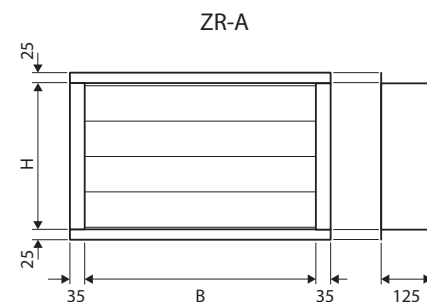
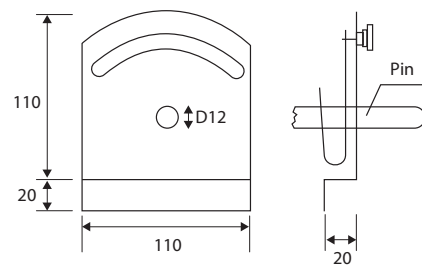




Characteristics

Volume control dampers in aluminium 100 mm pitch.

Material

Extruded aluminium frame.
Extruded aluminium blades.
Nylon spindles.

Model

ZR-A R: opposed blade damper with manual control.
ZR-A M: opposed blade damper with pin for servo-motor.

Selection key

ZR-A / 600 x 410 / M

M - Prepared for electric drive
R - Manual regulation

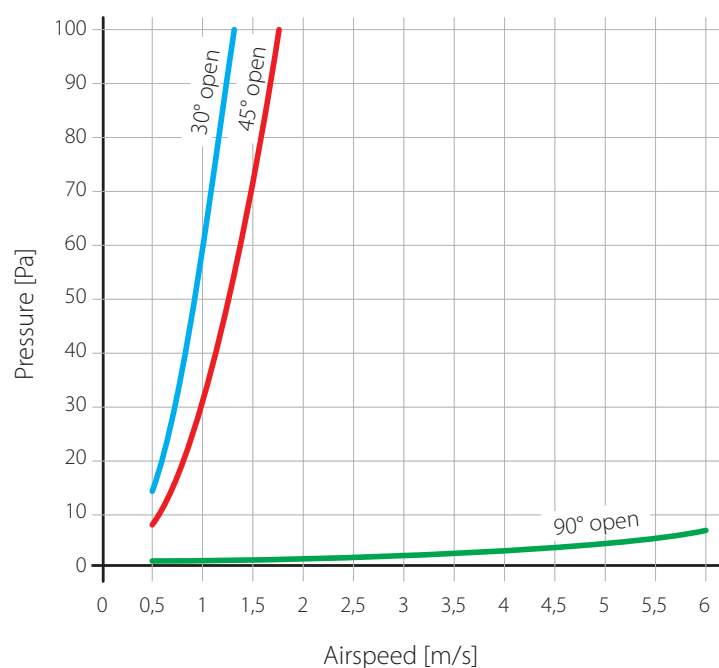
Size

Model

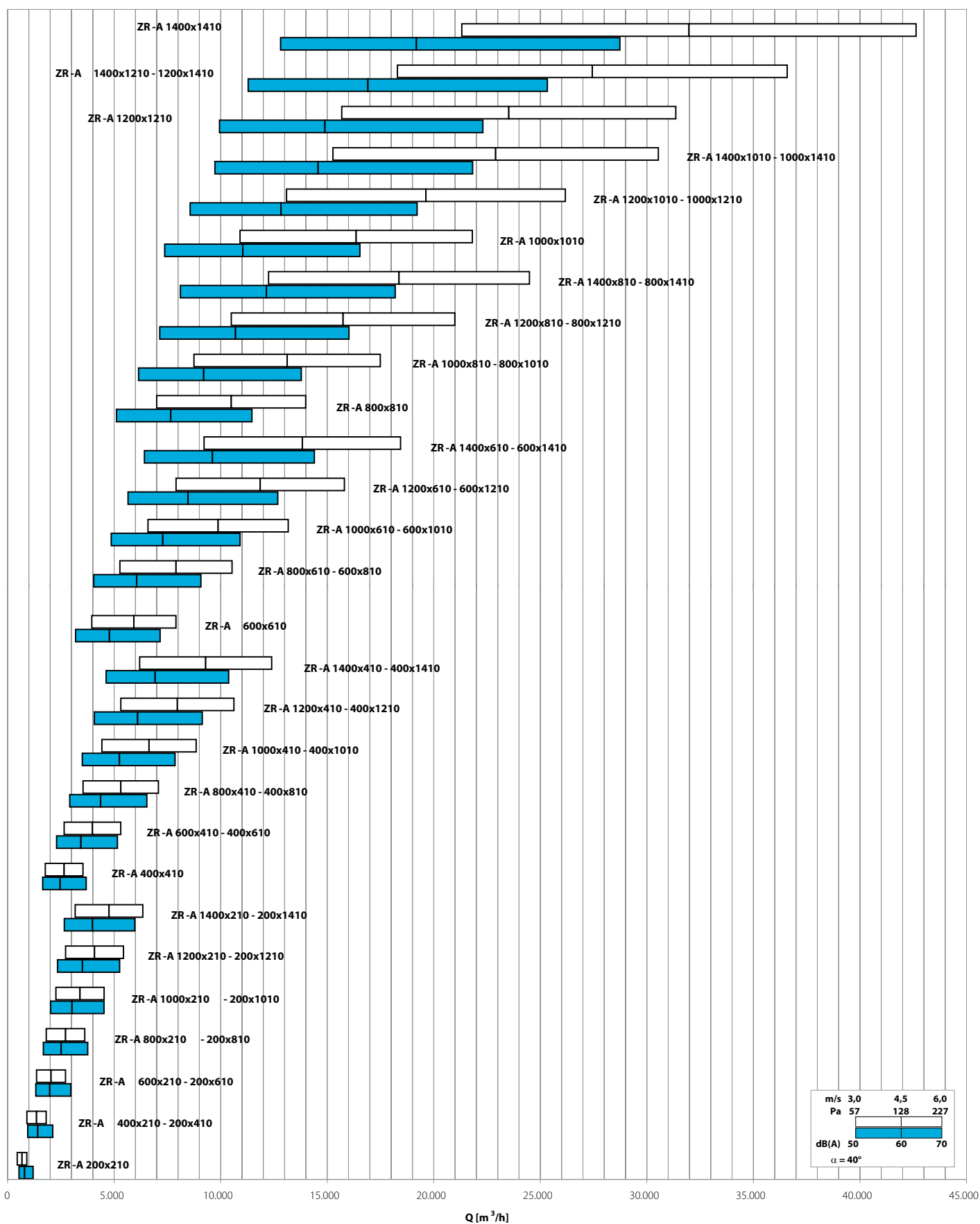
Selection table

Model	A ₁ [m ²]	Q [m ³ /h]		Q [m ³ /h]		D _p (α=40°) [Pa]		L _{WA} (α=40°) [dB(A)]	
		min	max	min	max	min	max	min	max
ZR-A 200x210	0,0420	3	6	450	910	57	227	46	63
ZR-A 400x210 - 200x410	0,0840	3	6	910	1810	57	227	49	66
ZR-A 600x210 - 200x610	0,1260	3	6	1360	2720	57	227	51	68
ZR-A 800x210 - 200x810	0,1680	3	6	1810	3630	57	227	52	69
ZR-A 1000x210 - 200x1010	0,2100	3	6	2270	4540	57	227	53	70
ZR-A 1200x210 - 200x1210	0,2520	3	6	2750	5440	57	227	54	71
ZR-A 1400x210 - 200x1410	0,2940	3	6	3180	6350	57	227	54	71
ZR-A 400x410	0,1640	3	6	1770	3540	57	227	52	69
ZR-A 600x410 - 400x610	0,2460	3	6	2660	5310	57	227	54	71
ZR-A 800x410 - 400x810	0,3280	3	6	3540	7080	57	227	55	72
ZR-A 1000x410 - 400x1010	0,4100	3	6	4430	8860	57	227	56	73
ZR-A 1200x410 - 400x1210	0,4920	3	6	5310	10630	57	227	57	74
ZR-A 1400x410 - 400x1410	0,5740	3	6	6200	12400	57	227	57	74
ZR-A 600x610	0,3660	3	6	3950	7910	57	227	55	72
ZR-A 800x610 - 600x810	0,4880	3	6	5270	10540	57	227	57	74
ZR-A 1000x610 - 600x1010	0,6100	3	6	6590	13180	57	227	58	75
ZR-A 1200x610 - 600x1210	0,7320	3	6	7910	15810	57	227	58	75
ZR-A 1400x610 - 600x1410	0,8540	3	6	9220	18450	57	227	59	76
ZR-A 800x810	0,6480	3	6	7000	14000	57	227	58	75
ZR-A 1000x810 - 800x1010	0,8100	3	6	8750	17500	57	227	59	76
ZR-A 1200x810 - 800x1210	0,9720	3	6	10500	21000	57	227	60	77
ZR-A 1400x810 - 800x1410	1,1340	3	6	12250	24490	57	227	60	77
ZR-A 1000x1010	1,0100	3	6	10910	21820	57	227	60	77
ZR-A 1200x1010 - 1000x1210	1,2120	3	6	13090	26180	57	227	60	78
ZR-A 1400x1010 - 1000x1410	1,4140	3	6	15270	30540	57	227	61	78
ZR-A 1200x1210	1,4520	3	6	15680	31360	57	227	61	78
ZR-A 1400x1210 - 1200x1410	1,6940	3	6	18300	36590	57	227	62	79
ZR-A 1400x1410	1,9740	3	6	21320	42640	57	227	63	80

Diagram of selection



Quick Selection Diagram



Servo-motors

Without spring return

CODE	VOLTAGE	COMMAND	€
CM24L	24 V	On-Off/3-p	
CM230L	230 V	On-Off/3-p	
CM24SRL	24 V	proportional	



CM
for dampers up to 0,4 m²
2 Nm

CODE	VOLTAGE	COMMAND	€
LM24A	24 V	On-Off / 3-t.	
LM24AS	24 V	On-Off / 3-t.	
LM24ASR	24 V	proportional	
LM230A	230 V	On-Off	
LM230AS	230 V	On-Off	
LM230ASR	230 V	proportional	



LM
for dampers up to 1 m²
5 Nm

CODE	VOLTAGE	COMMAND	€
NM24A	24 V	On-Off / 3-t.	
NM24ASR	24 V	proportional	
NM230A	230 V	On-Off	



NM
for dampers up to 2 m²
10 Nm

CODE	VOLTAGE	COMMAND	€
SM24A	24 V	On-Off / 3-t.	
SM24ASR	24 V	proportional	
SM230A	230 V	On-Off / 3-t.	
SM230ASR	230 V	proportional	



SM
for dampers up to 4 m²
20 Nm

CODE	VOLTAGE	COMMAND	€
GM24A	24 V	On-Off / 3-t.	
GM24ASR	24 V	proportional	
GM230A	230 V	On-Off / 3-t.	



GM
for dampers up to 8 m²
40 Nm

CODE	No. of contacts	SWITCHING POWER	APPLICATION ON	€
S1A	1 x SPDT	1 mA ... 3 (0,5) A 250 V c.a.	LM - NM - SM - GM / 24-230 V	
S2A	2 x SPDT			



S1A



S2A

CODE	VOLTAGE	SIMULTANEOUS REGULATION	APPLICATION ON	€
SGA24	AC/DC 24 V	max 10 motors	LM - NM - SM - GM / 24-230 V	
SGF24				



SGA24



SGF24

With spring return

CODE	VOLTAGE	COMMAND	€
TF24	24 V	On-Off	
TF24S	24 V	On-Off	
TF230	230 V	On-Off	
TF230S	230 V	On-Off	
TF24SR	24 V	proportional	



TF
for dampers up to 0,4 m²
2 Nm

CODE	VOLTAGE	COMMAND	€
LF24	24 V	On-Off	
LF24S	24 V	On-Off	
LF230	230 V	On-Off	
LF230S	230 V	On-Off	
LF24SR	24 V	proportional	



TF
for dampers up to 0,8 m²
4 Nm

CODE	VOLTAGE	COMMAND	€
NFA	230 VAC	On-Off	
NFAS2	230 VAC	On-Off	
NFA	24 VAC/DC	On-Off	
NFAS2	24 VAC/DC	On-Off	
NF24ASR	24 VAC/DC	proportional	
NF24ASRS2	24 VAC/DC	proportional	



NF
for dampers up to 2 m²
10 Nm

CODE	VOLTAGE	COMMAND	€
SFA	230 VAC	On-Off	
SFAS2	230 VAC	On-Off	
SFA	24 VAC/DC	On-Off	
SFAS2	24 VAC/DC	On-Off	
SF24ASR	24 VAC/DC	proportional	
SF24ASRS2	24 VAC/DC	proportional	



SF
for dampers up to 4 m²
20 Nm

CODE	VOLTAGE	COMMAND	€
EF230A	230 VAC	On-Off	
EF230AS2	230 VAC	On-Off	
EF24A	24 VAC/DC	On-Off	
EF24AS2	24 VAC/DC	On-Off	
EF24ASR	24 VAC/DC	proportional	
EF24ASRS2	24 VAC/DC	proportional	



EF
for dampers up to 6 m²
30 Nm