

CIRCULAR SHUT-OFF DAMPER

2.2.2B

RCE CLASS 4C

VOLUME CONTROL

DESCRIPTION

RCE type damper is a shut-off circular damper with high airtightness class 4C according to EN1751. It is suitable for clean rooms applications (laboratories, operation rooms, semi-conductors ...)

CASING

Galvanized steel
 Option: *Stainless steel (contact us)*
 Seals ensuring good airtightness with the ductwork
 Casing's airtightness class C according to EN 1751



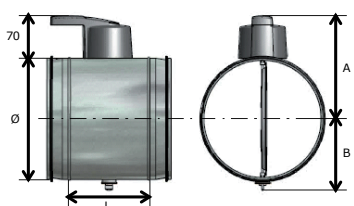
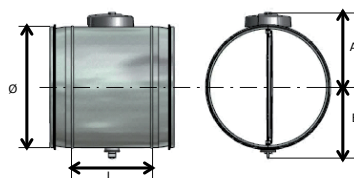
BLADE

Circular plate in galvanized steel
 Option : *Stainless steel (contact us)*
 EPDM seal on the periphery of the blade
 Airtightness class 4 according to EN1751

CONTROL

Manual control Ø≤315 mm	Manual control Ø>315 mm	Damper to be motorized	Motorized damper
Position control knob Blocking screw	Position control handle Blocking screw	Smooth shaft Ø16 length 110 mm	Actuator sized according required torque

DIMENSIONS AND RECOMMENDED TORQUES



Ø (mm)	L (mm)	A (mm)	B (mm)	Weight (kg)	Torque (Nm)
80	135	65	40	0,30	2
100	135	75	50	0,34	2
125	135	85	65	0,42	2
160	135	105	100	0,46	2
200	135	125	120	0,82	2
250	125	150	145	1,2	2
315	125	180	175	1,5	4
355	160	250	200	2,5	4
400	160	270	220	2,7	5
450	160	295	245	3,3	5
500	160	320	270	3,9	6
630	160	385	335	5,2	10

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TECHNICAL CHARACTERISTICS

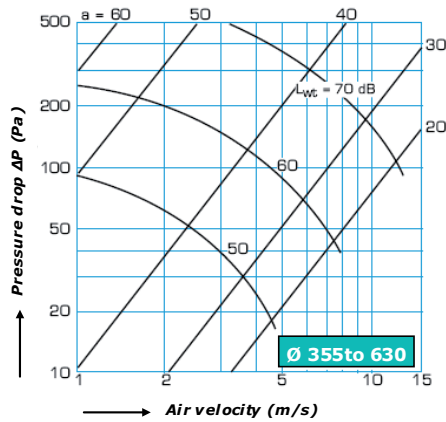
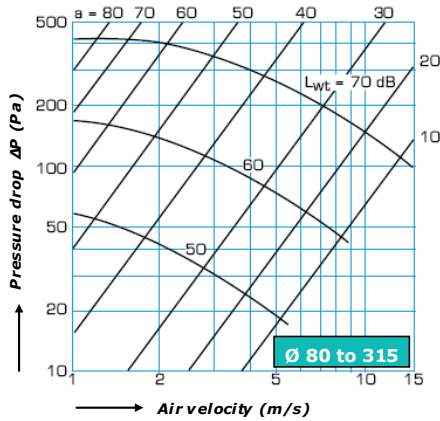
The various components composing the RCE damper enables it use up to 80°C in normal use.

a = opening angle of the blade (°)

Lw = noise power (dB) level per frequency.

$$L_w = L_{wt} + K1 + K2$$

Pressure loss and acoustic power level Lwt can be read on the hereunder curves according to the opening angle, diameter of the damper and air flow velocity (max velocity= 12 m/s).



K1 to be read on the hereunder table. It depends on the damper diameter:

Ø (mm)	80	100	125	160	200	250	315	355	400	450	500	630
K1 (dB)	-2	-2	-1	0	+1	+2	+3	+3	+4	+5	+5	+6

K2 per frequency, can be read on the hereunder table. It depends on the damper diameter and of the opening of angle:

Ø (mm)	Opening angle (°)	K2 (dB) per frequency (Hz)						
		125	250	500	1000	2000	4000	8000
$\text{Ø } 80$ to $\text{Ø } 315$	10	0	-12	-15	-22	-27	-32	-37
	20	0	-9	-14	-20	-26	-30	-36
	30	-2	-7	-12	-17	-20	-23	-29
	40	-4	-7	-12	-15	-12	-8	-8
	50	-4	-6	-8	-12	-14	-17	-22
	60	-6	-4	-10	-16	-18	-22	-25
	70	-7	-2	-13	-23	-27	-35	-42
	80	-13	-1	-16	-24	-28	-36	-45
$\text{Ø } 355$ to $\text{Ø } 630$	20	0	-16	-18	-24	-27	-31	-33
	30	0	-13	-16	-20	-21	-26	-29
	40	-1	-10	-13	-17	-16	-20	-24
	50	-5	-11	-12	-13	-11	-15	-19
	60	-12	-13	-13	-9	-6	-11	-13

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