CNP

Ventilation grilles

Application:
Ventilation grilles are used mainly for exhaust application in normal HVAC system.

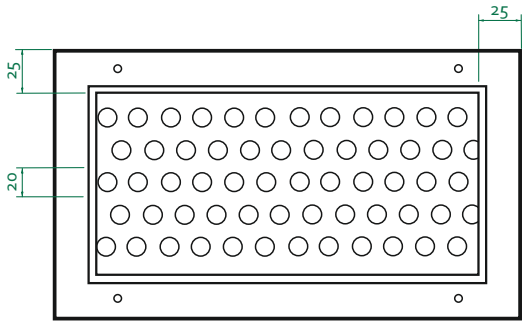
Type:
- **CNP** - simple line air grilles with perforated front plate, the perforation is ~35 %

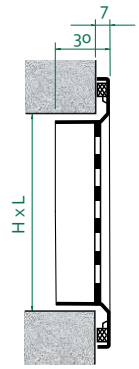
Fixing:
Directly mountable to wall opening or square duct.
- Fixed by visible screw (-C)
- Fixed by concealed bracket (-R)

Material:
- Grilles are made of steel powder coated RAL 9010 in standard

Options:
- Grilles are made of stainless steel (1.4301)
- or steel with other RAL colours

Accessories:
- FK mounting frame made of galvanised steel
- AZ type air volume control damper steel coated RAL 9005
- AL type deflection volume control damper steel coated RAL 9005
- DLLS galvanised steel plenum box with lateral circular spigot connection with damper
- DLFS galvanised steel plenum box with spigot connection on the top with damper





CNP

Dimensions of ventilation grilles

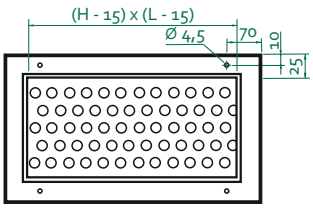
CNP

Ventilation grilles

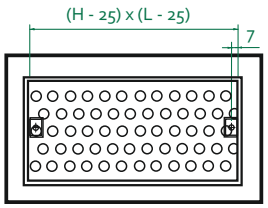
H / L	225	325	425	525	625	725	825	1025	1225
125	0,5	0,6	0,5	1,0	1,1				
175	0,6	0,8	1,0	1,1	1,3				
225	0,7	0,9	1,1	1,3	1,5	1,8	2,0		
325		1,2	1,4	1,7	2,0	2,2	2,5	3,0	3,6
425			1,8	2,1	2,4	2,7	3,0	3,7	4,3

*bigger H dimension is possible uppon request

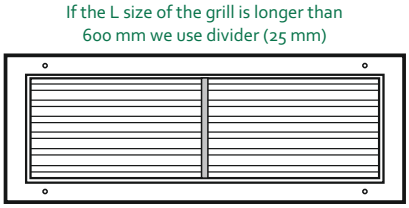
The range dimensions [mm] and weights [kg] of grilles type CNP

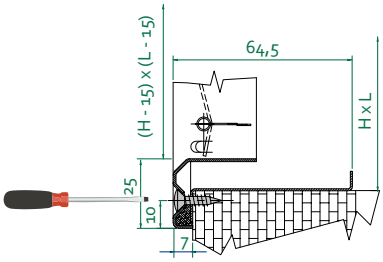


Fixed by visible screw (-C)

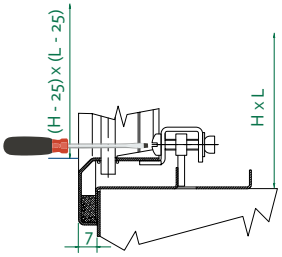


Fixed by concealed bracket (-R)

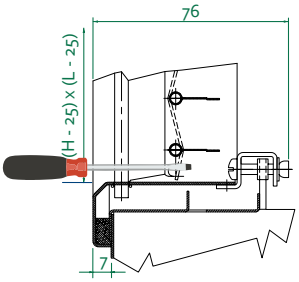




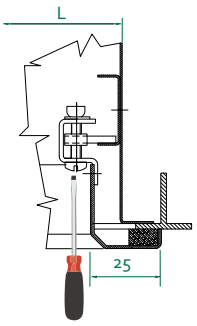
Fixing by screw to mounting frame type FK



Fixing by concealed bracket to mounting frame type FK
single line



Fixing by concealed bracket to mounting frame type FK
double line



Fixing by concealed bracket to plenum box

Installation of the grilles

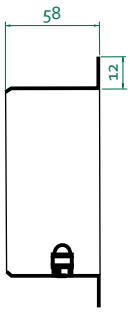
Accessories

Type:
- **FK** - mounting frame - galvanised steel

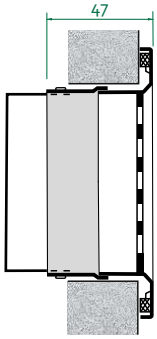
Fixing:
The mounting frame can be easily assembled on site without any tools. The assembled FK frame can be fixed to the opening with riveting, bolting and welding.

Type:
- **AL** - volume contror damper
- **AZ** - volume contror damper

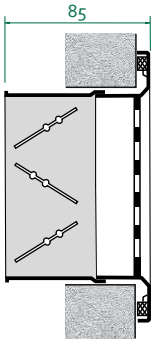
Fixing:
Dim. 3,2 mm POP rivet fixing to the grilles. Grilles and dampers are delivered assembled, if ordered together.



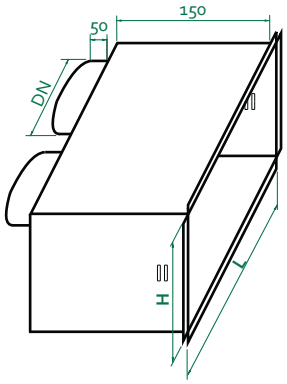
FK



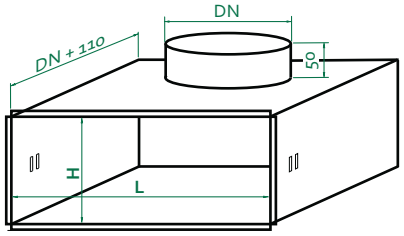
CNP + AL



CNP + AZ



DLFS
plenum box with top connection



DLLS
plenum box side connection

H / L	225	325	425	525	625	725	825	1025	1225
125	100	2*100	2*100	2*100	3*100				
175	160	160	2*160	2*160	2*160				
225	200	200	200	200	2*200	2*200	2*200		
325		250	250	250	250	2*250	2*250	2*250	3*250
425			400	400	400	400	400	2*400	2*400

H / L	225	325	425	525	625	725	825	1025	1225
125	160	160	200	200	250				
175	160	200	250	250	315				
225	200	250	250	315	315	2*250	2*250		
325		250	315	315	400	2*315	2*315	2*400	2*400
425			400	400	400	2*315	2*315	2*400	2*400

Nominal dimension of the sockets of plenum boxes

QUICK SELECTION

LxH	v_a = 2 [m/sec]				v_a = 3 [m/sec]				v_a = 4 [m/sec]				v_a = 5 [m/sec]			
	Q [m³/h]	Δp [Pa]	L_{WA} [dBA]	$L_{o,3}$ [m]	Q [m³/h]	Δp [Pa]	L_{WA} [dBA]	$L_{o,3}$ [m]	Q [m³/h]	Δp [Pa]	L_{WA} [dBA]	$L_{o,3}$ [m]	Q [m³/h]	Δp [Pa]	L_{WA} [dBA]	$L_{o,3}$ [m]
225x125	72	4,0	43,7	1,4	108	9,0	48,2	1,9	144	17,0	51,4	2,4	180	27,0	53,8	2,8
325x125	108	4,0	45,5	1,4	162	9,0	50,0	1,9	216	17,0	53,1	2,4	270	27,0	55,6	2,9
425x125	144	4,0	46,7	1,4	216	9,0	51,2	1,9	288	17,0	54,4	2,4	360	27,0	56,9	2,9
525x125	180	4,0	47,7	1,4	270	9,0	52,2	1,9	360	17,0	55,4	2,4	450	27,0	57,8	2,9
625x125	216	4,0	48,5	1,4	328	9,0	53,0	1,9	432	17,0	56,1	2,4	540	27,0	58,6	3,0
225x175	108	4,0	45,5	1,4	162	9,0	50,0	1,9	216	17,0	53,1	2,4	270	27,0	55,6	2,9
325x175	162	4,0	47,2	1,4	243	9,0	51,7	1,9	324	17,0	54,9	2,4	405	27,0	57,4	2,9
425x175	216	4,0	48,5	1,4	324	9,0	53,0	1,9	432	17,0	56,1	2,4	540	27,0	58,6	3,0
525x175	270	4,0	49,5	1,4	405	9,0	53,9	1,9	540	17,0	57,1	2,4	675	27,0	59,6	3,0
625x175	324	4,0	50,3	1,4	486	9,0	54,7	1,9	648	17,0	57,8	2,4	810	27,0	60,4	3,0
225x225	144	4,0	46,7	1,4	216	9,0	51,2	1,9	288	17,0	54,4	2,4	360	27,0	56,9	2,6
325x225	216	4,0	48,5	1,4	324	9,0	53,0	1,9	432	17,0	56,1	2,4	540	27,0	58,6	3,0
425x225	288	4,0	49,7	1,4	432	9,0	54,2	1,9	576	17,0	57,4	2,4	720	27,0	59,9	3,0
525x225	360	4,0	50,7	1,4	540	9,0	55,2	1,9	720	17,0	58,4	2,4	900	27,0	60,8	3,1
625x225	432	4,0	51,5	1,4	648	9,0	56,0	1,9	864	17,0	59,2	2,4	1008	27,0	61,6	3,1
725x225	504	4,0	52,2	1,4	756	9,0	56,7	1,9	1008	17,0	59,8	2,4	1260	27,0	62,3	3,2
825x225	576	4,0	52,8	1,4	864	9,0	57,2	1,9	1152	17,0	60,4	2,4	1440	27,0	62,9	3,3

LxH	v_a = 2 [m/sec]				v_a = 3 [m/sec]				v_a = 4 [m/sec]				v_a = 5 [m/sec]			
	Q [m³/h]	Δp [Pa]	L_{WA} [dBA]	$L_{o,3}$ [m]	Q [m³/h]	Δp [Pa]	L_{WA} [dBA]	$L_{o,3}$ [m]	Q [m³/h]	Δp [Pa]	L_{WA} [dBA]	$L_{o,3}$ [m]	Q [m³/h]	Δp [Pa]	L_{WA} [dBA]	$L_{o,3}$ [m]
325x325	324	4,0	50,3	1,4	486	9,0	54,7	1,9	648	17,0	57,9	2,5	810	27,0	60,4	3,0
425x325	432	4,0	51,5	1,4	648	9,0	56,0	2,0	864	17,0	59,2	2,5	1080	27,0	61,6	3,1
525x325	540	4,0	52,5	1,4	810	9,0	57,0	2,0	1080	17,0	60,1	2,6	1350	27,0	62,6	3,2
625x325	648	4,0	53,3	1,4	972	9,0	57,7	2,0	1296	17,0	60,9	2,6	1620	27,0	63,4	3,3
725x325	756	4,0	53,9	1,4	1134	9,0	58,4	2,0	1515	17,0	61,6	2,7	1890	27,0	64,1	3,4
825x325	864	4,0	54,5	1,4	1296	9,0	59,0	2,0	1728	17,0	62,2	2,7	2160	27,0	64,6	3,5
1025x325	1080	4,0	55,5	1,4	1620	9,0	60,0	2,1	2160	17,0	63,1	2,8	2700	27,0	65,6	3,7
1225x325	1296	4,0	56,5	1,4	1944	9,0	60,8	2,1	2596	17,0	63,9	2,9	3240	27,0	66,4	4,0
425x425	576	4,0	52,8	1,4	864	9,0	57,2	2,0	1152	17,0	60,4	2,6	1440	27,0	62,9	3,3
525x425	720	4,0	53,7	1,4	1080	9,0	58,2	2,0	1440	17,0	61,4	2,7	1800	27,0	63,8	3,4
625x425	864	4,0	54,5	1,4	1296	9,0	59,0	2,0	1728	17,0	62,2	2,7	2160	27,0	64,6	3,5
725x425	1008	4,0	55,2	1,4	1512	9,0	59,7	2,0	2016	17,0	62,8	2,8	2520	27,0	65,3	3,7
825x425	1152	4,0	55,8	1,4	1728	9,0	60,2	2,1	2304	17,0	63,4	2,8	2880	27,0	65,9	3,8
1025x425	1440	4,0	56,7	1,4	2160	9,0	61,2	2,1	2880	17,0	64,4	3,0	3600	27,0	66,9	4,1
1225x425	1728	4,0	57,5	1,4	2592	9,0	62,0	2,2	3456	17,0	65,2	3,1	4320	27,0	67,6	4,5

In the tables, data is calculated according to grilles frame size average speed between v_a=2 and v_a=5 (m/sec).
The data is ρ=1,2 (kg/m³) density and paralel (open) lamellas as well as in the case of isothermal blowing valid assumption.
The ventilation calculation is possible according to the above table. The intermediate values are estimated by interpolation.

Quick selection of the grilles type CNP