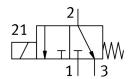
## Media separated solenoid valve VYKB-F12-M32-20-PE-1HPS

**FESTO** 

Part number: 8140318





## **Data sheet**

General operating condition

| Rocker valve with diaphragm seal Sealing principle Soft Materials in contact with the media EPDM PEEK Valve function 3/2, open/closed, monostable Nominal width 2 mm Flow direction Non-reversible Actuation type Electrical Flype of control Reset method Mechanical spring Manual override Mounting position Any Flype of mounting Electrical connection 1, connection type Electrical connection 1, connection type Electrical connection 1, connection type Electrical connection 1, connection technology Port pattern IIP Size 12 Fluid connector Flange Medium Gaseous media Information on medium Observer resistance of materials that come into contact with media Maximum particle size 5 µm Internal volume 60 µl Flemperature of ilquid media Gaseous media Internal rollume 0° C 50 ° C Ambient temperature 0° C 50 ° C Medium pressure 0° C 5  | Feature  | Value  |
|---|--|--|
| Materials in contact with the media  EPDM PEEK  Valve function  Nominal width  2 mm  Flow direction  Non-reversible  Electrical  Type of control  Reset method  Manual override  Mounting position  Any  Type of mounting  Electrical connection 1, connection type  Electrical connection 1, connection technology  Port pattern HP  Size  12  Flange  Liquid media  Gaseous media  Information on medium  Observe resistance of materials that come into contact with media Maximum particle size 5 µm  Internal volume  60 µl  Temperature of fliquid media  0 °C 50 °C  Ambient temperature  0 °C 50 °C  Ambient temperature  0 °C 50 °C  Medium pressure  0.075 MPa 0.3 MPa  Medium pressure  0.45 MPa  Overload pressure  0.45 MPa  Overload pressure  65.25 psi  DO operating voltage fluctuations  +/-10 %  | Structural design                              |  |
| PEEK 3/2, open/closed, monostable 3/2, open/closed, monostable Nominal width 2 mm Flow direction Non-reversible Actuation type Electrical Type of control Mechanical spring Mounting position Any Type of mounting Electrical connection 1, connection type Electrical connection 1, connection technology For pattern HP Size 12 Fluid connector Flange Medium Uiquid media Gaseous media Information on medium Observe resistance of materials that come into contact with media Maximum particle size 5 µm Internal volume Femperature of medium O° C 50 °C Ambient temperature O° C 50 °C Storage temperature O° C 50 °C Ambient temperature O° C 50 °C Ambient pressure O075 MPa 0.3 MPa Medium pressure O75 Mpa 0.3 MPa Medium pressure O75 Spa 3 Spa Medium pressure O75 Spa 3 Spa Overload pressure O75 Spa 3.5 psi Overload pressure  | Sealing principle                              | Soft   |
| Nominal width 2 mm Flow direction Non-reversible Actuation type Electrical Type of control Direct Reset method Mechanical spring Manual override None Mounting position Any Type of mounting Electrical connection 1, connection type Cable with plug Electrical connection 1, connection type Ileutrical connection 1, connection technology Port pattern HP Size 12 Fluid connector Flange Medium Liquid media Gaseous media Information on medium Observe resistance of materials that come into contact with media Maximum particle size 5 µm Internal volume 60 µl Temperature of liquid media 0 °C 50 °C Temperature of liquid media 0 °C 50 °C Storage temperature 0 °C 50 °C Storage temperature 0 °C 50 °C Medium pressure 0.075 MPa 0.3 MPa Medium pressure 0.075 MPa 0.3 MPa Medium pressure 0.45 MPa Overload pressure 0.45 MPa Overload pressure 4.5 bar Overload pressure 65.25 psi DC operating voltage range 24 V Permissible voltage fluctuations +/- 10 %   | Materials in contact with the media            |  |
| Flow direction Non-reversible Actuation type Electrical Type of control Reset method Mechanical spring Manual override Mounting position Any Type of mounting With through-hole for M3 screw Electrical connection 1, connection type Electrical connection 1, connection technology Port pattern HP Size Fluid connector Flange Liquid media Gaseous media Information on medium Observe resistance of materials that come into contact with media Maximum particle size \$ \mu m Maximum particle siz | Valve function                                 | 3/2, open/closed, monostable                             |
| Actuation type  Electrical  Direct  Reset method  Mechanical spring  Manual override  Mounting position  Mounting position  Type of mounting  Electrical connection 1, connection type  Electrical connection 1, connection technology  Port pattern HP  Size  12  Flange  Eliquid media Gaseous media  Information on medium  Observe resistance of materials that come into contact with media Maximum particle size 5 µm  Internal volume  60 µl  Temperature of flequid media  O °C 50 °C  Ambient temperature  Storage temperature  -20 °C 50 °C  Medium pressure  -0.075 MPa 0.3 MPa  Medium pressure  0.45 MPa  Overload pressure  0.45 MPa  Overload pressure  0.50 per missible voltage fluctuations  4/- 10 %   | Nominal width                                  | 2 mm   |
| Type of control  Reset method  Mechanical spring  Manual override  Mounting position  Any  Type of mounting  Electrical connection 1, connection type  Electrical connection 1, connection technology  Port pattern HP  Size  12  Fluid connector  Flange  Medium  Liquid media Gaseous media  Information on medium  Observe resistance of materials that come into contact with media Maximum particle size 5 μm  Internal volume  60 μl  Temperature of medium  ο °C 50 °C  Temperature of liquid media Ο °C 50 °C  Storage temperature  -20 °C 70 °C  Medium pressure  -0.075 MPa 0.3 MPa  Medium pressure  0.45 MPa  Overload pressure  Overload pressure  0.45 MPa  Overload pressure  0.60 permissible voltage fluctuations  +/- 10 %  | Flow direction                                 | Non-reversible   |
| Reset method Manual override Mounting position Mounting position Mounting position Mounting position Mounting position Mounting With through-hole for M3 screw Electrical connection 1, connection type Electrical connection 1, connection technology Port pattern HP  Size 12 Fluid connector Flange Liquid media Gaseous media Information on medium Observe resistance of materials that come into contact with media Maximum particle size 5 µm Internal volume 60 µl Temperature of medium 0 °C 50 °C Temperature of Iiquid media 0 °C 50 °C Ambient temperature 0 °C 50 °C  Medium pressure 0 °C 70 °C Medium pressure 0.0.75 MPa 0.3 MPa Medium pressure 0.75 bar 3 bar Medium pressure 0.4.5 MPa Overload pressure 4.5 bar Overload pressure 65.25 psi DC operating voltage range 4.7 10 %   | Actuation type                                 | Electrical   |
| Manual override  Mounting position  Any  Type of mounting  With through-hole for M3 screw  Electrical connection 1, connection type  Cable with plug  Electrical connection 1, connection technology  Port pattern HP  Size  12  Fluid connector  Flange  Liquid media Gaseous media  Information on medium  Observe resistance of materials that come into contact with media Maximum particle size 5 µm  Internal volume  60 µl  Temperature of medium  0° C 50 °C  Ambient temperature  0° C 50 °C  Storage temperature  0° C 50 °C  Medium pressure  0° C 70 °C  Medium pressure  0° C 50 °C  O.75 MPa 0.3 MPa  Medium pressure  0.45 MPa  Overload pressure  4.5 bar  Overload pressure  65.25 psi  DC operating voltage range  24 V  Permissible voltage fluctuations  4-7.10 %   | Type of control                                | Direct   |
| Mounting position Type of mounting With through-hole for M3 screw Electrical connection 1, connection type Electrical connection 1, connection technology Port pattern HP Size 12 Fluid connector Flange Medium Liquid media Gaseous media Information on medium Observe resistance of materials that come into contact with media Maximum particle size 5 μm Internal volume 60 μl Temperature of medium 0° C 50 ° C Temperature of liquid media 0° C 50 ° C Storage temperature 0° C 50 ° C Medium pressure 0.075 MPa 0.3 MPa Medium pressure 0.075 bar 3 bar Medium pressure 0.45 bar Overload pressure 4.5 bar Overload pressure 65.25 psi DC operating voltage range 4/- 10 %  | Reset method                                   | Mechanical spring  |
| Type of mounting  With through-hole for M3 screw  Electrical connection 1, connection type  Electrical connection 1, connection technology  Port pattern HP  Size  12  Flunge  Medium  Liquid media Gaseous media  Information on medium  Observe resistance of materials that come into contact with media Maximum particle size 5 μm  Internal volume  60 μl  Temperature of medium  0 °C 50 °C  Temperature of liquid media  0 °C 50 °C  Storage temperature  0 °C 50 °C  Medium pressure  0.075 MPa 0.3 MPa  Medium pressure  0.045 MPa  Overload pressure  0.45 MPa  Overload pressure  4.5 bar  Overload pressure  5.25 psi  DC operating voltage range  4/-10 %  | Manual override                                | None   |
| Electrical connection 1, connection type  Electrical connection 1, connection technology  Port pattern HP  Size  12  Fluid connector  Medium  Liquid media Gaseous media  Unformation on medium  Observe resistance of materials that come into contact with media Maximum particle size 5 µm  Internal volume  60 µl  Temperature of medium  0 °C 50 °C  Temperature of liquid media  0 °C 50 °C  Storage temperature  0 °C 50 °C  Medium pressure  0.075 MPa 0.3 MPa  Medium pressure  0.075 MPa 0.3 MPa  Medium pressure  0.45 MPa  Overload pressure  0.45 MPa  Overload pressure  4.5 bar  Overload pressure  Coperating voltage range  24 V  Permissible voltage fluctuations  **Cable with plug  Electrical connection 1, conne  | Mounting position                              | Any  |
| Electrical connection 1, connection technology  Port pattern HP  Size  12  Fluid connector  Flange  Liquid media Gaseous media  Information on medium  Observe resistance of materials that come into contact with media Maximum particle size 5 μm  Internal volume  60 μl  Temperature of medium  0° C 50° C  Temperature of liquid media  0° C 50° C  Ambient temperature  0° C 50° C  Storage temperature  20° C 70° C  Medium pressure  -0.075 MPa 0.3 MPa  Medium pressure  -0.75 bar 3 bar  Medium pressure  0.45 MPa  Overload pressure  0.45 MPa  Overload pressure  4.5 bar  Overload pressure  0.50 perating voltage range  24 V  Permissible voltage fluctuations  +/- 10 %   | Type of mounting                               | With through-hole for M3 screw                           |
| Fluid connector  Flange  Medium  Liquid media Gaseous media  Information on medium  Observe resistance of materials that come into contact with media Maximum particle size 5 μm  Internal volume  60 μl  Temperature of medium  0°C 50 °C  Temperature of liquid media  0°C 50 °C  Ambient temperature  0°C 50 °C  Storage temperature  20 °C 70 °C  Medium pressure  -0.075 MPa 0.3 MPa  Medium pressure  -0.75 bar 3 bar  Medium pressure  0 verload pressure  0.45 MPa  Overload pressure  0.45 MPa  Overload pressure  5.25 psi  DC operating voltage range  24 V  Permissible voltage fluctuations  +/- 10 %  | Electrical connection 1, connection type       | Cable with plug  |
| Fluid connector  Medium  Liquid media Gaseous media  Information on medium  Observe resistance of materials that come into contact with media Maximum particle size 5 μm  Internal volume  60 μl  Temperature of medium  0° C 50° C  Temperature of liquid media  0° C 50° C  Ambient temperature  0° C 50° C  Storage temperature  -20° C 70° C  Medium pressure  -0.075 MPa 0.3 MPa  Medium pressure  0° 5 bar 3 bar  Medium pressure  10.875 psi 43.5 psi  Overload pressure  0.45 MPa  Overload pressure  4.5 bar  Overload pressure  5.25 psi  DC operating voltage range  24 V  Permissible voltage fluctuations  Flange  Observe resistance of materials that come into contact with media Gaseous media  Doserve resistance of materials that come into contact with media Maximum particle size 5 μm  Assumum particle size 5 μm  Observe resistance of materials that come into contact with media Maximum particle size 5 μm  Observe resistance of materials that come into contact with media Maximum particle size 5 μm  Observe resistance of materials that come into contact with media Maximum particle size 5 μm  Observe resistance of materials that come into contact with media Maximum particle size 5 μm  Observe resistance of materials that come into contact with media Maximum particle size 5 μm  Observe resistance of materials that come into contact with media Maximum particle size 5 μm  Observe resistance of materials that come into contact with media Maximum particle size 5 μm  Observe resistance of materials that come into contact with media Maximum particle size 5 μm  Observe resistance of materials that come into contact with media Maximum particle size 5 μm  Observe resistance of materials that come into contact with media Assume particle size 5 μm  Observe resistance of materials that come into contact with media Assume particle size 5 μm  Observe resistance of μμα του συστεία μα του συστεία μ   | Electrical connection 1, connection technology | Port pattern HP  |
| Medium  Liquid media Gaseous media  Information on medium  Observe resistance of materials that come into contact with media Maximum particle size 5 μm  Internal volume  60 μl  Temperature of medium  0° C 50° C  Temperature of liquid media  0° C 50° C  Ambient temperature  0° C 50° C  Storage temperature  -20° C 70° C  Medium pressure  -0.075 MPa 0.3 MPa  Medium pressure  0.045 MPa  Overload pressure  0.45 bar  Overload pressure  4.5 bar  Overload pressure  5.25 psi  DC operating voltage range  24 V  Permissible voltage fluctuations  D Observe resistance of materials that come into contact with media Gaseous media  Observe resistance of materials that come into contact with media Maximum particle size 5 μm  Over 50° C  0° C 50° C  1° C 50°   | Size   | 12   |
| Gaseous media         Information on medium       Observe resistance of materials that come into contact with media Maximum particle size 5 μm         Internal volume       60 μl         Temperature of medium       0 °C 50 °C         Temperature of liquid media       0 °C 50 °C         Ambient temperature       0 °C 50 °C         Storage temperature       -20 °C 70 °C         Medium pressure       -0.75 MPa 0.3 MPa         Medium pressure       -0.75 bar 3 bar         Medium pressure       -10.875 psi 43.5 psi         Overload pressure       0.45 MPa         Overload pressure       4.5 bar         Overload pressure       65.25 psi         DC operating voltage range       24 V         Permissible voltage fluctuations       +/- 10 %  | Fluid connector                                | Flange   |
| Internal volume60 μlTemperature of medium0 °C 50 °CTemperature of liquid media0 °C 50 °CAmbient temperature0 °C 50 °CStorage temperature-20 °C 70 °CMedium pressure-0.075 MPa 0.3 MPaMedium pressure-0.75 bar 3 barMedium pressure-10.875 psi 43.5 psiOverload pressure0.45 MPaOverload pressure4.5 barOverload pressure4.5 barOverload pressure5.25 psiDC operating voltage range24 VPermissible voltage fluctuations+/- 10 %  | Medium   |  |
| Temperature of medium  O °C 50 °C  Temperature of liquid media O °C 50 °C  Ambient temperature O °C 50 °C  Storage temperature -20 °C 70 °C  Medium pressure -0.075 MPa 0.3 MPa  Medium pressure -0.75 bar 3 bar  Medium pressure -10.875 psi 43.5 psi  Overload pressure 0.45 MPa  Overload pressure 4.5 bar  Overload pressure  Overload pressure 4.5 bar  Overload pressure  Overload pressure 4.5 bar   | Information on medium                          |  |
| Temperature of liquid media 0 °C 50 °C  Ambient temperature 0 °C 50 °C  Storage temperature -20 °C 70 °C  Medium pressure -0.075 MPa 0.3 MPa  Medium pressure -0.75 bar 3 bar  Medium pressure -10.875 psi 43.5 psi  Overload pressure 0.45 MPa  Overload pressure 4.5 bar  Overload pressure 4.5 bar  Overload pressure 5.25 psi  DC operating voltage range 24 V  Permissible voltage fluctuations +/- 10 %   | Internal volume                                | 60 μl  |
| Ambient temperature 0 °C 50 °C  Storage temperature -20 °C 70 °C  Medium pressure -0.075 MPa 0.3 MPa  Medium pressure -0.75 bar 3 bar  Medium pressure -10.875 psi 43.5 psi  Overload pressure 0.45 MPa  Overload pressure 4.5 bar  Overload pressure 65.25 psi  DC operating voltage range 24 V  Permissible voltage fluctuations +/- 10 %   | Temperature of medium                          | 0 ℃ 50 ℃   |
| Storage temperature -20 °C 70 °C  Medium pressure -0.075 MPa 0.3 MPa  Medium pressure -0.75 bar 3 bar  Medium pressure -10.875 psi 43.5 psi  Overload pressure 0.45 MPa  Overload pressure 4.5 bar  Overload pressure 65.25 psi  DC operating voltage range 24 V  Permissible voltage fluctuations +/- 10 %   | Temperature of liquid media                    | 0 ℃ 50 ℃   |
| Medium pressure -0.075 MPa 0.3 MPa Medium pressure -0.75 bar 3 bar Medium pressure -10.875 psi 43.5 psi Overload pressure 0.45 MPa Overload pressure 4.5 bar Overload pressure 65.25 psi DC operating voltage range Permissible voltage fluctuations +/- 10 %   | Ambient temperature                            | 0 °C 50 °C   |
| Medium pressure -0.75 bar 3 bar  Medium pressure -10.875 psi 43.5 psi  Overload pressure 0.45 MPa  Overload pressure 4.5 bar  Overload pressure 65.25 psi  DC operating voltage range 24 V  Permissible voltage fluctuations +/- 10 %   | Storage temperature                            | -20 °C 70 °C   |
| Medium pressure -10.875 psi 43.5 psi Overload pressure 0.45 MPa Overload pressure 4.5 bar Overload pressure 65.25 psi DC operating voltage range 24 V Permissible voltage fluctuations +/- 10 %   | Medium pressure                                | -0.075 MPa 0.3 MPa                                       |
| Overload pressure 0.45 MPa Overload pressure 4.5 bar Overload pressure 65.25 psi DC operating voltage range 24 V Permissible voltage fluctuations +/- 10 %  | Medium pressure                                | -0.75 bar 3 bar  |
| Overload pressure 4.5 bar  Overload pressure 65.25 psi  DC operating voltage range 24 V  Permissible voltage fluctuations +/- 10 %  | Medium pressure                                | -10.875 psi 43.5 psi                                     |
| Overload pressure 65.25 psi DC operating voltage range 24 V Permissible voltage fluctuations +/- 10 %   | Overload pressure                              | 0.45 MPa   |
| DC operating voltage range 24 V Permissible voltage fluctuations +/- 10 %   | Overload pressure                              | 4.5 bar  |
| Permissible voltage fluctuations +/- 10 %   | Overload pressure                              | 65.25 psi  |
| -   | DC operating voltage range                     | 24 V   |
| Coil characteristics 24 V DC: low-current phase 1 W, high-current phase 5.2 W   | Permissible voltage fluctuations               | +/- 10 %   |
|   | Coil characteristics                           | 24 V DC: low-current phase 1 W, high-current phase 5.2 W |

| Feature                                      | Value  |
|--|--|
| Duty cycle                                   | 100%   |
| Max. switching frequency                     | 2 Hz   |
| On switching time                            | ≤15 ms   |
| Switching time off                           | ≤15 ms   |
| Flow rate Kv                                 | 0.056 m³/h   |
| Symbol                                       | 00997353   |
| Housing material                             | PEEK   |
| Diaphragm material                           | EPDM   |
| Seals material                               | EPDM   |
| Note on materials                            | RoHS-compliant                                     |
| LABS (PWIS) conformity                       | VDMA24364 zone III                                 |
| Product weight                               | 40 g   |
| Degree of protection                         | IP40   |
| Corrosion resistance class (CRC)             | 0 - No corrosion stress                            |
| CE marking (see declaration of conformity)   | As per EU EMC directive As per EU RoHS directive   |
| UKCA marking (see declaration of conformity) | To UK instructions for EMC To UK RoHS instructions |