

PDVM

Perforated diffuser

Supply

T-bar mounted in modular ceiling

Downflow

Use

The PDVM downflow ceiling diffuser is suitable for supplying cooled air with a small temperature difference. The diffuser can be T-bar mounted in a modular ceiling. The diffuser is designed for supplying rooms with an extremely high number of air changes, such as laboratories or computer rooms.

As the end velocity in the occupied zone depends on the temperature difference, the use and layout of the room must be taken into account when the supply panels are installed. As standard, the plenum box is equipped with 8 mm hanging holes in the raised edge of the plenum.

Characteristics

Max. number of air changes:	up to 100 x
Undertemperature:	up to 6 K
Overtemperature	0 K

Version

Ceiling diffuser

material:	steel
post-treatment:	epoxy
colour:	white RAL 9010, optional RAL colour of your choice

Top section

material:	sendzimir galvanised steel
post-treatment:	none

Plenum box

material:	sendzimir galvanised steel
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

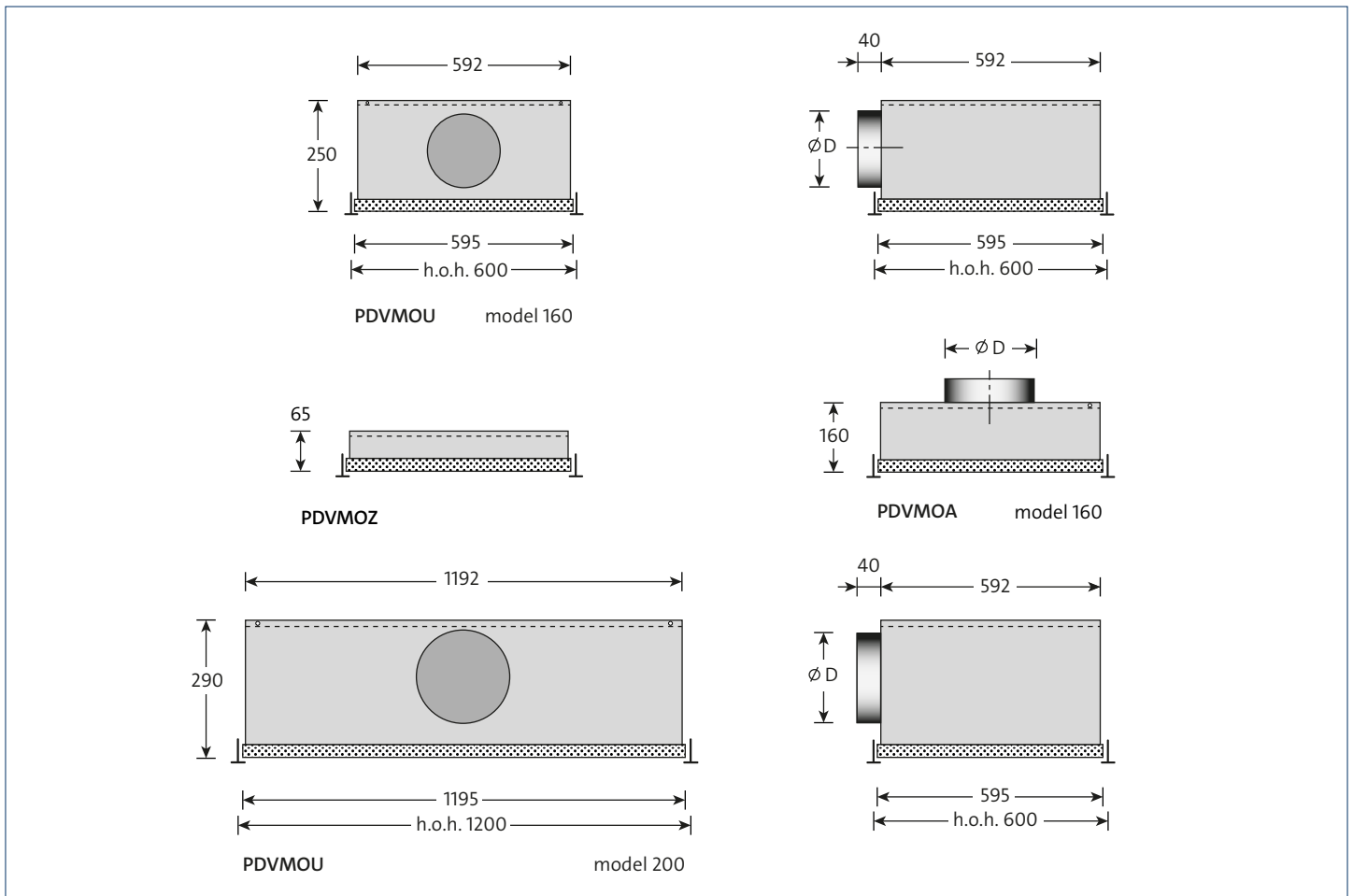
P D V M O -

- P** perforated ceiling diffuser
- D** downflow
- V** flat face plate
- M** modular ceiling, panel size 600 mm
- O** no accessories

- Version

- A** round top connection
- R** internally insulated plenum box
- U** uninsulated plenum box
- Z** square top connection

Dimensions



Available dimensions and sizes

model	panel	D
160	600 x 600	158
200	600 x 1200	198

Note

- The dimensions are in mm.

Selection details

PDVM

air volume		distance	panel size					
m ³ /s	m ³ /h		600 x 600			1200 x 600		
			v m/s	Δp _s Pa	L _{pA} dB(A)	v m/s	Δp _s Pa	L _{pA} dB(A)
0.025	90	0.3	0.16	3	-			
		0.6	0.16	3	-			
		0.9	0.16	3	-			
		1.2	0.16	3	-			
		1.5	0.16	3	-			
		1.8	0.16	3	-			
0.030	108	0.3	0.19	5	-			
		0.6	0.19	5	-			
		0.9	0.19	5	-			
		1.2	0.19	5	-			
		1.5	0.19	5	-			
		1.8	0.19	5	-			
0.040	144	0.3	0.26	8	14			
		0.6	0.26	8	14			
		0.9	0.26	8	14			
		1.2	0.26	8	14			
		1.5	0.26	8	14			
		1.8	0.26	8	14			
0.050	180	0.3	0.32	13	20	0.16	3	-
		0.6	0.32	13	20	0.16	3	-
		0.9	0.32	13	20	0.16	3	-
		1.2	0.32	13	20	0.16	3	-
		1.5	0.32	13	20	0.16	3	-
		1.8	0.32	13	20	0.16	3	-
0.060	216	0.3	0.38	18	25	0.19	5	10
		0.6	0.38	18	25	0.19	5	10
		0.9	0.38	18	25	0.19	5	10
		1.2	0.38	18	25	0.19	5	10
		1.5	0.38	18	25	0.19	5	10
		1.8	0.38	18	25	0.19	5	10
0.080	288	0.3	0.51	32	32	0.26	8	17
		0.6	0.51	32	32	0.26	8	17
		0.9	0.51	32	32	0.26	8	17
		1.2	0.51	32	32	0.26	8	17
		1.5	0.51	32	32	0.26	8	17
		1.8	0.51	32	32	0.26	8	17
0.100	360	0.3				0.32	13	23
		0.6				0.32	13	23
		0.9				0.32	13	23
		1.2				0.32	13	23
		1.5				0.32	13	23
		1.8				0.32	13	23
0.125	450	0.3				0.40	20	29
		0.6				0.40	20	29
		0.9				0.40	20	29
		1.2				0.40	20	29
		1.5				0.40	20	29
		1.8				0.40	20	29

General

- The velocities in the table apply in an isothermal situation and for individual panels.
- The values must be used as a guideline. The end velocity of the descending air column highly depends on the effective temperature difference between the supply air and the room air.
- Vertical air patterns can be used for a high number of air changes.
- It is preferable to project the extraction points over the heat source or sources.
- The panels may not be fitted directly above people who stay in one place.
- The assumed room attenuation is 10 dB.
- It is permitted to interpolate the interim values.