

**3/S5**  
v 3.3 (en)

## FLOOR DIFFUSER

PDI



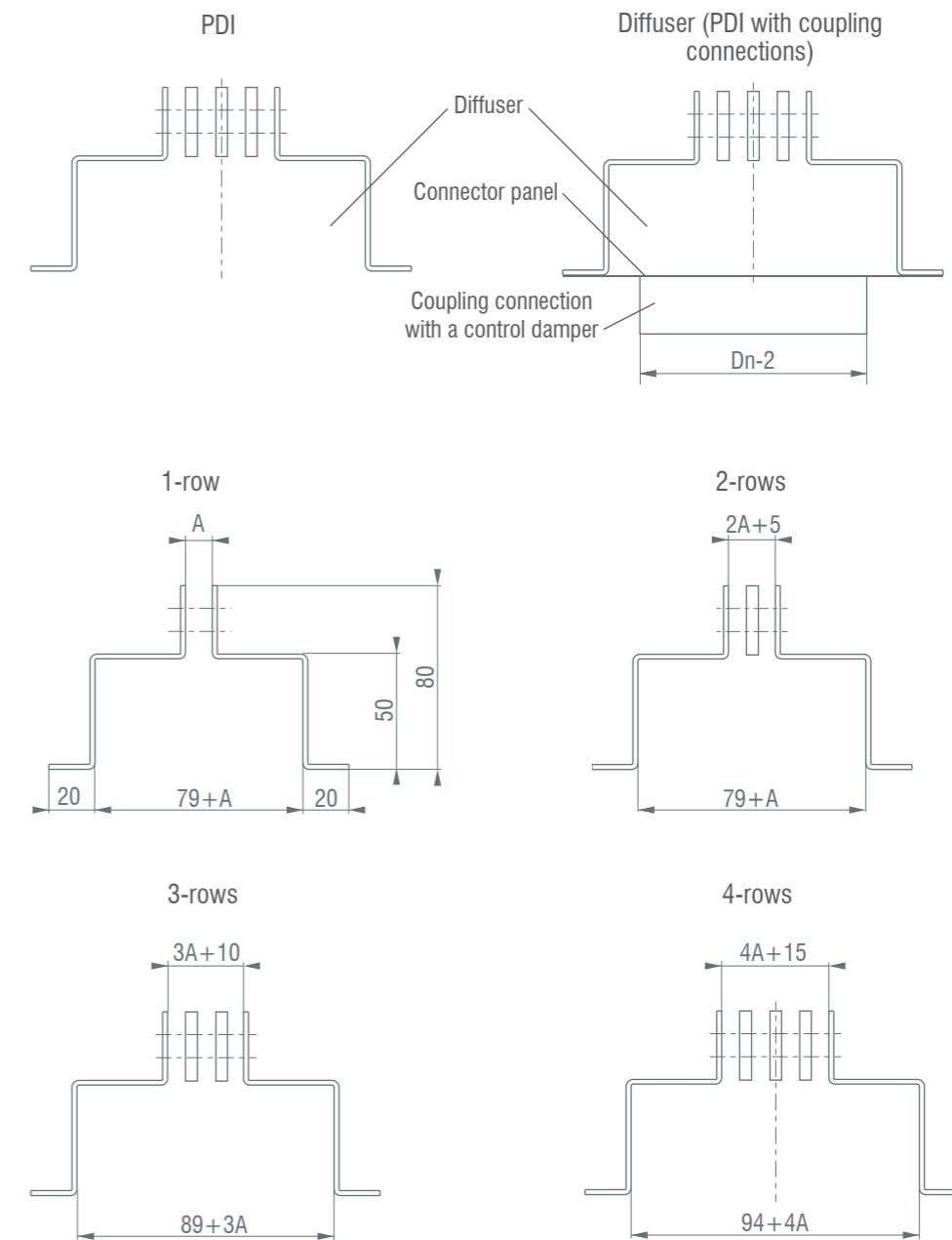
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**FLOOR DIFFUSER - PDI**

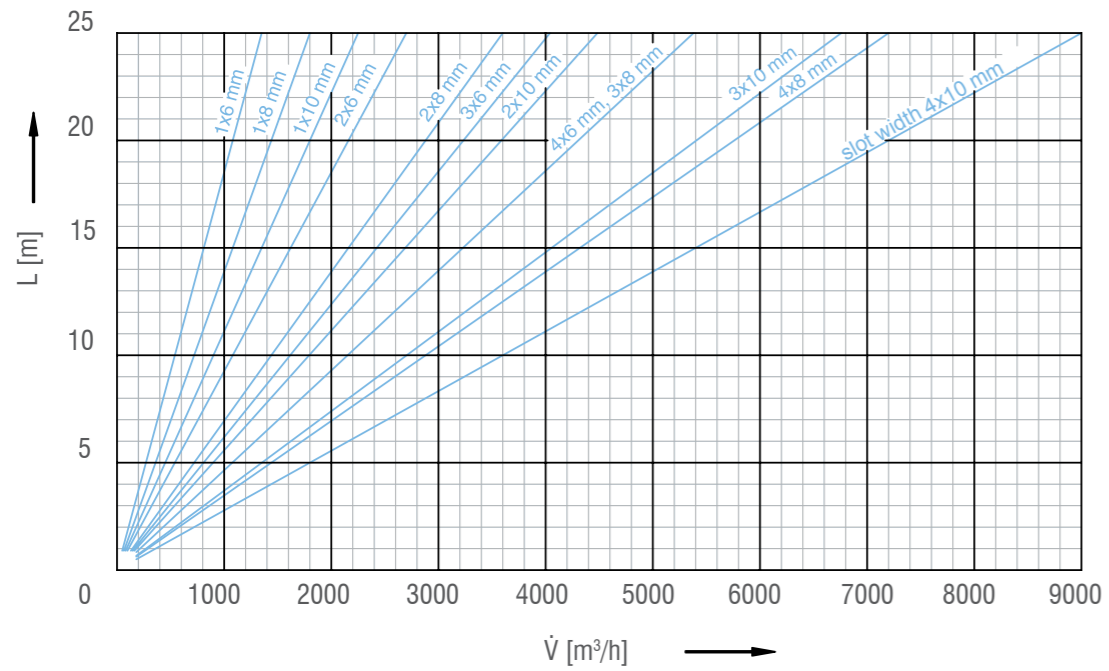
- Floor diffuser is used for air supply to large glass surfaces.
- Made of aluminium sheet, discharge elements made of extruded aluminium profiles, connecting elements made of stainless steel.
- Possible version with or without end connections at bottom plate from aluminium sheet.



Definition of symbols:

$V$ [m <sup>3</sup> /h]	- Airflow rate	$H_{uk}$ [m]	- Installation height
$y$ [m]	- Jet deflection	$\alpha$ [°]	- Angle of deflection
$A$ [m]	- Horizontal difference between nozzle and point of jet collision	$v_L$ [m/s]	- Medium air velocity at a point of jet collision
$B$ [m]	- Distance between two nozzles in row	$v_{H1}$ [m/s]	- Average air velocity at occupied zone
$L$ [m]	- Isothermal jet throw	$\Delta t_{H1}$ [K]	- Temperature difference between supply air at throw distance and room temperature
$L_{max}$ [m/s]	- Total air throw of isothermal vertical jet	$\Delta t_L$ [K]	- Difference between core and room temperature
$H_1$ [m]	- Distance from occupied zone to collision point of two cold jet		
$H_2$	- Distance from occupied zone to collision point of two warm jet		

SELECTION DIAGRAM



Diffuser characteristics

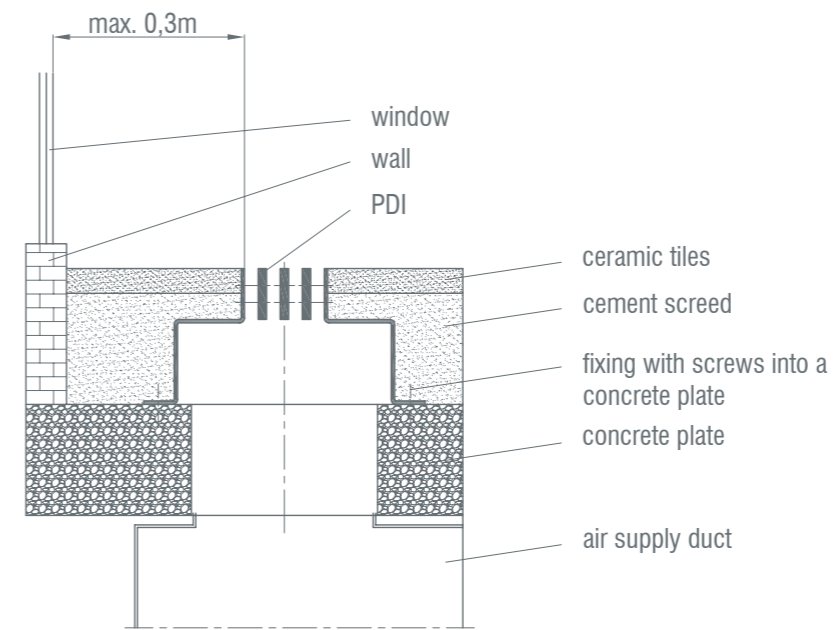
		Slot width														
		6 mm			8 mm			10 mm			12 mm			15 mm		
		$V_{min}$ [m³/h]	$V_{max}$ [m³/h]	$n \times D_n$	$V_{min}$ [m³/h]	$V_{max}$ [m³/h]	$n \times D_n$	$V_{min}$ [m³/h]	$V_{max}$ [m³/h]	$n \times D_n$	$V_{min}$ [m³/h]	$V_{max}$ [m³/h]	$n \times D_n$	$V_{min}$ [m³/h]	$V_{max}$ [m³/h]	$n \times D_n$
No. of slots	1	45	90	2xø80	55	110	2xø80	70	145	3xø80	90	180	3xø80	105	215	4xø80
	2	90	180	2xø80	110	220	4xø80	140	290	5xø80	180	360	4xø100	210	430	5xø100
	3	135	270	3xø100	165	330	4xø100	210	435	5xø100	270	540	6xø100	315	650	4xø125
	4	180	360	4xø100	220	440	5xø100	280	560	6xø100	360	720	5xø125	420	860	6xø125

\* Flow data given for diffuser length of 1m.

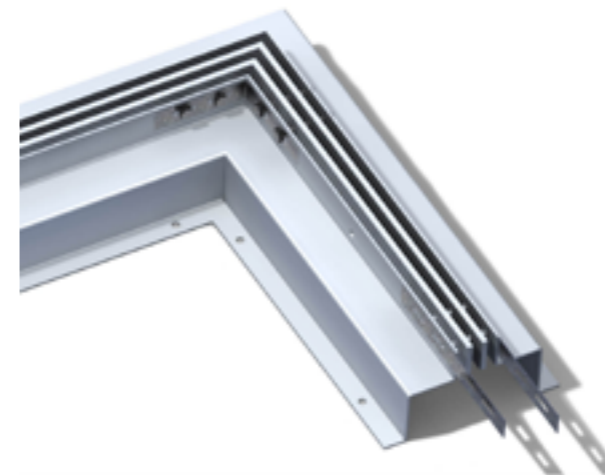
Ordering key:

Floor diffuser **PDI - 4 - 10 - 1600 - K - P**  
 No. of slots 1,2,3 or 4  
 Slot width - standard (6, 8, 10)  
 - on request (12, 15)  
 Length  
 End plate  
 Coupling connections

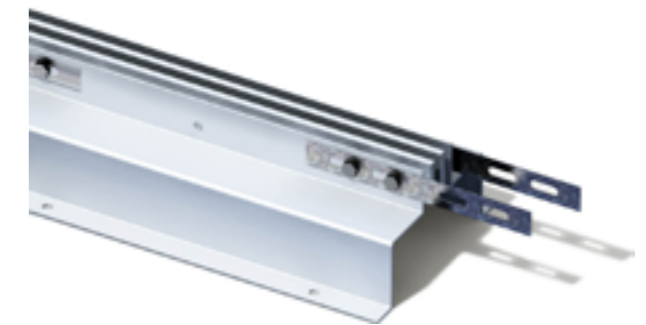
INSTALLATION



Corner connection



Line connection



End plate



Control damper

