

VAV DAMPERS

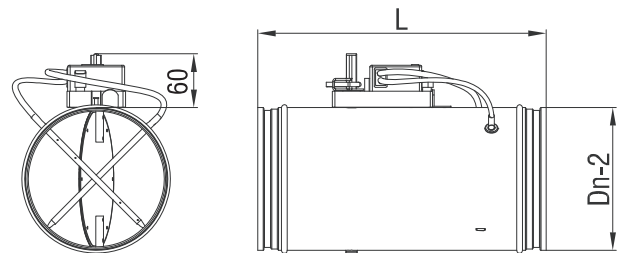
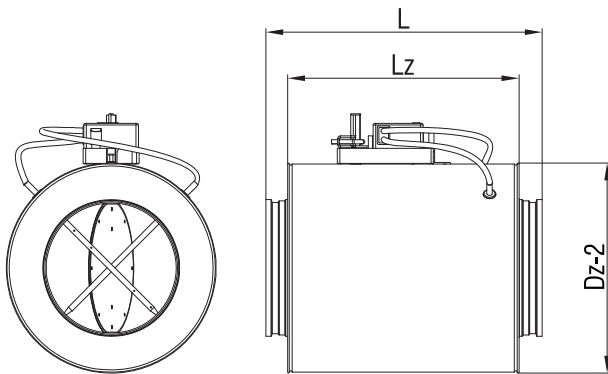


RVP-C

- Volume flow control regulation by a given set-point
- Factory parametrization in accordance with clients request
- High regulation precision
- No maintenance required

Options

- Constant
- Master-slave
- Insulated casing (50mm)
- MP-Bus (standard), LONWORKS, ModBus (Belimo/Siemens), KNX (Belimo/Siemens), MF (no Bus, Belimo), SGB (no Bus, Siemens), Bacnet (Siemens)



Specifications

$\varnothing D_n$ [mm]	L [mm]	$\varnothing D_z$	L_z [mm]	V_{min} [m ³]	V_{max}
100	400	198	330	37	343
125	400	223	330	54	540
160	400	258	330	90	900
200	400	298	330	145	1459
250	500	348	430	217	2215
315	600	413	530	380	3680
355	600	453	530	482	4275
400	600	498	530	615	6047
500	800	598	740	973	9484
630	850	728	810	1435	12482

Actuators overview

Type	$\varnothing d$ 100 - 500	$\varnothing d$ 630
MF	Belimo LMV-D3-MF	Belimo NMV-D3-MF
SGB	Siemens GDB181.1E/3	Siemens GLB181.1E/3
MP	Belimo LMV-D3-MP	Belimo NMV-D3-MP
MOD-S	Siemens GDB181.1E/MO	Siemens GLB181.1E/MO
MOD-B	Belimo LMV-D3-MOD	Belimo NMV-D3-MOD
KNX-S	Siemens GDB181.1E/KN	Siemens GLB181.1E/KN
KNX-B	Belimo LMV-D3-KNX	Belimo NMV-D3-KNX
BAC	Siemens GDB181.1E/BA	Siemens GLB181.1E/BA
LON	Belimo LMV-D3-LON	Belimo NMV-D3-LON
PP	Gruner 227VM-024-05	Gruner 227VM-024-10


* Maximum volume flow at velocity $v_{max} = 12$ m/s

** Size 630 comes with reinforcement ring

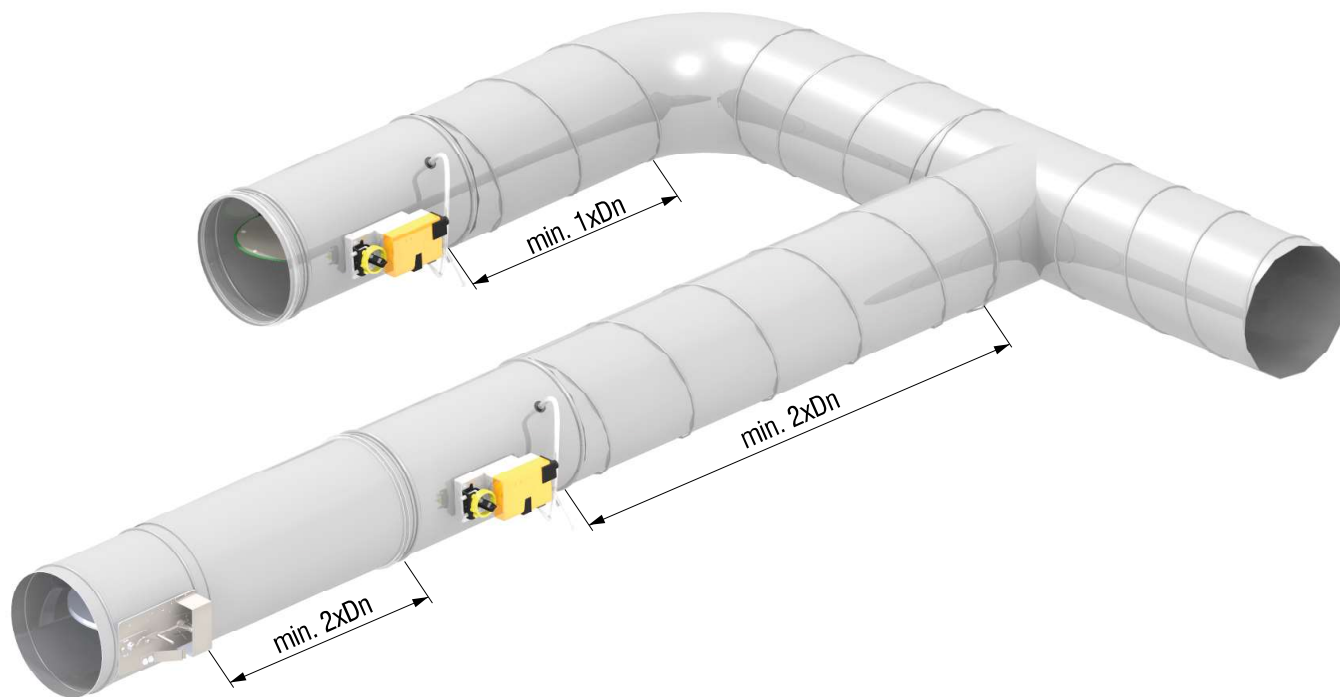
Definition of symbols:

Δp [Pa]	- Total pressure drop
v_{ef} [m/s]	- Effective outlet velocity
V [m ³ /h]	- Airflow rate
f [Hz]	- Sound frequency
L_w [dB/okt]	- Sound power level per octave
L_{WA} [dB(A)]	- Sound power level
V_{min} [m ³ /h]	- Minimal airflow rate

Δp_s [Pa]	- Static pressure differential
V_{max} [m ³ /h]	- Maximal airflow rate
$\varnothing D_n$ [mm]	- Damper diameter
L [mm]	- Damper length
$\varnothing D_z$ [mm]	- Insulation diameter
L_z [mm]	- Insulation length
B x H [mm]	- Dimensions

Compact VAV solutions - Belimo										
	Belimo L(N)MV-D3-MF	Belimo L(N)MV-D3-MP	Belimo L(N)MV-D3-MOD	Belimo L(N)MV-D3-LON	Belimo L(N)MV-D3-KNX	Siemens GL(D)B181.1E/3	Siemens GL(D)B181.1E/MO	Siemens GL(D)B181.1E/KN	Siemens GL(D)B181.1E/BA	Gruener 227VM-024-05(10)
Applications										
VAV/CAV control	•	•	•	•	•	•	•	•	•	•
Actuators										
Torque	5(10) Nm	5(10) Nm	5(10) Nm	5(10) Nm	5(10) Nm	5(10) Nm	5(10) Nm	5(10) Nm	5(10) Nm	5(10) Nm
Running time	Variable	Variable	Variable	Variable	Variable	Variable	Variable	Variable	Variable	Variable
Control										
0/2..10V	•	•				•				•
Via contacts (CAV)	•	•								•
MP-Bus		•								
Modbus RTU			•				•			
LonWorks				•						
KNX					•			•		
Bacnet									•	
PP Bus										•
Pressure sensor										
	0..450Pa	0..450Pa	0..450Pa	0..450Pa	0..450Pa	0..300Pa	0..300Pa	0..300Pa	0..300Pa	0..250Pa
Accessories										
KOER Codis C35-VAV	•	•				•			•	•
Room temperature controller / CR24..	•	•								
Fan optimiser / COU24-A-MP	•	•								
MP gateways / UK24xxx	•	•								
PC Tool / MFT-P	•	•	•	•	•					
Service tool / ZTH-GEN	•	•	•	•	•					
Siemens software ASC941						•	•	•	•	
AST20						•	•	•	•	
Supply / Inputs										
AC/DC 24V	•	•	•	•	•	•	•	•	•	•
Feedback signal	Airflow / Damper position / Δp	Airflow / Damper position / Δp	Modbus / Not relevant	LonWorks / Not relevant	KNX / Not relevant	Airflow	Modbus / Not relevant	KNX / Not relevant	Bacnet / Not relevant	Airflow

RVP-C INSTALLATION



*Wiring diagrams are on the page 282.

Ordering key

Variable air volume damper	RVP	- C	- ØDn	- MP	- Z	- V	- P
C - round							
Diameter							
MP-Bus (standard)							
LONWORKS							
ModBus (Belimo/Siemens)							
KNX (Belimo/Siemens)							
MF (no Bus, Belimo)							
SGB (no Bus, Siemens)							
Bacnet (Siemens)							
Insulation							
Volume flow V*min/max [m³/h]							
Mode							
P - single							
M - master							
S - slave							
K - constant flow							

* if not otherwise specified, regulator is set to standard factory values V_{max} and V_{min} .

PRESSURE DROP AND SOUND POWER LEVELS

