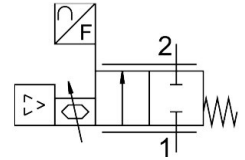


# Mass flow controller (MFC) VEMD-L-6-14-20-D21-M5-1-R1-V4

Part number: 8086472

**FESTO**



## Data sheet

| Feature                             | Value                                                                                                                                                     |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Size                                | 10                                                                                                                                                        |
| Degree of protection                | IP40                                                                                                                                                      |
| Note on degree of protection        | IP51 with horizontal installation                                                                                                                         |
| Flow rate control range             | 0 l/min...20 l/min                                                                                                                                        |
| Note on the flow rate control range | The specified flow control range only applies at room temperature. Above room temperature, a reduction of the max. adjustable flow rate may occur.        |
| Flow direction                      | Non-reversible                                                                                                                                            |
| Operating pressure                  | 0 MPa...0.25 MPa<br>0 bar...2.5 bar                                                                                                                       |
| Overload pressure                   | 0.6 MPa<br>6 bar<br>87 psi                                                                                                                                |
| Burst pressure                      | 1 MPa<br>10 bar<br>145 psi                                                                                                                                |
| Accuracy of flow rate               | ± (4% o.m.v. + 1.25% FS)                                                                                                                                  |
| Repetition accuracy in ± %FS        | 1 %FS                                                                                                                                                     |
| Hysteresis in ± %FS                 | 2.5 %FS                                                                                                                                                   |
| Linearity error FS                  | 2 %                                                                                                                                                       |
| Temperature coefficient             | 0.1 %/K                                                                                                                                                   |
| Valve function                      | 2-way proportional flow control valve                                                                                                                     |
| Nominal width                       | 1.4 mm                                                                                                                                                    |
| Pneumatic connection 1              | Internal thread M5                                                                                                                                        |
| Pneumatic connection 2              | Internal thread M5                                                                                                                                        |
| Medium                              | Argon<br>Compressed air to ISO 8573-1:2010 [5:4:1]<br>Carbon dioxide<br>Oxygen (oxygen applications according to IEC 60601-1 only on request)<br>Nitrogen |
| Information on medium               | Operation with oil lubrication not possible                                                                                                               |
| Special features                    | Oxygen-compatible as per DIN EN 1797                                                                                                                      |
| Ambient conditions                  | Not suitable for use in environments enriched with oxygen according to IEC 60601-1                                                                        |
| Duty cycle                          | 100%                                                                                                                                                      |

| Feature                                      | Value                                                 |
|----------------------------------------------|-------------------------------------------------------|
| Temperature of medium                        | 5 °C...40 °C                                          |
| Ambient temperature                          | 0 °C...50 °C                                          |
| Storage temperature                          | -20 °C...70 °C                                        |
| Nominal operating voltage DC                 | 24 V                                                  |
| DC operating voltage range                   | 22 V...26.4 V                                         |
| Max. current consumption                     | 40 mA                                                 |
| Max. electrical power consumption            | 1 W                                                   |
| Electrical connection                        | 4-pin<br>M8x1 A-coded as per EN 61076-2-104<br>Plug   |
| Reference value                              | 0.2 - 10 V                                            |
| Analog input signal range                    | 0.2 - 10 V                                            |
| Analog output signal range                   | 0.2 - 10 V                                            |
| Reverse polarity protection                  | for operating voltage connections                     |
| Product weight                               | 92 g                                                  |
| Seals material                               | EPDM<br>NBR                                           |
| Cover material                               | PA-reinforced                                         |
| Note on materials                            | RoHS compliant                                        |
| Dimensions W x L x H                         | 37 mm x 70 mm x 31 mm                                 |
| Type of mounting                             | Direct fastening via thread                           |
| Mounting position                            | Any                                                   |
| Certification                                | RCM compliance mark                                   |
| Conforms to standard                         | EN 61000-6-2 (EMC)<br>EN 61000-6-3 (EMC)              |
| KC characters                                | KC-EMV                                                |
| CE marking (see declaration of conformity)   | As per EU EMC directive<br>As per EU RoHS directive   |
| UKCA marking (see declaration of conformity) | To UK instructions for EMC<br>To UK RoHS instructions |
| LABS (PWIS) conformity                       | VDMA24364 Zone III                                    |