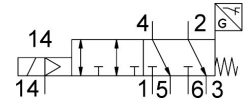


# Control block VOFT-L14-M62-MZS-G18-1M8RL-APC

Part number: 8219320

**FESTO**



 General operating condition

## Data sheet

| Feature                                               | Value                                                                |
|-------------------------------------------------------|----------------------------------------------------------------------|
| Valve function                                        | 6/2-way valve, single solenoid                                       |
| Type of actuation                                     | Electrical                                                           |
| Construction width                                    | 14.5 mm                                                              |
| Nominal flow rate standardised according to ISO 8778  | 830 l/min                                                            |
| Standard nominal flow rate (standardised to DIN 1343) | 770 l/min                                                            |
| pneumatic working port                                | G1/8                                                                 |
| Operating voltage                                     | 24 V DC                                                              |
| Operating pressure                                    | 0 MPa ... 1 MPa                                                      |
| Operating pressure                                    | 0 bar ... 10 bar                                                     |
| Operating pressure                                    | 0 psi ... 145 psi                                                    |
| Design                                                | Piston gate valve                                                    |
| Type of reset                                         | Mechanical spring                                                    |
| Degree of protection                                  | IP65                                                                 |
| 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                                              |
| Exhaust-air function                                  | Cannot be throttled                                                  |
| Sealing principle                                     | Soft                                                                 |
| Mounting position                                     | Any                                                                  |
| Conforms to standard                                  | EN 60947-5-2                                                         |
| Manual override                                       | Concealed                                                            |
| Type of piloting                                      | Piloted                                                              |
| Pilot air supply                                      | External                                                             |
| Flow direction                                        | Non-reversible                                                       |
| Symbol                                                | 00997535                                                             |
| Measuring principle                                   | Inductive                                                            |
| lap                                                   | Underlap                                                             |
| Reverse polarity protection                           | For all electrical connections                                       |
| Reverse polarity protection sensor                    | For all electrical connections                                       |
| Note on forced dynamization                           | Current information on this topic can be found in Technical Report V |
| Switching position indicator                          | LED                                                                  |
| Signal status display                                 | Yellow LED, valve control                                            |
| Switching position sensing                            | Normal position with sensor                                          |
| Switching status display sensor                       | LED                                                                  |
| Pilot pressure                                        | 0.35 MPa ... 0.8 MPa                                                 |
| Pilot pressure                                        | 3.5 bar ... 8 bar                                                    |

| Feature                                                   | Value                                                                            |
|-----------------------------------------------------------|----------------------------------------------------------------------------------|
| b value                                                   | 0.42                                                                             |
| C value                                                   | 3 l/sbar                                                                         |
| Switching time off                                        | 65 ms                                                                            |
| Switching time on                                         | 14 ms                                                                            |
| Valve - sensor switching time on                          | 11 ms                                                                            |
| Valve - sensor switching time off                         | 70 ms                                                                            |
| Operational voltage range DC                              | 24 V                                                                             |
| Duty cycle                                                | 100%                                                                             |
| Max. positive test pulse with 0 signal                    | 800 µs                                                                           |
| Max. negative test pulse with 1 signal                    | 400 µs                                                                           |
| Nominal operating voltage DC                              | 24 V                                                                             |
| Permissible voltage fluctuations                          | -10%                                                                             |
| Operating medium                                          | Compressed air to ISO 8573-1:2010 [7:4:4]                                        |
| Note on operating and pilot medium                        | Lubricated operation not possible                                                |
| Vibration resistance                                      | Transport application test with severity level 2 to FN 942017-4 and EN 60068-2-6 |
| Shock resistance                                          | Shock test with severity level 2 to FN 942017-5 and EN 60068-2-27                |
| Corrosion resistance class CRC                            | 2 - Moderate corrosion stress                                                    |
| LABS (PWIS) conformity                                    | VDMA24364 zone III                                                               |
| Cleanroom suitability, measured according to ISO 14644-14 | Class 5 according to ISO 14644-1                                                 |
| Storage temperature                                       | -10 °C ... 60 °C                                                                 |
| Media temperature                                         | -5 °C ... 50 °C                                                                  |
| Sound pressure level                                      | 64 dB(A)                                                                         |
| Protection against direct and indirect contact            | PELV                                                                             |
| Pilot medium                                              | Compressed air to ISO 8573-1:2010 [7:4:4]                                        |
| Ambient temperature                                       | -5 °C ... 50 °C                                                                  |
| Nominal altitude of use                                   | 1000 m in accordance with VDE 0580                                               |
| Product weight                                            | 140 g                                                                            |
| Operating voltage range, DC sensor                        | 10 V ... 30 V                                                                    |
| Short-circuit strength sensor                             | Yes                                                                              |
| Idle current sensor                                       | ≤10 mA                                                                           |
| Max. output current sensor                                | ≤200 mA                                                                          |
| Max. switching frequency sensor                           | 5000 Hz                                                                          |
| Residual ripple sensor                                    | ±10%                                                                             |
| Voltage drop sensor                                       | ≤2 V                                                                             |
| Electrical connection                                     | 3-pin<br>M8x1 A-encoded to EN 61076-2-104<br>Plug                                |
| Sensor connection                                         | Cable<br>3-pin<br>2.5 m                                                          |
| Type of mounting                                          | Via through-hole for M4 screw                                                    |
| Pilot air port 14                                         | M5                                                                               |
| Pneumatic connection, port 1                              | G1/8                                                                             |
| Pneumatic connection, port 2                              | G1/8                                                                             |
| Pneumatic connection, port 3                              | G1/8                                                                             |
| Pneumatic connection, port 4                              | G1/8                                                                             |
| Pneumatic connection, port 5                              | G1/8                                                                             |
| Pneumatic connection 6                                    | G1/8                                                                             |
| Note on materials                                         | RoHS compliant                                                                   |
| Material seals                                            | Fluoro rubber<br>HNBR<br>NBR                                                     |
| Material housing                                          | Wrought aluminium alloy                                                          |
| Material cable sheath                                     | PVC                                                                              |

| Feature                    | Value                           |
|----------------------------|---------------------------------|
| Material screws            | Steel, chemically nickel-plated |
| Switching element function | N/C contact                     |