

# Proportional pressure regulator

## VPPE-3-1-1/8-6-005-E1-F1A

Part number: 8156421

FESTO



## Data sheet

Feature	Value
Nominal diameter, pressurization	5 mm
Nominal diameter, exhaust	2.5 mm
Variants	Recommended for production facilities for the manufacture of lithium-ion batteries
Type of actuation	electrical
Sealing principle	soft
Assembly position	Any Preferably upright
Design structure	Pilot actuated diaphragm regulator
Short circuit strength	for all electrical connections
Safety instructions	VPPE safety position: If the power supply cable is interrupted, output pressure is maintained unregulated.
Polarity protected	for all electrical connections
Type of reset	mechanical spring
Type of piloting	Piloted
Valve function	3-way proportional-pressure regulator
Type of display	LED display 3-digit
Pressure regulation range MPa	0.006 ... 0.6 MPa
Pressure regulation range	0.06 ... 6 bar
Inlet pressure 1	6 ... 8 bar
Supply pressure 1 MPa	0.6 ... 0.8 MPa
Max. pressure hysteresis (MPa)	0.003 MPa
Max. pressure hysteresis	0.03 bar 0.435 psi
Standard nominal flow rate	800 l/min
Operating voltage range DC	21.6 ... 26.4 V
Max. current consumption	160 mA
Duty cycle	100 %
Max. electrical power consumption	4.2 W
Residual ripple	10 %
Switch output	PNP
Signal range, analog output	1 - 5 V
Signal range, analog input	0 - 5 V
Operating medium	Compressed air in accordance with ISO8573-1:2010 [7:4:4] Inert gases
Note on operating and pilot medium	Lubricated operation not possible
Authorization	RCM Mark c UL us - Listed (OL)
KC mark	KC-EMV
CE symbol (see declaration of conformity)	according to EU-EMV guideline in accordance with EU RoHS directive
UKCA marking (see declaration of conformity)	To UK instructions for EMC To UK RoHS instructions
Certificate issuing department	UL E322346
Corrosion resistance classification CRC	2 - Moderate corrosion stress

Feature	Value
PWIS conformity	VDMA24364-B2-L
RSBP classification to CD-0033	F1a
Cleanroom class	ISO class 4
Medium temperature	10 ... 50 °C
Protection class	IP65
Ambient temperature	0 ... 60 °C
Product weight	390 g
Linearity	1 %FS
Hysteresis	0.5 %FS
Reproducibility	0.5 %FS
Overall accuracy	1,25 %FS
Temperature coefficient	0.04 %/K
Electrical connection	5-pin M12 Plug
Mounting type	with through hole
Pneumatic connection, port 1	G1/8
Pneumatic connection, port 2	G1/8
Pneumatic connection, port 3	G1/8
Materials note	Conforms to RoHS
Material housing	Aluminium, powder-coated