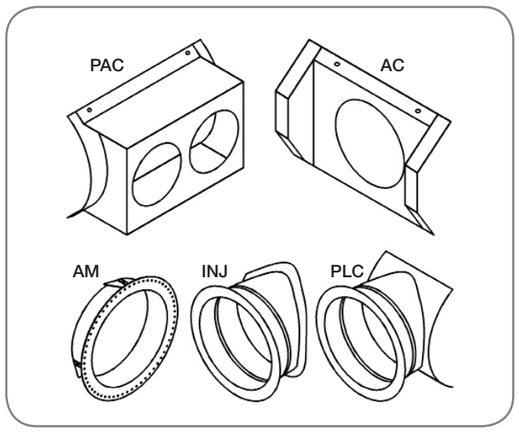
DF-89

Catalogue Series DF-89

Long throw nozzle

Product description

Long-throw nozzle, KOOLAIR, model **DF-89-A**, size _, used for diffusion large areas. The configuration allows the nozzle to swivel in all directions up to a maximum of (±30º), for the orientation of the air jet.
It incorporates a decorative ring, that hides the mounting screws. Made in aluminium. Painted in any RAL colour upon request.



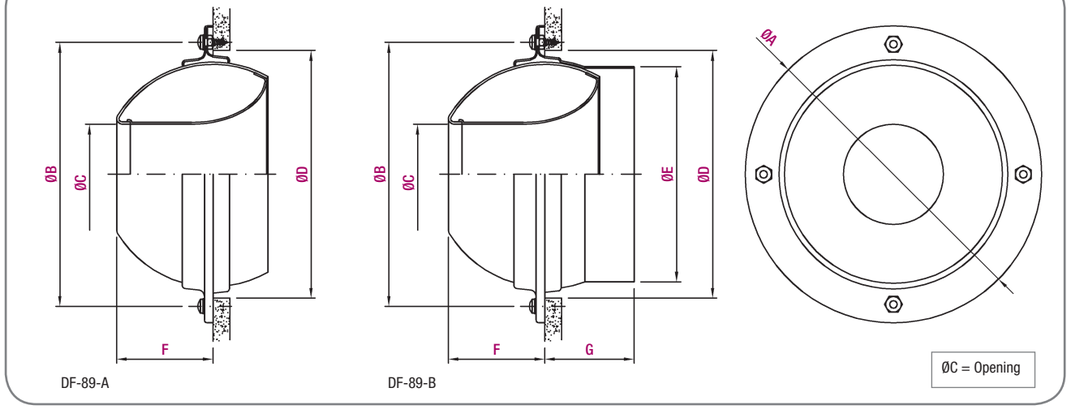
Other models

DF-89-B. Long-range nozzle with neck for flexible duct connection of commercial dimensions (Ø100, Ø160, Ø200, Ø250, Ø400 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/diffuser	Ø A	Ø B	Ø C	Ø D	Ø E	Ø F	Ø G
5	205	182	55	143	123	68	48
8	276	254	90	215	198	80	50
10	324	301	123	265	248	105	79
12	380	356	155	322	313	132	74
16	495	470	220	425	398	170	113
20	553	533	290	506	498	185	135

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
5	110	24	80	17	10	5	12,2
	140	32	129	21	13	6	15,5
	185	40	225	28	17	8	20,5
8	235	24	61	22	13	6	10,8
	305	32	103	28	17	8	14,1
	400	40	175	37	22	11	18,4
10	480	32	69	>30	18	9	10,6
	610	40	112	>30	23	12	13,4
	780	48	183	>30	>30	15	17,2
12	820	32	76	>30	26	13	12,4
	1070	40	130	>30	>30	17	16,1
	1400	48	222	>30	29	15	21,1
16	1360	32	48	>30	28	14	9,7
	1770	40	81	>30	>30	24	12,6
	2300	48	136	>30	>30	24	16,4
20	2500	32	35	>30	>30	19,1	9,6
	3300	40	61	>30	>30	25,2	12,7
	4250	48	102	>30	>30	>30	16,3

LEGEND

Q (m^3/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 (ΔT = 0º C).
V_k (m/s): Effective velocity.