

# Proportional pressure regulator VPPM-6L-L-1-G18-0L2H-A4N-S1

Part number: 542230

FESTO

with electric set point specification and two-stage control circuit for stable, precise characteristic of regulation.



## Data sheet

| Feature                                      | Value  |
|--|--|
| Nominal diameter, pressurization             | 6 mm   |
| Nominal diameter, exhaust                    | 4.5 mm   |
| Type of actuation                            | electrical   |
| Sealing principle                            | soft   |
| Assembly position                            | Any  |
| Design structure                             | Pilot actuated diaphragm regulator   |
| Short circuit strength                       | for all electrical connections   |
| Safety instructions                          | VPPM 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  |
| Pressure regulation range MPa                | 0.002 ... 0.2 MPa  |
| Pressure regulation range                    | 0.02 ... 2 bar   |
| Inlet pressure 1                             | 0 ... 4 bar  |
| Supply pressure 1 MPa                        | 0 ... 0.4 MPa  |
| Max. pressure hysteresis                     | 0.01 bar   |
| Standard nominal flow rate                   | 380 l/min  |
| Operating voltage range DC                   | 21.6 ... 26.4 V  |
| Max. current consumption                     | 300 mA   |
| Duty cycle                                   | 100 %  |
| Max. electrical power consumption            | 7 W  |
| Residual ripple                              | 10 %   |
| Switch output                                | NPN  |
| Signal range, analog output                  | 4 - 20 mA  |
| Signal range, analog input                   | 4 - 20 mA  |
| Operating medium                             | Compressed air in accordance with ISO8573-1:2010 [7:4:4]<br>Inert gases                                    |
| Note on operating and pilot medium           | Lubricated operation not possible  |
| Authorization                                | RCM Mark<br>c UL us - Listed (OL)  |
| KC mark                                      | KC-EMV   |
| CE symbol (see declaration of conformity)    | according to EU-EMV guideline<br>in accordance with EU RoHS directive                                      |
| UKCA marking (see declaration of conformity) | To UK instructions for EMC<br>To UK RoHS instructions  |
| Certificate issuing department               | UL E322346   |
| Corrosion resistance classification CRC      | 2 - Moderate corrosion stress  |
| PWIS conformity                              | VDMA24364-B1/B2-L  |
| Medium temperature                           | 10 ... 50 °C   |
| Protection class                             | IP65   |

| <b>Feature</b>               | <b>Value</b>                                      |
|------------------------------|---|
| Ambient temperature          | 0 ... 60 °C                                       |
| Product weight               | 400 g   |
| Linearity                    | 1 %FS   |
| Hysteresis                   | 0.5 %FS   |
| Reproducibility              | 0.5 %FS   |
| Overall accuracy             | 1,25 %FS  |
| Temperature coefficient      | 0.04 %/K  |
| FS repetition accuracy       | 0.5 %   |
| Electrical connection        | 8-pin<br>M12<br>Plug                              |
| Mounting type                | with through hole<br>with accessories<br>Optional |
| 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             | Wrought Aluminum alloy<br>Anodized                |