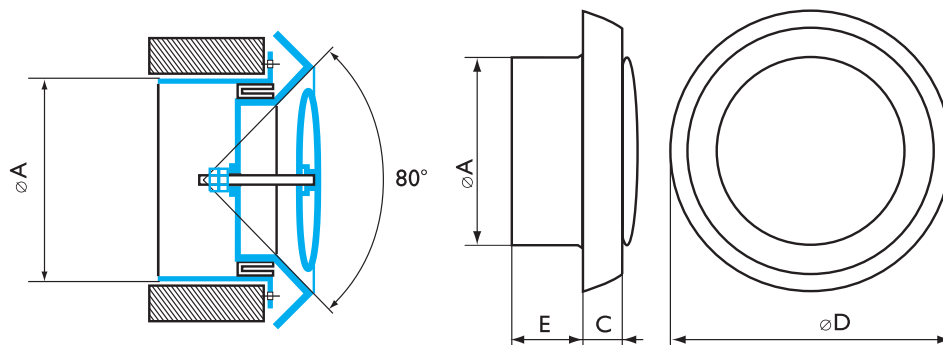


Plastic multi-purpose diffusers DPU



Plastic multi-purpose circular diffusers DPU are intended for supply and exhaust of air in residential, administrative and production rooms. They are mounted on the ceiling and provided with airflow regulating devices. Such a diffuser can be used as a shut-off valve in case of shutdown of the whole system or separate segments thereof.

DPU diffusers are mounted with the aid of a branch, which is connected with the air duct and fixed with self-tapping screws to the suspended ceiling or to the walls of the ventilation channel. The diffuser housing is secured in the branch by means of a collar.



Characteristics of DPU diffusers

Diffusers	$\varnothing A$, mm	$\varnothing D$, mm	E, mm	C, mm	F_0 , m ²	Mass, kg
DPU 100	100	150	63	18	0,005	0,20
DPU 125	125	170	63	18	0,008	0,23
DPU 150	150	180	63	18	0,011	0,40
DPU 200	200	240	63	18	0,022	0,45



Technical characteristics of DPU diffusers for supply ventilation systems

When air is supplied into a room through DPU diffusers recommended airflow rates L_0 depending on the level of noise generated L_A , relevant losses of total pressure ΔP_t and supply jet range $l_{0,2}$ at $V_x=0,2$ m/s, $l_{0,5}$ at $V_x=0,5$ m/s, $l_{0,75}$ at $V_x=0,75$ m/s are given in the table below.

Data for selection of DPU diffusers – supply air

ϕA , mm	$L_A < 20$ dB(A)				$L_A = 25$ dB(A)				$L_A = 35$ dB(A)				$L_A = 45$ dB(A)				
	L_0 , m ³ /h	ΔP_t , Pa	jet range, m at V_x , m/s		L_0 , m ³ /h	ΔP_t , Pa	jet range, m at V_x , m/s		L_0 , m ³ /h	ΔP_t , Pa	jet range, m at V_x , m/s			L_0 , m ³ /h	ΔP_t , Pa	jet range, m at V_x , m/s	
			0,2	0,5			0,2	0,5			0,2	0,5	0,75			0,5	0,75
100	40	23	2,2	0,9	80	91	4,4	1,8	110	170	6,0	2,4	1,6	-	-	-	-
125	60	20	2,6	1,0	130	94	5,6	2,3	180	180	7,8	3,1	2,1	-	-	-	-
150	80	19	3,0	1,2	150	67	5,6	2,2	210	130	7,8	3,1	2,1	240	170	3,6	2,4
200	120	11	3,2	1,3	220	36	5,8	2,3	330	80	8,7	3,5	2,3	400	120	4,2	2,8

Technical characteristics of DPU diffusers for exhaust ventilation systems

When air is exhausted out of a room through DPU diffusers, recommended airflow rates L_0 depending on the level of noise generated L_A and relevant losses of total pressure ΔP_t are given in the table below. The suction flow does not influence on the air parameters in the occupied zone and its velocity is not calculated.

Data for selection of DPU diffusers – exhaust air

ϕA , mm	$L_A = 25$ dB(A)			$L_A = 35$ dB(A)			$L_A = 45$ dB(A)		
	L_0 , m ³ /h	ΔP_t , Pa	V_0 , m/s	L_0 , m ³ /h	ΔP_t , Pa	V_0 , m/s	L_0 , m ³ /h	ΔP_t , Pa	V_0 , m/s
100	50	37	2,8	65	62	3,6	80	94	4,4
125	70	28	2,4	90	47	3,1	120	83	4,2
150	80	19	2,0	110	37	2,8	140	60	3,5
200	130	13	1,6	170	22	2,2	200	30	2,5