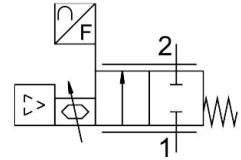


Mass Flow Controller (MFC)

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

Part number: 8163823

FESTO



 General operating condition

Data sheet

Feature	Value
Size	100
Symbol	00995693
Degree of protection	IP40
Standard nominal flow rate (standardised to DIN 1343)	50 l/min
Flow rate control range	0.5 l/min ... 50 l/min
Flow direction	Non-reversible
Nominal operating pressure	0.3 MPa
Nominal operating pressure	3 bar
Nominal operating pressure	43.5 psi
Operating pressure	0.1 MPa ... 0.6 MPa
Operating pressure	1 bar ... 6 bar
Note on operating pressure	For input pressures above 4 bar and low flow rates: Do not use components that reflect pressure waves in the pneumatic laminar flow inlet. The reflection of pressure waves can cause vibrations in the system and deviations in the accuracy of the product.
Overload pressure	0.8 MPa
Overload pressure	8 bar
Overload pressure	116 psi
Burst pressure	1.8 MPa
Burst pressure	18 bar
Burst pressure	261 psi
Accuracy of flow rate	± (1.3% read + 0.7% FS)
Note on accuracy of flow rate	Im Bereich 2 ... 100 %FS, Referenzbedingungen: 23° C Umgebungstemperatur und Mediumtemperatur, Medium Druckluft nach ISO 8573-1:2010 [6:4:1], mit Steckverschraubung QS-G1/4-8, Eingangsdruck p1: 0,16 ... 0,19 MPa, Ausgangsdruck p2: 0,12 MPa
Repetition accuracy of flow rate	± (0.1% read + 0.1% FS)
Maximum permissible leakage	0.6 l/h
Valve function	2-way proportional flow control valve Closed
Nominal size	6 mm
Type of actuation	Electrical
Pneumatic connection, port 1	Female thread G1/4
Pneumatic connection, port 2	Female thread G1/4
Typical precision flow rate value	± (0.6 % read + 0.5 %FS)

Feature	Value
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
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 10 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
Electrical connection 1, connection type	Socket
Electrical connection 1, connector system	RJ45
Electrical connection 1, number of connections/cores	8
Electrical connection 2, function	Analogue input Communication Power supply
Electrical connection 2, connection type	Plug
Electrical connection 2, connector system	Sub-D
Electrical connection 2, number of connections/cores	9
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	PFPE grease with anorganic thickeners Silicon Silicon nitride High-alloy stainless steel
Material seals	EPDM Fluoro rubber
Material housing	Anodised aluminium Reinforced PA Makrolon®
Note on materials	RoHS compliant
Dimensions (W x L x H)	116 mm x 38 mm x 124 mm

Feature	Value
Type of mounting	Direct mounting via through-hole Mounting plate, attached with screws On DIN rail via accessories Screw-clamped Via through-hole for M4 screw
Mounting position	Any
Approval	C-Tick RCM c UL us - Listed (Oil)
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
UKCA marking (see declaration of conformity)	To UK instructions for EMC To UK RoHS instructions
Certificate issuing authority	UL E322346
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