

**Hoval HomeVent® comfort
FRT (251-451)
Comfort ventilation unit**

- Comfort ventilation unit with self-adjusting heat and humidity recovery.
- For use within or outside the insulated building shell.
- High-quality, heat and sound insulated inner casing made from EPP.
- External casing made of film-coated sheet steel (red).
- Unit can be installed upright using the mounting set or the base.
- Rotary enthalpy recovery unit with speed regulation
- Two backward-curved EC fans (continuously adjustable 15-100 %)
- High-quality filter
 - supply air: ePM_{1.0} 55 % (F7)
 - extract air: ePM₁₀ 60 % (G4)
- Integrated prefilter
- Filter monitoring (timer)
- Ready-to-connect electronics
- No need for preheating or a condensate drain

Data

- Colour: red
- Dimensions:
 - L x W x H: 560 x 560 x 925 mm
 - Weight: 39 kg
- Electrical connection: 230 V/50 Hz, IP 40

Required accessories:

- Standard operator terminal BG02 E or
- TopTronic® E room control module comfort plus

Options

- Air quality sensor VOC or CO₂
- Active cool recovery (Option CoolVent®)
- Mounting set, base, IsiCube
- Supply air activated carbon filter

Delivery

- Comfort ventilation unit pre-assembled and packed.

On site

- 8-pin CAT 5 patch cable (parallel, not crossed) between comfort ventilation unit and operator terminal
- RJ45 socket
- 230 V socket

Use

The HomeVent® comfort ventilation unit provides centralised supply and extract air handling for residential spaces. This can be a single family home or a residential unit in a multi-family house. Office rooms, conference rooms and cloak-rooms are also ideal applications. The comfort ventilation unit is part of the HomeVent® ventilation system for comfort ventilation, which performs the following tasks:

- Supplies residential and commercial space with outdoor air
- Extracts used air (CO₂, aerosols, excess dampness, odours, etc.)
- Saves energy through intelligent latent heat recovery
- Cleans supply air using a fine dust filter



Tests

- TÜV Munich in accordance with DIN EN 13141-7
- TÜV Munich in accordance with DIBt
- TÜV Munich in accordance with EN 60335-1
- Type approval (DIBT) Z-51.3-448

Model range

HomeVent® comfort FRT type		Flow rate m³/h	Heat recovery efficiency %
(251)	A ⁺	50-250	90-130
(351)	A ⁺	60-350	90-130
(451)	A	70-450	90-130

Energy recovery

The built-in enthalpy recovery unit withdraws energy from the extract air and transfers it to the supply air. This enables the intelligent (temperature) and the latent (humidity) energy to be transferred. The transmission performance is regulated between 0 and 100 % depending on the outdoor temperature.

The advantages of the enthalpy recovery unit are:

- Temperature efficiency up to 90 %
- Degree of humidity recovery up to 95 %
- Transmission performance can be adjusted continuously
- No preheating required (down to -20 °C)
- No condensation
- No bypass required

Air filtration

The outdoor air goes through two cleaning stages, ensuring the highest standard. A fine-meshed grate (washable) at the entry of the unit prevents insects, leaves, etc. from reaching the unit. When the outdoor air leaves the unit, it flows through a high-capacity fine pollen filter (ePM_{1.0} 55 % (F7)). The operator receives a message when it is time to change the filter. In addition, an activated carbon filter can be installed on the supply air side as an option. The activated carbon filter can be inserted in place of the standard supply air filter. This is a high-capacity filter (ePM_{2.5} 50 %) with high efficiency against particles (pollen, fine dust, etc.) and against gaseous pollutants and odours (agriculture, traffic, etc.).

Air delivery

Two backward-curved centrifugal fans with EC direct current motors deliver the air. The rotating wheel made of high-tech composite material is produced in one piece with optimised fluid mechanics, and ensures quiet operation of the unit. The electronics built into the engine enable the air volumes to be finely regulated between 15 and 100 %. The fans are arranged in such a way that no extract air can find its way to the supply air.

Suitability for winter

Due to the built-in enthalpy recovery unit, no condensate is formed in the unit. No preheating (electronic air heater) is necessary for outdoor temperatures down to -20 °C. The air volume ratio between the supply air and extract air is not changed.

Summer operation

The energy recovery is automatically reduced to a minimum at high outdoor temperatures. This enables night cooling (free cooling) in the summer as well as when the seasons change. It is not necessary to arrange for a bypass via dampers and a drive. In addition, the CoolVent® option can recover cold in air-conditioned buildings. The hot outdoor air is cooled and dried with the air-conditioned extract air.

Installation

The HomeVent® comfort ventilation unit is characterised by a compact design. It is possible to access the unit from the front for servicing. No condensate forms in the unit. We recommend the corresponding mounting sets with vibration dampers.

Standard operator terminal BG02 E

The operator terminal consists of a plastic casing for on-wall mounting. The target air volume and the target air humidity can be set with two rotary knobs. With the party button, the air volume can be increased for a limited period of time. The connection to the HomeVent® comfort ventilation unit is made via RJ45 plug connection. The unit can also be installed in a secondary room.

TopTronic® E

room control module comfort plus

The TopTronic® E room control module comfort plus is available either with a black or white design. Operated by a colour touchscreen (4.3 inch). The connection to the HomeVent® comfort ventilation unit is made via RJ45 plug connection or plug terminals (max. 0.75 mm²). The unit can be installed on the wall with an on-wall mounted frame or with a wall-mounting plate and flush-mounted boxes. The unit can be installed in a secondary room.

Functional possibilities:

- Operation of all Hoval units connected to the bus.
- Authorisation management for operation.
- Efficient control of the ventilation system by working with day programmes
- Selection between different start screens possible during commissioning.
- Customer-specific configuration of the screen for displaying the following elements:
 - Date and time
 - Moon phases
 - Current air volume in %
 - Maximum target humidity in %
 - Active day or week programme
 - Display of current room air quality (optional VOC or CO₂ air quality sensor must be installed for this purpose)
 - Display of the current weather or weather forecast (only possible in combination with HovalConnect)

Air quality

Optionally, a VOC or CO₂ air quality sensor can be installed in the unit during commissioning. The VOC air quality sensor(s) continuously monitor(s) the air for volatile organic components and regulate the air volume that is supplied or extracted via the speed of the fans. This results in optimal air quality in the building with minimal energy input.

- VOC air quality sensor on the extract air side:
The extract air is continuously monitored for odours, tobacco smoke, cleansing agents, etc. If the concentration of the extract air exceeds a certain value, the air volume is increased correspondingly. The sensitivity can be chosen. On the TopTronic® E room control module comfort plus, the air quality is displayed by a bar, which will either be green (good air), orange (slightly contaminated air) or red (bad air).

Cooling

The fresh air can be pre-cooled using the CoolVent® option. However, this requires an air-conditioning system to be present in order to provide the necessary cooling in the room. The enthalpy recovery system extracts heat and humidity from the warm outdoor air and feeds it to the cold extract air. The energy consumption of the air-conditioning system is thereby reduced. The efficiency for this process is 85 %. The CoolVent® function is activated during commissioning.

Function HomeVent® comfort FRT (251-451)

The outside air fan draws in outdoor air via the main line. In the first stage, this air is cleaned via a prefilter. In the enthalpy recovery system, the supply air is heated, depending on the temperature, and humidified. The extent to which heat and humidity are recovered is dependent on the temperature and humidity differences between the exhaust air and the outdoor air as well as on the rotor speed. Then the pre-treated outdoor air is cleaned by means of a pollen fine dust filter. The exhaust air fan sucks in the used air via the coarse dust filter.

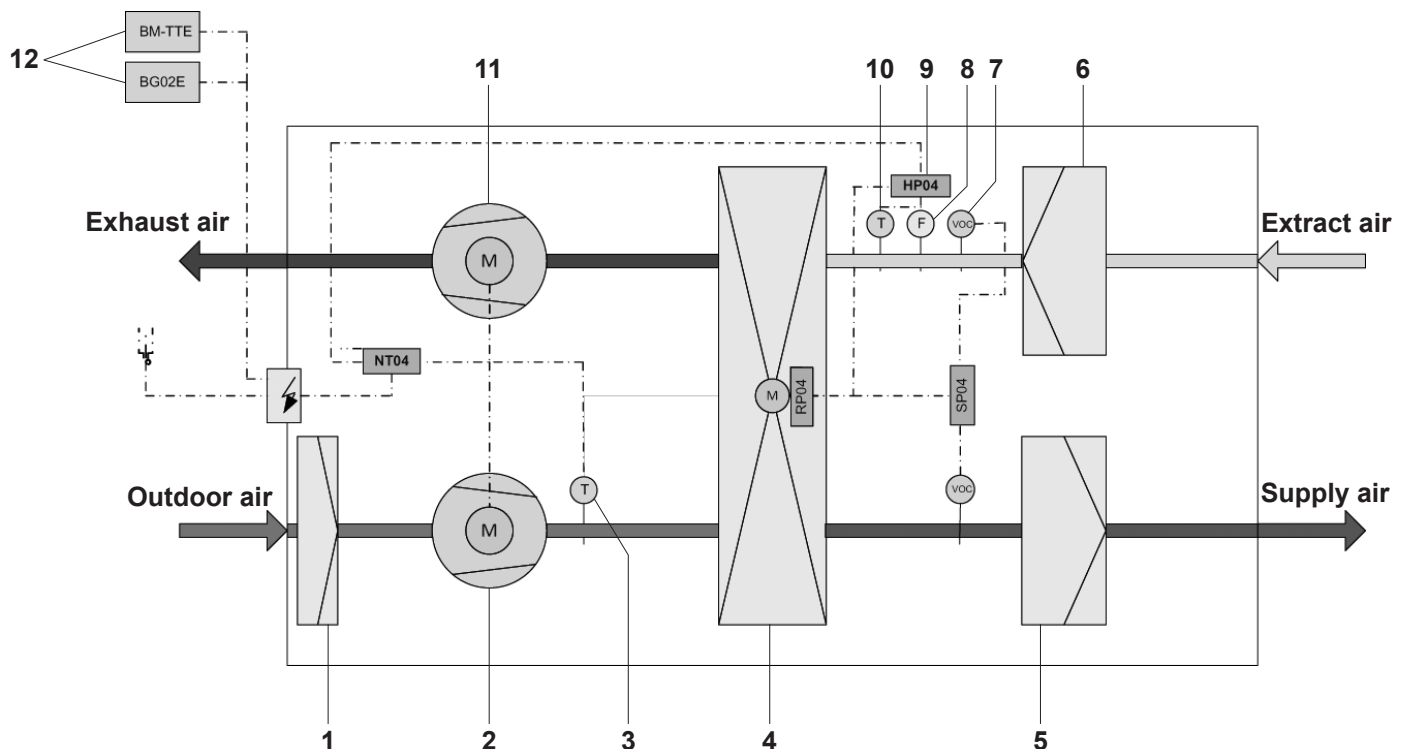
The enthalpy recovery system extracts heat and humidity from the air and passes these to the supply air.

The way the fans are positioned – with overpressure on the supply air side and underpressure on the extract air side – means that no extract air can find its way to the supply air.

The electronic controls and the operator terminal feature the following additional functions:

- The speed of the enthalpy recovery system is regulated by the outdoor temperature. In this way, the heat and humidity recovery is adjusted automatically.
- The humidity regulation changes the flow rate. Thus, if the humidity indoors is too high, for instance, more dry air is introduced from the outside.
- The functions of the unit are continuously monitored. In case of a malfunction, the device is switched to "fault" mode. The malfunction is displayed on the operator terminal.

- | | |
|---|---|
| 1 Prefilter | 8 Humidity sensor |
| 2 Outside air fan | 9 Electronics |
| 3 Outdoor sensor | 10 Extract air sensor |
| 4 Enthalpy recovery unit | 11 Exhaust air fan |
| 5 Supply air filter | 12 Operator terminal BG02 E or TopTronic® E |
| 6 Extract air filter | room control module comfort plus |
| 7 VOC or CO ₂ extract air sensor | |



Comfort ventilation units



HomeVent® comfort FRT (251-451)
 Comfort ventilation unit for ventilating a residential unit with high-efficiency heat and humidity recovery.

HomeVent® comfort FRT type		Nominal flow rate m³/h	Ext. pressure Pa
(251)	A+	250	100
(351)	A+	350	100
(451)	A	450	100

Part No.

7016 713
 7016 714
 7016 715

Required accessories



Operator terminal BG02 E
 for HomeVent® comfort FR (201-301), FRT (251-451) and ER (200-400)
 Plastic housing for on-wall mounting.
 Knob for flow rate and room air humidity.
 Service and fault display.

2066 444



TopTronic® E room control module comfort plus white
 for HomeVent® comfort FR (201-301), FRT (251-451) and ER (200-400)
 Operation of all Hoval ventilation units, heating and hot water circuits connected to the bus system.
 Customer-specific configurable start screen.

6037 072

incl. fitting accessories



TopTronic® E room control module comfort plus black
 for HomeVent® comfort FR (201-301), FRT (251-451) and ER (200-400)
 Operation of all Hoval ventilation units, heating and hot water circuits connected to the bus system.
 Customer-specific configurable start screen.

6042 543

incl. fitting accessories

Technical information
 see separate chapter.

Recommended accessories



VOC air quality sensor

for HomeVent® comfort FRT (251-451) and ER (200-400)
Can be installed on extract air side
Only in connection with the TopTronic® E room control module comfort plus.

6058 206



CO₂ air quality sensor

for HomeVent® comfort FRT (251-451) and ER (200-400)
Can be installed on extract air side
Only in connection with the TopTronic® E room control module comfort plus.

6058 211

Notice

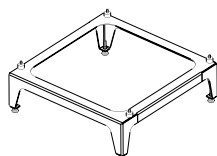
CO₂-sensor cannot be combined with VOC sensor



Cool recovery unit CoolVent®

for HomeVent® comfort FR (201-301), FRT (251-451) and ER (200-400)
Active-controlled cool recovery for air-conditioned buildings.
Activated by Hoval service technicians during commissioning.

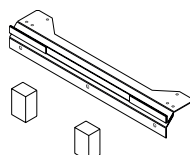
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Unit base GS (251-451)

for HomeVent® comfort FRT (251-451)
Red painted steel, 4 vibration dampers, height-adjustable feet.
Height: 185-205 mm

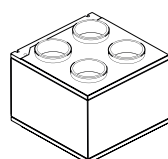
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Vertical wall mounting set

for HomeVent® comfort FR (201-301), FRT (251-451) and ER (200-400)
Steel bracket red coated
with vibration-damping support

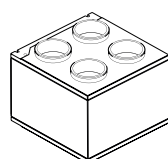
6046 215



Acoustic insulating box FRT extract-supply air front

for HomeVent® comfort FRT (251-451)
Red housing made of aluzinc sheet with connection nozzles 4 x DN 160.
Extract air front left,
supply air front right
Exhaust air back left,
fresh air back right
All 4 air ducts are sound-insulated.
Dimensions (L x W x H):
400 x 560 x 560 mm

6046 018

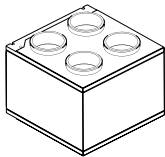


Acoustic insulating box

FRT extract air-supply air right
for HomeVent® comfort FRT (251-451)
Red housing made of aluzinc sheet with connection nozzles 4 x DN 160.
Extract air front right,
supply air rear right
Exhaust air front left,
fresh air rear left
All 4 air ducts are sound-insulated.
Dimensions (L x W x H):
400 x 560 x 560 mm

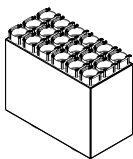
6046 019

Part No.



**Acoustic insulating box FRT
extract-supply air left**
for HomeVent® comfort FRT (251-451)
Red housing made of aluzinc sheet with
connection nozzles 4 x DN 160.
Extract air rear left,
supply air front left
Exhaust air back right,
fresh air front right
All 4 air ducts are sound-insulated.
Dimensions (L x W x H):
400 x 560 x 560 mm

6046 020



Distribution box VTB-180 18 x 75
for HomeVent® comfort FRT (251)
Housing made of aluzinc sheet with
connection nozzles 2 x DN 180
Connection nozzles 18 x DN 75
Acoustic insulating unit supply
and extract air side, access panel,
incl. throttle orifices
Dimensions (L x W x H):
400 x 560 x 280 mm

6045 932

**Filter HomeVent®
comfort FRT (251-451)**



Supply air filter FRT (251-451)
for HomeVent® comfort FRT (251-451)
Filter class ISO 16890: ePM_{1,0} 55 % (F7)

5043 550



Activated carbon filter FRT (251-451)
for HomeVent® comfort FRT (251-451)
Protection against pollutants and odours
Alternative to supply air filter
FRT (251-451)
Filter class ISO 16890: ePM_{2,5} 50 %

5043 778



Extract air filter FRT (251-451)
for HomeVent® comfort FRT (251-451),
Filter class ISO 16890: ePM_{1,0} 60 % (G4)

5043 611

HomeVent® comfort FR ventilation unit (251-451)

Type		(251)	(351)	(451)
• Max. flow rate (at 100 Pa external pressure)	m³/h	250	350	450
• Air flow rate control range	m³/h	50-250	60-350	70-450
• Humidity setpoint setting	%		30...65	
Electrical connection				
• Voltage (AC)	V		230	
• Frequency	Hz		50	
• Max. current consumption	A	0.76	1.04	1.23
• Type of protection			IP 40	
• Power consumption (at 70 % of the max. flow rate, 50 Pa external pressure)	W	36	61	97
• Degree of heat processing (as per DIN 4719)	%		90-130	
• Temperature ratio (at 70 % of the max. flow rate)	%	85	84	82
• Humidity ratio (at 70 % of the max. flow rate)	%	90	84	81
• Specific fan power SFP (at 70 % of the max. flow rate)	W/m³/h	0.21	0.25	0.31
Filter class (as per ISO-16890)				
• Supply air filter			ePM _{1,0} 55 %	
• Extract air filter			ePM ₁₀ 60 %	
• Sound power level			see table on following page	
Leakage (as per EN 13141-7)				
• Internal	%		< 1	
• External	%	1.4	1.0	0.8
• Net weight	kg		39	
Application limits for device setup, weather-protected (EN 60721-3-3), 3K5 as per EN 50090-2-2				
• Ambient temperature	°C		-20...45	
• Ambient humidity	g/kg		max. 15	
• Dew point temp. in installation room	°C		< 15	
Air conditions (moderate outdoor climate EN 60721-2-1)				
• Outside air intake temperature	°C		-20...40	
• Outside air intake humidity	% r.h.		5...95	
• Extract air temperature	°C		18...35	
• Extract air humidity	% r.h.		5...80	
• Max. extract air humidity winter	g/kg		12	

Sound power levels for HomeVent® comfort FRT (251)

Casing

Flow rate SUP/EXT [m³/h]	External pressure [Pa]	L _w [dB]							Sound pressure level L _{WA} 63 Hz ... 8 kHz [dB(A)]
		125	250	500	1 k	2 k	4 k	8 k	
175	50	41	44	39	33	26	11	10	40
250	100	47	51	45	40	34	21	12	47

Fresh air

Flow rate [m³/h]	External pressure [Pa]	L _w [dB]							Sound pressure level L _{WA} 63 Hz ... 8 kHz [dB(A)]
		125	250	500	1 k	2 k	4 k	8 k	
175	50	30	39	41	32	28	16	8	40
250	100	35	47	47	39	36	25	18	47

Supply air

Flow rate [m³/h]	External pressure [Pa]	L _w [dB]							Sound pressure level L _{WA} 63 Hz ... 8 kHz [dB(A)]
		125	250	500	1 k	2 k	4 k	8 k	
175	50	42	44	40	33	25	14	4	40
250	100	44	51	46	39	32	23	14	47

Extract air

Flow rate [m³/h]	External pressure [Pa]	L _w [dB]							Sound pressure level L _{WA} 63 Hz ... 8 kHz [dB(A)]
		125	250	500	1 k	2 k	4 k	8 k	
175	50	44	36	34	26	20	8	0	34
250	100	35	43	39	34	27	17	7	40

Exhaust air

Flow rate [m³/h]	External pressure [Pa]	L _w [dB]							Sound pressure level L _{WA} 63 Hz ... 8 kHz [dB(A)]
		125	250	500	1 k	2 k	4 k	8 k	
175	50	43	49	47	45	39	26	16	49
250	100	49	52	53	51	46	35	27	55

Sound power: HomeVent® comfort FRT (251) + acoustic insulating box FRT
Casing

Flow rate SUP/EXT [m³/h]	External pressure [Pa]	L _w [dB]							Sound pressure level L _{WA} 63 Hz ... 8 kHz [dB(A)]
		125	250	500	1 k	2 k	4 k	8 k	
175	50	42	43	36	27	23	17	15	37
250	100	46	47	41	35	30	16	9	43

Fresh air

Flow rate [m³/h]	External pressure [Pa]	L _w [dB]							Sound pressure level L _{WA} 63 Hz ... 8 kHz [dB(A)]
		125	250	500	1 k	2 k	4 k	8 k	
175	50	30	31	26	17	15	14	15	27
250	100	34	36	32	23	20	6	0	33

Supply air

Flow rate [m³/h]	External pressure [Pa]	L _w [dB]							Sound pressure level L _{WA} 63 Hz ... 8 kHz [dB(A)]
		125	250	500	1 k	2 k	4 k	8 k	
175	50	30	29	22	10	4	0	0	24
250	100	31	34	27	16	11	0	0	26

Extract air

Flow rate [m³/h]	External pressure [Pa]	L _w [dB]							Sound pressure level L _{WA} 63 Hz ... 8 kHz [dB(A)]
		125	250	500	1 k	2 k	4 k	8 k	
175	50	28	30	21	11	4	0	0	24
250	100	31	36	26	17	10	0	0	30

Exhaust air

Flow rate [m³/h]	External pressure [Pa]	L _w [dB]							Sound pressure level L _{WA} 63 Hz ... 8 kHz [dB(A)]
		125	250	500	1 k	2 k	4 k	8 k	
175	50	44	33	26	21	21	19	20	30
250	100	41	36	33	29	29	22	21	36

For external pressure drop, the sound insulation box is not taken into account.

Sound power levels for HomeVent® comfort FRT (351)

Casing

Flow rate SUP/EXT [m³/h]	External pressure [Pa]	L _w [dB]							Sound pressure level L _{WA} 63 Hz ... 8 kHz [dB(A)]
		125	250	500	1 k	2 k	4 k	8 k	
245	50	42	49	44	35	31	16	10	44
350	100	49	56	54	45	40	28	17	54

Fresh air

Flow rate [m³/h]	External pressure [Pa]	L _w [dB]							Sound pressure level L _{WA} 63 Hz ... 8 kHz [dB(A)]
		125	250	500	1 k	2 k	4 k	8 k	
245	50	31	45	46	37	34	23	15	45
350	100	40	53	55	44	42	32	25	53

Supply air

Flow rate [m³/h]	External pressure [Pa]	L _w [dB]							Sound pressure level L _{WA} 63 Hz ... 8 kHz [dB(A)]
		125	250	500	1 k	2 k	4 k	8 k	
245	50	42	56	44	37	31	21	11	49
350	100	55	56	57	44	39	30	23	55

Extract air

Flow rate [m³/h]	External pressure [Pa]	L _w [dB]							Sound pressure level L _{WA} 63 Hz ... 8 kHz [dB(A)]
		125	250	500	1 k	2 k	4 k	8 k	
245	50	35	46	37	32	25	15	6	40
350	100	45	48	45	39	33	24	15	46

Exhaust air

Flow rate [m³/h]	External pressure [Pa]	L _w [dB]							Sound pressure level L _{WA} 63 Hz ... 8 kHz [dB(A)]
		125	250	500	1 k	2 k	4 k	8 k	
245	50	44	50	51	49	44	33	24	53
350	100	56	64	60	56	52	43	35	62

Sound power: HomeVent® comfort FRT (351) + acoustic insulating box FRT
Casing

Flow rate	External pressure	L _w [dB]							Sound pressure level L _{WA}
SUP/EXT [m³/h]	[Pa]	125	250	500	1 k	2 k	4 k	8 k	63 Hz ... 8 kHz [dB(A)]
245	50	43	45	39	32	28	12	12	41
350	100	49	51	49	39	36	23	13	48

Fresh air

Flow rate [m³/h]	External pressure [Pa]	L _w [dB]							Sound pressure level L _{WA} 63 Hz ... 8 kHz [dB(A)]
		125	250	500	1 k	2 k	4 k	8 k	
245	50	31	34	30	21	18	3	0	30
350	100	34	42	38	28	26	12	5	38

Supply air

Flow rate [m³/h]	External pressure [Pa]	L _w [dB]							Sound pressure level L _{WA}
		125	250	500	1 k	2 k	4 k	8 k	63 Hz ... 8 kHz [dB(A)]
245	50	30	33	25	14	9	0	0	27
350	100	33	36	35	21	17	4	0	33 *

Extract air

Flow rate	External pressure	L _w [dB]							Sound pressure level L _{wa}
[m³/h]	[Pa]	125	250	500	1 k	2 k	4 k	8 k	63 Hz ... 8 kHz [dB(A)]
245	50	29	32	23	16	14	16	21	27
350	100	34	39	38	23	16	5	0	36 *

Exhaust air

Flow rate	External pressure	L _w [dB]							Sound pressure level L _{WA}
[m³/h]	[Pa]	125	250	500	1 k	2 k	4 k	8 k	63 Hz ... 8 kHz [dB(A)]
245	50	38	34	30	25	25	14	7	32
350	100	49	42	39	33	32	27	17	41

* Additional sound insulation measures are necessary for noise-sensitive rooms.

For external pressure drop, the sound insulation box is not taken into account.

Sound power levels for HomeVent® comfort FRT (451)

Casing

Flow rate SUP/EXT [m³/h]	External pressure [Pa]	L _w [dB]							Sound pressure level L _{WA} 63 Hz ... 8 kHz [dB(A)]
		125	250	500	1 k	2 k	4 k	8 k	
315	50	45	55	47	40	35	22	11	50
450	100	53	53	60	48	43	31	18	57

Fresh air

Flow rate [m³/h]	External pressure [Pa]	L _w [dB]							Sound pressure level L _{WA} 63 Hz ... 8 kHz [dB(A)]
		125	250	500	1 k	2 k	4 k	8 k	
315	50	35	53	49	41	39	29	22	50
450	100	44	49	58	49	46	38	32	57

Supply air

Flow rate [m³/h]	External pressure [Pa]	L _w [dB]							Sound pressure level L _{WA} 63 Hz ... 8 kHz [dB(A)]
		125	250	500	1 k	2 k	4 k	8 k	
315	50	50	56	48	41	37	28	20	52 *
450	100	62	56	60	50	44	37	30	57 *

Extract air

Flow rate [m³/h]	External pressure [Pa]	L _w [dB]							Sound pressure level L _{WA} 63 Hz ... 8 kHz [dB(A)]
		125	250	500	1 k	2 k	4 k	8 k	
315	50	41	47	41	35	30	21	10	43 *
450	100	49	47	48	44	37	29	20	48 *

Exhaust air

Flow rate [m³/h]	External pressure [Pa]	L _w [dB]							Sound pressure level L _{WA} 63 Hz ... 8 kHz [dB(A)]
		125	250	500	1 k	2 k	4 k	8 k	
315	50	49	58	55	53	49	39	30	58
450	100	59	57	75	61	56	48	42	71

* Additional sound insulation measures are necessary for noise-sensitive rooms.

Sound power: HomeVent® comfortFRT (451) + acoustic insulating box FRT
Casing

Flow rate SUP/EXT [m³/h]	External pressure [Pa]	L _w [dB]							Sound pressure level L _{WA} 63 Hz ... 8 kHz [dB(A)]
		125	250	500	1 k	2 k	4 k	8 k	
315	50	46	52	43	37	33	19	8	47
450	100	53	51	56	44	40	28	9	53

Fresh air

Flow rate [m³/h]	External pressure [Pa]	L _w [dB]							Sound pressure level L _{WA} 63 Hz ... 8 kHz [dB(A)]
		125	250	500	1 k	2 k	4 k	8 k	
315	50	34	42	33	25	23	9	2	37
450	100	39	38	48	32	29	20	15	44

Supply air

Flow rate [m³/h]	External pressure [Pa]	L _w [dB]							Sound pressure level L _{WA} 63 Hz ... 8 kHz [dB(A)]
		125	250	500	1 k	2 k	4 k	8 k	
315	50	33	39	28	17	13	11	16	33 *
450	100	48	37	41	26	23	12	5	38 *

Extract air

Flow rate [m³/h]	External pressure [Pa]	L _w [dB]							Sound pressure level L _{WA} 63 Hz ... 8 kHz [dB(A)]
		125	250	500	1 k	2 k	4 k	8 k	
315	50	32	40	27	19	13	1	0	34 *
450	100	39	37	42	28	22	17	16	39 *

Exhaust air

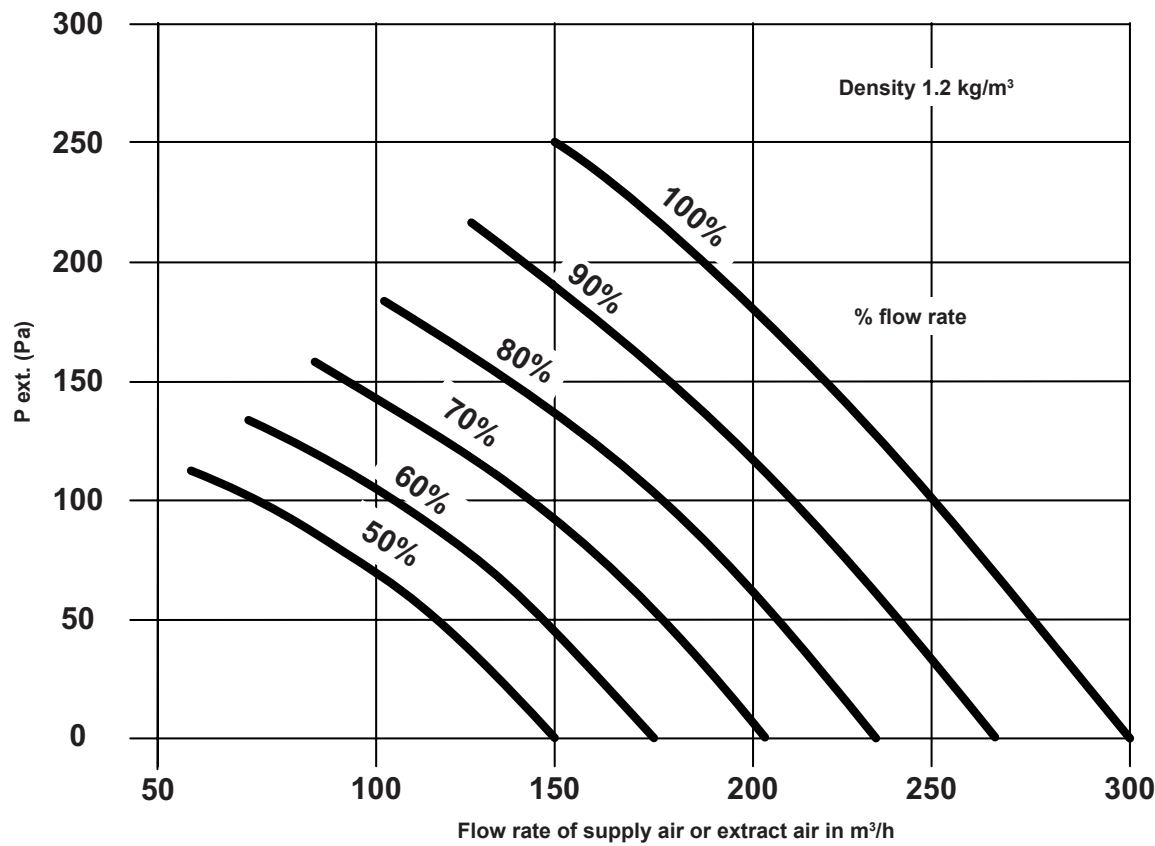
Flow rate [m³/h]	External pressure [Pa]	L _w [dB]							Sound pressure level L _{WA} 63 Hz ... 8 kHz [dB(A)]
		125	250	500	1 k	2 k	4 k	8 k	
315	50	51	43	35	51	30	21	17	40
450	100	58	46	49	38	38	29	25	48

* Additional sound insulation measures are necessary for noise-sensitive rooms.

For external pressure drop, the sound insulation box is not taken into account.

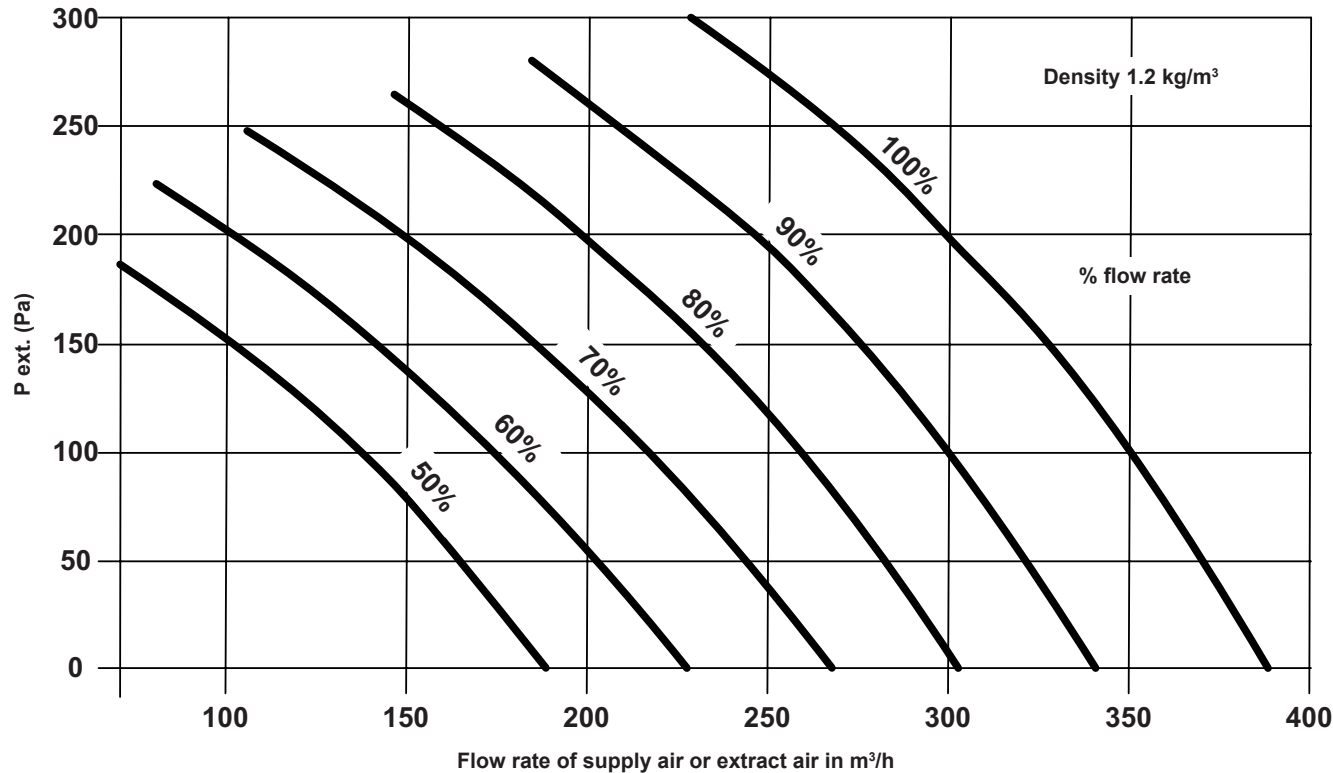
Performance chart for air flow rate, HomeVent® comfort FRT (251)

p_{ext} Sum of external pressure drops

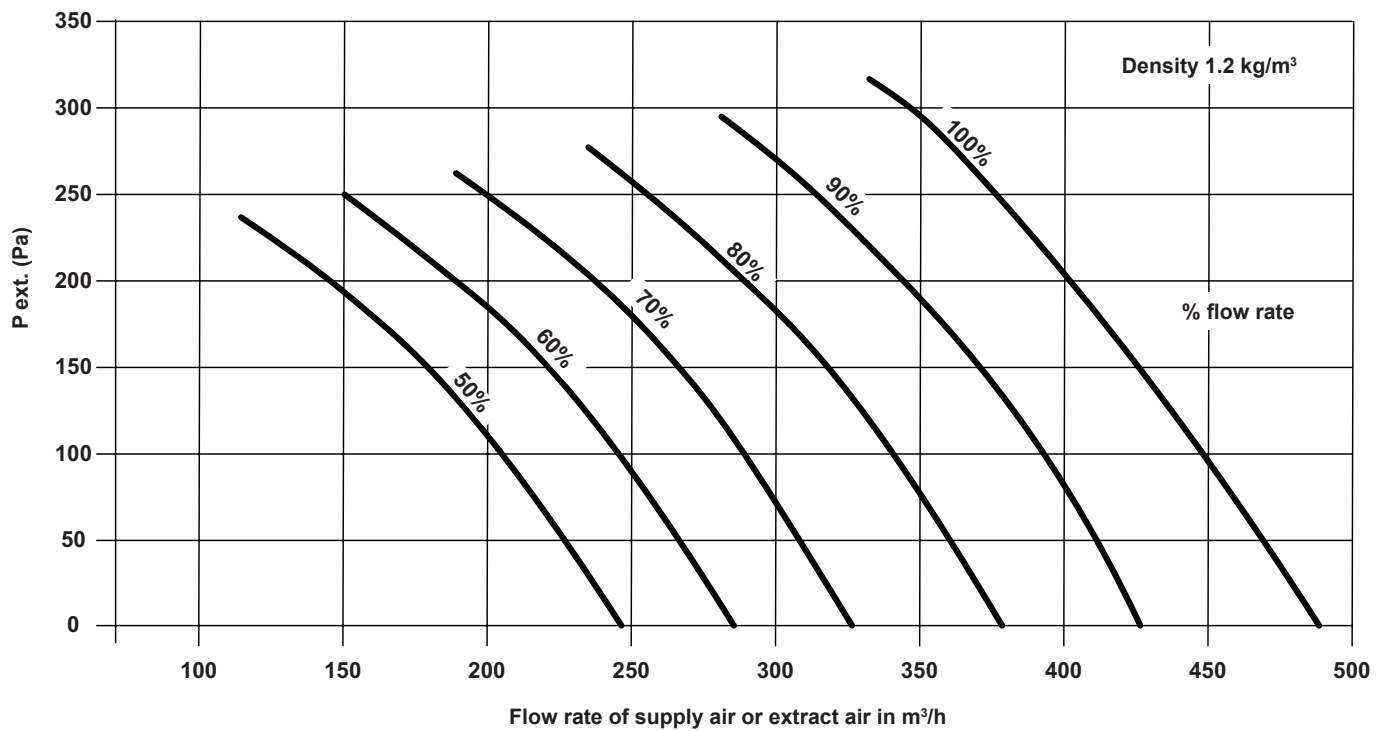


Performance chart for air flow rate, HomeVent® comfort FRT (351)

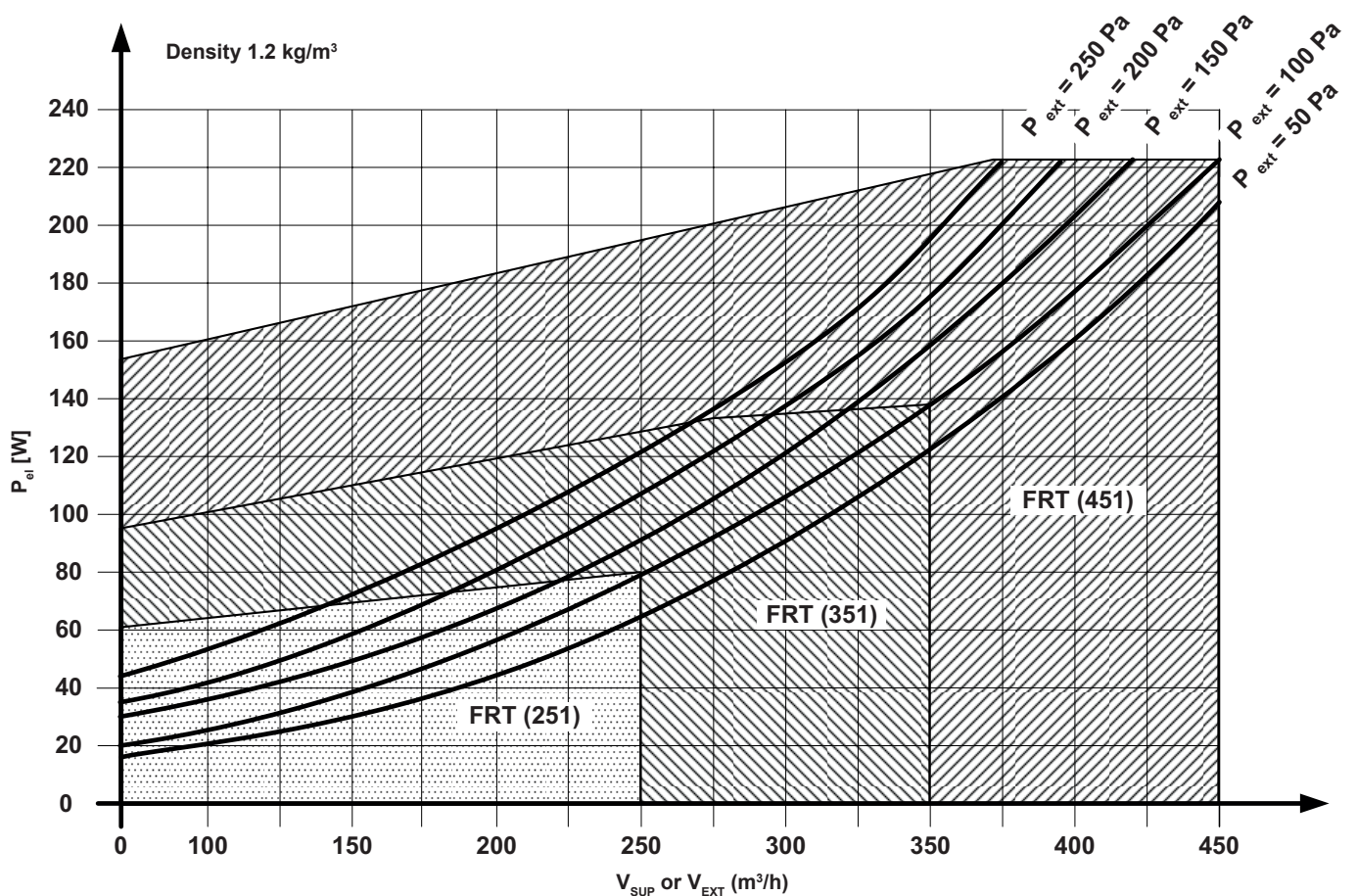
p_{ext} Sum of external pressure drops



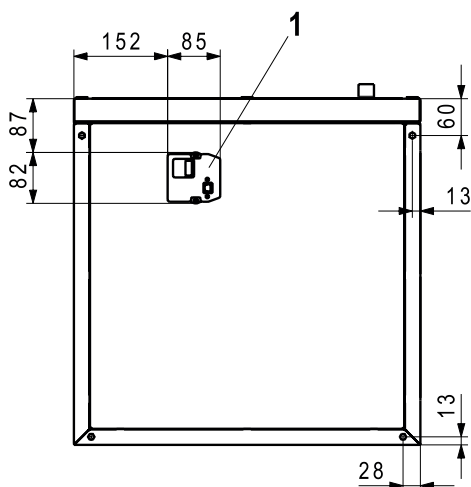
Performance chart for air flow rate, HomeVent® comfort FRT (451)

 p_{ext} Sum of external pressure drops


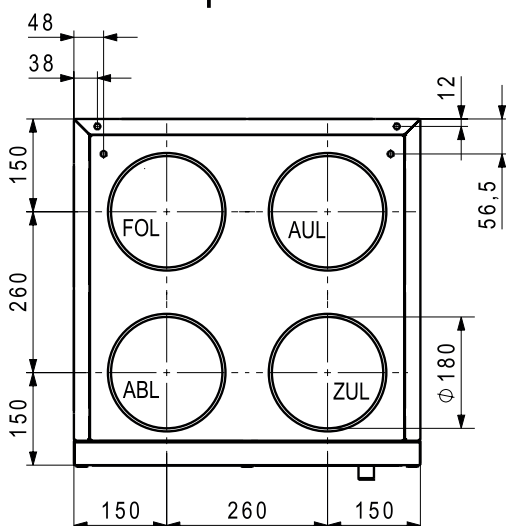
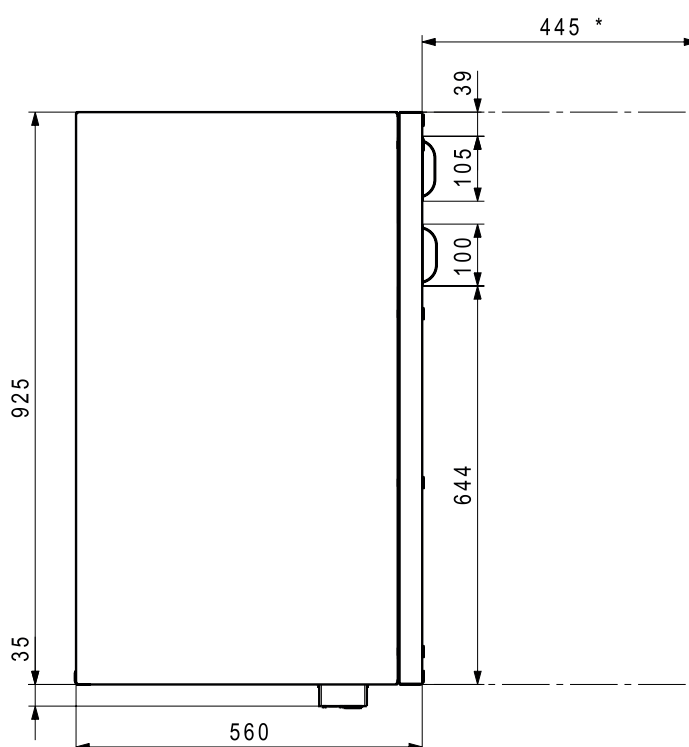
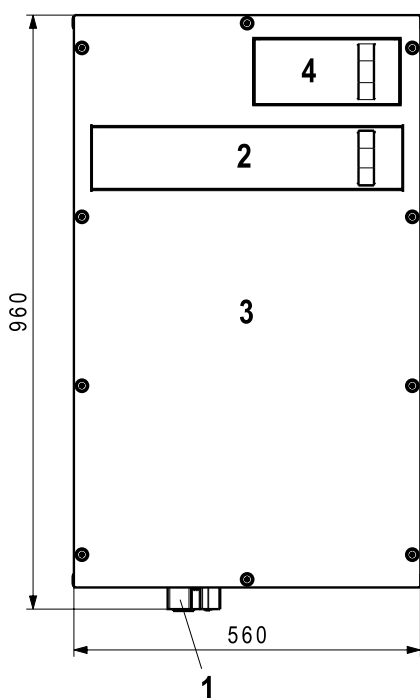
Electrical power consumption HomeVent® comfort FRT (251-451)



HomeVent® comfort ventilation unit



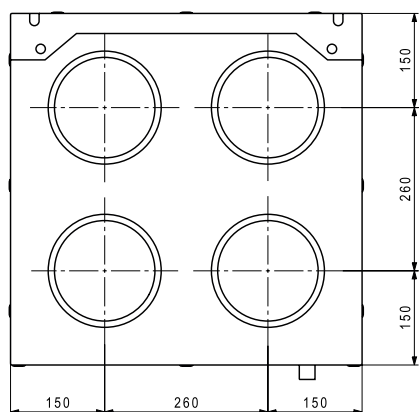
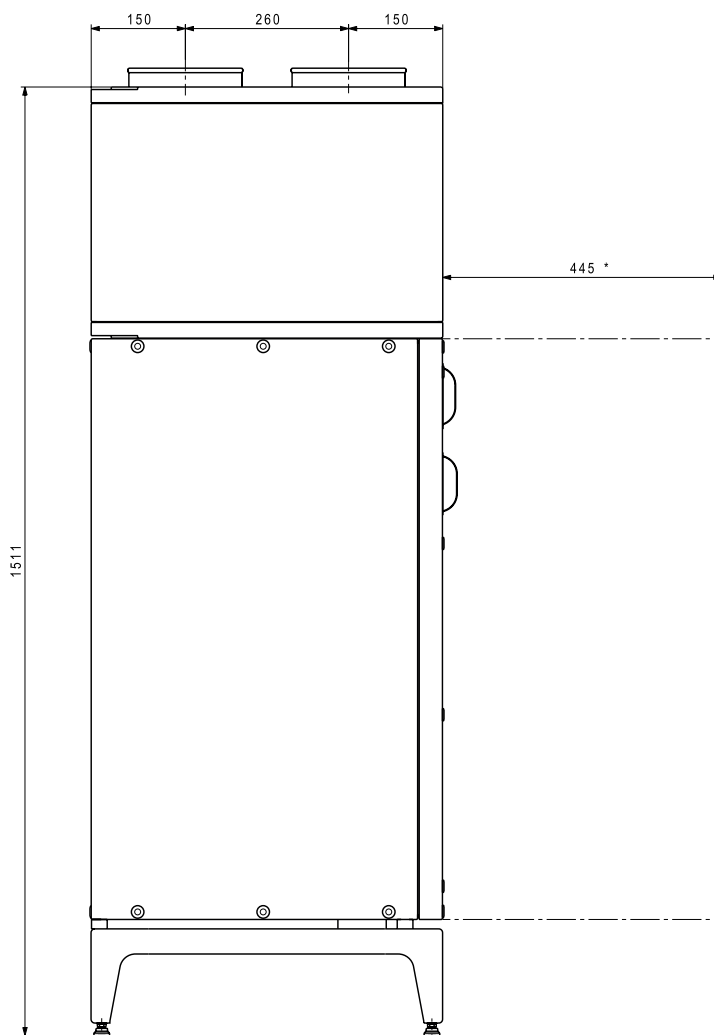
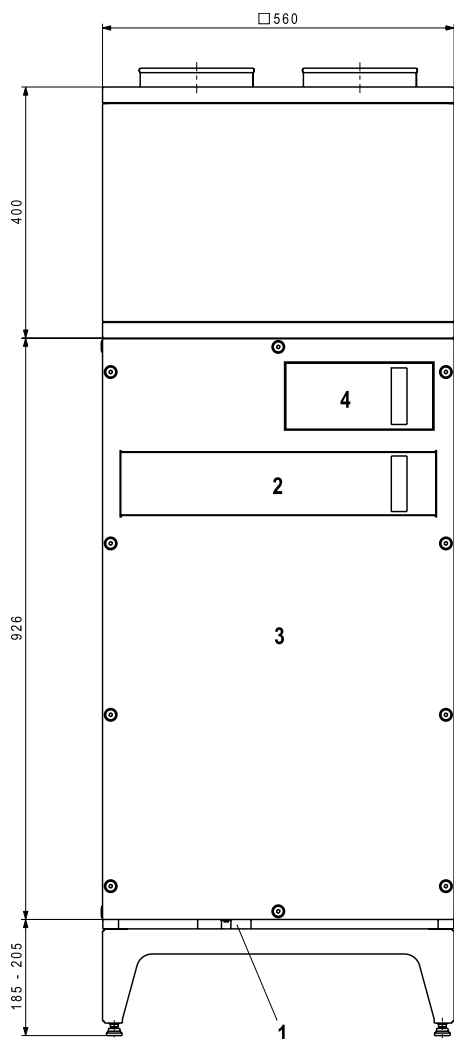
ZUL = supply air
 ABL = extract air
 FOL = exhaust air
 AUL = fresh air



- 1 Electrical connection with microfuse
Space is required for changing the microfuse.
- 2 Filter cover for supply air filter/extract air filter
- 3 Access panel
- 4 Maintenance cover for prefilter

* Space requirements for filter change and service tasks

HomeVent® comfort ventilation unit with acoustic insulating box and base

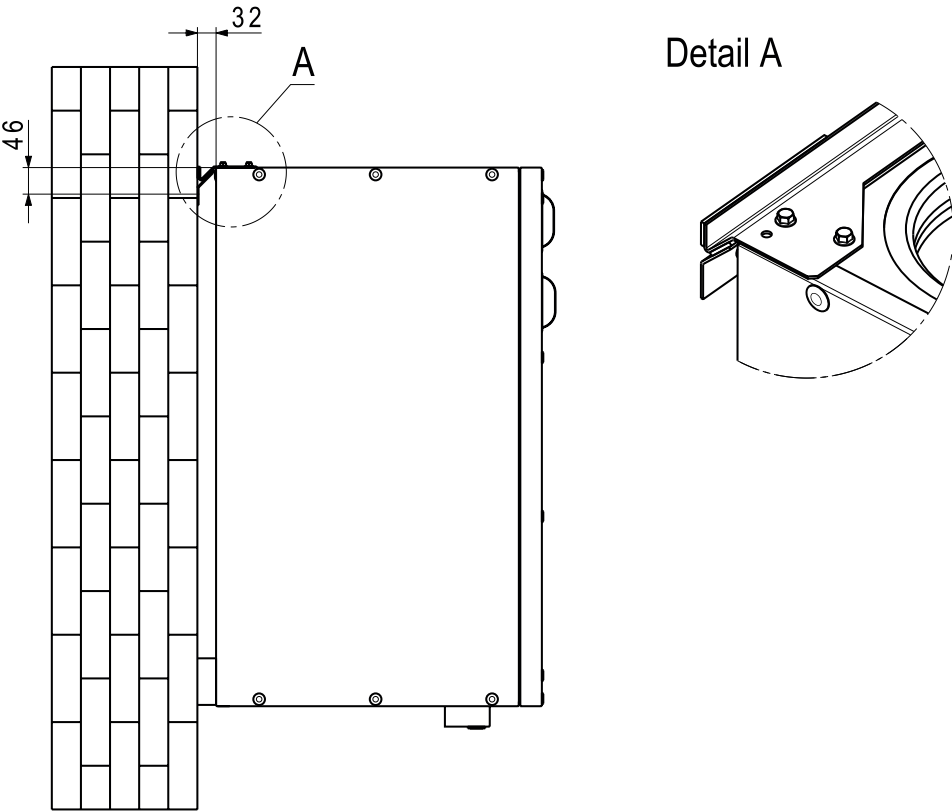


- 1 Electrical connection with microfuse
Space is required for changing the microfuse.
- 2 Filter cover for supply air filter/extract air filter
- 3 Access panel
- 4 Maintenance cover for prefilter

* Space requirements for filter change and service tasks

Space requirements

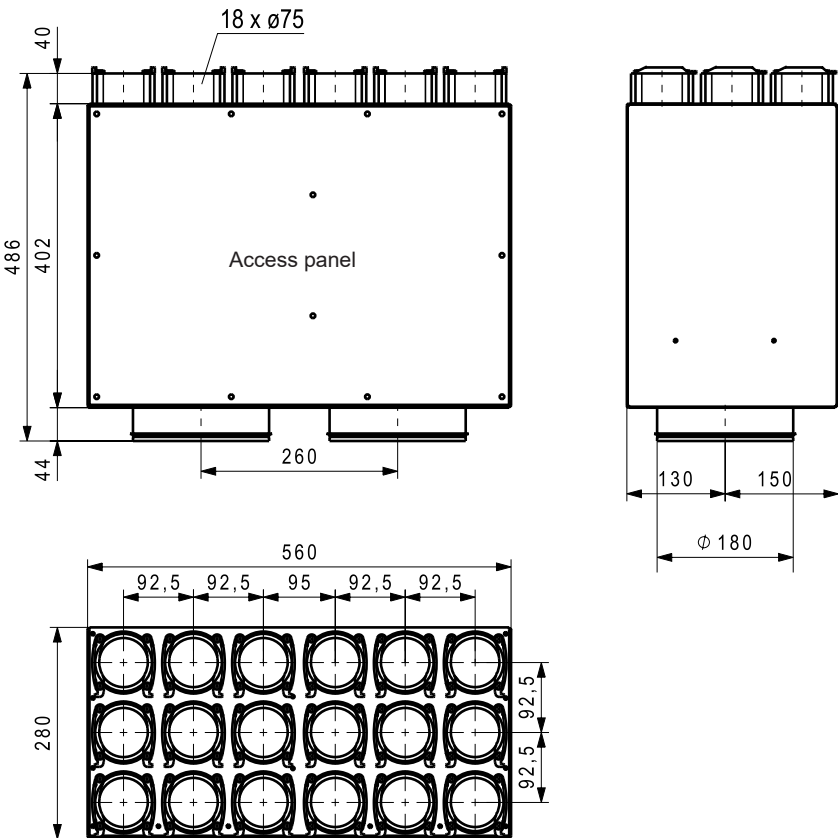
HomeVent® comfort ventilation unit
Installation with installation set



Distribution cases DN 180

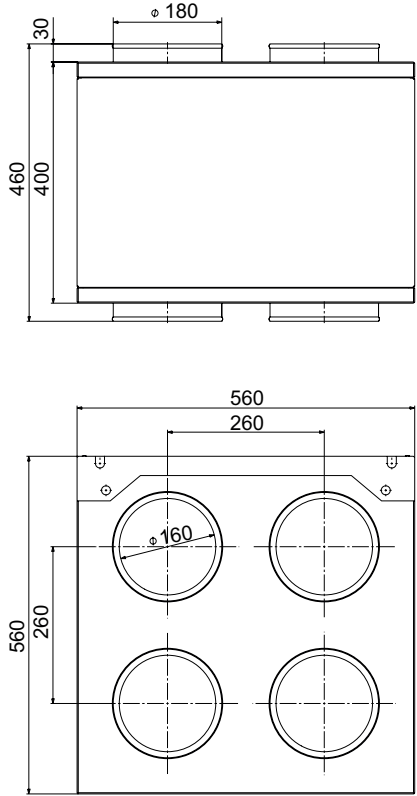
Distribution box VTB-180 18 x 75

for HomeVent® comfort FRT (251).
Casing made from aluzinc sheet with sound insulation element supply air and extract air side, access panel incl. throttle orifices.
Additional silencer recommended.
Connection nozzles:
2 x DN 180
SUP 9 x 75, EXT 9 x 75
Included accessories:
end covers and throttle orifices



Acoustic insulating box FRT

Red casing made of film-coated sheet steel.
All 4 air ducts are sound-insulated.
Connection nozzles:
4 x DN 160



Pressure drop at 100 % air flow rate:
FRT (251) 100 %

Silencer, straight	
ZUL [Δp Pa]	1
AUL [Δp Pa]	0
FOL [Δp Pa]	0
ABL [Δp Pa]	1

FRT (251) 100 %

Silencer, on the left/right	
ZUL [Δp Pa]	14
AUL [Δp Pa]	8
FOL [Δp Pa]	11
ABL [Δp Pa]	10

FRT (351) 100 %

Silencer, straight	
ZUL [Δp Pa]	7
AUL [Δp Pa]	1
FOL [Δp Pa]	2
ABL [Δp Pa]	6

FRT (351) 100 %

Silencer, on the left/right	
ZUL [Δp Pa]	27
AUL [Δp Pa]	26
FOL [Δp Pa]	21
ABL [Δp Pa]	23

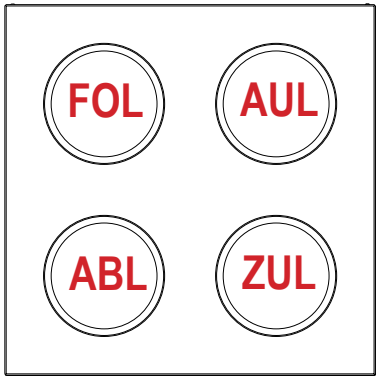
FRT (451) 100 %

Silencer, straight	
ZUL [Δp Pa]	19
AUL [Δp Pa]	4
FOL [Δp Pa]	10
ABL [Δp Pa]	19

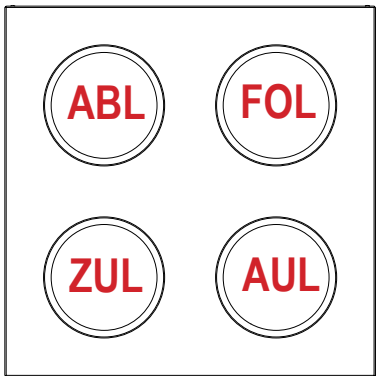
FRT (451) 100 %

Silencer, on the left/right	
ZUL [Δp Pa]	41
AUL [Δp Pa]	35
FOL [Δp Pa]	31
ABL [Δp Pa]	37

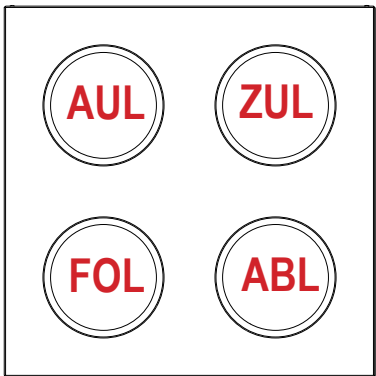
Acoustic insulating box FRT straight



Acoustic insulating box FRT left



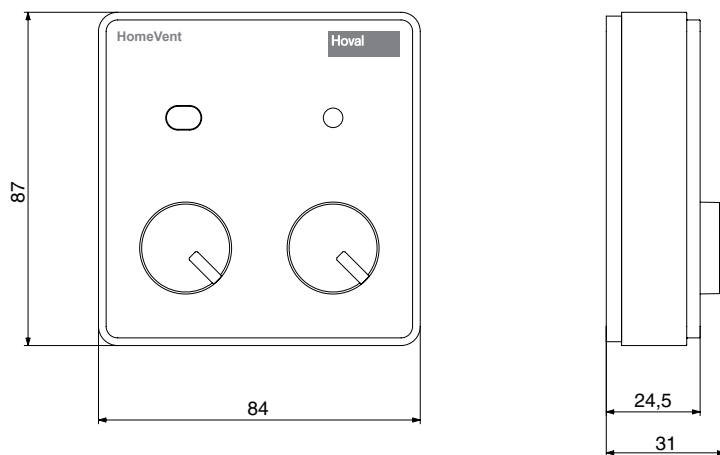
Acoustic insulating box FRT right



FOL = Exhaust air
AUL = Fresh air
ABL = Extract air
ZUL = Supply air

■ **Dimensions**

HomeVent® standard operator terminal BG02 E on-wall



Operator terminals BG02 E

Connection for RJ 45 plug
CAT5 patch (8-pin) connection cable
(parallel, not crossed)

Electrical connection

- Voltage (DC) 24 V

Type of protection IP 20

Application limits

3K3 as per EN 50090-2-2,
residential rooms, office

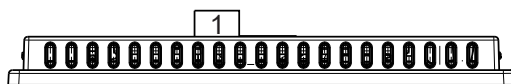
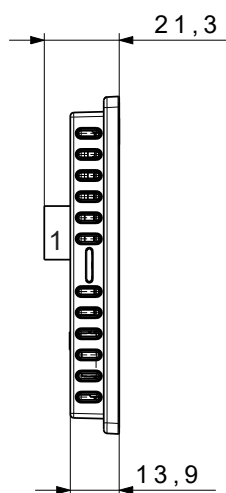
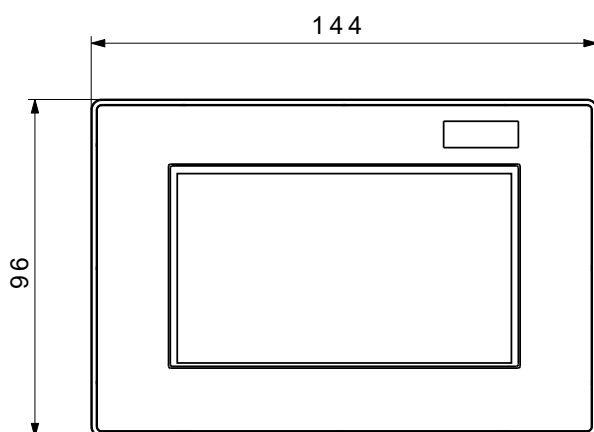
- Temperature range 15...40 °C
- Humidity range 5...85 % r.h.

TopTronic® E Room control module comfort plus

- Colour touchscreen 4.3 inch
- Resolution: 480 x 320
- Connection to the Hoval bus system via RJ45 plug connection or plug terminals (max. 0.75 mm²)
- Voltage: 12 V DC 100 mA
- Humidity (in operation): 20...80 %, non-condensing

■ Dimensions

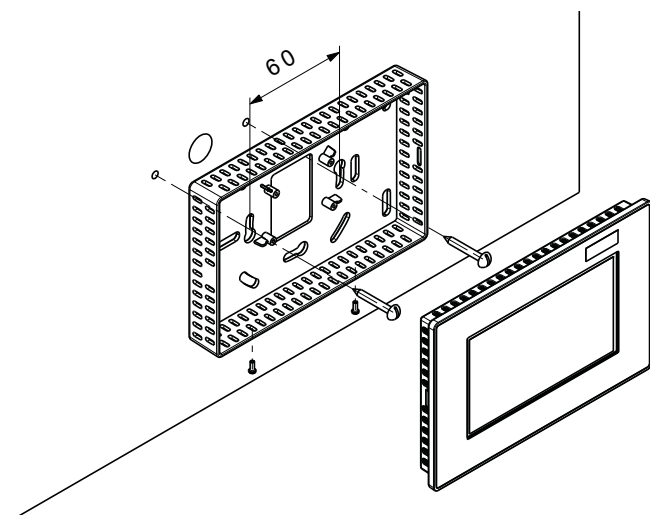
(Dimensions in mm)



1 Removable RJ45 plug connection
Alternative: plug terminal (max. 0.75 mm²)

Wall mounting with surface-mounting frame

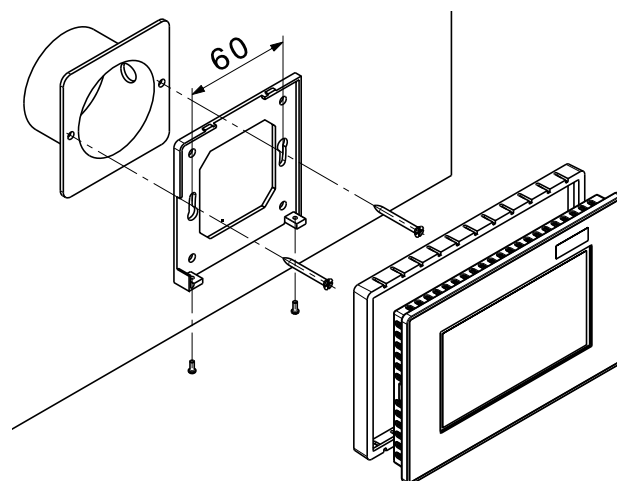
(On-wall mounted frame is included in the scope of delivery)



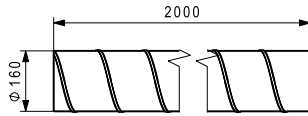
Wall mounting with wall mounting plate

with concealed sockets

(Wall-mounting plate is included in the scope of delivery)

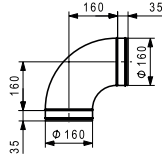


Pipe system DN 160 of sheet steel



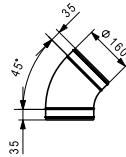
Spiral-seam tube WFR-160
of galvanised sheet steel
DN 160, length: 2 m

2074 487



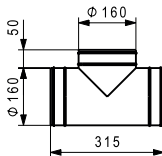
Pipe bend BU-160-90
90° bend of galvanised sheet steel
with double lip seal
DN 160

2074 488



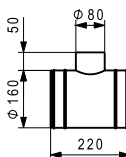
Pipe bend BU-160-45
45° bend of galvanised sheet steel
with double lip seal
DN 160

2074 489



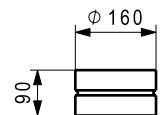
T-piece TCPU-160-160
of galvanised sheet steel
with double lip seal
DN 160/DN 160/DN 160

2074 490



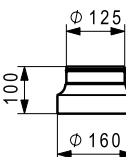
T-piece TCPU-160-80
of galvanised sheet steel
with double lip seal
DN 160/DN 80/DN 160

2074 491



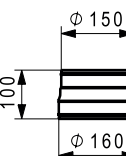
Sleeve MF-160
of galvanised sheet steel
DN 160

2074 492



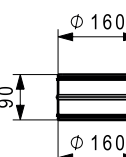
Reduction/extension RCFU-160-125
of galvanised sheet steel
with double lip seal
DN 160 sleeve/DN 125 nipple

2074 493



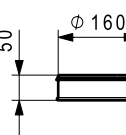
Reduction/extension RCU-160-150
of galvanised sheet steel
with double lip seal
DN 160 nipple/DN 150 nipple

2024 260



Nipple NPU-160
of galvanised sheet steel
with double lip seal
DN 160

2074 504



End cover ED-160
of galvanised sheet steel
with double lip seal
DN 160

2074 505

Part No.

6050 007

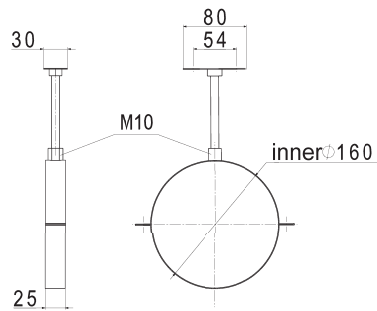
2074 507

2023 561

2023 560

2023 562

2023 563



Pipe clamp ROS-160
of galvanised steel
2-section pipe clamp with insulation
insert, threaded rod 0.2 m and
ground plate.
DN 160

Thermal insulation DN 160



Thermal insulation tube IS 160-25
for spiral-seam tube WFR 160
made of steam-tight EPDM
3 tubes of 2 m each
Insulation thickness: 25 mm



Thermal insulation IB 160-45
for pipe bend BU 160-45
made of steam-tight EPDM
Insulation thickness: 25 mm



Thermal insulation IB 160-90
for pipe bend BU 160-90
made of steam-tight EPDM
Insulation thickness: 25 mm

Caution
Comply with the regional regulations
with regard to thermal insulation.

Accessories DN 160

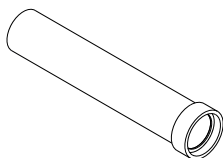


Adhesive IK
for thermal insulation
ready-to-use adhesive with brush
0.25 litre can



Adhesive tape IKB
for thermal insulation made of EPDM
Thickness: 3 mm,
width: 50 mm,
roll: 15 m

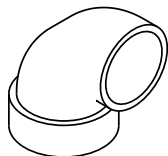
Pipe system DN 160 IsiPipe made of EPP



IsiPipe piping EPP-160-1000

Thermally insulated pipe
Material: EPP, wall thickness 15 mm
Inner Ø 160 mm, length: 1000 mm

2075 571



IsiPipe pipe bend EPP-160-90°

Thermally insulated pipe bend 90°
Material: EPP, wall thickness 15 mm
Inner Ø 160 mm

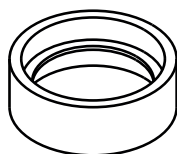
2075 572



IsiPipe pipe bend EPP-160-45°

Thermally insulated pipe bend 45°
Material: EPP, wall thickness 15 mm
Inner Ø 160 mm

2075 573



IsiPipe sleeve EPP-160

Thermally insulated sleeve
Material: EPP, wall thickness 15 mm
length: 80 mm
Inner Ø 160 mm

2075 594

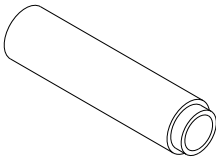


IsiPipe Pipe clamp ROS-X

of galvanised steel
semicircular pipe clamp, cable tie and
hanger bolt M8 60 mm including anchor

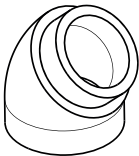
2045 744

Pipe system DN 160 IsiPipe made of EPP



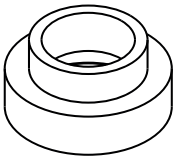
IsiPipe Plus pipeline EPP-160-1000
 Thermally insulated pipe
 Material: EPP, wall thickness 43 mm
 Inner Ø 160 mm, outer Ø 246 mm
 Length: 1000 mm incl. sleeve (60 mm)

2065 110



IsiPipe Plus pipe bend EPP-160-45°
 Thermally insulated pipe bend 45°
 Material: EPP, wall thickness 43 mm
 Inner Ø 160 mm, outer Ø 246 mm

2065 112



IsiPipe Plus sleeve EPP-160
 Thermally insulated sleeve
 Material: EPP, wall thickness 43 mm
 length: 80 mm
 Inner Ø 160 mm, outer Ø 286 mm

2065 124



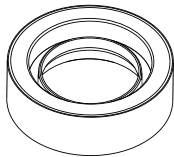
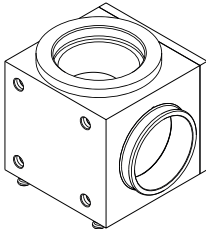
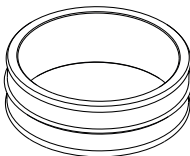
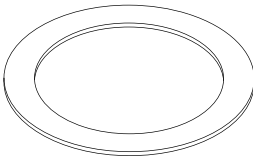
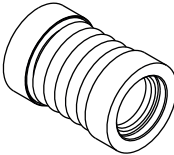
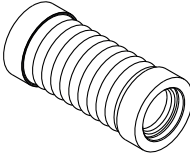
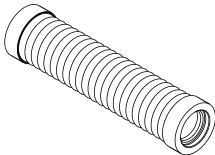
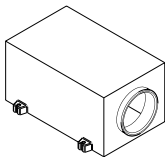
IsiPipe Plus ecc. adapter EPP-160-160
 Thermally insulated ecc. adapter
 Material: EPP, eccentric 38 mm
 length: 250 mm
 Inner Ø 160 mm on IsiPipe Plus 160

2065 127

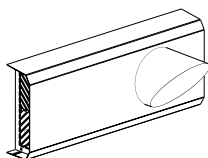


IsiPipe plus Pipe clamp ROS 160-200
 Semi-circular pipe clip from galvanized steel including cable tie.
 Hanger bolt 60 mm including anchor

2069 624

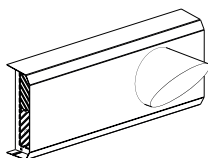
		Part No.
	IsiPipe plus device adapter 160 Thermally insulated connection of the pipes - IsiPipe 160 - IsiPipe Plus 160 to sound insulation boxes FRT 2 pieces	6052 925
	IsiCube Thermally insulated air guide DN 160 + base Material EPP, for outdoor applications Air guide either 90° or straight Including IsiFit and 4 feet Including 4 pins and compensating plate suitable for IsiPipe device adapter 160 Can be combined with themselves 2 pieces are required as base	6054 685
	IsiFit Nipple/nipple made of EPP Inner Ø 160 mm, outer Ø 180 mm Suitable for ER (200-400) and FRT (251-451), IsiCube, IsiPipe device adapter 160, IsiFlex	6054 723
	IsiSeal for a secure and tight connection when using IsiPipe Plus device adapter 160 (2 pieces in package)	6057 485
	IsiFlex 0.3 m Suitable for IsiSystem 160 Acoustically and thermally insulated, flexible connector, material EPP, rockwool, PVC film Length: 0.2-0.3 m	6055 896
	IsiFlex 0.5 m suitable for IsiSystem 160 Acoustically and thermally insulated, flexible connector, material EPP and rockwool Length: 0.25-0.5 m	6055 894
	IsiFlex 1.0 m suitable for IsiSystem 160 Acoustically and thermally insulated, flexible connector, material EPP and rockwool Length: 0.4-1.0 m	6055 877
	IsiSound Suitable for IsiSystem 160 Thermally insulated silencer insensitive to moisture, material EPP	6056 360

Accessories DN 160



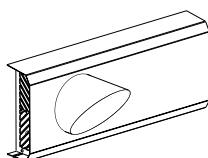
Wall outlet Ø 160 exhaust air on right
made of galvanised sheet metal

6052 505



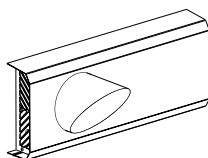
**Wall outlet white Ø 160
exhaust air on right**
made of galvanised sheet metal
white coated (RAL 9016)

6052 504



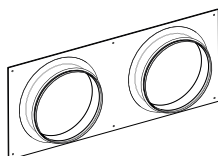
Wall outlet Ø 160 exhaust air on left
made of galvanised sheet metal

6052 507



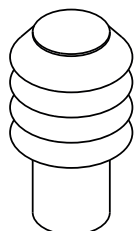
**Wall outlet white Ø 160
exhaust air on left**
made of galvanised sheet metal
white coated (RAL 9016)

6052 506



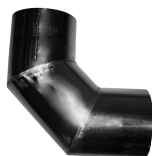
Plywood for wall outlet Ø 160
suitable for wall passage, for Ø 160

6052 517



Stainless steel cowl AAS-150
for spiral-seam tube DN 150,
galvanic isolation of the connection
for outside and exhaust air
of stainless steel, lamella cowl,
1 pipe DN 150, length = 0.5 m,
2 pipes DN 150, length = 1 m
and 2 wall mountings

6010 185



**Stainless steel segment pipe bend
CRB-150-90**
for spiral-seam tube DN 150,
galvanic isolation of the connection
90° bend of stainless steel
DN 150

2040 722



Cold-shrink tape
for sealing air ducts,
heat and cold resistant
width: 50 mm,
roll: 15 m

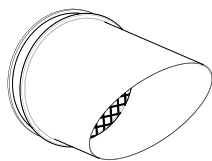
2021 796



Ventilation silicone
for sealing air ducts,
heat and cold resistant
odourless

3000 009

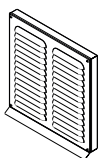
Accessories DN 160



Exhaust air nozzle FST-160

for spiral-seam tube DN 160
of galvanised sheet steel
with bird protection grille and
double lip seal
for horizontal installation

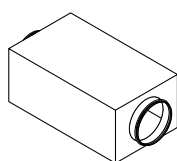
2070 412



Weatherproof grille WG-160

for spiral-seam tube DN 160
for outside and exhaust air
of aluminium with rain lug, can be
painted
with double lip seal,
pipe nozzle DN 160

2074 510



Sound absorber SD-160-500

for spiral-seam tube DN 160
rectangular casing
of galvanised sheet steel,
with double lip seal
DN 160, dimensions: 290 x 215 mm,
Length: 0.5 m

2074 514

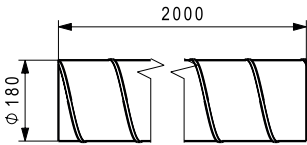


Shut-off damper DTU-160

for spiral-seam tube DN 160
sealed shut-off damper
for manual operation
of galvanised steel sheet
DN 160

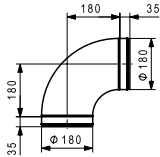
2074 513

Pipe system DN 180



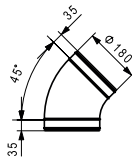
Spiral-seam tube WFR-180
of galvanised sheet steel
DN 180, length: 2 m

2057 030



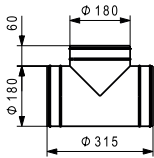
Pipe bend BU-180-90
90° bend of galvanised sheet steel
with double lip seal
DN 180

2057 047



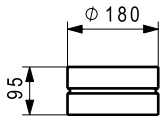
Pipe bend BU-180-45
45° bend of galvanised sheet steel
with double lip seal
DN 180

2057 048



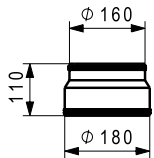
T-piece TCPU-180-180-180
of galvanised sheet steel
with double lip seal
DN 180/DN 180/DN 180

2057 049



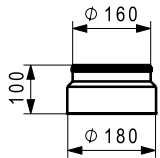
Sleeve MF-180
of galvanised sheet steel
DN 180

2057 051



Reduction/extension RCU-180-160
made of galvanised sheet steel
with double lip seal
DN 180 nipple/DN 160 nipple

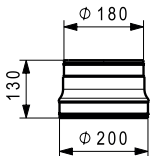
2070 976



Reduction/extension RCFU-180-160
made of galvanised sheet steel
with double lip seal
DN 180 sleeve/DN 160 nipple

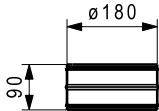
2070 975

Pipe system DN 180



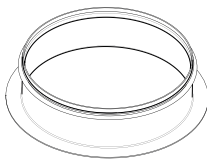
Reduction/extension RCU-200-180
 of galvanised sheet steel
 with double lip seal
 DN 200 nipple/DN 180 nipple

2057 053



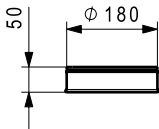
Nipple NPU-180
 of galvanised sheet steel
 with double lip seal
 DN 180

2057 064



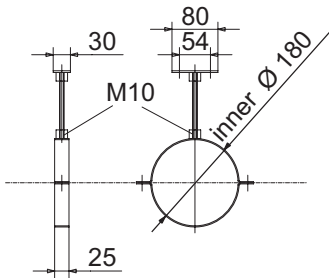
Spigot ILX Ø 180 x 40 mm
 with double lip seal

2070 895



End cover ED-180
 of galvanised sheet steel
 with double lip seal
 DN 180

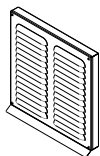
2057 065



Pipe clamp ROS-180
 of galvanised sheet steel
 2-section pipe clamp with insulation
 insert, threaded rod 0.2 m and
 ground plate.
 DN 180

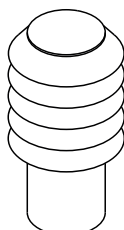
6034 767

Accessories DN 180



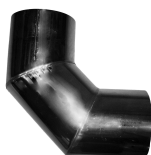
Weatherproof grille WG-180
for spiral-seam tube DN 180
for outside and exhaust air
of aluminium with rain lug, can be
painted, with double lip seal

2057 068



Fresh air suction set AAS-180
for spiral-seam tube DN 180
galvanic isolation of the connection
for outside and exhaust air
of stainless steel, lamella cowl,
1 tube DN 180, length: 0.5 m,
2 tubes DN 180, length: 1 m and
2 wall fastenings

6034 766



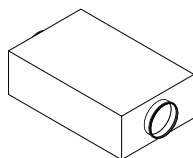
Stainless steel pipe bend CRB-180-90
for spiral-seam tube DN 180,
galvanic isolation of the connection
90° bend of stainless steel

2057 066



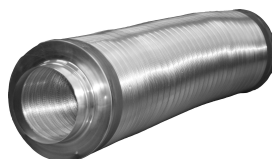
Exhaust air nozzle FST-180
for spiral-seam tube DN 180
of galvanised sheet steel
with bird protection grille
for horizontal installation

2057 069



Silencer FSR-180-750
for spiral-seam tube DN 180
rectangular casing made of galvanised
sheet steel,
with double lip seal, DN 180,
Dimensions: 480 x 250 mm, length: 0.75 m

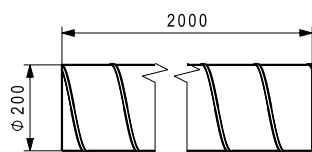
2057 874



Silencer FLSDA-180-1000
for spiral-seam tube DN 180
Silencer outside manufactured from
flexible aluminium envelope tube,
inside from perforated aluminium tube,
with double lip seal, DN 180,
packing thickness 50 mm, length: 1 m

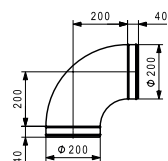
2057 875

Pipe system DN 200



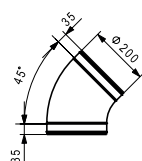
Spiral-seam tube WFR-200
of galvanised sheet steel
DN 200, length: 2 m

2045 707



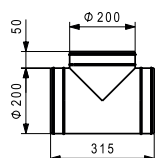
Pipe bend BU-200-90
90° bend of galvanised sheet steel
with double lip seal
DN 200

2040 734



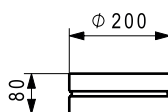
Pipe bend BU-200-45
45° bend of galvanised sheet steel
with double lip seal
DN 200

2040 735



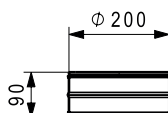
T-piece TCPU-200-200
of galvanised sheet steel
with double lip seal
DN 200/DN 200/DN 200

2040 736



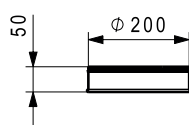
Sleeve MF-200
of galvanised sheet steel
DN 200

2040 737



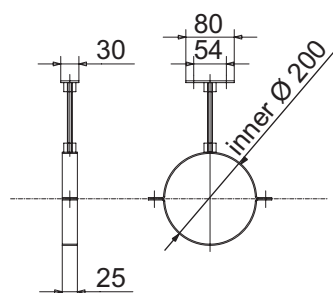
Nipple NPU-200
of galvanised sheet steel
with double lip seal
DN 200

2040 739



End cover ED-200
of galvanised sheet steel
with double lip seal
DN 200

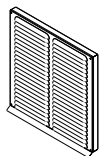
2040 740



Pipe clamp ROS-200
of galvanised steel
2-section pipe clamp with insulation
insert, threaded rod 0.2 m and
ground plate.
DN 200

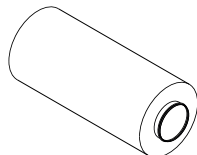
6025 970

Accessories DN 200



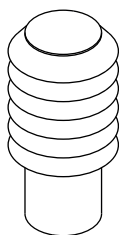
Weatherproof grille WG-200
for spiral-seam tube DN 200
for outside and exhaust air
of aluminium with rain lug, can be
painted
with double lip seal

2040 742



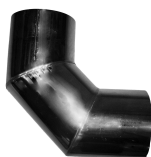
Silencer SD-200-1000
for spiral-seam tube DN 200
round casing of galvanised sheet steel,
with double lip seal,
DN 200, outer diameter: 400 mm,
length: 0.9 m

2040 743



Stainless steel cowl AAS-200
for spiral-seam tube DN 200,
galvanic isolation of the connection
for outside and exhaust air
of stainless steel, lamella cowl,
1 pipe DN 200, length: 0.5 m,
2 pipes DN 200, length: 1 m and
2 wall mountings

6031 914



**Stainless steel segment pipe bend
CRB-200-90**
for spiral-seam tube DN 200,
galvanic isolation of the connection
90° bend of stainless steel

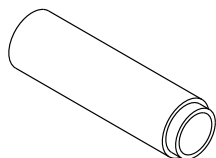
2054 221



Exhaust air nozzle FST-200
for spiral-seam tube DN 200
of galvanised sheet steel
with bird protection grille
for horizontal installation

2054 220

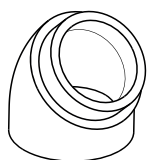
IsiPipe Plus Pipe system EPP DN 200



IsiPipe Plus pipeline EPP-200-1000

Thermally insulated pipe
Material: EPP, wall thickness 43 mm
Inner Ø 200 mm, outer Ø 286 mm
Length: 1000 mm incl. sleeve (60 mm)

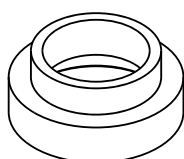
2065 111



IsiPipe Plus pipe bend EPP-200-45°

Thermally insulated pipe bend 45°
Material: EPP, wall thickness 43 mm
Inner Ø 200 mm, outer Ø 286 mm

2065 113



IsiPipe Plus sleeve EPP-200

Thermally insulated sleeve
Material: EPP, wall thickness 43 mm
length: 80 mm
Inner Ø 200 mm, outer Ø 326 mm

2065 125



IsiPipe Plus ecc. adapter EPP-180-200

Thermally insulated ecc. adapter
Material: EPP, eccentric 48 mm,
length: 250 mm
Inner Ø 180 mm on IsiPipe Plus 200

2065 128

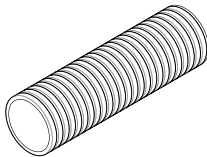


IsiPipe plus Pipe clamp ROS 160-200

Semi-circular pipe clip from galvanized
steel including cable tie.
Hanger bolt 60 mm including anchor

2069 624

Flex pipe system DN 75



Flexible pipe 75
of polyethylene PE-HD
DN 75, inner Ø 62 mm, roller: 50 m
smooth inner/ribbed outer surface,
antistatic coating

Part No.

2072 166

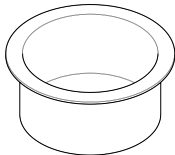
Flexible pipe package 75
of polyethylene PE-HD
DN 75, inner Ø 62 mm,
6 rolls of 50 m, smooth inner/ribbed
outer surface, antistatic coating
Flexible pipe packages are excluded
from return.

6050 103



Sealing ring DI-75 black
for flexible pipe DN 75

2016 227

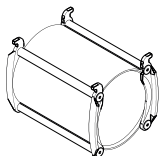


Stopper 75
For flexible pipe flex 75
Sealing plug

2072 168

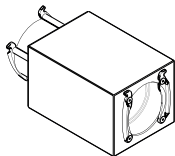
Accessories DN 75

Order the sealing rings for the accessories separately. For quick and simple installation, all accessories are equipped with snap-on clip for attachment of the flexible pipe.



Double sleeve DM-75
for flexible pipe DN 75
for connecting flexible pipes DN 75

6022 896



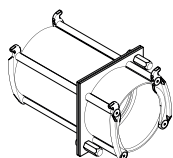
Helmholtz silencer HSD-75
for flexible pipe DN 75
for acoustically sensitive rooms
attenuates low frequencies (500 Hz)
DN 75

6020 756

Accessories DN 75

Part No.

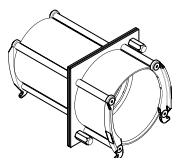
Order the sealing rings for the accessories separately. For quick and simple installation, all accessories are equipped with snap-on clip for attachment of the flexible pipe.



Formwork coupling SK-75

for flexible pipe DN 75 for extending a flexible pipe through the ceiling or the floor without damaging the boarding

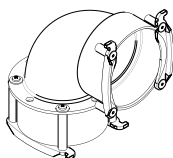
6013 047



Formwork coupling SK-75/90

for flexible pipe DN 75 and 90 for extending a flexible pipe through the ceiling or the floor and extension from DN 75 to DN 90 without damaging the boarding.

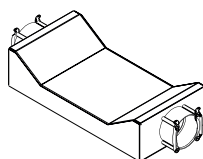
6030 820



Pipe bend RB-75

for flexible pipe DN 75 for connecting flexible pipes at an angle of 90°

6022 967



Flexible pipe crossing FRK-75

for flexible pipe DN 75 for crossing two flexible pipes DN 75 with reduced construction height (100 mm). For one crossing 2 pieces are necessary.

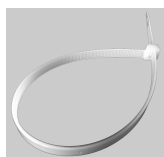
6031 011



Cable tie: 4.8 x 302 mm

As additional protection of the snap clip of the accessories for flex pipe with increased load.
100 pcs./package
Colour: natural

2057 027



Cable tie: 7.6 x 370 mm

For attaching flex pipes to the reinforcement.
100 pcs./package
Colour: natural

2057 028

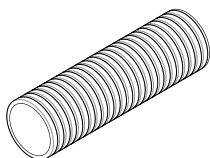


Cable tie: 9.0 x 610 mm

For attaching flex pipes to the reinforcement.
50 pcs./package
Colour: natural

2057 029

Flex pipe system DN 90



Flexible pipe 90

of polyethylene PE-HD
DN 90, inner Ø: 75 mm, roller: 50 m
smooth inner/ribbed outer surface,
antistatic coating

2072 167

Flexible pipe package 90

of polyethylene PE-HD
DN 90, inner Ø: 75 mm,
4 rolls of 50 m, smooth inner/ribbed
outer surface, antistatic coating
Flexible pipe packages are excluded
from return.

6050 104

Sealing ring DI-90 black

for flexible pipe DN 90

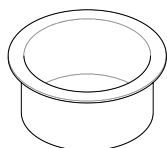
5031 311



Stopper 90

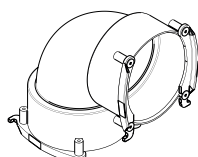
For flexible pipe flex 90
Sealing plug

2072 169



Accessories DN 90

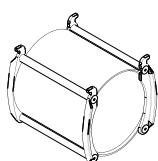
Order the sealing rings for the accessories separately. For quick and simple installation, all accessories are equipped with snap-on clip for attachment of the flexible pipe.



Pipe elbow RB-90/90°

for flexible pipe DN 90
for connecting flexible pipes
at an angle of 90°

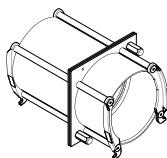
6043 275



Double sleeve DM-90

for flexible pipe DN 90
for connecting flexible pipes

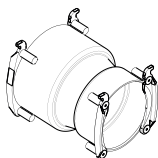
6022 494



Formwork coupling SK-90

for flexible pipe DN 90 for extending a
flexible pipe through the ceiling or the
floor without damaging the boarding

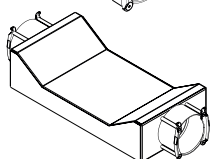
6022 495



Reduction/extension RCFU-90-75

for connecting flexible pipe DN 90 with
flexible pipe DN 75
of plastic

6022 514



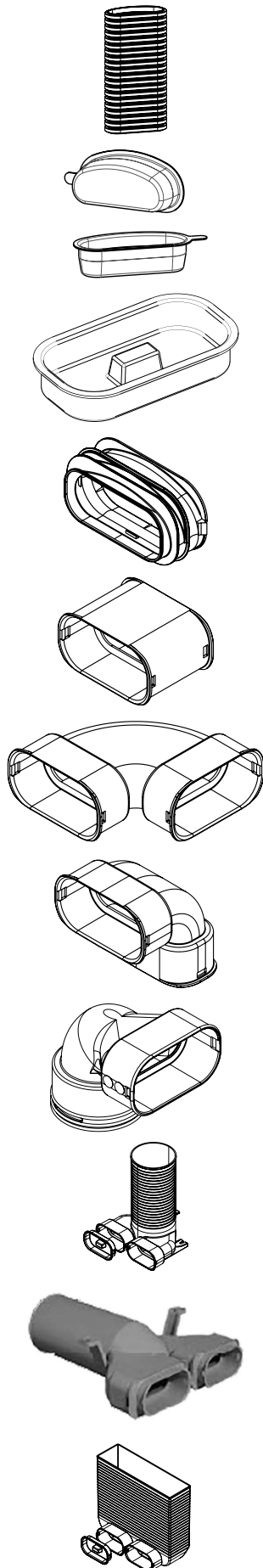
Flexible pipe crossing FRK-90

for flexible pipe DN 90
for crossing two flexible pipes DN 90
with reduced construction height
(100 mm).
For one crossing 2 pieces are necessary.

6031 012

Cable ties can be found under
"Flexible pipe DN 75".

Flat channel system DN 100


Flat channel 100

Flexible ventilation pipe 102 x 49 mm
Roll length 50 m

Stopper flat channel 100

for flat channel 100
Sealing plug for building protection

Stopper flat 100

for flat channel system 100 for sealing
unnecessary connections for outlet
round side 90° 125-2 x 100, outlet
round front 125-2 x 100 and
floor exhaust flat 2 x 100

Seal flat 100

for flat channel 100

Sleeve 100

for flat channel 100

Arch horizontal flat 100

for flat channel 100

Arch vertical flat 100

for flat channel 100

Arch vertical flat to round 100-75

Transition 90° round to flat

Outlet round, lateral 90° 125-2 x 100

for flat channel 100
incl. mounting bracket, 1 stopper 100
for poppet valve DN 125
supply air 40 m³/h
extract air 50 m³/h

Outlet round, front 125-2 x 100

for flat channel 100
incl. mounting bracket, 1 stopper 100
for poppet valve DN 125
supply air 40 m³/h
extract air 50 m³/h

Floor exhaust flat 2 x 100

for floor grille inox and white
309 x 86.5 mm interior
incl. 1 stopper 100
2 flat channel 100 connections

Part No.

2071 003

2072 404

2071 004

2071 005

2071 006

2071 007

2071 008

2071 009

2071 010

2071 011

2071 012

Flat channel system DN 140



Flat channel 140
Flexible ventilation pipe 142 x 49 mm
Roll length 20 m

2071 013



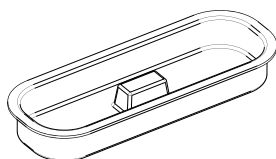
Stopper flat channel 140
for flat channel 140
Sealing plug for building protection

2072 406



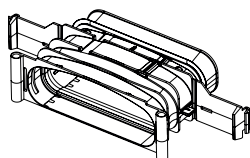
Stopper flat 140
for flat channel system 140

2071 014



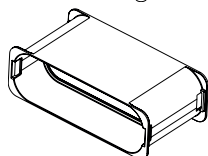
Seal flat 140
for flat channel 140

2071 015



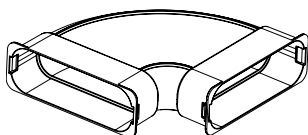
Sleeve 140
for flat channel 140

2071 016



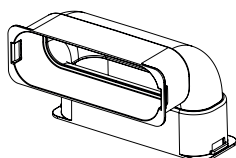
Arch horizontal flat 140
for flat channel 140

2071 017



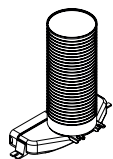
Arch vertical flat 140
for flat channel 140

2071 018



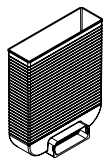
Outlet round, lateral 90° 125-2 x 140
for flat channel 140
incl. mounting bracket, 1 stopper 140
for poppet valve DN 125
supply air 40 m³/h
extract air 50 m³/h

2071 019



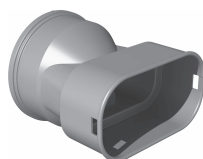
Floor exhaust flat 1 x 140
for floor grille inox and white
309 x 85 mm inside
1 connection flat channel 140

2071 020



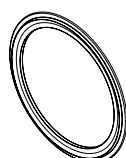
Adapter flat to round 140-90,
made of plastic

2071 001

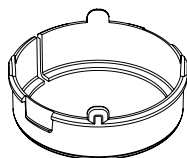


Sealing ring for flexible pipe DN 90
in connection with click ring 90, for
connection of flexible pipe FR-90
to adapter flat to round 140-90

2070 998

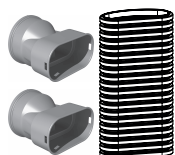


Part No.



Click ring DN 90
for adapter flat to round 140-90
and flexible pipe FR-90

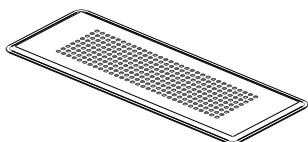
2071 000



Flat channel intersection 140-90
Consisting of:
1 metre flat channel 140
2 adapters flat to round 140-90
2 seals 140
2 click rings DN 90
2 seals 90

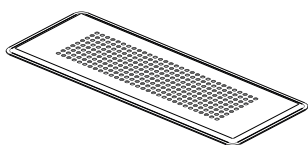
2071 002

System accessories



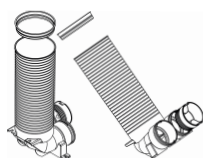
Floor grille Inox
for floor exhaust flat 2 x 100
and 1 x 140
Dimensions: 350 x 130 mm

2070 930



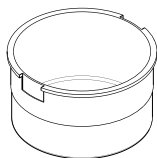
Floor grill, white
for floor exhaust flat 2 x 100
and 1 x 140
Dimensions: 350 x 130 mm

2070 931



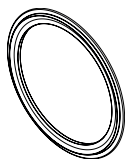
Outlet round 90° lateral 125-2 x 75
made of plastic 2 x 75/125 mm
Usable length 325 mm
incl. 1 stopper 75

2070 997



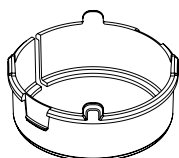
Stopper 75
Sealing plug for sealing
unnecessary connections to
round outlet 90° side 125-2 x 75

2070 932



Sealing ring for flexible pipe DN 75
in connection with click ring 75, for
connection of flexible pipe FR-75
to outlet round 90° side 125-2 x 75
and bend
vertical flat to round 100-75

2070 994

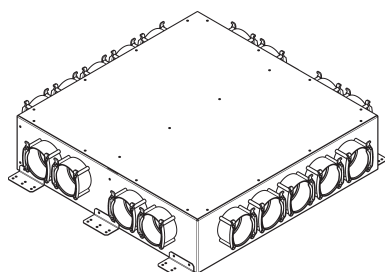


Click ring DN 75
for outlet round 90° side 125-2 x 75
and vertical bend flat to round 100-75
Flexible pipe FR-75
Positive locking, detachable connection
between flexible pipe and
round connection

2070 996

Distribution cases DN 160

Part No.



Application
Preferably concrete installation
(mass concrete)

Distribution box VTB-160 9 x 75

Air distribution box from aluzinc sheet with access panel (can be painted on site). Interior lined with sound insulation material.

Connection nozzle:

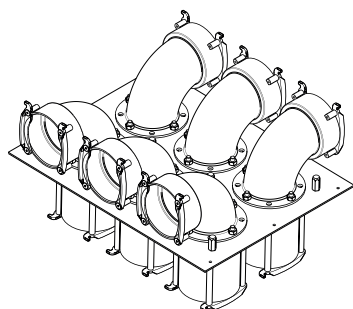
2 x DN 160 (downward)

ZUL 9 x 75 resp. ABL 9 x 75

Consisting of:

Box, 6 connection brackets,
 4 resp. 2 end caps, orifices for
 setting the air quantity per flex
 pipe DN 75.

6054 083



Section distributor SV-6 x 75

for flexible pipe DN 75

for space-saving laying of

6 flexible pipes in the ceiling.

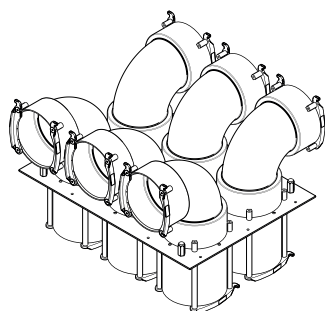
Option of 6 x 90° bends or 3

straight connecting pieces. Each 90°
 elbow can be turned at 45° increments.

6 x DN 75

One section distributor required for
 each supply and exhaust air source.

6042 706



Section distributor SV-6 x 90

for flexible pipes DN 90

for space-saving laying of

6 flexible pipes in the ceiling.

Option of 6 x 90° bends or 3 straight
 connecting pieces. Each 90° elbow can be
 turned at 45° increments. 6 x DN 90

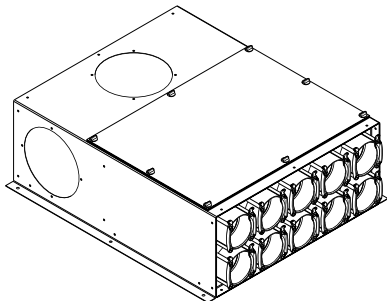
One section distributor required for
 each supply and exhaust air source

6044 775

Distribution cases DN 160

Part No.

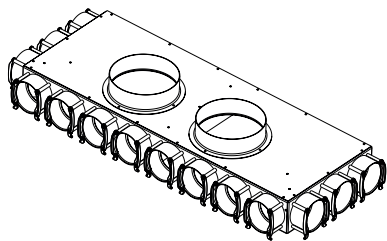
Application
On-wall installation



Distribution case VK
 Casing of aluzinc sheet with 1 connection nozzle Ø 160 mm (included separately), can be mounted on the front, at the top or laterally on the left or on the right (on site) and x connection nozzles for flexible pipe Ø 75 mm. PU sound absorption block inside with washable outer skin and an access panel.
 Incl. throttle orifices

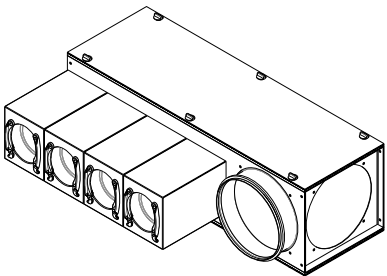
Type	Connections
VK-160 75 x 6	6
VK-160 75 x 8	8
VK-160 75 x 10	10

6054 084
 6054 085
 6054 086



Distribution box VTB-160 14 x 75
 for concrete installation height 91 mm
 Distribution box of aluzinc sheet without access panel.
 Connection nozzles:
 2 x DN 160 supply and extract air
 SUP 7 x DN 75
 (4 x front and 3 x side)
 EXT 7 x DN 75
 (4 x front and 3 x side)

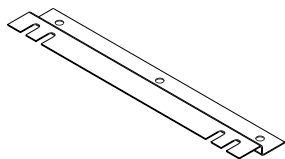
6052 044



Storey distributor GVT-X
 for connecting X flexible tubes Ø 75 mm.
 Casing of galvanised sheet steel with sound absorbing mat, connection possibilities Ø 160 mm, incl. 2 nozzles Ø 160 mm with double lip seal. Flexible installation possible due to access panel on both sides.
 Incl. throttle orifices

Type	Connections
GVT-3	3
GVT-4	4
GVT-5	5
GVT-6	6

6054 087
 6054 088
 6054 089
 6054 090



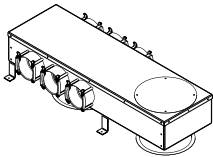
Mounting holder MH
 for storey distributor GVT-X
 from galvanised steel sheet
 Length: 0.3 m
 Two angle rails recommended per storey distributor.

5032 853

Distribution cases DN 160

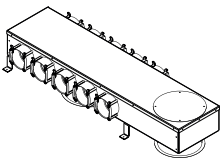
Part No.

Application
 Preferably concrete installation
 (mass concrete)



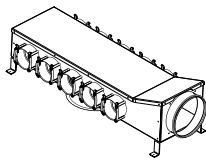
In-wall distribution case UPVK-160 75 x 6
 Distribution case made of aluzinc sheet metal for cementing in. With a sliding connection piece DN 160 and 2 x 3 connections DN 75 (side), incl. 2 end covers, inner lining of sound insulating material, inspection sliding connection piece DN 180
 Incl. throttle orifices

6051 581



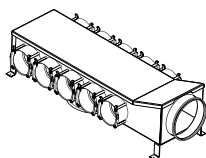
In-wall distribution case UPVK-160 75 x 10
 Distribution case made of aluzinc sheet metal for cementing in. With a sliding connection piece DN 160 and 2 x 5 connections DN 75 (side), incl. 4 end covers, inner lining of sound insulating material, inspection sliding connection piece DN 180
 Incl. throttle orifices

6051 589



In-wall distribution case UPVKS-160 75 x 10
 Distribution case made of aluzinc sheet metal for cementing in. With a connection nozzle DN 160 (end face) and 2 x 5 connections DN 75 (side) incl. 5 end covers, inner lining of sound insulating material, inspection sliding connection piece DN 180
 Incl. throttle orifices

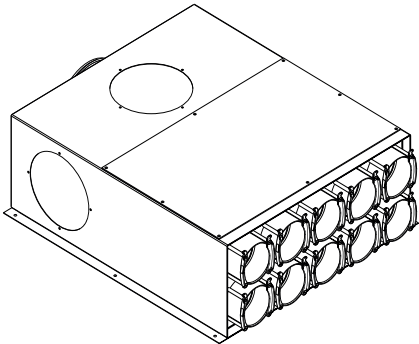
6051 671



In-wall distribution case UPVKS-160 90 x 10
 Distribution case made of aluzinc sheet metal for cementing in. With a connection nozzle DN 160 (end face) and 2 x 5 connections DN 90 (side) incl. 4 end covers, inner lining of sound insulating material, inspection sliding connection piece DN 180
 Incl. throttle orifices

6051 626

Distribution cases DN 180



Application
On-wall installation

Distribution case VK
Casing of aluzinc sheet with 1 connection nozzle Ø 180 mm (supplied loose), on end, top or left-side mounting (on site) and x connection nozzles for flex pipes Ø 75 resp. 90 mm. PU sound absorption block inside with washable outer skin and an access panel.
Incl. throttle orifices

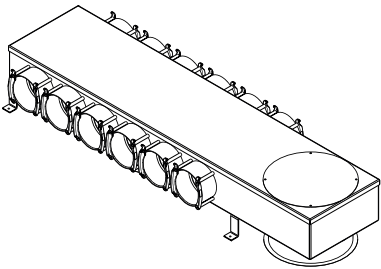
TypeConnections

VK-180 75 x 8	8
VK-180 75 x 10	10
VK-180 75 x 12	12
VK-180 90 x 8	8
VK-180 90 x 10	10
VK-180 90 x 12	12

Part No.

6031 881
6035 673
6035 674
6031 880
6035 675
6035 711

Distribution cases DN 200



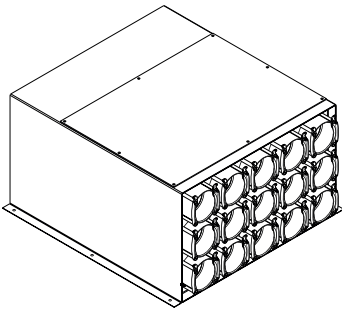
Access panel on bottom

Application
Preferably concrete installation
(mass concrete)

In-wall distribution case UPVK-200 90 x 12
Distribution case made of aluzinc sheet metal for cementing in. With a sliding connection piece DN 200 and 2 x 6 connections DN 90 (side), incl. 6 end covers, inner lining of sound insulating material, inspection sliding connection piece DN 180
Incl. throttle orifices

6051 623

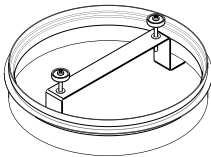
Application
On-wall installation



Distribution case VK-200 75 x 15
Air distribution case of aluzinc sheet with access panel.
Inside with sound insulation element.
Connection nozzles:
1 x DN 200 (on the back)
15 x (3 x 5) DN 75 (on the front)
Incl. throttle orifices

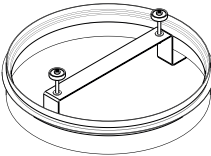
6030 966

Distribution case accessories



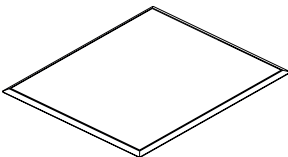
Access panel Ø 180 for UPV
from galvanised sheet incl. 2 magnets

5041 681



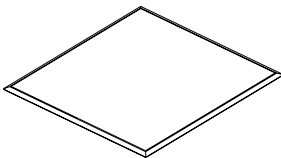
Access panel Ø 200 for UPV
made from galvanised sheet metal
incl. 2 magnets

5041 682



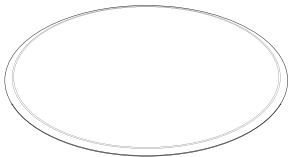
Design cover 220 x 220
suitable for access panel Ø 180
white RAL 9016

5041 683



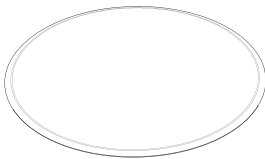
Design cover 240 x 240
suitable for access panel Ø 200
white RAL 9016

5041 684



Design cover Ø 220
suitable for access panel Ø 180
white RAL 9016

5041 685



Design cover Ø 240
suitable for access panel Ø 200
white RAL 9016

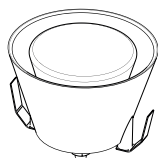
5041 686

Distribution case accessories



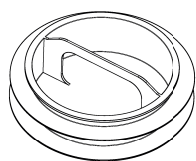
Control damper RK-80
for flexible pipe DN 75
sealing control damper
for adjustment of the air flow.
Of galvanised sheet steel
DN 80

6013 654



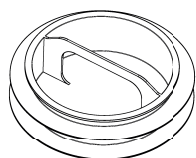
Air flow rate control valve DN 90
for connection housing AG-90, quick 90,
floor passage BD-30-90

2070 534



End cover quick 75
Cover for unused connections
DN 75

5043 525

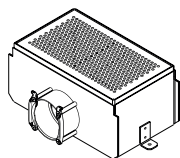


End cover quick 90
Cover for unused connections
DN 90

5043 522

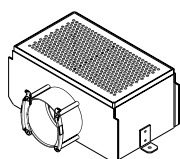
Air grilles - floor

Application
In the floor structure
(finished floor, only supply air)



Floor grille BD-30-75
perforated grille made from stainless
steel in an adjustable casing
Inner component of stainless
steel
Outer component of aluzinc sheet with
2 fastening catches and one connection
nozzle for flexible pipe DN 75
Supply air up to 30 m³/h
Height: 130 to 180 mm

6015 304

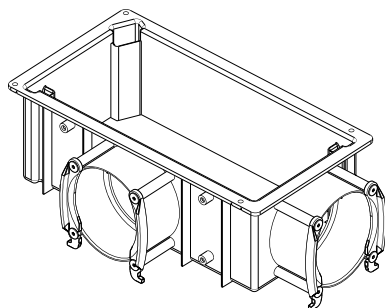


Floor grille BD-30-90
perforated grille made from stainless
steel in an adjustable casing.
Inner component of stainless
steel,
outer component of Al/Zn sheet with
2 fastening catches and one connection
nozzle for flexible pipe DN 90.
Supply air up to 40 m³/h
Height: 130 to 180 mm

6022 513

Air grilles - wall/ceiling

Part No.


Application

Mass concrete, masonry walls and lightweight walls

Connection housing AG-60

for supply and extract air in combination with design grilles. Casing allows precise grille alignment (swivelling) after mounting.

Plastic casing with 2 connection nozzles DN 75, fastening bracket, end cover, sound insulating mat and insert block as building protection cover and plastering aid.

Supply air:

1 x DN 75 up to 30 m³/h

2 x DN 75 for 40 m³/h

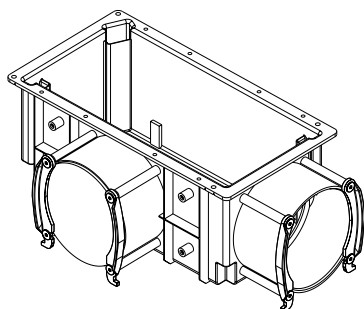
Exhaust air:

1 x DN 75 up to 30 m³/h

2 x DN 75 up to 60 m³/h

For installation in solid concrete, masonry and plasterboard walls.

6034 355


Connection housing AG-90

for supply and extract air in combination with design grilles. Casing allows precise grille alignment (swivelling) after mounting.

Plastic casing with 2 connection nozzles DN 90, fastening bracket, end cover, sound insulating mat and insert block as building protection cover and plastering aid.

Supply air:

1 x DN 90 up to 40 m³/h

Exhaust air:

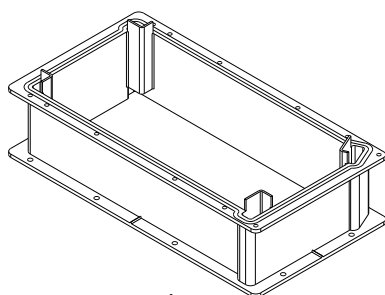
1 x DN 90 up to 60 m³/h

For installation in solid concrete, masonry and plasterboard walls.

6034 357

Application

Mass concrete

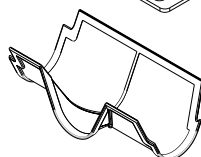

Extension VAG-60/90

for connection housing AG-60 and AG-90 for raising above the lower reinforcement for solid concrete ceilings.

Raising height: 60 mm

Extension permits precise grille alignment after installation.

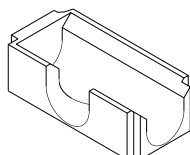
6034 360


Extract air filter AGF-60/90

for connection housing AG-60 and AG-90 of cleanable, fine-mesh polyamide net with plastic frame.

Cannot be combined with sound insulation insert.

5033 121


Sound insulation insert 60/90

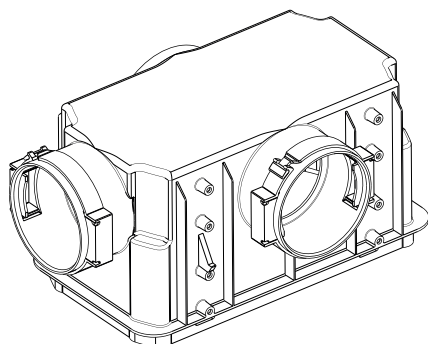
for connection housing AG-60 and AG-90 retrofittable sound insulation insert for acoustically sensitive rooms.

Cannot be combined with extract air filter AGF-60/90.

6034 398

Air grilles - wall/ceiling

Part No.



Application

Mass concrete, filigree blankets

Connection housing quick 75

for supply and extract air in combination with design grilles. Housing allows precise alignment of grilles after mounting. Plastic housing with 2 connection nozzles DN 75. Very easy to mount, no nails in concrete after stripping.

Supply air:

1 x DN 75 up to 30 m³/h

2 x DN 75 up to 40 m³/h

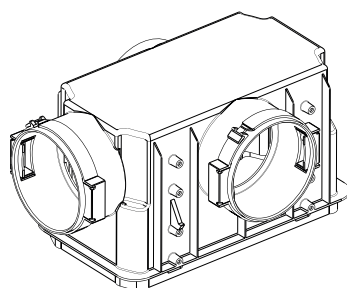
Extract air:

1 x DN 75 up to 30 m³/h

2 x DN 75 up to 60 m³/h

Suitable for installation in solid concrete

6046 302



Connection housing quick 90

for supply and extract air in combination with design grilles. Housing allows precise alignment of grilles after mounting. Plastic housing with 2 connection nozzles DN 90. Very easy to mount, no nails in concrete after stripping.

Supply air:

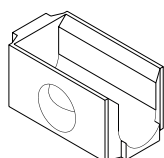
1 x DN 90 up to 40 m³/h

Extract air:

1 x DN 90 up to 60 m³/h

Suitable for installation in solid concrete

6046 296

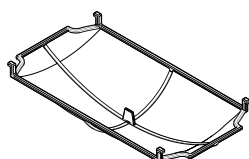


Sound insulation insert quick

for connection housing quick retrofittable sound insulation insert for acoustically sensitive rooms.

Not combinable with extract airfilter quick

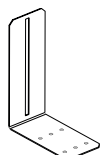
6047 831



Extract air filter quick

for connection housing quick of cleanable, fine-mesh polyamide net with plastic frame. Cannot combine w/sound insulation insert

5045 011



Mounting set quick

Mounting help for connection housing quick with 4 mounting brackets and 8 screws

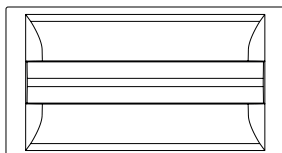
6048 808

Air grilles - wall/ceiling

Part No.

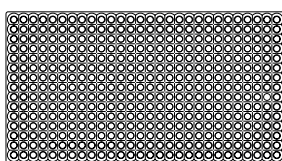
Plastic supply air/extract air grille

The alignment of the grilles can be slightly corrected after installation.


Design grille Pazifik

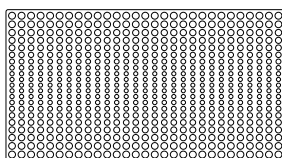
for connection housing AG-60, AG-90 and quick 75/90
made of plastic, with plug connection, white (RAL 9016) stove-enamelled,
Suited for:
supply air up to 40 m³/h
extract air up to 60 m³/h

6046 743


Design grille Adria

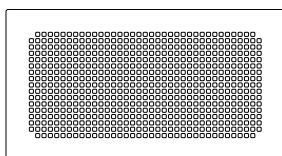
for connection housing AG-60, AG-90 and quick 75/90
made of plastic, with plug connection, white (RAL 9016) stove-enamelled,
Suited for:
supply air up to 40 m³/h
extract air up to 60 m³/h

6046 744


Design grille Atlantik

for connection housing AG-60, AG-90 and quick 75/90
made of plastic, with plug connection, white (RAL 9016) stove-enamelled,
Suited for:
supply air up to 40 m³/h
extract air up to 60 m³/h

6046 745


Design grille Karibik

for connection housing AG-60, AG-90 and quick 75/90
made of plastic, with plug connection, white (RAL 9016), painting on site,
Suitable for:
supply air up to 40 m³/h
extract air up to 60 m³/h

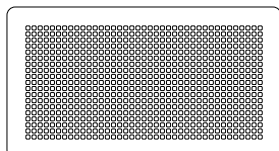
6047 228

Air grilles - wall/ceiling

Part No.

Metal supply air/extract air grille

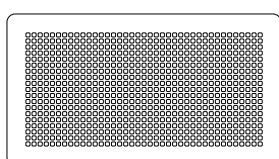
The alignment of the grilles can be slightly corrected after installation.



Design grille Pizol

for connection housing AG-60, AG-90 and quick 75/90
of brushed stainless steel,
with plug connection,
Suited for:
supply air up to 40 m³/h
extract air up to 60 m³/h

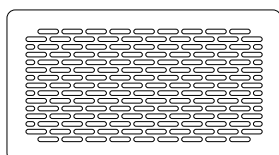
6046 696



Design grille Pizol

for connection housing AG-60, AG-90 and quick 75/90
of sheet steel, with plug connection,
white (RAL 9016) stove-enamelled,
Suited for:
supply air up to 40 m³/h
extract air up to 60 m³/h

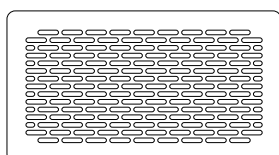
6046 698



Design grille Alvier

for connection housing AG-60, AG-90 and quick 75/90
of brushed stainless steel,
with plug connection,
Suited for:
supply air up to 40 m³/h
extract air up to 60 m³/h

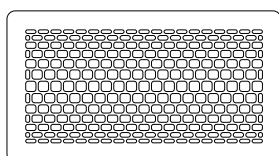
6046 700



Design grille Alvier

for connection housing AG-60, AG-90 and quick 75/90
of sheet steel, with plug connection,
white (RAL 9016) stove-enamelled,
Suited for:
supply air up to 40 m³/h
extract air up to 60 m³/h

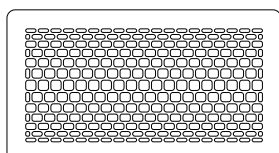
6046 702



Design grille Sântis

for connection housing AG-60, AG-90 and quick 75/90
of brushed stainless steel,
with plug connection,
Suited for:
supply air up to 40 m³/h
extract air up to 60 m³/h

6046 724

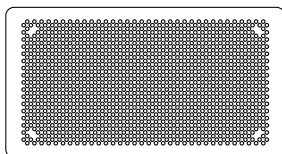


Design grille Sântis

for connection housing AG-60, AG-90 and quick 75/90
of sheet steel, with plug connection,
white (RAL 9016) stove-enamelled,
Suited for:
supply air up to 40 m³/h
extract air up to 60 m³/h

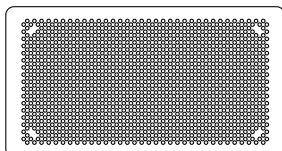
6046 726

Air grilles - wall/ceiling


Design grille Pilatus white

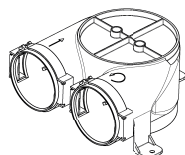
For connection housing
AG-60, AG-90, quick 75 and 90
Aluminium sheet with flanged edges
Painted white (RAL 9016)
With holding fixture
for connection housing
AG-60, AG-90, quick 75 and 90
- Supply air up to 40 m³/h
- Extract air up to 60 m³/h

6054 365


Design grille Pilatus Alu

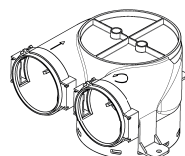
For connection housing
AG-60, AG-90, quick 75 and 90
Aluminium sheet with flanged edges
Surface: anodized brushed aluminium
With holding fixture
for connection housing
AG-60, AG-90, quick 75 and 90
- Supply air up to 40 m³/h
- Extract air up to 60 m³/h

6054 366


Connection cylinder quick 75 short

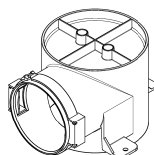
for masonry, lightweight
and wood construction
Plastic casing, two connections DN 75
incl. 1 stopper DN 75
Supply air:
1 x DN 75 up to 30 m³/h
2 x DN 75 up to 40 m³/h
With design grille Tangential 125
only 1 x DN 75
Extract air:
1 x DN 75 up to 30 m³/h
2 x DN 75 up to 60 m³/h

6050 374


Connection cylinder quick 75 medium

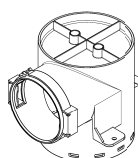
for element ceiling up to 60 mm,
solid concrete
Plastic casing, two connections DN 75
incl. 1 stopper DN 75
Supply air:
1 x DN 75 up to 30 m³/h
2 x DN 75 up to 40 m³/h
With design grille Tangential 125
only 1 x DN 75
Extract air:
1 x DN 75 up to 30 m³/h
2 x DN 75 up to 60 m³/h

6050 375


Connection cylinder quick 90 short

for masonry, lightweight
and wood construction
Plastic casing, with connection DN 90
Supply air:
1 x DN 90 up to 40 m³/h
Extract air:
1 x DN 90 up to 60 m³/h

6050 377

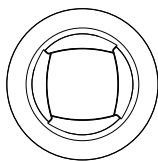

Connection cylinder quick 90 medium

for element ceiling up to 60 mm,
solid concrete
Plastic casing, with connection DN 90
Supply air:
1 x DN 90 up to 40 m³/h
Extract air:
1 x DN 90 up to 60 m³/h

6050 378

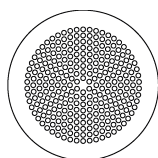
Air grilles - wall/ceiling

Part No.


Design grille Tangential 125

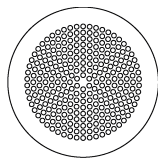
suitable for
connection cylinders quick 75 and 90
made of plastic, with plug-in connection
Colour: white RAL 9016,
can be painted on site
Supply air up to 40 m³/h
Extract air up to 50 m³/h

6052 158


Design grille Falknis painted white

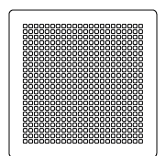
suitable for
connection cylinders quick 75 and 90
Steel, painted white (RAL 9016)
With plug-in connection
Supply air up to 40 m³/h
Extract air up to 50 m³/h

6052 162


Stainless steel design grille Falknis

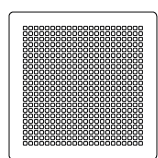
suitable for
connection cylinders quick 75 and 90
Brushed stainless steel
With plug-in connection
Supply air up to 40 m³/h
Extract air up to 50 m³/h

6051 847


Design grille Calanda painted white

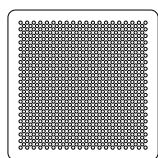
suitable for
connection cylinders quick 75 and 90
Steel, painted white (RAL 9016)
With plug-in connection
Supply air up to 40 m³/h
Extract air up to 50 m³/h

6052 161


Stainless steel design grille Calanda

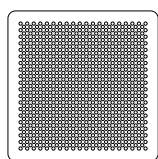
suitable for
connection cylinders quick 75 and 90
Brushed stainless steel
With plug-in connection
Supply air up to 40 m³/h
Extract air up to 50 m³/h

6051 849


Design grille Rigi white

suitable for
connection cylinder quick 75 and 90
Aluminium sheet with flanged edges
Painted white (RAL 9016)
With holding fixture for
connection cylinder quick 75 and 90
- Supply air up to 40 m³/h
- Extract air up to 60 m³/h

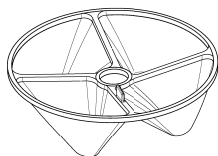
6054 363


Design grille Rigi aluminium

suitable for
connection cylinder quick 75 and 90
Aluminium sheet with flanged edges
Surface: anodized brushed aluminium
With holding fixture for
connection cylinder quick 75 and 90
- Supply air up to 40 m³/h
- Extract air up to 60 m³/h

6054 364

Air grilles - wall/ceiling



Extract air filter 125

for connection cylinder quick 75 and 90
of cleanable, fine-mesh polyamide net
with plastic frame.

5049 629



Disc valve supply air TVZ-125

for connection cylinder quick 75 and 90
of sheet steel (white RAL 9016)
with installation frame DN 125,
height: 45 mm
supply air up to 40 m³/h

2056 417



Disc valve extract air TVA-125

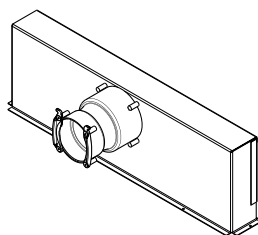
for connection cylinder quick 75 and 90
of sheet steel (white RAL 9016)
with installation frame DN 125,
height: 45 mm
extract air up to 60 m³/h

2056 416

Grilles - supply air/extract air

Application

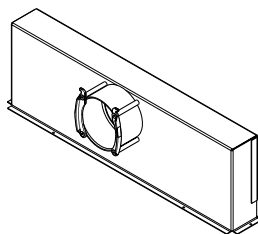
Concrete installation (in-situ concrete)



Connection box SD-75

for encasing in concrete, made of
galvanised sheet steel
with 1 nozzle 75 mm
Air quantity up to 30 m³/h

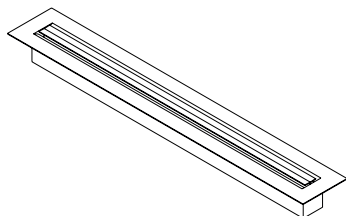
6022 617



Connection box SD-90

for encasing in concrete, made of
galvanised sheet steel
with 1 nozzle 90 mm
Air quantity up to 40 m³/h

6022 543



Design slit grille 500 mm

matching connection box SD-75 and SD-90
Colour: anodized aluminium
Supply air: up to 40 m³/h

2037 000

Pipe system DN 160

The pipe system consists of galvanised steel with double lip seal.
Pipe as per DIN 24145; 0.6 mm thick.

Flow rate [m³/h]	[Pa/m] Pipe	Pressure drop [Pa] 90° elbow	[Pa] 45° elbow
150	0.5	1.3	0.8
200	0.8	2.0	1.2
250	1.2	2.5	1.5
350	1.8	5.0	1.8

Pipe system DN 180

The pipe system consists of galvanised steel with double lip seal.
Pipe as per DIN 24145; 0.6 mm thick.

Flow rate [m³/h]	[Pa/m] Pipe	Pressure drop [Pa] 90° elbow	[Pa] 45° elbow
150	0.4	0.8	0.5
250	0.6	2.0	1.0
350	1.0	4.0	2.0

Pipe system DN 200

The pipe system consists of galvanised steel with double lip seal.
Pipe as per DIN 24145; 0.6 mm thick.

Flow rate [m³/h]	[Pa/m] Pipe	Pressure drop [Pa] 90° elbow	[Pa] 45° elbow
150	0.3	0.7	0.5
350	0.7	1.6	1.0
500	1.5	4.0	2.0

Thermal insulation for main duct DN 160

The insulation consists of synthetic rubber (closed-cell EPDM with resistant outside skin), insulation thickness 25 mm, black.
Thermal conductance λ at 0 °C is 0.032 W/mK
Steam diffusion resistance ≥ 7000
Fire class 5.3 or B1



Thermal insulation tube: for spiral-seam tube DN 160 mm, case contains 3 tubes, each with a length of 2 m

Adhesive: ready-to-use adhesive with brush 0.25 l

Thermal insulation for pipe elbow: Thermal insulation mat cut to length for pipe elbow (2-part) suitable for DN 160

Adhesive tape: of synthetic rubber, 50 mm wide, 15-meter roll

Pipe clamp with thermal insulation sleeve: For installation of pipes without thermal bridges

Attention:
Comply with regional regulations on thermal insulation.

IsiPipe Plus pipe system EPP

Pipeline consists of diffusion-tight EPP

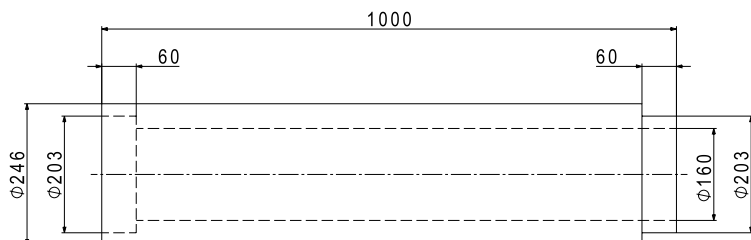
Wall thickness: 43 mm, black

Thermal conductance: $\lambda = 0.035 \text{ W/mK}$

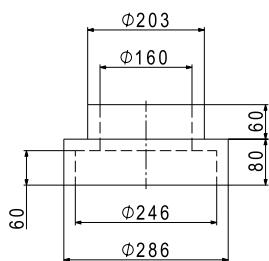
IsiPipe Plus pipe system EPP-160

(Dimensions in mm)

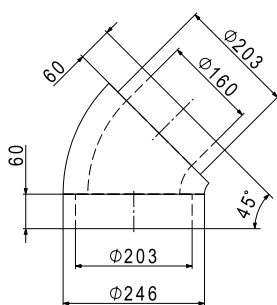
IsiPipe Plus pipeline EPP-160/1000



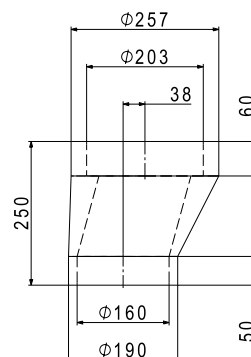
IsiPipe Plus sleeve EPP-160



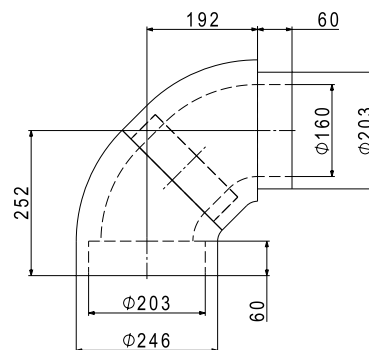
IsiPipe Plus pipe bend EPP-160



IsiPipe Plus eccentric adapter EPP-160-160



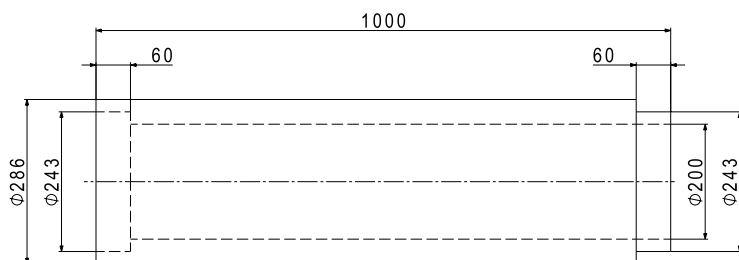
2x IsiPipe Plus pipe bend EPP-160/45



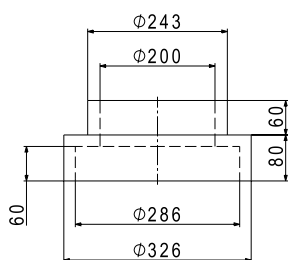
IsiPipe Plus pipe system EPP-200

(Dimensions in mm)

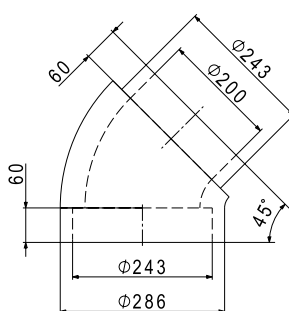
IsiPipe Plus pipeline EPP-200/1000



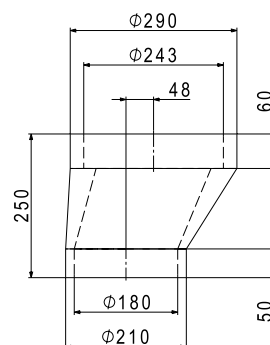
IsiPipe Plus device adapter EPP-200



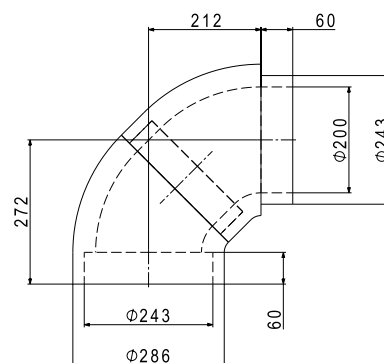
IsiPipe Plus pipe bend EPP-200/45



IsiPipe Plus eccentric adapter EPP-180-200



2x IsiPipe Plus pipe bend EPP-200/45



IsiPipe pipe system EPP

Pipeline consists of diffusion-tight EPP

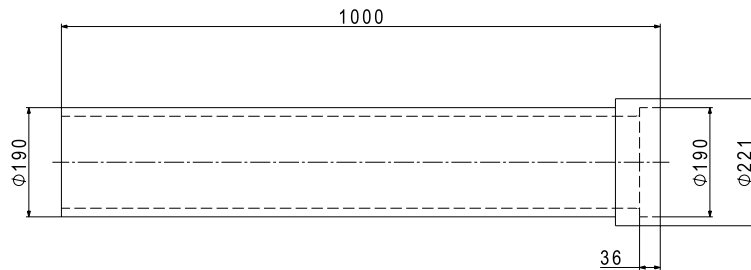
Wall thickness: 43 mm, black

Thermal conductance: $\lambda = 0.035 \text{ W/mK}$

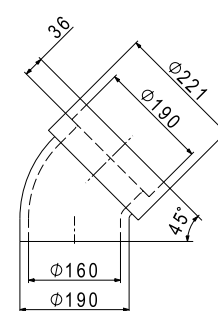
IsiPipe pipe system EPP-160

(Dimensions in mm)

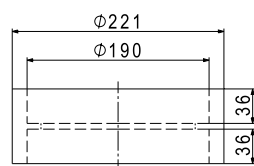
IsiPipe pipeline EPP-160/1000



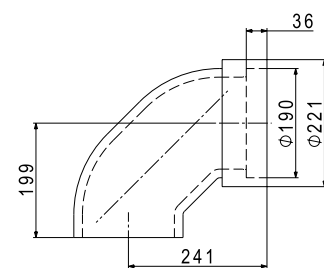
IsiPipe pipe bend EPP-160/45



IsiPipe sleeve EPP-160



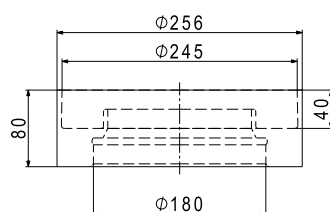
IsiPipe pipe bend EPP-160/90



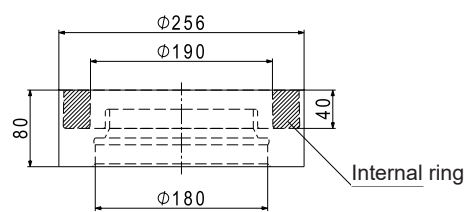
IsiPipe device adapter EPP-160

(Dimensions in mm)

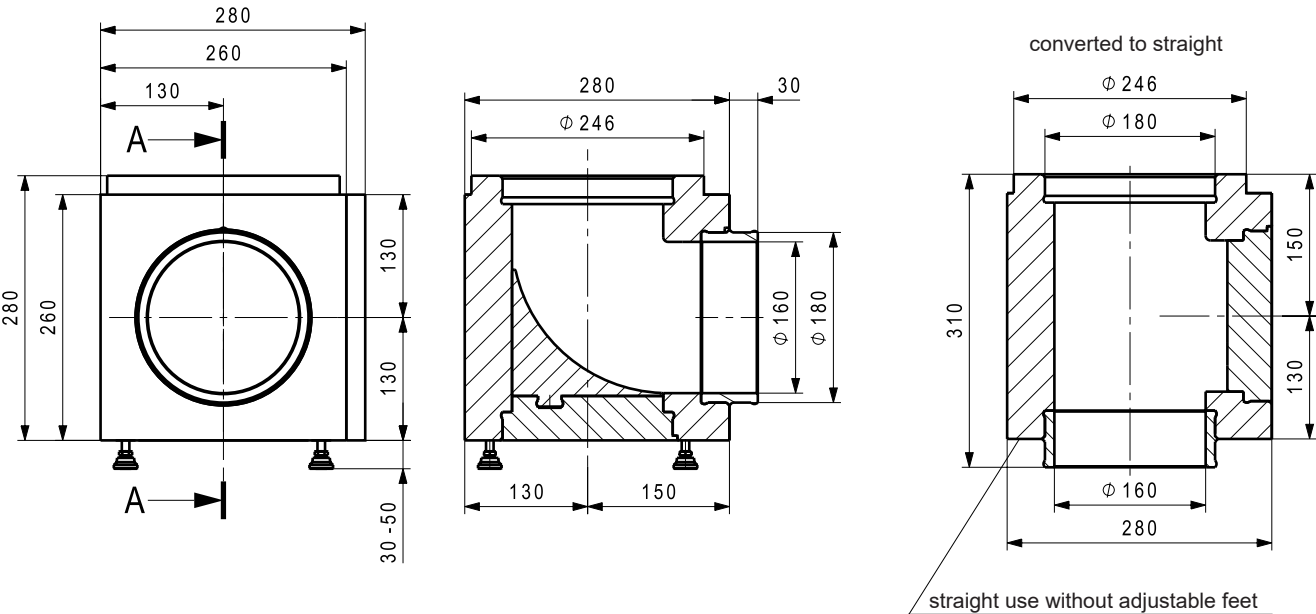
IsiPipe-Plus without internal ring



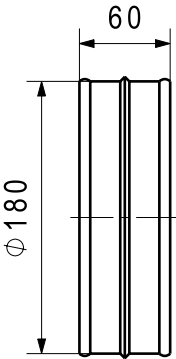
IsiPipe-Plus with internal ring



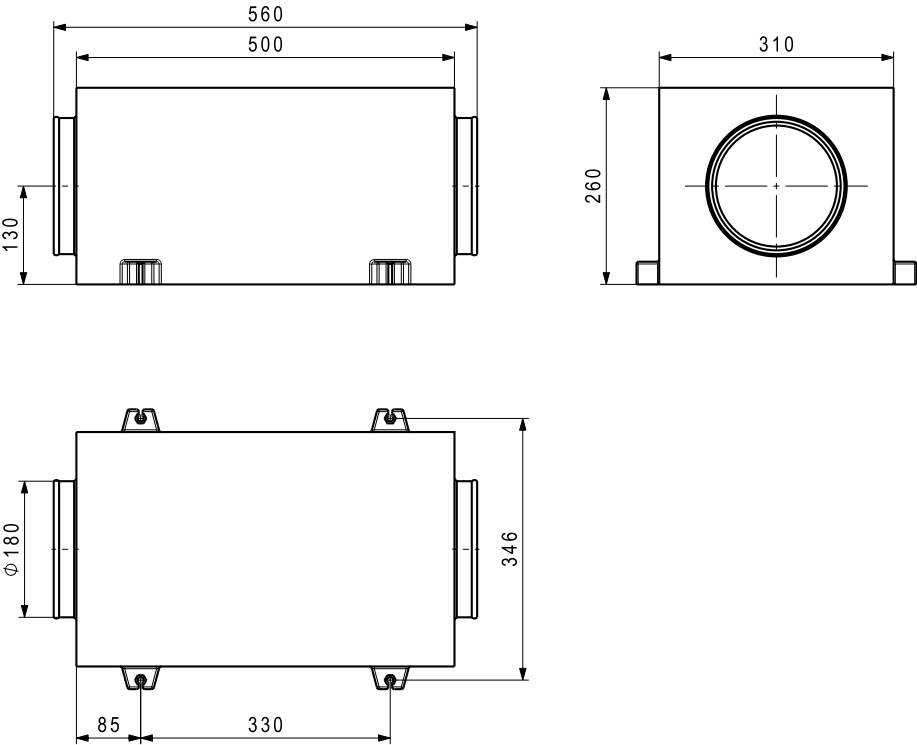
IsiCube
(Dimensions in mm)

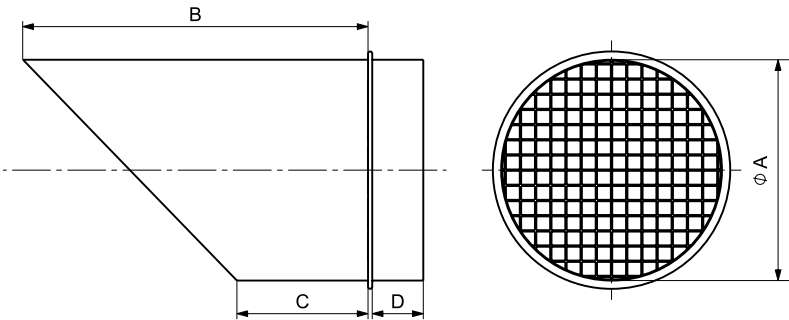


IsiFit



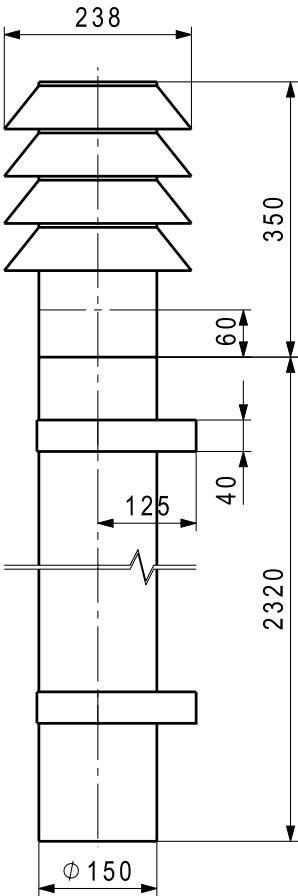
IsiSound





Exhaust air nozzle FST
for spiral-seam tube DN
of galvanised sheet steel
with bird protection grille DN
for horizontal installation

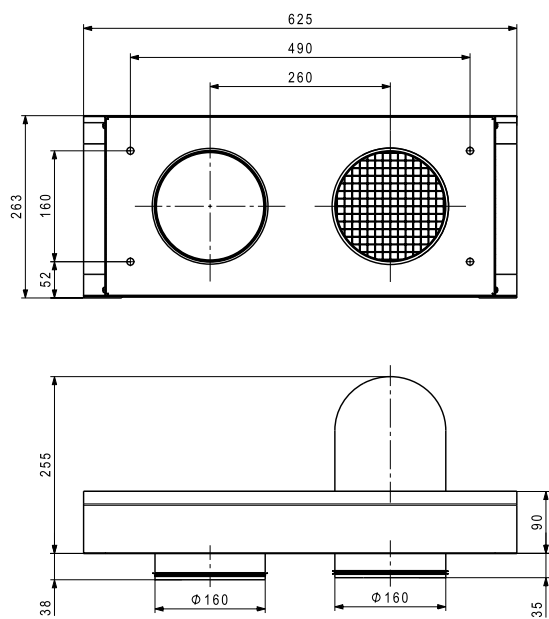
	A	B	C	D
FST-160	160	250	95	37
FST-180	180	270	90	45
FST-200	200	245	45	45



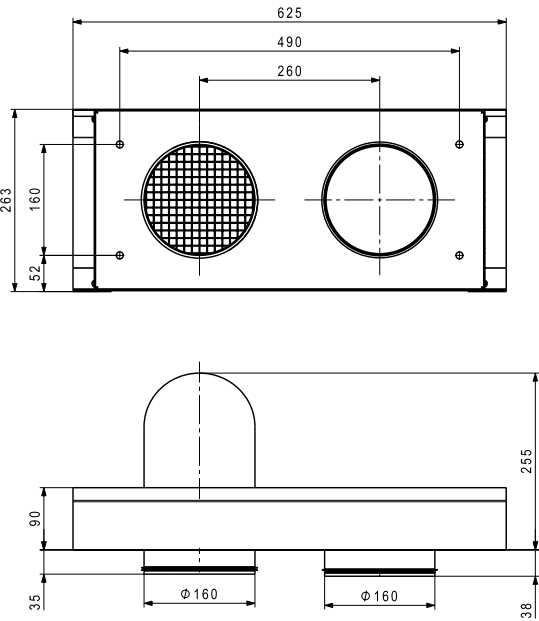
Outside air intake set AAS-150
for spiral-seam tube DN 150,
galvanic isolation of the connection
for outside and exhaust air
of stainless steel, lamella cowl,
consisting of:
1 cowl DN 150,
1 pipe DN 150, length: 0.5 m,
2 pipes DN 150, length: 1 m and
2 wall mountings

Volume flow [m³/h]	Pressure drop of cowl [Pa]
100	3
150	5
200	8
250	12

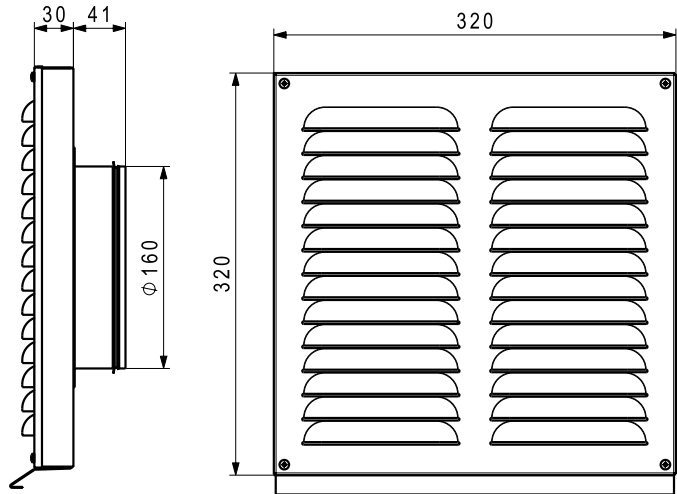
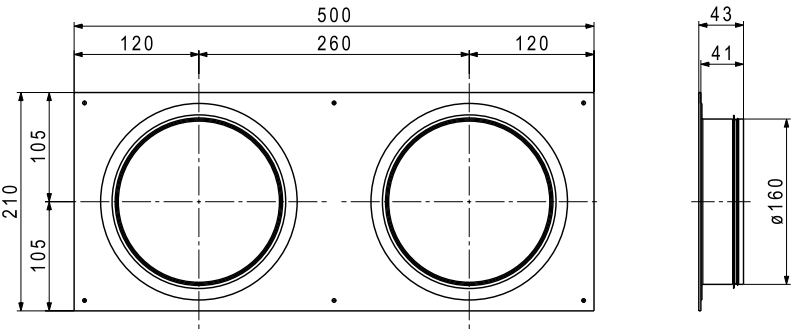
Wall outlet Ø 160 left



Wall outlet Ø 160 right



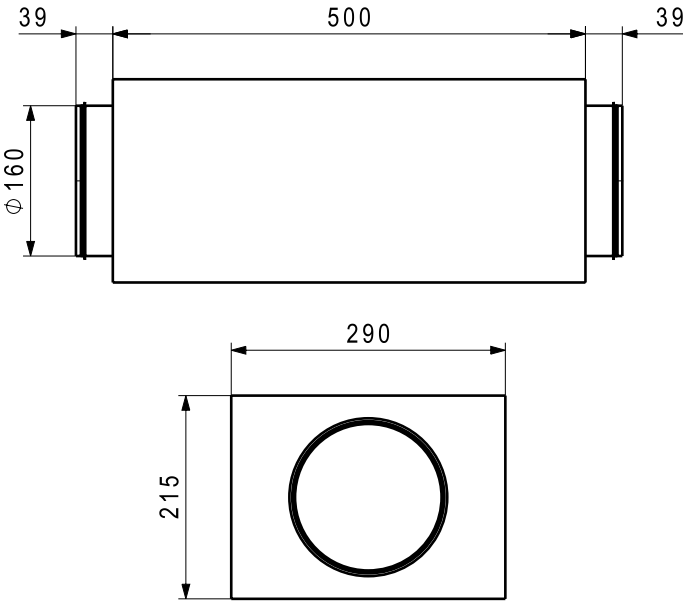
Plywood
for wall outlet, Ø 160



Weatherproof grille WG-160

for spiral-seam tube DN 160
for outside and exhaust air
of aluminium with rain lug,
can be painted with double lip seal,
pipe nozzle DN 160

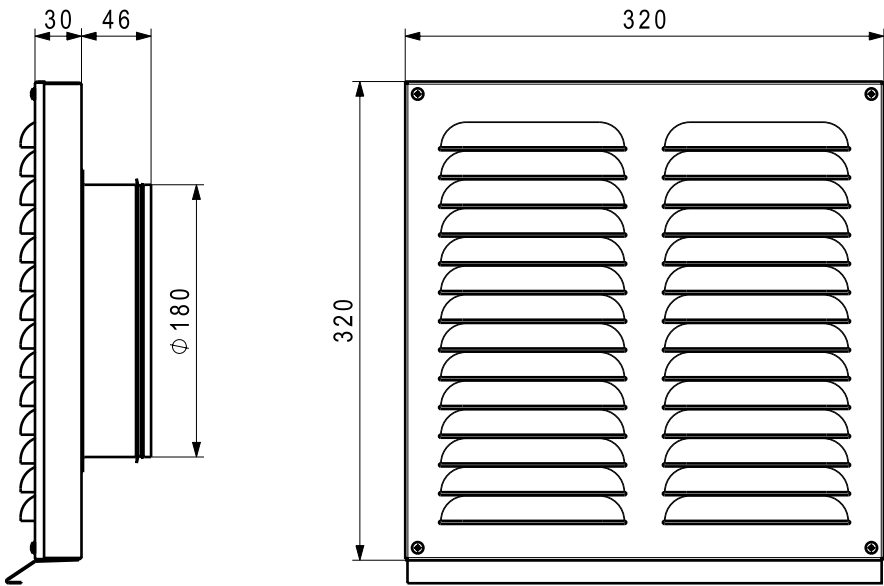
Flow rate [m³/h]	Pressure drop Outside air [Pa]	Pressure drop Exhaust air [Pa]
150	7	7
200	12	15
250	18	24



Silencer SD-160-500

The silencer consists of a rectangular casing of galvanised steel with connection nozzles on both sides. The housing is lined on the inside with highly effective sound absorbing material. The unit can be cleaned through the pipe nozzle. When used in fresh air and exhaust air, the silencers must be thermally insulated on site.

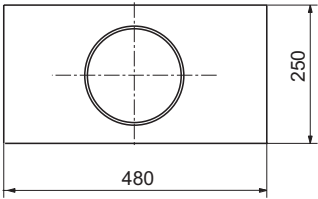
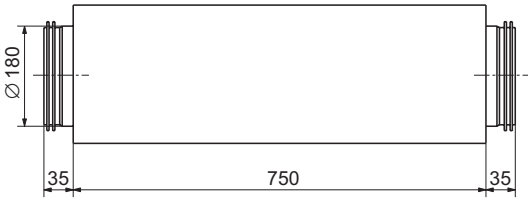
Frequency [Hz]	125	250	500	1000	2000	4000	8000
Simple damping [dB]	6	10	19	23	32	25	16



Weatherproof grille WG-180

for spiral-seam tube DN 180
for outside and exhaust air
of aluminium with rain lug,
can be painted with double lip seal,
pipe nozzle DN 180

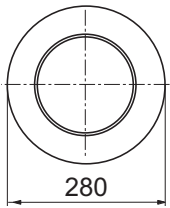
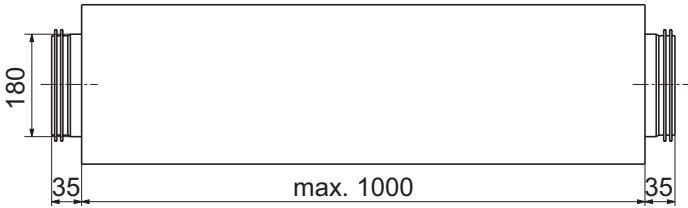
Flow rate [m³/h]	Pressure drop [Pa]
150	6
250	9
350	13



Silencer FSR-180-750

The silencer consists of a rectangular casing of galvanised steel with connection nozzles on both sides. The housing is lined on the inside with highly effective sound absorbing material. The unit can be cleaned through the pipe nozzle. When used in fresh air and exhaust air, the silencers must be thermally insulated on site.

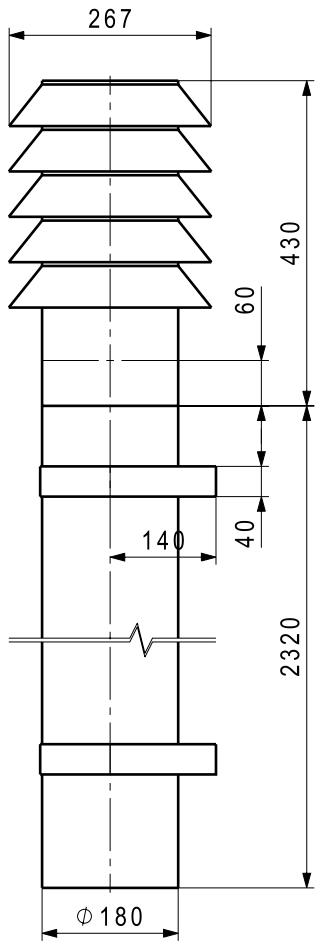
Frequency [Hz]	125	250	500	1000	2000	4000	8000
Simple damping [dB]	4	11	12	12	12	7	3



Silencer FLSDA-180-1000

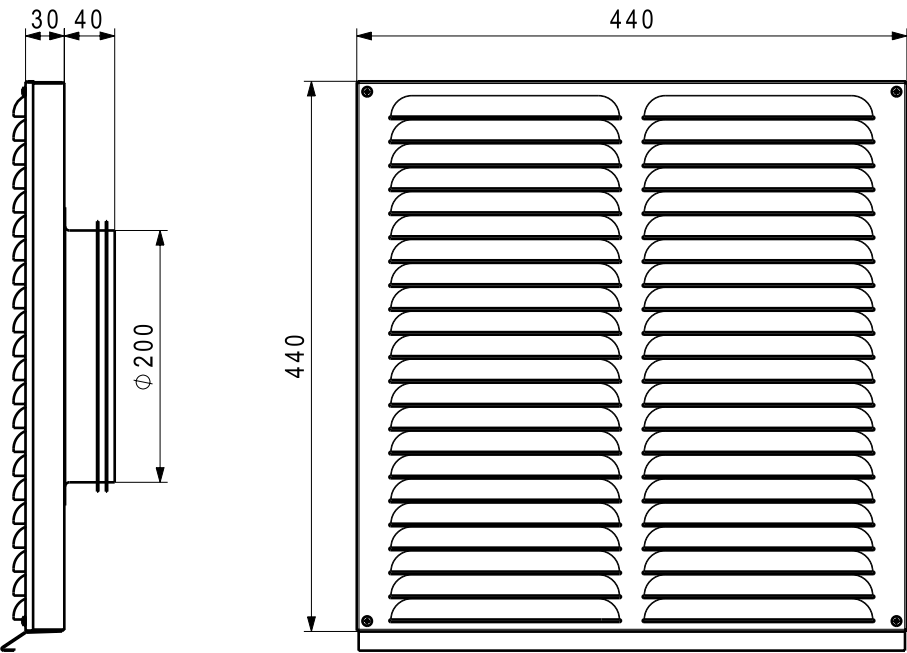
The silencer consists of a flexible aluminium envelope tube, inside from perforated aluminium tube with connection nozzles on both sides with double lip seal.

Frequency [Hz]	125	250	500	1000	2000	4000	8000
Simple damping [dB]	5	13	30	42	34	24	13



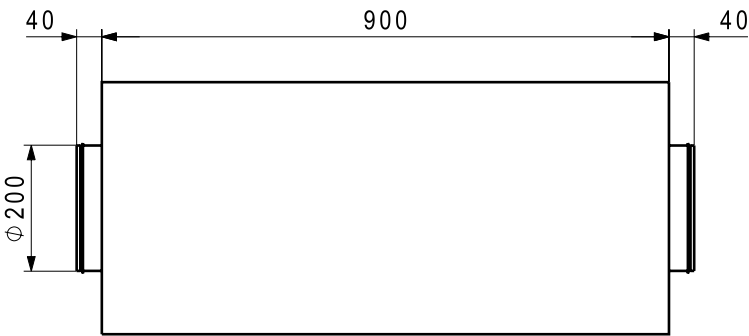
Stainless steel cowl AAS-180

for spiral-seam tube DN 180
galvanic isolation of the connection for outside and exhaust air of stainless steel, lamella cowl, consisting of:
1 cowl DN 180,
1 pipe DN 180, length: 0.5 m,
2 pipes DN 180, length: 1 m and
2 wall mountings



Weatherproof grille WG-200
for spiral-seam tube DN 200
for outside and exhaust air
of aluminium with rain lug,
can be painted with double lip seal,
pipe nozzle DN 200

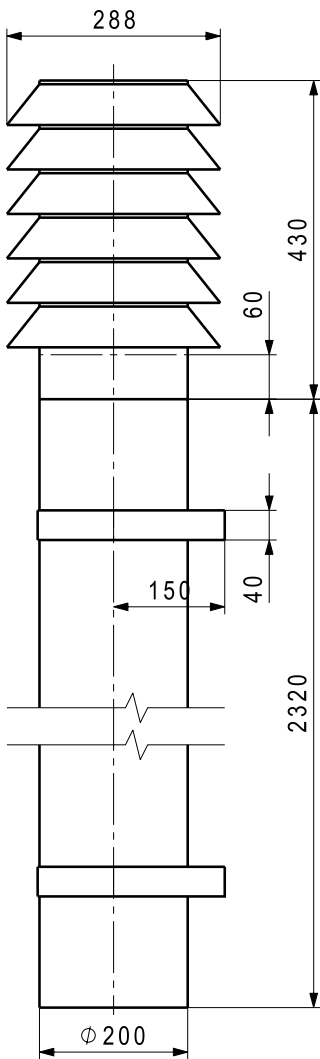
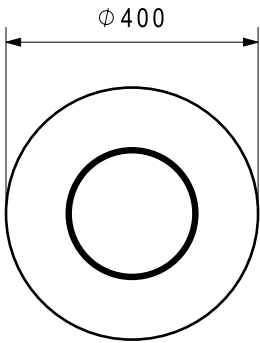
Flow rate [m³/h]	Pressure drop [Pa]
150	4
350	8
500	12



Silencer SD-200-1000

The silencer consists of a round casing of galvanised steel with connection nozzles on both sides. The housing is lined on the inside with highly effective sound absorbing material.
The unit can be cleaned through the pipe nozzle.

Frequency [Hz]	125	250	500	1000	2000	4000	8000
Damping [dB]	5	15	26	26	19	10	5



Stainless steel cowl AAS-200

for spiral-seam tube DN 200
galvanic isolation of the connection for outside and exhaust air of stainless steel, lamella cowl, consisting of:
1 cowl DN 200,
1 pipe DN 200, length: 0.5 m,
2 pipes DN 200, length: 1 m and
2 wall mountings

Pipe system distribution duct DN 75 and DN 90

The distribution duct is a flexible pipe of polyethylene PE-HD with a smooth inside wall, ribbed on the outside.

Antistatic coating

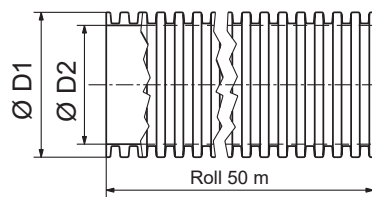
Weight 0.33 kg/m

Application limit: Air and ambient temperature

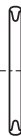
-25...60 °C

Pipe system	Flow rate [m³/h]	Pressure drop straight pipe [Pa/m]	Press loss pipe elbow 90° (r = 2D) [Pa]
DN 75	10	0.3	0.1
DN 75	20	1.1	0.4
DN 75	30	2.5	1.0
DN 90	20	0.6	0.2
DN 90	30	1.2	0.4
DN 90	40	2.2	0.8

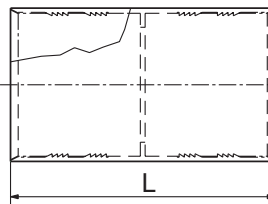
Flexible pipe FR



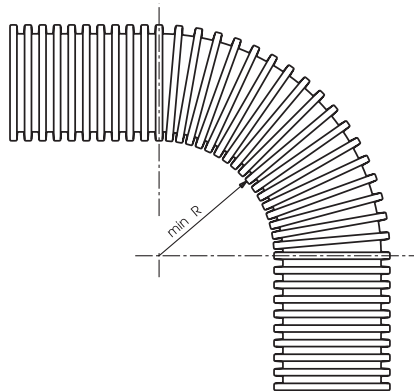
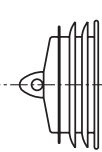
Sealing ring DI



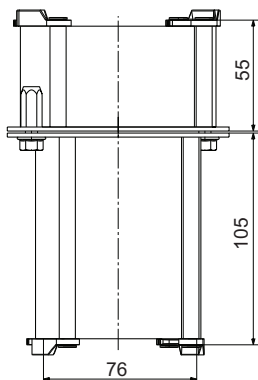
Double sleeve DM



Stopper ST

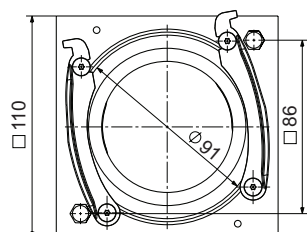


Pipe system	D1 [mm]	D2 [mm]	L [mm]	R
DN 75	75	62	100	150
DN 90	90	76	100	150



Formwork coupling SK-75/90

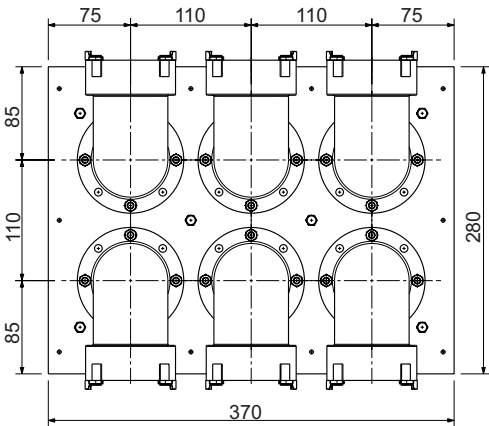
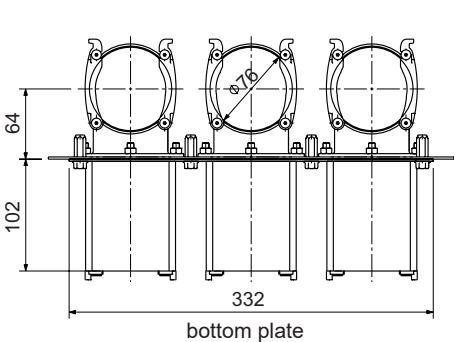
for flexible pipe DN 75 and 90 for extending a flexible pipe through the ceiling or the floor and extension from DN 75 to DN 90 without damaging the boarding.



Section distributor SV-6 x 75

For quick, space-saving installation of flexible pipes FR-75 in ceilings/floors and walls. Each 90° connection can be rotated in increments of 45°.

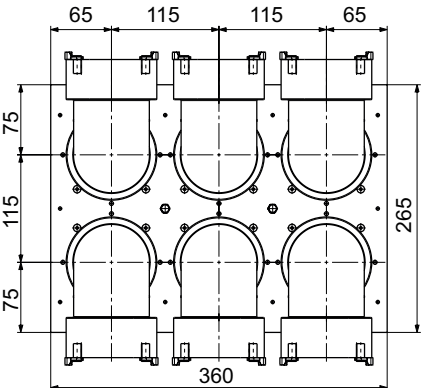
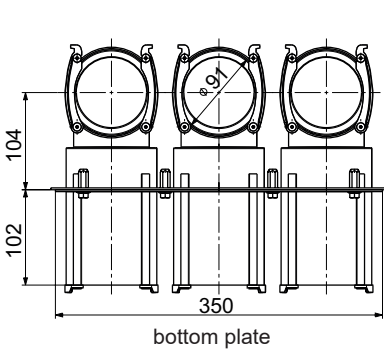
After completion of the building shell, the lower distributor plate is fitted and the flexible pipes FR-75 are simply connected up. The inside of the 90° nozzles is rounded to allow easy cleaning of the ducts.

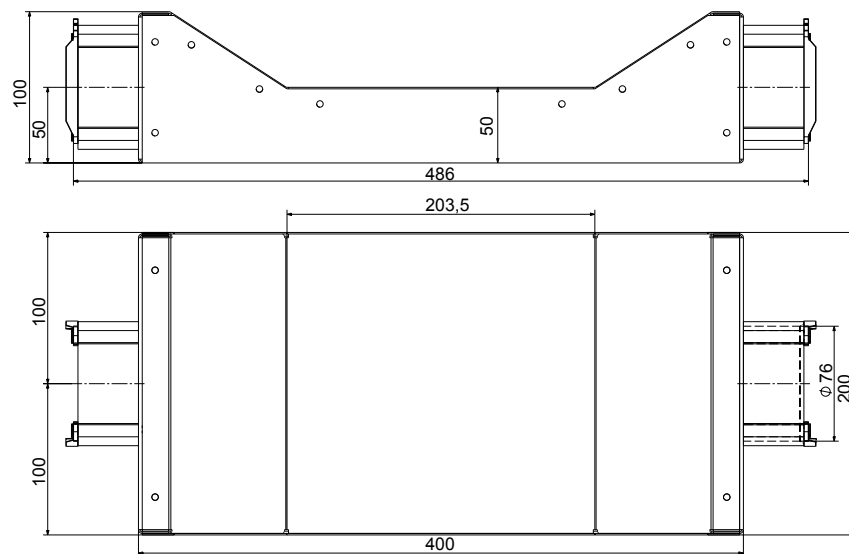


Section distributor SV-6 x 90

For quick, space-saving installation of flexible pipes FR-75 in ceilings/floors and walls. Each 90° connection can be rotated in increments of 45°.

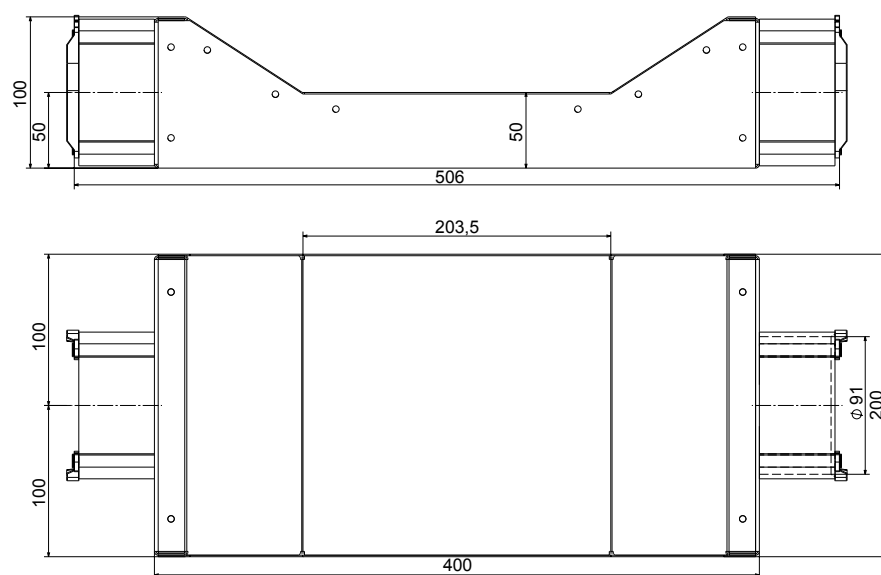
After completion of the building shell, the lower distributor plate is fitted and the flexible pipes FR-75 are simply connected up. The inside of the 90° nozzles is rounded to allow easy cleaning of the ducts.





Flexible pipe crossing FRK-75

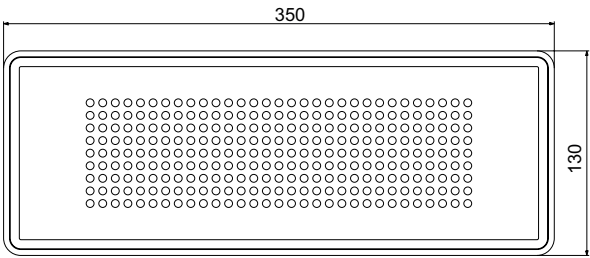
for flexible pipe DN 75
for crossing two flexible pipes DN 75
with reduced construction height (100 mm).
For one crossing 2 pieces are necessary.



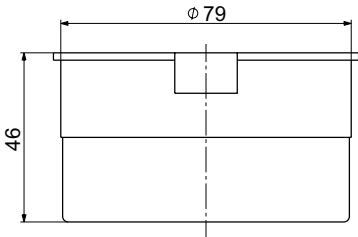
Flexible pipe crossing FRK-90

for flexible pipe DN 90
for crossing two flexible pipes DN 90
with reduced construction height (100 mm).
For one crossing 2 pieces are necessary.

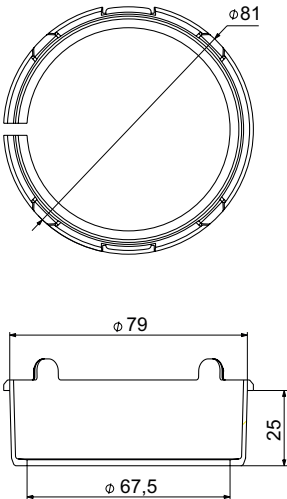
Floor grille 100, 140
 inox or white colour
 for flat channel system 100 and 140
 Dimensions: 350 x 130 mm



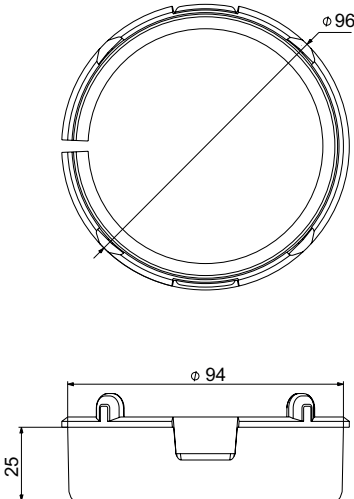
Stopper flat 75
 sealing plug for outlet 90°
 lateral 125-2 x 75



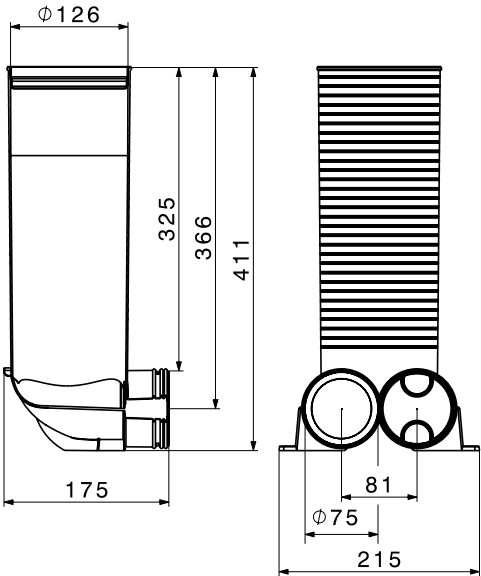
Click ring 75
 for outlet 90° lateral 125-2 x 75



Click ring 90
 for outlet 90° lateral 125-2 x 90

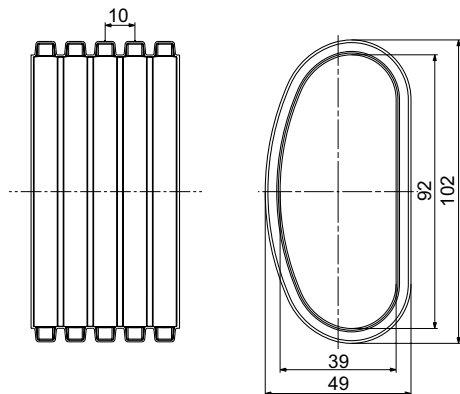


Outlet flat 90 125-75
 Outlet round 90° lateral 125-2 x 75
 made of plastic 2 x 75/125 mm
 Usable length 325 mm

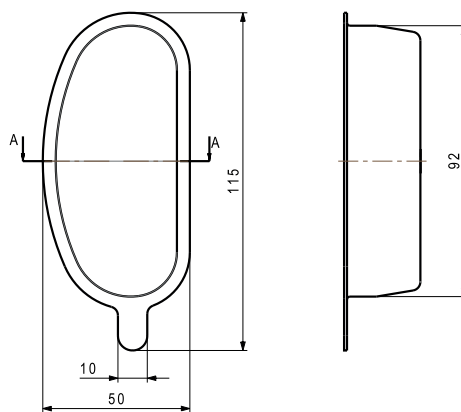


Flat channel 100

Flexible ventilation pipe 102 x 49 mm
Roll length 50 m
minimum bending radius 200 mm

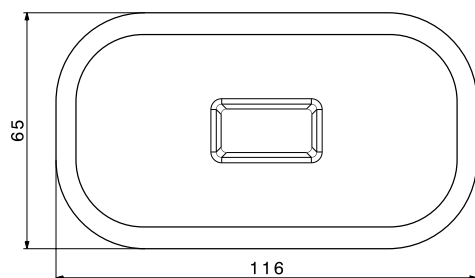
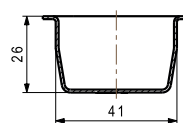
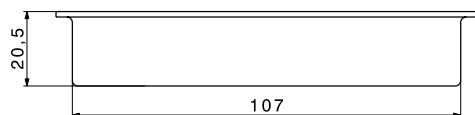


Plug flat channel 100



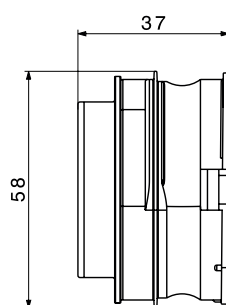
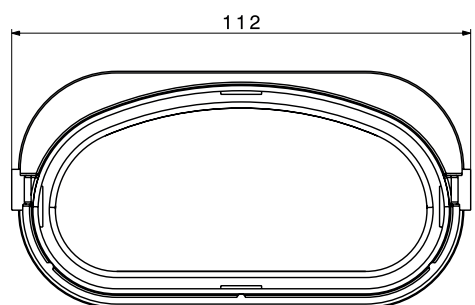
Stopper flat 100

for flat channel system 100 connections



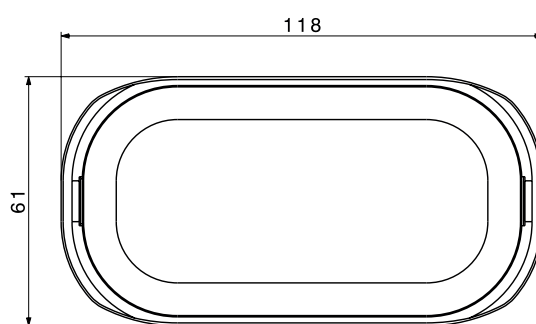
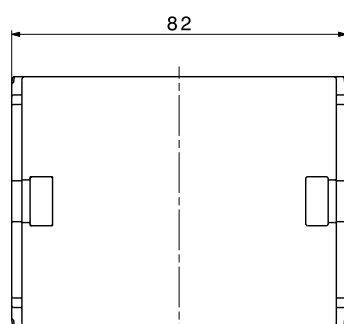
Seal flat 100

for flat channel 100

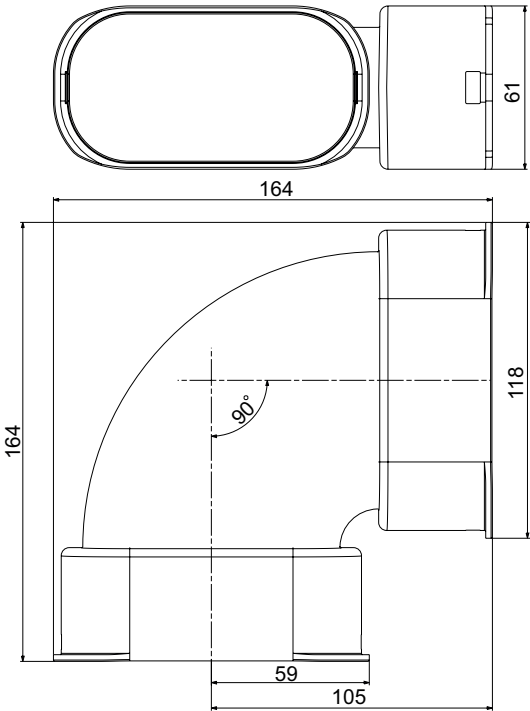


Sleeve 100

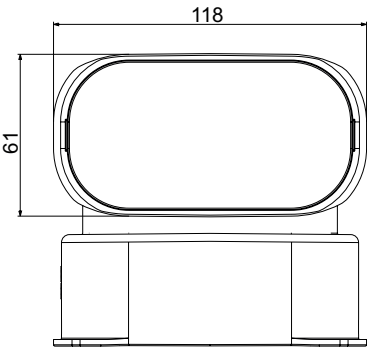
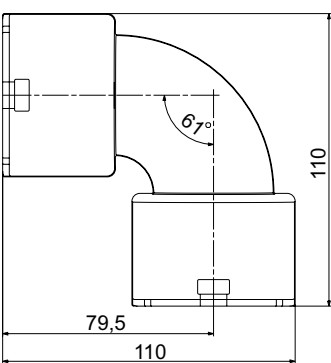
for flat channel 100



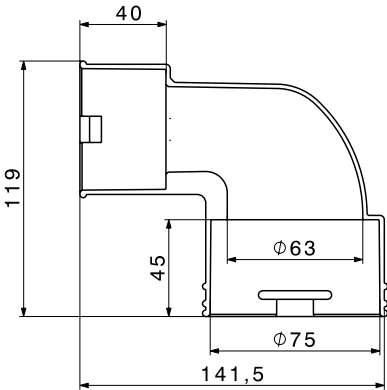
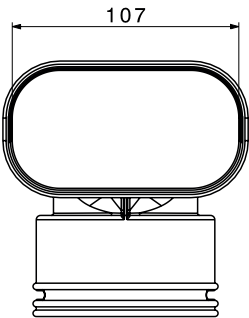
Arch horizontal flat 100
for flat channel 100



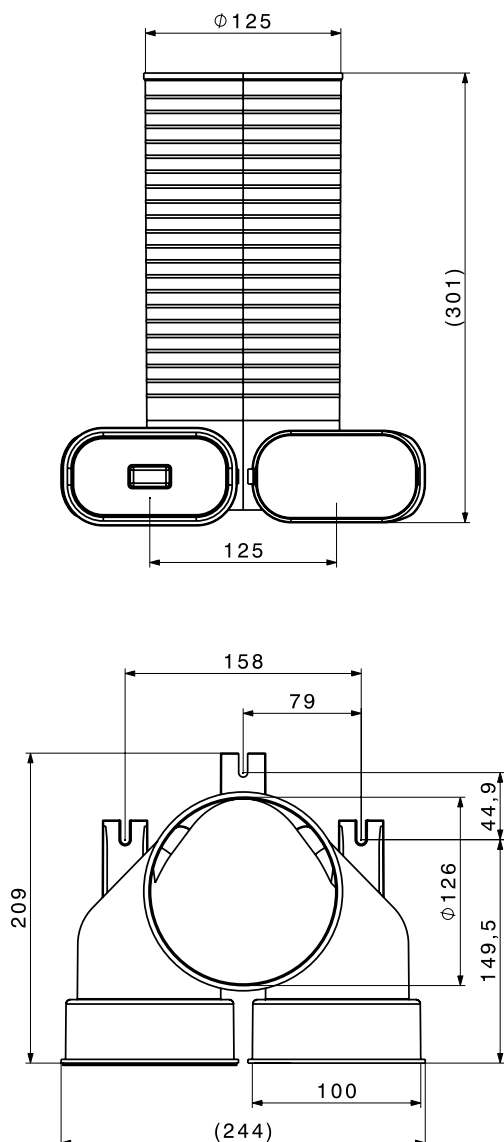
Arch vertical flat 100
for flat channel 100



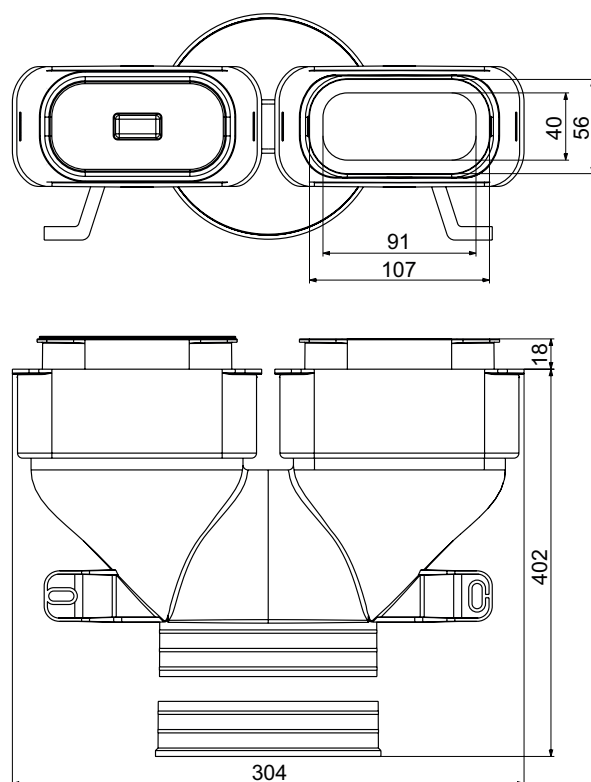
Arch vertical flat to round 100-75
Transition 90° round to flat



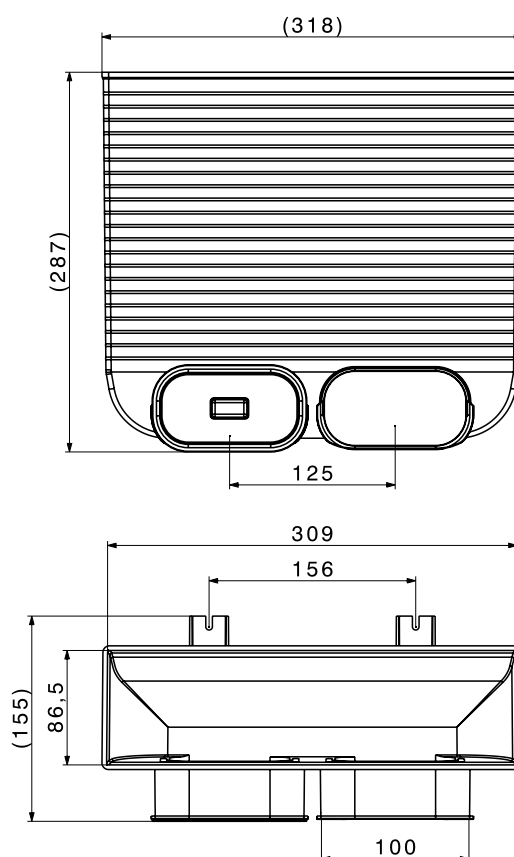
Outlet round, lateral 90° 125-2 x 100
for flat channel 100
incl. mounting bracket



Outlet round, front 125-2 x 100
for flat channel 100
incl. mounting bracket

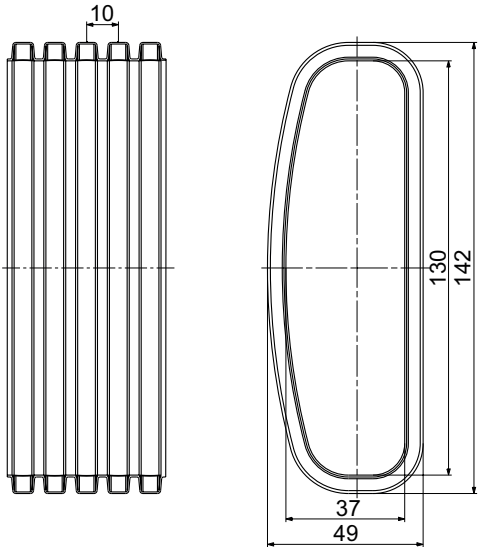


Floor exhaust flat 2 x 100
309 x 86.5 mm interior
2 flat channel 100 connections

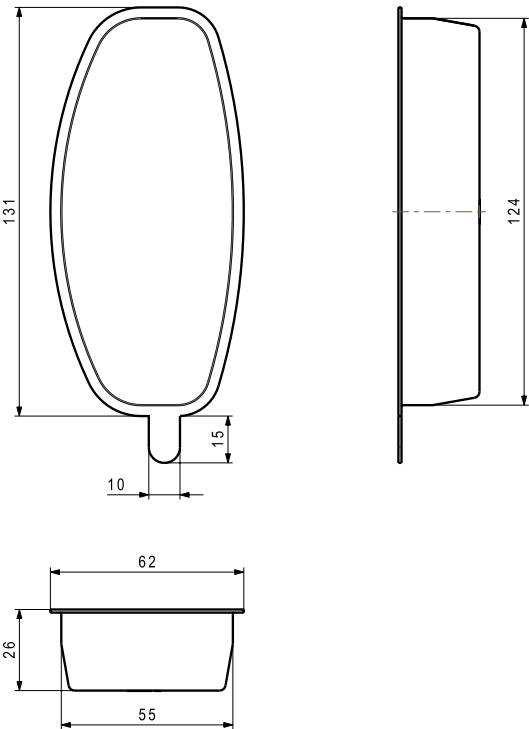


Flat channel 140

Flexible ventilation pipe 142 x 49 mm
 Roll length 20 m
 minimum bending radius 200 mm

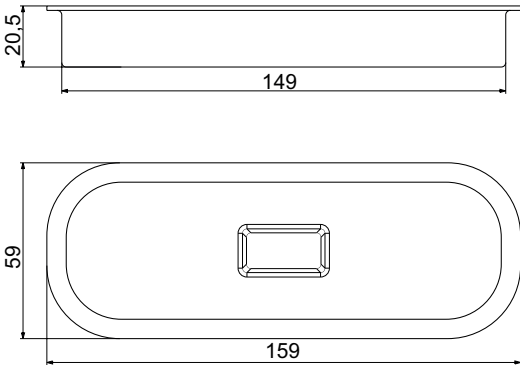


Plug flat channel 140



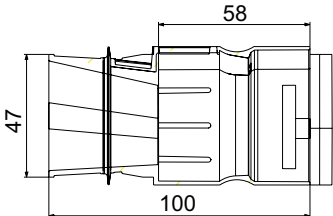
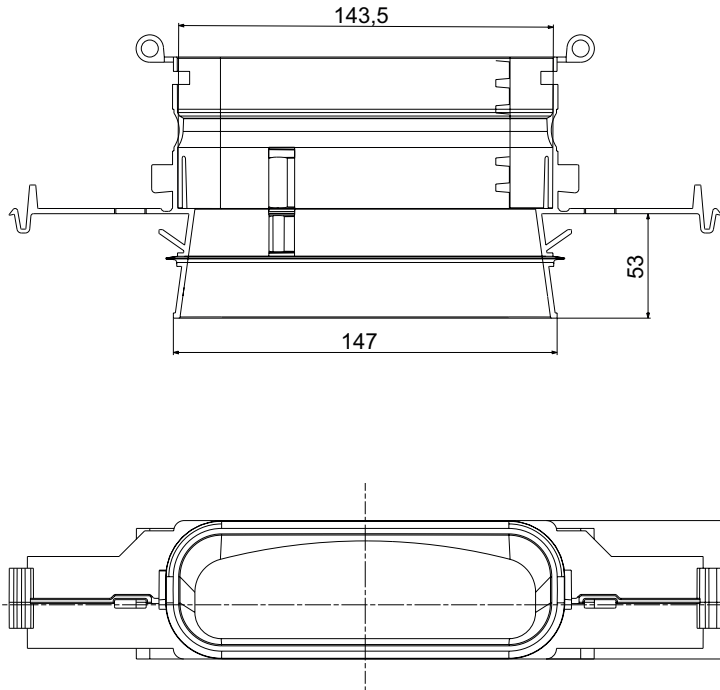
Stopper flat 140

for flat channel system 140 connections



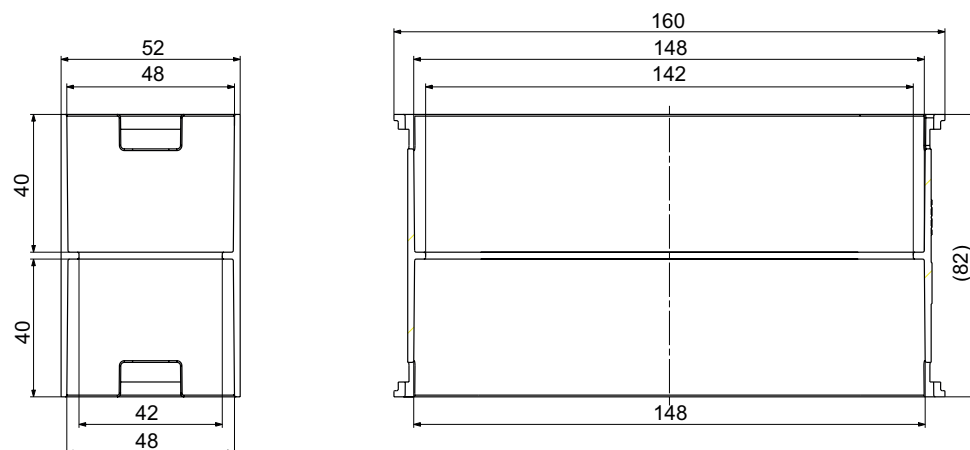
Seal flat 140

for flat channel 140



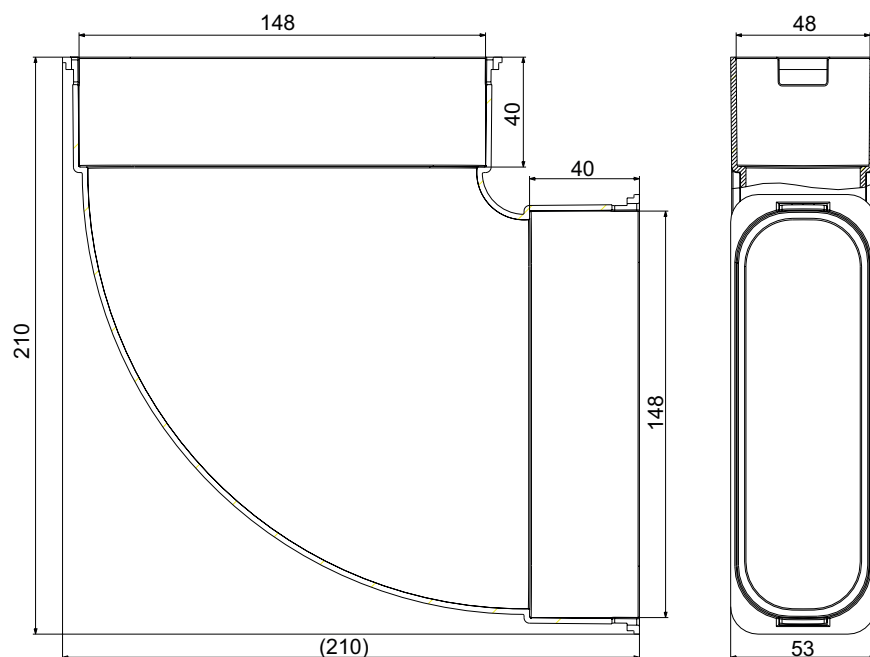
Sleeve 140

for flat channel 140



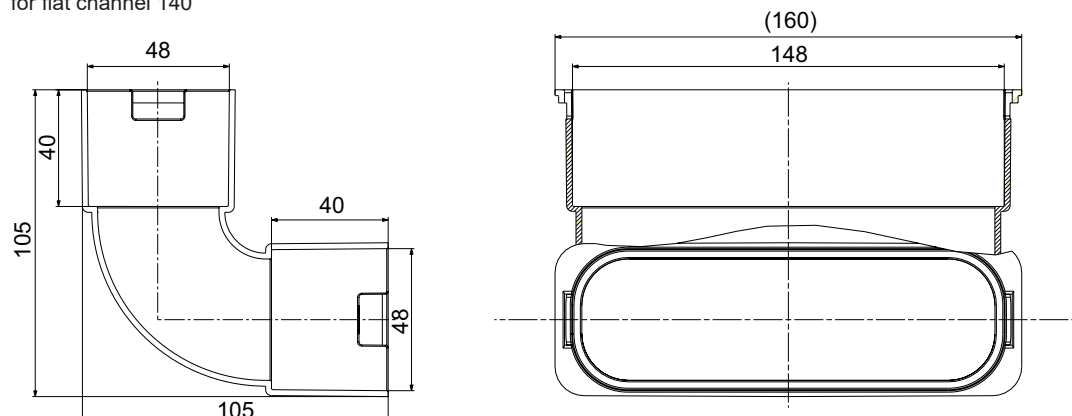
Arch horizontal flat 140

for flat channel 140

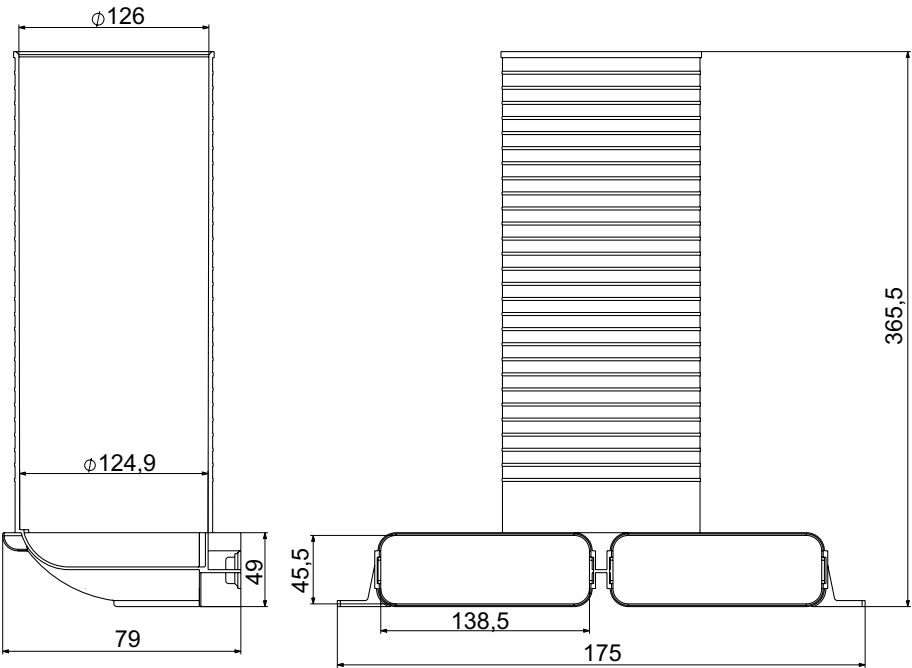


Arch vertical flat 140

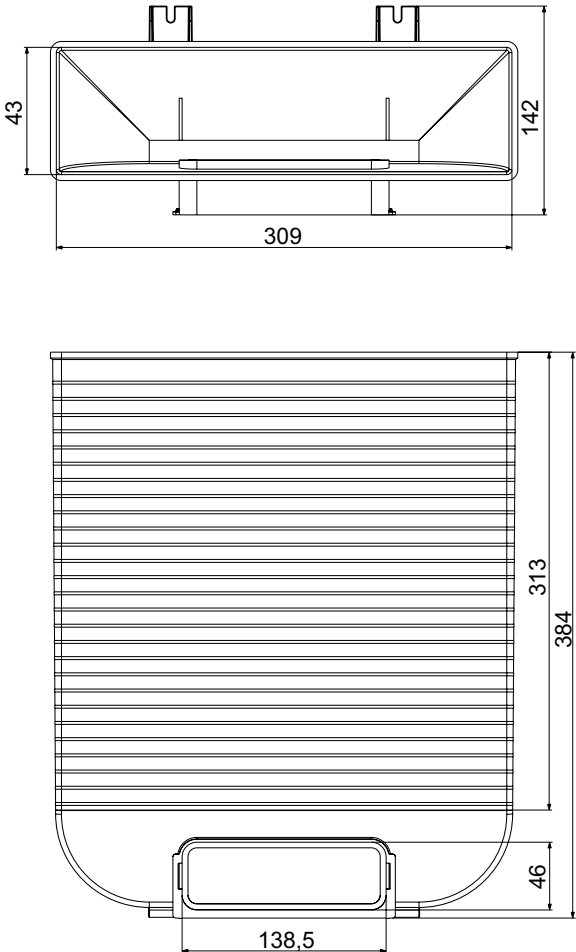
for flat channel 140



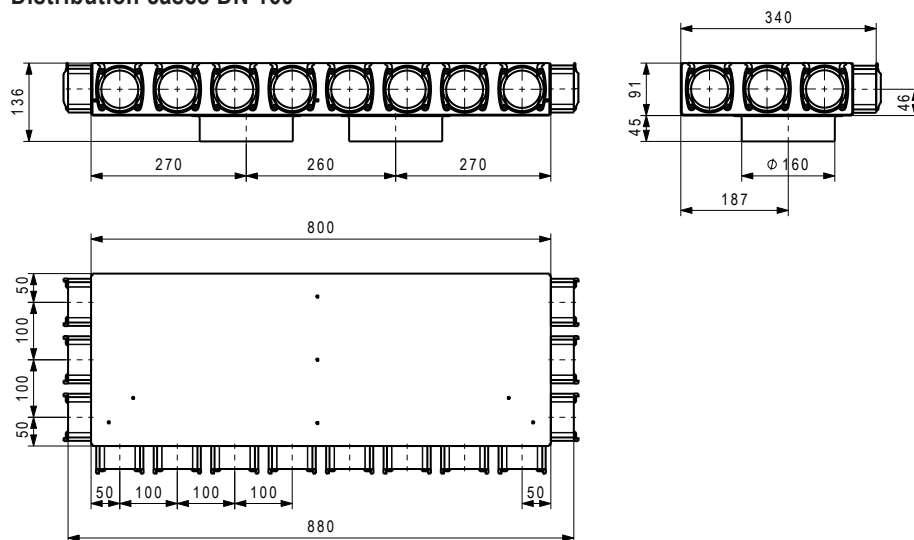
Outlet round, lateral 90° 125-2 x 140
for flat channel 140
incl. mounting bracket



Floor exhaust flat 1 x 140
309 x 85 mm interior
1 flat channel 140 connection



Distribution cases DN 160



Distribution box VTB-160 14 x 75

Air distribution box of aluzinc sheet without access panel.

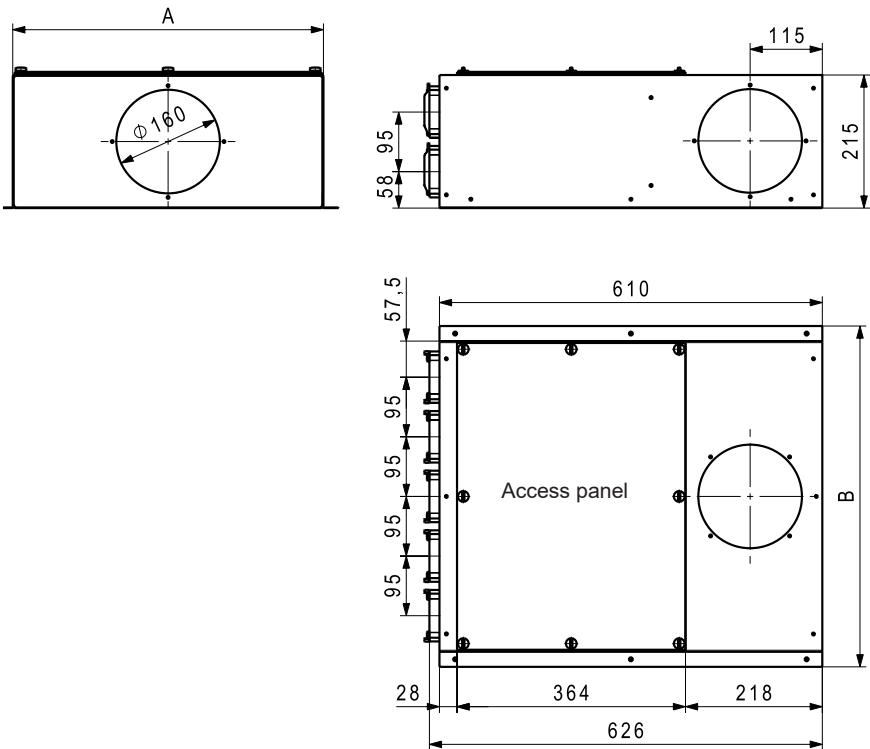
Connection nozzles:

2 x DN 160 supply and extract air

supply air 7 x DN 75 (4 x front and 3 x side)

extract air 7 x DN 75 (4 x front and 3 x side)

Distribution cases DN 160

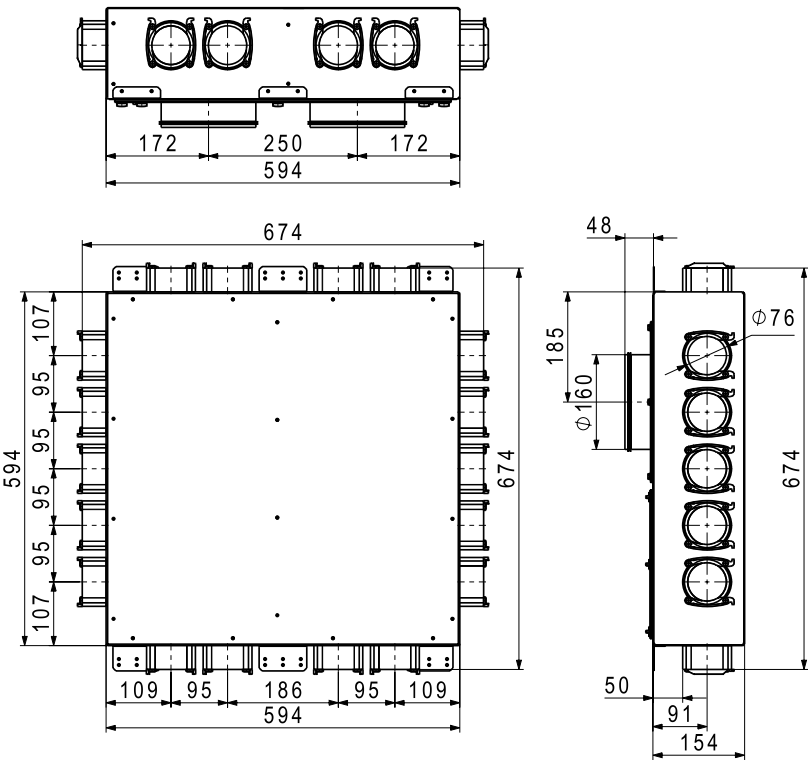


Distribution case for 6, 8 or 10 connections VK-160-75

This distribution case with an integrated silencer is used if the pipes can be arranged and laid centrally. Orifices for setting the air quantity per flexible pipe DN 75 (included in the scope of delivery).

In type VK, the DN 75 connections are on the end; the connection nozzle DN 160 is supplied and can be installed on the end, top or on the left or right side. The distribution case is suitable for on-wall installation.

Type	A	B	n
VK-160-75 x 6	305	355	6
VK-160-75 x 8	400	450	8
VK-160-75 x 10	495	545	10



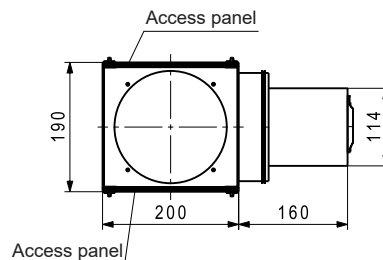
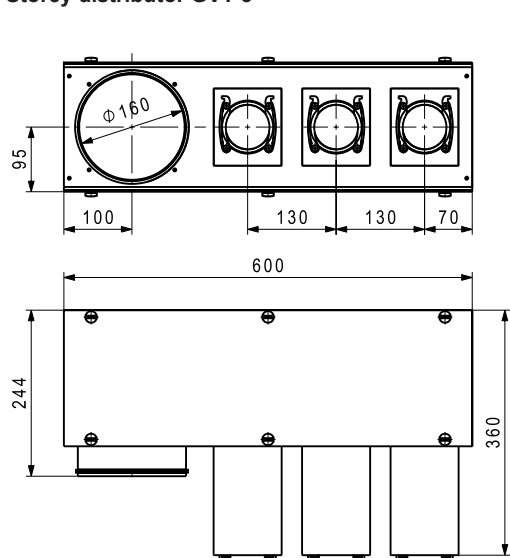
Distribution box VTB-160 9 x 75

for concrete installation
 Distribution box of aluzinc sheet with access panel (can be painted on site). Lined on the inside with sound absorbing material.

- Connection nozzle:
- 2 x DN 160 (downward)
 - Supply air 9 x DN 75 (5 x side / 2 x front and rear each)
 - Extract air 9 x DN 75 (5 x side / 2 x front and rear each)
- Consisting of: box, 6 connection brackets, 4 end caps, incl. throttle orifices.

Distribution cases DN 160

Storey distributor GVT-3

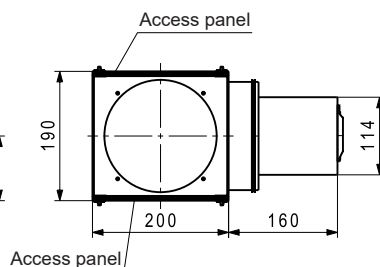
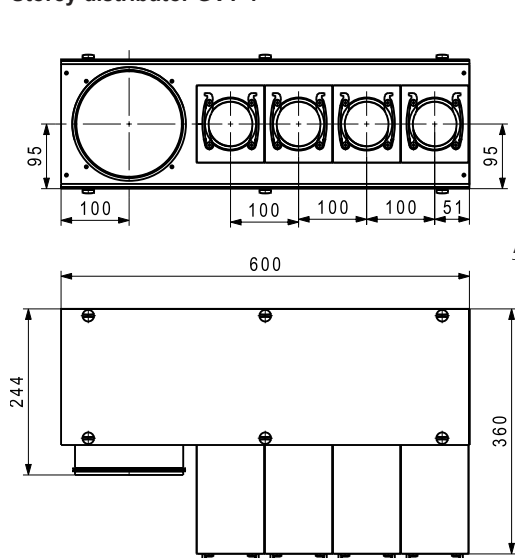


Storey distributor GVT-3 ... GVT-6

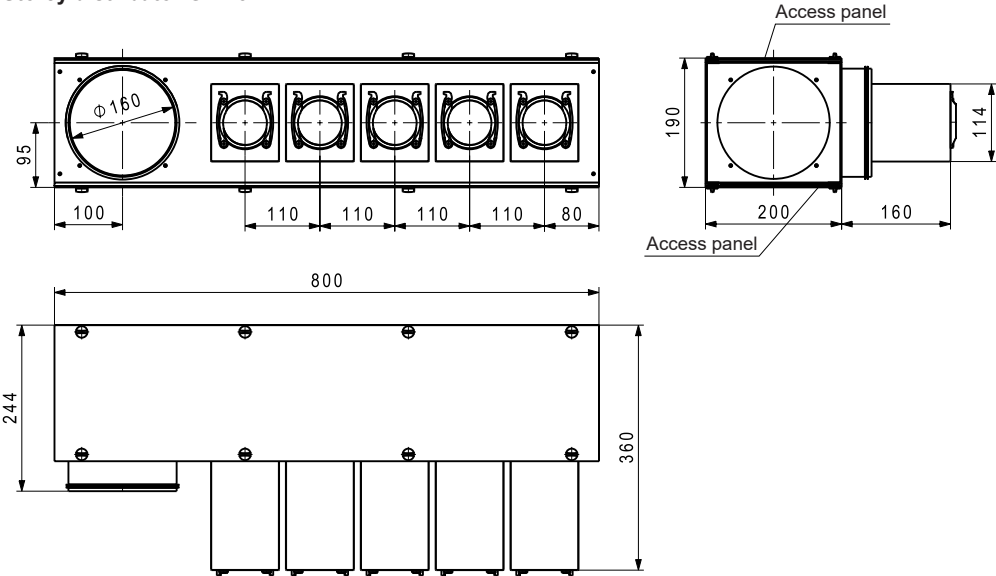
Storey distributor with 4 connection options for the main duct, incl. 2 connection nozzles DN 160, incl. 3 sealing caps DN 160. Flexible installation and easy cleaning of the pipes via the access panels on both sides. Orifices for setting the air quantity per flexible pipe DN 75 or DN 90 (included in the scope of delivery). Resonators for sound insulation. Material: Galvanised steel. Inside lining: Sound absorbing mat.

The mounting holder MH for floor distributor GVT-3 ... GVT-6 must be ordered separately.

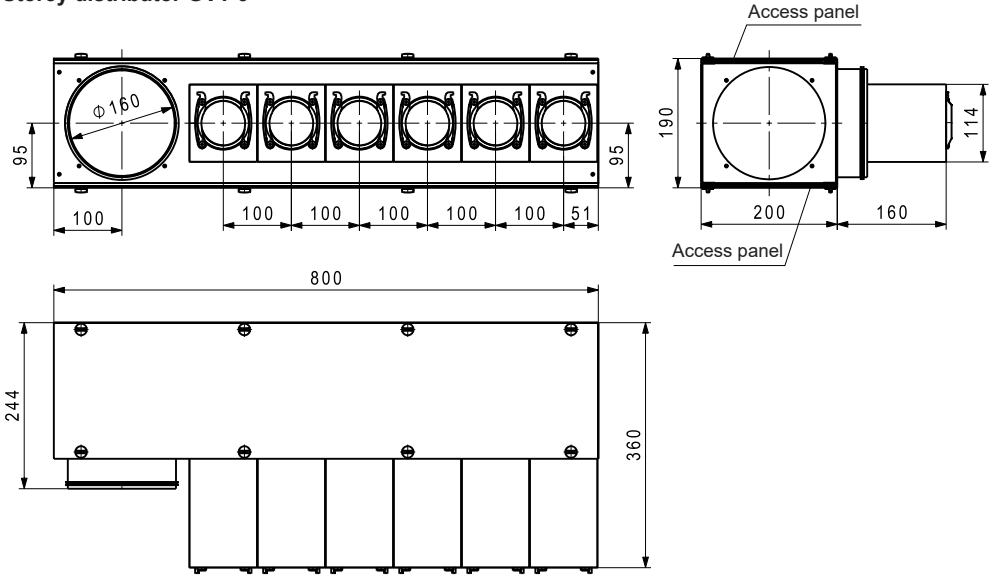
Storey distributor GVT-4



Storey distributor GVT-5

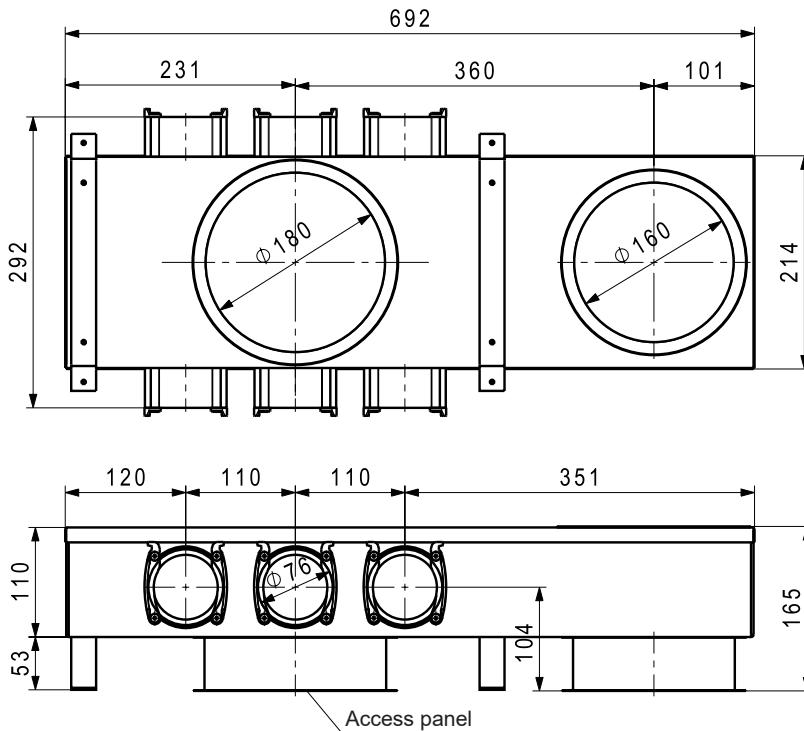


Storey distributor GVT-6



Distribution cases DN 160

UPVK 6 x 75

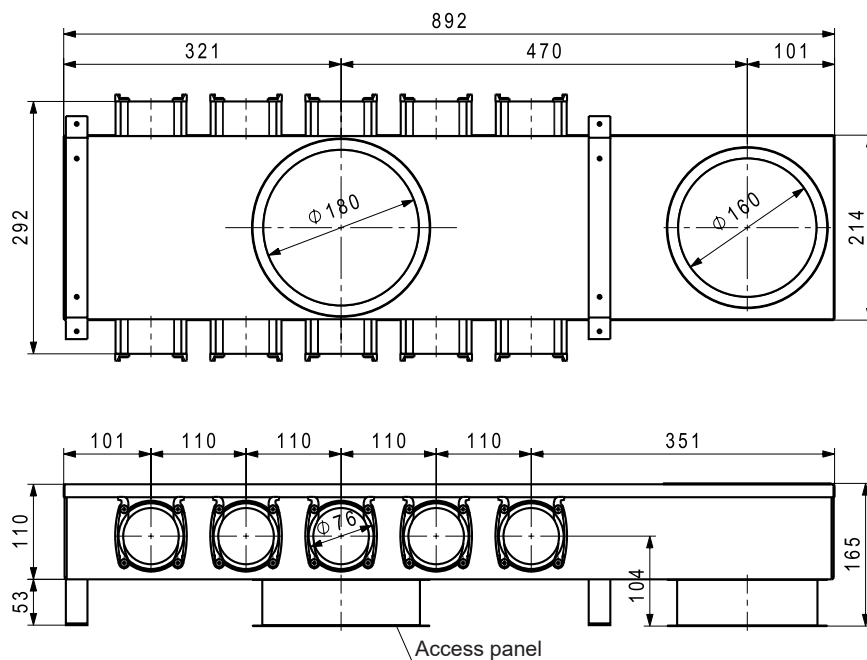


In-wall distribution case 6 x 75

for concrete installation

Distribution case of aluzinc sheet. With one connection nozzle DN 160 (upwards and downwards) and 2 x 3 nozzles DN 75 (lateral), incl. 2 end covers, 1 spigot DN 160, inside lining of sound insulation material, orifices for setting the air quantity per flexible pipe.

UPVK 10 x 75



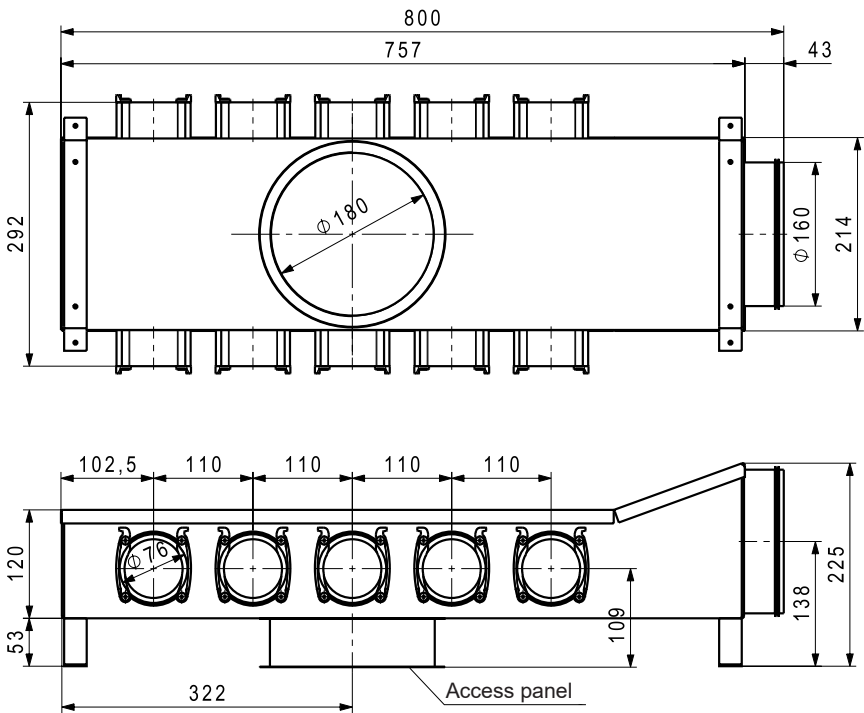
In-wall distribution case 10 x 75

for concrete installation

Distribution case of aluzinc sheet for encasing in concrete. With one connection nozzle DN 160 (upwards and downwards) and 2 x 5 nozzles DN 75 (lateral), incl. 4 end covers, 1 spigot DN 160, inside lining of sound insulation material. Orifices for setting the air quantity per flexible pipe.

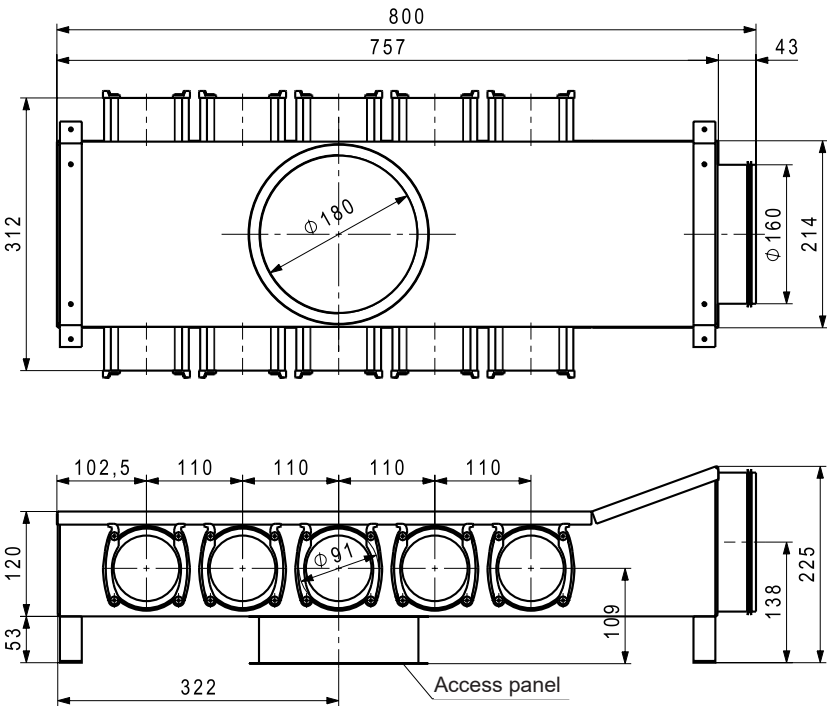
Distribution cases DN 160

In-wall distribution case UPVKS 10 x 75



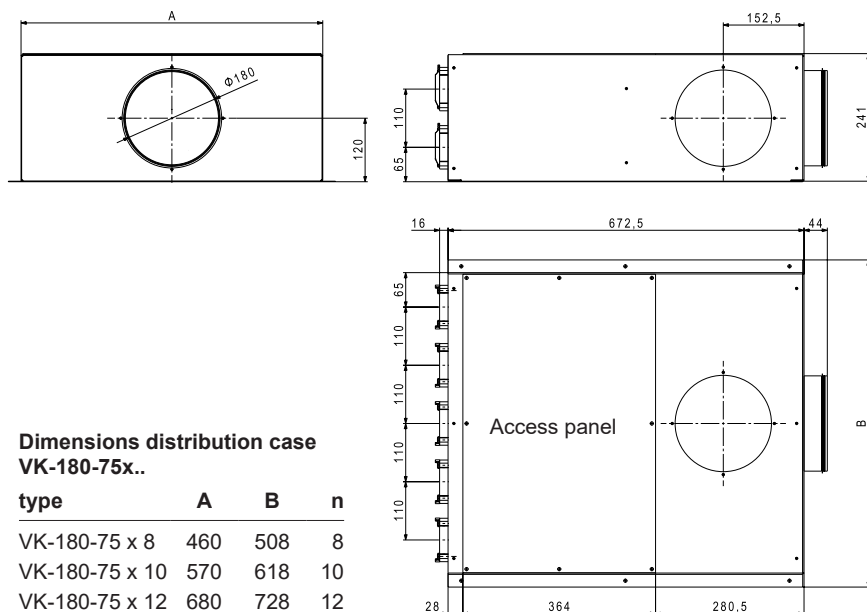
In-wall distribution case UPVKS 10 x DN X
 for concrete installation
 Distribution case made from aluzinc sheet.
 With one connection nozzle DN 160 (on face)
 and 2 x 5 nozzles DN 75 and DN 90 (lateral),
 incl. 4 end covers, inside lining of sound insu-
 lation material, incl. throttle orifices.

In-wall distribution case UPVKS 10 x 90



Distribution cases DN 180

Distribution case VK-180-75



Dimensions distribution case VK-180-75x..

type	A	B	n
VK-180-75 x 8	460	508	8
VK-180-75 x 10	570	618	10
VK-180-75 x 12	680	728	12

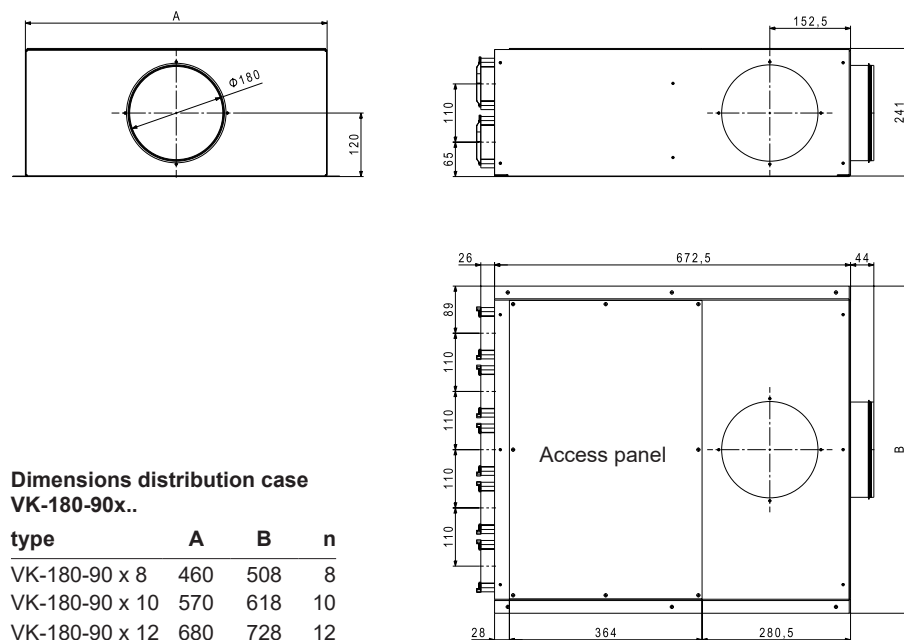
Distribution case for 8, 10 or 12 connections VK-180-75 resp. VK-180-90

This distribution case with an integrated silencer is used if the pipes can be arranged and laid centrally.

Incl. throttle orifices

In type VK, the DN 75 resp. DN 90 connections are on the end; the connection nozzle DN 180 is supplied and can be installed on the end, top or on the left or right side. The distribution case is suitable for on-wall installation.

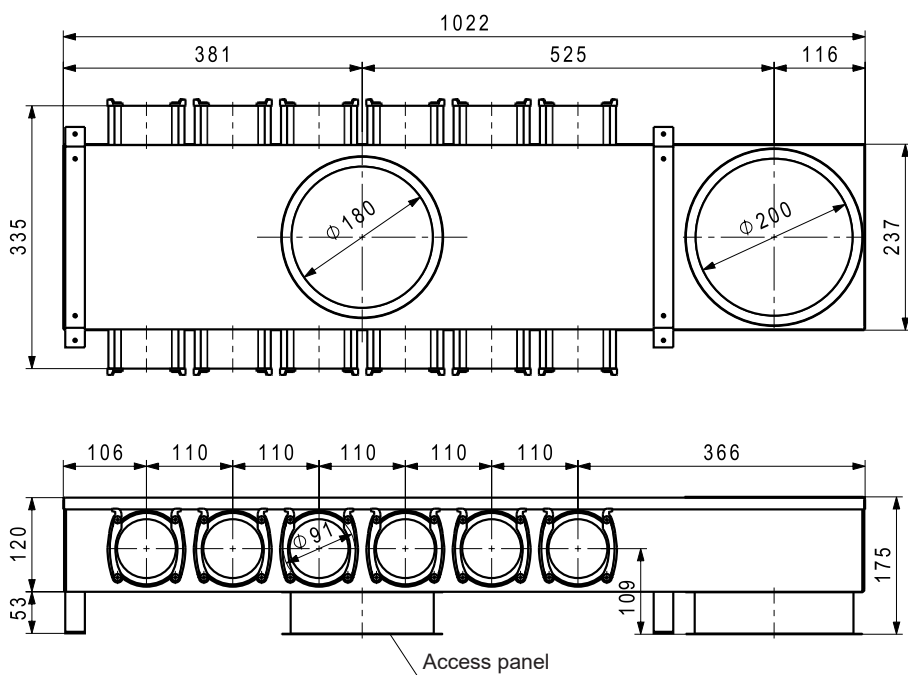
Distribution case VK-180-90



Dimensions distribution case VK-180-90x..

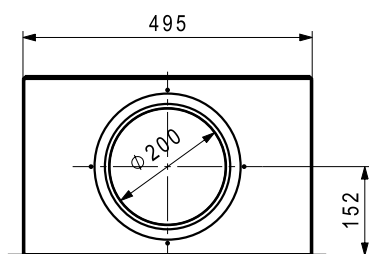
type	A	B	n
VK-180-90 x 8	460	508	8
VK-180-90 x 10	570	618	10
VK-180-90 x 12	680	728	12

Distribution cases DN 200

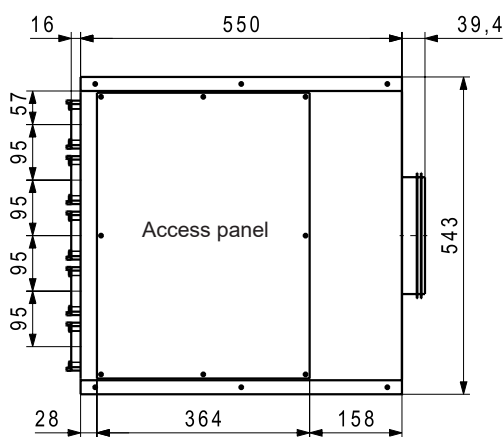


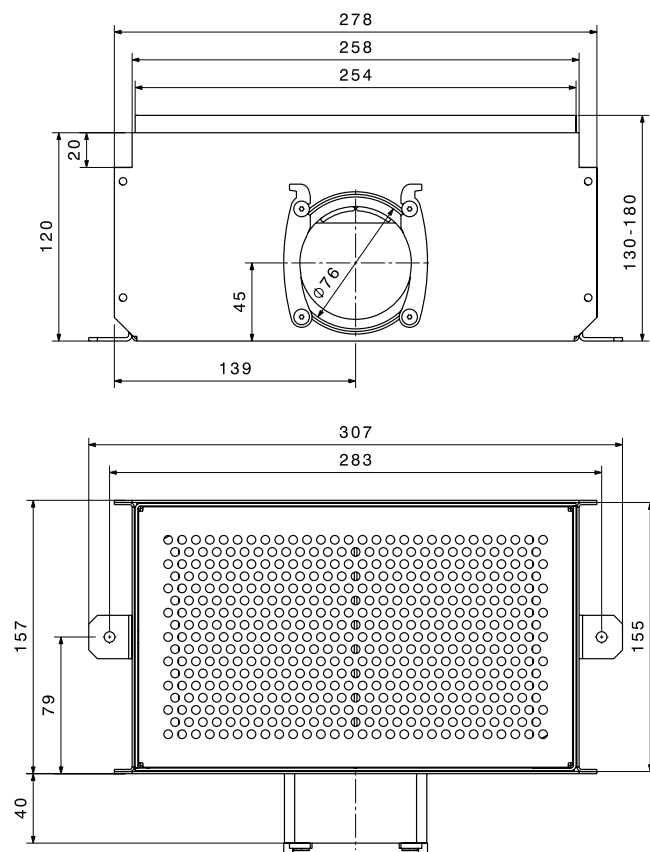
In-wall distribution cases UPVK 200-90x12

for concrete installation
Distribution case made from aluzinc sheet.
Lined on the inside with sound absorbing material.
Connection nozzles:
2 x DN 200, 2 x 6 DN 90 (sideways).
Incl. end covers, 1 connection nozzle DN 200,
incl. throttle orifices



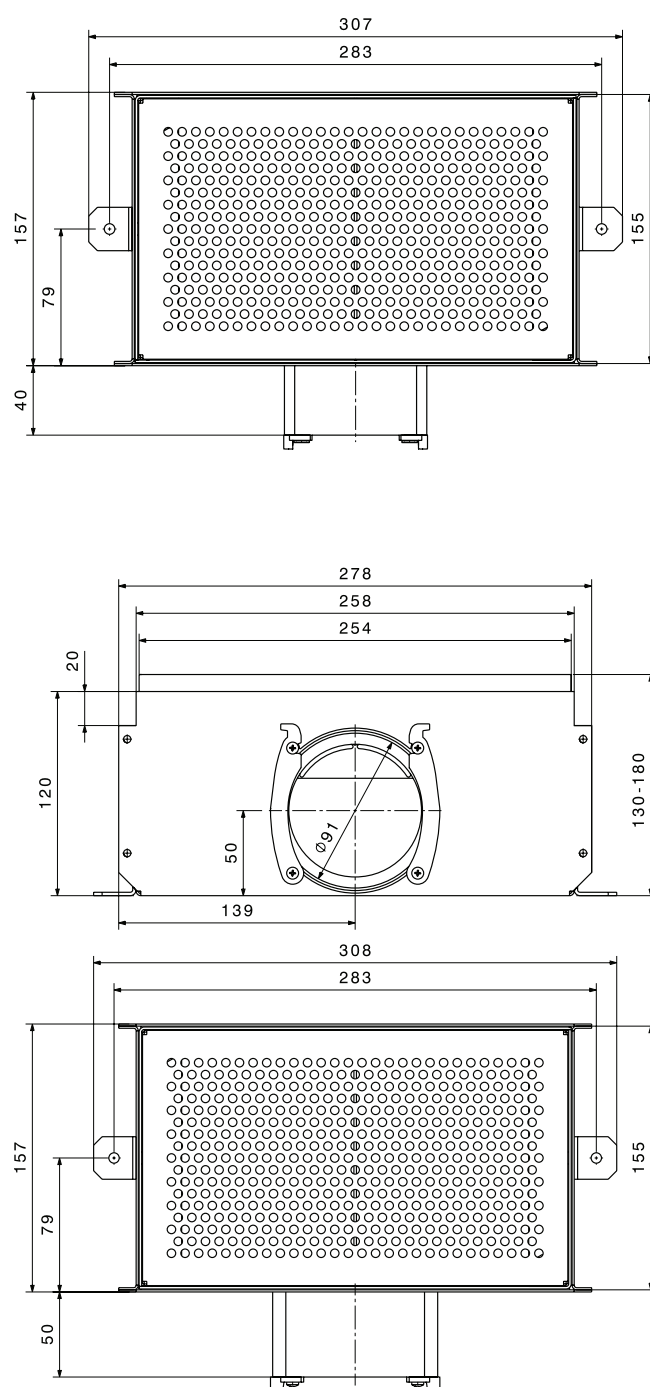
Distribution case VK200-75x15
Distribution case of aluzinc sheet
with access panel.
Inside with sound absorption block.
Connection nozzles:
1 x DN 200 (on the back)
15 x DN 75 (on the front)
Incl. throttle orifices





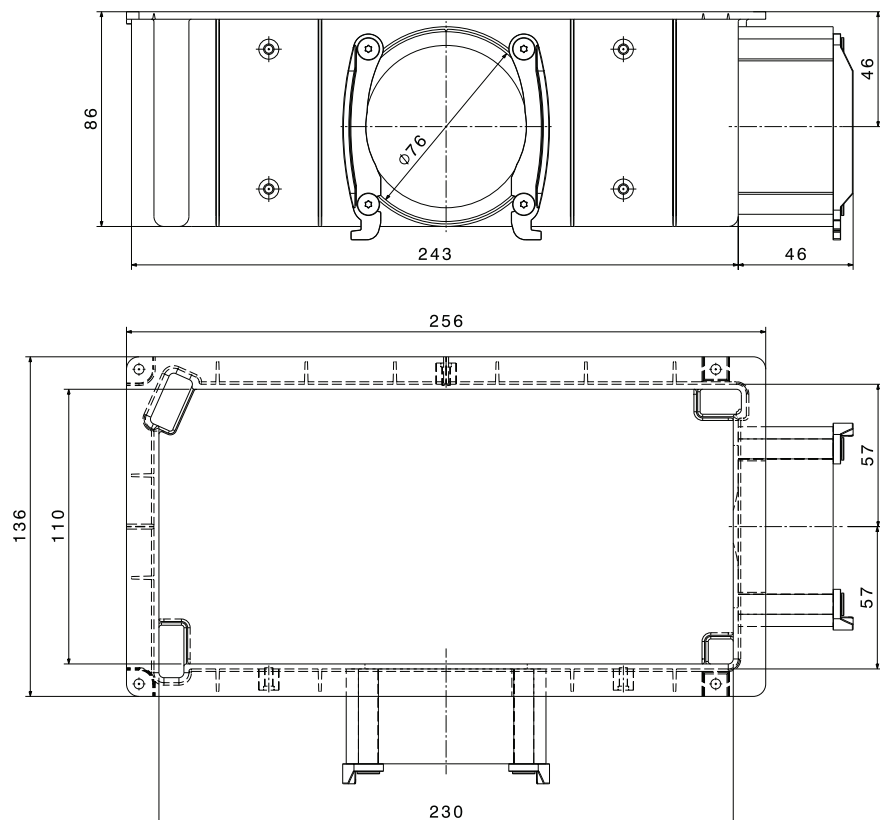
Floor grille BD-30-75

For installation in the floor structure, supply air flow rate 30 m³/h. Perforated stainless steel grille in an adjustable casing, height 130-180 mm, inner component of stainless steel with 3 contact points, outer component of aluzinc sheet with 2 fastening catches and one connection nozzle for flexible pipe FR-75. Only suitable for supply air.



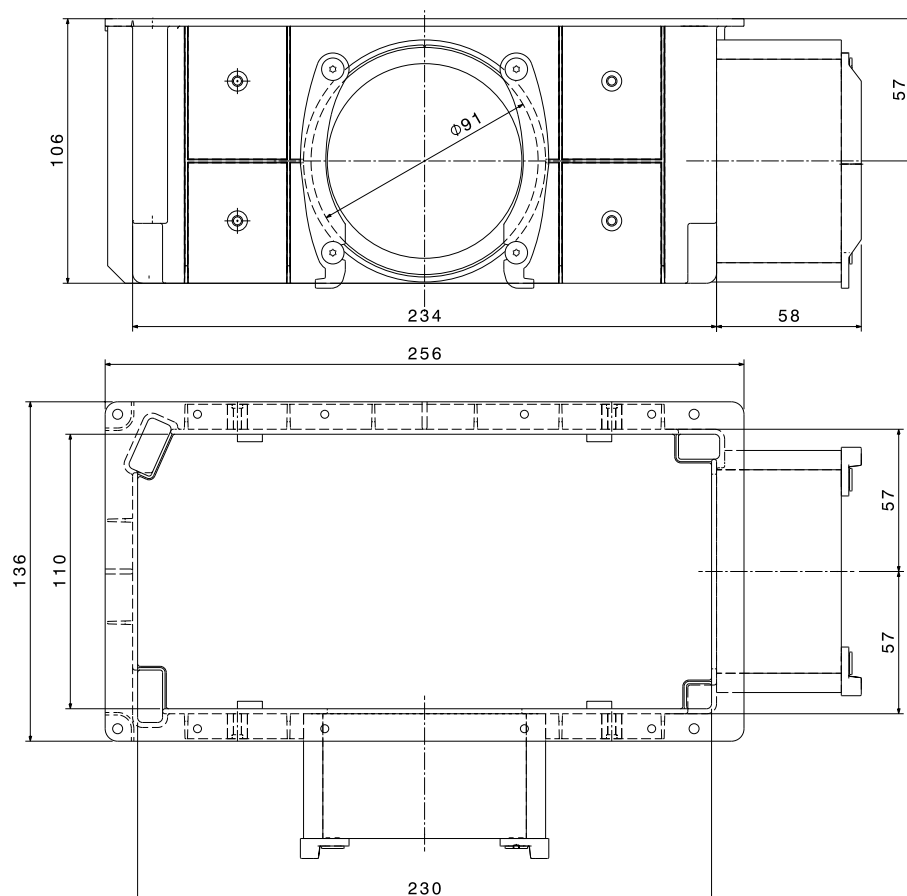
Floor grille BD-30-90

For installation in the floor structure, supply air flow rate 40 m³/h. Perforated stainless steel grille in an adjustable casing, height 130-180 mm, inner component of stainless steel with 3 contact points, outer component of aluzinc sheet with 2 fastening catches and one connection nozzle for flexible pipe FR-90. Only suitable for supply air.



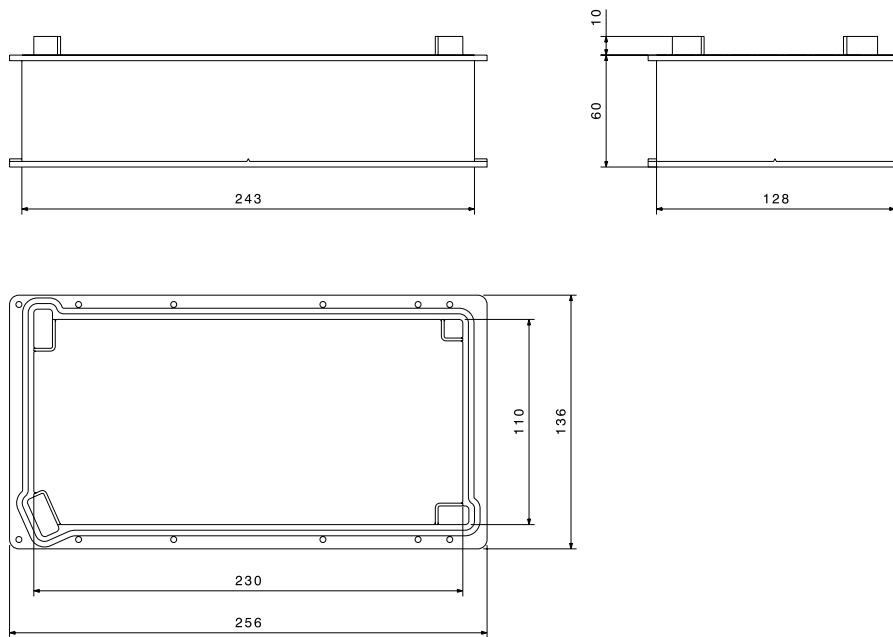
Connection housing AG-60

In combination with the design grilles. The extension allows fine adjustment of the grille (rotating) after installation. Suitable for installation in mass concrete, masonry walls or lightweight construction. Of plastic with 2 connection nozzles DN 75. Incl. fixing angles, sound absorbing mat and insert block as building protection cover and plastering aid.



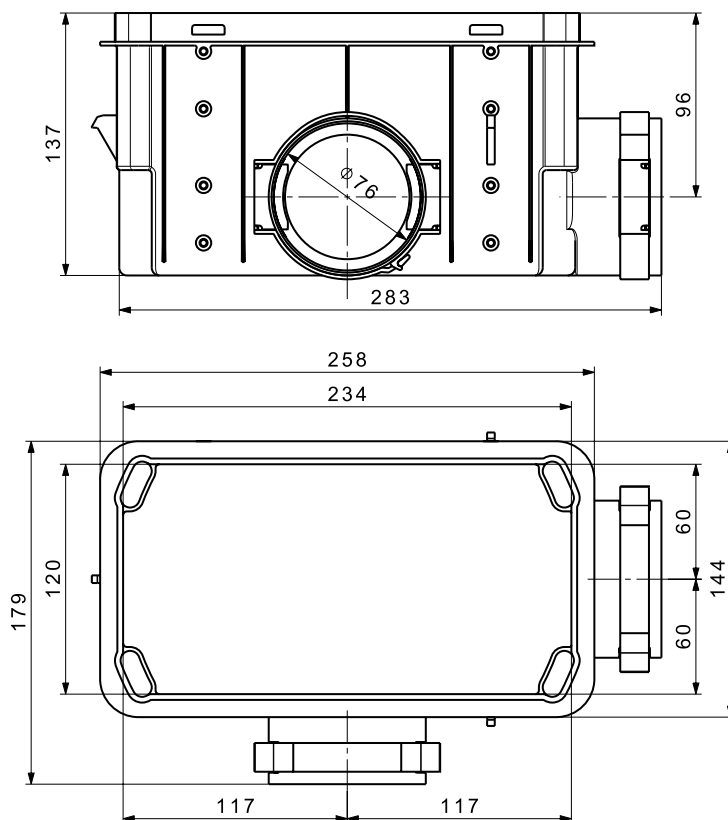
Connection housing AG-90

In combination with the design grilles. The housing allows fine adjustment of the grille (rotating) after installation. Suitable for installation in mass concrete, masonry walls or lightweight construction. Of plastic with 2 connection nozzles DN 90. Incl. fixing angles, sound insulation mat and insert block as building protection cover and plastering aid.



Extension VAG-60/VAG-90

For installation of AG-60 and AG-90 on the formwork panel. Extension permits precise grille alignment after installation.



Connection housing quick 75

for supply and extract air in combination with the design grilles. The housing allows fine adjustment of the grilles after installation. Plastic housing with 2 connection nozzles DN 75. Very easy to mount, no nails in concrete after stripping.

Supply air:

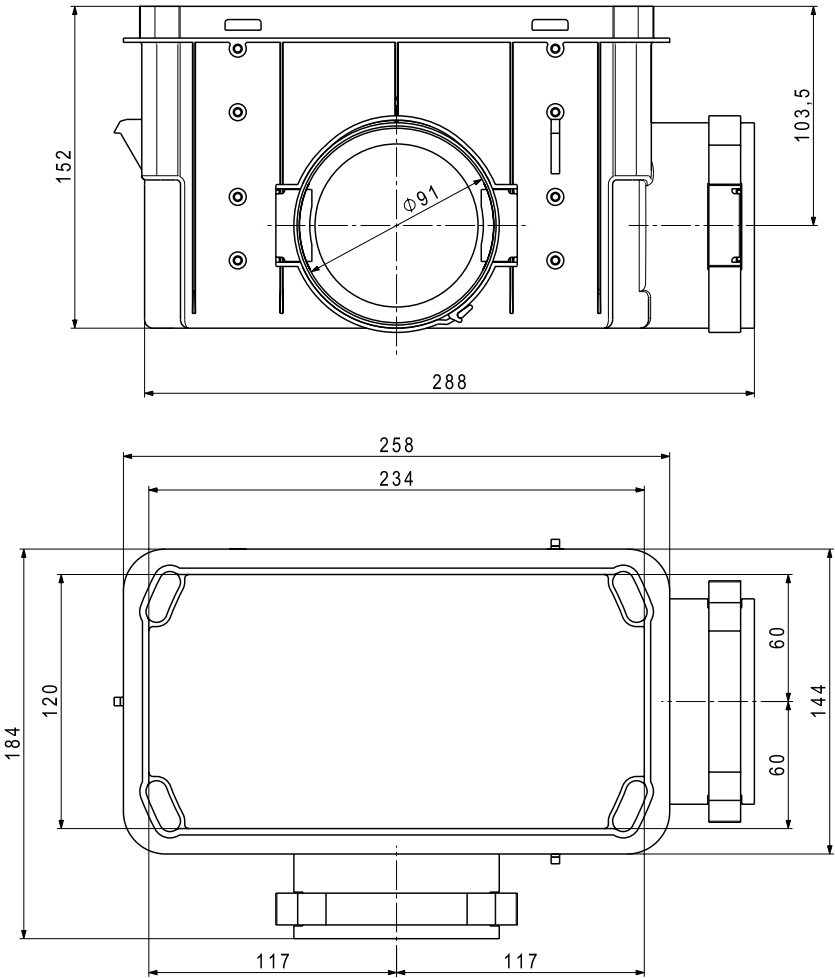
1 x DN 75 up to 30 m³/h

2 x DN 75 up to 40 m³/h

Extract air:

1 x DN 75 up to 30 m³/h

2 x DN 75 up to 60 m³/h



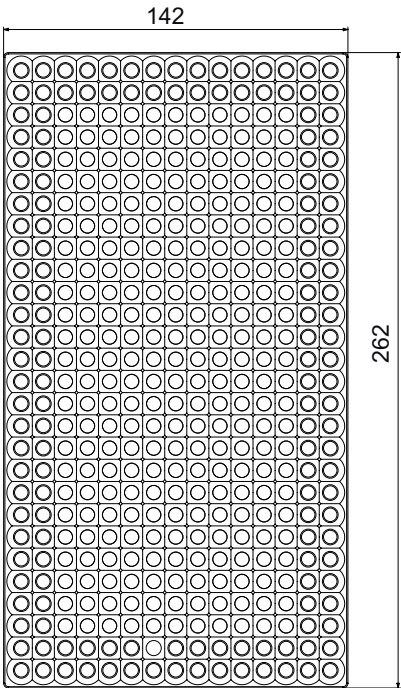
Connection housing quick 90
 for supply and extract air in combination with the design grilles. The housing allows fine adjustment of the grilles after installation. Plastic housing with 2 connection nozzles DN 90. Very easy to mount, no nails in concrete after stripping.

Supply air:
 1 x DN 90 up to 40 m³/h

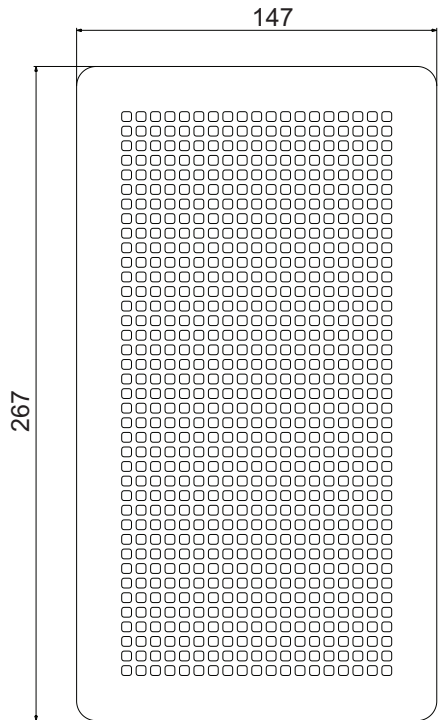
Extract air:
 1 x DN 90 up to 60 m³/h

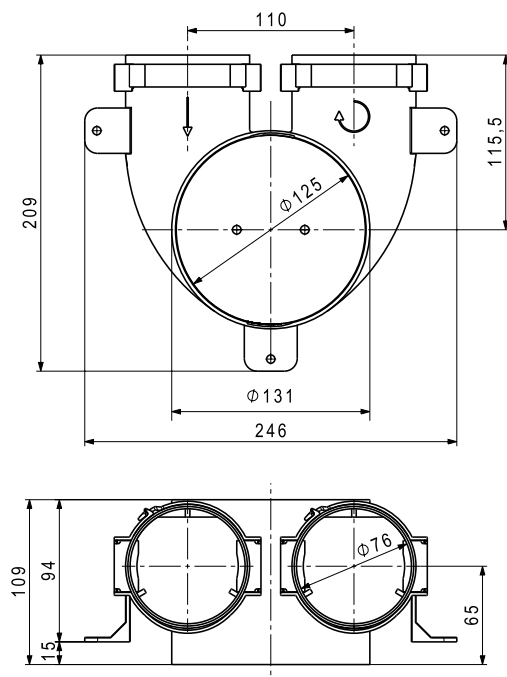
Suitable for installation in mass concrete

Design grille made of plastic
 The grille is mounted on the connection housing AG-60 or the connection housing quick 75/90. There are four grille designs (Pazifik, Adria, Atlantik, Karibik). The outside dimensions are identical for all grilles. The wall/ceiling plaster must not exceed 30 mm.



Design grille made of metal
 The grille is mounted on the connection housing AG-60 or the connection housing quick 75/90. There are three grille designs (Alvier, Sântis, Pizol, Pilatus). The outside dimensions are identical for all grilles. The wall/ceiling plaster must not exceed 30 mm.





Connection cylinder quick 75 short

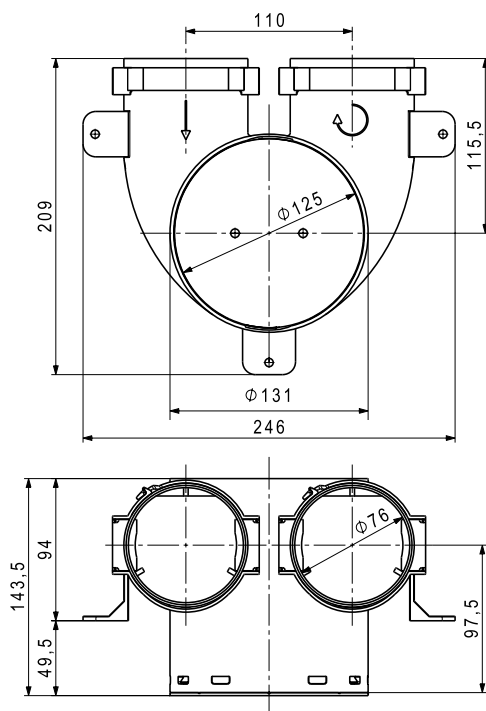
For masonry, lightweight and wood construction
Plastic casing, two connections DN 75
incl. 1 stopper DN 75

Supply air:

1 x DN 75 up to 30 m³/h
2 x DN 75 up to 40 m³/h
With tangential outlet only 1 x DN 75

Extract air:

1 x DN 75 up to 30 m³/h
2 x DN 75 up to 60 m³/h



Connection cylinder quick 75 medium

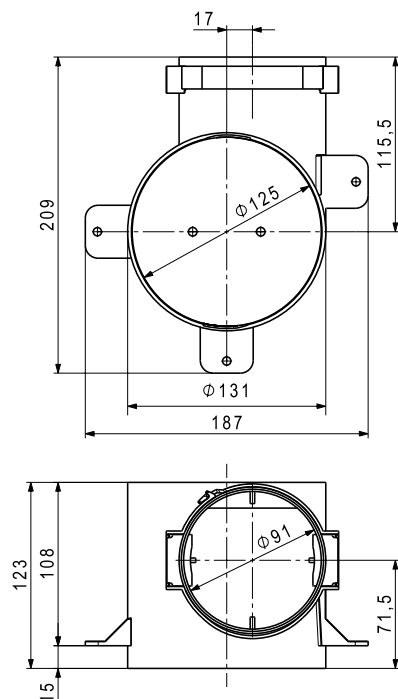
For element ceiling 60 mm, solid concrete
Plastic casing, two connections DN 75
incl. 1 stopper DN 75
and building protection cover

Supply air:

1 x DN 75 up to 30 m³/h
2 x DN 75 up to 40 m³/h
With tangential outlet only 1 x DN 75

Extract air:

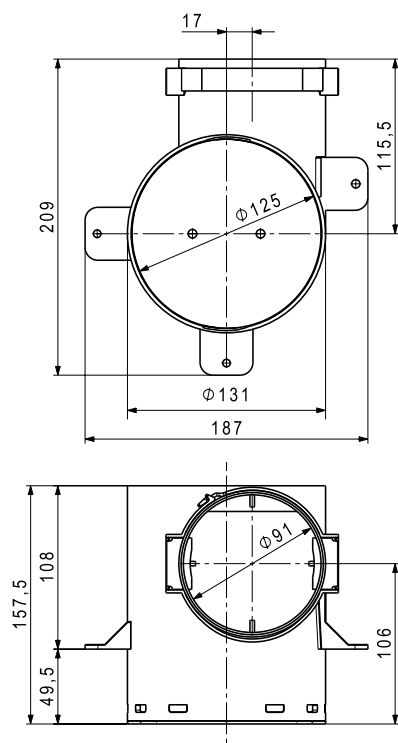
1 x DN 75 up to 30 m³/h
2 x DN 75 up to 60 m³/h



Connection cylinder quick 90 short
for masonry, lightweight
and wood construction
Plastic casing, with connection DN 90

Supply air:
1 x DN 90 up to 40 m³/h

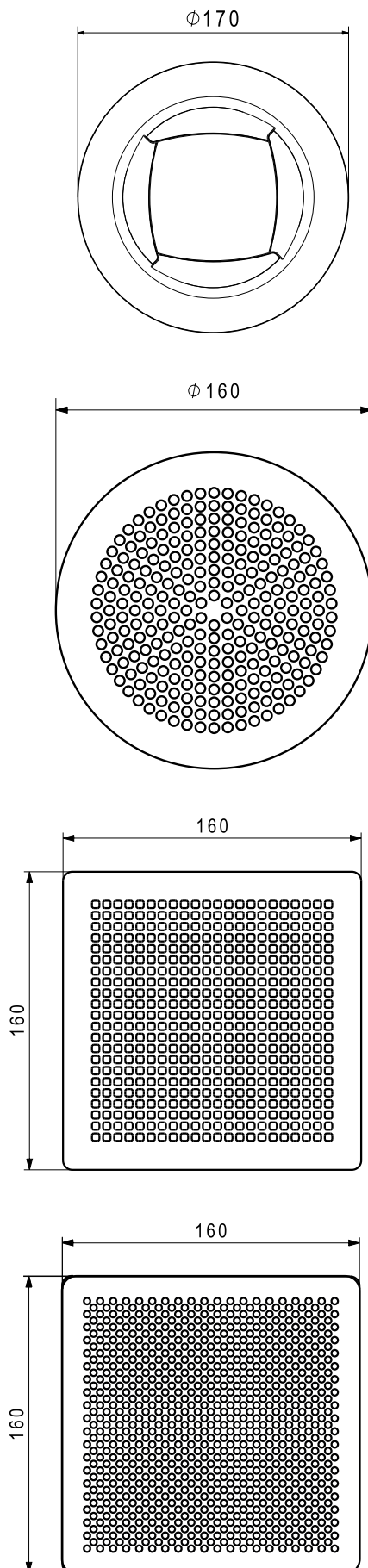
Extract air:
1 x DN 90 up to 60 m³/h



Connection cylinder quick 90 medium
for element ceiling up to 60 mm,
solid concrete
Plastic casing, with connection DN 90
incl. building protection cover

Supply air:
1 x DN 90 up to 40 m³/h

Extract air:
1 x DN 90 up to 60 m³/h



Design grille Tangential 125

suitable for:

Connection cylinder quick 75 and 90

made of plastic, with plug-in connection

Colour: white RAL 9016, can be painted on site

Supply air up to 40 m³/h

Extract air up to 50 m³/h

Stainless steel design grille Falknis

suitable for:

Connection cylinder quick 75 and 90

Brushed stainless steel

With plug-in connection

Supply air up to 40 m³/h

Extract air up to 50 m³/h

Design grille Falknis painted white

suitable for:

Connection cylinder quick 75 and 90

Steel, painted white (RAL 9016)

With plug-in connection

Supply air up to 40 m³/h

Extract air up to 50 m³/h

Stainless steel design grille Calanda

suitable for:

Connection cylinder quick 75 and 90

Brushed stainless steel

With support for

connection cylinder quick 75 and 90

Supply air up to 40 m³/h

Extract air up to 50 m³/h

Design grille Calanda painted white

suitable for:

Connection cylinder quick 75 and 90

Steel, painted white (RAL 9016)

With plug-in connection

Supply air up to 40 m³/h

Extract air up to 50 m³/h

Design grille Rigi aluminium

Suitable for connection cylinder quick 75 and 90

Aluminium sheet with flanged edges

Surface: anodized brushed aluminium

With holding fixture for

connection cylinder quick 75 and 90

Supply air up to 40 m³/h

Extract air up to 60 m³/h

Design grille Rigi white

Suitable for connection cylinder quick 75 and 90

Aluminium sheet with flanged edges

Painted white (RAL 9016)

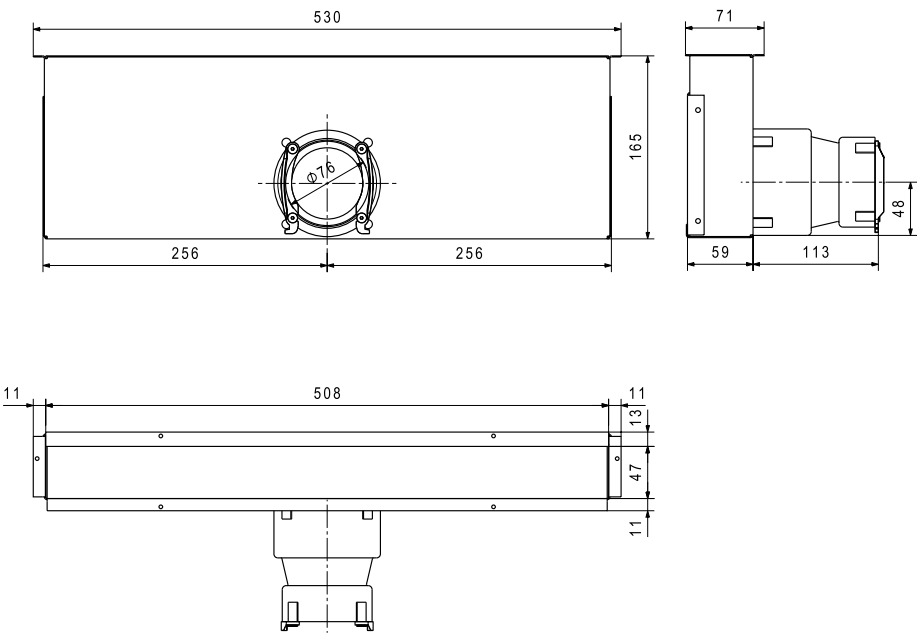
With holding fixture for

connection cylinder quick 75 and 90

Supply air up to 40 m³/h

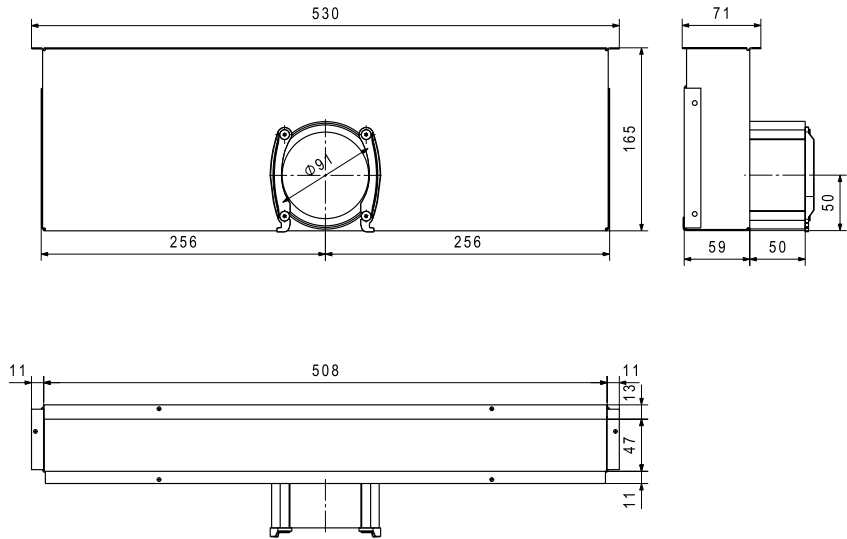
Extract air up to 60 m³/h

Slit grille SD-75



Slit grille SD-75 and SD-90
The slit grille is used for linear supply air distribution. It can be set to one or two outlet sides when taken into service, as required (preset to two sides).
The flow rate is set in the distribution case.

Slit grille SD-90



Relevant standards and regulations (incomplete)

- DIN 1946-T6: Controlled mechanical supply and extract air handling for apartments with heat recovery
- DIN 4109: Sound insulation in structural engineering
- DIN EN 779: 2012 Particulate air filters for general ventilation – determination of the filtration performance
- DIN 18017-T3: Ventilation of bathrooms and WCs without outside windows
- Energy Conservation Ordinance EnEV
- Ventilation System Guideline LÜAR

General

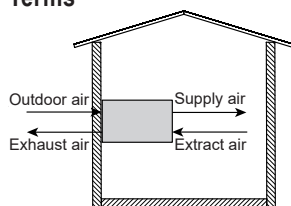
The following information is required for planning the comfort ventilation:

- Type, number, surface area and utilisation of the rooms included in the ventilation
- Floor plans and clear room heights
- Possible locations for routing distribution lines and outlets (ceiling, floor structure, outside wall, etc.)

One comfort ventilation device is only allowed to be used for one utilisation unit. The application limits must be complied with.

Fire protection requirements must be clarified with the responsible specialist. Normally (model building code), there are no special fire protection requirements within usage units with max. 2 dwelling units comprising in total less than 400 m² surface area and less than 7 m height. Living area ventilation units do not replace the drying out of the building. This should be completed by the time the living area ventilation is taken into operation.

Terms



Depending on the use to which they are put, rooms are divided into supply air, overflow and extract air areas (table 1). Rooms are only equipped with both supply and extract air ports in exceptional cases. Rooms equipped with comfort ventilation must be located within the thermal (insulated) building shell.

Table 1

Zone	Room use (examples)
Supply air zone	Bedroom, living room, nursery, dining room
Overflow zone	Corridor, hallway, stairway
Extract air zone	Bathroom, toilet, storage room, kitchen, hall

Flow rates

Necessary flow rates must be defined for a specific project on the basis of the current status of the relevant standards. Special requirements, e.g. concerning noise, moisture loads and temperatures must be taken into account. The following design recommendations are based on DIN 1946 part 6, although compliance with this standard must be examined on a case-by-case basis.

The largest of the flow rates described in the following 4 points is used as the basis for the nominal ventilation of the ventilation unit (e.g. total of all extract air flow rates).

The maximum air flow rate of the ventilation unit should be sufficient for intensive ventilation (1.3 x nominal ventilation at 170 Pa, for example).

1. A flow rate of 30 m³/h must be provided per person for the residential unit.
2. The area-related minimum flow rates in Table 2 must be complied with.
3. The flow rates in Table 3 must be guaranteed for extract air rooms.
4. The flow rates in Table 4 are recommended for supply air rooms.

Table 2

Relevant surface A _{NE} [m ²]	20	30	50	70	90	110	130	150	170	190	210
Nominal ventilation V _{R,NL} [m ³ /h]	35	45	65	80	100	115	125	140	150	155	165

Table 3: extract air

Room type	Extract air [m ³ /h]	n *
Kitchen, kitchenette	40	2
Bathroom, toilet with shower	40	2
Toilet	20	1
Utility room, hobby room	20	1

* n = usual number of flexible pipes

Table 4: supply air

Room type	Extract air [m ³ /h]	n *
Living room	40-50	2
Master bedroom (2 persons)	40	2
Nursery (1 person)	24	1
Office (private), dining room, guestroom	20	1

* n = usual number of flexible pipes

Supply/extract air

Only directly or indirectly heated rooms are included in the ventilation. All supply and extract lines should be routed within the insulated building envelope.

The position of the supply air, overflow air and extract air openings must be selected such that cross-ventilation occurs. Supply air openings must be positioned outside the occupied area, and in particular not above the head ends of beds, writing desks or couches.

Hoval normally uses round flexible pipes DN 75 or flat channels 100 as distribution lines. For noise and efficiency reasons, they should be 6 and 15 m long. The external pressure drops (outside + supply air or extract + exhaust air incl. distributor and silencer) should not be more than approx. 100 Pa for nominal ventilation. Hoval recommends complying with a maximum pressure drop of 40 Pa for the lines after the distributor (room-side). Flow rates in excess of 27 m³/h rated ventilation must therefore be distributed between 2 lines. In long line runs, it is necessary to carry out a corresponding calculation.

Distributors must be accessible for inserting the throttle orifices and for cleaning.

Lines between the ventilation unit and the supply air distributor or extract air manifold are normally routed with the diameter of the unit coupling. In cool rooms, they must be insulated.

Fresh/exhaust air

The fresh air inlet should be planned in such a way as to avoid the intake of pollutants and smells. It should be at least 2 m above ground and not close to garages or roads with heavy traffic.

The exhaust air outlet should be positioned in such a way that it cannot be drawn in by the outside air inlet. The horizontal distance should be at least 2 m (note the predominant wind direction).

The fresh and exhaust air lines must be insulated over their complete surface and be impervious to vapour diffusion so as to avoid condensation forming on surfaces (e.g. 25 mm EPDM). The insulation must be continued through the outer wall at least until shortly below the outside surface.

Silencers

Silencers suitable for the noise emissions of the ventilation units must always be positioned in the supply and extract air lines.

To avoid disturbance of neighbours or on your own patio, for example, it is recommended that silencers should be installed in the exhaust air and possibly also outside air lines.

Unit installation

The FR comfort ventilation units can be mounted in various different installation positions. (mounting on a wall/ceiling/floor, outside air top/bottom). The access panel is present on both sides for installation in opposite direction. The FRT comfort ventilation units are always installed with the nozzles directed upwards. Vibration dampers (accessories) must be used for mounting in order to avoid noise transmission and to prevent distortion of the unit. The entire comfort ventilation unit as well as its integrated and add-on parts must be accessible for maintenance and servicing work.

The installation conditions in the technical data (temperature, humidity) must be complied with.

Operator terminal/wiring

The comfort air ventilation unit is configured ready-to-connect. For connection with the mains supply a 3 m long cable with plug is supplied. A 230 V mains socket should be provided close to the comfort ventilation unit in the electrical planning. The operator terminal should be installed so that it is visible (fault display, operation).

The comfort ventilation unit and operator terminal are connected by an 8-pol CAT 5 patch ribbon cable. A socket (RJ45) must be installed in the building close to the comfort ventilation unit and connected to the position of the operator terminal (RJ45 plug). The HomeVent® comfort ventilation unit is supplied with a 3 m long cable with an RJ45 plug for connecting the unit to the socket.

Combination with heating sources

When using ventilation systems together with heating sources, the chimney sweep must be consulted in advance.

Systems extracting air (e.g. cooker hood, ventilation system, central vacuum cleaner, extract air dryer) can give rise to negative pressures and cause hazardous flue gases to be drawn out of the heat source; as a result, a pressure monitor with design certification is generally required as a safety device. This interrupts the electrical power supply to the air extraction system if dangerous pressure conditions arise. The use of approved fire sources independent from the room air can prevent the flue gas being sucked out.

Services

Hoval will be happy to assist you in planning and taking the systems into operation.

IsiPipe and IsiPipe Plus air ducts made of EPP

- The IsiPipe EPP air ducts are joined via a connecting sleeve.
- To ensure tight sealing, the individual sections must be inserted into the sleeve as far as the stop. Tight sealing must be ensured even when individual sections expand or contract as a result of temperature fluctuations.
- The individual sections can be shortened (e.g. using a knife or a saw). When shortening sections, always cut at right angles and remove any residue from the pipe. Use an assembly device, e.g. pipe clamp.
- IsiPipe air ducts made of EPP must be accessible (must not be routed in the cable duct).
- IsiPipe air ducts made of EPP must be supported at regular intervals (approx. every 1.5 m) with pipe clamps.
- When installing accessory parts with a high dead weight, the weight must be supported so that there is no load on the IsiPipe air duct.
- Thermal bridges must be prevented at the junctions between IsiPipe air ducts and pipes or components made of another material, e.g. metal.