

Mass flow controller (MFC) VEFC-L-6-100-D31-MFS14-MFS14-MRM1

Part number: 8204590

FESTO



 General operating condition

Data sheet

Feature	Value
Degree of protection	IP20
Flow rate control range	5 l/min ... 100 l/min
Note on the flow rate control range	N2 equivalent, the specified dynamic and accuracy values apply to setpoint values >10 %FS
Flow direction	Non-reversible
Operating pressure	0.6 MPa
Operating pressure	6 bar
Overload pressure	0.8 MPa
Overload pressure	8 bar
Overload pressure	116 psi
Burst pressure	2.1 MPa
Burst pressure	21 bar
Burst pressure	305 psi
Inlet pressure 1 MPa	0.1 MPa ... 0.7 MPa
Inlet pressure 1	1 bar ... 7 bar
Inlet pressure 1 psi	14.5 psi ... 101.5 psi
Output pressure 2	-0.1 MPa ... 0.35 MPa
Outlet pressure 2	-1 bar ... 3.5 bar
Output pressure 2	-14.5 psi ... 50.8 psi
Suitability for vacuum	yes
Valve function	2-way proportional flow control valve
Actuation type	Electrical
Pneumatic connection 1	front metal seal 1/4"
Pneumatic connection 2	front metal seal 1/4"
Total leakage	0.6 l/h
Note on total leakage	standardized according to SEMI E16 tested with CDA
Relative air humidity	5 - 85 % Non-condensing
Climatic category	3K22 as per EN 60721
Nominal altitude of use above sea level	≤ 2000 m NHN
Operating medium	Compressed air as per ISO 8573-1:2010 [7:4:4] Inert gas
Temperature of medium	5 °C ... 50 °C
Ambient temperature	5 °C ... 50 °C
Storage temperature	-20 °C ... 60 °C
Nominal operating voltage DC	24 V

Feature	Value
DC operating voltage range	24 V
Max. current consumption	65 mA
Max. electrical power consumption	1.6 W
Note on power consumption	Typical <1 W
Overvoltage category	II
Residual ripple	± 10%
Electrical connection 1, function	Analog output Analog input Communication Power supply
Electrical connection 1, connection type	Plug
Electrical connection 1, connection technology	Sub-D
Electrical connection 1, number of pins/wires	9
Setpoint input	0 - 5 V 0 - 10 V 1 - 5 V 4 - 20 mA Modbus RTU
Protection against direct and indirect contact	PELV
Display type	LED
Reverse polarity protection	for operating voltage
Overall accuracy	1.5 %FS
Reproducibility	0.2 %FS
Linearity	1.5 %FS
Hysteresis	0.15 %FS
Overshoot	2 %FS
Settling time	500 ms
Step response time	500 ms
Note on the measured variable	Dynamic characteristic values according to SEMI E17 with preset "fast". The dead time, the step response and the settling time may be increased in the event of setpoint changes from a closed valve state or when the back pressure is above atmospheric.
Product weight	250 g
Note on materials	RoHS-compliant
Dimensions W x L x H	24 mm x 152.8 mm x 97 mm
Application note	The product is suitable for industrial purposes only. Radio interference suppression measures may be required in residential areas. For indoor use only
Material fire test	UL94 HB
Contamination level	2
Certification	RCM compliance mark
CE marking (see declaration of conformity)	As per EU EMC directive As per EU RoHS directive
UKCA marking (see declaration of conformity)	To UK instructions for EMC To UK RoHS instructions
KC characters	KC EMC
KC approval number EMC/radio	FTO-KC-2024-1003
LABS (PWIS) conformity	VDMA24364 zone III
Suitability for the production of Li-ion batteries	Suitable for battery production with reduced Cu/Zn/Ni values (F1a)