

# Proportional-pressure regulator VPPM-6F-L-1-F-0L10H-V1N-S1

Part number: 542241

FESTO



General operating condition

## Data sheet

| Feature   | Value  |
|---|--|
| Nominal size, supply                                  | 6 mm   |
| Nominal size, exhaust                                 | 4,5 mm   |
| Type of actuation                                     | Electrical   |
| Sealing principle                                     | Soft   |
| Mounting position                                     | Any  |
| Design  | Piloted diaphragm regulator  |
| Short circuit current rating                          | For all electrical connections   |
| Safety instructions                                   | Safety position VPPM: if the power supply cable is interrupted, output pressure is maintained unregulated. |
| Symbol  | 00995303   |
| Reverse polarity protection                           | For all electrical connections   |
| Type of reset   | Mechanical spring  |
| Type of piloting                                      | Piloted  |
| Valve function  | 3-way proportional pressure regulator  |
| Display type  | LED  |
| Pressure regulation range                             | 0.01 MPa ... 1 MPa   |
| Pressure regulation range                             | 0.1 bar ... 10 bar   |
| Inlet pressure 1                                      | 0 bar ... 11 bar   |
| Inlet pressure 1                                      | 0 MPa ... 1.1 MPa  |
| Max. pressure hysteresis                              | 0.05 bar   |
| Standard nominal flow rate (standardised to DIN 1343) | 1400 l/min   |
| Operational voltage range DC                          | 21.6 V ... 26.4 V  |
| Max. current consumption                              | 300 mA   |
| Duty cycle  | 100%   |
| Max. electrical power consumption                     | 7 W  |
| Residual ripple                                       | 10%  |
| Switching output                                      | NPN  |
| Signal range analogue output                          | 0 - 10 V   |
| Accuracy analogue output in ± %FS                     | 2 %FS  |
| Signal range analogue input                           | 0 - 10 V   |
| Operating medium                                      | Compressed air to ISO 8573-1:2010 [7:4:4]<br>Inert gas   |
| Note on operating and pilot medium                    | Lubricated operation not possible  |
| Approval  | RCM<br>c UL us - Listed (Oil)  |
| KC mark   | KC-EMV   |

| Feature                                      | Value   |
|--|---|
| CE mark (see declaration of conformity)      | To EU EMC Directive<br>In accordance with EU RoHS Directive |
| UKCA marking (see declaration of conformity) | To UK RoHS instructions                                     |
| Certificate issuing authority                | UL E322346  |
| Corrosion resistance class CRC               | 2 - Moderate corrosion stress                               |
| LABS (PWIS) conformity                       | VDMA24364-B1/B2-L   |
| Media temperature                            | 10 °C ... 50 °C   |
| Degree of protection                         | IP65  |
| Ambient temperature                          | 0 °C ... 60 °C  |
| Product weight                               | 400 g   |
| Linearity                                    | 1 %FS   |
| Hysteresis                                   | 0.5 %FS   |
| Reproducibility                              | 0.5 %FS   |
| Total accuracy                               | 1.25 %FS  |
| Temperature coefficient                      | 0.04 %/K  |
| Repetition accuracy FS                       | 0.5 %   |
| Electrical connection                        | M12<br>Plug   |
| Type of mounting                             | With through-hole<br>With accessories                       |
| Pneumatic connection, port 1                 | Sub-base  |
| Pneumatic connection, port 2                 | Sub-base  |
| Pneumatic connection, port 3                 | Sub-base  |
| Note on materials                            | RoHS compliant  |
| Material housing                             | Wrought aluminium alloy<br>anodised                         |