## **Proportional pressure regulator VPPI-5L-3-G18-1V1H-V1-S1D** Part number: 8104673



## **Data sheet**

| Feature                              | Value  |
|--------------------------------------|--|
| Nominal diameter, pressurization     | 5 mm   |
| Nominal diameter, exhaust            | 5 mm   |
| Type of actuation                    | electrical   |
| Sealing principle                    | soft   |
| Total leakage                        | 5 l/h  |
| Flow direction                       | non reversible   |
| Assembly position                    | Any  |
| Design structure                     | Poppet valve with spring return                          |
| Short circuit strength               | for all electrical connections                           |
| Max. line length                     | 30 m   |
| Setpoint input                       | 0 - 10 V   |
|                                      | PWM  |
|                                      | Digital  |
| Input resistance                     | 100 kOhm   |
| Safety instructions                  | Safety position VPPI, normally closed                    |
| Polarity protected                   | for all electrical connections                           |
| Type of reset                        | mechanical spring  |
| Dimensions W x L x H                 | 42,2 mm x 95,3 mm x 94,3 mm                              |
| Type of piloting                     | direct   |
| Valve function                       | 3-way proportional-pressure regulator                    |
| Type of display                      | TFT color  |
| Display size                         | 1.77"  |
| Display resolution                   | 128x160 Pixel  |
| Working pressure                     | 1 2 bar  |
| Pressure regulation range MPa        | -0.1 0.1 MPa   |
| Pressure regulation range            | -1 1 bar   |
| Inlet pressure 1                     | 0 6 bar  |
| Supply pressure 1 MPa                | 0 0.6 MPa  |
| Input pressure 3                     | -0.1 0 MPa   |
| Inlet pressure 3                     | -1 0 bar   |
| Bursting pressure                    | 40 bar   |
| Standard nominal flow rate           | 150 l/min  |
| Standard nominal flow rate 2-3       | 20 l/min   |
| Operating voltage range DC           | 21.6 27.6 V  |
| Nominal current                      | 0.15 A   |
| Max. current consumption             | 525 mA   |
| Max. electrical power consumption    | 14.5 W   |
| Nominal operating voltage DC         | 24 V   |
| Switch output                        | Push-Pull  |
| Max. output current                  | 25 mA  |
| Signal range, analog output          | 0 - 10 V   |
| Min. load resistance, voltage output | 2,000 Ohm  |
| Accuracy, analog output FS           | 1 %FS  |
| 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                        |



**FESTO** 

## FESTO

| Feature  | Value   |
|--|---|
| Authorization                                  | RCM Mark  |
| 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   |
| Vibration resistance                           | Transport application test at severity level 2 in accordance with FN 942017-4 and EN 60068-2-6                                    |
| Shock resistance                               | Shock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-27   |
| Corrosion resistance classification CRC        | 2 - Moderate corrosion stress   |
| PWIS conformity                                | VDMA24364-B1/B2-L   |
| Food-safe                                      | See Supplementary material information  |
| Medium temperature                             | 0 50 °C   |
| Protection class                               | IP65  |
| Ambient temperature                            | 0 50 °C   |
| Storage temperature                            | -20 70 °C   |
| Climatic category                              | 3K3 to EN 60721   |
| Nominal altitude of use                        | < 3000 m NHN  |
| Instructions for use                           | The product is suitable for industrial purposes only. Measures for interference suppression 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                                 | 370 g   |
| Linearity                                      | 0.9 %FS   |
| Hysteresis                                     | 0.4 %FS   |
| Reproducibility                                | 0.4 %FS   |
| Overall 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       | Plug  |
| Electrical connection 1, connection technology | M12x1, A-coded in accordance with EN 61076-2-101  |
| Electrical connection 1, number of pins/wires  | 5   |
| Electrical connection 1, tightening torque     | 1.5 Nm  |
| Mounting type                                  | with through-hole for M4 screw  |
|  | with top-hat rail   |
| 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  |
| Materials note                                 | Conforms to RoHS  |
| Material housing                               | PA-reinforced   |
| Material seals                                 | HNBR  |
|  | PTFE  |