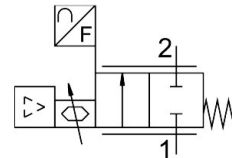


Mass Flow Controller (MFC)

VEMD-L-6-60-50-D9-G14-5YMPM1-VA

Part number: 8163823

FESTO



Data sheet

Feature	Value
Size	100
Degree of protection	IP40
Standard nominal flow rate (standardised to DIN 1343)	50 l/min
Flow rate control range	1 l/min...50 l/min
Flow direction	Non-reversible
Nominal operating pressure	0.3 MPa 3 bar 43.5 psi
Operating pressure	0.1 MPa...0.6 MPa 1 bar...6 bar
Note on operating pressure	For input pressures above 0.4 MPa (4 bar, 58 psi) and low flow rates: avoid components in the laminar flow inlet that reflect pressure waves. The reflection of pressure waves can lead to vibrations in the system and to accuracy deviations in the product.
Overload pressure	0.8 MPa 8 bar 116 psi
Burst pressure	1.8 MPa 18 bar 261 psi
Accuracy of flow rate	± (1.3% read + 0.7% FS)
Repetition accuracy of flow rate	± (0.25% o.m.v. + 0.25% FS)
Valve function	2-way proportional flow control valve
Nominal size	6 mm
Type of actuation	Electric
Pneumatic connection, port 1	Female thread G1/4
Pneumatic connection, port 2	Female thread G1/4
Environmental conditions	Not suitable for use in an environment enriched with oxygen to IEC 60601-1 Cleanest possible ambient air Dry
Nominal altitude of use	≤ 2000 m ASL (> 79.5 kPa)
Max. installation height	2000 m

Feature	Value
Operating medium	Argon Compressed air to ISO 8573-1:2010 [6:4:1] Carbon dioxide Oxygen Nitrogen
Note on operating and pilot medium	Lubricated operation not possible Maximum particle size 5 µm
Relative air humidity	0 - 90% Non-condensing
Pressure dew point	-20 °C
Duty cycle	100%
Media temperature	5 °C...40 °C
Ambient temperature	5 °C...40 °C
Storage temperature	-20 °C...70 °C
Nominal operating voltage DC	24 V
Operational voltage range DC	12 V...24 V
Max. electrical power consumption	8.5 W
Electrical connection 1, function	Communication
Setpoint value	4 - 20 mA 0 - 10 V 1 – 5 V Modbus®
Diagnostic function	Display via LED
Display type	LED
Signal range analogue input	0 - 10 V 4 - 20 mA 1 – 5 V
Signal range analogue output	0 - 10 V 1 - 5 V 4 - 20 mA
Reverse polarity protection	For operating voltage connections
Product weight	630 g
Material in contact with the medium	Anodised wrought aluminium alloy EPDM Epoxy FPM PA-reinforced Silicon Silicon nitride High-alloy stainless steel
Material seals	EPDM FPM
Material housing	Anodised aluminium PA-reinforced PC
Note on materials	RoHS-compliant
Dimensions (W x L x H)	116 mm x 38 mm x 124 mm
Type of mounting	Direct mounting via through-hole Mounting plate, attached with screws On H-rail via accessories Screw-clamped Via through-hole for M4 screw
Mounting position	optional
Approval	C-Tick RCM trademark c UL us listed (OL)
Conforms to standard	IEC 61010-1 ISO 15001
KC mark	KC-EMV
CE mark (see declaration of conformity)	To EU EMC Directive In accordance with EU RoHS Directive

Feature	Value
UKCA marking (see declaration of conformity)	To UK instructions for EMC To UK RoHS instructions
LABS (PWIS) conformity	VDMA24364 zone III
Oxygen suitability according to standard	ASTM G 63 ASTM G 93 ASTM G 94 CGA G 4.1 EIGA IGC 33/06/E ISO 15001