



PTVI/PRVI

Perforated diffuser

Supply/Return

Formwork version

Removable

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

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.

Available types

P-VIO-

P perforated ceiling diffuser

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

- V** flat, removable
- I** formwork
- O** no accessories

- **Version**

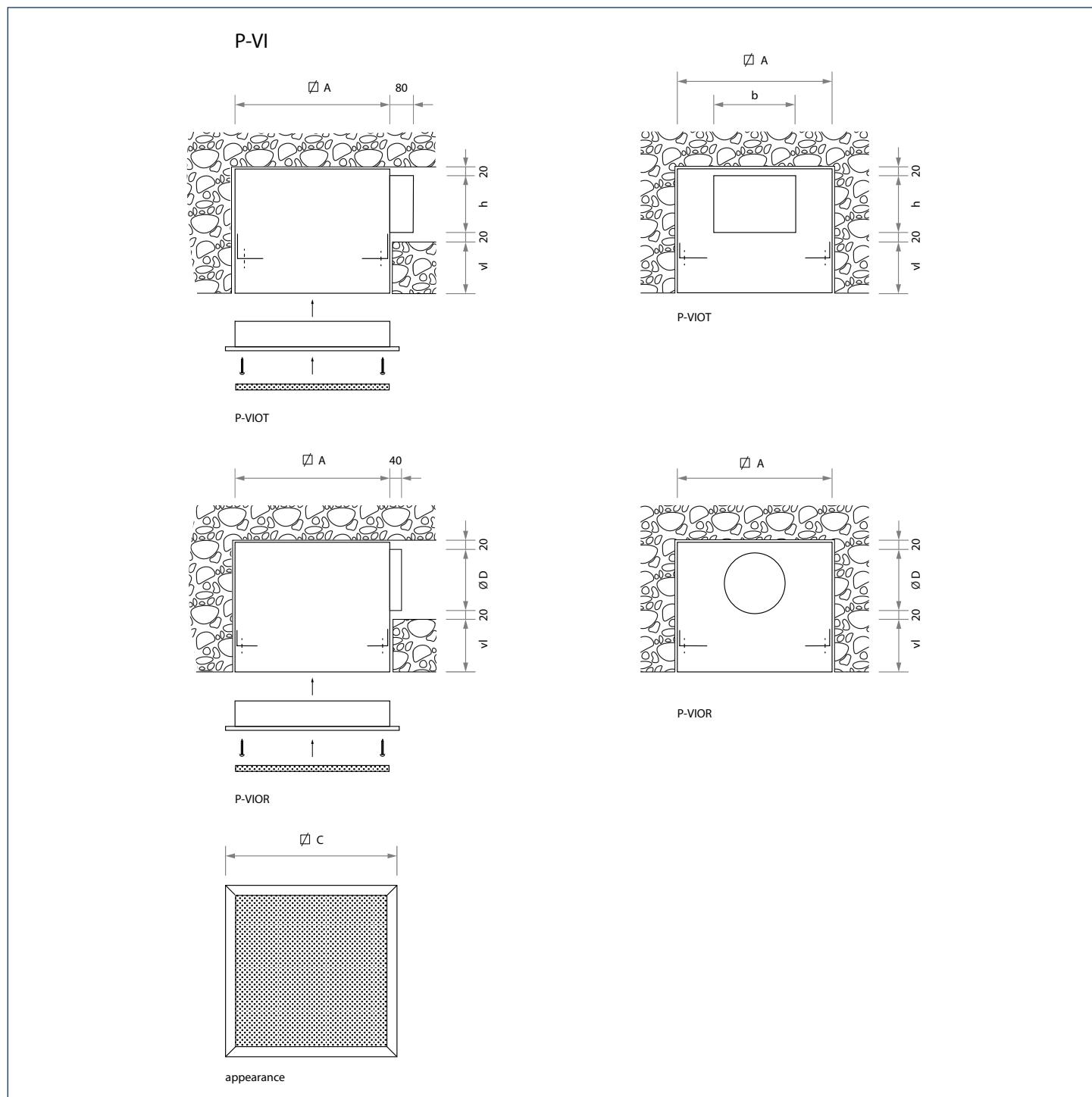
Round side connection

- R** assembled, internally insulated plenum box
- U** assembled, uninsulated plenum box

Square side connection

- T** internally insulated plenum box
- S** uninsulated plenum box

Dimensions



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 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 and 255	0.4	1	-	0.4	1	-	0.6	2	6	0.6	3	8	0.9	7	16
0.020	72	250 and 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 and 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 and 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 and 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 and 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 and 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	1.8	14	33	1.8	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

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

Attenuation values plenum box

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

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"