



A.04

Ceiling diffusers and grilles

PPTMB (RAL9010)

- Supply 1-4 directions
- Steel
- White, RAL 9010



Perforated ceiling diffusers for air supply type PPTMB (RAL9010)

Air supply ceiling diffusers with adjustable 1- to 4-way pattern perforated plate.

Application

• For air supply in ventilation and air conditioning systems

Material

Steel

Colour

■ White, RAL 9010

Composition

• Perforated removable front plate with incorporated top entry plenum box.

Text for tender

- The square air supply ceiling diffusers are of the multidirectional type with a perforated front plate and an incorporated plenum box. They are made of steel in white powdercoating finish RAL 9010.

 Cairox type PPTMB

Other available products

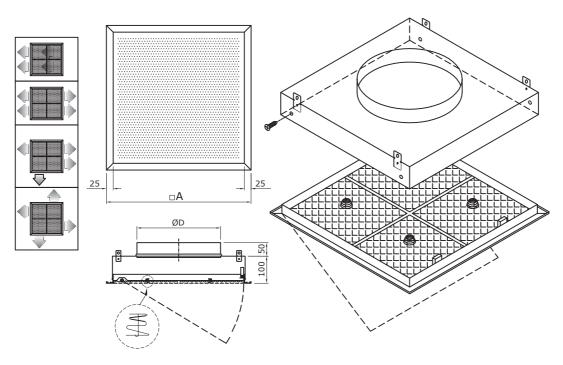
■ For PPTMB 315 see PS/PPTMB 315

Order example

PPTMB, 200 Explanation **PPTMB** = Diffuser type **200** = Diffuser size (connection diameter)



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Dimensions									
PPTMB	A [mm]	ØD [mm]							
160	300	160							
200	400	200							
250	500	250							

Quick selection												
	РРТМВ				300/160		400/200			500/250		
	Ak		0.0302			0.0591			0.0976			
Q		В		1.2	2.4	3.6	1.2	2.4	3.6	1.2	2.4	3.6
150		H=	2.7	0.97	0.32	0.19	0.69	0.23	0.14			
	Vz	H=	3.2	0.36	0.21	0.15	0.26	0.15	0.1			
		H=	3.8	0.21	0.15	0.11	0.15	0.1	0.08			
	Vk			1.4			0.7					
	X0.25			2.4			2					
	Ps			8		2						
	Lw(A)			25		<20						
		H=	2.7	1.29	0.43	0.26	0.92	0.31	0.18	0.73	0.24	0.15
	Vz	H=	3.2	0.49	0.28	0.19	0.35	0.2	0.14	0.27	0.16	0.11
		H=	3.8	0.28	0.19	0.15	0.2	0.14	0.11	0.16	0.11	0.08
200	Vk				1.8 0.9				0.6			
	X0.25				2.8 2.3			2.1				
		Ps			13		3		1			
		Lw(A)			34			<20			<20	
		H=	2.7	1.62	0.54	0.32	1.15	0.38	0.23	0.91	0.3	0.18
	Vz	H=	3.2	0.61	0.35	0.24	0.43	0.25	0.17	0.34	0.2	0.14
		H=	3.8	0.35	0.24	0.19	0.25	0.17	0.13	0.2	0.14	0.11
250		Vk			2.3			1.2			0.7	
	X0.25			3.1				2.6		2.3		
	_	Ps			22		6 22			2		
		Lw(A)			42		4.20		0.20	1.00	<20	0.22
300	Vz	H=	2.7 3.2				1.38 0.52	0.46 0.3	0.28 0.21	1.09	0.36 0.23	0.22
	VZ	H= H=	3.2 3.8				0.52	0.3	0.21	0.41 0.23	0.23	0.16
		Vk	3.6				0.5	1.4	0.16	0.23	0.16	0.13
	X0.25						2.9					
	Ps						8			2.5 3		
	Lw(A)						28			<20		
400		H=	2.7				1.85	0.62	0.37	1.46	0.49	0.29
	Vz	H=	3.2				0.69	0.4	0.28	0.55	0.31	0.22
		H=	3.8				0.4	0.28	0.21	0.31	0.22	0.17
	Vk					1.9			1.1			
	X0.25						3.4			3		
	Ps						15			5		
	Lw(A)						38			23		
		H=	2.7							2.19	0.73	0.44
	Vz	H=	3.2							0.82	0.47	0.33
		H=	3.8							0.47	0.33	0.25
600	Vk										1.7	
	X0.25									3.8		
	Ps									12		
	Lw(A)										36	
		H=	2.7							2.92	0.97	0.58
800	Vz	H=	3.2							1.09	0.63	0.44
		H=	3.8							0.63	0.44	0.34
	Vk							2.3				
	X0.25							4.7				
	Ps							22				
		Lw(A)									46	



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Symbols and specifications

- Q = Air Volume in m³/h
- Ak = Effective surface (free area) in m²
- B = Distance between diffusers in m
- H = Installation height of the diffusers in m
- Vz = Maximum velocity at the occupied zone regarding distance between diffusers and installation height in m/s
 Vk = Average effective velocity through the grill in m/s
- X0.25 = Throw length in m at an endvelocity Vt of 0,25m/s
 Ps = Static pressure loss given in Pa
- Lw(A) = Acoustic power in dB(A)
- The throw X0.25 is given at an end velocity of 0.25m/s for a smooth ceiling without any obstacles.
- The table values are given for the adjustable deflection plates set at its standard position to achieve an air flow pattern in 4 direction
- The values are given for isothermal supply air. Throw distances for cooling conditions at -11K can be calculated by deviding the X0.25 values with factor 1.1. For heating purposes at Dt of +11K a multiplier of 1.1 should be applied to the given X0.25 value.
- In order to achieve a high comfort level, selections can be made according to the maximal velocity at the occupied zone Vz. These values are given at distances between diffusers B and installation heights H. Velocities Vz lower than, or equal
- The pressure losses Ps are given at distances between diffusers B and installation neights it. Velocities v2 lower than, or equal to 0,25m/s at the occupied zone are advised.
 The pressure losses Ps are given for grilles without damper of with fully opened damper.
 The acoustic power Lw(A) are given for grilles without damper of with fully opened damper without room attenuation. Acoustic powers below 20dB(A) are mentioned as "<20" in the tables.
 For all special requirements, please contact our engineering office.



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Placement instruction

