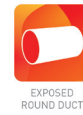


BR

ROUND VARIABLE AIR VOLUME CONTROLLER VAV



VARIANTS

BRS, BRD

Galvanised round VAV unit equipped with an electronic actuator and a specific aluminum differential pressure sensor. The damper is used to regulate constant or variable air flows in supply or exhaust ducts. The actuators are available with different control options, such as analogue 0(2)-10VDC, Modbus, BACnet & KNX. The oval damper blade is equipped with an airtight gasket and maintenance-free bearings. The casing airtightness meets class C according to EN1751, and damper blade air leakage meets class 2 according to EN1751. Available without insulation (BRS) and with insulation (BRD). External circular duct silencers are available as an option.

Grada-Gruner 327VM actuator with integrated display/control and hybrid control 0(2)-10VDC and/or Modbus

Available for analogue control 0(2)-10VDC, Modbus, BACnet & KNX

Aluminium extruded differential pressure sensor equipped with 8 to 24 measuring points according to the Log-Tchebycheff method

Casing airtightness meets class C according to EN1751

ACCESSORIES



URSIL

TECHNICAL INFORMATION

APPLICATION	Type	Variable airflow control, supply & exhaust
CONSTRUCTION	Shape	Round
	Measuring	non-polluting aluminium differential pressure sensor
	Min. diameter	Ø100
	Max. diameter	Ø630
	Spigot	Clamped-in double lip gasket, F-type
	Spigot length	Length conform EN1506
MATERIAL	Housing	Galvanised (275g/m ²) sheet steel
	Damper	Galvanised (275g/m ²) sheet steel with rubber gasket
	Insulation (BRD)	Mineral wool 50mm
PERFORMANCE	Air tightness housing	Class C - EN1751
	Air tightness blades	Class 2 - EN1751
	Min. air velocity	0,8m/s
GRUNER ACTUATOR	Standard actuator	GM01: 327VM-024-05-MB/GRA
	Input signal	0-10V, 2-10V (standard), Modbus
	Output signal	0-10V, 2-10V (standard), Modbus
	Operating voltage	24 VAC/DC +/- 20%
	Pressure sensor	Dynamic
BELIMO ACTUATOR	Standard actuator	B-01: LMV-D3-MP GD
	Input signal	0-10V, 2-10V (standard)
	Output signal	0-10V, 2-10V (standard)
	Operating voltage	24 VAC/DC +/- 20%
	Pressure sensor	Dynamic

GRADA-GRUNER GM01 ACTUATOR



PRODUCT KEY

ROUND VARIABLE AIRFLOW CONTROLLER VAV

B	R	S	0	0	GM01	0	2	0	0
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Nominal Diameter (mm):
100, 125, 160, 200, 250, 315,
355, 400, 500, 630

GM01: Gruner 327VM-024-05-MB/GRA - 5Nm - 0(2)-10VDC / Modbus
 GM02: Gruner 327VM-024-10-MB/GRA - 10Nm - 0(2)-10VDC / Modbus
 B-01: Belimo LMV-D3-MP-GD - 5Nm - 0(2)-10VDC / MP-Bus
 B-02: Belimo NMV-D3-MP - 10Nm - 0(2)-10VDC / MP-Bus
 B-03: Belimo LMV-D3-MF-GD - 5Nm - 0(2)-10VDC
 BM01: Belimo LMV-D3-MOD-GD - 5Nm - 0(2)-10VDC / Modbus / BACnet / MP-Bus
 BM02: Belimo NMV-D3-MOD - 10Nm - 0(2)-10VDC / Modbus / BACnet / MP-Bus
 BX01: Belimo LMV-D3-KNX - 5Nm - KNX
 BX02: Belimo NMV-D3-KNX - 10Nm - KNX
 S-01: Siemens GDB181.1E/3 - 5Nm - 0(2)-10VDC
 S-02: Siemens GLB181.1E/3 - 10Nm - 0(2)-10VDC
 SM01: Siemens GDB181.1E/MO - 5Nm - Modbus
 SM02: Siemens GLB181.1E/MO - 10Nm - Modbus
 SB01: Siemens GDB181.1E/BA - 5Nm - BACnet
 SB02: Siemens GLB181.1E/BA - 10Nm - BACnet
 SX01: Siemens GDB181.1E/KN - 5Nm - KNX
 SX02: Siemens GLB181.1E/KN - 10Nm - KNX

S: Single-walled round airflow controller VAV
 D: Double-walled round airflow controller VAV

Notes:

Motors with torque 10Nm not available for airflow controllers with nominal diameter \leq 400
 Motors with torque 5Nm not available for airflow controllers with nominal diameter $>$ 400
 Double-walled airflow controllers are not available with nominal diameter $>$ 400

CIRCULAR DUCT SILENCER

U	R	S	I	L	0	2	0	0	0	9	0	0
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Nominal Diameter (mm):
100, 125, 160, 200, 250, 315,
355, 400, 500, 630

Nominal length L (mm):
900, 1200

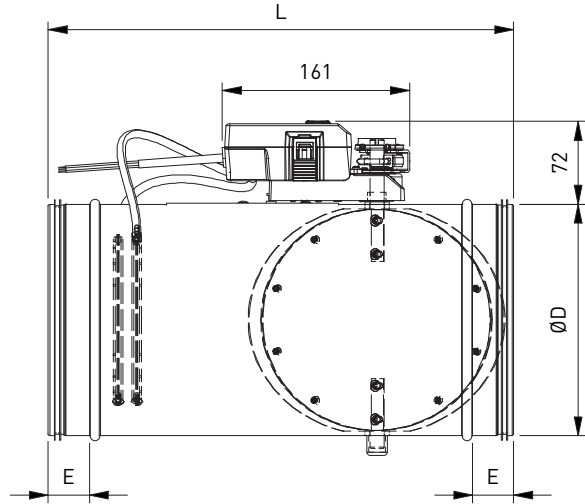
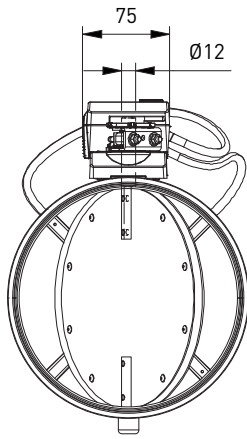
FACTORY SETTINGS - GRADA-GRUNER GM01 ACTUATOR

V_{max} corresponds to the air flow rate at a duct air velocity of 6m/s.

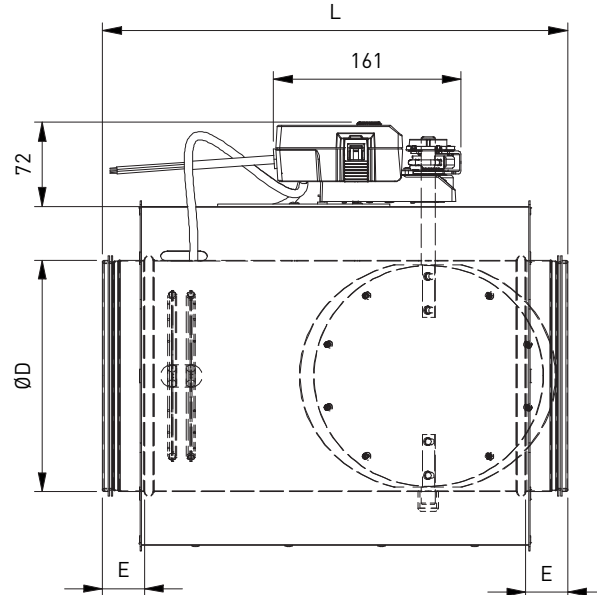
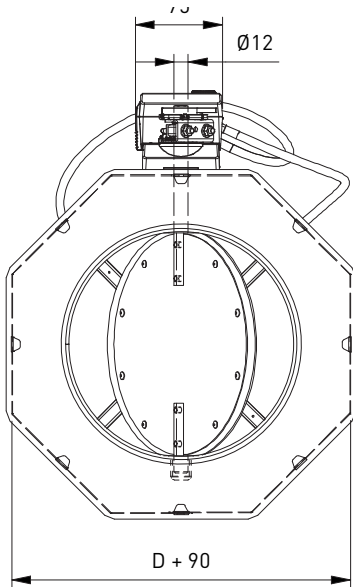
V_{min} corresponds to the air flow rate at a duct air velocity of 1.5m/s.

Mode 2 - 10 V DC

BRS00GM01



BRD00GM01



DIMENSIONS

ØD	L	E
100	400	36
125	400	36
160	400	36
200	400	36
250	625	56
315	625	56
355	625	56
400	635	71
500	833	71
630	837	71

All dimensions in mm

MEASUREMENT ACCURACY

Duct velocities larger than 1.2 m/s are recommended, and should not go below 0,8 m/s. At lower air velocities measurement accuracies cannot be guaranteed.

VELOCITY [m/s]	MEASUREMENT ERROR [%]
≥ 0.8	< 10
≥ 1.2	< 5

The above volume flow rate accuracy applies only to situations with a straight upstream section of the duct according to ISO 5219 / EN 1751, and measured according ISO 3966. The actuators show a measurement error of <5% with respect to ISO 3966 in the recommended working range. Direct upstream mounting of a 90° bend on the VAV results in a measurement error of <5%.

INSTALLATION INSTRUCTIONS

