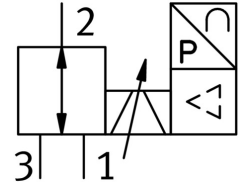


# Proportional pressure control valve VPPI-5L-3-G18-0L6H-V1-S1D

Part number: 8104665

**FESTO**



## Data sheet

| Feature                                               | Value                                                                                                                               |
|-------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| KC characters                                         | KC EMC                                                                                                                              |
| Nominal width pressurization                          | 5 mm                                                                                                                                |
| Electrical connection 1, function                     | Actual value output<br>Setpoint input<br>Power supply                                                                               |
| Electrical connection 1, connection technology        | M12x1 A-coded as per EN 61076-2-101                                                                                                 |
| Seals material                                        | HNBR<br>PTFE                                                                                                                        |
| Setpoint input                                        | 0 - 10 V<br>PWM<br>Digital                                                                                                          |
| Flow direction                                        | Non-reversible                                                                                                                      |
| Application note                                      | The product is suitable for industrial purposes only. Radio interference suppression measures may be required in residential areas. |
| Display size                                          | 1.77"                                                                                                                               |
| Electrical connection for input 1, connection pattern | 00994083                                                                                                                            |
| Display resolution                                    | 128x160 pixels                                                                                                                      |
| Electrical connection 1, connection type              | Plug                                                                                                                                |
| Nominal altitude of use above sea level               | < 3000 m NHN                                                                                                                        |
| Max. cable length                                     | 30 m                                                                                                                                |
| Dimensions W x L x H                                  | 42.2 mm x 95.3 mm x 94.3 mm                                                                                                         |
| Climatic category                                     | 3K3 as per EN 60721                                                                                                                 |
| Precision analog output in ± %FS                      | 1 %FS                                                                                                                               |
| Min. load resistance of voltage output                | 2 kOhm                                                                                                                              |
| Max. tightening torque of pneumatic fitting           | 8.5 Nm                                                                                                                              |
| Total leakage                                         | 5 l/h                                                                                                                               |
| Storage temperature                                   | -20 °C ... 70 °C                                                                                                                    |
| Electrical connection 1, tightening torque            | 1.5 Nm                                                                                                                              |
| Electrical connection 1, number of pins/wires         | 5                                                                                                                                   |
| Input resistance                                      | 100 kOhm                                                                                                                            |
| Max. output current                                   | 25 mA                                                                                                                               |
| Overall accuracy                                      | 1.1 %FS                                                                                                                             |
| Linearity                                             | 0.9 %FS                                                                                                                             |
| Reproducibility                                       | 0.4 %FS                                                                                                                             |
| Hysteresis                                            | 0.4 %FS                                                                                                                             |
| Burst pressure                                        | 40 bar                                                                                                                              |
| Sound power level                                     | 62.5 dB(A)                                                                                                                          |

| Feature                                    | Value                                                                                |
|--------------------------------------------|--------------------------------------------------------------------------------------|
| Sound power level at a distance of 1 m     | 51.9 dB(A)                                                                           |
| Inlet pressure 1 MPa                       | 0 MPa ... 1.3 MPa                                                                    |
| Nominal current                            | 0.15 A                                                                               |
| Pressure regulation range MPa              | 0 MPa ... 0.6 MPa                                                                    |
| Standard nominal flow rate 2-3             | 480 l/min                                                                            |
| Exhaust nominal width                      | 5 mm                                                                                 |
| Type code                                  | VPPI                                                                                 |
| Actuation type                             | Electrical                                                                           |
| Sealing principle                          | Soft                                                                                 |
| Mounting position                          | Any                                                                                  |
| Design                                     | Poppet valve with return spring                                                      |
| Short-circuit protection                   | For all electrical connections                                                       |
| Safety instructions                        | Safety position VPPI, normally closed                                                |
| Symbol                                     | 00997299                                                                             |
| Reverse polarity protection                | for all electrical connections                                                       |
| Reset method                               | Mechanical spring                                                                    |
| Type of control                            | Direct                                                                               |
| Valve function                             | 3-way proportional pressure control valve                                            |
| Display type                               | Color TFT                                                                            |
| Operating pressure                         | 6 bar ... 8 bar                                                                      |
| Pressure regulation range                  | 0 bar ... 6 bar                                                                      |
| Inlet pressure 1                           | 0 bar ... 13 bar                                                                     |
| Standard nominal flow rate                 | 900 l/min                                                                            |
| DC operating voltage range                 | 20.4 V ... 27.6 V                                                                    |
| Max. current consumption                   | 525 mA                                                                               |
| Max. electrical power consumption          | 14.5 W                                                                               |
| Nominal operating voltage DC               | 24 V                                                                                 |
| Switching output                           | Push-pull                                                                            |
| Analog output signal range                 | 0 - 10 V                                                                             |
| Operating medium                           | Compressed air as per ISO 8573-1:2010 [7:4:4]<br>Inert gas                           |
| Information on operating and pilot media   | Operation with oil lubrication not possible                                          |
| CE marking (see declaration of conformity) | As per EU EMC directive<br>As per EU RoHS directive                                  |
| Vibration resistance                       | Transport application test with severity level 2 as per FN 942017-4 and EN 60068-2-6 |
| Shock resistance                           | Shock test with severity level 2 as per FN 942017-5 and EN 60068-2-27                |
| Corrosion resistance class (CRC)           | 2 - Moderate corrosion stress                                                        |
| Temperature of medium                      | 0 °C ... 50 °C                                                                       |
| Degree of protection                       | IP65                                                                                 |
| Ambient temperature                        | 0 °C ... 50 °C                                                                       |
| Certification                              | RCM compliance mark                                                                  |
| Product weight                             | 370 g                                                                                |
| Temperature coefficient                    | 0.02 %/K                                                                             |
| Type of mounting                           | With through-hole for M4 screw<br>With H-rail                                        |
| Pneumatic connection 1                     | G1/8                                                                                 |
| Pneumatic connection 2                     | G1/8                                                                                 |
| Pneumatic connection 3                     | G1/8                                                                                 |
| Note on materials                          | RoHS-compliant                                                                       |
| Housing material                           | PA-reinforced                                                                        |