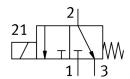
## Media separated solenoid valve VYKB-F10-M32-16-PF-1HPA

**FESTO** 

Part number: 8122812





## **Data sheet**

General operating condition

| Rocker valve with diaphragm seal Soft Materials in contact with the media FFPM PEEK Valve function 3/2, open/closed, monostable Vominal width 1.6 mm Flow direction Non-reversible Actuation type Electrical Five of control Resear method Manual override Mounting position Any Vipe of mounting Electrical connection 1, connection technology Port pattern HP Flow Electrical connection 1, connection technology Port pattern HP Flow Electrical connection 1, connection technology Port pattern HP Flange Hedium Gaseous media Idjud media Gaseous media Information on medium Discrete resistance of materials that come into contact with media Maximum particle size 5 µm Internal volume  15 µl Femperature of medium Porc 50 °C Femperature of flequid media Ambient temperature Flowedium pressure  0.075 MPa 10 MPa Medium pressure Medium pressure Medium pressure Medium pressure  0.075 MPa 10 MPa Medium pressure Medium pressure Medium pressure  0.075 MPa 10 MPa Medium pressure Medium pressure  0.3 MPa Diverload pressure 3 Dar Overload pressure 3 Doverload pressure 3.5 psi 20 Overload pressure 3.5 psi 20 Overload pressure 3.5 psi 20 Overload pressure 4.5 psi 20 Overload pressure 5.0 operating voltage fluctuations 4,7-10 %   | Feature  | Value  |
|---|--|--|
| Materials in contact with the media  FFPM PEEK  //alve function  3/2, open/closed, monostable  Nominal width  1.6 mm  Non-reversible  Electrical  Nope of control  Reset method  Mechanical spring  Mounting position  Mone  Mounting position  Any  With through-hole for M2 screw  Electrical connection 1, connection type  Electrical connector  Flange  Hujuld 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 ilquid media  O °C 50 °C  Femperature of ilquid media  O °C 50 °C  Ambient temperature  O °C 50 °C  O °C 50 °C  Medium pressure  O.075 MPa O 1 MPa  Medium pressure  O.075 MPa O 1 MPa  Medium pressure  Overload pressure  O 1.0875 psi 1 4.5 psi  Overload pressure  O 20 Overload pressure  43.5 psi  OC operating voltage fluctuations  +/-10 %  | Structural design                              |  |
| PEEK 3/2, open/closed, monostable 3/2, open/closed, monostable Nominal width 1.6 mm Non-reversible Actuation type Electrical Type of control Reset method Mechanical spring Manual override Mounting position Rype of mounting With through-hole for M2 screw Electrical connection 1, connection type Electrical connection 1, connection type Electrical connection 1, connection type Electrical connection 1, connection technology Port pattern HP Size 10 Fluid connector Flange Hedium Uquid media Gaseous media Information on medium Observe resistance of materials that come into contact with media Maximum particle size 5 µm Internal volume 35 µl Femperature of liquid media O °C 50 °C Ambient temperature O °C 50 °C Ambient temperature O °C 50 °C Wedium pressure O.075 Par 0.1 MPa Medium pressure O.075 Par 0.1 MPa Overload pressure Overload pressure 0.3 MPa Overload pressure 43.5 psi   | Sealing principle                              | Soft   |
| Nominal width  1.6 mm  Non-reversible  Electrical  Non-reversible  Electrical  Fype of control  Mechanical spring  Manual override  Mounting position  Any  Fype of mounting  With through-hole for M2 screw  Cable with plug  Electrical connection 1, connection type  Electrical connection 1, connection type  Electrical connection 1, connection technology  Port pattern HP  Sisize  10  Flange  Hedium  Liquid media  Gaseous media  nformation on medium  Observe resistance of materials that come into contact with media  Maximum particle size 5 µm  Internal volume  35 µl  Femperature of liquid media  0 °C 50 °C  Ambient temperature  O °C 50 °C  Storage temperature  O °C 50 °C  Wedium pressure  O.075 MPa 0.1 MPa  Medium pressure  O.075 MPa 0.1 MPa  Medium pressure  O.075 MPa 0.1 MPa  Medium pressure  O.075 MPa 0.1 MPa  Overload pressure  Overload pressure  3 bar  Overload pressure  4.3.5 psi  Ocoperating voltage range  44.5 psi  Ocoperating voltage range  47.5 psi  Ocoperating voltage range  47.5 psi  Ocoperating voltage fluctuations  47.10 %  | Materials in contact with the media            |  |
| Non-reversible Actuation type Control Direct Reset method Mechanical spring Manual override Mounting position Any Rype of mounting With through-hole for M2 screw Cable with plug Electrical connection 1, connection type Cable with plug Electrical connection 1, connection technology Port pattern HP Size 10 Hange Hedium Liquid media Gaseous media nformation on medium Observe resistance of materials that come into contact with media Maximum particle size 5 μm Internal volume 35 μl Femperature of medium O° C 50 °C Ambient temperature O° C 50 °C Medium pressure O° C 50 °C Medium pressure Overload pressure Overloa          | Valve function                                 | 3/2, open/closed, monostable                             |
| Electrical  Type of control  Reset method  Mechanical spring  Mounting position  Mounting With through-hole for M2 screw  Cable with plug  Electrical connection 1, connection type  Cable with plug  Electrical connection 1, connection technology  Port pattern HP  Size  10  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  Medium  Femperature of medium  O° C 50 °C  Ambient temperature  O° C 50 °C  Medium pressure  O.075 MPa 0.1 MPa  Medium pressure  Overload pressure  10.875 psi 14.5 psi  Overload pressure  Oxerload pressure  43.5 psi  Oxerload pressure  43.5 psi  Oxerload pressure  43.5 psi Oxerload pressure  44.5 psi Oxerload pressure  43.5 psi Oxerload pressure  44.5 psi Oxerload pressure  44.5 psi Oxerload pressure  43.5 psi Oxerload pressure  44.5 psi   | Nominal width                                  | 1.6 mm   |
| Direct Reset method Mechanical spring Manual override None Mounting position Any Rype of mounting Relectrical connection 1, connection type Cable with plug Electrical connection 1, connection technology Port pattern HP Size 10 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 35 μl Femperature of medium O° C 50 °C Itemperature of liquid media O° C 50 °C Storage temperature Storage temperature O° C 50 °C Overload pressure Overload pressure Overload pressure Overload pressure Overload pressure Overload pressure 43.5 psi Overload pressure Overload p             | Flow direction                                 | Non-reversible   |
| Reset method Manual override Mounting position Mounting position Mounting position Mounting position Mounting position Mith through-hole for M2 screw Electrical connection 1, connection type Electrical connection 1, connection type Electrical connection 1, connection technology Port pattern HP Electrical connector Flange Electrical connector Flange Electrical connector Medium Disperse resistance of materials that come into contact with media Gaseous media Maximum particle size 5 µm Information on medium Observe resistance of materials that come into contact with media Maximum particle size 5 µm Internal volume Medium O°C 50 °C Mounting of Medium pressure O.075 MPa 0.1 MPa Medium pressure O.075 MPa 0.1 MPa Medium pressure O.075 MPa 1 bar Medium pressure O.075 MPa 14.5 psi Overload pressure O.3 MPa Overload pressure O.3 MPa Overload pressure O.45 psi Occoperating voltage range Occoperating voltage fluctuations  +/-10 %  | Actuation type                                 | Electrical   |
| Manual override Mounting position Mounting With through-hole for M2 screw Cable with plug Electrical connection 1, connection type Cable with plug Port pattern HP  Size 10 Flange Hudid connector Flange Medium Caseous media Gaseous media Observe resistance of materials that come into contact with media Maximum particle size 5 μm  Maximum particle size 5 μm  Maximum particle size 5 μm  Mounternal volume Mounting Position Mounting Mounting Position Mounting Position Mounting Mounting Position Mounting Position Mounting Position Mounting Mo | Type of control                                | Direct   |
| Mounting position  Any  Fype of mounting  Electrical connection 1, connection type  Electrical connection 1, connection type  Electrical connection 1, connection technology  Port pattern HP  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  Ambient temperature of fliquid media O°C 50 °C  Foregature of liquid media O°C 50 °C  Storage temperature  O°C 50 °C  Wedium pressure  O.075 MPa 0.1 MPa  Medium pressure  O.3 MPa  Overload pressure  O.3 MPa  Overload pressure  Journal of the size of medium  O'C 50 °C  O  | Reset method                                   | Mechanical spring  |
| With through-hole for M2 screw  Electrical connection 1, connection type  Electrical connection 1, connection technology  Port pattern HP  Size  10  Flange  Medium  Liquid media Gaseous media  Naximum particle size 5 μm  Information on medium  O° C 50 °C  Femperature of medium  O° C 50 °C  Ambient temperature  O° C 50 °C  Medium pressure  O.075 MPa 0.1 MPa  Medium pressure  O.075 MPa 0.1 MPa  Medium pressure  O.3 MPa  Overload pressure  O.3 MPa  Overload pressure  O.3 MPa  OC operating voltage range  24 V  Permissible voltage fluctuations  Particle size range   | Manual override                                | None   |
| Cable with plug Electrical connection 1, connection type Electrical connection 1, connection technology Port pattern HP Size 10 Flunge Medium Liquid media Gaseous media Observe resistance of materials that come into contact with media Maximum particle size 5 µm Information on medium O° 50 °C Imperature of medium O° 50 °C Imperature of liquid media O° 50 °C O° 50 °  | Mounting position                              | Any  |
| Port pattern HP  Size 10  Flange  Liquid media Gaseous media  nformation on medium Observe resistance of materials that come into contact with media Maximum particle size 5 μm  nternal volume 35 μl  Femperature of medium 0 °C 50 °C  Femperature of liquid media 0 °C 50 °C  Ambient temperature 0 °C 50 °C  Storage temperature 20 °C 50 °C  Wedium pressure -0.075 MPa 0.1 MPa  Medium pressure -0.75 bar 1 bar  Medium pressure -0.3 MPa  Doerload pressure -0.3 MPa  Doerload pressure -0.3 MPa  Occurrioad pressure -0.4 MPa  Occurrioad pressure -0.4 MPa  Occurrioad pressure -0.3 MPa  Occurrioad pressure -0.3 MPa  Occurrioad pressure -0.3 MPa  Occurrioad pressure -0.4 MPa  Oc                         | Type of mounting                               | With through-hole for M2 screw                           |
| Flange Medium Fluid connector Flange Medium Cobserve 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  Internal volume Size Fun  The fremperature of medium Or C 50 °C  The fremperature of liquid media Or C 50 °C  Ambient temperature Or C 50 °C  Storage temperature Or C 70 °C  Medium pressure Or C 70 °C  Medium pressure Or C 75 MPa 0.1 MPa  Medium pressure Overload pressure                        | Electrical connection 1, connection type       | Cable with plug  |
| Fluid connector  Medium  Liquid media Gaseous media  Observe resistance of materials that come into contact with media Maximum particle size 5 μm  Internal volume  35 μl  Imperature of medium  0°C50°C  Imperature of liquid media  0°C50°C  Imperature of liquid media  0°C50°C  Imperature  0°C50°C  Imperature  0°C50°C  Imperature  10°C50°C  | Electrical connection 1, connection technology | Port pattern HP  |
| Medium  Liquid media Gaseous media  nformation on medium  Observe resistance of materials that come into contact with media Maximum particle size 5 μm  15 μl  Temperature of medium  O° C 50 ° C  Temperature of liquid media  O° C 50 ° C  Ambient temperature  O° C 50 ° C  Medium pressure  -0.075 MPa 0.1 MPa  Medium pressure  -0.75 bar 1 bar  Medium pressure  Overload pressure  0.3 MPa  Overload pressure  3 bar  Overload pressure  43.5 psi  Ocoperating voltage range  24 V  Permissible voltage fluctuations   | Size   | 10   |
| Gaseous media  Observe resistance of materials that come into contact with media Maximum particle size 5 μm  Internal volume  35 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 0.1 MPa  Medium pressure  -0.75 bar 1 bar  Medium pressure  0 °C 50 °C  3 bar  Overload pressure  0 3 MPa  Overload pressure  3 bar  Overload pressure  43.5 psi Oc operating voltage range  24 V  Permissible voltage fluctuations  γ μ 10 8 γ γ γ γ γ γ γ γ γ γ γ γ γ γ γ γ γ γ  | Fluid connector                                | Flange   |
| Maximum particle size 5 μmInternal volume35 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 0.1 MPaMedium pressure-0.75 bar 1 barMedium pressure-10.875 psi 14.5 psiOverload pressure0.3 MPaOverload pressure3 barOverload pressure43.5 psiOC operating voltage range24 VPermissible voltage fluctuations+/- 10 %   | Medium   |  |
| Femperature of medium  O °C 50 °C  Femperature of liquid media  O °C 50 °C  Ambient temperature  O °C 50 °C  Storage temperature  -20 °C 70 °C  Medium pressure  -0.075 MPa 0.1 MPa  Medium pressure  -0.75 bar 1 bar  Medium pressure  -10.875 psi 14.5 psi  Overload pressure  0.3 MPa  Overload pressure  3 bar  Overload pressure  43.5 psi  OC operating voltage range  24 V  Permissible voltage fluctuations  +/- 10 %   | Information on medium                          |  |
| 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 0.1 MPa  Medium pressure  -0.75 bar 1 bar  Medium pressure  -10.875 psi 14.5 psi  Overload pressure  0.3 MPa  Overload pressure  3 bar  Overload pressure  43.5 psi  OC operating voltage range  24 V  Permissible voltage fluctuations  +/- 10 %  | Internal volume                                | 35 μl  |
| Ambient temperature  O °C 50 °C  Storage temperature  -20 °C 70 °C  Medium pressure  -0.075 MPa 0.1 MPa  Medium pressure  -0.75 bar 1 bar  Medium pressure  -10.875 psi 14.5 psi  Overload pressure  0.3 MPa  Overload pressure  3 bar  Overload pressure  43.5 psi  OC 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 0.1 MPa  -0.75 bar 1 bar  Medium pressure  -10.875 psi 14.5 psi  Overload pressure  0.3 MPa  Overload pressure  3 bar  Overload pressure  43.5 psi  OC operating voltage range  24 V  Permissible voltage fluctuations  -20 °C 70 °C  -0.075 MPa 0.1 MPa  -0.75 bar 1 bar  -0.875 psi 14.5 psi  -0.3 MPa  24 V  -0.3 MPa  -0.3 MPa  -0.3 MPa  -0.4 MPa  -0.5 bar 1 bar  -1.8 MPa  -1.8 MP                                    | Temperature of liquid media                    | 0 ℃ 50 ℃   |
| Medium pressure  -0.075 MPa 0.1 MPa  Medium pressure  -0.75 bar 1 bar  Medium pressure  -10.875 psi 14.5 psi  Overload pressure  0.3 MPa  Overload pressure  3 bar  Overload pressure  43.5 psi  OC operating voltage range  24 V  Permissible voltage fluctuations  +/- 10 %   | Ambient temperature                            | 0 ℃ 50 ℃   |
| Medium pressure  -0.75 bar 1 bar  -10.875 psi 14.5 psi  Overload pressure  0.3 MPa  Overload pressure  3 bar  Overload pressure  43.5 psi  OC operating voltage range  24 V  Permissible voltage fluctuations  -0.75 bar 1 bar  -10.875 psi 14.5 psi  0.3 MPa  2 bar  -10.875 psi 14.5 psi  | Storage temperature                            | -20 °C 70 °C   |
| Medium pressure -10.875 psi 14.5 psi Overload pressure 0.3 MPa Overload pressure 3 bar Overload pressure 43.5 psi OC operating voltage range 24 V Permissible voltage fluctuations +/- 10 %   | Medium pressure                                | -0.075 MPa 0.1 MPa                                       |
| Overload pressure 0.3 MPa Overload pressure 3 bar Overload pressure 43.5 psi OC operating voltage range 24 V Permissible voltage fluctuations +/- 10 %  | Medium pressure                                | -0.75 bar 1 bar  |
| Overload pressure 3 bar Overload pressure 43.5 psi OC operating voltage range 24 V Permissible voltage fluctuations +/- 10 %  | Medium pressure                                | -10.875 psi 14.5 psi                                     |
| Overload pressure 43.5 psi OC operating voltage range 24 V Permissible voltage fluctuations +/- 10 %  | Overload pressure                              | 0.3 MPa  |
| OC operating voltage range 24 V Permissible voltage fluctuations +/- 10 %   | Overload pressure                              | 3 bar  |
| Permissible voltage fluctuations +/- 10 %   | Overload pressure                              | 43.5 psi   |
| -   | DC operating voltage range                     | 24 V   |
| Coil characteristics 24 V DC: low-current phase 1 W, high-current phase 3.7 W   | Permissible voltage fluctuations               | +/- 10 %   |
|   | Coil characteristics                           | 24 V DC: low-current phase 1 W, high-current phase 3.7 W |

| Feature                                      | Value   |
|--|---|
| Duty cycle                                   | 100%  |
| Max. switching frequency                     | 2 Hz  |
| On switching time                            | ≤20 ms  |
| Switching time off                           | ≤20 ms  |
| Flow rate Kv                                 | 0.034 m³/h  |
| Symbol                                       | 00997353  |
| Housing material                             | PEEK  |
| Diaphragm material                           | FFPM  |
| Seals material                               | FFPM  |
| Note on materials                            | RoHS-compliant  |
| LABS (PWIS) conformity                       | VDMA24364 zone III                                    |
| Product weight                               | 18 g  |
| Degree of protection                         | IP40  |
| Corrosion resistance class (CRC)             | 0 - No corrosion stress                               |
| 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 |