

# WTPD

- ▶ Wall diffuser
- ▶ Supply
- ▶ Perforated

## Design:

**Perforated diffuser**  
 frame: extruded aluminium  
 front sheet: steel  
 finish: epoxy powder  
 colour: white RAL 9010

**Plenum box**  
 material: galvanised sheet steel  
 lining: 12 mm polyester wool  
 finish: none

## Available types:

- W T P D O -**
- W** wall diffuser
  - T** supply
  - P** removable perforated front core
  - D** frame mounting
  - O** no accessories
- **designed with**
- R** lined plenum box, rear connection
  - U** un-lined plenum box, rear connection
  - T** lined plenum box, left connection
  - S** un-lined plenum box, left connection
  - K** lined plenum box, right connection
  - E** un-lined plenum box, right connection

## Application:

The wall diffuser type WTPD is suitable for the supply of cooled air with a big temperature difference compared with the room temperature. The diffuser has a very short throw which makes it suitable for mounting to an interior wall of a room where isothermal air is supplied in the direction of radiators or convectors.

## Features:

Max. air exchange: up to 8x  
 Under temperature: up to 10 K  
 Over temperature: up to 15 K

## Dimensional data:

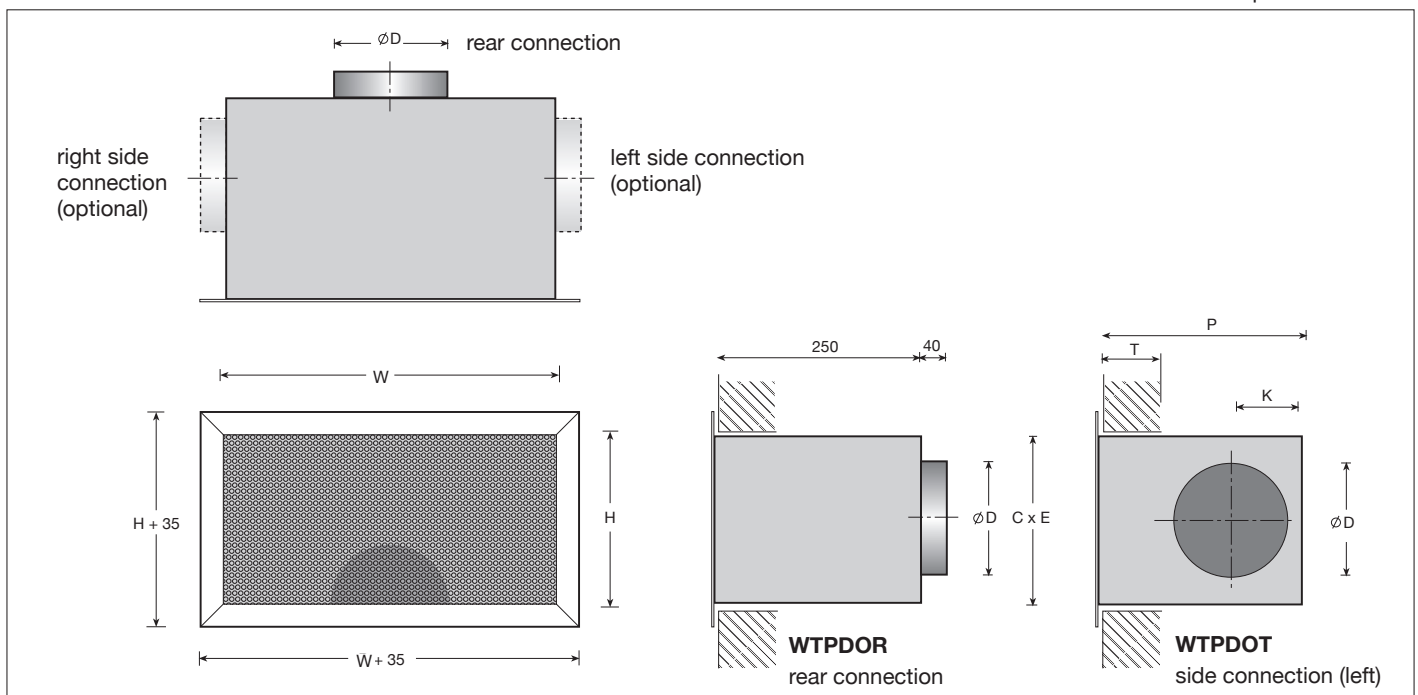
Model	W	H	C	E	D	P*	K*	T*
300	313	150	305	145	123	343	107	110
400	388	200	380	195	158	378	124	110
500	483	248	475	240	198	418	144	110
600	578	313	570	305	248	468	293	110

\*) only in case of side connection

## Dimensions:

## Remark:

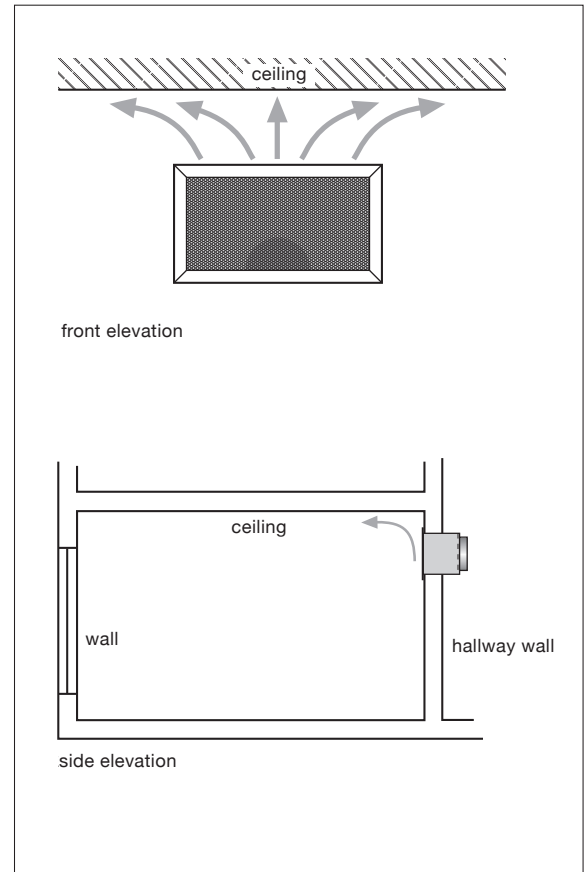
The stated dimensions are sizes in mm.  
 The dimensions W x H are the recommended hole sizes.  
 T size is minimal, plenums for non standard wall thickness is optional.  
 Connection "D" is actual O.D.  
 Please advise at time of order if face screws are required.



## Performance data WTPD:

Air volume		model	T	Ps	Lp
m <sup>3</sup> /s	m <sup>3</sup> /h				
0.012	45	300	0.6	1	-
0.015	54	300	0.7	1	-
0.020	72	300	0.9	3	11
		400	0.8	1	3
0.025	90	300	1.2	4	17
		400	1.0	2	9
0.030	108	300	1.5	6	21
		400	1.1	3	14
0.040	144	300	1.8	11	29
		400	1.5	6	21
		500	1.3	4	14
0.050	180	300	2.3	17	35
		400	1.9	9	27
		500	1.6	4	19
		600	1.4	4	16
0.060	216	400	2.4	13	33
		500	2.0	10	25
		600	1.8	6	19
0.080	288	400	2.9	19	37
		500	2.5	8	30
		600	2.2	8	24
0.100	360	500	3.3	25	37
		600	2.9	14	31
0.125	450	600	3.6	22	37
0.150	540	600	4.3	32	42
m <sup>3</sup> /s	m <sup>3</sup> /h	model	T	Ps	Lp

## Forced air outflow pattern:



## General:

The throw is stated for mounting up to about 0.3 m below the ceiling.

Minimum centre to centre distance of the diffusers in horizontal direction: throw  $T \times 2$

- throw T in meters
- static pressure drop Ps in Pa.

The adopted room absorption is 10 dB.

- sound pressure level Lp in dB(A).

Interpolation of intermediate values is acceptable.