

4/S2
v 3.3 (en)

DAMPERS

RZ-C, RZ-P, ZTZ-C, ZPC

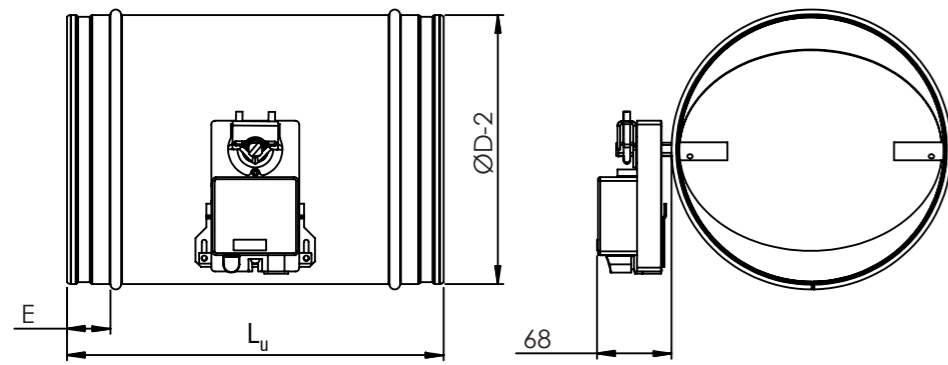




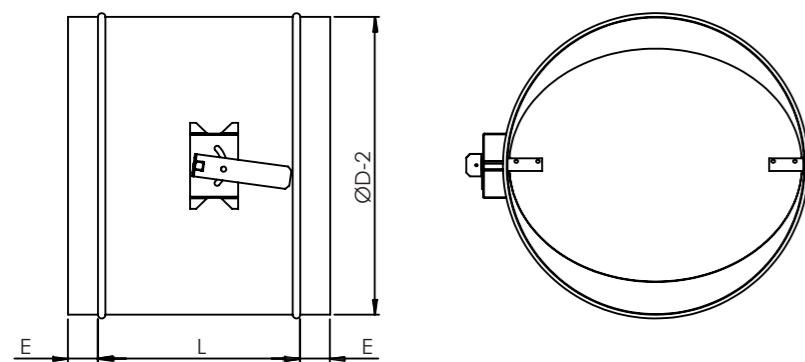
RZ - C

- Manual regulation / control of airflow in round ventilation ducts
- Made of galvanized steel sheet
- Self-locking control mechanism made of plastic is installed in dampers of diameter ≤ 250 mm and for operating temperatures up to 70°C
- For larger diameters, $D \geq 250$ mm, a metal control mechanism is installed

Round airtight damper with motor drive RZ-C-M



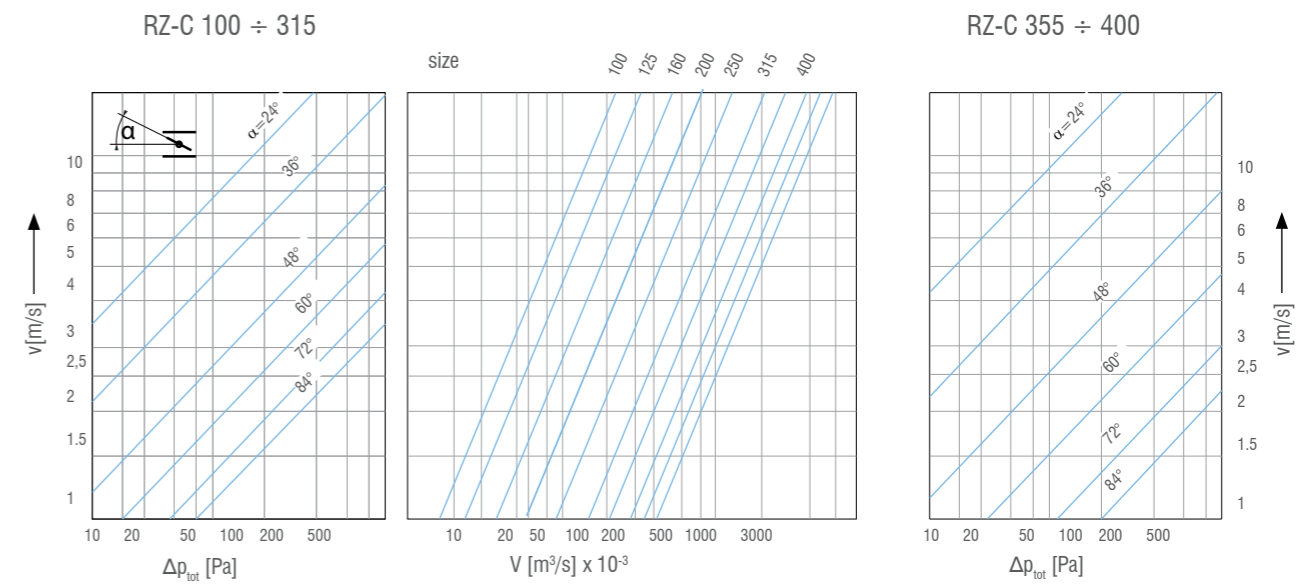
Round airtight damper with manual drive RZ-C-R



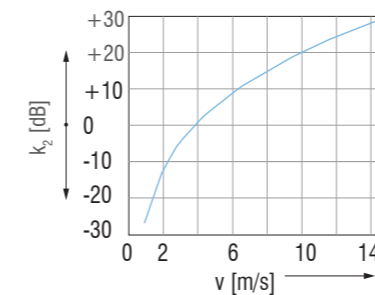
Dimensions

ØD	100	125	160	200	250	315	355	400
E	40	40	40	40	40	50	50	60
L	140	140	140	140	270	230	230	210
L _u	220	220	220	220	350	350	350	350

Selection diagram



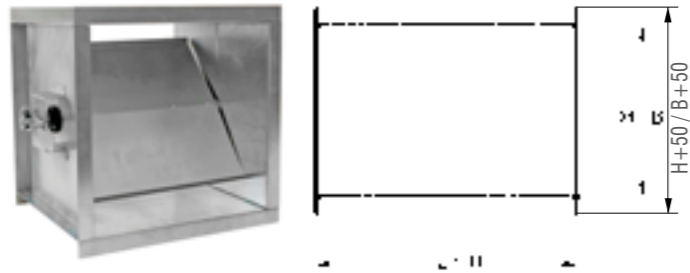
ØD	100	125	160	200	250	315	355	400
k ₁ [dB]	-2	-1	0	+1	+2	+3	+3	+4



Total sound power level :

$$L_w = L_{wnom} + k_1 + k_2$$

0 2 6 10 14
v [m/s]



RZ - P

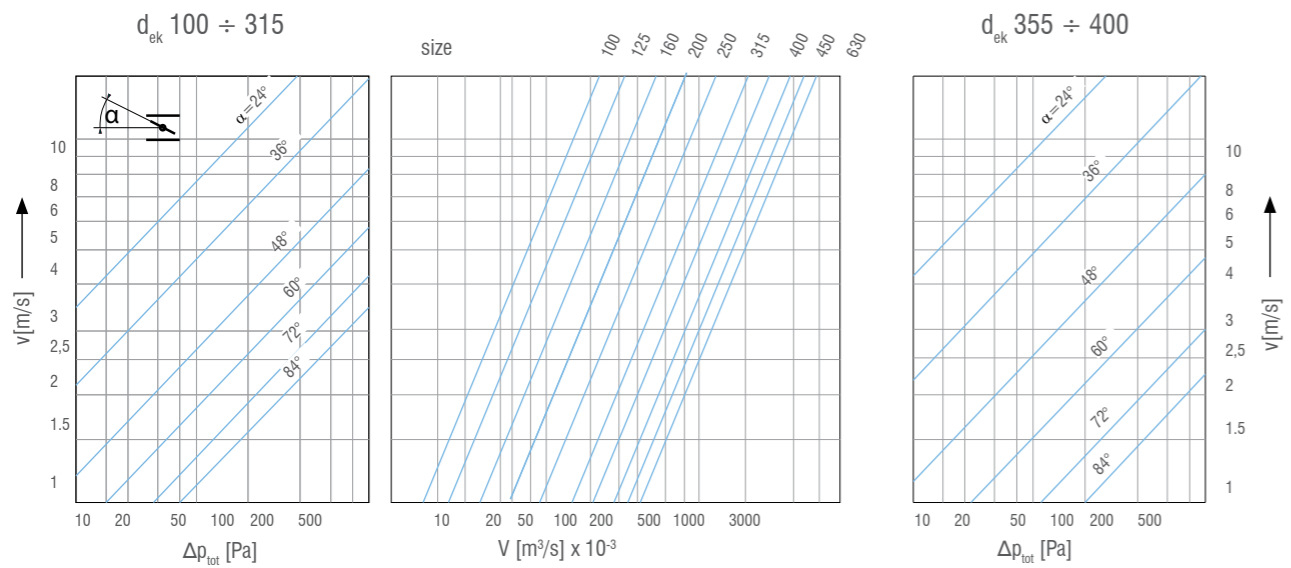
- Manual regulation / control of airflow in rectangular ventilation ducts
- Made of galvanized steel sheet
- Self-locking control mechanism made of plastic is installed in dampers up to $H \leq 300$ mm and for operating temperatures up to 70°C
- For $H \geq 300$ mm a metal control mechanism is installed

B [mm]	100	150	200	250	300	350	400
H [mm]	100	150	200	250	300	350	400
d_{ek} [mm]	100	150	200	250	300	350	400
k_1 [dB]	-2	0	+1	+2	+3	+3	+4

d_{ek} = equivalent diameter

* All B x H combinations are possible. In that case d_{ek} is calculated : $d_{ek} = 2B \cdot H / (B + H)$

Selection diagram



Ordering key

Volume control damper **RZ - C - ØDn (BxH) M230 - OZ**
 Type
C - round
P - rectangular
 Diameter (Dimensions)
 Drive
R - manual
M - preparation for a motor drive
M24 - motor drive 24V
M230 - motor drive 230V
 Regulation
OZ - two positions
K - continuous
F - returning spring



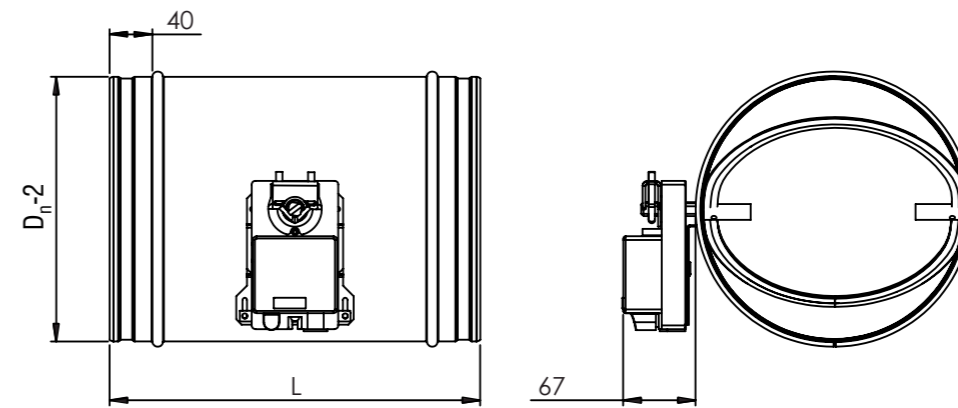
ZTZ-C

- For shutting off airflow in round ducts.
- Produced according to DIN 1946 (part 4).
- Casing and damper blade made of galvanized steel sheet. Rubber seal on blade for better sealing characteristics.

Options

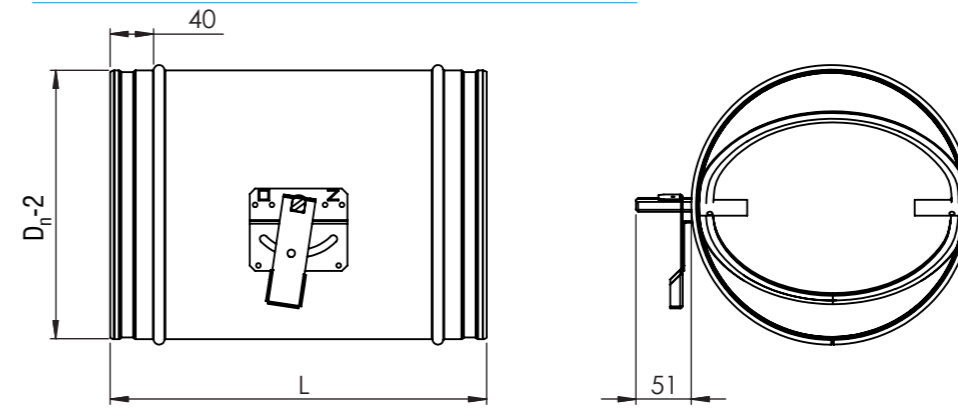
- Motor drive

Round airtight damper with motor drive ZTZ-C-M



ØD [mm]	L [mm]
100	220
125	220
160	220
200	220
250	350
315	350
400	350

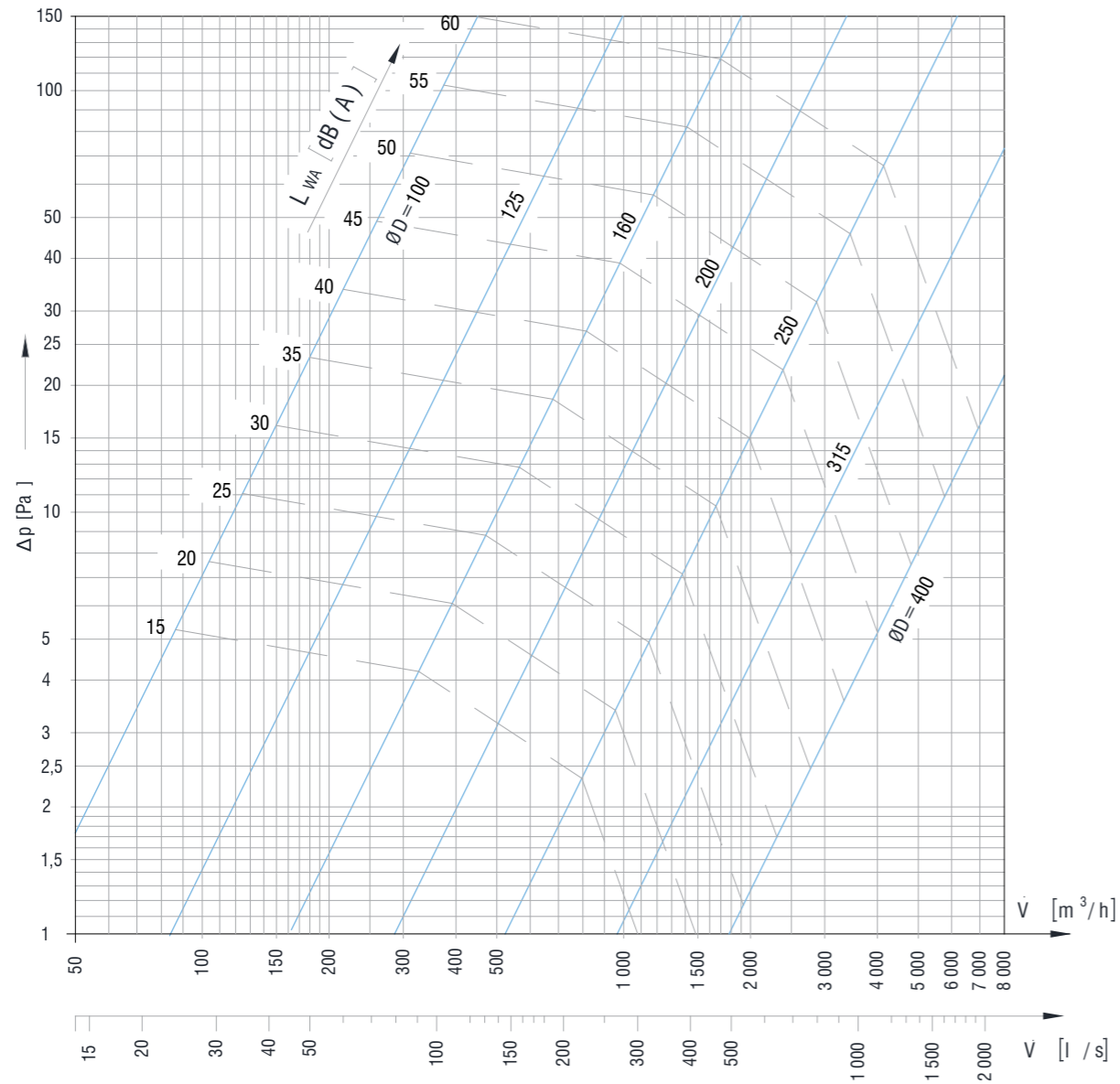
Round airtight damper with manual drive ZTZ-C-R



Ordering key

Airtight damper **ZTZ - C - ØDn M230 - OZ**
C - round
 Diameter
 Drive
R - manual
M - preparation for a motor drive
M24 - motor drive 24V
M230 - motor drive 230V
 Regulation
OZ - two positions
K - continuous
F - returning spring

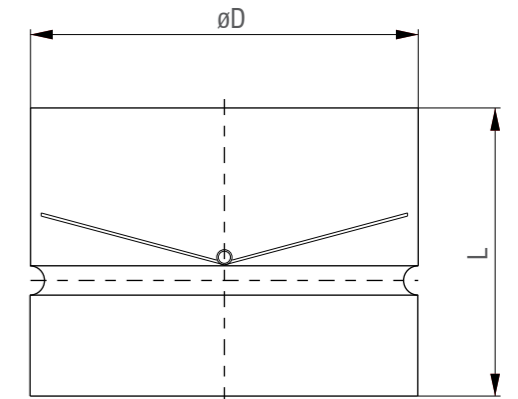
Pressure drop and sound power level diagram



Example:
 Given:
 $V = 850 \text{ m}^3/\text{h}$
 $v = 5 \text{ m/s}$
 Duct pressure = 2000 Pa
 Dg. 1: $D = 250 \text{ mm}$
 $\Delta p = 2,7 \text{ Pa}$, $L_w = 17 \text{ dB(A)}$

ZPC

- Prevents unwanted airflow
- In case of horizontal installation, damper axis must be in vertical position
- Casing made out of galvanized steel sheet, damper blade made out of anodized aluminium



Pay attention to airflow direction markings on the casing of a volume flow rate control damper

Dimensions

Size	ZPC 100	ZPC 125	ZPC 140	ZPC 150	ZPC 160	ZPC 180	ZPC 200	ZPC 250	ZPC 280	ZPC 300	ZPC 315	ZPC 355	ZPC 400	ZPC 450	ZPC 500
Connection diameter ØD [mm]	Ø98	Ø123	Ø138	Ø148	Ø158	Ø178	Ø198	Ø248	Ø278	Ø298	Ø313	Ø353	Ø398	Ø448	Ø498
Damper length L [mm]	80	80	80	80	80	80	80	80	80	80	80	100	100	100	100
Damper mass m [kg]	0,11	0,15	0,17	0,18	0,20	0,22	0,25	0,35	0,40	0,45	0,50	0,65	0,75	0,85	0,95

Ordering key

Round backdraft damper **ZPC - ØDn**
 Diameter