

DARCO

DARCO products catalogue 2025

CHIMNEY COWLS
HOT AIR DISTRIBUTION SYSTEMS
CHIMNEYS
VENTILATION

2025.03.07

DARCO catalogue consists of five sections.

To make usage of this compilation easier, each section is marked with color marker according to the scheme below::

- CHIMNEY COWLS
- STEERING & POWER SUPPLY
- HOT AIR DISTRIBUTION SYSTEM
- CHIMNEYS
- VENTILATION

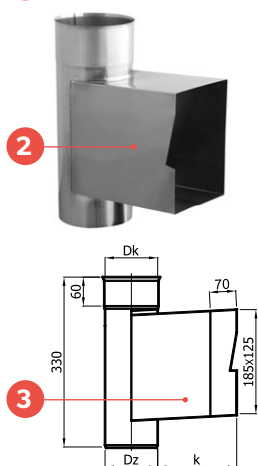
Each of the sections has a detailed index.

Particular attention should be paid to the section “Steering”, because it contains elements, that are used with products from sections “Chimney cowls” as well as “Hot air distribution systems”

How should the information in product data sheet be read?

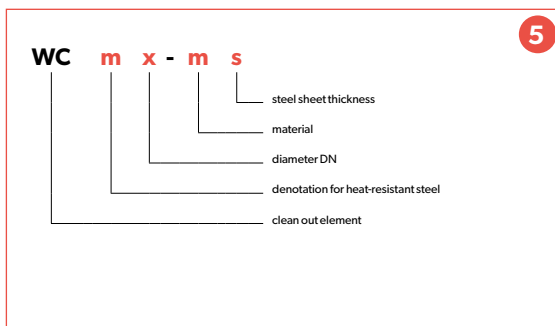
Vast majority of products in Darco catalogue is presented uniformly. Below we present a short description showing how to read technical data in order to set an appropriate product code..

1 25. WC CLEAN OUT ELEMENT



Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
Dz	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2
Dk	81.2	101.9	113.1	124.2	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6	351.9	402.9	452.2	503.2
k	170	160	155	150	145	140	135	155	145	135	157	145	145	145	145	145	145
Weight [kg]	0.90	1.00	1.05	1.10	1.10	1.10	1.15	1.30	1.35	1.40	1.60	1.70	1.95	2.20	2.45	2.70	2.95

for s=0.6



Destination	W	W	-	W - ventilation ducts
	S	-	-	S - gas and oil exhaust ducts
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - acid-resistant steel sheet 1.4404
	-	X	-	X - acid-resistant steel sheet 1.4301
	-	-	Z	Z - heat-resistant steel sheet 1.4828
Steel sheet thickness s	5	-	-	5 - thickness 0.5 mm
	6	6	-	6 - thickness 0.6 mm
	8	8	8	8 - thickness 0.8 mm
	1	1	1	1 - thickness 1.0 mm

1. Product name and key fragment of product code
2. Picture or 3D product render.
3. Basic technical drawing with dimensions or letters with references to the measurements table.
4. Table with dimensions and weights.
5. Product code or pattern on how to read the code for every product version.
6. Table of available material types and product usage.

Example of product code: WC150-CH5

means WC clean out element of 150 mm diameter, made with acid-resistant steel of 0.5 mm thickness.

Each table column should be read in direction shown by the arrow (from up to down).

Product from the column presented is designated for ventilation and smoke (gas) exhausting purposes, product is available in material version - acid-resistant steel sheet with possible thicknesses: 0.5 mm, 0.6 mm, 0.8 mm and 1.0 mm.

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CHIMNEY COWLS

STEERING & POWER SUPPLY

HOT AIR DISTRIBUTION SYSTEM

CHIMNEYS

VENTILATION

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Chimney cowls are to be mounted on top of chimney ducts. Their function is to protect against downwind, rainwater and birds nesting, but most of all their purpose is to create chimney draught.

All DARCO chimney cowls are available with variety of mounting bases to choose from, many inlet diameters and material versions (including chrome-nickel acid resistant steel). Most of them can be also powder-coated (any color from RAL palette). We produce also non-standard devices upon individual order.

We have the most complex chimney cowls offer in the world!

CHIMNEY COWLS

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CHIMNEYS

VENTILATION

	Chimney cowl version / description	Product name
	<p>Rotary chimney cowls</p> <p>Rotary chimney cowls use wind speed to increase chimney draught.</p>	<ul style="list-style-type: none"> · Turbowent · Turbowent with external bearings · Turbowent Tulipan
	<p>Hybrid chimney cowls</p> <p>Hybrid chimney cowls that work just like ordinary wind-driven cowl, using wind force to rotate the turbine. Difference is that they are additionally equipped with low power brushless electric motor used to maintain their rotation even if there is no wind or wind force is too weak to achieve desired parameters.</p>	<ul style="list-style-type: none"> · Hybrid Turbowent · Hybrid Turbowent Plus · Hybrid Solar Turbowent · Hybrid Turbowent Tulipan
	<p>Self-adjusting chimney cowls</p> <p>Self-adjusting chimney cowls always position themselves in direction of wind, thanks to that, covering the chimney duct and improving draught.</p>	<ul style="list-style-type: none"> · Rotowent · Rotowent Swing · Rotowent Dragon
	<p>Mechanical chimney cowls</p> <p>Mechanical chimney cowls (chimney fans) called draught generators allow to create chimney draught in situations when usage of wind driven appliances is not possible or demand for chimney draught is big.</p>	<ul style="list-style-type: none"> · Draught Generator
	<p>Static chimney cowls</p> <p>Static chimney cowls use kinetic energy of wind to improve chimney draught.</p>	<ul style="list-style-type: none"> · Static chimney cowl CAGI · Cap with base · Air intake for air-type ground heat exchanger · Sewer Venting Ring-type terminal · Chimney extensions · Envelope-type cap · Sombrero-type cap
	<p>Chimney bases</p> <p>Chimney bases allow to mount cowls in various roof or chimney configurations.</p>	<p>Wide range of bases, connectors and roof adapters.</p>

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Rotary chimney cowls - characteristics



TURBOWENT Ø150÷Ø350

Rotary chimney cowl Turbowent is a device, which, in a dynamic way, uses force of the wind to increase chimney draught. No matter from what direction is the wind blowing, no matter of its kind (horizontal, upwind, downwind) and strength, turbine always rotates in the same direction, creating underpressure in the inlet pipe. Turbowent is recommended to be mounted on top of natural (gravitation) functioning chimney ducts (only ventilation) for blocks as well as individual houses.



TURBOWENT WITH EXTERNAL BEARINGS Ø150÷Ø250

Chimney cowl, in which bearing system is placed outside the influence of hot gases, improves chimney draught on chimneys exhausting flue and smoke from heating appliances. It is recommended to be mounted on chimney duct endings especially for individual houses.



TURBOWENT TULIPAN Ø150

Turbowent equipped with unique, narrow turbine and special force-in mounting method. Construction of the cowl allows it to be mounted on chimney ducts (ventilation) which are very close to each other, where mounting of standard cowl with bigger turbine diameter is not possible.



TURBOWENT Ø400÷Ø500

Chimney cowls of large diameters are devices providing high efficiency. It is recommended to use them for commercial, utility and industrial ventilation. Used in combination with multiple duct reducing bases, they can improve chimney draught in many ventilation ducts at the same time.

Hybrid chimney cowls - characteristics



HYBRID TURBOWENT Ø150÷Ø200

Hybrid chimney cowl is an improved version of Turbowent. Energy efficient motor allows device to continue working also when there is no wind or wind strength is not sufficient. It assures that ventilation efficiency does not fall below a certain, set by the customer, value. HYBRID TURBOWENT is a solution for individual, multi-storey and utility buildings. It is an integral part of hybrid ventilation system and is used to improve draught in natural ventilation ducts.



HYBRID TURBOWENT TULIPAN Ø150

Hybrid Turbowent Tulipan is a device, which is special because of the construction of turbine. Its reduced diameter allows to place the cowl on ventilation chimneys situated very close to each other. Force-in mounting system does not require usage of any tools. Chimney cowl is dedicated to be mounted on individual ventilation ducts, where there is no space for using Turbowent with standard turbine size.



HYBRID TURBOWENT PLUS Ø200÷400

Hybrid Turbowent PLUS is a cowl having significantly increased efficiency compared to standard versions. Special vanes mounted inside the turbine allow to increase efficiency as well as pressure created. Thanks to this, cowl works nearly like fan, but, at the same time, does not lose advantages of a chimney cowl, such as: low energy consumption and low emission of sound. It is used for multi duct ventilation endings as well as for ventilation ducts of high efficiency.



HYBRID SOLAR TURBOWENT Ø150

Hybrid Solar Turbowent combines advantages of hybrid and ordinary chimney cowl. It is equipped with motor and photovoltaic panel, thanks to this it works in windless but sunny days. It does not need any cables for proper working, what makes mounting quick and simple.



HYBRID SOLAR TURBOWENT TULIPAN Ø150

Two original solutions in one chimney cowl: Hybrid Tulipan version equipped with a photovoltaic panel. Thanks to this combination it is possible to make terraced chimney ventilation without leading electric cables.

Self-adjusting chimney cowls - characteristics



ROTOWENT Ø150÷Ø400

Classic self-adjusting chimney cowl is available with slide bearings - designed for smoke ducts (max working temperature 500°C).



ROTOWENT DRAGON Ø150÷Ø300

Patented ball bearing system is placed outside the cowl and away from high temperature of fumes. This specific cowl construction ensures long-lasting and maintenance-free usage. Maximal working temperature is 500°C. It is recommended to be used as an ending of smoke ducts from fireplaces and wood burning stoves.



ROTOWENT SWING Ø150÷Ø200

Popular in Poland, cost-effective, self-adjusting cowl made according to Darco standards with particular emphasis on quality and stability. It is equipped with slide bearings, allowing it to work in temperatures up to 400°C.

Mechanical chimney cowls - characteristics



DRAUGHT GENERATOR Ø150÷Ø200

Draught generator is a solution for problems with too weak chimney draught (flue and smoke ducts) in cases where no wind-driven cowl can help. It is effective even if the problems are caused by small diameter or length of chimney duct.

Static chimney cowls - characteristics

**CAGI - STATIC CHIMNEY COWL Ø100÷Ø400**

Classic chimney cowl for ventilation and flue chimney duct endings. It is designed to protect against rainwater, snow and downwind.

**CAP WITH BASE (WDA) Ø100÷Ø250**

Cap with base is a device that protects the chimney duct (ventilation, flue) from rain or snow.

**CAP (DA) Ø100÷Ø250**

Cap is a device that protects ventilation and flue chimney ducts from rain or snow.

**DASZEK WYWIETRZNIKOWY Z SIATKĄ (DAL) Ø100÷Ø250**

Stanowi osłonę wylotu kominów wentylacyjnych i spalinowych. Chroni przed deszczem, śniegiem i ptakami.

**CAP WITH FORCE-IN MOUNTING BASE (DA-PT) Ø100÷Ø250**

Cap is a device that protects ventilation and flue ducts from rain or snow.

**CAP IN A BOX DAP Ø60÷Ø80, Ø100÷Ø130, Ø140÷Ø180, Ø200÷Ø250**

Cap in a box is a chimney cap of full value that fits in ... a pizza box. Unique mounting method, with no usage of tools needed, universal sizes and simple installation, makes it a good solution for all chimney pipe endings. Rigid design and reliable mounting method ensures that the cap is as durable and aesthetic as a traditional chimney cap. Packing in small box is a great advantage of this solution, allowing easy storage and cheap logistic.



AIR INTAKE FOR AIR-TYPE GROUND HEAT EXCHANGER (GWC) Ø160÷Ø400

Air intake for air-type ground heat exchanger provides an aesthetical termination of the air inlet. It is equipped with stainless steel mesh protecting from rodents. Cap can be easily dismantled (for cleaning or maintenance), it also allows application of a special anti-pollen filter.

SEWER VENTING RING-TYPE TERMINAL (PNK) Ø160÷Ø400

Sewer venting terminal is an aesthetical ending of a plumbing vent duct. The cowl should be attached to a concrete chimney top with screws, according to building principles.

CHIMNEY EXTENSIONS PKK, PKKD, PKO

Chimney extensions are used to lengthen the existing chimney ducts of non-standard dimensions. They should be attached to a concrete chimney top with screws, the connection then should be sealed with proper sealant.

ENVELOPE-TYPE CAP, SOMBRERO-TYPE CAP

They are an aesthetical ending of chimney duct. These products are produced upon individual order.

Types of chimney cowls

Type	Name	Diameters													
		ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø250	ø300	ø350	ø400	ø500
TU...	Turbowent	-	-	-	-	-	X	-	-	X	X	X	X	X	X
TUZ...	Turbowent with external bearings	-	-	-	-	-	X	-	-	X	X	-	-	-	-
TU...T	Turbowent Tulipan	-	-	-	-	-	X	-	-	-	-	-	-	-	-
TH...	Hybrid Turbowent	-	-	-	-	-	X	-	-	X	-	-	-	-	-
THP...	Hybrid Turbowent Plus	-	-	-	-	-	-	-	-	X	X	X	X	X	X
TH...T	Hybrid Turbowent Tulipan	-	-	-	-	-	X	-	-	-	-	-	-	-	-
TUS...CHAL-H	Hybrid Solar Turbowent	-	-	-	-	-	X	-	-	-	-	-	-	-	-
TUS...CHAL-T-H	Hybrid Solar Turbowent Tulipan	-	-	-	-	-	X	-	-	-	-	-	-	-	-
RO...	Rotowent	-	-	-	-	-	X	-	-	X	X	X	X	X	-
RO...DR	Rotowent Dragon	-	-	-	-	-	X	-	X	X	X	X	-	-	-
RO...SW	Rotowent Swing	-	-	-	-	-	X	-	X	X	-	-	-	-	-
GCK...	Draught Generator	-	-	-	-	-	X	-	-	X	-	-	-	-	-
WCG...	Cagi	X	X	X	X	X	X	X	X	X	X	X	X	X	-
WDA...	Cap with base	X	X	X	X	X	X	X	X	X	X	-	-	-	-
DA...	Cap	X	X	X	X	X	X	X	X	X	X	-	-	-	-
DAL...	Daszek wywietrznikowy z siatką	X	X	X	X	X	X	X	X	X	X	-	-	-	-
DAP...	Cap in a box	X	X	X	X	X	X	X	X	X	X	-	-	-	-
DA...PT	Cap with force-in mounting base	X	X	X	X	X	X	X	X	X	X	-	-	-	-

Diameters presented in the chart are standard versions of chimney cowls produced by DARCO. Apart from the standard versions, there is a possibility for production of untypical reducers, bases, roof flashings according to individual orders of an investor or designer.

Materials

Basic materials used for chimney cowls production are:

Material	CH	CH - chrome-nickel sheet
	OC	OC - galvanized steel sheet
	AL	AL - aluminum

Application of cowls:

- on already existing ventilation chimneys, which create insufficient natural draught for proper room ventilation
- in rooms located on the higher- storey parts of building where chimney height is limited
- whenever a downwind causes backdraught, particularly in places with adverse landform features
- whenever a chimney is unfavourably situated towards roof sweep (lowered chimney)
- whenever an effective work of a ventilation chimney is disturbed by other chimneys located on the same roof.

Type	Name	Max. work temp. [°C]	Chimney ducts		
			Ventilation	Flue	Smoke*
TU...	Turbowent	150	X	-	-
TUZ...	Turbowent with external bearings	250	-	X	X
TU...T	Turbowent Tulipan	150	X	-	-
TH...	Hybrid Turbowent	60	X	-	-
THP...	Hybrid Turbowent Plus	60	X	-	-
TH...T	Hybrid Turbowent Tulipan	60	X	-	-
TUS...CHAL-H	Hybrid Solar Turbowent	60	X	-	-
TUS...CHAL-T-H	Hybrid Solar Turbowent Tulipan	60	X	-	-
RO...	Rotowent (slide bearings)	500	-	X	X
RO...DR	Rotowent Dragon	500	-	X	X
RO...SW	Rotowent Swing	400	-	X	X
GCK...	Draught Generator	400	-	X	X
WCG...	Cagi	180	X	X	-
WDA...	Cap with base	180	X	X	-
DA...	Cap	180	X	X	-
DAL...	Daszek	180	X	X	-
DAP...	Cap in a box	180	X	X	-
DA...PT	Cap with force-in mounting base	180	X	X	-
GWC...-CH...	Airintake for air type ground heat exchanger	150	X	-	-
PNK...-CH	Sever Venting Ring - type terminal	150	X	-	-

* Cowl should not be mounted on ducts exhausting fumes from coal burning devices.

Application of the cowl on chimney ducts from fume and smoke chimney ducts is appropriate only when the building is equipped with properly functioning air supply ventilation.

Application of the cowl is always dependent on the choice of proper material version.

X - recommended

Hybrid ventilation system

Hybrid ventilation is a system based on natural ventilation ducts supported by mechanical devices. Proper air exhaust efficiency is secured by a Hybrid Turbowent chimney cowl. This cowl controls proper chimney draught and, thanks to the possibility of adjusting rotation speed, allows to set desired efficiency of ventilation. Wide range of chimney cowls offered by Darco allows to choose the one optimal for single-family housing, multi-family housing or for industrial applications.

Chimney cowl is only one of the three devices assuring stable and efficient ventilation working. Other elements that are needed are: draught stabilizer and air intake. Precise description of their work can be found in the "Ventilation" section of this catalogue.

What must be remembered, is that all elements are complementary and only complete system gives warranty of stable working and desired efficiency of ventilation.



Hybrid ventilation system in single-family housing

What is particularly worth noticing, is that Darco Hybrid ventilation system is more than useful with existing natural ventilation systems reconstruction, both in single- and multi-family housing. Devices responsible for proper functioning are located on inlets and outlets of ventilation ducts. Such mounting allows to install them with no special demolition works needed.



Single-pipe ventilation

CHIMNEY COWLS

STEERING & POWER SUPPLY

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Method of cowl's efficiency measurement

Measurement of the chimney cowl's efficiency gives rise to many difficulties. Obviously, it is impossible to create conditions in a research laboratory that would perfectly correspond to natural weather conditions. Detailed examination of all presented cowls was carried out according to the French norms P50-413, in aerodynamic tunnel of Technical University in Rzeszów, where all the measurements were taken to determine the underpressure of the cowls caused by wind. Specification of pressure loss ratio was prepared on the basis of French norms on a stand presented on the picture (Fig. 2)

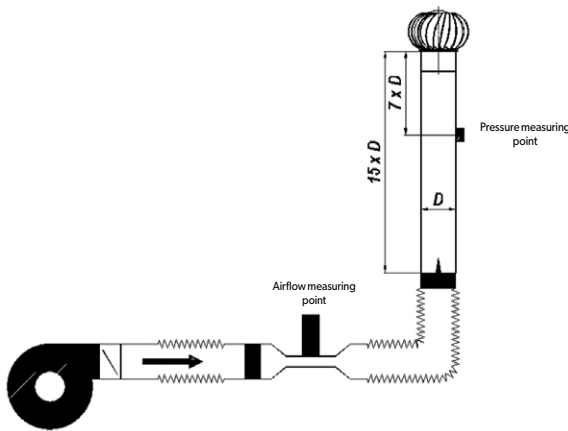


Fig.1. Schema of pressure loss measurement.

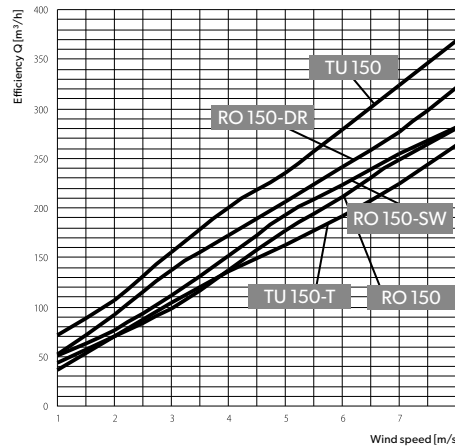


Fig.2. Comparison of efficiencies of dynamic chimney cowls diameter ø150.

Designing cues

While designing ventilation, fume exhaust and smoke chimneys, it is necessary to specify the diameter and height of ducts, location of their outlets towards the roof and setting according to PN-89/B-10425.

While defining diameter of ventilation ducts, it is obligatory to establish an airflow value, which will be extracted from the building, according to the norm PN-89/B-03430 (the chart on next page).

Efficiency of already existing chimneys with or without a cowl may be defined from graphs or through calculation.

$$Q = 3600 \cdot v_k \cdot S$$

where:

- Q** - stream of air flow [m³/h]
- v_k** - air velocity in a duct [m/s]
- S** - cross - section of a duct [m²]

Cowls installed on ventilation chimney are under the influence of two forces: force of wind and gravitational buoyancy of air (the active gravitational pressure). The condensed interaction of both forces towards the scheme "a cowl- a ventilation chimney" can take a form of the equation:

$$P_w + P_G = \left[\lambda \frac{h_k}{d} + \sum \zeta \right] \frac{v_k^2 \rho_w}{2}$$

$$\frac{c_{sr} v_w^2 \rho_z}{2} + P_G = \left[\lambda \frac{h_k}{d} + \sum \zeta \right] \frac{v_k^2 \rho_w}{2}$$

from which air velocity in ventilation duct v_k [m/s] can be calculated

$$v_k = \sqrt{\frac{c_{sr} v_w^2 \rho_z + 2g h_k (\rho_z - \rho_w)}{\left(\lambda \frac{h_k}{d} + \sum \zeta \right) \rho_w}}$$

where:

- c_{sr}** - average ratio of underpressure influenced by wind
- v_w** - wind velocity [m/s]
- ρ_z** - density of outer air [kg/m³]
- ρ_w** - density of inner air [kg/m³]
- P_w** - active pressure of a cowl caused by blowing wind [Pa]
- P_G** = ghk(ρ_z-ρ_w) - active pressure of gravitational ventilation [Pa]
- λ** - a ratio of air friction against the walls in chimney duct
- h_k** - a height of chimney duct (from the axis of an inlet to the axis of an outlet) [m]
- d** - a diameter of chimney duct or its equivalence [m]
- Σζ** = ζ_n+ζ_p - summarised pressure loss of a cowl and ventilation duct
- g** - gravity [9.81 m/s²]

Conditions in which the efficiency measurements were taken:

- Wind blows with horizontal direction with the velocity of 3 m/s (the velocity characteristic for wind in central territories of Poland) or 4 m/s (highlands and Baltic coasts)
- Outer temperature t_z = 12°C and inner temperature t_w = 20°C are defined according to the norm PN-83/B-03430 and PN-82/B-02402 (they are decisive for specifying gravitational air buoyancy in chimney)
- Ratio of air friction against the surface of chimney is defined for metal sheet chimney = 0.02 and brick chimney = 0.038
- Any additional pressure loss caused by ventilation shield grates or changes in airflow direction (e.g. elbow) were not taken into account
- Difference of pressures caused by wind blowing against building walls were not taken into account
- Air intake devices (e.g. air intake set) are in opened position - securing stable air flow in indispensable amounts.

Established coefficients:

ζ_p = 1.3 - pressure loss of air inlet (shield grate + a change of diameter + airflow curving) towards a diameter of vertical chimney duct.

Type	Name	Cowl's static friction ratio ζ _s	Average underpressure ratio C _p
TU...	Turbowent ø150+300	1.18-1.25	0.62-0.82
TU...	Turbowent ø400+500	1.25-1.3	0.68-0.94
TUZ...	Turbowent with external bearings	1.18-1.25	0.62-0.82
TU...T	Turbowent Tulipan	1.5	0.40
TH...	Hybrid Turbowent	1.41-1.60	0.57
TH...T	Hybrid Turbowent Tulipan	1.66	0.35
RO...	Rotowent	1.2-1.8	0.35-0.73
RO...DR	Rotowent Dragon	1.36-1.55	0.48-0.61
RO...SW	Rotowent Swing	1.2-1.8	0.35-0.73
WCG...	Cagi	1.2	0.40
WDA...	Cap with base	1.1	0
DA...	Cap	1.1	0
DAP...	Cap in a box	1.1	0
DA...PT	Cap with force-in base	1.1	0

The streams of ventilation air flow according to PN-83/B-03430

Room	Stream of air flow [m ³ /h]	Remarks / Additional requirements
Living quarters		
Kitchen with outer window with: · cooker for gas or solid fuel · electrical cooker (apartment for 1 or 2 people) · electrical cooker (apartment for 3 people)	70 30 50	
A kitchen without an outer window or dining alcove, kitchen with electric cooker	50	
A bathroom with or without WC	50	
Separate WC	30	
Additional room without windows	15	
Living rooms and bedrooms	20	per person
Buildings for larger communities (hotels, boarding houses etc.)		
Living rooms and bedrooms	20	per person, min 1 exchange/h
Rooms for communal life (dining rooms, day rooms, etc.)	20	per person
Bathrooms	50	
WCs: · individual · communal	40 50	25 m ³ /h per pisuar
Individual showers	30	communal, min.5 exchanges/h
Smoking rooms	35	per person, min 10 exchanges/h
Public utility buildings		
Rooms for permanent and temporary stays: · no smoking rooms · rooms where smoking is permitted	20 30	per person per person
Day care centres and kindergartens	15	per person

Other streams of air flow are available at appropriate norms

Presented data are based on:

- the results of the research laboratory: "CAGI"
- joint thesis: "Ventilation devices a collection of technical data"- 1962. Arkady: Warsaw
- academic publications of dr inż. Z. Nowakowski Technical University in Wrocław:
 - "The cooperation of roof vents with ventilation ducts." COW no. 2/2000
 - "The ventilation chimneys." COW no.5/2000
 - "The diameters of gravitational ventilation ducts." COW no. 2/1999

CHIMNEY COWLS

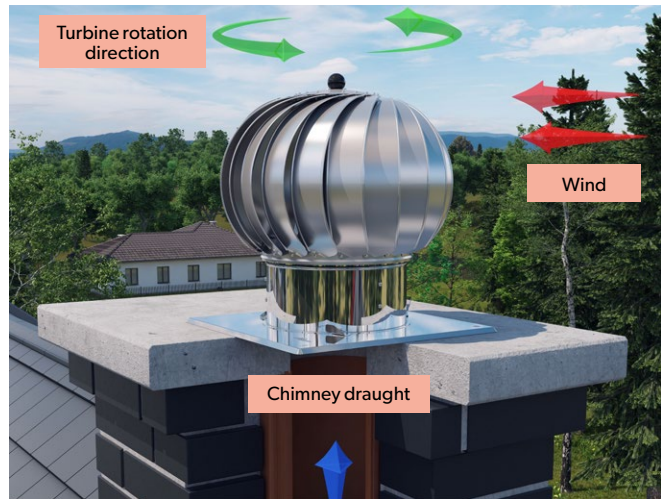
STEERING & POWER SUPPLY

HOT AIR DISTRIBUTION SYSTEM

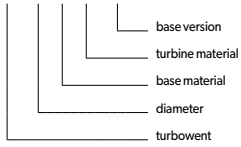
CHIMNEYS

VENTILATION

1. TURBOWENT Ø150÷Ø350



TU x a b - c

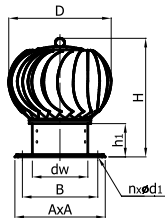


Destination	W	W	W	W	W - ventilation ducts
Base material	CH	-	CH	-	CH - chrome-nickel sheet 1.4301
	-	OC	-	-	OC - galvanised steel sheet
	-	-	-	ML	ML - galvanised steel sheet powder coated
Turbine material	CH	-	-	-	CH - chrome-nickel sheet 1.4301
	-	AL	AL	-	AL - aluminium
	-	-	-	ML	ML - aluminium powder coated

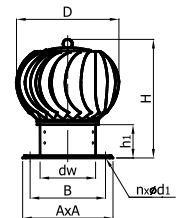
Diameter [mm]	ø150	ø200	ø250	ø300	ø350
Efficiency [m³/h] (at wind speed 4 m/s)	200	325	550	750	850
Underpressure [Pa] (at wind speed 4 m/s)	7.0	6.3	7.0	6.1	6.0
Max. working temperature [°C]	150				
Rotating unit	ball bearings system				

Versions of bases

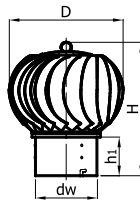
1. Square base openable ø150, ø200, ø250 -PK



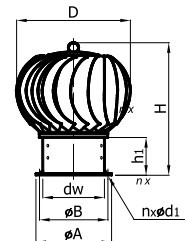
2. Square base not openable ø300, ø350 -PK



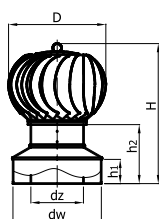
3. Dismountable base -R



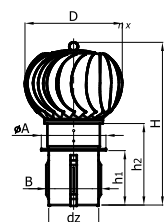
4. Base with collar -BIII



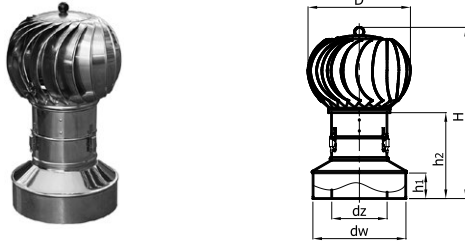
5. Base with insulation closing -B-K



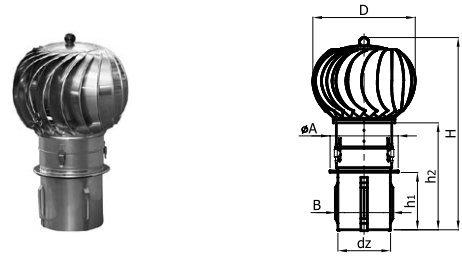
6. Force-in mounting base -PT



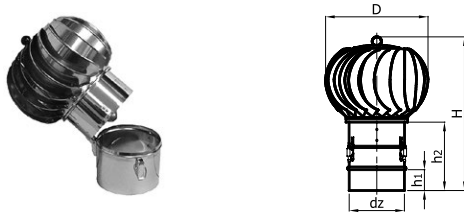
7. Base with insulation closing - openable -B-K-U



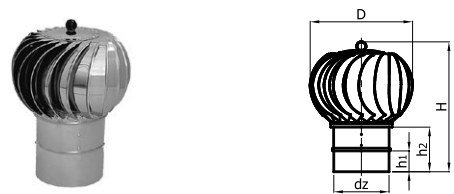
8. Force-in mounting base - openable -PT-U



9. Inlet pipe openable ø150, ø200, ø250, ø300 -B



10. Inlet pipe - not openable -B-S



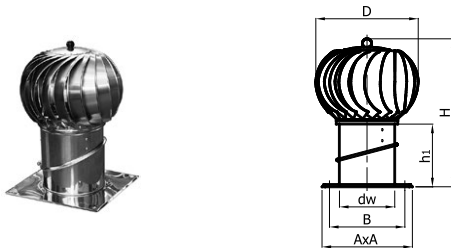
11. Inlet pipe reduced -X/Y-...-B-S



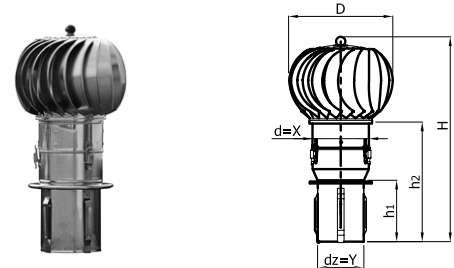
12. Inlet pipe reduced openable ø150, ø200, ø250, ø300 -X/Y-...-B



13. Adjustable base -N



14. Force in-mounting base, reduced -X/Y-...PTU



Adjustment ranges for various inlet diameters:
 · ø150+ø250 - angle 0°±45°
 · ø300+ø350 - angle 0°±45° or 0°±30°

Measurements table for various inlet diameters

Base version	Dimensions [mm]										Weight [kg]			
	D	dw	dz	H	h1	h2	A	B	d1	Amount n	OCAL	CHAL	ML	CHCH
-PK	~260	150.4	-	305	100	-	250	208	6.2	4	1.50	1.60	1.60	1.80
-R	~260	150.4	-	320	105	-	-	-	-	-	1.40	1.45	1.45	1.65
-BIII	~260	150.1	-	292	90	-	212	182	9.5	6	1.80	1.85	1.85	2.05
-B-K	~260	253.3	151.7	399	70	194	-	-	-	-	2.00	2.20	2.20	2.40
-PT	~260	-	144.0	450	157	244	202	158	-	-	1.75	1.85	1.85	2.05
-B-K-U	~260	253.3	151.7	449	70	244	-	-	-	-	2.20	2.40	2.40	2.60
-PT-U	~260	-	144.0	500	157	294	202	158	-	-	1.95	2.05	2.05	2.25
-X/Y-...PTU	~260	-	Y	560	157	354	-	-	-	-	2.10	2.25	2.25	2.45
-B	~260	-	152.0	402	60	197	-	-	-	-	1.50	1.60	1.60	1.80
-B-S	~260	-	152.0	349	60	144	-	-	-	-	1.35	1.40	1.40	1.60
-X/Y-...B-S	~260	-	Y	399	60	194	-	-	-	-	1.50	1.55	1.55	1.75
-X/Y-...B	~260	-	Y	492	60	287	-	-	-	-	1.80	1.90	1.90	2.10
-N	~260	150.4	-	425	220	-	250	-	-	-	1.80	1.90	1.90	2.10

Ø 200		Dimensions [mm]									Weight [kg]			
Base version	D	dw	dz	H	h1	h2	A	B	d1	Amount n	OCAL	CHAL	ML	CHCH
-PK	~320	200.0	-	340	100	-	330	284.0	6.2	4	1.90	2.00	2.00	2.30
-R	~320	199.7	-	355	105	-	-	-	-	-	1.45	1.50	1.50	1.80
-BIII	~320	199.4	-	362	90	-	263	233	9.5	6	2.00	2.00	2.00	2.30
-B-K	~320	303.1	201.0	434	70	194	-	-	-	-	2.35	2.50	2.40	2.80
-PT	~320	-	194.0	494	157	254	252	208	-	-	2.05	2.20	2.10	2.50
-B-K-U	~320	303.1	201.0	484	70	244	-	-	-	-	2.65	2.80	2.70	3.10
-PT-U	~320	-	194.0	544	157	304	252	208	-	-	2.35	2.50	2.40	2.80
-X/Y...-PTU	~320	-	Y	604	157	364	-	-	-	-	2.50	2.70	2.65	2.95
-B	~320	-	201.0	471	60	197	-	-	-	-	1.80	1.90	1.90	2.20
-B-S	~320	-	201.0	384	60	144	-	-	-	-	1.55	1.60	1.60	1.90
-X/Y...-B-S	~320	-	Y	434	60	194	-	-	-	-	1.75	1.80	1.80	2.10
-X/Y...-B	~320	-	Y	527	60	287	-	-	-	-	2.16	2.26	2.26	2.56
-N	~320	199.7	-	460	220	194	330	-	-	4	2.30	2.40	2.40	2.70

Ø 250		Dimensions [mm]									Weight [kg]			
Base version	D	dw	dz	H	h1	h2	A	B	d1	Amount n	OCAL	CHAL	ML	CHCH
-PK	~380	250.7	-	410	105	-	380	330	6.2	4	2.50	2.60	2.60	3.10
-R	~380	250.7	-	400	105	-	-	-	-	-	1.95	2.00	2.00	2.50
-BIII	~380	250.7	-	432	100	-	313	283	9.5	8	3.35	3.45	3.45	3.95
-B-K	~380	352.4	252.3	480	70	194	-	-	-	-	2.95	3.20	3.05	3.70
-PT	~380	-	244.0	550	157	264	302	259	-	-	2.75	2.80	2.85	3.40
-B-K-U	~380	352.4	252.3	530	70	244	-	-	-	-	3.40	3.65	3.50	4.15
-PT-U	~380	-	244.0	600	157	314	302	259	-	-	3.20	3.25	3.80	3.85
-B	~380	-	252.3	541	60	197	-	-	-	-	2.40	2.50	2.50	3.00
-B-S	~380	-	252.3	430	60	144	-	-	-	-	2.10	2.20	2.20	2.70
-X/Y...-B-S	~380	-	Y	480	60	190	-	-	-	-	2.30	2.40	2.40	2.90
-X/Y...-B	~380	-	Y	593	60	303	-	-	-	-	2.85	2.95	2.95	3.45
-N	~380	250.4	-	525	220	-	380	-	-	-	2.95	3.05	3.05	3.55

Ø 300		Dimensions [mm]									Weight [kg]			
Base version	D	dw	dz	H	h1	h2	A	B	d1	Amount n	OCAL	CHAL	ML	CHCH
-PK	~460	298.0	-	445	90	-	430	380	6.2	4	3.00	3.25	3.25	4.00
-R	~460	300.0	-	445	105	-	-	-	-	-	2.00	2.10	2.10	2.85
-BIII	~460	300.0	-	440	100	-	363	337	9.5	8	2.95	3.05	3.05	3.80
-B-K	~460	403.7	301.6	534	70	194	-	-	-	-	3.25	3.50	3.50	4.30
-PT	~460	-	294.0	600	157	244	352	308	-	-	3.00	3.20	3.20	4.00
-B-K-U	~460	403.7	301.6	550	70	244	-	-	-	-	3.90	4.15	4.15	4.95
-PT-U	~460	-	294.0	650	157	294	352	308	-	-	3.65	3.85	3.85	4.65
-B	~460	-	301.6	535	60	197	-	-	-	-	2.60	2.70	2.70	3.45
-B-S	~460	-	301.6	485	60	144	-	-	-	-	2.20	2.30	2.30	3.05
-X/Y...-B-S	~460	-	Y	561	60	174	-	-	-	-	2.50	2.60	2.60	3.35
-X/Y...-B	~460	-	Y	612	60	287	-	-	-	-	3.10	3.20	3.20	3.95
-N	~460	300	-	635	300	-	430	-	-	-	4.50	4.75	4.75	5.50

Ø 350		Dimensions [mm]									Weight [kg]			
Base version	D	dw	dz	H	h1	h2	A	B	d1	Amount n	OCAL	CHAL	ML	CHCH
-PK	~490	347.3	-	450	90	-	500	460	6.2	4	3.60	3.85	3.85	4.60
-R	~490	349.3	-	445	105	-	-	-	-	-	2.10	2.20	2.20	2.95
-BIII	~490	349.3	-	440	100	-	411	387	9.5	8	3.15	3.25	3.25	4.00
-B-K	~490	349.3	350.9	534	70	194	-	-	-	-	3.65	3.80	3.80	4.60
-PT	~490	-	344	616	157	244	402	358	-	-	3.60	3.80	3.80	4.60
-B-S	~490	-	350.9	485	60	144	-	-	-	-	2.35	2.45	2.45	3.20
-X/Y...-B-S	~490	-	Y	560	60	174	-	-	-	-	2.70	2.80	2.80	3.55
-N	~490	349.3	-	635	300	-	500	-	-	-	5.35	5.60	5.60	6.35

CHIMNEY COWLS

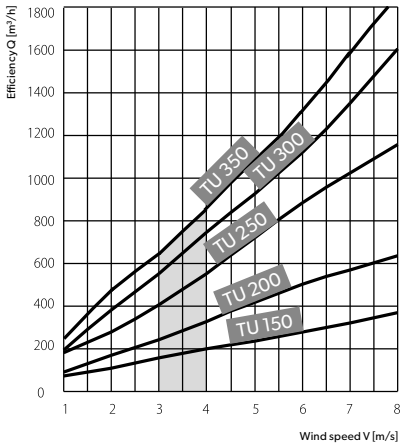
STEERING & POWER SUPPLY

HOT AIR DISTRIBUTION SYSTEM

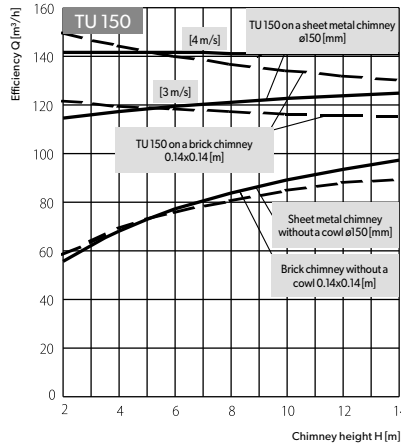
CHIMNEYS

VENTILATION

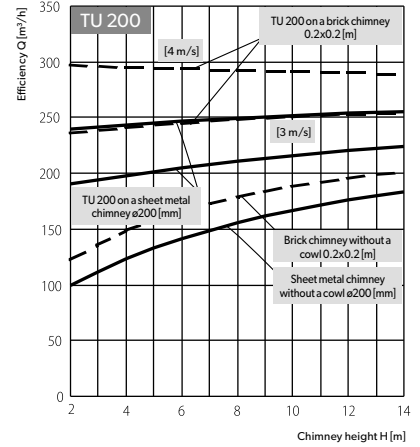
Airflow charts



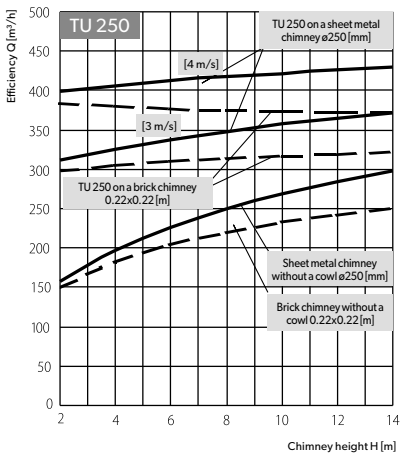
Efficiency chart for Turbowents (various diameters) in a function of wind speed, not including the influence of chimney height. (1[m/s]=3.6[km/h])



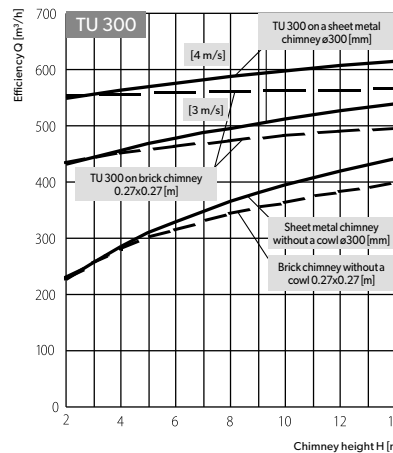
Efficiency chart for Turbowents ø150 in a function of chimney height on a brick or sheet metal chimney (for two wind speeds: 3 and 4 [m/s]).



Efficiency chart for Turbowents ø200 in a function of chimney height on a brick or sheet metal chimney (for two wind speeds: 3 and 4 [m/s]).

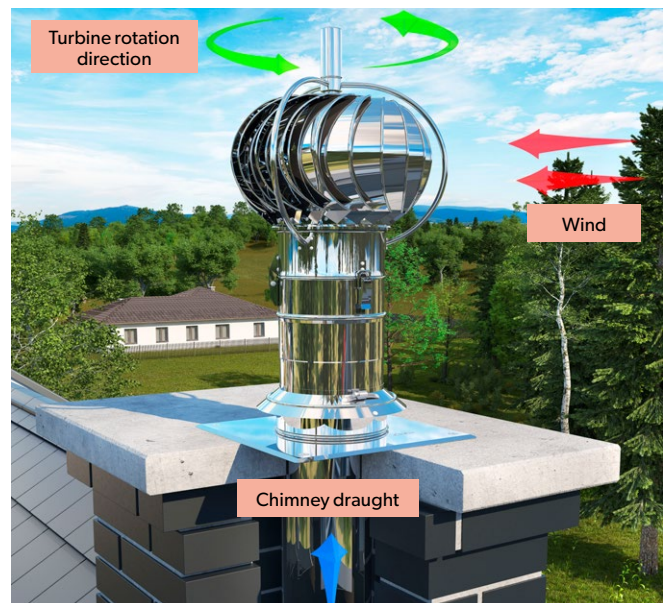


Efficiency chart for Turbowents ø250 in a function of chimney height on a brick or sheet metal chimney (for two wind speeds: 3 and 4 [m/s]).

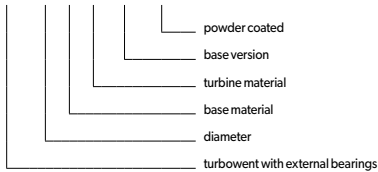


Efficiency chart for Turbowents ø300 in a function of chimney height on a brick or sheet metal chimney (for two wind speeds: 3 and 4 [m/s]).

2. TURBOWENT WITH EXTERNAL BEARINGS Ø150÷Ø250



TUZ x a b - c - ML



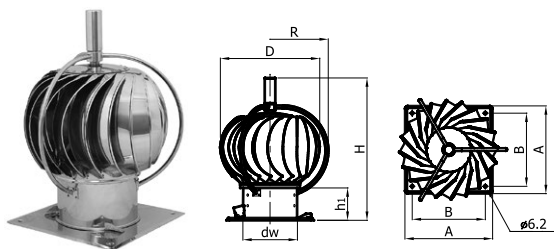
Destination	S	S- flue and smoke ducts
Materia	CH	CH - chrome-nickel sheet 1.4301
	ML	ML - chrome-nickel sheet 1.4301 powder coated (black)

Diameter [mm]	ø150	ø200	ø250
Efficiency [m³/h] at wind speed 4 m/s	200	325	550
Underpressure [Pa] (at wind speed 4 m/s)	7.0	6.3	7.0
Max. working temperature [°C]	250		
Rotating unit	greased ball bearings, placed outside the turbine		

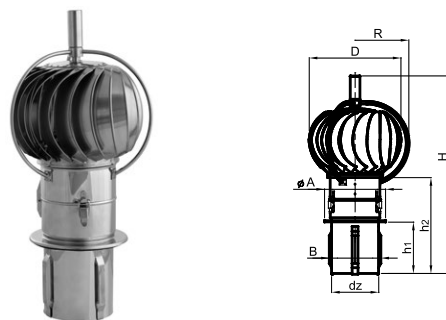
invent. build. enjoy.

Versions of bases

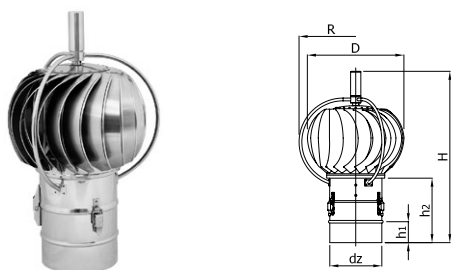
1. Square base openable -PK



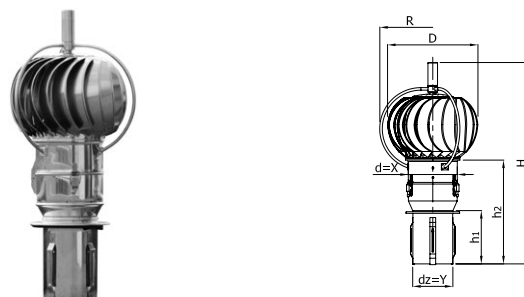
2. Force-in mounting base - openable -PT-U



3. Inlet pipe openable -B



4. Force in-mounting base, reduced -X/Y...PTU



Measurements table for various inlet diameters

Ø 150												
Base version	Dimensions [mm]											Weight [kg]
	D	dw	dz	H	h1	h2	A	B	d1	Amount n	R	
-PK	~260	150.4	-	400	100	-	250	208	6.2	4	165	2.00
-PT-U	~260	-	144.0	500	157	294	202	158	-	-	165	2.20
-B	~260	-	152.0	495	60	197	-	-	-	-	165	2.00
-X/Y...PTU	~260	-	Y	560	157	354	-	-	-	-	165	2.30

Ø 200												
Base version	Dimensions [mm]											Weight [kg]
	D	dw	dz	H	h1	h2	A	B	d1	Amount n	R	
-PK	~320	200.0	-	450	100	-	330	284	6.2	4	195	2.50
-PT-U	~320	-	194.0	540	157	304	202	208	-	-	195	2.80
-B	~320	-	201.0	545	60	197	-	-	-	-	195	2.50
-X/Y...PTU	~320	-	Y	600	157	364	-	-	-	-	195	2.95

Ø 250												
Base version	Dimensions [mm]											Weight [kg]
	D	dw	dz	H	h1	h2	A	B	d1	Amount n	R	
-PK	~380	250.7	-	470	105	-	380	330	6.2	4	225	3.80
-PT-U	~380	-	244.0	660	157	314	287	259	-	-	225	4.50
-B	~380	-	252.3	585	60	197	-	-	-	-	225	3.70

CHIMNEY COWLS

STEERING & POWER SUPPLY

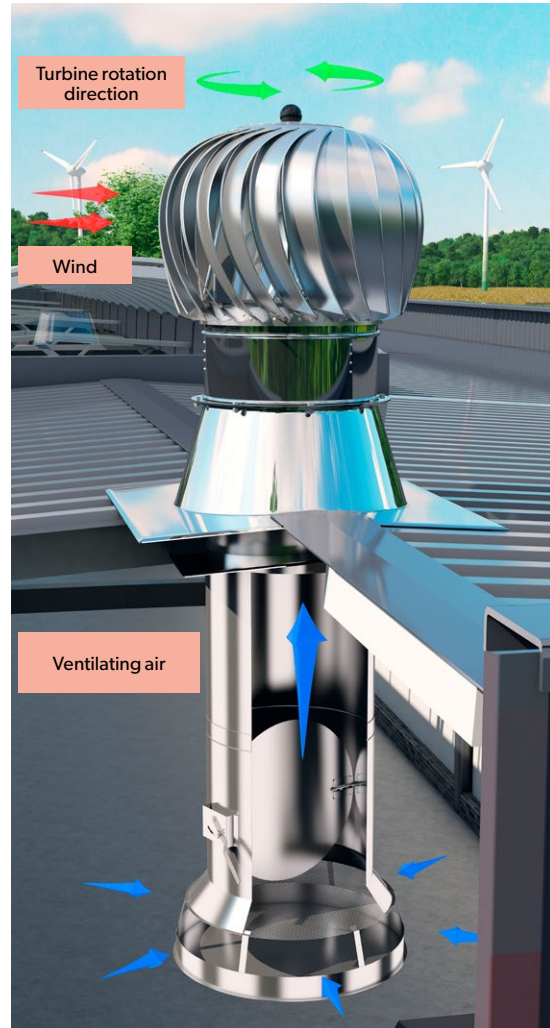
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CHIMNEYS

VENTILATION

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3. TURBOWENT Ø400÷Ø500



CHIMNEY COWLS

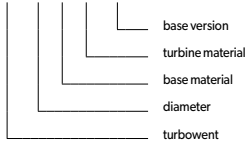
STEERING & POWER SUPPLY

HOT AIR DISTRIBUTION SYSTEM

CHIMNEYS

VENTILATION

TU x a b - c

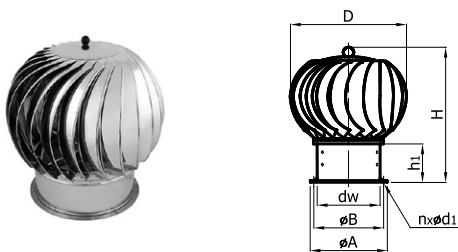


Destination	W	W	W	W - ventilation ducts
Base material	CH	-	CH	CH - chrome-nickel sheet 1.4301
	-	OC	-	OC - galvanised steel sheet
Turbine material	CH	-	-	CH - chrome-nickel sheet 1.4301
	-	AL	AL	AL - aluminium

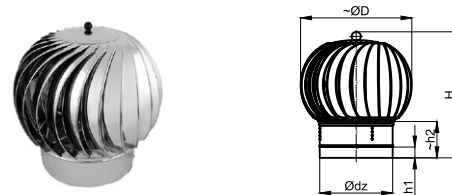
Diameter [mm]	ø400	ø500
Efficiency [m³/h] (at wind speed 4 m/s)	1580	2060
Underpressure [Pa] (at wind speed 4 m/s)	9.5	6.4
Max. working temperature [°C]	150	
Rotating unit	ball bearings system	

Versions of bases

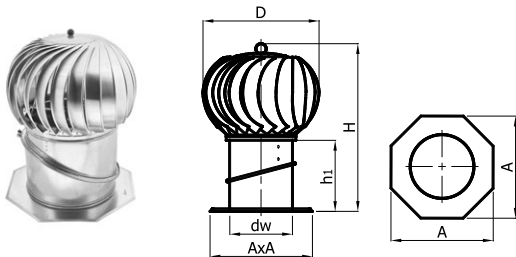
1. Base with collar -B-III



2. Inlet pipe -B-S



3. Adjustable base -N



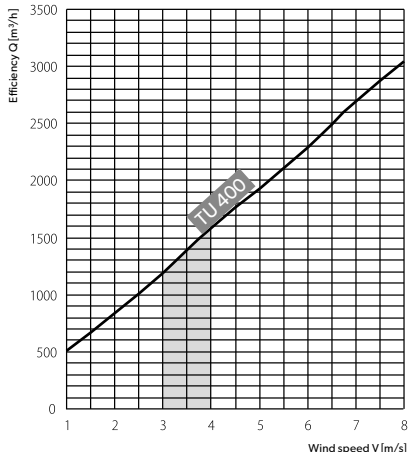
Adjustment ranges for various inlet diameters:
 · ø400÷ø500 - angle 0°÷45° or 0°÷30°

Measurements table for various inlet diameters

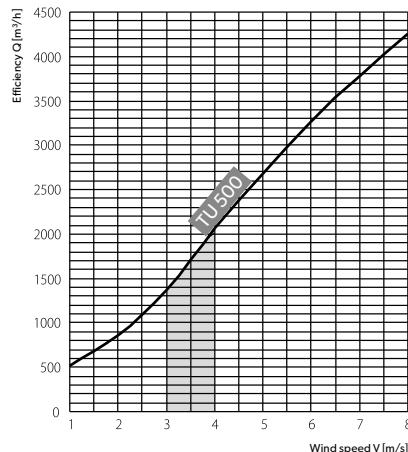
ø 400	Dimensions [mm]										Weight [kg]		
	Base version	D	dw	dz	H	h1	h2	A	B	d1	Amount n	OCAL	CHAL
-Bill	~630	398.8	-	649	165	-	464	438	9.5	8	8.00	8.00	11.00
-B-S	~630	-	400.8	650	170	-	-	-	-	-	6.85	6.85	9.80
-N	~630	398.8	-	785	300	-	550	-	-	-	12.90	12.90	15.90

ø 500	Dimensions [mm]										Weight [kg]		
	Base version	D	dw	dz	H	h1	h2	A	B	d1	Amount n	OCAL	CHAL
-Bill	~740	498.8	-	784	178	-	564	538	9.5	8	10.70	10.70	14.80
-B-S	~740	-	500.8	795	183	-	-	-	-	-	8.80	8.80	13.40
-N	~740	498.8	-	905	300	-	650	-	-	-	15.20	15.20	19.80

Airflow charts

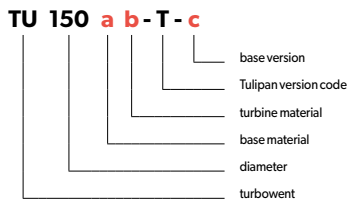
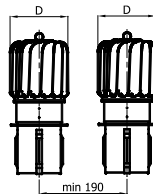


Efficiency chart for Turbowents (various diameters) in a function of wind speed, not including the influence of chimney height. (l[m/s]=3.6[km/h])

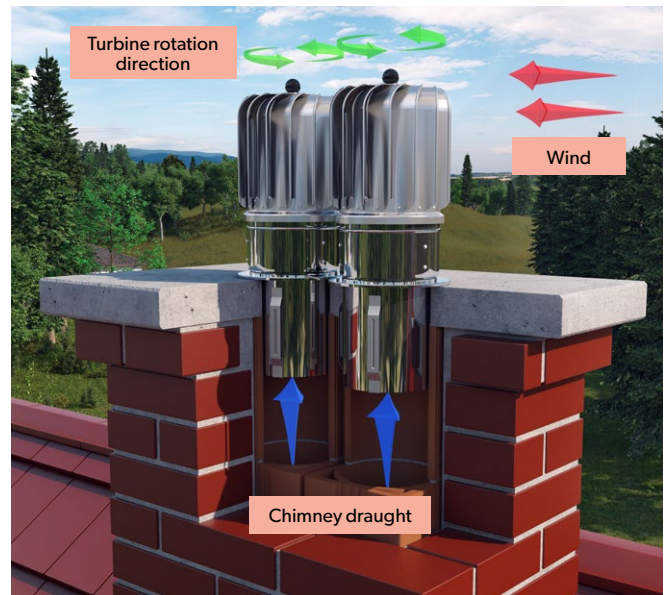


Efficiency chart for Turbowents (various diameters) in a function of wind speed, not including the influence of chimney height. (l[m/s]=3.6[km/h])

4. TURBOWENT TULIPAN Ø150



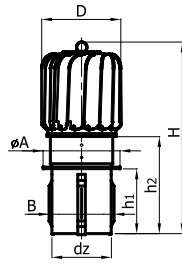
Diameter [mm]	ø150
Efficiency [m³/h] at wind speed 4 m/s	135
Underpressure [Pa] (at wind speed 4 m/s)	4,1
Max. working temperature [°C]	150
Rotating unit	ball bearings system



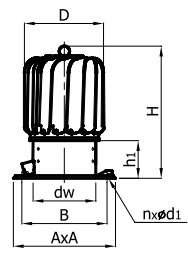
Destination	W	W	W	W	W - ventilation ducts
Base material	CH	-	CH	-	CH - chrome-nickel sheet 1.4301
	-	OC	-	-	OC - galvanised steel sheet
	-	-	-	ML	ML - galvanised steel sheet powder coated
Turbine material	CH	-	-	-	CH - chrome-nickel sheet 1.4301
	-	AL	AL	-	AL - aluminium
	-	-	-	ML	ML - aluminium powder coated

Versions of bases

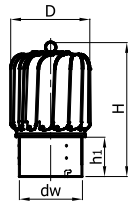
1. Force-in mounting base -PT



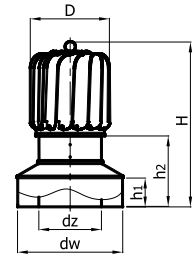
2. Square base -PK



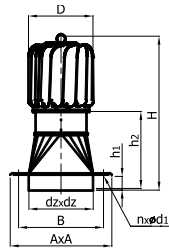
3. Dismountable base -R



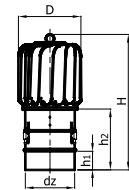
4. Base with insulation closing -B-K



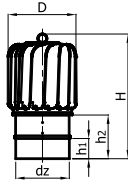
5. Inlet pipe reduced PKR -PKR



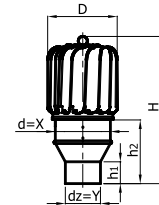
6. Inlet pipe openable -B



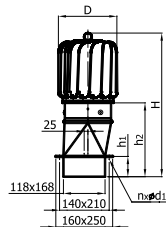
7. Inlet pipe not openable -B-S



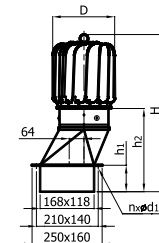
8. Inlet pipe reduced -X/Y-...-B-S



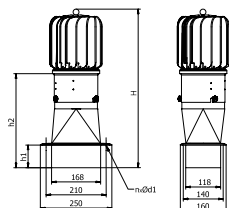
9. Inlet pipe reduced T/25+Tulipan with dismountable base -R -PKRT/25



10. Inlet pipe reduced T/64 +Tulipan with dismountable base -R -PKRT/64



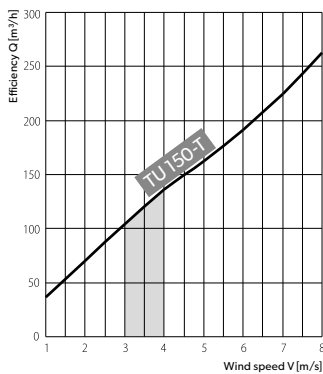
11. Inlet pipe reduced T/O+Tulipan with dismountable base -R -PKRT/O



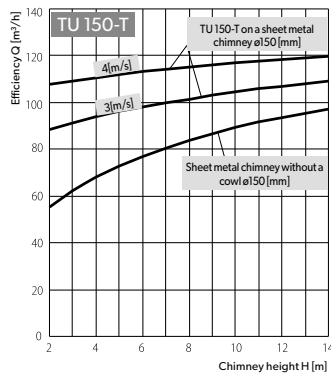
Measurements table for various inlet diameters

ø 150 Base version	Dimensions [mm]										Weight [kg]			
	D	d _w	d _z	H	h ₁	h ₂	A	B	d _l	Amount n	OCAL	CHAL	ML	CHCH
-PT	~180	-	144.0	475	157	240	187	158	6.2	-	1.30	1.40	1.40	1.60
-PK	~180	149.0	-	330	95	-	250	208	6.2	4	1.05	1.15	1.15	1.35
-R	~180	150.4	-	345	110	-	-	-	-	-	0.95	1.00	1.00	1.20
-B-K	~180	253.3	151.7	425	70	190	-	-	-	-	1.55	1.70	1.70	1.90
-PKR	~180	-	140.0	435	50	200	250	187	6.2	4	2.05	2.30	2.30	2.50
-B	~180	-	152.0	428	60	193	-	-	-	-	1.35	1.40	1.40	1.60
-B-S	~180	-	152.0	375	60	140	-	-	-	-	1.15	1.20	1.20	1.40
X/Y...-B-S	~180	-	Y	425	60	190	-	-	-	-	1.30	1.35	1.35	1.55
-PKR T/25	~180	-	-	595	80	360	168	118	6.2	4	1.80	2.05	2.05	2.30
-PKR T/64	~180	-	-	595	80	360	168	118	6.2	4	1.95	2.20	2.20	2.40
-PKR T/O	~180	-	-	595	80	360	168	118	6.2	4	1.95	2.20	2.20	2.40

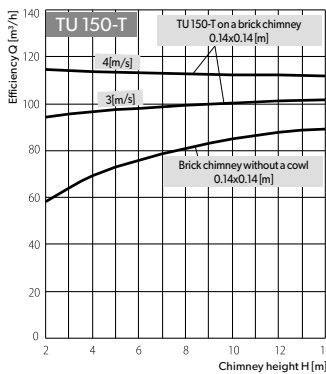
Airflow charts



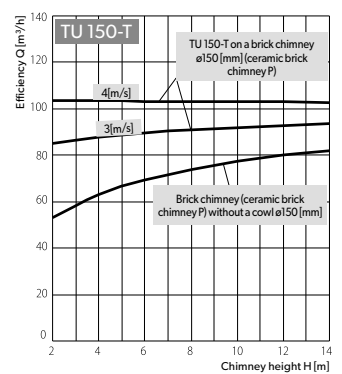
Efficiency chart for Tulipan (various diameters) in a function of wind speed, not including the influence of chimney height. (1[m/s]=3.6[km/h])



Efficiency chart for Tulipan ø150 in a function of chimney height on a sheet metal chimney (for two wind speeds: 3 and 4 [m/s]).

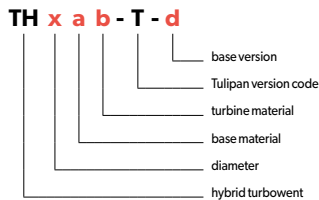


Efficiency chart for Tulipan ø150 in a function of chimney height on a brick chimney (for two wind speeds: 3 and 4 [m/s]).



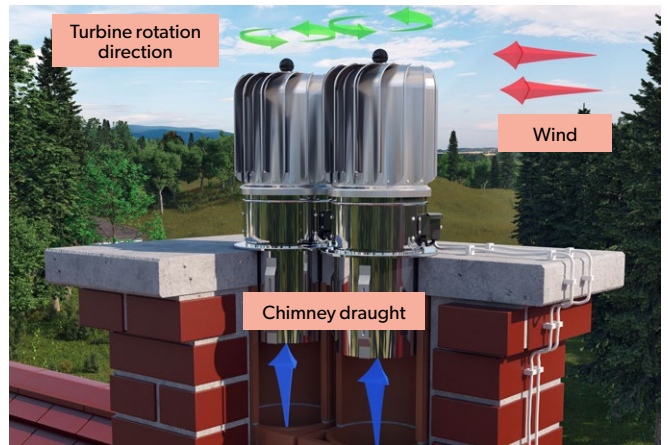
Efficiency chart for Tulipan in a function of chimney height on a round ceramic chimney (for two speeds 3 and 4 [m/s]).

5. HYBRID TURBOWENT TULIPAN -STANDARD Ø150



Diameter [mm]	ø150
Max. efficiency [m³/h]	197
Max. underpressure [Pa]	7
Rotating speed adjustment range [rev/min]	90 - 500
Voltage [V DC]	24
Nominal power* [W]	3.9
Max. current [mA]	360
Ambient temperature [°C]	-20 - +60
Rotating unit	ball bearings system

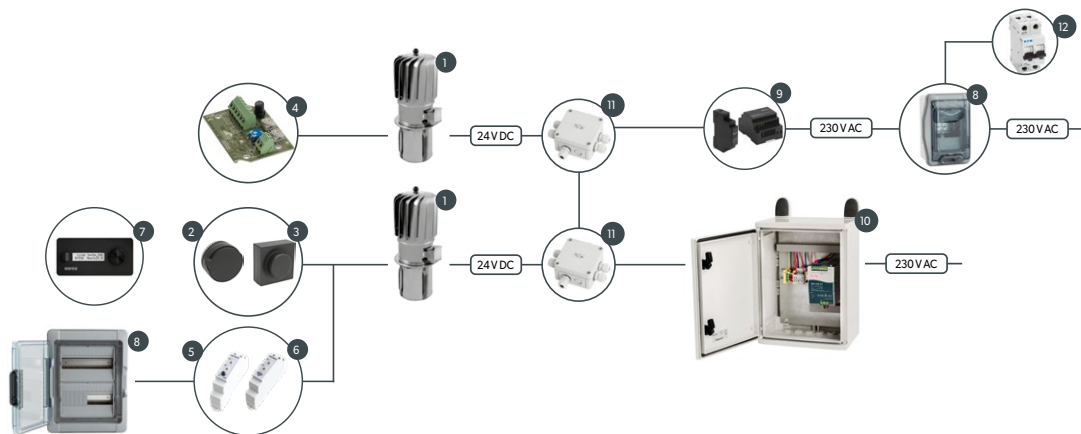
*at maximum efficiency



Destination	W	W	W	W - ventilation ducts
Base material	CH	CH	-	CH - chrome-nickel sheet 1.4301
	-	-	ML	ML - chrome-nickel sheet powder coated
	-	CH	-	CH - chrome-nickel sheet 1.4301
	-	-	ML	ML - aluminium powder coated
Turbine material	AL	-	-	AL - aluminium

Diameter	Sound pressure level A at a distance of 4 m from cowl (for rotation speed n)		Sound power level L (for min. rotation speed acc. to PN-EN ISO 3741:2003)	
	N _{dBmin} for n=90	N _{dBmax} for n=270	L _{WA} for n=90	L _{WA} for n=270
ø150	8 dB	15 dB	26 dB	33 dB

Connecting diagram



No	Symbol	Name
CONTROLLERS		
1	TH...T	Turbowent Tulipan version
2	ERO-32MN-2	ERO Electronic motor speed controller
3	ERO-32MN-1	ERO Electronic motor speed controller
4	ERO-31MW-1	ERO type electronic motor speed controller mounted on the cowl
5	ERO-32MS-0	ERO Electronic motor speed controller - on rail version TS-35
6	ERO-32WS-0	ERO Electronic motor speed controller - WiFi version (wBox application is required)
7	ERO-32AP-0	ERO Electronic motor speed controller - surface version
8	ESR-03W-0	Electronic control cabinet ESR - max amount of controllers: 3
	ESR-04W-0	Electronic control cabinet ESR - max amount of controllers: 4
	ESR-06W-0	Electronic control cabinet ESR - max amount of controllers: 6
	ESR-08W-0	Electronic control cabinet ESR - max amount of controllers: 8
	ESR-12W-0	Electronic control cabinet ESR - max amount of controllers: 12
8	ESR-24W-0	Electronic control cabinet ESR - max amount of controllers: 24
	ESR-36W-0	Electronic control cabinet ESR - max amount of controllers: 36
	ESR-54W-0	Electronic control cabinet ESR - max amount of controllers: 54
	ESR-72W-0	Electronic control cabinet ESR - max amount of controllers: 72

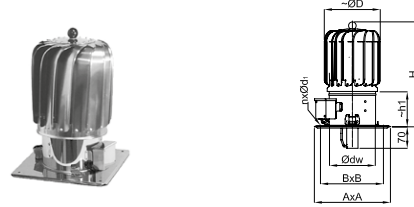
No	Symbol	Name
POWER FEEDERS		
9	EZN-010M-0	Electronic power supply EZN, nominal power 10 W
	EZN-030M-0	Electronic power supply EZN, nominal power 30 W
	EZN-060M-0	Electronic power supply EZN, nominal power 60 W
10	ESZ-060W-0	Electronic power supply cabinet ESZ, connected power 60 W
	ESZ-120W-0	Electronic power supply cabinet ESZ, connected power 120 W
	ESZ-240W-0	Electronic power supply cabinet ESZ, connected power 240 W
	ESZ-480W-0	Electronic power supply cabinet ESZ, connected power 480 W
11	ERZ-06D-0	Electronic power divider ERZ
12	CLS6-B4/IN	Circuit breaker

Versions of bases

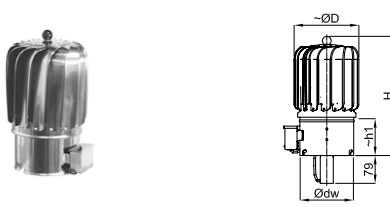
1. Force-in mounting base -PT



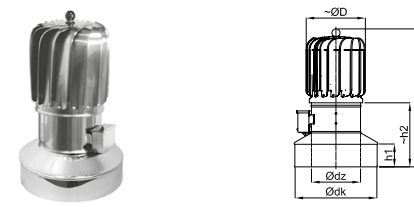
2. Square base -PK



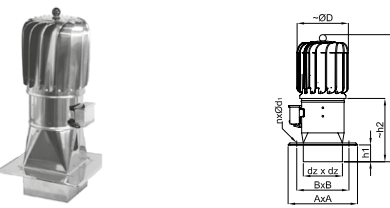
3. Dismountable base -R



4. Base with insulation closing -B-K



5. Inlet pipe reduced -PKR



6. Inlet pipe openable -B



CHIMNEY COWLS

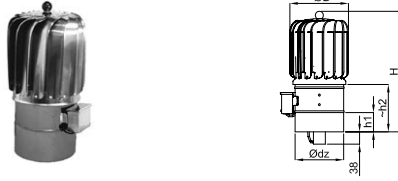
STEERING & POWER SUPPLY

HOT AIR DISTRIBUTION SYSTEM

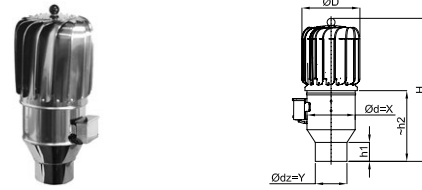
CHIMNEYS

VENTILATION

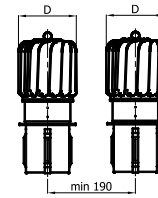
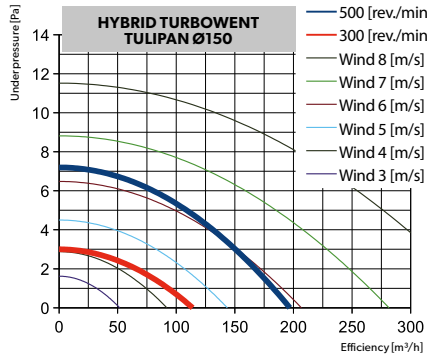
7. Inlet pipe not openable -B-S



8. Inlet pipe reduced -X/Y...-B-S



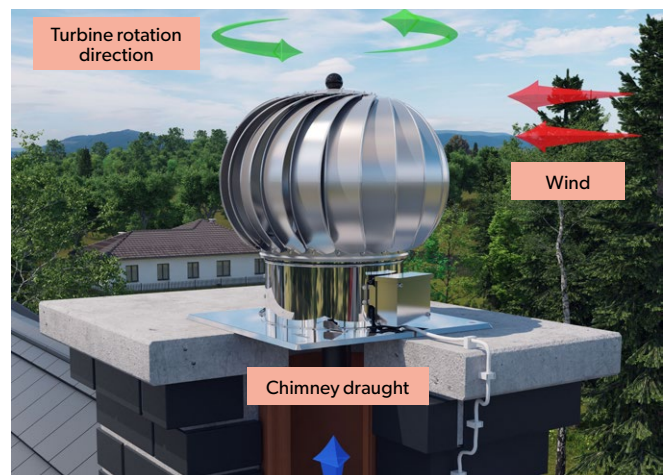
Airflow charts



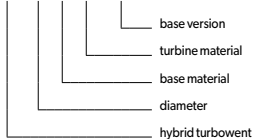
Measurements table for various inlet diameters

Base version	Dimensions [mm]										Weight [kg]	
	D	dw	dz	H	h1	h2	A	B	d1	Amount n		
ø 150												
-PT	-180	-	144.0	477	157	244	187	158	6.2	-	-	2.40
-PK	-180	149.0	-	333	100	-	250	208	6.2	4	-	2.15
-R	-180	150.4	-	337	107	-	-	-	-	-	-	2.00
-B-K	-180	253.3	151.7	427	70	197	-	-	-	-	-	2.70
-PKR	-180	-	140.0	429	60	200	250	187	6.2	4	-	3.30
-B	-180	-	152.0	422	60	196	-	-	-	-	-	2.40
-B-S	-180	-	152.0	376	60	147	-	-	-	-	-	2.20
-X/Y...-B-S	-180	-	Y	427	60	194	-	-	-	-	-	2.35

6. HYBRID TURBOWENT Ø150÷Ø200 - STANDARD



TH x a b - d



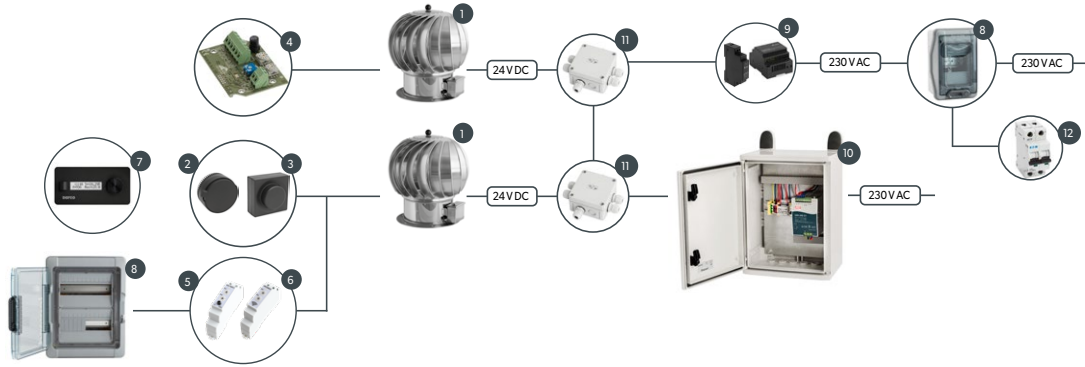
Diameter [mm]	ø150	ø200
Max. efficiency [m³/h]	197	373
Max. underpressure [Pa]	6	8
Rotating speed adjustment range [obr./min]	90 - 300	90 - 270
Voltage [V DC]	24	24
Nominal power* [W]	3.9	6.8
Max. current [mA]	360	360
Ambient temperature [°C]	-20 - +60	
Rotating unit	ball bearings system	

*at maximum efficiency

Destination	W	W	W	W - ventilation ducts
Base material	CH	CH	-	CH - chrome-nickel sheet 1.4301
Turbine material	-	-	ML	ML - chrome-nickel sheet powder coated
	-	CH	-	CH - chrome-nickel sheet 1.4301
	-	-	ML	ML - aluminium powder coated
	AL	-	-	AL - aluminium

Diameter	Sound pressure level A at a distance of 4 m from cowl (for rotation speed n)		Sound power level L (for min. rotation speed acc. to PN-EN ISO 3741:2003) (for rotation speed n)	
	N _{dmin} for n=90	N _{dmax} for n=270	L _{WA} for n=90	L _{WA} for n=270
ø150	8 dB	15 dB	26 dB	33 dB
ø200	7 dB	14 dB	25 dB	35 dB

Connecting diagram

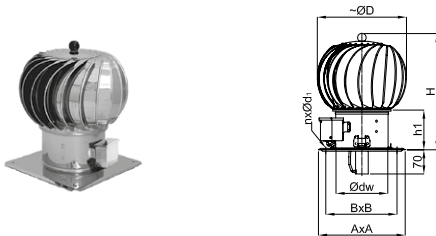


No	Symbol	Name
CONTROLLERS		
1	TH...	Hybrid Turbowent ø150+ø200
2	ERO-32MN-2	ERO Electronic motor speed controller
3	ERO-32MN-1	ERO Electronic motor speed controller
4	ERO-31MW-1	ERO type electronic motor speed controller mounted on the cowl
5	ERO-32MS-0	ERO Electronic motor speed controller - on rail version TS-35
6	ERO-32WS-0	ERO Electronic motor speed controller - WiFi version (wBox application is required)
7	ERO-32AP-0	ERO Electronic motor speed controller - under-surface version
8	ESR-03W-0	Electronic control cabinet ESR - max amount of controllers: 3
	ESR-04W-0	Electronic control cabinet ESR - max amount of controllers: 4
	ESR-06W-0	Electronic control cabinet ESR - max amount of controllers: 6
	ESR-08W-0	Electronic control cabinet ESR - max amount of controllers: 8
8	ESR-12W-0	Electronic control cabinet ESR - max amount of controllers: 12
	ESR-24W-0	Electronic control cabinet ESR - max amount of controllers: 24
	ESR-36W-0	Electronic control cabinet ESR - max amount of controllers: 36
	ESR-54W-0	Electronic control cabinet ESR - max amount of controllers: 54
	ESR-72W-0	Electronic control cabinet ESR - max amount of controllers: 72

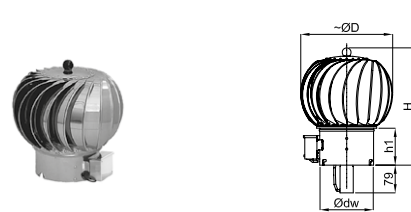
No	Symbol	Name
POWER FEEDERS		
9	EZN-010M-0	Electronic power supply EZN, nominal power 10 W
	EZN-030M-0	Electronic power supply EZN, nominal power 30 W
	EZN-060M-0	Electronic power supply EZN, nominal power 60 W
10	ESZ-060W-0	Electronic power supply cabinet ESZ, connected power 60 W
	ESZ-120W-0	Electronic power supply cabinet ESZ, connected power 120 W
	ESZ-240W-0	Electronic power supply cabinet ESZ, connected power 240 W
	ESZ-480W-0	Electronic power supply cabinet ESZ, connected power 480 W
11	ERZ-06D-0	Electronic power divider ERZ
12	CLS6-B4/1N	Circuit breaker

Versions of bases

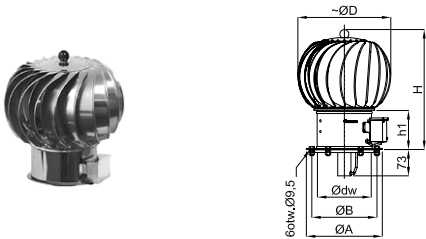
1. Square base -PK



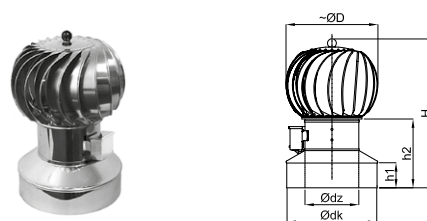
2. Dismountable base -R



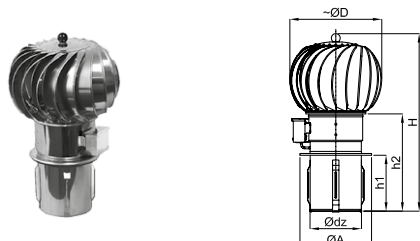
3. Base with collar -BIII



4. Base with insulation closing -B-K



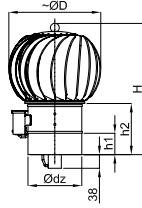
5. Force-in mounting base -PT



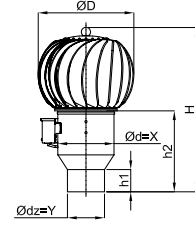
6. Inlet pipe openable -B



7. Inlet pipe not openable -B-S



8. Inlet pipe reduced -X/Y/...-B-S

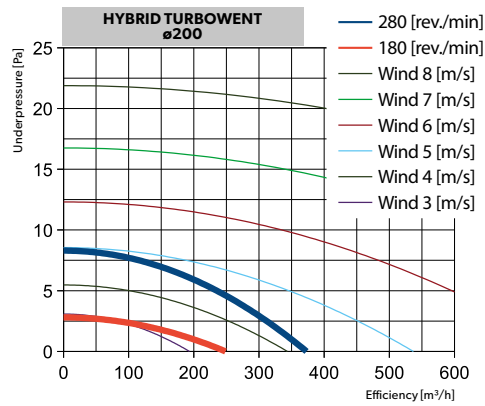
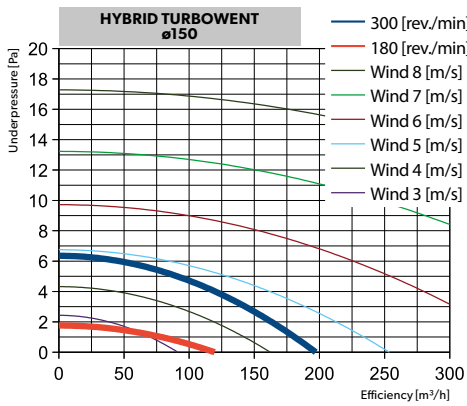


Measurements table for various inlet diameters

Ø 150		Dimensions [mm]									Weight [kg]	
Base version	D	dw	dz	H	h1	h2	A	B	d1	Amount n	CHAL	
-PK	-260	150.4	-	326	100	-	250	208	6.2	4	2.60	
-R	-260	150.4	-	330	105	-	-	-	-	-	2.45	
-BIII	-260	150.1	-	292	90	-	211	182	9.5	6	2.85	
-B-K	-260	253.4	151.7	399	70	194	-	-	-	-	3.20	
-PT	-260	-	144.0	450	157	244	202	158	-	-	2.85	
-B	-260	-	152.0	402	60	197	-	-	-	-	2.60	
-B-S	-260	-	152.0	349	60	144	-	-	-	-	2.40	
-X/Y/...-B-S	-260	-	Y	420	60	194	-	-	-	-	2.55	

Ø 200		Dimensions [mm]									Weight [kg]	
Base version	D	dw	dz	H	h1	h2	A	B	d1	Amount n	CHAL	
-PK	-320	200.0	-	340	100	-	330	284.0	6.2	4	3.00	
-R	-320	199.7	-	355	115	-	-	-	-	-	2.50	
-BIII	-320	199.7	-	362	90	-	261	233	9.5	6	3.00	
-B-K	-320	303.1	201.0	434	70	194	-	-	-	-	3.50	
-PT	-320	-	194.0	494	157	254	252	208	-	-	3.20	
-B	-320	-	201.0	471	60	197	-	-	-	-	2.90	
-B-S	-320	-	201.0	410	60	144	-	-	-	-	2.60	
-X/Y/...-B-S	-320	-	Y	454	60	194	-	-	-	-	2.80	

Airflow charts



7. HYBRID TURBOWENT PLUS Ø200÷Ø500 - STANDARD

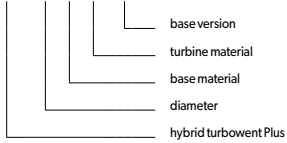


Destination	W	W	W - ventilation ducts
Base material	CH	-	CH - chrome-nickel sheet 1.4301
Turbine material	-	ML	ML - chrome-nickel sheet powder coated
	-	ML	ML - aluminium powder coated
	AL	-	AL - aluminium

Diameter [mm]	ø200	ø250	ø300	ø350	ø400	ø500
Max. efficiency [m³/h]	486	883	1094	1400	1700	3600
Max. underpressure [Pa]	20	25	20	17	13	22
Rotating speed adjustment range [rev/min]	90 - 380	90 - 380	90 - 280	90 - 262	40 - 180	
Voltage [V DC]	24					
Nominal power* [W]	10	17	20	24	14	70
Max.current [A]	2.3					
Ambient temperature [°C]	-30 - +60				-30 - +50	
Rotating unit	ball bearings system					

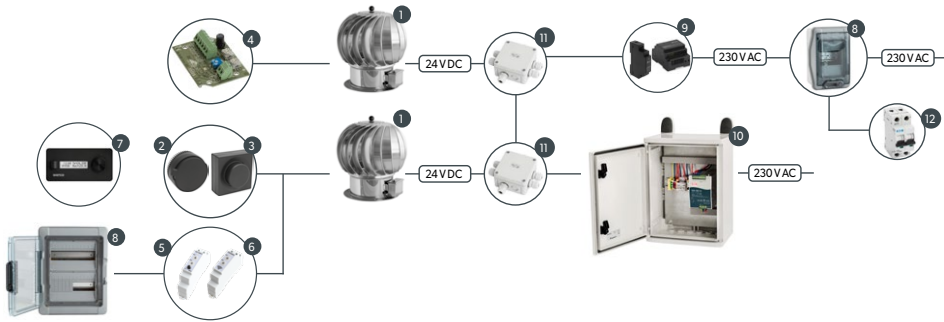
*at maximum efficiency

THP x a b - d



Diameter	Sound pressure level A at a distance of 4 m from cowl (for rotation speed n)		Sound power level LWA (for min. rotation speed acc. to PN-EN ISO 3741:2003)	
	N _{A, min} for n=min	N _{A, max} for n=max	L _{WA} for n=min	L _{WA} for n=max
ø200	16 dB	33 dB	36 dB	53 dB
ø250	18 dB	35 dB	37 dB	55 dB
ø300	24 dB	36 dB	43 dB	56 dB
ø350	25 dB	38 dB	45 dB	58 dB

Connecting diagram

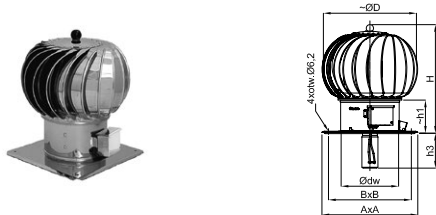


No	Symbol	Name
CONTROLLERS		
1	THP...	Hybrid Turbowent Plus ø200÷ø350
2	ERO-32MN-2	ERO Electronic motor speed controller
3	ERO-32MN-1	ERO Electronic motor speed controller
4	ERO-31MW-2	ERO type electronic motor speed controller mounted on the cowl THP200-350
4b	ERO-31MW-3	ERO type electronic motor speed controller mounted on the cowl THP400-500
5	ERO-32MS-0	ERO Electronic motor speed controller - on rail version TS-35
6	ERO-32WS-0	ERO Electronic motor speed controller - WiFi version (wBox application is required)
7	ERO-32AP-0	ERO Electronic motor speed controller - surface version
8	ESR-03W-0	Electronic control cabinet ESR - max amount of controllers: 3
	ESR-04W-0	Electronic control cabinet ESR - max amount of controllers: 4
	ESR-06W-0	Electronic control cabinet ESR - max amount of controllers: 6
	ESR-08W-0	Electronic control cabinet ESR - max amount of controllers: 8
	ESR-12W-0	Electronic control cabinet ESR - max amount of controllers: 12
	ESR-24W-0	Electronic control cabinet ESR - max amount of controllers: 24
	ESR-36W-0	Electronic control cabinet ESR - max amount of controllers: 36
	ESR-54W-0	Electronic control cabinet ESR - max amount of controllers: 54
	ESR-72W-0	Electronic control cabinet ESR - max amount of controllers: 72

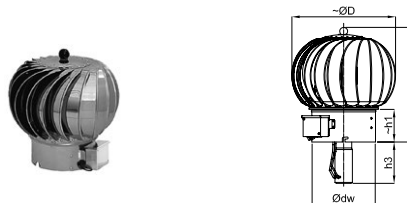
No	Symbol	Name
POWER FEEDERS		
9	EZN-010M-0	Electronic power supply EZN, nominal power 10 W
	EZN-030M-0	Electronic power supply EZN, nominal power 30 W
	EZN-060M-0	Electronic power supply EZN, nominal power 60 W
10	ESZ-060W-0	Electronic power supply cabinet ESZ, connected power 60 W
	ESZ-120W-0	Electronic power supply cabinet ESZ, connected power 120 W
	ESZ-240W-0	Electronic power supply cabinet ESZ, connected power 240 W
	ESZ-480W-0	Electronic power supply cabinet ESZ, connected power 480 W
11	ERZ-06D-0	Electronic power divider ERZ
12	CLS6-B4/IN	Circuit breaker

Versions of bases

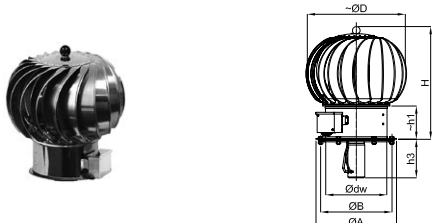
1. Square base -PK



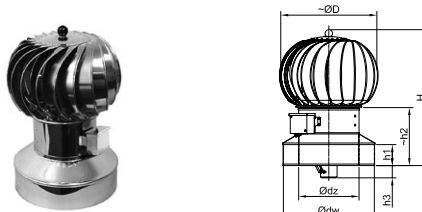
2. Dismountable base -R



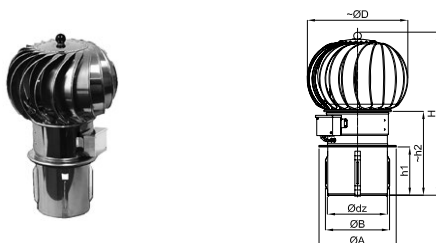
3. Base with collar -BIII



4. Base with insulation closing -B-K



5. Force-in mounting base -PT



6. Inlet pipe openable -B



7. Inlet pipe not openable -B-S



8. Inlet pipe reduced -X/Y/...-B-S



Measurements table for various inlet diameters

Base version	Dimensions [mm]											Weight [kg]	
	D	dw	dz	H	h1	h2	h3	A	B	d1	Amount n	CHAL	
-PK	~320	197.6	-	371	112	-	123	330	284	6.2	4	2.90	
-R	~320	199.7	-	363	103	-	131	-	-	-	-	2.40	
-BIII	~320	199.4	-	368	108	-	126	261	233	9.5	6	2.90	
-B-K	~320	303.1	199.4	453	70	193	41	-	-	-	-	3.40	
-PT	~320	-	194.0	533	157	254	-	252	208	-	-	3.10	
-B	~320	-	201.0	456	57	196	39	-	-	-	-	2.80	
-B-S	~320	-	201.0	403	57	143	91	-	-	-	-	2.50	
-X/Y/...-B-S	~320	-	Y	478	60	218	-	-	-	-	-	2.70	

Base version	Dimensions [mm]											Weight [kg]	
	D	dw	dz	H	h1	h2	h3	A	B	d1	Amount n	CHAL	
-PK	~380	248.3	-	408	112	-	122	380	330	6.1	4	3.50	
-R	~380	252.3	-	399	106	-	130	-	-	-	-	2.90	
-BIII	~380	250.7	-	404	111	-	125	311	283	9.5	8	4.35	
-B-K	~380	352.4	252.3	489	70	196	41	-	-	-	-	4.10	
-PT	~380	-	244.0	533	157	264	-	302	259	-	-	3.70	
-B	~380	-	252.3	512	57	219	17	-	-	-	-	3.40	
-B-S	~380	-	252.3	439	60	146	90	-	-	-	-	3.10	
-X/Y/...-B-S	~380	-	Y	514	60	221	-	-	-	-	-	3.40	

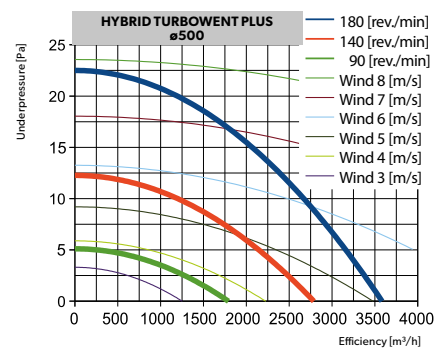
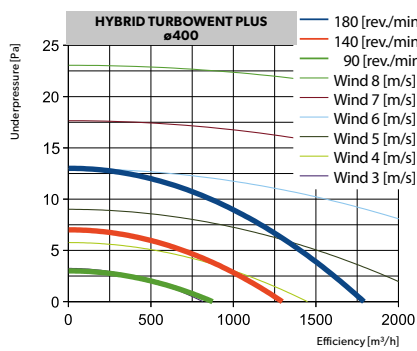
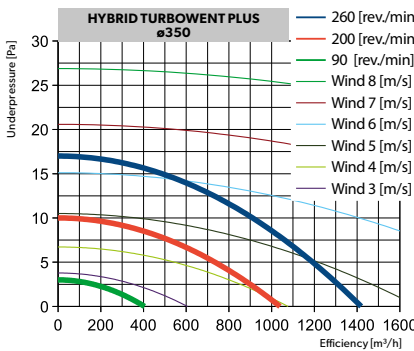
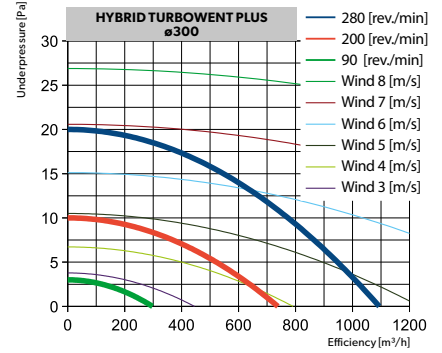
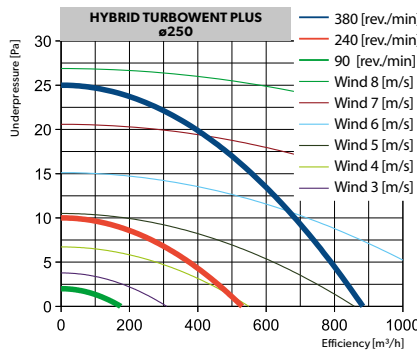
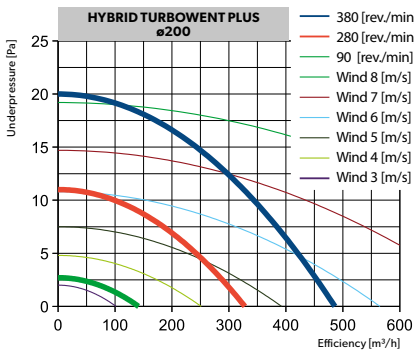
ø 300		Dimensions [mm]										Weight [kg]
Base version	D	dw	dz	H	h1	h2	h3	A	B	d1	Amount n	CHAL
-PK	~460	297.6	-	460	121	-	116	430	380	6.2	4	4.15
-R	~460	300.0	-	446	130	-	130	-	-	-	-	3.00
-BIII	~460	300.0	-	451	112	-	125	361	337	9.5	8	3.95
-B-K	~460	403.6	301.6	536	70	197	41	-	-	-	-	4.40
-PT	~460	-	294.0	606	157	244	-	352	308	-	-	4.10
-B	~460	-	301.5	559	57	220	18	-	-	-	-	3.60
-B-S	~460	-	301.6	486	60	147	90	-	-	-	-	3.20
-X/Y...-B-S	~460	-	Y	561	60	222	-	-	-	-	-	3.50

ø 350		Dimensions [mm]										Weight [kg]
Base version	D	dw	dz	H	h1	h2	h3	A	B	d1	Amount n	CHAL
-PK	~490	346.9	-	447	114	-	128	500	460	6.2	4	4.75
-R	~490	349.3	-	436	102	-	140	-	-	-	-	3.10
-BIII	~490	346.9	-	441	107	-	135	411	387	9.5	8	4.15
-B-K	~490	453.0	350.9	526	70	192	50	-	-	-	-	4.70
-PT	~490	-	344.0	616	157	244	-	402	358	-	-	4.70
-B-S	~490	-	350.9	476	60	142	100	-	-	-	-	3.35
-X/Y...-B-S	~490	-	Y	551	60	217	-	-	-	-	-	3.70

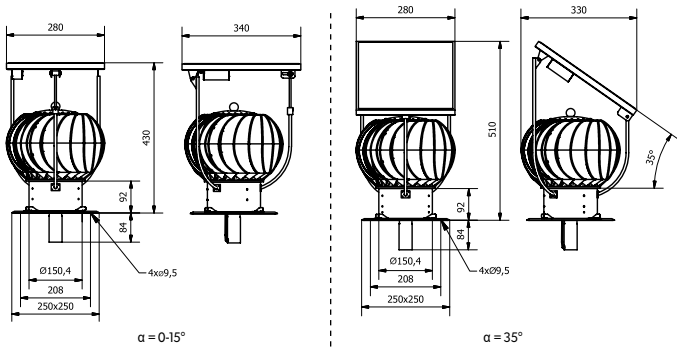
ø 400		Dimensions [mm]										Weight [kg]
Base version	D	dw	dz	H	h1	h2	h3	A	B	d1	Amount n	CHAL
-BIII	~610	398.0	-	657	165	-	131	464	437	9.5	8	8.90
-B-S	~610	-	401.0	687	60	195	101	-	-	-	-	7.80

ø 500		Dimensions [mm]										Weight [kg]
Base version	D	dw	dz	H	h1	h2	h3	A	B	d1	Amount n	CHAL
-BIII	~740	499.0	-	765	165	-	131	564	538	9.5	8	12.20
-B-S	~740	-	501.0	795	60	200	101	-	-	-	-	10.70

Airflow charts

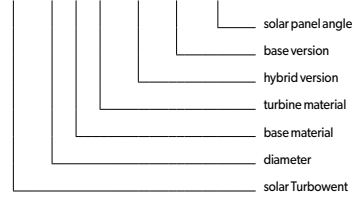


8. HYBRID SOLAR TURBOWENT



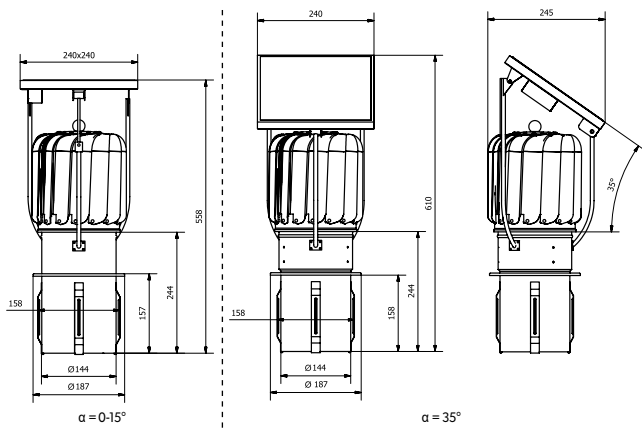
Diameter [mm]	ø150
Solar panel power [W]	10
Maximal rotating speed of cowl powered by energy from solar panel [rev/min]	360
Efficiency by maximal rotating speed [m³/h]	230
Power from panel needed to start the motor [W]	1.13
Minimal power required to rotate the cowl [W]	0.7
Regulation of the panel position in relations to axis of the turbine [°]	360

TUS x a b - H - d / α



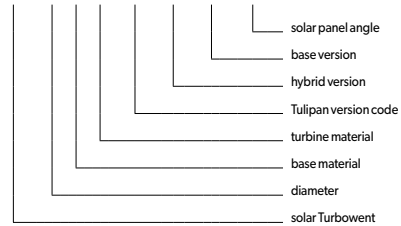
Destination	W	W - ventilation ducts
Base material	CH	CH - chrome-nickel sheet 1.4301
Turbine material	AL	AL - aluminium
Solar panel angle	0-15	0-15° - adjustable
	35	35° - constant (version suitable for most European countries)

9. HYBRID SOLAR TURBOWENT TULIPAN



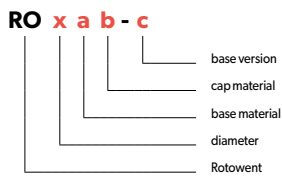
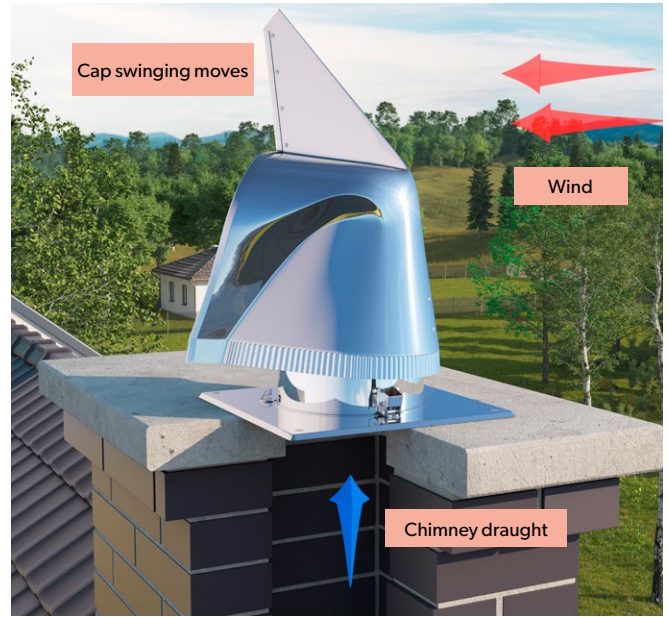
Diameter [mm]	ø150
Solar panel power [W]	5
Maximal rotating speed of cowl powered by energy from solar panel [rev/min]	600
Efficiency by maximal rotating speed [m³/h]	246
Power from panel needed to start the motor [W]	1.13
Minimal power required to rotate the cowl [W]	0.7
Regulation of the panel position in relations to axis of the turbine [°]	360

TUS x a b - T - H - d / α



Destination	W	W - ventilation ducts
Base material	CH	CH - chrome-nickel sheet 1.4301
Turbine material	AL	AL - aluminium
Solar panel angle	0-15	0-15° - adjustable
	35	35° - constant (version suitable for most European countries)

10. ROTOWENT Ø150÷Ø400



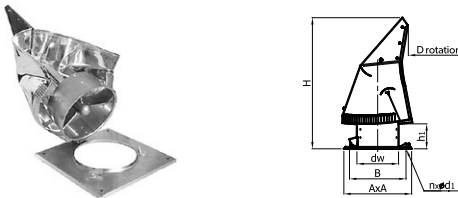
Diameter [mm]	ø150	ø200	ø250	ø300	ø350	ø400
Efficiency [m³/h] at wind speed 4 m/s	137	247	401	591	813	1236
Underpressure [Pa] (at wind speed 4 m/s)	3.35	4.1	4.3	4.8	5.3	8.08
Max. working temperature [°C]	500					

Destination	S	S - gas and oil exhaust ducts
	-	D - smoke ducts
Base material	CH	CH - chrome-nickel sheet 1.4301
	-	-
Cap material	CH	CH - chrome-nickel sheet 1.4301
	-	*) - chrome-nickel sheet 1.4404

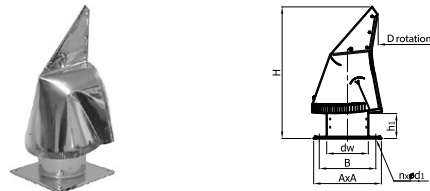
Warning!
Cowl may not be mounted on ducts exhausting fumes from coal burning stoves.

Versions of bases

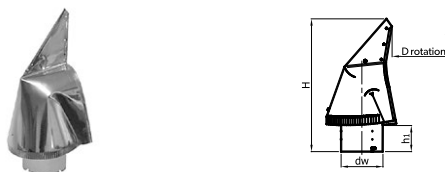
1. Square base openable ø150, ø200, ø250 -PK



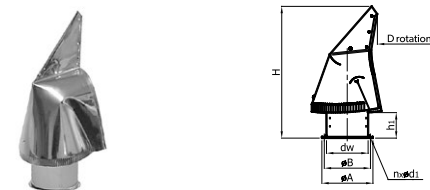
1a. Square base not openable ø300÷ø400 -PK



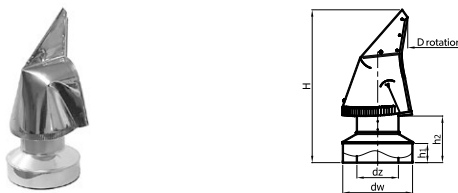
2. Dismountable base -R



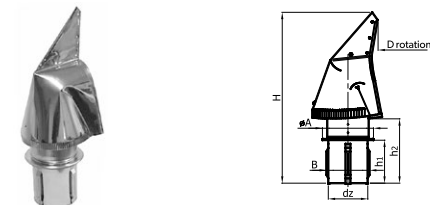
3. Base with collar -BIII



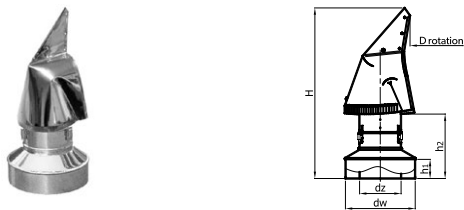
4. Base with insulation closing -B-K



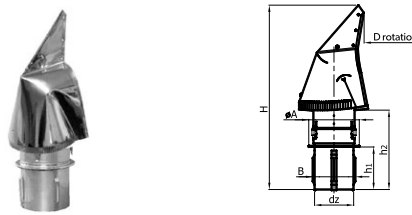
5. Force-in mounting base -PT



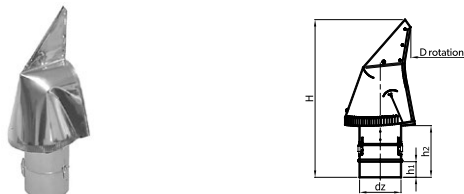
6. Base with insulation closing openable -B-K-U



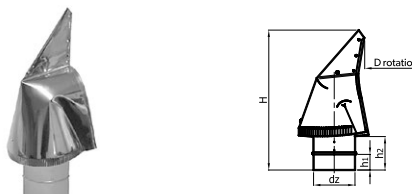
7. Force-in mounting base - openable ø150÷ø300 -PT-U



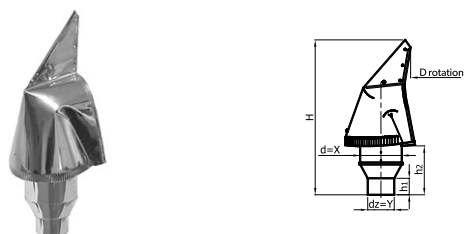
8. Inlet pipe openable ø150÷ø300 -B



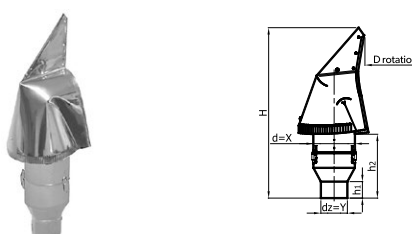
9. Inlet pipe not openable -B-S



10. Inlet pipe reduced -X/Y...-B-S



11. Inlet pipe reduced openable ø150÷ø300 -X/Y...-B



Measurements table for various inlet

ø 150	Dimensions [mm]										Weight [kg]		
	Base version	D	dw	dz	H	h1	h2	A	B	d1	Amount n	OCOC	OCCH
-PK	-325	148.0	-	465	54	-	250	208	6.2	4	1.75	1.80	1.80
-R	-325	150.5	-	500	89	-	-	-	-	-	1.40	1.45	1.45
-BIII	-325	150.5	-	460	50	-	211	182	9.5	6	1.80	1.85	1.85
-B-K	-325	253.3	151.8	580	70	170	-	-	-	-	2.30	2.35	2.35
-PT	-325	-	144.0	615	157	205	202	158	-	-	2.10	2.15	2.15
-B-K-U	-325	253.3	151.8	630	70	220	-	-	-	-	2.60	2.65	2.65
-PT-U	-325	-	144.0	665	157	255	202	158	-	-	2.30	2.35	2.35
-B	-325	-	152.0	585	60	174	-	-	-	-	1.75	1.80	1.80
-B-S	-325	-	152.0	531	60	120	-	-	-	-	1.55	1.60	1.60
-X/Y...-B-S	-325	-	Y	576	60	165	-	-	-	-	1.75	1.80	1.80
-X/Y...-B	-325	-	Y	675	60	264	-	-	-	-	2.10	2.15	2.15

ø 200	Dimensions [mm]										Weight [kg]		
	Base version	D	dw	dz	H	h1	h2	A	B	d1	Amount n	OCOC	OCCH
-PK	-395	198.0	-	500	55	-	330	284	6.2	4	2.50	2.60	2.60
-R	-395	200.0	-	535	90	-	-	-	-	-	1.85	1.95	1.95
-BIII	-395	199.0	-	495	50	-	261	233	9.5	6	2.35	2.45	2.45
-B-K	-395	303.1	201.1	615	70	170	-	-	-	-	2.90	3.00	3.00
-PT	-395	-	194.0	660	167	215	252	208	-	-	2.70	2.80	2.80
-B-K-U	-395	303.1	201.1	665	70	220	-	-	-	-	3.25	3.35	3.35
-PT-U	-395	-	194.0	710	167	265	252	208	-	-	3.05	3.15	3.15
-B	-395	-	201.1	619	60	174	-	-	-	-	2.30	2.40	2.40
-B-S	-395	-	201.1	565	60	120	-	-	-	-	2.00	2.10	2.10
-X/Y...-B-S	-395	-	Y	610	60	165	-	-	-	-	2.25	2.35	2.35
-X/Y...-B	-395	-	Y	709	60	264	-	-	-	-	2.75	2.85	2.85

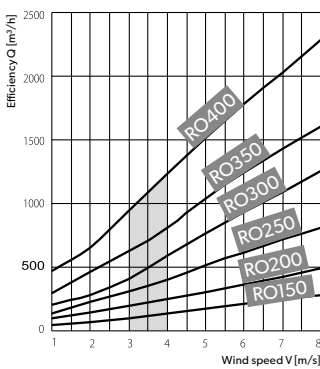
Base version	Dimensions [mm]										Weight [kg]		
	D	dw	dz	H	h1	h2	A	B	d1	Amount n	OCOC	OCCH	CHCH
-PK	~455	245.0	-	628	56	-	380	330	6.2	4	3.30	3.50	3.50
-R	~455	250.3	-	652	80	-	-	-	-	-	2.35	2.55	2.55
-BIII	~455	250.8	-	622	50	-	311	283	9.5	8	3.05	3.25	3.25
-B-K	~455	352.4	252.3	732	70	160	-	-	-	-	3.70	3.90	3.90
-PT	~455	-	244.0	787	177	215	302	259	-	-	3.55	3.75	3.75
-B-K-U	~455	352.4	252.3	782	70	210	-	-	-	-	4.15	4.35	4.35
-PT-U	~455	-	244.0	837	177	355	302	259	-	-	4.00	4.20	4.20
-B	~455	-	252.3	776	60	204	-	-	-	-	3.20	3.40	3.40
-B-S	~455	-	252.3	682	60	110	-	-	-	-	2.60	2.80	2.80
-X/Y...-B-S	~455	-	Y	647	60	165	-	-	-	-	2.95	3.15	3.15
-X/Y...-B	~455	-	Y	866	60	294	-	-	-	-	3.80	4.00	4.00

Base version	Dimensions [mm]										Weight [kg]		
	D	dw	dz	H	h1	h2	A	B	d1	Amount n	OCOC	OCCH	CHCH
-PK	~550	293.0	-	750	87	-	470	420	6.2	4	6.30	6.60	5.40
-R	~550	300.0	-	760	97	-	-	-	-	-	4.60	4.90	4.30
-BIII	~550	298.7	-	766	103	-	361	337	9.5	8	4.90	5.20	4.80
-B-K	~550	403.7	301.7	820	70	157	-	-	-	-	5.50	5.80	5.00
-PT	~550	-	294	925	177	217	352	308	-	-	5.30	5.60	4.80
-B-K-U	~550	403.7	301.7	870	70	207	-	-	-	-	6.00	6.30	5.50
-PT-U	~550	-	294	975	177	262	352	308	-	-	5.80	6.10	5.30
-B	~550	-	301.7	864	60	201	-	-	-	-	5.20	5.50	4.90
-B-S	~550	-	301.7	770	60	107	-	-	-	-	4.50	4.80	4.20
-X/Y...-B-S	~550	-	Y	870	60	207	-	-	-	-	5.00	5.30	4.55

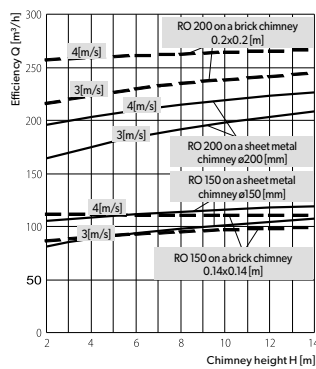
Base version	Dimensions [mm]										Weight [kg]		
	D	dw	dz	H	h1	h2	A	B	d1	Amount n	OCOC	OCCH	CHCH
-PK	~630	343.0	-	843	88	-	500	450	8.5	4	7.40	7.70	6.30
-R	~630	349.3	-	853	98	-	-	-	-	-	5.40	5.70	4.90
-BIII	~630	348.0	-	869	104	-	411	387	9.5	8	5.70	5.00	5.60
-B-K	~630	452.0	351	913	70	158	-	-	-	-	6.40	6.70	5.80
-PT	~630	-	-	-	-	-	402	-	-	-	-	-	-
-B	~630	-	-	-	-	-	-	-	-	-	-	-	-
-B-S	~630	-	351	863	60	107	-	-	-	-	5.25	5.55	4.90
-X/Y...-B-S	~630	-	Y	963	60	207	-	-	-	-	5.90	6.20	5.35

Base version	Dimensions [mm]										Weight [kg]		
	D	dw	dz	H	h1	h2	A	B	d1	Amount n	OCOC	OCCH	CHCH
-PK	~670	393.0	-	930	90	-	600	550	8.5	4	11.85	12.40	10.65
-R	~670	400.2	-	960	120	-	-	-	-	-	8.20	8.75	7.90
-BIII	~670	398.3	-	946	106	-	461	438	9.5	8	8.70	9.25	8.55
-B-K	~670	503.9	402.1	1000	70	160	-	-	-	-	9.95	10.50	9.30
-B-S	~670	-	402.1	950	60	110	-	-	-	-	8.40	8.95	8.00
-X/Y...-B-S	~670	-	Y	1050	60	210	-	-	-	-	9.40	9.96	8.75

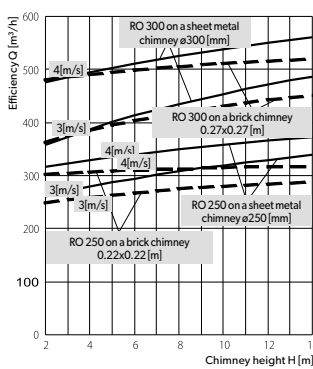
Airflow charts



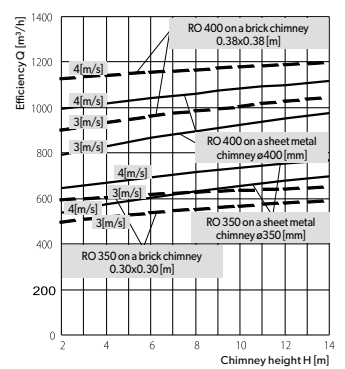
Efficiency chart for Turbowents (various diameters) in a function of wind speed, not including the influence of chimney height. (1[m/s]=3.6[km/h])



Efficiency chart for ROTOWENTS ø150 and ø200 in a function of chimney height on a brick or sheet metal chimney (for two wind speeds: 3 and 4 [m/s]).

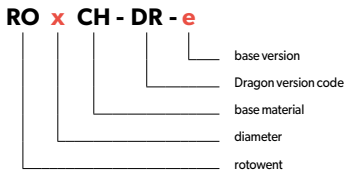
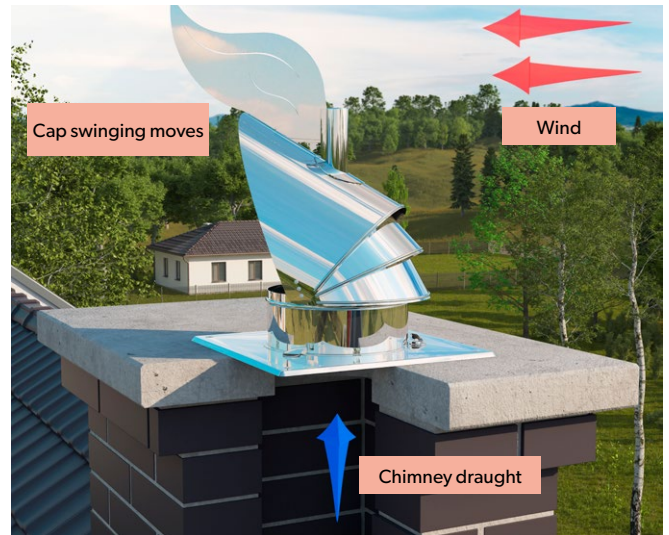


Efficiency chart for ROTOWENTS ø250 and ø300 in a function of chimney height on a brick or sheet metal chimney (for two wind speeds: 3 and 4 [m/s]).



Efficiency chart for ROTOWENTS ø350 and ø400 in a function of chimney height on a brick or sheet metal chimney (for two wind speeds: 3 and 4 [m/s]).

11. ROTOWENT DRAGON Ø150÷Ø300



Warning!

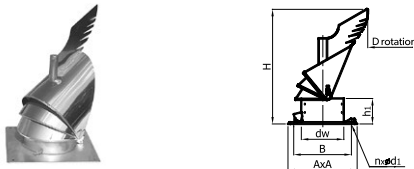
Cowl may not be mounted on ducts exhausting fumes from coal burning stoves.

Destination	S	S - gas and oil exhaust ducts
	D	D - smoke ducts
Material	CH	Base: chrome-nickel sheet 1.4301 Cap: chrome-nickel sheet 1.4404
	ML	Base: chrome-nickel sheet 1.4301 powder coated Cap: chrome-nickel sheet 1.4404 powder coated

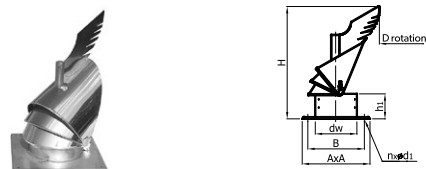
Diameter [mm]	ø150	ø180	ø200	ø250	ø300
Efficiency [m³/h] at wind speed 4 m/s	172	217	247	490	638
Underpressure [Pa] (at wind speed 4 m/s)	6.6	5.7	4.3	6.3	5.85
Max. working temperature [°C]	500				
Rotating unit	ball bearings system				

Versions of bases

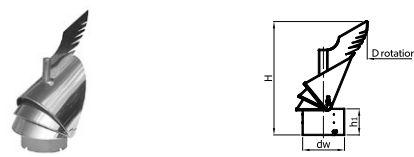
1. Square base openable ø150÷ø250 -PK



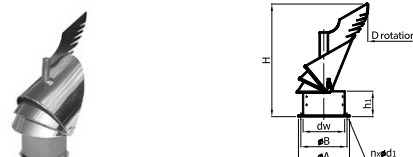
1a. Square base not openable ø300 -PK



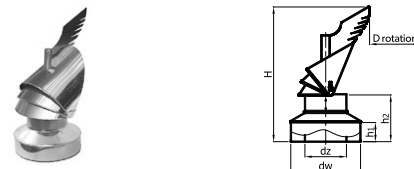
2. Dismountable base -R



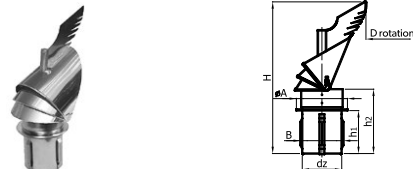
3. Base with collar -BIII



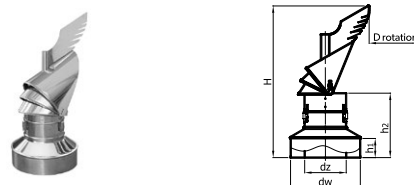
4. Base with insulation closing -B-K



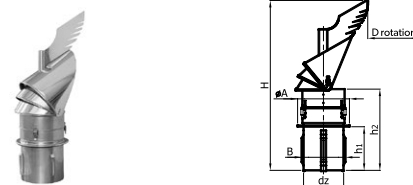
5. Force-in mounting base ø150÷ø300 -PT



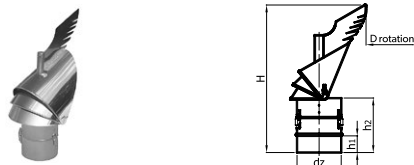
6. Base with insulation closing openable -B-K-U



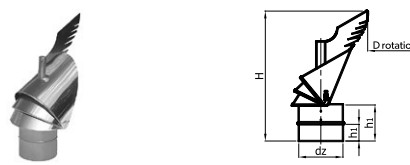
7. Force-in mounting base - openable ø150÷ø300 -PT-U



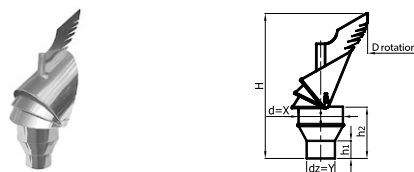
8. Inlet pipe openable $\varnothing 150 \div \varnothing 300$ -B



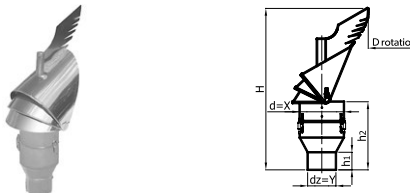
9. Inlet pipe not openable -B-S



10. Inlet pipe reduced -X/Y-...-B-S



11. Inlet pipe reduced openable $\varnothing 150, \varnothing 300$ -X/Y-...-B



Measurements table for various inlet diameters

$\varnothing 150$											
Base version	D	dw	dz	H	h1	h2	A	B	d1	Amount n	CH
-PK	~335	148.0	-	405	85	-	250	208	6.2	4	1.90
-R	~335	150.5	-	440	120	-	-	-	-	-	1.55
-Bill	~335	150.5	-	400	80	-	211	182	9.5	6	1.95
-B-K	~335	253.3	151.8	520	70	200	-	-	-	-	2.45
-PT	~335	-	144.0	555	157	235	202	158	-	-	2.25
-B-K-U	~335	253.3	151.8	570	70	250	-	-	-	-	2.75
-PT-U	~335	-	144.0	605	157	285	202	158	-	-	2.45
-B	~335	-	152.8	530	60	205	-	-	-	-	1.90
-B-S	~335	-	152.8	470	60	150	-	-	-	-	1.70
-X/Y-...-B-S	~335	-	Y	515	60	195	-	-	-	-	1.90
-X/Y-...-B	~335	-	Y	620	60	295	-	-	-	-	2.25

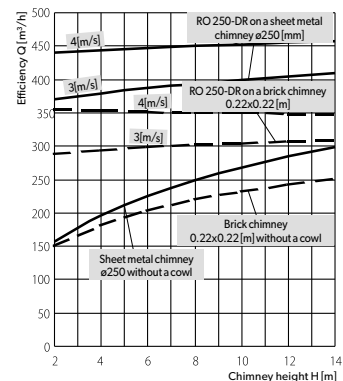
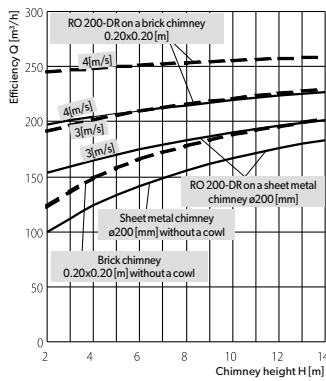
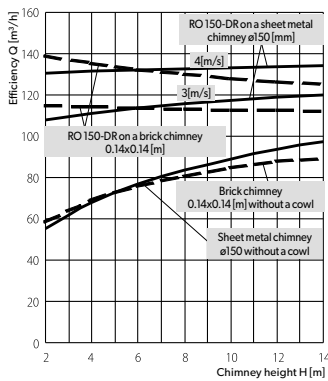
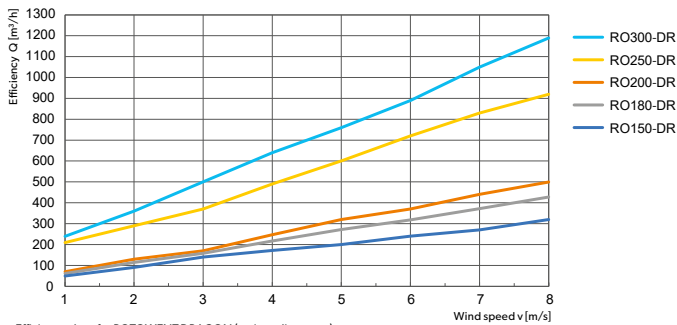
$\varnothing 180$											
Base version	D	dw	dz	H	h1	h2	A	B	d1	Amount n	CH
-PK	~431	180.4	-	481	84.9	-	300	250	6.2	4	2.20
-R	~431	182.1	-	496	100	-	-	-	-	-	1.75
-Bill	~431	182.1	-	496	100	-	237	210	9.5	6	2.20
-B-K	~431	282	182.1	597	70	200	-	-	-	-	2.80
-PT	~431	-	174	647	172	250	233	189	-	-	2.50
-PT/STAB	~431	-	163	647	165	250	220	178	-	-	2.50
-B-K-U	~431	282	182.1	647	70	250	-	-	-	-	3.10
-PT-U	~431	-	174	720	172	323.1	233	189	-	-	3.00
-PT-U/STAB	~431	-	163	749	165	352	220	178	-	-	3.00
-B	~431	-	182.1	600	60	203	-	-	-	-	2.30
-B-S	~431	-	182.1	546	60	150	-	-	-	-	1.95
-X/Y-...-B-S	~431	-	Y	600	60	195	-	-	-	-	2.20
-X/Y-...-B	~431	-	Y	690	60	295	-	-	-	-	2.60

$\varnothing 200$											
Base version	D	dw	dz	H	h1	h2	A	B	d1	Amount n	CH
-PK	~440	198.0	-	520	85	-	330	284	6.2	4	2.70
-R	~440	200.0	-	555	120	-	-	-	-	-	2.05
-Bill	~440	199.0	-	515	80	-	261	233	9.5	6	2.55
-B-K	~440	303.1	201.1	635	70	200	-	-	-	-	3.10
-PT	~440	-	194.0	680	167	245	252	208	-	-	2.90
-PT/STAB	~440	-	183	680	165	250	240	198	-	-	2.90
-B-K-U	~440	303.1	201.1	685	70	250	-	-	-	-	3.45
-PT-U	~440	-	194.0	730	167	295	252	208	-	-	3.25
-PT-U/STAB	~440	-	183	794	165	352	240	198	-	-	3.25
-B	~440	-	201.1	635	60	205	-	-	-	-	2.50
-B-S	~440	-	201.1	585	60	150	-	-	-	-	2.20
-X/Y-...-B-S	~440	-	Y	630	60	195	-	-	-	-	2.45
-X/Y-...-B	~440	-	Y	725	60	295	-	-	-	-	2.95

ø 250		Dimensions [mm]									Weight [kg]
Base version	D	dw	dz	H	h1	h2	A	B	d1	Amount n	CH
-PK	~560	245.0	-	620	80	-	380	330	6.2	4	3.60
-R	~560	250.3	-	645	120	-	-	-	-	-	2.65
-BIII	~560	250.8	-	615	90	-	311	283	9.5	8	3.35
-B-K	~560	352.4	252.3	725	70	200	-	-	-	-	4.00
-PT	~560	-	244.0	780	177	255	302	259	-	-	3.85
-B-K-U	~560	352.4	252.3	775	70	250	-	-	-	-	4.45
-PT-U	~560	-	244.0	830	177	305	302	259	-	-	4.30
-B	~560	-	252.3	735	60	245	-	-	-	-	3.50
-B-S	~560	-	252.3	675	60	150	-	-	-	-	2.90
-X/Y...-B-S	~560	-	Y	730	60	205	-	-	-	-	3.25
-X/Y...-B	~560	-	Y	825	60	315	-	-	-	-	4.10

ø 300		Dimensions [mm]									Weight [kg]
Base version	D	dw	dz	H	h1	h2	A	B	d1	Amount n	CH
-PK	~660	293.0	-	730	80	-	470	420	6.2	4	5.60
-R	~660	300.0	-	740	140	-	-	-	-	-	4.50
-BIII	~660	298.7	-	745	145	-	361	337	9.5	8	5.00
-B-K	~660	403.7	301.7	800	70	200	-	-	-	-	5.20
-PT	~660	-	294	855	177	255	352	308	-	-	5.00
-B-K-U	~660	403.7	301.7	850	70	250	-	-	-	-	5.70
-PT-U	~660	-	294	905	177	305	352	308	-	-	5.50
-B	~660	-	301.7	825	60	225	-	-	-	-	4.95
-B-S	~660	-	301.7	750	60	150	-	-	-	-	4.40
-X/Y...-B-S	~660	-	Y	850	60	250	-	-	-	-	4.75
-X/Y...-B	~660	-	Y	900	60	300	-	-	-	-	5.25

Airflow charts

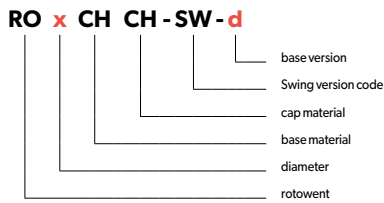
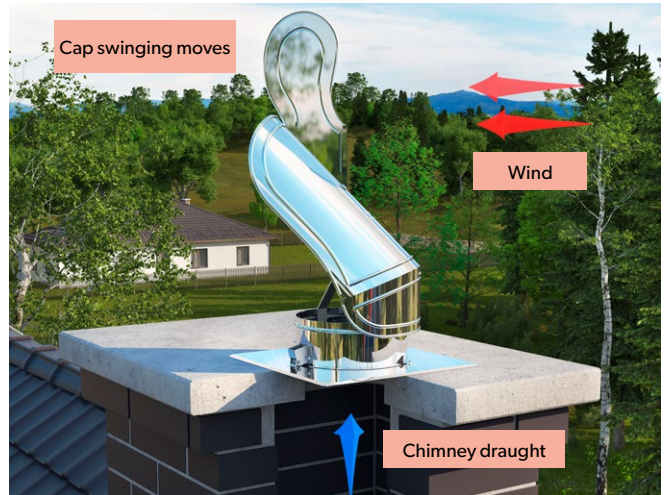


Efficiency chart for ROTOWENT DRAGON ø150 in a function of chimney height on a brick or sheet metal chimney (for two wind speeds: 3 and 4 [m/s]).

Efficiency chart for ROTOWENT DRAGON ø200 in a function of chimney height on a brick or sheet metal chimney (for two wind speeds: 3 and 4 [m/s]).

Efficiency chart for ROTOWENT DRAGON ø250 in a function of chimney height on a brick or sheet metal chimney (for two wind speeds: 3 and 4 [m/s]).

12. ROTOWENT SWING Ø150÷Ø200

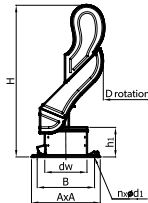


Warning!
Cowl may not be mounted on ducts exhausting fumes from coal burning stoves.

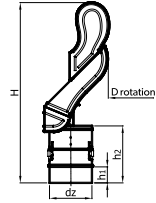
Destination	S	S - gas and oil exhaust ducts		
	D	D - smoke ducts		
Base material	CH	CH - chrome-nickel sheet 1.4301		
Cap material	CH	CH - chrome-nickel sheet 1.4301		
Diameter [mm]	ø150	ø180	ø200	
Efficiency [m³/h] at wind speed 4 m/s	152	220	270	
Underpressure [Pa] at wind speed 4 m/s			6.35	
Max. working temperature [°C]	400			
Rotating unit	slide bearings			

Versions of base

1. Square base openable -PK



2. Inlet pipe openable -B



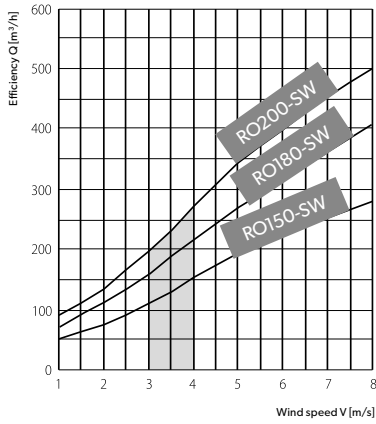
Measurements table for various inlet diameters

Ø 150		Dimensions [mm]									Weight [kg]
Base version	D	dw	dz	H	h1	h2	A	B	d1	Amount n	CH
-PK	310	148.0	-	525	85	-	250	208	6.2	4	3.30
-B	310	-	151.8	645	60	205	-	-	-	-	3.10

Ø 180		Dimensions [mm]									Weight [kg]
Base version	D	dw	dz	H	h1	h2	A	B	d1	Amount n	CH
-PK	340	178.0	-	590	85	-	300	250	6.2	4	3.70
-B	340	-	182	710	60	205	-	-	-	-	3.35

Ø 200		Dimensions [mm]									Weight [kg]
Base version	D	dw	dz	H	h1	h2	A	B	d1	Amount n	CH
-PK	380	198.0	-	620	85	-	330	284	6.2	4	4.00
-B	380	-	201.1	740	60	205	-	-	-	-	3.50

Airflow charts

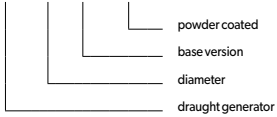


Efficiency chart for ROTOWENT DRAGON (various diameters) in a function of wind speed, not including the influence of chimney height. (1[m/s]=3.6[km/h]).

13. DRAUGHT GENERATOR GCK



GCK x - d - ML



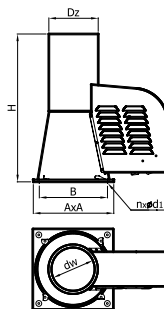
Destination	S	S - gas and oil exhaust ducts
	D	D* - smoke ducts
Material	CH	CH - chrome-nickel sheet 1.4301
	ML	ML - chrome-nickel sheet powder coated

*) CAUTION - only smoke ducts from wood burning devices

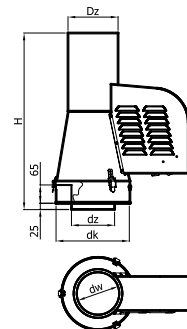
Diameter [mm]	ø150	ø200
Max. efficiency [m³/h]	300	450
Max. underpressure [Pa]	42	29
Single-phase voltage [V/Hz]	230/50	
Power [W]	94	141
Protection level	IP34	
Max. fumes temperature [°C]	400	
Ambient temperature [°C]	-30 +65	

Versions of bases

1. Square base -PK



2. Base with insulation closing -B-K

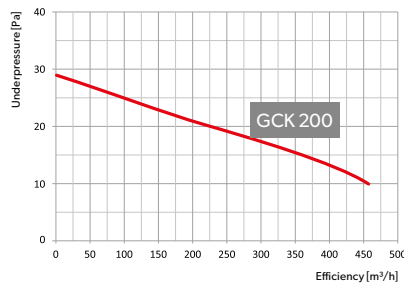
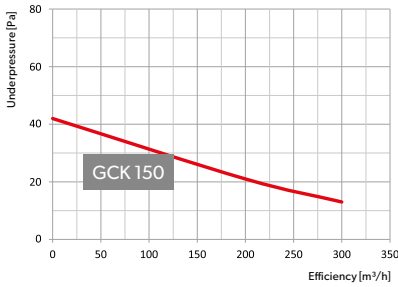


Measurements table for various inlet diameters

ø 150	Dimensions [mm]									Weight [kg]
	Base version	dw	dz	H	dk	A	B	Dz	d1	
-PK	147.0	-	518	-	282	240	173	6.2	4	7.80
-B-K	-	149	607	253.3	-	-	173	-	-	8.00

ø 200	Dimensions [mm]									Weight [kg]
	Base version	dw	dz	H	dk	A	B	Dz	d1	
-PK	197.0	-	598	-	342	290	230	6.2	4	10.00
-B-K	-	199	686	303	-	-	230	-	-	10.40

Airflow charts



14. GCK CAP

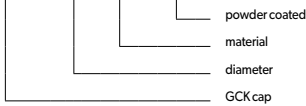


Basic function of the diffuser cap is protection from rain and snow. However, special design does not only minimize fumes exhaust obstruction, but also significantly increases chimney draught when wind blows.

Basic function of the diffuser cap is protection from rain and snow. However, special design does not only minimize fumes exhaust obstruction, but also significantly increases chimney draught when wind blows.

Mounting on the GCK is made using a special clamp (supplied with the cap)

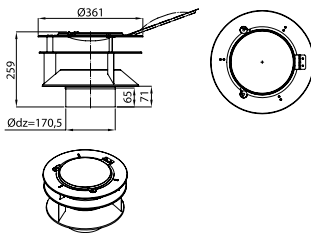
DA-GCK x - CH - ML



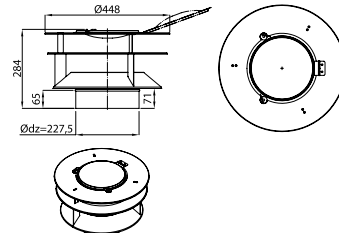
Destination	S	S - gas and oil exhaust ducts
	D	D ⁺ - smoke ducts
Material	CH	CH - chrome-nickel sheet 1.4301
	ML	ML - chrome-nickel sheet powder coated

*) CAUTION - only smoke ducts from wood burning devices

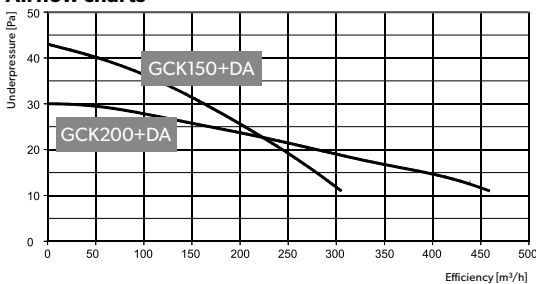
1. GCK cap mounted on the GCK - ø150



2. GCK cap mounted on the GCK - ø200



Airflow charts



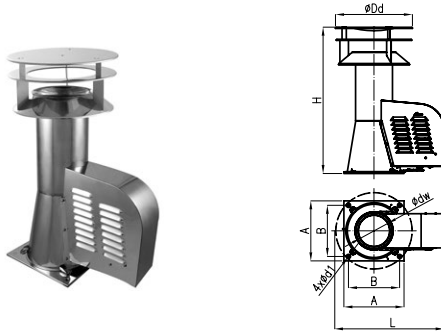
Measurements table for various inlet diameters

ø 150		Dimensions [mm]									Weight [kg]	
Base version	Dd	H	dz	dk	dw	A	B	L	dI	Amount n	CH	
-PK	361	686	-	-	147	282	240	510	6.2	4	10.40	
-B-K	361	770	149	253.3	-	-	-	510	-	-	10.60	

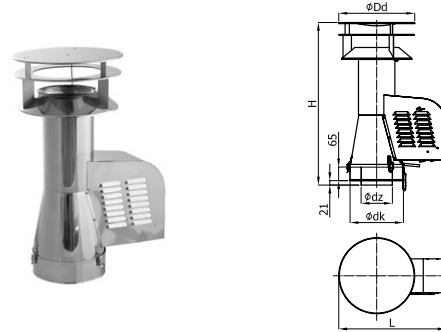
ø 200		Dimensions [mm]									Weight [kg]	
Base version	Dd	H	dz	dk	dw	A	B	L	dI	Amount n	CH	
-PK	448	790	-	-	197	342	290	579	6.2	4	13.00	
-B-K	448	876	199	303	-	-	-	579	-	-	13.40	

Versions of bases

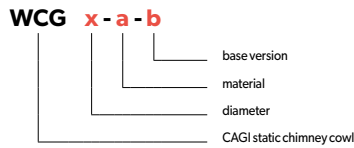
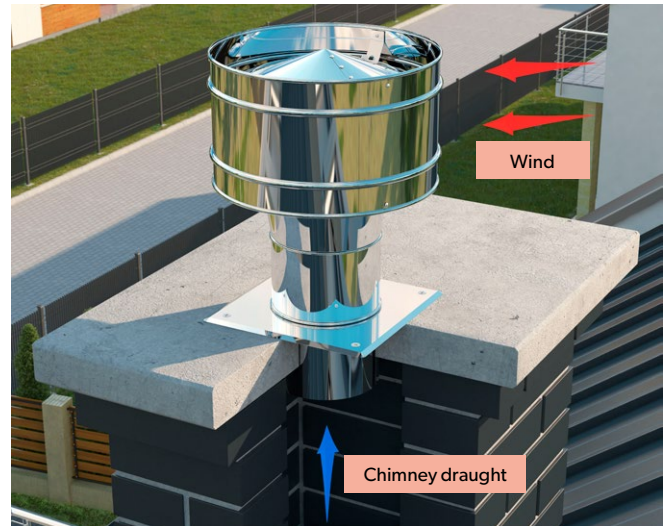
1. Square base -PK



2. Inlet pipe with insulation closing -B-K



15. CAGI - STATIC CHIMNEY COWL



Openable for diameters from 100 to 160

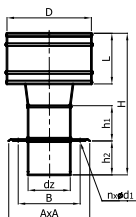
Destination	W	W	W - ventilation ducts
	S	-	S - gas and oil exhaust ducts
Material	CH	-	CH - chrome-nickel sheet 1.4301
	-	OC	OC - galvanised steel sheet

Diameter [mm]	ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø250	ø300	ø315	ø350	ø400
Efficiency [m³/h] at wind speed 4 m/s]	41	61	74	87	95	103	119	136	171	206	242	392	543	683	823	965
Max. working temperature [°C]	180															

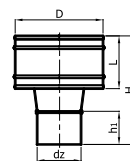
Diameter		ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø250	ø300	ø315	ø350	ø400
Cylinder dimensions [mm]	Diameter D	160	200	220	240	250	260	280	300	320	360	400	500	600	630	700	800
	Height L	108	120	132	144	150	156	168	180	192	216	240	300	340	378	420	480

Versions of bases

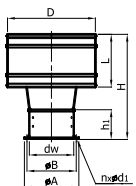
1. Square base -PK



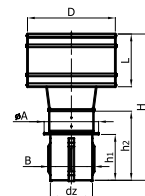
2. Inlet pipe -B



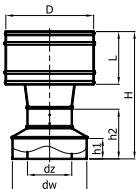
3. Base with collar -BIII



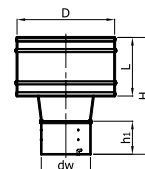
4. Force-in mounting base -PT



5. Base with insulation closing -B-K



6. Dismountable base -R



Measurements table for various inlet diameters

Ø 80	Dimensions [mm]									Weight [kg]	
	Base version	dw	dz	H	h1	h2	A	B	d1	Ilość n	OC
-PK	-	80.2	356	97	115	220	170	6.2	4	0.90	0.85
-B	-	80.2	358	215	-	-	-	-	-	0.70	0.65
-BIII	79.2	-	353	210	-	142	112	9.5	4	0.95	0.90
-PT	-	74	403	157	260	130	89	-	-	0.85	0.80
-B-K	-	-	-	-	-	-	-	-	-	-	-
-R	79.2	-	358	215	-	-	-	-	-	0.70	0.65

Ø 100	Dimensions [mm]									Weight [kg]	
	Base version	dw	dz	H	h1	h2	A	B	d1	Ilość n	OC
-PK	-	100.8	389	115	100	220	170	6.2	4	1.15	1.10
-B	-	100.8	389	215	-	-	-	-	-	1.00	0.95
-BIII	99.8	-	384	210	-	162	132	9.5	4	1.25	1.20
-PT	-	94	432	157	258	150	109	-	-	1.10	1.05
-B-K	202.1	100.8	385	70	215	-	-	-	-	1.30	1.25
-R	99.8	-	389	215	-	-	-	-	-	0.95	0.90

Ø 110	Dimensions [mm]									Weight [kg]	
	Base version	dw	dz	H	h1	h2	A	B	d1	Ilość n	OC
-PK	-	111.9	402	115	100	220	170	6.2	4	1.30	1.20
-B	-	111.9	405	215	-	-	-	-	-	1.15	1.05
-BIII	110.9	-	400	210	-	172	142	9.5	4	1.45	1.35
-PT	-	104	448	157	258	160	119	-	-	1.30	1.20
-B-K	202.1	111.9	402	70	215	-	-	-	-	1.50	1.40
-R	110.9	-	405	215	-	-	-	-	-	1.15	1.05

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ø 120		Dimensions [mm]								Weight [kg]	
Base version	dw	dz	H	h1	h2	A	B	d1	Ilość n	OC	CH
-PK	-	123	423	115	100	220	170	6.2	4	1.50	1.40
-B	-	123	423	215	-	-	-	-	-	1.30	1.20
-BIII	122	-	418	210	-	182	152	9.5	4	1.65	1.55
-PT	-	114	466	157	258	170	129	-	-	1.50	1.40
-B-K	227.6	123	423	70	215	-	-	-	-	1.60	1.50
-R	122	-	423	215	-	-	-	-	-	1.30	1.20

ø 125		Dimensions [mm]								Weight [kg]	
Base version	dw	dz	H	h1	h2	A	B	d1	Ilość n	OC	CH
-PK	-	124.6	432	115	100	220	170	6.2	4	1.55	1.45
-B	-	124.6	432	215	-	-	-	-	-	1.40	1.30
-BIII	123.6	-	427	210	-	187	157	9.5	4	1.75	1.65
-PT	-	119	474	157	258	175	134	-	-	1.55	1.45
-B-K	227.6	124.6	432	70	215	-	-	-	-	1.70	1.60
-R	123.6	-	432	215	-	-	-	-	-	1.40	1.30

ø 130		Dimensions [mm]								Weight [kg]	
Base version	dw	dz	H	h1	h2	A	B	d1	Ilość n	OC	CH
-PK	-	132.5	441	115	100	250	200	6.2	4	1.70	1.60
-B	-	132.5	441	215	-	-	-	-	-	1.50	1.40
-BIII	131.5	-	436	210	-	192	162	9.5	4	1.85	1.75
-PT	-	124	483	157	258	180	139	-	-	1.70	1.60
-B-K	227.6	132.5	435	70	215	-	-	-	-	1.90	1.80
-R	132.5	-	441	215	-	-	-	-	-	1.50	1.40

ø 140		Dimensions [mm]								Weight [kg]	
Base version	dw	dz	H	h1	h2	A	B	d1	Ilość n	OC	CH
-PK	-	140.6	461	115	100	250	200	6.2	4	1.90	1.80
-B	-	140.1	461	215	-	-	-	-	-	1.70	1.60
-BIII	139.6	-	456	210	-	202	172	9.5	6	2.10	2.00
-PT	-	134	503	157	258	190	149	-	-	1.90	1.80
-B-K	227.6	140.6	453	70	215	-	-	-	-	2.00	1.90
-R	139.6	-	461	215	-	-	-	-	-	1.70	1.60

ø 150		Dimensions [mm]								Weight [kg]	
Base version	dw	dz	H	h1	h2	A	B	d1	Ilość n	OC	CH
-PK	-	151.7	481	115	100	250	200	6.2	4	2.15	2.05
-B	-	151.7	481	215	-	-	-	-	-	1.95	1.85
-BIII	150.7	-	476	210	-	212	182	9.5	6	2.35	2.25
-PT	-	144	523	157	258	202	159	-	-	2.25	2.15
-B-K	253.3	151.7	470	70	215	-	-	-	-	2.45	2.35
-R	151.7	-	481	215	-	-	-	-	-	1.95	1.85

ø 160		Dimensions [mm]								Weight [kg]	
Base version	dw	dz	H	h1	h2	A	B	d1	Ilość n	OC	CH
-PK	-	161.3	498	115	100	250	200	6.2	4	2.40	2.35
-B	-	161.3	498	215	-	-	-	-	-	2.25	2.30
-BIII	160.3	-	493	210	-	222	192	9.5	6	2.65	2.60
-PT	-	154	540	157	258	210	169	-	-	2.45	2.40
-B-K	253.3	161.3	475	70	215	-	-	-	-	2.60	2.55
-R	160.3	-	498	215	-	-	-	-	-	2.25	2.20

ø 180		Dimensions [mm]								Weight [kg]	
Base version	dw	dz	H	h1	h2	A	B	d1	Ilość n	OC	CH
-PK	-	179.6	700	200	180	300	250	6.2	4	5.00	4.30
-B	-	182.4	491	170	-	-	-	-	-	3.55	3.00
-BIII	180.8	-	486	165	-	242	212	9.5	6	4.00	3.50
-PT	-	174	639	157	318	225	174	-	-	4.10	3.50
-B-K	281.9	182	485	70	215	-	-	-	-	2.95	2.90
-R	181.4	-	491	170	-	-	-	-	-	3.55	3.00

ø 200		Dimensions [mm]								Weight [kg]	
Base version	dw	dz	H	h1	h2	A	B	d1	Ilość n	OC	CH
-PK	-	199.6	733	200	180	330	280	6.2	4	6.00	5.15
-B	-	201	526	170	-	-	-	-	-	4.35	3.70
-BIII	199.7	-	521	165	-	263	233	9.5	6	4.85	4.15
-PT	-	194	674	157	318	252	194	-	-	5.10	4.35
-B-K	303.1	201	500	70	160	-	-	-	-	5.50	4.70
-R	199.7	-	526	170	-	-	-	-	-	4.35	3.70

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Ø 250	Dimensions [mm]									Weight [kg]	
	Base version	dw	dz	H	h1	h2	A	B	d1	Ilość n	OC
-PK	-	250.6	800	200	180	360	320	6.2	4	8.55	9.80
-B	-	252	591	170	-	-	-	-	-	6.50	7.40
-BIII	250.7	-	586	165	-	313	283	9.5	8	7.15	8.15
-PT	-	244	739	157	318	302	259	-	-	7.50	8.55
-B-K	352.4	252.3	585	70	160	-	-	-	-	7.60	8.70
-R	250.7	-	591	170	-	-	-	-	-	6.50	7.40

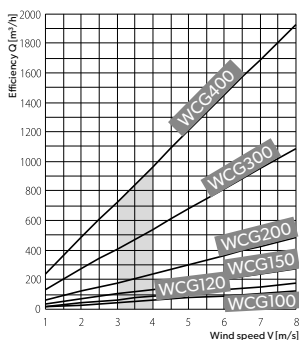
Ø 300	Dimensions [mm]									Weight [kg]	
	Base version	dw	dz	H	h1	h2	A	B	d1	Ilość n	OC
-PK	-	299.9	883	200	180	430	380	6.2	4	11.65	13.30
-B	-	301.3	676	170	-	-	-	-	-	9.15	10.45
-BIII	300	-	671	165	-	363	337	9.5	8	9.90	11.30
-PT	-	294	824	152	318	345	309	-	-	10.10	11.55
-B-K	403.6	301.3	670	70	160	-	-	-	-	12.05	13.75
-R	300	-	676	170	-	-	-	-	-	9.15	10.45

Ø 315	Dimensions [mm]									Weight [kg]	
	Base version	dw	dz	H	h1	h2	A	B	d1	Ilość n	OC
-PK	-	314.3	949	200	180	430	380	6.2	4	12.85	14.70
-B	-	315.7	741	170	-	-	-	-	-	10.35	11.80
-BIII	314.4	-	736	165	-	378	352	9.5	8	11.10	12.70
-PT	-	309.4	889	152	318	365	324	-	-	11.35	12.95
-B-K	403.6	316	696	70	160	-	-	-	-	12.05	13.75
-R	314.4	-	741	170	-	-	-	-	-	10.35	11.80

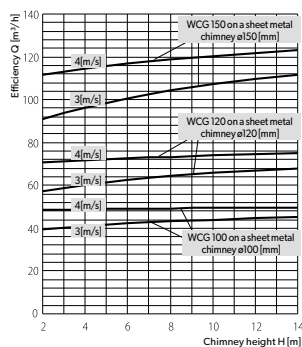
Ø 350	Dimensions [mm]									Weight [kg]		
	Base version	dw	dz	H	h1	h2	A	B	d1	Ilość n	OC	CH
-PK	-	-	-	-	-	-	-	-	-	-	-	-
-B	-	349.7	781	170	-	-	-	-	-	12.45	14.20	
-BIII	348.1	-	776	165	-	413	392	9.5	8	13.30	15.20	
-PT	-	-	-	-	-	-	-	-	-	-	-	-
-B-K	452.9	349.7	730	70	160	-	-	-	-	16.95	19.35	
-R	348.1	-	781	170	-	-	-	-	-	12.45	14.20	

Ø 400	Dimensions [mm]									Weight [kg]		
	Base version	dw	dz	H	h1	h2	A	B	d1	Ilość n	OC	CH
-PK	-	-	-	-	-	-	-	-	-	-	-	-
-B	-	401.9	846	170	-	-	-	-	-	15.90	18.15	
-BIII	400.3	-	841	165	-	464	438	9.5	8	16.85	19.25	
-PT	-	-	-	-	-	-	-	-	-	-	-	-
-B-K	503.8	401.9	830	70	160	-	-	-	-	16.95	19.35	
-R	400.3	-	846	170	-	-	-	-	-	15.90	18.15	

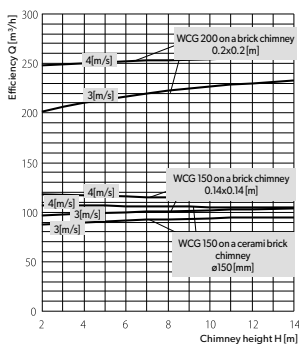
Airflow charts



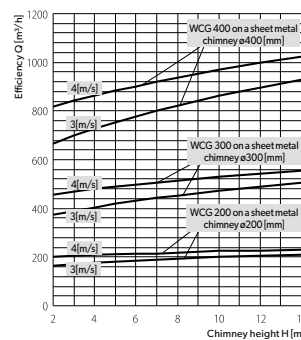
Efficiency chart for CAGI cowls (various diameters) in a function of wind speed, not including the influence of chimney height. (1[m/s]=3.6[km/h])



Efficiency chart for CAGI cowls ø100, 120, 150 in a function of chimney height on a brick or sheet metal chimney (for two wind speeds: 3 and 4 [m/s]).



Efficiency chart for CAGI cowls ø150, 200 in a function of chimney height on a brick or sheet metal chimney (for two wind speeds: 3 and 4 [m/s]).

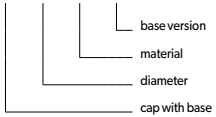


Efficiency chart for CAGI cowls ø200, 300, 400 in a function of chimney height on a brick or sheet metal chimney (for two wind speeds: 3 and 4 [m/s]).

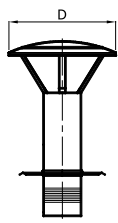
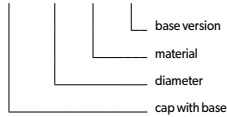
1. CAP WITH BASE



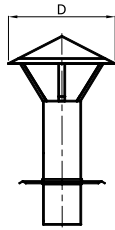
WDAx-CH-b



WDACx-OC-b



for $\phi \le 200$



for $\phi > 200$

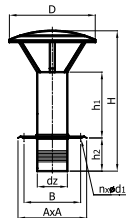
Destination	W	W	W - ventilation ducts						
	S	-	S - gas and oil exhaust ducts						
Material	CH	-	CH - chrome-nickel sheet 1.4301						
	-	OC	OC - galvanised steel sheet						

Diameter [mm]	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø250
Cap diameter D	220	220	250	250	290	290	290	290	350	400

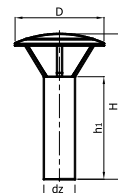
*Openable for diameters from ø100 mm to ø200mm (only WDA-CH version)

Versions of bases

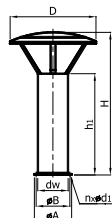
1. Square base -PK



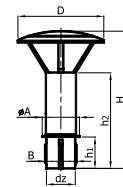
2. Inlet pipe -B



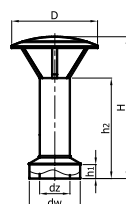
3. Base with collar -BIII



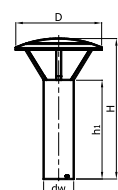
4. Force-in mounting base -PT



5. Base with insulation closing -B-K



6. Dismountable base -R



Measurements table for various inlet diameters

Ø 100	Dimensions [mm]										Weight [kg]	
	Base version	dw	dz	H	H(OC)	h1	h2	A	B	d1	Ilość n	OC
-PK	-	100.8	442	425	250	81	220	170	6.2	4	0.80	0.90
-B	-	100.8	442	425	333	-	-	-	-	-	0.70	0.75
-BIII	99.8	-	362	345	253	-	162	132	9.5	4	0.90	0.90
-PT	-	94	514	497	157	407	150	108	-	-	0.80	0.85
-B-K	202.1	100.8	358	341	70	250	-	-	-	-	1.10	1.10
-R	99.8	100.8	442	425	333	-	-	-	-	-	0.70	0.75

Ø 110	Dimensions [mm]										Weight [kg]	
	Base version	dw	dz	H	H(OC)	h1	h2	A	B	d1	Ilość n	OC
-PK	-	112	444	427	250	81	220	170	6.2	4	0.90	1.00
-B	-	112	444	427	333	-	-	-	-	-	0.70	0.85
-BIII	111	-	364	347	253	-	172	142	9.5	4	0.90	1.05
-PT	-	104	516	499	157	407	160	118	-	-	0.90	0.95
-B-K	202.1	111.9	365	348	70	250	-	-	-	-	1.20	1.20
-R	111	112	444	427	333	-	-	-	-	-	0.70	0.85

Ø 120	Dimensions [mm]										Weight [kg]	
	Base version	dw	dz	H	H(OC)	h1	h2	A	B	d1	Ilość n	OC
-PK	-	123.1	456	433	250	81	220	170	6.2	4	1.00	1.10
-B	-	123.1	456	433	333	-	-	-	-	-	0.80	0.95
-BIII	122.1	-	376	353	253	-	182	152	9.5	4	1.00	1.20
-PT	-	114	529	506	157	407	170	128	-	-	1.00	1.10
-B-K	202.1	123.1	372	349	70	250	-	-	-	-	1.30	1.30
-R	122.1	123.1	456	433	333	-	-	-	-	-	0.80	0.95

Ø 130	Dimensions [mm]										Weight [kg]	
	Base version	dw	dz	H	H(OC)	h1	h2	A	B	d1	Ilość n	OC
-PK	-	132.6	458	435	250	81	250	200	6.2	4	1.10	1.20
-B	-	132.6	458	435	333	-	-	-	-	-	0.90	1.00
-BIII	131.6	-	378	355	253	-	192	162	9.5	4	1.10	1.30
-PT	-	124	529	506	157	407	180	138	-	-	1.00	1.15
-B-K	227.6	132.5	379	356	70	250	-	-	-	-	1.40	1.40
-R	131.6	132.6	458	435	333	-	-	-	-	-	0.90	1.00

Ø 140	Dimensions [mm]										Weight [kg]	
	Base version	dw	dz	H	H(OC)	h1	h2	A	B	d1	Ilość n	OC
-PK	-	140.6	455	433	250	81	250	200	6.2	4	1.30	1.30
-B	-	140.6	455	433	333	-	-	-	-	-	1.10	1.10
-BIII	139.6	-	375	353	253	-	202	172	9.5	6	1.40	1.40
-PT	-	134	529	507	157	407	190	148	-	-	1.40	1.25
-B-K	227.6	140.6	386	364	70	250	-	-	-	-	1.50	1.50
-R	139.6	140.6	455	433	333	-	-	-	-	-	1.10	1.10

Ø 150	Dimensions [mm]										Weight [kg]	
	Base version	dw	dz	H	H(OC)	h1	h2	A	B	d1	Ilość n	OC
-PK	-	151.8	480	458	250	81	250	200	6.2	4	1.40	1.40
-B	-	151.8	480	458	333	-	-	-	-	-	1.20	1.20
-BIII	150.8	-	400	378	253	-	212	182	9.5	6	1.50	1.50
-PT	-	144	552	530	157	407	200	158	-	-	1.40	1.60
-B-K	253.3	151.7	393	371	70	330	-	-	-	-	1.75	1.75
-R	150.8	151.8	480	458	333	-	-	-	-	-	1.20	1.20

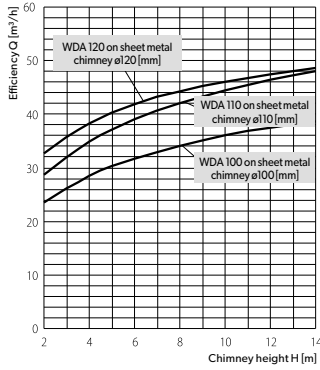
Ø 160	Dimensions [mm]										Weight [kg]	
	Base version	dw	dz	H	H(OC)	h1	h2	A	B	d1	Ilość n	OC
-PK	-	161.3	482	460	250	81	250	200	6.2	4	1.40	1.40
-B	-	161.3	482	460	330	-	-	-	-	-	1.20	1.20
-BIII	160.3	-	400	378	253	-	222	192	9.5	6	1.50	1.50
-PT	-	154	552	530	157	407	210	168	-	-	1.50	1.50
-R	160.3	161.3	482	460	333	-	-	-	-	-	1.20	1.20

Ø 180	Dimensions [mm]										Weight [kg]	
	Base version	dw	dz	H	H(OC)	h1	h2	A	B	d1	Ilość n	OC
-PK	-	182	485	463	250	81	300	250	6.2	4	1.60	1.60
-B	-	182	485	463	330	-	-	-	-	-	1.30	1.30
-BIII	181	-	400	378	253	-	242	212	9.5	6	1.60	1.60
-PT	-	154	552	530	157	407	230	198	-	-	1.60	1.60
-R	181	182	485	463	333	-	-	-	-	-	1.30	1.30

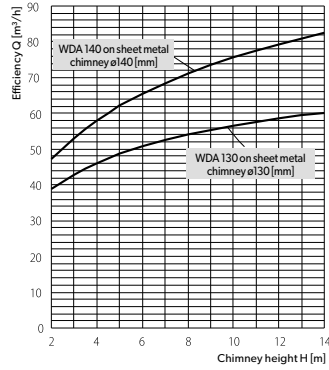
Ø 200	Dimensions [mm]										Weight [kg]	
	Base version	dw	dz	H	H(OC)	h1	h2	A	B	d1	Ilość n	OC
-PK	-	201.1	497	486	250	81	330	280	6.2	4	1.70	2.30
-B	-	201.1	497	486	333	-	-	-	-	-	1.40	1.50
-BIII	200.1	-	417	406	253	-	262	232	9.5	6	1.70	2.00
-PT	-	194	570	559	157	407	250	208	-	-	1.70	2.15
-B-K	302.6	201.0	428	417	70	250	-	-	-	-	2.20	2.20
-R	200.1	201.1	497	486	333	-	-	-	-	-	1.40	1.50

Ø 250	Dimensions [mm]										Weight [kg]	
	Base version	dw	dz	H	H(OC)	h1	h2	A	B	d1	Ilość n	OC
-PK	-	252.0	688	677	250	83	370	290	6	4	4.15	3.65
-B	-	252.3	603	592	333	-	-	-	-	-	2.75	2.45
-BIII	250.7	-	603	592	333	-	313	283	9.5	6	3.60	3.30
-PT	-	244.0	674	663	157	407	287	259	-	-	3.55	3.25
-B-K	352.4	252.3	532	521	70	250	-	-	-	-	3.65	3.35
-R	250.7	-	609	598	333	-	-	-	-	-	2.75	2.45

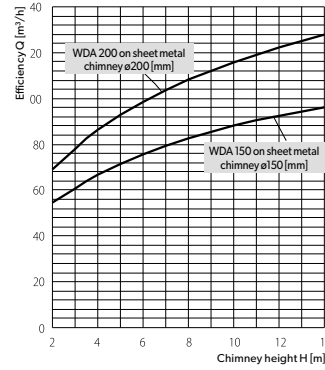
Airflow charts



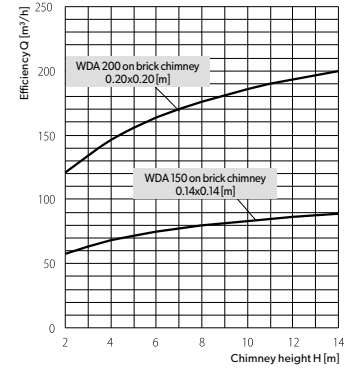
Efficiency chart for cap with base Ø100, 110, 120 on sheet metal chimney in situation with no wind.



Efficiency chart for cap with base Ø130, 140 on sheet metal chimney in situation with no wind.

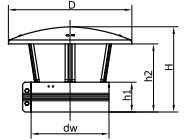
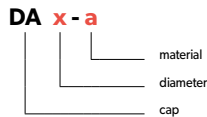


Efficiency chart for cap with base Ø150, 200 on sheet metal chimney in situation with no wind.



Efficiency chart for cap with base Ø150, 200 on brick chimney in situation with no wind.

2. CAP

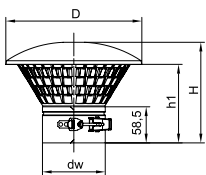
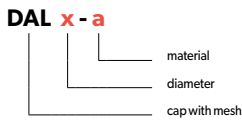


Diameter	Dimensions [mm]					Weight [kg]	
	D	H	dw	h1	h2	OC	CH
Ø100	220	178	100	70	140	0.30	0.30
Ø110	220	185	110	70	147	0.35	0.35
Ø120	250	202	120	80	164	0.37	0.37
Ø130	250	209	130	80	171	0.40	0.40
Ø140	290	218	140	80	178	0.45	0.45
Ø150	290	225	150	80	185	0.50	0.50
Ø160	290	225	160	80	185	0.55	0.55
Ø180	290	198	180	70	158	0.70	0.70
Ø200	350	260	200	80	220	0.94	0.94
Ø250	400	340	250	80	270	1.25	1.70



Destination	W	W	W	W - ventilation ducts
	S	-	-	S - gas and oil exhaust ducts
Material	CH	-	-	CH - chrome-nickel sheet 1.4301
	-	OC	-	OC - galvanised steel sheet

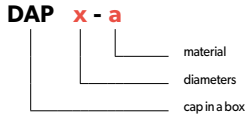
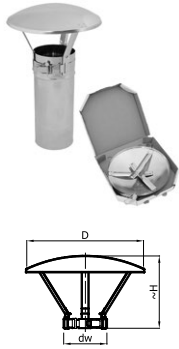
3. CAP WITH MESH



Diameter	Dimensions [mm]				Weight [kg]
	D	H	dw	h1	CH
Ø100	220	163.5	100	127.5	0.39
Ø110	220	167.0	110	131.0	0.40
Ø120	250	162.5	120	123.5	0.42
Ø130	250	166.0	130	127.5	0.49
Ø140	250	169.5	140	130.5	0.50
Ø150	250	180.0	150	139.0	0.68
Ø160	290	183.5	160	143.0	0.70
Ø180	290	189.5	180	149.0	0.72
Ø200	350	183.5	200	141.0	0.90
Ø250	350	195.0	250	152.5	0.96

Destination	W	W - ventilation ducts
	S	S - gas and oil exhaust ducts
Material	CH	CH - chrome-nickel sheet 1.4301

4. CAP IN A BOX

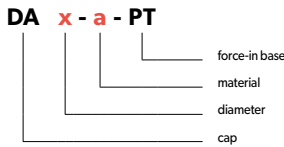
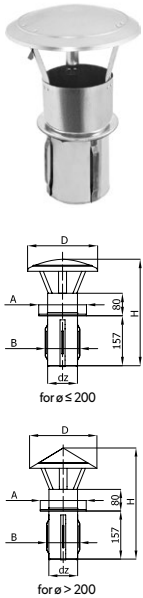


Diameter range	Dimensions [mm]			Weight [kg]
	D	H	dw	
ø60+ø80	160	150	60-80	0.20
ø100+ø130	220	180	100-130	0.30
ø140+ø180	290	210	140-180	0.45
ø200+ø250	350	240	200-250	0.60



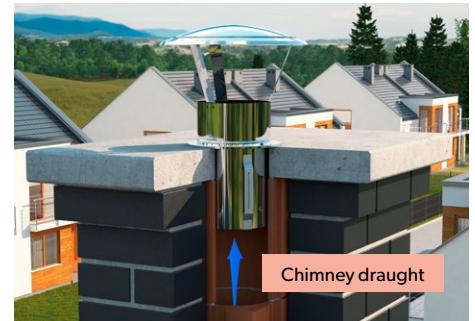
Destination	W	W - ventilation ducts
	S	S - gas and oil exhaust ducts
Material	CH	CH - chrome-nickel sheet 1.4301

5. CAP WITH FORCE-IN BASE



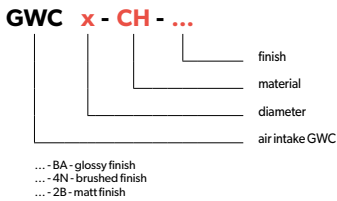
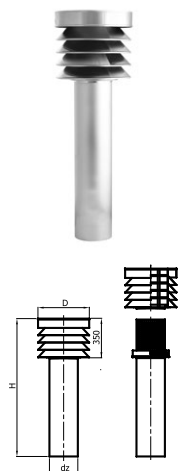
Diameter	Dimensions [mm]					Weight [kg]	
	A	B	D	H	dz	OC	CH
ø100	150	108	220	335	94	0.60	0.60
ø110	160	118	220	345	104	0.70	0.70
ø120	170	128	250	360	114	0.75	0.75
ø130	180	138	250	370	124	0.80	0.80
ø140	190	148	290	375	134	0.95	0.95
ø150	200	158	290	385	144	1.00	1.00
ø160	210	168	290	385	154	1.11	1.11
ø180	230	198	290	385	174	1.50	1.50
ø200	250	208	350	420	194	1.85	1.85
ø250	287	259	400	500	244	3.40	3.40

Openable for diameters from 100 to 200 mm.



Destination	W	W - ventilation ducts
	S	S - gas and oil exhaust ducts
Material	CH	CH - chrome-nickel sheet 1.4301
	-	OC - galvanised steel sheet

6. AIR INTAKE FOR AIR-TYPE GROUND HEAT EXCHANGER GWC



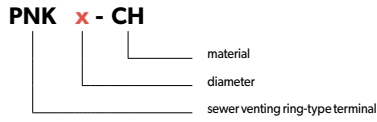
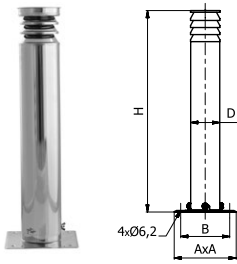
Diameter	Dimensions [mm]			Cross section [cm ²]	Weight
	D	H	dz		
ø160	360	1200	160	201	6.00
ø200	400	1200	200	314	7.50
ø250	450	1200	250	491	9.50
ø300	500	1200	300	707	12.0
ø350	550	1200	350	962	18.0
ø400	600	1200	400	1256	21.5

* other dimensions upon request



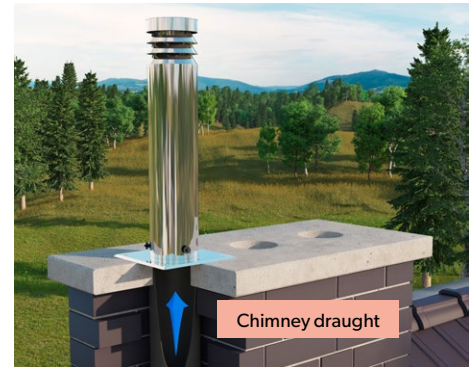
Destination	CH	CH - chrome-nickel sheet 1.4301
Material	CH	CH - chrome-nickel sheet 1.4301

7. SEWER VENTING RING-TYPE TERMINAL PNK



Diameter D	Dimensions [mm]				Cross section [cm ²]	Weight CH
	A	B	D	H		
80	215	170	80	700	84	1.45
100	215	170	100	700	84	1.65
110	215	170	110	700	95	1.75
120	215	170	120	700	116	1.85
130	215	170	130	700	119	1.95
140	245	200	140	700	122	2.10
150	245	200	150	700	132	2.20
160	245	200	160	700	140	2.35
180	325	280	180	700	166	2.85
200	325	280	200	700	180	3.15

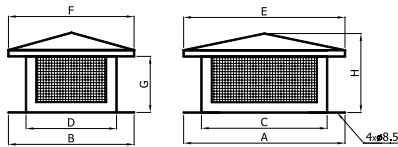
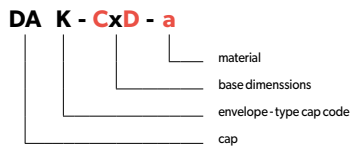
* other dimensions upon request



Chimney draught

Destination	Ventilations ducts
Material	CH CH - chrome-nickel sheet 1.4301

8. ENVELOPE - TYPE CAP



Example dimensions: DAK-CxD							
A	B	C	D	E	F	G	H
550	400	450	300	600	450	200	300

Product made upon order.

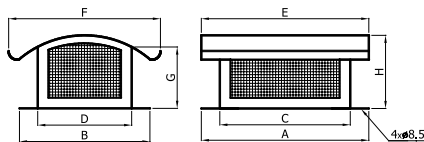
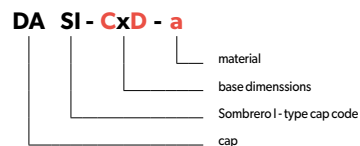
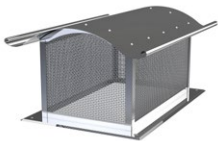


Chimney draught

Destination	Ventilation ducts
Material	CH CH - chrome-nickel sheet 1.4301 OC OC - galvanised steel sheet MI MI - copper sheet

* in version MI - chrome-nickel mesh

9. SOMBRERO I - TYPE CAP



Example dimensions: DAK-CxD							
A	B	C	D	E	F	G	H
550	400	450	300	600	450	200	300

Product made upon order.



Chimney draught

Destination	Ventilation ducts
Material	CH CH - chrome-nickel sheet 1.4301 OC OC - galvanised steel sheet MI MI - copper sheet

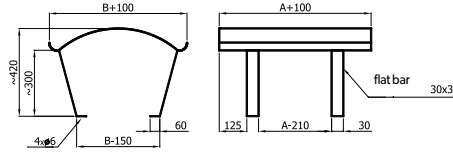
* in version MI - chrome-nickel mesh

10. SOMBRERO II - TYPE CAP



DA SII - AxB - a

- material
- chimney dimensions
- Sombrero II - type cap code
- cap



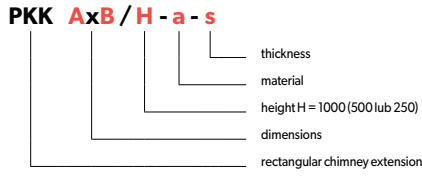
Product made upon order.



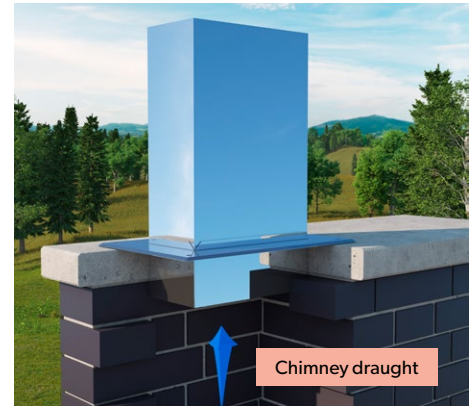
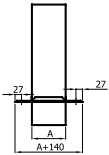
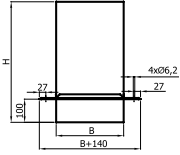
Destination	Ventilation ducts
Material	CH CH - chrome-nickel sheet 1.4301
	OC OC - galvanised steel sheet
	MI MI - copper sheet

* in version MI- chrome-nickel mesh

1. RECTANGULAR CHIMNEY EXTENSION

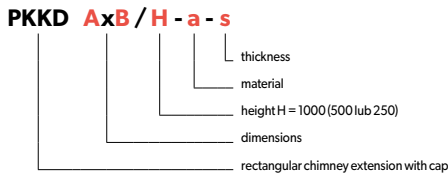


NOTICE!
Product made upon order. Precise AxB, height H dimensions and kind of material should be given when ordering

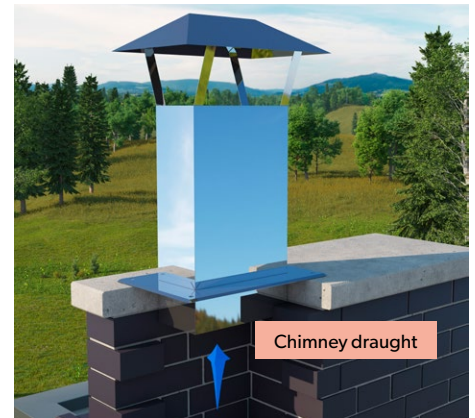
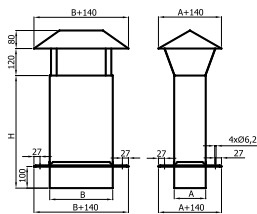


Destination	S	-	S- gas and oil exhaust ducts
	-	D	D- smoke ducts
Material	CH	-	CH- chrome-nickel sheet 1.4301
	-	Z	Z- heat resistant sheet 1.4828
	*)	-	*)- chrome-nickel sheet 1.4404

2. RECTANGULAR CHIMNEY EXTENSION WITH CAP

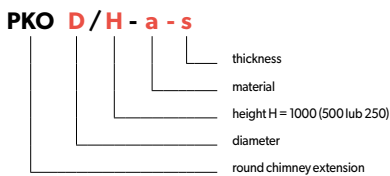


NOTICE!
Product made upon order. Precise AxB, height H dimensions and kind of material should be given when ordering

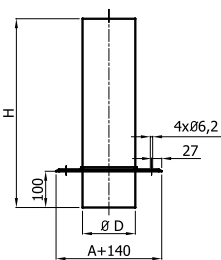


Destination	S	-	S- gas and oil exhaust ducts
	-	D	D- smoke ducts
Material	CH	-	CH- chrome-nickel sheet 1.4301
	-	Z	Z- heat resistant sheet 1.4828
	*)	-	*)- chrome-nickel sheet 1.4404

3. ROUND CHIMNEY EXTENSION

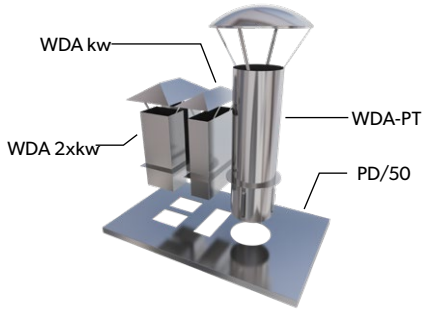


NOTICE!
Product made upon order. Precise AxB, height H dimensions and kind of material should be given when ordering



Destination	S	-	S- gas and oil exhaust ducts
	-	D	D- smoke ducts
Material	CH	-	CH- chrome-nickel sheet 1.4301
	-	Z	Z- heat resistant sheet 1.4828
	*)	-	*)- chrome-nickel sheet 1.4404

I. CHIMNEY COVER WITH CHIMNEY CAPS



Symbol	Name
PD...x.../50-...	Chimney plate
WDA.../500...-...-PT	Round cap on force-in mounting base
WDA2xkw...x.../0.25-...	Double rectangular cap
WDAkw...x.../0.25-...	Single rectangular cap

Chimney cover with caps enables building up top of concrete chimneys with vertical ducts in a easy way. This type of covering protects ducts from rain and snow as well as assures aesthetical chimney top finishing.

The solution allows building up chimneys, which are made od prefabricated elements covered with a concrete cap. Elements of the set should be fixed to concrete cap with mounting elements like screws or silicone.

CHIMNEY COWLS

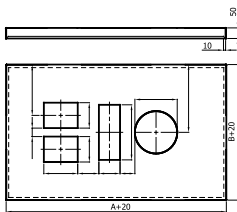
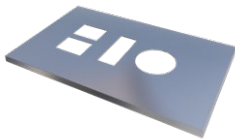
STEERING & POWER SUPPLY

HOT AIR DISTRIBUTION SYSTEM

CHIMNEYS

VENTILATION

1. CHIMNEY PLATE PD/50



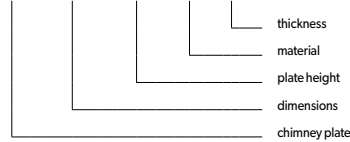
Notice!

Missing dimensions should be given when ordering or a separate hand made drawing should be send. Product available on customer's request.

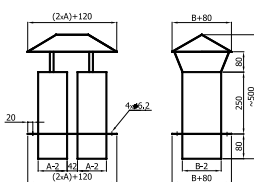
Destination	Flashing	
Material	CH	- CH - chrome-nickel sheet 1.4301
	-	OC OC - galvanised steel sheet

(---) actual outer dimensions of a chimney plate AxB

PD AxB / 50 - m - s



2. DOUBLE RECTANGULAR CAP WDA 2xKW/0,25



Notice!

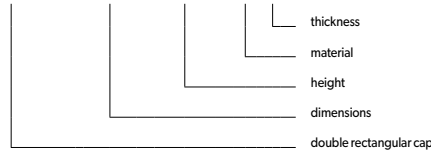
Missing dimensions should be given when ordering or a separate hand made drawing should be send.

Product available on customer's request

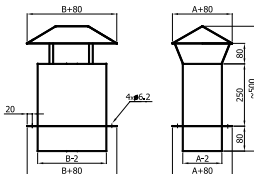
Destination	Chimney outlet cover	
Material	CH	- CH - chrome-nickel sheet 1.4301±0.6
	-	OC OC - galvanised steel sheet ±0.5

A	B
120	160

WDA2xkw AxB / 0,25 - m s



3. SINGLE RECTANGULAR CAP WDA KW/0,25



Notice!

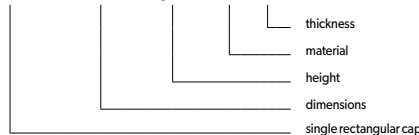
Missing dimensions should be given when ordering or a separate hand made drawing should be send.

Product available on customer's request

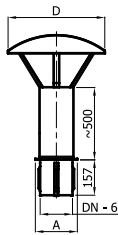
Destination	Chimney outlet cover	
Material	CH	- CH - chrome-nickel sheet 1.4301±0.6
	-	OC OC - galvanised steel sheet ±0.5

A	B
100	70

WDA kw AxB / 0,25 - m s



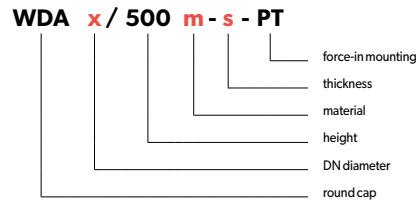
4. ROUND CAP ON FORCE-IN MOUNTING BASE WDA/500-PT



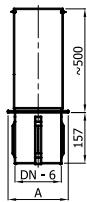
DN	140	160	180	200	225	250
A	177	197	217	237	257	287
D	290	290	290	350	370	400

Destination	-	S	S - exhaust ducts (gas and oil)
	D	-	D - smoke ducts
Material	Z	-	Z - heat-resistant sheet 1.4828+0.8
	-	CH	CH - chrome-nickel sheet 1.4301+0.8

Attention! For fi>200 cone type cap

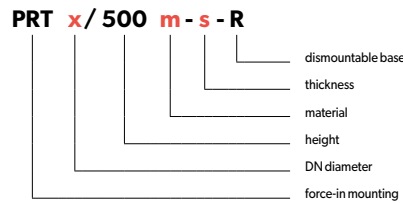


5. PIPE WITH FORCE-IN MOUNTING BASE - DISMOUNTABLE PRT/500-R

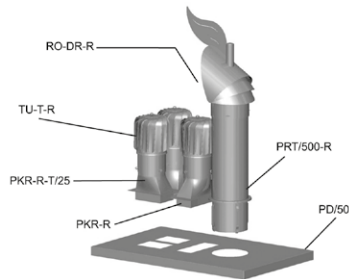


DN	140	160	180	200	225	250
A	177	197	217	237	257	287

Destination	-	S	S - exhaust ducts (gas and oil)
	D	-	D - smoke ducts
Material	Z	-	Z - heat-resistant sheet 1.4828+0.8
	-	CH	CH - chrome-nickel sheet 1.4301

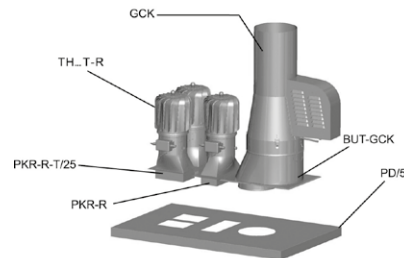


II. SET WITH CHIMNEY COWLS



Symbol	Name
PD...x.../50...	Chimney plate
PRT.../500...-R	Pipe with force in mounting base-dismountable
RO200CH-DR-R	Rotowent Dragon on dismountable base
TU.....-T-R	Turbowent Tulipan on dismountable base
PKR...x.../150...-R	Chimney base reduced
PKR...x.../150...-R-T/25	Chimney base reduced T/25

III. SET WITH HYBRID CHIMNEY COWLS



Symbol	Name
PD...x.../50...	Chimney plate
BUT.../...-CH-GCK	Adaptor BUT GCK
GCK...-B-K	Chimney draught generator on base with insulation closing
TH...T-R	Hybrid Turbowent Tulipan on dismountable base
PKR...x.../150...-R	Chimney base reduced
PKR...x.../150...-R-T/25	Chimney base reduced T/25

Destination

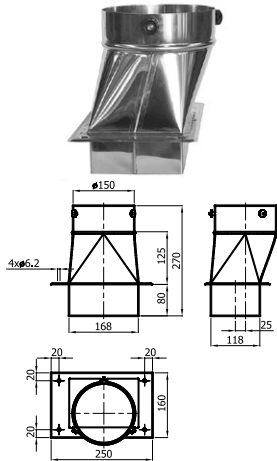
- Protects the concrete chimney top from destructive influence of atmospheric factors.
- Chimney cowls protect outlets from downwind and increase chimney draught.

Chimney cover with cowls enables building up top of concrete chimneys with vertical ducts in an easy way. This type of covering protects ducts from rain and snow as well as assures aesthetic chimney top finishing.

Notice! Make sure arrangement of cowls will allow their collision-free (rotating) operation.

Solution allows building up chimneys, which are made of prefabricated elements covered with a concrete cap. Elements of the set should be fixed to concrete cap with mounting elements like screws or silicone.

1. CHIMNEY BASE REDUCED T/25



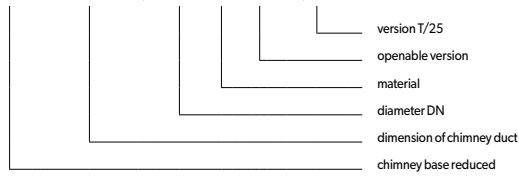
* other dimensions available upon request

Notice!

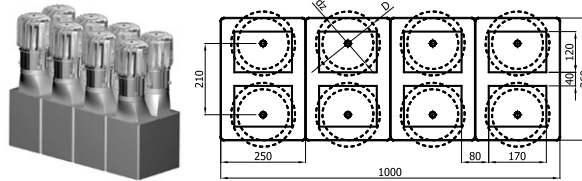
When ordering please check the dimensions of chimney ducts so the arrangement of cowls will allow their collision-free (rotating) operation

Destination	TU	TU	TU - Turbowent base
Material	CH	-	CH - chrome-nickel sheet 1.4301 #0.8
	-	OC	OC - galvanised steel sheet

PKR 120x170 / 150 m - R - T/25



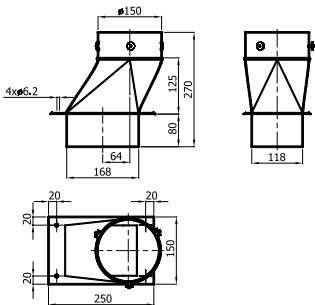
Example of Turbowent Tulipan chimney cowls mounted on brick chimney (duct size 120x170) in configuration as shown on drawing :



Diameter D	Diameter dz
188	150

dz - Tulipan base diameter
D - Tulipan turbine rotation diameter

2. CHIMNEY BASE REDUCED T/64



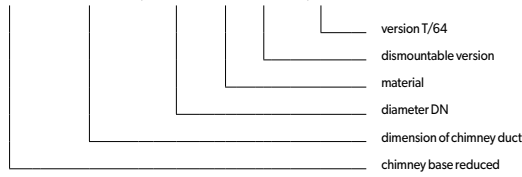
* other dimensions available upon request

Notice!

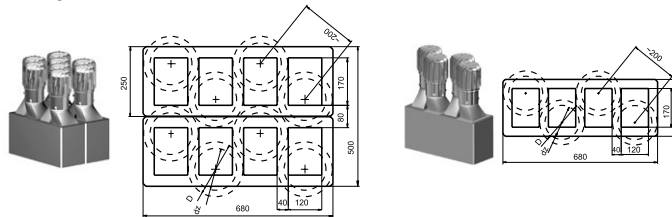
When ordering please check the dimensions of chimney ducts so the arrangement of cowls will allow their collision-free (rotating) operation

Destination	TU	TU	TU - Turbowent base
Material	CH	-	CH - chrome-nickel sheet 1.4301
	-	OC	OC - galvanised steel sheet

PKR 120x170 / 150 m - R - T/64



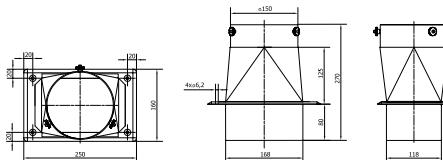
Example of Turbowent Tulipan chimney cowls mounted on brick chimney (duct size 120x170) in configuration as shown on drawing :



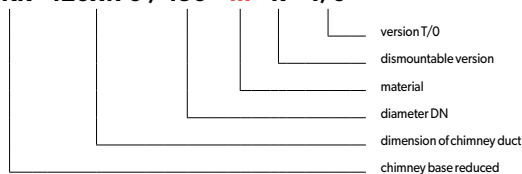
Diameter D	Diameter dz
188	150

dz - Tulipan base diameter
D - Tulipan turbine rotation diameter

3. CHIMNEY BASE REDUCED T/0

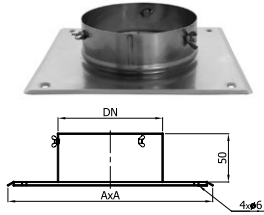


PKR 120x170 / 150 m - R - T/0



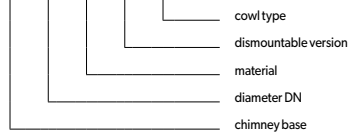
Destination	TU	TU	TU - Turbowent base
Material	CH	-	CH - chrome-nickel sheet 1.4301
	-	OC	OC - galvanised steel sheet

4. DISMOUNTABLE CHIMNEY BASE PK-R



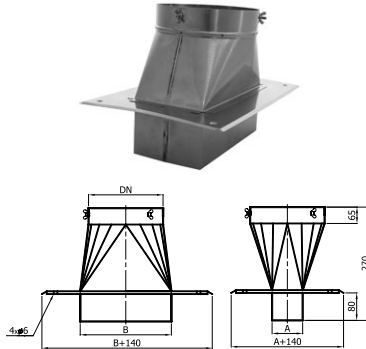
Diameter DN	ø150	ø200	ø250	ø300	ø350	ø400
AxA	250x250	330x330	380x380	430x430	500x500	600x600

PK x m - R - N



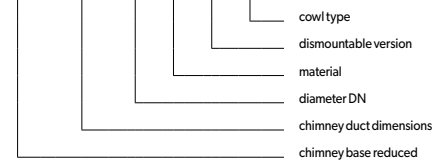
Destination	TU	TU	TU - Turbowent base
	RO	RO	RO - Rotowent base
	S	-	S - exhaust ducts (gas and oil)
Material	-	W	W - ventilation ducts
	CH	-	CH - chrome-nickel sheet 1.4301
	-	OC	OC - galvanised steel sheet

5. DISMOUNTABLE CHIMNEY BASE PKR-R



Diameter DN	ø150	ø200	ø250	ø250	ø300
A	140	140	140	200	270
B	140	270	350	200	270

PKR AxB / x m - R - N



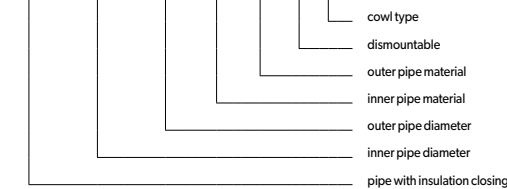
Destination	TU	TU	TU - Turbowent base
	RO	RO	RO - Rotowent base
	S	-	S - exhaust ducts (gas and oil)
	-	W	W - ventilation ducts
Material	-	D	D - smoke ducts
	CH	-	CH - chrome-nickel sheet 1.4301#0.8
	-	OC	OC - galvanised steel sheet #0.7
	-	Z	Z - heat resistand sheet 1.4828#0.8

6. PIPE WITH INSULATION CLOSING- DISMOUNTABLE KNKD



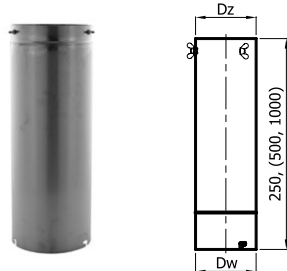
Diameter DN1	ø150	ø200	ø250	ø300
Diameter DN2	ø250	ø300	ø350	ø400

KNKD DN1 / DN2 m1 m2 - R - N



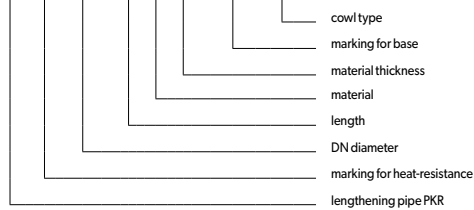
Destination	TU	TU	TU - Turbowent base
	RO	RO	RO - Rotowent base
	S	-	S - exhaust ducts (gas and oil)
	-	W	W - ventilation ducts
Material	-	D	D - smoke ducts
	CH	-	CH - chrome-nickel sheet 1.4301#0.8
	-	OC	OC - galvanised steel sheet #0.7
	-	Z	Z - heat resistand sheet 1.4828#0.8

7. LENGTHENING PIPE DISMOUNTABLE RP-PKR



Diameter DN	ø150	ø200	ø250	ø300
Diameter Dw	150.5	200	250.3	300
Diameter Dz	150	199	249.3	299

RP m DN / L m s - PKR - N



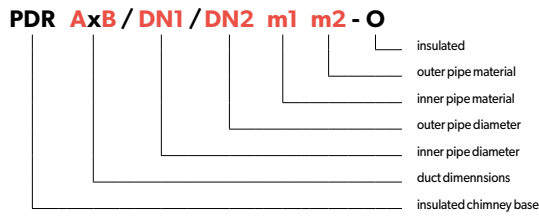
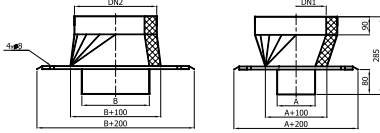
Destination	TU	TU	TU - Turbowent base
	RO	RO	RO - Rotowent base
	S	-	S - exhaust ducts (gas and oil)
	-	W	W - ventilation ducts
Material	-	D	D - smoke ducts
	CH	-	CH - chrome-nickel sheet 1.4301#0.8
	-	OC	OC - galvanised steel sheet #0.7
	-	Z	Z - heat resistand sheet 1.4828#0.8

8. INSULATED CHIMNEY BASE PDR-O

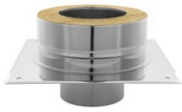


Diameter DN1	ø150	ø200	ø250	ø250	ø300
A	140	140	140	200	270
B	140	270	350	200	270

Destination	S	-	-	S - exhaust ducts (gas and oil)
	-	W	-	W - ventilation ducts
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - chrome-nickel sheet 1.4301+0.8
	-	OC	-	OC - galvanised steel sheet #0.7
	-	-	Z	Z - heat resistand sheet 1.4828#0.8

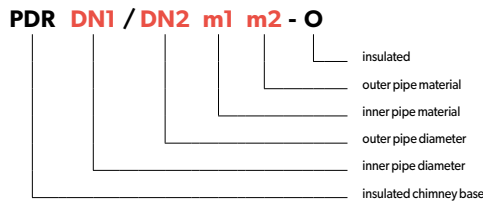
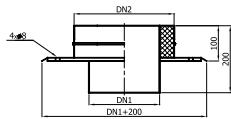


9. INSULATED CHIMNEY BASE PDR-O

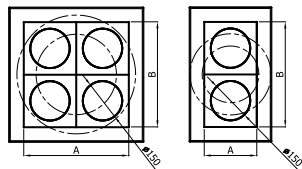
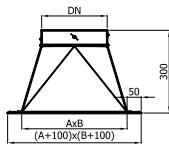
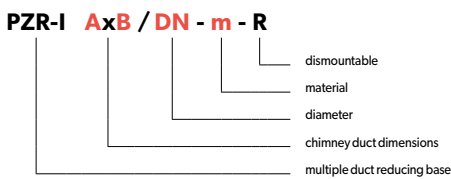


Diameter DN1	ø150	ø200	ø250	ø300
Diameter DN2	ø250	ø300	ø350	ø400

Destination	S	-	-	S - exhaust ducts (gas and oil)
	-	W	-	W - ventilation ducts
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - chrome-nickel sheet 1.4301+0.8
	-	OC	-	OC - galvanised steel sheet #0.7
	-	-	Z	Z - heat resistand sheet 1.4828#0.8

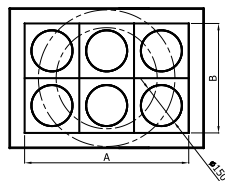
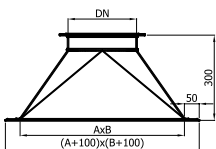
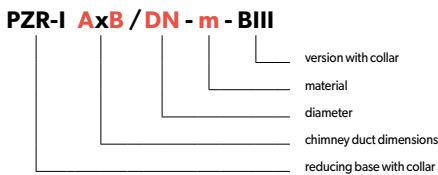
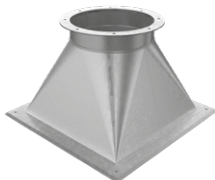


10. MULTIPLE DUCT REDUCING BASE PZR-I-R



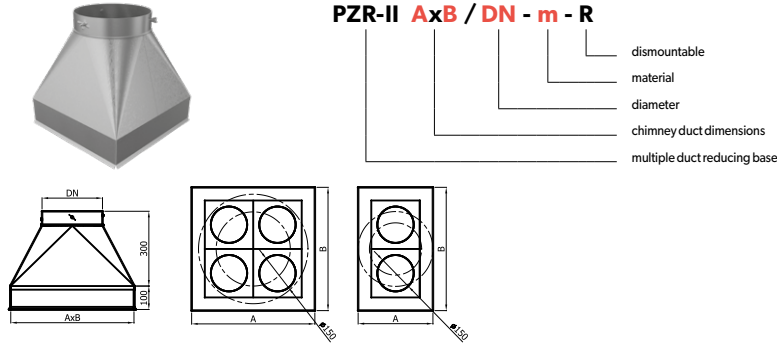
Destination	W	W	W - ventilation ducts
	CH	-	CH - chrome-nickel sheet 1.4301
Material	-	OC	OC - galvanised steel sheet

11. MULTIPLE DUCT REDUCING BASE WITH COLLAR PZR-I-BIII



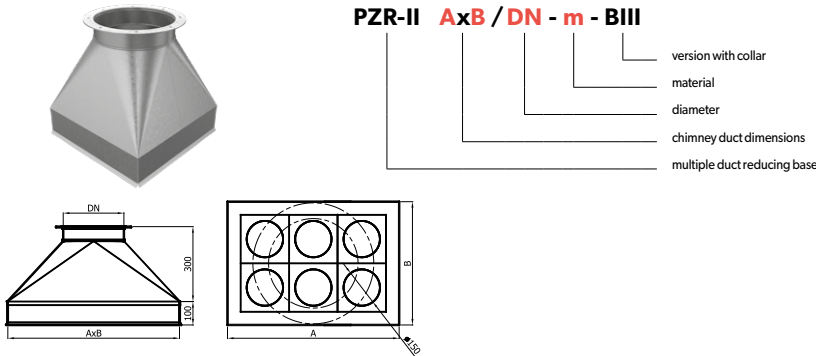
Destination	W	W	W - ventilation ducts
	CH	-	CH - chrome-nickel sheet 1.4301
Material	-	OC	OC - galvanised steel sheet

12. MULTIPLE DUCT REDUCING BASE PZR-II-R



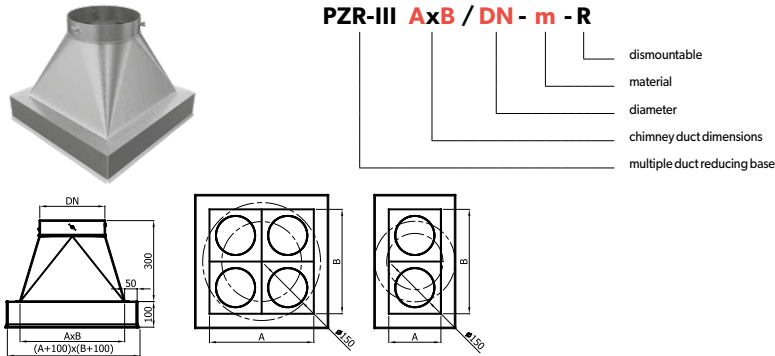
Destination	W	W	W - ventilation ducts
Material	CH	-	CH - chrome-nickel sheet 1.4301
	-	OC	OC - galvanised steel sheet

13. MULTIPLE DUCT REDUCING BASE WITH COLLAR PZR-II-BIII



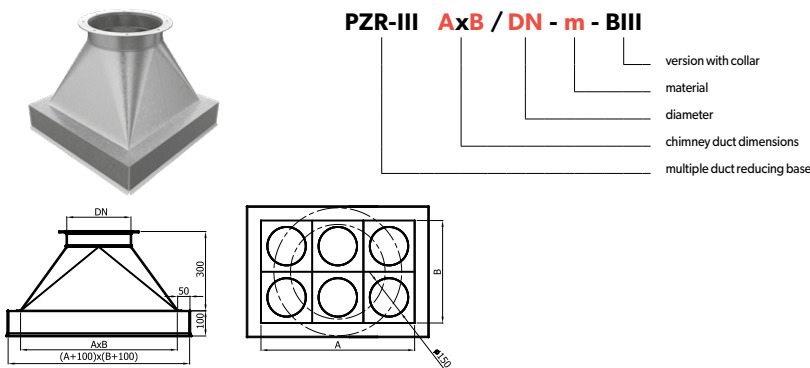
Destination	W	W	W - ventilation ducts
Material	CH	-	CH - chrome-nickel sheet 1.4301
	-	OC	OC - galvanised steel sheet

14. MULTIPLE DUCT REDUCING BASE PZR-III-R



Destination	W	W	W - ventilation ducts
Material	CH	-	CH - chrome-nickel sheet 1.4301
	-	OC	OC - galvanised steel sheet

15. MULTIPLE DUCT REDUCING BASE WITH COLLAR PZR-III-BIII



Destination	W	W	W - ventilation ducts
Material	CH	-	CH - chrome-nickel sheet 1.4301
	-	OC	OC - galvanised steel sheet

CHIMNEY COWLS

STEERING & POWER SUPPLY

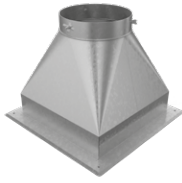
HOT AIR DISTRIBUTION SYSTEM

CHIMNEYS

VENTILATION

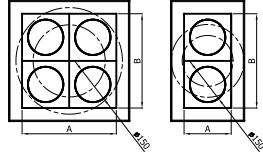
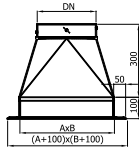
invent. build. enjoy.

16. MULTIPLE DUCT REDUCING BASE PZR-IV-R



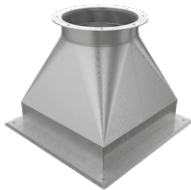
PZR-IV **AxB** / DN - m - R

- dismantlable
- material
- diameter
- chimney duct dimensions
- multiple duct reducing base



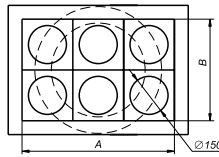
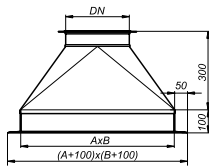
Destination	W	W	W - ventilation ducts
Material	CH	-	CH - chrome-nickel sheet 1.4301
	-	OC	OC - galvanised steel sheet

17. MULTIPLE DUCT REDUCING BASE WITH COLLAR PZR-IV-BIII



PZR-IV **AxB** / DN - m - BIII

- version with collar
- material
- diameter
- chimney duct dimensions
- multiple duct reducing base



Destination	W	W	W - ventilation ducts
Material	CH	-	CH - chrome-nickel sheet 1.4301
	-	OC	OC - galvanised steel sheet

18. REDUCING ADAPTER ZTD-GCK TO DRAUGHT GENERATOR



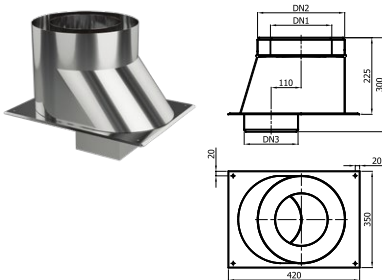
Diameter DN	150/120	150/130	200/160	200/180
DN1	150	150	200	200
DN2	250	250	300	300
DN3	120	130	160	180

ZTD **DN1 / DN3** CH - GCK

- cowl version
- material
- diameter DN3
- diameter DN1
- reducing adapter

Destination	S	-	S - exhaust ducts (gas and oil)
	-	D	D - smoke ducts
Material	CH	CH	CH - chrome-nickel sheet 1.4404 #1.0

19. REDUCING ADAPTER BUT-GCK TO DRAUGHT GENERATOR



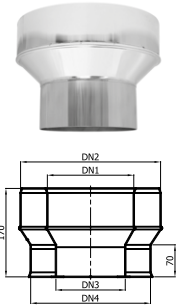
DN1 / DN2	150/250	150/250	150/250	200/300	200/300	200/300
DN3	120	140	160	180	200	225

BUT **DN1 / DN3** CH - GCK

- cowl version
- material
- diameter DN3
- diameter DN1
- reducing adapter BUT

Destination	S	-	S - exhaust ducts (gas and oil)
	-	D	D - smoke ducts
Material	CH	CH	CH - chrome-nickel sheet 1.4404 #1.0

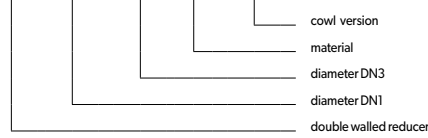
20. DOUBLE WALLED REDUCER RDD-GCK TO DRAUGHT GENERATOR



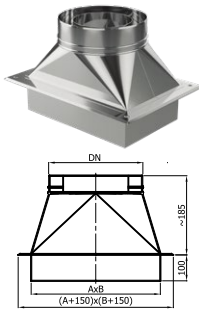
Diameter DN	150/120	150/130	200/160	200/180
DN1	150	150	200	200
DN2	250	250	300	300
DN3	120	130	160	180
DN4	225	225	150	280

Destination	S	-	S - exhaust ducts (gas and oil)
	-	D	D - smoke ducts
Material	CH	CH	CH - chrome-nickel sheet 1.4404 #1.0

RDD DN1 / DN3 CH - GCK



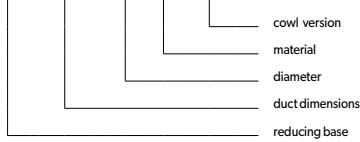
21. REDUCING BASE PKR-GCK TO DRAUGHT GENERATOR



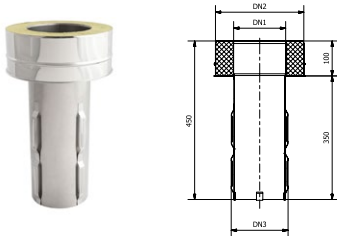
Diameter DN	ø150	ø200	ø250	ø250	ø300
A	140	140	140	200	270
B	140	270	350	200	270

Destination	S	-	S - exhaust ducts (gas and oil)
	-	D	D - smoke ducts
Material	CH	CH	CH - chrome-nickel sheet 1.4404

PKR AxB / DN m GCK



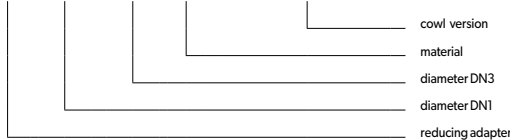
22. REDUCING ADAPTER PRT-GCK FOR DRAUGHT GENERATOR



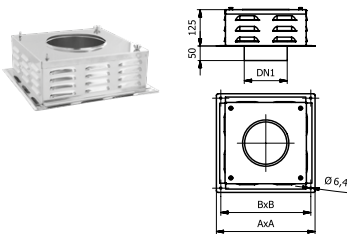
Diameter DN	150/120	150/130	150/150	200/160	200/180	200/200
DN1	150	150	150	200	200	200
DN2	250	250	250	300	300	300
DN3	120	130	150	160	180	200

Destination	S	-	S - exhaust ducts (gas and oil)
	-	D	D - smoke ducts
Material	CH	CH	CH - chrome-nickel sheet 1.4404 #1.0

PRT DN1 / DN3 CH / 0,35-ZTD-GCK



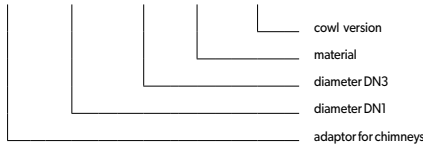
23. ADAPTER PRTD-CH-GCK FOR DRAUGHT GENERATOR



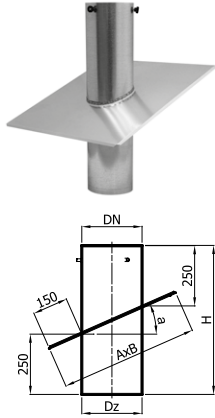
Diameter DN	150	180	200
DN1	150	180	200
A	340	400	400
B	310	370	370

Destination	S	-	S - exhaust ducts (gas and oil)
	-	D	D - smoke ducts
Material	CH	CH	CH - chrome-nickel sheet 1.4404 #1.0

PRT DN1 / DN3 CH - GCK

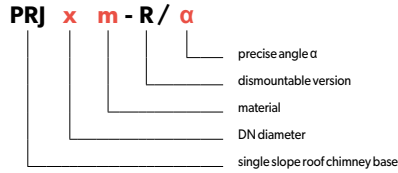


24. SINGLE SLOPE ROOF CHIMNEY BASE PRJ

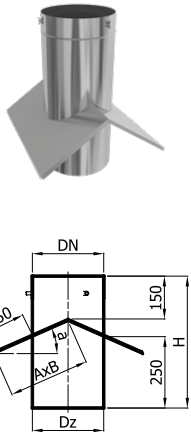


Diameter DN		150	200	250	300
Dz		149.1	198.8	249.7	299.0
α 20	A	460	510	560	610
	B	450	500	550	600
	H	600	600	600	600
α 35	A	480	540	600	660
	B	450	500	550	600
	H	700	700	700	700
α 50	A	540	610	680	750
	B	450	500	550	600
	H	800	800	800	800

Destination	W	W	W - ventilation ducts
Material	CH	-	CH - chrome-nickel sheet 1.4301
	-	OC	OC - galvanised steel sheet

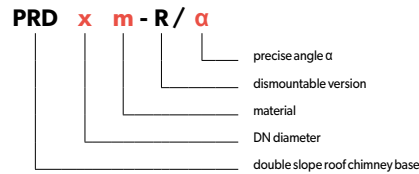


25. DOUBLE SLOPE ROOF CHIMNEY BASE PRD

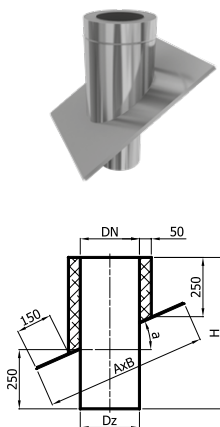


Diameter DN		150	200	250	300
Dz		149.1	198.8	249.7	299.0
α 20	A	230	255	280	305
	B	450	500	550	600
	H	500	500	500	500
α 35	A	240	270	300	330
	B	450	500	550	600
	H	500	500	500	500
α 50	A	270	305	370	350
	B	450	500	550	600
	H	500	500	500	500

Destination	W	W	W - ventilation ducts
Material	CH	-	CH - chrome-nickel sheet 1.4301
	-	OC	OC - galvanised steel sheet

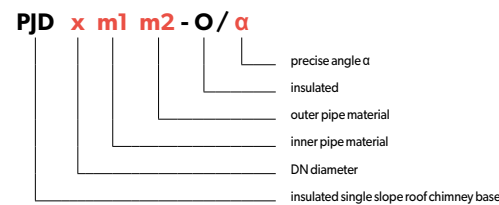


26. INSULATED SINGLE SLOPE ROOF CHIMNEY BASE PJD

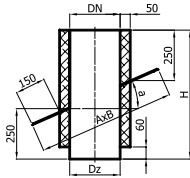
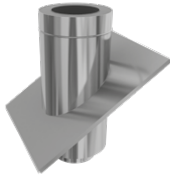


Diameter DN		150	200	250	300
Dz		149.1	198.8	249.7	299.0
α 20	A	570	620	670	720
	B	550	600	650	700
	H	600	600	600	600
α 35	A	610	670	730	790
	B	550	600	650	700
	H	700	700	700	700
α 50	A	700	770	840	910
	B	550	600	650	700
	H	800	800	800	800

Destination	W	W	W - ventilation ducts
Material	CH	-	CH - chrome-nickel sheet 1.4301
	-	OC	OC - galvanised steel sheet



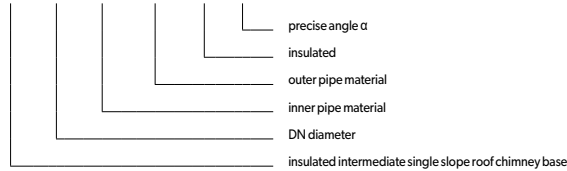
27. INSULATED INTERMEDIATE SINGLE SLOPE ROOF CHIMNEY BASE PPD



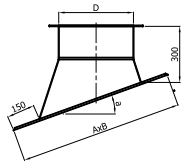
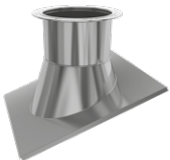
Diameter DN		150	200	250	300
Dz		149.1	198.8	249.7	299.0
α 20	A	570	620	670	720
	B	550	600	650	700
	H	600	600	600	600
α 35	A	610	670	730	790
	B	550	600	650	700
	H	700	700	700	700
α 50	A	700	770	840	910
	B	550	600	650	700
	H	800	800	800	800

Destination	W	W	W - ventilation ducts
Material	CH	-	CH - chrome-nickel sheet 1.4301
	-	OC	OC - galvanised steel sheet

PPD x m1 m2 - O / α



28. SINGLE SLOPE ROOF FLASHING PDKD-I-J

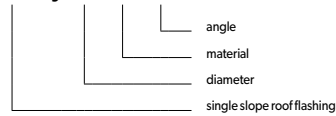


Diameter DN		150	200	250	300	400	500
α 20	A	580	640	700	760	870	990
	B	550	600	650	700	800	900
α 35	A	600	670	740	805	940	1060
	B	550	600	650	700	800	900
α 50	A	700	800	890	990	1170	1350
	B	550	600	650	700	800	900

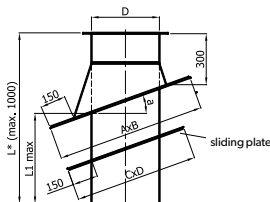
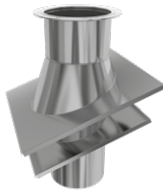
Destination	P	P	P - industrial processes
Material	CH	-	CH - chrome-nickel sheet 1.4301
	-	OC	OC - galvanised steel sheet

Notice! Precise angle must be given at order placing

PDKD-I-J x - m / α



29. SINGLE SLOPE ROOF FLASHING PDKD-II-J

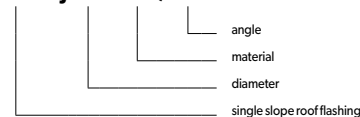


Diameter DN		150	200	250	300	400	500
α 20	AxB	580x550	640x600	700x650	760x700	870x800	990x900
	CxD	460x450	510x500	570x550	620x600	725x700	835x800
	L*max	625	605	585	570	530	515
α 35	AxB	600x550	670x600	740x650	805x700	940x800	1060x900
	CxD	490x450	550x500	610x550	670x600	790x700	910x800
	L*max	560	525	490	455	382	350
α 50	AxB	700x550	800x600	890x650	990x700	1170x800	1350x900
	CxD	540x450	610x500	690x550	770x600	880x700	1075x800
	L*max	460	400	345	285	164	105

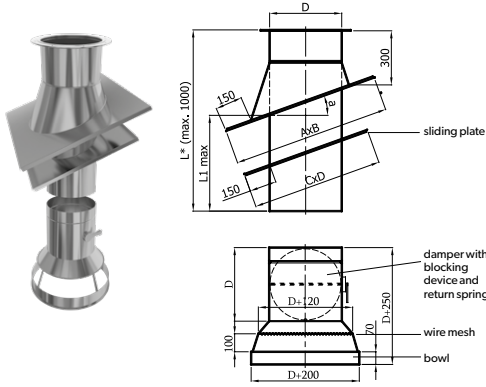
Destination	P	P	P - industrial processes
Material	CH	-	CH - chrome-nickel sheet 1.4301
	-	OC	OC - galvanised steel sheet

Notice! Precise angle must be given at order placing

PDKD-II-J x - m / α

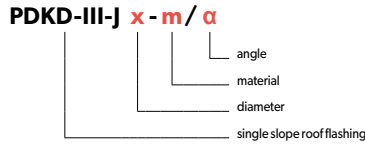


30. SINGLE SLOPE ROOF FLASHING PDKD-III-J

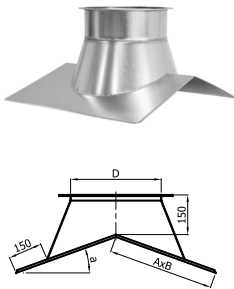


Destination	P	P	P - industrial processes
Material	CH	-	CH - chrome-nickel sheet 1.4301
	-	OC	OC - galvanised steel sheet

Notice! Precise angle must be given at order placing



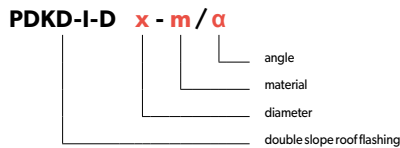
31. DOUBLE SLOPE ROOF FLASHING PDKD-I-D



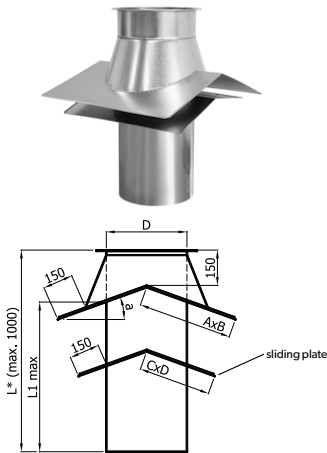
Diameter DN		150	200	250	300	400	500
α 20	A	315	350	380	410	470	535
	B	550	600	650	700	800	900
α 35	A	305	340	375	415	485	555
	B	550	600	650	700	800	900
α 50	A	375	430	480	540	630	750
	B	550	600	650	700	800	900

Destination	P	P	P - industrial processes
Material	CH	-	CH - chrome-nickel sheet 1.4301
	-	OC	OC - galvanised steel sheet

Notice! Precise angle must be given at order placing



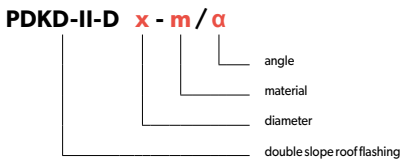
32. DOUBLE SLOPE ROOF FLASHING PDKD-II-D



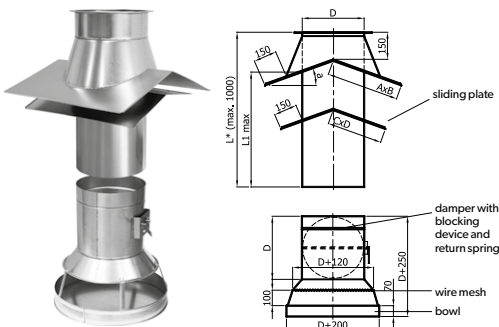
Diameter DN		150	200	250	300	400	500
α 20	AxB	315x550	350x600	380x650	410x700	470x800	535x900
	CxD	230x450	255x500	280x550	310x600	360x700	425x800
	L1max	790	780	770	760	740	725
α 35	AxB	305x550	340x600	375x650	415x700	485x800	555x900
	CxD	235x450	265x500	295x550	330x600	390x700	450x800
	L1max	765	745	730	710	670	640
α 50	AxB	375x550	430x600	480x650	540x700	630x800	750x900
	CxD	255x450	295x500	335x550	370x600	450x700	525x800
	L1max	725	695	665	635	570	515

Destination	P	P	P - industrial processes
Material	CH	-	CH - chrome-nickel sheet 1.4301
	-	OC	OC - galvanised steel sheet

Notice! Precise angle must be given at order placing

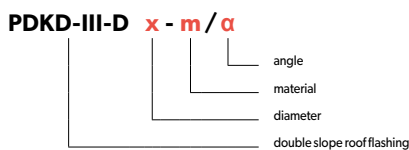


33. DOUBLE SLOPE ROOF FLASHING PDKD-III-D

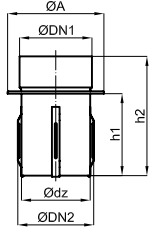


Destination	P	P	P - industrial processes
Material	CH	-	CH - chrome-nickel sheet 1.4301
	-	OC	OC - galvanised steel sheet

Notice! Precise angle must be given at order placing

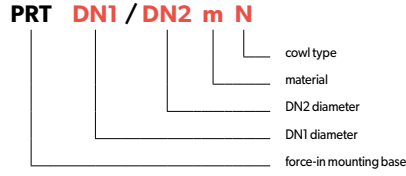


34. FORCE-IN MOUNTING BASE



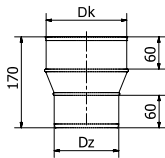
Diameter DN1	Diameter DN2	dz	h1	h2	A
150	150	144.0	157	244	187
200	200	194.0	167	254	237
250	250	244.0	177	260	287
300	300	294.0	177	244	337

* other diameters upon request



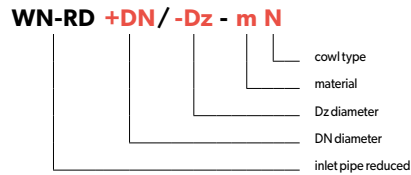
Destination	TU	TU	TU - Turbowent base
	RO	RO	RO - Rotowent base
	S	-	S - exhaust ducts (gas and oil)
	-	W	W - ventilation ducts
	-	D	D - smoke ducts
Material	CH	-	CH - chrome-nickel sheet 1.4301±0.8
	-	OC	OC - galvanised steel sheet ±0.7
	-	Z	Z - heat resistant sheet 1.4828±0.8

35. INLET PIPE REDUCED RD



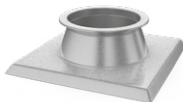
DN	150				
Dz	100	110	120	130	140
Dk	152.8				

Destination	TU	TU - Turbowent base
	W	W - ventilation ducts
Material	OC	OC - galvanised steel sheet ±0.7
	X6	X6 - chrome-nickel sheet 1.4301 ±0.6

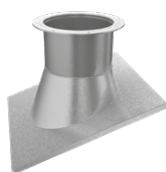


Base roof types:

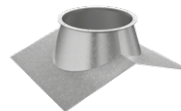
POD-BI-OC



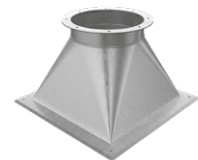
PDKD-I-J



PDKD-I-D



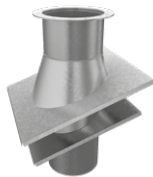
PZR-I



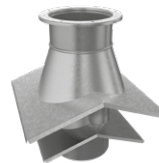
POD-BII-OC



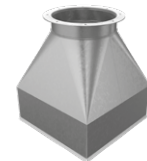
PDKD-II-J



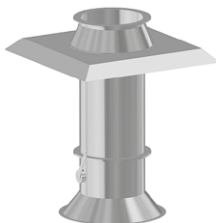
PDKD-II-D



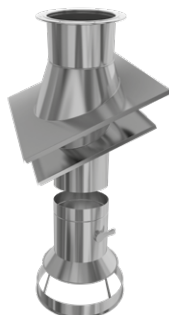
PZR-II



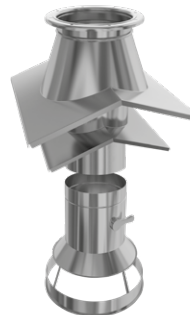
POD-BIII-OC



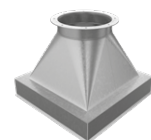
PDKD-III-J



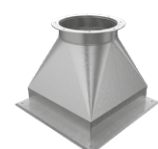
PDKD-III-D



PZR-III



PZR-IV

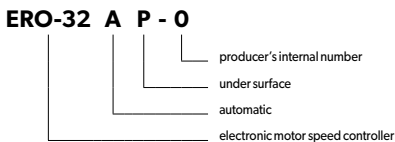


Electronic motor speed controllers ERO

N°	Name	Picture	Mounting	Compatible with
AUTOMATIC CONTROLLERS				
1	Electronic motor speed controller ERO-32AP-0		Under surface	Hot Air Ventilators*: - AN1-II - AN2-II - AN3-II - ANeco1-II - ANeco2-II - ANeco3-II Draught Generators: - GCKV150 - GCKV200 Hybrid Turbowents: - TH150-T - TH150 - TH200 - THP200 - THP250 - THP300 - THP350 - THP400 - THP500
MANUAL CONTROLLERS				
2	Electronic motor speed controller ERO-31MW-...		Mounted in the cowl	ERO-31MW-1 Hybrid Turbowents: TH150-T, TH150, TH200
				ERO-31MW-2 Hybrid Turbowents: THP200, THP250, THP300, THP350
				ERO-31MW-3 Hybrid Turbowents: THP400, THP500
3	Electronic motor speed controller ERO-32MN-1		On surface and under surface	Hot Air Ventilators*: - AN1-II - AN2-II - AN3-II - ANeco1-II - ANeco2-II - ANeco3-II Draught Generators: - GCKV150 - GCKV200 Hybrid Turbowents: - TH150-T - TH150 - TH200 - THP200 - THP250 - THP300 - THP350 - THP400 - THP500
4	Electronic motor speed controller ERO-32MN-2		On surface and under surface	
5	Electronic motor speed controller ERO-32MS-0		On TS-35 rail	
6	Electronic motor speed controller ERO-32WS-0		On TS-35 rail	
7	Electronic motor speed controller ERO-98SW-0		In the connector of the controlled device	
WIFI CONTROLLERS				
6	Electronic motor speed controller ERO-32WS-0		On TS-35 rail	Hot Air Ventilators*: - AN1-II - AN2-II - AN3-II - ANeco1-II - ANeco2-II - ANeco3-II Draught Generators: - GCKV150 - GCKV200 Hybrid Turbowents: - TH150-T - TH150 - TH200 - THP200 - THP250 - THP300 - THP350 - THP400 - THP500 The controller cooperates with smart building system elements offered by BleBox.
7	Electronic motor speed controller ERO-98SW-0		In the connector of the controlled device	Hot Air Ventilators*: - AN1-II - AN2-II - AN3-II - ANeco1-II - ANeco2-II - ANeco3-II Draught Generators: - GCKV150 - GCKV200

* Hot Air Ventilators II generation

1. ELECTRONIC MOTOR SPEED CONTROLLER ERO-32AP-0



Automatic motor speed controller can operate in following modes:

- Sensor mode: in which motor speed of the controlled device depends on temperature detected by the PT1000 thermal probe (the probe is an external element, that may be placed e.g. in the fireplace hood).
- Fixed mode: in which motor speed of the device remains constant.
- Zonal mode: in which motor speed of the controlled device depends on time zones defined by the user. Individual zones can be adjusted on a weekly basis, divided into: working days, Saturdays and Sundays. Four independent time zones can be set for each day.
- Fixed sensor mode: similar to fixed mode with the difference that controlled device is switched on/off basing on the status of the bistable sensor (measuring given physical parameter).
- Zonal sensor mode: similar to zonal mode with the difference that controlled device is switched on/off basing on the status of the bistable sensor (measuring given physical parameter).

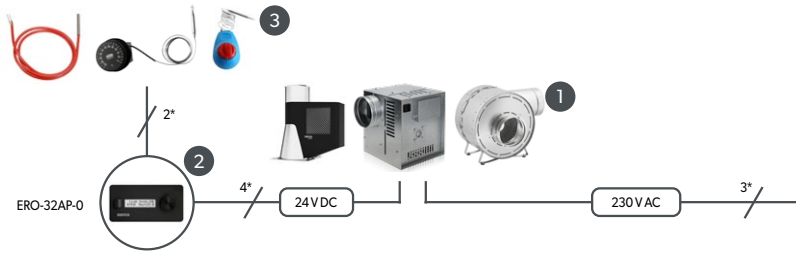
Controllers are equipped with two line alphanumeric display, allowing user to modify the parameters in convenient way.

Product code	Mounting	Voltage [VDC]	Nominal power* [W]	Max current [mA]
ERO-32AP-0	under surface	20-24	0.6	40

* power consumption in stand by mode: 0.3 [W]

Usage:
Hot Air Ventilators AN-II, ANeco-II, Hybrid Turbowents, Draught Generators GCKV

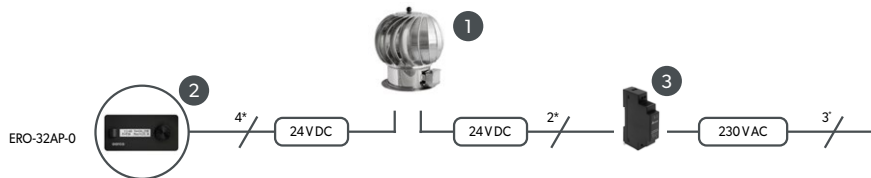
Connecting diagram for hot air ventilators AN-II, ANeco-II and Draught Generator GCKV



N°	Name
1	Hot Air Ventilator AN-II, ANeco-II, Draught Generator GCKV
2	Electronic motor speed controller ERO-32AP-0
3	Sensor (as option)

* number of wires in the cable

Connecting diagram for Hybrid Turbowents ø150-500



N°	Name
1	Hybrid Turbowent ø150-500
2	Electronic motor speed controller ERO-32AP-0
3	Electronic power supply

* number of wires in the cable

2. ELECTRONIC MOTOR SPEED CONTROLLERS



ERO-32MN-1...*



ERO-32MN-2...*



ERO-31MW...



ERO-32MS-0



ERO-98SW-0

Manual motor speed controllers maintain constant motor speed set by the user. Their status is signalled with a bicolour diode (LED lighting), which may inform i.e. about:

- type of controlled device,
- correct or incorrect rotation speed of the controlled device,
- damage to the controlled device or to the controller itself.

Type of controlled device is to be selected with the usage of two code switches installed on back side of the controller.

Product code	Mounting version	Voltage [V DC]	Nominal power [W]	Max current [mA]	Color
ERO-32MN-1...	on surface and under surface*	20 - 24	0.6	40	black / white
ERO-32MN-2...	on surface and under surface*	20 - 24	0.6	40	black / white
ERO-31MW...	in the cowl steering box	20 - 24	0.3	30	-
ERO-32MS-0	on TS-35 rail	20 - 24	0.3	30	-
ERO-98SW-0**	in the controlled device	20 - 24	0,1	2	-

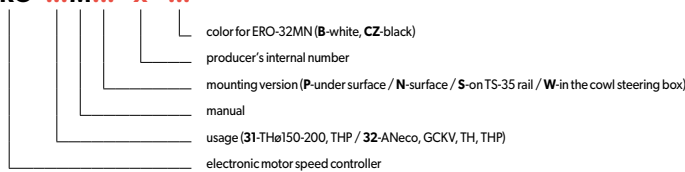
* Controllers delivered for on-surface mounting, dismantling the rear cover enables under surface mounting

Usage:

Hot Air Ventilators AN-II, ANeco-II, Hybrid Turbowents, Draught Generators GCKV

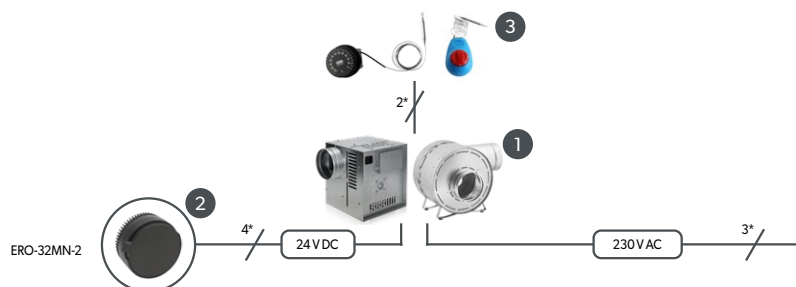
**1 is used as a maximum speed transmitter only for device types AN-II, ANeco-II and GCKV

ERO-...M...-X-...*



* for ex. ERO-32MN-1-B, ERO-32MN-2-CZ, for other regulators there is no color option for ex. ERO-31MW-0

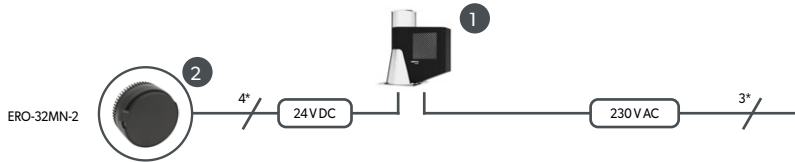
Connecting diagram for hot air ventilators AN-II, ANeco-II



N°	Name
1	Hot Air Ventilator AN-II, ANeco-II
2	Electronic motor speed controller
3	Sensor (as option)

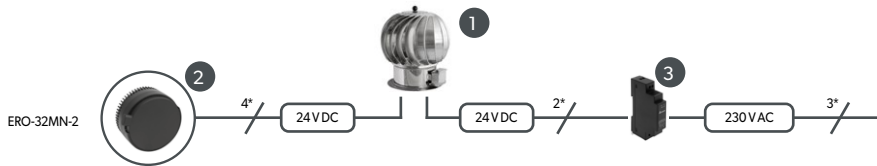
* number of wires in the cable

Connecting diagram for Draught Generators GCKV



N°	Name
1	Draught Generator GCKV
2	Electronic motor speed controller
*	number of wires in the cable

Connecting diagram for Hybrid Turbowents ø150-500



N°	Name
1	Hybrid Turbowent ø150÷500
2	Electronic motor speed controller
3	Electronic power supply
*	number of wires in the cable

3. ELECTRONIC MOTOR SPEED CONTROLLER ERO-32WS-0

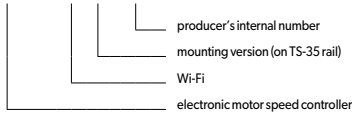


These type of motor speed controllers are equipped with Wi-Fi module. They can operate in two modes:

- Fixed mode: in which motor speed of the controlled device remains constant.
- Zonal mode: in which motor speed of the controlled device depends on time schedule defined by the user.

Controllers may be operated with the usage of a special application (BleBox) available for mobile phones and tablets (Android, iOS).

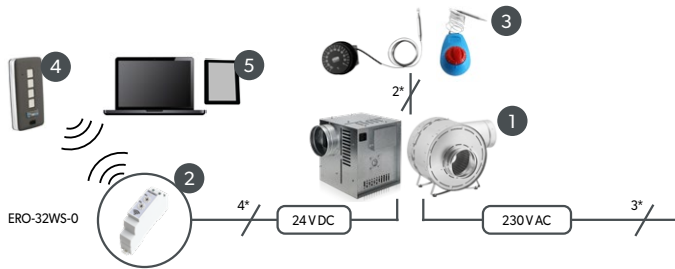
ERO-32 W S - 0



Product code	Mounting	Voltage [V DC]	Nominal power [W]	Max current [mA]	Transmission [GHz]
ERO-32WS-0	on TS-35 rail	20-24	1	50	2.4

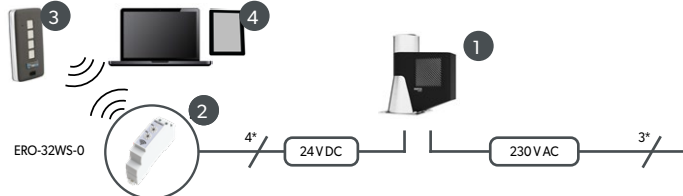
Usage:
Hot Air Ventilators AN-II, ANeco-II, Hybrid Turbowents, Draught Generators GCKV

Connecting diagram for hot air ventilators AN-II, ANeco-II



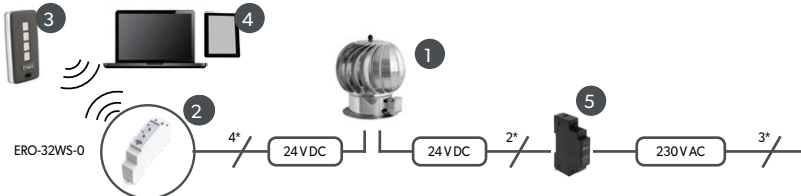
N°	Name
1	Hot Air Ventilator AN-II, ANeco-II
2	Electronic motor speed controller
3	Sensor (as option)
4	Remote control (as option)
5	Laptop/tablet/smart phone
*	number of wires in the cable

Connecting diagram for Draught Generators GCKV








N°	Name
1	Draught Generator GCKV
2	Electronic motor speed controller
3	Remote control (as option)
4	Laptop/tablet/smart phone
*	number of wires in the cable

Connecting diagram for Hybrid Turbowents ø150-500



N°	Name
1	Hybrid Turbowent ø150÷500
2	Electronic motor speed controller
3	Remote control (as option)
4	Laptop/tablet/smart phone
5	Electronic power supply
*	number of wires in the cable

Other electronic motor speed controllers

N°	Name	Picture	Mounting	Compatible with
AUTOMATIC CONTROLLERS				
1	Automatic motor speed controller ARO		Under surface	Hot Air Ventilators: - AN1 - AN2 - AN3
MANUAL CONTROLLERS				
2	Motor speed controller RO-DSS2		On surface	Hot Air Ventilators: - AN1 - AN2 - AN3 Draught Generators: - GCK150 - GCK200
3	Motor speed controller RO-N		On surface	
4	Motor speed controller RO-P		Under surface	
5	Motor speed controller RO-200		Under surface	

1. AUTOMATIC MOTOR SPEED CONTROLLER ARO



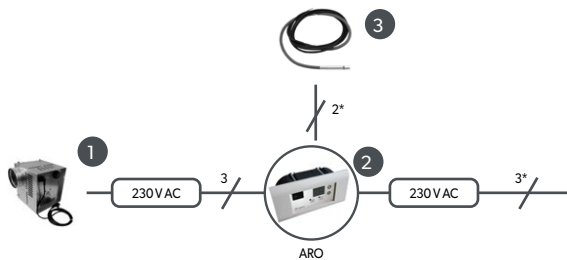
ARO
 _____ automatic motor speed controller

Product code	Mounting	Voltage [V / Hz]	Maximal load [W]
ARO	under surface	230 / 50	300

- Automatic motor speed controllers enable operation in following modes:
- Manual mode: in which motor speed of the controlled device is constant - user may set one of ten different speed values.
 - Automatic mode: in which motor speed of the controlled device depends on temperature detected by the analogue KTY84 thermal probe (an external element, included in the set), which may be placed f.e. in the fireplace hood.

Usage: Hot Air Ventilators.

Connecting diagram for hot air ventilators



2. MOTOR SPEED CONTROLLER RO-DSS2



RO-DSS2

RO-DSS2 manual motor speed controller is a digital controller, using IGBT transistors eliminating the so-called motor "buzzing" effect - that can appear with the standard, thyristor-based regulators. Motor speed of the controlled device can be changed using keyboard on the front panel. Front part is also equipped with an array of LED diodes, informing about current setting.

RO-DSS2

motor speed controller, on surface version

3. MOTOR SPEED CONTROLLERS RO



RO-P

RO-N

RO-N / RO-P digital manual speed controllers are used for precise adjustment of rotating speed of single-phase motors (having 10 possible speed settings).

RO- x

mounting [N - on surface, P - under surface]
motor speed controller

4. MOTOR SPEED CONTROLLER RO-200



RO-200

RO-200 analogue manual motor speed controller is used for precise adjustment of rotating speed of single-phase motors.

RO-200

motor speed controller, under surface version

Product code	Mounting	Voltage [V / Hz]	Maximal load [W]
RO-DSS2	on surface	230 / 50	350
RO-N	on surface	230 / 50	400
RO-P	under surface	230 / 50	400
RO-200	under surface	230 / 50	200

Usage:

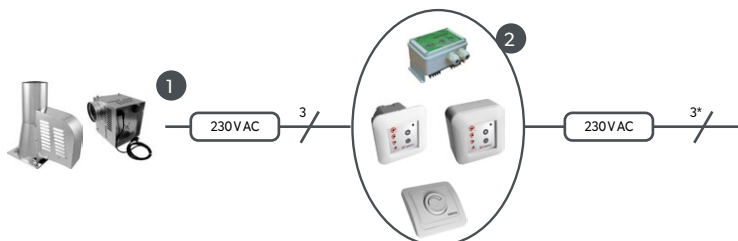
Hot Air Ventilators:

- AN1,
- AN2,
- AN3.

Draught Generators:

- GCK150,
- GCK200.

Connecting diagram for hot air ventilators AN and Draught Generators GCK



N°	Name
1	Hot Air Ventilator AN, Draught Generator GCK
2	Motor speed controller
*	number of wires in the cable

N°	Name	Picture	Usage
SENSORS			
1	Thermal probe PT1000		Sensor with analogue output: - ERO-32AP-0
2	Thermostat TERMO		Switching the steering devices on and off: - Hot Air Ventilators AN - Hot Air Ventilators AN-II - Hot Air Ventilators ANeco-II
3	Thermostat TERMO-ARTH097		Sensor with digital (bistable) output: - ERO-32AP-0
4	Thermostat ETT-MN-0		Switching on and off the following units: - Hot Air Ventilators AN-II - Hot Air Ventilators ANeco-II Sensor with digital (bistable) output for controllers: - ERO-32AP-0
5	Surface-mounted box ETT-PUSZKA		For installation of thermostat TERMO
REMOTE CONTROL FOR MOTOR SPEED CONTROLLERS			
6	Remote control PRO		Remote control for motor speed controllers: - ERO-32WS-0 The remote control cooperates with smart building system elements offered by BleBox.
ELECTRONIC CONTROL CABINET			
7	Electronic control cabinet ESR-03W-0 ESR-04W-0 ESR-06W-0 ESR-08W-0 ESR-12W-0 ESR-24W-0 ESR-36W-0 ESR-54W-0 ESR-72W-0		Modular cabinets for motor speed controllers: - ERO-32MS-0 - ERO-32WS-0

CHIMNEY COWLS

STEERING & POWER SUPPLY

HOT AIR DISTRIBUTION SYSTEM

CHIMNEYS

VENTILATION

1. THERMAL PROBE PT1000



PT1000 is a thermal probe designed for temperature measurement of hot air inside the fireplace hood.

Usage:

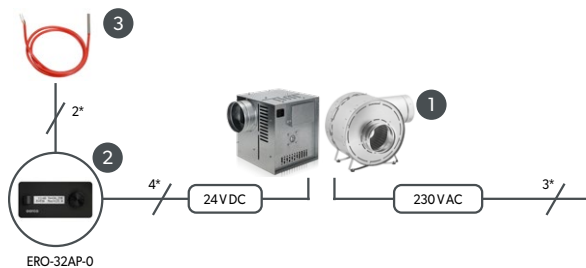
- Probe with analogue output, compatible with following controllers:
- ERO-32-AP-0

Product code	Range of temperature measured [°C]	Cable length [m]
PT1000	-50 ÷ 200	1

PT1000

temperature probe

Connecting diagram for motor speed controllers ERO-32AP-0



N°	Name
1	Hot Air Ventilator AN-II, ANeco-II
2	Electronic motor speed controller
3	Thermal probe PT1000

* number of wires in the cable

invent. build. enjoy.

2. THERMOSTAT TERMO, TERMO-ARTH097, ETT-MN-0



Thermostats are sensors used to switch the controlled devices on and off according to temperature set by the user. They may also be used as sensors with digital output, that may be connected with ERO-32AP-0 type controllers (operating modes: fixed sensor mode, zonal sensor mode).

Usage:

Switching controlled devices on and off:

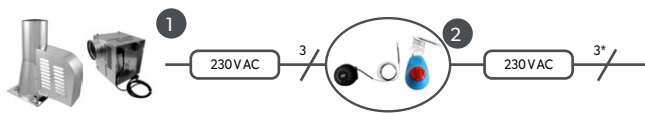
- Hot air ventilators AN, AN-II, ANeco-II
- Draught Generator GCK

Thermostat with digital (bistable) output for controllers:

- ERO-32AP-0

Product code	Adjustment range [°C]	Capillary length [m]
TERMO	0 + 220	1.5
TERMO-ARTH097	0 + 90	
ETT-MN-0	0 + 220	

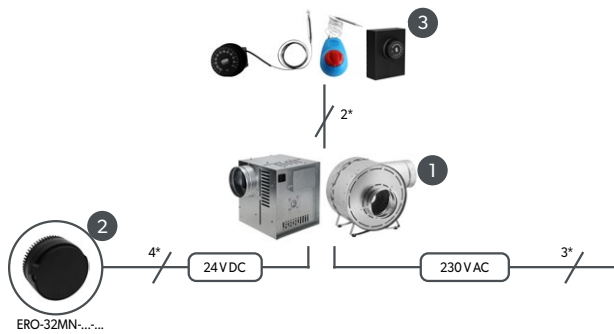
Connecting diagram for Hot Air Ventilator AN and Draught Generator GCK



N°	Name
1	Hot Air Ventilator AN, Draught Generator GCK
2	Thermostat

* number of wires in the cable

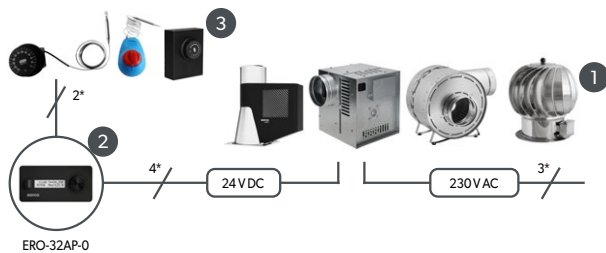
Connecting diagram for Hot Air Ventilator AN-II, ANeco-II



N°	Name
1	Hot Air Ventilator AN-II, ANeco-II
2	Electronic motor speed controller
3	Thermostat

* number of wires in the cable

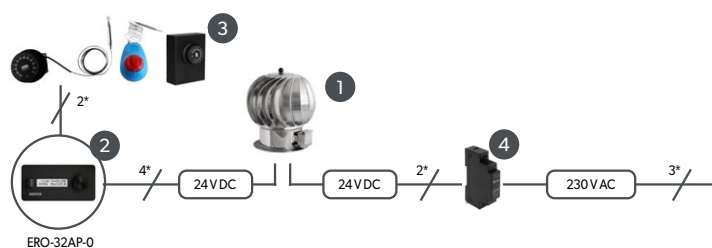
Connecting diagram for Hot Air Ventilator AN-II, ANeco-II, Draught Generator GCKV, Hybrid Turbowent ø400÷500



N°	Name
1	Hot Air Ventilator AN-II, ANeco-II, Draught Generator GCKV, Hybrid Turbowent ø400÷500
2	Electronic motor speed controller
3	Thermostat

* number of wires in the cable

Connecting diagram for Hybrid Turbowent ø150÷350



N°	Name
1	Hybrid Turbowent ø150÷350
2	Electronic motor speed controller
3	Thermostat
4	Electronic power supply

* number of wires in the cable

3. PRO REMOTE CONTROL



PRO-type remote controls are intended to replace mobile phone, tablet or PC computer in communication with the ERO-32WS-0 controller. It allows to increase and decrease rotating speed of the controlled device in a simple way. Also various different functions may be assigned to remote control buttons, i.e.:

- Incremental increase of rotating speed
- Setting a fixed value of rotating speed
- Switching the controlled device on and off

Usage:

- Remote control for controllers
- ERO-32WS-0

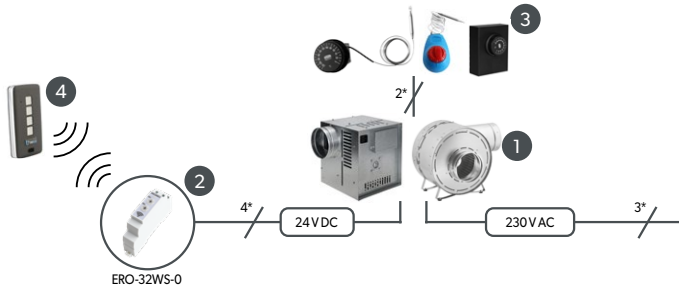
PRO - ...
 color (B- white, C- black)
 WiFi remote control

Product code	Transmission [GHz]	Power supply	Charging
PRO	2.4	lithium polymer battery	standard micro USB charger

Remote control is compatible with smart building solutions offered by the company BleBox.



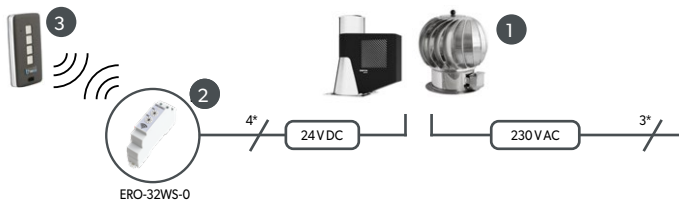
Connecting diagram for Hot Air Ventilators AN-II, ANeco-II



N°	Name
1	Hot Air Ventilators AN-II, ANeco-II
2	Electronic motor speed controller WiFi
3	Sensor (as option)
4	Remote control (as option)
5	wBox steering application

* number of wires in the cable

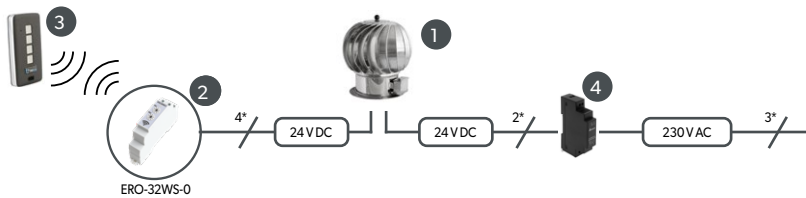
Connecting diagram for Draught Generator GCKV and Hybrid Turbowent ø400÷500



N°	Name
1	Draught Generator GCKV, Hybrid Turbowent ø400+500
2	Electronic motor speed controller WiFi
3	Remote control (as option)
4	wBox steering application

* number of wires in the cable

Connecting diagram for Hybrid Turbowent ø150÷350



N°	Name
1	Hybrid Turbowent ø150+350
2	Electronic motor speed controller WiFi
3	Remote control (as option)
4	Electronic power supply
5	wBox steering application

* number of wires in the cable

4. ELECTRONIC CONTROL CABINET ESR W-O



Modular control cabinets are used to gather larger number of ERO-32-MS-0 and/or ERO-32WS-0 controllers.

CAUTION! In cases where group of Hybrid Turbowents consumes power not exceeding 60W in total, it is allowed to install one EZN type power supply inside the cabinet.

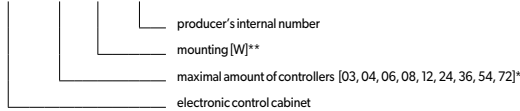
Usage:

Cabinets for controllers:

- ERO-32MS-0
- ERO-32WS-0

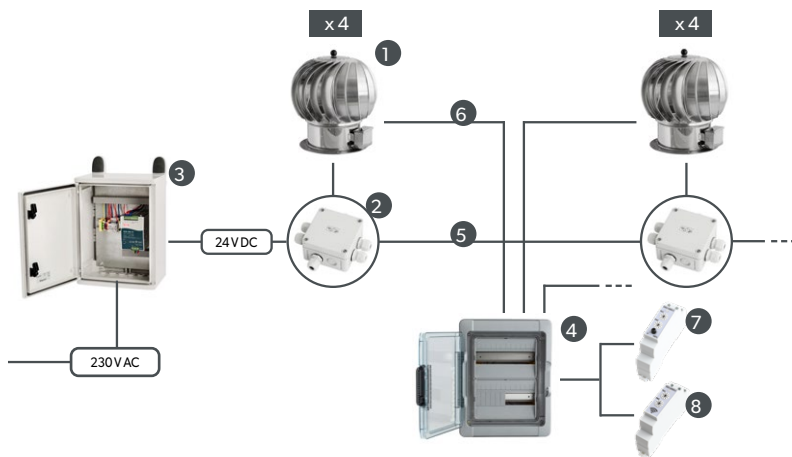
Product code	Maximal amount of controllers	Dimensions	Mounting
ESR-03W-0	3 controllers	174x 93x 109	on surface inside buildings
ESR-04W-0	4 controllers	128 x 200 x 115.6	
ESR-06W-0	6 controllers	200 x 164 x 115.6	
ESR-08W-0	8 controllers	200 x 200 x 115.6	
ESR-12W-0	12 controllers	340 x 282 x 141	
ESR-24W-0	24 controllers	340 x 432 x 161	
ESR-36W-0	36 controllers	340 x 622 x 161	
ESR-54W-0	54 controllers	448 x 622 x 161	
ESR-72W-0	72 controllers	448 x 822 x 161	

ESR - ... W - O



* 04 - 4 controllers
** W - on surface, inside buildings

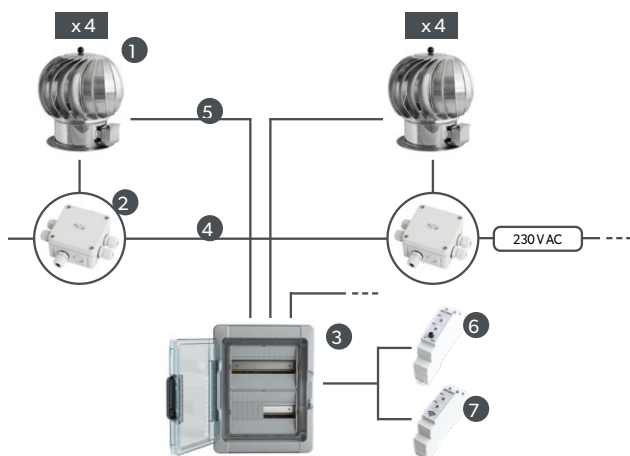
Connecting diagram for Hybrid Turbowent ø150÷350



N°	Name
1	Hybrid Turbowent ø150÷350
2	Electronic power divider
3	Electronic power supply cabinet
4	Electronic control cabinet
5	Cable cord type 2x[from 0.75 mm to 2.5 mm] ²⁾ (OMY/OWY 2x1.5") ¹⁾
6	Cable cord type 4x 0.5 mm max: 50 mm (OMY/OWY 4x0.5") ¹⁾
7	Manual motor speed controller on TS-35 rail mounted (ERO-32MS)
8	Wi-Fi controller on rail TS-35 (ERO-32WS)

¹⁾ it is necessary to protect cables from influence of UV light
²⁾ length of cables needs to be checked by means of the „cable and power calculator“ software - the application is available upon request by contacting DARCO technical assistance: darco@darco.pl

Connecting diagram for Hybrid Turbowent ø400÷500



N°	Name
1	Hybrid Turbowent ø400÷500
2	Any electrical box meeting the legal requirements
3	Electronic control cabinet
4	Cable cord type 2x[from 0.75 mm to 2.5 mm] ²⁾ (OMY/OWY 2x1.5") ¹⁾
5	Cable cord type 4x 0.5 mm max: 50 mm (OMY/OWY 4x0.5") ¹⁾
6	Manual motor speed controller on TS-35 rail mounted (ERO-32MS)
7	Wi-Fi controller on rail TS-35 (ERO-32WS)

¹⁾ it is necessary to protect cables from influence of UV light
²⁾ length of cables needs to be checked by means of the „cable and power calculator“ software - the application is available upon request by contacting DARCO technical assistance: darco@darco.pl

N°	Name	Picture	Usage
1	Radio switch single-channel ROM-01		Switching the steering devices on and off: <ul style="list-style-type: none"> Hot air ventilators AN Hot air ventilators AN-II Hot air ventilators ANeco-II Draught Generators GCK Draught Generators GCKV Hybrid Turbowents TH Hybrid Turbowents THP
2	Under surface radio switch single-channel ROP-01		

MODULAR RADIO SWITCHES SINGLE-CHANNEL

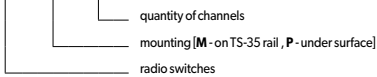


ROM-01



ROP-01

RO - ... - 01



Product code	Mounting	Voltage [V/Hz]	Nominal power [W]	Transmission [MHz]
ROM-01	on rail TS-35	230 / 50	0.45	868.32
ROP-01	under surface		0.29	

Signal receivers are used to wirelessly switch on and off following devices: Hot air ventilators AN-II and ANeco-II, Draught Generators GCK , GCKV and Hybrid Turbowents TH ,THP.

Controllers may operate in five modes:

- Bistable - device is alternately switched on and off using a single button.
- Time control - pressing the button causes device to switch on for a time period programmed by the user, after which it is switched off again.
- Switch On - device is switched on when the button is pressed.
- Switch Off - device is switched off when the button is pressed.
- Monostable - device is switched on for the time when button remains pressed (this mode is not recommended).

Usage:

Switching controlled devices on and off:

- Hot air ventilators AN
- Hot air ventilators AN-II
- Hot air ventilators ANeco-II
- Draught Generators GCK , GCKV
- Hybrid Turbowents TH, THP

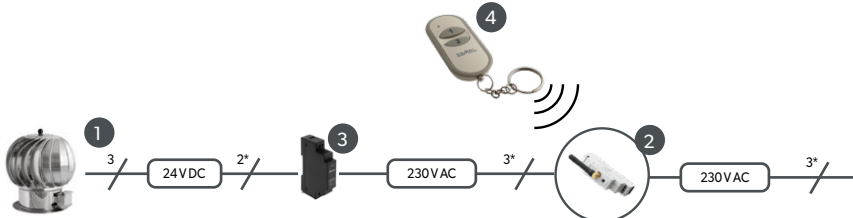
Connecting diagram for Hot Air Ventilator AN, AN-II, ANeco-II, Draught Generator GCK, GCKV, Hybrid Turbowent ø400÷500



N°	Name
1	Hot Air Ventilator AN, AN-II, ANeco-II, Draught Generator GCK, GCKV, Hybrid Turbowent ø400÷500
2	Modular radio switch
3	Remote control P-257/2

* number of wires in the cable

Connecting diagram for Hybrid Turbowent ø150÷350

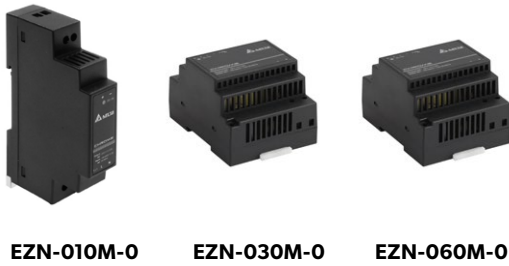


N°	Name
1	Hybrid Turbowent ø150÷350
2	Modular radio switch
3	Electronic power supply
4	Remote control P-257/2

* number of wires in the cable

N°	Name	Picture	Usage
1	Electronic power supplier EZN-010M-0		Hybrid Turbowent power supply: - TH150-T - TH150 - TH200 - THP200 - THP250 - THP300 - THP350
2	Electronic power supplier EZN-030M-0		
3	Electronic power supplier EZN-060M-0		

ELECTRONIC POWER SUPPLIERS



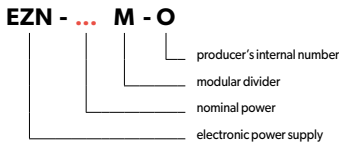
Presented devices are used as power supply for 1 to 8 pieces of Hybrid Turbowents (depending on their type). They are to be mounted on a TS-35 rail, in ESR type cabinets, with controllers.

CAUTION! Only one power supply is allowed to be installed inside the cabinet because of the heat it releases.

Usage:

Power supply of Hybrid Turbowents:

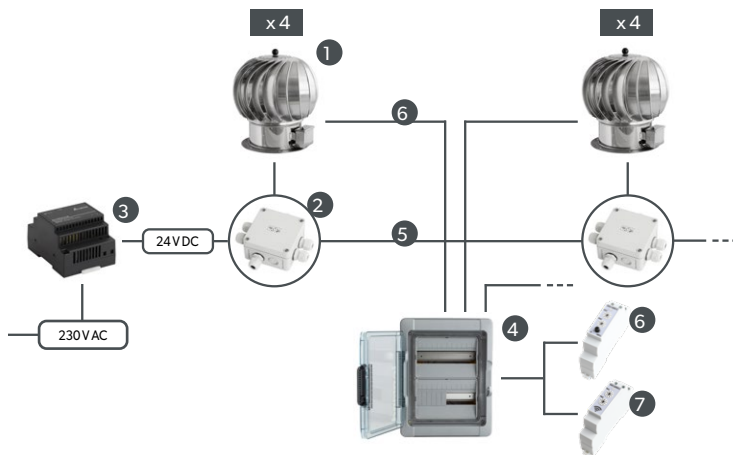
- TH150-T
- TH150
- TH200
- THP200
- THP250
- THP300
- THP350



Product code	Output parameters			Max. ambient temp. [°C]	Usage / maximal amount			
	Power [V DC]	Nominal power* [W]	Max current [A]		TH150T	TH150	TH200	THP200-350
EZN-010M-0	24	10	0.42	60	max 1	max 1	max 1	-
EZN-030M-0		30	1.25		max 3	max 3	max 3	-
EZN-060M-0		60	2.5		max 8	max 8	max 8	max 1





* by max load

Connecting diagram for Hybrid Turbowent ø150÷350

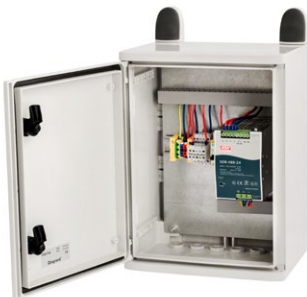


N°	Name
1	Hybrid Turbowent ø150÷350
2	Electronic power divider
3	Electronic power supply
4	Electronic control cabinet
5	Cable cord type 2x[from 0.75 mm to 2.5 mm] ²⁾ (OMY/OWY 2x1.5") ³⁾
6	Cable cord type 4x0.5 mm max: 50 mm (OMY/OWY 4x0.5") ³⁾
7	Manual motor speed controller on TS-35 rail mounted (ERO-32MS)
8	Wi-Fi controller on rail TS-35 (ERO-32WS)

¹⁾ it is necessary to protect cables from influence of UV light
²⁾ length of cables needs to be checked by means of the „cable and power calculator“ software - the application is available upon request by contacting DARCO technical assistance: darco@darco.pl

N°	Name	Picture	Usage
1	Electronic power supply cabinet ESZ-060Z-0		Hybrid Turbowent power supply: - TH150-T - TH150 - TH200 - THP200 - THP250 - THP300 - THP350
2	Electronic power supply cabinet ESZ-120Z-0		
3	Electronic power supply cabinet ESZ-240Z-0		
4	Electronic power supply cabinet ESZ-480Z-0		

ELECTRONIC POWER SUPPLY CABINET ESZ



Most convenient way of providing power supply to a group of Hybrid Turbowents is to use an Electronic Power Supply Cabinet ESZ type. Each version is equipped with connection terminals: one input for 230 V AC and five outputs for 24 V DC; they are also provided with required protection measures: against short-circuit, overvoltage, overload. Individual models differ in terms of the power supply unit used (while retaining the same external dimensions).

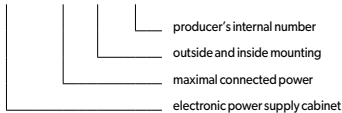
Selection of a specific device depends on the type and number of connected cowl. Use the "Wiring Calculator" programme available freeware at www.darco.pl or ask a DARCO technical advisor for assistance.

Usage:

Power supply of Hybrid Turbowents:

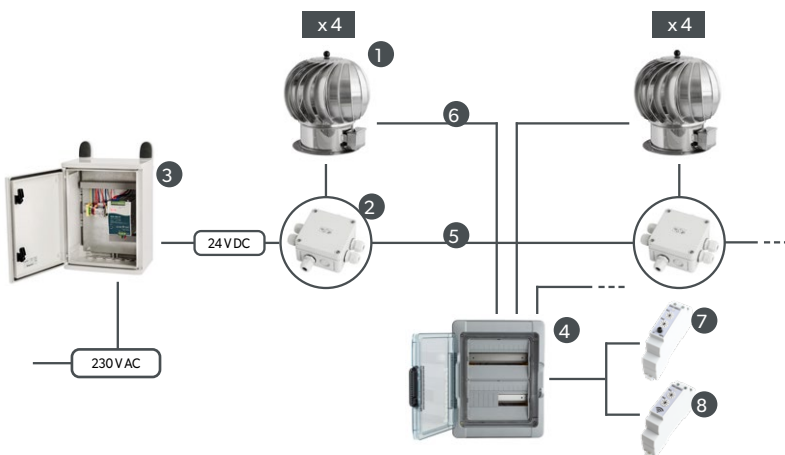
- TH150-T, • THP200,
- TH150, • THP250,
- TH200, • THP300,
- THP350.

ESZ - ... Z - 0





Product code	Dimensions [mm]	Output parameters			Max ambient temp. [°C]
		Power [V DC]	Nominal power [W]	Max current [A]	
ESZ-060Z-0	300 x 400 x 200	24	60	2.5	40
ESZ-120Z-0			120	5	
ESZ-240Z-0			240	10	
ESZ-480Z-0			480	20	

Connecting diagram for Hybrid Turbowent ø150÷350



N°	Name
1	Hybrid Turbowent ø150÷350
2	Electronic power divider
3	Electronic power supply cabinet
4	Electronic control cabinet
5	Cable cord type 2x[from 0.75 mm to 2.5 mm] ²⁾ (OMY/OWY 2x1.5") ³⁾
6	Cable cord type 4x 0.5 mm max: 50 mm (OMY/OWY 4x0.5") ³⁾
7	Manual motor speed controller on TS-35 rail mounted (ERO-32MS)
8	Wi-Fi controller on rail TS-35 (ERO-32WS)

¹⁾ it is necessary to protect cables from influence of UV light
²⁾ length of cables needs to be checked by means of the „cable and power calculator“ software- the application is available upon request by contacting DARCO technical assistance: darco@darco.pl

N°	Name	Picture	Usage
POWER DIVIDERS			
1	Electronic power divider ERZ-06D-0		Power supply for Hybrid Turbowents: - TH150-T - TH150 - TH200 - THP200 - THP250 - THP300 - THP350
CIRCUIT BREAKERS			
2	Circuit breaker CLS6-B4/1N		Circuit breaker cutting off power at both poles

ELECTRONIC POWER DIVIDER ERZ-06D-0



Power dividers are devices enabling convenient distribution of powering voltage to individual Hybrid Turbowents. A maximum of four (or five if the wire is terminated) devices may be connected to a single divider.

Usage:

Power supply of Hybrid Turbowents:

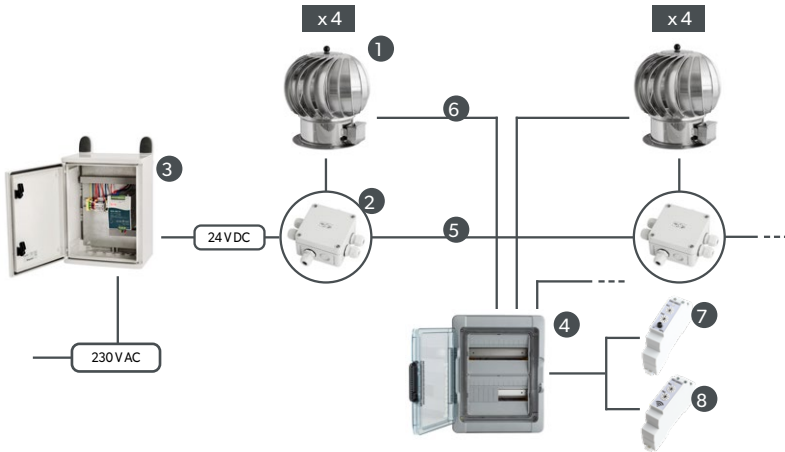
- TH150-T, • THP200,
- TH150, • THP250,
- TH200, • THP300,
- THP350.

ERZ-06D-0

_____ electronic power divider (24 VDC)

Product code	Input (WE)		Output (WY)		Outputs (U1, U2, U3, U4)	
	Power [V DC]	Current [A]	Power [V DC]	Current [A]	Power [V DC]	Current [A]
ERZ-06D-0	25	10	25	10	25	2.5

Connecting diagram for Hybrid Turbowent ø150÷350



N°	Name
1	Hybrid Turbowent ø150÷350
2	Electronic power divider
3	Electronic power supply cabinet
4	Electronic control cabinet
5	Cable cord type 2x[from 0.75 mm to 2.5 mm] ¹⁾ (OMY/OWY 2x1.5") ¹⁾
6	Cable cord type 4x0.5 mm max: 50 mm (OMY/OWY 4x0.5") ¹⁾
7	Manual motor speed controller on TS-35 rail mounted (ERO-32MS)
8	Wi-Fi controller on rail TS-35 (ERO-32WS)

¹⁾ it is necessary to protect cables from influence of UV light
²⁾ length of cables needs to be checked by means of the „cable and power calculator“ software - the application is available upon request by contacting DARCO technical assistance: darco@darco.pl

CIRCUIT BREAKER CLS6-B4/1N



Circuit breaker cutting off power at both poles.

CLS6-B4/1N

_____ circuit breaker

Product code	Rated power [V AC]	Rated current [A]	Number of poles
CLS6-B4/1N	230	4	1+N

Legal regulations and rules of situating fireplaces in the building

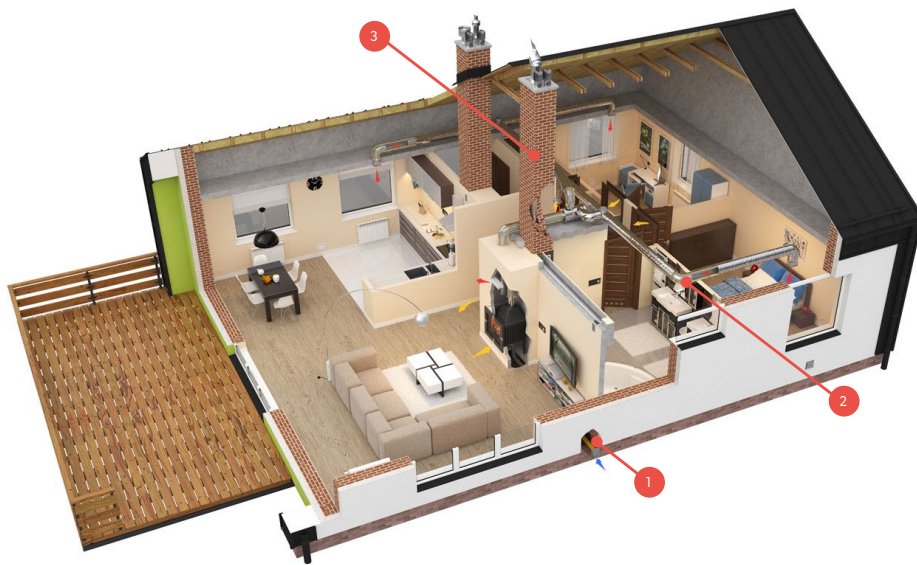
Wood fired fireplaces with open furnace chamber or those equipped with fireplace insert are to be mounted only in single-family housing, enclosure buildings, individual recreation, as well as low-rise multi-family housing, in the subsequent rooms:

1. Of cubic capacity not smaller than the one calculated with the index of 4 m^3 per each kW of fireplace's nominal power, though not less than 30 m^3
2. Fulfilling requirements concerning ventilation,
3. Equipped with proper chimney ducts
4. To which proper amount of inflow air into the firebox is provided:
 - a) at least $10 \text{ m}^3/\text{h}$ for 1 kW of the fireplace's nominal power for fireplaces with fireplace inserts
 - b) of velocity in fireplace chamber not smaller than 0.2 m/s for fireplaces with open chamber.

Elements of fireplace installation

Fireplace installation, even in its most complex variants, consists of three independent systems:

1. System of fresh air supply for burning and ventilation
2. System of hot air distribution, convection or mechanical (supported by ventilator)
3. System of fume extraction from the fireplace



Designation of particular systems

1. System of fresh air supply for burning and ventilation

Its main objective is to supply the fireplace with air necessary for burning. This function is extremely significant, especially when dealing with the problem of too tightly insulated buildings, where access of fresh (cold) air is limited. For the process of burning, great amount of fresh air is needed, therefore providing proper air supply guarantees protection against situation of sucking air through ventilation outlets (e.g. from bathroom's shield grates) and disorganizing the exhaust ventilation. In extreme cases, when there is no proper air supply, usage of fireplaces may have effects dangerous for life and health, such as sucking fumes from fume exhaust ducts (by causing backdraught in these ducts).

2. System of hot air distribution, convection and mechanical

It is a system of ducts, fittings and other equipment enabling supply of hot air from the fireplace (through the process of convection) to many distant rooms. The system may be of natural type (gravitational buoyancy of air) or of mechanical type (supported by ventilator).

3. System of fume extraction from the fireplace

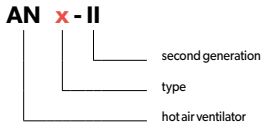
System securing safe extraction of dangerous for life and health products of wood burning, outside the building. Elements of the system, made with stainless steel or cold rolled steel sheet of appropriate thickness, provide resistance to temperature and acids, which are an elementary component of fumes. Application of radiator on the fume exhaust duct may serve as an additional source of air heating in HAD (hot air distribution) system. A chimney cowl may be mounted on top of the chimney securing improvement and stabilization of chimney draught.

AN-II HOT AIR VENTILATOR



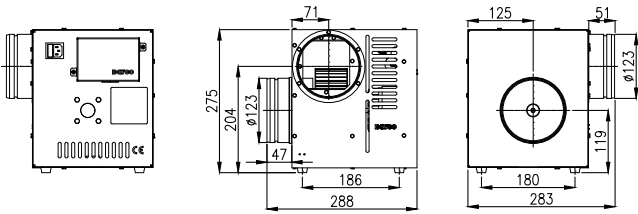
Destination	W	W - supply/exhaust ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

Technical data	AN1-II	AN2-II	AN3-II
Max. airflow [m ³ /h]	490	860	990
Max. pressure [Pa]	150	220	210
Max. transported air temperature [°C]		150	
Acoustic pressure [dB]		65	
Supply voltage [V/Hz]		230/50	
Rated power [W]	50	95	120
Max. current [A]	0.4	0.7	1.1
Power socket fuses		2A	
B1 fuse		100 mA (SCHUSTER 0034.6004)	
Max. ambient temperature [°C]		40	
IP protection class		IP20	
Weight [kg]	5.50	6.70	8.30

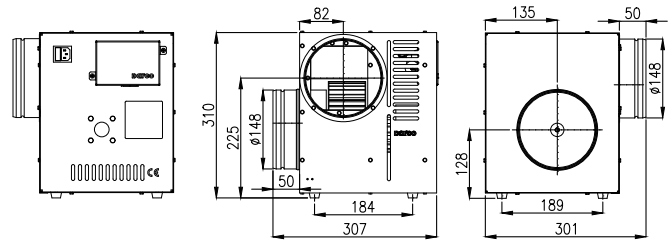


Hot air ventilators - types / dimensions

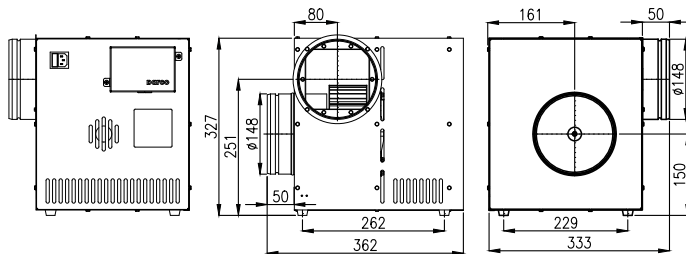
AN1-II



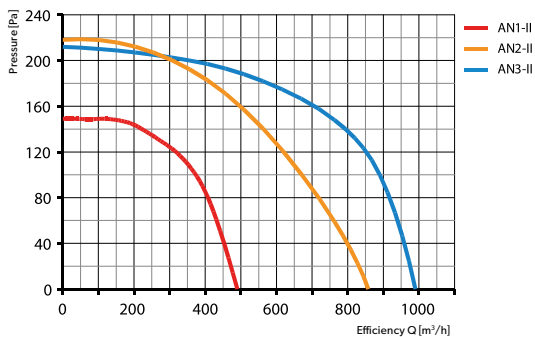
AN2-II



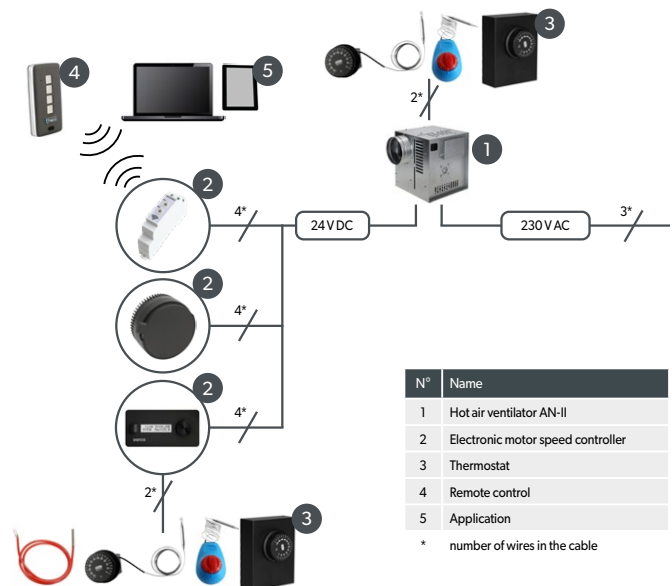
AN3-II



Airflow chart



Connecting diagram



CHIMNEY COWLS

STEERING & POWER SUPPLY

HOT AIR DISTRIBUTION SYSTEM

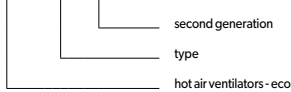
CHIMNEYS

VENTILATION

ANeco-II HOT AIR VENTILATOR



ANeco x - II

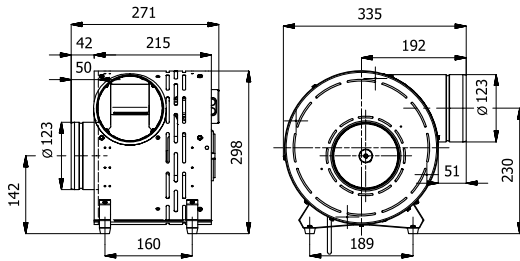


Destination	W	W - supply/exhaust ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

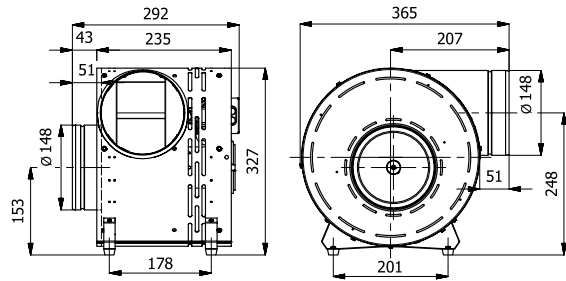
Technical data	ANeco1-II	ANeco2-II	ANeco3-II
Max. airflow [m ³ /h]	490	690	1080
Max. pressure [Pa]	150	180	205
Max. transported air temperature [°C]		150	
Supply voltage [V/Hz]		230/50	
Rated power [W]	30	50	125
Max. current [A]	0.7	0.7	1.4
Max. ambient temperature [°C]		40	
IP protection class		IP20	
Weight [kg]	6.30	7.30	8.30

Hot air ventilators - types / dimensions

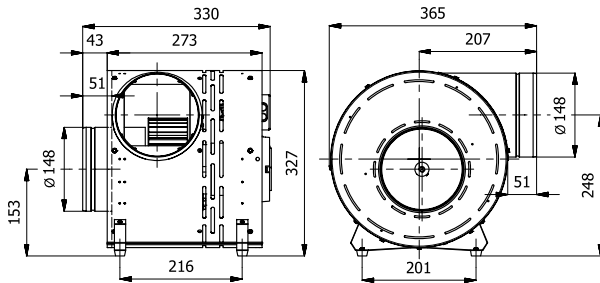
ANeco1-II



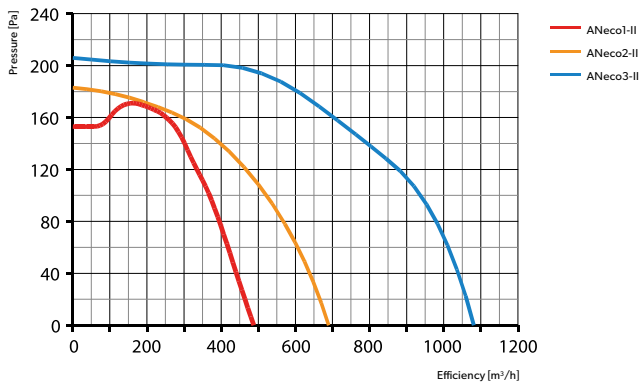
ANeco2-II



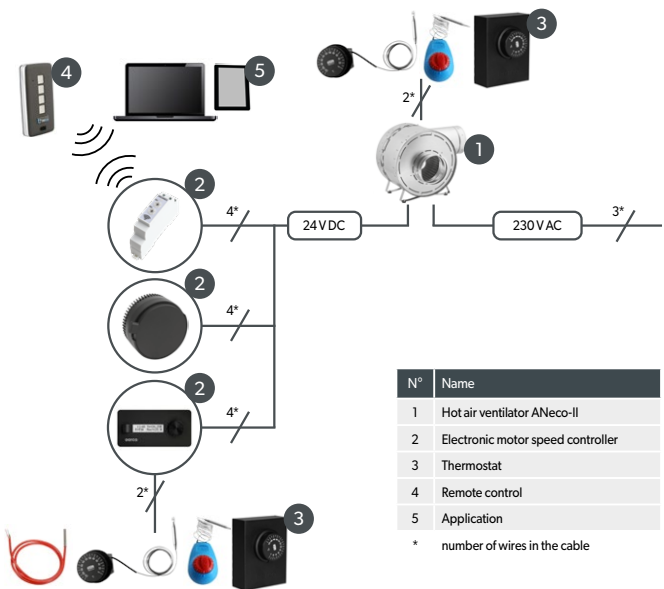
ANeco3-II



Airflow chart



Connecting diagram



BYPASS FOR HOT AIR VENTILATOR BAN



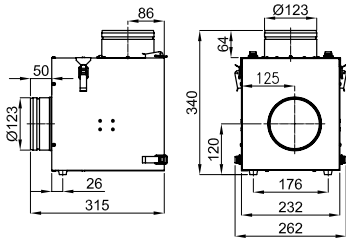
Destination	O	O - air heating
Material	OC	OC - galvanised steel sheet



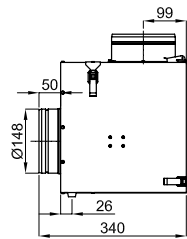
Type	Dimensions length/width/height [mm]	Inlets diameter	Weight [kg]	Max working temp. [°C]
BAN1	315x262x340	ø125	3.50	180
BAN2	340x281x375	ø150	4.00	
BAN3	340x313x392	ø150	4.50	

Bypass - types / dimensions

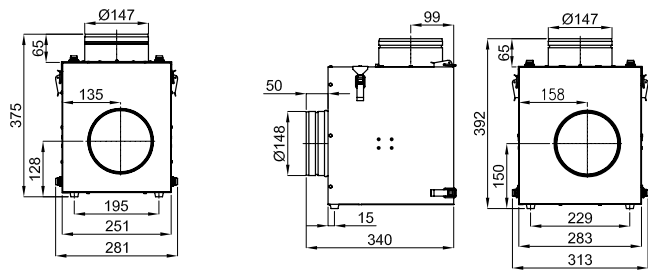
BAN1



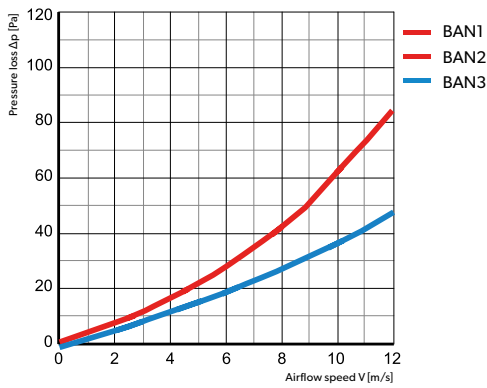
BAN2



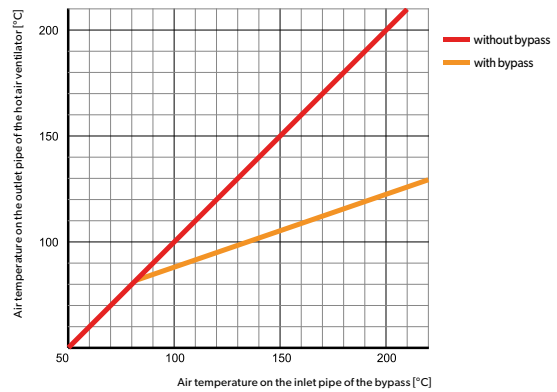
BAN3



Airflow charts



Construction diagram



BYPASS FOR HOT AIR VENTILATOR ANeco



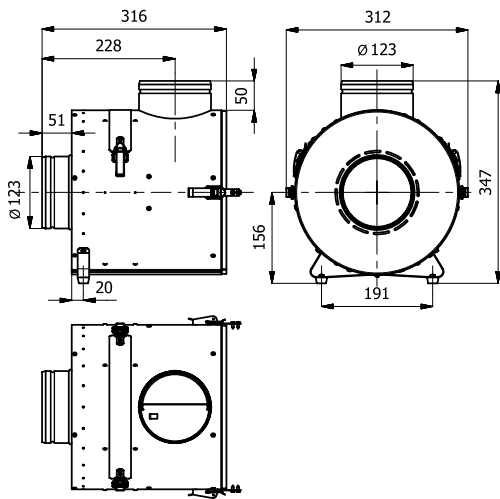
Destination	O	O - air heating
Material	OC	OC - galvanised steel sheet



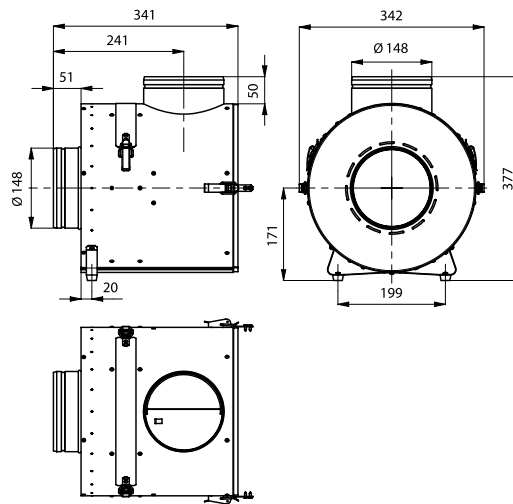
Types	Dimensions length/width/height [mm]	Inlets diameter	Weight [kg]
BANeco1	316x312x347	ø125	5.00
BANeco2	341x342x377	ø150	8.00
BANeco3	341x342x377	ø150	8.00

Bypass - types / dimensions

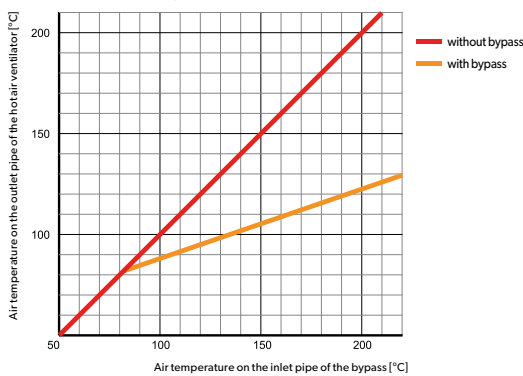
BANeco1



BANeco2, BANeco3



Construction diagram



CHIMNEY COWLS

STEERING & POWER SUPPLY

HOT AIR DISTRIBUTION SYSTEM

CHIMNEYS

VENTILATION

invent. build. enjoy.

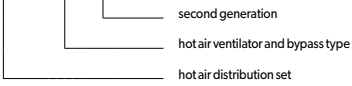
BANAN-II HOT AIR DISTRIBUTION SET



Destination	W	W - supply/exhaust ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

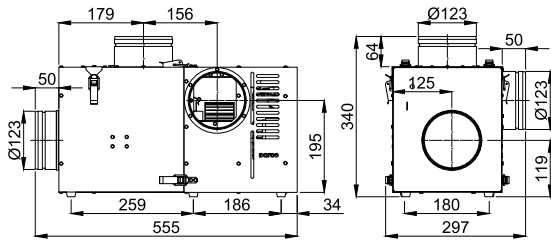
Technical data	BANAN1-II	BANAN2-II	BANAN3-II
"Spiro" diameter [mm]	ø 125	ø 150	ø 150
Max efficiency [m³/h]	370	570	660
Max pressure [Pa]	140	170	195
Max power [W]	50	80	90
Voltage [V/Hz]		230/50	
Max hot air temperature [°C]		180	
Ambient temperature [°C]		40	
IP protection class		IP20	

BANAN x - II

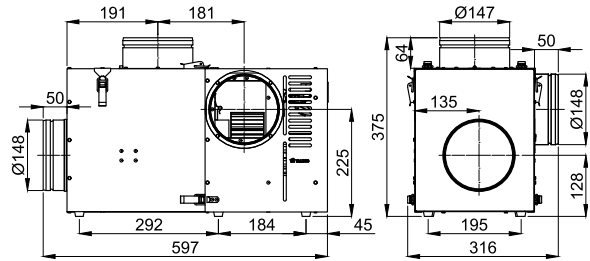


Hot air distribution sets - types / dimensions

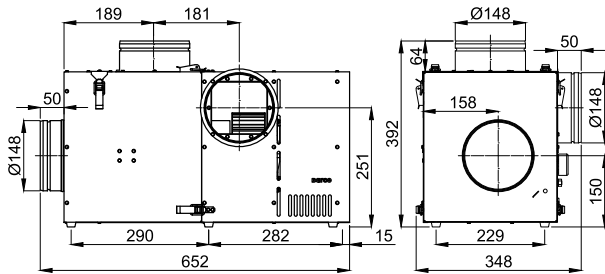
BANAN1-II



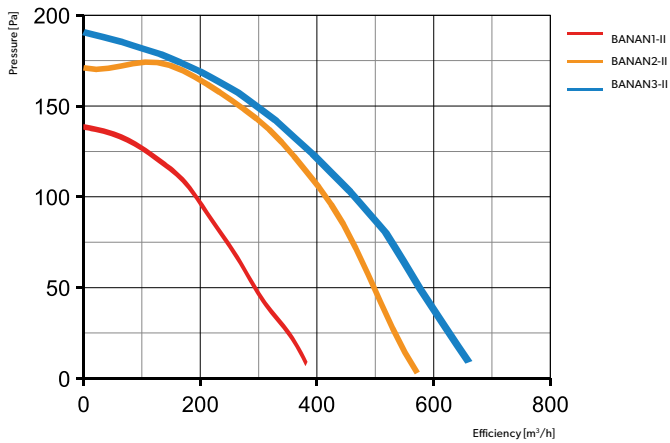
BANAN2-II



BANAN3-II



Airflow charts



Function principle

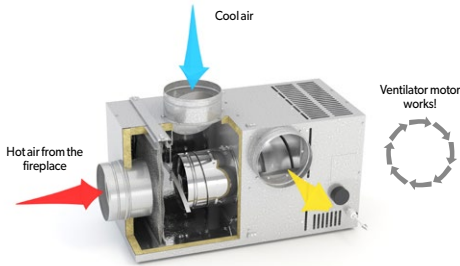
I. Temperature in fireplace hood is below the one set on the thermostat (recommended 40°C).



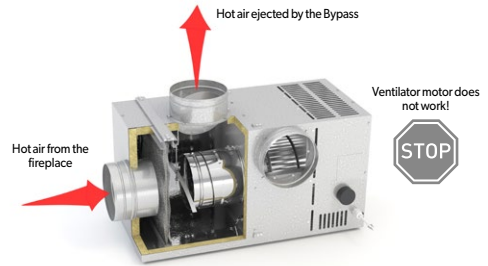
II. Temperature in fireplace hood is between 40°C and 70°C.



III. Temperature in fireplace hood is high (between 70°C and 180°C).



IV. Hot air ventilator does not work (for example due to power failure).



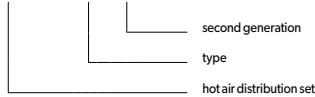
BANANeco-II HOT AIR DISTRIBUTION SET



Destination	W	W - supply/exhaust ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

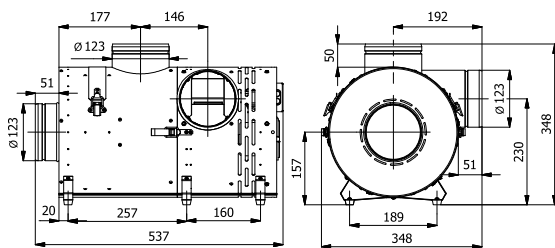
Technical data	BANANeco1-II	BANANeco2-II	BANANeco3-II
"Spiro" diameter [mm]	ø125	ø150	ø150
Max efficiency [m³/h]	340	540	760
Max pressure [Pa]	125	155	180
Max power [W]	31	48	78
Voltage [V/Hz]	230/50		
Speed regulation method: by voltage [V]	0-10		
Max hot air temperature [°C]	180		
Ambient temperature [°C]	40		
IP protection class	IP20		

BANANeco x - II

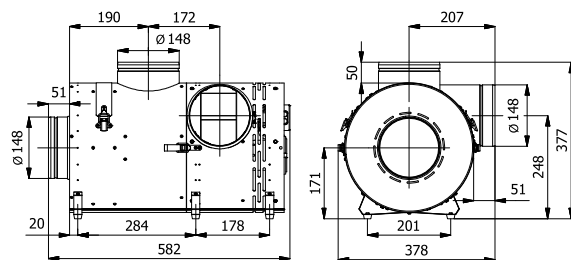


Hot air distribution sets - types / dimensions

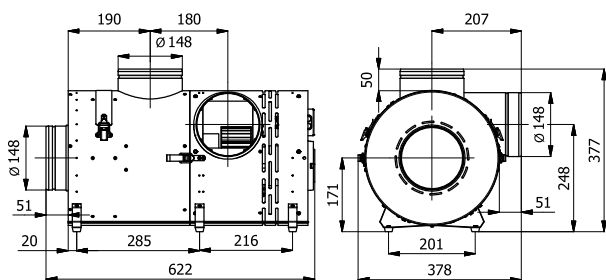
BANANeco1-II



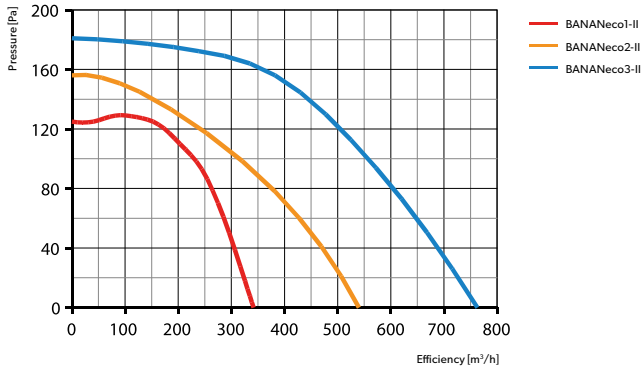
BANANeco2-II



BANANeco3-II

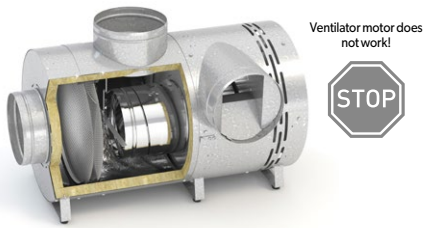


Airflow charts

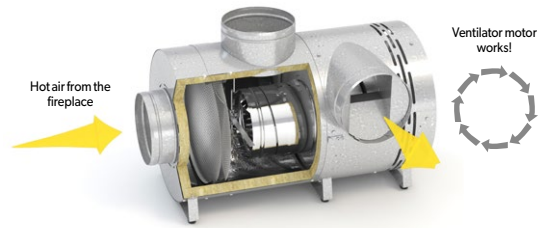


Function principle

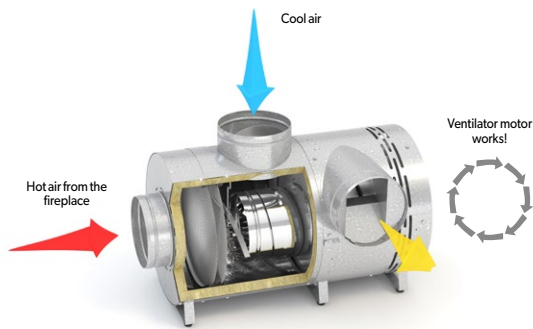
I. Temperature in fireplace hood is below the temperature of automatic start set on ART-AN-ZSA controller (for example 40°C).



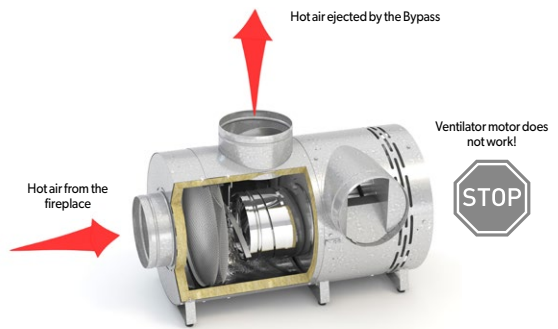
II. Temperature in fireplace hood is between 40°C and 70°C.



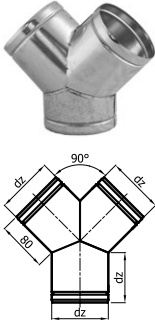
III. Temperature in fireplace hood is high (between 70°C and 180°C).



IV. Hot air ventilator does not work (for example due to a power failure).

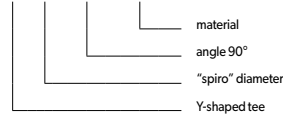


1. TEE YS/90



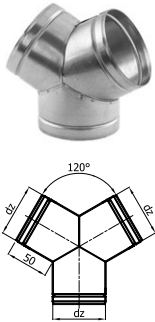
"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200
dz	78	98	108	113	118	123	128	138	148	158	178	198
Weight [kg]	0.23	0.26	0.27	0.28	0.29	0.33	0.35	0.38	0.42	0.45	0.51	0.56

YS x/ 90 - OC



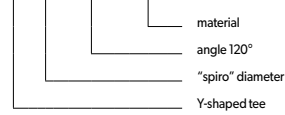
Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

2. TEE YS/120



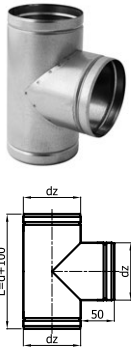
"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200
dz	78	98	108	113	118	123	128	138	148	158	178	198
Weight [kg]	0.19	0.21	0.22	0.23	0.24	0.26	0.28	0.30	0.33	0.34	0.38	0.42

YS x/ 120 - OC



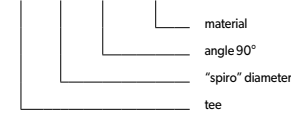
Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

3. TEE TRS/90



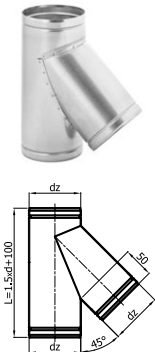
"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200
dz	78	98	108	113	118	123	128	138	148	158	178	198
Weight [kg]	0.23	0.30	0.35	0.38	0.40	0.43	0.45	0.50	0.57	0.62	0.72	0.80

TRS x/ 90 - OC



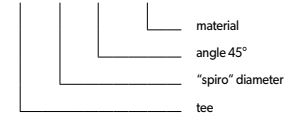
Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

4. TEE TRS/45



"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200
dz	78	98	108	113	118	123	128	138	148	158	178	198
Weight [kg]	0.33	0.48	0.55	0.61	0.66	0.71	0.76	0.87	0.98	1.05	1.15	1.28

TRS x/ 45 - OC



Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

CHIMNEY COWLS

STEERING & POWER SUPPLY

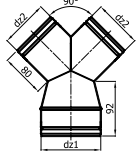
HOT AIR DISTRIBUTION SYSTEM

CHIMNEYS

VENTILATION

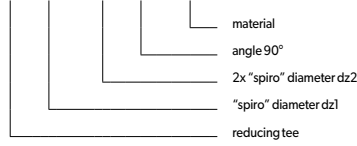
invent. build. enjoy.

5. REDUCING TEE YRS/90



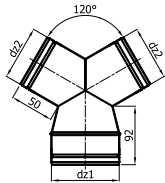
"Spiro" diameter	ø100-2xø80		ø125-2xø100		ø150-2xø100		ø150-2xø125		ø160-2xø125		ø160-2xø100		ø200-2xø150		ø200-2xø160	
dz1 / dz2	98	78	123	98	148	98	148	123	158	123	158	98	198	148	198	158
Weight [kg]	0.30		0.35		0.39		0.40		0.40		0.40		0.50		0.52	

YRS x-2x y / 90 - OC



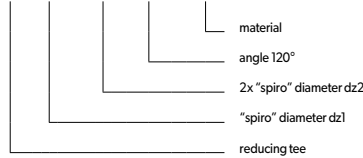
Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

6. REDUCING TEE YRS/120



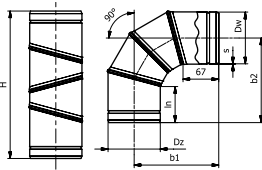
"Spiro" diameter	ø100-2xø80		ø125-2xø100		ø150-2xø125		ø150-2xø100		ø160-2xø125		ø160-2xø100		ø200-2xø150		ø200-2xø160	
dz1 / dz2	98	78	123	98	148	123	148	98	158	123	158	98	198	148	198	158
Weight [kg]	0.28		0.30		0.35		0.35		0.35		0.35		0.50		0.52	

YRS x-2x y / 120 - OC



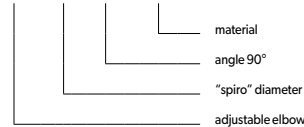
Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

7. ADJUSTABLE ELBOW KNS/90



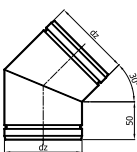
"Spiro" diameter	ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250
Dw [mm]	78.1	97.5	107.4	117.3	122.4	127.5	137.3	147.2	157.4	177.1	197.2	222.6	247.8
Dz [mm]	79.1	98.5	108.4	118.3	123.4	128.5	138.3	148.2	158.4	178.1	198.2	223.6	248.8
b1 [mm]	149	159	164	169	174	175	179	184	189	199	209	221	234
b2 [mm]	150	159	157	161	164	164	175	172	195	199	204	221	238
H [mm]	262	278	278	285	292	292	305	305	332	342	352	377	402
In [mm]	68	68	60	59	58	57	63	55	74	68	62	67	71
Weight [kg]	0.29	0.37	0.41	0.46	0.49	0.51	0.57	0.61	0.70	0.81	0.93	1.12	1.32

KNS x / 90 - OC



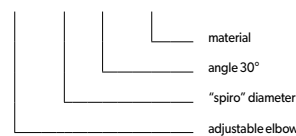
Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

8. ADJUSTABLE ELBOW KNS/30



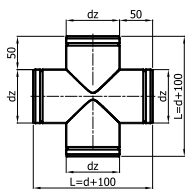
"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200
dz	78	98	108	113	118	123	128	138	148	158	178	198
Weight [kg]	0.18	0.25	0.29	0.31	0.33	0.35	0.38	0.42	0.45	0.48	0.58	0.63

KNS x / 30 - OC



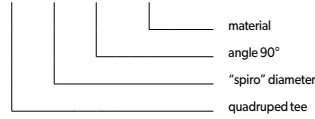
Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

9. QUADRUPED TEE CZO/90



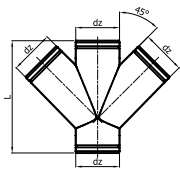
"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200
dz	78	98	108	113	118	123	128	138	148	158	178	198
Weight [kg]	0.27	0.35	0.38	0.41	0.43	0.45	0.47	0.52	0.58	0.63	0.84	1.00

CZO x/90 - OC



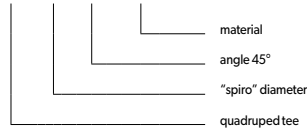
Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

10. QUADRUPED TEE CZO/45



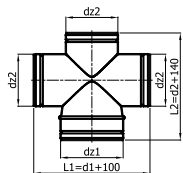
"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200
dz	78	98	108	113	118	123	128	138	148	158	178	198
Weight [kg]	0.50	0.58	0.66	0.73	0.79	0.88	0.92	1.05	1.18	1.26	1.38	1.54

CZO x/45 - OC



Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

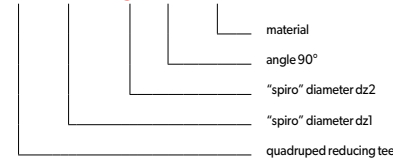
11. QUADRUPED REDUCING TEE CZOR/90



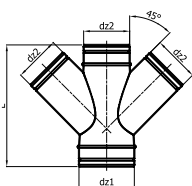
"Spiro" diameter	ø125-3xø80	ø125-3xø100	ø150-3xø100	ø150-3xø125
dz1 / dz2	123/78	123/98	148/98	148/123
Weight [kg]	0.35	0.45	0.52	0.58

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

CZOR x/3x y/90 - OC



12. QUADRUPED REDUCING TEE CZOR/45



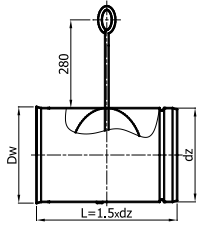
"Spiro" diameter	ø125-3xø80	ø125-3xø100	ø150-3xø100	ø150-3xø125
dz1 / dz2	123/78	123/98	148/98	148/123
Weight [kg]	0.85	0.88	1.05	1.18

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

CZOR x/3x y/45 - OC



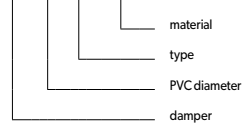
13. DAMPER PJS/1 (FOR PVC PIPES)



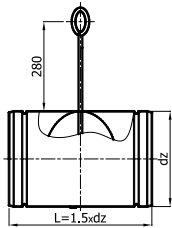
"Spiro" diameter	ø110	ø160	ø200
dz	108	158	198
Dw	110	160	200
Weight [kg]	0.29	0.58	0.96

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

PJS x/1 - OC



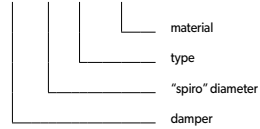
14. DAMPER PJS/2



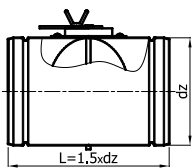
"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200
dz	78	98	108	113	118	123	128	138	148	158	178	198
Weight [kg]	0.18	0.26	0.29	0.30	0.33	0.35	0.38	0.45	0.50	0.58	0.71	0.84

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

PJS x/2 - OC



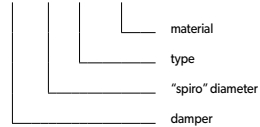
15. DAMPER PJS/3



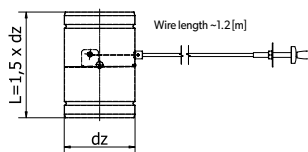
"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200
dz	78	98	108	113	118	123	128	138	148	158	178	198
Weight [kg]	0.18	0.26	0.29	0.30	0.33	0.35	0.38	0.45	0.50	0.58	0.71	0.84

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

PJS x/3 - OC



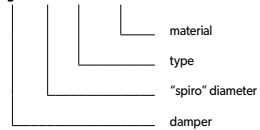
16. DAMPER WITH WIRE CORD PJS/C



"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200
dz	78	98	108	113	118	123	128	138	148	158	178	198
Weight [kg]	0.38	0.46	0.50	0.52	0.55	0.58	0.60	0.64	0.70	0.77	0.93	1.15

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

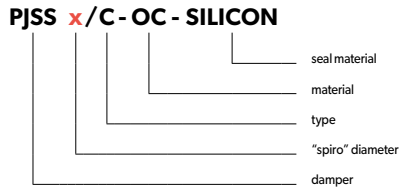
PJS x/C - OC



17. DAMPER WITH WIRE CORD AND SEAL PJSS

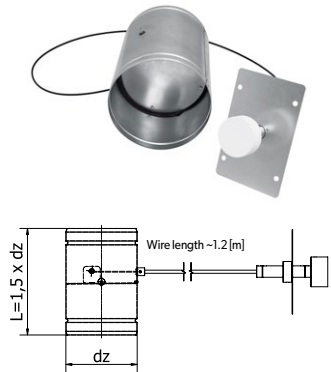


"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200
dz	78	98	108	113	118	123	128	138	148	158	178	198
Weight [kg]	0.45	0.50	0.57	0.59	0.62	0.66	0.67	0.73	0.80	0.87	1.03	1.25

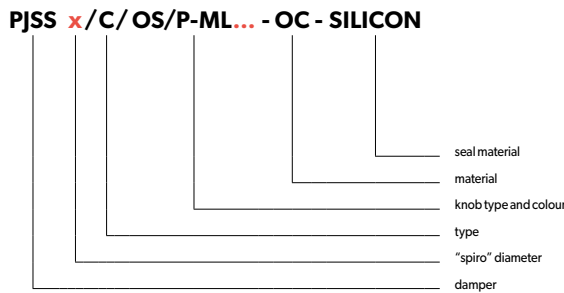


Destination	W	W - ventilation
	O	O - air heating
PJSS/...SILICON	W	Maximal temperature of flowing air: 150°C
	O	
Material	OC	OC - galvanised steel sheet

18. DAMPER WITH WIRE CORD AND SEAL PJSS/C/OS

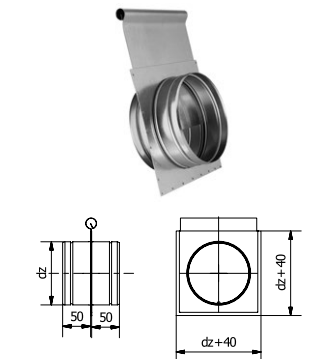


"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200
dz	78	98	108	113	118	123	128	138	148	158	178	198
Weight [kg]	0.45	0.50	0.57	0.59	0.62	0.66	0.67	0.73	0.80	0.87	1.03	1.25

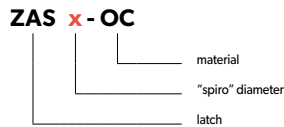


Destination	W	W - ventilation
	O	O - air heating
PJSS/...SILICON	W	Maximal temperature of flowing air: 150°C
	O	
Material	OC	OC - galvanised steel sheet
Knob colour	ML	B - white
	ML	CZ - black

19. LATCH ZAS

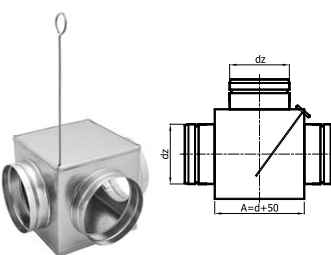


"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200
dz	78	98	108	113	118	123	128	138	148	158	178	198
Weight [kg]	0.20	0.30	0.35	0.38	0.40	0.43	0.45	0.50	0.55	0.60	0.75	0.90

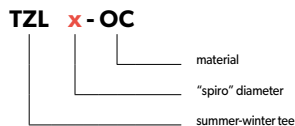


Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

20. SUMMER-WINTER TEE TZL



"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200
dz	78	98	108	113	118	123	128	138	148	158	178	198
Weight [kg]	0.60	0.75	0.85	0.90	0.95	1.00	1.05	1.15	1.25	1.35	1.50	1.65

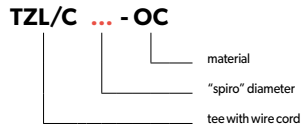
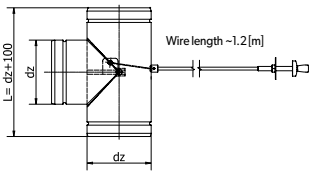


Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

21. SUMMER-WINTER TEE WITH WIRE CORD TZL/C



"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200
dz	78	98	108	113	118	123	128	138	148	158	178	198
Weight [kg]	0.53	0.60	0.65	0.68	0.70	0.73	0.75	0.80	0.87	0.92	1.02	1.10

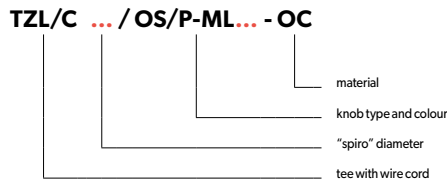
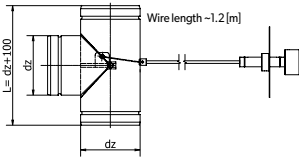


Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

22. SUMMER-WINTER TEE WITH WIRE CORD TZL/C/OS



"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200
dz	78	98	108	113	118	123	128	138	148	158	178	198
Weight [kg]	0.53	0.60	0.65	0.68	0.70	0.73	0.75	0.80	0.87	0.92	1.02	1.10

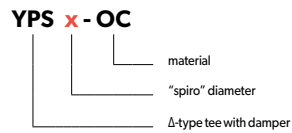
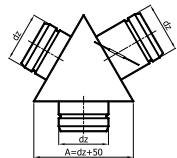


Destination	W	-	W - ventilation
	-	O	O - air heating
Material	OC	OC	OC - galvanised steel sheet
	ML	ML	B - white
Knob colour	ML	ML	CZ - black

23. Δ-TYPE TEE WITH DAMPER YPS



"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200
dz	78	98	108	113	118	123	128	138	148	158	178	198
Weight [kg]	0.45	0.55	0.65	0.68	0.71	0.75	0.80	0.85	0.95	1.00	1.15	1.30

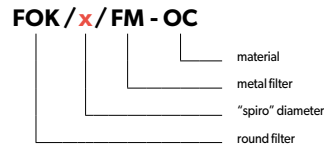
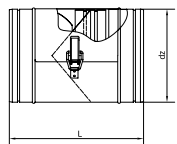


Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

24. ROUND FILTER (CHANNEL TYPE) FOK

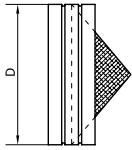
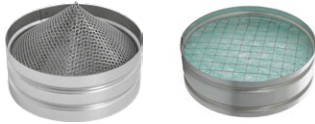


"Spiro" diameter	ø100	ø125	ø150	ø160	ø180	ø200
dz	98	123	148	158	178	198
L	200	210	225	230	240	250
Weight [kg]	0.60	0.90	1.20	1.30	1.40	1.50

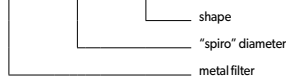


Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet
	FM	FM - metal filter

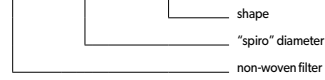
25. ROUND FILTER (CHANNEL TYPE) - REPLACEMENT FILTER FOK



FM-FOK - x - STOZEK



FW-FOK - x - PASTYLKA

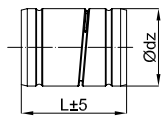


"Spiro" diameter	ø100	ø125	ø150	ø160	ø180	ø200
D	97	122	147	157	177	197
Weight [kg]	0.11	0.17	0.23	0.25	0.28	0.30

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

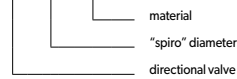
Temperature resistance:
 • FM: 250°C
 • FW: 120°C

26. DIRECTIONAL VALVE ZZ



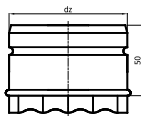
"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø250	ø315
dz	78	98	108	113	118	123	128	138	148	158	178	198	248	313
L	103	103	103	117	117	117	117	134	134	152	172	192	242	305
Weight [kg]	0.16	0.20	0.23	0.26	0.28	0.30	0.31	0.38	0.40	0.47	0.60	0.72	1.13	1.78

ZZ x - CH



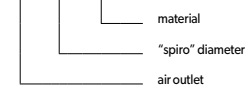
Destination	W	W - ventilation
	O	O - air heating
Material	CH	CH - chrome-nickel steel sheet

27. AIR OUTLET KSP



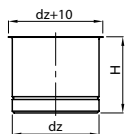
"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200
dz	78	98	108	113	118	123	128	138	148	158	178	198
Weight [kg]	0.08	0.08	0.08	0.08	0.08	0.10	0.10	0.10	0.12	0.12	0.14	0.16

KSP x - OC



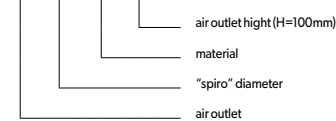
Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

28. AIR OUTLET KSP/H



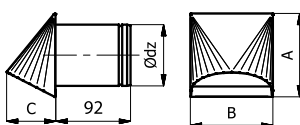
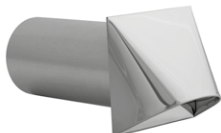
"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200
dz	78	98	108	113	118	123	128	138	148	158	178	198
Weight [kg]	0.10	0.13	0.14	0.14	0.15	0.16	0.16	0.18	0.19	0.20	0.23	0.25

KSP x - OC / H



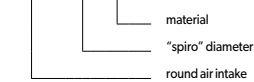
Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

29. ROUND AIR INTAKE CZNP



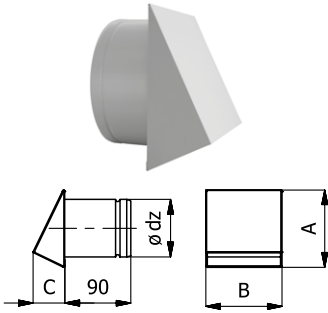
"Spiro" diameter	ø80	ø100	ø110	ø125	ø150	ø160	ø180	ø200
dz	79	99	108	123	148	158	178	198
A	105	147	147	147	197	197	228	228
B	104	146	146	146	196	196	226	226
C	62	87	87	87	117	117	134	134
Weight [kg]	0.48	0.53	0.53	0.62	0.78	0.80	0.85	0.95

CZNP x - m

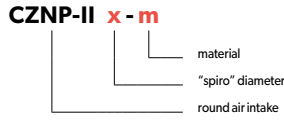


Destination	W	W - ventilation
	CH	CH - chrome-nickel steel sheet
Material	OC	OC - galvanised steel sheet
	ML	ML - galvanised steel sheet powder coated ML.B - white color ML.GR/7016 - grey color

30. ROUND AIR INTAKE CZNP II

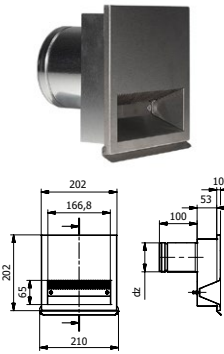


"Spiro" diameter	ø80	ø100	ø110	ø125	ø150	ø160	ø180	ø200
dz	79	99	108	123	148	158	178	198
A	106	147	147	147	197	197	228	228
B	104	146	146	146	196	196	226	226
C	44	60	60	60	80	80	91	91
Weight [kg]	0.21	0.33	0.34	0.34	0.54	0.54	0.67	0.67

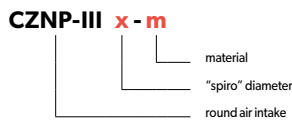


Destination	W	W - ventilation
Material	CH	CH - chrome-nickel steel sheet
	OC	OC - galvanised steel sheet
	ML	ML - galvanised steel sheet powder coated ML.B - white color ML.GR/7016 - grey color

31. ROUND AIR INTAKE CZNP II

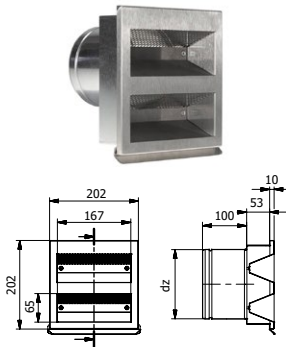


"Spiro" diameter	ø80	ø100	ø110	ø125	ø150	ø160
dz	78	98	108	123	148	158
Weight [kg]	0.72	0.73	0.74	0.75	0.76	0.76

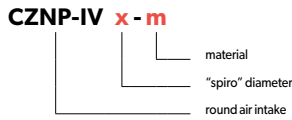


Destination	W	W - ventilation
Material	CH	CH - chrome-nickel steel sheet
	ML	ML - galvanised steel sheet powder coated ML.B - white color ML.GR/7016 - grey color

32. ROUND AIR INTAKE CZNP II

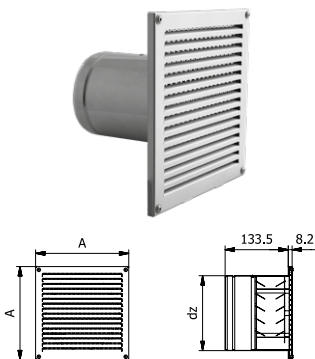


"Spiro" diameter	ø80	ø100	ø110	ø125	ø150	ø160
dz	78	98	108	123	148	158
Weight [kg]	0.73	0.75	0.75	0.76	0.77	0.77

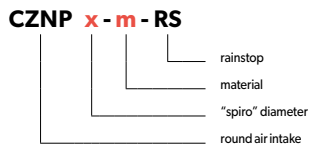


Destination	W	W - ventilation
Material	CH	CH - chrome-nickel steel sheet
	ML	ML - galvanised steel sheet powder coated ML.B - white color ML.GR/7016 - grey color

33. ROUND AIR INTAKE RAINSTOP CZNP-RS

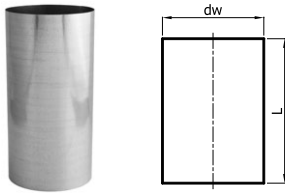


"Spiro" diameter	ø80	ø100	ø110	ø125	ø150	ø160	ø180	ø200
dz	79	99	108	123	148	158	178	198
A	197	197	197	197	197	197	227	227
Weight [kg]	0.60	0.70	0.70	0.80	0.90	0.90	1.10	1.30



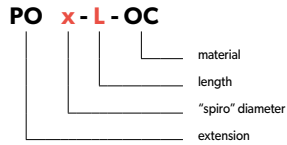
Destination	W	W - ventilation
Material	CH	CH - chrome-nickel steel sheet
	ML	ML - chrome-nickel sheet powder coated

34. EXTENSION PO



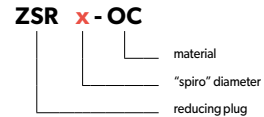
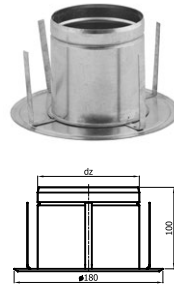
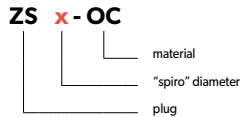
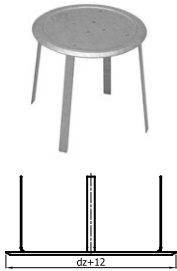
"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200
dw	79.4	99.4	109.3	114.4	119.3	124.3	129.5	139.4	149.4	159.3	179.3	199.4

Available lengths L = 150, 200, 250 [mm]



Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

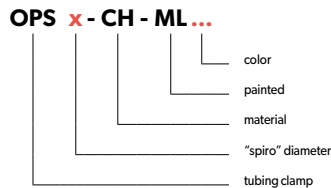
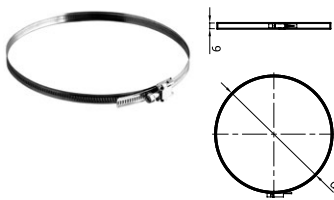
35. PLUGS ZS AND ZSR



"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200
dz	78	98	108	113	118	123	128	138	148	158	178	198
Weight [kg]	0.11	0.13	0.14	0.15	0.16	0.17	0.17	0.18	0.20	0.22	0.26	0.31

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

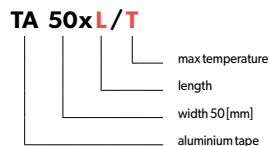
36. TUBING CLAMP OPS



"Spiro" d diameter range	ø80-160	ø160-200
Weight [kg]	0.025	0.032

Destination	W	W - ventilation
	O	O - air heating
Material	CH	CH - chrome-nickel steel sheet
Color	CZ	black
	SZ	grey

37. ALUMINIUM TAPE TA50

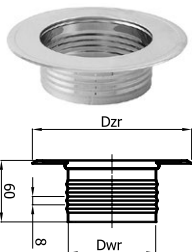


	Length L [m]			
Symbol	5	10	50	
TA50x.../150	-	0.11	0.48	Weight [kg]
TA50x.../350	0.07	0.11	0.48	

TA50x.../150 - max. working temperature: 150 [°C]
TA50x.../350 - max. inst. temperature: 350 [°C]

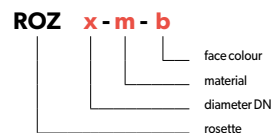
Destination	W	W - ventilation
	O	O - air heating
Material	AL	AL - aluminium

38. ROSETTE ROZ



Diameter DN	ø80	ø85	ø90	ø95	ø100	ø105	ø110	ø115	ø120	ø125	ø130	ø135
Dwr [mm]	86	91	96	101	106	111	116	121	126	131	136	141
Dzr [mm]	157	162	167	172	177	182	187	192	207	212	217	222
Weight [kg]	0.12	0.12	0.13	0.13	0.14	0.15	0.16	0.17	0.18	0.18	0.19	0.20

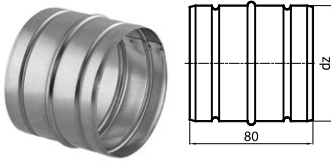
Diameter DN	ø140	ø145	ø150	ø160	ø180	ø200	ø225	ø250	ø280	ø300	ø315	ø350	ø400	ø450	ø500
Dwr [mm]	146	151	156	166	186	206	231	256	286	306	321	356	406	456	506
Dzr [mm]	227	242	247	257	277	297	322	347	377	397	412	448	498	548	598
Weight [kg]	0.21	0.22	0.23	0.25	0.28	0.30	0.34	0.37	0.41	0.44	0.46	0.51	0.58	0.65	0.72



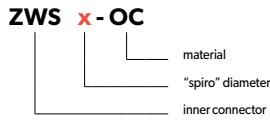
Destination	W	W	W	W - ventilation ducts
	CH	-	-	CH - chrome steel H17
Material	-	OC	-	OC - galvanised steel sheet
	-	-	ML	ML - mild steel powder coated*
Sheet thickness	5	5	5	5 - sheet thickness 0.5 mm

* powder coated - white colour standard

39. INNER CONNECTOR ZWS

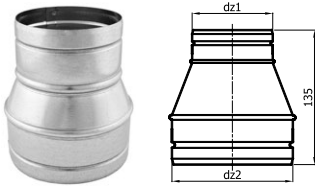


"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200
dz	78	98	108	113	118	123	128	138	148	158	178	198
Weight [kg]	0.10	0.12	0.13	0.14	0.15	0.16	0.16	0.17	0.19	0.20	0.23	0.26

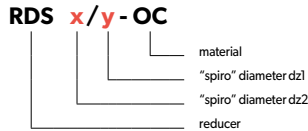


Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

40. REDUCER RDS

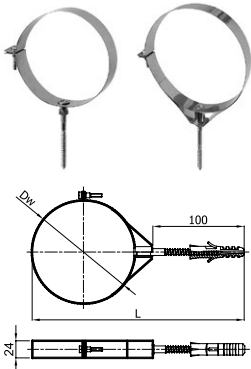


"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200
dz1	78	98	108	113	118	123	128	138	148	158	178	198
dz2	98	108	113	118	123	128	133	143	158	178	198	223

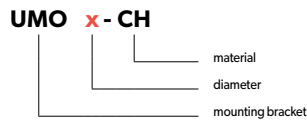


Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

41. MOUNTING BRACKET UMO

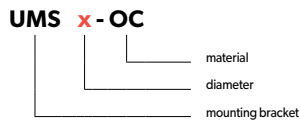
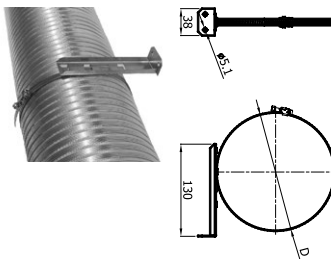


Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø250
Dw	80	100	110	120	130	140	150	160	180	200	250
L	180	200	210	220	230	240	250	260	280	300	350
Weight [kg]	0.08	0.10	0.12	0.12	0.12	0.13	0.14	0.21	0.28	0.30	0.34



Destination	W	W - ventilation
	O	O - air heating
Material	CH	CH - chrome-nickel steel sheet 1.4301

42. MOUNTING BRACKET WITH TUBING CLAMP UMS



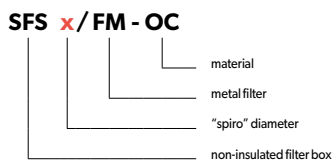
"Spiro" d diameter range	ø80-160
Weight [kg]	0.07

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

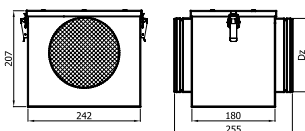
1. NON-INSULATED FILTER BOX SFS



"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø135	ø140	ø150	ø160	ø180	ø200
dz	78	98	108	113	118	123	128	133	138	148	158	178	198
Weight [kg]	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	2.55	2.55



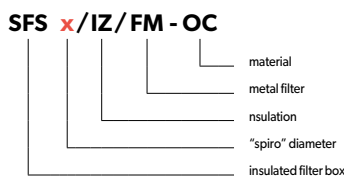
Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet



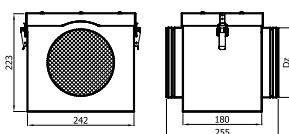
2. INSULATED FILTER BOX SFS/IZ



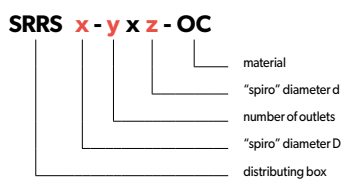
"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø135	ø140	ø150	ø160	ø180	ø200
dz	78	98	108	113	118	123	128	133	138	148	158	178	198
Weight [kg]	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.55	2.55



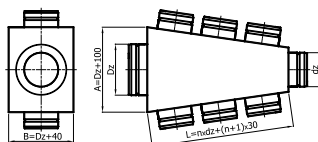
Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet



3. DISTRIBUTING BOX SRRS



Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

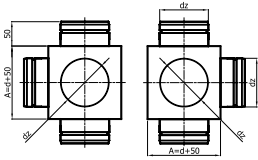


"Spiro" diameter	ø125-3xø100		ø150-3xø125		ø150-3xø100		ø150-5xø100		ø150-7xø100		ø160-5xø100		ø160-7xø100		ø180-5xø100		ø180-7xø100		ø200-5xø100		ø200-7xø100	
dz	123	98	148	123	148	98	148	98	148	98	158	98	158	98	178	98	178	98	198	198	198	98
Weight [kg]	0.85		1.00		0.90		1.80		2.50		1.80		1.80		2.25		2.25		2.25		2.25	

CHIMNEY COWLS
STEERING & POWER SUPPLY
HOT AIR DISTRIBUTION SYSTEM
CHIMNEYS
VENTILATION

invent. build. enjoy.

4. DISTRIBUTING BOX SRS



"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200
dz	78	98	108	113	118	123	128	138	148	158	178	198
Weight [kg]	0.50	0.65	0.75	0.80	0.85	0.88	0.92	1.00	1.08	1.15	1.45	1.45

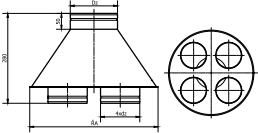
SRS - yxx OC

- material
- "spiro" diameter
- number of outlets
- distributing box

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

CHIMNEY COWLS

5. DISTRIBUTING BOX SRDS



"Spiro" diameter	ø125/4xø100	ø150/4xø125	ø150/4xø100	ø160/4xø100	ø180/4xø125	ø200/4xø100
Dz/dz/A	123/98/402	148/123/402	148/98/402	158/98/402	178/123/402	198/98/402
Weight [kg]	0.80	0.85	0.85	0.90	1.00	1.10

SRDS x/yxz - OC

- material
- "spiro" diameter
- number of outlets
- "spiro" diameter
- distributing box

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

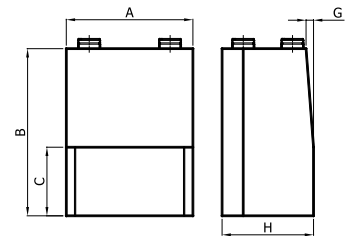
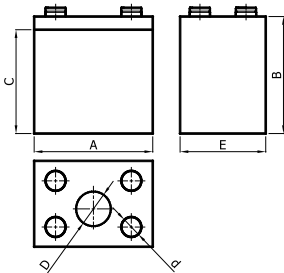
STEERING & POWER SUPPLY

HOT AIR DISTRIBUTION SYSTEM

DISTRIBUTORS

Distributors - example

CAUTION! Distributors are always made according to a specific model of fireplace insert or upon individual order.



Measurements [mm]	A	B	C	E	d	D
Firplace insert type	690	620	560	380	150	210

Measurements [mm]	A	B	C	H	E	F	G	D	d
Firplace insert type	850	1150	500	475	500	300	50	230	100

Number of outlets 0-8 pcs

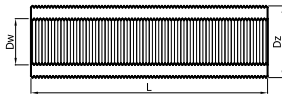
Number of outlets 0-8 pcs

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

CHIMNEYS

VENTILATION

1. INSULATED FLEXIBLE PIPE RESD

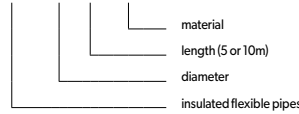


"Spiro" diameter	ø100	ø125	ø150	ø200
Dw	102	127	152	203
Dz	152	177	202	253
Weight 10m piece [kg]	4.90	6.00	7.20	8.00
Weight 5m piece [kg]	2.70	3.40	4.10	6.00

Destination	W	W - ventilation
	O	O - air heating
Material	AL	AL - aluminium foil

Pieces L = 10 [m] length compressed to 1.2 [m]
 Pieces L = 5 [m] length compressed to 0.8 [m]
 Max working temperature: 250 [°C]

RESD x - L - AL



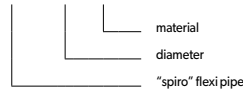
2. SPIRO-TYPE FLEXIBLE PIPE DARCO - RESF



"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200
dw	80	100	110	115	120	125	130	140	150	160	180	200
dz	87	107	117	122	127	132	137	147	157	167	187	207
Weight [kg]	0.45	0.46	0.50	0.52	0.55	0.57	0.60	0.67	0.71	0.73	0.75	0.77

Pieces of L = 2.7 [m] length, compressed to 1 [m]
 Max working temperature: 200 [°C]

RESF x - AL



Destination	W	W - ventilation
	O	O - air heating
Material	AL	AL - aluminium tape

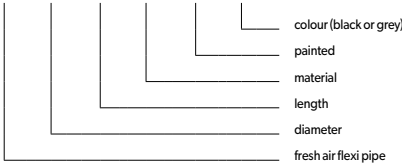
3. FRESH AIR FLEXI PIPE REP



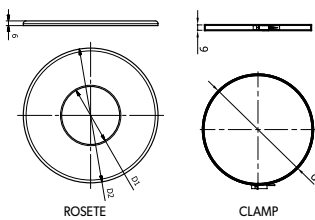
"Spiro" diameter	ø67	ø80	ø100	ø125	ø150
dw	67	80	100	125	150
dz	73	87	107	132	157
Weight [kg]	0.25	0.35	0.40	0.50	0.60

Destination	W	W - ventilation
	O	O - air heating
Material	AL	AL - aluminium tape
Colour	CZ	CZ - black
	SZ	SZ - grey

REP ... / 1,5 AL. ML. ...



4. FLEXI PIPE CONNECTION SET REP-SET



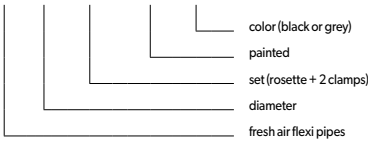
ROSETE

Diameter DN	ø50	ø63	ø80	ø100	ø125	ø150
D1	58	75	88	108	133	158
D2	158	175	188	208	233	258

CLAMP

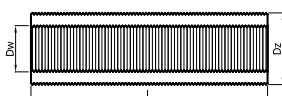
"Spiro" d diameter range	ø80-160	ø160-200
Weight [kg]	0.025	0.032

REP x - SET - ML. ...



Destination	O	O - air heating
Material	AL	AL - aluminium tape
Colour	CZ	CZ - black steel sheet DC01 - 0, 5 mm
	SZ	SZ - black

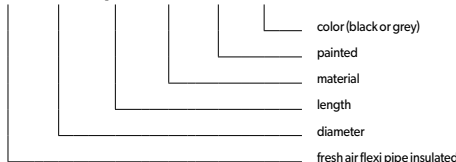
5. FRESH AIR FLEXI PIPE INSULATED REPI



"Spiro" diameter	ø50	ø67	ø80	ø100	ø125
dw	50	67	80	100	125
dz	96	106	118	136	166
Weight [kg]	0.40	0.42	0.48	0.53	0.60

Destination	W	W - ventilation
	O	O - air heating
Material	AL	AL - aluminium tape
Colour	CZ	CZ - black
	SZ	SZ - grey

REPI ... / 0,75 AL. ML. ...



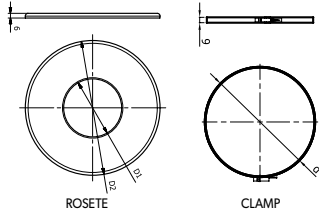
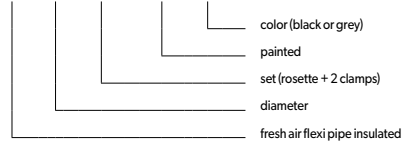
6. FLEXI PIPE INSULATED CONNECTION SET REPI-SET



ROSETE

Diameter DN	ø67	ø80	ø100	ø125
D1	108	119	139	168
D2	208	219	244	264

REPI x - SET - ML. ...



CLAMP

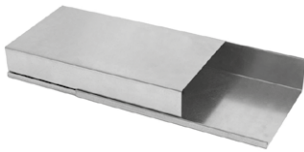
"Spiro" d diameter range	ø80-160	ø160-200
Weight [kg]	0.025	0.032

Destination	O	O - air heating
Material	CZ	CZ - black steel sheet DC01 - 0, 5 mm
Colour	CZ	CZ - black
	SZ	SZ - grey

CHIMNEY COWLS

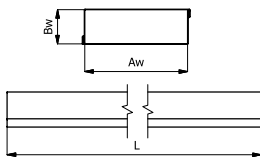
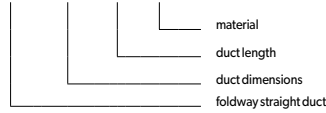
STEERING & POWER SUPPLY

1. FOLDWAY STRAIGHT DUCT KPS



Duct dimensions Aw x Bw [mm]	150 x 50			200 x 50			200 x 90		
Length L [mm]	2000	1000	500	2000	1000	500	2000	1000	500
Weight [kg]	3.60	1.80	0.90	1.00	2.00	1.00	4.70	2.35	1.18

KPS Ax B / L - OC



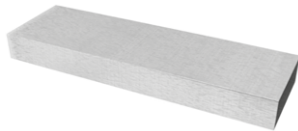
Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

Caution!
After assembling, duct needs to be sealed with aluminum tape or silicone (of working temp. 250°C). No connectors needed when assembling in „pass-by“ method.

HOT AIR DISTRIBUTION SYSTEM

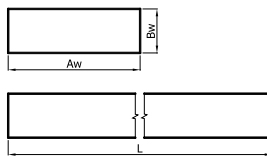
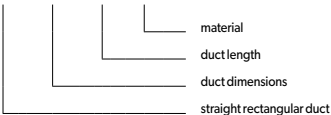
CHIMNEYS

2. STRAIGHT RECTANGULAR DUCT KP



Duct dimensions Aw x Bw [mm]	150 x 50		200 x 50		200 x 90	
Length L [mm]	1000	500	1000	500	1000	500
Weight [kg]	1.64	0.82	2.00	1.00	2.18	1.09

KP Ax B / L - OC



Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

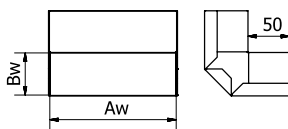
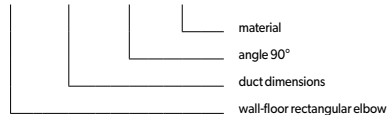
VENTILATION

3. WALL-FLOOR RECTANGULAR ELBOW KSS-90°



Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
Weight [kg]	0.20	0.30	0.40

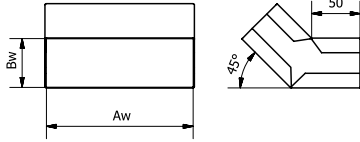
KSS Ax B / 90 - OC



Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

invent. build. enjoy.

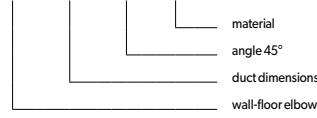
4. WALL-FLOOR ELBOW KSS-45°



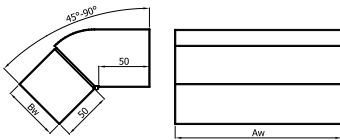
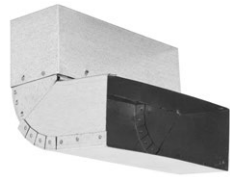
Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
Weight [kg]	0.20	0.30	0.40

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

KSS AxB / 45 - OC



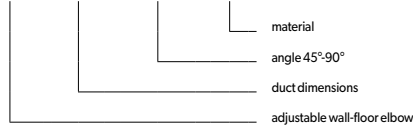
5. ADJUSTABLE WALL-FLOOR ELBOW KSSN 45-90°



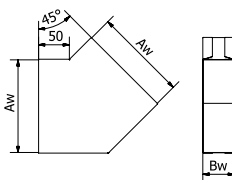
Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
Weight [kg]	0.32	0.50	0.55

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

KSSN AxB / 45-90 - OC



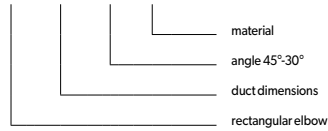
6. RECTANGULAR ELBOW KL/45(30)



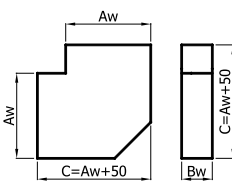
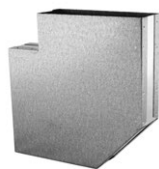
Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
Weight [kg]	0.40	0.60	0.70

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

KL AxB / x - OC



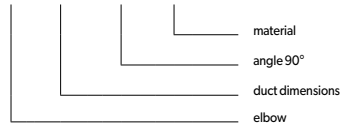
7. ELBOW KL/90



Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
Weight [kg]	0.40	0.50	0.60

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

KL AxB / 90 - OC



CHIMNEY COWLS

STEERING & POWER SUPPLY

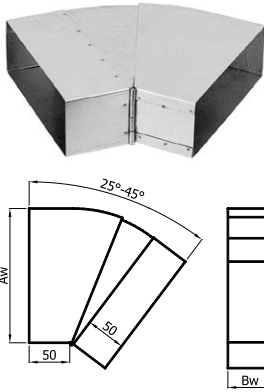
HOT AIR DISTRIBUTION SYSTEM

CHIMNEYS

VENTILATION

invent. build. enjoy.

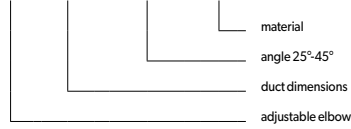
8. ADJUSTABLE ELBOW KLN 25-45



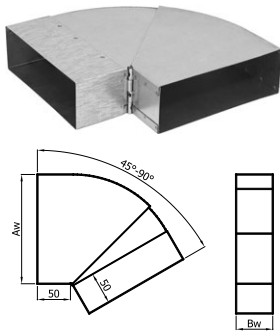
Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
Weight [kg]	0.30	0.45	0.50

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

KLN **AxB** / 25-45 - OC



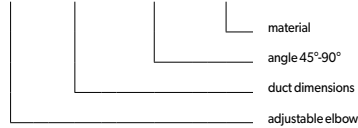
9. ADJUSTABLE ELBOW KLN 45-90



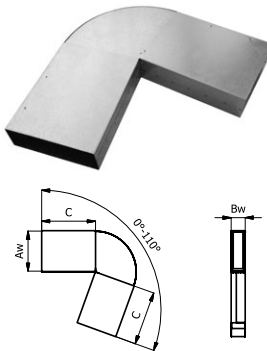
Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
Weight [kg]	0.40	0.50	0.60

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

KLN **AxB** / 45-90 - OC



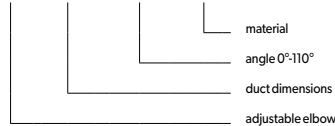
10. ADJUSTABLE ELBOW 0-110 KLN



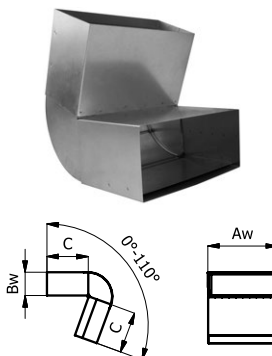
Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
C [mm]	200	250	250
Weight [kg]	1.40	1.70	1.95

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

KLN **AxB** / 0-110 - OC



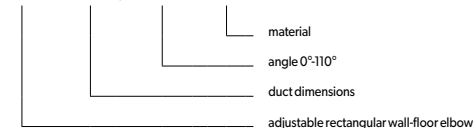
11. ADJUSTABLE RECTANGULAR WALL-FLOOR ELBOW 0-110 KSSN



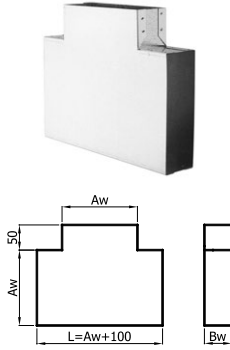
Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
C [mm]	120	120	140
Weight [kg]	0.50	0.80	0.90

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

KSSN **AxB** / 0-110 - OC



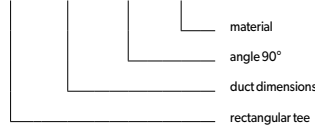
12. TEE TRP/90



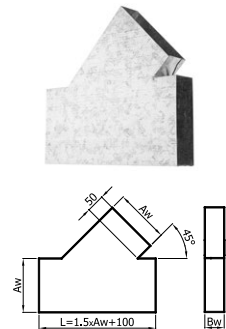
Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
Weight [kg]	0.45	0.65	0.75

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

TRP AxB / 90 - OC



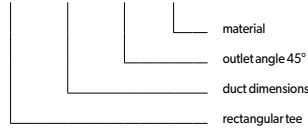
13. TEE TRP/45



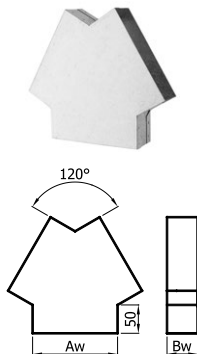
Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
Weight [kg]	0.70	0.90	1.05

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

TRP AxB / 45 - OC



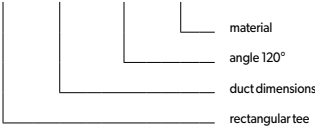
14. TEE YP/120



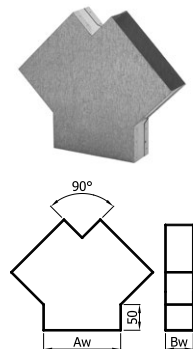
Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
Weight [kg]	0.30	0.40	0.45

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

YP AxB / 120 - OC



15. TEE YP/90



Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
Weight [kg]	0.50	0.60	0.70

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

YP AxB / 90 - OC



CHIMNEY COWLS

STEERING & POWER SUPPLY

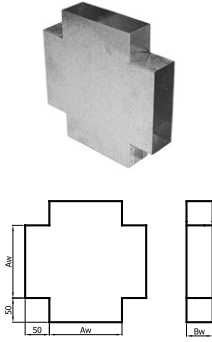
HOT AIR DISTRIBUTION SYSTEM

CHIMNEYS

VENTILATION

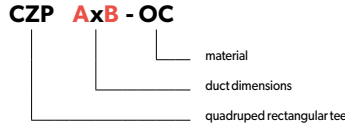
invent. build. enjoy.

16. QUADRUPED TEE CZP

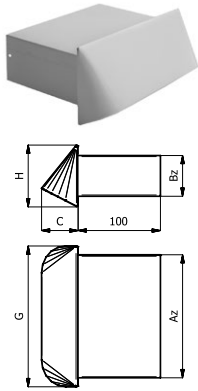


Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
Weight [kg]	0.50	0.60	0.70

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

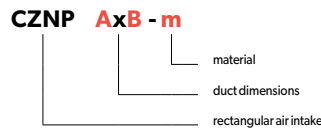


17. RECTANGULAR AIR INTAKE CZNP

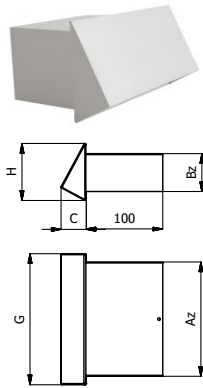


Duct dimensions Az x Bz [mm]	150 x 50	200 x 50	200 x 90
Az [mm]	149.5	199.5	199.5
Bz [mm]	49.5	49.5	89.5
C [mm]	44	44.0	69
G [mm]	171	221	221
H [mm]	75	75	115

Destination	W	W - ventilation
	OC	OC - galvanised steel sheet
Material	CH	CH - chrome-nickel steel sheet
	ML	ML - galvanised steel powder coated (white)

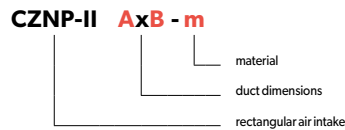


18. RECTANGULAR AIR INTAKE CZNP II

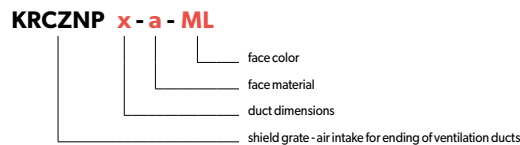


Duct dimensions Az x Bz [mm]	150 x 50	200 x 50	200 x 90
Az [mm]	149.5	199.5	199.5
Bz [mm]	49.5	49.5	89.5
C [mm]	33	33	49
G [mm]	171	221	221
H [mm]	75	75	115

Destination	W	W - ventilation
	OC	OC - galvanised steel sheet
Material	CH	CH - chrome-nickel steel sheet
	ML	ML - galvanised steel powder coated (white)

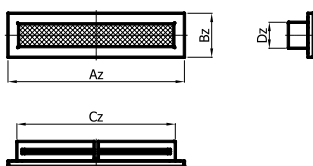


19. AIR INTAKE FOR ENDING OF VENTILATION DUCTS

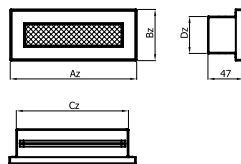


Destination	W	W - ventilation
	O	O - air heating
Face material	ML	ML - chrome-nickel steel sheet powder coated
	-	CH - chrome-nickel steel sheet 1.4301
Frame material	CH	CH - chrome-nickel steel sheet 1.4301

Face material for ML:
B - white, CZ - black, KR - beige, GR - graphite / 7024



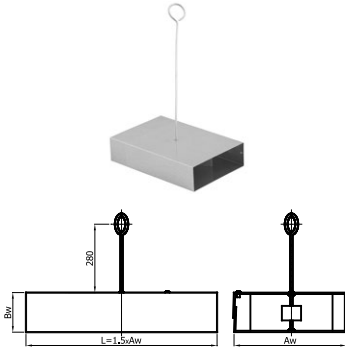
KRCZNP 300x50



KRCZNP 150x50, 200x50 and 200x90

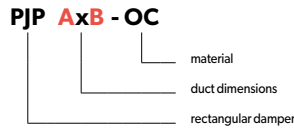
Type	Face outer dimensions Az x Bz	Cz	Dz	Cross-section [cm ²]	Weight [kg]
KRCZNP 150X50	184 x 84	149	49	60	0.30
KRCZNP 200X50	234 x 84	199	49	80	0.35
KRCZNP 200X90	234 x 124	199	89	160	0.45
KRCZNP 300X50	334 x 84	299	49	125	0.54

20. RECTANGULAR DAMPER PJP

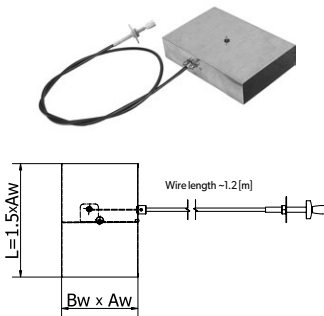


Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
Weight [kg]	0.40	0.70	0.80

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

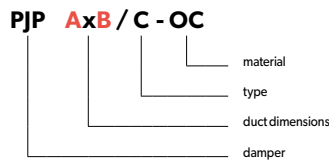


21. DAMPER WITH WIRE CORD PJP/C

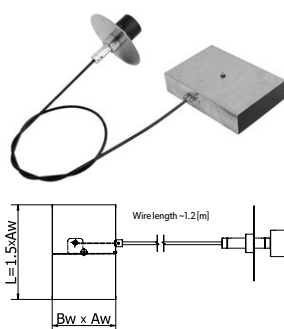


Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
Weight [kg]	0.50	0.75	0.85

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

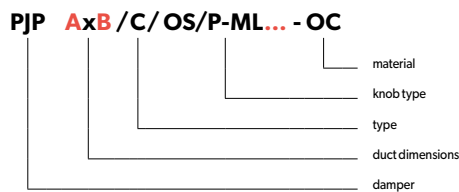


22. DAMPER WITH WIRE CORD PJP/C/OS

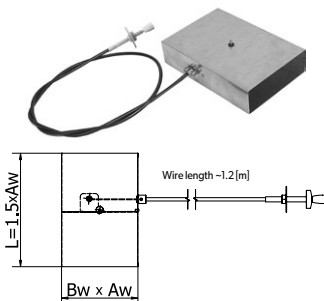


Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
Weight [kg]	0.50	0.75	0.85

Destination	W	-	W - ventilation
	-	O	O - air heating
Material	OC	OC	OC - galvanised steel sheet
Knob colour	ML	ML	B - white
	ML	ML	CZ - black

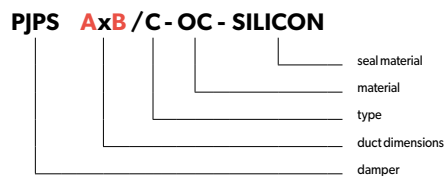


23. DAMPER WITH CORD AND SEAL PJP/S/C

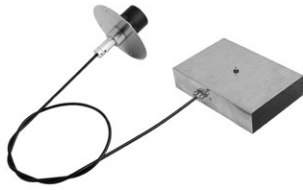


Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
Weight [kg]	0.50	0.75	0.85

Destination	W	W - ventilation
	O	O - air heating
PJP/S/...SILICON	W	Maximal temperature of flowing air: 150°C
Material	OC	OC - galvanised steel sheet

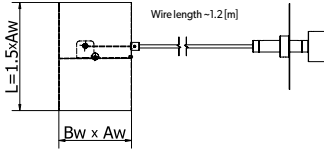


24. DAMPER WITH CORD AND SEAL PJPS/C/OS

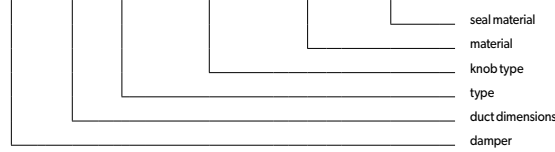


Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
Weight [kg]	0.50	0.75	0.85

Destination	W	-	W - ventilation
	-	O	O - air heating
PJPS/...SILICON	W	W	Maximal temperature of flowing air: 150°C
	O	O	
Material	OC	OC	OC - galvanised steel sheet
Knob colour	ML	ML	B - white
	ML	ML	CZ - black



PJPS Ax B / C / OS / P-ML... - OC - SILICON

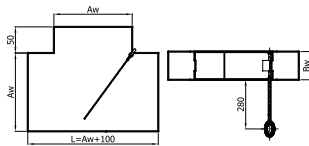


25. SUMMER-WINTER TEE TRP/90/Z

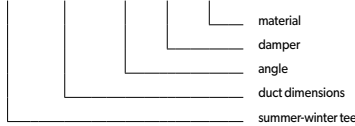


Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
Weight [kg]	0.50	0.75	0.85

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet



TRP Ax B / 90 / Z - OC

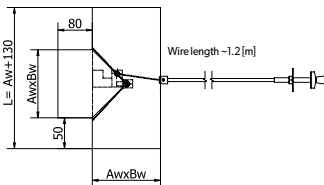


26. SUMMER-WINTER TEE WITH CORD TRP/C

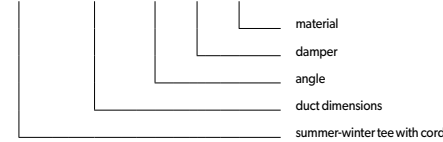


Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
Weight [kg]	0.80	1.00	1.15

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet



TRP/C Ax B / 90 / Z - OC

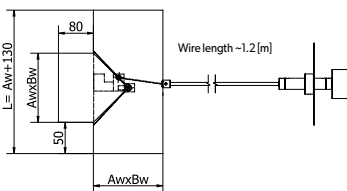


27. SUMMER-WINTER TEE WITH CORD TRP/C/OS

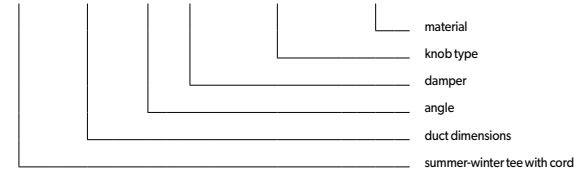


Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
Weight [kg]	0.80	1.00	1.15

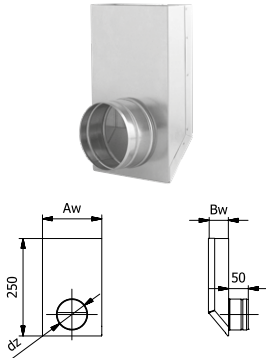
Destination	W	-	W - ventilation
	-	O	O - air heating
Material	OC	OC	OC - galvanised steel sheet
Knob colour	ML	ML	B - white
	ML	ML	CZ - black



TRP/C Ax B / 90 / Z / OS / P-ML... - OC



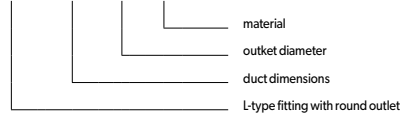
28. L-TYPE FITTING WITH ROUND OUTLET KLO



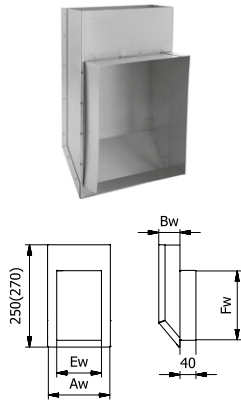
Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
dz	ø78 - 158		
Weight [kg]	0.50	0.70	0.80

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

KLO AxB/d - OC



29. L-TYPE FITTING WITH RECTANGULAR OUTLET KLP



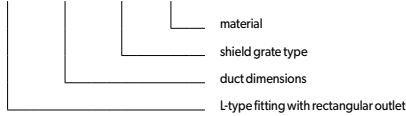
Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
Weight [kg]	0.50	0.70	0.80

	Ew	Fw
K1	105	165
K2	140	165
K3	140	215

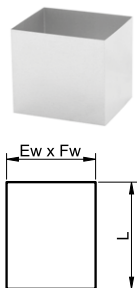
Outlet adjusted to Kz1, Kz2, Kz3 shield grate frames

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

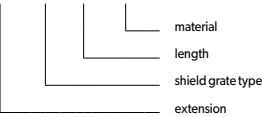
KLP AxB/Kx - OC



30. RECTANGULAR EXTENSION PP



PP Kx/L - OC



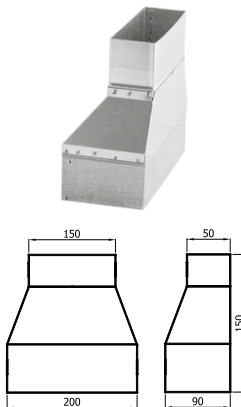
	Ew	Fw
K1	105	165
K2	140	165
K3	140	215

Dimensions of the extension fittings are adjusted to the K1, K2 or K3 shield grate frames.

Available lengths L = 150, 200, 250 [mm].

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

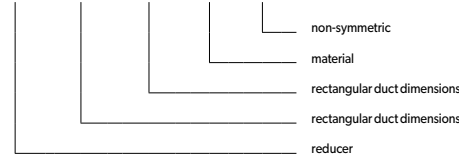
31. NON-SYMMETRIC RECTANGULAR REDUCER RDSS-NS



Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
Weight [kg]	0.35	0.35	0.35

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

RDSS AxB - CxD - OC - NS



CHIMNEY COWLS

STEERING & POWER SUPPLY

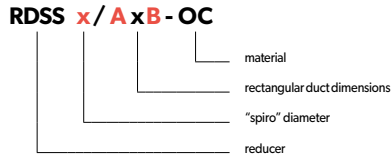
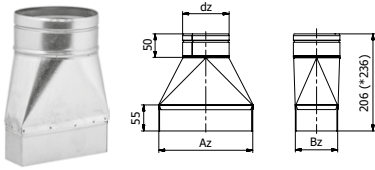
HOT AIR DISTRIBUTION SYSTEM

CHIMNEYS

VENTILATION

invent. build. enjoy.

32. SYMMETRIC REDUCER RDSS



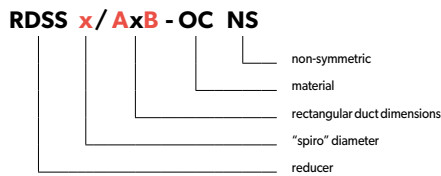
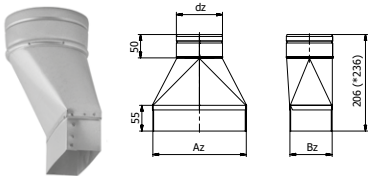
Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

"Spiro" diameter	ø80/150x50	ø100/150x50	ø110/150x50	ø120/150x50	ø125/150x50	ø130/150x50	ø140/150x50	ø150/150x50	ø160/150x50	ø200/150x50	ø250/150x50
dz / Az / Bz	78 149.5 49.5	98 149.5 49.5	108 149.5 49.5	118 149.5 49.5	123 149.5 49.5	128 149.5 49.5	138 149.5 49.5	148 149.5 49.5	158 149.5 49.5	198 149.5 49.5	248 149.5 49.5
Weight [kg]	0.33	0.35	0.37	0.38	0.39	0.40	0.41	0.43	0.44	0.51	0.67

"Spiro" diameter	ø100/200x50	ø125/200x50	ø150/200x50	ø160/200x50	ø200/200x50
dz / Az / Bz	98 199.5 49.5	123 199.5 49.5	148 199.5 49.5	158 199.5 49.5	198 199.5 49.5
Weight [kg]	0.42	0.45	0.49	0.50	0.56

"Spiro" diameter	ø100/200x90	ø115/200x90	ø120/200x90	ø125/200x90	ø140/200x90	ø150/200x90	ø160/200x90	ø180/200x90	ø200/200x90	ø250/200x90
dz / Az / Bz	98 199.5 89.5	113 199.5 89.5	118 199.5 89.5	123 199.5 89.5	138 199.5 89.5	148 199.5 89.5	158 199.5 89.5	178 199.5 89.5	198 199.5 89.5	248 199.5 89.5
Weight [kg]	0.46	0.48	0.48	0.49	0.51	0.52	0.54	0.57	0.60	0.76

33. NON-SYMMETRIC REDUCER RDSS-NS



Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

"Spiro" diameter	ø80/150x50	ø100/150x50	ø110/150x50	ø120/150x50	ø125/150x50	ø140/150x50	ø150/150x50	ø160/150x50
dz / Az / Bz	78 149.5 49.5	98 149.5 49.5	108 149.5 49.5	118 149.5 49.5	123 149.5 49.5	138 149.5 49.5	148 149.5 49.5	158 149.5 49.5
Weight [kg]	0.33	0.36	0.37	0.39	0.40	0.42	0.44	0.46

"Spiro" diameter	ø100/200x50	ø125/200x50	ø150/200x50	ø160/200x50	ø200/200x50
dz / Az / Bz	98 199.5 49.5	123 199.5 49.5	148 199.5 49.5	158 199.5 49.5	198 199.5 49.5
Weight [kg]	0.42	0.46	0.50	0.51	0.59

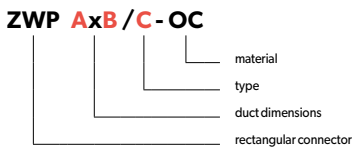
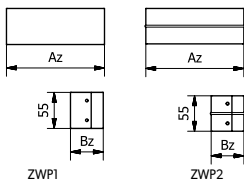
"Spiro" diameter	ø100/200x90	ø125/200x90	ø130/200x90	ø150/200x90	ø160/200x90	ø200/200x90	ø250/200x90
dz / Az / Bz	98 199.5 89.5	123 199.5 89.5	128 199.5 89.5	148 199.5 89.5	158 199.5 89.5	198 199.5 89.5	248 199.5 89.5
Weight [kg]	0.46	0.49	0.50	0.53	0.54	0.61	0.78

34. RECTANGULAR CONNECTOR ZWP1 AND ZWP2



Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
Weight [kg]	0.08	0.10	0.12

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

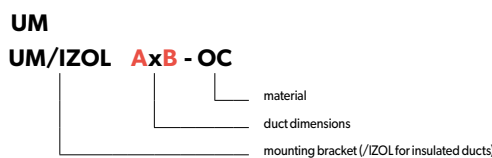
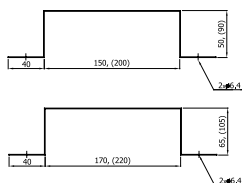


35. MOUNTING BRACKET UM; UM/IZOL (FOR INSULATED DUCTS)

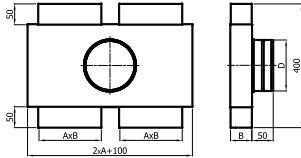
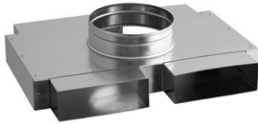


Duct dimensions Aw x Bw [mm]	UM	150 x 50	220 x 50	220 x 90
	UM/IZOL	170 x 65	200 x 65	200 x 105
Weight [kg]	UM	0.08	0.12	0.15
	UM/IZOL	0.15	0.13	0.16

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet



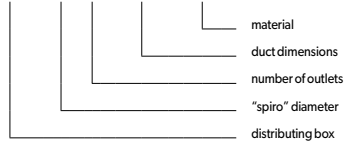
1. DISTRIBUTING BOX SRO-1



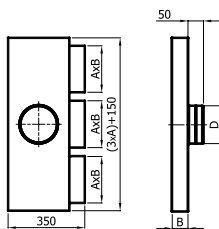
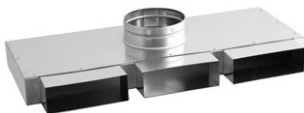
Duct dimensions A x B [mm]	150x50			200x50			200x90		
øD	ø123	ø148	ø198	ø123	ø140	ø198	ø123	ø148	ø198
Weight [kg]	1.50	1.52	1.56	1.80	1.80	1.80	2.08	2.10	2.13

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

SRO-1 x/4x AxB - OC



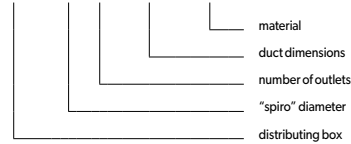
2. DISTRIBUTING BOX SRO-2



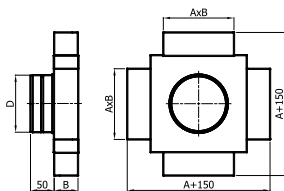
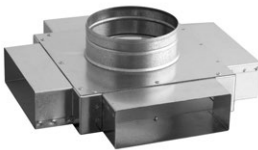
Duct dimensions A x B [mm]	150x50			200x50			200x90		
øD	ø123	ø148	ø198	ø123	ø140	ø198	ø123	ø148	ø198
Weight [kg]	0.78	0.80	0.82	1.10	1.15	1.15	1.30	1.32	1.34

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

SRO-2 x/3x AxB - OC



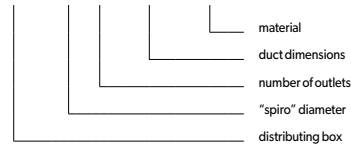
3. DISTRIBUTING BOX SRO-3



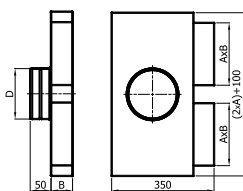
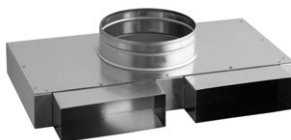
Duct dimensions A x B [mm]	150x50			200x50			200x90		
øD	ø123	ø148	ø198	ø123	ø140	ø198	ø123	ø148	ø198
Weight [kg]	1.50	1.52	1.56	2.35	2.40	2.25	2.70	2.72	2.74

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

SRO-3 x/4x AxB - OC



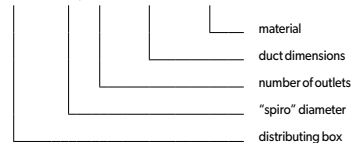
4. DISTRIBUTING BOX SRO-4



Duct dimensions A x B [mm]	150x50			200x50			200x90		
øD	ø123	ø148	ø198	ø123	ø140	ø198	ø123	ø148	ø198
Weight [kg]	1.38	1.40	1.42	1.67	1.69	1.71	1.94	1.96	1.98

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

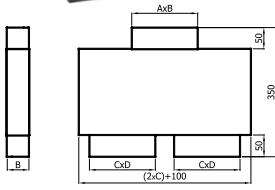
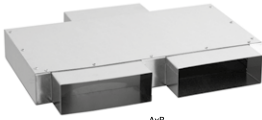
SRO-4 x/2x AxB - OC



DISTRIBUTING BOXES

CHIMNEY COWLS

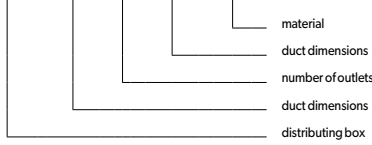
5. DISTRIBUTING BOX SRP-1



Duct dimensions A x B [mm]	150 x 50	200 x 50		200 x 90	
CxD	150 x 50	150 x 50	200 x 50	150 x 50	200 x 90
Weight [kg]	1.22	1.30	1.60	1.62	1.70

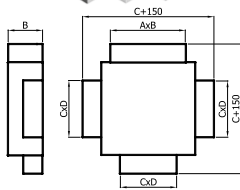
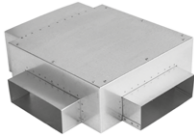
Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

SRP-1 AxB / 2x CxD - OC



STEERING & POWER SUPPLY

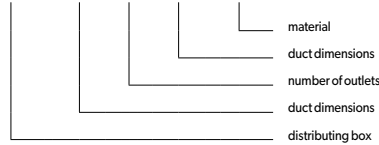
6. DISTRIBUTING BOX SRP-2



Duct dimensions A x B [mm]	200 x 50	200 x 90
CxD	200 x 50	150 x 50
Weight [kg]	0.60	0.69

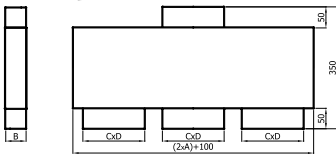
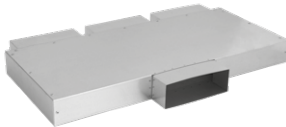
Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

SRP-2 AxB / 3x CxD - OC



HOT AIR DISTRIBUTION SYSTEM

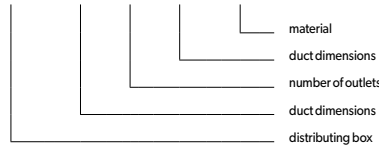
7. DISTRIBUTING BOX SRP-3



Duct dimensions A x B [mm]	150 x 50	200 x 50		200 x 90	
CxD	150 x 50	150 x 50	200 x 50	150 x 50	200 x 90
Weight [kg]	1.75	2.05	2.10	2.35	2.40

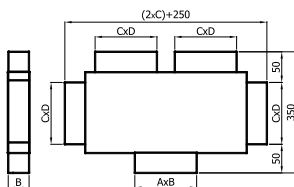
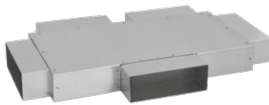
Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

SRP-3 AxB / 3x CxD - OC



CHIMNEYS

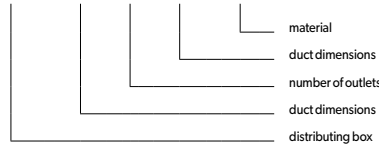
8. DISTRIBUTING BOX SRP-4



Duct dimensions A x B [mm]	150 x 50	200 x 50		200 x 90	
CxD	150 x 50	150 x 50	200 x 50	150 x 50	200 x 90
Weight [kg]	1.38	1.55	1.70	1.78	1.94

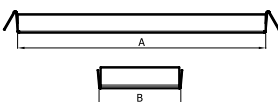
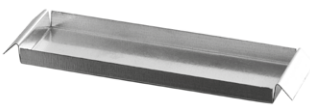
Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

SRP-4 AxB / 4x CxD - OC



VENTILATION

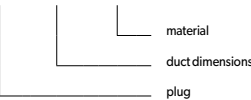
9. PLUG TO DISTRIBUTING BOXES ZSP



Duct dimensions A x B [mm]	150 x 50	200 x 50	200 x 90
Weight [kg]	0.06	0.10	0.11

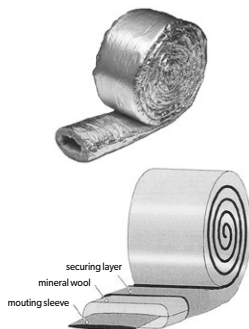
Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

ZSP AxB - OC



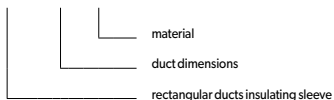
invent. build. enjoy.

1. RECTANGULAR DUCTS INSULATING SLEEVE REKP



Duct dimensions A x B [mm]	150 x 50	200 x 90
Weight [kg]	2.65	3.97

REKP X - AL



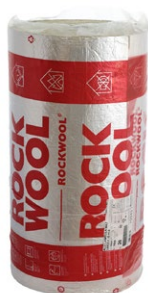
How to install? - Take a look into our Youtube channel

Destination	W	W - ventilation
	O	O - air heating
Material	AL	AL - aluminium foil

CAUTION! Remove mounting sleeve after mounting on the duct.

Max working temp.: 140°C

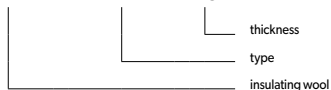
2. RECTANGULAR DUCTS INSULATING WOOL - LAMELLA



Max working temp.	250[°C]
Nominal density	36 [kg/m ³]
Roll dimensions	10 000 x 1000 [mm]
Thickness	20 [mm]
Number of m ² in box	10 [m ²]
Fire resistance	Non-flammable

Destination	O	O - air heating
Material	M	M - mineral wool

WELNA - LAMELLA - 20

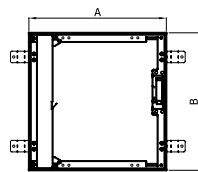
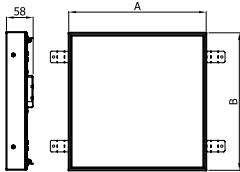


1. DWG - ACCESS DOOR

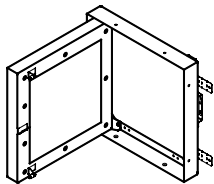


DWG access door provides easy access to the hood, at the same time ensuring continuity of insulation and not affecting the aesthetic values of the fireplace. With most fireplace systems, such access is of great importance; all servicing and maintenance work can be done without dismantling the cladding. This is especially important with water heating fireplace systems, as their hydraulic elements, valves and control electronics require periodic inspections.

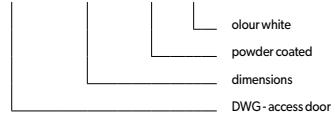
The door is mounted in fireplace cladding with glue and screws (the set includes special mounting tabs that enable mounting the door in cladding walls of 30, 40 or 50 mm). Body of the door is composed of a 30 mm thick vermiculite board, that provides good insulation. What is also important, this surface can be easily covered with decorative materials in the colour of the cladding, what makes the door virtually invisible. Yet another asset is the lack of a handle; door features a click opening system, pushing on the surface causes the mechanism to unlock and door springs open.



Dimensions [mm]	A	B
300 x 300	299	299
400 x 400	399	399
400 x 600	399	599
600 x 800	599	799



DWG - ...x... - ML - B



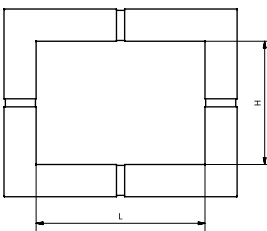
Destination	W	W - ventilation
	O	O - air heating
Material	ML	ML - mild steel sheet powder coated white color
	W	W - vermiculite

Caution! Max working temp. 150°C

2. UNIVERSAL FIREPLACE FRAME



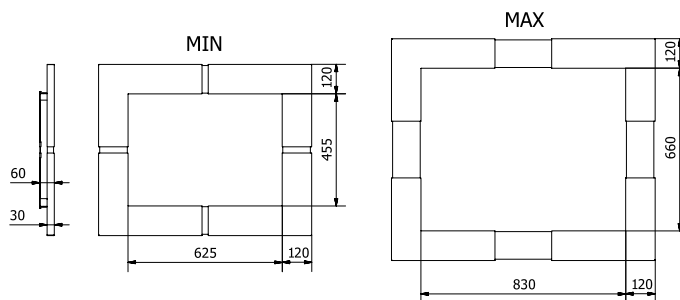
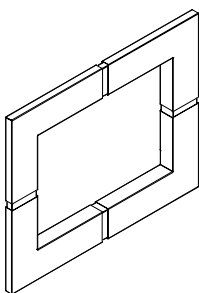
Universal Fireplace Frame - suits almost all fireplace inserts. Perfect for modern, stylish interior designs. Thanks to an innovative adjusting solution it is possible to fit the frame to almost all fireplace inserts on the market! Adjusting the frame is easy and can be made without any tools needed. You just slide the corners in or out! Mounting the frame to the fireplace cladding is also very easy and unique (placing special bolts on the wall and pressing the frame inside), that way of fitting gives the possibility for quick dismantling (in case of, for example, necessity of cleaning the insert).



H [mm]	L [mm]	Weight [kg]
445-660	625-830	8

WK-RWKR-1

universal fireplace frame

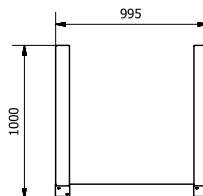
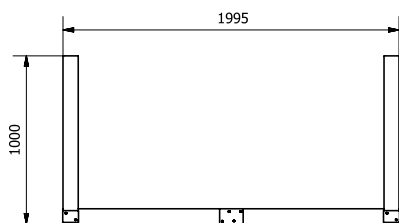


3. WOOD RACK "JAS"



Sold in boxes- „do it yourself“ mounting.

Destination	wood rack
Material	Metal elements made with mild steel 2.0mm powder coated black.



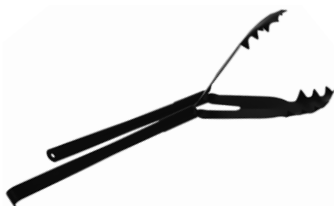
DESCRIPTION OF SET JAS-I:

- 2 x side bracket
- 2 x lateral connector
- 8 x pine painted tree wood board 30 x 90 x 1000 [mm]
- set of fastening screws

DESCRIPTION OF SET JAS-II:

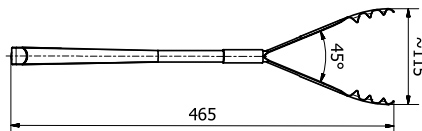
- 2 x side bracket
- 6 x pine painted tree wood board 30 x 90 x 1000 [mm]
- set of fastening screws

4. "CROCODILE" PLIERS



Crocodile fireplace pliers are a unique accessory, seemingly simple yet very functional. They replace a series of fireplace accessories. They help to load firewood into the fireplace quickly and safely. Thanks to them you can easily collect hot pieces of wood that may fall out of the fireplace.

Material: black spring steel, painted: Senotherm paint
Packed in aesthetic blister



SC-01



5. FIREPLACE AIR SUPPLY PREHEATING SET



Air intake set is equipped with a heater that preheats the air, significantly increasing efficiency of the stove and reducing smoke and dust emissions, particularly in the ignition phase. Air intake set also his equipped with a damper, which is used to regulate or close the air flow (which can be done manually, with a decorative knob or using an actuator). Air intake set channel is telescopic, what allows mounting it in walls of various thicknesses. Construction of the air intake allows easy access to the channel (for servicing or cleaning). Air exhaust (element mounted inside the room) is painted in a colour matching the REP / REPI flexible pipes and most free-standing stoves available on the market.



Usage

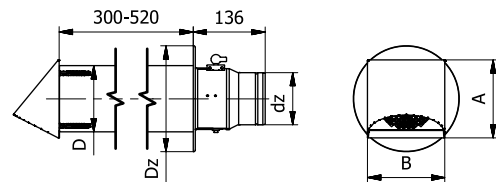
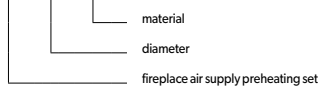
- Providing combustion air to fireplaces or stoves
- increasing efficiency of the stove
- reducing emission of the fireplace/stove

Destination	W	W - supply ventilation
Material	CC	CC - chrome-nickel steel

Diameter	ø100	ø150
A	147	197
B	146	196
D	125	175
Dz	200	250
dz	98.5	148.5
Voltage [V]	230	
Nominal power [W]	270	
Max current [A]	3	3.5
IP protection class	IP 33	
Weight (version with knob) [kg]	7.3	12.0
Weight (version with wire knob) [kg]	8.0	12.5
Weight (version with actuator) [kg]	8.5	13.0

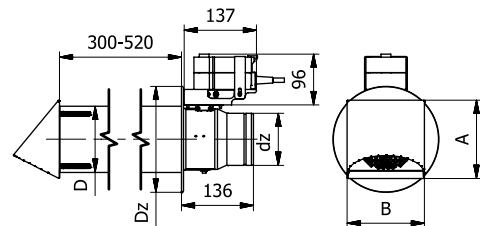
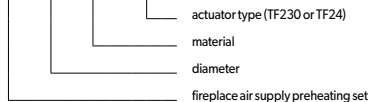
Fireplace air supply preheating set with knob

ZNK x - CC



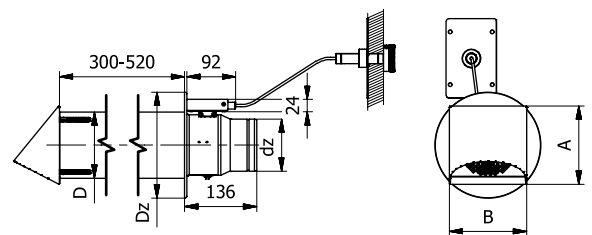
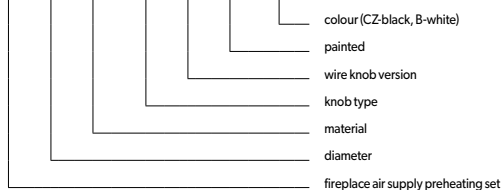
Fireplace air supply preheating set with electric actuator

ZNK x - CC / ...



Fireplace air supply preheating set with wire knob

ZNK x - CC / OS / y - ML - ...



Chimney construction:

According to regulations valid in Poland chimney duct should be situated in such way that the length of the connector (duct linking a stove with chimney), is as short as possible and adopted to working conditions of the device, as specified in accordance with the appropriate Norms. Length of the connector cannot exceed a quarter of effective height of the chimney. Slope of the connector must be bigger than 5 % in the direction of the stove, and its length for gas devices should not exceed 2 m.

Chimney duct should be constructed vertically and its diameter shall be equal throughout the whole length of the chimney. An acceptable chimney deviation from perpendicular may be not bigger than 30°, in this sloping part an inspection hole should be mounted.

Chimney ducts may be of round, oval, square and rectangular shape. Cross-section of chimney duct cannot be smaller than the cross-section of fume outlet of the stove. In case of changing from solid fuel burning stove to oil or gas appliance, diameter of chimney duct should be adjusted to new working conditions.

Smallest square dimension or diameter of fume chimney ducts made with bricks and smoke chimney ducts, with natural draught, should be at least 0.14 m. Whenever, a metal sheet chimney liner elements are being used, their smallest diameter should be at least 0.12 m. Chimney duct for natural ventilation should have at least 0.16 m² cross-section and the smallest diameter not smaller than 0.1 m.

Solid fuel burning stoves and fireplaces with open furnace chamber or with fireplace insert, with the smoke outlet up to 0.25 m² can be connected only to a separate chimney duct of the dimensions at least 0.14x0.14 m or 0.15 m diameter.

In case of fireplaces with larger smoke outlets, the necessary dimensions should be at least 0.14x0.27 m or a diameter of 0.18 m. For larger chimney ducts of rectangular shape 3:2 relation of rectangle walls should be kept.

Fume exhaust and smoke chimney ducts should be equipped with tightly closed inspection holes. In case of gas and oil burning stoves where wet fumes are extracted, a condensate drainage system must be used. Inspection hole should be situated below the connector line, in the distance of 0.3 m from the floor, in an easily accessible place.

For gas burning appliances (with power up to 35kW), length of fume chimney duct, measured from the axis of inlet of chimney duct to the edge of its outlet above the roof, must not be smaller than 2 m. In other cases chimneys should be at least 4 m high. For oil burning stoves, effective height of the chimney must be at least 5 m.

Chimney ducts should be built up above the roof line, in accordance with proper norms, so that height of the chimney secures undisturbed chimney draught. Depending on the particular wind zone, local topographical conditions, as well as on the specification of device working conditions, a chimney cowl should be mounted.

Those chimneys mounted in outer walls of the building and in unheated attics or outside placed chimneys must be thermally insulated. Single-walled elements of chimney systems may be mounted only in the inner walls, adjacent to heated rooms of the building.

Please confront these with actual laws and regulations valid in your country.

Designating the proper chimney diameter:

Stove with demand for draught, fumes temperature 130°C

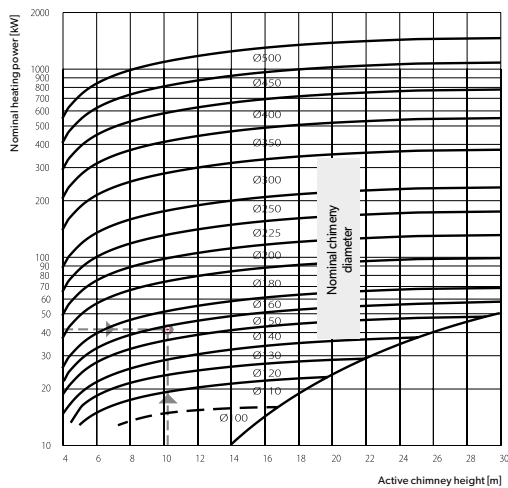


Fig. Diagram of the chimney duct diameter designation for a gas stove with demand for draught

Solid fuel burning stove, fumes temperature 200°C

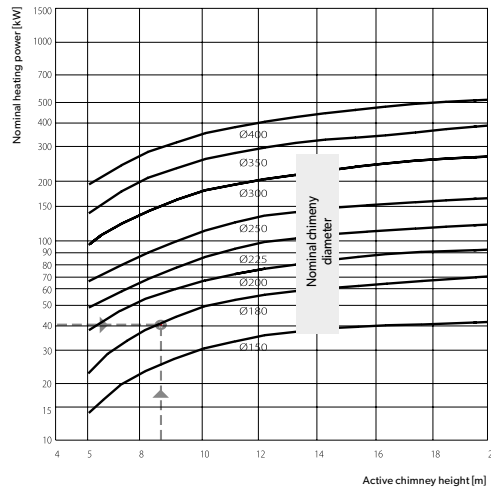


Fig. Diagram of the chimney duct diameter designation for a solid fuel burning stove

Stove with demand for draught, fumes temperature 190°C

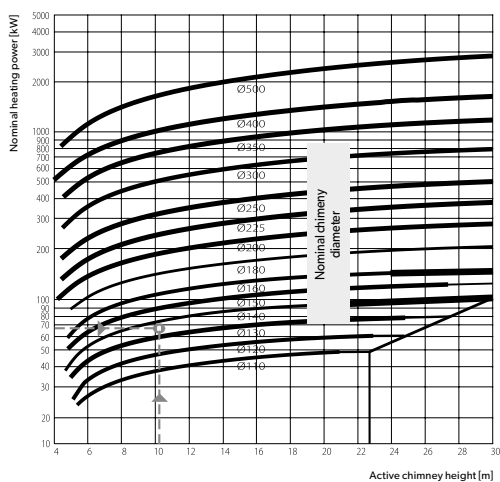


Fig. Diagram of the chimney duct diameter designation for a gas stove with demand for draught

Stove with no demand for draught, fumes temperature 190°C

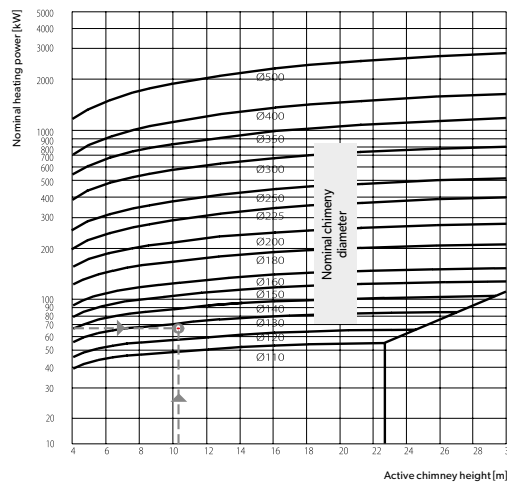


Fig. Diagram of the chimney duct diameter designation for a gas stove with no demand for draught

Placing of the chimney outlets:

CHIMNEY COWLS

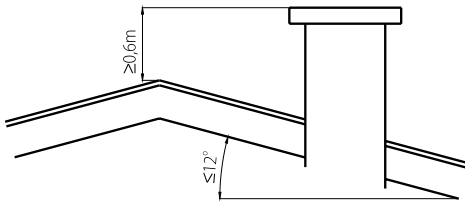


Fig. On flat roofs with the slope angle not bigger than 12° , regardless of roof construction, chimney outlets should be situated in a distance of 0.6 m from ridge level or edges of the building with depressed roofs.

STEERING & POWER SUPPLY

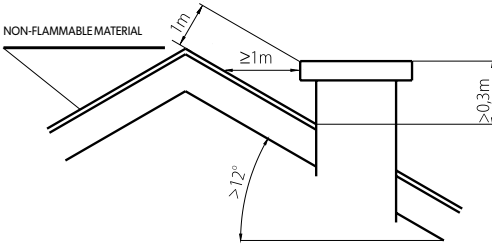


Fig. On steep roofs with the slope angle bigger than 12° and with non-flammable roofs, chimney outlets should be situated in a distance of at least 0.3 m from the roof surface and in a distance of at least 0.1 m measured horizontally from this surface.

HOT AIR DISTRIBUTION SYSTEM

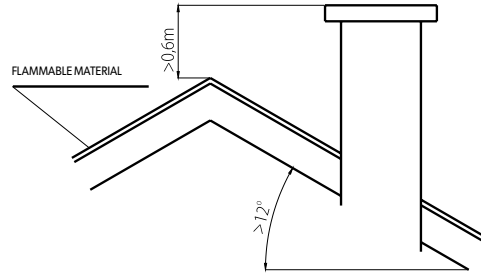


Fig. On steep roofs with the slope angle bigger than 12° or on easy-flammable roofs, chimney outlets should be situated in a distance of at least 0.6 m from the ridge level.

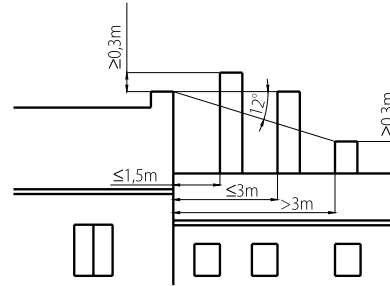


Fig. If the chimney is situated next to a part of a building, that creates an obstacle (cover), for the proper functioning of chimney ducts their outlets should be placed as follows:

- for chimneys situated in a distance between 3-10 m from the obstacle on a steep roof: above the surface built up from an angle of 12° downwards from the level of the highest obstacle
- for chimneys situated in a distance between 1.5-3 m from the obstacle: at least at the level of upper edge of the obstacle
- for chimneys situated in a distance of 1.5 m from the obstacle: at least 0.3 m higher than the upper edge of the obstacle.

CHIMNEYS



Offset calculator available at darco.pl

VENTILATION

Fill Fields

ELBOW ANGLE [α] DIAMETER [D] DESIRED OFFSET SPAN [S]

OR

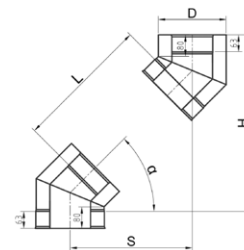
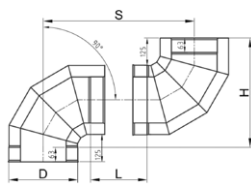
ELBOW ANGLE [α] DIAMETER [D] LENGTH BETWEEN ELBOWS [L]

Fill Fields

ELBOW ANGLE [α] DIAMETER [D] DESIRED OFFSET SPAN [S]

OR

ELBOW ANGLE [α] DIAMETER [D] LENGTH BETWEEN ELBOWS [L]



Chimney liners and double walled heat resistant chimneys <SWK>, <SWKow> and <SKD>

Chimney liners are made of acid-resist and chrome-nickel stainless steel sheet (type 1.4404 according to DIN17441) of thickness range from 0.5 to 1.0 mm. Their standard application is fume extraction from gas, oil, wood or pellet fired heating devices working in negative pressure conditions. These types of chimneys are resistant to corrosion created by acid condensate, produced during burning process. Steam condenses on the cold inner walls of chimney, and (as condensate) is removed through a condensate bowl placed at the bottom of chimney. Occurrence of condensation develops mostly at the moment of starting-up the stove as well as during its periodic functioning.

Maximum continuous working temperature: SWK 450°C and 600°C

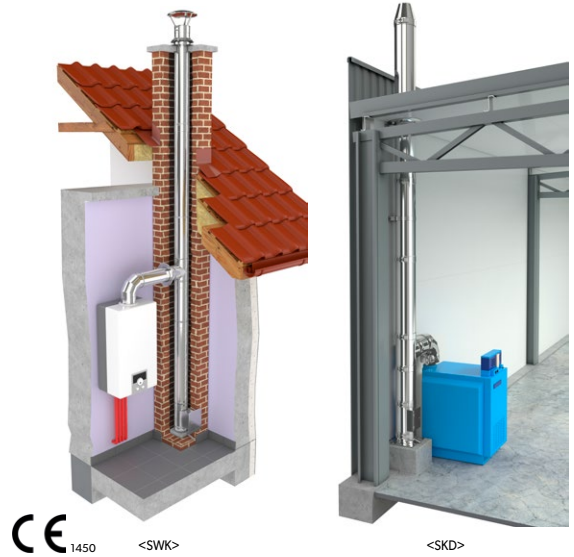
Maximum continuous working temperature: SWKow 450°C

Maximum continuous working temperature: SKD 600°C

Advantages:

- Acid-resistant, especially against sulphuric acid
- Much lower resistance of fume flow in comparison to traditional brick chimneys, because of small roughness of the surface
- Possibility of applying in case of modernization of already existing, cracked or leaking ceramic chimneys
- Easy and simple mounting process, without necessity of demolition works
- Multiple configuration possibilities

Double walled systems are also available with the outer wall powder coated (upon request).



CHIMNEY COWLS

STEERING & POWER SUPPLY

Acid-resistant steel chimney system <SKD-30> and <SKD-30-ML> SLIM

The chimneys are made of acid resistant chrome-nickel steel of grade 1.4404 according to DIN 17441 with a thickness of 0.5 to 0.6 mm. They are mainly used for the discharge of flue gases from heating appliances heated with gas, fuel oil, wood or pellets, operating under negative pressure. The outer wall is made of steel 1.4301-4N polished or painted black in RAL9005. Such chimneys are resistant to the corrosive effect of acidic condensate produced during the combustion process. The water vapour condenses on the cool inner walls of the chimney and, in the form of condensate, is discharged through a bowl at the bottom of the chimney. The condensation phenomenon can occur during start-up or cyclic operation of the boiler.

Maximum continuous operation temperature: 600°C

Advantages:

- High resistance to acids, mainly sulphuric acid
- Significantly lower resistance to flue gas flow than traditional masonry chimneys due to lower surface roughness
- Can be used indoors in newly built chimneys and for renovation of old chimneys
- Very simple and quick installation without demolition work
- Many possible set configurations



HOT AIR DISTRIBUTION SYSTEM

CHIMNEYS

Heat resistant chimney liners and double walled heat resistant chimneys <SWKZ> and <SKDZ>

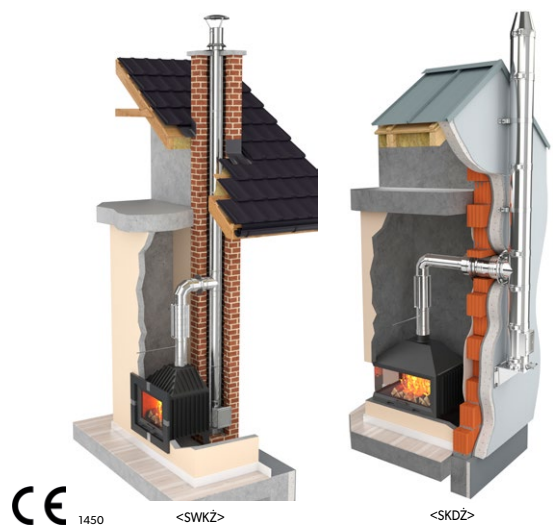
Heat resistant chimney liners and double walled heat resistant chimneys are made of chrome-nickel heat resistant steel sheet (type 1.4828 according to DIN 17441) of thicknesses of 0.8 and 1.0 mm. Their standard application is fume extraction from wood burning stoves.

Maximum continuous working temperature: 600°C

Advantages:

- Acid-resistant, especially against sulphuric acid
- Heat resistance (resistant to high temperatures of the fumes, which can rise up to 600°C and in the situation of soot fire even up to 1000°C)
- Much lower resistance of fume flow in comparison to traditional brick chimneys, because of small roughness of the surface
- Possibility of applying in case of modernization of already existing, cracked or leaking ceramic chimneys
- Easy and simple mounting process, without necessity of demolition works
- Multiple configuration possibilities

Double walled heat resistant chimneys are also available with the outer powder coated (upon request).



VENTILATION

invent. build. enjoy.

Vertical Flue System <SPOS>

The vertical flue system consists of SKDZ double-walled chimney components, SPK chimney connections and additional SPOS system elements.

They are mainly used to discharge flue gases from wood-fired heating appliances operating under negative pressure.

The system makes it possible to build a chimney directly above the fireplace's hearth. In this case, the function of the cleanout and condensate removal is performed by the hearth.

When designing this type of chimney, current national regulations must be taken into account.

Maximum continuous operating temperature: 600°C

Advantages:

- aesthetically pleasing and modern design
- any colour from RAL palette
- construction of the chimney directly above the fireplace
- installation on the roof with a pitch of 0-45 degrees
- very simple and quick installation
- various configurations of system components



<SPOS>

System of heat resistant chimney liners of oval shape <SWKZow>

Oval - shaped heat resistant chimney liners are made of chrome-nickel heat resistant steel sheet (type 1.4828 according to DIN 17441) of thicknesses of 0.8 and 1.0 mm. Their standard application is fume extraction from wood burning stoves.

Maximum continuous working temperature: 600°C

Advantages:

- Acid-resistant, especially against sulphuric acid
- Heat resistance (resistant to high temperatures of the fumes, which can rise up to 600°C and in the situation of soot fire even up to 1000°C)
- Much lower resistance of fume flow in comparison to traditional brick chimneys, because of small roughness of the surface
- Exploiting bigger crosswise diameter of the chimney compared to round chimney liners
- Possibility of applying in case of modernization of already existing, cracked or leaking ceramic chimneys
- Easy and simple mounting process, without necessity of demolition works
- Multiple configuration possibilities

Oval - shaped chimney liners are also available made of chrome - nickel 1.4404 acid resistant steel of thickness 0.6±1.0 mm. Their application is to exhaust fumes, from stoves where temperature can go up to 450°C.



<SWKZow>

Single walled flue system <SKS-X>

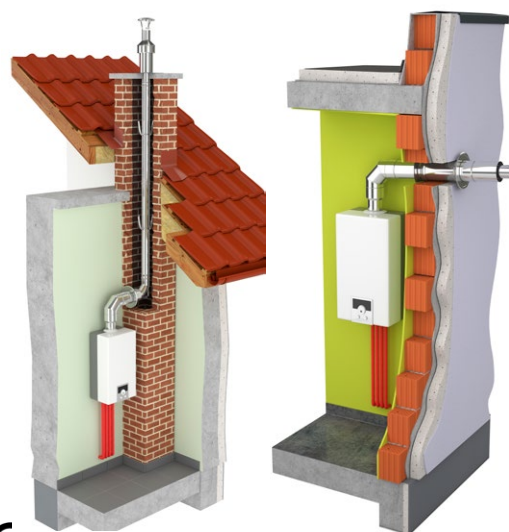
Single walled flue chimneys are made of acid-resistant chrome-nickel stainless steel sheet (type 1.4301 according to DIN 17441) of thicknesses of 0.4±0.6 mm. Their standard application is fume extraction from modern gas fired boilers with closed combustion chamber or condensing boilers and pellet stoves, where fume temperatures are low. These types of boilers are equipped with a ventilator for fume extraction, what creates positive pressure in the chimney duct.

These types of chimneys consist of single-walled fume duct removing fumes from the boiler. Flue chimneys must be of high tightness, because of their functioning in high pressure conditions. In order to prevent the fumes from escaping outside the duct, special seals are used in the bell joint of the pipe.

Maximum continuous working temperature: 250°C

Advantages:

- Resistance to aggressive chemical compounds contained in the fumes
- Long life span of the chimney
- Exploiting the boiler to its maximum efficiency, therefore reducing emission of harmful substances
- Easy and simple mounting process, without necessity of demolition works
- Multiple configuration possibilities
- Non-flammable material and high tightness of the chimney



<SKS-X>

Insulated walled flue system <SKS-X-IZ>

Insulated flue system is made of acid-resistant chrome-nickel stainless sheet. Inner pipe application (type 1.4301 acc. to DIN 17441 of thicknesses of 0.4 and 0.6 mm) is fume wet extraction from modern, energy-saving gas, oil boilers and pellet stoves. Outer pipe type is 1.4301 of thicknesses of 0.4 and 0.5 mm. Thermal insulation is made from mineral wool of thickness 30 mm.

Chimney system made of SKS-X-IZ elements is an independent construction. (there is no need to use ceramic materials).

Maximum continuous working temperature: 250°C

Advantages:

- Resistance to aggressive chemical compounds contained in the fumes
- Long life span of the chimney
- Exploiting the boiler to its maximum efficiency, therefore reducing emission of harmful substances
- Easy and simple mounting process, without necessity of demolition works
- Multiple configuration possibilities



<SKS-X-IZ>

CHIMNEY COWLS

STEERING & POWER SUPPLY

Double walled air-flue system <SKSP-X>, <SKSP-X-ML>

Inner ducts are made of acid-resistant chrome-nickel stainless steel sheet (type 1.4301 according to DIN 17441) of thicknesses of 0.4÷0.6 mm. Outer ducts are made of chrome-nickel steel sheet (type 1.4301 according to DIN 17441) of thicknesses of 0.4 and 0.6 mm. Their standard application is fume extraction from modern gas fired boilers with closed combustion chamber or condensing boilers and pellet stoves, where fume temperatures are low. Condensing boilers reclaim the heat out of steam contained in the fumes. They are equipped with a ventilator for fume extraction, what creates positive pressure in the chimney duct.

Air-flue chimneys consist of concentric fume duct, extracting fumes through the inner duct, and an outer duct supplying air necessary for burning process.

Inner ducts of the air-flue chimneys must be of great tightness, because of their functioning in high pressure conditions. In order to prevent the fumes from escaping to the outer duct, special silicone seals are used in bell joint of the pipe.

Maximum continuous working temperature: 250°C

Advantages:

- Resistance to aggressive chemical compounds contained in the fumes
- Long life span of the chimney
- Exploiting the boiler to its maximum efficiency, therefore reducing emission of harmful substances
- Easy and simple mounting process, without necessity of demolition works
- Multiple configuration possibilities
- Non-flammable material and high tightness of the chimney

<SKSP-X-ML> - double walled air-flue system with outer duct powder coated white (RAL 9003).



<SKSP-X>, <SKSP-X-ML>

HOT AIR DISTRIBUTION SYSTEM

CHIMNEYS

VENTILATION

Insulated air-flue system <SKSPD-X>

Inner duct is made of acid-resistant chrome-nickel stainless sheet, type 1.4301 acc. to DIN 17441 of thicknesses of 0.4÷0.6 mm. Air duct and outer duct is made of chrome-nickel steel sheet, type 1.4301 acc. to DIN 17441 of thicknesses of 0.4 and 0.6 mm. Their standard application is fume extraction from modern gas fired boilers with closed combustion chamber or condensing boilers and pellet stoves, where fume temperatures are low. Condensing boiler reclaims the heat out of steam contained in the fumes. It is equipped with a ventilator for fume extraction, what creates positive pressure in the chimney duct.

Insulated air-flue chimneys consist of concentric fume duct, extracting fumes through the inner duct and an outer duct supplying air necessary for burning process and thermal insulation 50 mm.

Insulated air-flue chimneys must be of great tightness, because of their functioning in high pressure conditions. In order to prevent the fumes from escaping to the outer duct, special silicone seals are used in bell joint of the pipe.

It is used to be mounted outside or in unheated building.

Maximum continuous working temperature: 250°C

Advantages:

- Resistance to aggressive chemical compounds contained in the fumes
- Long life span of the chimney
- Exploiting the boiler to its maximum efficiency, therefore reducing emission of harmful substances
- Easy and simple mounting process, without necessity of demolition works
- Multiple configuration possibilities
- Non-flammable material and high tightness of the chimney



<SKSPD-X>

invent. build. enjoy.

Chimney connections for accumulation systems <SPKA>

Chimney connections are made of chrome-nickel heat-resistant steel sheet (type 1.4828 according to DIN 17441) of thickness 2.0 mm. Their application is fume extraction from stoves, where fumes temperature can rise up even to 1200°C.

Chimney connections elements <SPKA> can not be used to build a chimney duct. Elements of system are plasma welded bell pipe joining.

Advantages:

- Resistance to aggressive chemical compounds contained in the fumes
- Exploiting the boiler to its maximum efficiency
- Easy and simple mounting process, without necessity of demolition works
- Multiple configuration possibilities
- Non-flammable material and high tightness of the chimney



CE 1450

<SPKA>

Chimney connections system <SPK>

Chimney connections are made with DC01 mild steel of 2.0 mm thickness. Their application is smoke extraction from wood burning stoves, where fumes temperature can rise up to 1000°C.

Maximum continuous working temperature: 600°C

Advantages:

- Easy and simple mounting process



CE 1450

<SPK>

Chimney connections for pellet stoves <SPKP>

Chimney connections for pellet stoves are made of mild steel sheet type DC01, thickness 1.2 mm. Their application is smoke extraction from pellet stoves, where fumes temperature can rise to 250°C. In order to prevent fumes from escaping the duct, special silicone seals are used in the bell joint of the pipe.

Maximum continuous working temperature: 250°C

Advantages:

- Easy and simple mounting process
- High tightness of the chimney connection
- High aesthetics (structured powder coating)



CE 1450

<SPKP>

Chimney connections for pellets stoves <SPP>

Chimney connections for pellet stoves are made of mild steel sheet type DC01, thickness 1.2 mm. Their application is smoke extraction from pellet stoves, where fumes temperature can rise to 250°C. In order to prevent fumes from escaping the duct, special silicone seals are used in the spigot joint of the pipe.

Maximum continuous working temperature: 250°C

Advantages:

- Easy and simple mounting process
- High tightness of the chimney connection
- Invisible bell connections provide high aesthetics



CE 1450

<SPP>

CHIMNEY COWLS

STEERING & POWER SUPPLY

Air-Flue chimney system for gas fireplaces <SGSP>

Air-Flue chimney system for gas fireplaces <SGSP> is a concentric double walled chimney system made of stainless steel: inner pipe - 1.4404, outer pipe - 1.4301. The system is used to exhaust fumes from modern gas fireplaces with closed combustion chamber. Air needed for burning process is taken from outside (through special air intakes) and then flows in the gap between the inner and outer chimney pipes. Smoke gases, from the burning process are taken out from the building using the inner pipe (natural convection). System secures ceramic surfaces of chimney duct from damages that can be caused by destructive influence chemical substances which are part of flue gases.

Maximum continuous working temperature: 600°C

Advantages:

- Resistance to aggressive chemical compounds contained in the fumes
- Long life span of the chimney
- Exploiting the boiler to its maximum efficiency, therefore reducing emission of harmful substances
- Easy and simple mounting process, without necessity of demolition works
- Multiple configuration possibilities



CE 1450

<SGSP>

HOT AIR DISTRIBUTION SYSTEM

CHIMNEYS

VENTILATION

invent. build. enjoy.

Chimney liner system <SWK>

Single-walled chimney liner system <SWK>, made of acid-resistant chrome-nickel steel sheet (type 1.4404 according to DIN 17441). It protects inner surfaces of ceramic chimneys (exhausting wet fumes from oil, gas, wood or pellet fired appliances), from destructive effects of acids.
Maximum working temperature: 450°C and 600°C.

Certificate of Factory Production Control 1450-CPR-0007 issued by INiG Cracow.

System of single walled chimney liners allows the adjustment of already existing chimney ducts to new specific working conditions.

Chimney liner system <SWK-X>

Round pipes and fittings products are used for building ducts in natural and mechanical ventilation systems, air heating as well as air conditioning installations. System made of acid-resistant chrome-nickel stainless steel, type 1.4031 acc. To DIN 17441. Maximum working temperature: 250°C.

Heat resistant chimney liner system <SWKZ>

Single-walled heat resistant chimney liner system <SWKZ>, made of heat-resistant chrome-nickel steel sheet (type 1.4828 according to DIN 17441). It protects inner surfaces of ceramic chimneys (extracting fumes from wood fired heating devices), from destructive functioning of acids. Maximum working temperature: 600°C.

Certificate of Factory Production Control 1450-CPR-0007 issued by INiG Cracow.

System of single walled heat resistant chimney liner allows the adjustment of already existing chimney ducts to new specific working conditions

CHIMNEY COWLS

STEERING & POWER SUPPLY

HOT AIR DISTRIBUTION SYSTEM

CHIMNEYS

VENTILATION

Application of chimney liners and recommended sheet thicknesses

Diameter DN	W, S, D 1.4404	D 1.4828	W 1.4301
80	0.5	-	0.6
100	0.5	-	0.6
110	0.5	-	0.6
120	0.5	0.8	0.6
130	0.5	0.8	0.6
140	0.6	0.8	0.6
150	0.6	0.8	0.6
160	0.6	0.8	0.6
180	0.6	0.8	0.6
200	0.6	0.8	0.6
225	0.6	0.8	0.6
250	0.8	0.8	0.8
280	0.8	0.8	0.8
300	0.8	0.8	0.8
325	0.8	0.8	0.8
350	0.8	0.8	0.8
400	1.0	0.8	1.0
450	1.0	-	1.0
500	1.0	-	1.0

Table of layouts and sizes

Diameter DN	Lr	Dz	Dw	Dk	s
80	250	80.1	79.1	81.1	0.5
100	315	100.8	99.8	101.8	
110	350	111.9	110.9	112.9	
120	385	123.0	122.0	124.0	
130	415	132.6	131.6	133.6	
140	440	140.7	139.5	141.7	0.6
150	475	151.8	150.6	152.8	
160	505	161.4	160.2	162.4	
180	570	182.0	180.8	183.0	
200	630	201.1	199.9	202.1	
225	710	226.6	225.4	227.6	0.8
250	790	252.3	250.7	253.3	
260	818	261.2	259.6	262.2	
280	880	280.9	279.3	281.9	
300	945	301.6	300.0	302.6	
325	1020	325.5	323.9	327.0	1.0
350	1100	350.9	349.3	352.4	
400	1260	402.1	400.1	403.6	
450	1415	451.4	449.4	452.9	
500	1575	502.3	500.3	503.8	

Destination:

- W - ventilation ducts
- S - flue ducts (gas, oil)
- D - smoke ducts

Measurments:

- Lr - metal sheet layout [mm]±0.1
- Dz - outer diameter of pipe [mm]±0.1
- Dw - inner diameter of pipe [mm]±0.1
- Dk - inner diameter of bell joint [mm]±0.1
- s - metal sheet thickness [mm]

Bell joint of the pipe

Individual elements of the chimney system are being joint by the way of pushing one part of the element - a spigot, into the other press-formed part - a bell. Thanks to this type of pipe joining, chimney liner is characterized by very tight and stiff construction. It also assures the proper flow of condensate, along walls of the chimney straight to the condensate drain bowl.

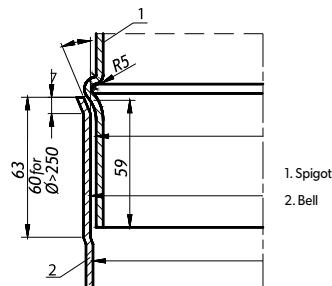
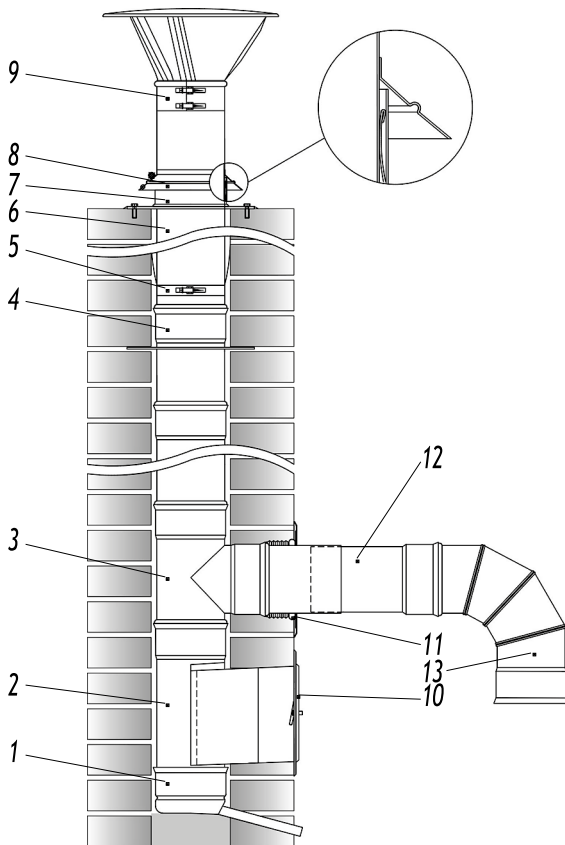


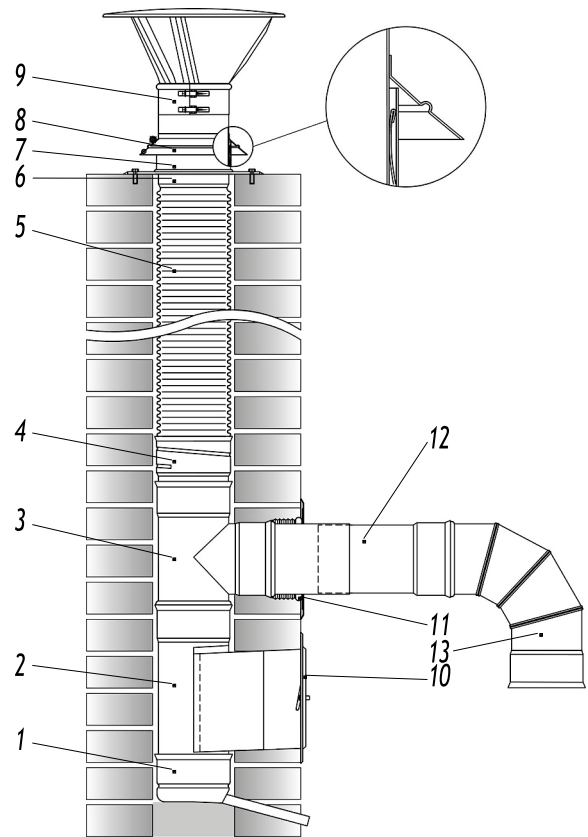
Fig. Method of joining single-walled pipe elements.

Model application of elements



No	Name	Destination
1	Condensate drain bowl	MS150-CH
2	Clean out element	WC150-CH6
3	Tee 90°	TR150/90-CH6
4	Intermediate support	PP150-CH6
5	Stabilizing brackets	OUI150-CH
6	Straight pipe 1 m	RP150/1000-CH6
7	Roof plate	PD150-X
8	Rain collar	KPD150-X
9	Cap	DK150-CH6
10	Doors	DW1-X
11	Rosette	ROZ150-CH
12	Telescopic pipe	RT150/2X250-CH6
13	Adjustable elbow 0-90°	KN150/90-CH6

Fig. An example of a single walled chimney construction (rigid pipes).



No	Name	Destination
1	Condensate drain bowl	MS150-CH
2	Clean out element	WC150-CH6
3	Tee 90°	TR150/90-CH6
4	Flexible pipe bell-type connector	ZST150-CH6-K
5	Stainless flexible pipe	RESF150-CH
6	Flexible pipe spigot-type connector	ZST150/150-CH6-N
7	Roof plate	PD150-X
8	Rain collar	KPD150-X
9	Cap	DK150-CH6
10	Doors	DW1-X
11	Rosette	ROZ150-CH
12	Telescopic pipe	RT150/2X250-CH6
13	Adjustable elbow 0-90°	KN150/90-CH6

Fig. An example of a single walled chimney construction (flexible pipes).

CHIMNEY COWLS

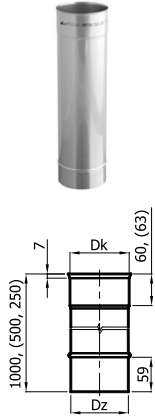
STEERING & POWER SUPPLY

HOT AIR DISTRIBUTION SYSTEM

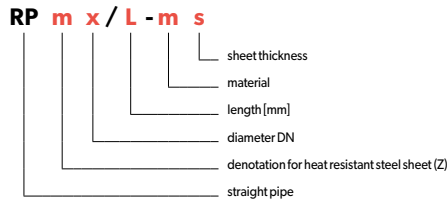
CHIMNEYS

VENTILATION

1. STRAIGHT PIPE RP

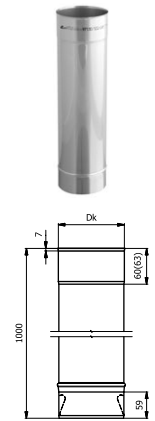


Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
Dz	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2
Dk	81.2	101.9	113.1	124.2	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6	351.9	402.9	452.2	503.2
Weight [kg]	1.20	1.50	1.70	1.85	2.00	2.10	2.30	2.40	2.75	3.00	3.40	3.80	4.55	5.30	6.05	6.80	7.55

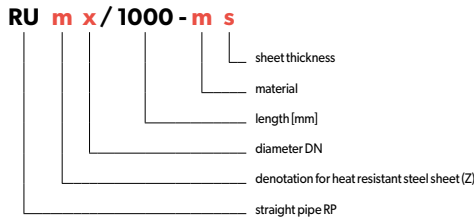


Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
Material	-	-	D	D - smoke ducts
	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
Sheet thickness s	-	-	Z	Z - heat resistant steel 1.4828
	5	-	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
1	1	1	1 - sheet thickness 1.0 mm	

2. STRAIGHT PIPE WITH MOUNTING HANDLES RU



Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
Dz	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2
Dk	81.2	101.9	113.1	124.2	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6	351.9	402.9	452.2	503.2
Weight [kg]	1.20	1.50	1.70	1.85	2.00	2.10	2.30	2.40	2.75	3.00	3.40	3.80	4.55	5.30	6.05	6.80	7.55



Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
Material	-	-	D	D - smoke ducts
	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
Sheet thickness s	-	-	Z	Z - heat resistant steel 1.4828
	5	-	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
1	1	1	1 - sheet thickness 1.0 mm	

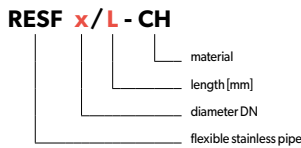
3. SINGLE WALLED FLEXIBLE STAINLESS PIPE DARCO FLEX RESF



Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200
Dw	80	100	110	120	130	140	150	160	180	200
Dz	87	107	107	127	137	147	157	167	187	207
Weight* [kg]	0.70	0.90	1.00	1.10	1.20	1.25	1.35	1.45	1.65	1.80

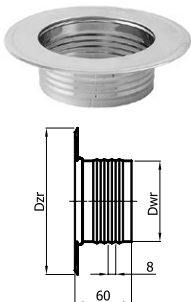
*Weight of 1 m of flexible pipe

Maximum length: 15 [m]
 Minimal bending radius: 3D
 Maximum working temp: 450°C

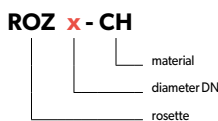


Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
Material	CH	CH - stainless steel 1.4404
Sheet thickness s	10	10 - sheet thickness 0.10 mm

4. ROSETTE ROZ

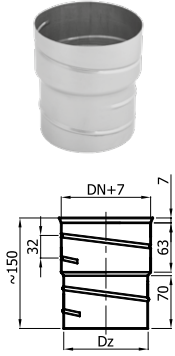


Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
Dwr [mm]	86	106	116	126	136	146	156	166	186	206	231	256	306	356	406	456	506
Dzr [mm]	157	177	188	207	217	227	247	257	277	297	322	347	398	448	498	548	598
Weight [kg]	0.12	0.14	0.16	0.18	0.19	0.21	0.23	0.25	0.28	0.30	0.34	0.37	0.44	0.51	0.58	0.65	0.72

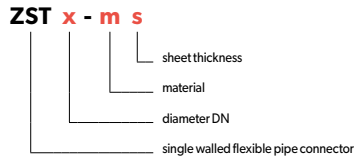


Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
Material	D	D - smoke ducts
	CH	CH - chrome steel H17
Sheet thickness s	5	5 - sheet thickness 0.5 mm

5. SINGLE WALLED FLEXIBLE PIPE CONNECTOR ZST

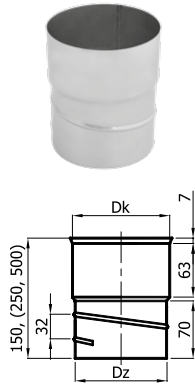


Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	for s=0.6
Dz	78	98	108	118	128	138	148	158	178	198	
Weight [kg]	0.18	0.22	0.25	0.27	0.29	0.31	0.34	0.36	0.40	0.44	

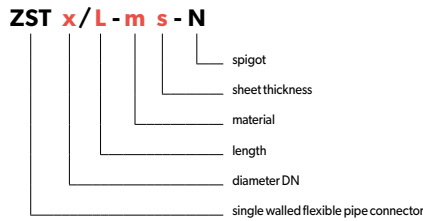


Destination	W	W	W - ventilation ducts
	S	-	-
Material	CH	-	CH - stainless steel 1.4404
	-	X	X - stainless steel 1.4301
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	6	6 - sheet thickness 0.6 mm

6. SINGLE WALLED FLEXIBLE PIPE CONNECTOR ZST-N

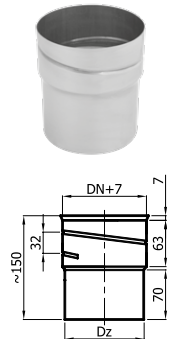


Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	for s=0.6
Dz	78	98	108	118	128	138	148	158	178	198	
Dk	81.2	101.9	113.1	124.2	133.8	141.7	152.9	162.4	183.1	202.2	
Weight [kg]	0.18	0.22	0.25	0.27	0.29	0.31	0.34	0.36	0.40	0.44	

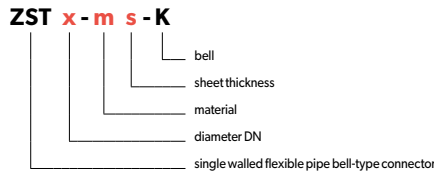


Destination	W	W	W - ventilation ducts
	S	-	-
Material	CH	-	CH - stainless steel 1.4404
	-	X	X - stainless steel 1.4301
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	6	6 - sheet thickness 0.6 mm

7. SINGLE WALLED FLEXIBLE PIPE BELL-TYPE CONNECTOR ZST-K

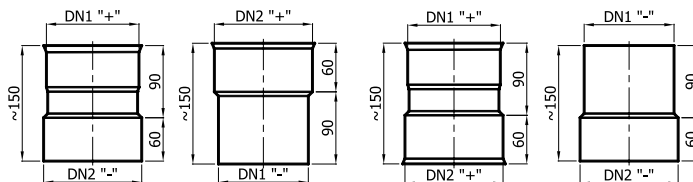


Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	for s=0.6
Dz	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	
Weight [kg]	0.18	0.22	0.25	0.27	0.29	0.31	0.34	0.36	0.40	0.44	



Destination	W	W	W - ventilation ducts
	S	-	-
Material	CH	-	CH - stainless steel 1.4404
	-	X	X - stainless steel 1.4301
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	6	6 - sheet thickness 0.6 mm

8. REDUCER (BELL-TYPE) RD-R

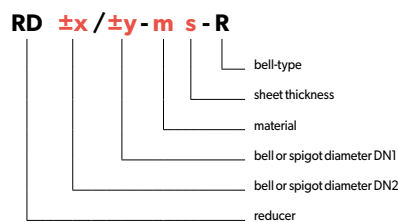


Diameter differences range:
DN2-DN1 ≤ 20 mm

ex. **RD-200/+180-CH6-R**

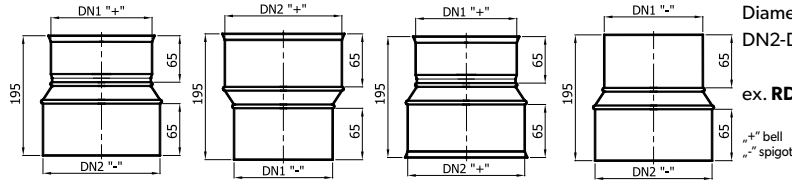
„+“ bell
„-“ spigot

Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	for s=0.6
Weight [kg]	0.18	0.23	0.25	0.28	0.30	0.32	0.34	0.36	0.41	0.45	0.51	0.57	0.68	0.79	0.90	1.00	1.13	

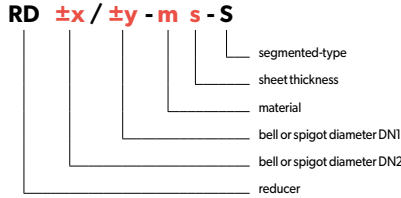


Destination	W	W	-	W - ventilation ducts
	S	-	-	-
-	-	-	-	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
-	-	Z	-	Z - heat resistant steel 1.4828
Sheet thickness s	5	-	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
1	1	1	-	1 - sheet thickness 1.0 mm

9. REDUCER (SEGMENTED-TYPE) RD-S



Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
Weight [kg]	depends on dimensions																

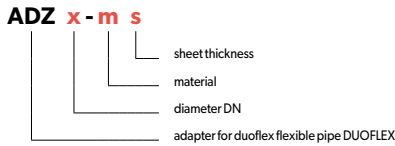
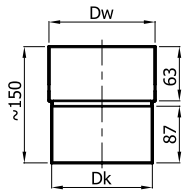


Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	5	-	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

10. ADAPTER FOR DUOFLEX FLEXIBLE PIPE ADZ



Diameter DN	ø130	ø150	ø180	ø200
Dk	133.9	153.0	183.4	202.3
Dw	138	158	188	208
Weight [kg]	0.50	0.60	0.70	0.75

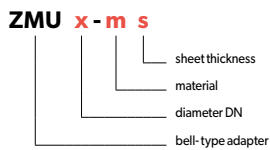
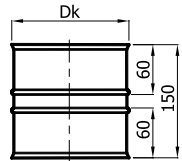


Destination	D	D - smoke ducts
Material	Z	Z - heat resistant steel 1.4828
Sheet thickness s	8	8 - sheet thickness 0.8 mm
	1	1 - sheet thickness 1.0 mm

11. BELL-TYPE ADAPTER ZMU



Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
Dk	81.2	101.9	113.1	124.2	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6	351.9	402.9	452.2	503.2
Weight [kg]	0.18	0.23	0.25	0.28	0.30	0.32	0.34	0.36	0.41	0.45	0.51	0.57	0.68	0.79	0.90	1.00	1.13

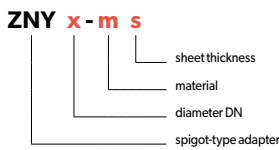
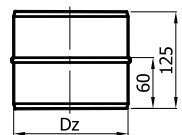


Destination	W	-	W - ventilation ducts
	S	-	S - flue ducts (gas, oil)
	-	D	D - smoke ducts
Material	CH	-	CH - stainless steel 1.4404
	-	Z	Z - heat resistant steel 1.4828
	8	8	8 - sheet thickness 0.8 mm
Sheet thickness s	1	1	1 - sheet thickness 1.0 mm

12. SPIGOT-TYPE ADAPTER ZNY



Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
Dz	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2
Weight [kg]	0.18	0.23	0.25	0.28	0.30	0.32	0.34	0.36	0.41	0.45	0.51	0.57	0.68	0.79	0.90	1.00	1.13



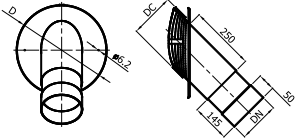
Destination	W	-	W - ventilation ducts
	S	-	S - flue ducts (gas, oil)
	-	D	D - smoke ducts
Material	CH	-	CH - stainless steel 1.4404
	-	Z	Z - heat resistant steel 1.4828
	8	8	8 - sheet thickness 0.8 mm
Sheet thickness s	1	1	1 - sheet thickness 1.0 mm

13. ANGULAR WALL INSERT WITH ROPE FOR CERAMIC CHIMNEYS WKK-CS

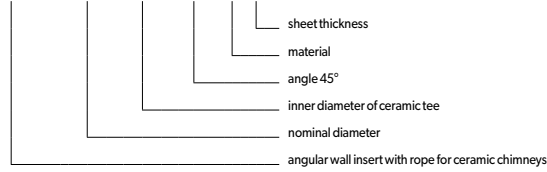


Diameter DN	120	130	140	150	160	180	200	225
DC	140	150	160	170	180	200	220	250
D	280	290	300	310	320	340	360	385
Weight [kg]	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.45

Angular wall insert allows to connect the stove to a chimney at 45° angle.

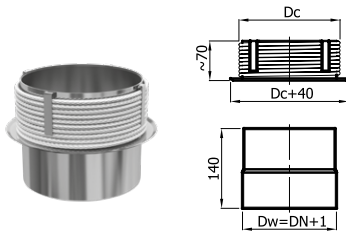


WKK-CS DN / DC / 45 - Z s

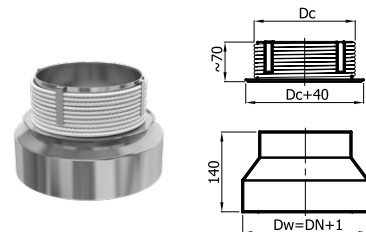


Destination	D	D - smoke ducts
Material	Z	Z - heat resistant steel 1.4828
Sheet thickness s	8	8 - sheet thickness 0.8 mm
	1	1 - sheet thickness 1.0 mm

14. WALL INSERT FOR CERAMIC CHIMNEYS WKC

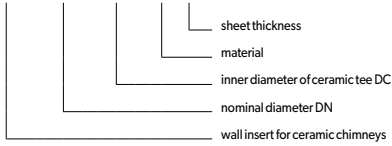


WKC

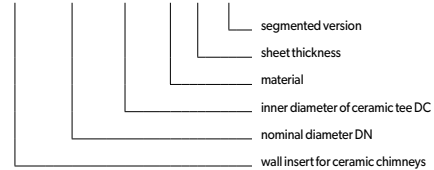


WKC-S

WKC DN / DC - m s



WKC DN / DC - m s - S

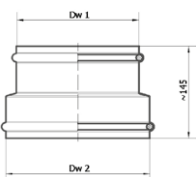


DN	DC									
	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	
ø120	WKC	WKC	WKC	WKC	WKC	WKC-S	WKC-S	WKC-S	WKC-S	
ø130	WKC-S	WKC	WKC	WKC	WKC	WKC-S	WKC-S	WKC-S	WKC-S	
ø140	WKC-S	WKC-S	WKC	WKC	WKC	WKC	WKC-S	WKC-S	WKC-S	
ø150	WKC-S	WKC-S	WKC-S	WKC	WKC	WKC	WKC-S	WKC-S	WKC-S	
ø160	WKC-S	WKC-S	WKC-S	WKC-S	WKC	WKC	WKC	WKC-S	WKC-S	
ø180	WKC-S	WKC-S	WKC-S	WKC-S	WKC-S	WKC	WKC	WKC	WKC-S	
ø200	WKC-S	WKC-S	WKC-S	WKC-S	WKC-S	WKC-S	WKC	WKC	WKC-S	
ø225	WKC-S	WKC-S	WKC-S	WKC-S	WKC-S	WKC-S	WKC-S	WKC	WKC	
ø250	WKC-S	WKC-S	WKC-S	WKC-S	WKC-S	WKC-S	WKC-S	WKC-S	WKC	

Destination	D	D - smoke ducts
Material	Z	Z - heat resistant steel 1.4828
Sheet thickness s	8	8 - sheet thickness 0.8 mm
	1	1 - sheet thickness 1.0 mm

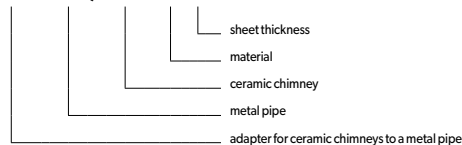
This wall insert protects tees of ceramic chimneys from damages caused by thermal expansion of metal elements of the chimney connection.

15. ADAPTER FOR CERAMIC CHIMNEYS TO A METAL PIPE RDZS



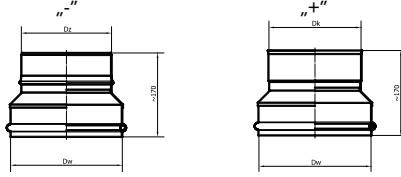
Diameter DN/DC	ø150/ø160	ø160/ø160	ø150/ø180	ø180/ø180	ø150/ø200	ø160/ø200	ø180/ø200	ø200/ø200
Dw1 (DN)	158	168	158	188	158	168	188	208
Dw2 (DC)	200	200	220	220	240	240	240	240
Weight [kg]	0.80	0.80	0.90	0.90	1.07	1.07	1.07	1.07

RDZS DN / DC - m s



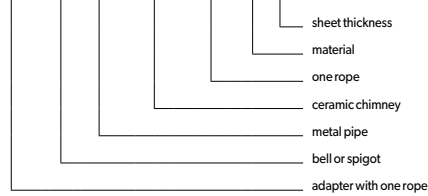
Destination	D	D - smoke ducts
Material	Z	Z - heat resistant steel 1.4828
Sheet thickness s	8	8 - sheet thickness 0.8 mm
	1	1 - sheet thickness 1.0 mm

16. ADAPTER WITH ONE ROPE RDZS+1S



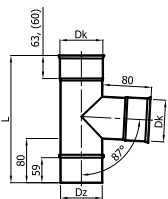
Diameter DN/DC	ø180 / ø180	ø200 / ø200
Dw (DC)	220.0	240.0
Dk (DN)	183.0	202.5
Dz (DN)	182.0	201.5
Weight [kg]	1.10	1.20

RDZS ± DN/DC + 1S - m s



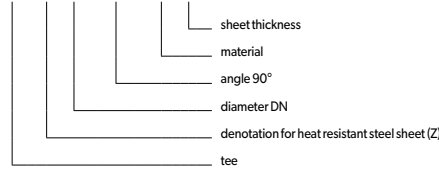
Destination	D	D - smoke ducts
Material	Z	Z - heat resistant steel 1.4828
Sheet thickness s	8	8 - sheet thickness 0.8 mm
	1	1 - sheet thickness 1.0 mm

17. TEE 90° TR/90



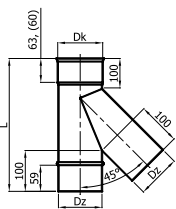
Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
Dz	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2
Dk	81.2	101.9	113.1	124.2	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6	351.9	402.9	452.2	503.2
L [mm]	230	270	270	270	280	300	300	330	350	370	380	420	500	500	600	600	650
Weight [kg]	0.50	0.65	0.75	0.90	0.95	1.00	1.20	1.30	1.50	1.75	2.10	2.45	3.30	4.20	5.25	6.35	7.65

TR m x / 90 - m s



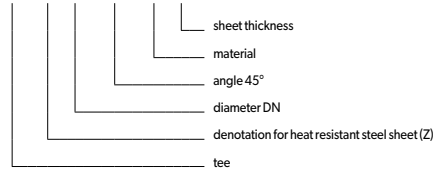
Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
Material	-	D - smoke ducts
	CH	CH - stainless steel 1.4404
	-	X - stainless steel 1.4301
Sheet thickness s	-	Z - heat resistant steel 1.4828
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm
	8	8 - sheet thickness 0.8 mm

18. TEE 45° TR/45



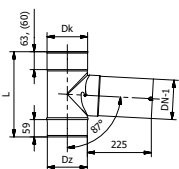
Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
Dz	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2
Dk	81.2	101.9	113.1	124.2	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6	351.9	402.9	452.2	503.2
L [mm]	315	340	340	375	385	350	400	425	455	480	520	550	625	695	765	835	910
Weight [kg]	0.50	0.65	0.75	0.90	0.95	1.00	1.20	1.30	1.50	1.75	2.10	2.45	3.30	4.20	5.25	6.35	7.65

TR m x / 45 - m s



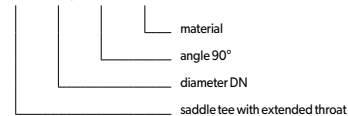
Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
Material	-	D - smoke ducts
	CH	CH - stainless steel 1.4404
	-	X - stainless steel 1.4301
Sheet thickness s	-	Z - heat resistant steel 1.4828
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm
	8	8 - sheet thickness 0.8 mm

19. SADDLE TEE WITH EXTENDED THROAT



Diameter DN	ø100	ø120	ø130	ø140	ø150	ø160	ø180
Dz	100.8	123	132.6	140.8	151.8	161.4	182
Dk	101.8	124	133.6	141.6	152.8	162.2	182.8
L [mm]	270	280	280	300	300	320	350
Weight [kg]	0.60	0.80	0.85	1.20	1.10	1.40	1.65

TRG x / 90 - m

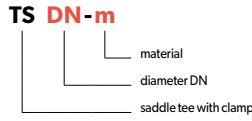
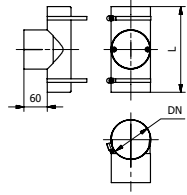


Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
Material	CH	CH - stainless steel 1.4404
Sheet thickness s	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

20. SADDLE TEE WITH CLAMP



Diameter DN	ø100	ø120	ø130	ø150
L [mm]	220	240	250	250
Weight [kg]	0.35	0.45	0.50	0.55

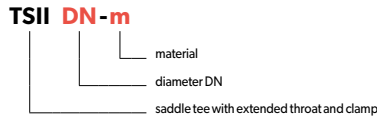
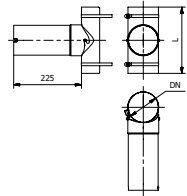


Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
Material	CH	CH - stainless steel 1.4404
Sheet thickness s	6	6 - sheet thickness 0.6 mm

21. SADDLE TEE WITH EXTENDED THROAT AND CLAMP

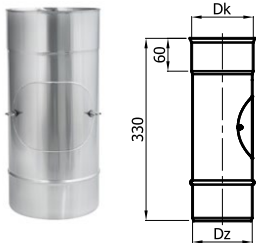


Diameter DN	ø100	ø120	ø130	ø150
L [mm]	220	240	250	250
Weight [kg]	0.50	0.65	0.70	0.90

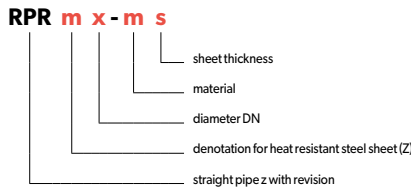


Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
Material	CH	CH - stainless steel 1.4404
Sheet thickness s	6	6 - sheet thickness 0.6 mm

22. STRAIGHT PIPE Z WITH REVISION RPR

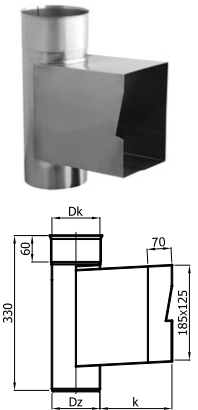


Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	for s=0.6
Dz	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2	
Dk	81.2	101.9	113.1	124.2	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6	351.9	402.9	452.2	503.2	
Weight [kg]	0.40	0.50	0.55	0.60	0.66	0.70	0.75	0.80	0.90	1.00	1.13	1.27	1.52	1.76	2.02	2.27	2.52	

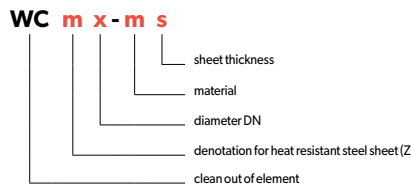


Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
Material	-	D - smoke ducts
	CH	CH - stainless steel 1.4404
	-	X - stainless steel 1.4301
Sheet thickness s	-	Z - heat resistant steel 1.4828
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm
	8	8 - sheet thickness 0.8 mm
1	1 - sheet thickness 1.0 mm	

23. CLEAN OUT OF ELEMENT WC

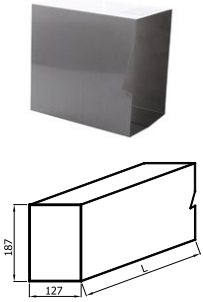


Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	for s=0.6
Dz	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2	
Dk	81.2	101.9	113.1	124.2	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6	351.9	402.9	452.2	503.2	
Weight [kg]	0.90	1.00	1.05	1.10	1.10	1.10	1.15	1.30	1.35	1.40	1.60	1.70	1.95	2.20	2.45	2.70	2.95	

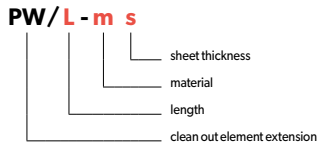


Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
Material	-	D - smoke ducts
	CH	CH - stainless steel 1.4404
	-	X - stainless steel 1.4301
Sheet thickness s	-	Z - heat resistant steel 1.4828
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm
	8	8 - sheet thickness 0.8 mm
1	1 - sheet thickness 1.0 mm	

24. CLEAN OUT ELEMENT EXTENSION PW

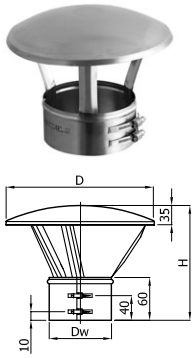


Length L [mm]	200	300	500	1000	for s=0.6
Weight [kg]	0.60	0.90	1.50	2.95	

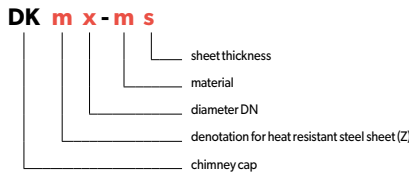


Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
Material	-	-	D	D - smoke ducts
	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
Sheet thickness s	-	-	Z	Z - heat resistant steel 1.4828
	5	-	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

25. CHIMNEY CAP DK

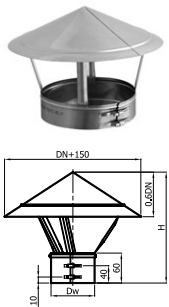


Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	for s=0.6
Dw	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	
D	160	220	220	250	250	290	290	290	290	350	
H	145	180	180	180	180	200	200	200	200	220	
Weight [kg]	0.30	0.33	0.34	0.35	0.36	0.37	0.51	0.52	0.54	0.56	

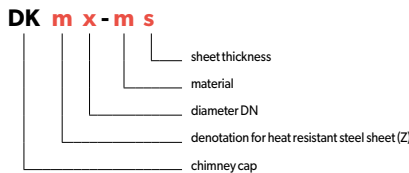


Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
Material	-	-	D	D - smoke ducts
	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
Sheet thickness s	-	-	Z	Z - heat resistant steel 1.4828
	5	-	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	-	8	8	8 - sheet thickness 0.8 mm
	-	1	1	1 - sheet thickness 1.0 mm

26. CHIMNEY CAP DK

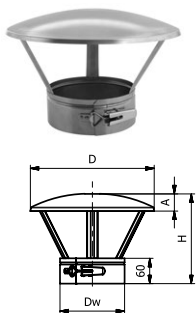


Diameter DN	ø225	ø250	ø300	ø350	ø400	ø450	ø500	for s=0.6
Dw	226.7	252.2	301.6	350.9	401.9	451.2	502.2	
H	330	360	420	480	540	600	660	
Weight [kg]	1.05	1.25	1.60	2.00	2.45	2.95	3.45	

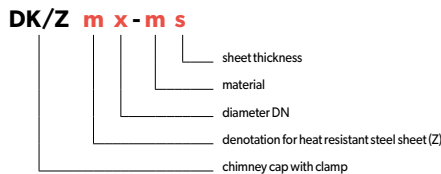


Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
Material	-	-	D	D - smoke ducts
	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
Sheet thickness s	-	-	Z	Z - heat resistant steel 1.4828
	-	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

27. CHIMNEY CAP WITH CLAMP DK/Z

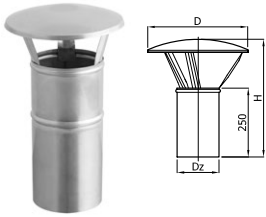


Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	for s=0.6
Dw	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	
D	160	220	220	250	250	290	290	290	290	350	
H	145	180	180	180	180	200	200	200	200	220	
Weight [kg]	0.30	0.33	0.34	0.35	0.36	0.37	0.51	0.52	0.54	0.56	



Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
Material	-	-	D	D - smoke ducts
	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
Sheet thickness s	-	-	Z	Z - heat resistant steel 1.4828
	5	-	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	-	8	8	8 - sheet thickness 0.8 mm
	-	1	1	1 - sheet thickness 1.0 mm

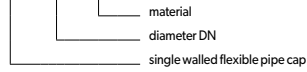
28. SINGLE WALLED FLEXIBLE PIPE CAP DKST



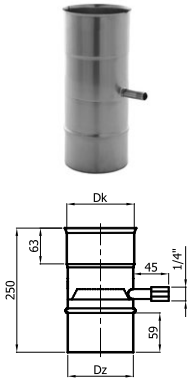
Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	for s=0.6
Dz	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	
D	160	220	220	250	290	290	290	290	290	350	
H	365	380	385	390	405	410	415	415	420	450	
Weight [kg]	0.50	0.60	0.65	0.70	0.75	0.80	0.95	1.00	1.05	1.10	

Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
Material	CH	CH - stainless steel 1.4404
Sheet thickness s	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

DKST x - CH

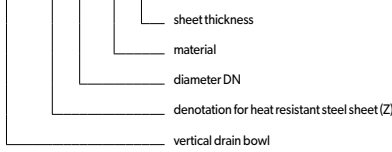


29. VERTICAL DRAIN BOWL MSP



Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	for s=0.6
Dz	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2	
Dk	81.1	101.8	113.0	124.1	133.7	141.7	152.9	162.4	183.1	202.2	227.7	253.2	303.1	352.4	403.4	452.7	503.7	
Weight [kg]	0.35	0.45	0.50	0.50	0.55	0.65	0.70	0.75	0.85	0.90	1.00	1.10	1.30	1.50	1.75	1.95	2.15	

MSP m x - m s



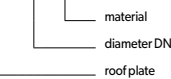
Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
Material	-	D - smoke ducts
	CH	CH - stainless steel 1.4404
	X	X - stainless steel 1.4301
Sheet thickness s	-	Z - heat resistant steel 1.4828
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm
	8	8 - sheet thickness 0.8 mm
1	1 - sheet thickness 1.0 mm	

30. ROOF PLATE PD



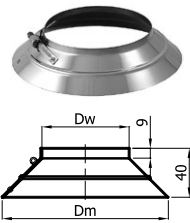
Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	for s=0.6(0.5)
Dz [mm]	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2	
A [mm]	250	250	250	250	250	250	300	300	330	330	350	400	450	500	550	600	650	
B [mm]	200	200	200	200	200	200	250	250	280	280	300	350	400	450	500	550	600	
Weight [kg]	0.35	0.40	0.40	0.40	0.40	0.40	0.50	0.50	0.60	0.60	0.65	0.80	0.95	1.10	1.25	1.40	1.55	

PD x - X



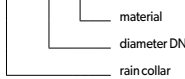
Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	6	6 - sheet thickness 0.6 mm

31. RAIN COLLAR KPD



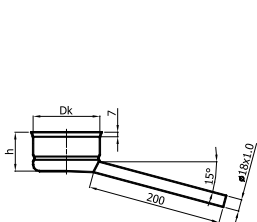
Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø280	ø300	ø350	ø400	ø450	ø500	ø550	ø600	for s=0.6(0.5)
Dw [mm]	79.0	99.7	110.9	122.0	131.6	139.5	150.7	160.2	180.9	200.0	225.5	251.0	279	300.4	349.7	400.7	450.0	501.0	550	600	
Dm [mm]	151	172	183	194	204	212	223	232	253	272	326	350	379	400	450	501	550	601	650	700	
Weight [kg]	0.14	0.16	0.17	0.18	0.18	0.19	0.20	0.21	0.23	0.25	0.29	0.31	0.37	0.36	0.41	0.45	0.50	0.54	0.6	0.65	

KPD x - X



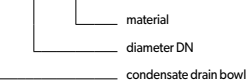
Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	6	6 - sheet thickness 0.6 mm

32. CONDENSATE DRAIN BOWL MS



Miska	I					II					III					IV					for s=0.5
Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500				
Dk [mm]	81	102	113	123	134	142	152	166	183	202	228	253	303	355	404	453	504				
h [mm]	60	60	60	57	55	60	52	45	41	43	60	60	60	60	60	60	60				
Weight [kg]	0.20	0.25	0.25	0.30	0.30	0.30	0.35	0.40	0.50	0.60	0.60	0.70	0.85	1.05	1.35	1.60	1.85				

MS x - CH

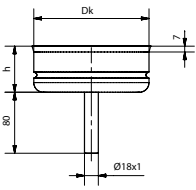


Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	CH	CH - stainless steel 1.4404

33. CONDENSATE DRAIN BOWL MS



Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
Dk [mm]	81	102	113	123	134	142	152	166	183	202	228	253	303	355	404	453	504
h [mm]	60	60	60	57	55	60	52	45	41	43	60	60	60	60	60	60	60
Weight [kg]	0.20	0.25	0.25	0.30	0.30	0.30	0.35	0.40	0.50	0.60	0.60	0.70	0.85	1.05	1.35	1.60	1.85



MS x - CH - P

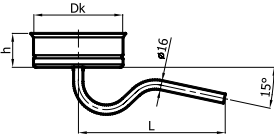
- MS - material
- x - vertical
- CH - diameter DN
- P - condensate drain bowl

Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	CH	CH - stainless steel 1.4404

34. CONDENSATE DRAIN BOWL WITH SIPHON MSF



Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
Dk [mm]	81	102	113	123	134	142	152	166	183	202	228	253	303	355	404	453	504
L [mm]	230	230	230	230	230	230	260	260	260	260	upon individual order						
h [mm]	60	60	60	57	55	60	52	45	41	43	60	60	60	60	60	60	60
Weight [kg]	0.20	0.25	0.25	0.30	0.30	0.30	0.35	0.40	0.50	0.60	0.60	0.70	0.85	1.05	1.35	1.60	1.85



MSF x - CH

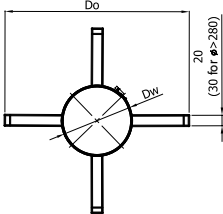
- MSF - material
- x - diameter DN
- CH - condensate drain bowl with siphon

Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	CH	CH - stainless steel 1.4404

35. STABILIZING BRACKET OU



Diameter DN	ø60	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
Do [mm]	480	480	500	512	523	532	540	552	561	582	602	626	652	702	752	802	852	902
Dw [mm]	60.4	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2
Weight [kg]	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.15	0.15	0.15	0.15	0.20	0.20	0.20	0.20	0.25



OU x - X

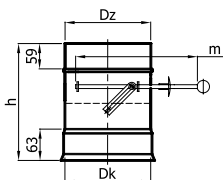
- OU - material
- x - diameter DN
- X - stabilizing bracket

Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	6	6 - sheet thickness 0.6 mm

36. CHIMNEY DAMPER SZK



Diameter DN	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300
Dz	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6
Dk	124.2	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6
h [mm]	220	230	240	250	260	280	300	325	350	400
m [mm]	660	660	660	800	800	800	800	800	800	800
Weight [kg]	1.45	1.55	1.65	1.80	1.90	2.15	2.45	2.85	3.30	4.30

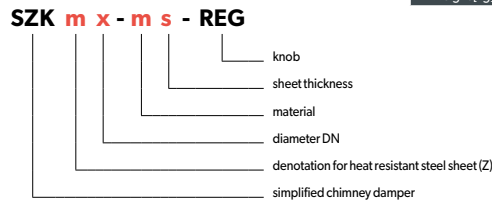
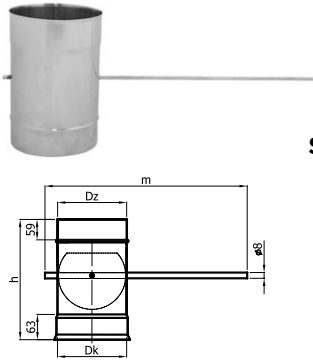


SZK m x - m s

- m - sheet thickness
- x - material
- m - diameter DN
- s - denotation for heat resistant steel sheet (Z)
- SZK - chimney damper

Destination	W	-	W - ventilation ducts
	S	-	S - flue ducts (gas, oil)
	D	-	D - smoke ducts
Material	CH	-	CH - stainless steel 1.4404
	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	8	8	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

37. SIMPLIFIED CHIMNEY DAMPER SZK-REG



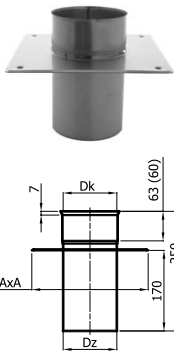
Diameter DN	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300
Dz	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6
Dk	124.2	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6
h [mm]	220	230	240	250	260	280	300	325	350	400
m [mm]	690	690	690	690	690	690	690	690	690	690
Weight [kg]	1.25	1.35	1.45	1.60	1.70	1.95	2.25	2.65	3.10	4.10

for s=1.0

Destination	W	-	W - ventilation ducts
	S	-	S - flue ducts (gas, oil)
	-	D	D - smoke ducts
Material	CH	-	CH - stainless steel 1.4404
	-	Z	Z - heat resistant steel 1.4828
	8	8	8 - sheet thickness 0.8 mm
Sheet thickness s	1	1	1 - sheet thickness 1.0 mm

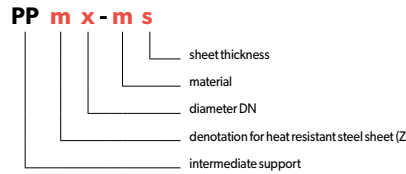
Chimney damper knobs - see page 187.

38. INTERMEDIATE SUPPORT PP



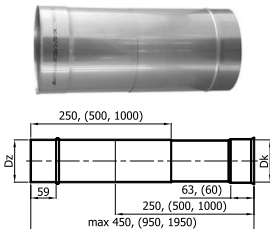
Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
Dz [mm]	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2
Dk [mm]	81.2	101.9	113.1	124.2	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6	351.9	402.9	452.2	503.2
A [mm]	250	250	250	250	250	300	300	300	300	330	350	400	450	550	550	600	650
Weight [kg]	0.75	0.80	0.85	0.87	0.90	0.95	1.10	1.15	1.20	1.35	1.50	1.85	2.20	2.55	2.90	3.30	3.70

for s=0.6



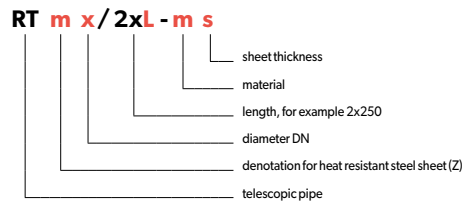
Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	5	-	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

39. TELESCOPIC PIPE RT



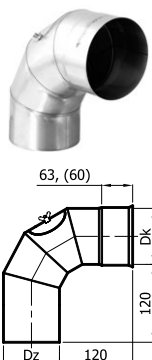
Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
Dz	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2
Dk	81.2	101.9	113.1	124.2	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6	351.9	402.9	452.2	503.2
Weight [kg]	0.60	0.76	0.84	0.93	1.00	1.06	1.14	1.21	1.37	1.51	1.70	1.90	2.27	2.64	3.03	3.40	3.78

for s=0.6
L=2x, 250



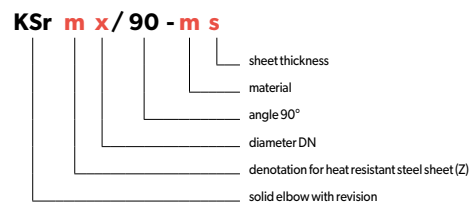
Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	5	-	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

40. SOLID ELBOW 90° WITH REVISION KSR/90



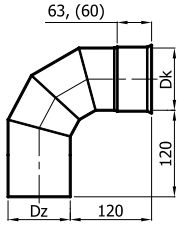
Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
Dz [mm]	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2
Dk [mm]	81.2	101.9	113.1	124.2	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6	351.9	402.9	452.2	503.2
Weight [kg]	0.32	0.48	0.54	0.62	0.66	0.74	0.80	0.97	1.10	1.21	1.36	1.82	2.27	2.64	3.75	4.55	5.44

for s=0.6



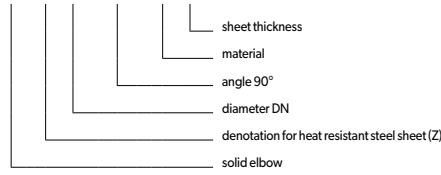
Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	5	-	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

41. SOLID ELBOW 90° KS/90



Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
Dz [mm]	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2
Dk [mm]	81.2	101.9	113.1	124.2	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6	351.9	402.9	452.2	503.2
Weight [kg]	0.32	0.48	0.54	0.62	0.66	0.74	0.80	0.97	1.10	1.21	1.36	1.82	2.27	2.64	3.75	4.55	5.44

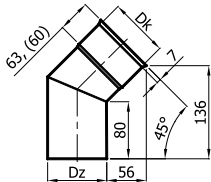
KS m x / 90 - m s



Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
Material	-	-	D	D - smoke ducts
	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
Sheet thickness s	-	-	Z	Z - heat resistant steel 1.4828
	5	-	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

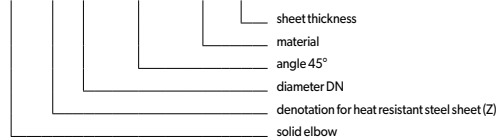
for s=0.6

42. SOLID ELBOW 45° KS/45



Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
Dz [mm]	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2
Dk [mm]	81.2	101.9	113.1	124.2	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6	351.9	402.9	452.2	503.2
Weight [kg]	0.25	0.35	0.40	0.45	0.50	0.50	0.55	0.60	0.70	0.80	0.95	1.10	1.40	1.70	2.10	2.50	2.95

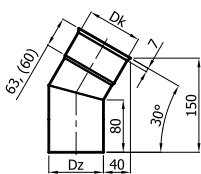
KS m x / 45 - m s



Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
Material	-	-	D	D - smoke ducts
	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
Sheet thickness s	-	-	Z	Z - heat resistant steel 1.4828
	5	-	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

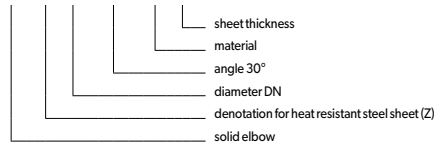
for s=0.6

43. SOLID ELBOW 30° KS/30



Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
Dz [mm]	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2
Dk [mm]	81.2	101.9	113.1	124.2	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6	351.9	402.9	452.2	503.2
Weight [kg]	0.25	0.30	0.35	0.40	0.45	0.45	0.50	0.55	0.65	0.70	0.80	0.95	1.20	1.45	1.75	2.05	2.40

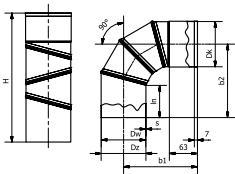
KS m x / 30 - m s



Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
Material	-	-	D	D - smoke ducts
	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
Sheet thickness s	-	-	Z	Z - heat resistant steel 1.4828
	5	-	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

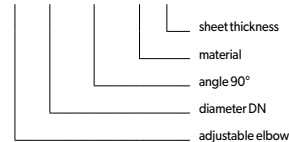
for s=0.6

44. ADJUSTABLE ELBOW 90° KN/90



Diameter DN	ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250
Dw [mm]	79.1	99.8	110.9	122	126.1	131.6	139.5	150.6	160.2	180.8	199.9	225.4	250.9
Dz [mm]	80.1	100.8	111.9	123	127.1	132.6	140.7	151.8	161.4	182	201.1	226.6	252.1
Dk [mm]	81.1	101.8	112.9	124	128.1	133.6	141.7	152.8	162.4	183	202.1	227.6	253.1
b1 [mm]	156	166	170	175	177	180	184	190	194	205	214	227	239
b2 [mm]	155	165	163	166	172	170	181	178	202	205	210	227	244
H [mm]	274	290	290	297	304	304	317	317	344	354	364	389	414
In [mm]	73	72	67	64	68	64	70	61	80	74	68	73	78
Weight [kg]	0.28	0.38	0.42	0.47	0.49	0.52	0.69	0.74	0.85	0.99	1.12	1.35	1.59

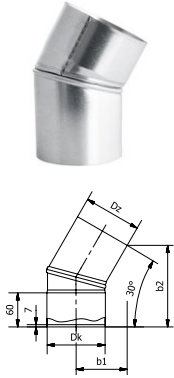
KN x / 90 - m s



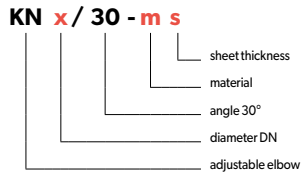
Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
Material	-	-	D	D - smoke ducts
	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
Sheet thickness s	-	-	Z	Z - heat resistant steel 1.4828
	5	5	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm

for s=0.6

45. ADJUSTABLE ELBOW 30° KN/30

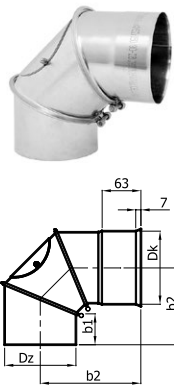


Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	for s=0.6
b1 [mm]	78	91	97	103	108	113	120	126	142	158	
b2 [mm]	143	152	153	155	157	160	162	169	191	215	
Weight [kg]	0.17	0.23	0.27	0.31	0.35	0.38	0.42	0.46	0.59	0.72	

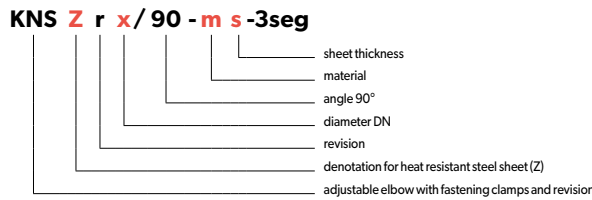


Destination	W	W	W - ventilation ducts
	S	-	S - flue ducts (gas, oil)
Material	-	-	D - smoke ducts
	CH	-	CH - stainless steel 1.4404
	-	X	X - stainless steel 1.4301
Sheet thickness s	-	-	Z - heat resistant steel 1.4828
	5	5	5 - sheet thickness 0.5 mm
	6	6	6 - sheet thickness 0.6 mm

46. ADJUSTABLE ELBOW WITH FASTENING CLAMPS AND REVISION 90° KNSZR/90-3 SEG

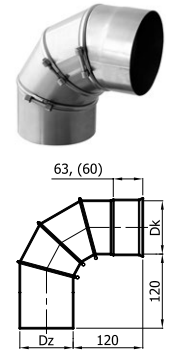


Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø225	ø250	for s=0.6
Dz [mm]	123.2	132.8	151.9	161.4	182.1	201.2	226.7	252.2	
Dk [mm]	124.2	133.8	152.9	162.4	183.1	202.2	227.7	253.0	
b1 [mm]	70	70	70	70	70	70	70	70	
b2 [mm]	205	205	210	205	205	220	205	220	
Weight [kg]	0.62	0.66	0.80	0.97	1.10	1.21	1.36	1.82	

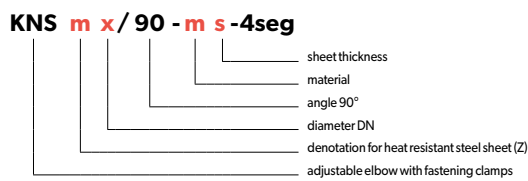


Destination	W	-	W - ventilation ducts
	S	-	S - flue ducts (gas, oil)
Material	-	D	D - smoke ducts
	CH	-	CH - stainless steel 1.4404
	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	8	8	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

47. ADJUSTABLE ELBOW WITH FASTENING CLAMPS 90° KNS/90 (ø120÷ø250)-4 SEG

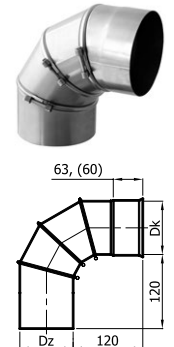


Diameter DN	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	for s=0.6
Dz [mm]	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	
Dk [mm]	124.2	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.0	
Weight [kg]	0.62	0.66	0.74	0.80	0.97	1.10	1.21	1.36	1.82	

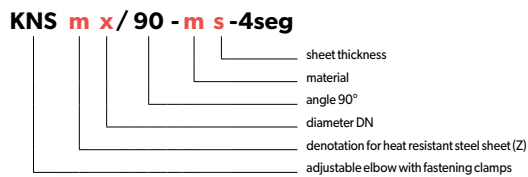


Destination	W	W	W - ventilation ducts
	S	-	S - flue ducts (gas, oil)
Material	-	D	D - smoke ducts
	CH	-	CH - stainless steel 1.4404
	-	X	X - stainless steel 1.4301
Sheet thickness s	5	-	5 - sheet thickness 0.5 mm
	6	6	6 - sheet thickness 0.6 mm

48. ADJUSTABLE ELBOW WITH FASTENING CLAMPS 90° KNS/90 (ø300÷ø500)-4 SEG

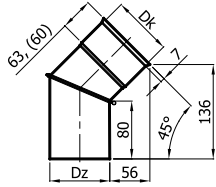


Diameter DN	ø300	ø350	ø400	ø450	ø500	for s=0.6
Dz [mm]	301.6	350.9	401.9	451.2	502.2	
Dk [mm]	302.6	351.9	402.9	452.2	503.2	
Weight [kg]	2.27	2.64	3.75	4.55	5.44	



Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
Material	-	-	D	D - smoke ducts
	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
Sheet thickness s	-	-	Z	Z - heat resistant steel 1.4828
	5	-	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

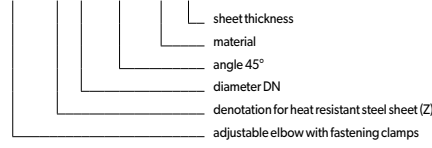
49. ADJUSTABLE ELBOW WITH FASTENING CLAMPS 45° KNSZ/45 (ø120÷ø250)



Diameter DN	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250
Dz [mm]	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2
Dk [mm]	124.2	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2
Weight [kg]	0.45	0.50	0.50	0.55	0.60	0.70	0.80	0.95	1.10

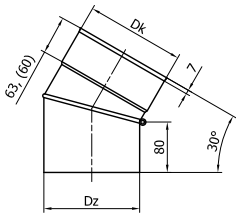
for s=0,6

KNS Z x/45 - m s



Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

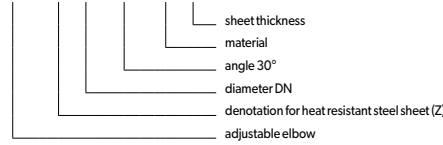
50. ADJUSTABLE ELBOW WITH FASTENING CLAMPS 30° KNS/30 (ø100÷ø500)



Diameter DN	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
Dz [mm]	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2
Dk [mm]	101.9	113.1	124.2	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6	351.9	402.9	452.2	503.2
Weight [kg]	0.35	0.4	0.45	0.50	0.50	0.55	0.60	0.70	0.80	0.95	1.10	1.40	1.70	2.10	2.50	2.95

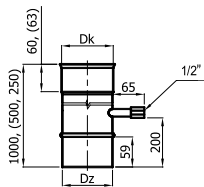
for s=0,6

KNS m x/30 - m s



Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	5	-	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

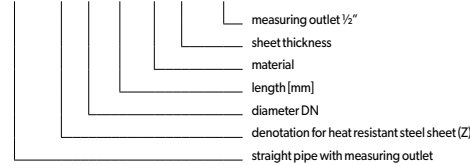
51. STRAIGHT PIPE WITH MEASURING OUTLET 1/2" ROP-1/2



Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
Dz	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2
Dk	81.2	101.9	113.1	124.2	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6	351.9	402.9	452.2	503.2
Weight [kg]	1.20	1.50	1.70	1.85	2.00	2.10	2.30	2.40	2.75	3.00	3.40	3.80	4.55	5.30	6.05	6.80	7.55

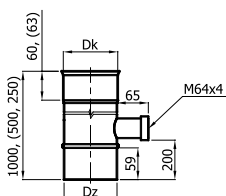
for s=0,6

ROP m x/L - m s - 1/2



Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	5	-	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

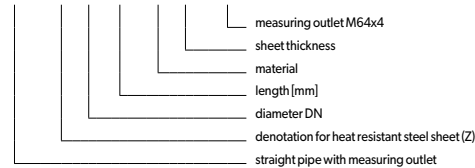
52. STRAIGHT PIPE WITH MEASURING OUTLET M64x4 ROP-64



Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
Dz	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2
Dk	81.2	101.9	113.1	124.2	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6	351.9	402.9	452.2	503.2
Weight [kg]	1.20	1.50	1.70	1.85	2.00	2.10	2.30	2.40	2.75	3.00	3.40	3.80	4.55	5.30	6.05	6.80	7.55

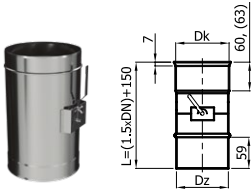
for s=0,6

ROP m x/L - m s - 64

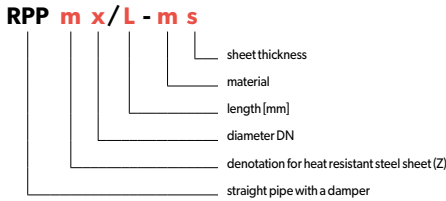


Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	5	-	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

53. STRAIGHT PIPE WITH A DAMPER RPP

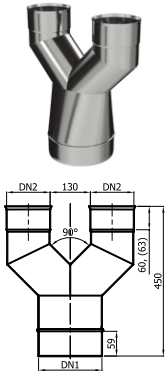


Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
Dz	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2
Dk	81.2	101.9	113.1	124.2	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6	351.9	402.9	452.2	503.2
Weight [kg]	0.40	0.50	0.60	0.65	0.75	0.80	0.85	1.00	1.20	1.40	1.70	2.00	2.75	3.60	4.60	5.70	6.90

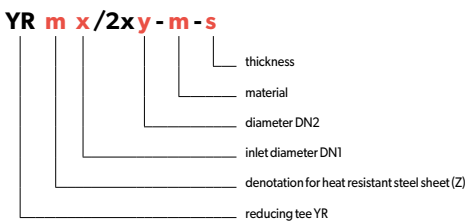


Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	5	-	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

54. REDUCING TEE YR

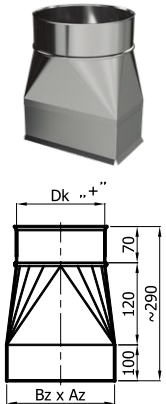


Diameter DN1	ø180	ø200	ø225
Diameter DN2	ø110	ø120	ø130
ø140	ø150		

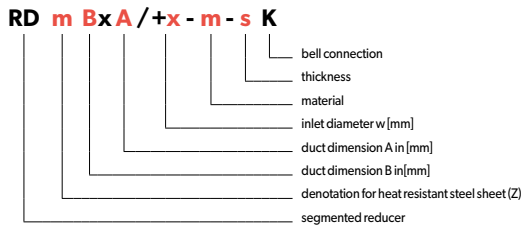


Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

55. SEGMENTED REDUCER RD

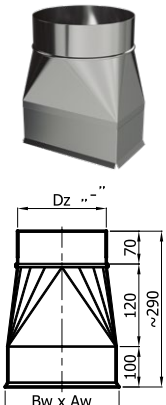


Diameter DN	ø150	ø160	ø170	ø180	ø190	ø200	ø210	ø225	ø250	ø300
Dk [mm]	152.9	162.4	172.0	183.1	192.7	202.2	211.8	227.7	253.2	302.6
Az [mm]	120	125	135	120	120	120	120	125	135	235
Bz [mm]	120	130	135	165	180	200	210	230	260	235
Weight [kg]	0.60	0.63	0.66	0.70	0.73	0.78	0.80	0.87	0.97	1.15

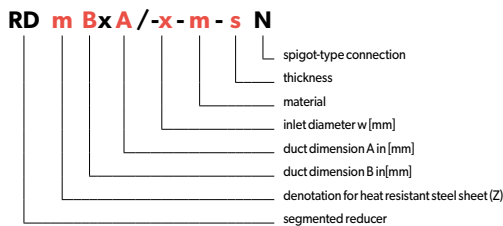


Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	5	-	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

56. SEGMENTED REDUCER RD



Diameter DN	ø150	ø160	ø170	ø180	ø190	ø200	ø210	ø225	ø250	ø300
Dk [mm]	151.9	161.4	171.0	182.1	191.7	201.2	210.8	226.7	252.2	301.6
Aw [mm]	120	125	135	120	120	120	120	125	135	235
Bw [mm]	120	130	135	165	180	200	210	230	260	235
Weight [kg]	0.60	0.63	0.66	0.70	0.73	0.78	0.80	0.87	0.97	1.15

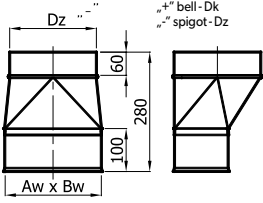


Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	5	-	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

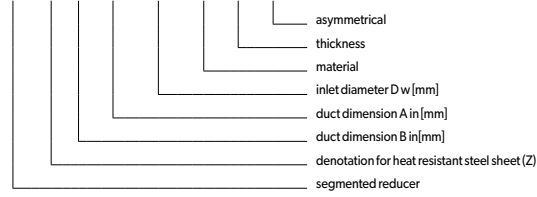
57. SEGMENTED REDUCER RD-NS ASYMMETRICAL



Diameter DN	ø150	ø160	ø170	ø180	ø190	ø200	ø210	ø225	ø250	ø300	for s=0.6
Dk [mm]	151.9	161.4	171.0	182.1	191.7	201.2	210.8	226.7	252.2	301.6	
Aw [mm]	120	125	135	120	120	120	120	125	135	235	
Bw [mm]	120	130	135	165	180	200	210	230	260	235	
Weight [kg]	0.60	0.63	0.66	0.70	0.73	0.78	0.80	0.87	0.97	1.15	

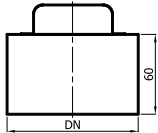
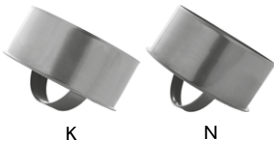


RD m BxA / ±x - m - s NS



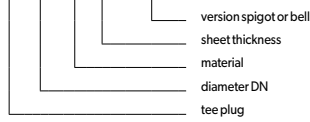
Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
Material	-	-	D	D - smoke ducts
	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
Sheet thickness s	-	-	Z	Z - heat resistant steel 1.4828
	5	-	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

58. TEE PLUG ZT-K/N



Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	for s=0.6
Weight [kg]	0.12	0.15	0.17	0.19	0.20	0.22	0.24	0.26	0.30	0.35	0.42	0.48	0.63	0.80	1.00	1.20	1.40	

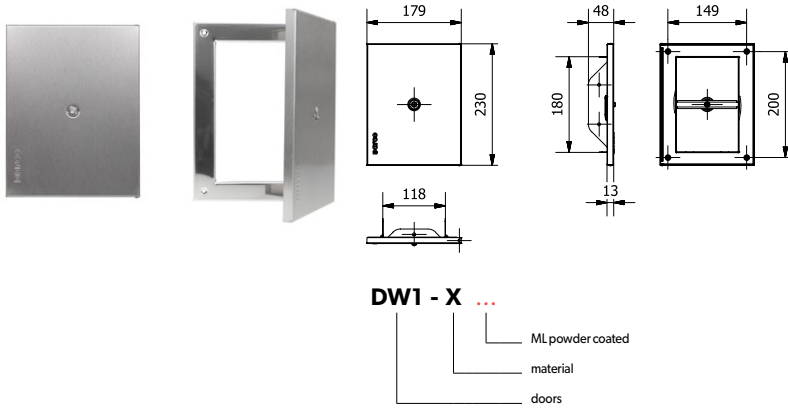
ZT x - m s - K/N



N - for TR 90°
K - for TR 45°

Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
Material	-	-	D	D - smoke ducts
	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
Sheet thickness s	-	-	Z	Z - heat resistant steel 1.4828
	5	-	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

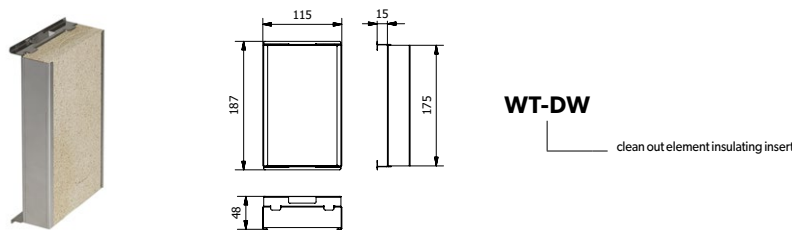
1. DOORS DW1



Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	6	6 - sheet thickness 0.6 mm

Weight [kg]	0.60
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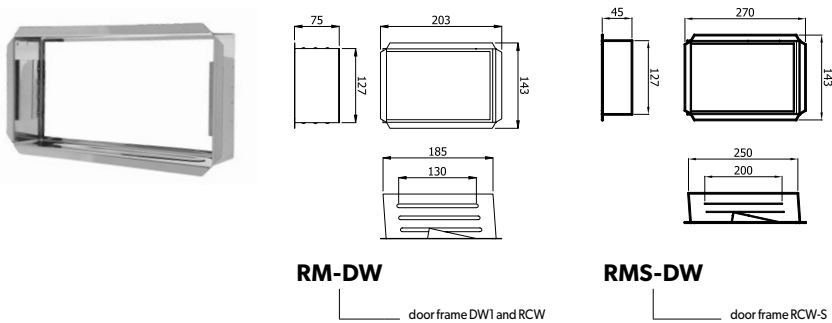
2. CLEAN OUT ELEMENT INSULATING INSERT WT-DW



Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301 (vermiculite)
Sheet thickness s	5	5 - sheet thickness 0.5 mm

Weight [kg]	0.60
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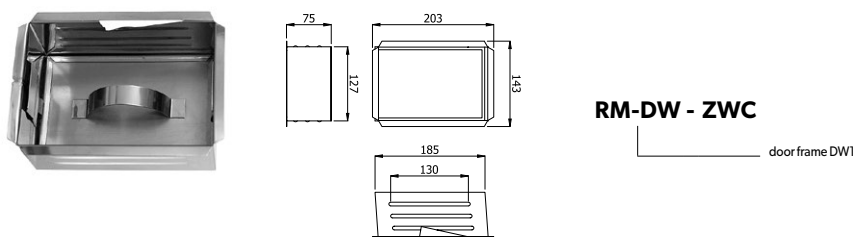
3. DRAUGHT REGULATOR DOOR FRAME RCW RM-DW / RMS-DW



Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	8	8 - sheet thickness 0.8 mm

Weight [kg]	RM-DW	0.50
	RMS-DW	0.60

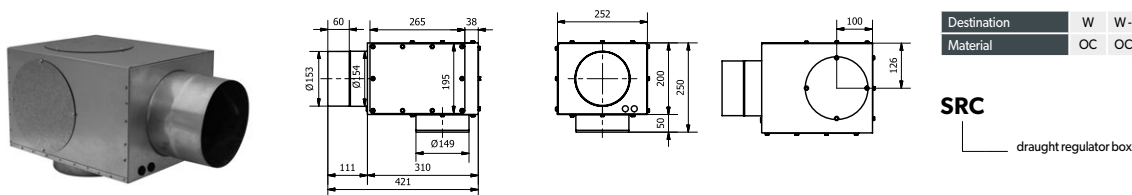
4. DRAUGHT REGULATOR DOOR FRAME WITH CLEAN OUT ELEMENT PLUG RCW RM-DW-ZWC



Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	8	8 - sheet thickness 0.8 mm

Weight [kg]	0.64
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5. DRAUGHT REGULATOR BOX SRC



Destination	W	W - ventilation ducts
Material	OC	OC - galvanized steel sheet

Description

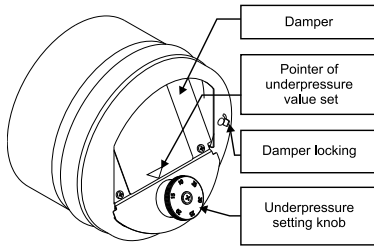
Chimney draught regulator decreases too high pressure in smoeck chimney duct, which:

- appears despite correct cross-section of a chimney duct,
- appears if the cross-sectional area of chimney duct is to big,
- is caused by temporary impact of weather conditions for example strong wind.

Device is destined to be mounted:

- a) on the connector which connects stove with the chimney,
- b) over the connector,
- c) under the connector.

Construction



Technical data

Type	RCO / RCO-EX RCW / RCR / RCP		RCO-80	
Group	5		1	
Norm	PN-EN 16475-3		PN-EN 16475-3	
Underpressure range [Pa]	10 ÷ 35		10 ÷ 35	
Max. fumes temp. [°C]	400		400	
Max. chimney duct cross-section [cm ²]	500 *	750 *	160 *	220 *
Max. diameter of a round chimney duct [cm]	25 *	31 *	14 *	16 *
Insulation clas	I, II	III	I, II	III

*Chimney parameters (chimney height not bigger than 20m)

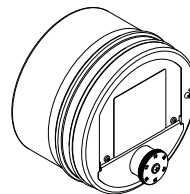
Functioning

The weight on the damper of draught regulator is balanced. When in a chimney duct the negative pressure rises too high, damper opens and lets fresh air in.

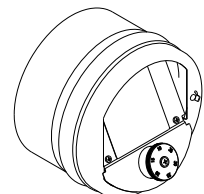
Thanks to this, pressure decreases because:

- fumes are cooler and in consequence the draught is smaller
- chimney duct apart from fumes must conduct fresh air supplied by the damper, so there is a substantial increase of the air resistance.

Changing the pressure settings on the draught regulator is made by screwing the damper balance (with its knob). On this knob there is a scale to set the negative pressure value, and on the label on the damper there is a mark showing the actual value set.

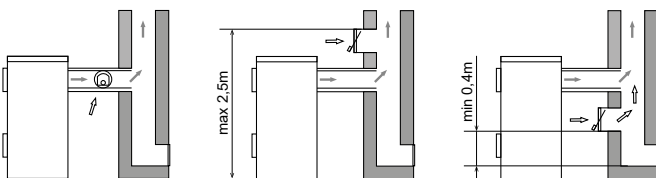


Damper closed



Damper opened

Placing

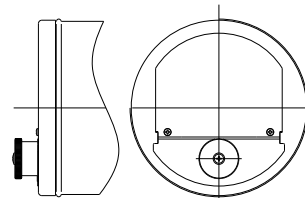


REMARKS

1. Draught regulator must be located in the same room as the heating device.
2. Draught regulator must be mounted in a room where there is a properly functioning natural air supply ventilation (must be an inlet of fresh air).
3. Draught regulator must be at an adequate distance from easy flammable elements:
 - door frames and similar parts made of flammable materials: min. 20 [cm]
 - other parts which are made of or contain flammable materials: min: 40 [cm]
4. It is forbidden to mount the draught regulator in room without natural ventilation!
5. Afterburning in the connector pipe or in chimney ducts is unacceptable!
6. Do not allow to arise a soot fire in the chimney!
7. Draught regulator cannot be installed on the way of the smoke and cannot disturb fumes flow in any other way.

Mounting positions

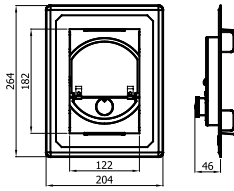
Regulator will work properly only if placed perfectly horizontal, like shown on the diagram above.



Note! Adjust negative pressure by rotating the knob on the regulator. Knob features "+" and "-" indicators. Turning the knob to the utmost "-" position (until resistance is felt) sets negative pressure at the value of 10 [Pa]. By making a half turn in the opposite direction, negative pressure is increased by 5 [Pa] (so to the value of 15 [Pa]), another half turn gives 20 [Pa] and then 25 [Pa] and 30 [Pa], respectively, up to the value of 35 [Pa], which is achieved by setting the knob to the utmost "+" position.

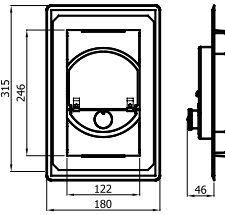
For reference, see the diagram on the product nameplate.

1. DRAUGHT REGULATOR TO DARCO CLEAN OUT ELEMENT RCW / RCW-S



RCW

draught regulator to DARCO clean out element



RCW-S

draught regulator to clean out element of ceramic chimney

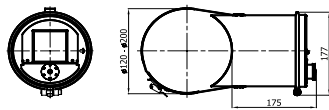
Notice! Mounting of the RCW regulator requires usage of the RM-DW door frame

Destination	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301

Weight [kg]	RCW	0.65
	RCWS	0.70

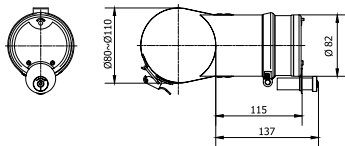
No	Name	Value		
1	Group	5		
2	Underpressure range [Pa]	10 ÷ 35		
3	Max fumes temp [°C]	400		
4	Chimney parameters (chimney height not bigger than 20 m)	Max chimney duct cross-section [cm ²]		
		I and II insulation class	500	25
		III insulation class	750	31

2. ON PIPE MOUNTED DRAUGHT REGULATOR RCR



RCR

on pipe mounted draught regulator



RCR-80

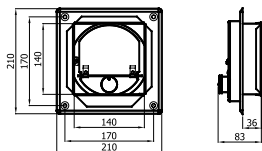
on pipe mounted draught regulator

Destination	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301

Weight [kg]	RCR	0.65
	RCR-80	0.40

No	Name	Value		
1	Group	5		
2	Underpressure range [Pa]	10 ÷ 35		
3	Max fumes temp [°C]	400		
4	Chimney parameters (chimney height not bigger than 20 m)	Max chimney duct cross-section [cm ²]		
		I and II insulation class	500	25
		III insulation class	750	31

3. RECTANGULAR DRAUGHT REGULATOR RCP



RCP

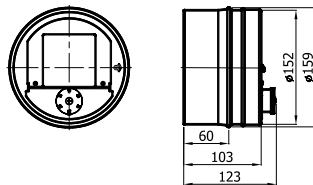
rectangular draught regulator

Destination	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301

Weight [kg]	0.55
-------------	------

No	Name	Value		
1	Group	5		
2	Underpressure range [Pa]	10 ÷ 35		
3	Max fumes temp. [°C]	400		
4	Chimney parameters (chimney height not bigger than 20 m)	Max chimney duct cross-section [cm ²]		
		I and II insulation class	500	25
		III insulation class	750	31

4. ROUND DRAUGHT REGULATOR RCO



RCO

round draught regulator

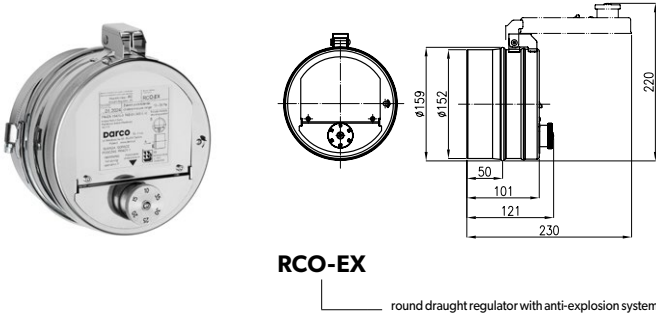
Caution! Mounting clamp included

Destination	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301

Weight [kg]	0.60
-------------	------

No	Name	Value		
1	Group	5		
2	Underpressure range [Pa]	10 ÷ 35		
3	Max fumes temp. [°C]	400		
4	Chimney parameters (chimney height not bigger than 20 m)	Max chimney duct cross-section [cm ²]		
		I and II insulation class	500	25
		III insulation class	750	31

5. ROUND DRAUGHT REGULATOR WITH ANTI-EXPLOSION SYSTEM RCO-EX



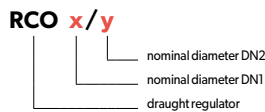
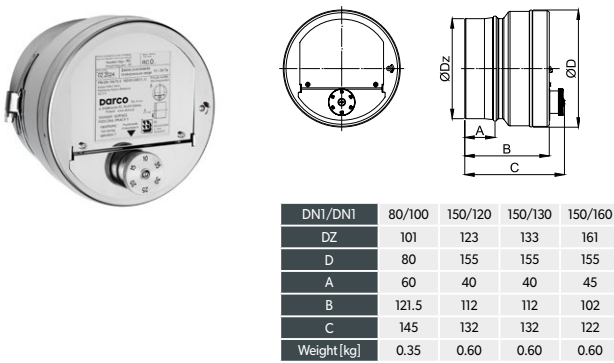
Caution! Mounting clamp included

Destination	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301

Weight [kg]	0.60
-------------	------

No	Name	Value
1	Group	5
2	Underpressure range [Pa]	10 ÷ 35
3	Max fumes temp. [°C]	400
4	Chimney parameters (chimney height not bigger than 20 m)	Max chimney duct cross-section [cm²]
	I and II insulation class	500
	III insulation class	750
		Max diameter of a round chimney duct [cm]
		25
		31

6. ROUND DRAUGHT REGULATOR WITH REDUCER RCO

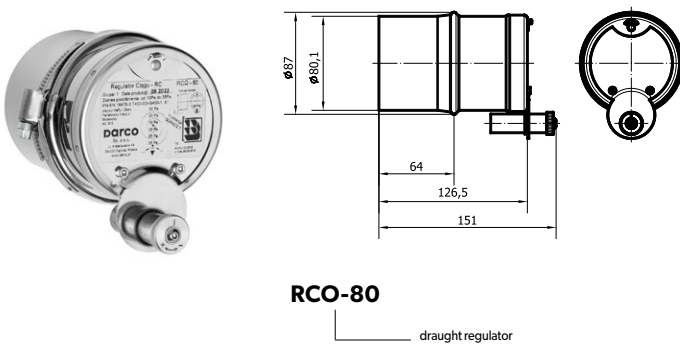


Caution! Mounting clamp included

Destination	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301

No	Name	Value
1	Group	5
2	Underpressure range [Pa]	10 ÷ 35
3	Max fumes temp. [°C]	400
RCO 80/100		
4	Chimney parameters (chimney height not bigger than 20 m)	Max chimney duct cross-section [cm²]
	I and II insulation class	160
	III insulation class	220
		Max diameter of a round chimney duct [cm]
		14
		16
RCO 150/120, RCO 150/130, RCO 150/160		
5	Chimney parameters (chimney height not bigger than 20 m)	Max chimney duct cross-section [cm²]
	I and II insulation class	500
	III insulation class	750
		Max diameter of a round chimney duct [cm]
		25
		31

7. ROUND DRAUGHT REGULATOR RCO-80



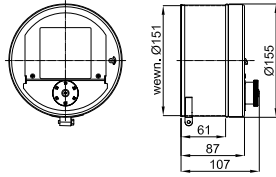
Caution! Mounting clamp included

Destination	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301

Weight [kg]	0.30
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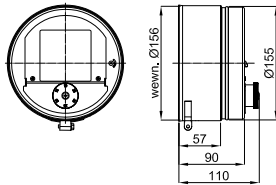
No	Name	Value
1	Group	1
2	Underpressure range [Pa]	10 ÷ 35
3	Max fumes temp. [°C]	400
4	Chimney parameters (chimney height not bigger than 20 m)	Max chimney duct cross-section [cm²]
	I and II insulation class	160
	III insulation class	220
		Max diameter of a round chimney duct [cm]
		14
		16

8. ON PIPE MOUNTED DRAUGHT REGULATOR SPK-2MM



RCO-150/+151-SPK

on pipe mounted draught regulator SPK-2mm



RCO-150/+156-SPK

on pipe mounted draught regulator SPK-2mm

Destination	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301

Weight [kg]	0.50
-------------	------

No	Name	Value	
1	Group	5	
2	Underpressure range [Pa]	10 ÷ 35	
3	Max fumes temp. [°C]	400	
4	Chimney parameters (chimney height not bigger than 20 m)	Max chimney duct cross-section [cm ²]	Max diameter of a round chimney duct [cm]
	I and II insulation class	500	25
	III insulation class	750	31

CHIMNEY COWLS

STEERING & POWER SUPPLY

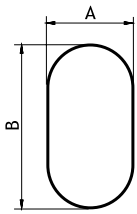
HOT AIR DISTRIBUTION SYSTEM

CHIMNEYS

VENTILATION

Hydraulic diameter for chimneys of oval shape (for proper diameter designation)

$$DH = 4 \times (3.14 \times A \times A / 4 + (B - A) \times A) / (3.14 \times A + 2 \times (B - A))$$



A \ B	120	130	140	150	160	170	180	185	200	215	230	245	250	255	275	285	300	320	350	
110																				
120		126	132	136	141	145	149	151	156	160	164	168	169	170	174	176	179	182		
130			136	142	147	151	156	158	163	168	173	177	178	179	184	186	189	193		
140				146	152	157	162	164	170	176	181	185	187	188	193	196	199	203		
150					156	162	167	169	176	182	188	193	195	196	202	205	208	213		
160						166	172	174	182	189	195	200	202	204	210	213	217	222		
180								183	192	200	207	214	216	218	225	229	234	240		
200										209	217	225	227	230	239	243	248	255		
225											228	237	240	243	253	258	264	273		
250														253	265	270	278	288		
300																				

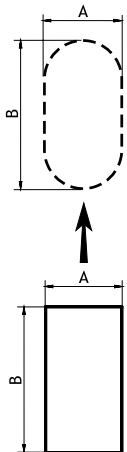
Hydraulic diameter for an oval shaped chimney duct $DH = 4S/O$ (S - cross-section, O - circumference) is a diameter equal (measured by the airflow characteristics) to the diameter of a round duct. For example, for an oval duct of 120x170 dimensions, the hydraulic diameter is 145 mm.

In the table above, marked with frames, there are hydraulic diameters of the oval shaped elements, that are considered as typical in DARCO offer.

Other dimensions are made upon individual order.

Hydraulic diameter for chimney of rectangular shape (for proper diameter designation)

$$DH = 2AB / (A + B)$$

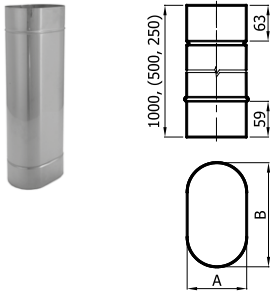


A \ B	120	125	130	135	140	150	160	165	170	180	200	210	230	235	250	260	270	300	350	
110																				
120	120	122	125	127	129	133	137	139	141	144	150	153	158	159	162	164	166	171		
125		125	127	130	132	136	140	142	144	148	154	157	162	163	167	169	171	176		
130			130	132	135	139	143	145	147	151	158	161	166	167	171	173	176	181		
135				135	137	142	146	149	150	154	161	164	170	171	175	178	180	186		
140					140	145	149	151	154	158	165	168	174	175	179	182	184	191		
150							155	157	159	164	171	175	182	183	188	190	193	200		
160								162	165	169	178	182	189	190	195	198	201	209		
180										180	189	194	202	204	209	213	216	225		
200											200	205	214	216	222	226	230	240		
225													227	230	237	241	245	257		
235														235	242	247	251	264		
250																255	260	273		
300																				

Hydraulic diameter for a rectangular shaped chimney duct $DH = 2AB / (A + B)$ is a diameter equal (measured by the airflow characteristics) to the diameter of a round duct. For example, for a rectangular duct of 120x165 cross - section, the hydraulic diameter is 139 mm. Basing on a certain A x B cross-section and matching it with the corresponding hydraulic diameter (for example DH=139 mm) it is possible to calculate the equivalent oval duct dimensions (for example 120x170 mm).

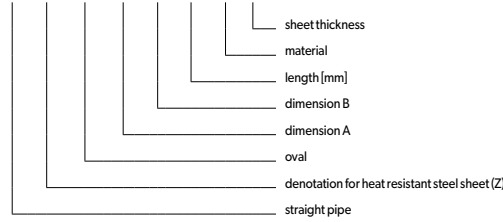
Rectangular chimney ducts system is not in DARCO standard offer. They are made upon individual order.

1. STRAIGHT PIPE RP



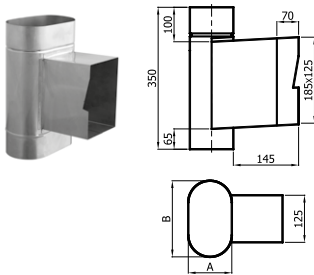
Dimension A/B	120	120	120	120	120	120	130	120	140	130	for s=0.6
Weight [kg]	2.30	2.45	2.60	2.70	2.85	3.00	3.15	3.40	3.40	3.80	

RP m ow Ax B / L - m s



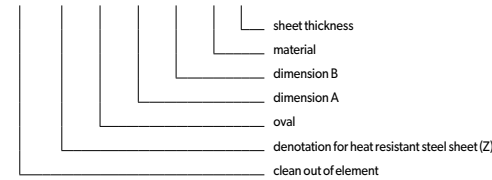
Destination	S	-	S - flue ducts (gas, oil)
	-	D	D - smoke ducts
Material	CH	-	CH - stainless steel 1.4404
	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	6	-	6 - sheet thickness 0.6 mm
	8	8	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

2. CLEAN OUT OF ELEMENT WC



Dimension A/B	120	120	120	120	120	120	130	120	140	130	for s=0.6
Weight [kg]	1.25	1.30	1.35	1.40	1.45	1.50	1.55	1.60	1.65	1.75	

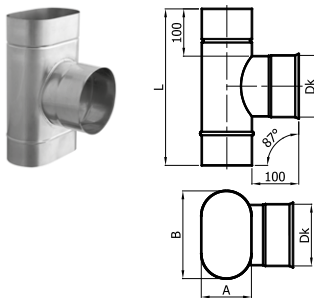
WC m ow Ax B - m s



Destination	S	-	S - flue ducts (gas, oil)
	-	D	D - smoke ducts
Material	CH	-	CH - stainless steel 1.4404
	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	6	-	6 - sheet thickness 0.6 mm
	8	8	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

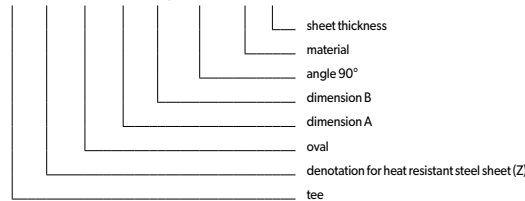
Caution!
Application with outlet on the narrow side - upon individual order.

3. TEE 90° TR/90



Dimension A/B	120	120	120	120	120	120	130	120	140	130	for s=0.6
Dk	152.8	162.4	183.0	183.0	202.7	202.1	202.1	227.6	227.6	253.3	
L [mm]	350	360	370	380	390	400	410	425	425	450	
Weight [kg]	0.95	1.00	1.10	1.20	1.25	1.35	1.45	1.60	1.60	1.85	

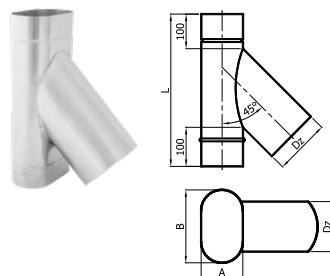
TR m ow Ax B / 90 - m s



Destination	S	-	S - flue ducts (gas, oil)
	-	D	D - smoke ducts
Material	CH	-	CH - stainless steel 1.4404
	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	6	-	6 - sheet thickness 0.6 mm
	8	8	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

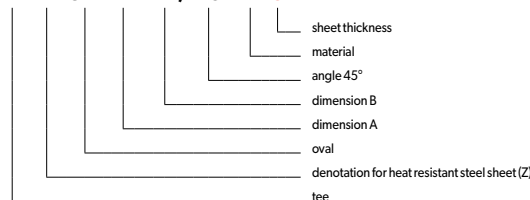
Caution!
Application with outlet on the narrow side - upon individual order.

4. TEE 45° TR/45



Dimension A/B	120	120	120	120	120	120	130	120	140	130	for s=0.6
Dz	151.8	161.4	182.0	182.0	201.1	201.1	201.1	226.6	226.6	252.3	
L [mm]	415	425	440	455	470	480	495	520	520	555	
Weight [kg]	1.20	1.30	1.40	1.50	1.65	1.75	1.90	2.10	2.10	2.50	

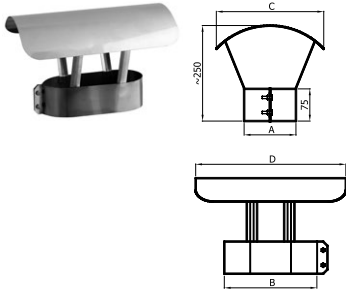
TR m ow Ax B / 45 - m s



Destination	S	-	S - flue ducts (gas, oil)
	-	D	D - smoke ducts
Material	CH	-	CH - stainless steel 1.4404
	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	6	-	6 - sheet thickness 0.6 mm
	8	8	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

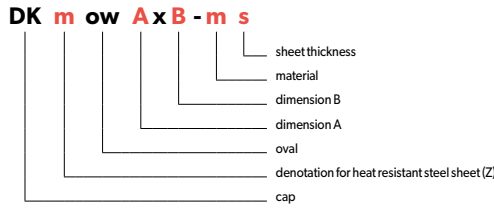
Caution!
Application with outlet on the narrow side - upon individual order.

5. CAP DK

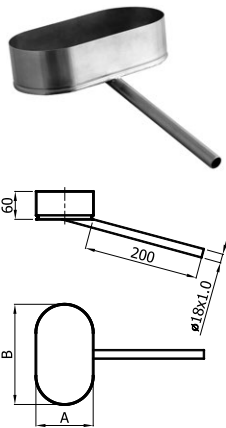


Dimension A/B	120	120	120	120	120	120	130	120	140	130	for s=0.6
C	230	230	230	230	230	230	230	230	230	230	
D	300	315	330	345	360	375	385	415	405	450	
Weight [kg]	0.42	0.44	0.46	0.48	0.50	0.52	0.56	0.57	0.62	0.65	

Destination	S	-	S - flue ducts (gas, oil)
	-	D	D - smoke ducts
Material	CH	-	CH - stainless steel 1.4404
	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	6	-	6 - sheet thickness 0.6 mm
	8	8	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

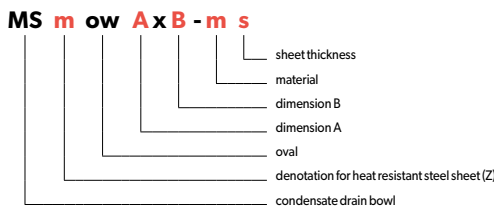


6. CONDENSATE DRAIN BOWL MS



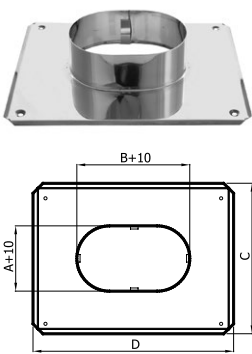
Dimension A/B	120	120	120	120	120	120	130	120	140	130	for s=0.6
Weight [kg]	0.32	0.34	0.35	0.37	0.39	0.41	0.44	0.45	0.48	0.52	

Destination	S	-	S - flue ducts (gas, oil)
	-	D	D - smoke ducts
Material	CH	-	CH - stainless steel 1.4404
	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	6	-	6 - sheet thickness 0.6 mm
	8	8	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm



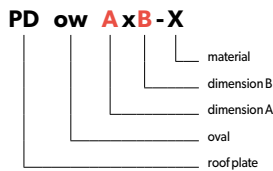
Caution!
Application with the drain pipe on the narrow side-upon individual order

7. ROOF PLATE PD

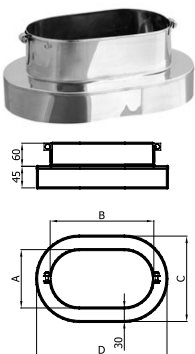


Dimension A/B	120	120	120	120	120	120	130	120	140	130	for s=0.6
C	300	300	300	300	300	300	300	300	300	300	
D	360	380	380	400	400	400	400	420	420	470	
Weight [kg]	0.53	0.56	0.56	0.59	0.59	0.58	0.57	0.60	0.60	0.66	

Destination	S	-	S - flue ducts (gas, oil)
	-	D	D - smoke ducts
Material	X	-	X - stainless steel 1.4301
Sheet thickness s	6	-	6 - sheet thickness 0.6 mm

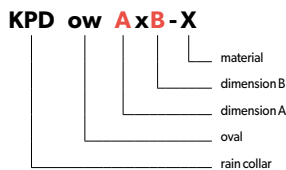


8. RAIN COLLAR KPD

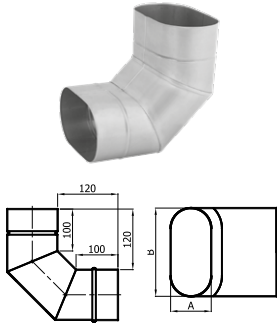


Dimension A/B	120	120	120	120	120	120	130	120	140	130	for s=0.6
C	180	180	180	180	180	180	180	180	200	190	
D	230	245	260	275	290	305	315	345	335	380	
Weight [kg]	0.42	0.44	0.45	0.47	0.49	0.50	0.53	0.55	0.56	0.60	

Destination	S	-	S - flue ducts (gas, oil)
	-	D	D - smoke ducts
Material	X	-	X - stainless steel 1.4301
Sheet thickness s	6	-	6 - sheet thickness 0.6 mm

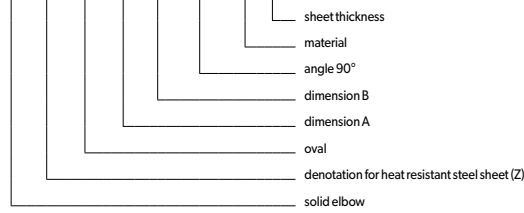


9. SOLID ELBOW 90° KS/90



Dimension A/B	120	120	120	120	120	120	130	120	140	130	for s=0.6
Weight [kg]	0.65	0.70	0.75	0.80	0.85	0.87	0.90	1.00	1.00	1.10	

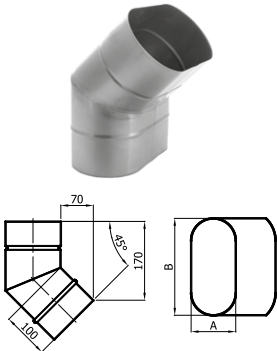
KS m ow Ax B / 90 - m s



Destination	S	-	S - flue ducts (gas, oil)
	-	D	D - smoke ducts
Material	CH	-	CH - stainless steel 1.4404
	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	6	-	6 - sheet thickness 0.6 mm
	8	8	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

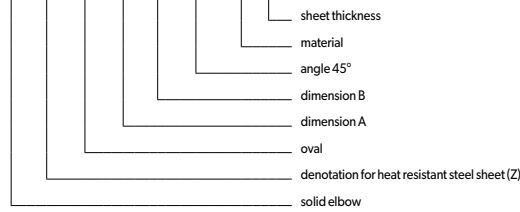
Caution!
Application of elbow on the narrow side-upon individual order.

10. SOLID ELBOW 45° KS/45



Dimension A/B	120	120	120	120	120	120	130	120	140	130	for s=0.6
Weight [kg]	0.45	0.48	0.52	0.55	0.57	0.60	0.63	0.68	0.68	0.75	

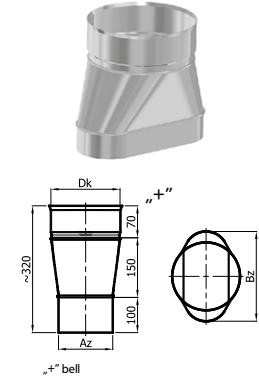
KS m ow Ax B / 45 - m s



Destination	S	-	S - flue ducts (gas, oil)
	-	D	D - smoke ducts
Material	CH	-	CH - stainless steel 1.4404
	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	6	-	6 - sheet thickness 0.6 mm
	8	8	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

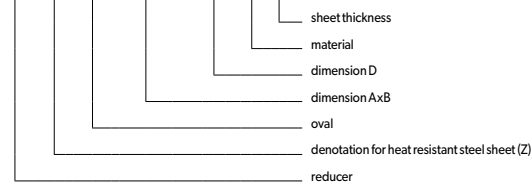
Caution!
Application of elbow on the narrow side-upon individual order.

11. REDUCER RD-K



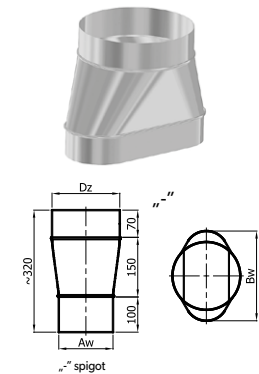
Dimension Az/Bz	120	120	120	120	120	120	130	120	140	130	for s=0.6
Dk	152.8	162.4	183.0	183.0	202.1	202.1	202.1	227.6	227.6	253.3	
Weight [kg]	0.75	0.80	0.85	0.90	0.95	1.00	1.05	1.10	1.10	1.25	

RD m ow Ax B / + D - m s



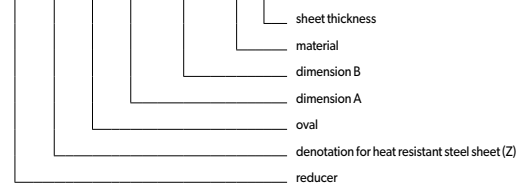
Destination	S	-	S - flue ducts (gas, oil)
	-	D	D - smoke ducts
Material	CH	-	CH - stainless steel 1.4404
	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	6	-	6 - sheet thickness 0.6 mm
	8	8	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

12. REDUCER RD-N



Wymiar Aw/Bw	120	120	120	120	120	120	130	120	140	130	for s=0.6
Dz	151.8	161.4	182.0	182.0	201.1	201.1	201.1	226.6	226.6	252.3	
Weight [kg]	0.75	0.80	0.85	0.90	0.95	1.00	1.05	1.10	1.10	1.25	

RD m ow Ax B / - D - m s



Destination	S	-	S - flue ducts (gas, oil)
	-	D	D - smoke ducts
Material	CH	-	CH - stainless steel 1.4404
	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	6	-	6 - sheet thickness 0.6 mm
	8	8	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

Chimney connections for accumulation systems <SPKA>

Chimney connections are made of chrome-nickel heat-resistant steel sheet (type 1.4828 according to DIN 17441) of thickness 2.0 mm. Their application is fume extraction from stoves, where fumes temperature can rise up even to 1200°C.

Chimney connection elements <SPKA> can not be used to build a chimney duct. Elements of system are plasma welded, bell pipe joining.

Certificate of Factory Production Control 1450-CPR-0007 issued by INiG Cracow.

Bell joint pipe connection

Individual elements of the chimney connection system are being joint by the way of pushing one part of the element - specially press-formed (a spigot), into the other, not prefabricated part of the element. Thanks to this type of pipe joining, chimney liner is characterized by very tight and stiff construction. It also assures proper flow of exhaust fumes from stove to the chimney. Elements should be connected with the press-formed (shrunk) part up.



<SPKA>

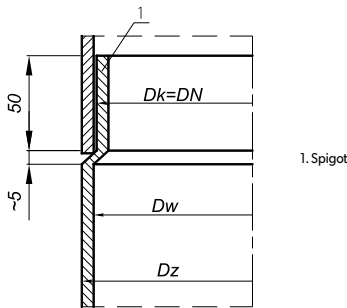


Fig. Method of joining chimney connection pipe elements

Table of layouts and sizes

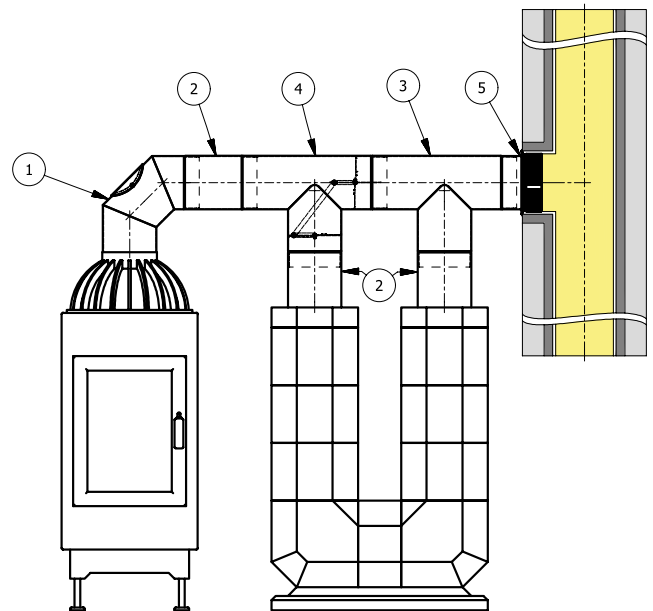
Diameter DN	Lr	Dz	Dw	Dk=DN
150	481	155	151	150
160	512	165	161	160
180	575	185	181	180
200	638	205	201	200

Measurments

- Lr - metal sheet layout [mm]±0.1
- Dz - outer diameter of pipe [mm]
- Dw - inner diameter of pipe [mm]
- Dk - inner diameter of spigot [mm]

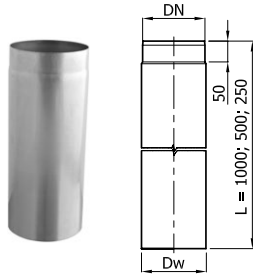
Destination

- D - smoke ducts



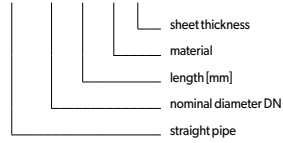
No	Name	Denotation
1	Solid elbow with revision 90°	KSR180/90-Z2
2	Straight pipe 250 [mm]	RP180/250-Z2
3	Tee 90°	TR180/90-Z2
4	Twin-flow tee	TRM180/90-Z2
5	Wall insert to ceramic chimneys	WKC180/200-Z2

1. STRAIGHT PIPE RPZ



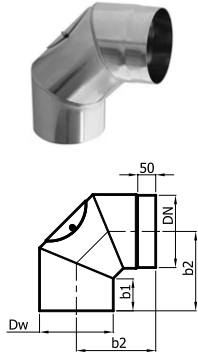
Length L	1000				500				250			
Diameter DN	ø150	ø160	ø180	ø200	ø150	ø160	ø180	ø200	ø150	ø160	ø180	ø200
Dw	151.0	161.0	181.0	201.0	151.0	161.0	181.0	201.0	151.0	161.0	181.0	201.0
Weight [kg]	7.80	8.20	9.20	10.40	3.80	4.10	4.60	5.20	1.90	2.10	2.30	2.60

RPZ x/L - Z 2



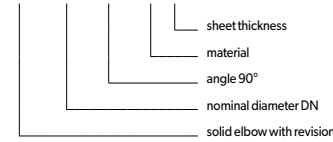
Destination	D	D - smoke ducts
Material	Z	Z - heat resistant steel 1.4828
Sheet thickness s	2	2 - sheet thickness 2.0 mm

2. SOLID ELBOW 90° WITH REVISION KSRZ/90



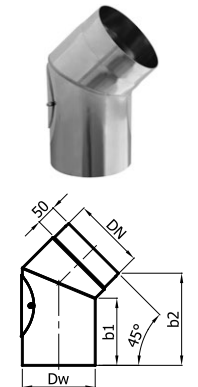
Diameter DN	ø150	ø160	ø180	ø200
Dw [mm]	151.0	161.0	181.0	201.0
b1 [mm]	95.0	95.0	87.0	84.0
b2 [mm]	235.0	235.0	235.0	235.0
Weight [kg]	3.40	3.60	4.00	4.40

KSRZ x/90 - Z 2



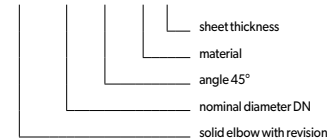
Destination	D	D - smoke ducts
Material	Z	Z - heat resistant steel 1.4828
Sheet thickness s	2	2 - sheet thickness 2.0 mm

3. SOLID ELBOW 45° WITH REVISION KSRZ/45



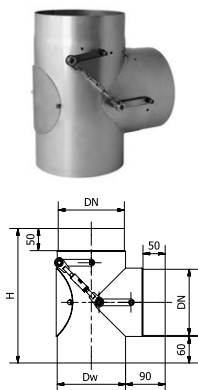
Diameter DN	ø150	ø160	ø180	ø200
Dw [mm]	151.0	161.0	181.0	201.0
b1 [mm]	172.0	168.0	168.0	162.0
b2 [mm]	243.0	238.0	233.0	225.0
Weight [kg]	2.80	3.00	3.20	3.40

KSRZ x/45 - Z 2



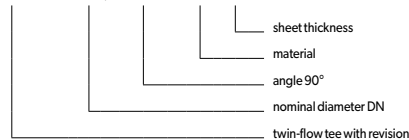
Destination	D	D - smoke ducts
Material	Z	Z - heat resistant steel 1.4828
Sheet thickness s	2	2 - sheet thickness 2.0 mm

4. TWIN-FLOW TEE TRZMr/90 WITH REVISION



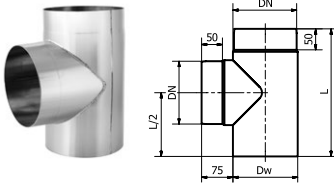
Diameter DN	ø150	ø160	ø180	ø200
Dw [mm]	151.0	161.0	181.0	201.0
H [mm]	305.0	315.0	335.0	355.0
Weight [kg]	4.00	4.40	5.10	6.00

TRZMr x/90 - Z 2



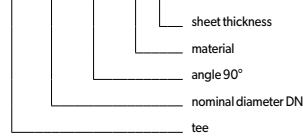
Destination	D	D - smoke ducts
Material	Z	Z - heat resistant steel 1.4828
Sheet thickness s	2	2 - sheet thickness 2.0 mm

5. TEE 90° TRZ/90



Diameter DN	ø150	ø160	ø180	ø200
Dw [mm]	151.0	161.0	181.0	201.0
L [mm]	305.0	315.0	335.0	355.0
Weight [kg]	2.70	3.00	3.50	4.00

TRZ x/90 - Z 2



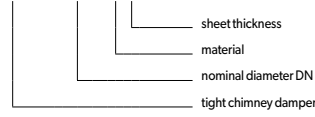
Destination	D	D - smoke ducts
Material	Z	Z - heat resistant steel 1.4828
Sheet thickness s	2	2 - sheet thickness 2.0 mm

6. TIGHT CHIMNEY DAMPER SZKZsz

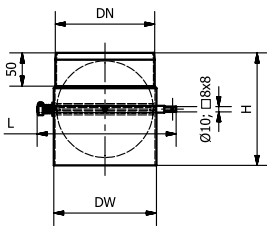


Diameter DN	ø150	ø160	ø180	ø200
Dw [mm]	151.0	161.0	181.0	201.0
L [mm]	210.0	220.0	240.0	260.0
H [mm]	170.0	180.0	200.0	220.0
Weight [kg]	1.77	1.98	2.45	2.97

SZKZsz ... - Z2-8x8

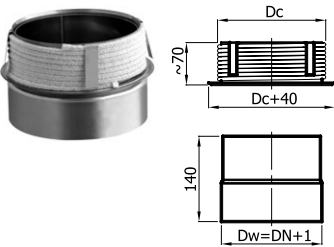


Destination	D	D - smoke ducts
Material	Z	Z - heat resistant steel 1.4828
Sheet thickness s	2	2 - sheet thickness 2.0 mm



Additional devices - see page 186.

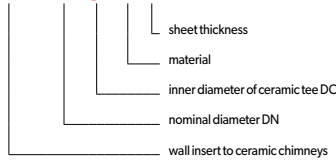
7. WALL INSERT TO CERAMIC CHIMNEYS WKCZ



Diameters	DN	ø150	ø160	ø180
	DC	ø160	ø180	ø200
Weight [kg]		1.30	1.70	1.90

Caution! Other inserts upon individual order.

WKCZ x/y - Z 2



Destination	D	D - smoke ducts
Material	Z	Z - heat resistant steel 1.4828
Sheet thickness s	2	2 - sheet thickness 2.0 mm

Caution! This wall insert protects tees of ceramic chimneys from damages caused by thermal expansion of metal elements of the chimney connection.

Chimney connection system <SPK>

Is used for the construction of chimney connection made entirely of 2mm mild steel DC01 acc. to EN-10130/07. Recommended for fume extraction from fireplaces and solid fuel heating appliances operating without condensation. The <SPK> chimney connection system can be used as a connection to boilers discharging flue gases whose temperature can briefly reach 1000°C. The components of the <SPK> system are not allowed to be used to form a chimney or chimney liner. Maximum continuous operating temperature: 600°C Certificate of Factory Production Control I450-CPR-0007 issued by INiG in Cracow. System components are laser-welded and coated with SENOTHERM odourless, heat resistant paint, bell joints. Warranty 2 years.



Bell joint pipe connection

The individual components of the SPK chimney connection system are joint by inserting one part of the element (spigot), which is characteristically squeezed, into the other part, which is not compressed. Bell-type connection ensures a tight and rigid connection structure and proper flow of exhaust fumes from the stove to the chimney. Elements should be connected with the spigot part upwards. Possible reversal of the flow of the elements (to prevent the condensate from flowing out of the connection) can be carried out using male connectors. Proper condensate drainage is secured by usage of g a female connector (with anti-condensation protection).

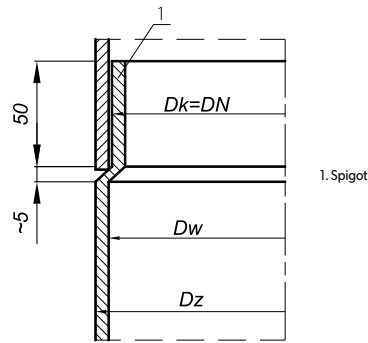


Fig. Method of joining chimney connection pipe elements

Table of layouts and sizes

Diameter DN	Lr	Dz	Dw	Dk=DN
120	386	125	121	120
130	418	135	131	130
150	481	155	151	150
160	512	165	161	160
180	575	185	181	180
200	638	205	201	200
220	700	225	221	220
250	795	255	251	250

Measurments

- Lr - metal sheet layout [mm] ±0.1
- Dz - outer diameter of pipe [mm]
- Dw - inner diameter of pipe [mm]
- Dk - inner diameter of spigot [mm]

Destination

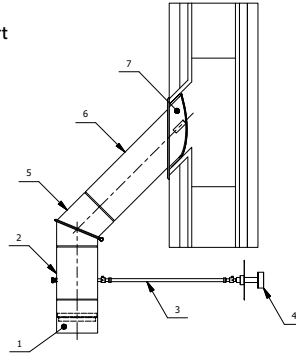
- D - smoke ducts

Model application of elements

Scheme I - Built-in fireplace

Example construction of chimney connection with 45 degree angular insert with rope. Requires cutting the flue pipe to the correct angle.

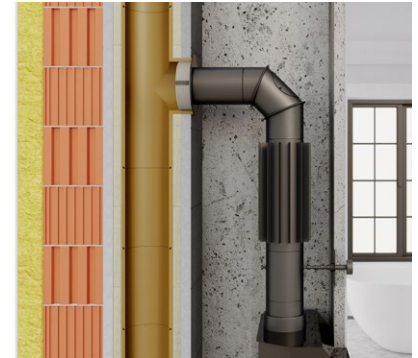
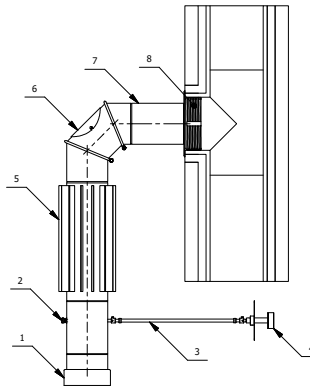
No	Name	Denotation
1	Female connector	ZZ150-CZ2
2	Chimney damper	SZK150-CZ2-8x8
3	Flexible shaft	SZKZ-REG-WG
4	Chimney damper knob	SZKZV-REG...
5	Adjustable elbow 45°	KNS150/45-CZ2
6	Straight pipe 500 [mm]	RP150/500-CZ2
7	Angular insert 45° with rope	WKK-KS150/150/45-CZ2



Scheme II - Built-in fireplace

Example construction of a chimney connection with an insert with rope.

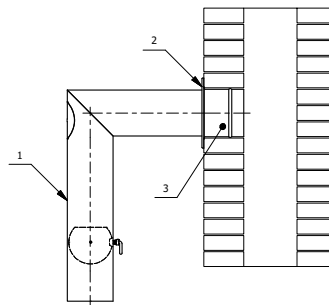
No	Name	Denotation
1	Reducer (adaptor)	RD200/180-CZ2-R
2	Chimney damper	SZK180-CZ2-8x8
3	Flexible shaft	SZKZ-REG-WG
4	Chimney damper knob	SZKZV-REG...
5	Radiator pipe	RPZ180/500-CZ2
6	Adjustable elbow 90° with revision	KNSr180/90-CZ2
7	Straight pipe 250 [mm]	RP180/250-CZ2
8	Ceramic chimney wall insert	WKCP180/200-CZ2



Scheme III - Free-standing fireplace

Example of a chimney connection with double-walled insert for traditional ceramic chimneys.

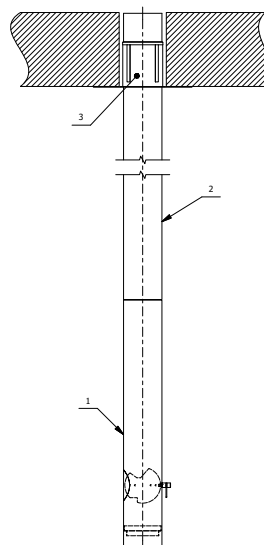
No	Name	Denotation
1	Solid elbow HIGH, polished, with damper and revision	KSrs-II-150/90-CZ2
2	Rosette	ROZ150-CZ
3	Double-walled wall insert	WD150-CZ



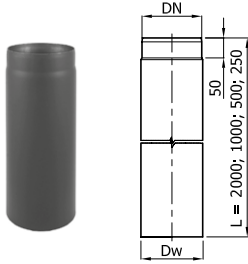
Scheme IV - Free-standing fireplace (centre of room)

Example construction of a chimney connection with a round plate with double-walled insert.

No	Name	Denotation
1	Straight pipe with anti-condensation protection, damper and revision	RPsr/ZA/150/500-CZ2
2	Straight pipe 2000 [mm]	RP150/2000-CZ2
3	Round roof plate with double-walled connection	PLo150-CZ2/WD



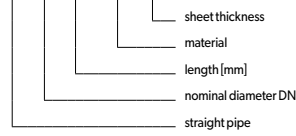
1. STRAIGHT PIPE 2000, 1000, 500, 250 [mm] RP



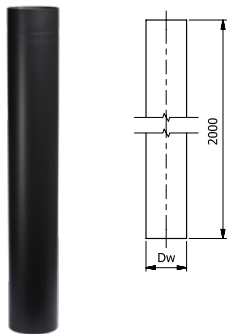
Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dw	121.0	131.0	151.0	161.0	181.0	201.0	221.0	251.0
Weight [kg]	L=2000	12.40	13.40	15.40	16.40	18.40	20.50	22.40
	L=1000	6.20	6.70	7.70	8.20	9.20	10.25	11.20
	L=500	3.10	3.35	3.85	4.20	4.60	5.10	5.60
	L=250	1.55	1.70	1.95	2.10	2.30	2.55	2.80

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

RP x / L - CZ 2



2. STRAIGHT PIPE 2000 [mm] FEMALE/FEMALE RP/FF



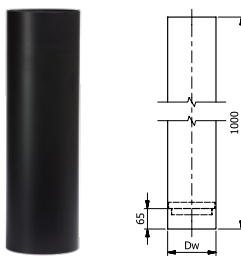
Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dw	121.0	131.0	151.0	161.0	181.0	201.0	221.0	251.0
Weight [kg]	12.40	13.40	15.40	16.40	18.40	20.50	22.40	25.40

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

RP x / 2000 - CZ 2 / FF



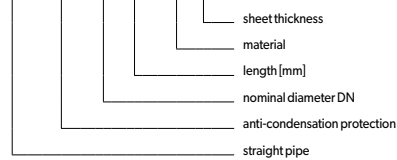
3. STRAIGHT PIPE WITH ANTI-CONDENSATION PROTECTION 1000, 500 [mm] RP/ZA



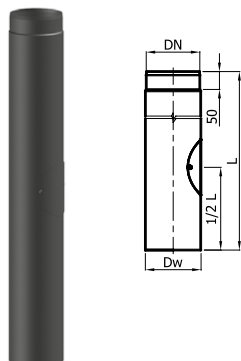
Diameter DN	ø120	ø130	ø150
Dw	121.0	131.0	151.0
Weight [kg] L=1000 mm	6.20	6.70	7.70

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

RP / ZA / x / L - CZ 2



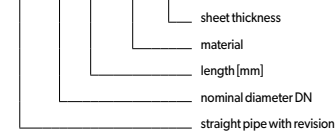
4. STRAIGHT PIPE WITH REVISION 1000, 500, 250 [mm] RPr



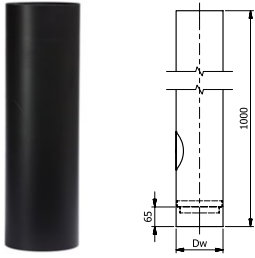
Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dw	121.0	131.0	151.0	161.0	181.0	201.0	221.0	251.0
Weight [kg] L=1000 mm	1.55	1.70	1.95	2.10	2.30	2.55	2.80	3.18

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

RPr x / L - CZ 2



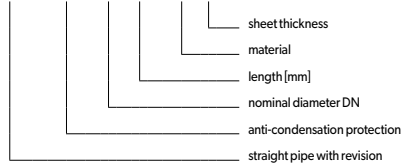
5. STRAIGHT PIPE WITH ANTI-CONDENSATION PROTECTION AND REVISION 1000, 500 [mm] PRr/ZA



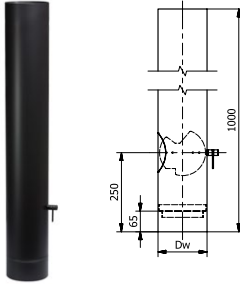
Diameter DN	ø120	ø130	ø150
Dw	121.0	131.0	151.0
Weight [kg] L = 1000 mm	6.30	6.80	7.80

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

RPr / ZA / x / L - CZ 2



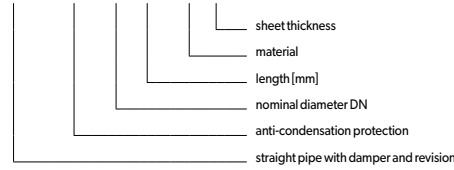
6. STRAIGHT PIPE WITH ANTI-CONDENSATION PROTECTION, DAMPER AND REVISION 1000, 500 [mm] RPrs/ZA



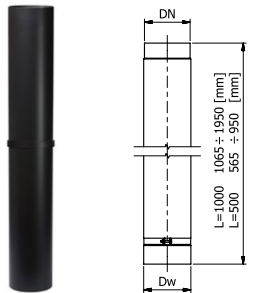
Diameter DN	ø120	ø130	ø150
Dw	121.0	131.0	151.0
Weight [kg] L = 1000 mm	6.50	6.90	7.90

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

RPrs / ZA / x / L - CZ 2



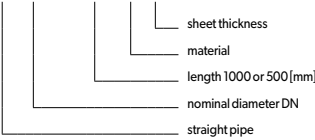
7. STRAIGHT PIPE RT



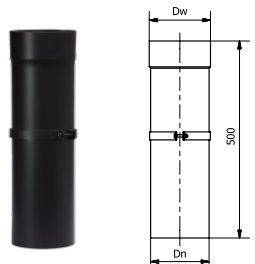
Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dw	121.0	131.0	151.0	161.0	181.0	201.0	221.0	251.0
Weight [kg] for L1000	12.00	13.00	15.00	16.00	18.00	20.00	22.00	25.00
Weight [kg] for L500	6.00	6.50	7.50	8.00	9.00	10.00	11.00	22.50

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

RT x / 2x L - CZ 2



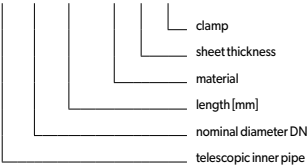
8. TELESCOPIC INNER PIPE WITH CLAMP 1000, 500 [mm] RT/O



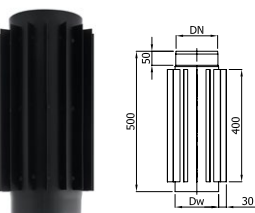
Diameter DN	ø120	ø130	ø150
Dw	121.0	131.0	151.0
Dn	118	128	148
Weight [kg] L = 500 mm	3.00	3.30	3.80

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

RT x / L - CZ 2 / O



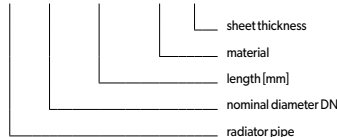
9. RADIATOR PIPE 500 [mm] RPZ



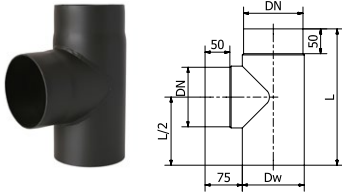
Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dw	121.0	131.0	151.0	161.0	181.0	201.0	221.0	251.0
Weight [kg]	6.00	6.30	6.55	6.80	7.70	8.60	9.25	10.00

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.00 mm

RPZ x / 500 - CZ 2



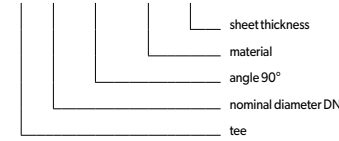
10. TEE 90° TR/90



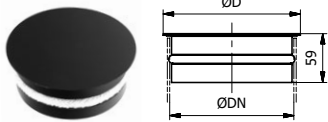
Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dw	121.0	131.0	151.0	161.0	181.0	201.0	221.0	251.0
L [mm]	275	285	305	315	335	355	375	405
Weight [kg]	2.00	2.20	2.70	3.00	3.50	4.00	4.60	5.60

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

TR x/90 - CZ 2



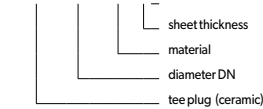
11. TEE PLUG (CERAMIC)



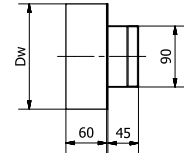
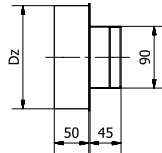
Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
D	136	146	166	176	196	216	236	266
Weight [kg]	0.54	0.60	0.72	0.78	0.92	1.10	1.22	1.47

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

ZTSC x - CZ2



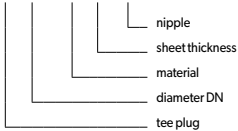
12. TEE PLUG ZT-K/N



Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dz	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Weight [kg]	0.54	0.60	0.72	0.78	0.92	1.10	1.22	1.47

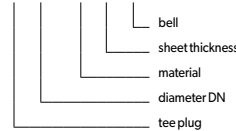
Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dw	ø121	ø131	ø151	ø161	ø181	ø201	ø221	ø251
Weight [kg]	0.61	0.67	0.81	0.87	1.00	1.20	1.30	1.60

ZT x - CZ2 - N



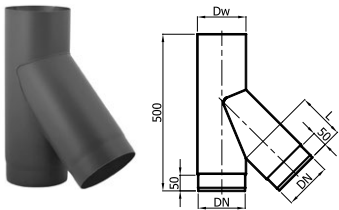
Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

ZT x - CZ2 - K



Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

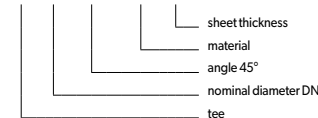
13. TEE 45° TR/45



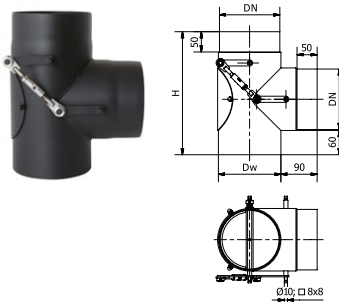
Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dw	121.0	131.0	151.0	161.0	181.0	201.0	221.0	251.0
L [mm]	150.0	150.0	150.0	150.0	150.0	150.0	180.0	120.0
Weight [kg]	3.10	3.40	3.90	4.20	4.60	5.10	7.55	8.70

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

TR x/45 - CZ 2



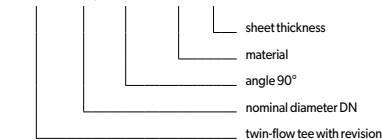
14. TWIN-FLOW TEE WITH REVISION TRMr



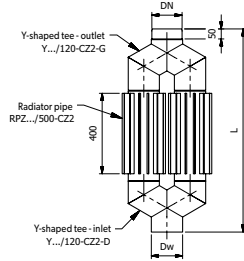
Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dw	121	131	151	161	181	201	221	251
H [mm]	275	285	305	315	335	355	375	405
Weight [kg]	3.10	3.40	4.00	4.40	5.10	6.00	6.80	8.10

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

TRMr x/90 - CZ 2



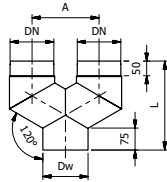
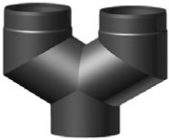
15. Y-SHAPED TEE



Diameter DN	ø150	ø160	ø180	ø200
Dw [mm]	151.0	161.0	181.0	201.0
L [mm]	1010	1030	1060	1096
Weight [kg]	21.20	22.50	25.90	29.50

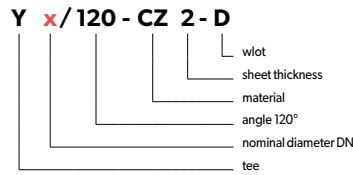
Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

16. Y-SHAPED TEE - INLET

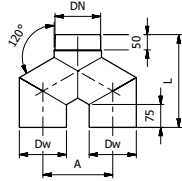
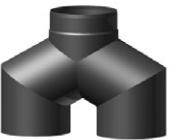


Diameter DN	ø150	ø160	ø180	ø200
Dw [mm]	151.0	161.0	181.0	201.0
L [mm]	305	315	331	348
Weight [kg]	4.05	4.45	5.25	6.15

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

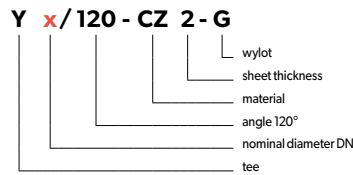


17. Y-SHAPED TEE - OUTLET

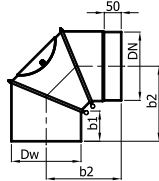


Diameter DN	ø150	ø160	ø180	ø200
Dw [mm]	151.0	161.0	181.0	201.0
L [mm]	305	315	331	348
Weight [kg]	4.05	4.45	5.25	6.15

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

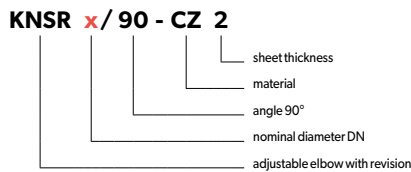


18. ADJUSTABLE ELBOW 90° WITH REVISION KNSR/90

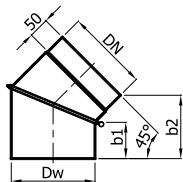


Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dw	121.0	131.0	151.0	161.0	181.0	201.0	221.0	251.0
b1 [mm]	84.0	86.0	85.0	85.0	82.0	73.0	83.0	83.0
b2 [mm]	220.0	220.0	224.5	220.0	219.0	221.0	273.0	270.0
Weight [kg]	2.80	3.00	3.40	3.80	4.10	4.50	6.0	6.80

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

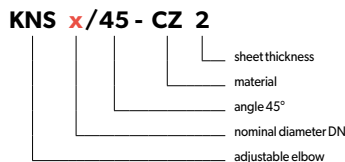


19. ADJUSTABLE ELBOW 45° KNS/45

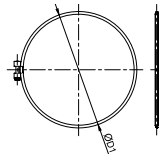


Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dw	121.0	131.0	151.0	161.0	181.0	201.0	221.0	251.0
b1 [mm]	84.0	86.0	85.0	85.0	82.0	73.0	83.0	83.0
b2 [mm]	172.0	170.0	162.0	158.0	151.0	144.0	165.0	165.0
Weight [kg]	1.80	1.90	2.10	2.20	2.35	2.50	3.30	3.30

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm



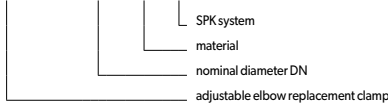
20. ADJUSTABLE ELBOW REPLACEMENT CLAMP; ADJUSTABLE ELBOW REPLACEMENT CERAMIC SEAL



Caution! Sold in sets of 2 pcs.

Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
D1	152	162	184	196	217	240	260	300
Weight [kg]	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10

KNSR-OPASKA x - CZ 2



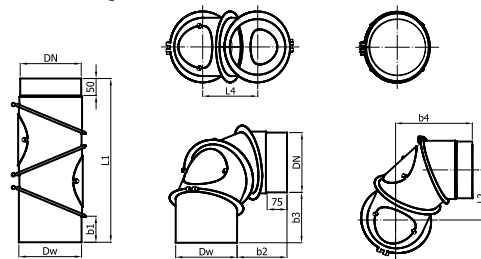
KNSR-USZCZELKA - CZ2



21. ADJUSTABLE ELBOW WITH REVISION - 4 SEGMENTS KNSR/UNI

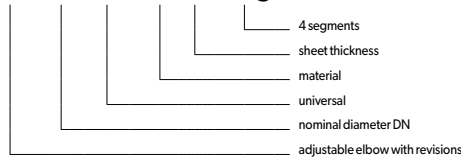


Available configurations



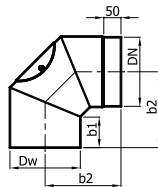
Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dw [mm]	121.0	131.0	151.0	161.0	181.0	201.0	221.0	251.0
b1 [mm]	84.0	86.0	85.0	85.0	82.0	73.0	83.0	83.0
b2 [mm]	205.0	190.0	180.0	160.0	160.0	145.0	220.0	200.0
b3 [mm]	205.0	190.0	180.0	160.0	160.0	145.0	220.0	200.0
b4 [mm]	265.0	285.0	275.0	280.0	290.0	300.0	335.0	330.0
b5 [mm]	225.0	220.0	200.0	200.0	200.0	200.0	280.0	260.0
L1 [mm]	535.0	535.0	525.0	500.0	515.0	505.0	650.0	640.0
L2 [mm]	200.0	200.0	190.0	160.0	180.0	200.0	240.0	230.0
L3 [mm]	440.0	440.0	440.0	415.0	430.0	420.0	540.0	535.0
L4 [mm]	225.0	220.0	200.0	200.0	200.0	200.0	280.0	260.0
Weight [kg]	3.90	4.30	4.80	5.20	5.70	6.30	8.80	9.60

KNSR x/UNI - CZ 2-4seg



Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

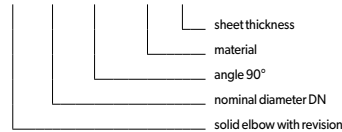
22. SOLID ELBOW 90° WITH REVISION KSr/90



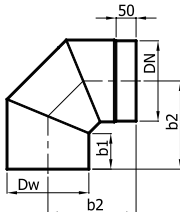
Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dw [mm]	121.0	131.0	151.0	161.0	181.0	201.0	221.0	251.0
b1 [mm]	96.0	94.0	95.0	95.0	87.0	84.0	95.0	95.0
b2 [mm]	243.0	243.0	241.0	240.0	242.0	241.0	271.0	292.0
Weight [kg]	2.80	3.00	3.40	3.60	4.10	4.50	6.0	6.80

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

KSr x/90 - CZ 2



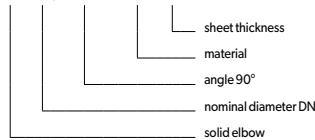
23. SOLID ELBOW 90° KS/90



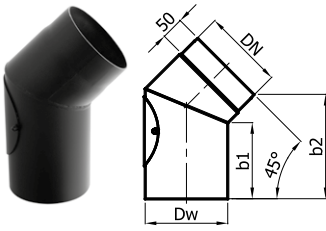
Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dw [mm]	121.0	131.0	151.0	161.0	181.0	201.0	221.0	251.0
b1 [mm]	96.0	94.0	95.0	95.0	87.0	84.0	95.0	95.0
b2 [mm]	243.0	243.0	241.0	240.0	242.0	241.0	271.0	292.0
Weight [kg]	2.80	3.00	3.40	3.60	4.10	4.50	6.00	6.80

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

KS x/90 - CZ 2



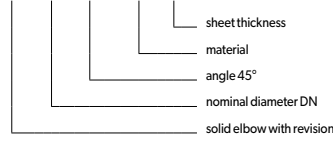
24. SOLID ELBOW 45° WITH REVISION KSr/45



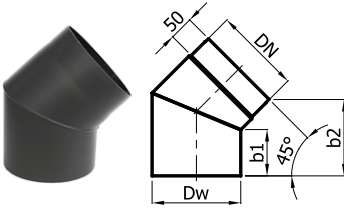
Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dw [mm]	121.0	131.0	151.0	161.0	181.0	201.0	221.0	251.0
b1 [mm]	187.0	184.0	174.0	170.0	170.0	165.0	145.0	132.0
b2 [mm]	258.0	254.0	245.0	241.0	235.0	228.0	216.0	204.0
Weight [kg]	2.10	2.30	2.60	2.80	3.10	3.50	3.80	4.30

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

KSr x/45 - CZ 2



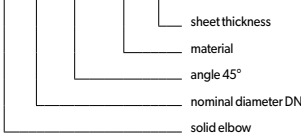
25. SOLID ELBOW 45° KS/45



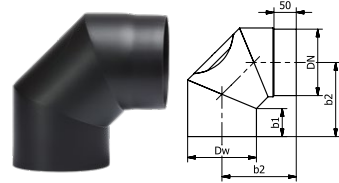
Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dw [mm]	121.0	131.0	151.0	161.0	181.0	201.0	221.0	251.0
b1 [mm]	96	94.0	95.0	95.0	87.0	84.0	95.0	95.0
b2 [mm]	172.0	170.0	162.0	158.0	151.0	144.0	165.0	165.0
Weight [kg]	1.80	1.90	2.10	2.20	2.35	2.50	3.33	3.90

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

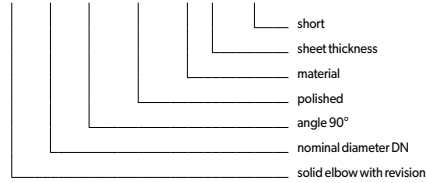
KS x/45 - CZ 2



26. SOLID ELBOW 90° 3-SEGMENTS, POLISHED WITH REVISION, SHORT VERSION KSr/KR



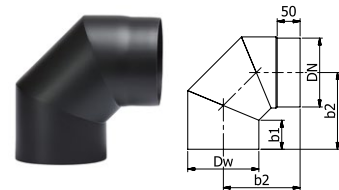
KSr x/90 - SzL - CZ2 / KR



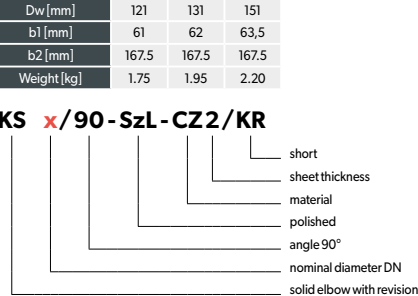
Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

Diameter DN	ø120	ø130	ø150
Dw [mm]	121.0	131.0	151.0
b1 [mm]	61	62	63.5
b2 [mm]	167.5	167.5	167.5
Weight [kg]	1.90	2.00	2.30

27. SOLID POLISHED ELBOW 90° 3-SEGMENTS, SHORT VERSION KS/KR

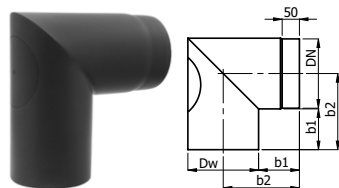


KS x/90 - SzL - CZ2 / KR



Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

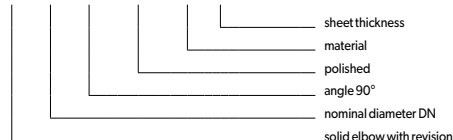
28. SOLID POLISHED ELBOW 90° WITH REVISION KSr/90



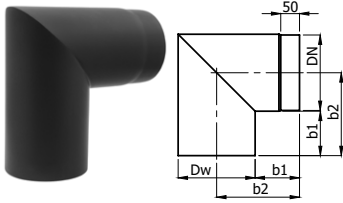
Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dw [mm]	121.0	131.0	151.0	161.0	181.0	201.0	221.0	251.0
b1 [mm]	145	145	145	145	145	145	145	145
b2 [mm]	207.5	212.5	222.5	227.5	237.5	247.5	257.5	272.5
Weight [kg]	2.60	2.90	3.50	3.80	4.40	5.10	5.80	6.90

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

KSr x/90 - SzL - CZ 2-2SEG



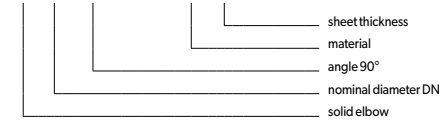
29. SOLID POLISHED ELBOW 90° KS/90



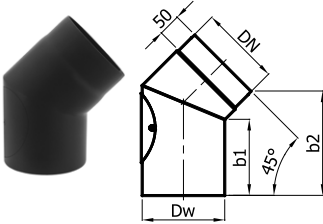
Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dw [mm]	121.0	131.0	151.0	161.0	181.0	201.0	221.0	251.0
b1 [mm]	145	145	145	145	145	145	145	145
b2 [mm]	207.5	212.5	222.5	227.5	237.5	247.5	257.5	272.5
Weight [kg]	2.60	2.90	3.50	3.80	4.40	5.10	5.80	6.90

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

KS x/90 - SzL - CZ 2-2SEG



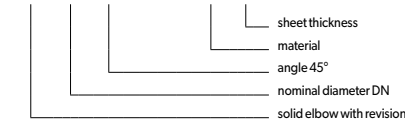
30. SOLID POLISHED ELBOW 45° WITH REVISION KSr/45



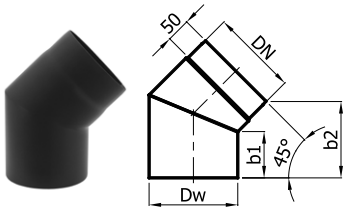
Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dw [mm]	121.0	131.0	151.0	161.0	181.0	201.0	221.0	251.0
b1 [mm]	187.0	184.0	174.0	170.0	170.0	165.0	145.0	132.0
b2 [mm]	258.0	254.0	245.0	241.0	235.0	228.0	216.0	204.0
Weight [kg]	2.10	2.30	2.60	2.80	3.10	3.50	3.80	4.30

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

KSr x/45 - SzL - CZ 2



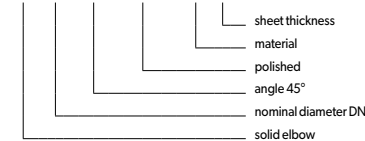
31. SOLID POLISHED ELBOW 45° KS/45



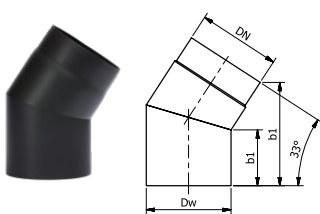
Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dw [mm]	121.0	131.0	151.0	161.0	181.0	201.0	221.0	251.0
b1 [mm]	96	94.0	95.0	95.0	87.0	84.0	95.0	95.0
b2 [mm]	172.0	170.0	162.0	158.0	151.0	144.0	165.0	165.0
Weight [kg]	1.80	1.90	2.10	2.20	2.35	2.50	3.33	3.90

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

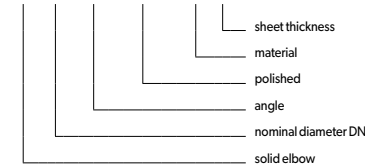
KS x/45 - SzL - CZ 2



32. SOLID POLISHED ELBOW 33° KS/33



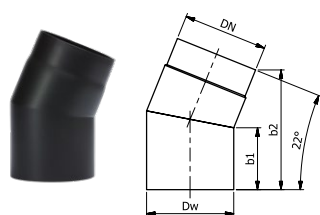
KS x/33 - SzL - CZ 2



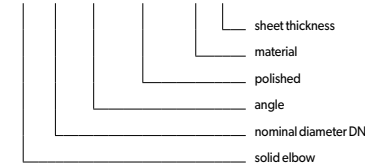
Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

Diameter DN	ø120	ø130	ø150
Dw [mm]	121.0	131.0	151.0
b1 [mm]	106.5	105	102
b2 [mm]	197	195	189
Weight [kg]	1.50	1.70	1.90

33. SOLID POLISHED ELBOW 22° KS/22



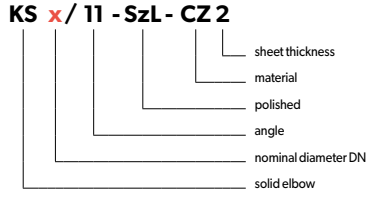
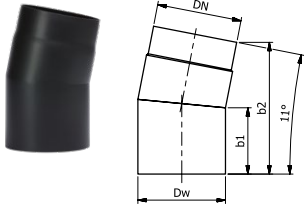
KS x/22 - SzL - CZ 2



Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

Diameter DN	ø120	ø130	ø150
Dw [mm]	121.0	131.0	151.0
b1 [mm]	113	112	110
b2 [mm]	219	217	213
Weight [kg]	1.50	1.70	1.90

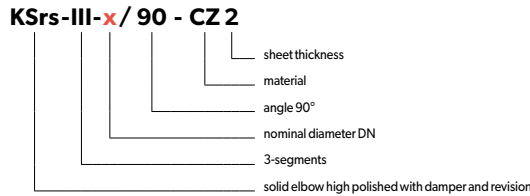
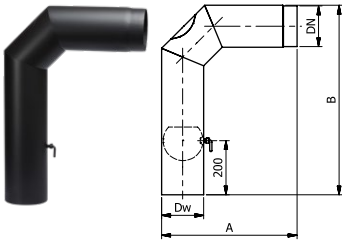
34. SOLID POLISHED ELBOW 11° KS/11



Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

Diameter DN	ø120	ø130	ø150
Dw [mm]	121.0	131.0	151.0
b1 [mm]	119	118.5	117.5
b2 [mm]	236	235	233
Weight [kg]	1.50	1.70	1.90

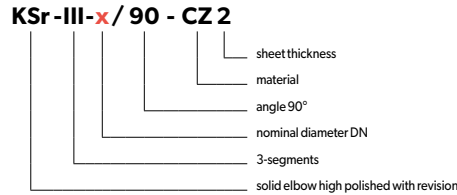
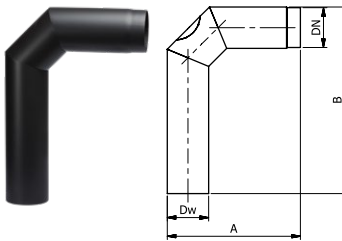
35. SOLID ELBOW HIGH 90° 3-SEGMENTS, POLISHED WITH DAMPER AND REVISION KSrs - III



Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

Diameter DN	ø120	ø130	ø150
Dw [mm]	121.0	131.0	151.0
A [mm]	500	500	500
B [mm]	700	700	700
Weight [kg]	6.50	7.00	8.00

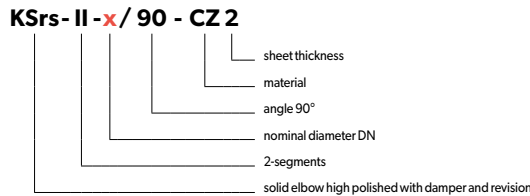
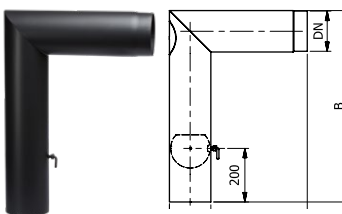
36. SOLID ELBOW HIGH 90° 3-SEGMENTS, POLISHED WITH REVISION KSr - III



Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

Diameter DN	ø120	ø130	ø150
Dw [mm]	121.0	131.0	151.0
A [mm]	500	500	500
B [mm]	700	700	700
Weight [kg]	6.00	6.50	7.50

37. SOLID ELBOW HIGH 90° 2-SEGMENTS, POLISHED WITH DAMPER AND REVISION KSrs - II



Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

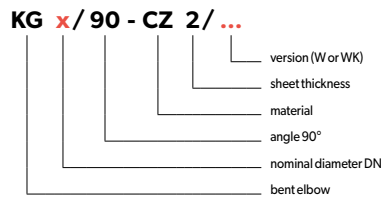
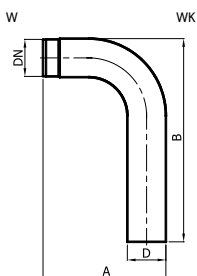
Diameter DN	ø120	ø130	ø150
Dw [mm]	121.0	131.0	151.0
A [mm]	500	505	515
B [mm]	700	705	715
Weight [kg]	7.00	7.50	9.50

38. BENT ELBOW - HIGH, HIGH-SHORT KG

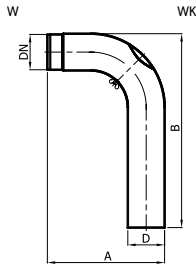


Version	W (high)			WK (high-short)		
Diameter DN	ø120	ø130	ø150	ø120	ø130	ø150
øD [mm]	125.0	135.0	155.0	125.0	135.0	155.0
øDk [mm]	120.0	130.0	150.0	120.0	130.0	150.0
A [mm]	398.0	420.0	460.0	318.0	340.0	380.0
B [mm]	645.0	640.0	645.0	645.0	640.0	645.0
Weight [kg]	5.10	5.50	6.60	4.70	5.00	6.00

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

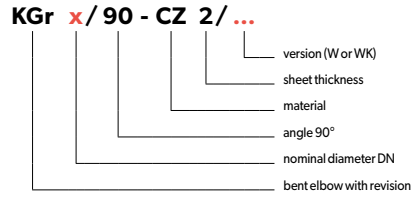


39. BENT ELBOW - HIGH, HIGH-SHORT WITH REVISION

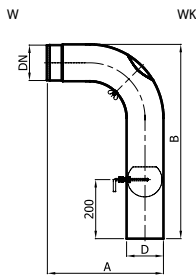


Version	W (high)			WK (high-short)		
Diameter DN	ø120	ø130	ø150	ø120	ø130	ø150
øD [mm]	125.0	135.0	155.0	125.0	135.0	155.0
øDk [mm]	120.0	130.0	150.0	120.0	130.0	150.0
A [mm]	398.0	420.0	460.0	318.0	340.0	380.0
B [mm]	645.0	640.0	645.0	645.0	640.0	645.0
Weight [kg]	5.20	5.60	6.70	4.70	5.00	6.10

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

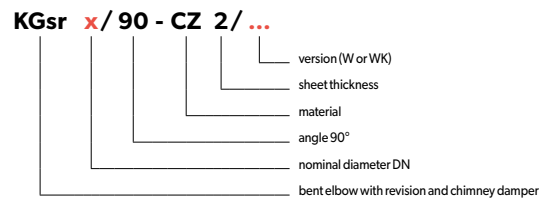


40. BENT ELBOW - HIGH, HIGH-SHORT WITH REVISION AND CHIMNEY DAMPER KGSR

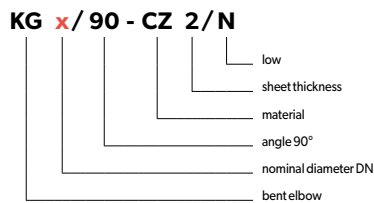
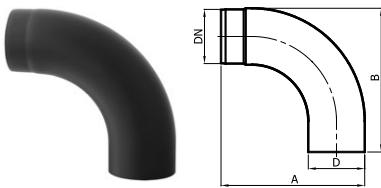


Version	W (high)			WK (high-short)		
Diameter DN	ø120	ø130	ø150	ø120	ø130	ø150
øD [mm]	125.0	135.0	155.0	125.0	135.0	155.0
øDk [mm]	120.0	130.0	150.0	120.0	130.0	150.0
A [mm]	398.0	420.0	460.0	318.0	340.0	380.0
B [mm]	645.0	640.0	645.0	645.0	640.0	645.0
Weight [kg]	5.50	5.80	7.00	5.00	5.30	6.40

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm



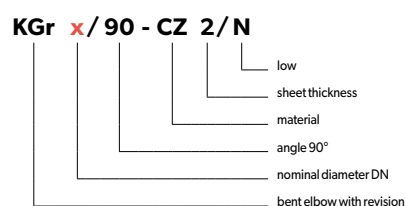
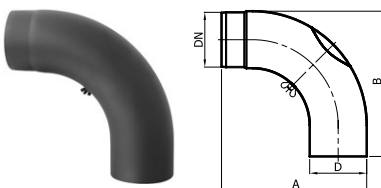
41. BENT ELBOW LOW KG



Diameter DN	ø120	ø130	ø150
øD [mm]	125.0	135.0	155.0
øDk [mm]	120.0	130.0	150.0
A [mm]	318.0	340.0	380.0
B [mm]	318.0	340.0	380.0
Weight [kg]	2.60	3.00	3.80

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

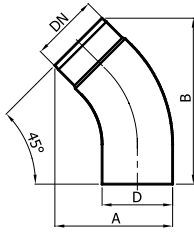
42. BENT ELBOW LOW WITH REVISION KGR



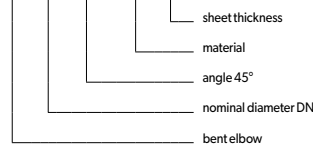
Diameter DN	ø120	ø130	ø150
øD [mm]	125.0	135.0	155.0
øDk [mm]	120.0	130.0	150.0
A [mm]	318.0	340.0	380.0
B [mm]	318.0	340.0	380.0
Weight [kg]	2.70	3.10	3.90

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

43. BENT ELBOW 45° KG



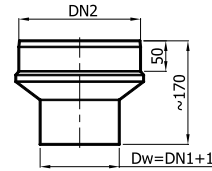
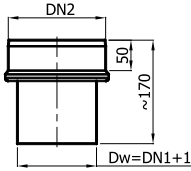
KG x/45 - CZ 2



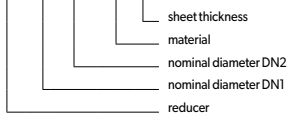
Diameter DN	ø120	ø130	ø150
øD [mm]	125.0	135.0	155.0
øDk [mm]	120.0	130.0	150.0
A [mm]	208.0	222.0	248.0
B [mm]	294.0	308.0	336.0
Weight [kg]	1.70	1.90	2.40

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

44. REDUCERS RD



RD x/y - CZ 2



RD x/y - CZ 2 - S

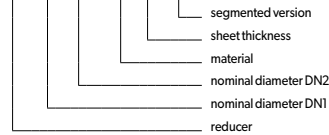


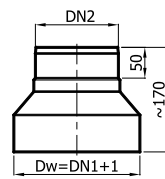
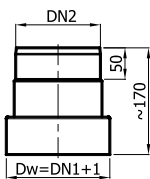
Table of versions and available diameters

Diameter DNI	Diameter DN2							
	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
ø120		R	R	R	S	S	S	S
ø130	R		R	R	R	S	S	S
ø150	R	R		R	R	R	S	S
ø160	R	R	R		R	R	S	S
ø180	S	R	R	R		R	R	S
ø200	S	S	R	R	R		R	R
ø220	S	S	S	S	R	R		R
ø250	S	S	S	S	S	R	R	
ø300	S	S	S	S	S	S	S	S

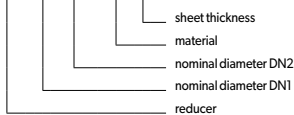
Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

ex: RD130/120-CZ2, RD120/130-CZ2,
RD120/200-CZ2-S
S - redukcje segmentowe
R - redukcje rozpęczane

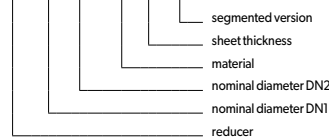
45. REDUCERS RD



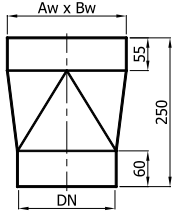
RD x/y - CZ 2



RD x/y - CZ 2 - S

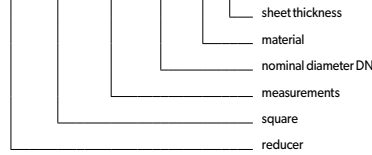


46. REDUCER RDKW



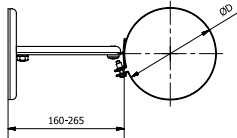
Measurements Aw x Bw [mm]	122 x 122	135 x 189	142 x 142	142 x 162	152 x 152	162 x 162	171 x 171	180 x 180	192 x 192	200 x 200	
Diameter DN	ø120	1.80 kg	-	-	-	-	-	-	-	-	
	ø130	1.85 kg	-	2.00 kg	-	2.05 kg	-	-	-	-	
	ø150	1.95 kg	-	2.10 kg	-	2.10 kg	2.30 kg	2.35 kg	2.40 kg	-	
	ø160	-	-	2.15 kg	-	2.15 kg	2.40 kg	2.45 kg	2.50 kg	2.60 kg	2.70 kg
	ø180	-	2.70 kg	2.25 kg	2.40 kg	2.30 kg	2.50 kg	2.55 kg	2.60 kg	2.70 kg	2.80 kg
	ø200	-	2.90 kg	2.35 kg	-	2.45 kg	2.60 kg	2.65 kg	2.70 kg	2.80 kg	2.90 kg

RD kw Ax B / x - CZ 2



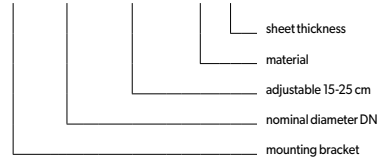
Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

47. MOUNTING BRACKET



Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
D [mm]	125	135	155	165	185	205	225	255
Weight [kg]	0.44	0.45	0.47	0.48	0.50	0.52	0.54	0.57

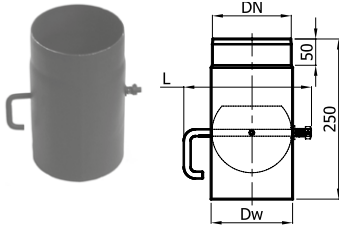
OMD-I ... / 15-25 - CZ 2



Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

Not to use with flammable materials.

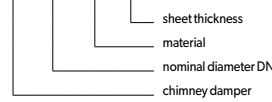
48. CHIMNEY DAMPER WITH SHORT HANDLE SZK



Chimney dampers are produced in versions:

- with long handle for diameters 180, 200, 220 and 250
- with short handle 120, 130, 150 and 160

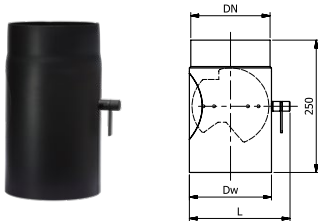
SZK x - CZ 2



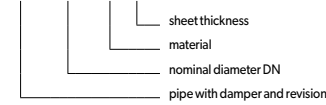
Diameter DN	ø120	ø130	ø150	ø160
Dw [mm]	121.0	131.0	151.0	161.0
L [mm]	193.0	203.0	223.0	223.0
Weight [kg]	1.90	2.05	2.40	2.50

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

49. CHIMNEY DAMPER WITH REVISION SZKr



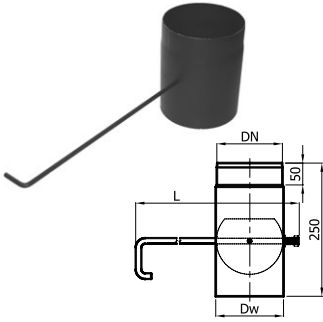
SZKr x - CZ 2



Diameter DN	ø120	ø130	ø150
Dw [mm]	121.0	131.0	151.0
L [mm]	160	170	190
Weight [kg]	1.65	1.95	2.25

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

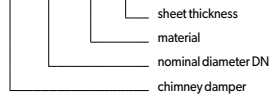
50. CHIMNEY DAMPER WITH LONG HANDLE SZK



Chimney dampers are produced in versions:

- with long handle for diameters 180, 200, 220 and 250
- with short handle 120, 130, 150 and 160

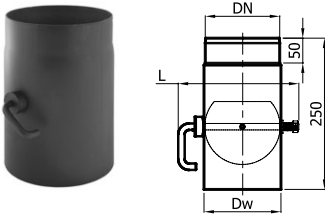
SZK x - CZ 2



Diameter DN	ø180	ø200	ø220	ø250
Dw [mm]	181.0	201.0	221.0	251.0
L [mm]	690.0	710.0	730.0	760.0
Weight [kg]	3.40	3.60	3.90	4.30

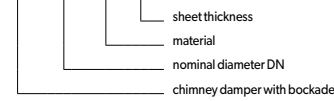
Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

51. CHIMNEY DAMPER WITH BLOCKADE SZKB



In standard version damper is produced with short handle.

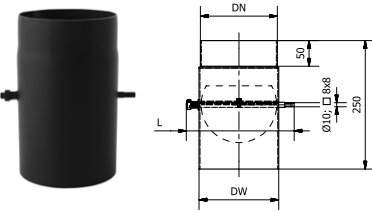
SZKB x - CZ 2



Diameter DN	ø120	ø130	ø150	ø160
Dw [mm]	121.0	131.0	151.0	161.0
L [mm]	193.0	203.0	223.0	223.0
Weight [kg]	1.90	2.10	2.40	2.55

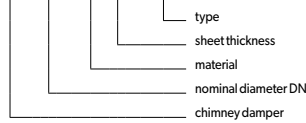
Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

52. CHIMNEY DAMPER SZK 8x8



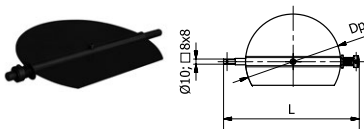
Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dw [mm]	121.0	131.0	151.0	161.0	181.0	201.0	221.0	251.0
L [mm]	180	190	210	220	240	260	280	310
Weight [kg]	1.65	1.95	2.25	2.41	2.76	3.10	3.47	4.00

SZK x - CZ 2 - 8x8



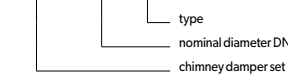
Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

53. CHIMNEY DAMPER SET SZK-SET 8x8



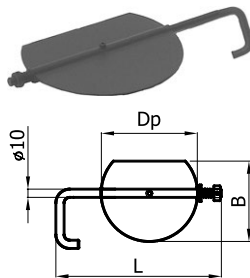
Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dp [mm]	117	127	147	157	177	197	217	247
L [mm]	180	190	210	220	240	260	280	310
Weight [kg]	0.28	0.32	0.37	0.41	0.51	0.59	0.73	0.91

SZK-SET x - 8x8



Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

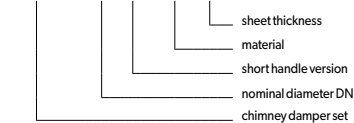
54. CHIMNEY DAMPER „DO IT YOURSELF“ SET WITH SHORT HANDLE SZK-SET



Chimney dampers are produced in versions:

- with long handle for diameters 180, 200, 220 and 250
- with short handle 120, 130, 150 and 160

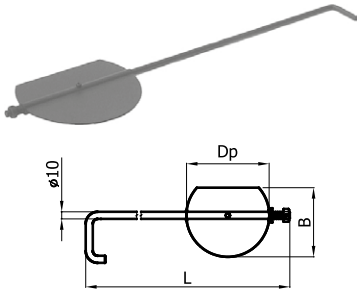
SZK-SET x - K - CZ 2



Diameter DN	ø120	ø130	ø150	ø160
B [mm]	97.5	105.0	110.0	118.0
Dp [mm]	117.0	127.0	147.0	157.0
L [mm]	193.0	203.0	223.0	223.0
Weight [kg]	1.65	1.80	2.00	2.20

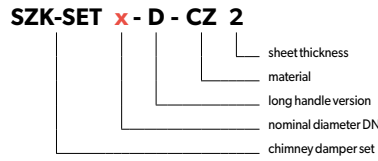
Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

55. CHIMNEY DAMPER „DO IT YOURSELF“ SET WITH LONG HANDLE SZK-SET



Chimney dampers are produced in versions:

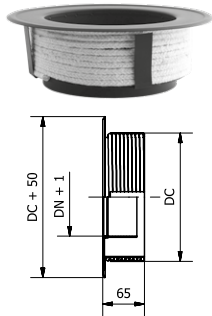
- with long handle for diameters 180, 200, 220 and 250
- with short handle 120, 130, 150 and 160



Diameter DN	ø180	ø200
B [mm]	142.5	154.5
Dp [mm]	177.0	197.0
L [mm]	690.0	710.0
Weight [kg]	2.70	3.00

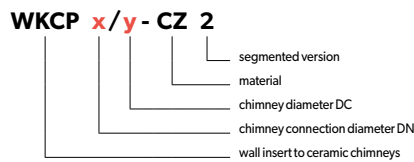
Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

56. WALL INSERT TO CERAMIC CHIMNEYS WKCP

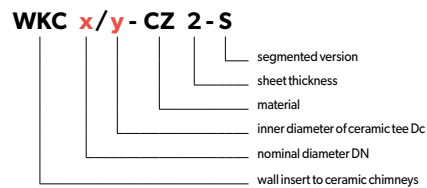
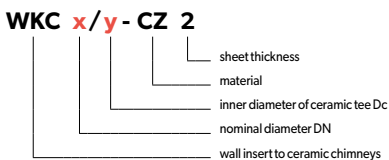
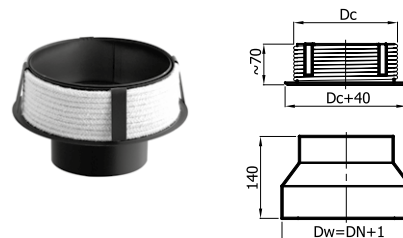
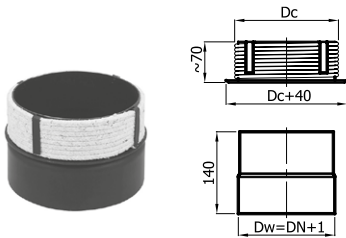


Diameter DC	ø150	ø160	ø180	ø200	ø220	ø250
ø120	WKCP	WKCP	WKCP	WKCP	WKCP	WKCP
ø130	-	WKCP	WKCP	WKCP	WKCP	WKCP
ø150	-	-	WKCP	WKCP	WKCP	WKCP
ø160	-	-	-	WKCP	WKCP	WKCP
ø180	-	-	-	-	WKCP	WKCP
ø200	-	-	-	-	-	WKCP
ø220	-	-	-	-	-	WKCP

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm



57. WALL INSERTS TO CERAMIC CHIMNEYS WKC; WKC-S



This wall insert protects tees of ceramic chimneys from damages caused by thermal expansion of metal elements of the chimney connection.

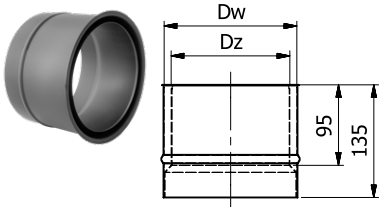
Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

Table of versions and available sets

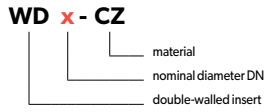
Diameter DN	Diameter DC																	
	ø120		ø130		ø140		ø150		ø160		ø180		ø200		ø220		ø250	
	Version	Weight [kg]	Version	Weight [kg]	Version	Weight [kg]	Version	Weight [kg]	Version	Weight [kg]	Version	Weight [kg]	Version	Weight [kg]	Version	Weight [kg]	Version	Weight [kg]
ø120	R	1.10	R	1.15	R	1.30	R	1.30	R	1.40	R	1.60	S	1.85	S	-	S	-
ø130	R	1.15	R	1.20	R	1.35	R	1.35	R	1.50	R	1.60	R	1.65	S	-	S	-
ø150	R	1.25	R	1.30	R	1.40	R	1.50	R	1.60	R	1.65	R	1.70	R	1.90	S	-
ø160	S	1.70	S	1.75	R	1.50	R	1.60	R	1.65	R	1.70	R	1.75	R	1.90	R	1.95
ø180	S	1.85	S	1.90	S	1.95	S	2.00	R	1.75	R	1.80	R	1.85	R	2.00	R	2.00
ø200	S	1.95	S	2.00	S	2.05	S	2.10	S	2.15	R	1.90	R	1.95	R	2.05	R	2.05
ø220	S	-	S	-	S	-	S	-	S	-	R	2.00	R	2.05	R	2.10	R	2.20
ø250	S	-	S	-	S	-	S	-	S	-	S	-	S	2.35	R	2.20	R	2.30

S - segmented version
R - redukcie rozpeczęane

58. DOUBLE - WALLED WALL INSERT WD



Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dz [mm]	110.0	120.0	140.0	150.0	170.0	190.0	210.0	240.0
Dw [mm]	128.0	138.0	158.0	168.0	188.0	208.0	228.0	258.0
Weight [kg]	0.65	0.70	0.85	0.90	1.00	1.10	1.20	1.25

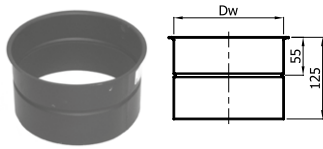


Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	8	8 - sheet thickness 0.8 mm

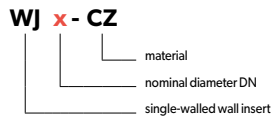
Caution!

Double-walled insert is used to secure connection of the SPK element to chimney duct with metal insert.

59. SINGLE-WALLED WALL INSERT WJ

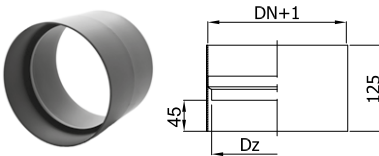


Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dz [mm]	128.0	138.0	158.0	168.0	188.0	208.0	228.0	258.0
Weight [kg]	0.30	0.35	0.40	0.42	0.45	0.50	0.55	0.60

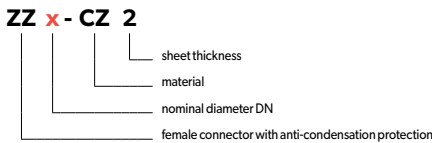


Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	8	8 - sheet thickness 0.8 mm

60. FEMALE CONNECTOR WITH ANTI-CONDENSATION PROTECTION ZZ



Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dz [mm]	110.0	120.0	140.0	150.0	170.0	190.0	210.0	240.0
Weight [kg]	0.95	1.10	1.20	1.30	1.45	1.60	1.75	1.90

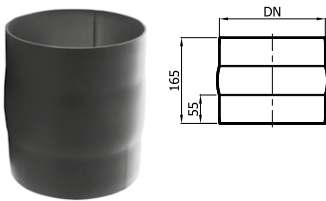


Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

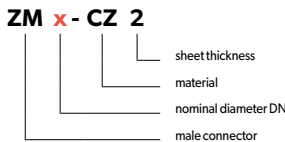
Caution!

Female connector allows to connect two press-formed elements to each other and divert the connection schema.

61. MALE CONNECTOR ZM



Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Weight [kg]	0.40	0.45	0.50	0.55	0.60	0.70	0.80	0.90

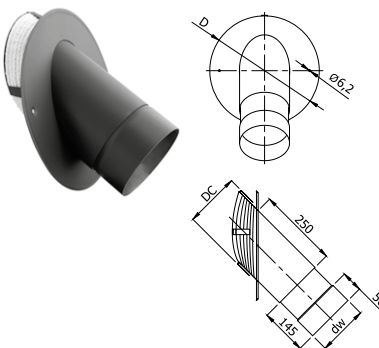


Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

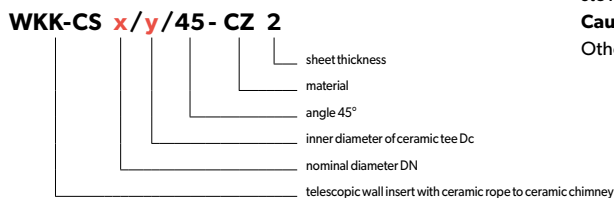
Caution!

Male connector allows to connect the on site cut pipe elements to other elements of the SPK system.

62. TELESCOPIC WALL INSERT WITH CERAMIC ROPE TO CERAMIC CHIMNEY WKK-CS



Diameter DN	ø150	ø150	ø180
Dc	180.0	200.0	200.0
D	340.0	360.0	360.0
dw	151	151	181
Weight [kg]	2.95	3.20	3.20



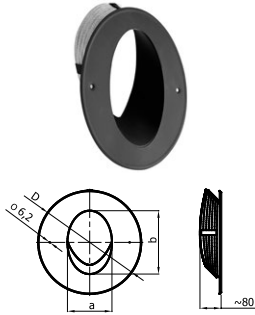
Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

Telescopic wall insert allows to connect the stove/fireplace to the chimney at 45° angle

Caution!

Other inserts upon individual order

63. ANGULAR WALL INSERT WITH CERAMIC ROPE WKK-KS (TO BE BUILT IN)



Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
a [mm]	130.0	140.0	160.0	170.0	190.0	210.0	230.0	260.0
b [mm]	184.0	198.0	226.0	240.0	269.0	297.0	325.0	368.0
Diameter D	280	290	310	320	340	360	380	410
Weight [kg]	0.95	1.10	1.20	1.35	1.45	1.60	1.75	2.00

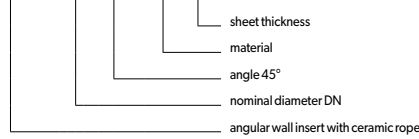
Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

Angular insert allows to connect the stove/ fireplace to the chimney at 45° angle.

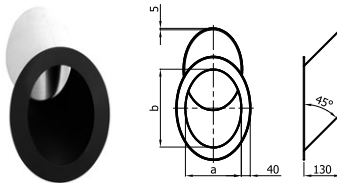
Caution!

Pipe element ending that is put into the WKK-KS wall insert should be cut at the proper angle, so the pipe does not go into chimney duct causing an obstruction.

WKK-KS x/45 - CZ 2



64. ANGULAR WALL INSERT WITH INSULATION WKK (TO BE BUILT IN)



Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
a [mm]	130.0	140.0	160.0	170.0	190.0	210.0	230.0	260.0
b [mm]	184.0	198.0	226.0	240.0	269.0	297.0	325.0	368.0
Weight [kg]	0.95	1.10	1.20	1.35	1.45	1.60	1.75	1.90

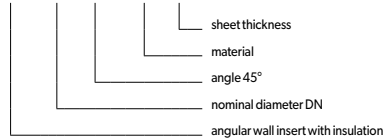
Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

Angular wall insert allows to connect the stove to a chimney at 45° angle. Thermal insulation protects ceramic chimneys from damages caused by thermal expansion of metal elements.

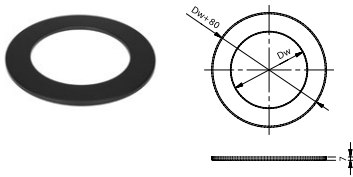
Caution!

Pipe element ending that is put into the WKK wall insert should be cut at the proper angle, so the pipe does not go into chimney duct causing an obstruction.

WKK x/45 - CZ 2



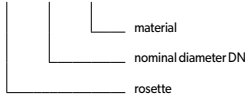
65. ROSETTE ROZ



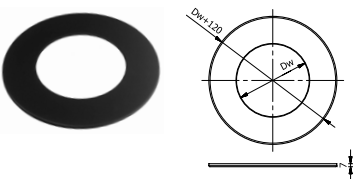
Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dw [mm]	127	137	157	167	187	207	227	257
Weight [kg]	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	5	5 - sheet thickness 0.5 mm

ROZ x - CZ



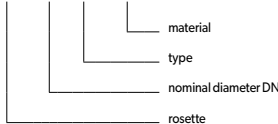
66. WIDE ROSETTE ROZ-II



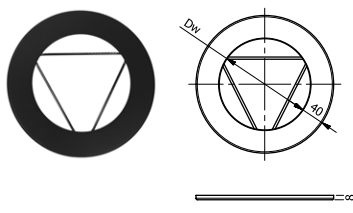
Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200
Dw [mm]	127	137	157	167	187	207
Weight [kg]	0.19	0.20	0.22	0.23	0.25	0.27

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	5	5 - sheet thickness 0.5 mm

ROZ x - II - CZ



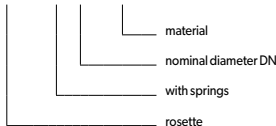
67. ROSETTE WITH SPRINGS ROZ/S



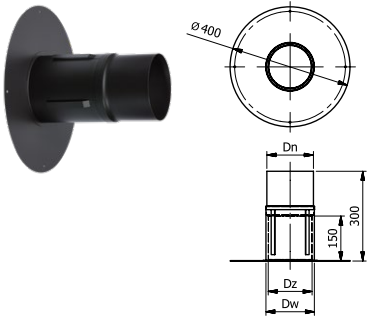
Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dw [mm]	127	137	157	167	187	207	227	257
Weight [kg]	0.14	0.15	0.16	0.17	0.18	0.19	0.20	0.21

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	6	6 - sheet thickness 0,6 mm

ROZ/S x - CZ



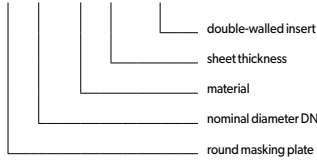
68. ROUND MASKING PLATE Ø400 WITH DOUBLE-WALLED INSERT PLo/W



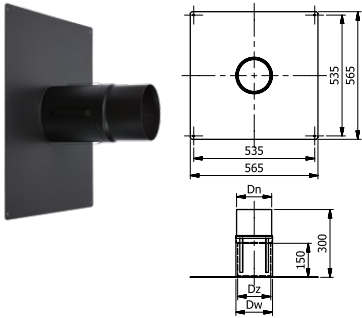
Diameter DN	ø120	ø130	ø150
Dw [mm]	117	127	147
Dz [mm]	130	140	160
Dn [mm]	125	135	155
Weight [kg]	4.90	5.00	5.10

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

PLo x - CZ 2 / WD



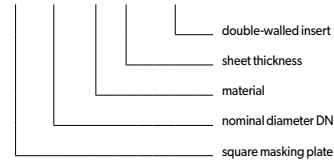
69. SQUARE MASKING PLATE #565x565 WITH DOUBLE-WALLED INSERT PLkw/W



Diameter DN	ø120	ø130	ø150
Dw [mm]	117	127	147
Dz [mm]	130	140	160
Dn [mm]	125	135	155
Weight [kg]	4.90	5.00	5.10

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

PLkw x - CZ 2 / WD



Chimney connections for pellet stoves <SPKP>

Chimney connections for pellet stoves are made of mild steel sheet type DC01, thickness 1.2 mm. Their application is smoke extraction from pellet stoves, where fumes temperature can rise to 250°C. Maximum working temperature: 250°C.

Bell joint pipe connection

Individual elements of the chimney system are being joint by the way of pushing one part of the element - a spigot, into the other press-formed part of the element - a bell. Thanks to this type of pipe joining, chimney connection is characterized by very tight and stiff construction. It also assures proper flow of condensate. In order to prevent fumes from leaking out, special silicone seals are used in the bell joint of the pipe. Elements are powder coated with special high temperature paint (400°C) in black matt colour.

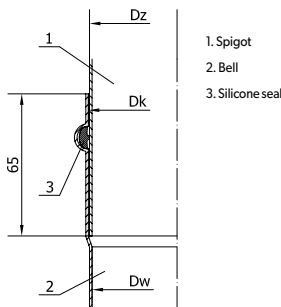


Fig. Method of joining chimney connection pipe elements <SPKP>



CHIMNEY COWLS

STEERING & POWER SUPPLY

Table of layouts and sizes

Diameter DN	Dz	Dw	Dk
80	80.1	77.7	81.1
100	100.2	97.8	101.2

Measurements

- Dz - outer diameter of pipe [mm]
- Dw - inner diameter of pipe [mm]
- Dk - outer diameter of spigot [mm]

Destination

- D - smoke ducts

Model of application of elements

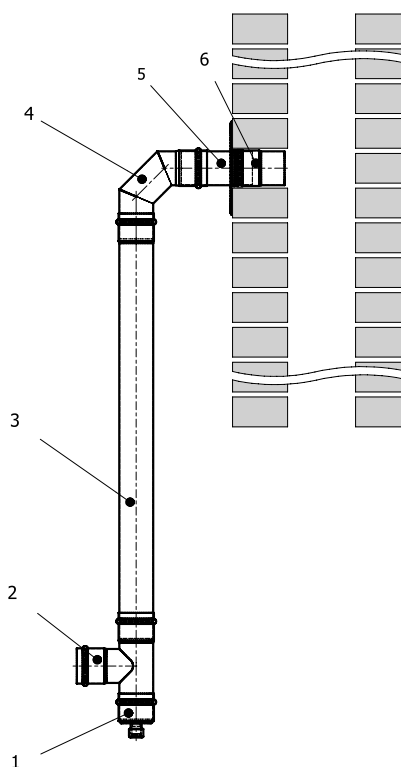


Fig. Example of chimney connection SPKP system

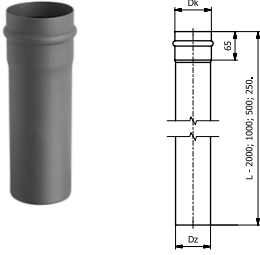
No	Name	Denotation
1	Drain bowl	MS80-CZ1,2P
2	Tee 90°	TR80/90-CZ1,2P
3	Straight pipe 1000 [mm]	RP80/100-CZ1,2P
4	Solid elbow 90°	KS80/90-CZ1,2P
5	Male connector	ZM80-CZ1,2P
6	Rosette	ROZ80-CZ1,2P

HOT AIR DISTRIBUTION SYSTEM

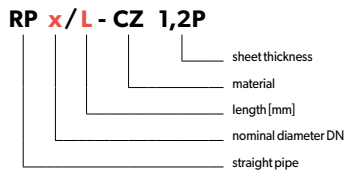
CHIMNEYS

VENTILATION

1. STRAIGHT PIPE 1000, 500, 250 [mm] RP

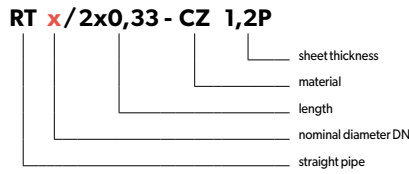
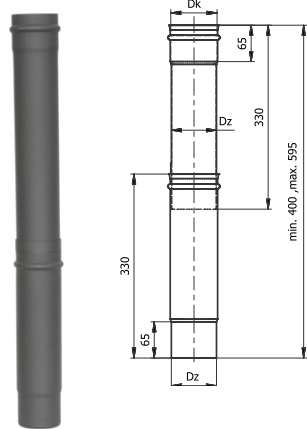


Length L	1000		500		250	
Diameter DN	ø80	ø100	ø80	ø100	ø80	ø100
Dz	80.1	100.2	80.1	100.2	80.1	100.2
Dk	81.1	101.2	81.1	101.2	81.1	101.2
Weight [kg]	2.40	2.95	1.20	1.50	0.60	0.75



Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

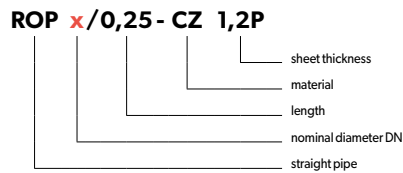
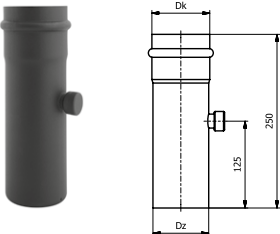
2. TELESCOPIC PIPE RT



Diameter DN	ø80	ø100
Dz	80.1	100.2
Dk	81.1	101.2
Weight [kg]	1.7	2.1

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

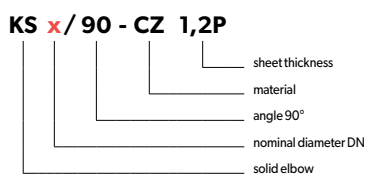
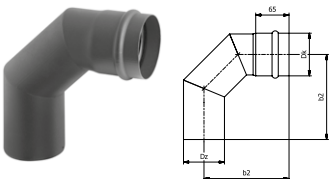
3. STRAIGHT PIPE WITH MEASURING OUTLET ROP



Diameter DN	ø80	ø100
Dz	80.1	100.2
Dk	81.1	101.2
Weight [kg]	0.7	0.9

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

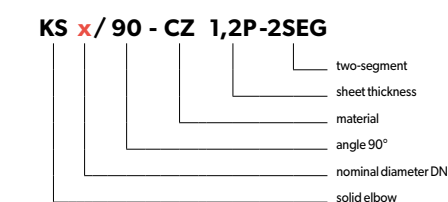
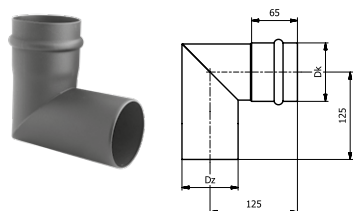
4. SOLID ELBOW 90° KS/90



Diameter DN	ø80	ø100
Dz [mm]	80.1	100.2
Dk [mm]	81.1	101.2
b1 [mm]	83.0	79.0
b2 [mm]	166.0	165.0
Weight [kg]	0.70	0.90

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

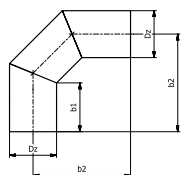
5. SOLID ELBOW 90° - 2SEG



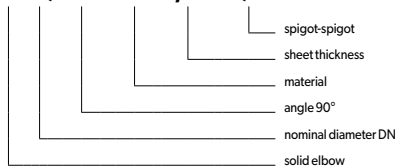
Diameter DN	ø80	ø100
Dz [mm]	80.1	100.2
Dk [mm]	81.1	101.2
Weight [kg]	0.6	0.75

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

6. SOLID ELBOW 90° SPIGOT - SPIGOT



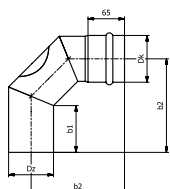
KS x/90 - CZ 1,2P N/N



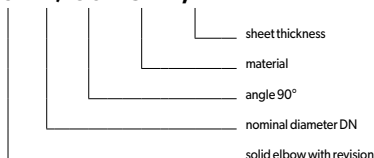
Diameter DN	ø80	ø100
Dz [mm]	80.1	100.2
b1 [mm]	83	79
b2 [mm]	166	165
Weight [kg]	0.70	0.90

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

7. SOLID ELBOW 90° WITH REVISION KSR/90



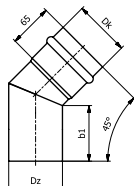
KSR x/90 - CZ 1,2P



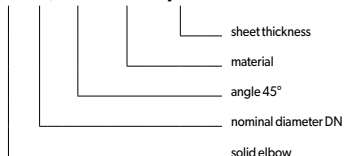
Diameter DN	ø80	ø100
Dz [mm]	80.1	100.2
Dk [mm]	81.1	101.2
b1 [mm]	83.0	79.0
Weight [kg]	0.80	1.00

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

8. SOLID ELBOW 45° KS/45



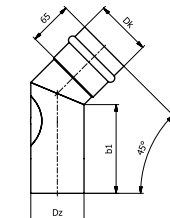
KS x/45 - CZ 1,2P



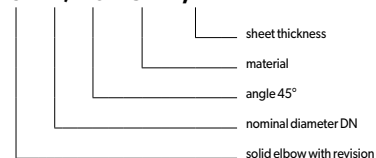
Diameter DN	ø80	ø100
Dz [mm]	80.1	100.2
Dk [mm]	81.1	101.2
b1 [mm]	83.0	79.0
Weight [kg]	0.50	0.65

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

9. SOLID ELBOW 45° WITH REVISION KSR/45



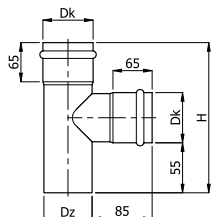
KSR x/45 - CZ 1,2P



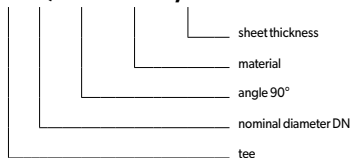
Diameter DN	ø80	ø100
Dz [mm]	80.1	100.2
Dk [mm]	81.1	101.2
b1 [mm]	133	129
Weight [kg]	1.0	1.2

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

10. TEE 90° TR/90



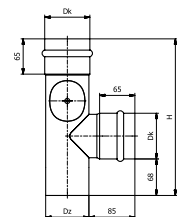
TR x/90 - CZ 1,2P



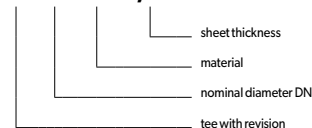
Diameter DN	ø80	ø100
Dz [mm]	80.1	100.2
Dk [mm]	81.1	101.2
H [mm]	220	290
Weight [kg]	0.85	1.15

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

11. TEE WITH REVISION TRR



TRR x - CZ 1,2P



Diameter DN	ø80	ø100
Dz [mm]	80.1	100.2
Dk [mm]	81.1	101.2
H [mm]	220	290
Weight [kg]	0.95	1.25

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

CHIMNEY COWLS

STEERING & POWER SUPPLY

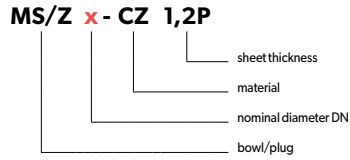
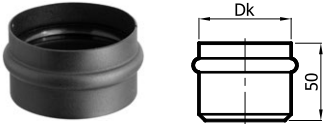
HOT AIR DISTRIBUTION SYSTEM

CHIMNEYS

VENTILATION

invent. build. enjoy.

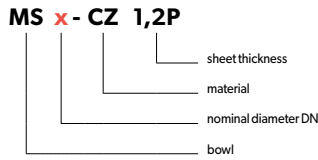
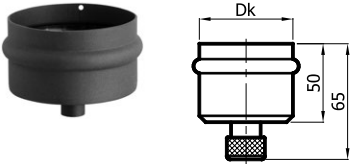
12. BOWL/PLUG MS



Diameter DN	ø80	ø100
Dk	81.1	101.2
Weight [kg]	0.25	0.35

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

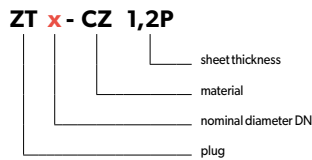
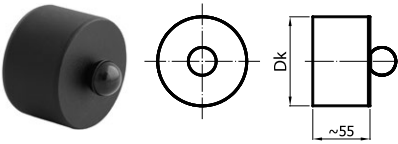
13. DRAIN BOWL MS



Diameter DN	ø80	ø100
Dk	81.1	101.2
Weight [kg]	0.40	0.50

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

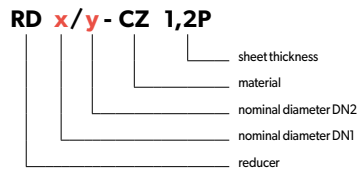
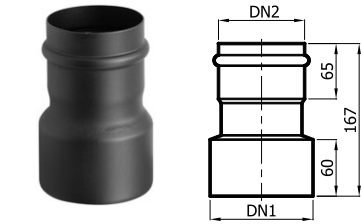
14. TEE PLUG ZT



Diameter DN	ø80	ø100
Dk	81.1	101.2
Weight [kg]	0.40	0.50

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

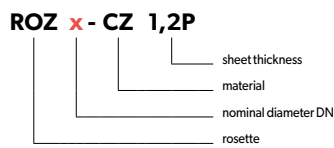
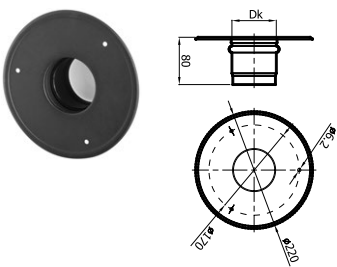
15. REDUCER RD



Diameter DN1/DN2	80/100	100/80
Weight [kg]	0.50	0.50

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

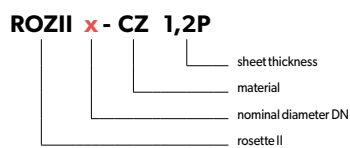
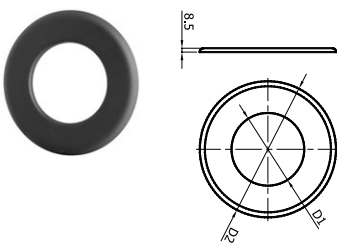
16. ROSETTE ROZ



Diameter DN	ø80	ø100
Dk [mm]	80.6	100.7
Weight [kg]	0.60	0.80

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

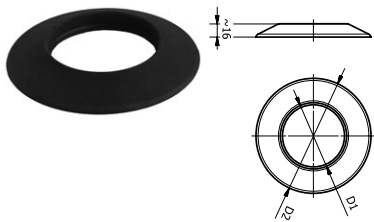
17. ROSETTE ROZII



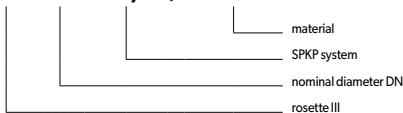
Diameter DN	ø80	ø100
D1 [mm]	80.8	100.8
D2 [mm]	150	170
Weight [kg]	0.12	0.14

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01

18. SILICONE ROSETTE ROZIII



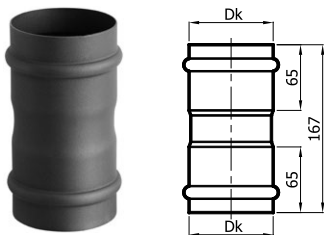
ROZIII x - CZ 1,2P / SILIKON



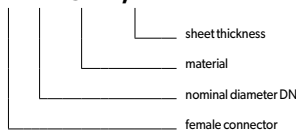
Diameter DN	ø80	ø100
D1 [mm]	79.5	99.5
D2 [mm]	138	158
Weight [kg]	0.05	0.08

Destination	D	D - smoke ducts
Material	S	S - silicone

19. FEMALE CONNECTOR ZZ



ZZ x - CZ 1,2P



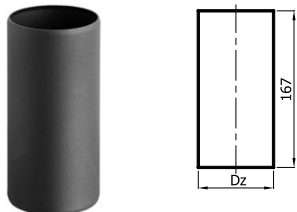
Diameter DN	ø80	ø100
Dk	81.1	101.2
Weight [kg]	0.45	0.55

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

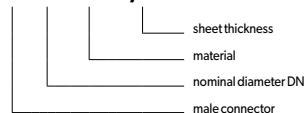
Caution!

Female connector allows to connect two spigot sided elements of the system for example due to a cut-to-size necessity.

20. MALE CONNECTOR ZM



ZM x - CZ 1,2P



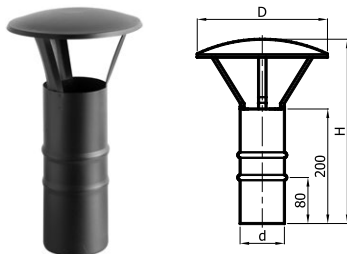
Diameter DN	ø80	ø100
Dz	80.1	100.2
Weight [kg]	0.45	0.55

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

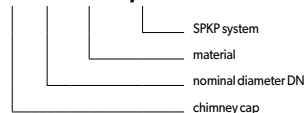
Caution!

Male connector allows to connect elements of the system with two bell-ended sides and divert the connection schema.

21. CAP DK



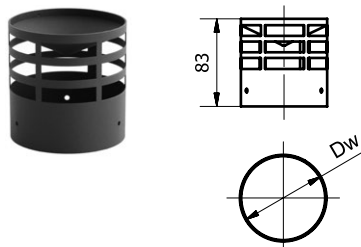
DK x - CZ 1,2P



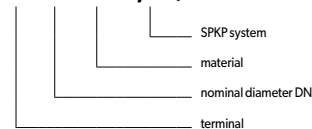
Diameter DN	ø80	ø100
d [mm]	77.2	96.9
D [mm]	160	220
H [mm]	285	220
Weight [kg]	0.31	1.44

Destination	D	D - smoke ducts
Material	X	X - stainless steel 1.4301 powder coated black colour
Sheet thickness	0.5	0.5 - sheet thickness 0.5 mm

22. TERMINAL WB



WB x - CZ 1,2P / TERMINAL



Diameter DN	ø80	ø100
Dw	82	102
Weight [kg]	0.15	0.20

Destination	D	D - smoke ducts
Material	X	X - stainless steel 1.4301 powder coated black colour
Sheet thickness	0.5	0.5 - sheet thickness 0.5 mm

CHIMNEY COWLS

STEERING & POWER SUPPLY

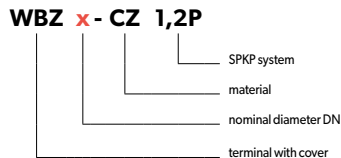
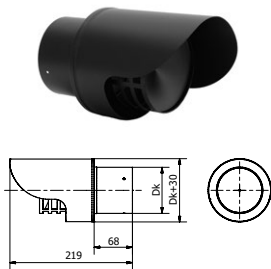
HOT AIR DISTRIBUTION SYSTEM

CHIMNEYS

VENTILATION

invent. build. enjoy.

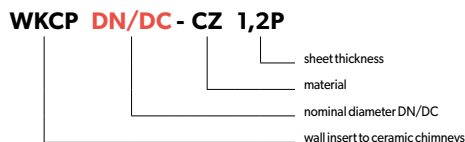
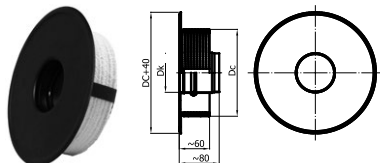
23. TERMINAL WITH COVER



Diameter DN	ø80	ø100
Dk	81	101
Weight [kg]	0.4	0.45

Destination	D	D - smoke ducts
Material	X	X - stainless steel 1.4301 powder coated black colour
Sheet thickness	0.5	0.5 - sheet thickness 0.5 mm

24. WALL INSERT TO CERAMIC CHIMNEYS WKCP

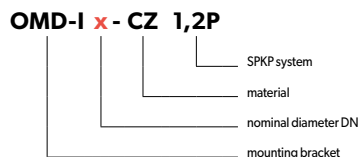
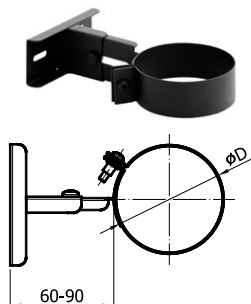


DC - chimney diameter
DN - chimney connection diameter

Diameter DN	ø80	ø100
Dk [mm]	81.1	101.2
Weight [kg]	0.71	0.77

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

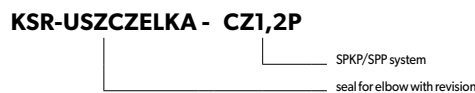
25. MOUNTING BRACKET OMD-I



Diameter DN	ø80	ø100
øD [mm]	80	100
Weight [kg]	0.16	0.17

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01

26. REVISION REPLACEMENT SEAL

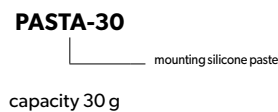


Caution! Sold in sets of 2 pcs.

27. SILICONE SEAL



28. MOUNTING SILICONE PASTE



Chimney connections for pellet stoves <SPP>

Chimney connections for pellet stoves are made of mild steel sheet type DC01, thickness 1.2 mm. Their application is smoke extraction from pellet stoves, where fumes temperature can rise to 250°C. Maximum working temperature: 250°C.

Bell joint pipe connection

Individual elements of the chimney system are being joint by the way of pushing one part of the element - a spigot, into the other press-formed part of the element - a bell. Thanks to this type of pipe joining, chimney connection is characterized by very tight and stiff construction. It also assures proper flow of condensate. In order to prevent fumes from leaking out, special silicone seals are used in the bell joint of the pipe. Usage of a special seal made of silicone, which is applied in the middle of the bell, secures tightness of the system by positive pressure of fumes up to 200Pa.

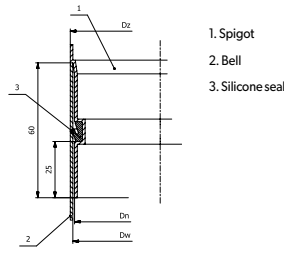


Fig. Method of joining chimney connection pipe elements



CHIMNEY COWLS

STEERING & POWER SUPPLY

Table of layouts and sizes

Diameter DN	Dz	Dw	Dn
80	80.1	77.7	76
100	100.2	97.8	96

Measurements

Dz - outer diameter of pipe [mm]

Dw - inner diameter of pipe [mm]

Dn - inner diameter of spigot [mm]

Destination

D - smoke ducts

Model of application of elements

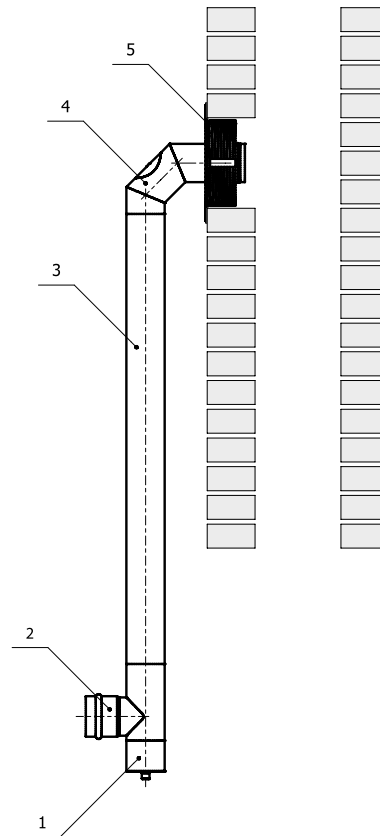


Fig. Example of chimney connection SPP system

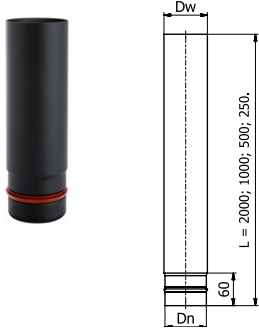
No	Name	Denotation
1	Drain bowl	MS80-CZ1,2SP
2	Tee 90°	TR80/90-CZ1,2SP
3	Straight pipe 1000 [mm]	RP80/100-CZ1,2SP
4	Solid elbow 90°	KS80/90-CZ1,2SP
5	Rosette	ROZ80-CZ1,2SP

HOT AIR DISTRIBUTION SYSTEM

CHIMNEYS

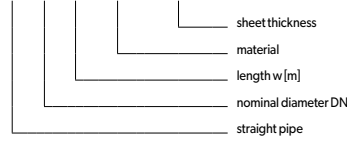
VENTILATION

1. STRAIGHT PIPE 2000, 1000, 500, 250 [mm] RP



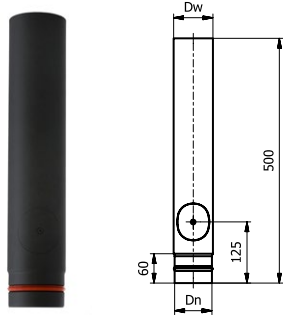
Length L	2000		1000		500		250	
Diameter DN	ø80	ø100	ø80	ø100	ø80	ø100	ø80	ø100
Dw	77.7	97.8	77.7	97.8	77.7	97.8	77.7	97.8
Dn	76.0	96.1	76.0	96.1	76.0	96.1	76.0	96.1
Weight [kg]	4.80	5.90	2.40	2.95	1.20	1.50	0.60	0.75

RP x/L - CZ 1,2SP



Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

2. STRAIGHT PIPE WITH REVISION RPR



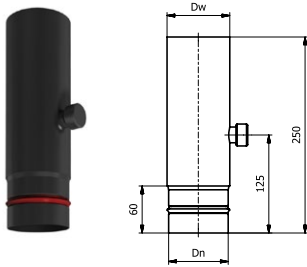
RPR x/0,50 - CZ 1,2SP



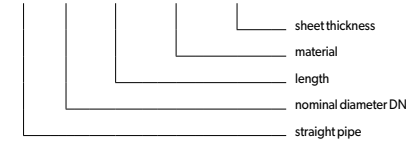
Diameter DN	ø80	ø100
Dw	77.7	97.8
Dn	76.0	96.1
Weight [kg]	1.30	1.60

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

3. STRAIGHT PIPE WITH MEASURING OUTLET ROP



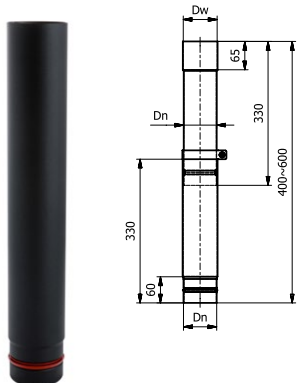
ROP x/0,25 - CZ 1,2SP



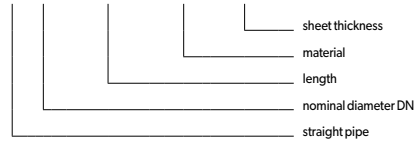
Diameter DN	ø80	ø100
Dw	77.7	97.8
Dn	76.0	96.1
Weight [kg]	0.70	0.85

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

4. TELESCOPIC PIPE RT



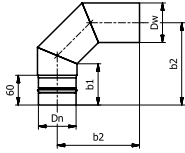
RT x/2x0,33 - CZ 1,2SP



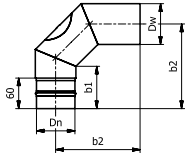
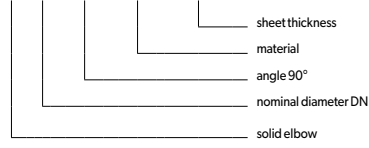
Diameter DN	ø80	ø100
Dw	77.7	97.8
Dn	76.0	96.1
Weight [kg]	1.70	2.10

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

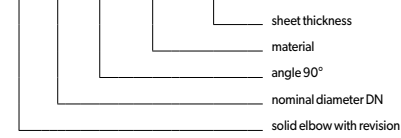
5. SOLID ELBOW 90° KS/90, WITH REVISION KSR/90



KS x/ 90 - CZ 1,2SP



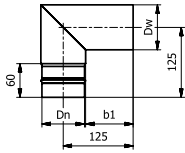
KSR x/ 90 - CZ 1,2SP



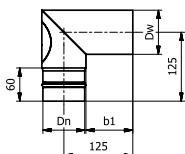
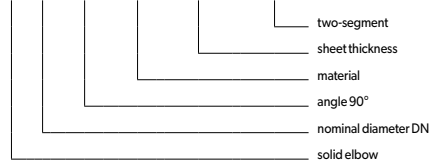
Diameter DN	ø80	ø100
Dw [mm]	77.7	97.8
Dn [mm]	76	96.1
b1 [mm]	83	79
b2 [mm]	167	165
Weight [kg]	KS	0.70
	KSR	0.80

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

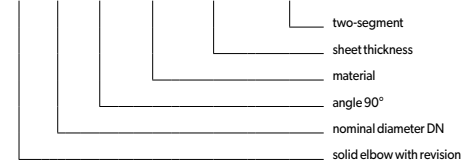
6. SOLID ELBOW 90° - 2 SEG. KS/90-2SEG, WITH REVISION/90-2SEG



KS x/ 90 - CZ 1,2SP -2SEG



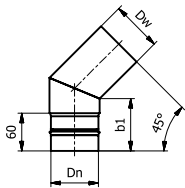
KSR x/ 90 - CZ 1,2SP -2SEG



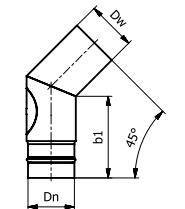
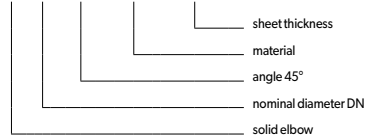
Diameter DN	ø80	ø100
Dw [mm]	77.7	97.8
Dn [mm]	76	96.1
b1 [mm]	85	75
Weight [kg]	KS	0.60
	KSR	0.70

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

7. SOLID ELBOW 45° KS/45, WITH REVISION KSR/45



KS x/45 - CZ 1,2SP



KSR x/45 - CZ 1,2SP



Diameter DN	ø80	ø100
Dw [mm]	77.7	97.8
Dn [mm]	76	96.1
b1 [mm]	KS	83
	KSR	133
Weight [kg]	KS	0.70
	KSR	0.90

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

CHIMNEY COWLS

STEERING & POWER SUPPLY

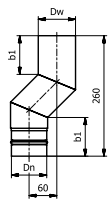
HOT AIR DISTRIBUTION SYSTEM

CHIMNEYS

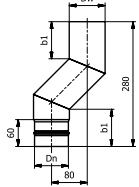
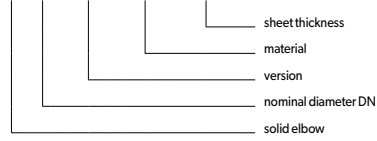
VENTILATION

invent. build. enjoy.

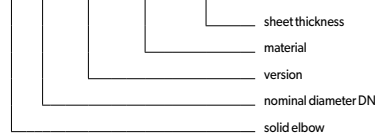
8. SOLID ELBOW S60, S80



KS x/S60 - CZ 1,2SP



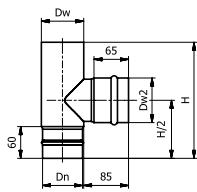
KS x/S80 - CZ 1,2SP



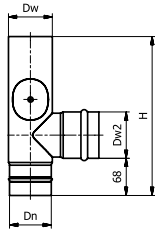
Diameter DN	ø80	ø100
Dw [mm]	77.7	97.8
Dn [mm]	76	96
b1 [mm]	83	79
Weight [kg]	KS	0.70
	KSR	0.75

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

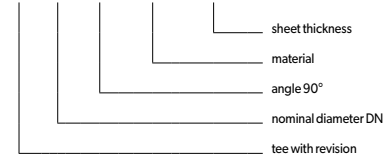
9. TEE 90° TR/90, WITH REVISION TRR/90



TR x/ 90 - CZ 1,2SP



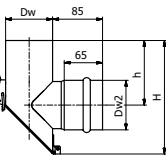
TRR x/ 90 - CZ 1,2SP



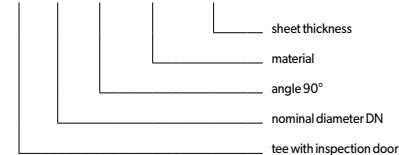
Diameter DN	ø80	ø100
Dw [mm]	77.7	97.8
Dn [mm]	76	96.1
Dw2	81	101
H [mm]	TR	220
	TRR	290
Weight [kg]	TR	0.85
	TRR	1.00

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

10. TEE WITH INSPECTION DOOR



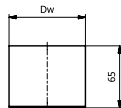
TRZ x/ 90 - CZ 1,2SP



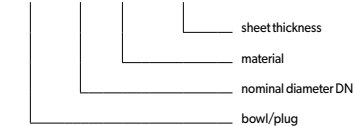
Diameter DN	ø80	ø100
Dw	77.7	97.8
Dw2	81	101
H	195	210
h	110	120
Weight [kg]	0.70	1.00

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

11. BOWL/PLUG MS/Z



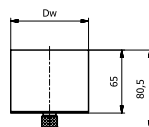
MS/Z x - CZ 1,2SP



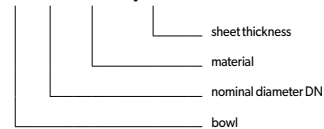
Diameter DN	ø80	ø100
Dw	77.7	97.8
Weight [kg]	0.25	0.35

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

12. CONDENSATE DRAIN BOWL MS



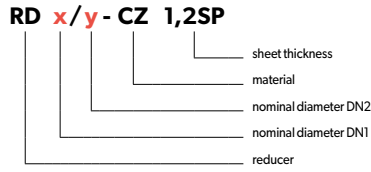
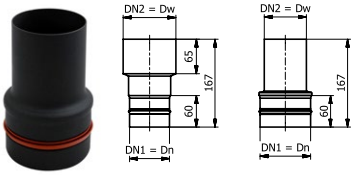
MS x - CZ 1,2SP



Diameter DN	ø80	ø100
Dw	77.7	97.8
Weight [kg]	0.40	0.50

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

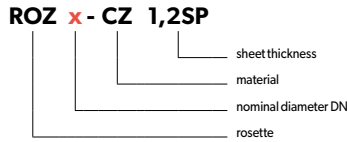
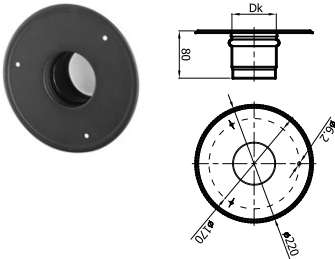
13. REDUCER RD



Diameter DN1/DN2	80/100	100/80
Weight [kg]	0.50	0.50

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

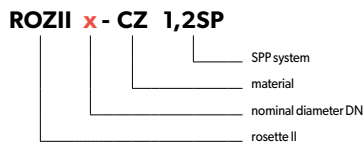
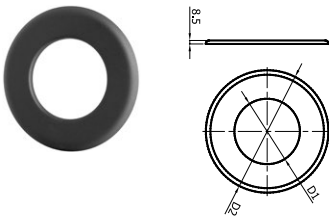
14. ROSETTE ROZ



Diameter DN	ø80	ø100
Dk [mm]	80.6	100.7
Weight [kg]	0.60	0.80

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

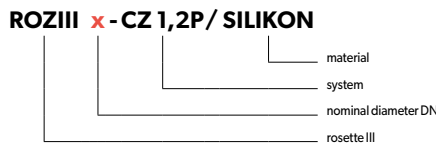
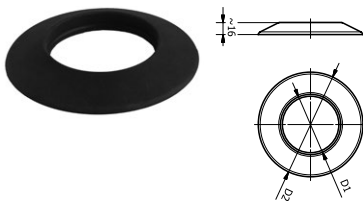
15. ROSETTE ROZII



Diameter DN	ø80	ø100
D1 [mm]	80.8	100.8
D2 [mm]	150	170
Weight [kg]	0.12	0.14

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01

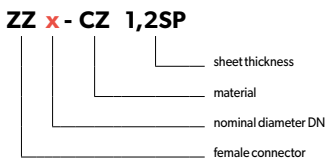
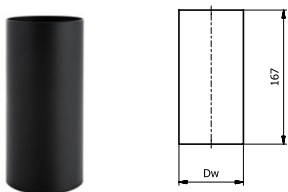
16. SILICONE ROSETTE ROZIII



Diameter DN	ø80	ø100
D1 [mm]	79.5	99.5
D2 [mm]	138	158
Weight [kg]	0.05	0.08

Destination	D	D - smoke ducts
Material	S	S - silicone

17. FEMALE CONNECTOR ZZ



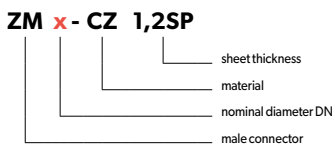
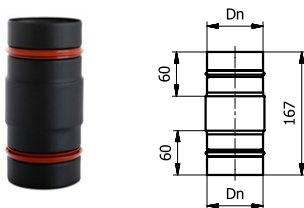
Caution!

Female connector allows to connect two spigot sided elements of the system and divert connection schema.

Diameter DN	ø80	ø100
Dw	77.7	97.8
Weight [kg]	0.45	0.55

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

18. MALE CONNECTOR ZM



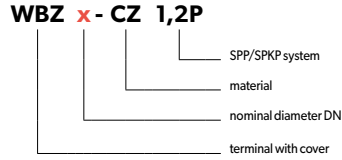
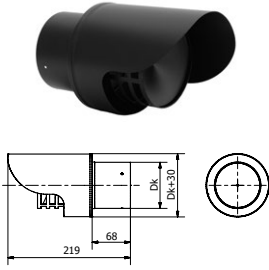
Caution!

Male connector allows to connect two parts of pipe when there is a cut-to-size necessity.

Diameter DN	ø80	ø100
Dn	76.0	96.1
Weight [kg]	0.45	0.55

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

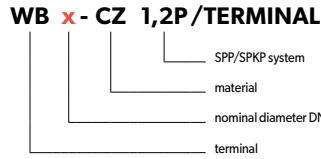
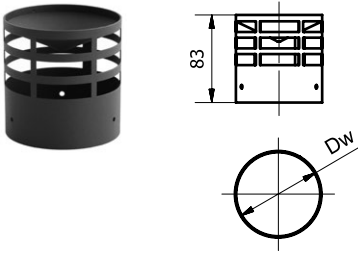
19. TERMINAL WITH COVER



Diameter DN	ø80	ø100
Dk	81	101
Weight [kg]	0.40	0.45

Destination	D	D - smoke ducts
Material	X	X - stainless steel 1.4301 powder coated black colour
Sheet thickness	0.5	0.5 - sheet thickness 0.5 mm

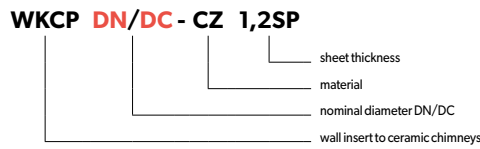
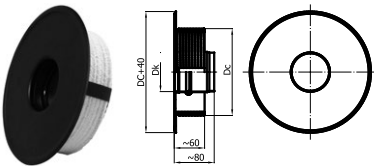
20. TERMINAL WB



Diameter DN	ø80	ø100
Dw	82	102
Weight [kg]	0.15	0.20

Destination	D	D - smoke ducts
Material	X	X - stainless steel 1.4301 powder coated black colour
Sheet thickness	0.5	0.5 - sheet thickness 0.5 mm

21. WALL INSERT TO CERAMIC CHIMNEYS WKCP

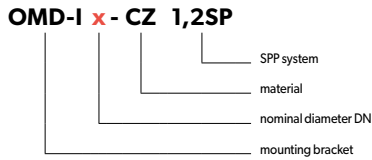
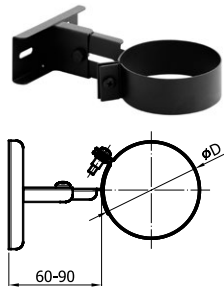


DC - chimney diameter
DN - chimney connection diameter

Diameter DN	ø80	ø100
Dk [mm]	81.1	101.2
Weight [kg]	0.71	0.77

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

22. MOUNTING BRACKET OMD-I



Diameter DN	ø80	ø100
øD [mm]	80	100
Weight [kg]	0.16	0.17

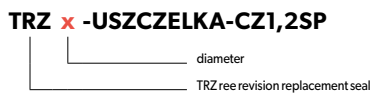
Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01

23. REVISION REPLACEMENT SEAL



Caution! Sold in sets of 2 pcs.

24. TRZ TEE REVISION REPLACEMENT SEAL



Caution! Sold in sets of 2 pcs.
Material: ceramic paper

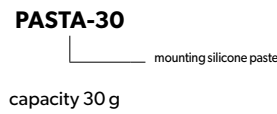
25. SILICONE SEAL



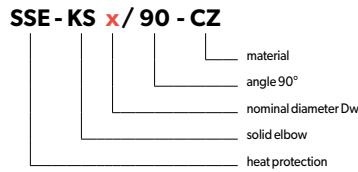
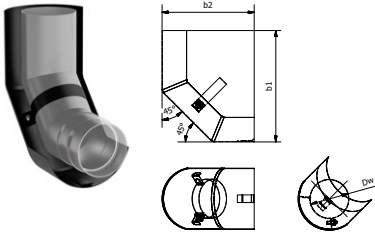
26. SILICONE SEAL



27. MOUNTING SILICONE PASTE



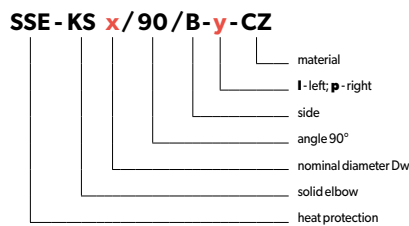
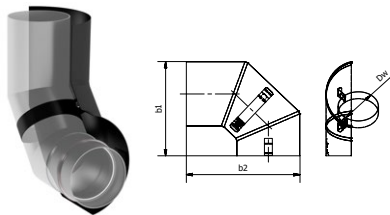
28. ELBOW HEAT PROTECTION SSE



Diameter Dw	ø80	ø100
b1	231.5	240
b2	191.5	200
Weight [kg]	0.45	0.50

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01

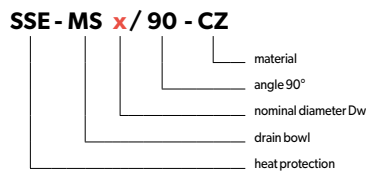
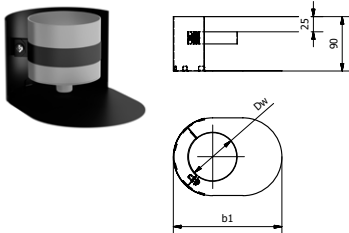
29. ELBOW HEAT PROTECTION SSE-B



Diameter Dw	ø80	ø100
b1	190	200
b2	230	240
Weight [kg]	0.35	0.40

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01

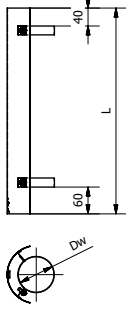
30. DRAIN BOWL HEAT PROTECTION SSE-MS



Diameter Dw	ø80	ø100
b1	180	200
Weight [kg]	0.30	0.35

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01

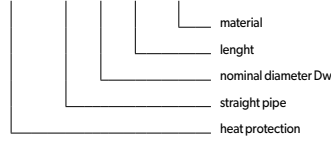
31. PIPE HEAT PROTECTION 1000, 500, 250 [mm]



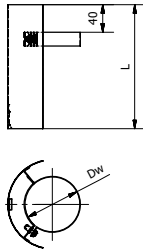
Pipe length	1000		500		250	
Diameter Dw	ø80	ø100	ø80	ø100	ø80	ø100
Length	960		460		210	
Weight [kg]	1.15	1.35	0.60	0.70	0.30	0.35

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01

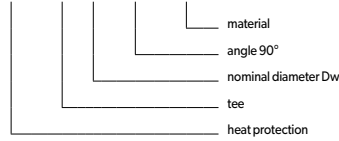
SSE - RP x/ y - CZ



32. TEE 90° TR/90, TEE 90° WITH REVISION TRR/90 HEAT PROTECTION



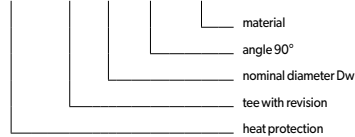
SSE - TR x/ 90 - CZ



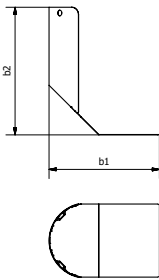
Diameter Dw	ø80	ø100
Length L [mm]	TR 180	TRR 210
Weight [kg]	TR 0.25	TRR 0.30
	TRR 0.30	TRR 0.40

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01

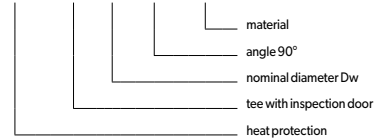
SSE - TRR x/ 90 - CZ



33. TEE WITH INSPECTION DOOR



SSE - TRZ x/ 90 - CZ



Diameter Dw	ø80	ø100
b1	191	210
b2	220	235
Weight [kg]	0.30	0.40

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01

Air-Flue chimney system for gas fireplaces <SGSP>

Air-Flue chimney system for gas fireplaces <SGSP> is a concentric double walled chimney system made of stainless steel: inner pipe - 1.4404, outer pipe - 1.4301. The system is used to exhaust fumes from modern gas fireplaces with closed combustion chamber. Air needed for burning process is taken from outside (through special air intakes) and then flows in the gap between the inner and outer chimney pipes. Smoke gases from the burning process are taken out from the building using the inner pipe (natural convection). System secures ceramic surfaces of chimney duct from damages that can be caused by destructive influence chemical substances which are part of flue gases. Max working temperature: 600°C

Certificate of Factory Production Control 1450-CPR-0007 issued by INiG Cracow. Marked with CE sign.



CHIMNEY COWLS

STEERING & POWER SUPPLY

HOT AIR DISTRIBUTION SYSTEM

CHIMNEYS

VENTILATION

Application of chimney liners and recommended sheet thicknesses

Diameter DN	S 1.4404	s*) 1.4301
100	0.5	-
130	0.5	-
150	-	0.5
200	-	0.5

Table of layouts and sizes

Diameter DN	Lr	Dz	Dw	Dk	s
100	315	100.8	99.8	101.8	0.5
130	415	132.6	131.6	133.6	0.5
150	475	151.8	150.8	152.8	0.5
200	630	201.1	199.9	202.1	0.5

Measurements

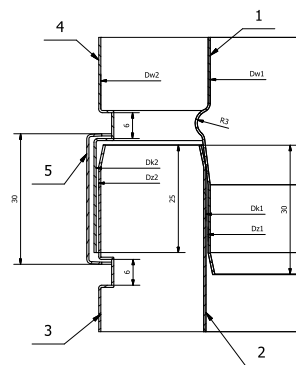
- Lr - metal sheet layout [mm]±0.1
- Dz - outer diameter of pipe [mm]±0.1
- Dw - inner diameter of pipe [mm]±0.1
- Dk - inner diameter of bell [mm]±0.1
- s - metal sheet thickness [mm]

Destination

- S - flue ducts (gas, oil)
- *) - air ducts

Bell joint of the pipe

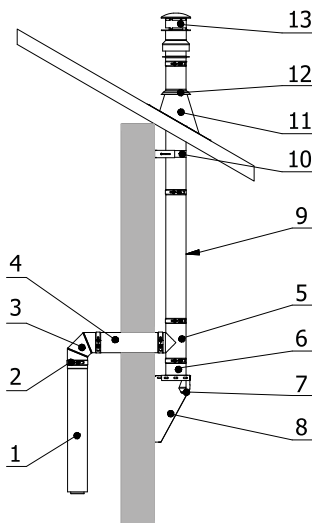
Individual elements of the chimney system are being joint by the way of pushing one part of the element- a spigot, into the other press-formed part- a bell. Thanks to this pipe joining, chimney liner is characterized by very tight and stiff construction. It also allows for proper flow of condensate, along the walls of chimney. The outer layer is to be connected in direction "bell down", what secures the duct from rainwater. Special mounting clamps are used to secure connection.



1. Spigot - inner pipe
2. Bell - inner pipe
3. Spigot - outer pipe
4. Bell - outer pipe
5. Mounting clamp

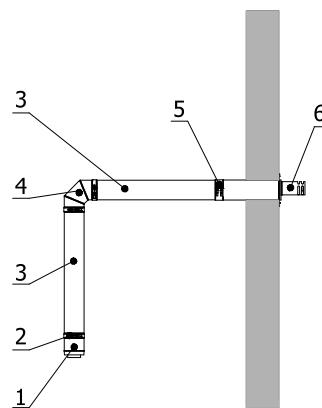
Fig. Method of joining double-walled pipe elements

Model application of elements: SGSP



No	Name	Denotation
1	Adaptor 3 100/150	ADD.../.../1,0-SGSP
2	Clamp 1 fi 150	OPI...-SGSP
3	Solid elbow 100/150-90	KSD.../.../90-SGSP
4	Pipe 100/150-0.5 m	RPD.../.../500-SGSP
5	Tee 100/150	TRD.../.../90-SGSP
6	Intermediate support	PPD.../...-SGSP
7	Tee plug	ZTD.../...-SGSP
8	Supporting console	KWD.../...5-15-SGSP
9	Pipe 100/150-1 m	RPD.../.../1000-SGSP
10	Mounting bracket OMD	OMD-II...X/5-15
11	Angular roof flashing	PDK.../20-X
12	Rain collar	KPD...-X
13	Vertical terminal	WGD.../...PION-SGSP

Fig. Example of a flue chimney construction - vertical fume exhaust



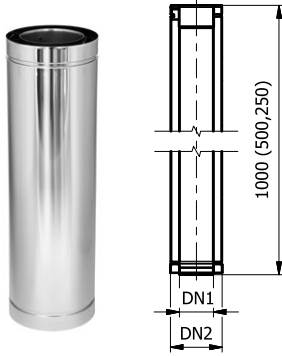
No	Name	Denotation
1	Adaptor 1 100/150	ADD.../...-SGSP-1
2	Clamp 1 fi 150	OPI...-SGSP
3	Pipe 100/150-1 m	RPD.../...1000-SGSP
4	Solid elbow 100/150-90	KSD.../.../90-SGSP
5	Clamp 2	OPI...-SGSP
6	Horizontal terminal 100/150	WB.../...Horizontal-II-SGSP

Fig. Example of a flue chimney construction - horizontal fume exhaust (through the wall) Air-Flue chimney system for gas fireplaces <SGSP>



Offset calculator available at darco.pl

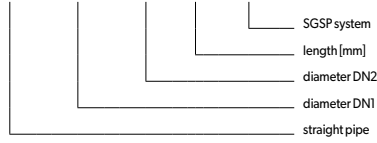
1. STRAIGHT PIPE 1000, 500, 250 [mm] RPD



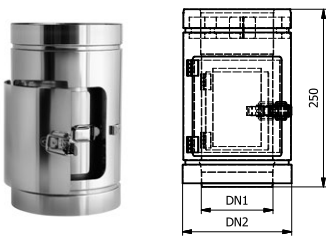
Diameter DN1	100	100	100	130	130	130
Diameter DN2	150	150	150	200	200	200
L [mm]	1000	500	250	1000	500	250
Weight [kg]	3.20	1.60	0.80	4.20	2.10	1.00

Destination	S	S - flue ducts
Material	CH	CH - stainless steel 1.4404/ 1.4301
Sheet thickness	5	5 - sheet thickness 0.5 mm

RPD DN1 / DN2 / L - SGSP



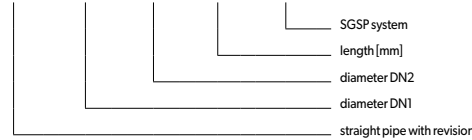
2. STRAIGHT PIPE WITH REVISION 250 [mm] RPDr



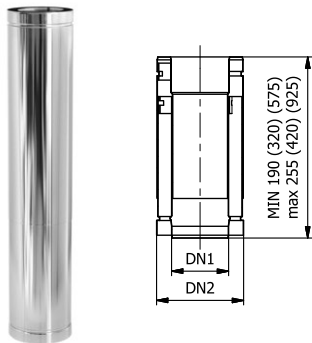
Diameter DN1	100	130
Diameter DN2	150	200
L [mm]	250	250
Weight [kg]	0.80	1.00

Destination	S	S - flue ducts
Material	CH	CH - stainless steel 1.4404/ 1.4301
Sheet thickness	5	5 - sheet thickness 0.5 mm

RPDr DN1 / DN2 / 250 - SGSP



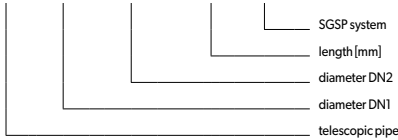
3. TELESCOPIC PIPE RTD



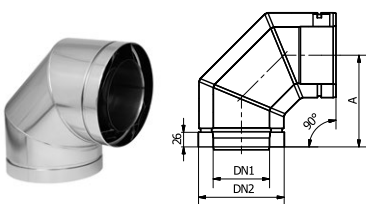
Diameter DN1	100	100	100	130	130	130
Diameter DN2	150	150	150	200	200	200
L [mm]	500	250	150	500	250	150
Weight [kg]	3.20	1.70	1.00	4.20	2.20	1.40

Destination	S	S - flue ducts
Material	CH	CH - stainless steel 1.4404/ 1.4301
Sheet thickness	5	5 - sheet thickness 0.5 mm

RTD DN1 / DN2 / 2xL - SGSP



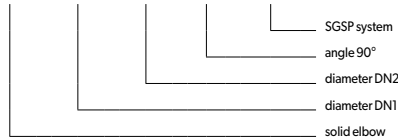
4. SOLID ELBOW 90° KSD 90



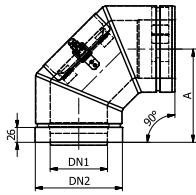
Diameter DN1	100	130
Diameter DN2	150	200
A [mm]	165	175
Weight [kg]	1.10	1.50

Destination	S	S - flue ducts
Material	CH	CH - stainless steel 1.4404/ 1.4301
Sheet thickness	5	5 - sheet thickness 0.5 mm

KSD DN1 / DN2 / 90 - SGSP

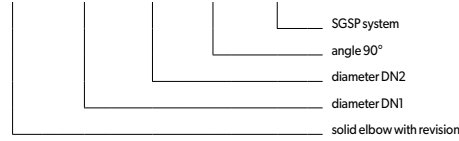


5. SOLID ELBOW 90° WITH REVISION KSDr 90



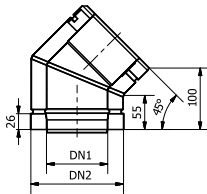
Diameter DN1	100	130
Diameter DN2	150	200
A [mm]	170	180
Weight [kg]	1.10	1.50

KSDr DN1 / DN2 / 90 - SGSP



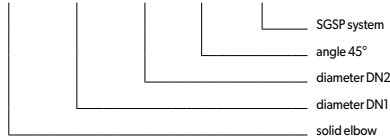
Destination	S	S - flue ducts
Material	CH	CH - stainless steel 1.4404/ 1.4301
Sheet thickness	5	5 - sheet thickness 0.5 mm

6. SOLID ELBOW 45° KSD 45



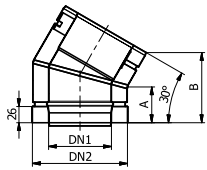
Diameter DN1	100	130
Diameter DN2	150	200
Weight [kg]	0.70	1.00

KSD DN1 / DN2 / 45 - SGSP



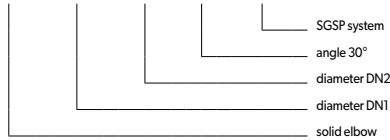
Destination	S	S - flue ducts
Material	CH	CH - stainless steel 1.4404/ 1.4301
Sheet thickness	5	5 - sheet thickness 0.5 mm

7. SOLID ELBOW 30° KSD 30



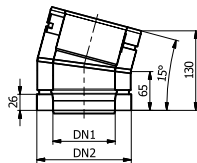
Diameter DN1	100	130
Diameter DN2	150	200
A [mm]	58	62
B [mm]	110	120
Weight [kg]	0.65	0.90

KSD DN1 / DN2 / 30 - SGSP



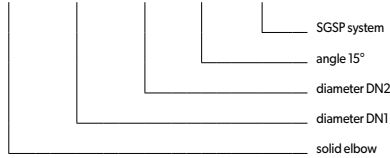
Destination	S	S - flue ducts
Material	CH	CH - stainless steel 1.4404/ 1.4301
Sheet thickness	5	5 - sheet thickness 0.5 mm

8. SOLID ELBOW 15° KSD 15



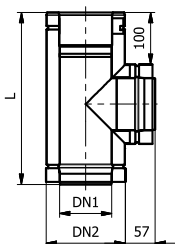
Diameter DN1	100	130
Diameter DN2	150	200
Weight [kg]	0.60	0.80

KSD DN1 / DN2 / 15 - SGSP



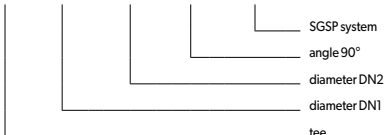
Destination	S	S - flue ducts
Material	CH	CH - stainless steel 1.4404/ 1.4301
Sheet thickness	5	5 - sheet thickness 0.5 mm

9. TEE 90° TRD 90



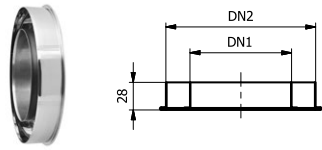
Diameter DN1	100	130
Diameter DN2	150	200
L [mm]	332	332
Weight [kg]	1.20	1.70

TRD DN1 / DN2 / 90 - SGSP



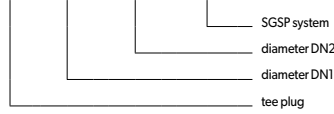
Destination	S	S - flue ducts
Material	CH	CH - stainless steel 1.4404/ 1.4301
Sheet thickness	5	5 - sheet thickness 0.5 mm

10. TEE PLUG ZTD



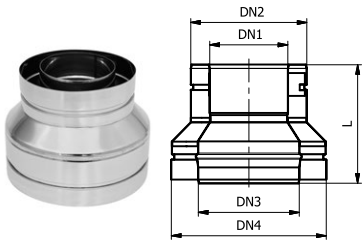
Diameter DN1	100	130
Diameter DN2	150	200
Weight [kg]	0.30	0.50

ZTD DN1 / DN2 - SGSP



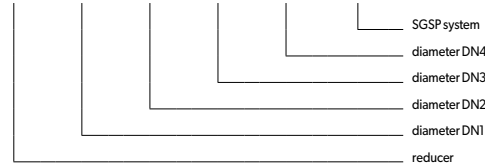
Destination	S	S- flue ducts
Material	CH	CH - stainless steel 1.4404
Sheet thickness	5	5- sheet thickness 0.5 mm

11. REDUCER RDD



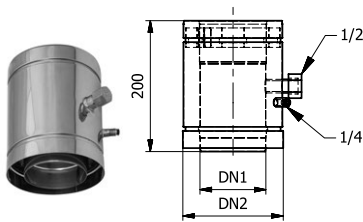
Diameter DN1	100	100
Diameter DN2	150	150
Diameter DN3	130	130
Diameter DN4	200	200
L [mm]	155	155
Weight [kg]	0.70	0.75

RDD DN1 / DN2 / DN3 / DN4 - SGSP



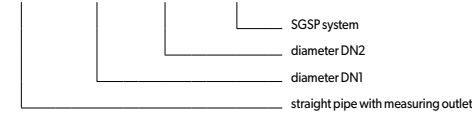
Destination	S	S- flue ducts
Material	CH	CH - stainless steel 1.4404/ 1.4301
Sheet thickness	5	5- sheet thickness 0.5 mm

12. STRAIGHT PIPE WITH MEASURING OUTLET ROPD



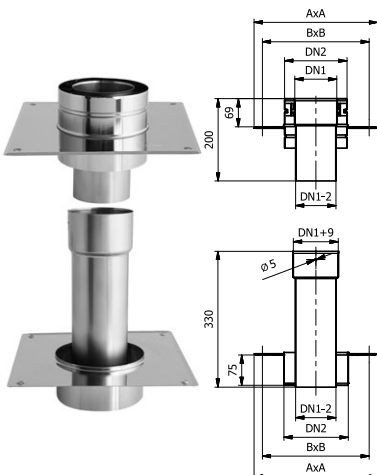
Diameter DN1	100	130
Diameter DN2	150	200
Weight [kg]	0.85	1.10

ROPD DN1 / DN2 - SGSP



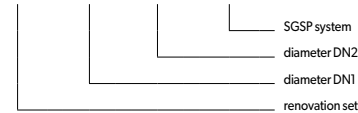
Destination	S	S- flue ducts
Material	CH	CH - stainless steel 1.4404/ 1.4301
Sheet thickness	5	5- sheet thickness 0.5 mm

13. RENOVATION SET PPDR



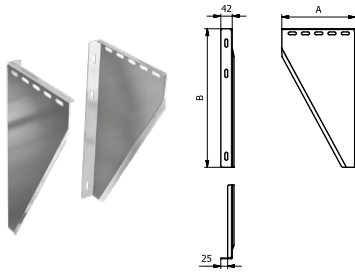
Diameter DN1	100	130
Diameter DN2	150	200
AxA	300	300
BxB	260	260
Weight [kg]	1.75	2.05

PPDR DN1 / DN2 - SGSP



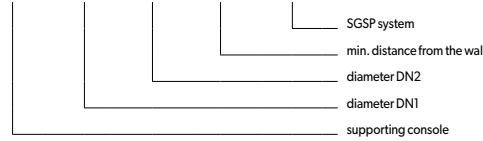
Destination	S	S- flue ducts
Material	CH	CH - stainless steel 1.4404/ 1.4301
Sheet thickness	5	5- sheet thickness 0.5 mm

14. SUPPORTING CONSOLE KWD



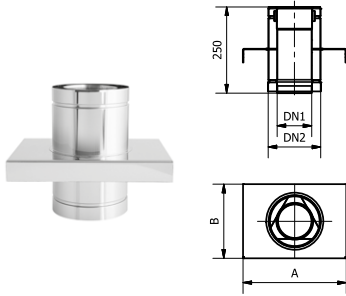
Diameter DN1/DN2	100/150	130/200
A	267	267
B	502	502
Weight [kg]	3.50	3.50

KWD DN1 / DN2 / 5-15 - SGSP



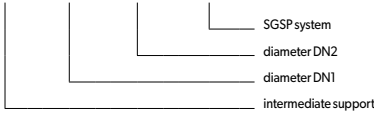
Destination	S	S - flue ducts
Material	X	X - stainless steel 1.4301
Sheet thickness	2	2 - sheet thickness 2 mm

15. INTERMEDIATE SUPPORT PPD



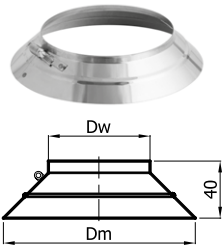
Diameter DN1/DN2	100/150	130/200
A	300	300
B	215	255
Weight [kg]	2.00	2.30

PPD DN1 / DN2 - SGSP



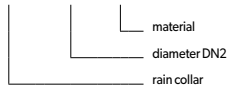
Destination	S	S - flue ducts
Material	CH	CH - stainless steel 1.4404/1.4301
Sheet thickness	5	5 - sheet thickness 0.5 mm

16. RAIN COLLAR KPD



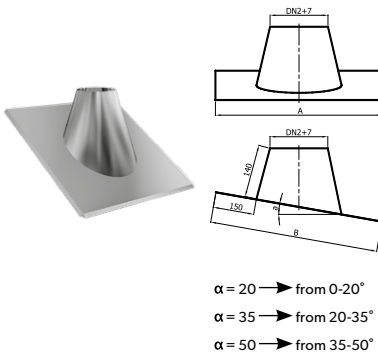
Diameter DN2	ø150	ø200
Dw [mm]	150.7	200.0
Dm [mm]	223	272
Weight [kg]	0.21	0.25

KPD DN2 - X



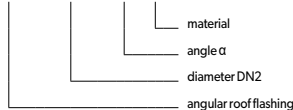
Destination	S	S - flue ducts
Material	X	X - stainless steel 1.4301
Sheet thickness	6	6 - sheet thickness 0.6 mm

17. ANGULAR ROOF FLASHING PDK



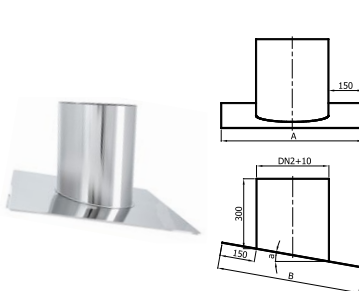
Diameter DN2	150	200
α 20	A	560
	B	600
α 35	A	605
	B	685
α 50	A	640
	B	800

PDK DN2 / α - X



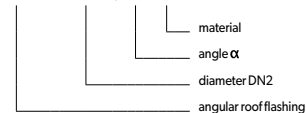
Destination	W	W - ventilation ducts
	S	S - flue ducts
Material	X	X - stainless steel 1.4301
Sheet thickness	6	6 - sheet thickness 0.6 mm

18. ANGULAR ROOF FLASHING PDK II



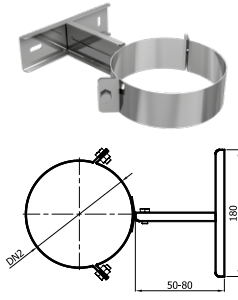
Diameter DN2	150	200
α 20	A	470
	B	485
α 35	A	470
	B	515
α 50	A	470
	B	555

PDK II DN2 / α - X



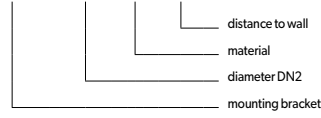
Destination	W	W - ventilation ducts
	S	S - flue ducts
Material	X	X - stainless steel 1.4301
Sheet thickness	6	6 - sheet thickness 0.6 mm

19. MOUNTING BRACKET OMD-I



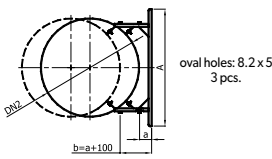
Diameter DN2	150	200
Weight [kg]	0.75	0.85

OMD-I DN2 -X/ 5-8



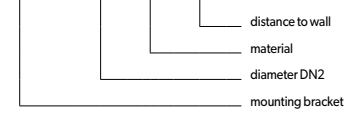
Destination	W	W - ventilation ducts
	S	S - flue ducts
Material	X	X - stainless steel 1.4301

20. MOUNTING BRACKET OMD-II



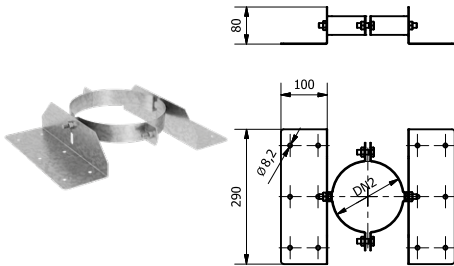
Diameter DN2	150	200
A	345	380
a	50	50
b	b = a + 100	b = a + 100
Weight [kg]	1.05	1.1

OMD-II DN2 -X/ 5-15



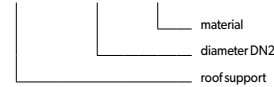
Destination	W	W - ventilation ducts
	S	S - flue ducts
Material	X	X - stainless steel 1.4301

21. ROOF SUPPORT OMD-III



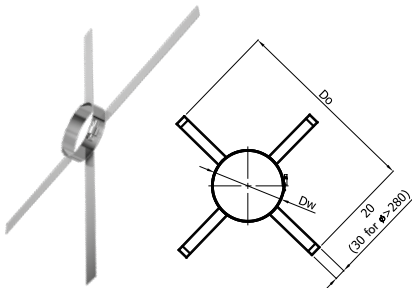
Diameter DN2	150	200
Weight [kg]	1.60	1.65

OMD-III DN2 -OC



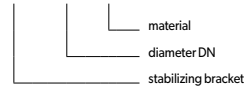
Destination	W	W - ventilation ducts
	S	S - flue ducts
Material	OC	OC - galvanised steel sheet

22. STABILIZING BRACKET OU



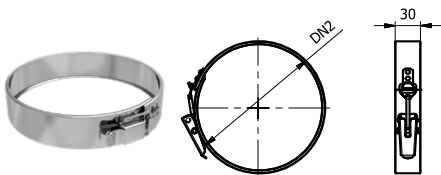
Diameter DN	ø100	ø130
Do [mm]	500	530
Dw [mm]	100.9	132.8
Weight [kg]	0.10	0.10

OU DN -X



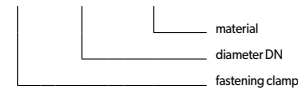
Destination	S	S - flue ducts
Material	X	X - stainless steel 1.4301
Sheet thickness	6	6 - sheet thickness 0.6 mm

23. FASTENING CLAMP 30 MM OPI



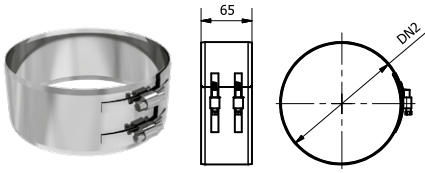
Diameter DN2	ø150	ø200
Weight [kg]	0.10	0.15

OPI DN2 -SGSP



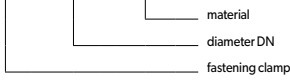
Destination	S	S - flue ducts
Material	X	X - stainless steel 1.4301
Sheet thickness	5	5 - sheet thickness 0.5 mm

24. FASTENING CLAMP 65 MM OPII



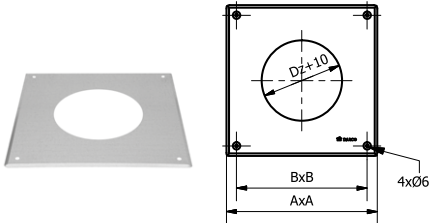
Diameter DN2	ø150	ø200
Weight [kg]	0.18	0.20

OPII DN2 - SGSP



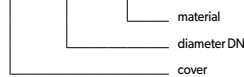
Destination	S	S - flue ducts
Material	X	X - stainless steel 1.4301
Sheet thickness	5	5 - sheet thickness 0.5 mm

25. COVER PL



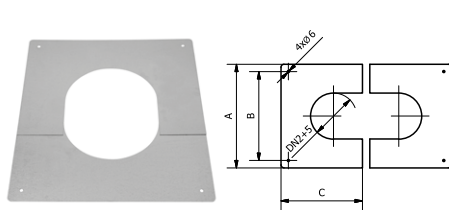
Diameter DN	150	200
AxA	300	350
BxB	260	310
Weight [kg]	0.30	0.35

PL DN2 - OC



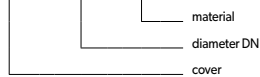
Destination	S	S - flue ducts
Material	OC	OC - galvanised steel sheet

26. COVER PL/O



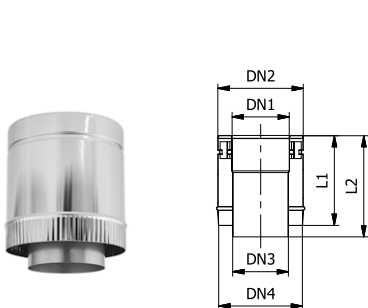
Diameter DN	150	200
AxA	350	400
BxB	300	350
C	275	300
Weight [kg]	1.15	1.35

PL/O DN2 - OC



Destination	S	S - flue ducts
Material	OC	OC - galvanised steel sheet

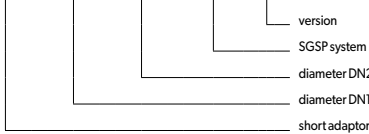
27. ADAPTOR (SHORT) ADD



Diameter DN1	100	130
Diameter DN2	150	200
Diameter DN3	Dz*	Dz*
Diameter DN4	Dz*	Dz*
L1 [mm]	160	160
L2 [mm]	180	180
Weight [kg]	0.60	0.80

* Dimensions are made upon individual order

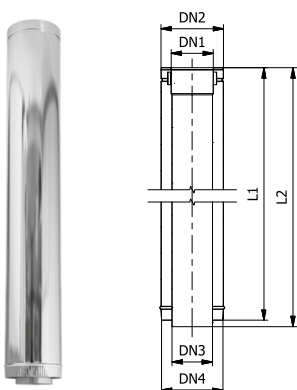
ADD DN1 / DN2 - SGSP - x



Destination	S	S - flue ducts
Material	CH	CH - stainless steel 1.4404/ 1.4301
Sheet thickness	5	5 - sheet thickness 0.5 mm

When ordering the adaptor fireplace type or exact measurement should be given.

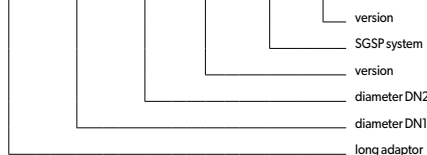
28. ADAPTOR (LONG) ADD 1,0



Diameter DN1	100	130
Diameter DN2	150	200
Diameter DN3	Dz*	Dz*
Diameter DN4	Dz*	Dz*
L1 [mm]	985	985
L2 [mm]	1000	1000
Weight [kg]	4.20	4.20

* Dimensions are made upon individual order

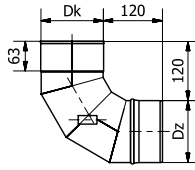
ADD DN1 / DN2 / 1,0 - SGSP - x



Destination	S	S - flue ducts
Material	CH	CH - stainless steel 1.4404/ 1.4301
Sheet thickness	5	5 - sheet thickness 0.5 mm

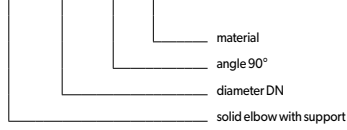
When ordering the adaptor fireplace type or exact measurement should be given.

29. SOLID ELBOW WITH SUPPORT KSW 90



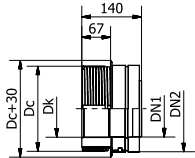
Diameter DN1	100	130
Diameter Dz	100.9	132.8
Diameter Dk	101.9	133.8
Weight [kg]	0.50	0.70

KSW DN/90 - x - II



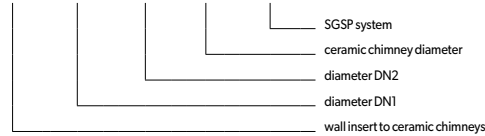
Destination	S	S - flue ducts
Material	CH	CH - stainless steel 1.4404
Sheet thickness	6	6 - sheet thickness 0.6 mm

30. WALL INSERT TO CERAMIC CHIMNEYS WKC



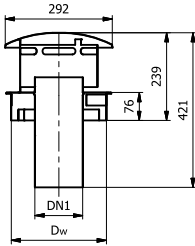
Diameter DN1	100	130
Diameter DN2	150	200
Diameter Dc	200	200
Diameter Dk	101.9	133.7
Weight [kg]	1.10	1.20

WKC DN1 / DN2 / DC - SGSP



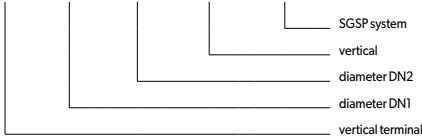
Destination	S	S - flue ducts
Material	CH	CH - stainless steel 1.4404/ 1.4301
Sheet thickness	5	5 - sheet thickness 0.5 mm

31. VERTICAL TERMINAL WG



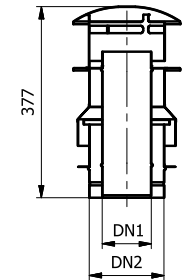
Diameter DN1	100	130
Diameter Dw	209	259
Weight [kg]	1.45	1.75

WG DN1 / DN2 PION - SGSP



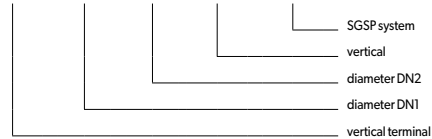
Destination	S	S - flue ducts
Material	CH	CH - stainless steel 1.4404/ 1.4301
Sheet thickness	5	5 - sheet thickness 0.5 mm

32. VERTICAL TERMINAL WGD



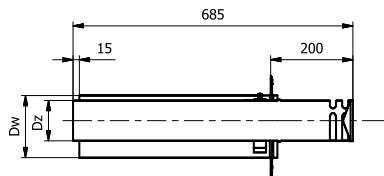
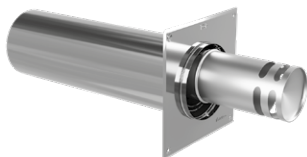
Diameter DN1	100	130
Diameter DN2	150	200
Weight [kg]	1.65	1.95

WGD DN1 / DN2 PION - SGSP



Destination	S	S - flue ducts
Material	CH	CH - stainless steel 1.4404/ 1.4301
Sheet thickness	5	5 - sheet thickness 0.5 mm

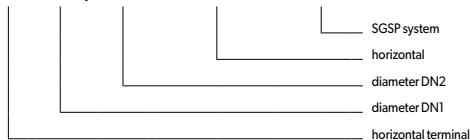
33. HORIZONTAL TERMINAL WB II



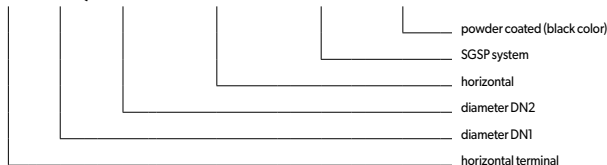
Diameter DN1/DN2	100/150	130/200
Diameter Dw	152	201.5
Diameter Dz	98.8	130.6
Weight [kg]	2.10	2.90

Destination	S	S- flue ducts
Material	CH	CH - stainless steel 1.4404/ 1.4301
Sheet thickness	5	5- sheet thickness 0.5 mm

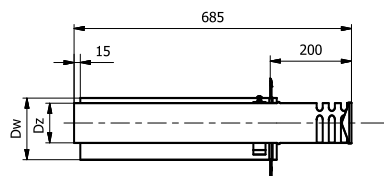
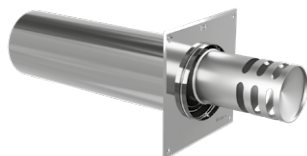
WB DN1/DN2 POZIOM-II - SGSP



WB DN1/DN2 POZIOM-II - SGSP - ML.CZ



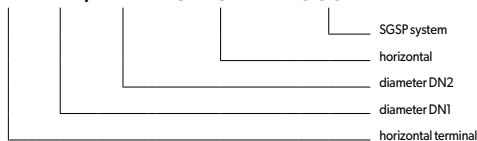
34. HORIZONTAL TERMINAL WB III



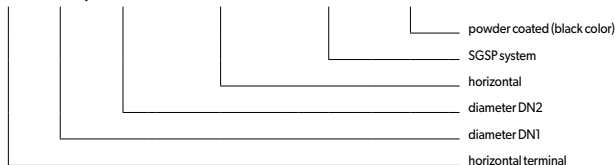
Diameter DN1/DN2	100/150	130/200
Diameter Dw	152	201.5
Diameter Dz	98.8	130.6
Weight [kg]	2.10	2.85

Destination	S	S- flue ducts
Material	CH	CH - stainless steel 1.4404/ 1.4301
Sheet thickness	5	5- sheet thickness 0.5 mm

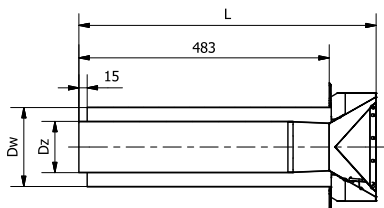
WB DN1/DN2 POZIOM-III - SGSP



WB DN1/DN2 POZIOM-III - SGSP - ML.CZ



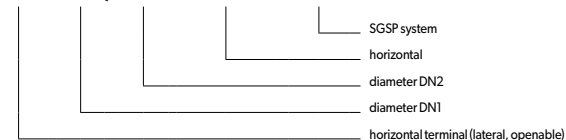
35. HORIZONTAL TERMINAL (LATERAL, OPENABLE)



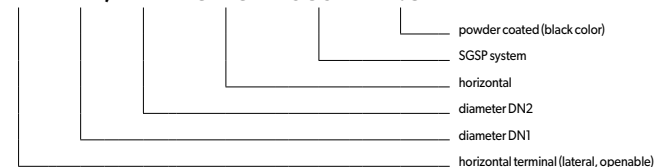
Diameter DN1/DN2	100/150	130/200
Diameter Dw	152	201.5
Diameter Dz	98.8	130.6
L	573	577
Weight [kg]	2.63	3.60

Destination	S	S- flue ducts
Material	CH	CH - stainless steel 1.4404/ 1.4301
Sheet thickness	5	5- sheet thickness 0.5 mm

WBK DN1/DN2 POZIOM - SGSP



WBK DN1/DN2 POZIOM - SGSP - ML.CZ



CHIMNEY COWLS

STEERING & POWER SUPPLY

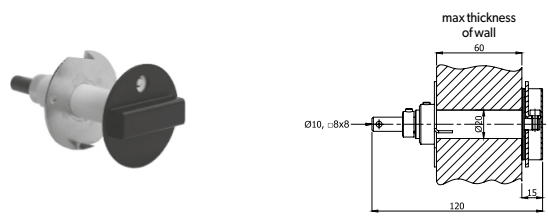
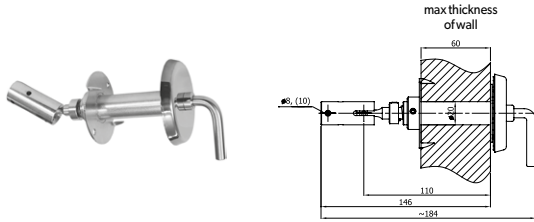
HOT AIR DISTRIBUTION SYSTEM

CHIMNEYS

VENTILATION

invent. build. enjoy.

1. CHIMNEY DAMPER KNOB SZKZ-REG, SZKZ-REG-LIGHT



SZKZ - REG

knob
chimney damper

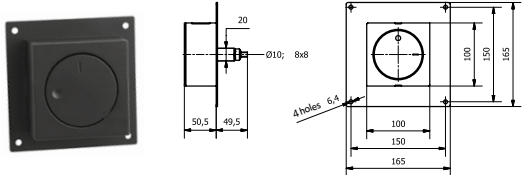
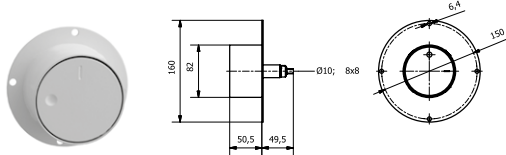
SZKZ - REG-LIGHT - ...

colour
knob
chimney damper

Destination	S	-	S - flue ducts
	-	D	D - smoke ducts
Material	CH	CH	CH - stainless steel 1.4301
	ML	ML	ML - stainless steel 1.4301 powder coated

Destination	S	-	S - flue ducts
	-	D	D - smoke ducts
Material	CZ	CZ	CZ - steel sheet (black)
	B	B	B - white
Colour	B	B	B - white
	CZ	CZ	CZ - black

2. ROUND AND RECTANGULAR UNDER SURFACE CHIMNEY DAMPER KNOBS



SZKZ - REG-OK - ML ...

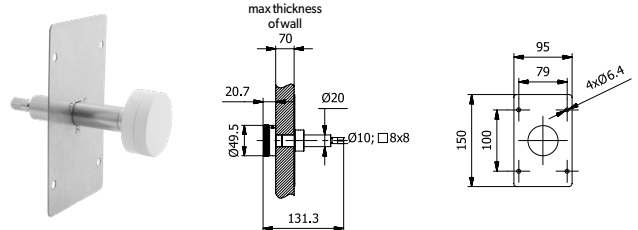
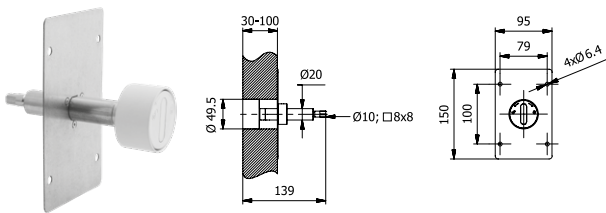
colour
powder coated
round knob
chimney damper

SZKZ - REG-KW - ML ...

colour
powder coated
rectangular knob
chimney damper

Destination	S	-	S - flue ducts
	-	D	D - smoke ducts
Material	CZ	CZ	CZ - steel sheet (black)
	B	B	B - white
Colour	B	B	B - white
	CZ	CZ	CZ - black

3. CHIMNEY DAMPER ... OS (ON SURFACE AND UNDER SURFACE VERSION)



SZKZ - REG-OS/P - ML - ...

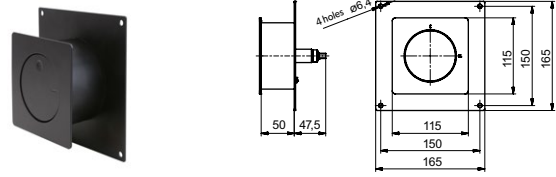
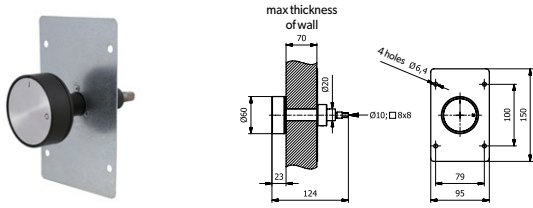
colour
material
under surface version
knob
chimney damper

SZKZ - REG-OS/N - ML - ...

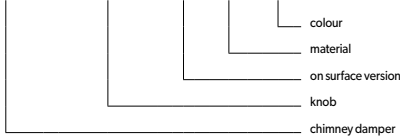
colour
material
on surface version
knob
chimney damper

Destination	S	-	S - flue ducts
	-	D	D - smoke ducts
Material	ML	ML	ML - aluminium powder coated
	B	B	B - white
Colour	B	B	B - white
	CZ	CZ	CZ - black

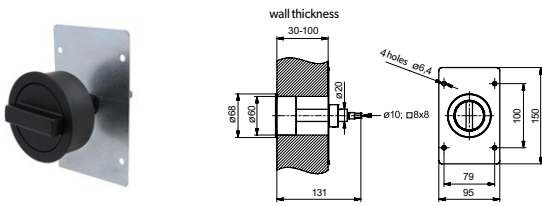
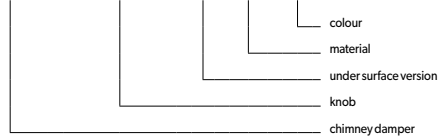
4. CHIMNEY DAMPER KNOB



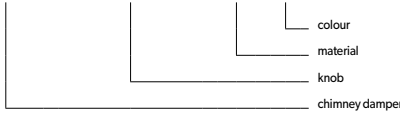
SZKZV - REG1-OS / N - ML - ...



SZKZV - REG2-KW / P - ML - ...

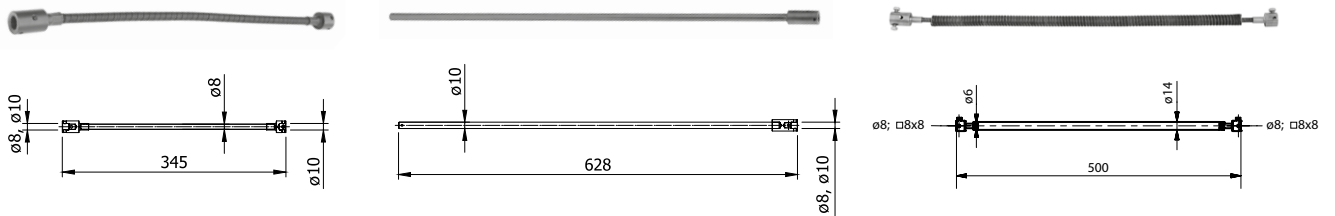


SZKZV - REG3-LIGHT - ML - ...



Destination	S	-	S - flue ducts
	-	D	D - smoke ducts
Material	ML	ML	ML - aluminium powder coated
	B	B	B - white
Colour	CZ	CZ	CZ - black

5. FLEXIBLE SHAFT SZK-REG-WG, SZKZ-REG-WGSZ, EXTENSION OF FLEXIBLE SHAFT SZKZ-REG-PW600



SZK-REG-WG

flexible shaft

SZKZ-REG-PW600

extension of flexible shaft

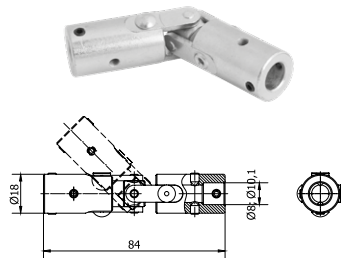
SZKZ-REG-WGSZ

flexible shaft with cover

Destination	S	-	S - flue ducts
	-	D	D - smoke ducts
Material	CZ	CZ	CZ - steel sheet (black)

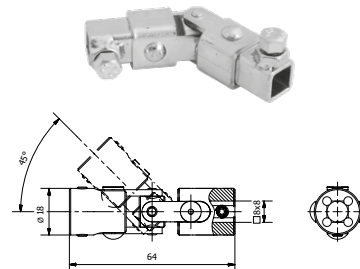
Compatible with chimney dampers with rod diameters $\varnothing 8$ and $\varnothing 10$ mm and knobs produced by DARCO.

6. ROUND, SQUARE JOINT



SZKZ-REG-PGO

round joint



SZKZ-REG-PGK

square joint

<SKD>

Double-walled chimney system <SKD> is used for building chimneys extracting fumes from gas and oil burning stoves. Inner pipe is made with 1.4404 acc. to DIN17441, outer pipe - 1.4301 acc. to DIN17441, thermal insulation - ceramic fibre wool, thickness 50 mm.

Maximum working temperature: 600°C.

Chimney made from elements of this system is a self-standing construction, not needing usage of any additional ceramic materials. Certificate of Factory Production Control 1450-CPR-0007 issued by INiG Cracow.

<SKDZ>

Double-walled heat - resistant chimney system <SKDZ> is used for building chimneys extracting fumes from wood burning stoves. Inner pipe is made with 1.4828 acc. to DIN17441, outer pipe - 1.4301 acc. to DIN17441, thermal insulation - ceramic fibre wool, thickness 50 mm.

Maximum working temperature: 600°C.

Chimney made from elements of this system is a self-standing construction, not needing usage of any additional ceramic materials.

<SKDX>

Round pipes and fittings are used for building ventilation systems in mechanical or natural ventilation, air heating and air-conditioning systems. Both inner and outer pipe are made of stainless steel 1.4301 acc. to DIN17441, thermal insulation - mineral wool, thickness 50 mm.

Maximum working temperature: 250°C.

Certificate of Factory Production Control 1450-CPR-0007 issued by INiG Cracow



Application of chimneys and recommended sheet thicknesses

Diameter DN	W/S 1.4404	D 1.4828	W 1.4301	*) 1.4301
60	0.5	-	0.6	0.5
80	0.5	-	0.6	0.5
90	0.5	-	0.6	0.5
100	0.5	-	0.6	0.5
110	0.5	-	0.6	0.5
120	0.5	0.8	0.6	0.5
130	0.5	0.8	0.6	0.5
140	0.6	0.8	0.6	0.5
150	0.6	0.8	0.6	0.5
160	0.6	0.8	0.6	0.5
180	0.6	0.8	0.6	0.5
200	0.6	0.8	0.6	0.5
225	0.6	0.8	0.6	0.5
240	0.6	0.8	0.6	0.5
250	0.8	0.8	0.6	0.5
260	0.8	0.8	0.6	0.5
300	0.8	0.8	0.6	0.5
325	0.8	0.8	0.6	0.6
350	0.8	0.8	0.6	0.6
400	1.0	0.8	0.6	0.6
450	1.0	-	0.6	0.6
500	1.0	-	0.6	0.6
550	-	-	0.6	0.6
600	-	-	0.6	0.6

Table of layouts and sizes

Diameter DN	Lr	Dz	Dw	Dk	s
60	188	60.4	59.4	61.4	0.5
80	250	80.1	79.1	81.1	
90	285	91.2	90.2	92.2	
100	315	100.8	99.8	101.8	
110	350	111.9	110.9	112.9	
120	385	123.0	122.0	124.0	
130	415	132.6	131.6	133.6	0.6
140	440	140.7	139.5	141.7	
150	475	151.8	150.6	152.8	
160	505	161.4	160.2	162.4	
180	570	182.0	180.8	183.0	
200	630	201.1	199.9	202.1	
225	710	226.6	225.4	227.6	0.8
240	753	240.3	239.1	241.3	
250	790	252.3	250.7	253.3	
260	818	261.2	259.6	262.2	
280	880	280.9	279.3	281.9	
300	945	301.6	300.0	302.6	
325	1020	325.5	323.9	327.0	1.0
350	1100	350.9	349.4	352.4	
400	1260	402.1	400.1	403.6	
450	1415	451.4	449.4	452.9	
500	1575	502.3	500.3	503.8	
550	1728	551.0	549.0	552.5	
600	1885	601.0	599.0	602.5	

Destination

- W - ventilation ducts
- S - flue ducts (gas, oil)
- D - smoke ducts
- *) - outer pipe

Measurements

- Lr - metal sheet layout [mm]±0.1
- Dz - outer diameter of pipe [mm]±0.1
- Dw - inner diameter of pipe [mm]±0.1
- Dk - inner diameter of bell [mm]±0.1
- s - metal sheet thickness [mm]

Bell joint pipe connection

Individual elements of the chimney system are being joint by the way of pushing one part of the element - a spigot, into the other press-formed part of the element - a bell. Thanks to this type of pipe joining, metal chimney is characterized by very tight and stiff construction. It also assures proper flow of condensate, along walls of the chimney straight to condensate drain bowl. Outer elements are connected "bell down" what prevents chimney insulation from rain water. Outer casings of the chimney elements should be riveted together with couple of stainless steel rivets before placing a fastening clamp.

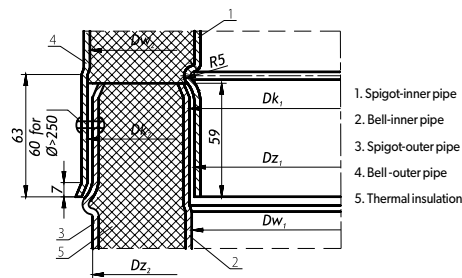
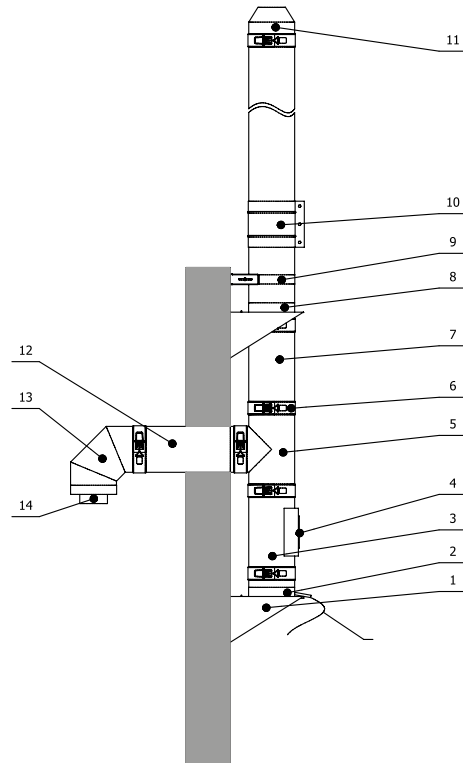
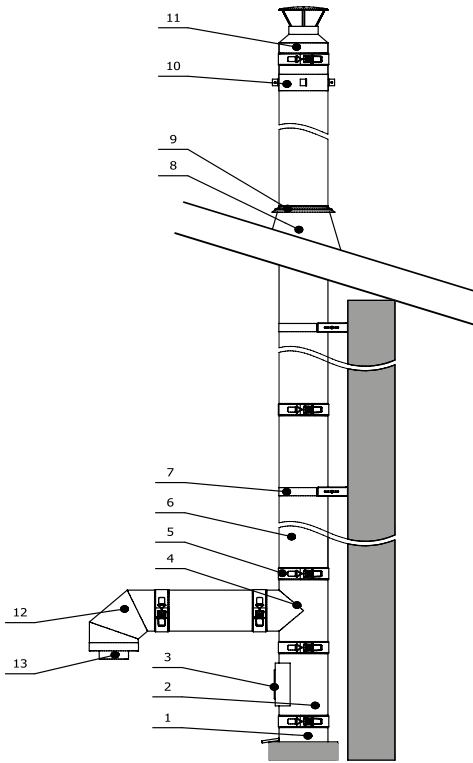


Fig. Method of joining double-walled pipe elements.

Model application of elements



No	Name	Denotation
1	Condensate drain bowl	MSD150/250-CH
2	Clean out element with doors	WCD150/250-CH6
3	Tee 90°	TRD150/250/90-CH6
4	Fastening clamp IV	OPIV250-X
5	Straight pipe 1 m	RPD150/250/1000-CH6
6	Mounting bracket	OMD-II-250-X/...
7	Angular roof flashing	PDK250/20-X
8	Rain collar	KPD250-X
9	Bracket for stabilizing cords	OPO250-X
10	Cap	DKD150/250-CH6
11	Solid elbow 90°	KSD150/250/90-CH6
12	Tee plug	ZTD150/250-CH6-K

Fig. An example of a double walled chimney construction - a chimney inside the building.

No	Name	Denotation
1	Supporting console	KWD250-X/...
2	Condensate drain bowl	MSD150/250-CH
3	Clean out element with doors	WCD150/250-CH6
4	Tee 90°	TRD150/250/90-CH6
5	Fastening clamp IV	OPIV250-X
6	Straight pipe 1 m	RPD150/250/1000-CH6
7	Intermediate support	PPD150/250-CH
8	Mounting bracket	OMD-II-250-X/...
9	Fastening clamp III	OPIII250-X
10	Mouthpiece	USD150/250-CH6
11	Straight pipe 0.25 m	RPD150/250/250-CH6
12	Solid elbow 90°	KSD150/250/90-CH6
13	Tee plug	ZTD150/250-CH6-K

Fig. An example of a double walled chimney construction - a chimney outside the building.



Offset calculator available at darco.pl

CHIMNEY COWLS

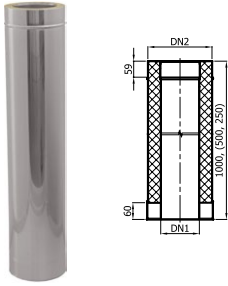
STEERING & POWER SUPPLY

HOT AIR DISTRIBUTION SYSTEM

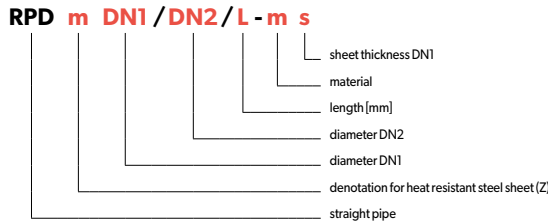
CHIMNEYS

VENTILATION

1. STRAIGHT PIPE RPD



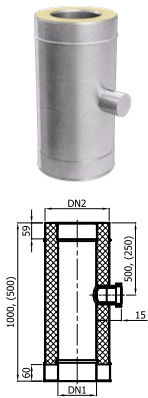
Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0,6/0,6
Weight [kg]	7.00	7.20	8.10	8.25	8.75	9.25	9.35	10.50	11.35	12.40	13.45	15.60	17.75	19.90	22.00	24.15	



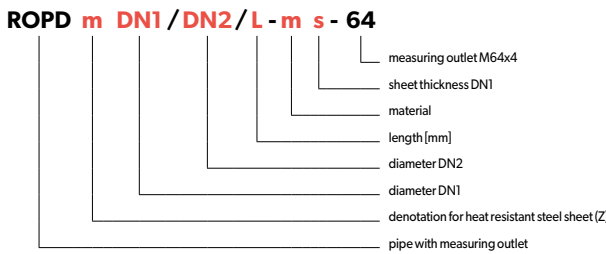
Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
Material	-	-	D	D - smoke ducts
	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
Sheet thickness	-	-	Z	Z - heat resistant steel 1.4828
	5	5	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	-	1 - sheet thickness 1.0 mm

* Available painted coated version (black). Other colors upon request.

2. STRAIGHT PIPE WITH MEASURING OUTLET M64X4 ROPD-64



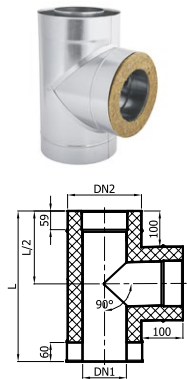
Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0,6/0,6
Weight [kg]	7.00	7.20	8.10	8.25	8.75	9.25	9.35	10.50	11.35	12.40	13.45	15.60	17.75	19.90	22.00	24.15	



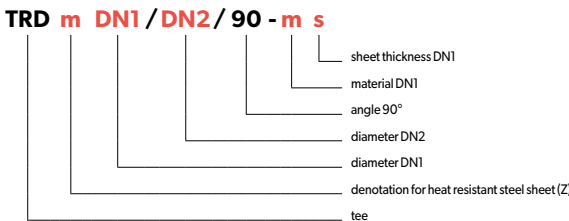
Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
Material	-	-	D	D - smoke ducts
	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
Sheet thickness	-	-	Z	Z - heat resistant steel 1.4828
	5	5	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

* Available painted coated version (black). Other colors upon request.

3. TEE 90° TRD/90



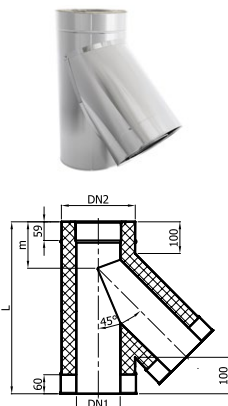
Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0,6/0,6
L [mm]	400	400	425	425	440	450	450	480	500	525	550	600	650	700	750	800	
Weight [kg]	3.60	3.70	4.35	4.40	4.80	5.20	5.30	6.20	6.95	7.90	8.95	11.15	13.55	16.25	19.00	22.10	



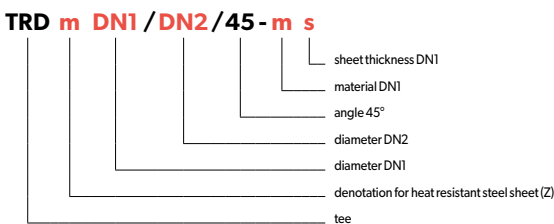
Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
Material	-	-	D	D - smoke ducts
	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
Sheet thickness	-	-	Z	Z - heat resistant steel 1.4828
	5	5	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

* Available painted coated version (black). Other colors upon request.

4. TEE 45° TRD/45



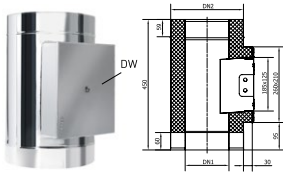
Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0,6/0,6
L [mm]	485	485	520	520	540	555	555	600	625	660	695	770	840	910	980	1050	
m [mm]	120	120	125	125	130	130	135	140	140	145	150	165	170	180	190	205	
Weight [kg]	4.10	4.20	5.00	5.10	5.55	6.00	6.10	7.30	8.15	9.35	10.70	13.50	16.55	20.00	23.65	27.60	



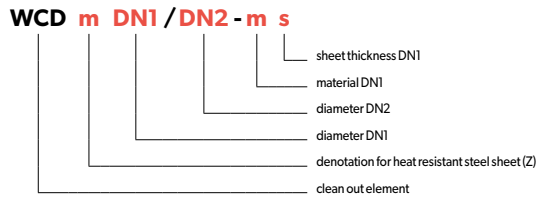
Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
Material	-	-	D	D - smoke ducts
	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
Sheet thickness	-	-	Z	Z - heat resistant steel 1.4828
	5	5	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

* Available painted coated version (black). Other colors upon request.

5. CLEAN OUT ELEMENT WCD + DOORS DW2-X



Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
Weight [kg]	3.80	3.90	4.30	4.35	4.60	4.80	4.85	5.35	5.75	6.20	6.70	7.70	8.60	9.60	10.55	11.50	



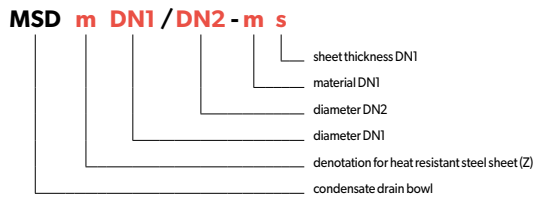
Destination	W	W	-	W - ventilation ducts
	S	-	-	-
Material	-	-	D	D - smoke ducts
	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
Sheet thickness	-	-	Z	Z - heat resistant steel 1.4828
	5	5	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

* Available painted coated version (black). Other colors upon request.

6. CONDENSATE DRAIN BOWL MSD



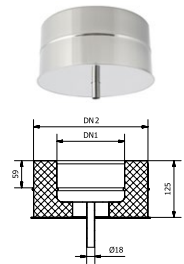
Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
A [mm]	300	300	325	325	325	350	350	380	400	425	450	500	550	600	650	700	
Weight [kg]	2.15	2.20	2.50	2.55	2.70	2.90	3.00	3.50	3.90	4.20	4.65	5.60	6.70	7.90	9.15	10.40	



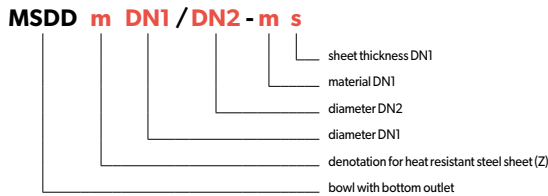
Destination	W	W	-	W - ventilation ducts
	S	-	-	-
Material	-	-	D	D - smoke ducts
	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
Sheet thickness	-	-	Z	Z - heat resistant steel 1.4828
	5	5	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

* Available painted coated version (black). Other colors upon request.

7. BOWL WITH BOTTOM OUTLET MSDD



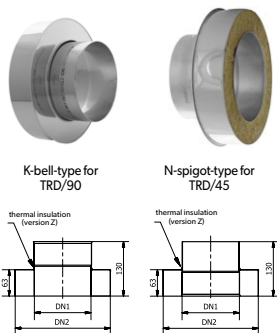
Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
A [mm]	300	300	325	325	325	350	350	380	400	425	450	500	550	600	650	700	
Weight [kg]	1.07	1.06	1.21	1.20	1.29	1.34	1.40	1.52	1.65	1.82	2.00	2.38	2.80	3.25	3.75	4.27	



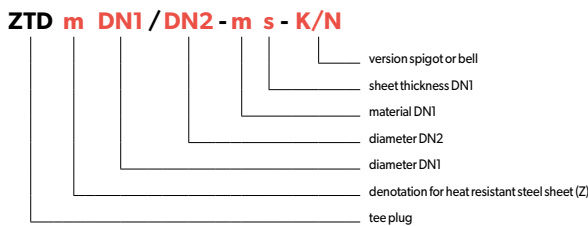
Destination	W	W	-	W - ventilation ducts
	S	-	-	-
Material	-	-	D	D - smoke ducts
	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
Sheet thickness	-	-	Z	Z - heat resistant steel 1.4828
	5	5	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

* Available painted coated version (black). Other colors upon request.

8. TEE PLUG ZTD-K (N)



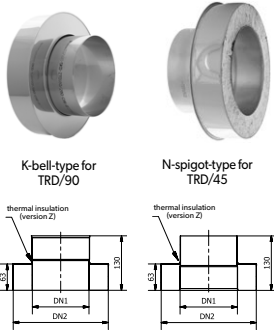
Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
Weight [kg]	0.40	0.40	0.45	0.45	0.50	0.55	0.55	0.60	0.70	0.75	0.80	1.00	1.10	1.25	1.40	1.55	



Destination	W	W	-	W - ventilation ducts
	S	-	-	-
Material	-	-	D	D - smoke ducts
	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
Sheet thickness	-	-	Z	Z - heat resistant steel 1.4828
	5	5	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

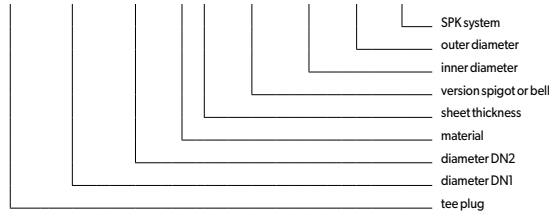
* Available painted coated version (black). Other colors upon request.

9. TEE PLUG SPK 2.0 SYSTEM ZTDZ



Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
Weight [kg]	0.40	0.40	0.45	0.45	0.50	0.55	0.55	0.60	0.70	0.75	0.80	1.00	1.10	1.25	1.40	1.55	

ZTDZ DN1/DN2 - Z s - K/N/Dw/Dz/CZ2

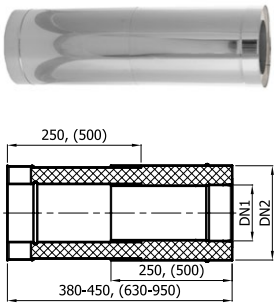


Destination	D	D - smoke ducts
Material	Z	Z - heat resistant steel 1.4828
Sheet thickness	8	8 - sheet thickness 0.8 mm
	1	1 - sheet thickness 1.0 mm

* Available painted coated version (black). Other colors upon request.

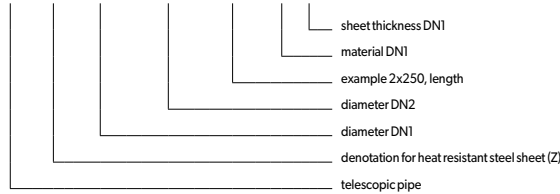
CHIMNEY COWLS

10. TELESCOPIC PIPE RTD



Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
Weight [kg]	6.90	7.05	7.90	8.05	8.75	9.00	9.15	10.25	11.10	12.15	13.20	15.30	17.35	19.50	21.60	23.70	

RTD m DN1 / DN2 / 2xL - m s



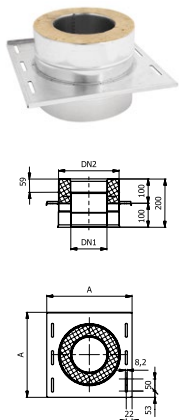
Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness	5	5	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

* Available painted coated version (black). Other colors upon request.

STEERING & POWER SUPPLY

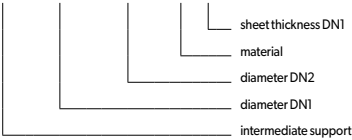
HOT AIR DISTRIBUTION SYSTEM

11. INTERMEDIATE SUPPORT PPD



Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
A [mm]	300	300	325	325	325	350	350	380	400	425	450	500	550	600	650	700	
Weight [kg]	2.35	2.30	2.60	2.60	2.75	2.90	2.90	3.30	3.40	3.90	4.25	4.95	5.65	6.40	7.10	7.85	

PPD DN1 / DN2 - m s



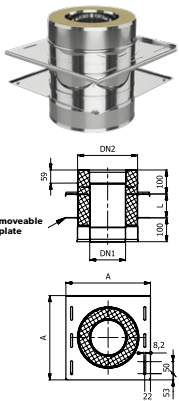
Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness	5	5	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

* Available painted coated version (black). Other colors upon request.

CHIMNEYS

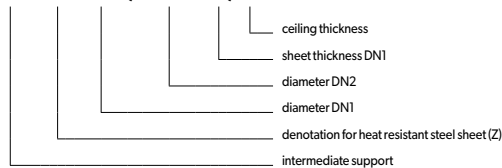
VENTILATION

12. CEILING INTERMEDIATE SUPPORT PPD SZ



Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	depends on dimensions
A [mm]	300	300	325	325	325	350	350	380	400	425	450	500	550	600	650	700	
Weight [kg]																	

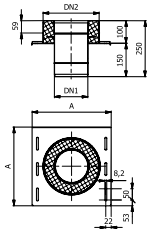
PPD SZ DN1 / DN2 - s / L



Destination	D	D - smoke ducts
Material	Z	Z - heat resistant steel 1.4828
Sheet thickness	8	8 - sheet thickness 0.8 mm
	1	1 - sheet thickness 1.0 mm

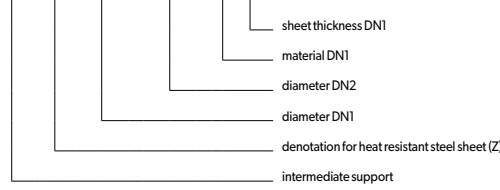
* Available painted coated version (black). Other colors upon request.

13. INTERMEDIATE SUPPORT PJD



Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0,6/0,6
A [mm]	300	300	325	325	325	350	350	380	400	425	450	500	550	600	650	700	
Weight [kg]	2.00	2.00	2.35	2.35	2.50	2.70	2.70	3.15	3.50	3.90	4.35	5.20	6.20	7.20	8.30	9.30	

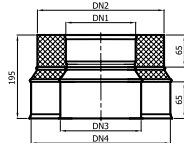
PJD m DN1 / DN2 - m s



Destination	W	W	-	W - ventilation ducts
	S	-	-	-
Material	-	-	D	D - smoke ducts
	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
Sheet thickness	-	-	Z	Z - heat resistant steel 1.4828
	5	5	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
1	1	1	1 - sheet thickness 1.0 mm	

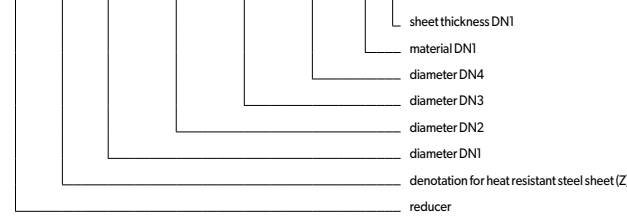
* Available painted coated version (black). Other colors upon request.

14. REDUCER RDD



Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0,6/0,6
Weight [kg]	depends on dimensions																

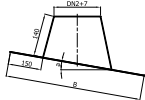
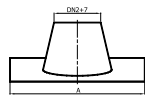
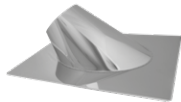
RDD m DN1 / DN2 / DN3 / DN4 - m s



Destination	W	W	-	W - ventilation ducts
	S	-	-	-
Material	-	-	D	D - smoke ducts
	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
Sheet thickness	-	-	Z	Z - heat resistant steel 1.4828
	5	5	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
1	1	1	1 - sheet thickness 1.0 mm	

* Available painted coated version (black). Other colors upon request.

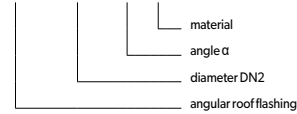
15. ANGULAR ROOF FLASHING PDK



a = 20 → from 0-20°
a = 35 → from 20-35°
a = 50 → from 35-50°

Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s = 0,6
A	605	605	628	628	628	685	685	710	748	804	804	802	865	915	971	1022	
B	610	610	632	632	632	708	708	718	756	820	816	803	875	929	982	1035	
A	645	645	665	665	665	694	694	708	746	778	806	867	917	974	1031	1088	
B	715	715	724	724	724	758	758	769	816	854	899	939	1013	1079	1145	1211	
A	670	670	700	700	700	735	735	769	795	797	821	908	970	1032	1094	1156	
Weight [kg]	depends on dimensions																

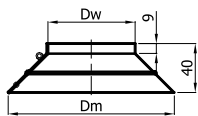
PDK DN2 / α - X



Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
	6	6 - sheet thickness 0.6 mm

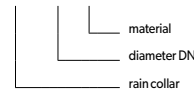
* Available painted coated version (black). Other colors upon request.

16. RAIN COLLAR KPD



Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø280	ø300	ø350	ø400	ø450	ø500	ø550	ø600	for s=0,6 (0,5)
Dw [mm]	79.0	99.7	110.9	122.0	131.6	139.5	150.7	160.2	180.9	200.0	225.5	251.0	279	300.4	349.7	400.7	450.0	501.0	550	600	
Dm [mm]	151	172	183	194	204	212	223	232	253	272	326	350	379	400	450	501	550	601	650	700	
Weight [kg]	0.14	0.16	0.17	0.18	0.18	0.19	0.20	0.21	0.23	0.25	0.29	0.31	0.37	0.36	0.41	0.45	0.50	0.54	0.6	0.65	

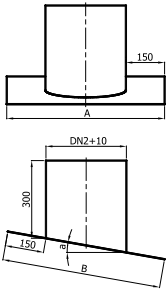
KPD x - X



Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
	6	6 - sheet thickness 0.6 mm

* Available painted coated version (black). Other colors upon request.

17. ANGULAR ROOF FLASHING PDK II



Diameter DN1/DN2	Diameter																
	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	
α 20	A	510	510	535	535	550	560	570	590	610	635	660	710	760	810	860	910
	B	525	525	550	550	570	580	590	610	630	655	685	735	790	840	895	950
α 35	A	510	510	535	535	550	560	570	590	610	635	660	710	760	810	860	910
	B	560	560	590	590	605	620	630	655	680	710	740	800	860	920	985	1045
α 50	A	510	510	535	535	550	560	570	590	610	635	660	710	760	810	860	910
	B	600	600	635	635	690	705	720	750	785	825	860	940	1015	1095	1170	1250
Weight [kg]		depends on dimensions															

for s = 0.6

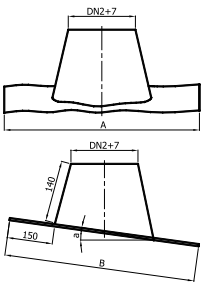
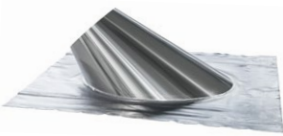
PDK II DN2/α-X



Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness	6	6 - sheet thickness 0.6 mm

* Available painted coated version (black). Other colors upon request.

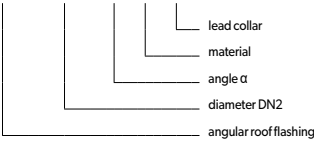
18. ANGULAR ROOF FLASHING WITH COLLAR PDK



Diameter DN1/DN2	Diameter																
	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	
α 20	A	1000 (1120 PE version)															
	B	610	610	632	632	632	708	708	718	756	820	816	803	875	929	982	1035
α 35	A	1000 (1120 PE version)															
	B	715	715	724	724	724	758	758	769	816	854	899	939	1013	1079	1145	1211
α 50	A	1000 (1120 PE version)															
	B	867	867	879	879	879	944	944	980	1017	942	959	1168	1256	1346	1433	1522
Weight [kg]		depends on dimensions															

for s = 0.6

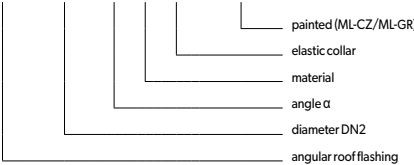
PDK DN2/α-X Pb



Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness	6	6 - sheet thickness 0.6 mm

* Available painted coated version (black). Other colors upon request.

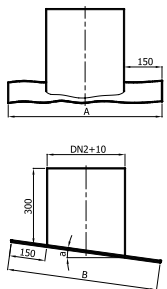
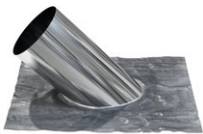
PDK DN2/α-X PE (ML-...)



ML-CZ: painted - black colour (RAL 9011)
ML-GR: painted - grey colour (RAL 7043)

- a = 20 → 0-20°
- a = 35 → 20-35°
- a = 50 → 35-50°

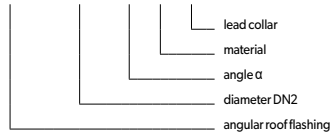
19. ANGULAR ROOF FLASHING WITH COLLAR PDK II



Diameter DN1/DN2	Diameter																
	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	
α 20	A	510	510	535	535	550	560	570	590	610	635	660	710	760	810	860	910
	B	525	525	550	550	570	580	590	610	630	655	685	735	790	840	895	950
α 35	A	510	510	535	535	550	560	570	590	610	635	660	710	760	810	860	910
	B	560	560	590	590	605	620	630	655	680	710	740	800	860	920	985	1045
α 50	A	510	510	535	535	550	560	570	590	610	635	660	710	760	810	860	910
	B	600	600	635	635	690	705	720	750	785	825	860	940	1015	1095	1170	1250
Weight [kg]		depends on dimensions															

for s = 0.6

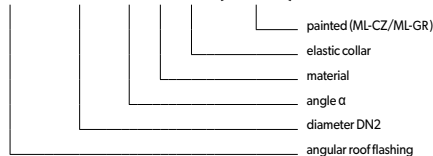
PDK II DN2/α-X Pb



Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness	6	6 - sheet thickness 0.6 mm

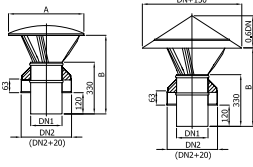
* Available painted coated version (black). Other colors upon request.

PDK II DN2/α-X PE (ML-...)



ML-CZ: painted - black colour (RAL 9011)
ML-GR: painted - grey colour (RAL 7043)

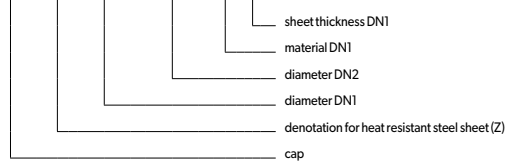
20. CAP DKD



DN2+20 - for heat-resistant sheet

Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
D [mm]	220	220	250	250	290	290	290	350	400	400	450	550	550	650	650		
B [mm]	410	410	410	410	430	430	430	450	600	630	690	750	810	870	930		
Weight [kg]	1.55	1.60	1.70	1.75	1.90	2.05	2.10	2.25	2.40	3.15	3.60	4.00	4.80	5.55	6.65	7.00	

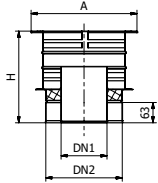
DKD m DN1 / DN2 - m s



Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
Material	-	-	D	D - smoke ducts
	CH	-	-	CH - stainless steel 1.4404
Sheet thickness	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
	5	5	-	5 - sheet thickness 0.5 mm
Sheet thickness	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

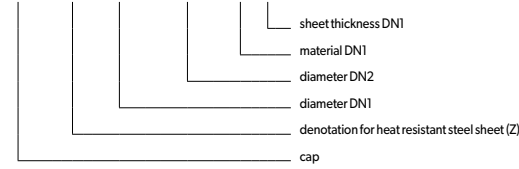
* Available painted coated version (black). Other colors upon request.

21. CAP DKD-I



Diameter DN1/DN2	100	130	150	150	160	180	200	200	225	250	300	for s 0.6/0.6
A [mm]	300	325	350	310	360	380	400	360	425	450	500	
H [mm]	300	300	300	300	300	300	300	300	300	300	300	
Weight [kg]	2.00	2.40	2.70	2.50	3.30	3.39	3.40	3.40	3.50	3.70	4.00	

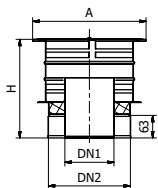
DKD-I m DN1 / DN2 - m s



Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
Material	-	-	D	D - smoke ducts
	CH	-	-	CH - stainless steel 1.4404
Sheet thickness	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
	5	5	-	5 - sheet thickness 0.5 mm
Sheet thickness	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

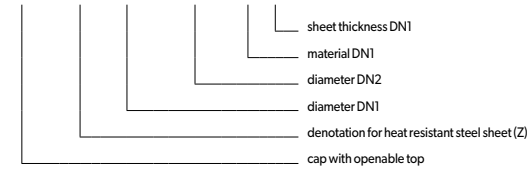
* Available painted coated version (black). Other colors upon request.

22. CAP WITH OPENABLE TOP DKD-II



Diameter DN1/DN2	100	130	150	150	160	180	200	200	225	250	300	for s 0.6/0.6
A [mm]	300	325	350	310	360	380	400	360	425	450	500	
H [mm]	300	300	300	300	300	300	300	300	300	300	300	
Weight [kg]	2.00	2.40	2.70	2.50	3.30	3.39	3.40	3.40	3.50	3.70	4.00	

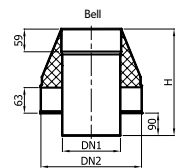
DKD-II m DN1 / DN2 - m s



Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
Material	-	-	D	D - smoke ducts
	CH	-	-	CH - stainless steel 1.4404
Sheet thickness	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
	5	5	-	5 - sheet thickness 0.5 mm
Sheet thickness	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

* Available painted coated version (black). Other colors upon request.

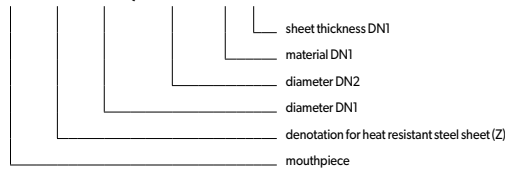
23. MOUTHPIECE USD



DN2+20 - for heat-resistant sheet

Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
H [mm]	330	330	330	330	330	330	330	330	330	330	330	330	400	420	420	420	
Weight [kg]	1.00	1.05	1.15	1.20	1.35	1.50	1.60	1.80	2.00	3.80	4.20	4.90	7.10	8.00	10.70	11.80	

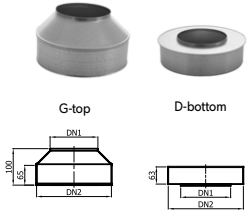
USD m DN1 / DN2 - m s



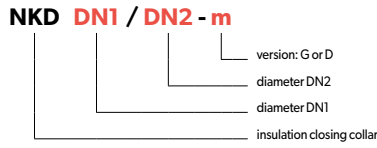
Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
Material	-	-	D	D - smoke ducts
	CH	-	-	CH - stainless steel 1.4404
Sheet thickness	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
	5	5	-	5 - sheet thickness 0.5 mm
Sheet thickness	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

* Available painted coated version (black). Other colors upon request.

24. INSULATION CLOSING COLLAR NKD-G (D)



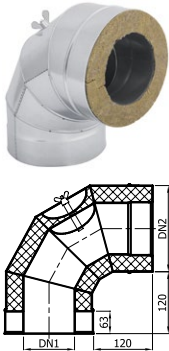
Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
Weight [kg]	0.15	0.16	0.18	0.19	0.20	0.21	0.22	0.25	0.28	0.31	0.34	0.40	0.46	0.52	0.58	0.64	



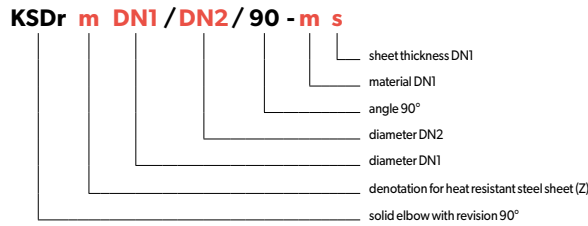
Destination	W	W	W - ventilation ducts
	S	S	S - flue ducts (gas, oil)
	D	D	D - smoke ducts
Material	-	X	X - stainless steel 1.4301
	Z	-	Z - heat resistant steel 1.4828
Sheet thickness	5	-	5 - sheet thickness 0.5 mm
	-	6	6 - sheet thickness 0.6 mm

* Available painted coated version (black). Other colors upon request.

25. SOLID ELBOW 90° WITH REVISION KSDr/90



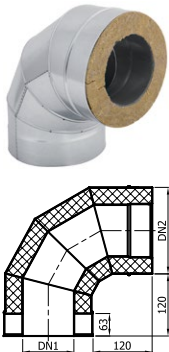
Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
Weight [kg]	2.35	2.40	2.70	2.75	3.35	3.70	3.75	4.20	4.50	4.95	6.45	7.80	8.85	12.35	14.75	17.40	



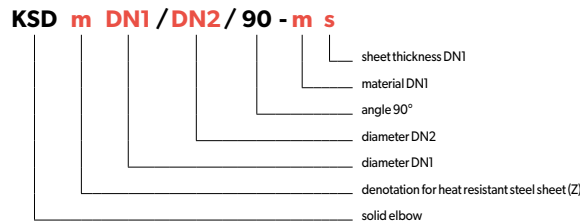
Destination	W	W	W - ventilation ducts
	S	-	S - flue ducts (gas, oil)
	-	D	D - smoke ducts
Material	CH	-	CH - stainless steel 1.4404
	-	X	X - stainless steel 1.4301
	-	Z	Z - heat resistant steel 1.4828
Sheet thickness	5	5	5 - sheet thickness 0.5 mm
	6	6	6 - sheet thickness 0.6 mm
	8	8	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

* Available painted coated version (black). Other colors upon request.

26. SOLID ELBOW 90° KSD/90



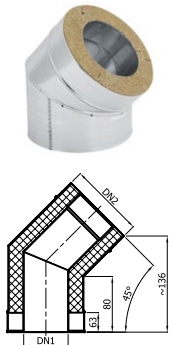
Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
Weight [kg]	2.35	2.40	2.70	2.75	3.35	3.70	3.75	4.20	4.50	4.95	6.45	7.80	8.85	12.35	14.75	17.40	



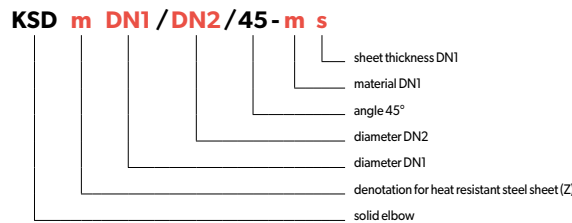
Destination	W	W	W - ventilation ducts
	S	-	S - flue ducts (gas, oil)
	-	D	D - smoke ducts
Material	CH	-	CH - stainless steel 1.4404
	-	X	X - stainless steel 1.4301
	-	Z	Z - heat resistant steel 1.4828
Sheet thickness	5	5	5 - sheet thickness 0.5 mm
	6	6	6 - sheet thickness 0.6 mm
	8	8	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

* Available painted coated version (black). Other colors upon request.

27. SOLID ELBOW 45° KSD/45



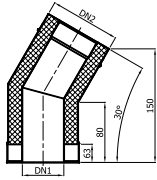
Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
Weight [kg]	1.55	1.60	1.85	1.95	2.10	2.25	2.30	2.65	3.00	3.40	3.80	4.75	5.65	6.85	8.15	9.40	



Destination	W	W	W - ventilation ducts
	S	-	S - flue ducts (gas, oil)
	-	D	D - smoke ducts
Material	CH	-	CH - stainless steel 1.4404
	-	X	X - stainless steel 1.4301
	-	Z	Z - heat resistant steel 1.4828
Sheet thickness	5	5	5 - sheet thickness 0.5 mm
	6	6	6 - sheet thickness 0.6 mm
	8	8	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

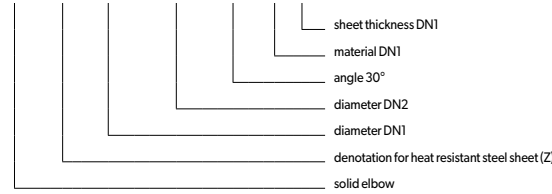
* Available painted coated version (black). Other colors upon request.

28. SOLID ELBOW 30° KSD/30



Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
Weight [kg]	1.45	1.50	1.75	1.75	1.90	2.00	2.10	2.40	2.65	3.00	3.35	4.05	4.85	5.75	6.60	7.60	

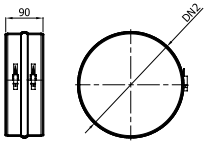
KSD m DN1 / DN2 / 30 - m s



Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
Material	-	-	D	D - smoke ducts
	CH	-	-	CH - stainless steel 1.4404
Sheet thickness	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
	5	5	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

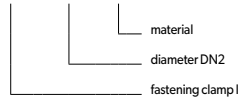
* Available painted coated version (black). Other colors upon request.

29. FASTENING CLAMP OPI



Diameter DN2	200	225	240	250	260	280	300	325	350	400	450	500	550	600	for s 0.6/0.6
Weight [kg]	0.25	0.30	0.34	0.35	0.36	0.38	0.40	0.45	0.50	0.55	0.60	0.70	0.75	0.80	

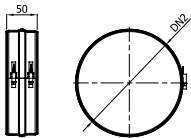
OPI DN2 - X



Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness	6	6 - sheet thickness 0.6 mm

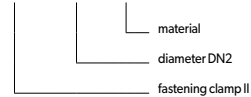
* Available painted coated version (black). Other colors upon request.

30. FASTENING CLAMP OPII



Diameter DN2	200	225	240	250	260	280	300	325	350	400	450	500	550	600	for s 0.6/0.6
Weight [kg]	0.17	0.19	0.20	0.21	0.22	0.23	0.25	0.27	0.29	0.33	0.37	0.42	0.46	0.50	

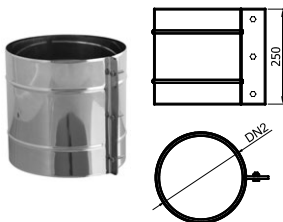
OPII DN2 - X



Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness	6	6 - sheet thickness 0.6 mm

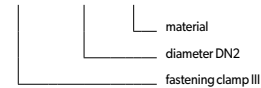
* Available painted coated version (black). Other colors upon request.

31. FASTENING CLAMP OPIII



Diameter DN2	200	225	240	250	260	280	300	325	350	400	450	500	550	600	for s 1.0
Weight [kg]	2.10	2.35	2.35	2.65	2.65	2.90	3.15	3.40	3.65	4.15	4.65	5.25	5.75	6.25	

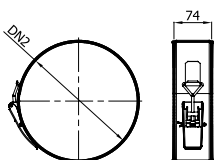
OPIII DN2 - X



Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness	1	1 - sheet thickness 1.0 mm

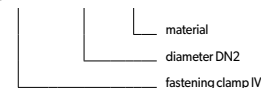
* Available painted coated version (black). Other colors upon request.

32. FASTENING CLAMP OPIV



Diameter DN2	200	225	240	250	260	280	300	325	350	400	450	500	for s 0.6/0.6
Weight [kg]	0.35	0.35	0.35	0.40	0.40	0.40	0.45	0.45	0.50	0.55	0.60	0.65	

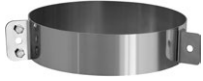
OPIV DN2 - X



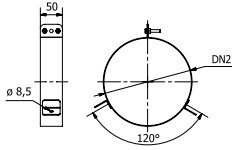
Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness	6	6 - sheet thickness 0.6 mm

* Available painted coated version (black). Other colors upon request.

33. BRACKET FOR STABILIZING CORDS OPO



Diameter DN2	200	225	240	250	260	280	300	325	350	400	450	500	550	600	for s 1.5(2.0)
Weight [kg]	0.50	0.54	0.57	0.59	0.61	0.65	0.69	0.73	0.78	0.87	0.97	1.06	1.16	1.25	



OPO DN2 -X

- material
- diameter DN2
- bracket for stabilizing cords

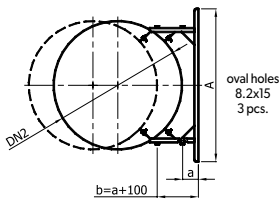
Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness	1.5	1.5 - sheet thickness 1.5 mm
	2	2 - sheet thickness 2.0 mm

* Available painted coated version (black). Other colors upon request.

34. MOUNTING BRACKET OMD-II



Diameter DN2	120	125	140	160	190	210	220	225	240	250	260	280	3600	310	3325	350	400	450	500	550	600
A [mm]	322	327	339	354	380	380	395	395	409	409	415	424	433	433	445	456	476	556	580	608	634
Weight [kg]	1.00	1.00	1.04	1.08	1.14	1.15	1.20	1.20	1.23	1.24	1.26	1.29	1.33	1.35	1.37	1.41	1.49	1.98	2.10	2.60	2.71



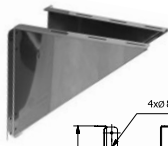
OMD-II DN2 -X/5-15

- min. distance from the wall
- material
- diameter DN2
- mounting bracket

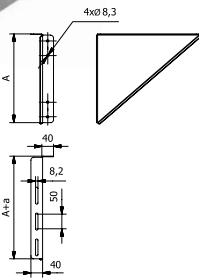
Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301

* Available painted coated version (black). Other colors upon request.

35. SUPPORTING CONSOLE KWD



Diameter DN2	120	125	140	160	190	210	220	225	240	250	260	280	300	310	325	350	400	450	500	550	600	for s=2.0
A [mm]	231	231	254	254	304	304	304	304	354	354	354	384	404	404	429	454	504	552	604	654	701	
Weight [kg]	1.70	1.70	2.00	2.00	2.60	2.60	2.70	2.70	3.25	3.25	3.25	3.70	4.20	4.20	4.65	5.10	6.05	7.10	8.20	9.40	10.65	



KWD DN2 -X/a-(a+100)

- min. distance from the wall
- material
- diameter DN2
- supporting console

Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness	2	2 - sheet thickness 2.0 mm

* Available painted coated version (black). Other colors upon request.

The Double Wall Chimney System <SKD-30> is used for the construction of chimneys and flue ducts.

The inner pipe used for the discharge of wet flue gases from modern energy-saving oil, gas, pellet and wood-fired heating appliances is made of the material grade 1.4404 to DIN17441, outer wall - 1.4301 to DIN17441, or galvanized steel painted black, thermal insulation - mineral wool, thickness 30mm.

Maximum working temperature of <SKD-30> system: 600°C

A chimney made of the system elements is a self-contained structure that does not require the use of conventional ceramic materials.

Certificate of Factory Production Control 1450-CPR-0007 issued by INiG in Crakow.



CHIMNEY COWLS

STEERING & POWER SUPPLY

HOT AIR DISTRIBUTION SYSTEM

Application of chimney liners and recommended sheet thicknesses

Diameter DN	S, D* 1.4404	** 1.4301 / OC-ML-CZ
100	0.5	-
130	0.5	-
150	0.5	-
160	-	0.5
180	0.6	-
190	-	0.5
200	0.6	-
210	-	0.5
240	-	0.5
260	-	0.5

Table of layouts and sizes

Diameter DN	Lr	Dz	Dw	Dk	Ds	s
100	315	100.8	99.9	101.8	-	0.5
130	415	132.6	131.6	133.6	-	0.5
150	475	151.7	150.7	152.7	-	0.5
160	505	161.2	160.2	-	158.9	0.5
180	570	182	180.8	183	-	0.6
190	595	189.9	188.9	-	187.5	0.5
200	630	201.1	199.9	202.1	-	0.6
210	660	210.6	209.6	-	208.2	0.5
240	753	240.3	239.1	-	237.8	0.5
260	818	261.2	259.6	-	258.5	0.5

Destination

- S - flue ducts (gas, oil)
- D* - smoke ducts (wood and pellets)
- ** - outer pipe

Measurements

- Lr - metal sheet layout [mm]±0,1
- Dz - outer diameter of pipe [mm]±0,1
- Dw - inner diameter of pipe [mm]±0,1
- Dk - inner diameter of bell joint [mm]±0,1
- Ds - outer diameter of nipple pipe part [mm]±0,1
- s - metal sheet thickness [mm]

Bell- joint connection

The individual elements of the chimney system are connected by inserting one part of the element - the spigot - into the other part of the element - the bell. The bell connection results in a tight and rigid chimney construction. The way in which the elements are connected allows for the proper flow of condensate down the walls of the chimney liner into the drain bowl. The outer wall is connected upwards which protects the chimney against rainwater. The elements of the outer jacket should be riveted in place with a few chrome-nickel rivets

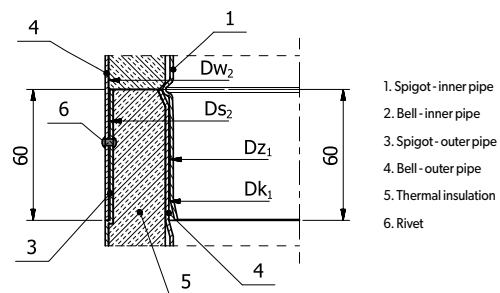


Fig. Method of joining acid-resistant steel chimney system elements <SKD-30-SLIM>

CHIMNEYS

VENTILATION

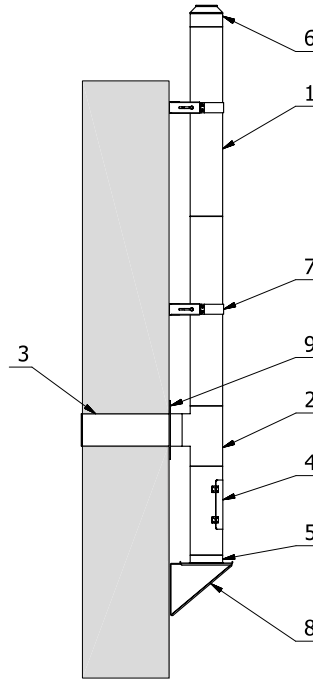
invent. build. enjoy.

Model application of elements

Scheme I

Stainless steel brushed outer wall.

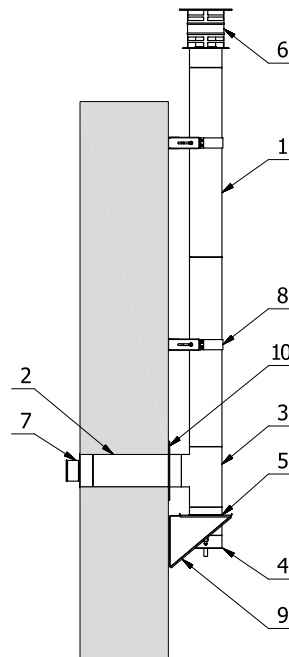
No	Name	Denotation
1	Straight pipe 1m	RPD.../.../1,0-CH/X.SZ
2	Tee 90°	TRD.../.../90-CH/X.SZ
3	Straight pipe with double wall adapter	RPD.../.../1,0-CH/X.SZ/WD
4	Clean out element (incl.doors)	WCD.../...-CH/X.SZ
5	Condensate drain bowl	MSD.../...-CH/X.SZ
6	Mouthpiece	USD.../...-CH/X.SZ
7	Mounting bracket	OMD-II...-X.SZ/5-15
8	Supporting console	KWD...-X.SZ/5-15
9	Rosette	ROZ...-X.SZ



Scheme II

Black painted outer wall.

No	Name	Denotation
1	Straight pipe 1 m	RPD.../.../1,0-CH/OC-ML.CZ
2	Straight pipe 0,5 m	RPD.../.../0,5-CH/OC-ML.CZ
3	Tee 90°	TRD.../.../90-CH/OC-ML.CZ
4	Condensate drain bowl with the bottom outlet	MSDD.../...-CH/OC-ML.CZ
5	Intermediate support	PPD.../...-CH/OC-ML.CZ
6	Chimney cap	DKD-I.../...-CH-ML.CZ
7	Tee plug bell type	ZTD.../...-CH/OC-ML.CZ-K
8	Mounting bracket	OMD-II...-OC-ML.CZ/5-15
9	Supporting console	KWD...-OC-ML.CZ/5-15
10	Rosette	ROZ...-OC-ML.CZ



CHIMNEY COWLS

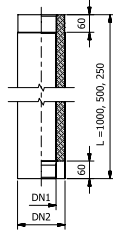
STEERING & POWER SUPPLY

HOT AIR DISTRIBUTION SYSTEM

CHIMNEYS

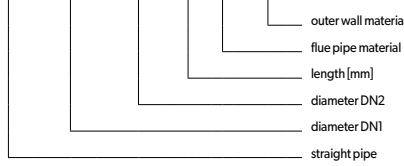
VENTILATION

1. STRAIGHT PIPE RPD



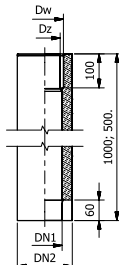
Diameter DNI/DN2	100	130	150	180	200
L [mm]	1000	1000	1000	1000	1000
Weight [kg]	7.10	8.50	9.65	11.60	12.90

RPD DNI / DN2 / L - m / mp



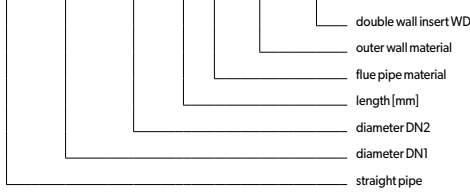
Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	CH	CH - stainless steel 1.4404
Outer wall material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	OC-ML.CZ	OC-ML.CZ - galvanised steel painted black as standard
Sheet thickness	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

2. STRAIGHT PIPE WITH DOUBLE WALL ADAPTER RPD-WD



Diameter DNI/DN2	100	130	150	180	200
Dz [mm]	90	120	140	170	190
Dw [mm]	109	139	159	189	209
Weight [kg]	7.75	9.30	10.57	12.65	14.00

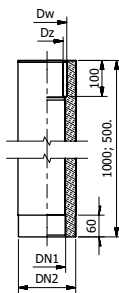
RPD DNI / DN2 / L - m / mp / WD



Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	CH	CH - stainless steel 1.4404
Outer wall material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	X.SZ-ML.CZ	steel sheet grade 1.4301-4N painted black as standard
Sheet thickness	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

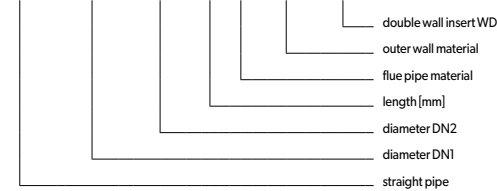
Installation on the inlet to a T-piece TRD/90

3. STRAIGHT PIPE WITH DOUBLE WALL ADAPTER RPD-WD-II



Diameter DNI/DN2	100	130	150	180	200
Dz [mm]	90	120	140	170	190
Dw [mm]	109	139	159	189	209
Weight [kg]	7.75	9.30	10.57	12.65	14.00

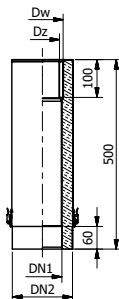
RPD-II DNI / DN2 / L - m / mp / WD



Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	CH	CH - stainless steel 1.4404
Outer wall material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	X.SZ-ML.CZ	steel sheet grade 1.4301-4N painted black as standard
Sheet thickness	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

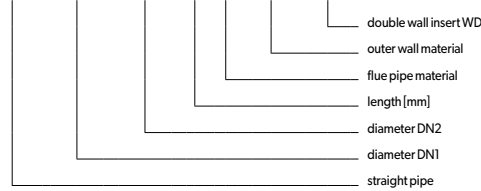
Installation on the inlet to a T-Piece TRD/45 or RPD pipe in vertical flue gases discharge constructions

4. STRAIGHT PIPE WITH DOUBLE WALL ADAPTER AND FASTENER (COMPATIBLE WITH PPD) RPDz-WD-II



Diameter DNI/DN2	100	130	150	180	200
Dz [mm]	90	120	140	170	190
Dw [mm]	109	139	159	189	209
Weight [kg]	7.75	9.30	10.57	12.65	14.00

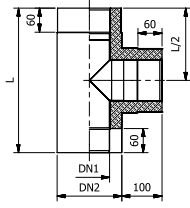
RPDz DNI / DN2 / L - m / mp / WD-II



Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	CH	CH - stainless steel 1.4404
Outer wall material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	X.SZ-ML.CZ	steel sheet grade 1.4301-4N painted black as standard
Sheet thickness	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

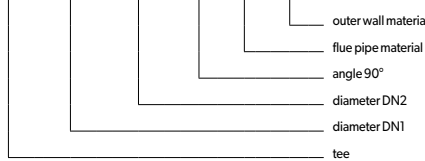
Installation on the inlet to PPD base

5. TEE 90° TRD/90



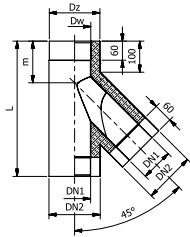
Diameter DNI/DN2	100	130	150	180	200
L [mm]	360	390	410	440	460
Weight [kg]	2.45	3.15	3.70	4.80	5.50

TRD DNI / DN2 / 90 - m / mp



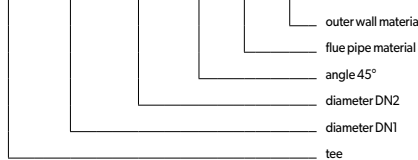
Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	CH	CH - stainless steel 1.4404
Outer wall material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	OC-ML.CZ	OC-ML.CZ - galvanised steel painted black as standard
Sheet thickness	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

6. TEE 45° TRD/45



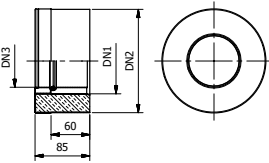
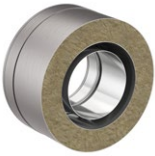
Diameter DNI/DN2	100	130	150	180	200
L [mm]	425	470	500	540	570
m [mm]	130	140	145	160	155
Weight [kg]	4.00	5.30	6.45	8.42	9.85

TRD DNI / DN2 / 45 - m / mp



Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	CH	CH - stainless steel 1.4404
Outer wall material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	OC-ML.CZ	OC-ML.CZ - galvanised steel painted black as standard
Sheet thickness	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

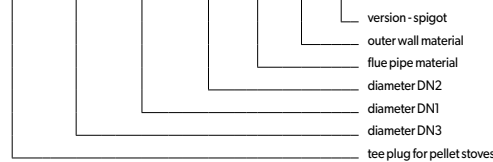
7. TEE PLUG FOR PELLET STOVES ZTDp DN3/DN1/DN2-M/MP-N (SPIGOT TYPE)



Diameter DNI/DN2	100	130	150	180	200
DN3			80 or 100*		
Weight [kg]	0.55	0.68	0.77	0.94	1.04

* - except for 100/160 diameter

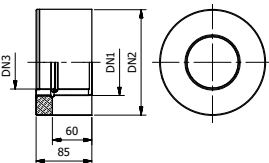
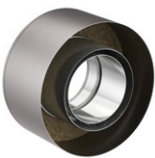
ZTDp DN3 / DN1 / DN2 - m / mp - N



Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	CH	CH - stainless steel 1.4404
Outer wall material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	OC-ML.CZ	OC-ML.CZ - galvanised steel painted black as standard
Sheet thickness	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

Max working temperature 250°C

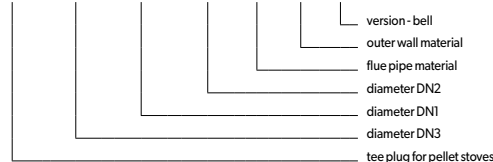
8. TEE PLUG FOR PELLET STOVES ZTDp DN3/DN1/DN2-M/MP-K (BELL TYPE)



Diameter DNI/DN2	100	130	150	180	200
DN3			80 or 100*		
Weight [kg]	0.48	0.61	0.68	0.84	0.92

* - except for 100/160 diameter

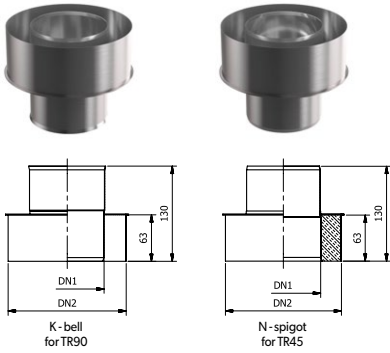
ZTDp DN3 / DN1 / DN2 - m / mp - K



Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	CH	CH - stainless steel 1.4404
Outer wall material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	OC-ML.CZ	OC-ML.CZ - galvanised steel painted black as standard
Sheet thickness	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

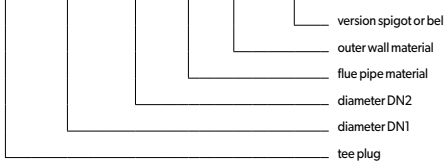
Max working temperature 250°C

9. TEE PLUG ZTD (K-BELL TYPE / N-SPIGOT TYPE)



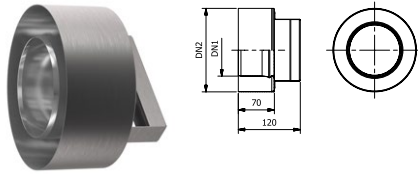
Diameter DN1/DN2	100	130	150	180	200	
	160	190	210	240	260	
Weight [kg]	ZTD-K	0.37	0.45	0.51	0.65	0.72
	ZTD-N	0.62	0.75	0.85	1.05	1.18

ZTD DN1 / DN2 - m / mp - K / N



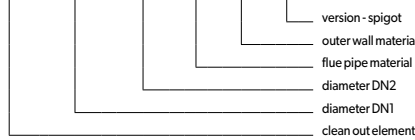
Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	CH	CH - stainless steel 1.4404
Outer wall material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	OC-ML.CZ	OC-ML.CZ - galvanised steel painted black as standard
Sheet thickness	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

10. TEE PLUG, FULLY COVERED WITH HANDLE ZTDr



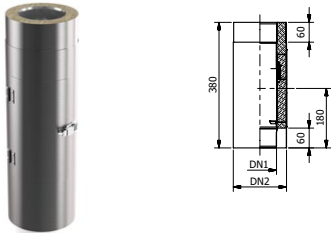
Diameter DN1/DN2	100	130	150	180	200
	160	190	210	240	260
Weight [kg]	0.45	0.55	0.62	0.78	0.88

ZTDr DN1 / DN2 / m / mp - N



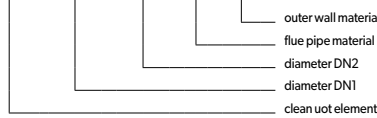
Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	CH	CH - stainless steel 1.4404
Outer wall material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	OC-ML.CZ	OC-ML.CZ - galvanised steel painted black as standard
Sheet thickness	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

11. CLEAN OUT ELEMENT WCD WITH DOORS



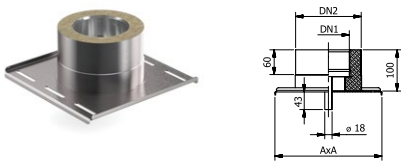
Diameter DN1/DN2	100	130	150	180	200
	160	190	210	240	260
Weight [kg]	2.80	3.35	3.75	4.50	5.00

WCD DN1 / DN2 - m / mp



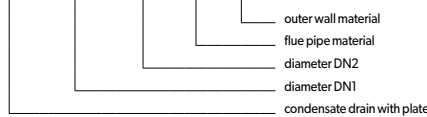
Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	CH	CH - stainless steel 1.4404
Outer wall material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	OC-ML.CZ	OC-ML.CZ - galvanised steel painted black as standard
Sheet thickness	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

12. CONDENSATE DRAIN BOWL WITH PLATE MSD



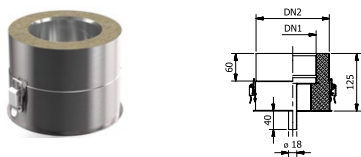
Diameter DN1/DN2	100	130	150	180	200
	160	190	210	240	260
A [mm]	260	290	310	340	360
Weight [kg]	2.00	2.45	2.85	3.40	3.85

MSD DN1 / DN2 - m / mp



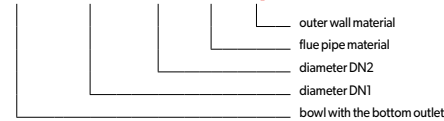
Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	CH	CH - stainless steel 1.4404
Outer wall material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	OC-ML.CZ	OC-ML.CZ - galvanised steel painted black as standard
Sheet thickness	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

13. CONDENSATE DRAIN BOWL WITH THE BOTTOM OUTLET MSDD



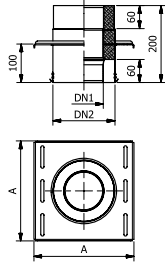
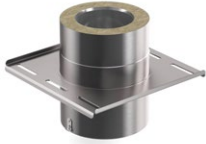
Diameter DN1/DN2	100	130	150	180	200
	160	190	210	240	260
Weight [kg]	1.20	1.50	1.80	2.20	2.50

MSDD DN1 / DN2 - m / mp



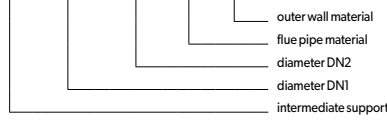
Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	CH	CH - stainless steel 1.4404
Outer wall material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	OC-ML.CZ	OC-ML.CZ - galvanised steel painted black as standard
Sheet thickness	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

14. INTERMEDIATE SUPPORT PPD



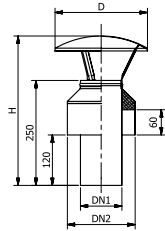
Diameter DNI/DN2	100	130	150	180	200
A [mm]	260	290	310	340	360
Weight [kg]	2.25	2.65	3.00	3.55	3.90

PPD DN1 / DN2 - m / mp



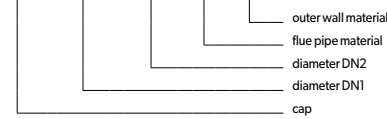
Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	CH	CH - stainless steel 1.4404
Outer wall material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	OC-ML.CZ	OC-ML.CZ - galvanised steel painted black as standard
Sheet thickness	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

15. CHIMNEY CAP DKD



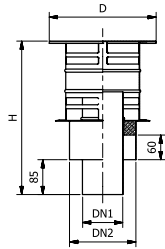
Diameter DNI/DN2	100	130	150	180	200
D [mm]	220	250	290	290	350
H [mm]	355	359	360	360	360
Weight [kg]	0.90	1.15	1.40	1.68	1.90

DKD DN1 / DN2 - m / mp



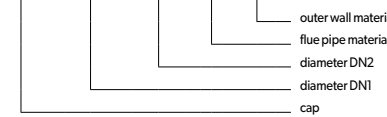
Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	CH	CH - stainless steel 1.4404
Outer wall material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	X.SZ-ML.CZ	steel sheet grade 1.4301-4N painted black as standard
Sheet thickness	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

16. CHIMNEY CAP DKD-I - CYLINDRIC



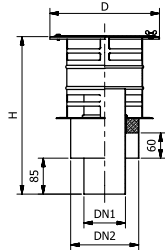
Diameter DNI/DN2	100	130	150	180	200
D [mm]	260	290	310	340	360
H [mm]	375	375	375	375	375
Weight [kg]	1.88	2.27	2.55	3.05	3.35

DKD-I DN1 / DN2 - m / mp



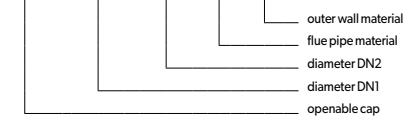
Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	CH	CH - stainless steel 1.4404
Outer wall material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	X.SZ-ML.CZ	steel sheet grade 1.4301-4N painted black as standard
Sheet thickness	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

17. CHIMNEY CAP DKD-II - CYLINDRIC, OPENABLE



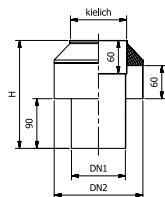
Diameter DNI/DN2	100	130	150	180	200
D [mm]	260	290	310	340	360
H [mm]	375	375	375	375	375
Weight [kg]	2.00	2.40	2.70	3.20	3.50

DKD-II DN1 / DN2 - m / mp



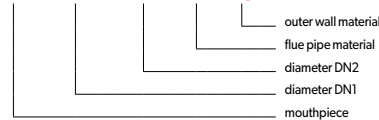
Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	CH	CH - stainless steel 1.4404
Outer wall material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	X.SZ-ML.CZ	steel sheet grade 1.4301-4N painted black as standard
Sheet thickness	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

18. MOUTHPIECE USD



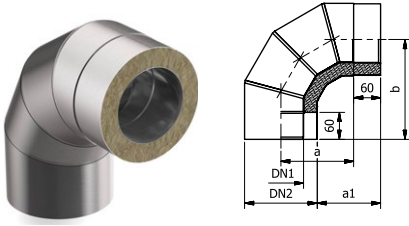
Diameter DNI/DN2	100	130	150	180	200
H [mm]	195	195	195	195	195
Weight [kg]	0.65	0.80	0.90	1.15	1.25

USD DN1 / DN2 - m / mp



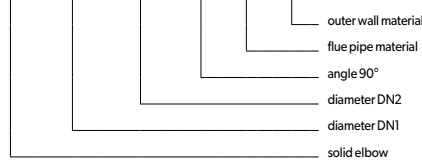
Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	CH	CH - stainless steel 1.4404
Outer wall material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	X.SZ-ML.CZ	steel sheet grade 1.4301-4N painted black as standard
Sheet thickness	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

19. SOLID ELBOW 90° KSD/90



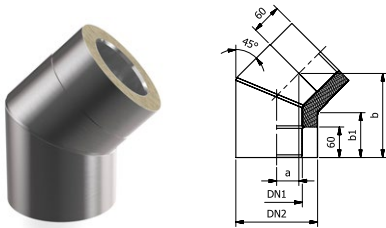
Diameter DN1/DN2	100	130	150	180	200
a [mm]	162	174	180	199	206
a1 [mm]	141	139	135	139	135
b [mm]	222	234	240	259	266
Weight [kg]	2.58	3.25	3.82	4.96	5.65

KSD DN1 / DN2 / 90 - m / mp



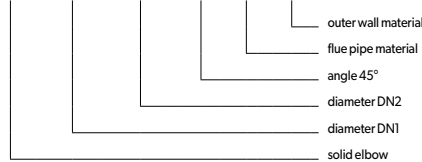
Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	CH	CH - stainless steel 1.4404
	X.SZ	X.SZ - steel sheet grade 1.4301-4N
Outer wall material	OC-ML.CZ	OC-ML.CZ - galvanised steel painted black as standard
	5	5 - sheet thickness 0.5 mm
Sheet thickness	6	6 - sheet thickness 0.6 mm

20. SOLID ELBOW 45° KSD/45



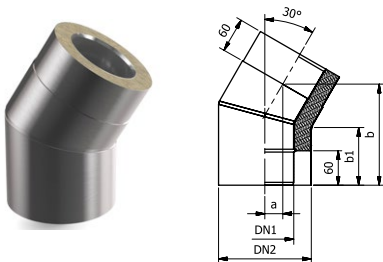
Diameter DN1/DN2	100	130	150	180	200
a [mm]	44	44	49	49	62
a1 [mm]	88	82	85	79	93
b [mm]	166	166	179	179	209
Weight [kg]	1.56	1.87	2.28	2.76	3.53

KSD DN1 / DN2 / 45 - m / mp



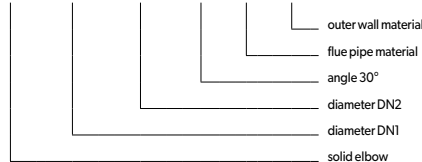
Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	CH	CH - stainless steel 1.4404
	X.SZ	X.SZ - steel sheet grade 1.4301-4N
Outer wall material	OC-ML.CZ	OC-ML.CZ - galvanised steel painted black as standard
	5	5 - sheet thickness 0.5 mm
Sheet thickness	6	6 - sheet thickness 0.6 mm

21. SOLID ELBOW 30° KSD/30



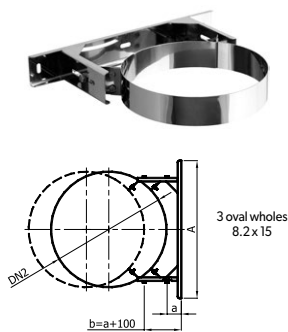
Diameter DN1/DN2	100	130	150	180	200
a [mm]	31	31	31	31	31
a1 [mm]	100	96	94	90	87
b [mm]	176	176	176	176	176
Weight [kg]	1.56	1.87	2.15	2.58	2.75

KSD DN1 / DN2 / 30 - m / mp



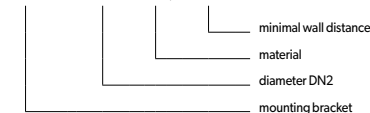
Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	CH	CH - stainless steel 1.4404
	X.SZ	X.SZ - steel sheet grade 1.4301-4N
Outer wall material	OC-ML.CZ	OC-ML.CZ - galvanised steel painted black as standard
	5	5 - sheet thickness 0.5 mm
Sheet thickness	6	6 - sheet thickness 0.6 mm

22. MOUNTING BRACKET OMD-II



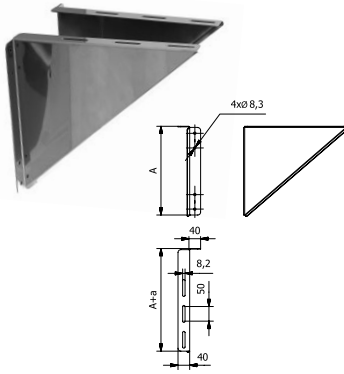
Diameter DN2	160	190	210	240	260
A [mm]	354	380	380	409	416
Weight [kg]	1.08	1.14	1.15	1.23	1.26

OMD-II DN2 - m / 5-15



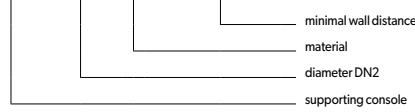
Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	OC-ML.CZ	OC-ML.CZ - galvanised steel painted black as standard

23. SUPPORTING CONSOLE KWD



Diameter DN2	160	190	210	240	260
A [mm]	254	304	304	354	354
Weight [kg]	2.00	2.60	2.60	3.25	3.25

KWD DN2 - m / a-(a+100)



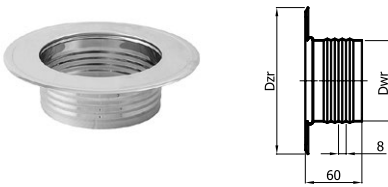
Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	OC-ML.CZ	OC-ML.CZ - galvanised steel painted black as standard

CHIMNEY COWLS

STEERING & POWER SUPPLY

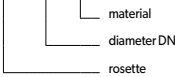
HOT AIR DISTRIBUTION SYSTEM

24. ROSETTE ROZ



Diameter DN2	160	190	210	240	260
Dwr [mm]	166	196	216	246	266
Dzr [mm]	257	287	307	337	357
Weight [kg]	0.25	0.29	0.32	0.36	0.39

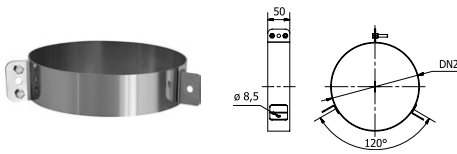
ROZ x - m



Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	OC-ML.CZ	OC-ML.CZ - galvanised steel painted black as standard
Sheet thickness	5	5 - sheet thickness 0.5 mm

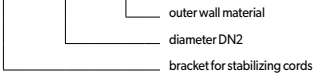
CHIMNEYS

25. BRACKET FOR STABILIZING CORDS OPO



Diameter DN2	160	190	210	240	260
Weight [kg]	0.31	0.48	0.52	0.57	0.61

OPO DN2 - mp



Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	OC-ML.CZ	OC-ML.CZ - galvanised steel painted black as standard

VENTILATION

Vertical Flue System <SPOS>

The vertical flue system allows the chimney to be built directly above the fireplace's hearth. In this case, the function of the cleanout and condensate removal is fulfilled by the hearth. The SPOS system uses typical elements of double-walled chimneys SKDZ and chimney connections SPK. When designing this type of chimney, current national regulations must be taken into account.

Application: In newly built or modernised buildings where there is no free smoke chimney

Caution! In particular, the distances from combustible parts must be kept and suitable roof flashings must be used at the roof crossing points.

Distances from combustible elements:

- SKDZ system elements - 100 mm
- Chimney connection elements SPK - 500 mm

Model application of elements

Scheme I - Version with passage through several storeys

The chimney passes through the timber ceiling and the next storey. Roof insulated with rock wool and ceiling lined with plasterboard on the inside.

No	Denotation	Name	Chimney System
1	DKD-II-.../...-Z8 lub /ML	Cap with openable top	SKDZ
2	RPDZ-.../...-Z8 lub /ML	Straight pipe	SKDZ
3	WPDT/Z8 lub /ML	Roof base	SPOS
4	PPD-.../...-Z8	Intermediate support	SKDZ
5	KWD-II-...-X	Supporting console	SKDZ
6	ZTDZ-.../...-Z8-N-II	Tee plug	SPOS
7	ROZ-.../.../WPDT-ML	Rosette	SPOS
8	OP-IV-...-X lub /ML	Fastening clamp	SKDZ
9	RP-.../...-CZ2	Straight pipe	SPK
10	ZZ-...-CZ2	Female connector	SPK



CHIMNEY COWLS

STEERING & POWER SUPPLY

HOT AIR DISTRIBUTION SYSTEM

Scheme II - Version with passage directly through the roof.

The chimney goes directly through the rock wool insulated roof and the ceiling is lined with wood panels on the inside.

No	Denotation	Name	Chimney System
1	DKD-II-.../...-Z8 lub /ML	Cap with openable top	SKDZ
2	RPDZ-.../...-Z8 lub /ML	Straight pipe	SKDZ
3	WPDT/Z8 lub /ML	Roof base	SPOS
4	ZTDZ-.../...-Z8-N-II	Tee plug	SPOS
5	ROZ-.../...-CZ2/WPDT-...st/ML	Angular rosette	SPOS
6	OP-IV-...-X lub /ML	Fastening clamp	SKDZ
7	RP-.../2,0-CZ2	Straight pipe	SPK
8	RP/ZA-.../1,0-CZ2 RP/ZA-.../1,0-CZ2 RP/ZA-.../1,0-CZ2	Straight pipe with anti-condensation protection, damper and revision	SPK



CHIMNEYS

VENTILATION

Scheme III - Version with 90 degrees tee with passage through roof and ceiling.

The chimney passes through the timber ceiling and the next storey. The roof is insulated with rock wool and the ceiling is lined with plasterboard on the inside.

A connection to the chimney via a 90 degrees tee was used in this case.

A chimney with a cleanout and a condensate drain bowl ensures that soot and any condensate will not flow directly into the fireplace.

No	Denotation	Name	Chimney System
1	DKD-II-.../...-Z8 lub /ML	Cap with openable top	SKDZ
2	RPDZ-.../...-Z8 lub /ML	Straight pipe	SKDZ
3	WPDT/Z8 lub /ML	Roof base	SPOS
4	TRDZ-.../...-Z8-II	Tee	SPOS
5	WCDZ-.../...-Z8	Clean out element with doors	SKDZ
6	MSDZ-.../...-Z8	Condensate drain bowl	SKDZ
7	KSDZ-.../.../90-Z8	Solid elbow	SKDZ
8	PPD-.../...-Z8	Intermediate support	SKDZ
9	KWD-II-...-X	Supporting console	SKDZ
10	ZTDZ-.../...-Z8-N-II	Tee plug	SPOS
11	ROZ-.../.../WPDT-ML	Rosette	SPOS
12	OP-IV-...-X	Fastening clamp	SKDZ
13	RP-.../1,0-CZ2	Straight pipe	SPK
14	ZZ-...-CZ2	Female connector	SPK



invent. build. enjoy.

TECHNICAL DATA OF VERTICAL FLUE SYSTEM <SPOS> ELEMENTS

CHIMNEY COWLS

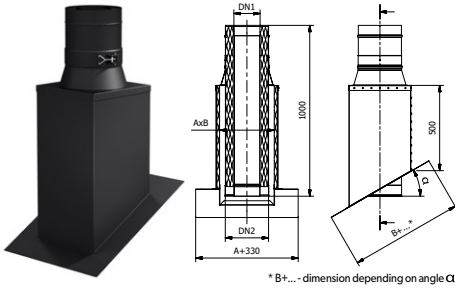
STEERING & POWER SUPPLY

HOT AIR DISTRIBUTION SYSTEM

CHIMNEYS

VENTILATION

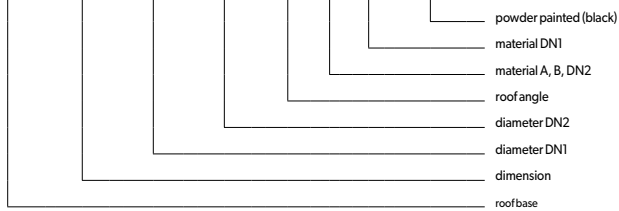
1. ROOF BASE WPDT/Z8



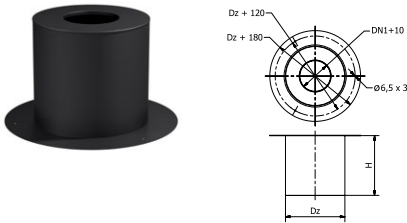
Diameter DN1/DN2	150	160	180	200
A [mm]	320	320	370	370
B [mm]	320	320	370	370
Weight [kg]	weight depends on the roof angle			

Destination	D	D - smoke ducts
Material	Z	Z - heat resistant sheet 1.4828
Sheet thickness s	8	8 - sheet thickness 0.8 mm

WPDT AxB / DN1 / DN2 / ...st-X/Z8-ML.CZ



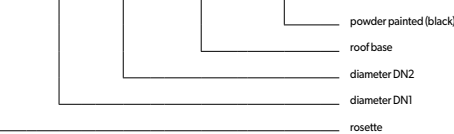
2. ROSETTE ROZ/WPDT



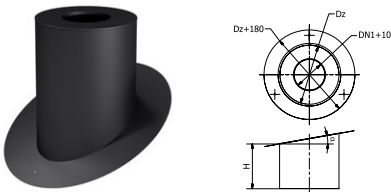
Diameter DN1/DN2	150	160	180	200
H [mm]	300	300	300	300
Dz [mm]	310	320	340	360
Weight [kg]	3.60	3.70	3.95	4.15

Destination	D	D - smoke ducts
Material	Z	Z - heat resistant sheet 1.4828
Sheet thickness s	8	8 - sheet thickness 0.8 mm

ROZ DN1/DN2/WPDT-ML.CZ



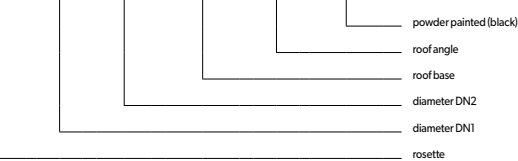
3. ANGULAR ROSETTE ROZ/WPDT/...st



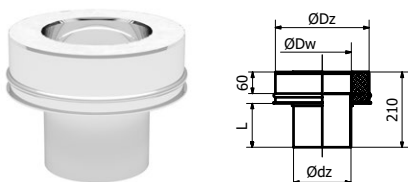
Diameter DN1/DN2	150	160	180	200
H	dimensions depends on the roof angle			
Dz	weight depends on the roof angle			
Weight [kg]	weight depends on the roof angle			

Destination	D	D - smoke ducts
Material	Z	Z - heat resistant sheet 1.4828
Sheet thickness s	8	8 - sheet thickness 0.8 mm

ROZ DN1/DN2/WPDT / ...st-ML.CZ



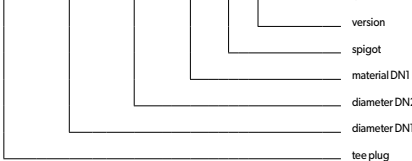
4. TEE PLUG ZTDZ-N-II



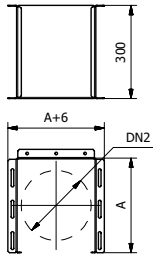
Diameter DN1/DN2	150	160	180	200
Dw [mm]	152.7	162.2	182.9	202
dz [mm]	150	160	180	200
Dz [mm]	252.1	261.2	280.9	301.6
Weight [kg]	0.90	0.95	1.00	1.15

Destination	D	D - smoke ducts
Material	Z	Z - heat resistant sheet 1.4828
Sheet thickness s	8	8 - sheet thickness 0.8 mm

ZTDZ DN1/DN2 - Z8 - N - II / dz=... (L=120)



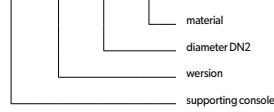
5. SUPPORTING CONSOLE KWD-II-...-X



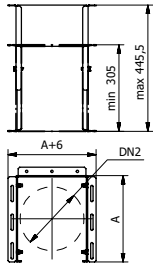
Diameter DN1/DN2	150	160	180	200
A [mm]	330	330	360	380
Weight [kg]	5.10	5.10	5.60	5.90

Destination	D	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	2	2 - sheet thickness 2 mm

KWD-II-DN2-X



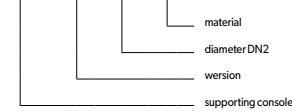
6. TELESCOPIC SUPPORTING CONSOLE KWDT-II-...-X



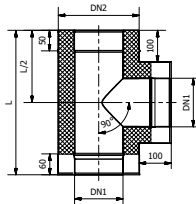
Diameter DN1/DN2	150	160	180	200
A [mm]	330	330	360	380
Weight [kg]	9.60	9.60	10.60	11.10

Przeznaczenie elementu	D	D - przewody dymowe
Materiał	X	X - blacha kwasoodporna 1.4301
Grubość blachy s	2	2 - grubość 2 mm

KWDT-II-DN2-X



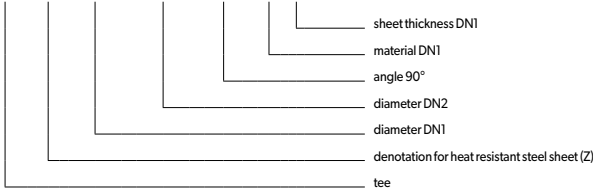
7. TEE 90° TRD/90-II



Diameter DN1/DN2	150	160	180	200
L [mm]	450	450	480	500
Weight [kg]	5.50	5.60	7.30	7.70

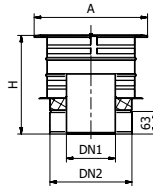
Destination	D	D - smoke ducts
Material	Z	Z - heat resistant sheet 1.4828
Sheet thickness s	8	8 - sheet thickness 0.8 mm

TRD m DN1 / DN2 / 90 - m s-II



TECHNICAL DATA OF DOUBLE WALLED CHIMNEY SYSTEM <SKDZ> ELEMENTS

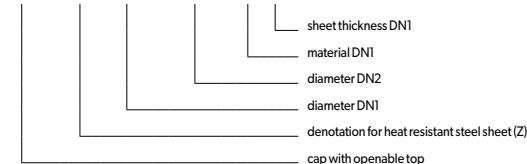
1. CAP WITH OPENABLE TOP DKD-II



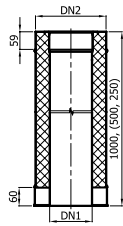
Diameter DN1/DN2	150	160	180	200
A [mm]	350	360	380	400
H [mm]	300	300	300	300
Weight [kg]	2.70	3.30	3.39	3.40

Destination	D	D - smoke ducts
Material	Z	Z - heat resistant sheet 1.4828
Sheet thickness s	8	8 - sheet thickness 0.8 mm

DKD-II m DN1 / DN2 - m s



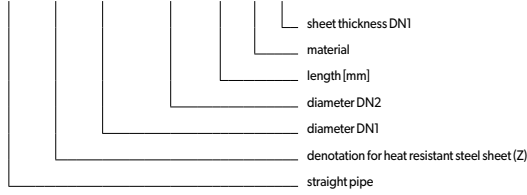
2. STRAIGHT PIPE RPD



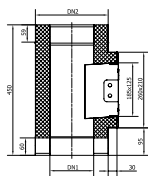
Diameter	150	160	180	200
DN1/DN2	250	260	280	300
Weight [kg]	10.00	10.20	11.40	12.40

Destination	D	D - smoke ducts
Material	Z	Z - heat resistant sheet 1.4828
Sheet thickness s	8	8 - sheet thickness 0.8 mm

RPD m DN1 / DN2 / L - m s



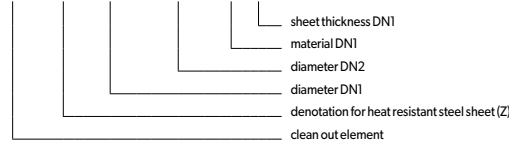
3. CLEAN OUT ELEMENT WCD + DOORS DW2-X



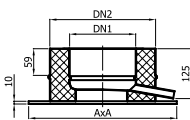
Diameter	150	160	180	200
DN1/DN2	250	260	280	300
Weight [kg]	5.20	5.30	5.80	6.30

Destination	D	D - smoke ducts
Material	Z	Z - heat resistant sheet 1.4828
Sheet thickness s	8	8 - sheet thickness 0.8 mm

WCD m DN1 / DN2 - m s



4. CONDENSATE DRAIN BOWL MSD



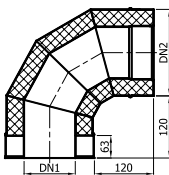
Diameter	150	160	180	200
DN1/DN2	250	260	280	300
A [mm]	350	350	380	400
Weight [kg]	2.90	3.00	3.50	3.90

Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	CH	CH - stainless steel 1.4404

MSD DN1 / DN2 - CH



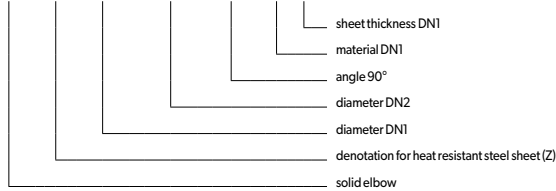
5. SOLID ELBOW 90° KSD/90



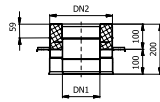
Diameter	150	160	180	200
DN1/DN2	250	260	280	300
Weight [kg]	3.90	4.00	4.50	4.90

Destination	D	D - smoke ducts
Material	Z	Z - heat resistant sheet 1.4828
Sheet thickness s	8	8 - sheet thickness 0.8 mm

KSD m DN1 / DN2 / 90 - m s

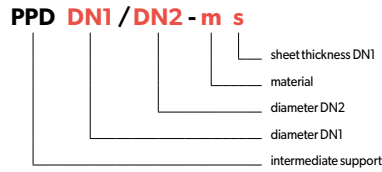
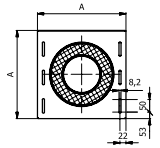


6. INTERMEDIATE SUPPORT PPD

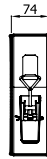
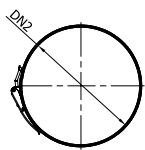


Diameter DN1/DN2	150	160	180	200
A [mm]	350	350	380	400
Weight [kg]	2.90	2.90	3.30	3.40

Destination	D	D - smoke ducts
Material	Z	Z - heat resistant sheet 1.4828
Sheet thickness s	8	8 - sheet thickness 0.8 mm



7. FASTENING CLAMP OP IV



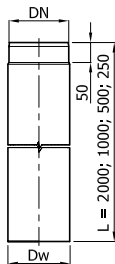
Diameter DN2	250	260	280	300
Weight [kg]	0.40	0.40	0.40	0.45

Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness	6	6 - sheet thickness 0.6 mm



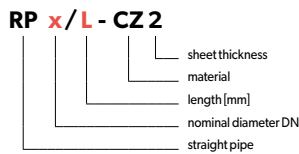
TECHNICAL DATA OF CHIMNEY CONNECTION SYSTEM <SPK 2.0> ELEMENTS

1. STRAIGHT PIPE 2000, 1000, 500, 250 [mm] RP

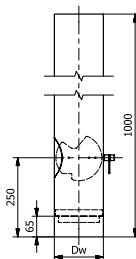


Diameter DN	ø150	ø160	ø180	ø200	
Dw [mm]	151.0	161.0	181.0	201.0	
Weight [kg]	L=2000	15.40	16.40	18.40	20.50
	L=1000	7.70	8.20	9.20	10.25
	L=500	3.85	4.20	4.60	5.10
	L=250	1.95	2.10	2.30	2.55

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

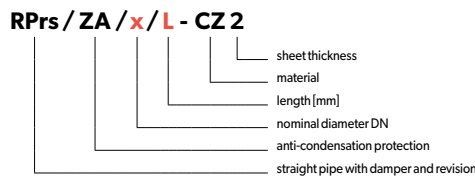


2. STRAIGHT PIPE WITH ANTI-CONDENSATION PROTECTION, DAMPER AND REVISION 1000, 500 [mm] RPrs/ZA

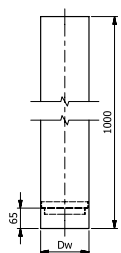


Diameter DN	ø150	ø160	ø180	ø200
Dw [mm]	151.0	161.0	181.0	201.0
Weight [kg] L = 1000 mm	7.90	8.50	9.60	10.60

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

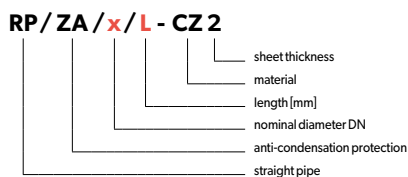


3. STRAIGHT PIPE WITH ANTI-CONDENSATION PROTECTION 1000, 500 [mm] RP/ZA

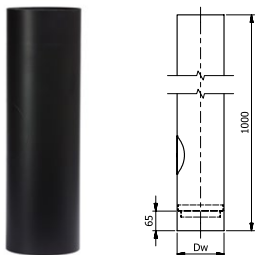


Diameter DN	ø150	ø160	ø180	ø200
Dw [mm]	151.0	161.0	181.0	201.0
Weight [kg] L = 1000 mm	7.80	8.30	9.60	10.60

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm



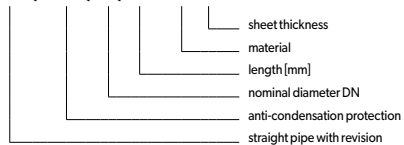
4. STRAIGHT PIPE WITH ANTI-CONDENSATION PROTECTION AND REVISION 1000, 500 [mm] RPr/ZA



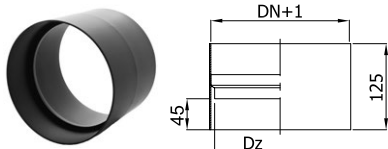
Diameter DN	ø150	ø160	ø180	ø200
Dw [mm]	151.0	161.0	181.0	201.0
Weight [kg] L = 1000 mm	7.80	8.30	9.60	10.60

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

RPr / ZA / x / L - CZ 2



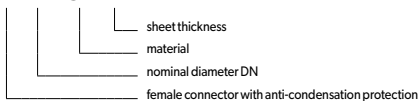
5. FEMALE CONNECTOR WITH ANTI-CONDENSATION PROTECTION ZZ



Diameter DN	ø150	ø160	ø180	ø200
Dz [mm]	140.0	150.0	170.0	190.0
Weight [kg]	1.20	1.30	1.45	1.60

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

ZZ x - CZ 2



Caution!

Female connector allows to connect two press-formed elements to each other and divert the connection schema.

Single Walled Flue System <SKS-X>

Single Walled Flue System <SKS-X> is single walled chimney duct made of stainless steel 1.4301 acc. to DIN17441. IT is used to exhaust fumes from modern condensing boilers which use the effect of water vapour condensation in the combustion process or from "Turbo" type of boilers with closed combustion chamber, that use a ventilator to exhaust fumes (positive pressure chimney duct) as well as stoves for pellets. In this system, air necessary for combustion process is taken directly from the boiler room or from outside with the usage of a separate pipe. This system secure inner surface of ceramic chimney ducts from destructive influence of chemical substances which are part of the fumes.

Maximum working temperature: 250°C.

Single walled flue system <SKS-X> allows old, existing chimney ducts to be used with new and modern type of boilers.

Certificate of Factory Production Control 1450-CPD-0030 issued by INiG Cracow.



Application of chimneys and recommended sheet thickness

Diameter DN	S, D* 1.4301
60	0.4
80	0.4
100	0.4
110	0.4
120	0.4
130	0.4
140	0.4
150	0.5
160	0.5
180	0.5
200	0.5
225	0.6
250	0.6

Destination

S - flue ducts (gas, oil)

D* - smoke ducts from pellets burning devices

Table of layouts and sizes

Diameter DN	Lr	Dz	Dw	Dk	s
60	188	60.2	59.4	60.5	0.4
80	250	80.0	79.2	81.0	
100	315	100.7	99.9	101.7	
110	350	111.8	111.0	112.8	
120	385	122.9	122.1	123.9	
130	415	132.5	131.7	133.5	
140	440	140.5	139.7	141.5	0.5
150	475	151.7	150.7	152.7	
160	505	161.2	160.2	162.2	
180	570	181.9	180.9	182.9	
200	630	201.0	200.0	202.0	0.6
225	710	226.6	225.4	227.6	
250	790	252.1	250.9	253.1	

Measurments

Lr - metal sheet layout [mm]±0.1

Dz - outer diameter of pipe [mm]±0.1

Dw - inner diameter of pipe [mm]±0.1

Dk - inner diameter of bell [mm]±0.1

s - metal sheet thickness [mm]

Example application of elements

CHIMNEY COWLS

STEERING & POWER SUPPLY

HOT AIR DISTRIBUTION SYSTEM

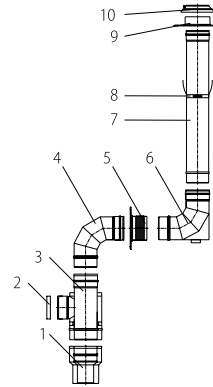
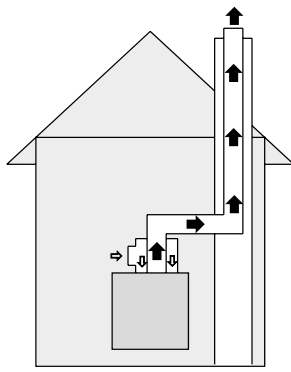
CHIMNEYS

VENTILATION

I.



Fume exhaust through an existing chimney with chimney liner
Air for combustion process supplied from the boiler room

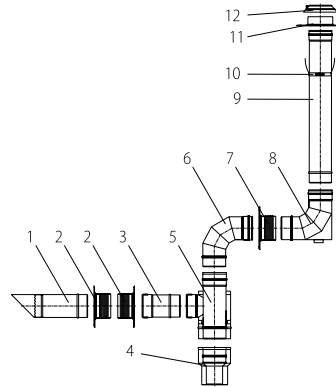
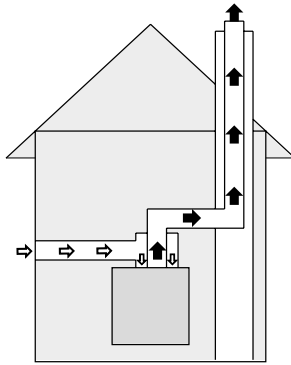


No	Denotation
1	RDD60/80/100/125-KSP-X
2	ZTS80-KSP-X
3	TRD80/125/90-DB-KSP-X
4	KS80/90-KS-X
5	ROZ80-H17
6	KSW80/90-KS-X
7	RP80/1000-KS-X
8	OU80-X
9	PD80-X
10	KPD80-X

II.



Fume exhaust through an existing chimney with chimney liner
Air for combustion process supplied through a pipe from outside the building

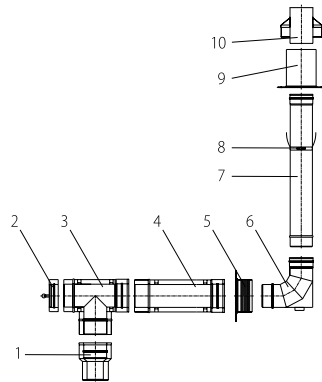
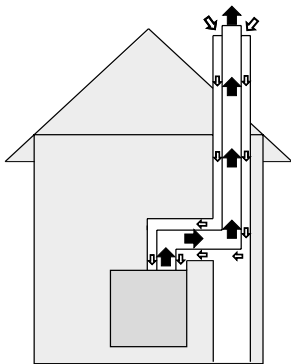


No	Denotation
1	WB125/500-X
2	ROZ125-H17
3	RP125/250-X
4	RDD60/80/100/125-KSP-X
5	TRD80/125/90-DB-KSP-X
6	KS80/90-KS-X
7	ROZ80-H17
8	KSW80/90-KS-X
9	RP80/1000-KS-X
10	OU80-X
11	PD80-X
12	KPD80-X

III.



Fume exhaust through an existing chimney with chimney liner
Air for combustion process supplied through an existing chimney using space between chimney and chimney liner

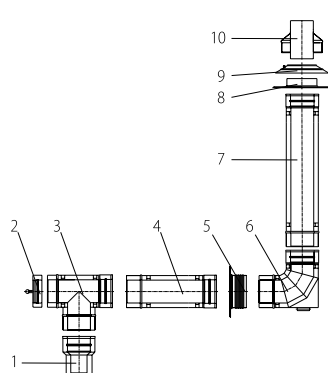
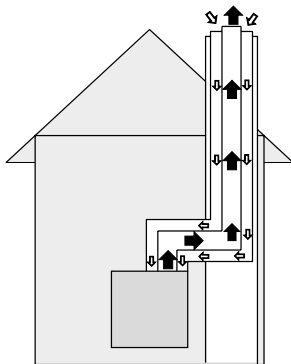


No	Denotation
1	RDD60/80/100/125-KSP-X
2	MSD80/125-KSP-X
3	TRD80/125/90-KSP-X
4	RPD80/125/500-KSP-X
5	ROZ125-H17
6	KSW80/90-KS-X
7	RP80/1000-KS-X
8	OU80-X
9	PDP80-KS-X
10	USD80/125-KSP-X

IV.



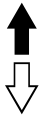
Fume exhaust through inner pipe of the concentric chimney
Air for combustion process supplied through outer pipe of concentric chimney



No	Denotation
1	RDD80/60-KSP-X
2	MSD80/125-KSP-X
3	TRD80/125/90-KSP-X
4	RPD80/125/500-KSP-X
5	ROZ125-H17
6	KSDW80/125/90-KSP-X
7	RPD80/125/1000-KSP-X
8	PDI25-KSP-X
9	KPDI25-KSP-X
10	USD80/125-KSP-X

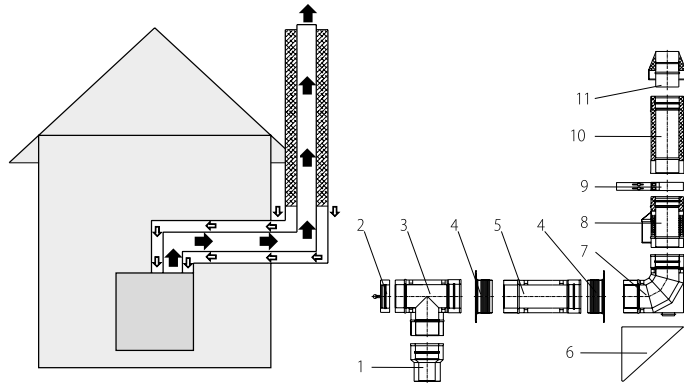
**SINGLE WALLED FLUE SYSTEM <SKS-X>
DOUBLE-WALLED AIR-FLUE SYSTEM <SKSP-X>**

V.



Fume exhaust through inner pipe of the concentric chimney

Air for combustion process supplied through outer pipe



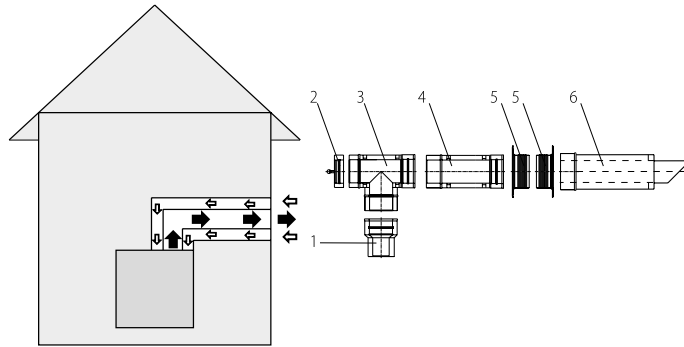
No	Denotation
1	RDD60/80/100/125-KSP-X4
2	MSD80/125-KSP-X4
3	TRD80/125/90-KSP-X4
4	ROZ125-CH
5	RPD80/125/500-KSP-X4
6	KWD125-X-60
7	KSDW80/125/90-KSP-X4
8	RP80/125-DB-KSP-X4
9	OMD-III25-X
10	RPD80/125/1000-KS-X4-IZ
11	USD80/125-X4-IZ

VI.



Fume exhaust through inner pipe of the concentric chimney - horizontally through the wall

Air for combustion process supplied through outer pipe



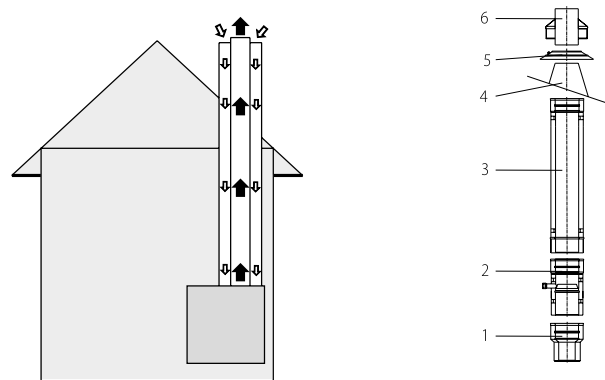
No	Denotation
1	RDD60/80/100/125-KSP-X4
2	MSD80/125-KSP-X4
3	TRD80/125/90-KSP-X4
4	RPD80/125-KSP-X4
5	ROZ125-CH
6	WBD80/125-KSP-X4

VII.



Fume exhaust through inner pipe of the concentric chimney

Air for combustion process supplied through outer pipe of concentric chimney



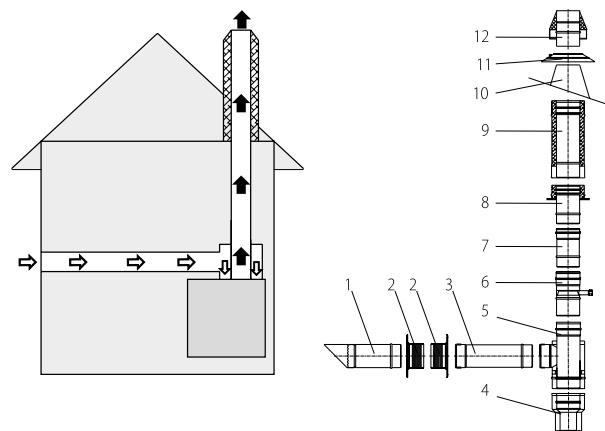
No	Denotation
1	RDD60/80/100/125-KSP-X4
2	MSP80/125-KSP-X4
3	RPD80/125/1000-KSP-X4
4	PKI25/10-X
5	KPD125-X
6	USD80/125-KSP-X4

VIII.



Fume exhaust above the roof through the chimney pipe

Air for combustion process supplied through horizontal pipe coming through the wall



No	Denotation
1	WB125/500-X4
2	ROZ125-CH
3	RP125/250-X4
4	RDD60/80/100/125-KSP-X4
5	TRD80/125/90-DB-KSP-X4
6	MSP80-KS-X4
7	RP80/500-KS-X4
8	PJD80/125-KS-X4-IZ
9	RPD80/125/1000-KS-X4-IZ
10	PKI25/10-X
11	KPD125-X
12	USD80/125-X4-IZ

CHIMNEY COWLS

STEERING & POWER SUPPLY

HOT AIR DISTRIBUTION SYSTEM

CHIMNEYS

VENTILATION

Bell joint pipe connection

Individual elements of the chimney system are being joint by the way of pushing one part of the element - a spigot, into the other press-formed part of the element - a bell. Thanks to this type of pipe joining, chimney is characterized by very tight and stiff construction. It also allows proper flow of condensate, along the walls of the chimney. Usage of a special seal made of silicone, which is applied in the middle of the bell, secures tightness of the system by positive pressure of fumes up to 200Pa.

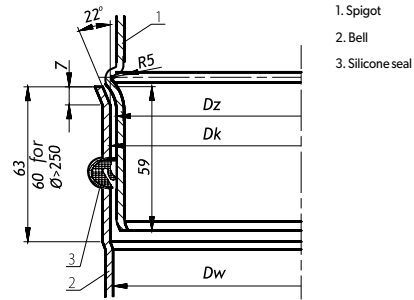
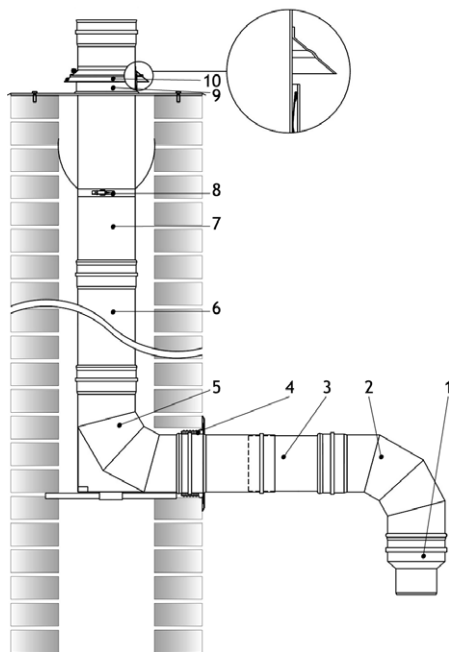


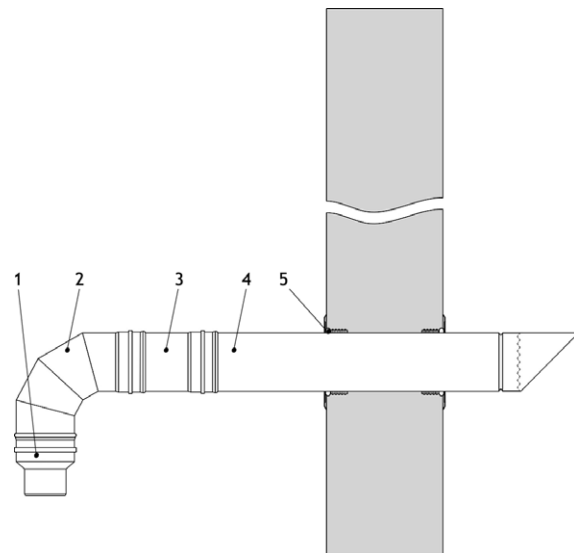
Fig. Method of joining single-walled pipe elements.

Model application of elements: SKS-X



No	Name	Denotation
1	Reducer (adaptor)	RD80/60-KS-X4
2	Solid elbow 90°	KS80/90-KS-X4
3	Telescopic pipe	RT80/2X250-KS-X4
4	Rosette	ROZ80-CH
5	Solid elbow 90° with support	KSW80/90-KS-X4
6	Straight pipe 250 mm	RP80/250-KS-X4
7	Straight pipe 1000 mm	RP80/1000-KS-X4
8	Stabilizing brackets	OU80-X
9	Roof plate	PD80-X
10	Rain collar	KPD80-X

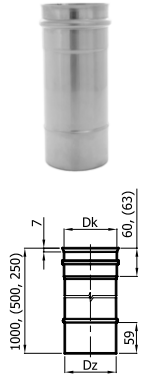
Fig. Example of a flue chimney construction - vertical fume exhaust.



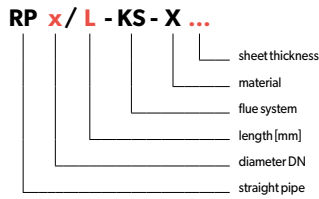
No	Name	Denotation
1	Reducer (adaptor)	RD80/60-KS-X4
2	Solid elbow 90°	KS80/90-KS-X4
3	Straight pipe 250 mm	RP80/250-KS-X4
4	Horizontal terminal 1000 mm	WB80/1000-KS-X4
5	Rosette	ROZ80-CH

Fig. Example of a flue chimney construction - horizontal fume exhaust (through the wall)

1. STRAIGHT PIPE RP-KS-X



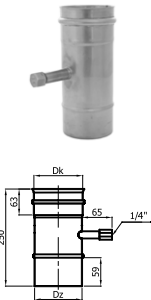
Diameter DN	ø60	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	for s=0.4+0.6
Dz	60.2	80.0	100.7	111.8	122.9	132.5	140.5	151.7	161.2	181.9	201.0	226.6	252.1	
Dk	60.5	81.0	101.7	112.8	123.9	133.5	141.5	152.7	162.2	182.9	202.0	227.6	253.1	
Weight [kg]	0.60	0.80	1.00	1.10	1.20	1.30	1.40	1.90	2.00	2.30	2.50	3.40	3.80	



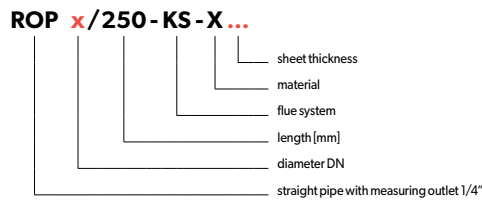
Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

2. STRAIGHT PIPE WITH MEASURING OUTLET 1/4" ROP-KS-X



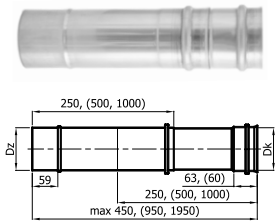
Diameter DN	ø60	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	for s=0.4+0.6
Dz	60.2	80.0	100.7	111.8	122.9	132.5	140.5	151.7	161.2	181.9	201.0	226.7	252.1	
Dk	60.5	81.0	101.7	112.8	123.9	133.5	141.5	152.7	162.2	182.9	202.0	227.6	253.1	
Weight [kg]	0.25	0.30	0.35	0.40	0.40	0.45	0.45	0.60	0.60	0.70	0.75	0.85	1.00	



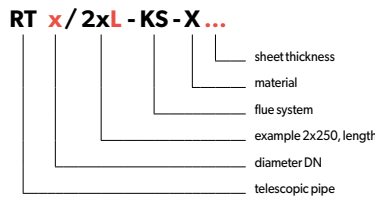
Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

3. TELESCOPIC PIPE RT-KS-X



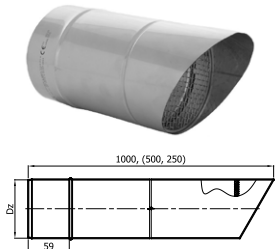
Diameter DN	ø60	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	for s=0.4+0.6 L=2x250
Dz	60.2	80.0	100.7	111.8	122.9	132.5	140.5	151.7	161.2	181.9	201.0	226.7	252.1	
Dk	60.5	81.0	101.7	112.8	123.9	133.5	141.5	152.7	162.2	182.9	202.0	227.6	253.1	
Weight [kg]	0.30	0.40	0.50	0.55	0.60	0.65	0.70	0.95	1.00	1.15	1.25	1.70	1.90	



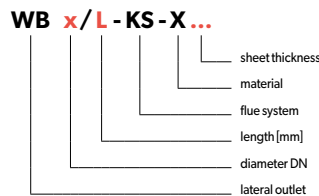
Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

4. LATERAL OUTLET WITH WIRE MESH WB-KS-X



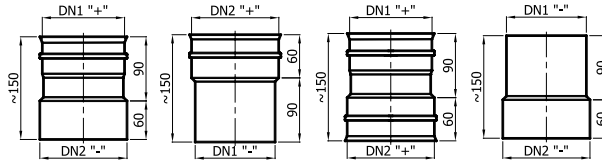
Diameter DN	ø60	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	for s=0.4+0.6
Dz	60.2	80.0	100.7	111.8	122.9	132.5	140.5	151.7	161.2	181.9	201.0	226.7	252.1	
Weight [kg]	0.60	0.80	1.00	1.10	1.20	1.30	1.40	1.90	2.00	2.30	2.50	3.00	3.30	



Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

5. REDUCER RD-KS-X

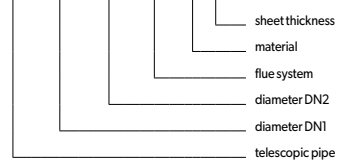


ex. RD+80/-60-KS

„+“ bell
„-“ spigot

Diameter DN	ø60	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	for s=0,4≠0,6
Weight [kg]	0.10	0.15	0.19	0.21	0.23	0.25	0.32	0.34	0.36	0.41	0.45	0.51	0.57	

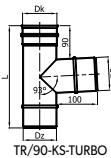
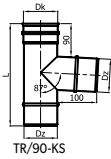
RD ±x / ±y -KS -X ...



Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

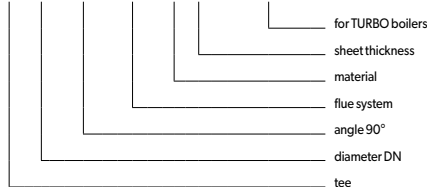
* from pellet stoves

6. TEE 87° TR/90-KS, TEE 93° TR/90-KS-X-TURBO



Diameter DN	ø60	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	for s=0,4≠0,6
Dz	60.2	80.0	100.7	111.8	122.9	132.5	140.5	151.7	161.2	181.9	201.0	226.7	252.1	
Dk	60.5	81.0	101.7	112.8	123.9	133.5	141.5	152.7	162.2	182.9	202.0	227.6	253.1	
L [mm]	240	260	280	290	300	310	320	330	340	360	380	405	430	
Weight [kg]	0.20	0.30	0.40	0.45	0.50	0.55	0.60	0.80	0.90	1.10	1.20	1.75	2.00	

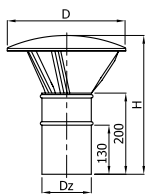
TR x / 90 -KS -X ... -TURBO



Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

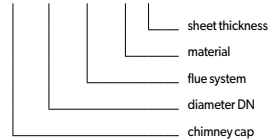
* from pellet stoves

7. CHIMNEY CAP DK-KS-X



Diameter DN	ø60	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	for s=0,4≠0,6
Dz	59.0	78.7	99.4	110.5	121.7	131.2	139.0	150.1	159.7	180.4	199.5	
D	160	160	220	220	250	250	290	290	290	290	350	
H	315	315	330	335	340	355	360	365	365	365	400	
Weight [kg]	0.40	0.45	0.50	0.55	0.60	0.65	0.70	0.85	0.90	1.00	1.10	

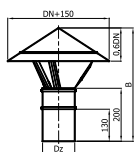
DK x -KS -X ...



Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

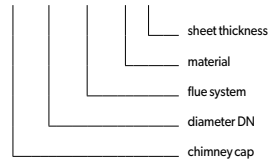
* from pellet stoves

8. CHIMNEY CAP DK-KS-X



Diameter DN	ø225	ø250	for s=0,6
Dz	224.5	250.2	
B	470	500	
Weight [kg]	1.75	2.00	

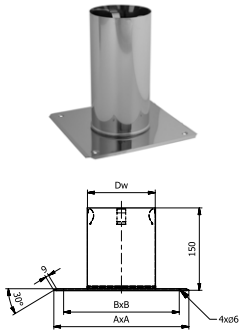
DK x -KS -X ...



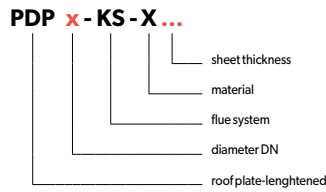
Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

9. ROOF PLATE-LENGTHENED PDP-KS

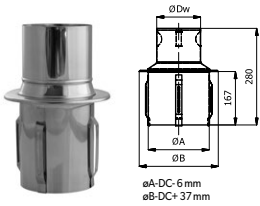


Diameter DN	ø60	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	for s=0,4≠0,6
Dw [mm]	99.8	125.2	150.7	160.3	181.0	200.1	225.5	225.5	250.9	300.3	300.3	324.2	324.2	
A [mm]	250	250	300	300	300	300	350	350	400	450	450	450	450	
B [mm]	210	210	260	260	260	290	310	310	360	410	410	410	410	
Weight [kg]	0.60	0.65	0.80	0.80	0.85	0.95	1.20	1.25	1.45	1.65	1.70	1.85	1.90	

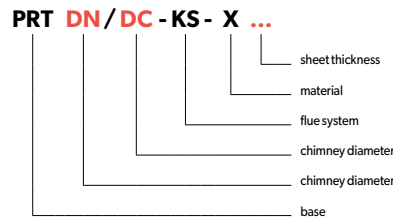


Destination	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

10. FORCE-IN MOUNTING BASE PRT-KS

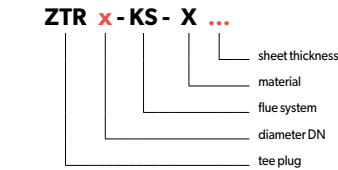
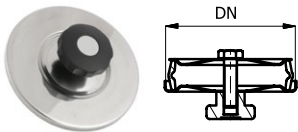


Diameter DN	ø60	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	for s=0,4≠0,6
øDw [mm]	99.8	125.2	150.7	160.3	181.0	200.1	225.5	225.5	250.9	300.3	324.2	324.2	324.2	
Weight [kg]	0.60	0.65	0.80	0.80	0.85	0.95	1.20	1.25	1.45	1.65	1.70	1.85	1.90	



Destination	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

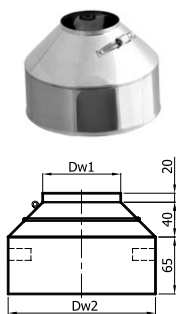
11. TEE PLUG ZTR-KS



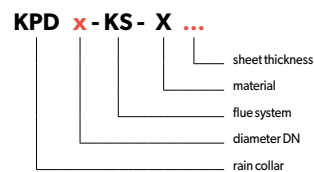
Destination	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

Diameter DN	ø60	ø80	for s=0,4≠0,6
Weight [kg]	0.16	0.18	

12. RAIN COLLAR WITH AIR INLET KPD-KS

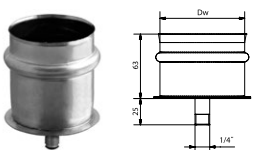


Diameter DN	ø60	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	for s=0,4≠0,6
Dw1	60.1	80.1	100.8	111.9	123.0	132.6	140.6	151.8	161.3	182.0	201.1	226.7	252.2	
Dw2	160	180	210	220	240	260	280	280	310	360	360	410	140	
Weight [kg]	0.20	0.25	0.25	0.30	0.30	0.35	0.45	0.45	0.50	0.55	0.55	0.60	0.60	

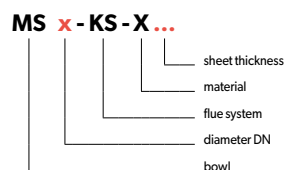


Destination	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

13. CONDENSATE BOWL/PLUG MS-KS-X



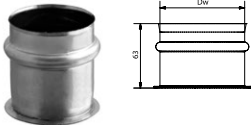
Diameter DN	ø60	ø80	ø90	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	for s=0,4≠0,6
Dw [mm]	59.6	79.2	99.9	111.0	122.1	131.7	139.7	150.7	160.2	180.9	200.0	225.4	250.9	251.0	
Weight [kg]	0.16	0.18	0.20	0.21	0.23	0.24	0.26	0.30	0.33	0.35	0.40	0.45	0.50	0.60	



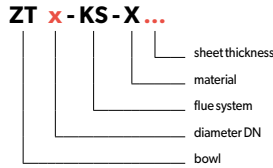
Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

14. CONDENSATE BOWL/PLUG ZT-KS-X



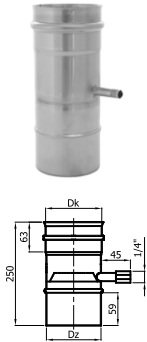
Diameter DN	ø60	ø80	ø90	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	for s=0.4≠0.6
Dw [mm]	59.6	79.2	99.9	111.0	122.1	131.7	139.7	150.7	160.2	180.9	200.0	225.4	250.9	251.0	
Weight [kg]	0.14	0.16	0.18	0.19	0.21	0.22	0.24	0.28	0.31	0.32	0.38	0.43	0.48	0.58	



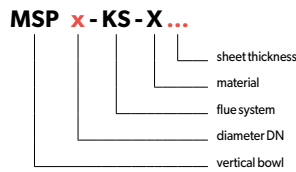
Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

15. VERTICAL BOWL MSP-KS-X



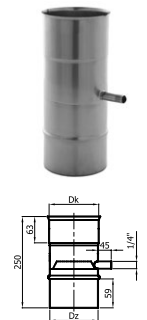
Diameter DN	ø60	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	for s=0.4≠0.6
Dz	60.2	80.0	100.7	111.8	122.9	132.5	140.5	151.7	161.2	181.9	201.0	226.6	252.1	
Dk	60.5	81.0	101.7	112.8	123.9	133.5	141.5	152.7	162.2	182.9	202.0	227.6	253.1	
Weight [kg]	0.25	0.30	0.35	0.40	0.40	0.45	0.45	0.60	0.60	0.70	0.75	0.85	1.00	



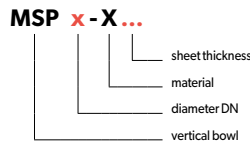
Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

16. VERTICAL BOWL MSP-X



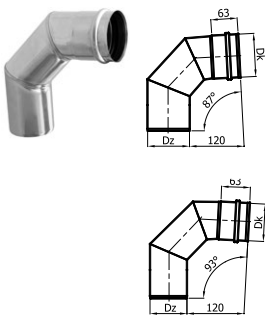
Diameter DN	ø100	ø125	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	for s=0.4≠0.6
Dz	100.8	124.6	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	
Dk	101.8	125.6	152.9	162.4	183.1	202.2	227.7	253.2	303.1	352.4	
Weight [kg]	0.45	0.50	0.70	0.75	0.85	0.90	1.00	1.10	1.30	1.50	



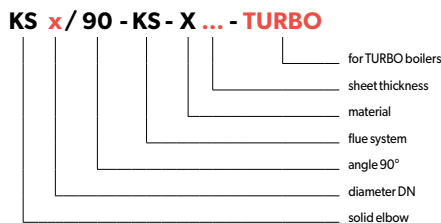
Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

17. SOLID ELBOW 87° KS/90-KS, SOLID ELBOW 93° KS/90-KS-X-TURBO



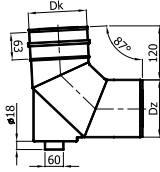
Diameter DN	ø60	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	for s=0.4≠0.6
Dz [mm]	60.2	80.0	100.7	111.8	122.9	132.5	140.5	151.7	161.2	181.9	201.0	226.6	252.1	
Dk [mm]	60.5	81.0	101.7	112.8	123.9	133.5	141.5	152.7	162.2	182.9	202.0	227.6	253.1	
Weight [kg]	0.19	0.24	0.36	0.40	0.44	0.48	0.60	0.70	0.85	0.90	1.05	1.40	1.85	



Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

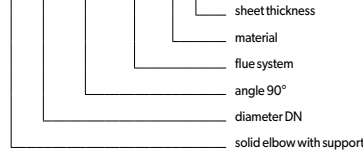
* from pellet stoves

18. SOLID ELBOW 87° WITH SUPPORT KSW/90-KS-X



Diameter DN	ø60	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	for s=0,4#0,6
Dz [mm]	60.2	80.0	100.7	111.8	122.9	132.5	140.5	151.7	161.2	181.9	201.0	226.6	252.1	
Dk [mm]	60.5	81.0	101.7	112.8	123.9	133.5	141.5	152.7	162.2	182.9	202.0	227.6	253.1	
Weight [kg]	0.19	0.24	0.36	0.40	0.44	0.48	0.60	0.70	0.85	0.90	1.05	1.40	1.85	

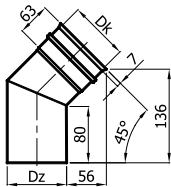
KS x / 90 - KS - X ...



Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

19. SOLID ELBOW 45° KS/45-KS-X



Diameter DN	ø60	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	for s=0,4#0,6
Dz	60.2	80.0	100.7	111.8	122.9	132.5	140.5	151.7	161.2	181.9	201.0	226.6	252.1	
Dk	60.5	81.0	101.7	112.8	123.9	133.5	141.5	152.7	162.2	182.9	202.0	227.6	253.1	
Weight [kg]	0.12	0.16	0.24	0.24	0.28	0.32	0.40	0.42	0.50	0.60	0.66	0.95	1.10	

KS x / 45 - KS - X ...



Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

CHIMNEY COWLS

STEERING & POWER SUPPLY

HOT AIR DISTRIBUTION SYSTEM

CHIMNEYS

VENTILATION

DOUBLE-WALLED AIR-FLUE SYSTEM <SKSP-X> DOUBLE-WALLED AIR-FLUE SYSTEM POWDER COATED <SKSP-X-ML>

DARCO system

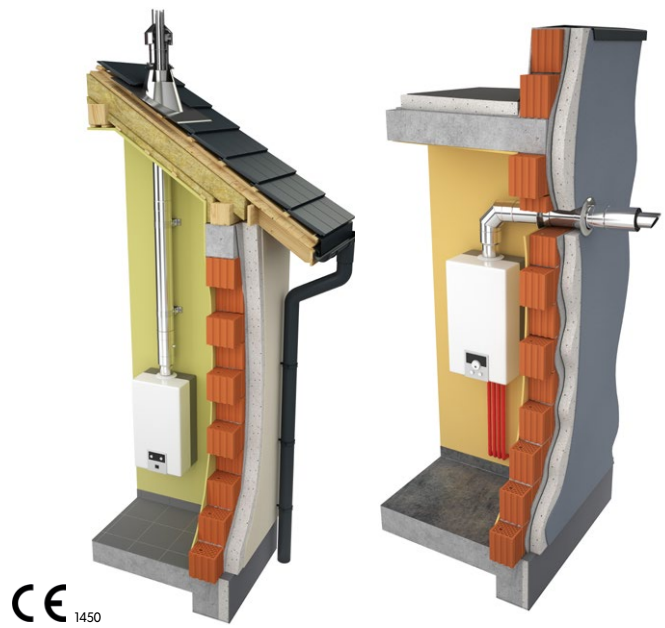
Double - walled air - flue system

Double - walled air - flue system <SKSP-X> - double walled chimney elements made of stainless steel: inner pipe - 1.4301, outer pipe - 1.4301. This is used to exhaust fumes from modern condensing boilers, which use the effect of water vapour condensing in the combustion process or from "Turbo" type boilers with closed combustion chamber, that use a ventilator to exhaust fumes (positive pressure chimney duct) as well as from pellet stoves. SKSP-X system is built with double walled elements (two pipes axially placed). Construction of the system allows fume exhaustion to be made through inner duct while air supply is made through the gap between inner and outer duct.

Maximum working temperature: 250°C

In DARCO offer there is also double walled air - flue system powder coated <SKSP-X-ML> chimney systems, in which outer pipe is powder coated in RAL 9003 colour.

Certificate of Factory Production Control 1450-CPD-0030 issued by INiG Cracow.



CHIMNEY COWLS

STEERING & POWER SUPPLY

HOT AIR DISTRIBUTION SYSTEM

CHIMNEYS

VENTILATION

Application of chimneys and recommended sheet thicknesses

Diameter DN	S, D* 1.4301	** 1.4301
60	0.4	0.4
80	0.4	0.4
100	0.4	0.4
110	0.4	0.4
120	0.4	0.4
125	0.4	0.4
130	0.4	0.4
140	0.4	0.4
150	0.5	0.5
160	0.5	0.5
180	0.5	0.5
200	0.5	0.5
225	0.6	0.5
250	0.6	0.5
280	-	0.6
300	-	0.6
350	-	0.6

Destination

- S - flue ducts (gas, oil)
- D* - smoke ducts from pellets burning devices
- ** -

Table of layouts and sizes

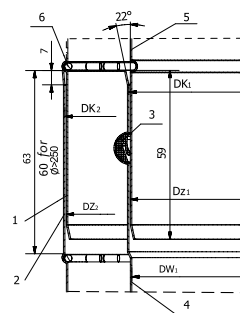
Diameter DN	Lr	Dz	Dw	Dk	s
60	188	60.2	59.4	60.5	0.4
80	250	80.0	79.2	81.0	
100	315	100.7	99.9	101.7	
110	350	111.8	110.0	112.8	
120	385	122.9	122.1	123.9	
125	390	124.5	123.7	125.5	
130	415	132.5	131.7	133.5	
140	440	140.5	139.7	141.5	
150	475	151.7	150.7	152.7	
160	505	161.2	160.2	162.2	
180	570	181.9	180.9	182.9	0.5
200	630	201.0	200.0	202.0	
225	710	226.6	225.4	227.6	
250	790	252.1	250.9	253.1	
280	880	280.7	279.5	281.7	
300	945	301.4	300.2	302.4	0.6
350	1100	350.9	349.4	352.4	

Measurements

- Lr - metal sheet layout [mm]±0.1
- Dz - outer diameter of pipe [mm]
- Dw - inner diameter of pipe [mm]
- Dk - inner diameter of bell [mm]
- s - metal sheet thickness [mm]

Bell joint pipe connection

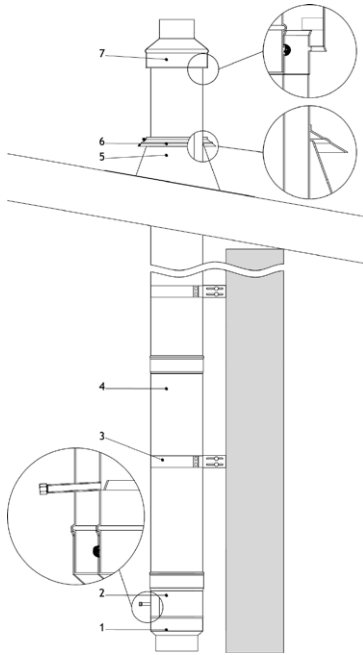
Individual elements of the chimney system are being joint by the way of pushing one part - a spigot, into the other press-formed part - a bell. Thanks to this type of pipe joining, chimney is characterized by very tight and stiff construction. It also allows proper flow of condensate, along walls of the chimney. Usage of a special seal made of silicone, which is applied in the middle of the bell, secures tightness of the system by positive pressure of fumes up to 200Pa.



1. Spigot - outer pipe
2. Bell - outer pipe
3. Silicone seal
4. Bell - inner pipe
5. Spigot - inner pipe
6. Stabilizing wire

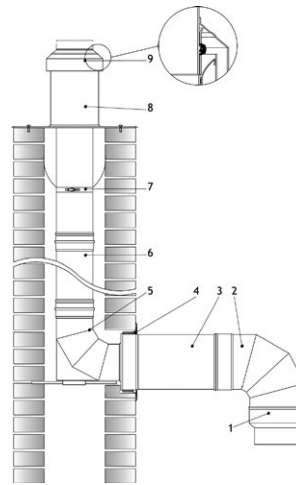
Fig. Method of joining double - walled pipe elements.

Model application of elements: SKSP-X



No	Name	Denotation
1	Reducer (adaptor)	RDD80/60/125/100-KSP-X4
2	Bowl vertical	MSPD80/125-KSP-X4
3	Mounting bracket	OMD-I125-X/5-8
4	Straight pipe 1000 mm	RPD80/125/1000-KSP-X4
5	Roof flashing 0°-20°	PDK80/125/20-X
6	Rain collar	KPD125-X
7	Mouthpiece	USD80/125-KSP-X4

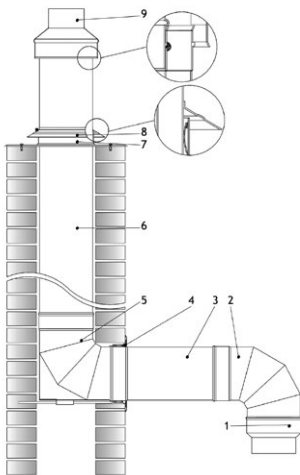
Fig. Example of a double walled air - flue chimney construction (chimney inside the building).



No	Name	Denotation
1	Reducer (adaptor)	RDD80/60/125/100-KSP-X4
2	Solid elbow 90°	KSD80/125/90-KSP-X4
3	Straight pipe 250 mm	RPD80/125/250-KSP-X4
4	Rosette	ROZ125-CH
5	Solid elbow 90° with support	KSW80/90-KS-X
6	Straight pipe 1000 mm	RP80/1000-KS-X4
7	Stabilizing brackets	OU80-X
8	Roof plate lengthened	PDP80-X4
9	Rain collar with air inlet	KPD125-KS-X

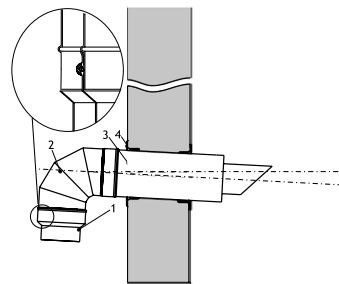
Fig. Example of a double walled air - flue chimney and a single walled flue chimney construction (chimney inside the existing ceramic chimney duct)

Model application of elements: SKSP-X



No	Name	Denotation
1	Reducer (adaptor)	RDD80/60/125/100-KSP-X4
2	Solid elbow 90°	KSD80/12590-KSP-X4
3	Straight pipe 250 mm	RPD80/125/250-KSP-X4
4	Rosette	ROZ125-CH
5	Solid elbow 90° ze wspornikiem	KSDW80/125/90-KSP-X4
6	Straight pipe 1000 mm	RPD80/125/1000-KSP-X4
7	Roof plate	PD125-X
8	Rain collar	KPD125-X
9	Mouthpiece	USD80/125-KSP-X4

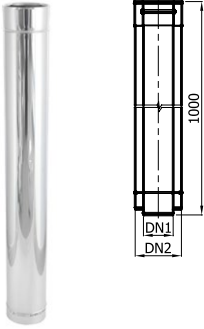
Fig. Example of a double walled air-flue chimney construction vertical fume exhaust



No	Name	Denotation
1	Reducer (adaptor)	RDD80/60/125/100-KSP-X4
2	Solid elbow 90°	KSD80/125/90-KSP-X4-TURBO
3	Horizontal terminal	WBD80/125-KSP-X4
4	Rosette	ROZ125-CH

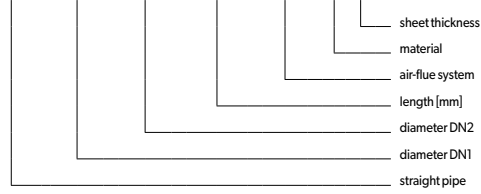
Fig. Example of a double walled air - flue chimney construction horizontal fume exhaust (through the wall).

1. STRAIGHT PIPE RPDS-X



Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	250	for s 0.4#0.6
Weight [kg]	1.60	2.05	2.90	3.15	3.50	3.85	4.75	5.15	6.05	6.30	8.20	

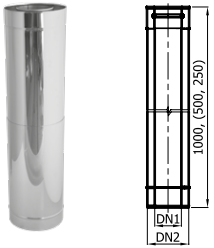
RPDS DN1 / DN2 / 1000 - KSP - X ...



Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

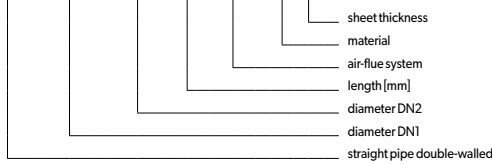
* from pellet stoves

2. TRAIHT PIPE RPD-KSP-X



Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	250	for s 0.4#0.6
Weight [kg]	1.60	2.05	2.90	3.15	3.50	3.85	4.75	5.15	6.05	6.30	8.20	

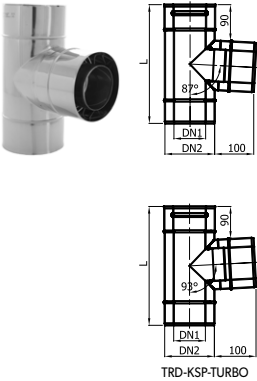
RPD DN1 / DN2 / L - KSP - X ...



Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

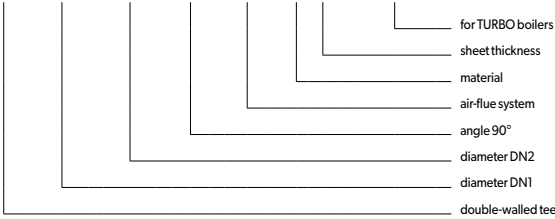
* from pellet stoves

3. TEE 87° TRD-KSP, TEE 93° TRD-KSP-X-TURBO



Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	250	for s 0.4#0.6
L [mm]	280	300	330	340	360	380	405	430	480	480	530	
Weight [kg]	0.65	0.85	1.30	1.40	1.60	1.85	2.45	2.75	3.50	3.65	5.15	

TRD DN1 / DN2 / 90 - KSP - X ... - TURBO



Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

Usage:

TRD/90-KSP - for boilers with closed combustion chamber where flow of condensate can be carried out through the boiler.

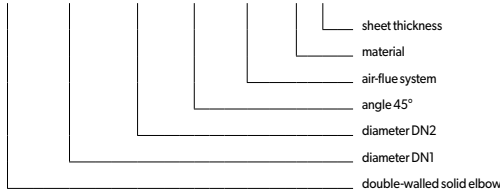
TRD/90-KSP-TURBO - for boilers with closed combustion chamber (TURBO) where flow of condensate can not be carried out through the boiler.

4. SOLID ELBOW 45° KSD/45-KSP-X



Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	250	for s 0.4#0.6
Weight [kg]	0.35	0.50	0.70	0.80	0.90	1.10	1.40	1.60	2.10	2.20	3.20	

KSD DN1 / DN2 / 45 - KSP - X ...



Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

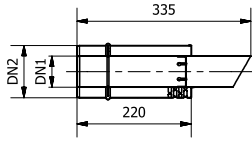
5. LATERAL OUTLET WITH AIR INTAKE [0.22 m] WBD-KSP-X



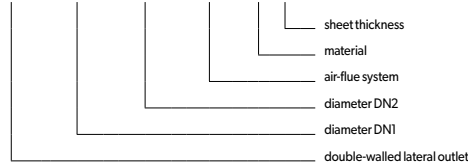
Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	250	for s 0.4#0.6
Weight [kg]	0.46	0.58	0.80	0.87	0.98	1.10	1.37	1.63	1.96	2.01	2.50	

Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves



WBD DN1 / DN2 - KSP - X ...



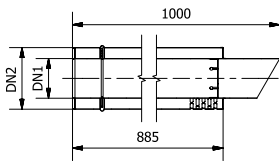
6. LATERAL OUTLET WITH AIR INTAKE [1 m] WBD-KSP-X



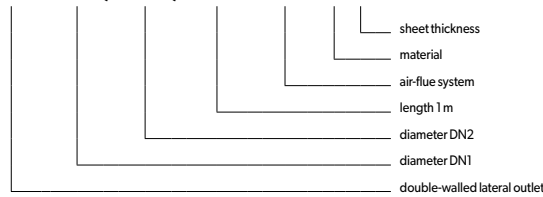
Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	for s 0.4#0.6
Weight [kg]	1.52	1.95	2.76	2.99	3.33	3.66	4.51	4.89	5.75	5.99	

Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

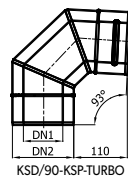
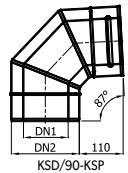
* from pellet stoves



WBD DN1 / DN2 / 1000 - KSP - X ...



7. SOLID ELBOW 87° KSD/90-KSP, SOLID ELBOW 93° KSD/90-KSP-TURBO-X

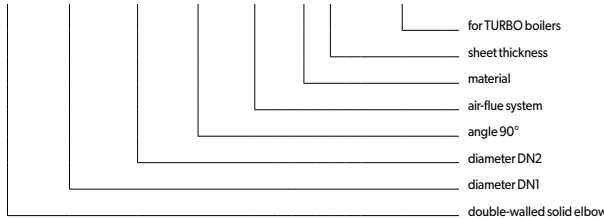


Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	250	for s 0.4#0.6
Weight [kg]	0.46	0.64	0.96	1.07	1.24	1.43	1.84	2.11	2.73	2.84	4.02	

Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

KSD DN1 / DN2 / 90 - KSP - X ... - TURBO

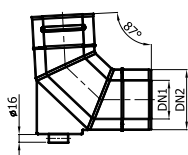


Usage:

TRD/90-KSP - for boilers with closed combustion chamber where flow of condensate can be carried out through the boiler.

TRD/90-KSP-TURBO - for boilers with closed combustion chamber (TURBO) where flow of condensate can not be carried out through the boiler.

8. SOLID ELBOW 87° WITH SUPPORT KSDW/90-KSP-X

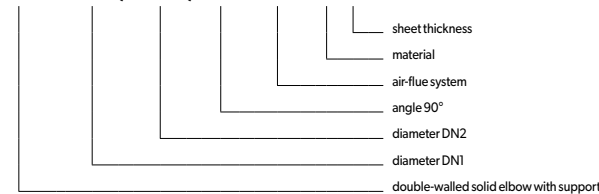


Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	250	for s 0.4#0.6
Weight [kg]	0.66	0.84	1.16	1.27	1.44	1.63	2.04	2.31	2.93	3.04	4.22	

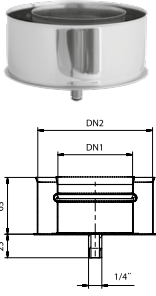
Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

KSDW DN1 / DN2 / 90 - KSP - X ...

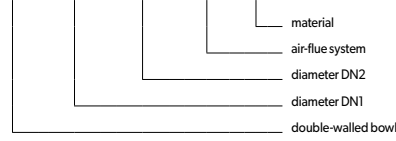


9. BOWL/PLUG MSD-KSP-X



Diameter DNI/DN2	60	80	100	110	120	130	150	160	180	200	250	for s 0.4#0.6
Weight [kg]	0.30	0.35	0.45	0.50	0.55	0.60	0.75	0.80	1.00	1.10	1.20	

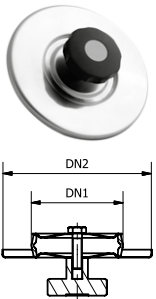
MSD DNI / DN2 - KSP - X



Destination	S	S- flue ducts (gas, oil)
	*	D- smoke ducts
Material	X	X- stainless steel 1.4301
Sheet thickness	4	4- sheet thickness 0.4 mm
	5	5- sheet thickness 0.5 mm
	6	6- sheet thickness 0.6 mm

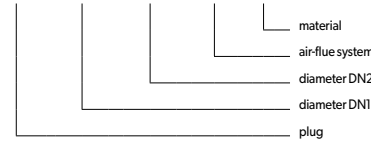
* from pellet stoves

10. TEE PLUG ZTRD-KSP-X



Diameter DNI/DN2	60	80	for s 0.4#0.6
Weight [kg]	0.30	0.35	

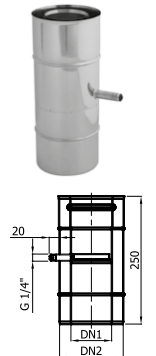
ZTRD DNI / DN2 - KSP - X



Destination	S	S- flue ducts (gas, oil)
	*	D- smoke ducts
Material	X	X- stainless steel 1.4301
Sheet thickness	4	4- sheet thickness 0.4 mm
	5	5- sheet thickness 0.5 mm
	6	6- sheet thickness 0.6 mm

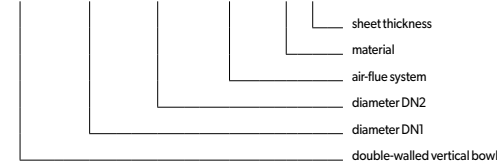
* from pellet stoves

11. VERTICAL BOWL ON THE FLUE DUCT MSPD-KSP-I-X



Diameter DNI/DN2	60	80	100	110	120	130	150	160	180	200	250	for s 0.4#0.6
Weight [kg]	0.55	0.66	0.88	0.94	1.03	1.11	1.34	1.44	1.66	1.73	2.20	

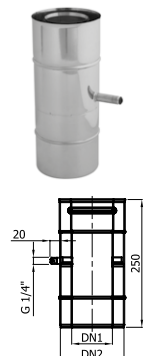
MSPD DNI / DN2 - KSP-I - X ...



Destination	S	S- flue ducts (gas, oil)
	*	D- smoke ducts
Material	X	X- stainless steel 1.4301
Sheet thickness s	4	4- sheet thickness 0.4 mm
	5	5- sheet thickness 0.5 mm
	6	6- sheet thickness 0.6 mm

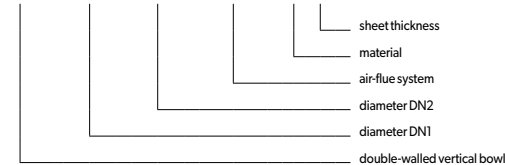
* from pellet stoves

12. VERTICAL BOWL ON THE AIR DUCT MSPD-KSP-II-X



Diameter DNI/DN2	60	80	100	110	120	130	150	160	180	200	250	for s 0.4#0.6
Weight [kg]	0.55	0.66	0.88	0.94	1.03	1.11	1.34	1.44	1.66	1.73	2.20	

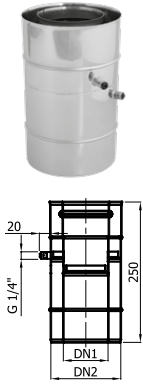
MSPD DNI / DN2 - KSP-II - X ...



Destination	S	S- flue ducts (gas, oil)
	*	D- smoke ducts
Material	X	X- stainless steel 1.4301
Sheet thickness s	4	4- sheet thickness 0.4 mm
	5	5- sheet thickness 0.5 mm
	6	6- sheet thickness 0.6 mm

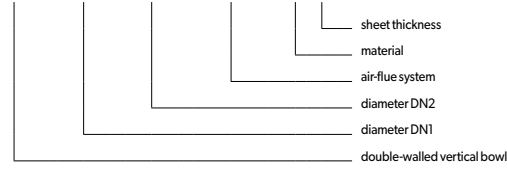
* from pellet stoves

13. VERTICAL BOWL ON AIR-FLUE DUCT MSPD-KSP-III-X



Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	250	for s 0.4±0.6
Weight [kg]	0.70	0.81	1.03	1.09	1.18	1.26	1.49	1.59	1.81	1.88	2.35	

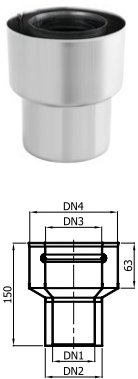
MSPD **DN1 / DN2** - KSP-III - X ...



Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

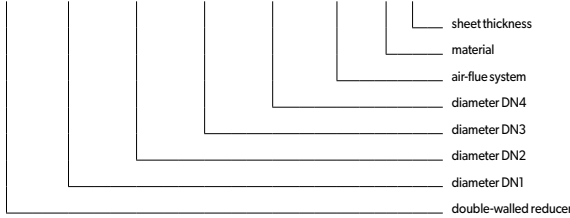
* from pellet stoves

14. REDUCER RDD-KSP-X



Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	250	for s 0.4±0.6
Weight [kg]	0.24	0.31	0.44	0.47	0.53	0.58	0.71	0.77	0.91	0.95	1.23	

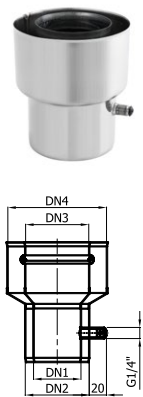
RDD **DN1 / DN2 / DN3 / DN4** - KSP - X ...



Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

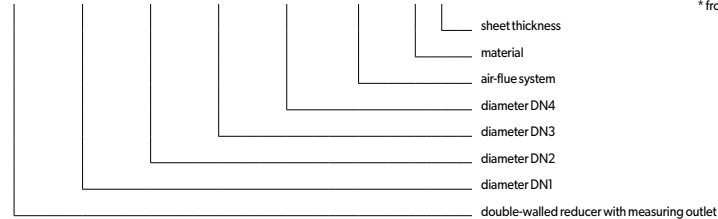
* from pellet stoves

15. REDUCER WITH MEASURING OUTLET 1/4" - S RDDP-KSP-I-X



Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	250	for s 0.4±0.6
Weight [kg]	0.34	0.41	0.54	0.57	0.63	0.68	0.81	0.87	1.01	1.05	1.33	

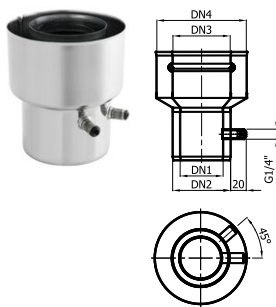
RDDP **DN1 / DN2 / DN3 / DN4** - KSP-I - X ...



Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

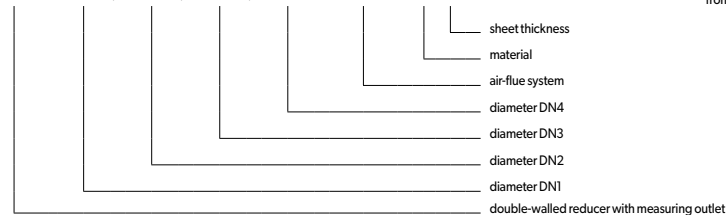
* from pellet stoves

16. REDUCER WITH MEASURING OUTLET 1/4" - SP RDDP-KSP-II-X



Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	250	for s 0.4±0.6
Weight [kg]	0.34	0.41	0.54	0.57	0.63	0.68	0.81	0.87	1.01	1.05	1.33	

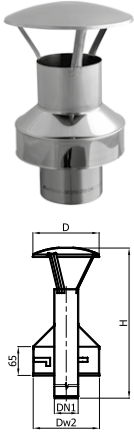
RDDP **DN1 / DN2 / DN3 / DN4** - KSP-II - X ...



Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

17. CAP DKD-KSP-X

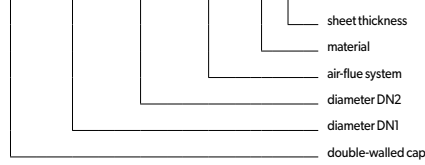


Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	250	for s 0.4÷0.6
Dw2 [mm]	160	180	210	220	240	260	280	310	360	360	410	
D	160	160	220	220	250	250	290	290	290	350	400	
H	410	410	410	410	410	410	430	430	430	450	630	
Weight [kg]	0.65	0.75	0.90	0.95	1.05	1.10	1.35	1.65	1.85	2.05	3.60	

Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

DKD DN1 / DN2 - KSP - X ...



18. MOUTHPIECE WITH AIR INLET USD-KSP-X

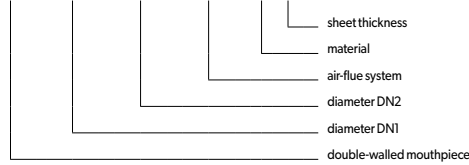


Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	250	for s 0.4÷0.6
Dw2 [mm]	160	180	210	220	240	260	280	310	360	360	410	
Weight [kg]	0.40	0.45	0.55	0.60	0.70	0.75	0.85	1.10	1.30	1.55	1.60	

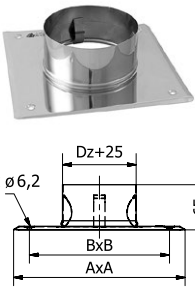
Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

USD DN1 / DN2 - KSP - X ...



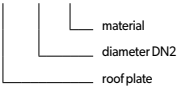
19. ROOF PLATE PD-X



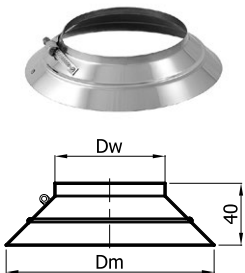
Diameter DN2	100	125	150	160	180	200	225	250	300	300	for s 0.4÷0.6
Dz [mm]	100.9	124.6	151.9	161.4	182.1	201.2	226.7	252.2	301.6	301.6	
A [mm]	250	250	300	300	330	330	350	400	450	450	
B [mm]	200	200	250	250	280	280	300	350	400	400	
Weight [kg]	0.35	0.35	0.50	0.50	0.60	0.60	0.60	0.80	0.90	1.10	

Destination	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301

PD x - X



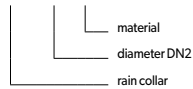
20. RAIN COLLAR KPD-X



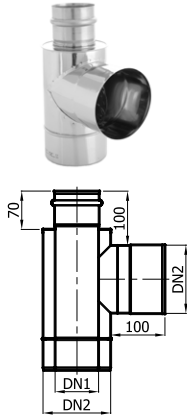
Diameter DN2	100	125	130	150	160	180	200	225	250	300	350	for s 0.4÷0.6
Dw [mm]	99.7	124	131.6	150.7	160.2	180.9	200.0	225.5	251.0	300.4	349.7	
Dm [mm]	172	196	204	223	232	253	272	326	350	400	450	
Weight [kg]	0.15	0.20	0.20	0.20	0.25	0.25	0.30	0.30	0.35	0.35	0.40	

Destination	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301

KPD x - X

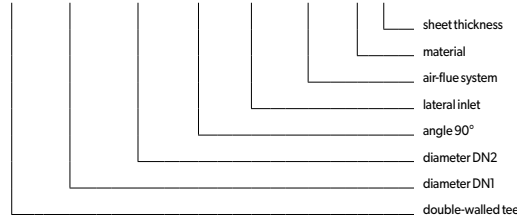


21. TEE 90° WITH LATERAL INLET TRD-DB-KSP-X



Diameter DNI/DN2	60	80	100	110	120	130	150	160	180	200	250	for s 0,4±0,6
L [mm]	280	300	330	340	360	380	405	430	480	480	510	
Weight [kg]	0.65	0.85	1.30	1.40	1.60	1.85	2.45	2.75	3.50	3.65	5.15	

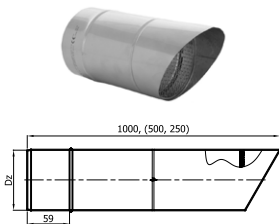
TRD DNI / DN2 / 90 - DB - KSP - X ...



Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

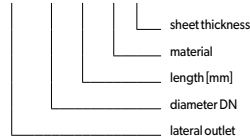
* from pellet stoves

22. LATERAL OUTLET WITH WIRE MESH (AIR INTAKE) WB-X



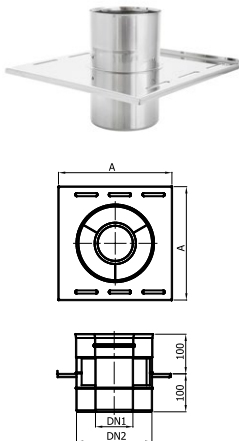
Diameter DN	100	120	125	130	150	160	180	200	225	250	300	for s 0,4±0,6
Dz	100.9	123.2	124.6	132.8	151.8	161.4	182.0	201.1	226.6	252.2	301.6	
Weight [kg]	1.00	1.20	1.25	1.30	1.90	2.00	2.30	2.50	3.00	3.30	3.60	

WB x / L - X ...



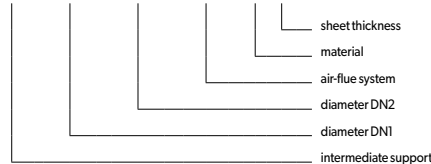
Destination	W	W - ventilation ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

23. INTERMEDIATE SUPPORT PPD-KSP-X



Diameter DNI/DN2	60	80	100	110	120	130	150	160	180	200	250	for s 0,4±0,6
A [mm]	300	300	325	325	325	350	350	380	400	425	450	
Weight [kg]	0.60	0.75	0.90	1.00	1.10	1.20	1.50	1.60	1.85	1.95	2.35	

PPD DNI / DN2 - KSP - X ...



Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

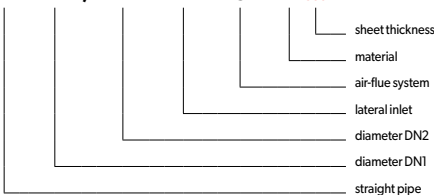
* from pellet stoves

24. STRAIGHT PIPE WITH LATERAL INLET RP-DB-KSP-X



Diameter DNI/DN2	60	80	100	110	120	130	150	160	180	200	250	for s 0,4±0,6
Weight [kg]	1.20	1.50	1.80	1.95	2.15	2.35	3.05	3.30	3.55	3.65	4.00	

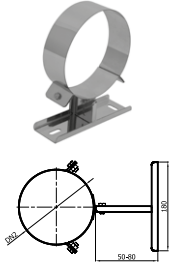
RP DNI / DN2 - DB - KSP - X ...



Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

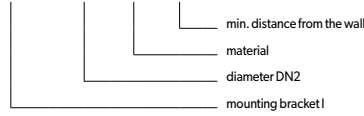
* from pellet stoves

25. MOUNTING BRACKET WITH ADJUSTMENT OMD-I-X



Diameter DN2	100	125	150	160	180	200	225	250	300	350	for s 0.4#0.6
Weight [kg]	0.55	0.70	0.75	0.80	0.85	0.85	0.90	0.95	1.00	1.10	

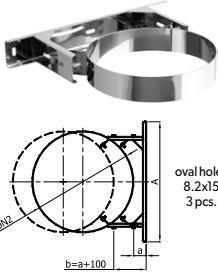
OMD-I-DN2-X/ 5-8



Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301

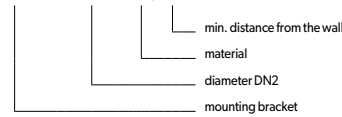
Caution! Bracket should be applied inside buildings.

26. MOUNTING BRACKET WITH ADJUSTMENT OMD-II-X



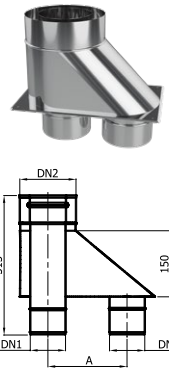
Diameter DN2	100	125	150	160	180	200	225	250	300	350	for s 0.4#0.6
A [mm]	300	327	346	354	368	380	395	409	433	456	
Weight [kg]	0.80	1.00	1.05	1.05	1.10	1.10	1.15	1.20	1.30	1.40	

OMD-II-DN2-X/a



Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301

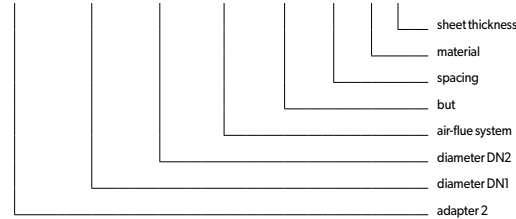
27. ADAPTER 2 ADAP2-KSP-BUT-X



Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	250	for s 0.4#0.6
Weight [kg]	100	125	150	160	180	200	225	250	300	300	350	

depends on dimensions

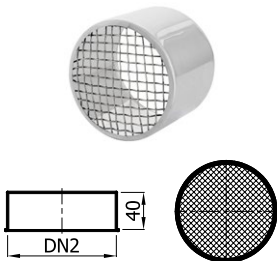
ADAP2 DN1 / DN2 - KSP - BUT / A - X ...



Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

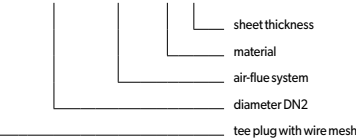
* from pellet stoves

28. TEE PLUG WITH WIRE MESH (AIR INTAKE) ZTS-KSP



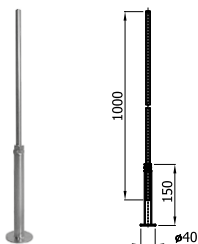
Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	250	for s 0.4#0.6
Weight [kg]	0.06	0.08	0.10	0.11	0.13	0.14	0.17	0.20	0.25	0.25	0.30	

ZTS DN2 - KSP - X ...

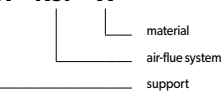


Destination	W	W - ventilation ducts
	X	X - stainless steel 1.4301
Sheet thickness	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

29. SUPPORT KW-KSP



KW - KSP - X



Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301

Insulated flue system <SKS-X-IZ>

Insulated flue system is made of acid-resistant chrome-nickel stainless sheet. Inner pipe application (type 1.4301 acc. to DIN 17441 of thicknesses of 0.4 and 0.6 mm) is fume wet extraction from modern, energy-saving gas, oil boilers and pellet stoves. Outer pipe type is 1.4301 of thicknesses of 0.4 and 0.5 mm. Thermal insulation is made from mineral wool of thickness 30 mm.

Chimney system made of SKS-X-IZ elements is an independent construction. (there is no need to use ceramic materials).

Maximum working temperature: 250°C



CHIMNEY COWLS

STEERING & POWER SUPPLY

Application of chimneys and recommended sheet thicknesses

Diameter DN	S, D* 1.4301	** 1.4301
60	0.4	-
80	0.4	-
100	0.4	-
120	0.4	0.4
130	0.4	-
140	0.4	0.4
150	0.5	-
160	0.5	0.5
180	0.5	0.5
190	0.5	0.5
200	0.5	-
210	0.5	0.5
220	-	0.5
240	-	0.5
250	0.6	-
260	-	0.5
310	-	0.5

Table of layouts and sizes

Diameter DN	Lr	Dz	Dw	Dk	s
60	188	60.2	59.4	60.5	0.4
80	250	80.0	79.2	81.0	
100	315	100.7	99.9	101.7	
120	385	122.9	122.1	123.9	
130	415	132.5	131.7	133.5	
140	440	140.5	139.7	141.5	
150	475	151.7	150.7	152.7	0.5
160	505	161.2	160.2	162.2	
180	570	181.9	180.9	182.9	
190	595	189.9	188.9	190.9	
200	630	201.0	200.0	202.0	
210	660	210.6	209.6	211.6	
220	690	220.2	219.0	221.0	0.6
240	753	240.3	239.1	241.3	
250	790	252.1	250.9	253.1	
260	818	261.2	259.6	262.2	
310	974	310.6	309.4	311.6	

Destination

S - flue ducts (gas, oil)

D* - outer pipe

** -

Measurements

Lr - metal sheet layout [mm]±0.1

Dz - outer diameter of pipe [mm] ±0.1

Dw - inner diameter of pipe [mm] ±0.1

Dk - inner diameter of bell [mm] ±0.1

s - metal sheet thickness [mm]

Bell joint pipe connection

Individual elements of the chimney system are being joint by the way of pushing one part of the element - a spigot, into the other press-formed part of the element - a bell. Thanks to this type of pipe joining, metal chimney is characterized by very tight and stiff construction. It also assures proper flow of condensate, along walls of the chimney straight to condensate drain bowl. Outer elements are connected "bell down" what prevents chimney insulation from rain water. Outer casings of the chimney elements should be riveted together with couple of stainless steel rivets before placing a fastening clamp. Usage of a special seal made of silicone, which is applied in the middle of the bell, secures tightness of the system by positive pressure of fumes up to 200Pa.

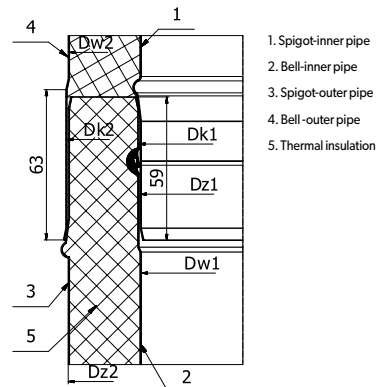


Fig. Method of joining double-walled pipe elements.

HOT AIR DISTRIBUTION SYSTEM

CHIMNEYS

VENTILATION

Model application of elements

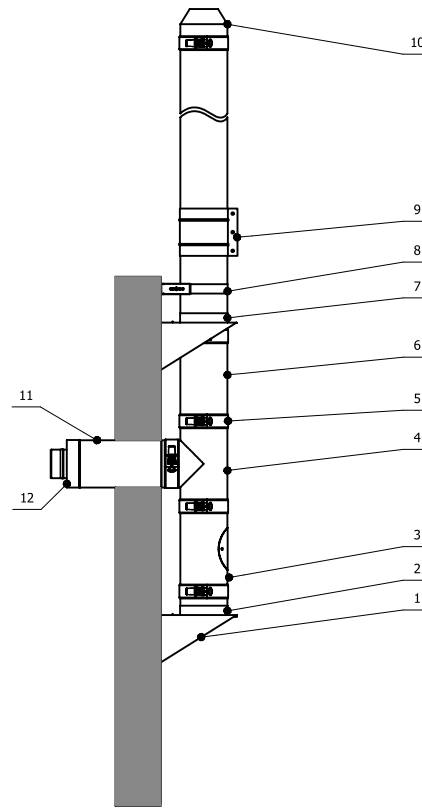
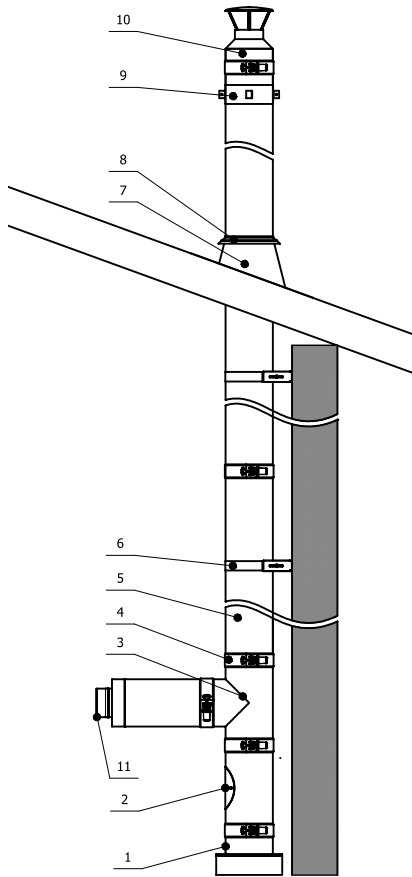
CHIMNEY COWLS

STEERING & POWER SUPPLY

HOT AIR DISTRIBUTION SYSTEM

CHIMNEYS

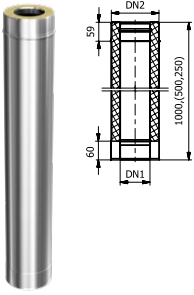
VENTILATION



No	Name	Denotation
1	Bowl	MSD100/160-KS-X4-IZ
2	Straight pipe with revision	RPDr100/160-KS-X4-IZ
3	Tee	TRD100/160/90-KS-X4-IZ
4	Clamp	OPIV160-X
5	Straight pipe	RPD100/160/1000-KS-X4-IZ
6	Mounting bracket	OMD-II-160-X/50-150
7	Angular roof flashing	PDK160/20-X
8	Rain collar	KPD160-X
9	Bracket for stabilizing cords	OPO160-X
10	Cap	DKD100/160-KS-X4-IZ
11	Tee plug	ZTD100/160-KS-X4-IZ

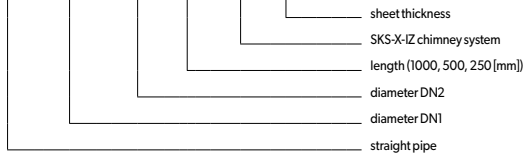
No	Name	Denotation
1	Supporting console	KWD160-X/50-150
2	Bowl	MSD100/160-KS-X4-IZ
3	Straight pipe with revision	RPDr100/160/250-KS-X4-IZ
4	Tee	TRD100/160/90-KS-X4-IZ
5	Clamp	OPIV160-X
6	Straight pipe	RPD100/160/500-KS-X4-IZ
7	Intermediate support	PPD100/160-KS-X4-IZ
8	Mounting bracket	OMD-II-160-X/50-150
9	Fastening clamp	OPIII100/160-KS-X-IZ
10	Mouthpiece	USD100/160-KS-X4-IZ
11	Straight pipe	RPD100/160/500-KS-X4-IZ
12	Tee plug	ZTD100/160-KS-X4-IZ

1. STRAIGHT PIPE RPD



Diameter DN1/DN2	60	80	100	130	150	160	180	200	250
Weight	2.60	3.10	4.10	5.20	6.20	6.55	7.10	7.90	10.20

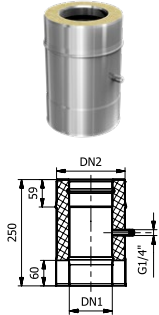
RPD DN1 / DN2 / L - KS-X ... - IZ



Destination	D	D - smoke ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

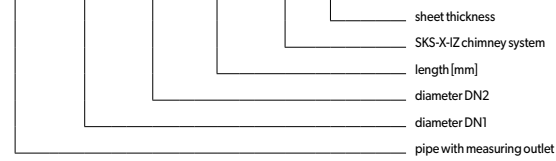
* from pellet stoves

2. PIPE WITH MEASURING OUTLET ROPD



Diameter DN1/DN2	60	80	100	130	150	160	180	200	250
Weight	0.75	0.90	1.10	1.40	1.60	1.70	1.90	2.10	2.60

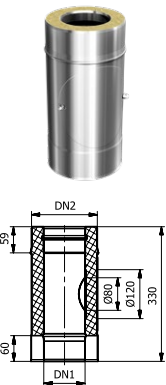
ROPD DN1 / DN2 / 250 - KS-X ... - IZ



Destination	D	D - smoke ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

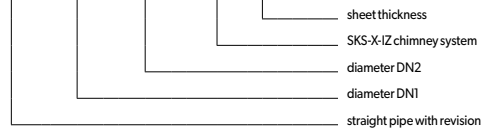
* from pellet stoves

3. PIPE WITH REVISION RPDR



Diameter DN1/DN2	60	80	100	130	150	160	180	200	250
Weight	1.00	1.10	1.50	1.80	2.10	2.20	2.50	2.70	3.50

RPDR DN1 / DN2 - KS-X ... - IZ



Destination	D	D - smoke ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

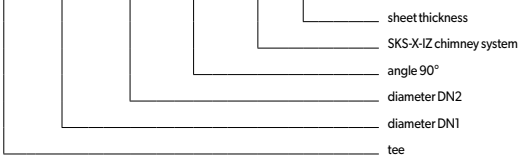
* from pellet stoves

4. TEE 90° TRD/90



Diameter DN1/DN2	60	80	100	130	150	160	180	200	250
L [mm]	320	340	360	390	410	420	440	460	510
Weight	1.10	1.40	1.90	2.50	3.10	3.40	3.80	4.40	6.30

TRD DN1 / DN2 / 90 - KS-X ... - IZ



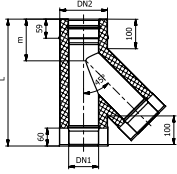
Destination	D	D - smoke ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

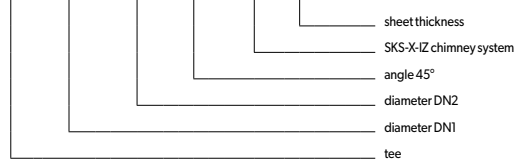
5. TEE 45° TRD/45



Diameter DN1/DN2	60	80	100	130	150	160	180	200	250
L [mm]	370	420	425	470	500	510	540	570	640
m [mm]	125	129	133	140	145	147	150	155	166
Weight	1.20	1.60	2.10	2.90	3.70	4.00	4.60	5.30	7.50



TRD DN1 / DN2 / 45 - KS-X ... - IZ



Destination	D	D - smoke ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
	4	4 - sheet thickness 0.4 mm
Sheet thickness s	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

CHIMNEY COWLS

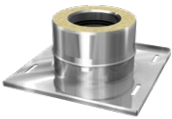
STEERING & POWER SUPPLY

HOT AIR DISTRIBUTION SYSTEM

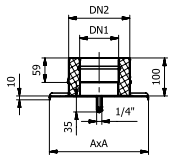
CHIMNEYS

VENTILATION

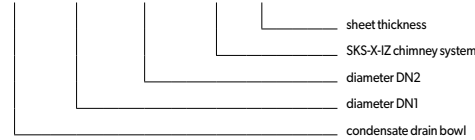
6. CONDENSATE DRAIN BOWL MSD



Diameter DN1/DN2	60	80	100	130	150	160	180	200	250
A [mm]	210	240	260	300	300	325	325	350	400
Weight	1.00	1.20	1.50	2.00	2.20	2.40	2.90	3.00	4.00



MSD DN1 / DN2 - KS-X ... - IZ



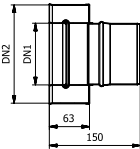
Destination	D	D - smoke ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
	4	4 - sheet thickness 0.4 mm
Sheet thickness s	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

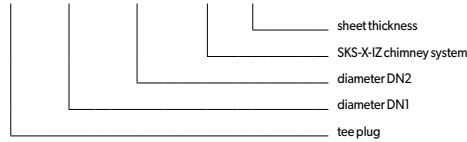
7. TEE PLUG ZTD



Diameter DN1/DN2	60	80	100	130	150	160	180	200	250
Weight	0.30	0.35	0.38	0.40	0.40	0.45	0.50	0.55	0.70



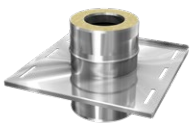
ZTD DN1 / DN2 - KS-X ... - IZ



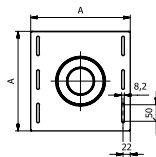
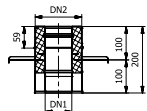
Destination	D	D - smoke ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
	4	4 - sheet thickness 0.4 mm
Sheet thickness s	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

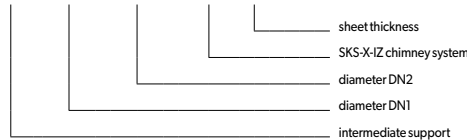
8. INTERMEDIATE SUPPORT PPD



Diameter DN1/DN2	60	80	100	130	150	160	180	200	250
Weight	1.50	1.80	2.10	2.10	2.60	2.90	3.00	3.60	4.45



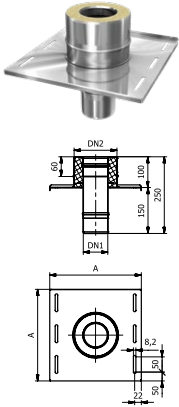
PPD DN1 / DN2 - KS-X ... - IZ



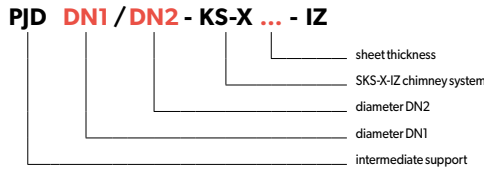
Destination	D	D - smoke ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
	4	4 - sheet thickness 0.4 mm
Sheet thickness s	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

9. INTERMEDIATE SUPPORT PJD



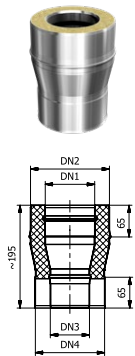
Diameter DN1/DN2	60	80	100	130	150	160	180	200	250
	120	140	160	190	210	220	240	260	310
Weight	1.30	1.60	1.80	2.00	2.40	2.60	2.70	3.30	4.10



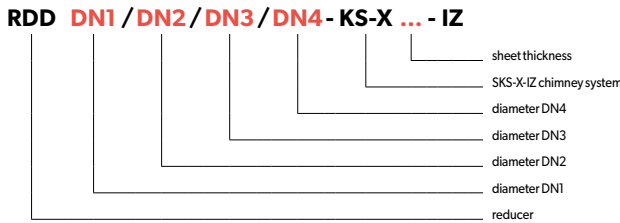
Destination	D	D - smoke ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
	4	4 - sheet thickness 0.4 mm
Sheet thickness s	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

10. REDUCER RDD



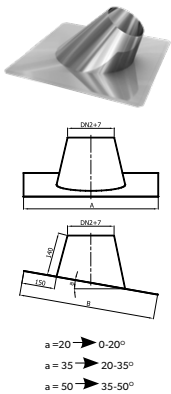
Diameter DN1/DN2	60	80	100	130	150	160	180	200	250
	120	140	160	190	210	220	240	260	310
Weight	0.40	0.50	0.60	0.80	1.00	1.00	1.10	1.20	1.60



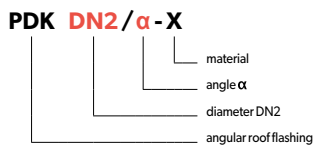
Destination	D	D - smoke ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
	4	4 - sheet thickness 0.4 mm
Sheet thickness s	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

11. ANGULAR ROOF FLASHING PDK

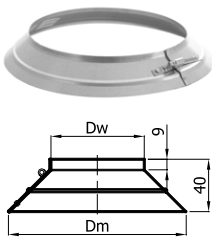


Diameter DN1/DN2	60	80	100	130	150	160	180	200	250	
	120	140	160	190	210	220	240	260	310	
α 20	A	525	555	575	605	625	635	640	680	735
	B	525	555	575	605	625	635	640	680	735
α 35	A	545	575	595	630	650	670	690	720	775
	B	580	610	630	675	700	715	740	765	835
α 50	A	580	610	640	680	710	715	750	770	835
	B	690	725	760	810	850	870	910	950	1000

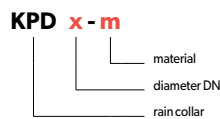


Destination	D	D - smoke ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
	4	4 - sheet thickness 0.4 mm
Sheet thickness	6	6 - sheet thickness 0.6 mm

12. RAIN COLLAR KPD

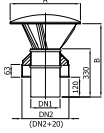


Diameter DN	ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
Dw [mm]	79.0	99.7	110.9	122.0	126	131.6	139.5	150.7	160.2	180.9	200.0	225.5	251.0	300.4	349.7	400.7	450.0	501.0
Dm [mm]	151	172	183	194	200	204	212	223	232	253	272	326	350	400	450	501	550	601
Weight [kg]	0.14	0.16	0.17	0.18	0.18	0.18	0.19	0.20	0.21	0.23	0.25	0.29	0.31	0.36	0.41	0.45	0.50	0.54



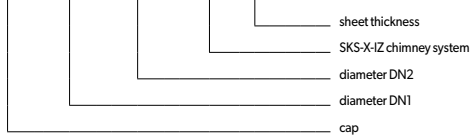
Destination	W	W - ventilation
	X	X - stainless steel 1.4301
Material	-	OC - galvanised steel sheet
	5	5 - sheet thickness 0.5 mm
Sheet thickness s	6	6 - sheet thickness 0.6 mm
	7	7 - sheet thickness 0.75 mm
	8	8 - sheet thickness 0.8 mm
	1	1 - sheet thickness 1.0 mm

13. CAP DKD



Diameter DN1/DN2	60	80	100	130	150	160	180	200	250
D [mm]	160	160	220	250	290	290	290	350	400
B [mm]	410	410	410	410	430	430	430	450	630
Weight	1.10	1.30	1.50	1.70	1.90	2.00	2.20	2.30	3.60

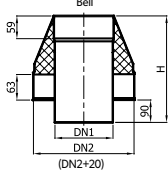
DKD DN1 / DN2 - KS-X ... - IZ



Destination	D	D - smoke ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

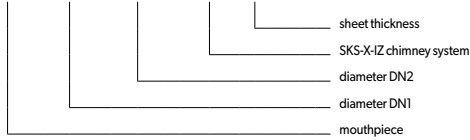
* from pellet stoves

14. MOUTHPIECE USD



Diameter DN1/DN2	60	80	100	130	150	160	180	200	250
H [mm]	250	250	250	250	250	250	250	250	250
Weight	0.60	0.70	0.80	0.90	1.10	1.20	1.30	1.40	1.90

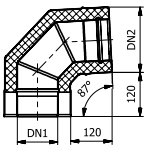
USD DN1 / DN2 - KS-X ... - IZ



Destination	D	D - smoke ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

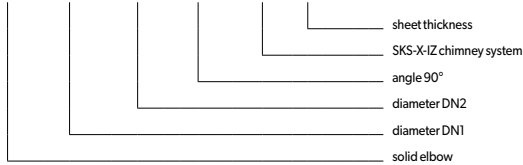
* from pellet stoves

15. SOLID ELBOW 90° KSD/90



Diameter DN1/DN2	60	80	100	130	150	160	180	200	250
Weight	0.90	1.20	1.50	2.00	2.50	2.70	3.10	3.60	4.90

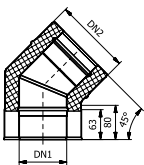
KSD DN1 / DN2 / 90 - KS-X ... - IZ



Destination	D	D - smoke ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

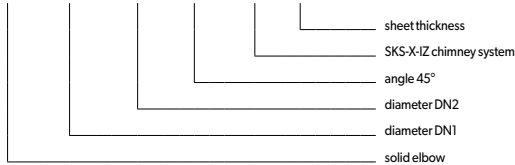
* from pellet stoves

16. SOLID ELBOW 45° KSD/45



Diameter DN1/DN2	60	80	100	130	150	160	180	200	250
Weight	0.50	0.70	0.90	1.20	1.50	1.60	1.80	2.10	2.90

KSD DN1 / DN2 / 45 - KS-X ... - IZ



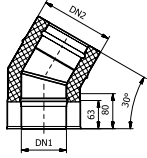
Destination	D	D - smoke ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

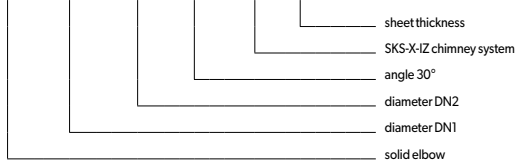
17. SOLID ELBOW 30° KSD/30



Diameter DN1/DN2	60	80	100	130	150	160	180	200	250
Weight	0.50	0.70	0.90	1.20	1.50	1.60	1.80	2.10	2.90



KSD DN1 / DN2 / 30 - KS-X ... - IZ



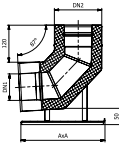
Destination	D	D - smoke ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
	4	4 - sheet thickness 0.4 mm
Sheet thickness s	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

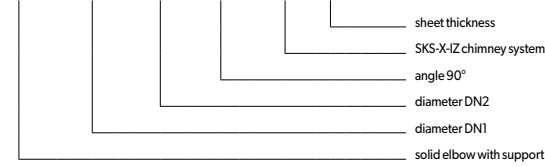
18. SOLID ELBOW 90° WITH SUPPORT KSDW/90



Diameter DN1/DN2	60	80	100	130	150	160	180	200	250
A [mm]	240	240	260	300	300	325	325	350	400
Weight	1.20	1.40	1.50	2.30	2.80	3.00	3.40	3.90	5.20



KSDW DN1 / DN2 / 90 - KS-X ... - IZ



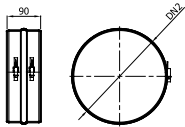
Destination	D	D - smoke ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
	4	4 - sheet thickness 0.4 mm
Sheet thickness s	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

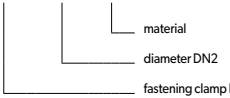
19. FASTENING CLAMP OP I



Diameter DN2	120	140	160	190	210	220	240	260	310
Weight [kg]	0.20	0.21	0.22	0.24	0.25	0.30	0.34	0.36	0.41



OPI DN2 - X

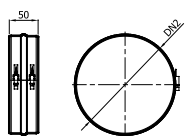


Destination	D	D - smoke ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
	4	4 - sheet thickness 0.4 mm
Sheet thickness	6	6 - sheet thickness 0.6 mm

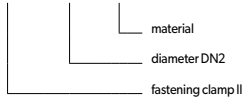
20. FASTENING CLAMP OP II



Diameter DN2	120	140	160	190	210	220	240	260	310
Weight [kg]	0.13	0.14	0.15	0.16	0.17	0.19	0.20	0.22	0.26



OPII DN2 - X

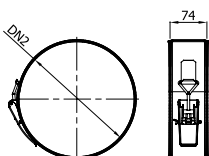


Destination	D	D - smoke ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
	4	4 - sheet thickness 0.4 mm
Sheet thickness	6	6 - sheet thickness 0.6 mm

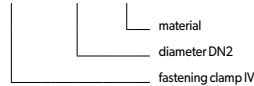
21. FASTENING CLAMP OP IV



Diameter DN2	120	140	160	190	210	220	240	260	310
Weight [kg]	0.25	0.30	0.30	0.35	0.35	0.40	0.40	0.40	0.50



OPIV DN2 - X

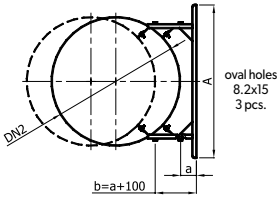


Destination	D	D - smoke ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
	4	4 - sheet thickness 0.4 mm
Sheet thickness	6	6 - sheet thickness 0.6 mm

22. MOUNTING BRACKET OMD-II



Diameter DN2	120	125	140	160	190	210	220	225	240	250	260	280	3600	310	3325	350	400	450	500	550	600
A [mm]	322	327	339	354	380	380	395	395	409	409	415	424	433	433	445	456	476	556	580	608	634
Weight [kg]	1.00	1.00	1.04	1.08	1.14	1.15	1.20	1.20	1.23	1.24	1.26	1.29	1.33	1.35	1.37	1.41	1.49	1.98	2.10	2.60	2.71

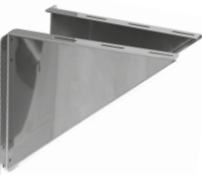


OMD-II DN2 - X/ 5-15

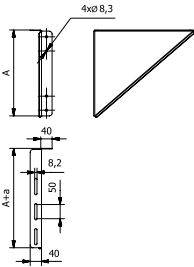


Destination	D	D - smoke ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301

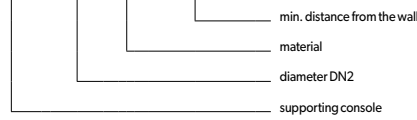
23. SUPPORTING CONSOLE KWD



Diameter DN2	120	125	140	160	190	210	220	225	240	250	260	280	300	310	325	350	400	450	500	550	600
A [mm]	231	231	254	254	304	304	304	304	354	354	354	384	404	404	429	454	504	552	604	654	701
Weight [kg]	1.70	1.70	2.00	2.00	2.60	2.60	2.70	2.70	3.25	3.25	3.25	3.70	4.20	4.20	4.65	5.10	6.05	7.10	8.20	9.40	10.65

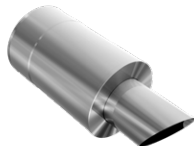


KWD DN2 - X/a-(a+100)

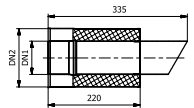


Destination	D	D - smoke ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
Sheet thickness	2	2 - sheet thickness 2.0 mm

24. LATERAL OUTLET 0.22 [m] WBD



Diameter DN1 / DN2	60	80	100	130	150	160	180	200	250
	120	140	160	190	210	220	240	260	310
Weight	0.60	0.80	1.00	1.20	1.60	1.70	1.90	2.00	2.50



WBD DN1 / DN2 - KS-X ... - IZ



Destination	D	D - smoke ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

Insulated air-flue system <SKSPD-X>

Insulated air - flue system is used to exhaust fumes from modern condensing boilers, which use the effect of vapor condensation in the combustion process or from "Turbo" type of boilers with closed combustion chamber, that use a ventilator to exhaust fumes (positive pressure chimney duct) as well as pellet stoves. It is used for building self-standing chimneys that are resistant to destructive influence of chemical substances which are part of the fumes. In this system, air necessary for combustion process is taken from outside with the usage of the outer pipe - that is why SKSPD-X system is built with triple walled elements (two pipes axially placed and thermal insulation of 50 mm with outer casing).

Construction of the system allows fume exhaustion to be made through inner duct while air supply is made through the gap between inner and outer duct.

Triple walled air - flue system element is made of stainless steel: inner pipe - 1.4301 thickness 0.4÷0.6 mm, outer pipe - 1.4301 thickness 0.4÷0.6 mm, thermal insulation 50 mm and outer casing - 1.4301.

Maximum working temperature: 250°C

Certificate of Factory Production Control 1450-CPR-0030 issued by INiG Cracow.



CHIMNEY COWLS

STEERING & POWER SUPPLY

Application of chimneys and recommended sheet thicknesses

Diameter DN	S, D* 1.4301	** 1.4301
60	0.4	0.4
80	0.4	0.4
100	0.4	0.4
110	0.4	0.4
120	0.4	0.4
125	0.4	0.4
130	0.4	0.4
140	0.4	0.4
150	0.5	0.5
160	0.5	0.5
180	0.5	0.5
200	0.5	0.5
225	0.6	0.5
250	0.6	0.5
280	-	0.6
300	-	0.6
350	-	0.6

Table of layouts and sizes

Diameter DN	Lr	Dz	Dw	Dk	s
60	188	60.2	59.4	60.5	0.4
80	250	80.0	79.2	81.1	
100	315	100.7	99.9	101.8	
110	350	111.8	110.0	112.9	
120	385	122.9	122.1	124.0	
125	390	124.5	123.7	125.6	
130	415	132.5	131.7	133.6	
140	440	140.5	139.7	141.7	
150	475	151.7	150.7	152.8	
160	505	161.2	160.2	162.4	
180	570	181.9	180.9	183.0	0.5
200	630	201.0	200.0	202.1	
225	710	226.6	225.4	227.6	
250	790	252.1	250.9	253.1	
280	880	280.7	279.5	281.7	
300	945	301.4	300.2	302.4	0.6
350	1100	350.9	349.4	352.4	

Destination

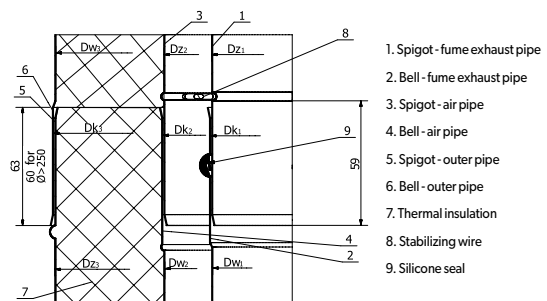
- S - flue ducts
- D* - smoke ducts from pellets burning devices
- ** - air pipe, outer wall

Measurements

- Lr - metal sheet layout [mm]±0.1
- Dz - outer diameter of pipe [mm]
- Dw - inner diameter of pipe [mm]
- Dk - inner diameter of bell [mm]
- s - metal sheet thickness [mm]

Bell joint pipe connection

Individual elements of the chimney system are being joint by the way of pushing one part - a spigot, into the other press-formed part - a bell. Thanks to this type of pipe joining, chimney is characterized by very tight and stiff construction. It also allows proper flow of condensate, along walls of the chimney. In order to prevent chimney from rain water, outer pipe is connected bell in down. Before placing mounting bracket the elements of outer pipe should be secured with screws or rivets.



HOT AIR DISTRIBUTION SYSTEM

CHIMNEYS

VENTILATION

Model application of elements

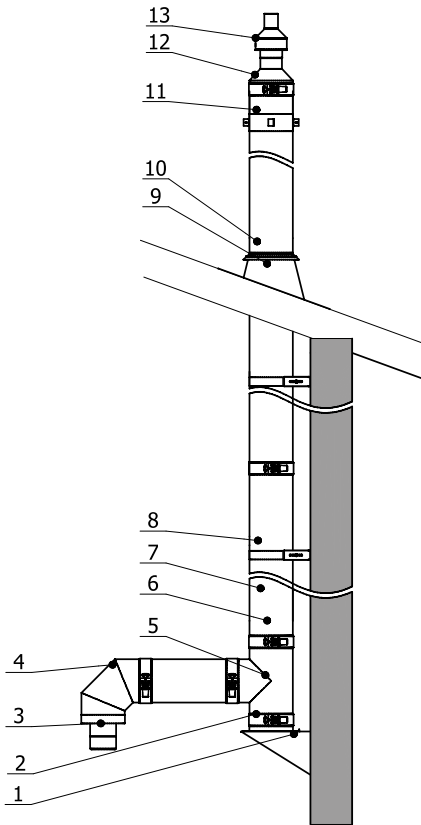
CHIMNEY COWLS

STEERING & POWER SUPPLY

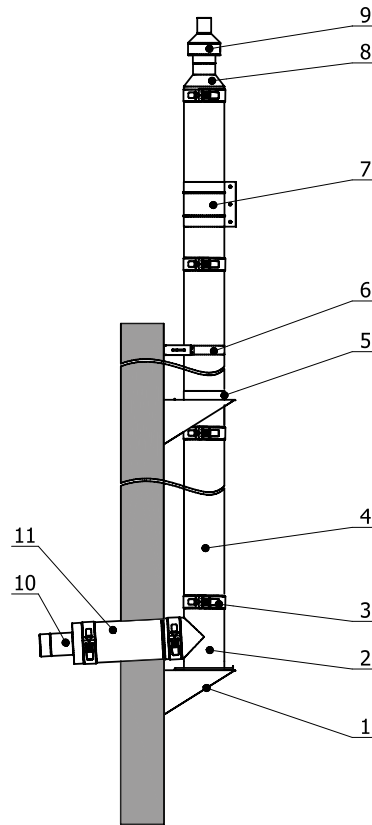
HOT AIR DISTRIBUTION SYSTEM

CHIMNEYS

VENTILATION



No	Name	Denotation
1	Supporting console	KWD225-X/50-150
2	Bowl	MSD80/125/225-KSPD-X4
3	Bottom insulation closing	ZTD80/125/225-D-KSPD-X4
4	Elbow 90°	KSD80/125/225/90-KSPD-X4
5	Tee	TRD/80/125/225-KSPD-X4
6	Fastening clamp	OPIV225-X
7	Straight pipe 1000 mm	RPD80/125/225/1000-KSPD-X4
8	Mounting bracket	OMD-II-225-X/50-150
9	Angular roof flashing	PKD225/20-X
10	Rain collar	KPD250-X
11	Bracket for stabilizing cords	OPO225-X
12	Top insulation closing	ZTD80/125/225-G-KSPD-X4
13	Mouthpiece	USD80/125-KSP-X4



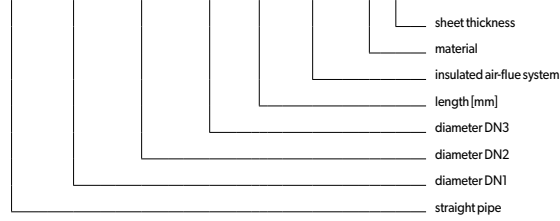
No	Name	Denotation
1	Supporting console	KWD225-X/50-150
2	Elbow with support	KSWD80/125/225/90-KSPD-X4
3	Fastening clamp	OPIV225-X
4	Straight pipe 1000 mm	RPD80/125/225/1000-KSPD-X4
5	Intermediate support	PPD80/125/225-KSPD-X4
6	Mounting bracket	OMD-II-225-X/50-150
7	Fastening clamp	OPII225-X
8	Top insulation closing	ZTD80/125/225-G-KSPD-X4
9	Mouthpiece	USD80/125-KSP-X4
10	Bottom insulation closing	ZTD80/125/225-D-KSPD-X4
11	Straight pipe 500 mm	RPD80/125/225/500-KSPD-X4

1. STRAIGHT PIPE RPD-KSPD-X



Diameter	60	80	100	110	120	130	150	160	180	200	250	for s 0.4±0.6
DN1/DN2	100	125	150	160	180	200	225	250	300	300	350	
DN3	200	225	250	260	280	300	325	350	400	400	450	

RPD DN1 / DN2 / DN3 / L - KSPD - X ...



Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

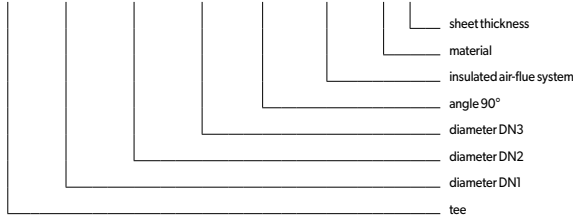
* from pellet stoves

2. TEE TRD/90-KSPD-X



Diameter	60	80	100	110	120	130	150	160	180	200	250	for s 0.4±0.6
DN1/DN2	100	125	150	160	180	200	225	250	300	300	350	
DN3	200	225	250	260	280	300	325	350	400	400	450	

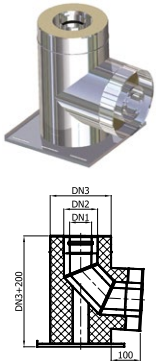
TRD DN1 / DN2 / DN3 / 90 - KSPD - X ...



Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

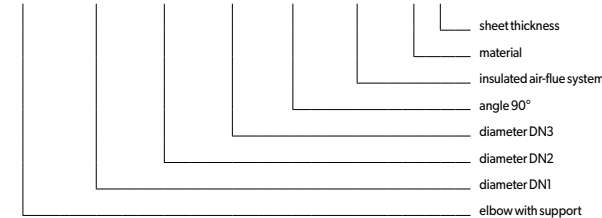
* from pellet stoves

3. ELBOW WITH SUPPORT KSDW-KSPD-X



Diameter	60	80	100	110	120	130	150	160	180	200	250	for s 0.4±0.6
DN1/DN2	100	125	150	160	180	200	225	250	300	300	350	
DN3	200	225	250	260	280	300	325	350	400	400	450	

KSDW DN1 / DN2 / DN3 / 90 - KSPD - X ...



Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

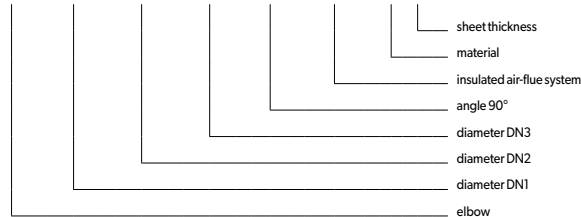
* from pellet stoves

4. ELBOW 90° KSD/90-KSPD-X



Diameter	60	80	100	110	120	130	150	160	180	200	250	for s 0.4±0.6
DN1/DN2	100	125	150	160	180	200	225	250	300	300	350	
DN3	200	225	250	260	280	300	325	350	400	400	450	

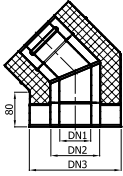
KSD DN1 / DN2 / DN3 / 90 - KSPD - X ...



Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

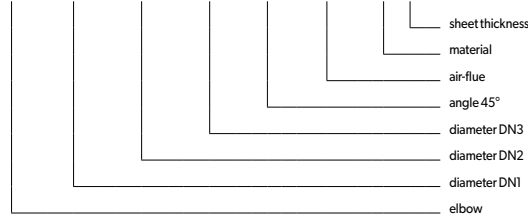
5. ELBOW 45° KSD/45-KSPD-X



Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	250
DN3	200	225	250	260	280	300	325	350	400	400	450

for s
0.4#0.6

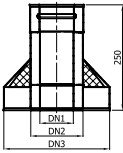
KSD DN1 / DN2 / DN3 / 45 - KSPD - X ...



Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

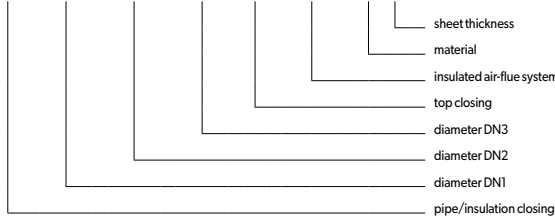
6. PIPE / TOP INSULATION CLOSING ZTD-G-KSPD-X



Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	250
DN3	200	225	250	260	280	300	325	350	400	400	450

for s
0.4#0.6

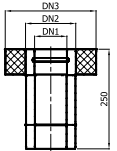
ZTD DN1 / DN2 / DN3 / G - KSPD - X ...



Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

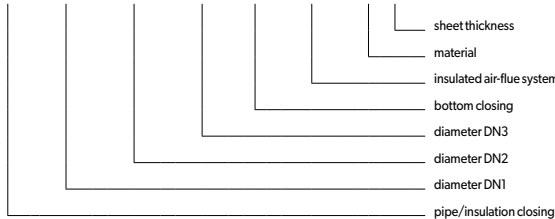
7. PIPE / BOTTOM INSULATION CLOSING ZTD-D-KSPD-X



Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	250
DN3	200	225	250	260	280	300	325	350	400	400	450

for s
0.4#0.6

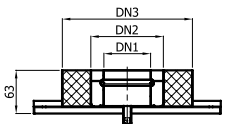
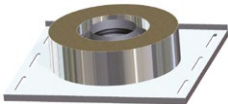
ZTD DN1 / DN2 / DN3 / D - KSPD - X ...



Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

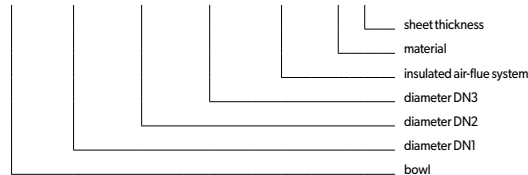
8. BOWL MSD-KSPD



Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	250
DN3	200	225	250	260	280	300	325	350	400	400	450

for s
0.4#0.6

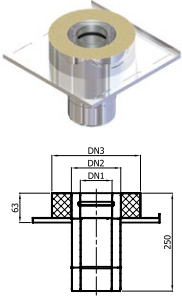
MSD DN1 / DN2 / DN3 - KSPD - X ...



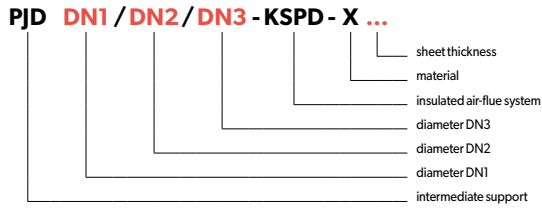
Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

9. INTERMEDIATE SUPPORT PJD-KSPD



Diameter	60	80	100	110	120	130	150	160	180	200	250	
DN1/DN2	100	125	150	160	180	200	225	250	300	300	350	
DN3	200	225	250	260	280	300	325	350	400	400	450	for s 0.4±0.6



Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

CHIMNEY COWLS

STEERING & POWER SUPPLY

HOT AIR DISTRIBUTION SYSTEM

CHIMNEYS

VENTILATION

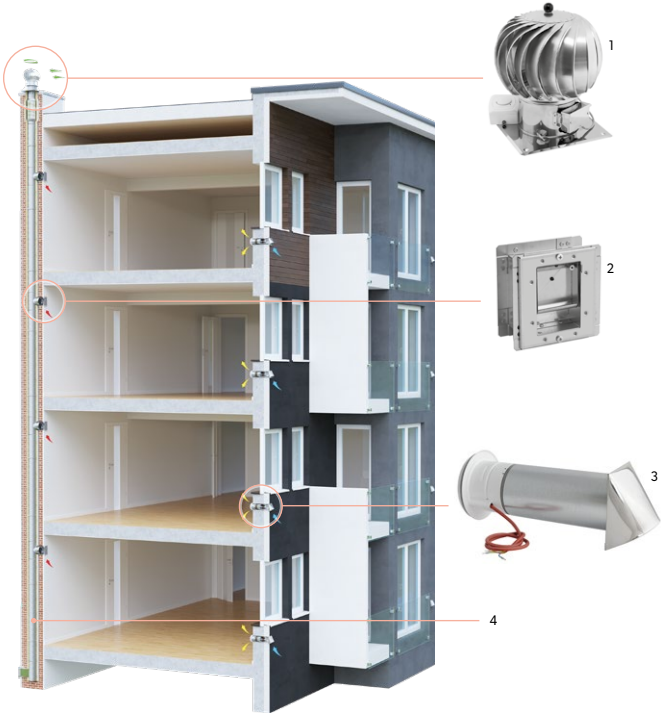
INTRODUCTION

Proper ventilation in the building can be provided by air exchange caused by natural or mechanical measures. Also hybrid ventilation system can here be an option. Regardless of the choice, it is necessary to have a set of devices assuring proper air flow: air ducts, intake and exhaust appliances etc. Elements of hybrid ventilation system include: shield grates, flap valves, air intakes, stabilizers, ducts and fittings as well as terminals - mounted outside the building.

We recommend to take a closer look at the Hybrid Ventilation System.

Thanks to proper selection of devices supporting natural ventilation, a truly hybrid ventilation arises. It works just like natural ventilation, when weather conditions are favorable and when they are not - it is mechanically supported. Installation is based on natural ventilation ducts and use advantages of this system in the most complex way, this means low noise level and minimal exploitation costs. Devices that are of mechanical support begin their work only when installation does not achieve parameters set. Regulators and devices improving the air flow are designed to stabilize working of the system and to keep proper level of ventilation efficiency in every room.

Elements of Hybrid Ventilation System



1. Hybrid Turbowent	Rotary chimney cowl is a device providing proper efficiency of ventilation system. Precise information about different versions, sizes, efficiency parameters and available types is available in chapter titled "CHIMNEY COWLS".
2. Draught Stabilizer	This device is to be mounted behind the shield grate, its main purpose is to limit the amount of air exhausted out of the building. It works in mechanical way, with no electricity used. Damper is closing when increased airflow through the ventilation channel is recognized, when the airflow is falling down, the damper opens again. For detailed information please go to the page 238.
3. Air intake sets	Air supply is the key issue for proper ventilation system working. Good parameters as well as high comfort can be provided by special devices mounted in the walls. Darco air intake sets, thanks to their special construction and additional equipment (like air heating module), make the supply ventilation imperceptible and efficient at the same time.
4. Single-pipe system	Darco offers wide variety of elements allowing to make a complete ventilation duct. Fittings are compatible with key system devices (stabilizers, chimney cowls etc) what allows easy and quick mounting. Tightness is ensured by special seals in each element connection.

CHIMNEY COWLS

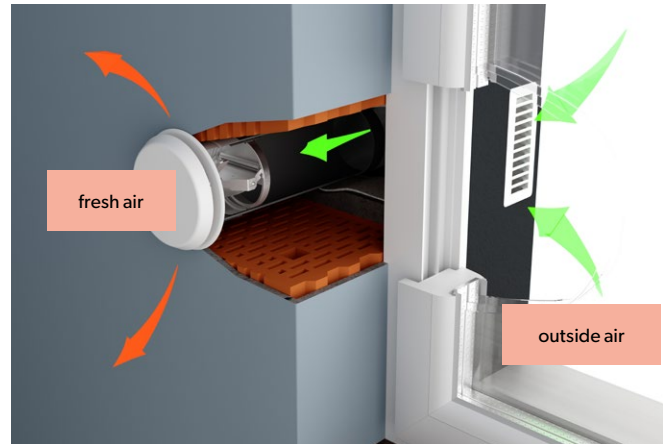
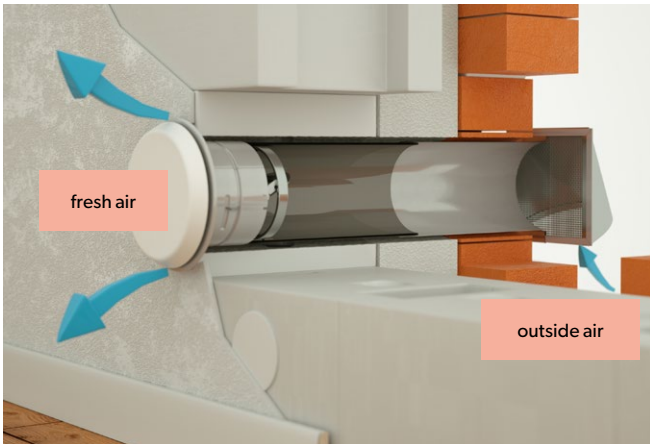
STEERING & POWER SUPPLY

HOT AIR DISTRIBUTION SYSTEM

CHIMNEYS

VENTILATION

ROUND AIR INTAKE SET; WINDOW RECESS AIR INTAKE SET



Air intake set provides fresh air into the building. It is to be mounted above or next to the window, in the wall. Basic version is equipped with an air intake that assures proper air supply from outside. It is constructed in a way that protects from rainwater and is also equipped with wire mesh against rodents. On the side mounted inside the building air intake set is equipped with a flap valve with insulation, that prevents from water vapor condensation in winter as well as reduces noise. Valve allows to regulate the airflow precisely.

Positioning of the air intake in accordance with PN-83/B-03430/Az3

Air volume flow rate with the air intake open:

- Requirement for mechanical exhaust ventilation: 20-30 [m³/h]
- Requirement for gravity ventilation: 20-50 [m³/h]

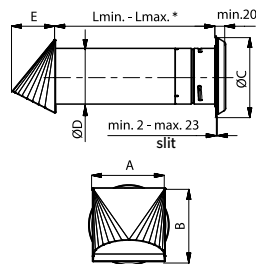
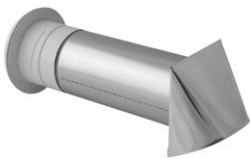
Air volume flow rate with air intake closed:

20% to 30% of the flow at its nominal opening

Air intakes NAP included in the National Technical Assessment can be installed in the external partitions of the residential buildings, collective residence (including hotels), public, office and business buildings. The design of the installation must take into account the flow characteristics, the tightness to rainwater penetration and the use in specific categories of corrosivity of the atmosphere.

Air intake set can be additionally equipped with airflow stabilizer. It controls the airflow: limits the air supply to certain limits as well as protects from backflow. Each air intake set includes a filter (separately in the box, to be mounted by the user). Filter enables effective capturing of dust and other particles carried by the air.

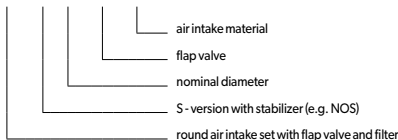
ROUND AIR INTAKE SET NO



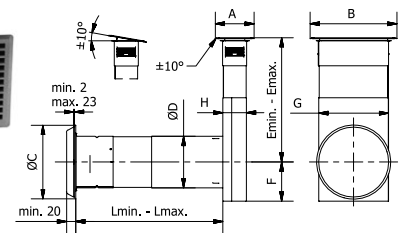
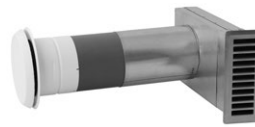
Diameter	Dimensions [mm]					
	A	B	C	D	E	F
80	104	105	121	77	62	-
110	146	147	161	112	87	-
150	196	197	211	162	116	-

* L_{min.}-L_{max.} - in next tables with technical datas

NO a x - A - b

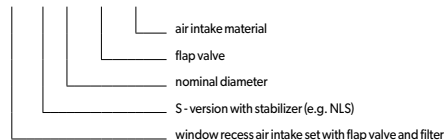


WINDOW RECESS AIR INTAKE SET NL



Diameter	Dimensions [mm]							
	A	B	C	D	E	F	G	H
80	85	189	121	77	200+270	65	152	52
110	85	189	161	112	200+270	85	152	52
150	125	238	211	162	240+310	110	202	92

NL a x - A - b



Additional equipment:

- basic filter
- stabilizer

Destination	W	W	W	W - air supply ventilation
	OC	-	-	OC - galvanised steel sheet
Air intake material	-	CC	-	CC - chrome-nickel steel sheet
	-	-	ML	ML - galvanised steel sheet powder coated
Channel material	PP	PP	P	PP - pipe

Flap valve material-mild steel powder coated (white)

Technical data

Version	Channel cross-section [cm ²]	Channel dimensions ** L _{min} -L _{max} [mm]	Mounting hole diameter [mm]	Efficiency at 10 [Pa] (without filter) flap valve opening 23 mm [m ³ /h]	Sound attenuation - flap valve opening D _{n,e,w} [dB]		Weight [kg]
					2 mm	23 mm	
					NO080A	38	
NO110A	87	320x550	120	60	38 (-1,-3)	29 (0,0)	1.3
NO150A	177	350x580	170	124	36 (-1,-3)	27 (0,-1)	2.3
NOS080A	38	320x550	90	27	37 (-1,-3)	31 (-1,-1)	0.9
NOS110A	87	320x550	120	45	38 (0,-3)	29 (0,-1)	1.5
NOS150A	177	350x580	170	83	37 (-1,-3)	27 (0,-1)	2.6

Version	Channel cross-section [cm ²]	Channel dimensions ** L _{min} -L _{max} [mm]	Mounting hole diameter [mm]	Efficiency at 10 [Pa] (without filter) flap valve opening 23 mm [m ³ /h]	Sound attenuation - flap valve opening D _{n,e,w} [dB]		Weight [kg]
					2 mm	23 mm	
					NL080A	38	
NL110A	87	150*+450	120	30	40 (-1,-2)	34 (-1,-1)	1.4
NL150A	177	150*+450	170	64	42 (-1,-3)	30 (0,0)	2.7
NLS080A	38	150*+450	90	22	44 (-1,-4)	40 (-1,-3)	1.4
NLS110A	87	150*+450	120	25	40 (-1,-2)	34 (-1,-1)	1.7
NLS150A	177	150*+450	170	60	41 (-1,-3)	30 (0,0)	3.0

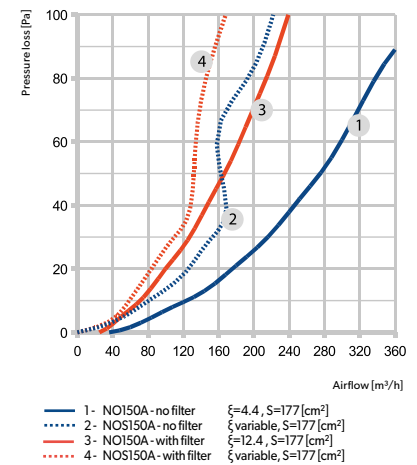
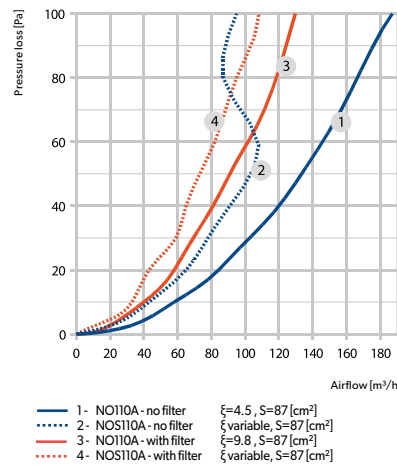
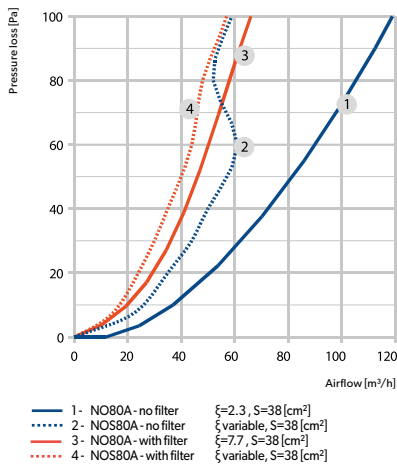
Version	Airflow at 10 [Pa] (with filter) acc. to PN-83/B-03430/Az3			
	minimum [m ³ /h]	opening [mm]	nominal [m ³ /h]	opening [mm]
	NO080A	4,7	2	20
NO110A	6,1	2	28,8	22
NO150A	7,8	1	29,1	6
NOS080A	5,6	3	19	23
NOS110A	6,3	3	30	28
NOS150A	8,7	1	29,3	7

Version	Airflow at 10 [Pa] (with filter) acc. to PN-83/B-03430/Az3			
	minimum [m ³ /h]	opening [mm]	nominal [m ³ /h]	opening [mm]
	NL080A	4,4	2	20,3
NL110A	7	1	23,8	25
NL150A	8	1	26	14
NLS080A	5,5	1	19,9	23
NLS110A	6,2	2	24	29
NLS150A	7,5	1	29,3	21

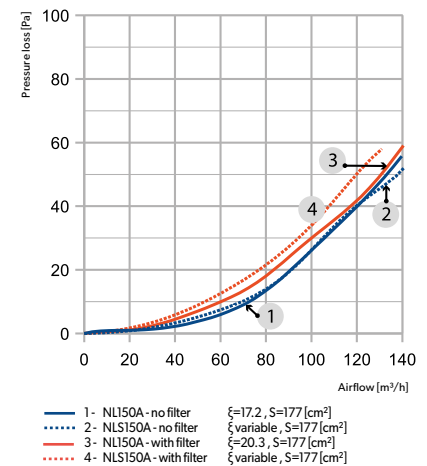
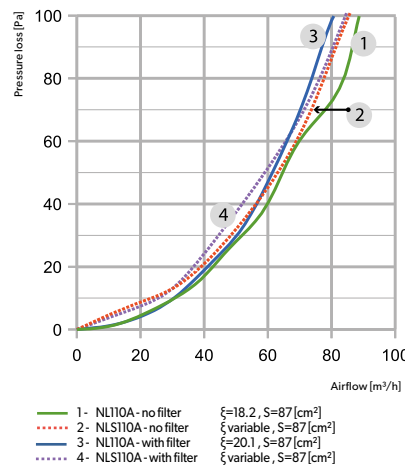
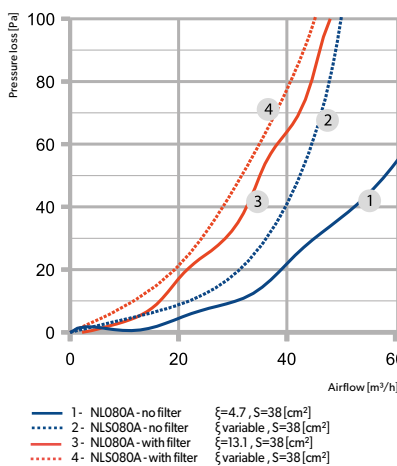
* dimensions to be reached after duct cutting

** see technical drawing on page 231

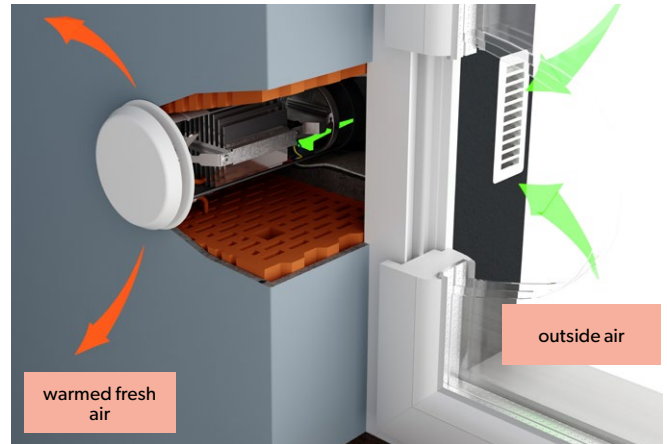
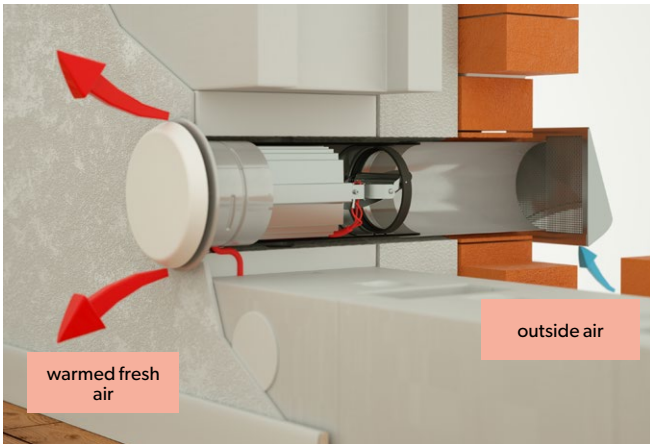
Airflow charts (round air intake set)



Airflow charts (window recess air intake set)



AIR INTAKE SET WITH HEATER



Air intake set with heater provides fresh and preheated air into the building. Thermostat turns the heating module on when temperature falls below 3°C and switches it off when temperature rises above 10-15°C. Semiconductor heating elements automatically regulate power consumption in relation to the amount and temperature of flowing air.

Basic version is equipped with a flap valve. Optionally a version with stabilizer is available. Airflow stabilizer controls the airflow: limits the air supply to certain limits as well as protects from backflow. Each air intake set includes a filter (separately in the box, to be mounted by the user). Filter enables effective capturing of dust and other particles carried by the air.

Destination	W	W	W - air supply ventilation
Air intake and flap valve material	CC	-	CC - chrome-nickel steel sheet
	-	ML	ML - galvanised steel sheet powder coated
Channel material	PP	PP	PP - pipe

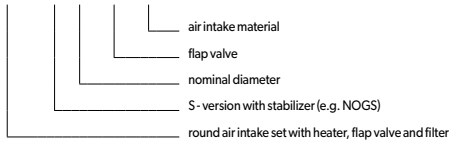
Additional equipment:

- basic filter
- stabilizer

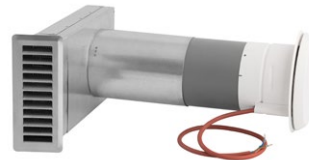
ROUND AIR INTAKE SET WITH HEATER NOG



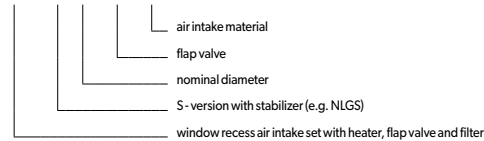
NOG a x - A - b



WINDOW RECESS AIR INTAKE SET WITH HEATER NLG



NLG a x - A - b



Technical data

Version	Channel cross-section [cm²]	Channel dimensions ** L _{min} -L _{max} [mm]	Mounting hole diameter [mm]	Airflow at 10 [Pa] (without filter) flap valve opening 23 mm [m³/h]	Sound attenuation - Flap valve opening D _{n,e,w} [dB]		Weight [kg]
					2 mm	23 mm	
					NOG080A	38	
NOG110A	87	320+550	120	49	38 (0,-3)	30 (0,-1)	2.4
NOG150A	177	350+580	170	97	36 (0,-2)	28 (-1,-2)	4.1
NOGS080A	38	320+550	90	22	38 (-1,-3)	32 (0,-1)	1.4
NOGS110A	87	320+550	120	40	38 (-1,-3)	30 (0,-1)	2.6
NOGS150A	177	350+580	170	74	37 (-1,-3)	28 (0,-1)	4.4

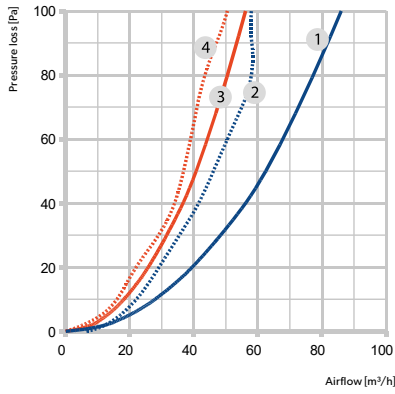
Version	Airflow at 10 [Pa] (with filter) acc. to PN-83/B-03430 / Az3			
	minimum [m³/h]	opening [mm]	nominal [m³/h]	opening [mm]
	NOG080A	5,2	2	20,4
NOG110A	5,8	3	26,3	24
NOG150A	8,1	2	33	8
NOGS080A	5,2	3	13,4	24
NOGS110A	7,8	3	28,9	25
NOGS150A	7,6	1	27,8	7

Version	Channel cross-section [cm²]	Channel dimensions ** L _{min} -L _{max} [mm]	Mounting hole diameter [mm]	Airflow at 10 [Pa] (without filter) flap valve opening 23 mm [m³/h]	Sound attenuation - Flap valve opening D _{n,e,w} [dB]		Weight [kg]
					2 mm	23 mm	
					NLG080A	38	
NLG110A	87	200+450	120	33	40 (-1,-2)	34 (0,0)	2.8
NLG150A	177	200+450	170	76	42 (-1,-4)	30 (0,0)	4.8
NLGS080A	38	320+450	90	20	44 (-1,-4)	40 (-1,-3)	1.9
NLGS110A	87	320+450	120	23	40 (-1,-2)	34 (-1,-1)	2.9
NLGS150A	177	320+450	170	55	41 (-1,-3)	31 (0,0)	5.1

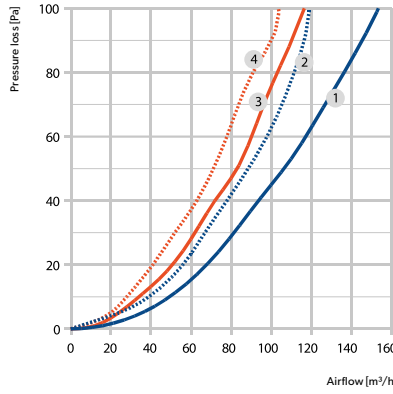
Version	Airflow at 10 [Pa] (with filter) acc. to PN-83/B-03430 / Az3			
	minimum [m³/h]	opening [mm]	nominal [m³/h]	opening [mm]
	NLG080A	6,3	1	11,1
NLG110A	6,8	1	22,9	25
NLG150A	8	1	29,1	15
NLGS080A	4,4	2	20,6	23
NLGS110A	6,3	2	22,8	21
NLGS150A	7,6	2	26,2	23

* dimensions to be reached after duct cutting
 ** see technical drawing on page 231

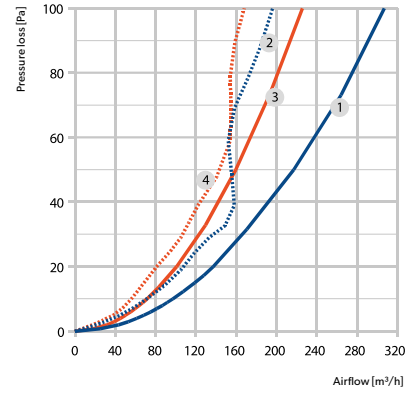
Airflow charts - round air intake set with heater



- 1- NOG80A - no filter $\xi=4.0, S=38[\text{cm}^2]$
- 2- NOGS80A - no filter ξ variable, $S=38[\text{cm}^2]$
- 3- NOG80A - with filter $\xi=9.4, S=38[\text{cm}^2]$
- 4- NOGS80A - with filter ξ variable, $S=38[\text{cm}^2]$

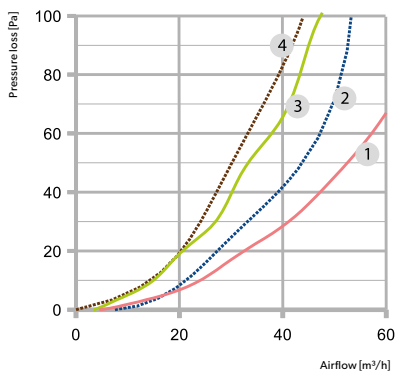


- 1- NOG110A - no filter $\xi=6.9, S=87[\text{cm}^2]$
- 2- NOGS110A - no filter ξ variable, $S=87[\text{cm}^2]$
- 3- NOG110A - with filter $\xi=12.4, S=87[\text{cm}^2]$
- 4- NOGS110A - with filter ξ variable, $S=87[\text{cm}^2]$

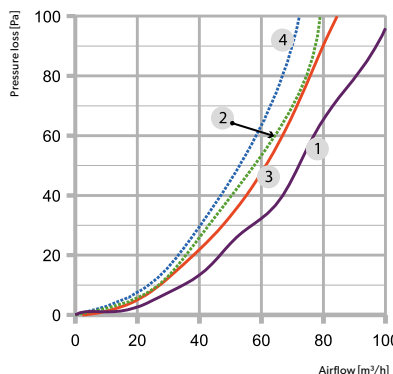


- 1- NOG150A - no filter $\xi=7.2, S=177[\text{cm}^2]$
- 2- NOGS150A - no filter ξ variable, $S=177[\text{cm}^2]$
- 3- NOG150A - with filter $\xi=13.3, S=177[\text{cm}^2]$
- 4- NOGS150A - with filter ξ variable, $S=177[\text{cm}^2]$

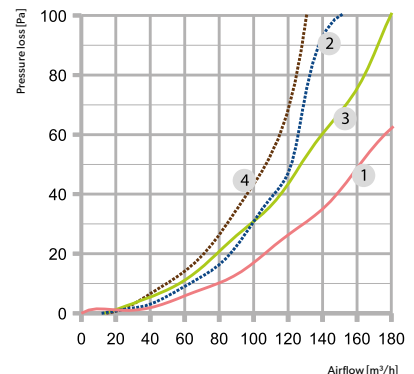
Airflow charts - window recess air intake set with heater



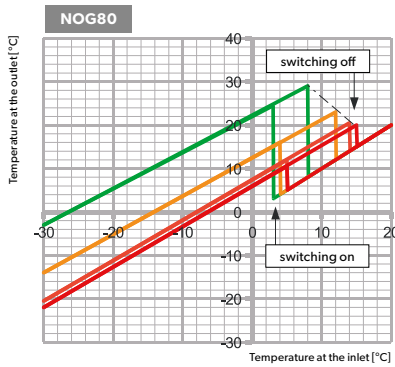
- 1- NLG80A no filter $\xi=6.2, S=38[\text{cm}^2]$
- 2- NLGS80A no filter ξ variable, $S=38[\text{cm}^2]$
- 3- NLG80A with filter $\xi=15.2, S=38[\text{cm}^2]$
- 4- NLGS80A with filter ξ variable, $S=38[\text{cm}^2]$



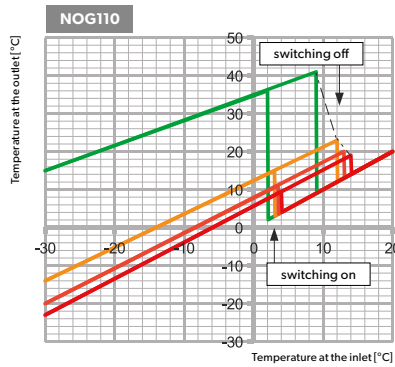
- 1- NLG110A no filter $\xi=14.7, S=87[\text{cm}^2]$
- 2- NLGS110A no filter ξ variable, $S=87[\text{cm}^2]$
- 3- NLG110A with filter $\xi=21.7, S=87[\text{cm}^2]$
- 4- NLGS110A with filter ξ variable, $S=87[\text{cm}^2]$



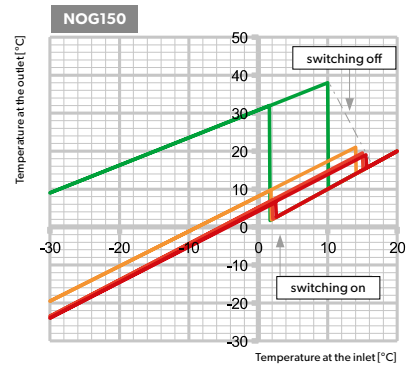
- 1- NLG150A no filter $\xi=12.4, S=177[\text{cm}^2]$
- 2- NLGS150A no filter ξ variable, $S=177[\text{cm}^2]$
- 3- NLG150A with filter $\xi=22.0, S=177[\text{cm}^2]$
- 4- NLGS150A with filter ξ variable, $S=177[\text{cm}^2]$



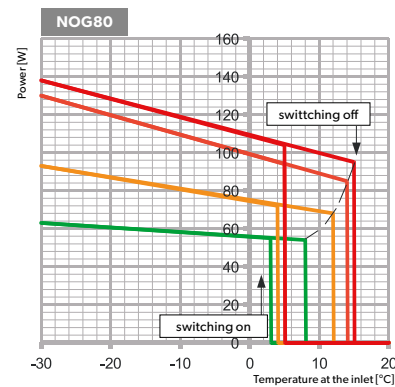
- Airflow 56 [m³/h]
- Airflow 18 [m³/h]
- Airflow 42 [m³/h]
- Airflow 8 [m³/h]



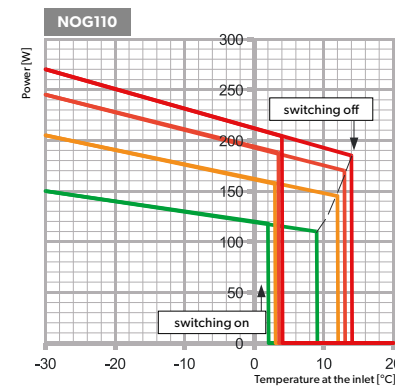
- Airflow 115 [m³/h]
- Airflow 40 [m³/h]
- Airflow 77 [m³/h]
- Airflow 11 [m³/h]



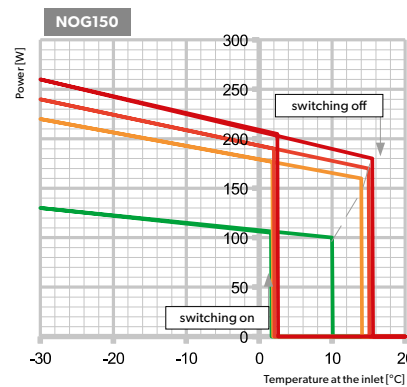
- Airflow 141 [m³/h]
- Airflow 73 [m³/h]
- Airflow 123 [m³/h]
- Airflow 11 [m³/h]



- Airflow 56 [m³/h]
- Airflow 18 [m³/h]
- Airflow 42 [m³/h]
- Airflow 8 [m³/h]

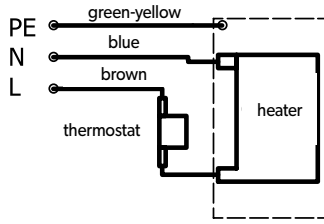


- Airflow 115 [m³/h]
- Airflow 40 [m³/h]
- Airflow 77 [m³/h]
- Airflow 11 [m³/h]



- Airflow 141 [m³/h]
- Airflow 73 [m³/h]
- Airflow 123 [m³/h]
- Airflow 11 [m³/h]

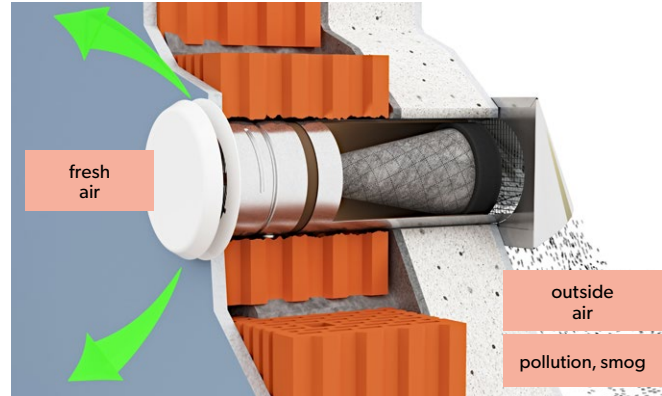
Electric diagram



Electric parameters	NOG80	NOG110	NOG150
Supply voltage	230 V		
Nominal power	138 W	270 W	305 W
Max current	2 A	3 A	3.5 A
Protection level	IP 33		

ANTI POLLEN ROUND AIR INTAKE SET

Anti-pollen round air intake set is equipped with a nano-filter made of patented membrane. It catches even the smallest particles of harmful dust (PM 2.5), thanks to that it protects not only against smog, but also against allergens. Caution! Periodic membrane cleaning is necessary. Dust or pollution may cause airflow reduction.



Destination	W	W	W	W - air supply ventilation
Air intake material	OC	-	-	OC - galvanised steel sheet
Channel material	-	CC	-	CC - chrome-nickel steel sheet
	-	-	ML	ML - galvanised steel sheet powder coated
Flap valve material	PP	PP	PP	PP - pipe

Flap valve material-mild steel powder coated (white)

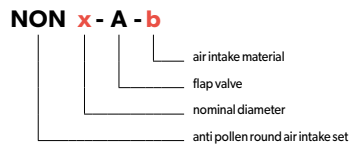
Technical data

Version	Channel cross-section [cm ²]	Channel dimensions * L _{min} -L _{max} [mm]	Mounting hole diameter [mm]	Airflow at 10 [Pa] (without filter) flap valve opening 23 mm [m ³ /h]	Weight [kg]
NON080A	38	320÷550	90	14	0.9
NON110A	87	320÷550	120	26	1.5
NON150A	177	350÷580	170	39	2.6
NLN080A	38	320÷450	90	15	1.3
NLN110A	87	320÷450	120	22	1.4
NLN150A	177	320÷450	170	33	2.7

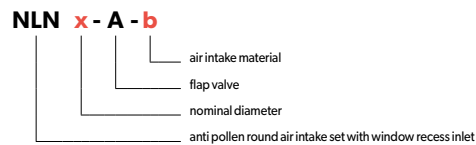
Version	Airflow at 10 [Pa] (with filter) acc. to PN-83/B-03430/Az3			
	minimum [m ³ /h]	opening [mm]	nominal [m ³ /h]	opening [mm]
NON080A	4,3	2	19,9	24
NON110A	5,5	2	27,2	25
NON150A	8,1	2	27	12
NLN080A	4,5	1	20,1	23
NLN110A	5,8	1	21	22
NLN150A	7,2	1	23,3	22

* see technical drawing on page 231

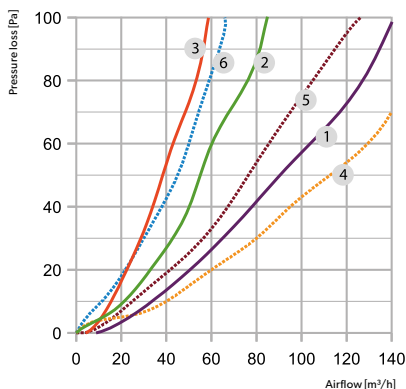
ANTI POLLEN ROUND AIR INTAKE SET NON



ANTI POLLEN ROUND AIR INTAKE SET WITH WINDOW RECESS INLET NLN



Airflow charts



1- NLN150A { variable, S=177 [cm²]
 2- NLN110A { variable, S=87 [cm²]
 3- NLN080A { variable, S=38 [cm²]
 4- NON150A { variable, S=177 [cm²]
 5- NON110A { variable, S=87 [cm²]
 6- NON080A { variable, S=38 [cm²]

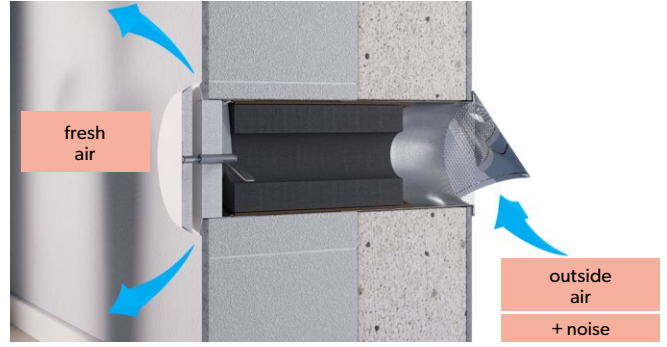
AIR INTAKE SETS

ACOUSTIC AIR INTAKE SET

Acoustic round air intake set is equipped with noise reducing channel.

Destination	W	W	W	W - air supply ventilation
Air intake material	OC	-	-	OC - galvanised steel sheet
	-	CC	-	CC - chrome-nickel steel sheet
	-	-	ML	ML - galvanised steel sheet powder coated
Channel material	PP	PP	PP	PP - pipe

Flap valve material-mild steel powder coated (white)



CHIMNEY COWLS

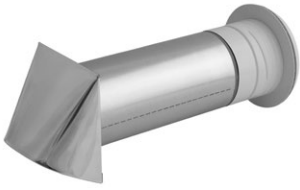
STEERING & POWER SUPPLY

HOT AIR DISTRIBUTION SYSTEM

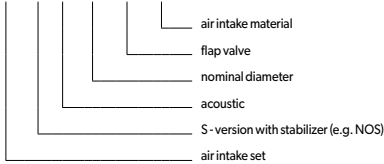
CHIMNEYS

VENTILATION

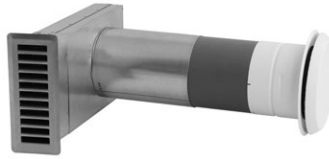
ACOUSTIC ROUND AIR INTAKE SET NOA



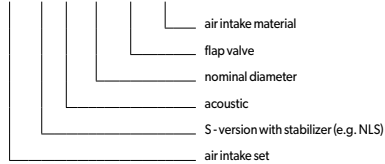
NO a A x - A - b



ACOUSTIC WINDOW RECESS AIR INTAKE SET NLA



NL a A x - A - b



Technical data

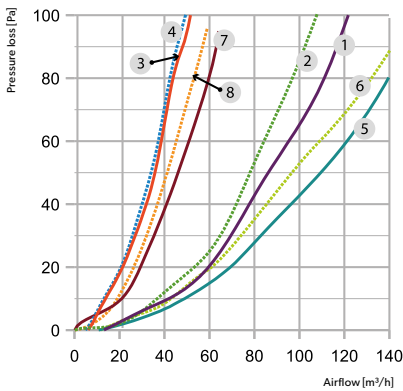
Version	Channel cross-section [cm ²]	Channel dimensions * L _{min} -L _{max} [mm]	Mounting hole diameter [mm]	Airflow at 10 [Pa] (without filter) flap valve opening 23 mm [m ³ /h]	Sound attenuation - Flap valve opening D _{n,e,w} [dB]		Weight [kg]
					2 mm	23 mm	
NOA110A	14	320+550	120	21	51 (-1;-4)	48 (-1;-4)	1.4
NOA150A	38	350+580	170	49	48 (-1;-5)	43 (-1;-4)	2.4
NLA110A	14	320+450	120	14	51 (-1;-4)	49 (0;3)	1.5
NLA150A	38	320+450	170	41	49 (-2;5)	45 (-1;-4)	2.8

* see technical drawing on page 231

Version	Airflow at 10 [Pa] (with filter) acc. to PN-83/B-03430/Az3			
	minimum [m ³ /h]	opening [mm]	nominal [m ³ /h]	opening [mm]
NOA150A	7,7	2	29,2	20
NLA150A	7,4	2	26,1	22
NOSA150A	5,5	2	19,8	23
NLSA150A	6,3	2	22,5	23

Version	Airflow at 10 [Pa] (no filter) acc. to PN-83/B-03430/Az3			
	minimum [m ³ /h]	opening [mm]	nominal [m ³ /h]	opening [mm]
NOA110A	5,1	2	25,4	13
NLA110A	4,4	1	20,2	23

Airflow charts



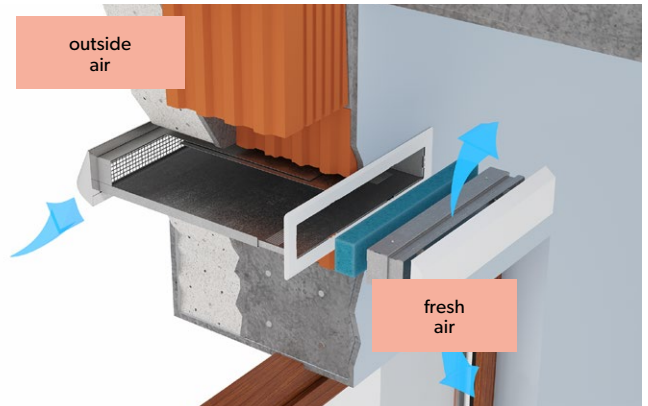
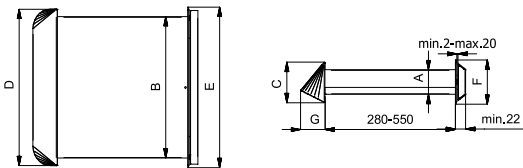
- 1- NLA150A - no filter $\xi=45.5, S=38$ [cm²]
- 2- NLA150A - with filter $\xi=55.7, S=38$ [cm²]
- 3- NLA110A - no filter $\xi=72.7, S=14$ [cm²]
- 4- NLA110A - with filter $\xi=73.4, S=14$ [cm²]
- 5- NOA150A - no filter $\xi=1.3, S=38$ [cm²]
- 6- NOA150A - with filter $\xi=1.7, S=38$ [cm²]
- 7- NOA110A - no filter $\xi=1.0, S=14$ [cm²]
- 8- NOA110A - with filter $\xi=1.2, S=14$ [cm²]

RECTANGULAR AIR INTAKE SET



Additional equipment:

- basic filter
- directional valve



Destination	W	W	W	W	W-ventilation
Air intake material	CH	-	-	-	CH - chrome-nickel steel sheet
	-	CH	-	-	CH - chrome-nickel steel sheet
	-	-	ML	-	ML - galvanised steel sheet powder coated (white)
Channel material	CH	-	-	OC	OC - galvanised steel sheet
	-	OC	OC	OC	CH - chrome-nickel steel sheet
	-	OC	OC	OC	OC - galvanised steel sheet
Flap valve material	CH	-	-	-	CH - chrome-nickel steel sheet
	-	ML	ML	ML	ML - mild steel powder coated (white)

Technical data

Version	Dimensions [mm]							Channel cross-section S [cm ²]	Pressure loss ratio ζ with filter	Airflow at 10 [Pa] (without filter) flap valve opening 20 mm [m ³ /h]	Sound attenuation - Flap valve opening Dn,e,w [dB]		Weight [kg]
	A	B	C	D	E	F	G				2 mm	20 mm	
NP1	53	304	87	336	345	95	52	147	10.8	115	33(-1,-)	26(0,0)	2.50
NPS1								147	13.0	84	33(-1,-)	26(0,0)	2.90
NP2	75	594	109	626	635	116	64	419	15.9	249	38(-1,-2)	26(0,0)	4.80
NPS2								419	18.1	218	38(-1,-2)	26(0,0)	5.70

Version	Airflow at 10 [Pa] (with filter) acc. to PN-83/B-03430/Az3			
	minimum [m ³ /h]	opening [mm]	nominal [m ³ /h]	opening [mm]
NP1	7,9	2	26,9	5
NPS1	6,6	2	26,5	5
NP2	7,3	2	25,2	4
NPS2	8,7	1	28,7	max. u.t.

max. u.t. - maximum upper tilt

Positioning of the air intake in accordance with PN-83/B-03430/Az3

Air volume flow rate with the air intake open:

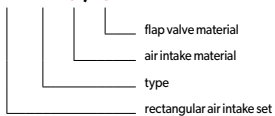
Requirement for mechanical exhaust ventilation: 20-30 [m³/h]

Requirement for gravity ventilation: 20-50 [m³/h]

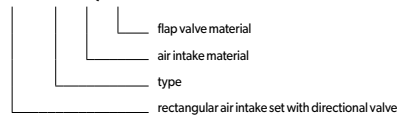
Air volume flow rate with air intake closed:

20% to 30% of the flow at its nominal opening

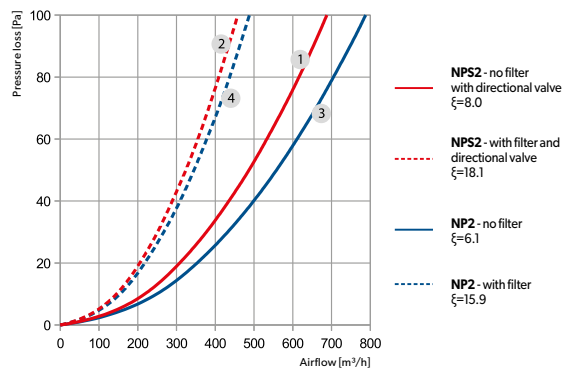
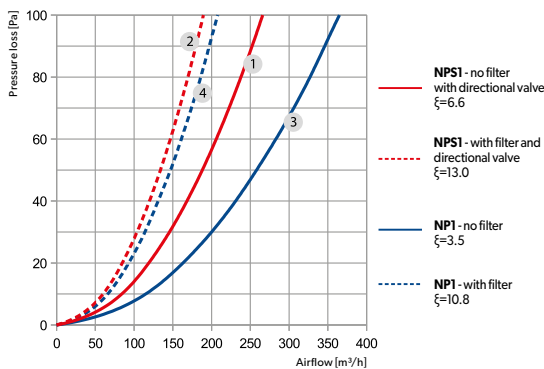
NP x-a/b






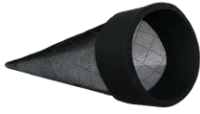




NPS x-a/b



Airflow charts:



ADDITIONAL EQUIPMENT

N°	Name	Picture	Symbol	Usage
1	Flap valve		Anemostat ANP-...	Round air intake set additional equipment ... - inlet diameter (ø 080, 110, 150)
2	Airflow stabilizer		Stabilizator Przepływu SNP-...	
3	Filter		Filtr FNP-...	
4	Nano filter		Filtr antysmogowy FNON-...	
5	Filter FNP		FNP1	Rectangular air intake set additional equipment ... - material (OC - galvanised steel sheet, CH - chrome-nickel steel sheet)
6	Filter FNP		FNP2	
7	Directional valve SNP		SNPS1-...	
8	Directional valve SNP		SNPS2-...	

CHIMNEY COWLS

STEERING & POWER SUPPLY

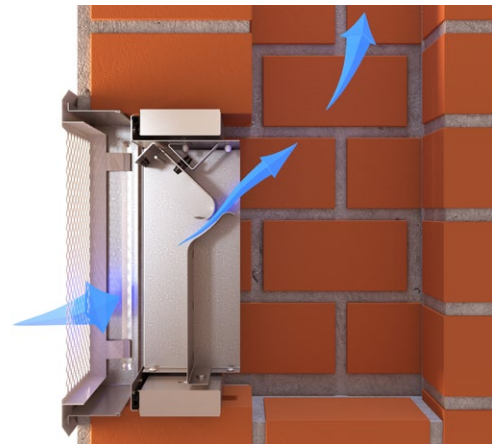
HOT AIR DISTRIBUTION SYSTEM

CHIMNEYS

VENTILATION

DRAUGHT STABILIZER - STABILER SW

Draught stabilizer is to be mounted in the horizontal part of a ventilation duct (of natural or hybrid type) just behind a ventilation grate. Main purpose of the stabilizer is to reduce excessive flow of air through the ventilation duct. Maximal amount of air that is allowed to flow through the device is limited by the way device is constructed. By low airflow volumes device allows it with very small pressure losses, when airflow gets bigger (closer to the maximal amount), damper of the device begins to close, limiting the airflow to a certain level. Maximal airflow values are set in a way that they are complying with current norms and directives regarding ventilation, what makes designating device to a proper room or ventilation channel easy. Stabiler SW is designed to limit the discharge of internal air in ventilation and air-conditioning systems in residential, community and public buildings



CHIMNEY COWLS

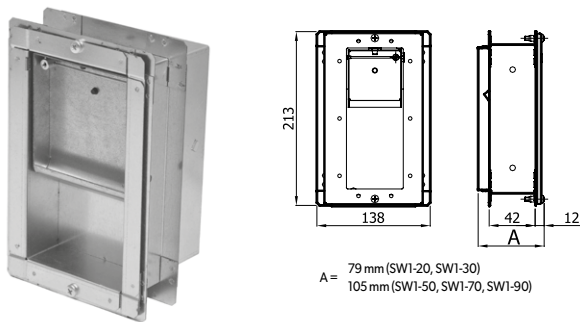
STEERING & POWER SUPPLY

HOT AIR DISTRIBUTION SYSTEM

CHIMNEYS

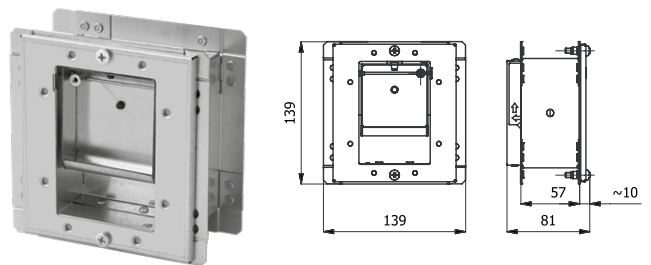
VENTILATION

DRAUGHT STABILIZER - STABILER SW1



SW1 ...
 airflow limit (20, 30, 50, 70, 90)
 draught stabilizer - version 1

DRAUGHT STABILIZER - STABILER SW2



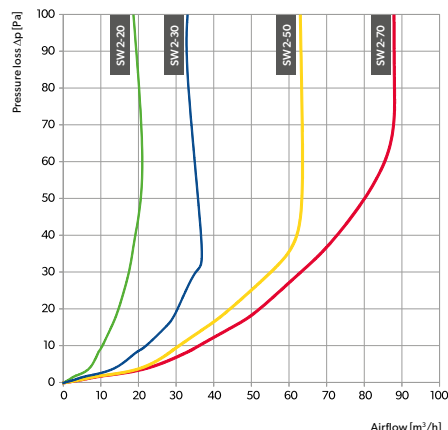
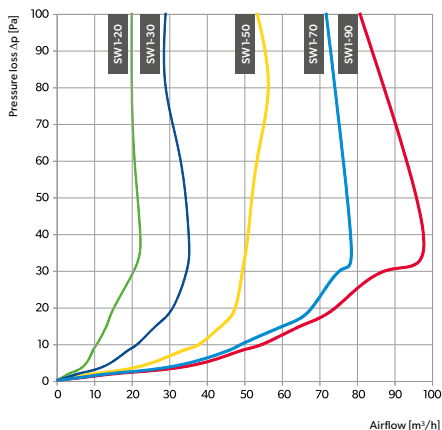
SW2 ...
 airflow limit (20, 30, 50, 70)
 draught stabilizer - version 2

Determining proper Stabilizer to a certain ventilation duct (based on polish regulations*):

Type of room	Efficiency of stabilizer [m³/h]
- Living rooms and bedrooms (per 1 person)	20
- Kitchen with outside window and electric cooker (apartment for 1 or 2 persons)	30
- Separate toilet	
- Living rooms and bedrooms (for 2 persons)	50
- Kitchen with outside window and electric cooker (apartment for 3 persons)	
- Kitchen without outside window or alcove, kitchen with electric cooker	
- Bathroom with or without toilet	
- Kitchen with outside window and gas or solid fuel cooker	70
- Living rooms and bedrooms (per 3 persons)	
- Living rooms and bedrooms (per 4 persons)	90

Destination	W	W-ventilation
Material	OC	OC-galvanised steel sheet

Airflow charts:



DRAUGHT STABILIZER WITH CASSETTE KSW1, KSW2

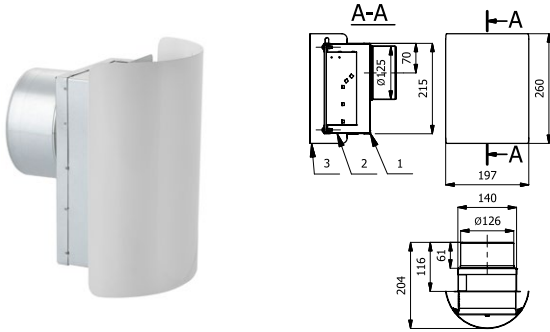
Stabiler KSW is designed to limit the discharge of internal air in ventilation and air-conditioning systems in residential, community and public buildings. Stabiler reduces excessive flow of air through the ventilation duct. Maximal amount of air that is allowed to flow through the device is limited by the way it is constructed. By low airflow volumes device allows it to go through with very small pressure losses, when airflow gets bigger (closer to the maximal amount) damper begins to close, limiting the airflow to a certain level.

Stabilizer versions are prepared in a way that they are complying with appropriate norms and directives regarding ventilation, this makes choosing a proper one to a given room or ventilation channel more than easy.

KSW series is a set dedicated to be mounted on pipe ducts. It consists of: stabilizer, mounting cassette with outlet and a decorative covering replacing ventilation shield grate.

Destination	W	W - ventilation
Material	OC	OC - galvanised steel sheet

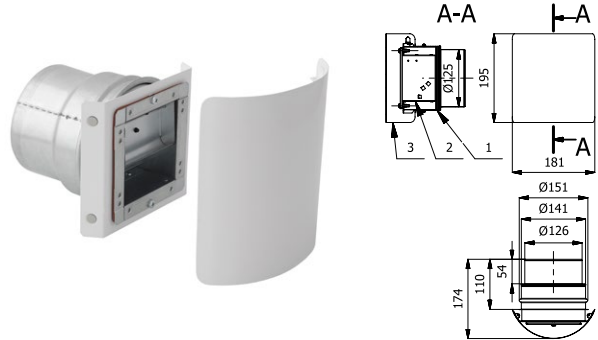
DRAUGHT STABILIZER - WITH CASSETTE KSW1



KSW1 x - ML - B

- colour
- painted version
- airflow limit (20, 30, 50, 70, 90)
- draught stabilizer with cassette

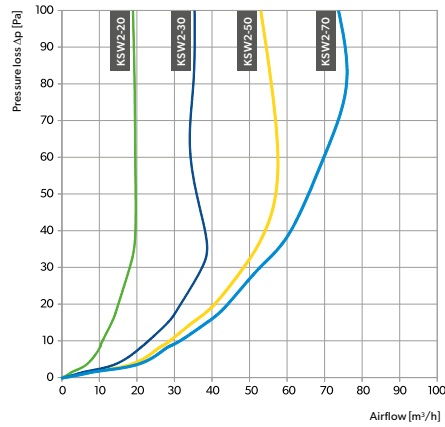
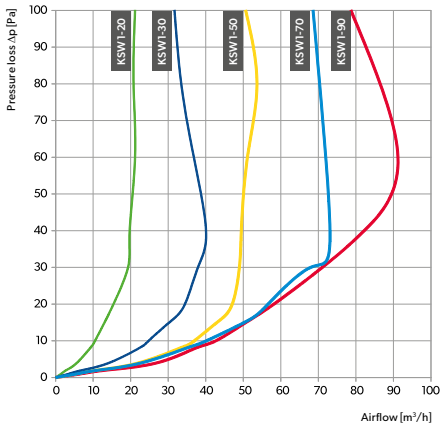
DRAUGHT STABILIZER - WITH CASSETTE KSW2



KSW2 x - ML - B

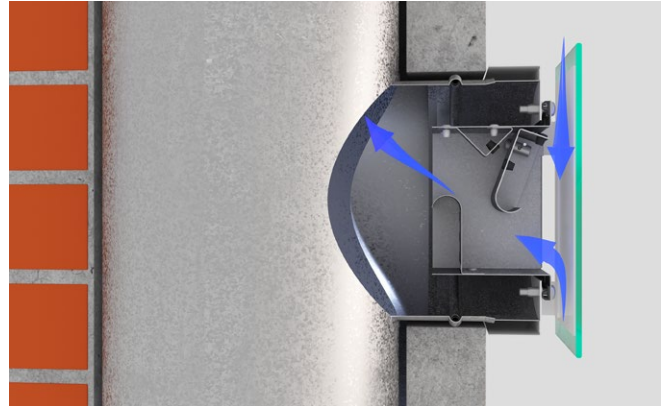
- colour
- painted version
- airflow limit (20, 30, 50, 70)
- draught stabilizer with cassette

Airflow charts:



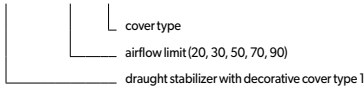
Pressure loss chart for draught stabilizers in a function of the airflow coming through it.

DRAUGHT STABILIZER WITH DECORATIVE COVER CSW

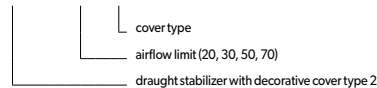


Stabler CSW is designed to limit the discharge of internal air in ventilation and air-conditioning systems in residential, community and public buildings. CSW Draught Stabilizers are devices that combine functionality with modern design. This type of stabilizer allows easy mounting of one of several aesthetical wall panels and fronts, that will correspond nicely with every interior. Wall panels are mounted to the Stabler with screws (included in set) while removable, decorative fronts are to be hung on the panel.

CSW1 - ... - a



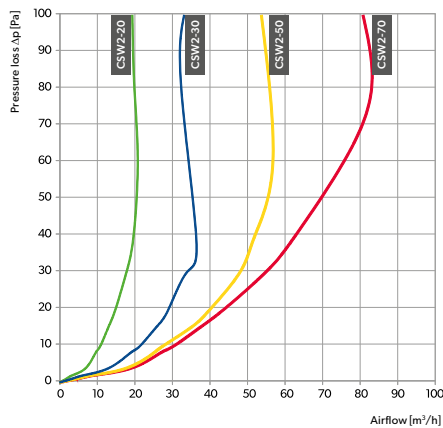
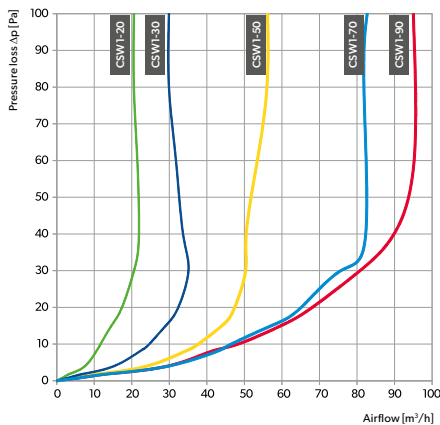
CSW2 - ... - a



Version	Mounting dimension		Airflow [m³/h] for Δp = 10 Pa				
	square ceramic duct [mm]	round steel duct [mm]	20	30	50	70	90
CSW1-...	140x210	≤ ø 140	x	x	x	x	x
CSW2-...	140x140	≤ ø 140	x	x	x	x	

Destination	W	W	W	W	W-ventilation
Flap valve version	STYL-1-ML.CZ	-	-	-	STYL-1-ML.CZ - mild steel powder painted (black)
	STYL-1-ML.B	-	-	-	STYL-1-ML.B - mild steel powder painted (white)
	STYL-3-ML.CZ	-	-	-	STYL-3-ML.CZ - mild steel powder painted (black)
	STYL-3-ML.B	-	-	-	STYL-3-ML.B - mild steel powder painted (white)
	-	-	SZ	-	SZ - white glass
	-	-	Z-CH	-	Z-CH - form of blinds - chrome-nickel steel
-	-	-	G	G - prepared for plastering	

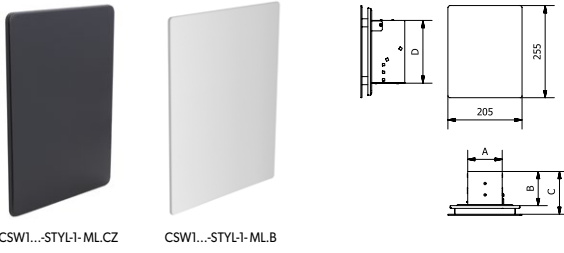
Airflow charts:



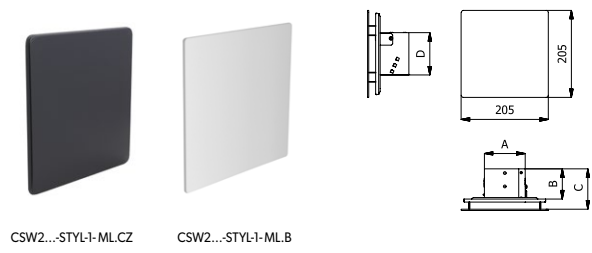
Pressure loss chart for draught stabilizers in a function of the airflow coming through it.

STABILIZERS - TYPES:

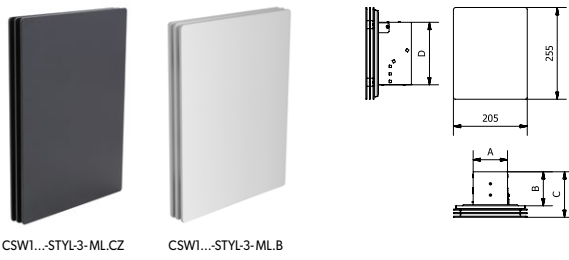
1. Stabilizer CSW1...-STYL-1- ML. ...



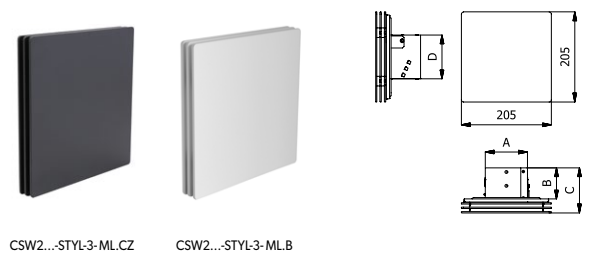
2. Stabilizer CSW2...-STYL-1- ML. ...



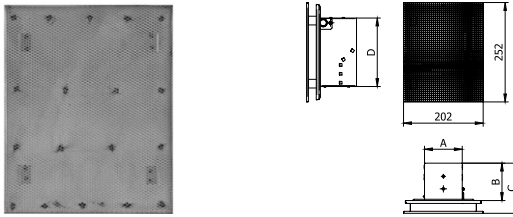
3. Stabilizer CSW1...-STYL-3- ML. ...



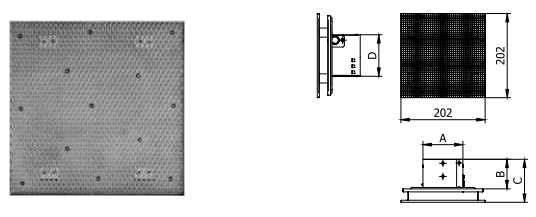
4. Stabilizer CSW2...-STYL-3- ML. ...



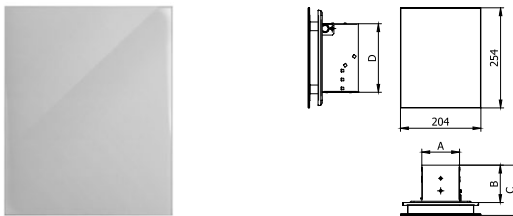
5. Stabilizer CSW1...-G



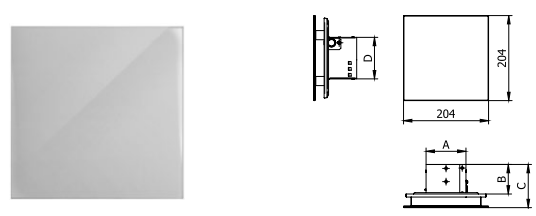
6. Stabilizer CSW2...-G



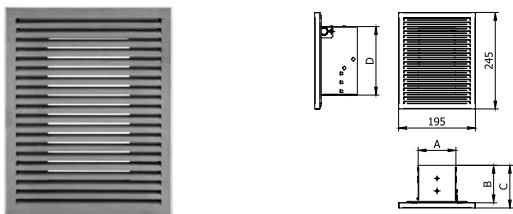
7. Stabilizer CSW1...-SZ



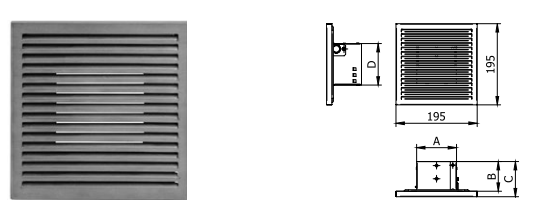
8. Stabilizer CSW2...-SZ



9. Stabilizer CSW1...-Z-CH



10. Stabilizer CSW2...-Z-CH



CHIMNEY COWLS

STEERING & POWER SUPPLY

HOT AIR DISTRIBUTION SYSTEM

CHIMNEYS

VENTILATION

Measurements:

No	Version	A	B	C	D
1	CSW1-90-STYL1-ML....	96	95	122	174
2	CSW1-70-STYL1-ML....	96	95	122	174
3	CSW1-50-STYL1-ML....	96	95	122	174
4	CSW1-30-STYL1-ML....	70	70	97	174
5	CSW1-20-STYL1-ML....	35	70	97	174
6	CSW1-90-STYL3-ML....	96	95	127	174
7	CSW1-70-STYL3-ML....	96	95	127	174
8	CSW1-50-STYL3-ML....	96	95	127	174
9	CSW1-30-STYL3-ML....	70	70	102	174
10	CSW1-20-STYL3-ML....	35	70	102	174
11	CSW1-90-G	96	95	127	174
12	CSW1-70-G	96	95	127	174
13	CSW1-50-G	96	95	127	174
14	CSW1-30-G	70	70	103	174
15	CSW1-20-G	35	70	103	174
16	CSW1-90-SZ	96	95	128	174
17	CSW1-70-SZ	96	95	128	174
18	CSW1-50-SZ	96	95	128	174
19	CSW1-30-SZ	70	70	103	174
20	CSW1-20-SZ	35	70	103	174
21	CSW1-90-Z-CH	96	95	108	174
22	CSW1-70-Z-CH	96	95	108	174
23	CSW1-50-Z-CH	96	95	108	174
24	CSW1-30-Z-CH	70	71	84	174
25	CSW1-20-Z-CH	35	71	84	174

No	Version	A	B	C	D
1	CSW2-70-STYL1-ML....	96	71	98	100
2	CSW2-50-STYL1-ML....	96	71	98	100
3	CSW2-30-STYL1-ML....	70	70	97	102
4	CSW2-20-STYL1-ML....	35	70	97	102
5	CSW2-70-STYL3-ML....	96	71	103	100
6	CSW2-50-STYL3-ML....	96	71	103	100
7	CSW2-30-STYL3-ML....	70	70	102	102
8	CSW2-20-STYL3-ML....	35	70	102	102
9	CSW2-70-G	96	71	103	100
10	CSW2-50-G	96	71	103	100
11	CSW2-30-G	70	70	103	102
12	CSW2-20-G	35	70	103	102
13	CSW2-70-SZ	96	71	104	100
14	CSW2-50-SZ	96	71	104	100
15	CSW2-30-SZ	70	70	104	102
16	CSW2-20-SZ	35	70	104	102
17	CSW2-70-Z-CH	96	71	84	100
18	CSW2-50-Z-CH	96	71	84	100
19	CSW2-30-Z-CH	70	71	84	102
20	CSW2-20-Z-CH	35	71	84	102

CHIMNEY COWLS

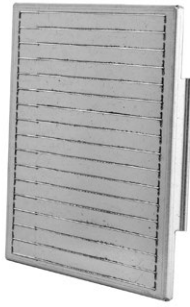
STEERING & POWER SUPPLY

HOT AIR DISTRIBUTION SYSTEM

CHIMNEYS

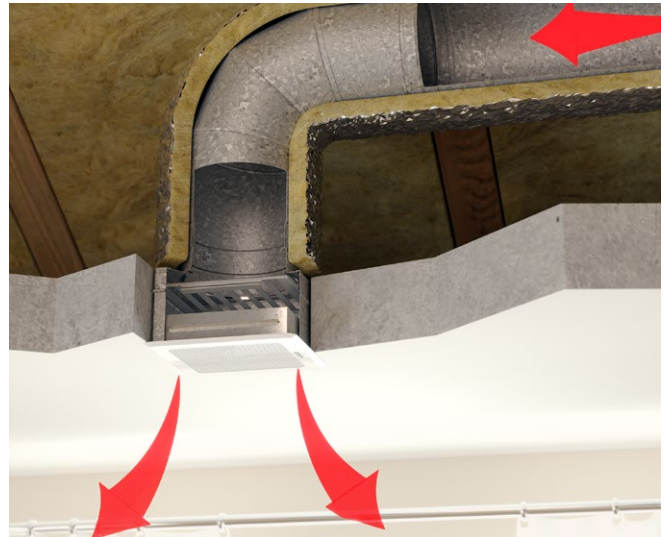
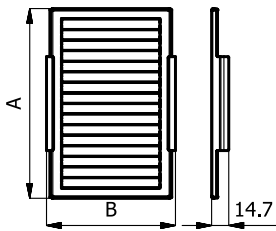
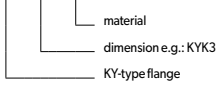
VENTILATION

KY-TYPE FLANGE (RECTANGULAR)



KY-type flanges in Hot Air Distribution System are used to adjust the amount of air supplied to the rooms. They are to be mounted in frames of shield grates (rectangular flanges) or inside inlet cassettes (round flanges). Adjustment is done by breaking off proper amount of shutters. Thanks to this it is possible to balance the airflow coming to all rooms.

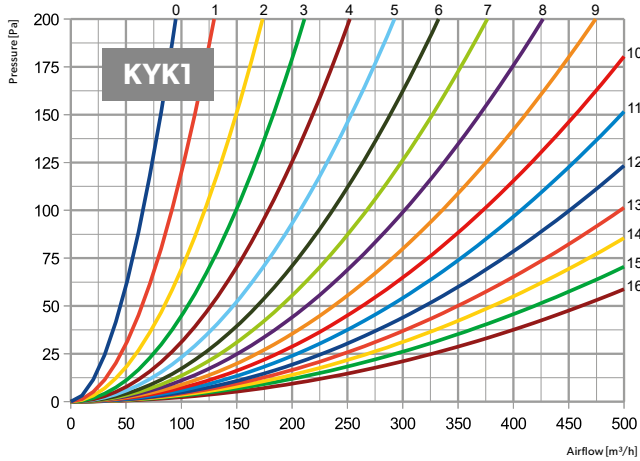
KY x OC



Destination	-	O	O - air heating
Material	OC	OC	OC - galvanised steel sheet

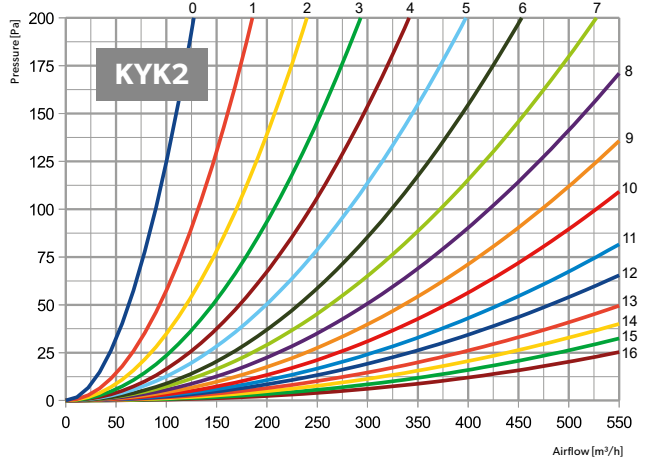
Type	A [mm]	B [mm]	Weight [kg]
KYK1	161.8	109.8	0.13
KYK2	161.0	143.3	0.16
KYK3	214.4	143.6	0.20

Airflow charts:



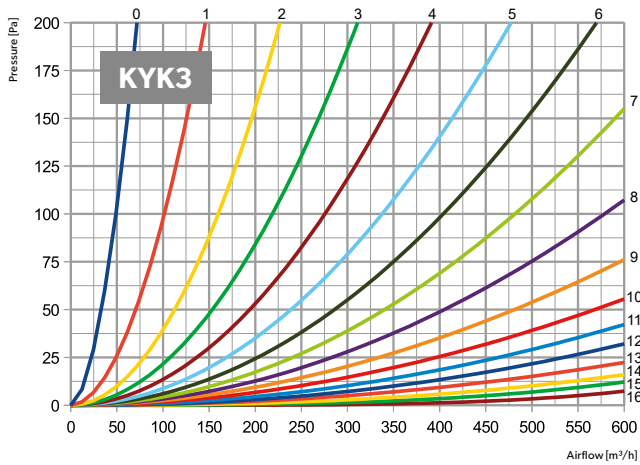
Pressure loss chart for KYK1 in a function of the airflow coming through it.

* 0...16 - amount of shutters broken off



Pressure loss chart for KYK2 in a function of the airflow coming through it.

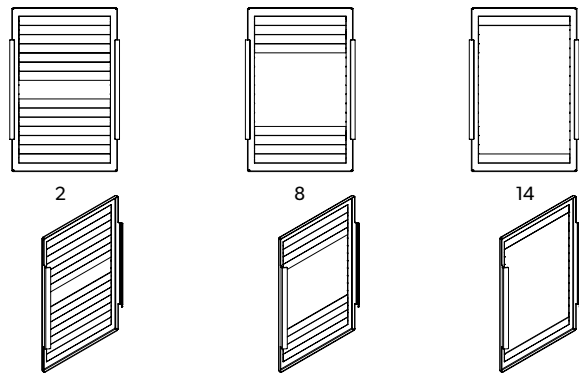
* 0...16 - amount of shutters broken off



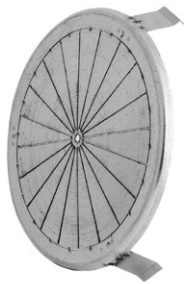
Pressure loss chart for KYK3 in a function of the airflow coming through it.

* 0...16 - amount of shutters broken off

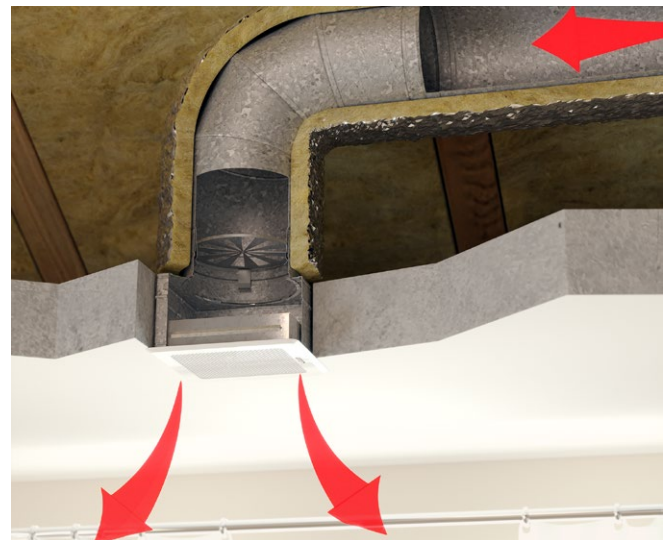
Example for shutters broken off 2, 8 and 14:



KY-TYPE FLANGE (ROUND)

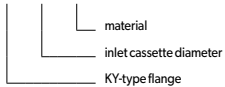


KY-type flanges in Hot Air Distribution System are used to adjust the amount of air supplied to the rooms. They are to be mounted in frames of shield grates (rectangular flanges) or inside inlet cassettes (round flanges). Adjustment is done by breaking off proper amount of shutters. Thanks to this it is possible to balance the airflow coming to all rooms.

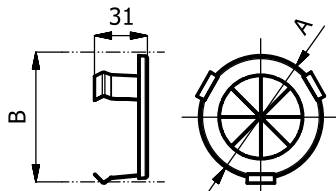


Destination	-	O	O - air heating
Material	OC	OC	OC - galvanised steel sheet

KY x OC

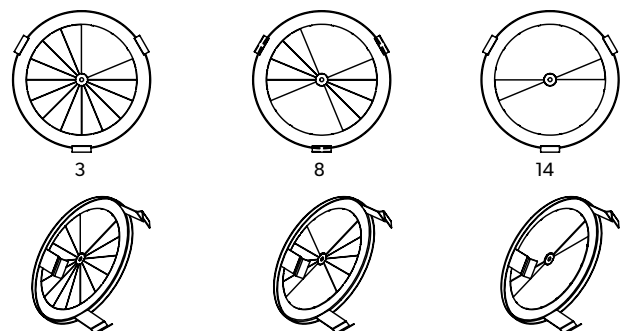


Dimensions:

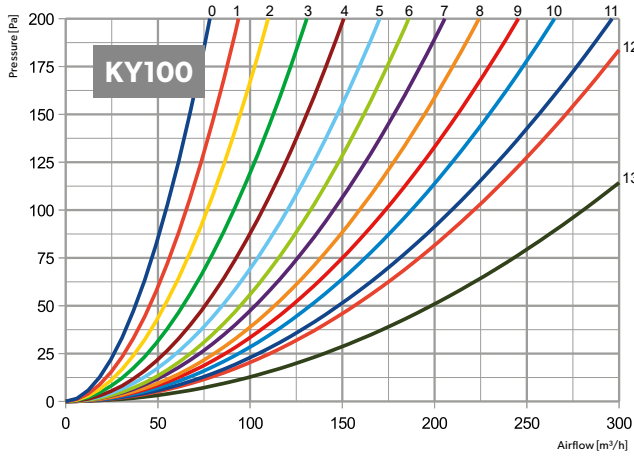


Type	A [mm]	B [mm]	Weight [kg]
KY100	ø92	ø96	0.05
KY110	ø102	ø106	0.06
KY125	ø117	ø121	0.07
KY130	ø120	ø126	0.07
KY140	ø125	ø134	0.08
KY150	ø138	ø140	0.10

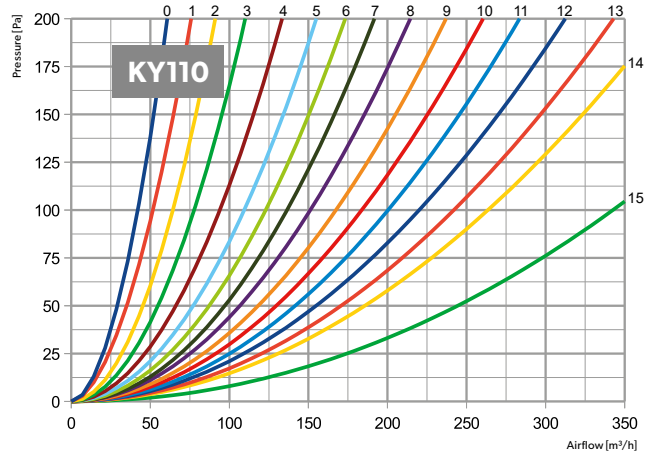
Example for shutters broken off 3, 8 and 14:



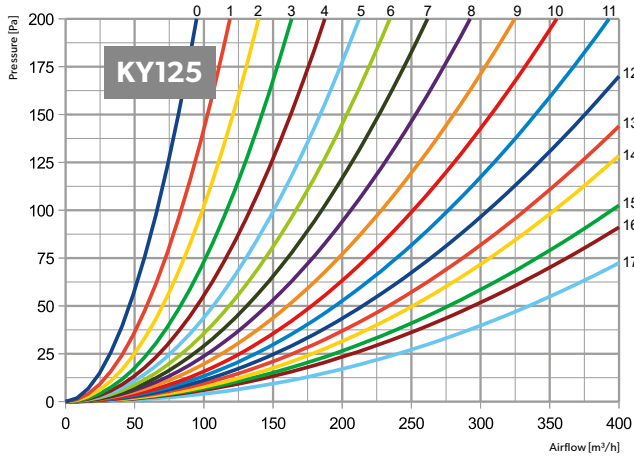
Airflow charts:



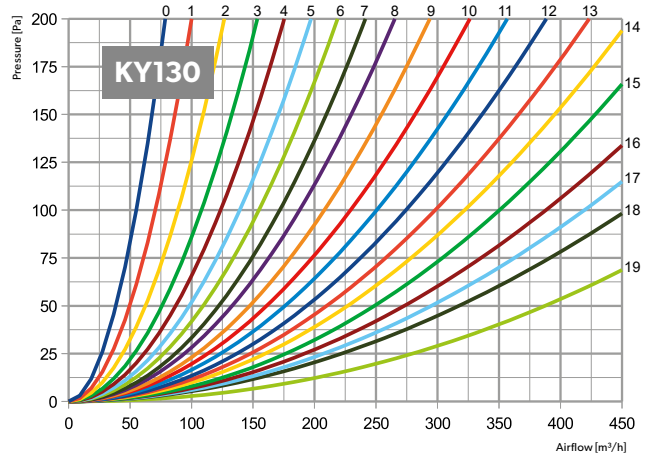
Pressure loss chart for KY100 in a function of the airflow coming through it.
* 0...12 - amount of shutters broken off, 13 - no flange



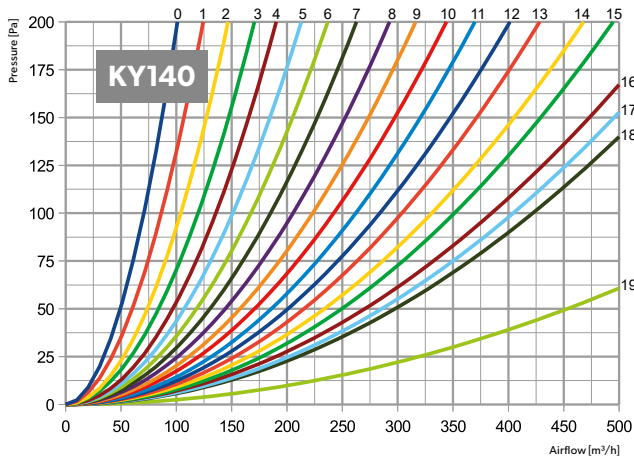
Pressure loss chart for KY110 in a function of the airflow coming through it.
* 0...14 - amount of shutters broken off, 15 - no flange



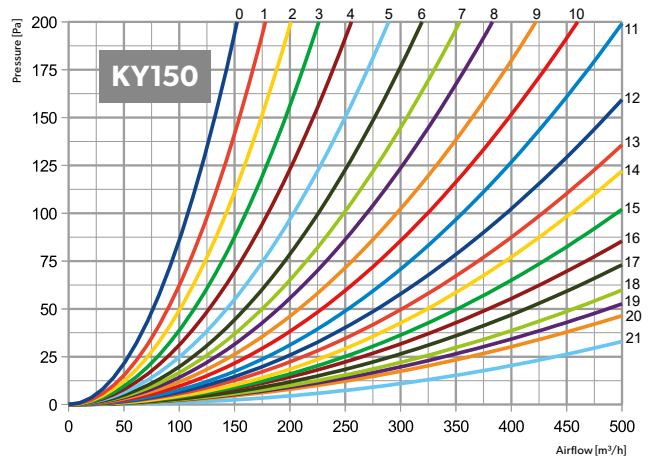
Pressure loss chart for KY125 in a function of the airflow coming through it.
* 0...16 - amount of shutters broken off, 17 - no flange



Pressure loss chart for KY130 in a function of the airflow coming through it.
* 0...18 - amount of shutters broken off, 19 - no flange

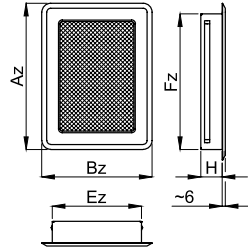


Pressure loss chart for KY140 in a function of the airflow coming through it.
* 0...18 - amount of shutters broken off, 19 - no flange

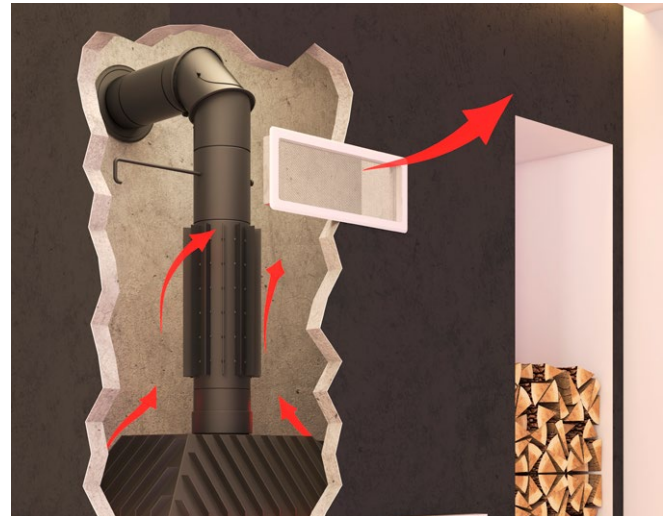
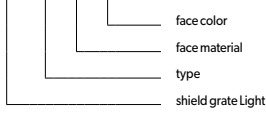


Pressure loss chart for KY150 in a function of the airflow coming through it.
* 0...20 - amount of shutters broken off, 21 - no flange

SHIELD GRATES LIGHT



KRL x-a-b

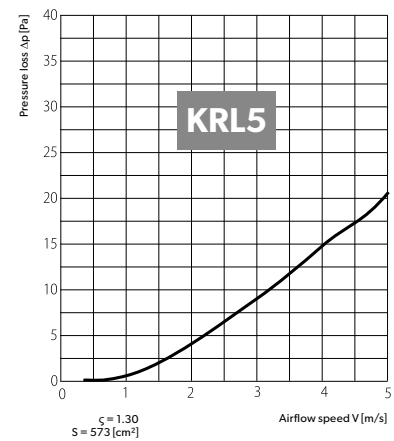
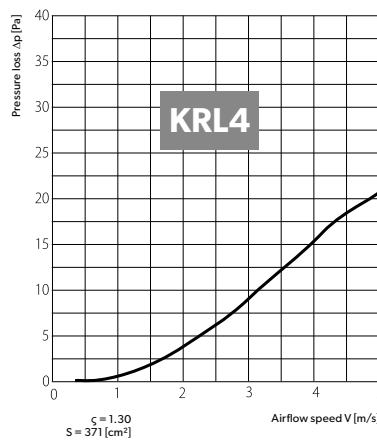
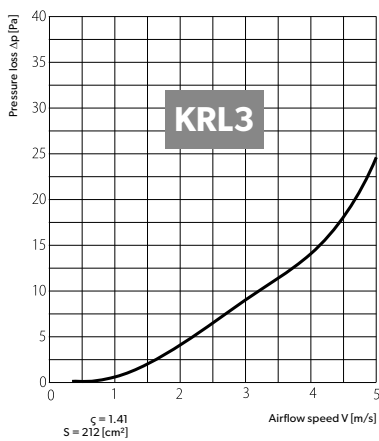
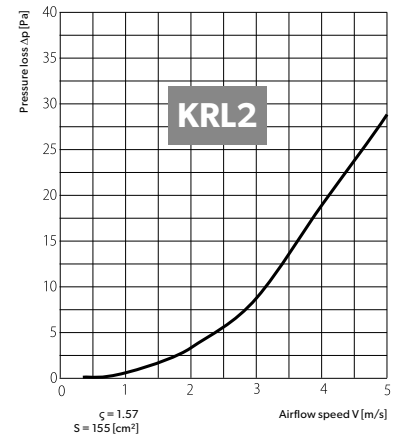
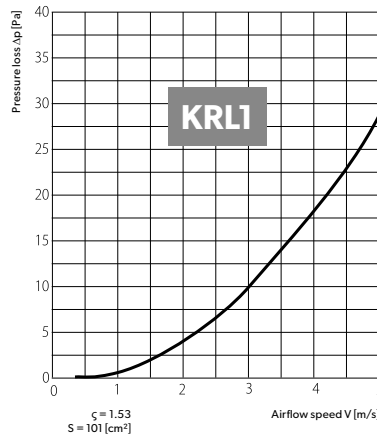
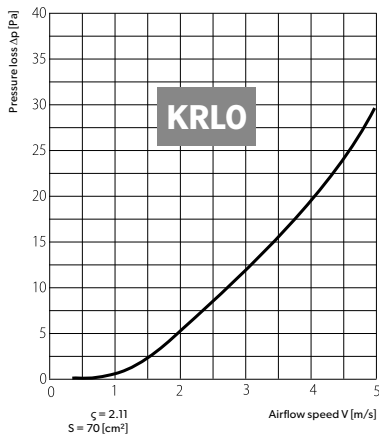


Measurements:

No	Type	Dimensions [mm]					Cross-section [cm ²]	Weight [kg]
		Az	Bz	Fz	Ez	H		
1	KRL0	205	65	185	45	36	42	0.15
2	KRL1	195	135	165	105	36	64	0.35
3	KRL14	175	175	140	140	36	84	0.38
4	KRL2	195	175	165	140	36	98	0.40
5	KRL3	245	175	215	140	36	134	0.50
6	KRL4	335	195	300	165	36	234	0.70
7	KRL5	485	195	455	165	36	359	1.20

Destination	W	W	W-ventilation	Face material	
	O	O	O-air heating	B	white
Face material	ML	-	ML - mild steel powder coated	KR	beige
				GR	graphite / 7024
				CZ	black
Frame material	OC	OC	OC - galvanised steel sheet	-	-

Airflow charts:



ζ - pressure loss ratio
S - opening area

CHIMNEY COWLS

STEERING & POWER SUPPLY

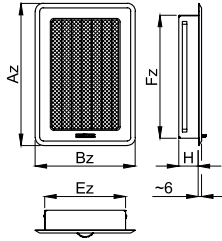
HOT AIR DISTRIBUTION SYSTEM

CHIMNEYS

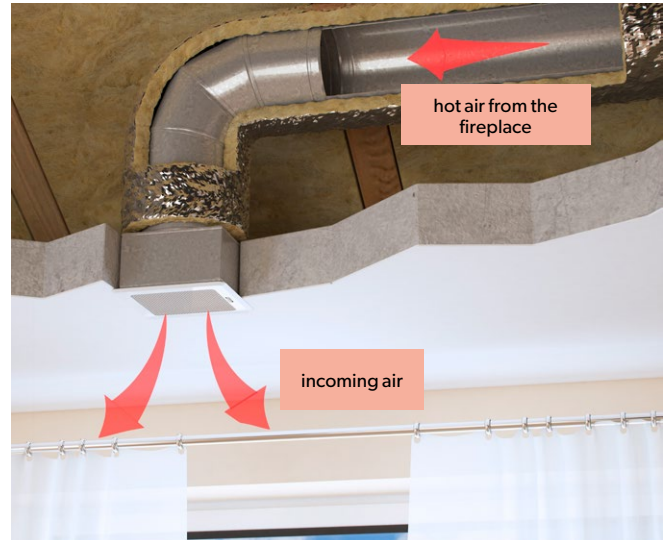
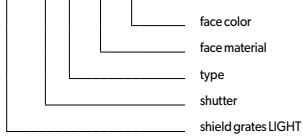
VENTILATION

invent. build. enjoy.

SHIELD GRATES WITH SHUTTER LIGHT



KRL z x-a-b

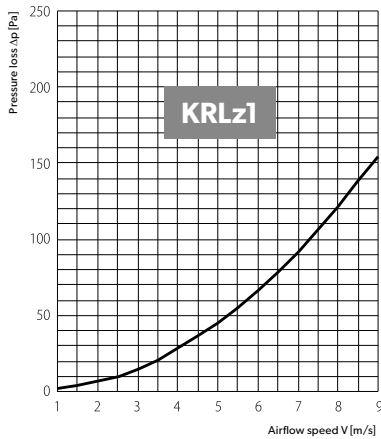


Measurements:

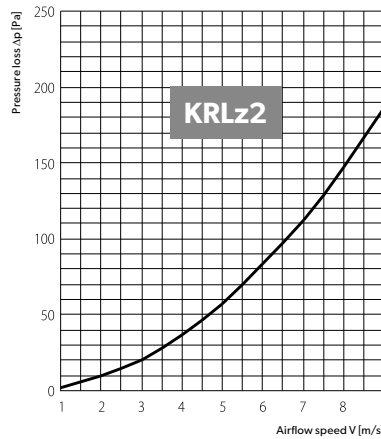
No	Type	Dimensions [mm]					Cross-section [cm ²]	Weight [kg]
		Az	Bz	Fz	Ez	H		
1	KRLz1	195	135	165	105	36	64	0.40
2	KRLz14	175	175	140	140	36	84	0.48
3	KRLz2	195	175	165	140	36	98	0.50
4	KRLz3	245	175	215	140	36	134	0.70
5	KRLz4	335	195	300	165	36	234	0.95
6	KRLz5	485	195	455	165	36	359	1.40

Destination	W	W	W - ventilation	Face material	
	O	O	O - air heating	B	white
Face material	ML	-	ML - mild steel powder coated	KR	beige
				GR	graphite / 7024
				CZ	black
Frame material	OC	OC	OC - galvanised steel sheet	-	-

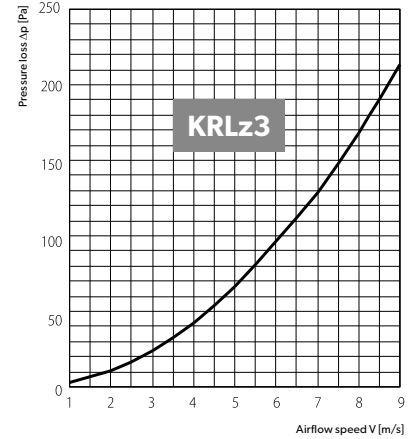
Airflow charts:



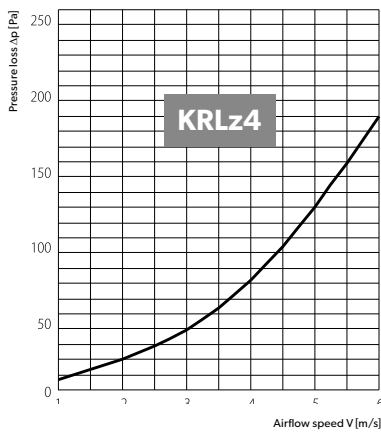
Pressure loss chart for the KRLz1 shield grate in a function of the airflow speed coming through its face.



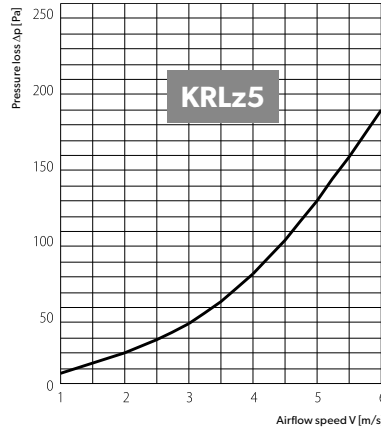
Pressure loss chart for the KRLz14 and KRLz2 shield grate in a function of the airflow speed coming through its face.



Pressure loss chart for the KRLz3 shield grate in a function of the airflow speed coming through its face.



Pressure loss chart for the KRLz4 shield grate in a function of the airflow speed coming through its face.

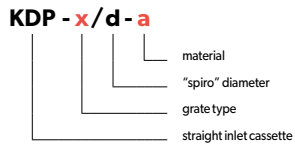


Pressure loss chart for the KRLz5 shield grate in a function of the airflow speed coming through its face.

1. STRAIGHT INLET CASSETTE KDP

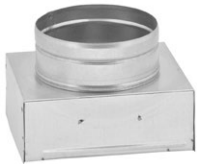


Grate type	K1-Kz1	K14-Kz14	K2-Kz2	K3-Kz3	K4-Kz4	K5-Kz5
A	166	141	166	216	301	456
B	106	141	141	141	166	166
d „spiro“ range	100-110	100-125	100-150	100-150	100-150	100-150
Weight [kg]	0.20	0.23	0.25	0.35	0.55	0.60

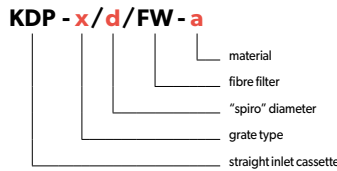
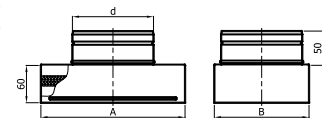


Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

2. STRAIGHT INLET CASSETTE WITH FILTER KDP/FW



Grate type	K1-Kz1	K14-Kz14	K2-Kz2	K3-Kz3	K4-Kz4	K5-Kz5
A	166	141	166	216	301	456
B	106	141	141	141	166	166
d „spiro“ range	100-110	100-125	100-150	100-150	100-150	100-150
Weight [kg]	0.40	0.45	0.50	0.70	0.80	0.95

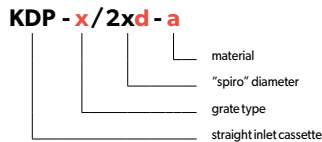
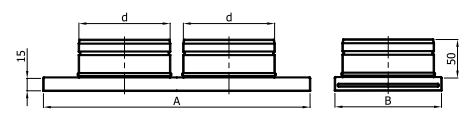


Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

3. STRAIGHT DOUBLE INLET CASSETTE KDP



Grate type	K4-Kz4	K5-Kz5
A	301	456
B	166	166
d „spiro“ range	100-125	100-150
Weight [kg]	0.63	0.68

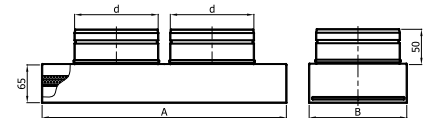


Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

4. STRAIGHT DOUBLE INLET CASSETTE WITH FILTER KDP/FW



Grate type	K4-Kz4	K5-Kz5
A	301	456
B	166	166
d „spiro“ range	100-125	100-150
Weight [kg]	0.63	0.68

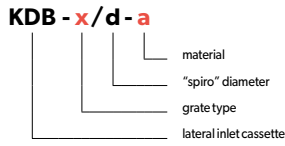
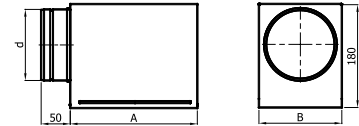


Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

5. LATERAL INLET CASSETTE KDB



Grate type	K1-Kz1	K14-Kz14	K2-Kz2	K3-Kz3	K4-Kz4	K5-Kz5
A	166	141	166	216	301	456
B	106	141	141	141	166	166
d „spiro“ range	100-110	100-125	100-150	100-150	100-150	100-150
Weight [kg]	0.50	0.60	0.70	0.85	1.15	1.50

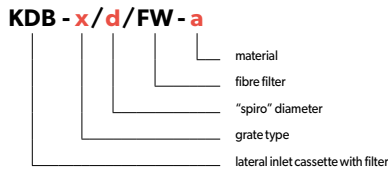
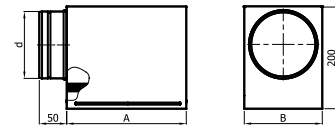


Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

6. LATERAL INLET CASSETTE WITH FILTER KDB/FW

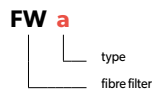
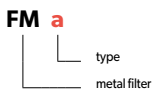
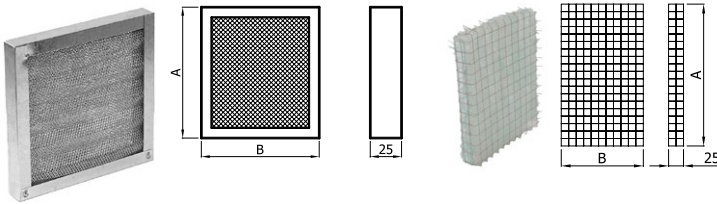


Grate type	K1-Kz1	K14-Kz14	K2-Kz2	K3-Kz3	K4-Kz4	K5-Kz5
A	166	141	166	216	301	456
B	106	141	141	141	166	166
d „spiro“ range	100-110	100-125	100-150	100-150	100-150	100-150
Weight [kg]	0.55	0.65	0.75	0.90	1.20	1.60



Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

7. METAL FILTER TO INLET CASSETTES FM, FW

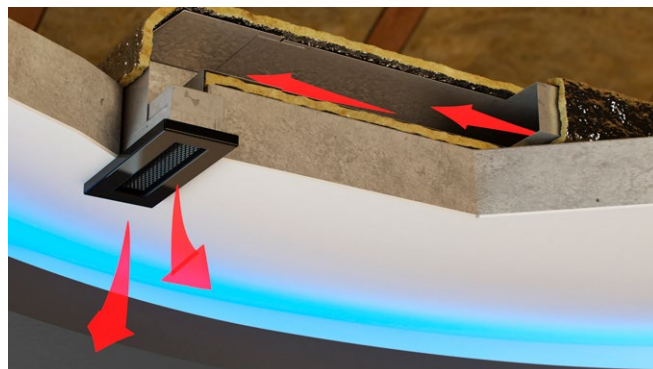
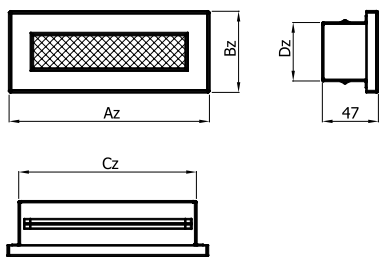
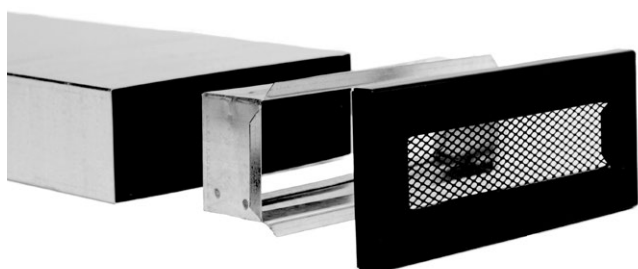


Grate type	K1-Kz1	K14-Kz14	K2-Kz2	K3-Kz3	K4-Kz4	K5-Kz5
A	162	137	162	212	297	452
B	102	137	137	137	162	162
Weight FM [kg]	0.45	0.50	0.55	0.80	0.90	1.20
Weight FW [kg]	0.10	0.10	0.10	0.12	0.15	0.20

Destination	W	W - ventilation
	O	O - air heating
Material FM	M	M - metal
Material FW	-	W - fibre

FW - working temperature up to 120°C

SHIELD GRATES FOR ENDING OF VENTILATION AND HOT AIR DISTRIBUTION RECTANGULAR DUCTS



KRKP x-a-b

- face color
- face material
- duct dimensions
- rectangular ducts ending grate

Measurements:

Type	Face outer dimensions Az x Bz	Cz	Dz	Cross-section [cm ²]	Weight [kg]
KRKP 150x50	168 x 68	149	49	36	0.30
KRKP 200x50	218 x 68	199	49	66	0.38
KRKP 200x90	218 x 108	199	89	121	0.44
KRKP 250x50	268 x 68	249	49	83	0.44

Destination	W	W	W - ventilation	Face material	
	O	O	O - air heating		
Face material	ML	-	ML - mild steel powder coated	B	white
				CZ	black
				KR	beige
				GR	graphite / 7024
Frame material	OC	OC	OC - galvanised steel sheet	-	-

CHIMNEY COWLS

STEERING & POWER SUPPLY

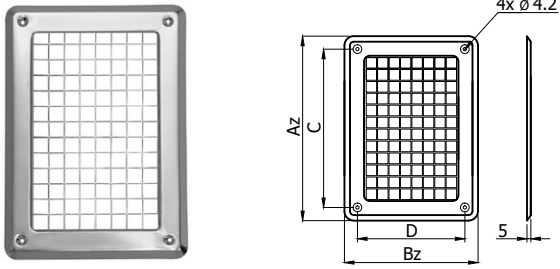
HOT AIR DISTRIBUTION SYSTEM

CHIMNEYS

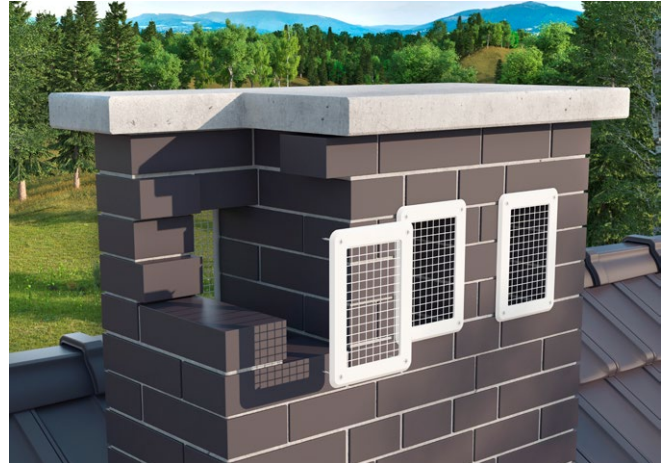
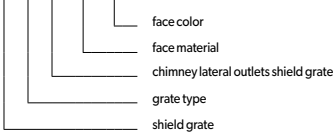
VENTILATION

invent. build. enjoy.

CHIMNEY LATERAL OUTLETS SHIELD GRATES



K x k - a - b

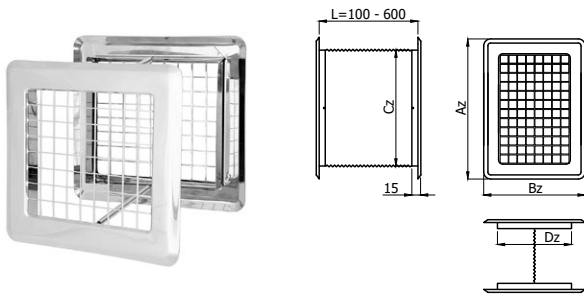


Measurements:

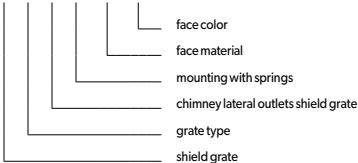
Type	Dimensions [mm]			Cross-section [cm ²]	Weight [kg]
	Face outer dimensions Bz x Az	C	D		
K1k	135 x 195	159	99	84	0.08
K14k	175 x 175	139	139	100	0.09
K2k	175 x 195	159	139	141	0.10
K3k	175 x 245	209	139	204	0.12

Destination	W	W	W-ventilation	Face material	
Face material	ML	-	ML - chrome-nickel steel sheet 1.4301 powder coated	GR	graphite / 7024
				CZ	black
				BR	brown / 8017
	CE	brickred / 8004			
-	CH	-	CH - chrome-nickel steel sheet 1.4301	-	-

CHIMNEY LATERAL OUTLETS SHIELD GRATES



K x k s - a - b

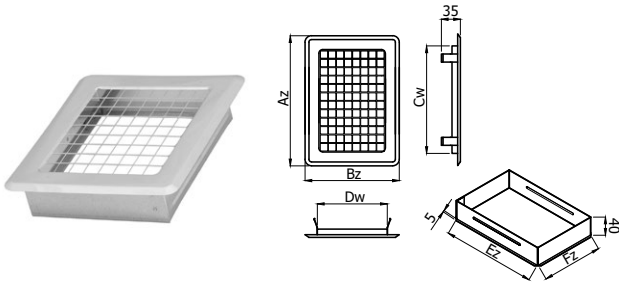


Measurements:

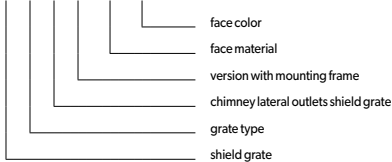
Type	Dimensions [mm]			Cross-section [cm ²]	Weight [kg]
	Face outer dimensions Bz x Az	Cz	Dz		
K1ks	135 x 195	145	95	84	0.40
K14ks	175 x 175	130	130	100	0.35
K2ks	175 x 195	145	130	141	0.45
K3ks	175 x 245	200	130	204	0.50

Destination	W	W	W-ventilation	Face material	
Face material	ML	-	ML - chrome-nickel steel sheet 1.4301 powder coated	GR	graphite / 7024
				CZ	black
				BR	brown / 8017
	CE	brickred / 8004			
-	CH	-	CH - chrome-nickel steel sheet 1.4301	-	-

CHIMNEY LATERAL OUTLETS SHIELD GRATES WITH MOUNTING FRAME



K x k r - a - b

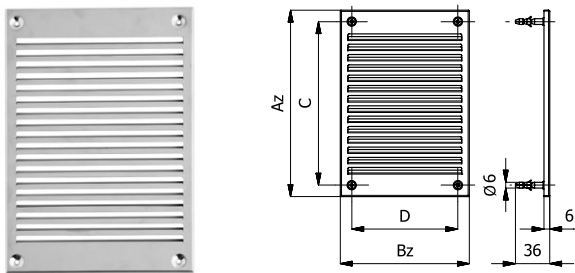


Measurements:

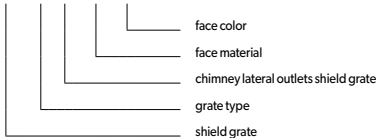
Type	Dimensions [mm]					Cross-section [cm ²]	Weight [kg]
	Face outer dimensions Bz x Az	Cw	Dw	Ez	Fz		
K1kr	135 x 195	145	95	165	105	84	0.35
K14kr	175 x 175	130	130	140	140	100	0.38
K2kr	175 x 195	145	130	165	140	141	0.40
K3kr	175 x 245	200	130	215	140	204	0.50

Destination	W	W	W-ventilation	Face material	
Face material	ML	-	ML - chrome-nickel steel sheet 1.4301 powder coated	GR	graphite / 7024
				CZ	black
				BR	brown / 8017
				CE	brickred / 8004
Frame material	CH	CH	CH - chrome-nickel steel sheet 1.4301	-	-
				CH	CH - chrome-nickel steel sheet 1.4301

CHIMNEY LATERAL OUTLETS SHIELD GRATES KO (SHUTTER)



KO x k - a - b

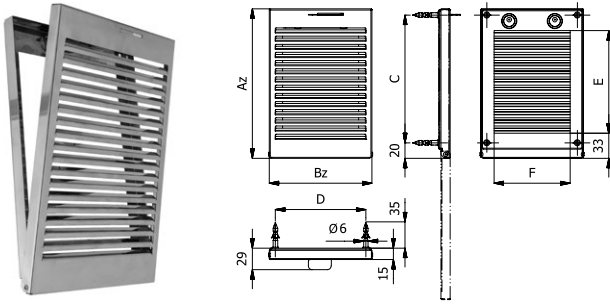


Measurements:

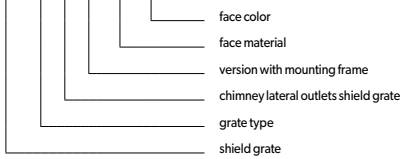
Type	Cross-section [cm ²]	Az	Bz	C	D	Weight [kg]
KO1k	82	195	135	171	111	0.08
KO2k	117	195	175	173	151	0.16
KO3k	137	245	175	221	151	0.20

Destination	W	W	W-ventilation	Face material	
Face material	ML	-	ML - chrome-nickel steel sheet 1.4301 powder coated	GR	graphite / 7024
				CZ	black
				BR	brown / 8017
				CE	brickred / 8004
Frame material	CH	CH	CH - chrome-nickel steel sheet 1.4301	-	-
				CH	CH - chrome-nickel steel sheet 1.4301

CHIMNEY LATERAL OUTLETS SHIELD GRATES WITH MOUNTING FRAME KO...kr



KO x k r - a - b

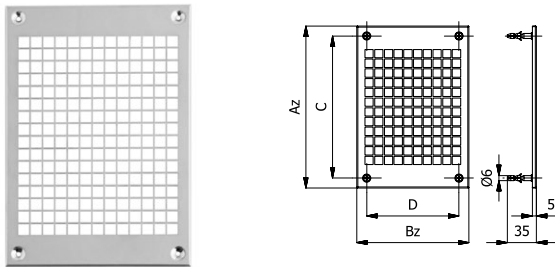


Measurements:

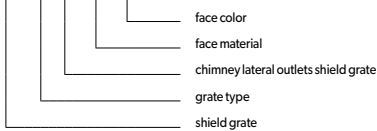
Type	Cross-section [cm ²]	Az	Bz	C	D	E	F	Weight [kg]
KO1kr	82	196	135	168	119	135	100	0.24
KO2kr	117	196	175	168	159	135	140	0.29
KO3kr	137	246	175	218	159	185	140	0.34

Destination	W	W	W - ventilation	Face material	
Face material	ML	-	ML - chrome-nickel steel sheet 1.4301 powder coated	GR	graphite / 7024
				CZ	black
				BR	brown / 8017
				CE	brick red / 8004
Frame material	CH	CH	CH - chrome-nickel steel sheet 1.4301	-	-
				CH	CH - chrome-nickel steel sheet 1.4301

CHIMNEY LATERAL OUTLETS SHIELD GRATE KB



KB x k - a - b

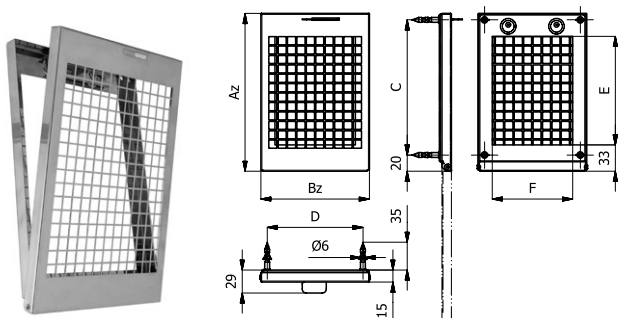


Measurements:

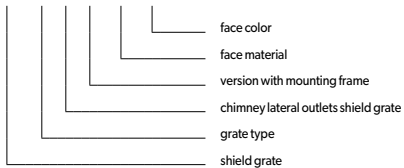
Type	Cross-section [cm ²]	Az	Bz	C	D	Weight [kg]
KB1k	120	195	135	171	111	0.08
KB2k	169	195	175	171	151	0.09
KB3k	208	245	175	221	151	0.12

Destination	W	W	W - ventilation	Face material	
Face material	ML	-	ML - chrome-nickel steel sheet 1.4301 powder coated	GR	graphite / 7024
				CZ	black
				BR	brown / 8017
				CE	brick red / 8004
Frame material	CH	CH	CH - chrome-nickel steel sheet 1.4301	-	-

CHIMNEY LATERAL OUTLETS SHIELD GRATES WITH MOUNTING FRAME KB...kr



KB x k r - a - b



Measurements:

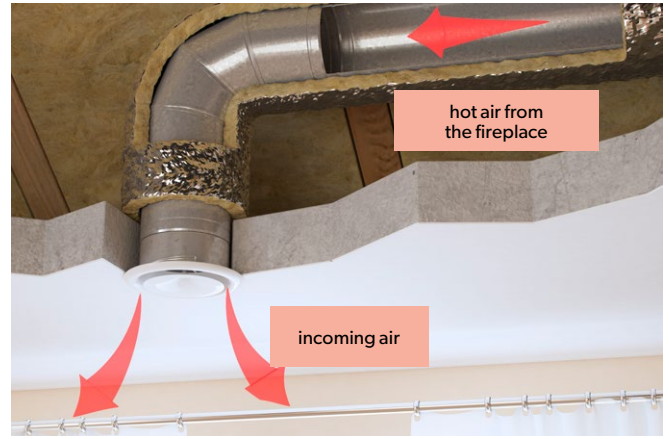
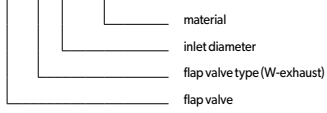
Type	Cross-section [cm ²]	Az	Bz	C	D	E	F	Weight [kg]
KB1kr	120	196	135	168	119	135	100	0.19
KB2kr	169	196	175	168	159	135	140	0.22
KB3kr	208	246	175	218	159	185	140	0.25

Destination	W	W	W-ventilation	Face material	
Face material	ML	-	ML - chrome-nickel steel sheet 1.4301 powder coated	GR	graphite / 7024
				CZ	black
				BR	brown / 8017
Frame material	CH	CH	CH - chrome-nickel steel sheet 1.4301	CE	brick red / 8004
				-	-

FLAP VALVE



AS x y - ML

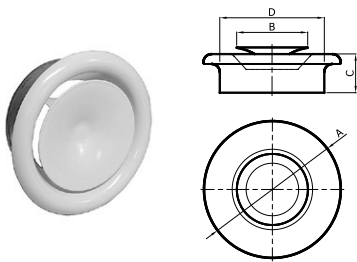


Measurements:

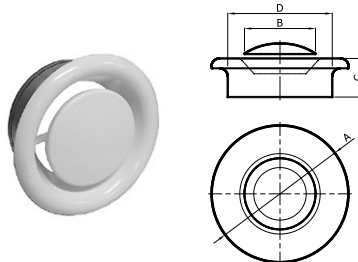
No	Type	Flap valve dimensions [mm]				Mounting frame dimensions [mm]			Channel cross-section [cm ²]	Weight [kg]
		A	B	C	D	A	B	C		
1	AS80	115	76	42	77	105	78	50	50	0.23
2	AS100	138	92	40	97	125	98	50	78	0.25
3	AS125	164	111	46	122	150	123	50	122	0.30
4	AS150	202	135	50	147	175	148	50	176	0.44
5	AS160	211	147	54	157	185	158	50	201	0.50
6	AS200	248	194	63	197	225	198	50	314	0.75

Destination	W	W	W-ventilation
	O	O	O- air heating
Flap valve material	-	ML	ML- mild steel powder coated white
Frame material	-	OC	OC- galvanised steel sheet

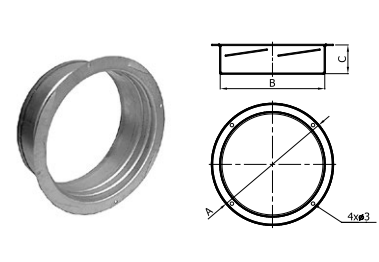
Flap valves are sold with mounting frame in a set.



Air supply flap valve AS

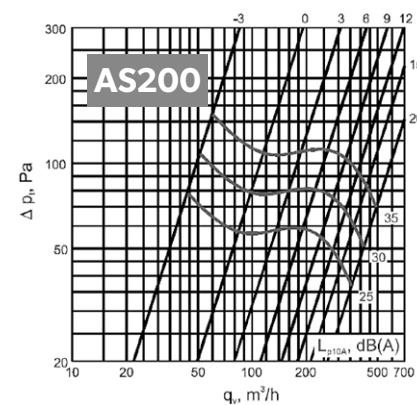
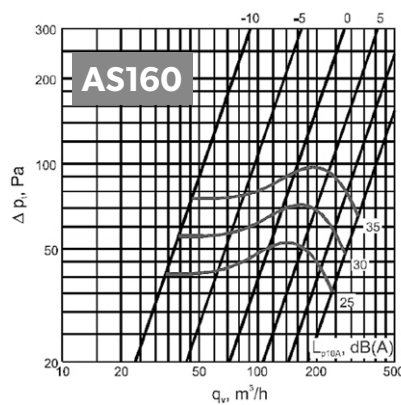
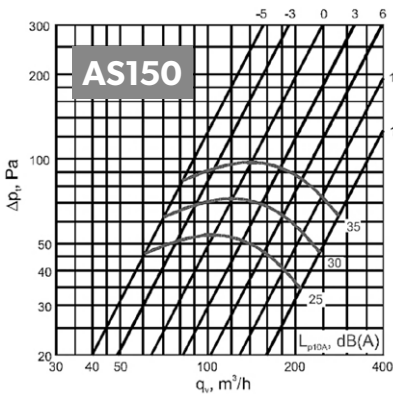
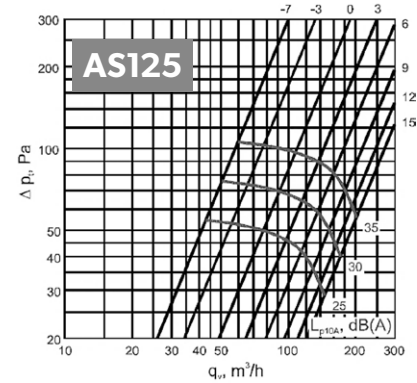
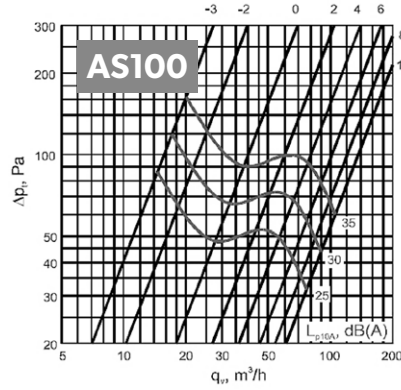
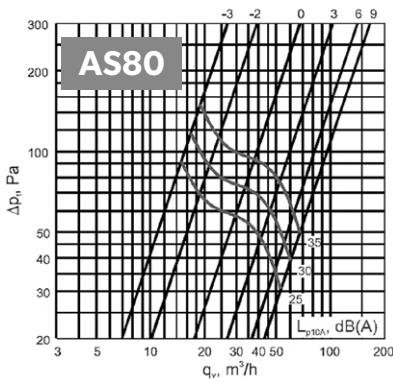


Air exhaust flap valve ASW



Mounting frame RAN

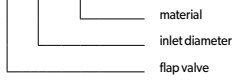
Airflow charts



CHROME-NICKEL FLAP VALVES

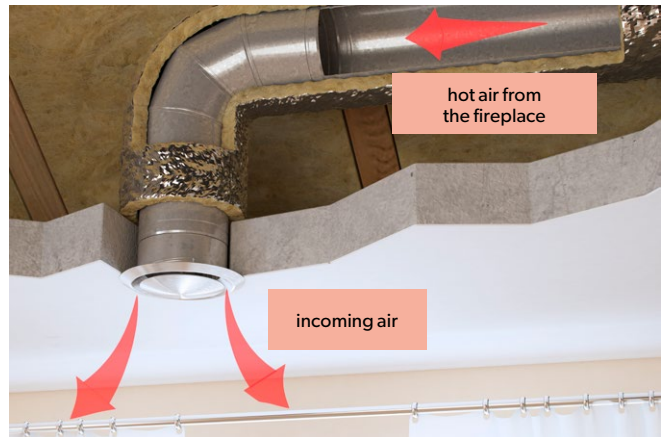


AS y - CH



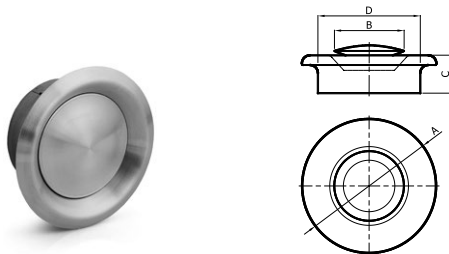
Measurements:

No	Type	Flap valve dimensions [mm]				Mounting frame dimensions [mm]			Channel cross-section [cm ²]	Weight [kg]
		A	B	C	D	A	B	C		
1	AS100	142	97	37	105	125	98	50	78	0.20
2	AS125	172	118	42	127	150	123	50	122	0.30
3	AS150	217	142	50	153	175	148	50	176	0.44

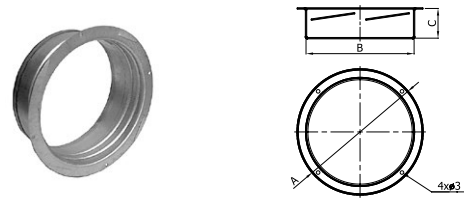


Destination	W	W	W - ventilation
	O	O	O - air heating
Flap valve material	CH	-	CH - chrome-nickel steel sheet 1.4301
Frame material	CH	-	CH - chrome-nickel steel sheet 1.4301

Flap valves are sold with mounting frame in a set.



Flap valve AS-CH



Mounting frame RAN

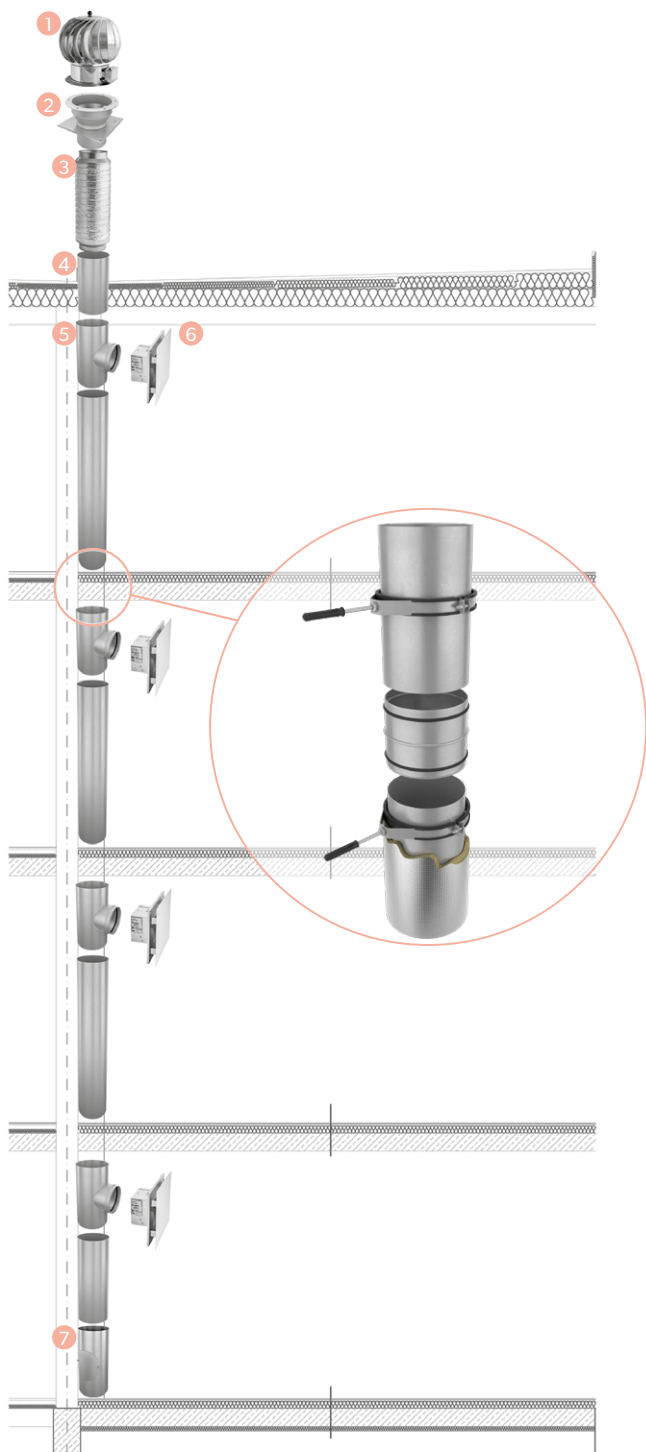
CHIMNEY COWLS

STEERING & POWER SUPPLY

HOT AIR DISTRIBUTION SYSTEM



CHIMNEYS

VENTILATION



Building a typical vertical ventilation duct

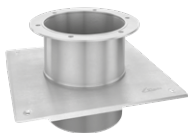
Location	Product	Length [m]
ROOF	Hybrid Turbowent Plus 250 mm	-
	Reducing connecting pipe 250/200	0.20
	Silencer ø 200	0.60
	Pipe ø 200	0.50
THIRD FLOOR	Tee ø 200/150 + Stabilizer CSW2	0.31
	Pipe ø 200	2.69
SECOND FLOOR	Tee ø 200/150 + Stabilizer CSW2	0.31
	Pipe ø 200	2.69
FIRST FLOOR	Tee ø 200/150 + Stabilizer CSW2	0.31
	Pipe ø 200	2.69
GROUND FLOOR	Tee ø 200/150 + Stabilizer CSW2	0.31
	Pipe ø 200	2.06
	Clean out element with bottom ø 200	0.33

Additional elements		
	Male connector Ø 200 with seal	use on connections, one for each pipe element
	Mounting bracket with rubber cover	fixing to the construction every 2 m

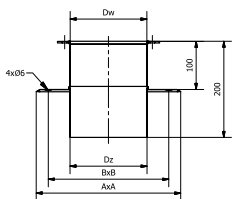
Summary of elements for a vertical sanitary duct in a building with four floors.

No	Elements	Product	Amount [pcs.]
1	Hybrid Turbowent Plus 250 mm	THP250CHAL-BIII	1
2	Reducing connecting pipe 250/200	KPKR250/200-OC	1
3	Silencer ø 200	TLE200/600-OC	1
4	Pipe ø 200	RP200/1000-OC-N	11
5	Tee ø 200/150	TRU200/150-OC-N-U	4
6	Stabilizer CSW2-50	CSW2-50	4
7	Clean out element with bottom ø 200	RPZR200-OC-N	1
8	Male connector ø 200	ZNY200-OC-U	18
9	Mounting bracket	UMO200-U	6

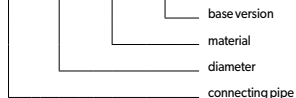
1. CONNECTING PIPE KPK



Dimensions [mm]				
DN	150	200	250	300
Dw	150.6	199.9	250.7	300.0
Dz	151.8	201.1	252.3	301.6
AxA	250x250	330x330	380x380	430x430
BxB	208x208	284x284	330x330	380x380

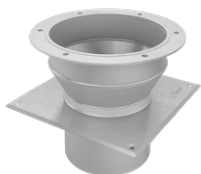


KPK DN - OC - BIII

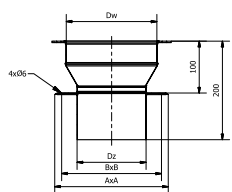


Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

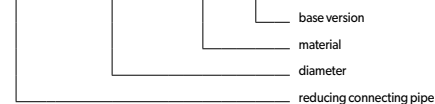
2. REDUCING CONNECTING PIPE KPKR



Dimensions [mm]:					
DN1/DN2	150/125	200/150	250/200	300/250	350/300
Dw	150.6	199.9	250.7	300	349.3
Dz	126.2	151.8	201.1	252.3	301.6
AxA	250x250	250x250	330x330	380x380	430x430
BxB	208x208	208x208	284x284	330x330	380x380



KPKR DN1/DN2 - OC - BIII



Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

3. ROOF TOP WQD

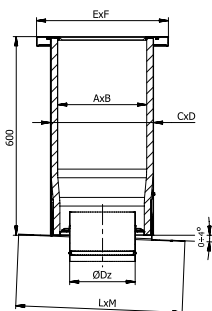


Connecting element allows easy and fast connection of a Turbowent chimney cowl with ventilation duct by using a male joint. Collar of chimney cowl and pipe are to be connected with each other with screws. This solution allows easy disassembling of the chimney cowl in case of maintenance.

WQD AxB/DN - OC



Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet



Dimensions [mm]							
Diameter DN	150 or 200	150 or 200	200 or 250	200 or 250	250 or 300	300 or 350	350
AxB	220 x 220	220 x 220	270 x 270	270 x 270	320 x 320	360 x 360	410 x 410
CxD	260 x 260	260 x 260	310 x 310	310 x 310	360 x 360	400 x 400	450 x 450
ExF	350 x 350	350 x 350	400 x 400	400 x 400	450 x 450	520 x 520	600 x 600
LxM	450 x 450	450 x 450	500 x 500	500 x 500	550 x 550	600 x 600	680 x 680
Dz	123	148	148	198	248	298	348

CHIMNEY COWLS

STEERING & POWER SUPPLY

HOT AIR DISTRIBUTION SYSTEM

CHIMNEYS

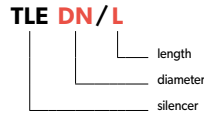
VENTILATION

invent. build. enjoy.

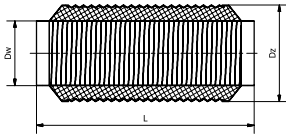
4. SILENCER TE



Silencer is a device used to reduce sounds transferred by ventilation ducts. They are placed between ducts and a Turbowent chimney cowl. Inner side of a silencer is made with perforated pipe. Outer side it is protected by covering that is strengthened with steel wire spirally wined. Filling between layers is made with mineral wool insulation of 25 mm thickness. Silencer is ended with metal collars, which are used to connect with elements of the installation by male joints.



Dimensions [mm]					
DN	125	150	200	250	300
Dw	125	150	200	250	300
Dz2	175	200	300	350	400
L	Length 600 or 1200 mm				

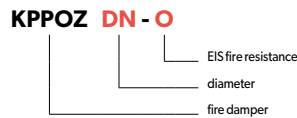


DN	L [mm]	Silencing [dB] for frequency [Hz]						
		125	250	500	1000	2000	4000	8000
125	600	2	7	14	21	26	20	12
150		2	5	12	17	24	17	11
200		1	4	10	16	20	14	11
250		1	4	8	14	16	12	10
300		1	3	6	12	13	10	10
125	1200	7	12	23	39	47	32	18
150		4	8	21	37	40	22	14
200		4	8	20	31	32	20	14
250		2	6	15	27	25	15	13
300		2	6	12	17	14	11	10

5. FIRE DAMPER KPPOZ



If different fire zones are determined in the building a necessity of usage of fire dampers may occur. These devices prevent from spreading the fire. Fire damper can be mounted in vertical ventilation duct or in horizontal part of channel, in stabilizer's cassette. Precise guidelines should be described in the construction project consulted with fire protection authorities. Fire damper is offered in two fire resistance classes EIS (60 and 120) in accordance to EN 1366-2. Fire damper should be mounted in opened position. Closing the flap is caused by a thermal releaser that is reacting when temperature rises above 72°C. After closing, flap is mechanically secured in closed position, it can be re-opened only manually (after cooling down). Any further usage is possible only after replacing the thermal releaser.



Type	EIS fire resistance	Diameter [mm]	Max. ambient temperature
Fire damper 125 mm EI60S	60	123.5	65°C
Fire damper 125 mm EI120S	120	123.5	65°C

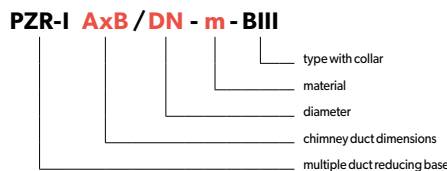
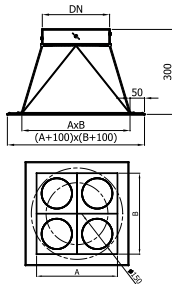
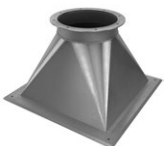
6. BACKFLOW FLAP ZZS



Backflow flap is designed to be mounted in the connection pipe of the kitchen extractor hood (diameter 125 mm). It prevents air and odors from getting into the kitchen from the collective channel. Device is equipped with sleeve which is closed when kitchen hood is off. When it is on - air pumped by ventilator opens it and allows the air to enter the ventilation duct.

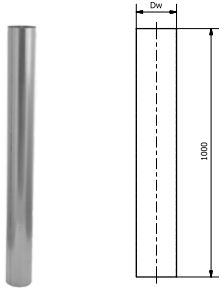


7. MULTIPLE DUCT REDUCING BASE (PIPE SYSTEM) PZR-I



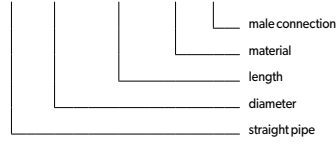
Material	CH	-	CH - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

8. STRAIGHT PIPE (PIPE SYSTEM) RP



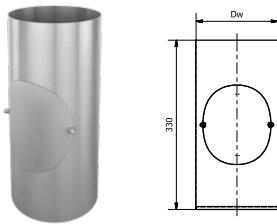
		Dimensions [mm]					
DN		125	150	200	250	300	350
Dw		123.6	150.6	199.9	250.7	300.0	349.3

RP DN / 1000 - m - N



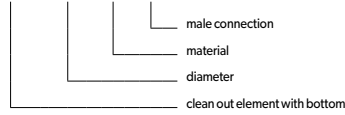
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

9. CLEAN OUT ELEMENT WITH BOTTOM (PIPE SYSTEM) WZD



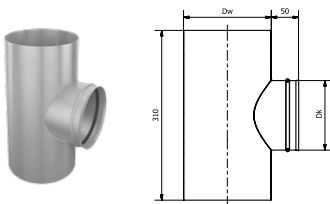
		Dimensions [mm]					
DN		125	150	200	250	300	350
Dw		123.6	150.6	199.9	250.7	300.0	349.3

WZD DN - m - N



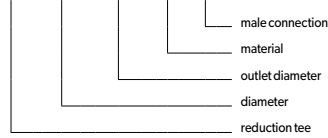
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

10. TEE 90 DEGREES WITH SEAL (PIPE SYSTEM) TRU



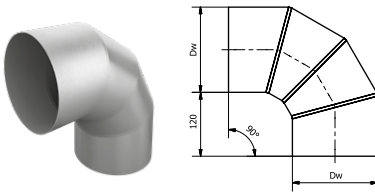
		Dimensions [mm]					
DN		125	150	200	250	300	350
Dw		123.6	150.6	199.9	250.7	300.0	349.3
Dk		127	127	127	127	127	127

TRU DN / 125 - m - N



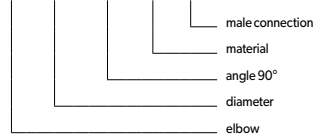
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

11. ELBOW 90 DEGREES (PIPE SYSTEM) KS



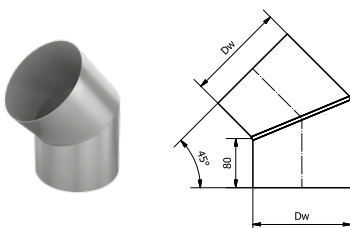
		Dimensions [mm]					
DN		125	150	200	250	300	350
Dw		123.6	150.6	199.9	250.7	300.0	349.3

KS DN / 90 - m - N



Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

12. ELBOW 45 DEGREES (PIPE SYSTEM) KS



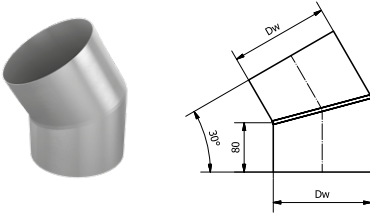
		Dimensions [mm]					
DN		125	150	200	250	300	350
Dw		123.6	150.6	199.9	250.7	300.0	349.3

KS DN / 45 - m - N

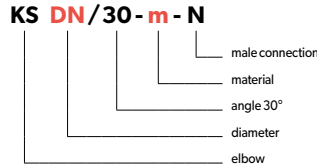


Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

13. ELBOW 30 DEGREES (PIPE SYSTEM) KS

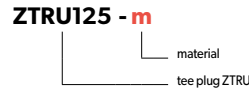
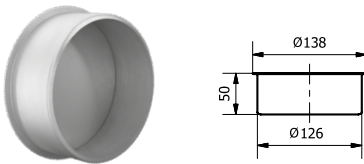


Dimensions [mm]						
DN	125	150	200	250	300	350
Dw	123.6	150.6	199.9	250.7	300.0	349.3



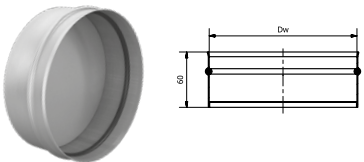
Material	X	-	X-chrome-nickel steel sheet 1.4301
	-	OC	OC-galvanised steel sheet

14. TEE PLUG (PIPE SYSTEM) ZTRU

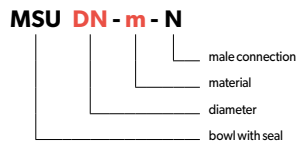


Material	X	-	X-chrome-nickel steel sheet 1.4301
	-	OC	OC-galvanised steel sheet

15. BOWL WITH SEAL (PIPE SYSTEM) MSU

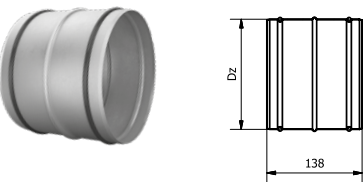


Dimensions [mm]						
DN	125	150	200	250	300	350
Dw	125.6	152.8	202.1	253.3	302.6	352.4

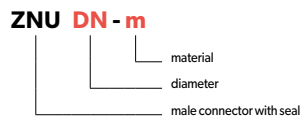


Material	X	-	X-chrome-nickel steel sheet 1.4301
	-	OC	OC-galvanised steel sheet

16. MALE CONNECTOR WITH SEAL (PIPE SYSTEM) ZNU

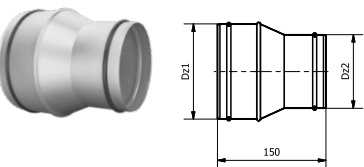


Dimensions [mm]						
DN	125	150	200	250	300	350
Dz	122.6	149.6	198.9	249.7	299.0	348.3



Material	X	-	X-chrome-nickel steel sheet 1.4301
	-	OC	OC-galvanised steel sheet

17. MALE REDUCING CONNECTOR WITH SEAL (PIPE SYSTEM) ZNRU

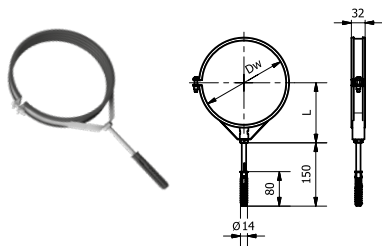


Dimensions [mm]					
DN1/DN2	150/125	200/150	250/200	300/250	350/300
Dz1	149.6	198.9	249.7	299	348.3
Dz2	122.6	149.6	198.9	249.7	299



Material	X	-	X-chrome-nickel steel sheet 1.4301
	-	OC	OC-galvanised steel sheet

18. MOUNTING BRACKET WITH RUBBER COVER (PIPE SYSTEM) UMO



Dimensions [mm]						
DN	125	150	200	250	300	350
Dw	123.6	150.6	199.9	250.7	300.0	349.3
L	103.8	117.3	141.9	167.3	192.0	216.6

Material	X	X - chrome-nickel steel sheet 1.4301
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For mounting to following surfaces:

- concrete C220/25 class
- full ceramic brick class 15
- full silicate brick class 15
- ceramic construction brick (f.e. Porotherm) class 15

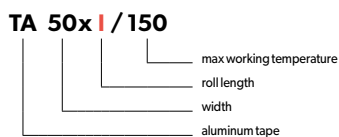


19. ADHESIVE WOOL STRIP WITH ALUMINUM FOIL



Length	Width	thickness	Amount of m ² in one pack
10.000	1.000	20	10
8.000	1.000	30	8
6.000	1.000	40	6
5.000	1.000	50	5

20. ALUMINUM TAPE 150°C



Width [mm]	5.00	
Roll length [m]	10	50

Round pipes and fittings - OC (galvanized) products made entirely of galvanized steel sheet are used for building ducts in natural and mechanical ventilation systems, air heating as well as air conditioning installations. Maximum working temperature: 250°C.

Round pipes and fittings made of chrome-nickel steel sheet (type 1.4301 according to DIN17441) are used for building ducts in natural and mechanical ventilation systems, air heating as well as air conditioning installations. Maximum working temperature: 250°C.

Application of chimneys and recommended sheet thicknesses

Diameter DN	W OC	W 1.4301
80	0.5	0.5
100	0.5	0.5
110	0.5	0.5
120	0.5	0.5
130	0.5	0.5
140	0.5	0.6
150	0.5	0.6
160	0.5	0.6
180	0.5	0.6
200	0.5	0.6
225	0.5	0.6
250	0.5	0.8
280	0.5	0.8
300	0.5	0.8
325	0.7	0.8
350	0.7	0.8
400	0.7	1.0
450	0.7	1.0
500	0.7	1.0

Table of layouts and sizes

Diameter DN	Lr	Dz	Dw	Dk	s
80	250	80.1	79.1	81.1	0.5
100	315	100.8	99.8	101.8	
110	350	111.9	110.9	112.9	
120	385	123.0	122.0	124.0	
130	415	132.6	131.6	133.6	
140	440	140.7	139.5	141.7	0.6
150	475	151.8	150.6	152.8	
160	505	161.4	160.2	162.4	
180	570	182.0	180.8	183.0	
200	630	201.1	199.9	202.1	
225	710	226.6	225.4	227.6	0.8
250	790	252.3	250.7	253.3	
260	818	261.2	259.6	262.2	
280	880	280.9	279.3	281.9	
300	945	301.6	300.0	302.6	
325	1020	325.5	323.9	327.0	1.0
350	1100	350.9	349.3	352.4	
400	1260	402.1	400.1	403.6	
450	1415	451.4	449.4	452.9	
500	1575	502.3	500.3	503.8	

Destination:

- W - ventilation
- P - industrial processes

Sizes:

- Lr - metal sheet layout [mm]±0.1
- Dz - outer diameter of pipe [mm]±0.1
- Dw - inner diameter of pipe [mm]±0.1
- Dk - inner diameter of bell joint of pipe [mm]±0.1
- s - metal sheet thickness [mm]

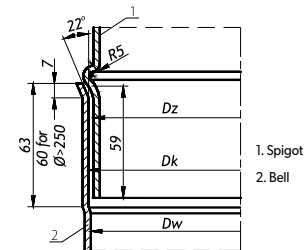
VENTILATION PIPE AND KKO FITTINGS:

Bell joint of the pipe - K

Individual elements of the chimney system are being joint by the way of pushing one part of the element - a spigot, into the other press-formed part of the element - a bell. Thanks to this type of joining chimney liner is characterized by very tight and stiff construction. It also assures the proper flow of condensate, along walls of the chimney straight to the condensate drain bowl.

CAUTION!

When placing orders for pipes and fittings, please always give the type of joint to be used. In Darco catalogues and pricelist there are pictures and prices for products with the usage of a bell joint given.

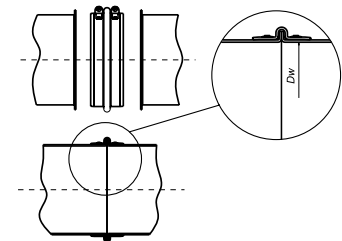


Clamp joint of the pipe - O

Individual elements of the system are being joint by a fastening clamp OPII. Both ends of pipe elements are flanged 5 mm to the outside. After putting two elements together and securing them with a fastening clamp a tight and rigid connection is achieved.

CAUTION!

When placing orders for pipes and fittings, please always give the type of joint to be used. In Darco catalogues and pricelist there are pictures and prices for products with the usage of a bell joint given.

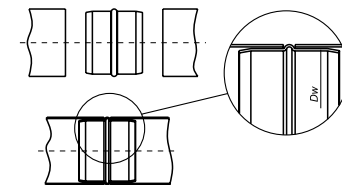


Spigot type joint of the pipe - N

Individual elements of the system are being joint by a special type of inner connector - a spigot. In this system both ends of pipe elements are even, without any bells, blocking rolls or prefabricated endings. This type of pipe joining allows getting rigid connection as well as gives possibility of cutting the pipe elements to size. It is necessary to secure the connection against accidental disconnecting (for example by securing it by screws or rivets).

CAUTION!

When placing orders for pipes and fittings, please always give the type of joint to be used. In Darco catalogues and pricelist there are pictures and prices for products with the usage of a bell joint given.



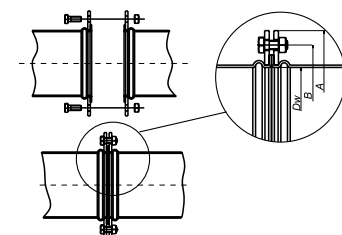
PIPES AND FITTINGS USED IN INDUSTRIAL PROCESSES:

Collar type joint of the pipe - KL

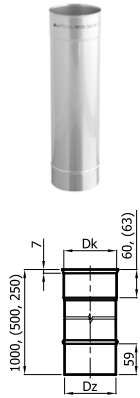
Individual elements of the system are being joint by use of collars according to PN-EN-12220, which are fixed together with screws. With the usage of collar type joint a very rigid and secure connection is achieved. To maintain tightness, usage of special sealant (appropriate to the fluid flowing in the pipelines) between collars is recommended.

CAUTION!

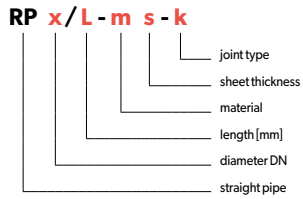
Elements quoted upon individual order. Manufacturer does not supply screws and seals.



1. STRAIGHT PIPE RP

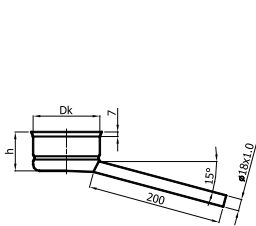


Diameter DN	ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
Dz	80.2	100.9	112.1	123.2	121.6	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2
Dk	81.2	101.9	113.1	124.2	125.6	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6	351.9	402.9	452.2	503.2
Weight [kg]	1.00	1.25	1.42	1.55	1.60	1.67	1.75	1.92	2.00	2.30	2.50	2.85	3.17	3.80	4.45	5.04	5.70	6.30

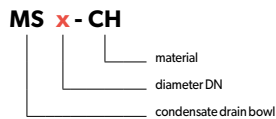


Destination	W	W	W-ventilation
Material	X	-	X- stainless steel 1.4301
	-	OC	OC- galvanised steel sheet
Sheet thickness s	5	5	5- sheet thickness 0.5 mm
	6	-	6- sheet thickness 0.6 mm
	-	7	7- sheet thickness 0.75 mm
	8	-	8- sheet thickness 0.8 mm
	1	1	1- sheet thickness 1.0 mm

2. CONDENSATE DRAIN BOWL MS

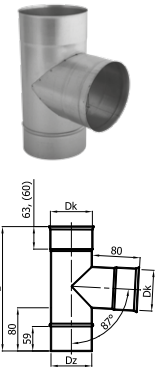


Bowl	I	II		III		IV											
Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
Dk [mm]	81	102	113	123	134	142	152	166	183	202	228	253	303	355	404	453	504
h [mm]	60	60	60	57	55	60	52	45	41	43	60	60	60	60	60	60	60
Weight [kg]	0.20	0.25	0.25	0.30	0.30	0.30	0.35	0.40	0.50	0.60	0.60	0.70	0.85	1.05	1.35	1.60	1.85

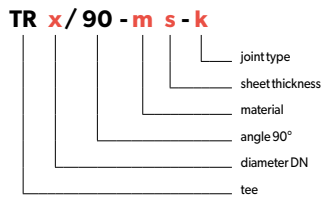


Destination	W	W-ventilation
	S	S- flue ducts
	D	D- smoke ducts
Material	CH	CH- stainless steel 1.4404

3. TEE 90° TR/90

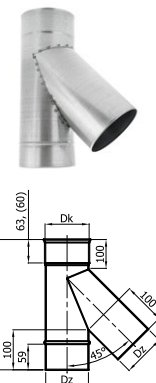


Diameter DN	ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
Dz	80.2	100.9	112.1	123.2	121.6	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2
Dk	81.2	101.9	113.1	124.2	125.6	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6	351.9	402.9	452.2	503.2
L[mm]	230	250	270	270	270	280	300	300	310	330	350	380	400	450	500	550	600	650
Weight [kg]	0.33	0.42	0.50	0.55	0.56	0.58	0.66	0.71	0.79	0.92	1.09	1.29	1.60	2.12	2.70	3.17	3.39	4.85

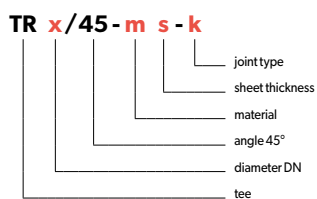


Destination	W	W	W-ventilation
Material	X	-	X- stainless steel 1.4301
	-	OC	OC- galvanised steel sheet
Sheet thickness s	5	5	5- sheet thickness 0.5 mm
	6	-	6- sheet thickness 0.6 mm
	-	7	7- sheet thickness 0.75 mm
	8	-	8- sheet thickness 0.8 mm
	1	1	1- sheet thickness 1.0 mm

4. TEE 45° TR/45

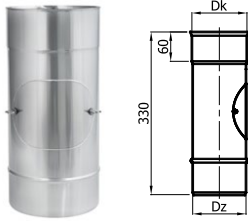


Diameter DN	ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
Dz	80.2	100.9	112.1	123.2	124.6	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2
Dk	81.2	101.9	113.1	124.2	125.6	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6	351.9	402.9	452.2	503.2
L[mm]	315	340	355	375	375	385	390	415	425	455	480	520	550	625	695	765	835	910
Weight [kg]	0.42	0.55	0.63	0.75	0.77	0.79	0.83	1.00	1.09	1.25	1.45	1.75	2.04	2.75	3.50	4.38	5.30	6.38

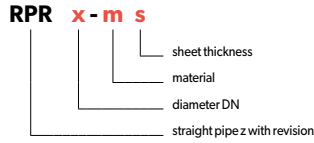


Destination	W	W	W-ventilation
Material	X	-	X- stainless steel 1.4301
	-	OC	OC- galvanised steel sheet
Sheet thickness s	5	5	5- sheet thickness 0.5 mm
	6	-	6- sheet thickness 0.6 mm
	-	7	7- sheet thickness 0.75 mm
	8	-	8- sheet thickness 0.8 mm
	1	1	1- sheet thickness 1.0 mm

5. STRAIGHT PIPE Z WITH REVISION RPR

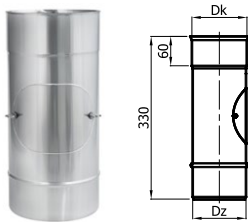


Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
Dz	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2
Dk	81.2	101.9	113.1	124.2	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6	351.9	402.9	452.2	503.2
Weight [kg]	0.40	0.50	0.55	0.60	0.66	0.70	0.75	0.80	0.90	1.00	1.13	1.27	1.52	1.76	2.02	2.27	2.52

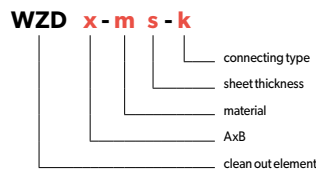


Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	7	-	7 - sheet thickness 0.75 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

6. CLEAN OUT ELEMENT WITH BOTTOM

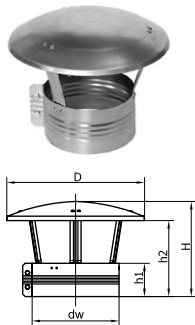


Diameter DN	ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
Dz	80.2	100.9	112.1	123.2	124.6	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2
Dk	81.2	101.9	113.1	124.2	125.6	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6	351.9	402.9	452.2	503.2
Weight [kg]	0.75	0.83	0.88	0.92	0.92	0.92	0.92	0.96	1.08	1.23	1.27	1.33	1.42	1.63	1.85	2.05	2.25	2.45

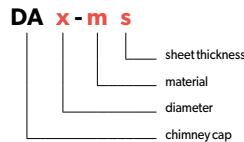


Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	7	-	7 - sheet thickness 0.75 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

7. CHIMNEY CAP



Diameter DN Dz	Dimensions [mm]					Weight [kg]	
	D	H	dw	h1	h2	OC	CH
ø100	220	178	100	70	140	0.30	0.30
ø110	220	185	110	70	147	0.35	0.35
ø120	250	202	120	80	164	0.37	0.37
ø125	250	202	125	80	164	0.37	0.37
ø130	250	209	130	80	171	0.40	0.40
ø140	290	218	140	80	178	0.45	0.45
ø150	290	225	150	80	185	0.50	0.50
ø160	290	225	160	80	185	0.55	0.55
ø200	350	260	200	80	220	0.94	0.94

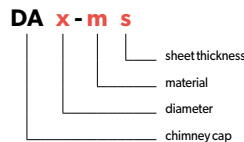


Destination	W	W	W - ventilation
Material	CH	-	CH - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

8. CHIMNEY CAP

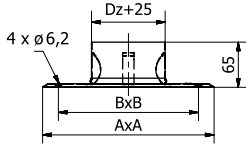
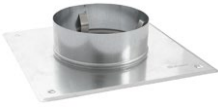


Diameter DN	ø225	ø250	ø300	ø350	ø400	ø450	ø500
Dz	226.7	252.2	301.6	350.9	401.9	451.2	502.2
H	330	360	420	480	540	600	660
Weight [kg]	0.88	1.05	1.33	1.67	2.04	2.45	2.87

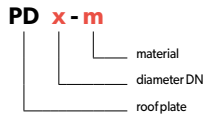


Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	7	-	7 - sheet thickness 0.75 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

9. ROOF PLATE PD

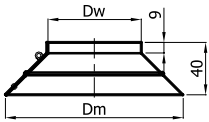


Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø280	ø300	ø350	ø400	ø450	ø500
Dz [mm]	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	280.8	301.6	350.9	401.9	451.2	502.2
A [mm]	250	250	250	250	250	300	300	300	330	330	350	400	450	450	500	550	600	650
B [mm]	200	200	200	200	200	250	250	250	280	280	300	350	400	400	450	500	550	600
Weight [kg]	0.36	0.37	0.37	0.37	0.37	0.51	0.51	0.50	0.59	0.58	0.62	0.78	0.95	0.93	1.08	1.23	1.39	1.56

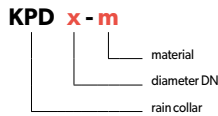


Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	7	-	7 - sheet thickness 0.75 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

10. RAIN COLLAR KPD

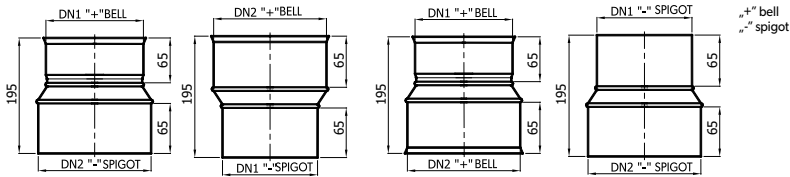


Diameter DN	ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
Dw [mm]	79.0	99.7	110.9	122.0	126	131.6	139.5	150.7	160.2	180.9	200.0	225.5	251.0	300.4	349.7	400.7	450.0	501.0
Dm [mm]	151	172	183	194	200	204	212	223	232	253	272	326	350	400	450	501	550	601
Weight [kg]	0.14	0.16	0.17	0.18	0.18	0.18	0.19	0.20	0.21	0.23	0.25	0.29	0.31	0.36	0.41	0.45	0.50	0.54

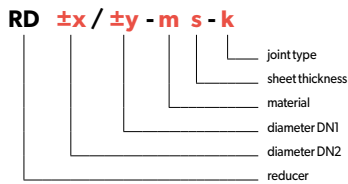


Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	7	-	7 - sheet thickness 0.75 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

11. REDUCER (SEGMENT-TYPE) RD

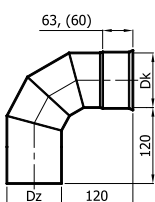


Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
Weight [kg]	depending on measurements																

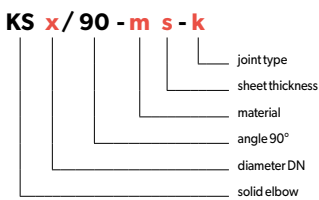


Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	7	-	7 - sheet thickness 0.75 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

12. SOLID ELBOW 90° KS/90

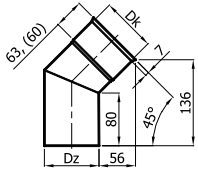


Diameter DN	ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
Dz [mm]	80.2	100.9	112.1	123.2	124.6	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2
Dk [mm]	81.2	101.9	113.1	124.2	125.6	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6	351.9	402.9	452.2	503.2
Weight [kg]	0.27	0.40	0.45	0.51	0.53	0.55	0.62	0.67	0.81	0.92	1.00	1.13	1.52	1.89	2.20	3.12	3.80	4.55



Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	7	-	7 - sheet thickness 0.75 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

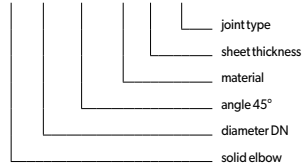
13. SOLID ELBOW 45° KS/45



Diameter DN	ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
Dz [mm]	80.2	100.9	112.1	123.2	124.6	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2
Dk [mm]	81.2	101.9	113.1	124.2	125.6	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6	351.9	402.9	452.2	503.2
Weight [kg]	0.21	0.29	0.39	0.38	0.40	0.42	0.42	0.46	0.50	0.58	0.67	0.79	0.92	1.17	1.42	1.75	2.10	2.45

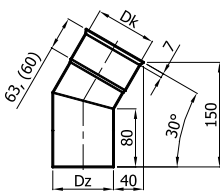
for s=0.5

KS x/45 - m s - k



Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.75 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

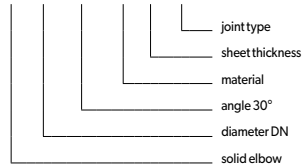
14. SOLID ELBOW 30° KS/30



Diameter DN	ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
Dz [mm]	80.2	100.9	112.1	123.2	124.6	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2
Dk [mm]	81.2	101.9	113.1	124.2	125.6	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6	351.9	402.9	452.2	503.2
Weight [kg]	0.21	0.29	0.39	0.38	0.40	0.42	0.42	0.46	0.50	0.58	0.67	0.79	0.92	1.17	1.42	1.75	2.10	2.45

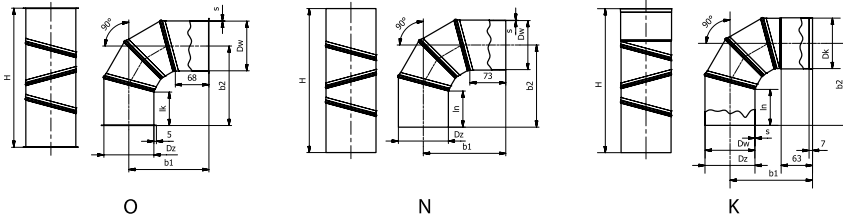
for s=0.5

KS x/30 - m s - k



Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.75 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

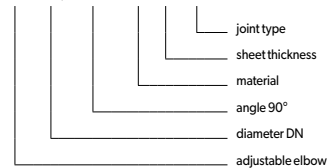
15. ADJUSTABLE ELBOW 90° KN/90



Diameter DN	Version	ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250
Dw [mm]	O N K	79.1	99.8	110.9	122	126.1	131.6	139.5	150.6	160.2	180.8	199.9	225.5	251
Dz [mm]	O N K	80.1	100.8	111.9	123	127.1	132.6	140.5	151.6	161.2	181.8	200.9	226.5	252
b1 [mm] d1a	O	151	162	165	170	177	175	179	184	189	200	209	222	234
	N K	156	166	170	175	177	180	184	189	194	205	214	227	239
b2 [mm] d1a	O K	150	161	158	161	172	165	176	173	197	200	205	222	239
	N	155	165	163	166	172	170	181	178	202	205	210	227	244
H [mm] d1a	O K	264	280	280	287	294	294	307	307	334	344	354	379	404
	N	274	290	290	297	304	304	317	317	344	354	364	389	414
lk [mm]	O	68	67	61	59	63	59	65	57	76	69	64	68	73
ln [mm]	N K	73	73	67	65	68	64	70	62	81	74	67	73	78
Weight [kg]	O N K	0.29	0.38	0.42	0.48	0.49	0.53	0.58	0.62	0.72	0.83	0.94	1.13	1.33

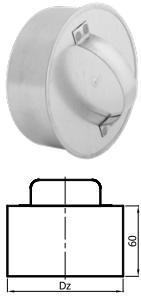
for s=0.5

KN x/90 - m s - k



Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.75 mm
	8	-	8 - sheet thickness 0.8 mm

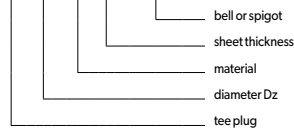
16. TEE PLUG ZT



Diameter DN	ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
Dz [mm]	80.2	100.9	112.1	123.2	124.6	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2
Weight [kg]	0.10	0.12	0.14	0.16	0.16	0.17	0.18	0.20	0.22	0.25	0.29	0.35	0.40	0.53	0.67	0.83	1.00	1.17

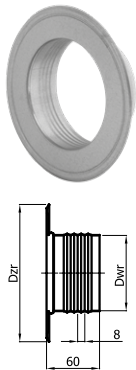
for s=0.5

ZT x - m s - K/N



Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	7	-	7 - sheet thickness 0.75 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

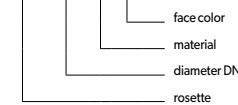
17. ROSETTE ROZ



Diameter DN	ø80	ø85	ø90	ø95	ø100	ø105	ø110	ø115	ø120	ø125	ø130	ø135
Dwr [mm]	86	91	96	101	106	111	116	121	126	131	136	141
Dzr [mm]	157	162	167	172	177	182	187	192	207	212	217	222
Weight [kg]	0.12	0.12	0.13	0.13	0.14	0.15	0.16	0.17	0.18	0.18	0.19	0.20

Diameter DN	ø140	ø145	ø150	ø160	ø180	ø200	ø225	ø250	ø280	ø300	ø315	ø350	ø400	ø450	ø500
Dwr [mm]	146	151	156	166	186	206	231	256	286	306	321	356	406	456	506
Dzr [mm]	227	242	247	257	277	297	322	347	377	397	412	448	498	548	598
Weight [kg]	0.21	0.22	0.23	0.25	0.28	0.30	0.34	0.37	0.41	0.44	0.46	0.51	0.58	0.65	0.72

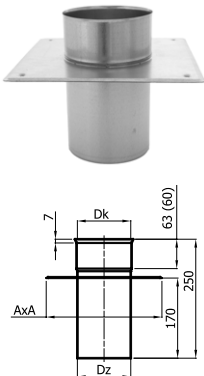
ROZ x - m b



Destination	W	W	W - ventilation
Material	CH	-	CH - chrome steel H17
	-	OC	OC - galvanised steel sheet
	-	ML	ML - mild steel powder painted (white)*
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm

* painted white as standard

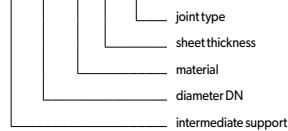
18. INTERMEDIATE SUPPORT PP



Diameter DN	ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
Dz [mm]	80.2	100.9	112.1	123.2	124.6	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2
Dk [mm]	81.2	101.9	113.1	124.2	125.6	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6	351.9	402.9	452.2	503.2
A [mm]	250	250	250	250	250	250	300	300	300	300	330	350	400	450	550	600	650	650
Weight [kg]	0.75	0.80	0.85	0.87	0.88	0.90	0.95	1.10	1.15	1.20	1.35	1.50	1.85	2.20	2.55	2.90	3.30	3.70

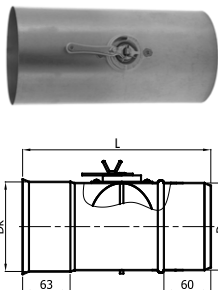
for s=0.6

PP x - m s - k



Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	7	-	7 - sheet thickness 0.75 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

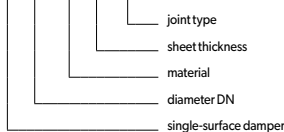
19. SINGLE-SURFACE DAMPER PJ



Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
dz [mm]	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2
L	130	150	160	170	180	190	200	210	230	250	275	250	300	350	400	450	500
Weight [kg]	0.18	0.26	0.29	0.33	0.38	0.45	0.50	0.58	0.73	0.90	1.15	1.40	2.05	4.15	5.40	6.80	8.50

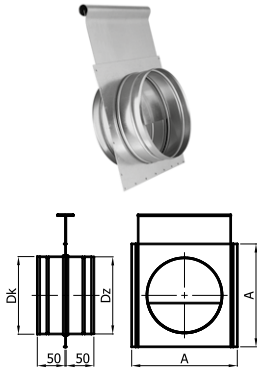
for s=0.6

PJ x - m s - k



Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	7	-	7 - sheet thickness 0.75 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

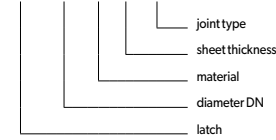
20. LATCH ZS



Diameter DN	ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
Dz [mm]	80.2	100.9	112.1	123.2	124.6	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2
Dk [mm]	81.2	101.9	113.1	124.2	125.6	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6	351.9	402.9	452.2	503.2
A [mm]	130	150	160	170	175	180	170	180	210	230	250	265	300	350	400	450	500	550
Weight [kg]	0.20	0.30	0.35	0.40	0.42	0.45	0.50	0.55	0.60	0.75	0.90	1.10	1.30	1.75	2.00	2.50	3.00	3.50

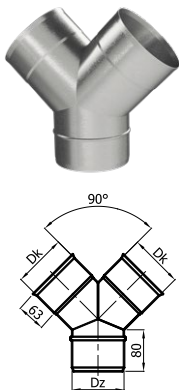
for s=0.5 (0.75)

ZAS x - m s - k



Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.75 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

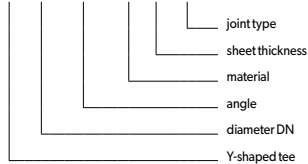
21. Y-SHAPED TEE YR/90



Diameter DN	ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
dz [mm]	80.2	100.9	112.1	123.2	124.6	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2
Weight [kg]	0.32	0.42	0.48	0.54	0.57	0.60	0.67	0.75	0.81	0.95	1.10	1.31	1.55	2.05	2.50	3.20	3.90	4.65

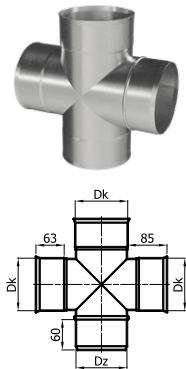
for s=0.5 (0.75)

YR x / 90 - m s - k



Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.75 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

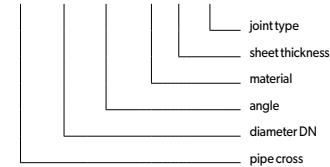
22. PIPE CROSS CZO/90



Diameter DN	ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
dz [mm]	80.2	100.9	112.1	123.2	124.6	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2
Weight [kg]	0.20	0.30	0.35	0.40	0.42	0.45	0.50	0.55	0.60	0.75	0.90	1.10	1.30	1.75	2.00	2.50	3.00	3.50

for s=0.5 (0.75)

CZO x / 90 - m s - k



Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.75 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

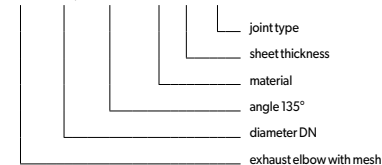
23. AIR EXHAUST ELBOW WITH MESH KWS/135



Diameter DN	ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
dz [mm]	80.2	100.9	112.1	123.2	124.6	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2
Weight [kg]	0.40	0.60	0.68	0.80	0.81	0.83	0.95	1.00	1.21	1.40	1.51	1.70	2.30	2.90	3.30	4.70	5.70	6.80

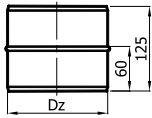
for s=0.5 (0.75)

KWS x / 135 - m s - k

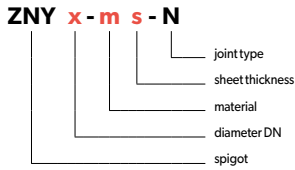


Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.75 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

24. SPIGOT - ZNY

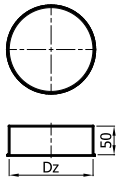


Diameter DN	ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
dz [mm]	78.1	98.8	109.9	121.0	122.7	130.6	138.5	149.6	159.2	179.8	189.9	224.4	249.7	299.0	348.3	399.1	448.4	499.3
Weight [kg]	0.12	0.16	0.17	0.19	0.20	0.21	0.22	0.24	0.26	0.29	0.31	0.35	0.40	0.47	0.55	0.63	0.70	0.79

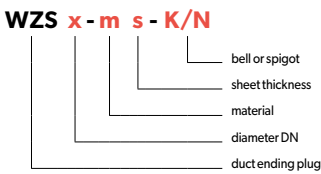


Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.75 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

25. DUCT ENDING PLUG - WZS

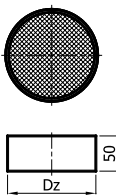
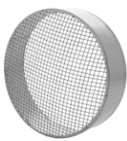


Diameter DN	ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
dz [mm]	80.2	100.9	112.1	123.2	124.6	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2
Weight [kg]	0.12	0.16	0.17	0.19	0.20	0.21	0.22	0.24	0.26	0.29	0.31	0.35	0.40	0.47	0.55	0.63	0.70	0.79

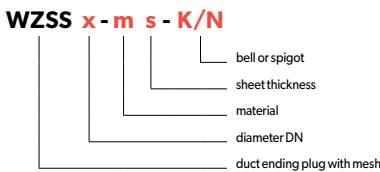


Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.75 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

26. DUCT ENDING PLUG WITH MESH - WZSS

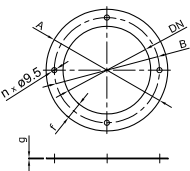


Diameter DN	ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
dz [mm]	80.2	100.9	112.1	123.2	124.6	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2
Weight [kg]	0.12	0.16	0.17	0.19	0.20	0.21	0.22	0.24	0.26	0.29	0.31	0.35	0.40	0.47	0.55	0.63	0.70	0.79

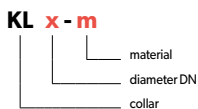


Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.75 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

27. CIRCULAR COLLAR ACCORDING TO PN-EN 12220 - KL

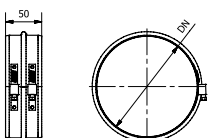


ø DN	160	200	250	315	350	400	500	630
ø B	192	233	283	352	392	438	538	670
ø A	222	263	313	378	413	464	564	714
n	6	6	8	8	8	8	8	12
f	30	30	30	30	30	30	30	40
g	3	3	3	3	3	4	4	4

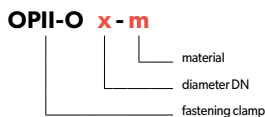


Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet

28. FASTENING CLAMP OPII-O



Diameter DN	ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	ø630
dz [mm]	80	100	110	120	125	130	140	150	160	180	200	225	250	300	350	400	450	500	630
Weight [kg]	0.16	0.17	0.17	0.19	0.19	0.19	0.19	0.21	0.21	0.23	0.25	0.27	0.29	0.33	0.37	0.42	0.46	0.50	0.63



Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	-	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm

Insulated round pipes and fittings - OC (galvanized) products made entirely of galvanized steel sheet are used for building ducts in natural and mechanical ventilation systems, heating as well as air conditioning installations. Inner pipe and outer layer are made of galvanized steel sheet; thermal insulation - mineral wool of 50 mm thickness.

Maximum working temperature: 250°C.

Insulated round pipes and fittings made (both inner and outer layer) of chrome-nickel steel sheet (type 1.4301 according to DIN17441) with thermal insulation - mineral wool of 50 mm thickness are used for building ducts in natural and mechanical ventilation systems, heating as well as air conditioning installations.

Maximum working temperature: 250°C.

Application of chimneys and recommended sheet thicknesses

Diameter DN	OC W/OC	OC *)/OC	X W 1.4301	X *)/1.4301
100	0.5	0.5	0.5	0.5
110	0.5	0.5	0.5	0.5
120	0.5	0.5	0.5	0.5
130	0.5	0.5	0.5	0.5
140	0.5	0.5	0.6	0.5
150	0.5	0.5	0.6	0.5
160	0.5	0.5	0.6	0.5
180	0.5	0.5	0.6	0.5
200	0.5	0.5	0.6	0.5
225	0.5	0.5	0.6	0.6
240	0.5	0.5	0.6	0.6
250	0.5	0.5	0.6	0.6
300	0.5	0.5	0.6	0.6
350	0.7	0.5	0.6	0.6
400	0.7	0.5	0.6	0.6
450	0.7	0.5	0.6	0.6
500	0.7	0.5	0.6	0.6
550	-	0.5	0.6	0.6
600	-	0.5	0.6	0.6

Table of layouts and sizes

Diameter DN	Lr	Dz	Dw	Dk	s
100	315	100.8	99.8	101.8	0.5
110	350	111.9	110.9	112.9	
120	385	123.0	122.0	124.0	
130	415	132.6	131.6	133.6	
140	440	140.7	139.5	141.7	
150	475	151.8	150.6	152.8	0.6
160	505	161.4	160.2	162.4	
180	570	182.0	180.8	183.0	
200	630	201.1	199.9	202.1	
225	710	226.6	225.4	227.6	
240	766	244.4	243.2	245.4	0.8
250	790	252.3	250.7	253.3	
260	818	251.2	259.6	262.2	
280	880	280.9	279.3	281.9	
300	945	301.6	300.0	302.6	
325	1020	325.5	323.9	327.0	1.0
350	1100	350.9	349.3	352.4	
400	1260	402.1	400.1	403.6	
450	1415	451.4	449.4	452.9	
500	1575	502.3	500.3	503.8	
550	1728	551.0	549.0	552.5	
600	1885	601.0	599.0	602.5	

Destination:

W - ventilation

*) - outer pipe

Dimensions:

Lr - metal sheet layout [mm]±0.1

Dz - outer diameter of pipe [mm]±0.1

Dw - inner diameter of pipe [mm]±0.1

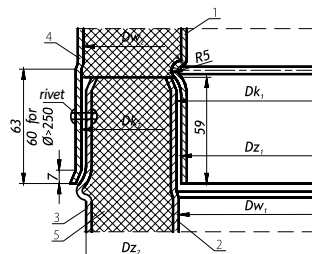
Dk - inner diameter of bell joint of pipe [mm]±0.1

s - metal sheet thickness [mm]

Bell joint of the pipe

Individual elements of the chimney system are being joint by the way of pushing one part of the element - a spigot, into the other pressformed part of the element - a bell. Thanks to this type of pipe joining, metal chimney is characterized by very tight and stiff construction. It also assures the proper flow of condensate, along walls of the chimney straight to the condensate drain bowl. The outer elements are connected „bell down” which prevents the chimney insulation from rain water.

Outer casings of the chimney elements should be riveted together with couple of stainless steel rivets before placing a fastening clamp.



- 1. Spigot - inner pipe
- 2. Bell - inner pipe
- 3. Spigot - outer pipe
- 4. Bell - outer pipe
- 5. Thermal insulation

Fig. Method of joining double-walled pipe elements.

CHIMNEY COWLS

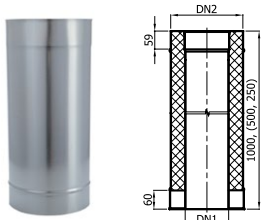
STEERING & POWER SUPPLY

HOT AIR DISTRIBUTION SYSTEM

CHIMNEYS

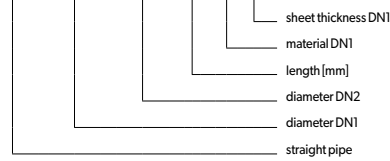
VENTILATION

1. STRAIGHT PIPE RPD



Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0,6/0,6
Weight [kg]	7.00	7.20	8.10	8.25	8.75	9.25	9.35	10.50	11.35	12.40	13.45	15.60	17.75	19.90	22.00	24.15	

RPD DN1 / DN2 / L - m s



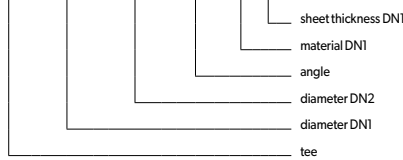
Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.7 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

2. TEE 90° TRD/90



Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0,6/0,6
L [mm]	400	400	425	425	440	450	450	480	500	525	550	600	650	700	750	800	
Weight [kg]	3.60	3.70	4.35	4.40	4.80	5.20	5.30	6.20	6.95	7.90	8.95	11.15	13.55	16.25	19.00	22.10	

TRD DN1 / DN2 / 90 - m s



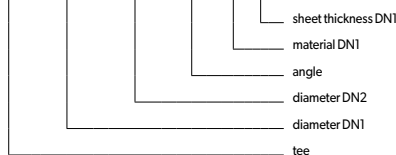
Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.7 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

3. TEE 45° TRD/45



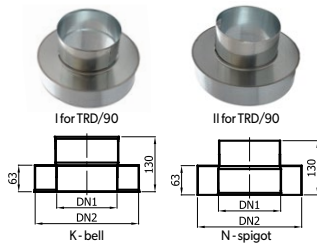
Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0,6/0,6
L [mm]	485	485	520	520	540	555	555	600	625	660	695	770	840	910	980	1050	
m [mm]	120	120	125	125	130	130	135	140	140	145	150	165	170	180	190	205	
Weight [kg]	4.10	4.20	5.00	5.10	5.55	6.00	6.10	7.30	8.15	9.35	10.70	13.50	16.55	20.00	23.65	27.60	

TRD DN1 / DN2 / 45 - m s



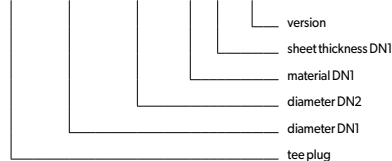
Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.7 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

4. TEE PLUG ZTD-K (N)



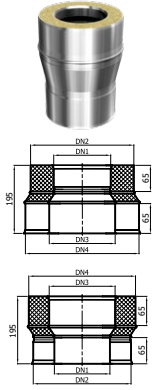
Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0,6/0,6
Weight [kg]	0.40	0.40	0.45	0.45	0.50	0.55	0.55	0.60	0.70	0.75	0.80	1.00	1.10	1.25	1.40	1.55	

ZTD DN1 / DN2 - m s - w



Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.7 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

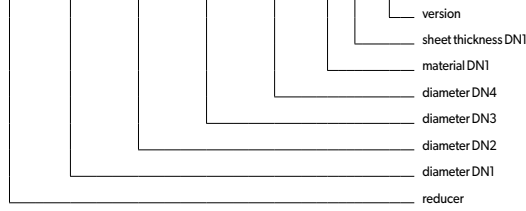
5. REDUCER RDD



Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	280	300	350	400	450	500	for s 0.6/0.6
Weight [kg]	200	200	225	225	225	250	250	280	300	325	350	380	400	450	500	550	600	

depending on measurements

RDD DN1 / DN2 / DN3 / DN4 - m s - w



Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - bl. ocynkowana
Sheet thickness s	5	5	5 - thickness 0.5 mm
	6	-	6 - thickness 0.6 mm
	-	7	7 - thickness 0.75 mm
	8	-	8 - thickness 0.8 mm
	1	1	1 - thickness 1.0 mm

6. CLEAN OUT ELEMENT WITH DOORS



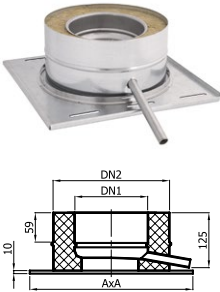
Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
Weight [kg]	3.80	3.90	4.30	4.35	4.60	4.80	4.85	5.35	5.75	6.20	6.70	7.70	8.60	9.60	10.55	11.50	

WCD DN1 / DN2 - m s



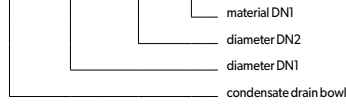
Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.7 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

7. CONDENSATE DRAIN BOWL MSD



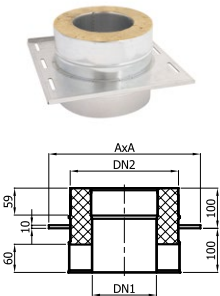
Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
A [mm]	300	300	325	325	325	350	350	380	400	425	450	500	550	600	650	700	
Weight [kg]	2.15	2.20	2.50	2.55	2.70	2.90	3.00	3.50	3.90	4.20	4.65	5.60	6.70	7.90	9.15	10.40	

MSD DN1 / DN2 - m



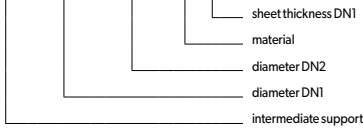
Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.7 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

8. INTERMEDIATE SUPPORT PPD



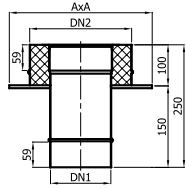
Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
A [mm]	300	300	325	325	325	350	350	380	400	425	450	500	550	600	650	700	
Weight [kg]	2.35	2.30	2.60	2.60	2.75	2.90	2.90	3.30	3.40	3.90	4.25	4.95	5.65	6.40	7.10	7.85	

PPD DN1 / DN2 - m s

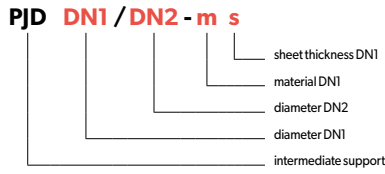


Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.7 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

9. INTERMEDIATE SUPPORT PJD

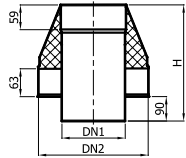


Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
A [mm]	300	300	325	325	325	350	350	380	400	425	450	500	550	600	650	700	
Weight [kg]	2.00	2.00	2.35	2.35	2.50	2.70	2.70	3.15	3.50	3.90	4.35	5.20	6.20	7.20	8.30	9.30	

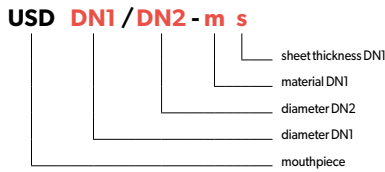


Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.7 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

10. MOUTHPIECE USD

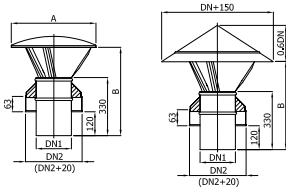


Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
H [mm]	330	330	330	330	330	330	330	330	330	330	330	330	400	420	420	420	
Weight [kg]	1.00	1.05	1.15	1.20	1.35	1.50	1.60	1.80	2.00	3.80	4.20	4.90	7.10	8.00	10.70	11.80	



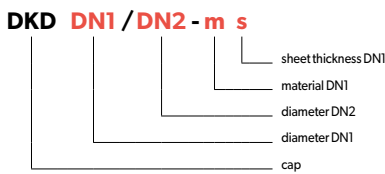
Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.7 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

11. CAP DKD



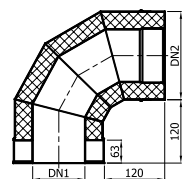
for DN1/DN2<200/300 for DN1/DN2<225/325

Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
A [mm]	220	220	250	250	220	290	290	290	290	450	450	450	550	550	650	650	
Weight [kg]	1.55	1.60	1.70	1.75	1.90	2.05	2.10	2.25	2.40	3.15	3.60	4.00	4.80	5.55	6.65	7.00	

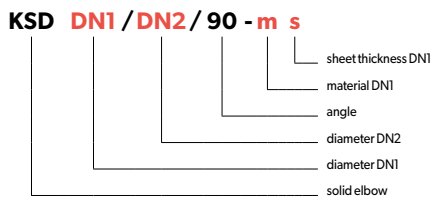


Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.7 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

12. SOLID ELBOW 90° KSD/90

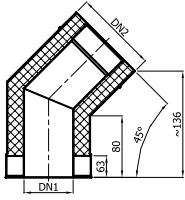


Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
Weight [kg]	2.35	2.40	2.70	2.75	3.35	3.70	3.75	4.20	4.50	4.95	6.45	7.80	8.85	12.35	14.75	17.40	

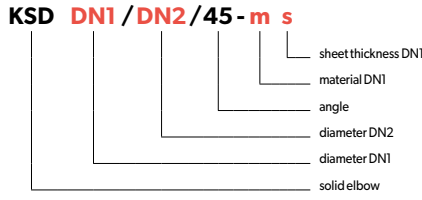


Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.7 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

13. SOLID ELBOW 45° KSD/45

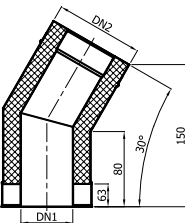


Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
Weight [kg]	1.55	1.60	1.85	1.95	2.10	2.25	2.30	2.65	3.00	3.40	3.80	4.75	5.65	6.85	8.15	9.40	

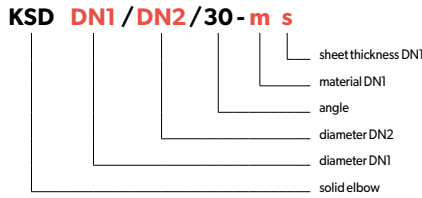


Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.7 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

14. SOLID ELBOW 30° KSD/30

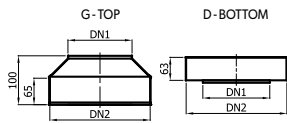
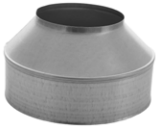


Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
Weight [kg]	1.45	1.50	1.75	1.75	1.80	1.90	2.10	2.40	2.65	3.00	3.35	4.05	4.85	5.75	6.60	7.60	

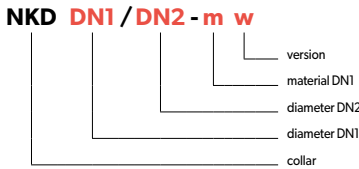


Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.7 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

15. INSULATION CLOSING COLLAR NKD-G (D)

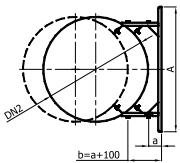


Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
Weight [kg]	0.15	0.16	0.18	0.19	0.20	0.21	0.22	0.25	0.28	0.31	0.34	0.40	0.46	0.52	0.58	0.64	



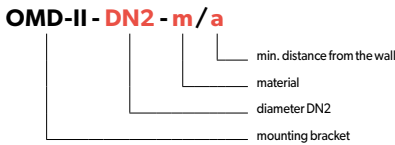
Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm

16. MOUNTING BRACKET OMD II



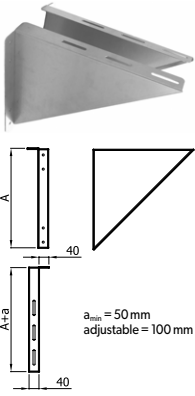
amin = 50 mm
adjustable = 100 mm

Diameter DN2	200	225	240	250	280	300	325	350	400	450	500	550	600
A [mm]	380	395	400	409	424	433	445	456	476	556	580	602	622
Weight [kg]	1.10	1.15	1.20	1.20	1.25	1.30	1.35	1.40	1.45	1.95	2.05	2.50	2.60



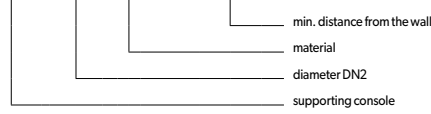
Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet

17. SUPPORTING CONSOLE KWD



Diameter DN2	200	225	240	250	280	300	325	350	400	450	500	550	600	for s=2.0
A [mm]	304	304	354	354	384	404	429	454	504	552	604	654	701	
Weight [kg]	2.60	2.70	3.25	3.25	3.70	4.20	4.65	5.10	6.05	7.10	8.20	9.40	10.65	

KWD DN2 - m/a-(a+100)



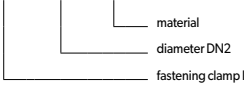
Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet

18. FASTENING CLAMP OP I



Diameter DNI/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
Weight [kg]	0.25	0.25	0.30	0.30	0.30	0.35	0.35	0.40	0.40	0.45	0.50	0.55	0.60	0.70	0.75	0.80	

OPI DN2 - m



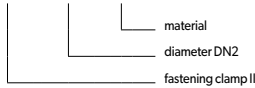
Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm

19. FASTENING CLAMP OP II



Diameter DNI/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
Weight [kg]	0.17	0.17	0.19	0.19	0.19	0.21	0.21	0.23	0.25	0.27	0.29	0.33	0.37	0.42	0.46	0.50	

OPII DN2 - m



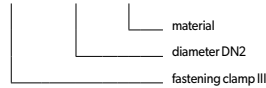
Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm

20. FASTENING CLAMP OP III



Diameter DNI/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s=1.0
Weight [kg]	2.10	2.10	2.35	2.35	2.50	2.65	2.65	2.90	3.15	3.40	3.65	4.15	4.65	5.25	5.75	6.25	

OPIII DN2 - m



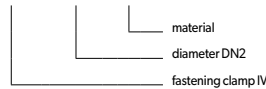
Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	1	1	1 - sheet thickness 1.0 mm

21. FASTENING CLAMP OP IV



Diameter DNI/DN2	120	130	140	150	160	180	200	225	250	300	350	400	for s 0.6/0.6
Weight [kg]	0.38	0.38	0.38	0.41	0.42	0.44	0.46	0.49	0.52	0.57	0.63	0.69	

OPIV DN2 - m

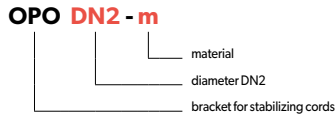


Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm

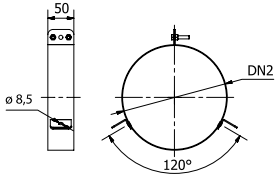
22. BRACKET FOR STABILIZING CORDS OPO



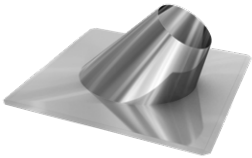
Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500
Weight [kg]	0.50	0.50	0.55	0.55	0.55	0.59	0.59	0.65	0.69	0.73	0.78	0.88	0.97	1.07	1.16	1.25



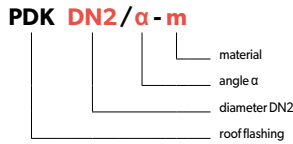
Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet



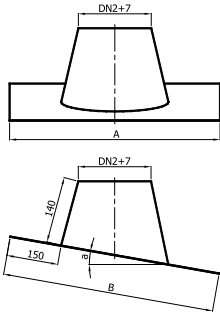
23. ROOF FLASHING PDK



Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	
α 20	A	605	605	628	628	628	685	685	710	748	804	781	802	865	915	971	1022
	B	610	610	632	632	632	708	708	718	756	820	816	803	875	929	982	1035
α 35	A	645	645	665	665	665	694	694	708	746	778	806	867	917	974	1031	1088
	B	715	715	724	724	724	758	758	769	816	854	899	939	1013	1079	1145	1211
α 50	A	670	670	700	700	700	735	735	769	795	797	821	908	970	1032	1094	1156
	B	867	867	879	879	879	944	944	980	1017	942	959	1168	1256	1346	1433	1522
Weight [kg]	depending on measurements																

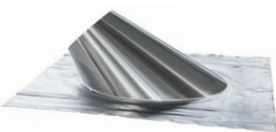


Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm

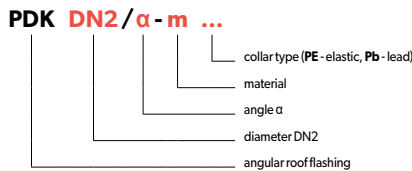


- α = 20 → from 0-20°
- α = 35 → from 20-35°
- α = 50 → from 35-50°

24. ANGULAR ROOF FLASHING WITH COLLAR PDK

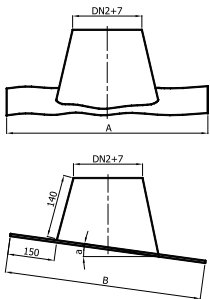
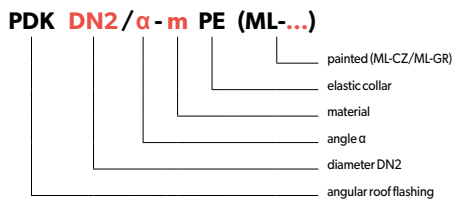


Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500
α 20	A	1000 (1120 - PE version)														
	B	610	610	632	632	632	708	708	718	756	820	816	803	875	929	982
α 35	A	1000 (1120 - PE version)														
	B	715	715	724	724	724	758	758	769	816	854	899	939	1013	1079	1145
α 50	A	1000 (1120 - PE version)														
	B	867	867	879	879	879	944	944	980	1017	942	959	1168	1256	1346	1433
Weight [kg]	depending on measurements															



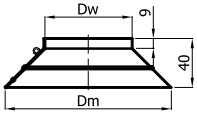
Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm

ML-CZ: painted - black colour (RAL 9011)
ML-GR: painted - grey colour (RAL 7043)



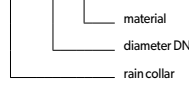
- α = 20 → 0-20°
- α = 35 → 20-35°
- α = 50 → 35-50°

25. RAIN COLLAR KPD



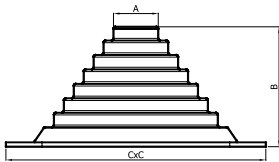
Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø280	ø300	ø350	ø400	ø450	ø500	ø550	ø600	for s=0.6 (0.5)
Dw [mm]	79.0	99.7	110.9	122.0	131.6	139.5	150.7	160.2	180.9	200.0	225.5	251.0	279	300.4	349.7	400.7	450.0	501.0	550	600	
Dm [mm]	151	172	183	194	204	212	223	232	253	272	326	350	379	400	450	501	550	601	650	700	
Weight [kg]	0.14	0.16	0.17	0.18	0.18	0.19	0.20	0.21	0.23	0.25	0.29	0.31	0.37	0.36	0.41	0.45	0.50	0.54	0.6	0.65	

KPD x - X



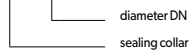
Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	6	6 - sheet thickness 0.6 mm

26. SEALING COLLAR KV



KV sealing collars are made with EPDM elastomer with strip of flexible aluminum alloy on the edges. Flexible base adjusts to all roof types creating durable connection. Sealing collars are especially useful when making passages for antennas, small ventilation chimneys etc.

KV x



Destination	Roof flashing
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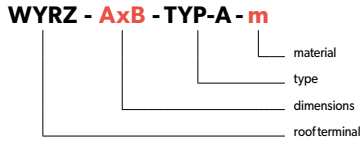
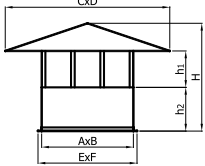
Max. working temperature 100°C.

Type	A	B	CxC
KV 30	ø 6 - 100	80	205x205
KV 40	ø 75 - 155	100	250x250
KV 50	ø 102 - 178	105	270x270
KV 60	ø 125 - 230	130	305x305
KV 70	ø 150 - 280	140	360x360

1. ROOF TERMINAL - TYPE A ACC. TO BN-70/8865-31 - WYRZ-A



A x B	250x250	250x400	250x630	400x400	400x630	630x630	630x1000	1000x1000
C x D	450x450	290x640	540x920	720x720	800x1030	1130x1130	1250x1620	1800x1800
E x F	290x290	290x440	290x670	440x440	440x670	690x690	690x1060	1060x1060
H	475	525	590	580	670	740	885	996
h1	300	300	350	300	360	300	300	300
h2	100	120	140	160	200	250	320	400

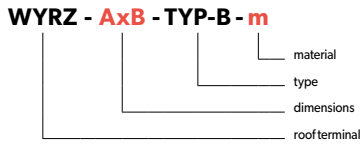
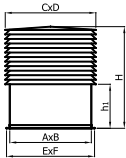


Application	P	P	P - industrial processes
Material	OC	-	OC - galvanised steel sheet
	-	X	X - chrome-nickel steel sheet 1.4301

2. ROOF TERMINAL - TYPE B ACC. TO BN-70/8865-31 - WYRZ-B



A x B	250x250	250x400	250x630	400x400	400x630	630x630	630x1000	1000x1000
C x D	320x320	320x470	320x700	470x470	470x700	700x700	700x1070	1070x1070
E x F	290x290	290x440	290x670	440x440	440x670	690x690	690x1060	1060x1060
H	515	520	520	640	640	760	765	1130
h1	315	320	320	320	320	320	325	330

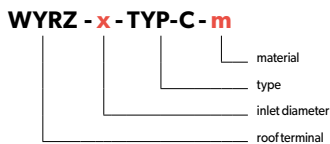
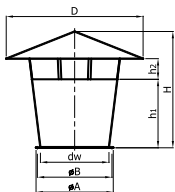


Application	P	P	P - industrial processes
Material	OC	-	OC - galvanised steel sheet
	-	X	X - chrome-nickel steel sheet 1.4301

3. ROOF TERMINAL - TYPE C ACC. TO BN-70/8865-31 - WYRZ-C

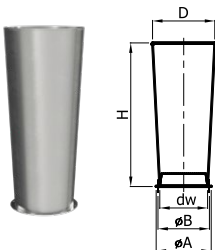


ø dw	160	200	250	315	350	400	500	630
ø D	320	400	500	630	700	800	1000	1260
ø B	192	233	283	352	387	438	538	670
ø A	222	263	313	378	413	464	564	714
H	320	340	425	535	595	680	850	1070
h1	200	200	250	315	350	400	500	630
h2	60	60	75	95	110	120	150	190

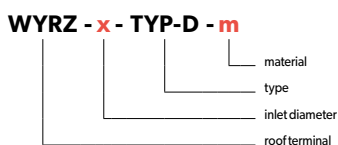


Application	P	P	P - industrial processes
Material	OC	-	OC - galvanised steel sheet
	-	X	X - chrome-nickel steel sheet 1.4301

4. ROOF TERMINAL - TYPE D ACC. TO BN-70/8865-31 - WYRZ-D



ø dw	160	200	250	315	350	400	500	630
ø D	210	260	325	410	455	520	650	820
ø B	192	233	283	352	387	438	538	670
ø A	222	263	313	378	413	464	564	714
H	480	600	750	945	1050	1200	1500	1890

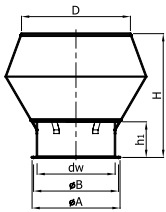


Application	P	P	P - industrial processes
Material	OC	-	OC - galvanised steel sheet
	-	X	X - chrome-nickel steel sheet 1.4301

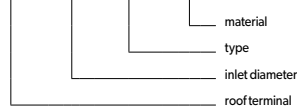
5. ROOF TERMINAL - TYPE E ACC. TO BN-70/8865-31 - WYRZ-E



ø dw	160	200	250	315	350	400	500	630
ø D	250	280	350	440	490	560	700	880
ø B	192	233	283	352	387	438	538	670
ø A	222	263	313	378	413	464	564	714
H	300	375	430	500	555	600	715	1000
h1	150	150	150	150	150	150	150	150



WYRZ - x - TYP-E - m

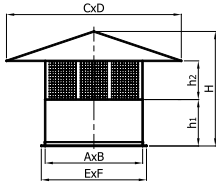


Application	P	P	P - industrial processes
Material	OC	-	OC - galvanised steel sheet
	-	X	X - chrome-nickel steel sheet 1.4301

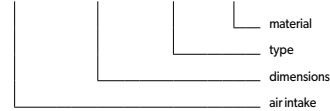
6. AIR INTAKE TYPE A ACC. TO BN-70/8865-33 - CZERP-A



A x B	250x250	250x400	250x630	400x400	400x630	630x630	630x1000	1000x1000
C x D	450x450	490x640	540x920	720x720	800x1030	1130x1130	1250x1620	1800x1800
E x F	290x290	290x440	290x670	440x440	440x670	690x690	690x1060	1060x1060
H	525	590	665	660	715	870	1035	1195
h1	300	300	300	300	300	300	300	300
h2	150	185	215	240	245	380	470	600



CZERP - Ax B - TYP-A - m

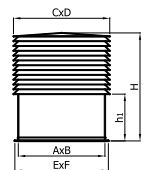


Application	P	P	P - industrial processes
Material	OC	-	OC - galvanised steel sheet
	-	X	X - chrome-nickel steel sheet 1.4301

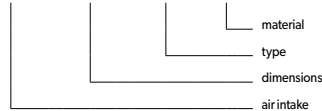
7. AIR INTAKE TYPE B ACC. TO BN-70/8865-33 - CZERP-B



A x B	250x250	250x400	250x630	400x400	400x630	630x630	630x1000	1000x1000
C x D	320x320	320x470	320x700	470x470	470x700	700x700	700x1070	1070x1070
E x F	290x290	290x440	290x670	440x440	440x670	690x690	690x1060	1060x1060
H	515	520	570	640	640	760	765	1130
h1	315	320	320	320	320	320	325	330



CZERP - Ax B - TYP-B - m

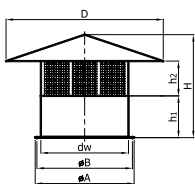


Application	P	P	P - industrial processes
Material	OC	-	OC - galvanised steel sheet
	-	X	X - chrome-nickel steel sheet 1.4301

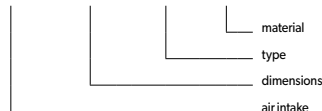
8. AIR INTAKE TYPE C ACC. TO BN-70/8865-33 - CZERP-C



ø dw	160	200	250	315	350	400	500	630
ø D	290	360	450	570	630	720	900	1140
ø B	192	233	283	352	387	438	538	670
ø A	222	263	313	378	413	464	564	714
H	445	480	525	585	630	720	900	1040
h1	300	300	300	300	300	300	300	300
h2	95	120	150	190	210	240	300	380

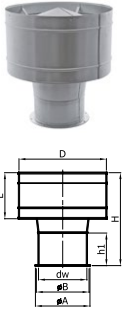


CZERP - Ax B - TYP-C - m

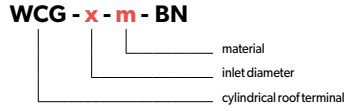


Application	P	P	P - industrial processes
Material	OC	-	OC - galvanised steel sheet
	-	X	X - chrome-nickel steel sheet 1.4301

9. CYLINDRICAL ROOF TERMINAL ACC. TO BN-66/8865-13 - WCG



	160	200	250	315	350	400	500	630
ø d _w	160	200	250	315	350	400	500	630
ø D	320	400	500	630	700	800	1000	1260
ø B	192	233	283	352	387	438	538	670
ø A	222	263	313	378	413	464	564	714
H	475	495	580	690	725	825	1000	1270
h ₁	210	155	155	155	155	155	200	200
L	192	240	300	378	420	480	600	756

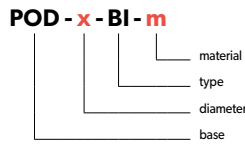


Application	P	P	P - industrial processes
Material	OC	-	OC - galvanised steel sheet
	-	X	X - chrome-nickel steel sheet 1.4301

10. ROOF BASE TYPE BI - POD-BI

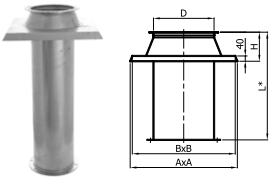


Diameter D	ø110	ø125	ø150	ø160	ø200	ø250	ø300	ø315	ø350	ø400	ø500	ø630
A	306	317	418	446	456	516	580	640	660	706	830	960
B	266	277	378	406	416	476	540	600	620	666	790	920
H	85	85	98	105	115	125	135	145	160	165	190	230

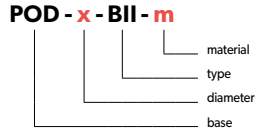


Application	P	P	P - industrial processes
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - mild steel hot dip galvanized

11. ROOF BASE TYPE BII - POD-BII



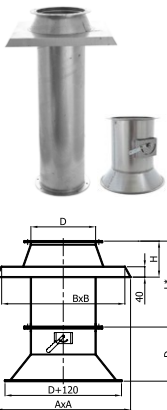
Diameter D	ø110	ø125	ø150	ø160	ø200	ø250	ø300	ø315	ø350	ø400	ø500	ø630
A	306	317	418	446	456	516	580	640	660	706	830	960
B	266	277	378	406	416	476	540	600	620	666	790	920
H	85	85	98	105	115	125	135	145	160	165	190	230



Application	P	P	P - industrial processes
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - mild steel hot dip galvanized

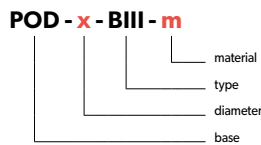
* L=1000 [mm] - other dimensions upon request

12. ROOF BASE TYPE BIII - POD-BIII



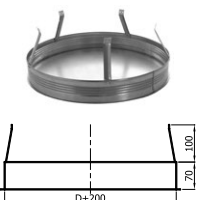
Diameter D	ø110	ø125	ø150	ø160	ø200	ø250	ø300	ø315	ø350	ø400	ø500	ø630
A	306	317	418	446	456	516	580	640	660	706	830	960
B	266	277	378	406	416	476	540	600	620	666	790	920
H	85	85	98	105	115	125	135	145	160	165	190	230

* L=1000 [mm] - other dimensions upon request

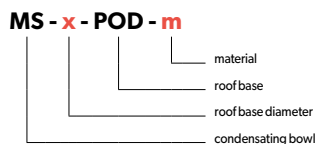


Application	P	P	P - industrial processes
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - mild steel hot dip galvanized

13. CONDENSATING BOWL FOR ROOF BASE - TYPE BIII - MS-POD

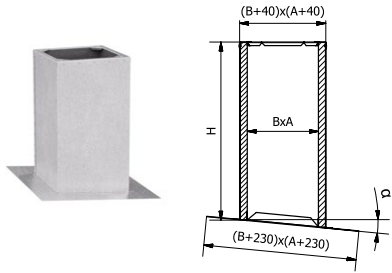


Diameter D	ø110	ø125	ø150	ø160	ø200	ø250	ø300	ø315	ø350	ø400	ø500	ø630
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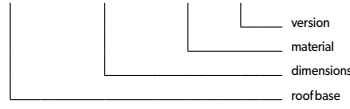
Application	P	P	P - industrial processes
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - mild steel hot dip galvanized

14. ROOF BASE WITH INSULATION - WPD



A [mm]	200	220	250	270	320	370	420	500	600
B [mm]	200	220	250	270	320	370	420	500	600

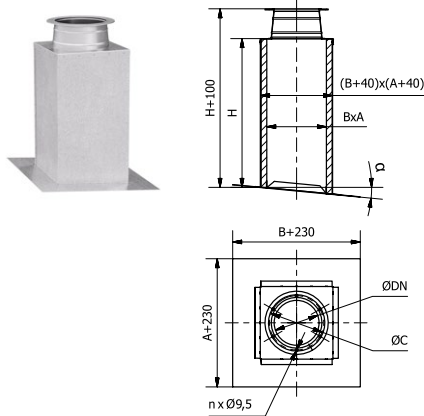
WPD - Ax B/H/α - OC / BIII



Application	P	P - industrial processes
Material	OC	OC - galvanised steel/mineral fibre glass wool

Roof base to be used for roof flashings for type A or B roof base.

15. ROOF BASE WITH INSULATION - WPDT-I



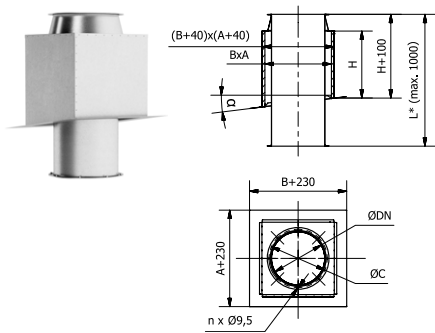
A [mm]	220	270	320	370	420	500	600
B [mm]	220	270	320	370	420	500	600
C [mm]	182	233	283	337	392	438	538
n	6	6	8	8	8	8	8
DN [mm]	150	200	250	300	350	400	500

WPDT-I - Ax B/H/α - OC



Application	P	P - industrial processes
Material	OC	OC - galvanised steel/mineral fibre glass wool

16. ROOF BASE WITH INSULATION AND PIPE - WPDT-II



A [mm]	220	270	320	370	420	500	600
B [mm]	220	270	320	370	420	500	600
C [mm]	182	233	283	337	392	438	538
n	6	6	8	8	8	8	8
DN [mm]	150	200	250	300	350	400	500

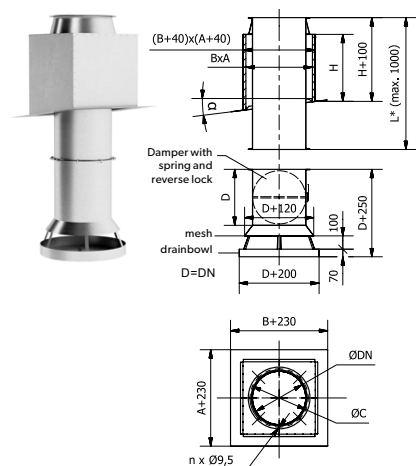
WPDT-II - Ax B/H/α - OC



Application	P	P - industrial processes
	O	O - air heating
Material	OC	OC - galvanised steel/mineral fibre glass wool

* L=1000 [mm] - other dimensions upon request

17. ROOF BASE WITH INSULATION AND DAMPER - WPDT-III



A [mm]	220	270	320	370	420	500	600
B [mm]	220	270	320	370	420	500	600
C [mm]	182	233	283	337	392	438	538
n	6	6	8	8	8	8	8
DN [mm]	150	200	250	300	350	400	500

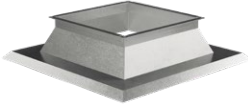
WPDT-III - Ax B/H/α - OC



Application	P	P - industrial processes
	O	O - air heating
Material	OC	OC - galvanised steel/mineral fibre glass wool

* Standard L=1000 [mm] other dimensions upon request

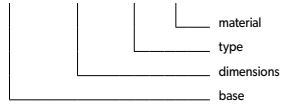
18. ROOF BASE TYPE AI ACC. TO BN-70/8865-32 - POD-AI



A x B	250x250	250x400	250x630	400x400	400x630	630x630	630x1000	1000x1000
C x D	490x490	490x640	490x870	665x665	665x745	945x945	945x1410	1410x1410
E x F	530x530	530x680	530x910	705x705	705x985	985x985	985x1450	1450x1450
H	145	145	145	170	170	220	220	320

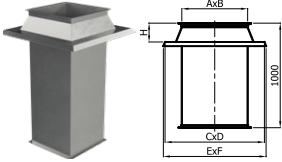


POD - Ax B - AI - m



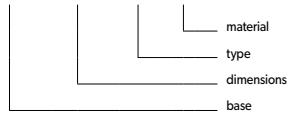
Application	P	P	P - industrial processes
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - mild steel hot dip galvanized

19. ROOF BASE TYPE AII ACC. TO BN-70/8865-32 - POD-AII



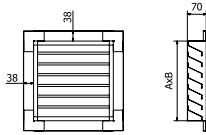
A x B	250x250	250x400	250x630	400x400	400x630	630x630	630x1000	1000x1000
C x D	490x490	490x640	490x870	665x665	665x745	945x945	945x1410	1410x1410
E x F	530x530	530x680	530x910	705x705	705x985	985x985	985x1450	1450x1450
H	145	145	145	170	170	220	220	320

POD - Ax B - AII - m



Application	P	P	P - industrial processes
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - mild steel hot dip galvanized

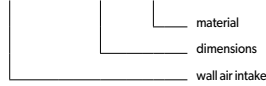
1. WALL AIR INTAKE ACCORDING TO BN-70/8865-33 - CZERP-S



B - horizontal dimension
A - vertical dimension

B x A	200x200	250x250	300x300	350x350	400x400	500x500	600x600	700x700	800x800
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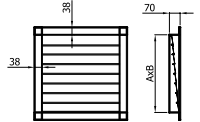
CZERP-S - B x A - m



Application	P	P	P - industrial processes
	O	O	O - air heating
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

stała żaluzja i siatka

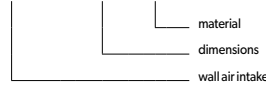
2. WALL AIR INTAKE ACCORDING TO BN-70/8865-31 - WYRZ-S



B - horizontal dimension
A - vertical dimension

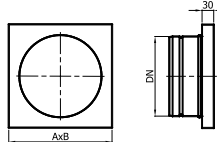
B x A	200x200	250x250	300x300	350x350	400x400	500x500	600x600	700x700	800x800
-------	---------	---------	---------	---------	---------	---------	---------	---------	---------

WYRZ-S - B x A - m



Application	P	P	P - industrial processes
	O	O	O - air heating
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

3. INLET CASSETTE FOR ROOF TERMINALS AND AIR INTAKES



B - horizontal dimension
A - vertical dimension

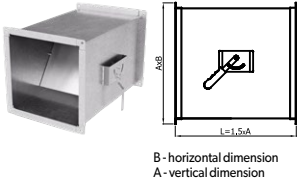
A x B	200x200	250x250	300x300	350x350	400x400	500x500	600x600	700x700	800x800
-------	---------	---------	---------	---------	---------	---------	---------	---------	---------

KASETA-S - B x A - m



Application	P	P	P - industrial processes
	O	O	O - air heating
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

1. SINGLE-SURFACE DAMPER - WPJ



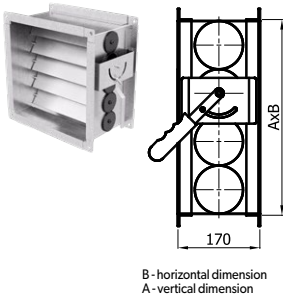
B x A	200x200	250x250	300x300	350x350	400x400	500x500	600x600	700x700	800x800
-------	---------	---------	---------	---------	---------	---------	---------	---------	---------

WPJ - BxA - m

- material
- dimensions
- single-surface damper

Application	P	P	P - industrial processes
	O	O	O - air heating
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

2. MULTISURFACE DAMPER - WPW



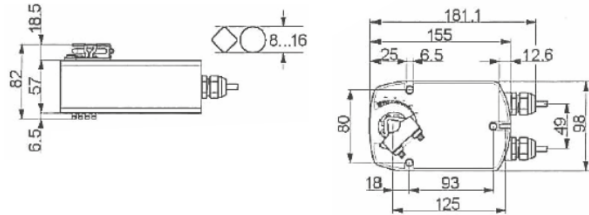
B x A	200x200	250x250	300x300	350x350	400x400	500x500	600x600	700x700	800x800
-------	---------	---------	---------	---------	---------	---------	---------	---------	---------

WPW - BxA - m

- material
- dimensions
- multisurface damper

Application	P	P	P - industrial processes
	O	O	O - air heating
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

3. LF ACTUATOR (WITH RETURN SPRING)

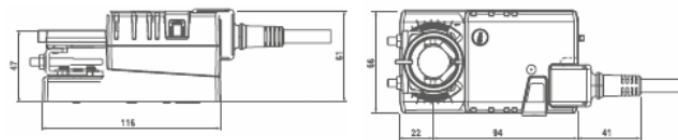


SIL-LF - X

- type
- LF actuator

Proper type of actuator should be chosen according to the Belimo product catalogue.

4. LMC ACTUATOR (WITHOUT RETURN SPRING)



SIL-LMC - X

- type
- LMC actuator

Proper type of actuator should be chosen according to the Belimo product catalogue.

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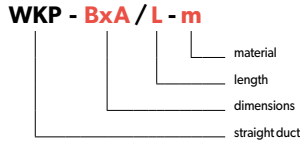
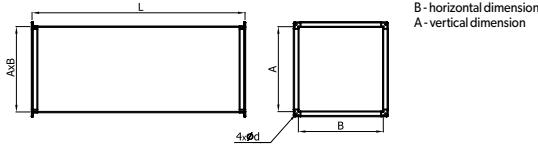
HOT AIR DISTRIBUTION SYSTEM

CHIMNEYS

VENTILATION

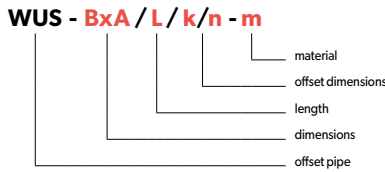
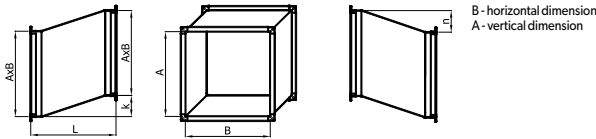
invent. build. enjoy.

1. STRAIGHT DUCT - WKP



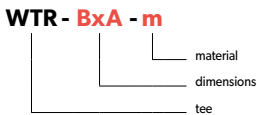
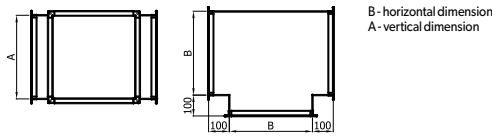
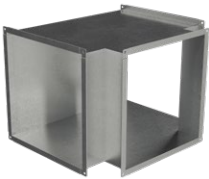
Application	P	P	P - industrial processes
	O	O	O - air heating
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

2. OFFSET PIPE - WUS



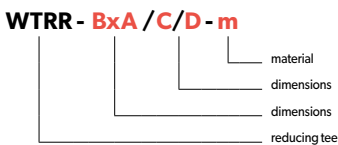
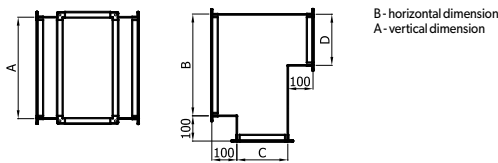
Application	P	P	P - industrial processes
	O	O	O - air heating
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

3. TEE - WTR



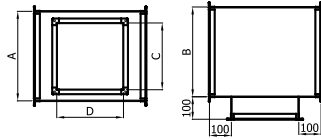
Application	P	P	P - industrial processes
	O	O	O - air heating
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

4. REDUCING TEE - WTRR



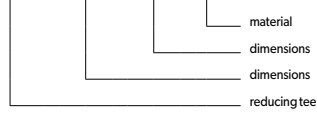
Application	P	P	P - industrial processes
	O	O	O - air heating
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

5. REDUCING TEE - WTRP



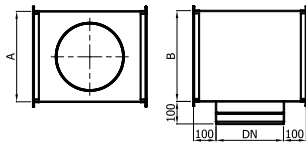
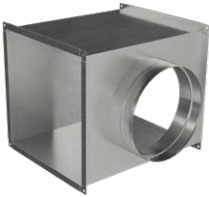
B - horizontal dimension
A - vertical dimension

WTRP - BxA / CxD - m



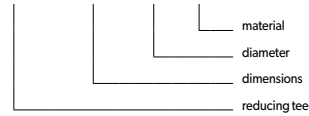
Application	P	P	P - industrial processes
	O	O	O - air heating
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

6. REDUCING TEE - WTRO



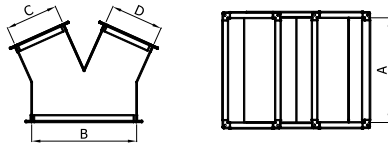
B - horizontal dimension
A - vertical dimension

WTRO - BxA / DN - m



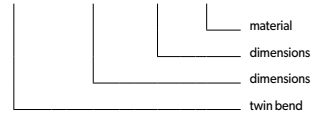
Application	P	P	P - industrial processes
	O	O	O - air heating
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

7. TWIN BEND - WYRP



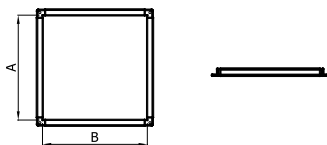
B - horizontal dimension
A - vertical dimension

WYRP - BxA / C/D - m



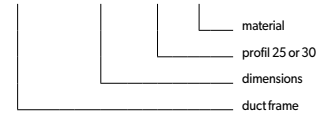
Application	P	P	P - industrial processes
	O	O	O - air heating
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

8. DUCT FRAME - WRAM



25 - for channels ≤ 1000x1000
30 - for channels > 1000x1000
other dimensions upon request

WRAM - BxA / ... - m



Application	P	P	P - industrial processes
	O	O	O - air heating
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

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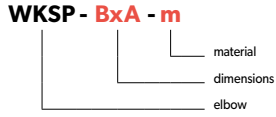
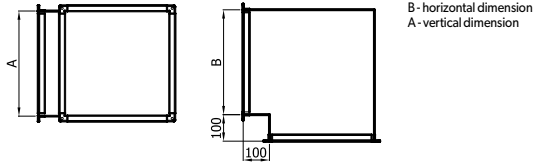
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VENTILATION

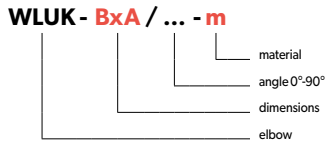
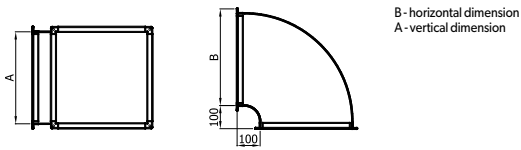
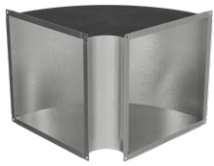
invent. build. enjoy.

9. ELBOW 90° - WKSP



Application	P	P	P - industrial processes
	O	O	O - air heating
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

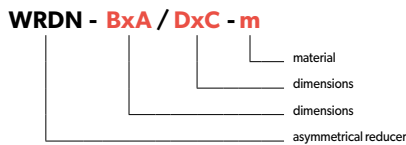
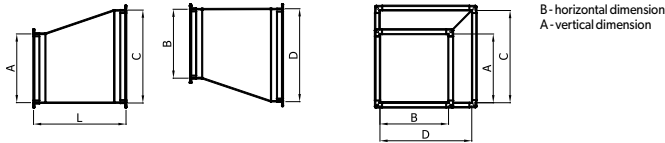
10. ELBOW 0°- 90° - WLUK



Application	P	P	P - industrial processes
	O	O	O - air heating
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

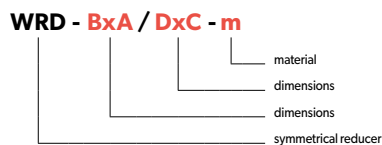
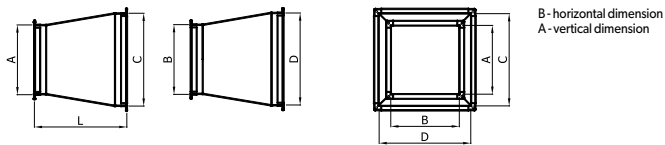
While ordering indicate the actual angle.

11. ASYMMETRICAL REDUCER - WRDN



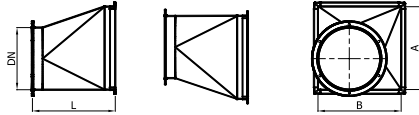
Application	P	P	P - industrial processes
	O	O	O - air heating
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

12. SYMMETRICAL REDUCER - WRD



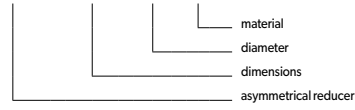
Application	P	P	P - industrial processes
	O	O	O - air heating
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

13. ASYMMETRICAL REDUCER - WRDN



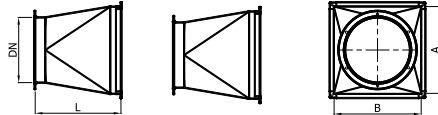
B - horizontal dimension
A - vertical dimension

WRDN - BxA / DN - m



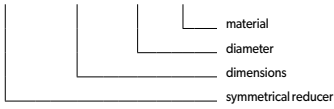
Application	P	P	P - industrial processes
	O	O	O - air heating
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

14. SYMMETRICAL REDUCER - WRD



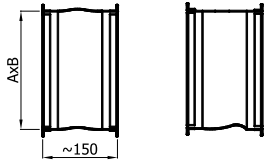
B - horizontal dimension
A - vertical dimension

WRD - BxA / DN - m

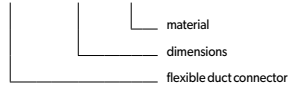


Application	P	P	P - industrial processes
	O	O	O - air heating
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

15. FLEXIBLE DUCT CONNECTOR - WKE

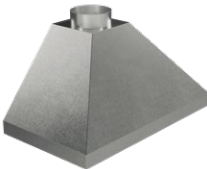


WKE - BxA - m

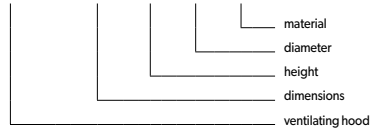


Application	P	P	P - industrial processes
	O	O	O - air heating
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

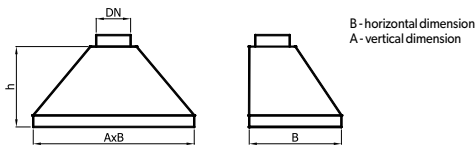
16. VENTILATING HOOD - WOKAP



WOKAP - BxA / H / DN - m



Application	P	P	P - industrial processes
	O	O	O - air heating
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet



B - horizontal dimension
A - vertical dimension

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DARCO Sp. z o.o.
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39-200 Dębica, POLAND

darco.pl