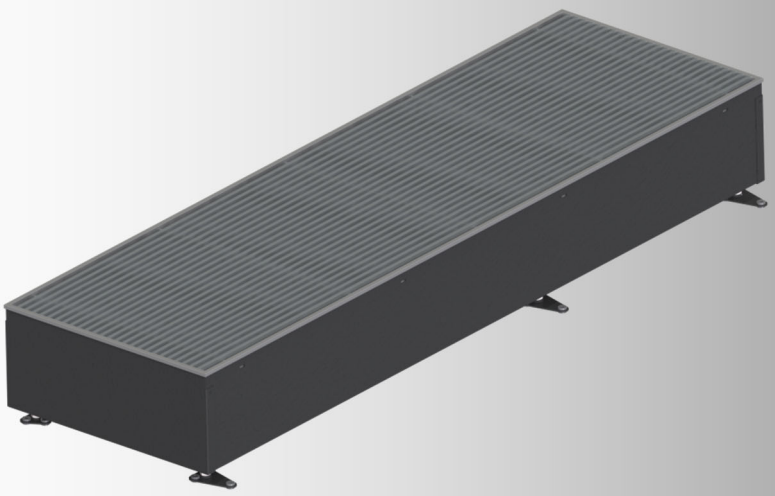
TECHNICAL DOCUMENTATION



CNV

Floor convector

Contents

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GENERAL DESCRIPTION

SCHAKO's passive floor convectors CNV as decentralised air-conditioners (heating mode) enable energy-efficient and comfortable air-conditioning of offices and administration buildings, exhibition and sales rooms, private living spaces, and conservatories.

The main area of use of floor convectors of this type is as addition to other heating systems and as an autonomous heating element for single-room heating.

The units are particularly suitable for installation in false floors in buildings with large glass facades of large surface area reaching down to the floor. The function of these convectors is to compensate thermal loads and to avoid the formation of condensates in the window/facade area.

For optimum adjustment to the performances required in the system, the CNV convector series comprises four heights and four widths. All variants are available in lengths ranging from 850 mm to 3850 mm (in 300 mm steps).

ADVANTAGES

--- High heating capacity in combination with low space requirement.
--- Protection from cold draughts on facade areas, walls and window panes.
--- Compact dimensions, low height and low width.
--- Tread-resistant, visually pleasing and functional grille insert.
--- Height adjustment operable from the room side.
--- Simple installation and maintenance.
--- Combination of passive and active convectors in the same width possible.
--- A complete delivery with hydraulic connections, valves, actuator, and lock pre-mounted ex works possible.
--- Project-specific solutions for maximum architectural adjustment possible.
--- Heating capacity according to EN-442 and EN-16430.

OPERATION

Passive floor convectors work by the principle of natural convection. Cold air close to the floor flows into the convector, is heated by the heat exchanger and flows upwards.

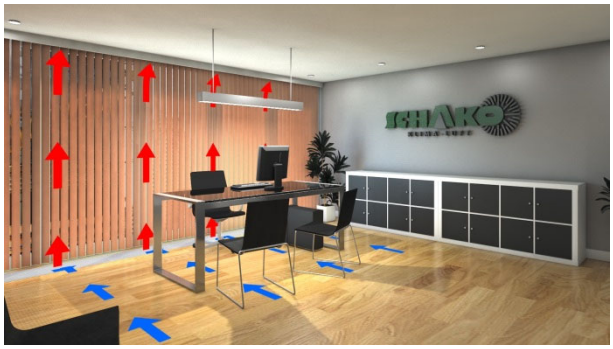


Figure1: Schematic diagram of the mode of operation

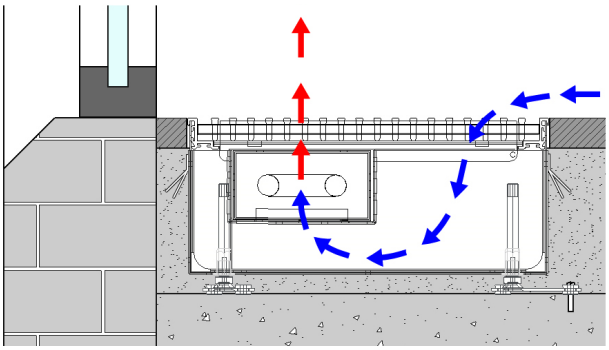


Figure2: Schematic diagram of the mode of operation

DESCRIPTION OF THE EQUIPMENT

MODELS

1 - Housing

--- Made of galvanised sheet steel, painted internally and externally to RAL 9005 (black), with pre-marked connection openings for hydraulic connections.
Total length up to < 4000 mm
Band design:
  --- without end pieces (-**E0**)
  --- with 1 end piece on the right (**-ER**)
  --- with 1 end piece on the left (**-EL**)
Single convector with 2 end pieces (-**E2**) (standard)
Housing outside:
  --- painted to RAL 9005 (black) (-**A1**) (standard)
  --- painted with polyester powder as rust protection (-**A2**)
  --- With impact sound insulation 3 mm, bonded over the entire surface (**-A3**)

2 - Heat exchanger

--- Heat exchanger as 2-pipe system with galvanised sheet steel frame, aluminium blades, 15-mm pipes, made of copper, and manual ventilation system. Completely painted to RAL 9005 (black).
--- Connection side:
  --- right (-**W2** end face / -**W4** front face)
  --- left (**-W1** end face / **-W3** front face)
--- Hydraulic connection:
  --- Male thread flat-sealing ½" (**-0**) (standard)
  --- Female connections ¾“ Eurocone (**-1**)
  --- Flexible metal hoses (-**3**)
  --- Control units

3 – Grille layer / Frame

--- Extruded aluminium profiles natural colour anodised E6/EV1 (**-G1**) (standard)
--- Extruded aluminium profiles black anodised E6/EV6 (-**G2**)
--- Extruded aluminium profiles bronze anodised E6/C33 (-**G3**)

4 - Spacer bridges

--- Reinforcements depend on the total length. Made of galvanised steel, 1.5 mm thick, painted to RAL9005 (black) (standard).

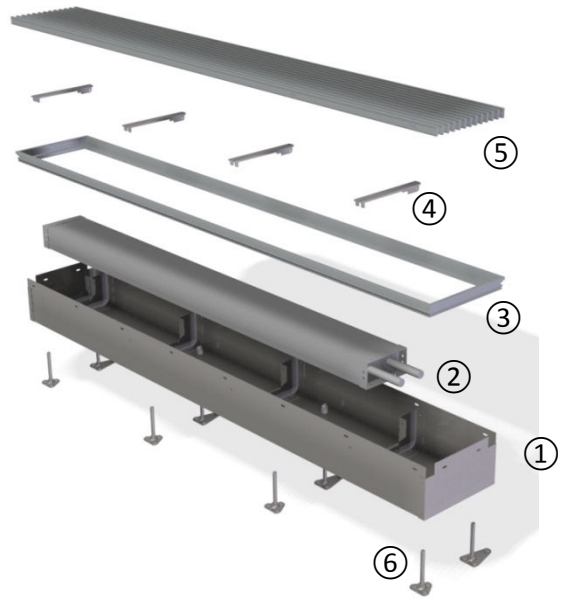
5 - Tread-resistant louvre grid

--- Linear grille aluminium natural colour anodised E6/EV1(**-L1**)
--- Linear grille aluminium black anodised E6/EV6 (**-L2**)
--- Linear grille aluminium bronze anodised E6/C33 (**-L3**)
--- Roll-down grille aluminium natural colour anodised E6/EV1 (**-R1**)
--- Roll-down grille aluminium black anodised E6/EV6 (**-R2**)
--- Roll-down grille aluminium bronze anodised E6/C33 (**-R3**)

6 - Adjustable legs

--- Adjustable legs for industrial floors with decoupling rubber and fastening holders towards the room side.
  --- Adjustable height up to 60 mm (-**07**) (standard)
  --- Adjustable height up to 120 mm (-**13**)

Construction subject to change.
Return not possible.



1- Housing
2- Heat exchanger
3- Upper frame
4- Spacer bridges
5- Tread-resistant louvre grid
6- Adjustable legs

Figure 3: Exploded drawing of CNV

MODEL

CNV-…	Passive floor convector
CNV-190…	Total width 190 mm
CNV-270…	Total width 270 mm
CNV-350…	Total width 350 mm
CNV-400…	Total width 400 mm
CNV-…090	Housing height 90 mm
CNV-…106	Housing height 106 mm
CNV-…150	Housing height 150 mm
CNV-…190	Housing height 190 mm
CNV-…-0850	Nominal length 850 mm
CNV-…-1150	Nominal length 1150 mm
CNV-…-1450	Nominal length 1450 mm
CNV-…-1750	Nominal length 1750 mm
CNV-…-2050	Nominal length 2050 mm
CNV-…-2350	Nominal length 2350 mm
CNV-…-2650	Nominal length 2650 mm
CNV-…-2950	Nominal length 2950 mm
CNV-…-3250	Nominal length 3250 mm
CNV-…-3550	Nominal length 3550 mm
CNV-…-3850	Nominal length 3850 mm
CNVZ-…-180	Dummy pieces (without register)
CNVZ-…-xxx	Corner pieces at various angles

ACCESSORIES

--- Primary air connection spigot with/without rubber lip seal
--- Electrical junction box
--- Protective mounting cover
--- Room temperature control

CONSTRUCTION AND DIMENSIONS

CONSTRUCTIVE FEATURES

W = Width
H = Height
NL = Nominal length

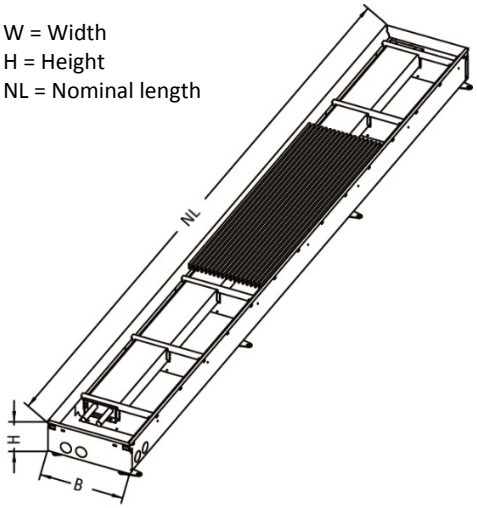


Figure 4: Dimensions CNV

ATTENTION
For all dimensions given, the dimensions of projecting fastening elements have not been taken into account.

Model	B (mm)	H (mm)	NL (mm)	Weights* (kg/m)	Amount of water (l/m)
-190	190	90	850	7.5	0.20
-190		106		8.0	0.20
-190		150	1150	9.9	0.40
-190		190	1450	11.2	0.40
-270	270	90		9.2	0.38
-270		106	1750	9.7	0.38
-270		150	2050	11.7	0.75
-270		190		12.9	0.75
-350	350	90	2350	11.4	1.11
-350		106	2650	11.9	1.11
-350		150		14.8	1.12
-350		190	2950	15.9	1.12
-400	400	90	3250	12.9	0.75
-400		106	3550	13.6	0.75
-400		150		17.0	1.48
-400		190	3850	18.3	1.48

* Dry weight per metre with linear grille, frame, spacer bridges and water register, without connections.

Table 1: Constructive features CNV

WIDTH AND HEIGHT

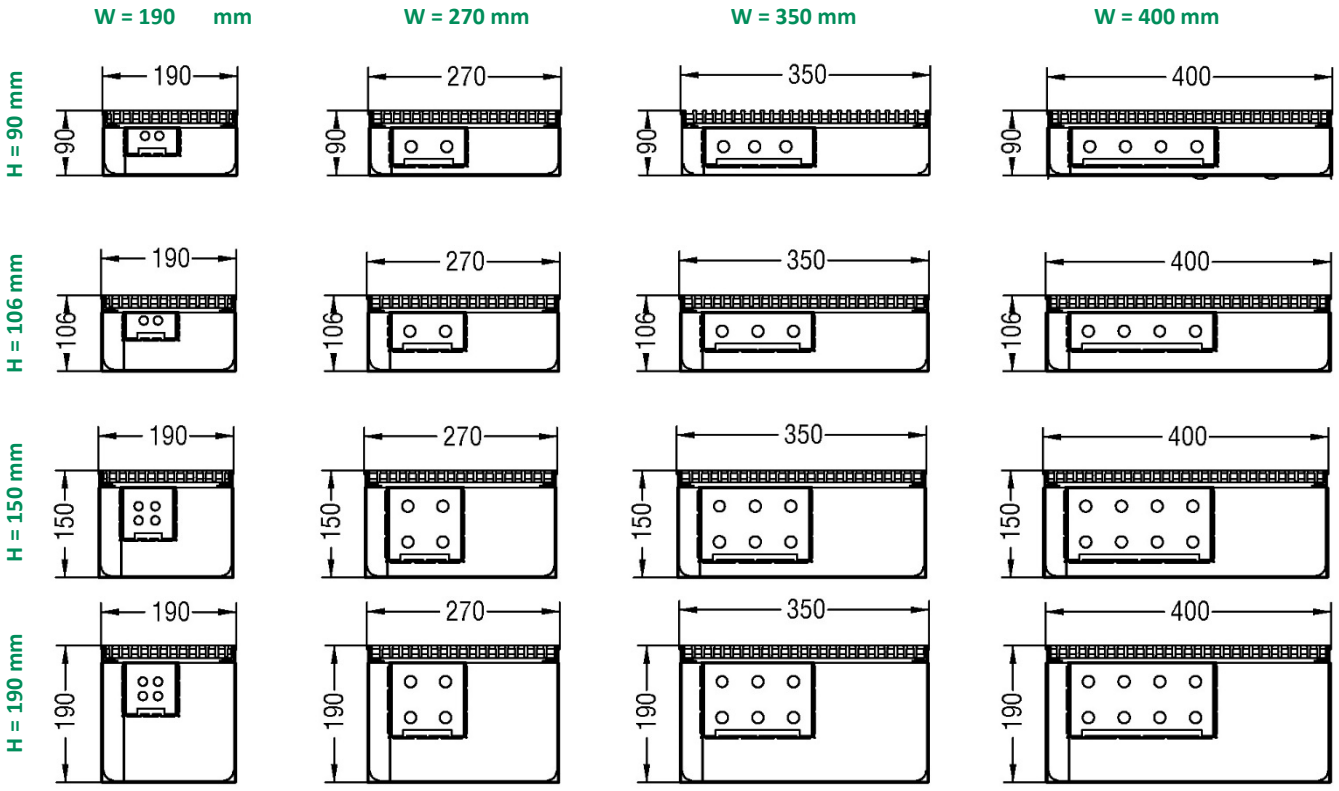


Figure 5: Convector series CNV

TOTAL LENGTH AND REGISTER POSITION

All passive floor convectors can be lengthened with inactive parts to a total length (-LG) of ≤4000 to adjust them to the structural conditions or to adjust them architecturally.
Additional flexibility is achieved by having the option of selecting the register position.

xxxx = Total length (LG)
--- Nominal length up to < 4000 mm
--- The total length (LG) must be entered with 4 digits.

The position of the floor convector in the housing depends on the total length, the following options being possible:

1. Standard model

Total length (LG) = Nominal length (NL):

S = Without moving the register inside the housing (standard)

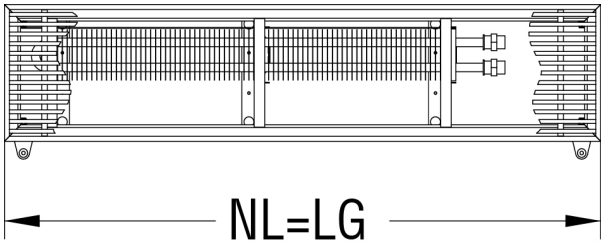


Figure 6: Standard model NL=LG

2. Model

Total length (LG) > Nominal length (NL)

M = Register in the centre with all connection positions.

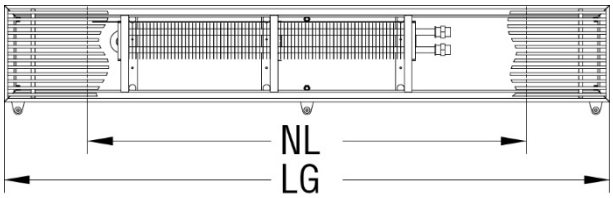


Figure 7: Register in the centre

L = Register on the left with all connection positions.

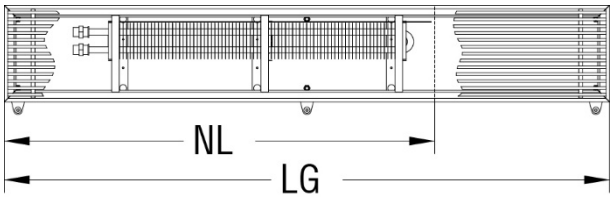


Figure 8: Register on the left

R = Register on the right with all connection positions.

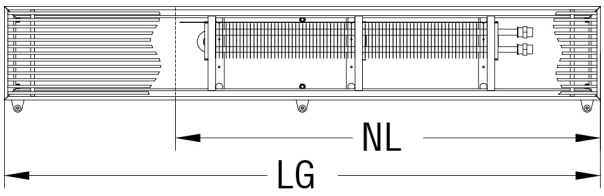
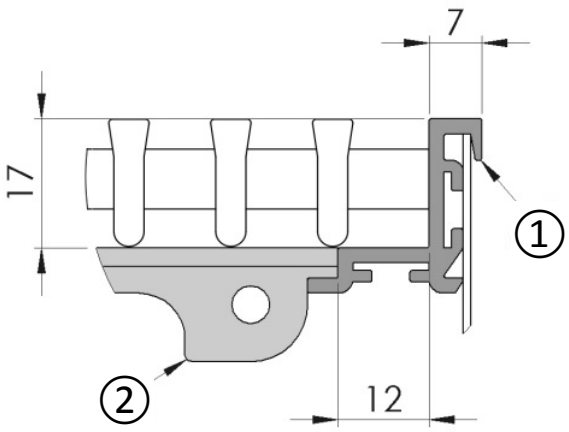


Figure 9: Register on the right

GRILLES AND PROFILES

The tread-resistant grille of the passive floor convectors CNV consists of a linear grille or a roll-down grille (optional) which, fitted in a frame and reinforced with several spacer bridges, serves for transmitting and distributing the load uniformly all the way to the adjusting legs.



1- Frame profile / Grille layer
2- Spacer bridge

Figure 10: Profile view

Both the grille and frame are available in different colours. The grille can be ordered as linear grille or roll-down grille.

The spacer bridges are painted black.

Upper frame:

G1 = Extruded aluminium profiles natural colour anodised E6/EV1
G2 = Extruded aluminium profiles black anodised E6/EV6
G3 = Extruded aluminium profiles bronze anodised E6/C33

SCHAKO linear grille PA:

L1 = Linear grille aluminium natural colour anodised E6/EV1
L2 = Linear grille aluminium black anodised E6/EV6
L3 = Linear grille aluminium bronze anodised E6/C33

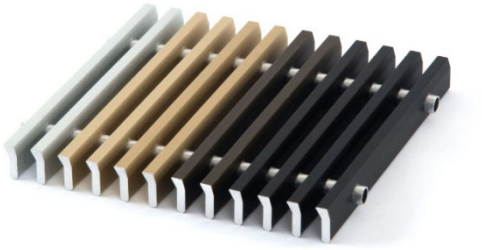


Figure 11: Linear grille PA

SCHAKO roll-down grille PA-R:

R1 = Roll-down grille aluminium natural colour anodised E6/EV1
R2 = Roll-down grille aluminium black anodised E6/EV6
R3 = Roll-down grille aluminium bronze anodised E6/C33

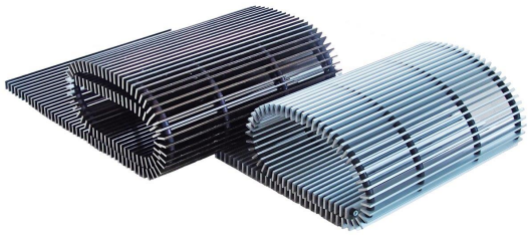


Figure 12: Roll-down grille PA-R (black and natural colour anodised)

PRIMARY AIR CONNECTION SPIGOT

In the complete CNV series, additional spigots with air diffuser plates for introducing conditioned fresh air can be used for covering all possible air-conditioning needs.

Spigot diameter:

P1 = Width of rectangular spigot = as ordered, without GD

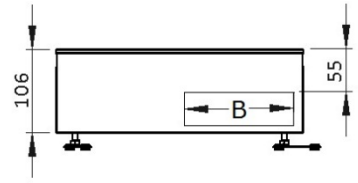


Figure 13: Rectangular spigot H=106

P2 = Spigot DN 78, without GD

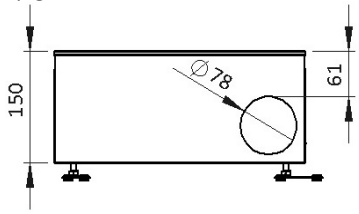


Figure 14: Spigot H=150

P3 = Spigot DN 98, without GD
P4 = Spigot DN 123, without GD

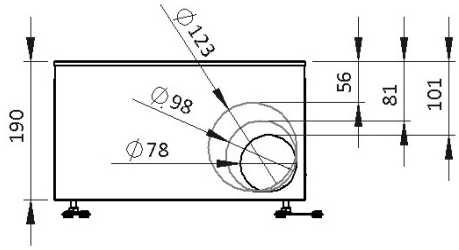


Figure 15: Spigot H=190

P5 = Spigot DN 78, with GD
P6 = Spigot DN 98, with GD
P7 = Spigot DN 123, with GD

Type	DN 78	DN 98	DN 123
H=090	X	X	X
H=106	Rectangular connection spigot is available on order		
H=150	✓	X	X
H=190	✓	✓	✓

✓ - available
X - not available

Table 2: Possible primary air connection spigots

Rubber lip seal (-GD)

Rubber lip seal for the primary air connection spigot for air-tight connection between device and duct.

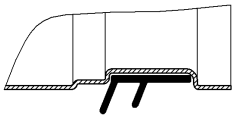


Figure 16 : Rubber lip seal

Primary air connection spigot position

1 = Primary air connection spigot in left end face
2 = Primary air connection spigot in right end face
3 = Primary air connection spigot in left front face
4 = Primary air connection spigot in right front face

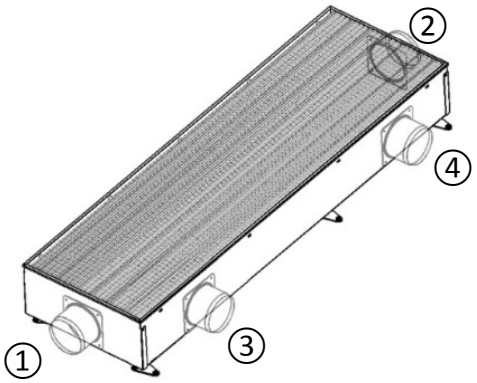


Figure 17: Primary air connection spigot for CNV

ATTENTION
The position of the water connections and the position of the primary air connection spigot without housing extension must not be identical.

CONNECTION

The housings of the floor convectors CNV are pre-punched for various positions of the electrical and hydraulic connections, thus facilitating installation.

CONNECTION POSITION

W1 = Left end face (standard)
W2 = Right end face
W3 = Left front face - Room side
W4 = Right front face - Room side

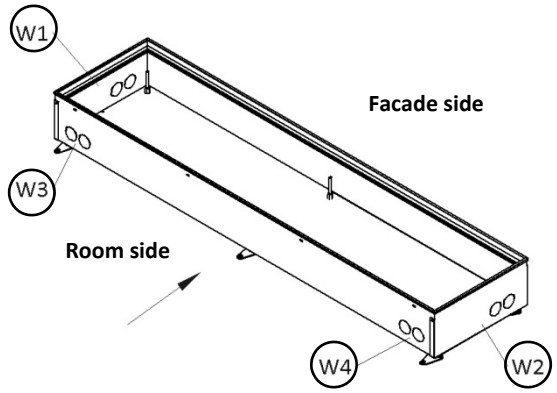


Figure 18: Connection side

ATTENTION
The position of the water connections and the position of the primary air connection spigot without housing extension must not be identical.

Model B = 190 mm

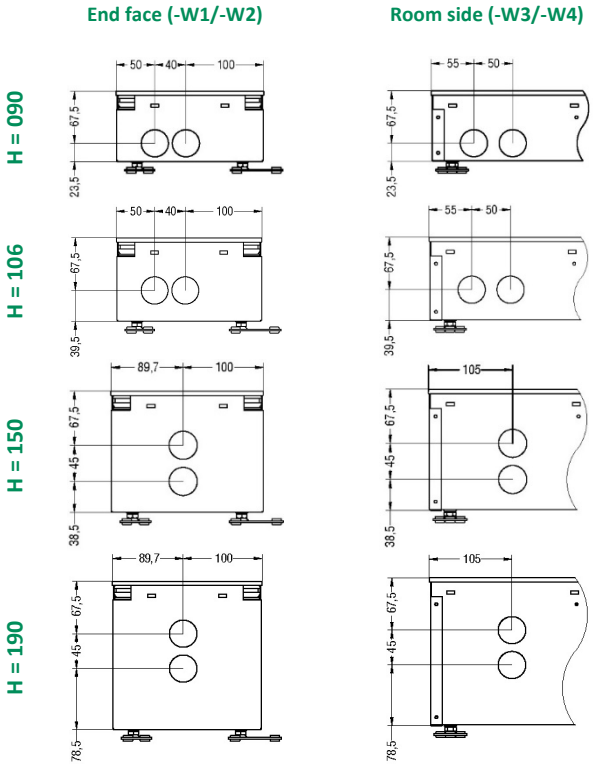


Figure 19: Connection position for type CNV 190

Model B = 270 mm

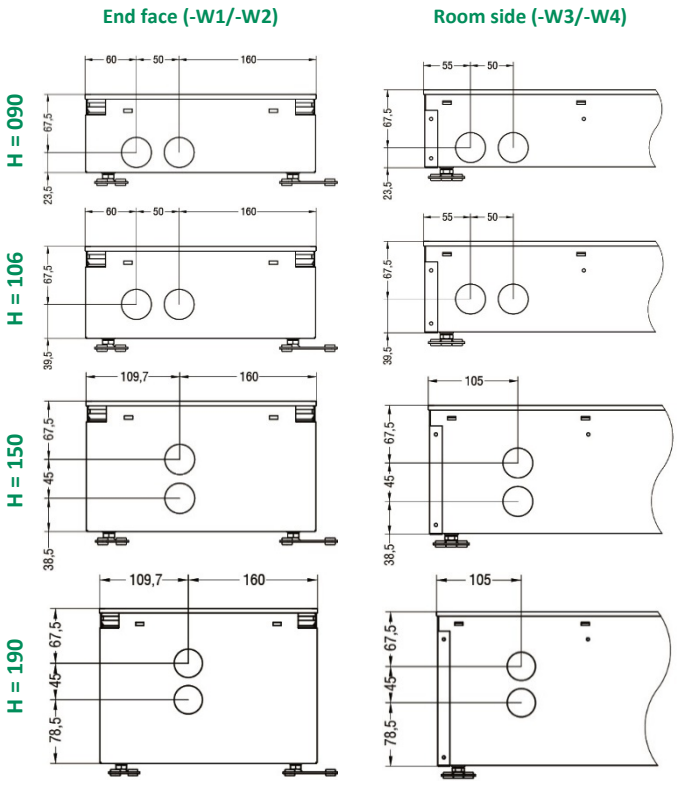


Figure 20: Connection position for type CNV 270

Model B = 350 mm

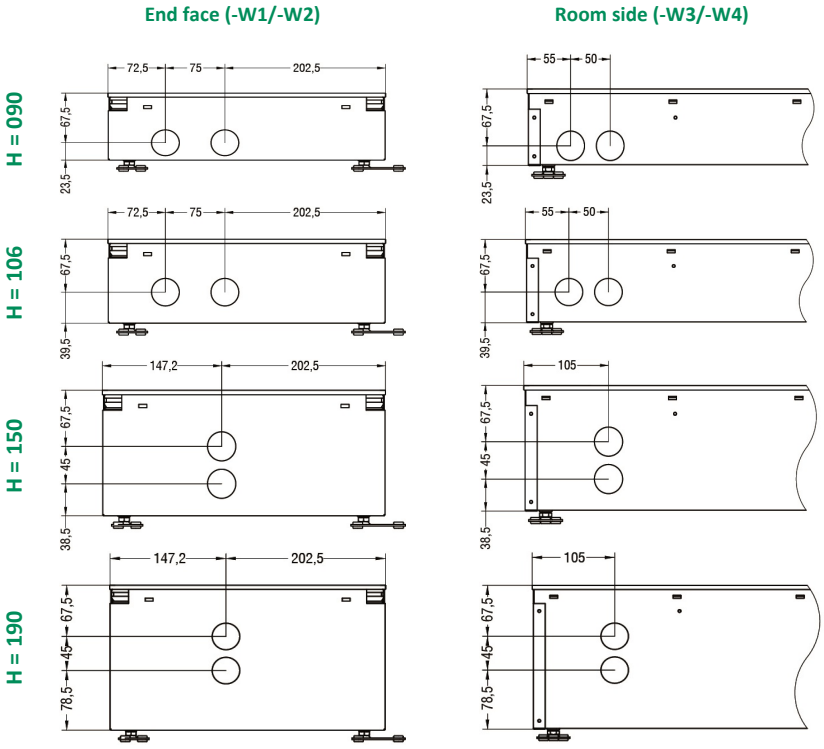


Figure 21: Connection position for type CNV 350

Model B = 400 mm

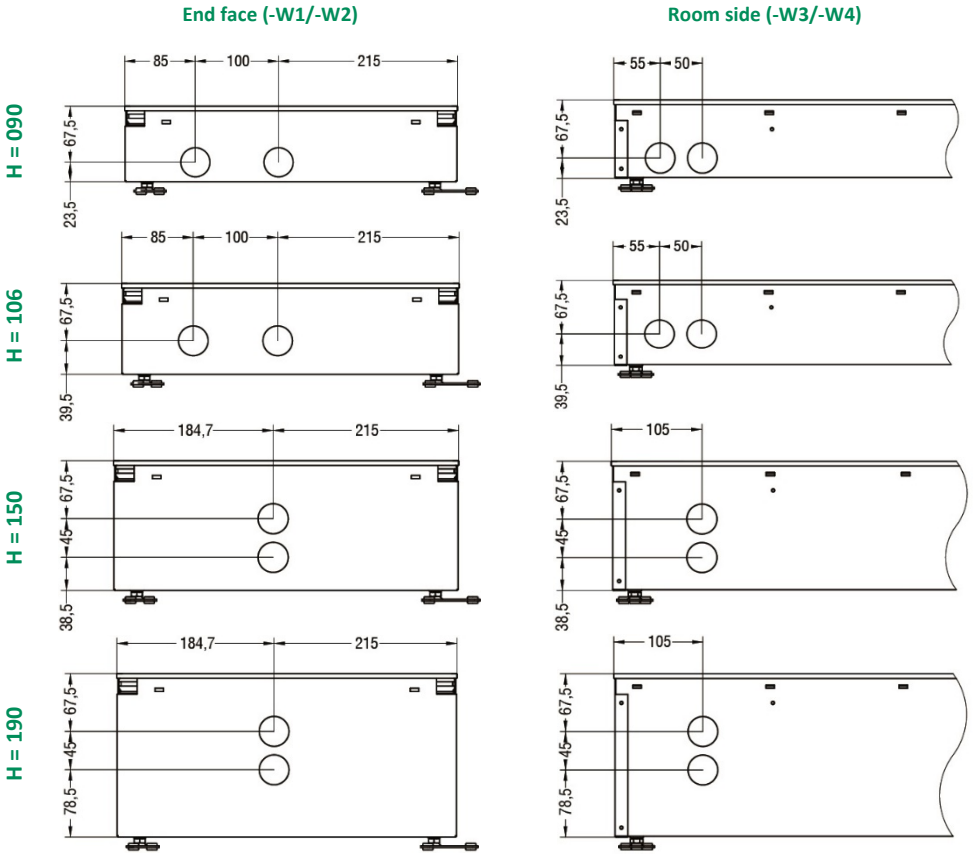


Figure 22: Connection position for type CNV 400

WATER CONNECTION

Plug fitting male thread

Rotating plug fitting with male thread ½“ flat-sealing. Fitting body made of brass, sealing rings made of rubber and clamping ring made of stainless steel.

Figure 23: Plug fitting male thread

Eurocone connections

Spigot nut female thread ¾“ Eurocone for copper pipe 15.

Figure 24: Eurocone

Flexible connection hoses

Flexible metal hoses made of INOX AISI 316 stainless steel with female or male ½“ thread, oxygen-diffusion-resistant to DIN 4726

Figure 25: Flexible connection hoses

Ball valves

Ball valve to shut off the register to a hydraulic circuit (during maintenance work). Male thread connection ½“.

Figure 26: Ball valves

Valves

2-way valves for drive.

	**DN** (mm)	**Rp** (mm)	**R** (mm)	**G** (mm)	**Weight** (kg)	**K_{VS}** (m^3/h)
VDN110	10	$^3/_8$	$^3/_8$B	$^5/_8$	0.24	0.63
VDN115	15	$^1/_2$	$^1/_2$B	$^3/_4$	0.29	0.89
VDN120	20	$^3/_4$	$^3/_4$B	1	0.41	1.41
VD115CLC	15	$^1/_2$	$^1/_2$	$^3/_4$	0.28	1.90
VD120CLC	20	$^3/_4$	$^3/_4$	1	0.33	2.60

--- If details are missing from the order, the valve variant VDN115 will be confirmed and delivered.
--- Other valves available on request

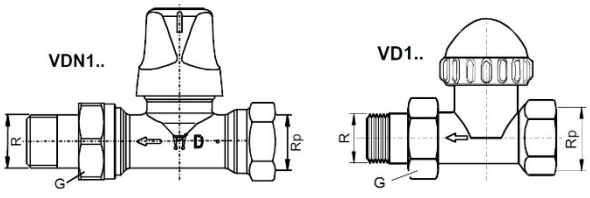


Table 3: Technical data of valves

Actuators

Model STA

--- Actuating power 100 N
--- Simple installation
--- Standard version prewired
--- Motion and position indicator
--- Two-/ three-wire connection
--- Pulse width modulation (PDM)
--- STA23:Actuator thermal, operating voltage AC 230 V, actuator signal 2-point
--- STA73: Actuator thermal, operating voltage AC/DC 24 V, actuator signal 2-point or PDM
--- Normally Closed (NC)

Figure 27: STA

Model OEM5

--- Actuator thermal (continuous)
--- Actuating power 125 N+5%
--- Simple installation
--- Standard version prewired
--- Installation position 360°
--- Operating voltage DC 24V actuator signal 0…10V DC
--- Parallel circuit of several actuators
--- Normally Closed (NC)

Figure 28: OEM5

Model SSA

--- Actuating power 100 N
--- Automatic detection of the valve stroke
--- Direct mounting
--- Manual adjustment and position indicator
--- Standard version prewired
--- Three-wire connection
-- SSA61: Operating voltage 24 V AC/DC, actuator signal 0 ... 10 V

Figure 29: SSA

Room temperature controller RDG160 (optional)

--- Operating voltage AC 24 V
--- LCD display with back lighting
--- For 2-pipe system and 4-pipe system
--- Operating modes: Comfort, Economy and Protected
--- Auto timer mode with 8 programmable time switches
--- 2-point or DC 0...10 V control outputs
--- Adjustable commissioning and control parameters
--- Minimum and maximum setpoint limits
--- Receiver for infrared remote control (RDG160T)
--- Switch-on/off weekly switching programme (RDG160T)
--- NX communication (RDG160KN)

Figure 30: RDG160

WATER CONNECTION OPTIONS

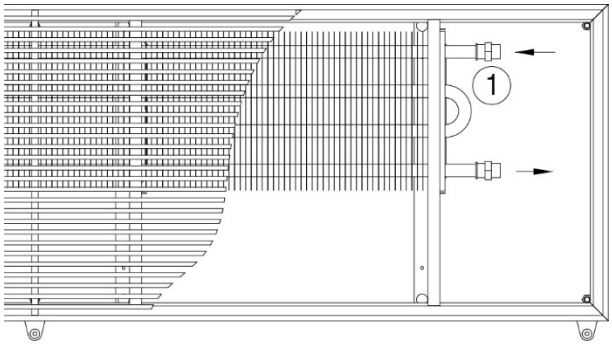


Figure 31: Water connection (-0, -1 ,-2)

0 = Register connection ½" male thread (standard)

1 = Female connections ¾" Eurocone

2 = 2-pipe valve set supplied loose

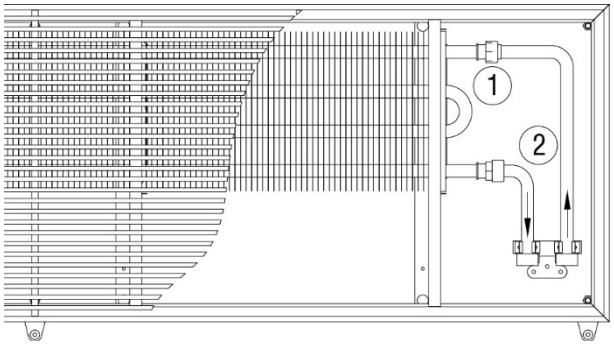


Figure 32: Water connection (-3)

3 = With water connection, flexible ½" male thread

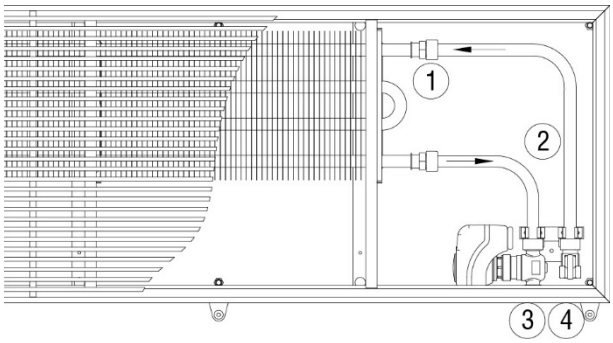
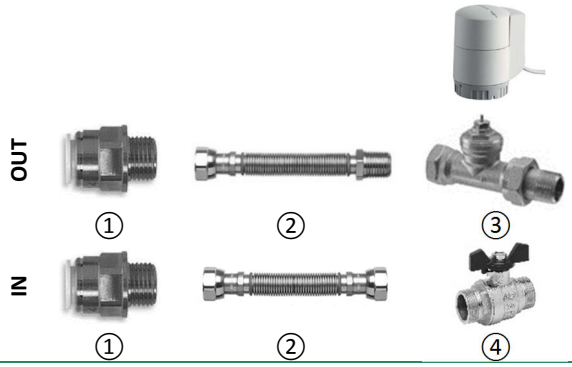
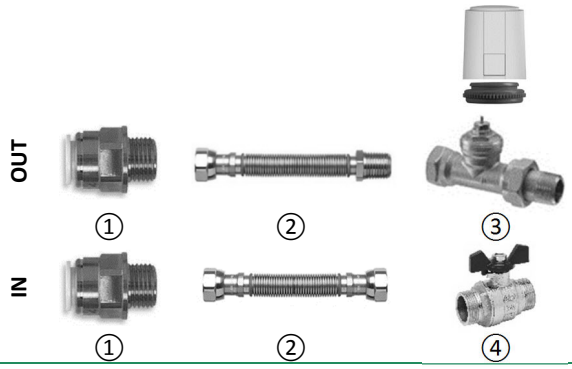


Figure 33: Water connection (--4, -5 ,-6)

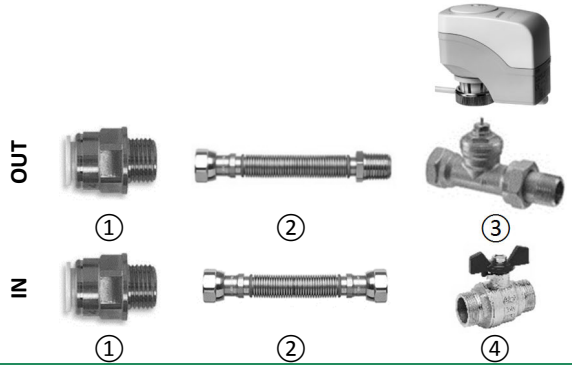
4 = Straight-through valve, shut-off valve and actuator thermal 24 V 2P, LG_{min} = NL+100 mm



5 = Straight-through valve, shut-off valve and actuator thermal continuous 24 V, LG_{min} = NL+100 mm



6 = Straight-through valve, shut-off valve and actuator continuous 24V (motorised), LG_{min}=NL+100 mm



CLOSED-CIRCUIT AND OPEN-CIRCUIT CONTROL SYSTEM

ELECTRICAL JUNCTION BOX

Connecting a CNV unit

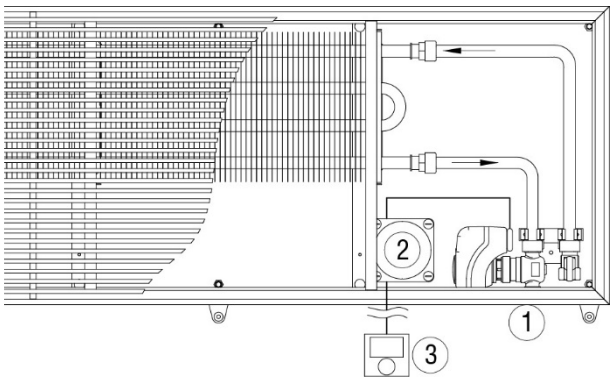


Figure 34: Connecting a CNV unit

Connecting several CNV units

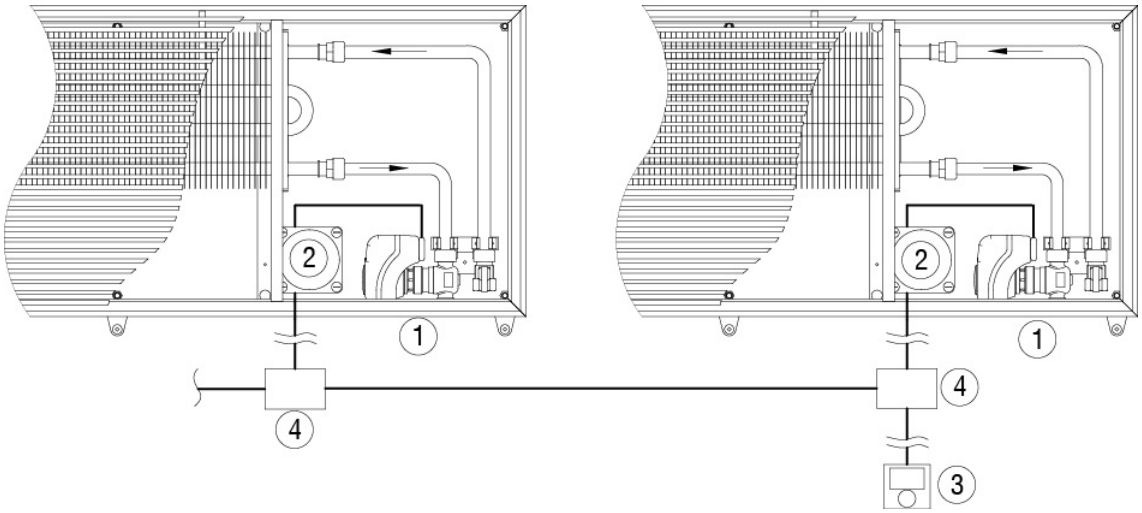
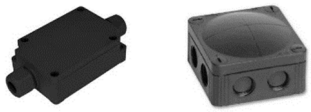
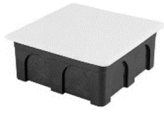


Figure 35: Connecting several CNV units

S0 =	without electric junction box (standard)

S1 =	Electric junction box, with terminal strip, internally prewired			
				
①*	CNV-090	CNV-270 CNV-350 CNV-400 ②	③*	**on site** ④

* **ATTENTION**
When using the floor convectors CNV in parallel, the load limits of the control and power consumption of the floor convectors must be taken into account. If the floor convectors CNV are controlled via actuators SSA61, STA23/73 and OEM5, a maximum of up to 10 floor convectors CNV can be activated by one room temperature controller RDG160.

MODELS

END PIECE

The CNVs can be installed individually or in band design with an end piece on both sides, only on the right or only on the left, or without an end piece..

E0 = Band design, central part without end piece

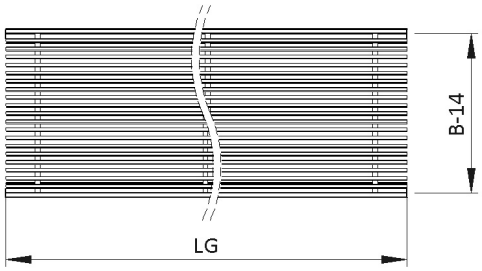


Figure 36: Central part without end piece

ER = Band design with right end piece

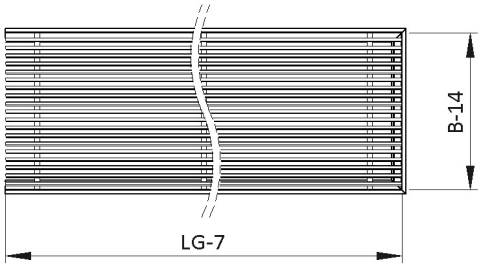


Figure 37: End piece on the right

EL = Band design with left end piece

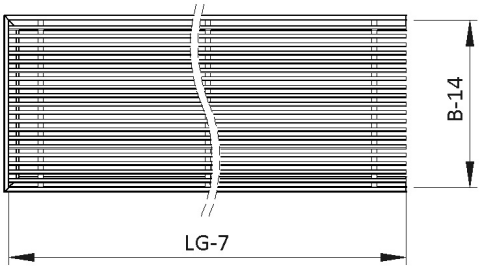


Figure 38: End piece on the left

E2 = Single convector with 2 end pieces (standard)

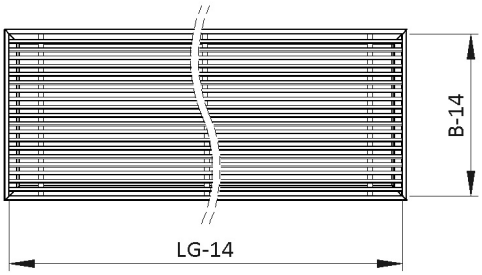


Figure 39: Single convector with 2 end pieces

CONNECTING PIECE FOR BAND DESIGN

Connecting pieces for band design. No end pieces at the ends.

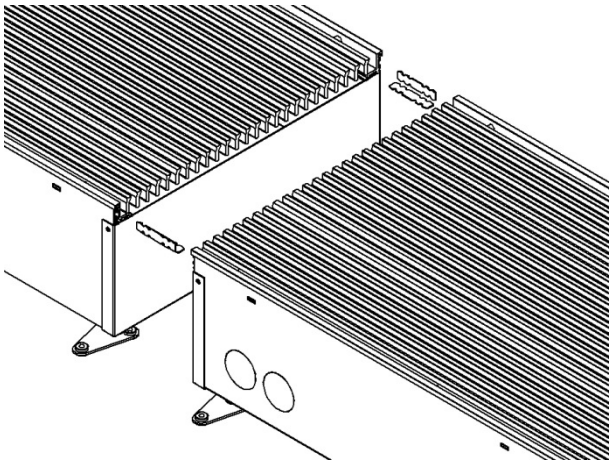


Figure 40: Connecting piece for band design

ATTENTION
For perfect alignment of the units, the four connecting parts should be installed and fastened using the delivered screws.

EXTERNAL COATING

Housing painted externally to RAL9005 (-**A1)** (standard), or painted with polyester powder as rust protection (-**A2**).

Optional: Impact-sound insulation made of 3-mm polyethylene on the outside of the housing (-**A3**). Recommended for installation in false floors.

ADJUSTABLE LEGS

The CNV is easily height-adjustable thanks to its adjustable legs.

07 = L = 70 mm, adjustable legs for adjusting the device height up to 60 mm (standard)
13 = L = 130 mm, adjustable legs for adjusting the device height up to 120 mm (Not suitable for units of type H=90 and H=106)

--- Fastening point on room side.
--- Threaded rod DIN913 M8.

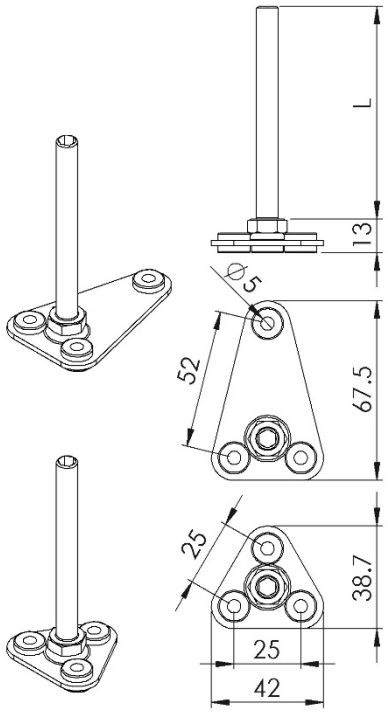


Figure 41: Dimensions of the adjustable legs

Type	L = 70 mm (-07)	L = 130 mm (-13)
H=090	✓	X
H=106	✓	X
H=150	✓	✓
H=190	✓	✓

✓ - available
X - not available

Table 4: Adjustable legs options

PROTECTIVE MOUNTING COVER

As standard, the device is delivered with a cover of stable cardboard for protection against dirt and damage during transport and all the way to commissioning (**-M1**) (standard).

Optionally, a protective mounting cover made of tread-resistant wooden press boards (**-M2**) is also available.

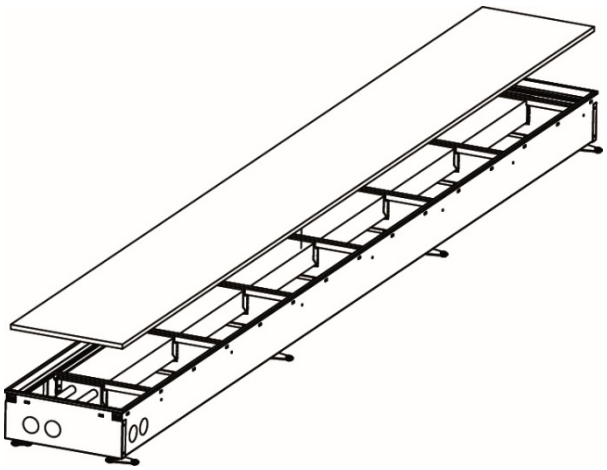


Figure 42: Protective cover made of stable cardboard

CNVZ (ACCESSORIES)

Dummy element without interior parts (housing only) for adjustment to various angles, columns or other architectural elements.

The dummy and corner pieces are determined on the basis of 1 angle and 1 length.

MODEL

Angle α (°):
180 = Dummy piece (α=180°)
xxx = Corner piece 035≤xxx≤325 (α between 35° and 325°)
--- The angular dimension must be entered with 3 digits

Length L (mm)
xxxx= Dummy piece 0600≤xxxx≤3000
xxxx= Corner piece (L=xxxx according to data in Table 5)
--- The length must be entered with 4 digits.
--- Other lengths on request

L (mm)	Angular dimension (°)						
	35≤α<45 315<α≤325	45≤α<55 305<α≤315	55≤α<70 290<α≤305	70≤α<90 270<α≤290	90≤α<115 245<α≤270	115≤α<145 215<α≤245	145≤α<180 180<α≤215
W=190	900	750	650	550	500	400	350
W=270	1150	950	800	700	550	450	400
W=350	1400	1150	950	800	650	500	400
W=400	1550	1250	1050	850	700	550	450

Table 5: Length for cornier pieces

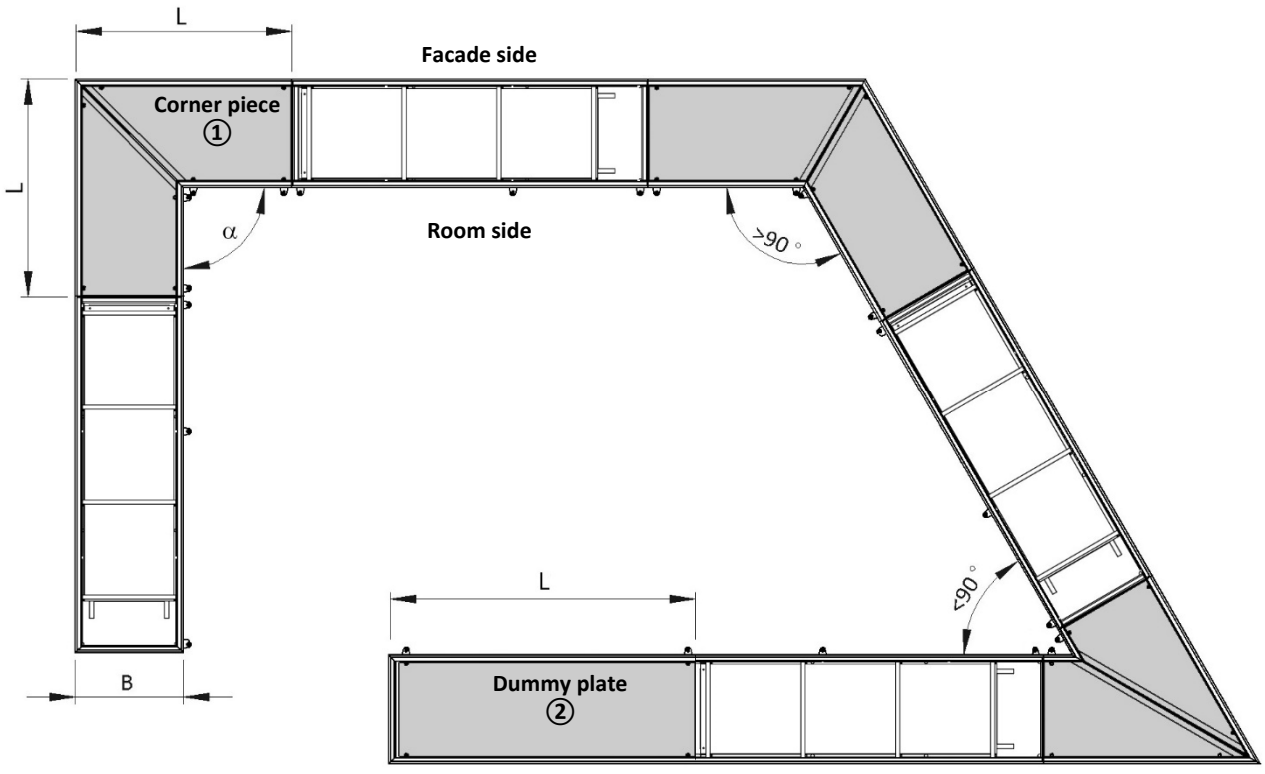


Figure 43: Special grille

Examples:

① Accessories for floor convector | Width 190 mm | Height 150 mm | Angle α=90° | Length L=500 mm | […]
→ **CNVZ-190-150-090-0500-[…]**

② Accessories for floor convector | Width 190 mm | Height 150 mm | Dummy plate α=180° | Length L=900 mm | […]
→ **CNVZ-190-150-180-0900-[…]**

CUTS / BEVEL CUTS

A0 = Without cuts in dummy element (standard)
A1 = With rectangular cuts in dummy element

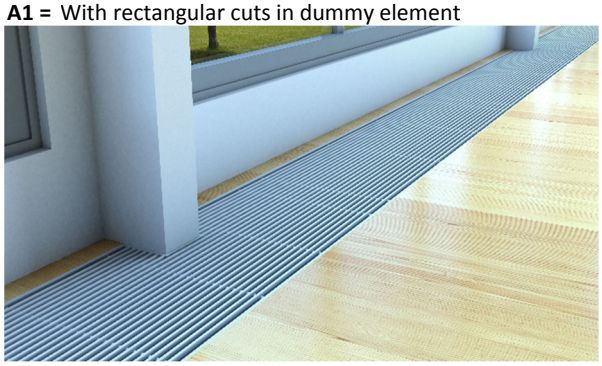


Figure 44: CNVZ-A1

A2 = With round cuts in dummy element

Figure 45: CNVZ-A2

A3 = With bevel cut on dummy element

Figure 46: CNVZ-A3

SOUNDPROOFING BULKHEAD

S0 = Without soundproofing bulkhead in dummy element (standard)
S1 = Soundproofing bulkhead with centre covering, 2 bulkhead sheets made of galvanised sheet steel, coated in black and a centre covering made of 2-mm aluminium plate, natural colour anodised. Bulkhead sheets mounted in duct ex works, space in-between filled with insulating material to be provided on site.

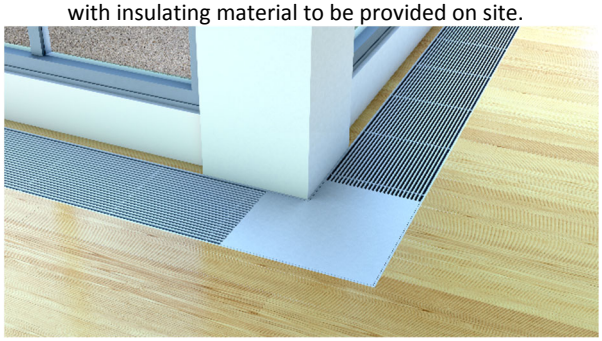


Figure 47: CNVZ-S1

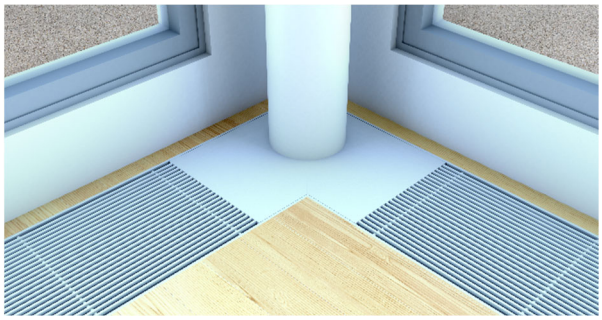


Figure 48: CNVZ-S1

PICTURES OF THE END PIECES

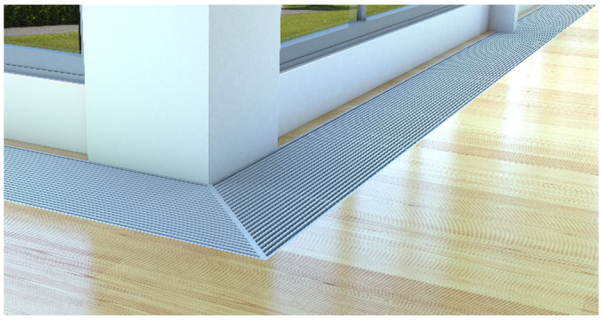


Figure 49: CNVZ-270

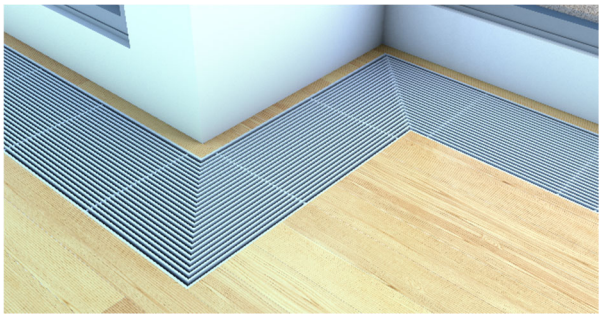


Figure 50: CNVZ-270 & CNVZ-090

INSTALLATION

The CNV series is suitable for horizontal mounting in false floors and screed floors. The register should always be installed on the facade side.

ATTENTION
It is recommended installing the CNV as closely as possible to the facade.

Thanks to the legs adjustable from inside, the device can be aligned perfectly. On the side facing the room, the device is equipped with special fastening elements with decoupling rubber, to guarantee optimum fixing to the floor.

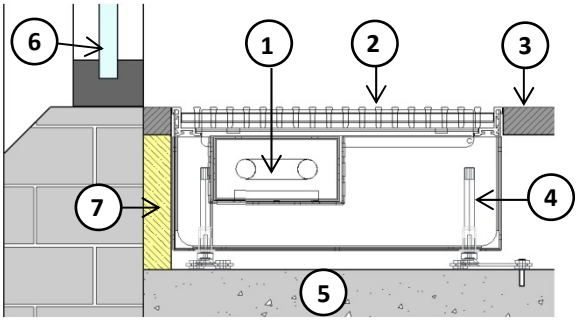


Figure 51: Detail of installation in double floor

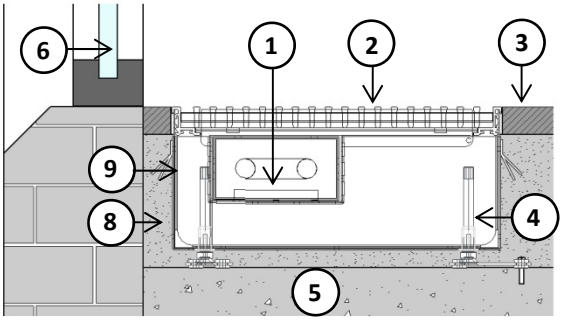


Figure 52: **Detail of installation in screed floor**

1- Heat exchanger
2- Louvre grid
3- Floor covering
4- Adjustable legs
5- Raw concrete
6- Façade
7*- Insulation
8- Screed
9*- Impact sound insulation

7* on site
9* When installed in a screed floor, SCHAKO recommends using an additional external insulation (-A3)

NOTE
When installed in a screed floor, the device must be protected from being compressed!
The spacer bridges must have been mounted in the device!

MAINTENANCE

The CNV series is particularly maintenance-friendly. For performing maintenance activities, the heat exchanger with flexible connections can be swivelled upwards, and almost all internal parts can be removed completely without tools.

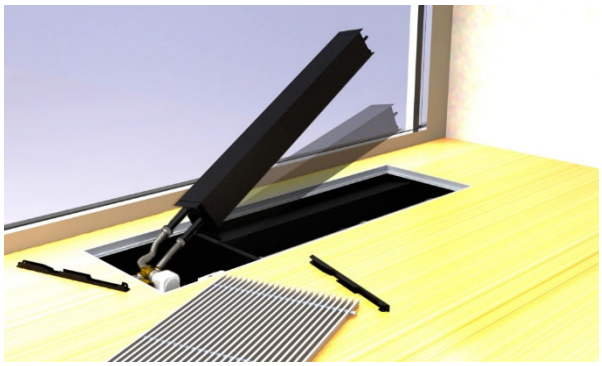


Figure 53: View of dismounted internal parts of CNV

ATTENTION
The operating temperatures are between 5°C and 95°C, and the maximum operating pressure is 7 bar.

To prevent deposits and corrosion, the quality of the water for filling the registers must comply with regulations VDI 2035 and DIN 50930.

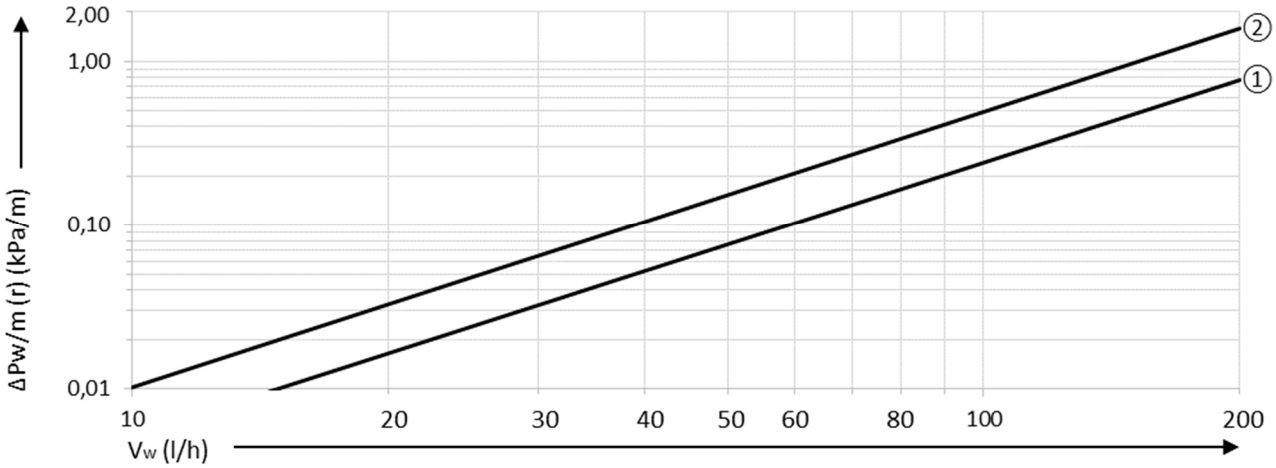
TECHNICAL DATA

CNV-190

NOTE
All calculations of the product can be performed using the SCHAKO design program.

		CNV-190-90			CNV-190-106			CNV-190-150			CNV-190-190		
	L (mm)	Q (W)	V_w (l/h)	Pa_w (kPa)	Q (W)	V_w (l/h)	Pa_w (kPa)	Q (W)	V_w (l/h)	Pa_w (kPa)	Q (W)	V_w (l/h)	Pa_w (kPa)
T = 30 K (t_1 = 55°C / t_2 = 45°C / t_i = 20°C)	850	68	6	0.00	76	6	0.00	94	8	0.00	95	8	0.00
	1150	104	9	0.00	117	10	0.00	145	12	0.01	147	13	0.01
	1450	141	12	0.01	158	14	0.01	196	17	0.03	198	17	0.03
	1750	178	15	0.02	199	17	0.02	247	21	0.06	250	22	0.06
	2050	215	18	0.03	240	21	0.03	298	26	0.09	302	26	0.09
	2350	252	22	0.04	281	24	0.05	350	30	0.14	354	30	0.14
	2650	289	25	0.06	323	28	0.07	401	34	0.20	405	35	0.20
	2950	326	28	0.08	364	31	0.09	452	39	0.27	457	39	0.28
	3250	362	31	0.10	405	35	0.12	503	43	0.36	509	44	0.37
	3550	399	34	0.13	446	38	0.16	554	48	0.47	561	48	0.48
	3850	436	38	0.17	487	42	0.20	605	52	0.60	612	53	0.61
T = 50 K (t_1 = 75°C / t_2 = 65°C / t_i = 20°C)	850	134	12	0.00	144	12	0.00	183	16	0.01	196	17	0.01
	1150	208	18	0.01	222	19	0.01	283	24	0.04	302	26	0.05
	1450	281	24	0.03	301	26	0.03	383	33	0.09	409	35	0.10
	1750	354	30	0.05	380	33	0.06	483	42	0.17	515	44	0.19
	2050	427	37	0.08	458	39	0.09	583	50	0.28	622	54	0.32
	2350	501	43	0.12	537	46	0.14	683	59	0.43	729	63	0.48
	2650	574	49	0.18	615	53	0.20	782	67	0.62	835	72	0.69
	2950	647	56	0.25	694	60	0.28	882	76	0.85	942	81	0.95
	3250	721	62	0.33	772	66	0.37	982	84	1.13	1049	90	1.26
	3550	794	68	0.42	851	73	0.48	1082	93	1.46	1155	99	1.64
	3850	867	75	0.53	929	80	0.60	1182	102	1.85	1262	109	2.07

Table 6: Technical data CNV-190 (to EN 442 and EN 16430)



① CNV-190-090 and CNV-190-106
② CNV-190-150 and CNV-190-190

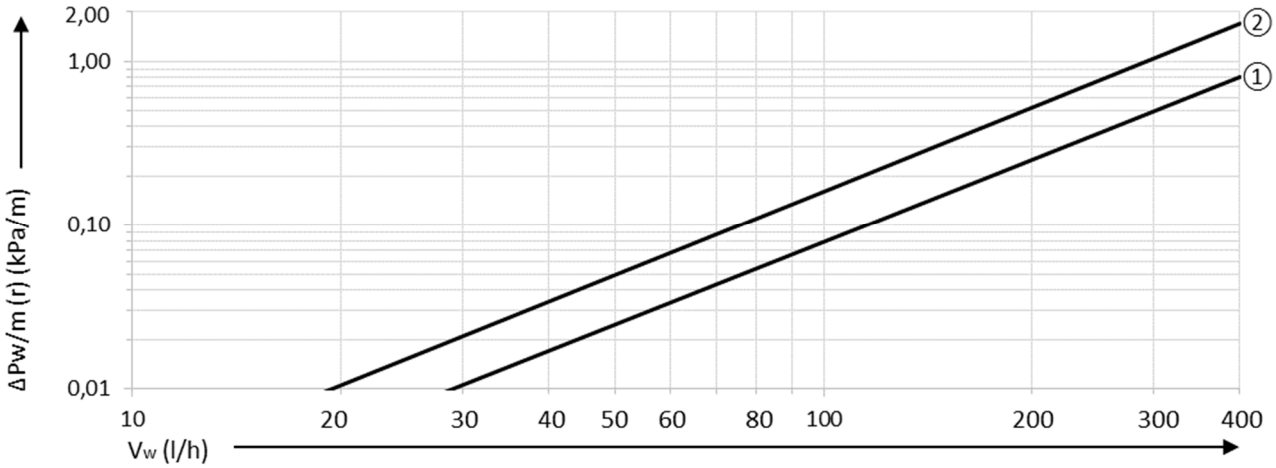
$$Pa_w = \frac{(NL - 300)}{1000} \cdot r\ (kPa)$$

with NL = Nominal Length (mm)

CNV-270

		CNV-270-90			CNV-270-106			CNV-270-150			CNV-270-190		
	L (mm)	Q (W)	V_w (l/h)	Pa_w (kPa)	Q (W)	V_w (l/h)	Pa_w (kPa)	Q (W)	V_w (l/h)	Pa_w (kPa)	Q (W)	V_w (l/h)	Pa_w (kPa)
T = 30 K (t_1 = 55°C / t_2 = 45°C / t_i = 20°C)	850	78	7	0.00	96	8	0.00	156	13	0.00	170	15	0.00
	1150	120	10	0.00	148	13	0.00	241	21	0.01	263	23	0.01
	1450	162	14	0.00	200	17	0.00	325	28	0.02	356	31	0.03
	1750	205	18	0.01	253	22	0.01	410	35	0.04	449	39	0.05
	2050	247	21	0.01	305	26	0.02	495	43	0.07	542	47	0.08
	2350	289	25	0.02	357	31	0.02	580	50	0.11	634	55	0.12
	2650	332	29	0.02	409	35	0.03	665	57	0.15	727	63	0.18
	2950	374	32	0.03	462	40	0.05	750	64	0.21	820	71	0.25
	3250	416	36	0.04	514	44	0.06	835	72	0.28	913	79	0.33
	3550	459	39	0.05	566	49	0.08	920	79	0.36	1006	86	0.42
	3850	501	43	0.07	619	53	0.10	1005	86	0.46	1099	94	0.54
T = 50 K (t_1 = 75°C / t_2 = 65°C / t_i = 20°C)	850	165	14	0.00	204	18	0.00	330	28	0.01	353	30	0.01
	1150	255	22	0.01	315	27	0.01	509	44	0.04	546	47	0.04
	1450	345	30	0.01	426	37	0.02	689	59	0.08	739	64	0.09
	1750	436	37	0.02	538	46	0.03	869	75	0.15	931	80	0.17
	2050	526	45	0.04	649	56	0.05	1049	90	0.25	1124	97	0.28
	2350	616	53	0.06	760	65	0.08	1229	106	0.38	1317	113	0.43
	2650	706	61	0.08	871	75	0.12	1408	121	0.55	1510	130	0.62
	2950	796	68	0.11	983	85	0.16	1588	137	0.76	1702	146	0.86
	3250	886	76	0.15	1094	94	0.22	1768	152	1.01	1895	163	1.14
	3550	976	84	0.19	1205	104	0.28	1948	168	1.31	2088	180	1.48
	3850	1066	92	0.24	1316	113	0.35	2128	183	1.65	2280	196	1.87

Table 7: Technical data CNV-270 (to EN 442 and EN 16430)



① CNV-270-090 and CNV-270-106
② CNV-270-150 and CNV-270-190

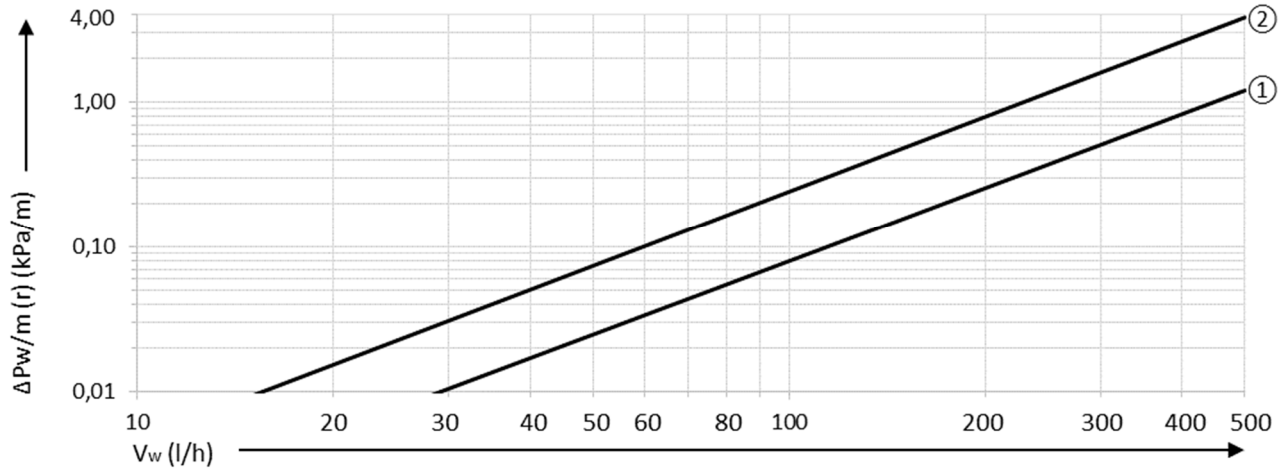
$$Pa_w = \frac{(NL - 300)}{1000} \cdot r\ (kPa)$$

with NL = Nominal length (mm)

CNV-350

		CNV-350-90			CNV-350-106			CNV-350-150			CNV-350-190		
	L (mm)	Q (W)	V_w (l/h)	Pa_w (kPa)	Q (W)	V_w (l/h)	Pa_w (kPa)	Q (W)	V_w (l/h)	Pa_w (kPa)	Q (W)	V_w (l/h)	Pa_w (kPa)
T = 30 K (t_1 = 55°C / t_2 = 45°C / t_i = 20°C)	850	114	10	0.00	136	12	0.00	220	19	0.01	252	22	0.01
	1150	176	15	0.00	211	18	0.01	340	29	0.03	389	33	0.04
	1450	238	21	0.01	285	25	0.01	460	40	0.06	526	45	0.08
	1750	301	26	0.02	359	31	0.02	580	50	0.11	664	57	0.15
	2050	363	31	0.02	434	37	0.03	699	60	0.19	801	69	0.24
	2350	425	37	0.04	508	44	0.05	819	70	0.29	938	81	0.37
	2650	487	42	0.05	582	50	0.07	939	81	0.42	1076	93	0.53
	2950	549	47	0.07	657	56	0.10	1059	91	0.58	1213	104	0.73
	3250	612	53	0.09	731	63	0.13	1179	101	0.77	1350	116	0.97
	3550	674	58	0.12	805	69	0.16	1299	112	0.99	1488	128	1.26
	3850	736	63	0.15	880	76	0.20	1419	122	1.26	1625	140	1.59
T = 50 K (t_1 = 75°C / t_2 = 65°C / t_i = 20°C)	850	231	20	0.00	275	24	0.01	474	41	0.03	539	46	0.04
	1150	356	31	0.01	425	37	0.02	733	63	0.11	832	72	0.13
	1450	482	41	0.03	575	49	0.04	991	85	0.24	1126	97	0.29
	1750	608	52	0.05	724	62	0.07	1250	107	0.44	1420	122	0.54
	2050	734	63	0.08	874	75	0.11	1508	130	0.72	1713	147	0.90
	2350	859	74	0.12	1024	88	0.17	1767	152	1.09	2007	173	1.37
	2650	985	85	0.18	1174	101	0.24	2026	174	1.57	2301	198	1.97
	2950	1111	96	0.24	1324	114	0.33	2284	196	2.17	2595	223	2.71
	3250	1237	106	0.31	1474	127	0.43	2543	219	2.88	2888	248	3.61
	3550	1363	117	0.40	1624	140	0.55	2801	241	3.74	3182	274	4.68
	3850	1488	128	0.50	1774	153	0.69	3060	263	4.73	3476	299	5.93

Table 8: Technical data CNV-350 (to EN 442 and EN 16430)



① CNV-350-090 and CNV-350-106
② CNV-350-150 and CNV-350-190

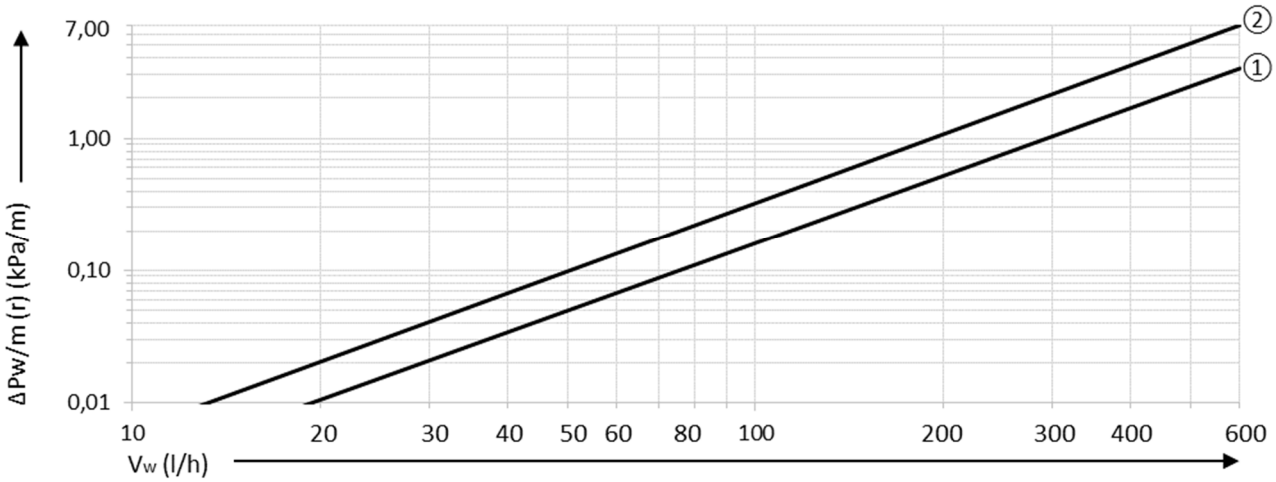
$$Pa_w = \frac{(NL - 300)}{1000} \cdot r\ (kPa)$$

with NL = Nominal length (mm)

CNV-400

		CNV-400-90			CNV-400-106			CNV-400-150			CNV-400-190		
	L (mm)	Q (W)	V_w (l/h)	Pa_w (kPa)	Q (W)	V_w (l/h)	Pa_w (kPa)	Q (W)	V_w (l/h)	Pa_w (kPa)	Q (W)	V_w (l/h)	Pa_w (kPa)
T = 30 K (t_1 = 55°C / t_2 = 45°C / t_i = 20°C)	850	125	11	0.00	161	14	0.00	254	22	0.02	303	26	0.02
	1150	192	17	0.01	249	21	0.01	393	34	0.05	468	40	0.06
	1450	260	22	0.02	337	29	0.02	531	46	0.11	633	54	0.14
	1750	328	28	0.03	425	37	0.04	670	58	0.20	798	69	0.27
	2050	396	34	0.05	513	44	0.07	809	70	0.33	963	83	0.44
	2350	464	40	0.07	601	52	0.11	947	81	0.50	1128	97	0.67
	2650	532	46	0.10	689	59	0.16	1086	93	0.72	1293	111	0.97
	2950	600	52	0.14	777	67	0.22	1225	105	0.99	1458	125	1.34
	3250	668	57	0.19	865	74	0.30	1363	117	1.32	1623	140	1.79
	3550	736	63	0.25	953	82	0.39	1502	129	1.71	1788	154	2.32
	3850	804	69	0.31	1041	90	0.49	1641	141	2.16	1953	168	2.94
T = 50 K (t_1 = 75°C / t_2 = 65°C / t_i = 20°C)	850	264	23	0.01	325	28	0.01	521	45	0.05	636	55	0.08
	1150	408	35	0.03	503	43	0.04	805	69	0.17	983	85	0.24
	1450	551	47	0.06	680	59	0.08	1089	94	0.37	1330	114	0.53
	1750	695	60	0.10	858	74	0.15	1373	118	0.69	1677	144	0.98
	2050	839	72	0.17	1035	89	0.25	1657	143	1.13	2024	174	1.61
	2350	983	85	0.26	1213	104	0.37	1941	167	1.72	2371	204	2.45
	2650	1127	97	0.37	1391	120	0.54	2225	191	2.48	2719	234	3.53
	2950	1271	109	0.51	1568	135	0.74	2509	216	3.42	3066	264	4.87
	3250	1415	122	0.68	1746	150	0.99	2794	240	4.55	3413	293	6.49
	3550	1558	134	0.88	1923	165	1.28	3078	265	5.90	3760	323	8.41
	3850	1702	146	1.12	2101	181	1.62	3362	289	7.47	4107	353	10.66

Table 9: Technical data CNV-400 (to EN 442 and EN 16430)



① CNV-400-090 and CNV-400-106
② CNV-400-150 and CNV-400-190

$$Pa_w = \frac{(NL - 300)}{1000} \cdot r\ (kPa)$$

with NL = Nominal length (mm)

LEGEND

NL	(mm)	= Nominal length
LG	(mm)	= Total length
B	(mm)	= Width
H	(mm)	= Height
Q	(kW)	= Total thermal capacity
V_W	[l/h]	= Water flow rate
t	(K)	= Temperature difference between room air and average water supply temperature of the register
t_1	(°C)	= Water inlet temperature
t_2	(°C)	= Water outlet temperature
t_r	(°C)	= Air inlet temperature
Pa_W	(kPa)	= Water-side pressure loss
DN	(mm)	= Diameter, nominal width
K_{VS}	(m^3/h)	= Nominal flow rate of the cold water through the fully open valve (H100) at a differential pressure of 100 kPa (1 bar)

ORDER CODE CNV

01	02	03	04	05	06	07	08	09
Type	Width (W)	Height (H)	Nominal length (NL)	Total length (LG)	Housing position	Grille layer / Frame	Tread-resistant grille insert	Spigot di-ameter / Rubber lip seal
Example:								
CNV	-270	-106	-1150	-1250	-R	-G1	-00	-P0

10	11	12	13	14	15	16	17
Primary air connection spigot / Po-sition	Connection position	Water connection	Electrical junction box	End piece	External coating	Adjusting legs	Protective mounting cover
Example:							
-0	-W1	-0	-S0	-E2	-A1	-07	-M1

NOTE
If details are missing from the order, the standard model will be confirmed and delivered.
* = if no details are given, processing is impossible.
** = if details are missing from the order, the valve variant VDN115 will be confirmed and delivered.

SAMPLE

CNV-270-106-1150-1250-R-G1-00-P0-0-W1-0-S0-E2-A1-07-M1

Passive floor convector CNV| Width (W) 270 mm | Height (H) 106 mm | Nominal length (NL) 1150 mm | Total length (LG) 1250 mm | Heat exchanger / Register on the right, LG > NL | Grille layer / Frame aluminium natural colour anodised E6/EV1 | without grille | Without primary air connection spigot | Without primary air connection spigot | Connection position left end face | Register connection ½" male thread | Without electric junction box | Single convector with 2 end pieces | Housing painted on the inside and outside to RAL9005 - | Adjusting legs 70 mm | With cardboard insert, not tread-resistant

ORDER DETAILS CNV

01 – Type *
CNV = Floor convector CNV

02 – Width (W) *
190 = 190 mm
270 = 270 mm
350 = 350 mm
400 = 400 mm

03 – Height (H) *
090 = 90 mm
106 = 106 mm
150 = 150 mm
190 = 190 mm

04 – Nominal length (NL) *
0850 = 850 mm
1150 = 1150 mm
1450 = 1450 mm
1750 = 1750 mm
2050 = 2050 mm
2350 = 2350 mm
2650 = 2650 mm
2950 = 2950 mm
3250 = 3250 mm
3550 = 3550 mm
3850 = 3850 mm

05 – Total length (LG) *
xxxx = Total length xxxx mm
= The total length must be entered with 4 digits.
= Nominal length up to < 4000 mm

06 – Housing position
S = Standard model NL = LG (standard)
M = Heat exchanger / register centre, LG > NL
L = Heat exchanger / register left, LG > NL
R = Heat exchanger / register right, LG > NL

07 – Grille layer / Frame
G1 = Aluminium natural colour anodised E6/EV1 (standard)
G2 = Aluminium black anodised E6/EV6
G3 = Aluminium bronze anodised E6/C33

08 – Tread-resistant grille insert
00 = Without grille (standard)
L1 = Linear grille aluminium natural colour anodised E6/EV1
L2 = Linear grille aluminium black anodised E6/EV6
L3 = Linear grille aluminium bronze anodised E6/C33
R1 = Roll-down grille aluminium natural colour anodised E6/EV1
R2 = Roll-down grille aluminium black anodised E6/EV6
R3 = Roll-down grille aluminium bronze anodised E6/C33

09 – Spigot diameter / Rubber lip seal
P0 = Without primary air connection spigot (standard)
P1 = Rectangular spigot, without rubber lip seal, H=106 mm
P2 = Spigot DN 78, without rubber lip seal, H=150 or H=190 mm
P3 = Spigot DN 98, without rubber lip seal, H=190 only
P4 = Spigot DN 123, without rubber lip seal, H=190 only
P5 = Spigot DN 78, with rubber lip seal, H=150 and H=190 mm only
P6 = Spigot DN 98, with rubber lip seal, H=190 mm only
P7 = Spigot DN 123, with rubber lip seal, H=190 mm only

10 – Primary air connection spigot / Position
0 = Without primary air connection spigot (standard)
1 = With primary air connection spigot, left end face
2 = With primary air connection spigot, right end face
3 = With primary air connection spigot, room side left
4 = With primary air connection spigot, room side right

11 – Connection position
W1 = Left end face (standard)
W2 = Right end face
W3 = Left front face - Room side
W4 = Right front face - Room side

12 – Water connection
0 = Register connection ½" male thread (standard)
1 = Spigot nut female thread ¾" Eurocone
2 = 2-pipe valve set supplied loose
3 = With water connection, flexible ½" male thread
4 = With straight-through valve **, shut-off valve and actuator thermal 24 V 2P, LG_{min} = NL+100 mm
5 = With straight-through valve **, shut-off valve and actuator thermal continuous 24 V, LG_{min} = NL+100 mm
6 = With straight-through valve **, shut-off valve and actuator continuous 24 V (motorised), LG_{min}=NL+100 mm

13 – Electric junction box
S0 = Without electric junction box (standard)
S1 = Electric junction box, with terminal strip, internally prewired

14 – End piece
E0 = Band design, centre part without end piece
ER = Band design with right end piece
EL = Band design with left end piece
E2 = Single convector with 2 end pieces (standard)

15 – External coating
A1 = Housing painted internally and externally - RAL 9005 - (standard)
A2 = Housing painted externally - special paint - as rust protection with polyester powder (on request)
A3 = With impact sound insulation 3 mm, bonded over the entire surface

16 – Adjusting legs
07 = Adjusting legs 70 mm (standard)
13 = Adjusting legs 130 mm

17 – Protective mounting cover
M0 = Without protective mounting cover
M1 = With cardboard insert, not tread-resistant (standard)
M2 = With tread-resistant wooden insert

ORDER CODE CNVZ

01	02	03	04	05	06	07	08
Type	Width (W)	Height (H)	Angle α (°)	Length L (mm)	Colour grille layer / Frame	Tread-resistant grille layer	Spigot diameter / Rubber lip seal
Example:							
CNVZ	-190	-150	-180	-0600	-G1	-00	-P0

09	10	11	12	13	14	15
Primary air connection spigot / Position	End piece	External coating	Adjusting legs	Protective mounting cover	Cuts / Bevel cuts	Soundproofing bulkhead
Example:						
-0	-E2	-A1	-07	-M1	-A0	-S0

NOTE
If details are missing from the order, the standard model will be confirmed and delivered.
* = if no details are given, processing is impossible.

SAMPLE

CNVZ-190-150-180-0600-G1-00-P0-0-E2-A1-07-M1-A0-S0

Accessories for floor convector CNV| Width (W) 190 mm | Height (H) 150mm | Straight dummy plate (α=180°) | Length L (mm) dummy plate 0600 | Grille layer / Frame aluminium natural colour anodised E6/EV1 | Without grille | Without primary air connection spigot | Without primary air connection spigot | Single convector with 2 end pieces | Housing painted internally and externally to - RAL9005 - | Adjusting legs 70 mm | With cardboard insert, not tread-resistant | Without cuts in dummy element | Without soundproofing bulkhead in dummy element

ORDER DETAILS CNVZ

01 – Type *
CNVZ = Accessories for floor convector CNV

02 – Width (W) *
190 = 190 mm
270 = 270 mm
350 = 350 mm
400 = 400 mm

03 – Height (H) *
090 = 90 mm
106 = 106 mm
150 = 150 mm
190 = 190 mm

04 – Angle α (°) *
180 = Straight dummy plate (α=180°)
xxx = Corner piece 035≤xxx≤325 (α from 35° to 325°)
--- The angle must be entered with 3 digits.

05 – Length L (mm) *
xxxx = Dummy plate 0600≤xxxx≤3000
xxxx = Corner piece (L=xxxx according to Table 5)
= The length must be entered with 4 digits.
= Other lengths available on order

06 – Grille layer / Frame
G1 = Aluminium natural colour anodised E6/EV1 (standard)
G2 = Aluminium black anodised E6/EV6
G3 = Aluminium bronze anodised E6/C33

07 – Tread-resistant grille insert
00 = Without grille (standard)
L1 = Linear grille aluminium natural colour anodised E6/EV1
L2 = Linear grille aluminium black anodised E6/EV6
L3 = Linear grille aluminium bronze anodised E6/C33
R1 = Roll-down grille aluminium natural colour anodised E6/EV1
R2 = Roll-down grille aluminium black anodised E6/EV6
R3 = Roll-down grille aluminium bronze anodised E6/C33

08 – Spigot diameter / Rubber lip seal
P0 = Without primary air connection spigot (standard)
P1 = Rectangular spigot, without rubber lip seal, H=106 mm
P2 = Spigot DN 78, without rubber lip seal, H=150 or H=190 mm
P3 = Spigot DN 98, without rubber lip seal, H=190 only
P4 = Spigot DN 123, without rubber lip seal, H=190 only
P5 = Spigot DN 78, with rubber lip seal, H=150 and H=190 mm only
P6 = Spigot DN 98, with rubber lip seal, H=190 mm only
P7 = Spigot DN 123, with rubber lip seal, H=190 mm only

09 – Primary air connection spigot / Position
0 = Without primary air connection spigot (standard)
1 = With primary air connection spigot, left end face
2 = With primary air connection spigot, right end face
3 = With primary air connection spigot, room side left
4 = With primary air connection spigot, room side right

10 – End piece
E0 = Band design, centre part without end piece
ER = Band design with right end piece
EL = Band design with left end piece
E2 = Single convector with 2 end pieces (standard)

11 – External coating
A1 = Housing painted internally and externally - RAL 9005 - (standard)
A2 = Housing painted externally - special paint - as rust protection with polyester powder (on request)
A3 = With impact sound insulation 3 mm, bonded over the entire surface

12 – Adjusting legs
07 = Adjusting legs 70 mm (standard)
13 = Adjusting legs 130 mm

13 – Protective mounting cover
M0 = Without protective mounting cover
M1 = With cardboard insert, not tread-resistant (standard)
M2 = With tread-resistant wooden insert

14 – Cuts / Bevel cuts
A0 = Without cuts in dummy element (standard)
A1 = With rectangular cuts in dummy element
A2 = With round cuts in dummy element
A3 = With bevel cut on dummy element

15 – Soundproofing bulkhead
S0 = Without soundproofing bulkhead in dummy element (standard)
S1 = Soundproofing bulkhead with centre covering, 2 bulkhead sheets made of galvanised sheet steel, coated in black and a centre covering made of 2-mm aluminium plate, natural colour anodised. Bulkhead sheets mounted in duct ex works, space in-between filled with insulating material to be provided on site.

SPECIFICATION TEXTS

Floor convectors CNV for heating in free convection, suitable for installation in floors and false floors, in particular in buildings with large glass facades of large surface area reaching down to the floor. For shielding cold-radiating areas and for compensating high heat loads. The floor duct consists of galvanised sheet steel painted black to RAL 9005 with a frame made extruded aluminium profiles with legs adjustable from the room side and decoupled with rubber buffers. The adjustable legs are additionally equipped with decoupled fastening lugs towards the room side. The heat exchanger consists of performance-optimised aluminium blades and copper pipes, including a ventilation valve. Towards the rooms the floor convector is equipped with a tread-resistant aluminium grille as linear grille or roll-down grille (optional).

Product: SCHAKO **type CNV / CNVZ**

Design variants

Width (W)
190 mm -190
270 mm -270
350 mm -350
400 mm -400

Height (H)
90 mm -090
106 mm -106
150 mm -150
190 mm -190

Nominal length (NL)
850 mm -0850
1150 mm -1150
1450 mm -1450
1750 mm -1750
2050 mm -2050
2350 mm -2350
2650 mm -2650
2950 mm -2950
3250 mm -3250
3550 mm -3550
3850 mm -3850

Total length (LG)
Total length xxxx mm -xxxx

Housing position
Standard model NL = LG -S
Heat exchanger / Register centre, LG > NL -M
Heat exchanger / Register left, LG > NL -L
Heat exchanger / Register right, LG > NL -R

Grille layer / Frame
Aluminium natural colour anodised E6/EV1 -G1
Aluminium black anodised E6/EV6 -G2
Aluminium bronze anodised E6/C33 -G3

Tread-resistant grille insert
Without grille -00
Linear grille aluminium natural colour anodised E6/EV1 -L1
Linear grille aluminium black anodised E6/EV6 -L2
Linear grille aluminium bronze anodised E6/C33 -L3
Roll-down grille aluminium natural colour anodised E6/EV1 -R1
Roll-down grille aluminium black anodised E6/EV6 -R2
Roll-down grille aluminium bronze anodised E6/C33 -R3

Spigot diameter / Rubber lip seal
Without primary air connection spigot -P0
Rectangular spigot, without rubber lip seal, H=106 mm -P1
Spigot DN 78, without rubber lip seal, H=150 or H=190 mm -P2
Spigot DN 98, without rubber lip seal, H=190 mm only -P3
Spigot DN 123, without rubber lip seal, H=190 mm only -P4
Spigot DN 78, with rubber lip seal, H=150 and H=190 mm only -P5
Spigot DN 98, with rubber lip seal, H=190 mm only-P6
Spigot DN 123, with rubber lip seal, H=190 mm only -P7

Primary air connection spigot / Position
Without primary air connection spigot -0
With primary air connection spigot, left end face -1
With primary air connection spigot, right end face -2
With primary air connection spigot, room side left -3
With primary air connection spigot, room side right -4

Connection position
Left end face -W1
Right end face -W2
Left end face - Room side -W3
Right end face - Room side -W4

Water connection
Register connection ½" male thread -0
Spigot nut female thread ¾" Eurocone -1
2-pipe valve set supplied loose -2
With water connection, flexible ½" male thread -3
With straight-through valve **, shut-off valve and actuator thermal 24 V 2P, LG_{min} = NL+100 mm -4
With straight-through valve **, shut-off valve and actuator thermal continuous 24 V, LG_{min} = NL+100 mm -5
With straight-through valve **, shut-off valve and actuator continuous 24 V (motorised), LG_{min}=NL+100 mm -6

Electrical junction box
Without electrical junction box-S0
Electric junction box, with terminal strip, internally prewired -S1

End piece
Band design, centre part without end piece -E0
Band design with right end piece -ER
Band design with left end piece -EL
Single convector with 2 end pieces -E2

External coating
Housing painted internally and externally to - RAL 9005 - -A1
Housing painted externally - special paint - as rust protection with polyester powder (on request) -A2
With impact sound insulation 3 mm, bonded over the entire surface -A3

Adjusting legs
Adjusting legs 70 mm -07
Adjusting legs 130 mm -13

CNVZ (Accessories) - Dummy element without interior parts for CNV

Width (W)
190 mm -190
270 mm -270
350 mm -350
400 mm -400

Height (H)
90 mm -090
106 mm -106
150 mm -150
190 mm -190

Angle α (°)
Straight dummy plate (α=180°)-180
Corner piece 035≤xxx≤325 (α from 35° to 325°) -xxx

Length L (mm)
Dummy plate 0600≤xxxx≤3000 -xxxx
Corner piece (L=xxxx according to Table 5) -xxxx

Grille layer / Frame
Aluminium natural colour anodised E6/EV1 -G1
Aluminium black anodised E6/EV6 -G2
Aluminium bronze anodised E6/C33 -G3

Tread-resistant grille insert
Without grille -00
Linear grille aluminium natural colour anodised E6/EV1 -L1
Linear grille aluminium black anodised E6/EV6 -L2
Linear grille aluminium bronze anodised E6/C33 -L3
Roll-down grille aluminium natural colour anodised E6/EV1 -R1
Roll-down grille aluminium black anodised E6/EV6 -R2
Roll-down grille aluminium bronze anodised E6/C33 -R3

Spigot diameter / Rubber lip seal
Without primary air connection spigot -P0
Rectangular spigot, without rubber lip seal, H=106 mm -P1
Spigot DN 78, without rubber lip seal, H=150 or H=190 mm -P2
Spigot DN 98, without rubber lip seal, H=190 mm only -P3
Spigot DN 123, without rubber lip seal, H=190 mm only -P4
Spigot DN 78, with rubber lip seal, H=150 and H=190 mm only -P5
Spigot DN 98, with rubber lip seal, H=190 mm only-P6
Spigot DN 123, with rubber lip seal, H=190 mm only -P7

Protective mounting cover
Without protective mounting cover -M0
With cardboard insert, not tread-resistant -M1
With tread-resistant wooden insert -M2

Primary air connection spigot / Position
Without primary air connection spigot -0
With primary air connection spigot, left end face -1
With primary air connection spigot, right end face -2
With primary air connection spigot, room side left -3
With primary air connection spigot, room side right -4

End piece
Band design, centre part without end piece -E0
Band design with right end piece -ER
Band design with left end piece -EL
Single convector with 2 end pieces -E2

External coating
Housing painted internally and externally to - RAL9005 - -A1
Housing painted externally - special paint - as rust protection with polyester powder (on request) -A2
With impact sound insulation 3 mm, bonded over the entire surface -A3

Adjusting legs
Adjusting legs 70 mm -07
Adjusting legs 130 mm -13

Protective mounting cover
Without protective mounting cover -M0
With cardboard insert, not tread-resistant -M1
With tread-resistant wooden insert -M2

Cuts / Bevel cuts
Without cuts in dummy element -A0
With rectangular cuts in dummy element -A1
With round cuts in dummy element -A2
With bevel cut on dummy element -A3

Soundproofing bulkhead
Without soundproofing bulkhead in dummy element -S0
Soundproofing bulkhead with centre covering, 2 bulkhead sheets made of galvanised sheet steel, coated in black and a centre covering made of 2-mm aluminium plate, natural colour anodised. Bulkhead sheets mounted in duct ex works, space in-between filled with insulating material to be provided on site S1