

DF-48



Catalogue Series DF-48



Long throw spherical diffuser

Product description

Long-throw spherical diffuser, KOOLAIR, model **DF-48**, size $_$. The configuration allows the diffuser to be swiveled in any direction up to a maximum of ($\pm 35^\circ$) in the horizontal or vertical direction. It has a volume control damper at the outlet. Made in aluminium. Finished in anodised aluminium or painted in any RAL colour upon request.

Other models

DF-48-B. Long-range nozzle with neck for flexible duct connection of commercial dimensions ($\text{\O}100$, $\text{\O}160$, $\text{\O}200$, $\text{\O}250$, $\text{\O}400$ mm depending on the size of the nozzle).

Mounting

With screws (-T). Without indication the diffuser is always screw-mounted.

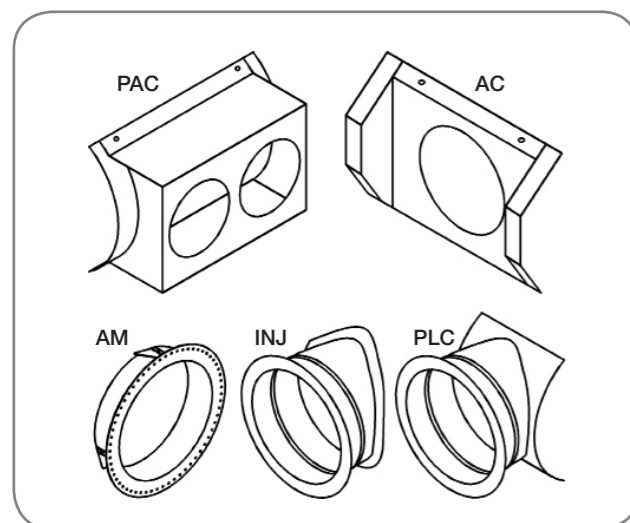
AM. With metal mounting ring.

AC. Integrated in flat plate for connection to round duct. Depending on the size, 6 is the maximum number of diffusers, (to be consulted).

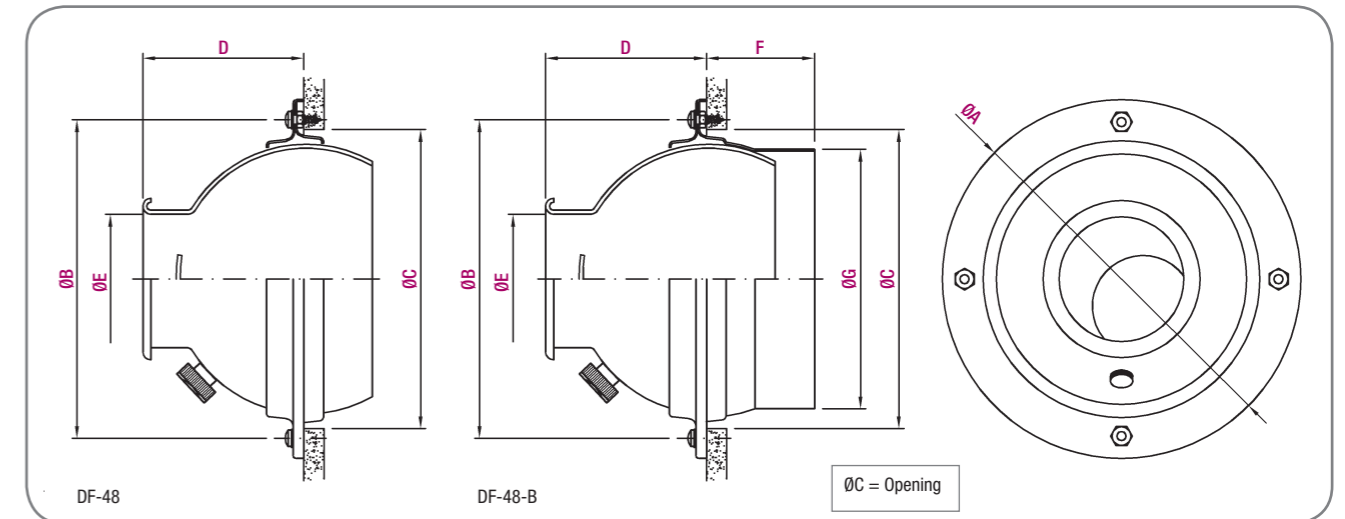
PAC. Integrated in plenum box with connection to round duct. Depending on the size, 6 is the maximum number of diffusers, (to be consulted).

PLC. Integrated in plate with 45° full saddle tap for lateral connection to round duct. Depending on the size, 6 is the maximum number of diffusers, (to be consulted).

INJ. 45° full saddle tap for lateral connection to exposed circular duct. One adapter per diffuser.



General dimensions

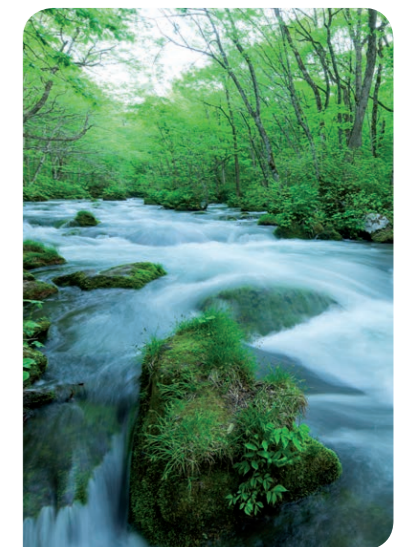


Model	Ø A	Ø B	Ø C	D	Ø E	F	Ø G
3	132	107	80	44	40	26	61
5	205	182	143	91	65	48	123
8	276	254	215	129	100	50	198
10	324	301	265	150	136	79	248
12	380	356	322	201	165	74	313
16	495	470	425	249	230	113	398
20	553	533	500	296	300	135	498

Unit mm

Selection table

Size	Q (m ³ /h)	L _{wa} [dB(A)]	ΔP_t (Pa)	X _{0,3}	X _{0,5}	X _{1,0}	V _k
3	60	32	109	8.4	5.0	2.5	12.8
	80	40	175	6.7	4.0	2.0	17.1
	110	48	331	14.7	8.8	4.4	23.5
5	140	32	82	11.7	7.0	3.5	11.8
	180	40	138	15.1	9.1	4.5	15.2
	240	48	245	20.1	12.1	6.0	20.2
8	290	32	64	15.9	9.6	4.8	10.2
	380	40	107	20.6	12.4	6.2	13.4
	500	48	185	27.1	16.3	8.1	17.6
10	460	32	46	18.4	11.0	5.5	8.8
	650	40	91	26.0	15.6	7.8	12.4
	910	48	179	>30	21.8	10.9	17.4
12	690	32	48	22.7	13.6	6.8	9.0
	900	40	82	29.6	17.8	8.9	11.7
	1170	48	138	>30	23.1	11.6	15.2
16	1220	32	40	28.8	17.3	8.7	8.2
	1590	40	68	>30	22.5	11.3	10.6
	2060	48	114	>30	29.2	14.6	13.8
20	1930	32	35	>30	21.0	10.5	7.6
	2500	40	58	>30	27.2	13.6	9.8
	3260	48	98	>30	>30	17.7	12.8



LEGEND

Q (m³/h): Air flow.
 L_{wa} [dB(A)]: Sound power level.
 ΔP_t (Pa): Total pressure loss.
 X_{0,3}-X_{0,5}-X_{1,0} (m): Throw for terminal velocity of the air stream of 0.3, 0.5, and 1.0 m/s, respectively, in isothermal conditions ($\Delta T = 0^\circ \text{C}$).
 V_k (m/s): Effective velocity.