

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
Design	Piston gate valve With integrated pressure sensors
Type of piloting	Direct
Type of actuation	Electrical
Type of reset	Magnetic spring
Symbol	00995603
Flow direction	Non-reversible
Mounting position	Any
Sealing principle	Hard
Nominal size	6 mm
Short circuit current rating	Yes
Display type	LED
Flow 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 as of 20 l/min; below this reference value the flow control valve switches to the exhaust port. 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
Media temperature	15 °C ... 35 °C
Operating medium	Compressed air to ISO 8573-1:2010 [6:4:4]
Note on operating and pilot medium	Maximum particle size 5 μ m
Degree of protection	IP65
Note on degree of protection	In mounted state
Approval	RCM
CE mark (see declaration of conformity)	To EU EMC Directive To EU Explosion Protection Directive (ATEX) In accordance with EU RoHS Directive
Explosion 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 dust	II 3D
Explosion ignition protection type for gas	Ex nA IIC T5 X Gc
Explosion ignition protection type for dust	Ex tc IIIC T60°C X Dc
Explosion 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 to FN 942017-4 and EN 60068-2-6
Shock resistance	Shock test with severity level 2 to FN 942017-5 and EN 60068-2-27
Corrosion resistance class CRC	1 - Low corrosion stress
Nominal operating voltage DC	24 V
Operational voltage range DC	20.4 V ... 30 V
Residual ripple	5%
Max. current consumption	1.2 A
Current consumption with no-load 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
Signal range analogue output	0 - 10 V
Signal range analogue input	0 - 10 V
Diagnostic function	Display via LED
Electrical connection	M12x1 Plug
Type of mounting	Direct mounting via through-hole Direct mounting via thread
Pneumatic connection, port 1	G3/8
Pneumatic connection, port 2	G3/8
Pneumatic connection, port 3	G3/8
Product weight	856 g
Material housing	Anodised wrought aluminium alloy
Material seals	Fluoro rubber HNBR