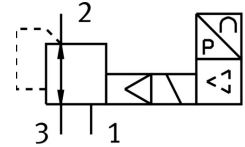


Proportional pressure regulator VPPE-3-1-1/8-6-420-E1-F1A

FESTO

Part number: 8156423



 General operating condition

Data sheet

| Feature | Value |
|-----------------------------------|--|
| Nominal width pressurization | 5 mm |
| Exhaust nominal width | 2.5 mm |
| Variants | Metals with copper, zinc or nickel by mass as main constituent are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils. |
| Actuation type | Electrical |
| Sealing principle | Soft |
| Mounting position | Any Preferably upright |
| Structural design | Pilot-controlled diaphragm regulator |
| Short-circuit protection | For all electrical connections |
| Safety instructions | VPPE safety position: if the supply cable breaks, the outlet pressure is maintained in uncontrolled form. |
| Symbol | 00995303 |
| Reverse polarity protection | for all electrical connections |
| Reset method | Mechanical spring |
| Type of control | Pilot-controlled |
| Valve function | 3-way proportional pressure control valve |
| Display type | LED display 3-digit |
| Pressure regulation range MPa | 0.006 MPa ... 0.6 MPa |
| Pressure regulation range | 0.06 bar ... 6 bar |
| Inlet pressure 1 | 6 bar ... 8 bar |
| Inlet pressure 1 MPa | 0.6 MPa ... 0.8 MPa |
| Max. pressure hysteresis | 0.003 MPa |
| Max. pressure hysteresis | 0.03 bar |
| Max. pressure hysteresis | 0.435 psi |
| Standard nominal flow rate | 800 l/min |
| DC operating voltage range | 21.6 V ... 26.4 V |
| Max. current consumption | 160 mA |
| Duty cycle | 100% |
| Max. electrical power consumption | 4.2 W |
| Residual ripple | 10 % |
| Switching output | PNP |
| Analog output signal range | 4 - 20 mA |
| Analog input signal range | 4 - 20 mA |

| Feature | Value |
|--|---|
| Operating medium | Compressed air as per ISO 8573-1:2010 [7:4:4] Inert gas |
| Information on operating and pilot media | Operation with oil lubrication not possible |
| Certification | RCM compliance mark c UL us - Listed (OL) |
| KC characters | KC EMC |
| 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 |
| Certificate issuing authority | UL E322346 |
| Corrosion resistance class (CRC) | 2 - Moderate corrosion stress |
| LABS (PWIS) conformity | VDMA24364-B2-L |
| Suitability for the production of Li-ion batteries | Metals with more than 1% by mass of copper, zinc or nickel by mass are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils |
| Cleanroom class | Class 4 according to ISO 14644-1 |
| Temperature of medium | 10 °C ... 50 °C |
| Degree of protection | IP65 |
| Ambient temperature | 0 °C ... 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 |
| Type of mounting | With through-hole |
| Pneumatic connection 1 | G1/8 |
| Pneumatic connection 2 | G1/8 |
| Pneumatic connection 3 | G1/8 |
| Note on materials | RoHS-compliant |
| Housing material | Aluminum, powder-coated |