PTVI/PRVI

Perforated diffuser
Supply/Return
Formwork version
Removable

Available types
P - V I O -

P perforated ceiling diffuser

- **Supply/return**
  T supply
  R return

V flat, removable
I formwork
O no accessories

- **Version**
  Round side connection
  R assembled, internally insulated plenum box
  U assembled, uninsulated plenum box

  Square side connection
  T internally insulated plenum box
  S uninsulated plenum box

SA-Select
Check SA-Select to create extended order codes and selection details online. **NB!** At this moment, SA-Select is only available in Dutch. But it is possible to create extended order codes and selection details online.

Use
The PTVI formwork perforated diffuser is suitable for supplying cooled or heated air with a large temperature difference in respect of the room temperature. The PRVI type is suitable for return air. The separately supplied insulated or uninsulated plenum box can be fitted in poured concrete. As standard, the plenum box is equipped with 8 mm hanging holes in the raised edge of the plenum. After removing the formwork, it is easy to fit the diffuser in the plenum. With the four pattern blades, there is a free choice of discharge direction, even after fitting. The high induction effect facilitates a large number of air changes. The pure radial pattern ensures minimal smudging of the ceiling. With the extremely shallow inflow pattern, the PTVI diffuser is also suitable for slightly lower rooms.

Version
Perforated diffuser

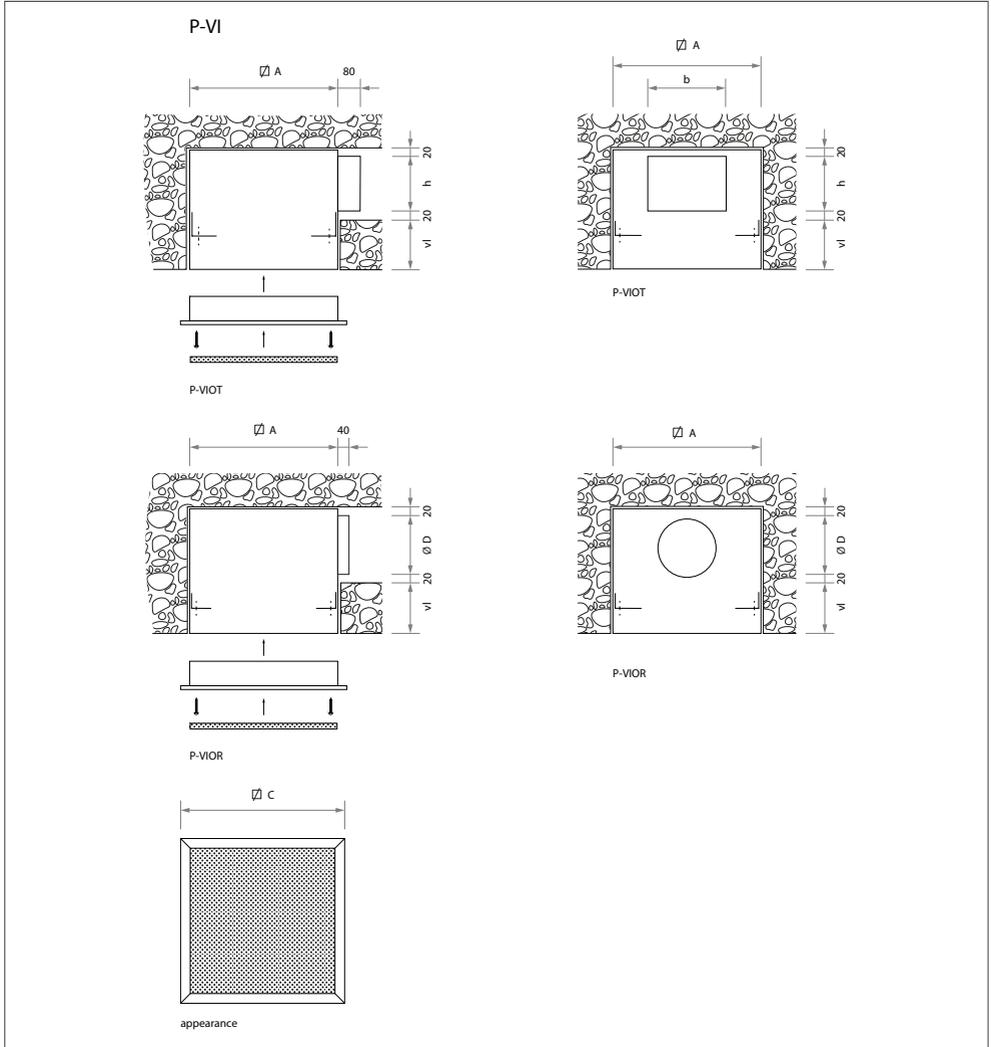|	
Frame:	extruded aluminium
Front plate:	steel
Post-treatment:	epoxy
Colour:	white RAL 9010, optional RAL colour of your choice

Plenum box

Material:	sendzimir galvanised steel
Internal insulation:	1/2" duct liner
Post-treatment:	none

Dimensions

P-VI

P-VIOT

P-VIOT

P-VIOR

P-VIOR

appearance

Available dimensions and sizes

Square connection version P-VIOT/P-VIOS.

model	C	A	b*	h*
250	283	252	172	72
255	283	252	172	82
300	348	320	222	82

*Sizes B and H are internal sizes.

Round connection version P-VIOU/P-VIOR.

model	C	A	D
250	283	252	123
300	348	320	158

Note
- The listed dimensions are in mm.
- Concrete floor "vl" must be at least 60 mm.
- The internal unit with the diffuser is fitted after the ceiling has been finished.

Selection details
PTVI

air volume		model	discharge pattern														
			4-sided			3-sided			2-sided opposite			2-sided angle			1-sided		
m³/s	m³/h		throw m	Δp$_s$ Pa	L$_{pA}$ dB(A)	throw m	Δp$_s$ Pa	L$_{pA}$ dB(A)	throw m	Δp$_s$ Pa	L$_{pA}$ dB(A)	throw m	Δp$_s$ Pa	L$_{pA}$ dB(A)	throw m	Δp$_s$ Pa	L$_{pA}$ dB(A)
0.015	54	250 en 255	0.4	1	-	0.4	1	-	0.6	2	6	0.6	3	8	0.9	7	16
0.020	72	250 en 255	0.6	1	8	0.6	2	10	0.7	4	13	0.7	4	15	1.2	12	24
0.025	90	250 en 255	0.7	2	14	0.7	3	16	0.9	5	19	0.9	7	21	1.5	19	30
		300	0.6	1	-	0.6	1	7	0.8	3	10	0.8	3	12	1.3	9	22
0.030	108	250 en 255	0.8	3	19	0.9	4	21	1.1	8	24	1.1	10	26	2.0	28	34
		300	0.7	1	5	0.7	2	11	0.9	4	15	0.9	5	17	1.5	13	26
0.040	144	250 en 255	1.1	4	26	1.2	6	28	1.5	13	31	1.5	17	32	2.5	49	42
		300	0.9	3	17	1.0	3	19	1.2	6	22	1.2	8	24	2.0	23	34
0.050	180	250 en 255	1.4	6	32	1.5	10	34	1.9	20	37	1.9	25	37			
		300	1.2	4	23	1.2	5	25	1.5	10	28	1.5	13	30	2.5	34	39
0.060	216	250 en 255	1.7	8	37	1.8	13	39	2.2	28	42	2.2	35	44			
		300	1.5	6	27	1.5	8	29	1.5	14	33	1.5	19	35	3.0	51	44
0.080	288	300	1.8	11	35	1.9	14	37	2.4	26	40	2.4	33	42			
0.100	360	300	2.3	17	41	2.4	21	43									

Selection details
PRVI

lucht-hoeveelheid		model	Δp$_s$ Pa	L$_{pA}$ dB(A)
m³/s	m³/h			
0.015	54	250 en 255	1	-
0.020	72	250 en 255	3	-
0.025	90	250 en 255	4	-
		300	1	-
0.030	108	250 en 255	6	-
		300	2	-
0.040	144	250 en 255	11	-
		300	4	-
0.050	180	250 en 255	16	15
		300	6	-
0.060	216	250 en 255	24	20
		300	9	-
0.080	288	300	15	16
0.100	360	300	24	22

General
- The throw applies to flush-mounting in a flat, closed ceiling.
- The assumed room attenuation is 10 dB.
- It is permitted to interpolate the interim values.

Outflow pattern

4-sided

3-sided

2-sided angle

2-sided opposite

1-sided

pattern blade "closed"

pattern blade "open"

Attenuation values plenum box (without end reflection)

model	attenuation values						
	125	250	500	1k	2k	4k	Hz
250 en 255	5	0	3	10	5	11	dB
300	3	1	6	7	7	9	dB