

Proportional flow control valve VPCF-6-L-8-G38-6-V1-E-EX2

FESTO

Part number: 8041714



 General operating condition

Data sheet

Feature	Value
Valve function	3-way proportional flow control valve
Structural design	Piston gate valve with integrated pressure sensors
Type of control	Direct
Actuation type	Electrical
Reset method	Magnetic spring
Symbol	00995603
Flow direction	Non-reversible
Mounting position	Any
Sealing principle	Hard
Nominal width	6 mm
Short-circuit protection	yes
Display type	LED
Flow rate range	0 l/min ... 1000 l/min
Operating pressure	0.1 MPa ... 0.6 MPa
Operating pressure	1 bar ... 6 bar
Flow rate control range	20 l/min ... 1000 l/min
Note on the flow rate control range	Regulation takes place at 20 l/min; below this setpoint value, the flow control valve switches to the exhausting position. The accuracy specifications provided are based on a flow rate control range of 50-1000 l/min.
Repetition accuracy in \pm %FS	0.5 %FS
Absolute accuracy in \pm %FS at room temperature	3 %FS
Hysteresis in \pm %FS	0.8 %FS
Ambient temperature	0 °C ... 50 °C
Temperature of medium	15 °C ... 35 °C
Operating medium	Compressed air as per ISO 8573-1:2010 [6:4:4]
Information on operating and pilot media	Maximum particle size 5 μ m
Degree of protection	IP65
Note on degree of protection	In mounted state
Certification	RCM compliance mark
CE marking (see declaration of conformity)	As per EU EMC directive as per EU explosion protection directive (ATEX) As per EU RoHS directive
Explosion prevention and protection	Zone 2 (ATEX) Zone 22 (ATEX)
UKCA marking (see declaration of conformity)	To UK RoHS instructions
ATEX category gas	II 3G

Feature	Value
ATEX category for dust	II 3D
Type of ignition protection for gas	Ex nA IIC T5 X Gc
Type of (ignition) protection for dust	Ex tc IIIC T60°C X Dc
Explosive ambient temperature	0°C ≤ Ta ≤ +50°C
LABS (PWIS) conformity	VDMA24364-B1/B2-L
Note on materials	RoHS-compliant
Vibration resistance	Transport application test with severity level 2 as per FN 942017-4 and EN 60068-2-6
Shock resistance	Shock test with severity level 2 as per FN 942017-5 and EN 60068-2-27
Corrosion resistance class (CRC)	1 - Low corrosion stress
Nominal operating voltage DC	24 V
DC operating voltage range	20.4 V ... 30 V
Residual ripple	5 %
Max. current consumption	1.2 A
Current consumption with load-free outputs	150 mA
Switching output	PNP
Switching input	PNP
Current rating per output	100 mA
Reverse polarity protection	for operating voltage
Duty cycle	100%
Max. electrical power consumption	36 W
Analog output signal range	0 - 10 V
Analog input signal range	0 - 10 V
Diagnostic function	Indication via LED
Electrical connection	M12x1 Plug
Type of mounting	Direct mounting via through-hole Direct fastening via thread
Pneumatic connection 1	G3/8
Pneumatic connection 2	G3/8
Pneumatic connection 3	G3/8
Product weight	856 g
Housing material	Wrought aluminum alloy, anodized
Seals material	FPM HNBR