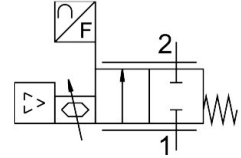


Proportional flow control valve VEMD-L-6-60-100-D9-G14-5YMPM1-VA

Part number: 8163824

FESTO



[PDF](#) General operating condition

Data sheet

Feature	Value
Size	100
Symbol	00995693
Degree of protection	IP40
Standard nominal flow rate (standardised to DIN 1343)	100 l/min
Flow rate control range	2 l/min ... 100 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	Bei Eingangsdrücken über 0,4 MPa (4 bar, 58 psi) und geringen Durchflüssen: In der pneumatischen Einlaufstrecke Bauteile vermeiden, die Druckwellen reflektieren. Die Reflexion von Druckwellen kann zu Schwingungen im System und zu Genauigkeitsabweichungen im
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	± (2% o.m.v. + 1% FS)
Repetition accuracy of flow rate	± (0.25% o.m.v. + 0.25% FS)
Maximum permissible leakage	0.6 l/h
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
Medium	Argon Compressed air to ISO 8573-1:2010 [6:4:4] Carbon dioxide Oxygen Nitrogen
Note on the medium	Lubricated operation not possible

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	Plugs
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	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

Feature	Value
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
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