

# Proportional pressure regulator VPPI-5L-3-G18-1V0H-V1-S1BT

Part number: 8153298

FESTO



General operating condition

## Data sheet

Feature	Value
Nominal size, supply	5 mm
Nominal size, exhaust	5 mm
Type of actuation	Electric
Sealing principle	Soft
Total leakage	5 l/h
Flow direction	Non-reversible
Mounting position	optional
Design	Poppet valve with spring return
Short circuit current rating	For all electrical connections
Max. cable length	30 m
Setpoint value input	0 - 10 V PWM
Input resistance	100 kOhm
Safety instructions	Safety position VPPI, normally closed
Symbol	00997299
Reverse polarity protection	For all electrical connections
Type of reset	Mechanical spring
Dimensions (W x L x H)	42.2 x 95.3 x 94.3 mm
Type of piloting	Direct
Valve function	3-way proportional pressure regulator
Display type	LED
Operating pressure	0 bar ... 2 bar
Pressure regulation range	-0.1 MPa ... 0 MPa
Pressure regulation range	-1 bar ... 0 bar
Inlet pressure 1	0 bar ... 6 bar
Inlet pressure 1	0 MPa ... 0.6 MPa
Input pressure 3	-0.1 MPa ... 0 MPa
Input pressure 3	-1 bar ... 0 bar
Burst pressure	40 bar
Standard nominal flow rate 2-3	20 l/min
Operational voltage range DC	21.6 V ... 27.6 V
Nominal current	0.15 A
Max. current consumption	525 mA
Max. electrical power consumption	14.5 W

Feature	Value
Nominal operating voltage DC	24 V
Signal range analogue output	0 - 10 V
Min. load resistance voltage output	2 kOhm
Accuracy analogue output in $\pm$ %FS	1 %FS
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4] Inert gases
Note on operating and pilot medium	Lubricated operation not possible
Approval	FCC MIC c UL us listed (OL)
CE mark (see declaration of conformity)	To EU EMC Directive EU-radio equipment-directive (RED) In accordance with EU RoHS Directive
UKCA marking (see declaration of conformity)	To UK RoHS instructions
Certificate issuing authority	UL E322346
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	2 - Moderate corrosion stress
LABS (PWIS) conformity	VDMA24364-B1/B2-L
Cleanroom suitability, measured according to ISO 14644-14	Class 4 according to ISO 14644-1
Suitable for use with food	See supplementary material information
Media temperature	0 °C ... 50 °C
Degree of protection	IP65
Pollution degree	2
Ambient temperature	0 °C ... 50 °C
Storage temperature	-20 °C ... 70 °C
Climatic category	3K3 as per EN 60721
Relative air humidity	Non-condensing
Nominal altitude of use	< 3000 m NHN
Instructions on use	The product is suitable for industrial purposes only. Measures to eliminate radio interference may be required in residential areas.
Sound power level	62.5 dB(A)
Sound power level at a distance of 1 m	51.9 dB(A)
Product weight	365 g
Linearity	0.9 %FS
Hysteresis	0.4 %FS
Reproducibility	0.4 %FS
Total accuracy	1.1%FS
Temperature coefficient	0.02 %/K
Electrical connection 1, function	Actual value output Setpoint input Power supply
Electrical connection 1, connection type	Plugs
Electrical connection 1, connector system	M12x1, A-coded to EN 61076-2-101
Electrical connection 1, number of connections/cores	5
Electrical connection 1, connection pattern	00995383
Electrical connection 1, tightening torque	1.5 Nm
Type of mounting	Via through-hole for M4 screw With H-rail
Additional functions	Bluetooth (version 4.2)
Pneumatic connection, port 1	G1/8
Pneumatic connection, port 2	G1/8
Pneumatic connection, port 3	G1/8
Max. tightening torque for fitting	8.5 Nm
Note on materials	RoHS-compliant

<b>Feature</b>	<b>Value</b>
Material housing	PA-reinforced
Material seals	HNBR PTFE