

**PERFORATED CEILING DIFFUSERS**  
SQUARE, 'LAY-IN', WITH REMOVABLE, PERFORATED FACE-PLATE

**PED TYPE**



✓ Return



### Application

- Types PED..O4 square ceiling diffusers with removable, perforated face-plate are designed for (easy) installation in suspended T-bar type ceiling applications and are suitable for return or exhaust air applications. These diffusers have the same appearance as their corresponding supply diffusers type PBD..O4, however without deflection disc.

### Technical information

#### Features:

- Low sound level at high air volume.
- Lay-in design allows quick/easy installation on site in most T-bar suspended ceiling systems.
- Removable face-plate to simplify maintenance and access to air pattern adjustment blades and volume control without opening the ceiling.

#### Construction:

- Lay-in panel: sheet steel with integral removable perforated face-plate.
- Standard finish: no. 4 white stove enamelled, RAL 9010.
- Plenum box: (option) galvanized sheet steel with or without internal thermal or acoustic insulation.
- Diffuser types PEDO1O4 en PEDO3O4 are also available with lowered plenum box.
- Non standard type available upon request.

#### Delivery format:

- Diffuser and plenum box are supplied as a single assembly, packed in a carton box to minimize damage during shipping and storage at site.

#### Assembly:

- The diffuser and the combination of diffuser and plenum box are provided with holes for suspension.

### Regular types

- PEDO1O4: ceiling diffuser with removable perforated face-plate.
- PEDO5O4: ceiling diffuser with adaptor.

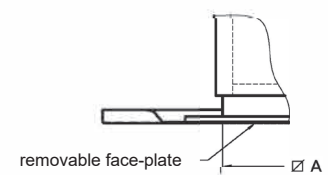
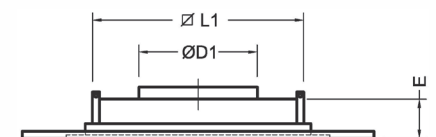
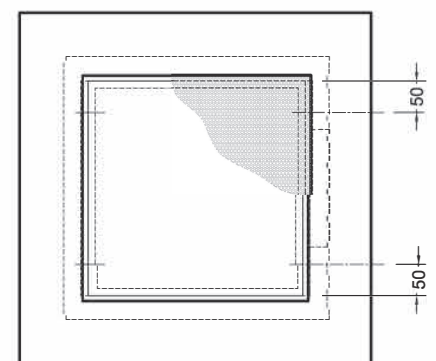
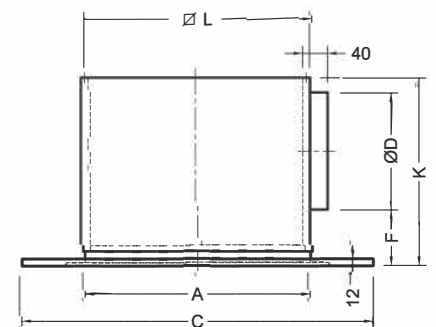
### Specify as

#### Example:

Supply square, return air ceiling diffusers with lay-in panel with integral removable perforated face-plate and appearance to match the corresponding supply air diffusers. Complete with uninsulated plenum box from galvanized sheet steel and volume control damper. Finish, white stove enamelled, RAL 9010.

Barcol-Air type: PEDO1O4

Sizes and arrangements as shown on the plants.



Detail PEDO.O4

### Dimensions

Model	A	∅ C	∅ D	∅ D1	E	F	K	K <sub>vl</sub>	∅ L	∅ L1
610	234	594	123	158	49	78	226	181	240	210
812	279	594	158	198	58	87	270	210	285	255
1016	381	594	198	248	64	93	316	241	387	357
1220	482	594	198	313	77	106	329	254	489	459

Other dimensions are available on request.

#### Notes dimensions:

1. All dimensions are in millimetres
2. The plenum box is provided with 4 or 6 holes for suspension. The location is indicated by centre lines on the bottom view
3.  $K_{vl} = K_{lowered}$  = lowered plenum box.  
A lowered plenum box will be executed with an oval pressed spigot. The circumference of the oval pressed spigot is equal to the original pressed spigot diameter (∅D). The height of the plenum box is indicated in the size chart.

## Square, 'lay-in', with removable, perforated face-plate

Return ✓

Type PED..O4, diffusers with or without plenum box or adaptor

54 - 1440 m<sup>3</sup>/h

Diffuser type		model	with uninsulated plenum box		with adaptor		w/o plenum box or adaptor	
air volume m <sup>3</sup> /s	m <sup>3</sup> /h		$\Delta p_s$ Pa	LpA dB(A)	$\Delta p_s$ Pa	LpA dB(A)	$\Delta p_s$ Pa	LpA dB(A)
0,015	54	610	2	--	1	--	1	--
		812	1	--	1	--	1	--
0,02	72	610	3	--	1	--	1	--
		812	1	--	1	--	1	--
0,025	90	610	4	--	2	--	1	--
		812	2	--	1	--	1	--
0,03	108	610	6	--	2	--	1	--
		812	2	--	1	--	1	--
0,035	126	610	8	--	3	--	1	--
		812	3	--	1	--	1	--
0,04	144	610	11	--	4	--	2	--
		812	4	--	2	--	1	--
0,045	162	610	14	--	6	--	3	--
		812	5	--	2	--	1	--
		1016	2	--	1	--	1	--
0,05	180	610	17	--	7	--	3	--
		812	6	--	2	--	1	--
		1016	2	--	1	--	1	--
0,06	216	610	24	20	10	23	4	--
		812	9	--	4	--	2	--
		1016	4	--	2	--	1	--
		1220	2	--	1	--	1	--
0,07	252	610	33	25	13	26	5	21
		812	12	--	6	--	3	--
		1016	5	--	3	--	1	--
		1220	3	--	1	--	1	--
0,08	288	610	43	29	18	30	8	25
		812	16	--	8	--	4	--
		1016	6	--	3	--	1	--
		1220	4	--	2	--	1	--
0,09	324	610			22	33	9	29
		812	20	--	10	--	5	--
		1016	8	--	4	--	2	--
		1220	6	--	2	--	1	--
0,1	360	610			27	36	11	32
		812	25	22	12	--	6	--
		1016	15	--	5	--	2	--
		1220	7	--	3	--	2	--
0,125	450	812	38	29	19	23	9	--
		1016	16	--	8	--	4	--
		1220	11	--	4	--	2	--
0,15	540	812			27	28	12	20
		1016	22	23	12	20	6	--
		1220	15	--	6	--	4	--
0,175	630	812			37	32	17	25
		1016	31	27	16	24	8	--
		1220	21	24	8	--	5	--
0,2	720	1016	40	31	22	27	12	22
		1220	27	28	11	21	7	--
0,25	900	1016			34	33	18	27
		1220	43	35	17	25	11	22
0,3	1080	1016			48	38	24	31
		1220			25	29	16	26
0,35	1260	1220			34	33	21	29
0,4	1440	1220			44	36	28	32

1. The stated LpA values are based on a room absorption of 10dB.

2. Sound pressure levels below NC 20 are indicated by "--".

3. For non standard diffusers, we recommend to contact our technical staff.



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