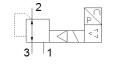
## proportional pressure regulator VPPE-3-1-1/8-10-420-E1-F1A Part number: 8156424







## **Data sheet**

| Feature                                      | Value                                                                  |
|----------------------------------------------|------------------------------------------------------------------------|
| Nominal diameter, pressurisation             | 5 mm                                                                   |
| Nominal diameter, exhaust                    | 2.5 mm                                                                 |
| Variants                                     | Recommended for production facilities for the manufacture of lithium-  |
|                                              | ion batteries                                                          |
| Type of actuation                            | electrical                                                             |
| Sealing principle                            | soft                                                                   |
| Assembly position                            | Any                                                                    |
|                                              | Preferably upright                                                     |
| Design structure                             | Pilot actuated diaphragm regulator                                     |
| Short circuit strength                       | for all electrical connections                                         |
| Safety instructions                          | VPPE 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 display                                                            |
|                                              | 3-digit                                                                |
| Pressure regulation range MPa                | 0.01 1 MPa                                                             |
| Pressure regulation range                    | 0.1 10 bar                                                             |
| Inlet pressure 1                             | 6 11 bar                                                               |
| Supply pressure 1 MPa                        | 0.6 1.1 MPa                                                            |
| Max. pressure hysteresis (MPa)               | 0.005 MPa                                                              |
| Max. pressure hysteresis                     | 0.05 bar                                                               |
| •                                            | 0.725 psi                                                              |
| Standard nominal flow rate                   | 1,250 l/min                                                            |
| Operating voltage range DC                   | 21.6 26.4 V                                                            |
| Max. current consumption                     | 160 mA                                                                 |
| Duty cycle                                   | 100 %                                                                  |
| Max. electrical power consumption            | 4.2 W                                                                  |
| Residual ripple                              | 10 %                                                                   |
| Switch output                                | PNP                                                                    |
| Signal range, analogue output                | 4 - 20 mA                                                              |
| Signal range, analogue input                 | 4 - 20 mA                                                              |
| 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                                      |
| Authorisation                                | RCM Mark                                                               |
|                                              | c UL us - Listed (OL)                                                  |
| KC mark                                      | KC-EMV                                                                 |
| CE mark (see declaration of conformity)      | to EU directive for EMC                                                |
| <i>,</i>                                     | in accordance with EU RoHS directive                                   |
| UKCA marking (see declaration of conformity) | To UK instructions for EMC                                             |
|                                              | To UK RoHS instructions                                                |
| Certificate issuing department               | UL E322346                                                             |
| Corrosion resistance classification CRC      | 2 - Moderate corrosion stress                                          |



| Feature                        | Value                    |
|--------------------------------|--------------------------|
| PWIS conformity                | VDMA24364-B2-L           |
| RSBP classification to CD-0033 | F1a                      |
| Cleanroom class                | ISO class 4              |
| Medium temperature             | 10 50 °C                 |
| Protection class               | IP65                     |
| Ambient temperature            | 0 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                     |
| Mounting type                  | with through hole        |
| 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               | Aluminium, powder-coated |