Media separated solenoid valve VYKB-F10-M22C-16-PF-5HPA

FESTO

Part number: 8122803



21 T W

Data sheet

General operating condition

Electrical connection at side Rocker valve with diaphragm seal Sealing principle Soft Materials in contact with the media PEEK Valve function 2/2, closed, monostable Nominal width 1.6 mm Flow direction Non-reversible Actuation type Electrical Type of control Reset method Mechanical spring Manual override None Mounting position Any Type of mounting 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 Fluid connector Fluid 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 Emperature of medium O °C 50 °C Emperature of fliquid media O °C 50 °C Storage temperature O °C 50 °C Occupancy Medium pressure O.075 MPa 0.1 MPa Medium pressure O.075 MPa 0.1 MPa Medium pressure O.075 Spar 1 bar Overload pressure Overload pr	Feature	Value
Sealing principle Soft Materials in contact with the media PEEK Valve function 2/2, closed, monostable Nominal width 1.6 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 With through-hole for M2 screw Electrical connection 1, connection type Cable with plug Electrical connection 1, connection technology Port pattern HP Size 10 Fluid connector Flange Medium Gaseous media Information on medium 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 Ambient temperature 0 °C 50 °C Storage temperature 20 °C 50 °C Medium pressure 0.075 MPa 0.1 MPa Medium pressure 0.075 MPa 0.1 MPa <t< td=""><td>Structural design</td><td></td></t<>	Structural design	
Materials in contact with the media PEEK Valve function 2/2, closed, monostable Nominal width 1.6 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 With through-hole for M2 screw Electrical connection 1, connection type Cable with plug Electrical connection 1, connection technology Port pattern HP Size 10 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 35 µl Temperature of medium 0 °C 50 °C Temperature of iliquid media 0 °C 50 °C Ambient temperature 0 °C 50 °C Storage temperature 0 °C 50 °C Medium pressure 0.075 MPa 0.1 MPa Medium pressure 0.075 MPa .		, <u> </u>
Valve function 2/2, closed, monostable Nominal width 1.6 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 With through-hole for M2 screw Electrical connection 1, connection type Cable with plug Electrical connection 1, connection technology Port pattern HP Size 10 Fluid connector Flange Medium Liquid media Gaseous 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 Temperature of medium 0 °C 50 °C Temperature of liquid media 0 °C 50 °C Ambient temperature 0 °C 50 °C Storage temperature -0.0°C Medium pressure -0.075 MPa 0.1 MPa Medium pressure -0.075 MPa 0.1 MPa	Sealing principle	Soft
Nominal width Flow direction Non-reversible Actuation type Electrical Type of control Reset method Mechanical spring Manual override Mounting position None Mounting position Type of mounting Electrical connection 1, connection type Electrical connection 1, connection type Electrical connection 1, connection technology Port pattern HP Size 10 Fluid connector Fluid connector Fluid connector Medium Cliquid media Gaseous media Information on medium O° c 50 °C Femperature of medium O° c 50 °C Emperature of fliquid media Ambient temperature O° c 50 °C Storage temperature Medium pressure 0.07 S har 1 har Medium pressure Medium pressure 0.07 S har 1 har Mediu	Materials in contact with the media	PEEK
Flow direction Non-reversible Actuation type Electrical Type of control Direct Reset method Mechanical spring Manual override None Mounting position Any Type of mounting With through-hole for M2 screw Electrical connection 1, connection type Cable with plug Electrical connection 1, connection technology Port pattern HP Fluid connector Flange Medium Liquid media Gaseous media Information on medium Spring Internal volume 35 µl Temperature of flequid media 0°C50°C Remperature of flequid media 0°C50°C Storage temperature Medium pressure 0.075 MPa0.1 MPa Medium pressure 0.076 MPa0.1 MPa Medium pressure 0.075 MPa0.1 MPa Mediu	Valve function	2/2, closed, monostable
Actuation type Electrical Type of control Direct Reset method Mechanical spring Manual override None Mounting position Any Type of mounting With through-hole for M2 screw Electrical connection 1, connection type Cable with plug Electrical connection 1, connection technology Port pattern HP Size 10 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 35 µl Temperature of medium 0°C50°C Temperature of liquid media 0°C50°C Temperature of liquid media 0°C50°C Ambient temperature 20°C70°C Medium pressure -0.075 MPa0.1 MPa Medium pressure -0.075 M	Nominal width	1.6 mm
Type of control Direct Reset method Mechanical spring Manual override None Mounting position Any Type of mounting Electrical connection 1, connection type Electrical connection 1, connection technology Port pattern HP Size 10 Fluid connector Flange Medium Liquid media Gaseous media Maximum particle size 5 µm Information on medium 0°C 50 °C Temperature of medium 0°C 50 °C Temperature of fluid media 0°C 50 °C Storage temperature Medium pressure 0.075 Mpa 0.1 Mpa 0.2 Spri 1 4.5 psi 1 4.5 psi 1 4.5 psi 0.2 Coverload pressure 0.3 Mpa 0.2 Mpa 0.3 Mpa 0.2 V Coverload pressure 0.5 % / +10 % 0.1 Covernet phase 1 W, high-current phase 3.7 W 0.1 Covernet phase 1 W	Flow direction	Non-reversible
Reset method Mechanical spring Manual override None Mounting position Any Type of mounting With through-hole for M2 screw Electrical connection 1, connection type Cable with plug Electrical connection 1, connection technology Port pattern HP Size 10 Fluid connector Flange Medium Liquid media Medium 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 -0.075 MPa 0.1 MPa Medium pressure -0.075 MPa 0.1 MPa Medium pressure -0.75 bar 1 bar Medium pressure 0.3 MPa Overload pressure 3 bar Overload pressure 43.5 psi DC operating voltage range 12 V Permissible voltage fluctuations 5% / +10 % Coll characteristics 12 V DC: low-current phase 1 W, high-current phase 3.7 W	Actuation type	Electrical
Manual override None Mounting position Any Type of mounting With through-hole for M2 screw Electrical connection 1, connection type Cable with plug Electrical connection 1, connection technology Port pattern HP Size 10 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 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 -0.075 MPa 0.1 MPa Medium pressure -0.075 MPa 0.1 MPa Medium pressure -0.075 MPa 0.1 MPa Medium pressure -0.087 psi 14.5 psi Overload pressure 3 bar Overload pressure 3 bar Overload pressure 43.5 psi DC operating voltage range 12 V Permissible voltage fluctuations 5 % / +10 % Coil characteristics 12 V DC: low-current phase 1 W, high-current phase 3.7 W	Type of control	Direct
Mounting position Any Type of mounting With through-hole for M2 screw Electrical connection 1, connection type Cable with plug Electrical connection 1, connection technology Port pattern HP Size 10 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 35 µl Temperature of medium 0°C50°C Temperature of liquid media 0°C50°C Ambient temperature 0°C50°C Storage temperature -0.075 MPa0.1 MPa Medium pressure -0.075 MPa0.1 MPa Medium pressure -0.75 bar 1 bar Medium pressure -0.3875 psi 14.5 psi Overload pressure 3 bar Overload pressure 3 bar Overload pressure 43.5 psi DC operating voltage range 12 V Permissible voltage fluctuations 5 % / +10 % Coll characteristics 12 V DC: low-current phase 1 W, high-current phase 3.7 W	Reset method	Mechanical spring
Type of mounting With through-hole for M2 screw Electrical connection 1, connection type Cable with plug Electrical connection 1, connection technology Port pattern HP Size 10 Fluid connector Flange Medium Cliquid 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 Temperature of medium O°C 50°C Temperature of liquid media O°C 50°C Temperature of liquid media O°C 50°C Storage temperature O°C 50°C Medium pressure O.075 MPa 0.1 MPa Medium pressure O.03 MPa Overload pressure O.3 MPa Overload pressure O.3 MPa Overload pressure O.3 MPa Overload pressure O.5 MPa 0.1 MPa Ove	Manual override	None
Electrical connection 1, connection type Cable with plug Electrical connection 1, connection technology Port pattern HP Size 10 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 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 -0.75 bar 14.5 psi Overload pressure 0.3 MPa Overload pressure 3 bar Overload pressure 43.5 psi Overload pressure 43.5 psi DC operating voltage range 12 V Permissible voltage fluctuations -5 % / +10 % Coll characteristics 12 V DC: low-current phase 1 W, high-current phase 3.7 W	Mounting position	Any
Electrical connection 1, connection technology Port pattern HP Size 10 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 35 μl Temperature of medium 0°C50°C Temperature of liquid media 0°C50°C Ambient temperature 0°C50°C Storage temperature -0.075 MPa0.1 MPa Medium pressure -0.075 MPa0.1 MPa Medium pressure -0.75 bar 1 bar Medium pressure -0.3 MPa Overload pressure 0.3 MPa Overload pressure 3 bar Overload pressure 43.5 psi DC operating voltage range 12 V Permissible voltage fluctuations -5 % / +10 % Coil characteristics 12 V DC: low-current phase 1 W, high-current phase 3.7 W	Type of mounting	With through-hole for M2 screw
Size 10 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 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 -0.075 MPa 0.1 MPa Medium pressure -0.75 bar 1 bar Medium pressure -0.875 psi 14.5 psi Overload pressure 0.3 MPa Overload pressure 3 bar Overload pressure 43.5 psi Overload pressure 43.5 psi DC operating voltage range 12 V Permissible voltage fluctuations -5 % / +10 % Coil characteristics 12 V DC: low-current phase 1 W, high-current phase 3.7 W	Electrical connection 1, connection type	Cable with plug
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 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 -10.875 psi 14.5 psi Overload pressure 0.3 MPa Overload pressure 3 bar Overload pressure 43.5 psi DC operating voltage range 12 V Permissible voltage fluctuations -5 % / +10 % Coil characteristics 12 V DC: low-current phase 1 W, high-current phase 3.7 W	Electrical connection 1, connection technology	Port pattern HP
MediumLiquid media Gaseous mediaInformation on mediumObserve resistance of materials that come into contact with media Maximum particle size 5 μmInternal volume35 μlTemperature of medium0 °C 50 °CTemperature of liquid media0 °C 50 °CAmbient temperature0 °C 50 °CStorage temperature-0.0 °C 70 °CMedium pressure-0.075 MPa 0.1 MPaMedium pressure-0.75 bar 1 barMedium pressure10.875 psi 14.5 psiOverload pressure0.3 MPaOverload pressure3 barOverload pressure43.5 psiDC operating voltage range12 VPermissible voltage fluctuations-5 % / +10 %Coil characteristics12 V DC: low-current phase 1 W, high-current phase 3.7 W	Size	10
Gaseous mediaInformation on mediumObserve resistance of materials that come into contact with media 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-0.75 MPa 0.1 MPaMedium pressure-0.75 bar 1 barMedium pressure10.875 psi 14.5 psiOverload pressure3 MPaOverload pressure3 barOverload pressure43.5 psiDC operating voltage range12 VPermissible voltage fluctuations-5 % / +10 %Coil characteristics12 V DC: low-current phase 1 W, high-current phase 3.7 W	Fluid connector	Flange
Internal volumeMaximum 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 psiDC operating voltage range12 VPermissible voltage fluctuations-5 % / +10 %Coil characteristics12 V DC: low-current phase 1 W, high-current phase 3.7 W	Medium	
Temperature of medium 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 0 3 MPa Overload pressure 0.3 MPa Overload pressure 3 bar Overload pressure DC operating voltage range Permissible voltage fluctuations Coil characteristics O °C 50 °C 0 °C 50 °C 0 °C 70 °C -0.075 MPa 0.1 MPa -0.75 bar 1 bar -0.75 bar 1 bar -0.875 psi 14.5 psi 0 3 MPa 1 2 V Coil characteristics 1 2 V DC: low-current phase 1 W, high-current phase 3.7 W	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 0.1 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 DC operating voltage range 12 V Permissible voltage fluctuations -5 % / +10 % Coil characteristics 12 V DC: low-current phase 1 W, high-current phase 3.7 W	Internal volume	35 µl
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 -10.875 psi 14.5 psi Overload pressure 0.3 MPa Overload pressure 3 bar Overload pressure 43.5 psi DC operating voltage range 12 V Permissible voltage fluctuations -5% / +10 % Coil characteristics 12 V DC: low-current phase 1 W, high-current phase 3.7 W	Temperature of medium	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 -10.875 psi 14.5 psi Overload pressure 0.3 MPa Overload pressure 3 bar Overload pressure 43.5 psi DC operating voltage range 12 V Permissible voltage fluctuations -5 % / +10 % Coil characteristics 12 V DC: low-current phase 1 W, high-current phase 3.7 W	Temperature of liquid media	0 °C 50 °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 DC operating voltage range 12 V Permissible voltage fluctuations -5 % / +10 % Coil characteristics 12 V DC: low-current phase 1 W, high-current phase 3.7 W	Ambient temperature	0 °C 50 °C
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 DC operating voltage range 12 V Permissible voltage fluctuations -5 % / +10 % Coil characteristics 12 V DC: low-current phase 1 W, high-current phase 3.7 W	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 DC operating voltage range 12 V Permissible voltage fluctuations -5 % / +10 % Coil characteristics 12 V DC: low-current phase 1 W, high-current phase 3.7 W	Medium pressure	-0.075 MPa 0.1 MPa
Overload pressure0.3 MPaOverload pressure3 barOverload pressure43.5 psiDC operating voltage range12 VPermissible voltage fluctuations-5 % / +10 %Coil characteristics12 V DC: low-current phase 1 W, high-current phase 3.7 W	Medium pressure	-0.75 bar 1 bar
Overload pressure 3 bar Overload pressure 43.5 psi DC operating voltage range 12 V Permissible voltage fluctuations -5 % / +10 % Coil characteristics 12 V DC: low-current phase 1 W, high-current phase 3.7 W	Medium pressure	-10.875 psi 14.5 psi
Overload pressure 43.5 psi DC operating voltage range 12 V Permissible voltage fluctuations -5 % / +10 % Coil characteristics 12 V DC: low-current phase 1 W, high-current phase 3.7 W	Overload pressure	0.3 MPa
DC operating voltage range 12 V Permissible voltage fluctuations -5 % / +10 % Coil characteristics 12 V DC: low-current phase 1 W, high-current phase 3.7 W	Overload pressure	3 bar
Permissible voltage fluctuations -5 % / +10 % Coil characteristics 12 V DC: low-current phase 1 W, high-current phase 3.7 W	Overload pressure	43.5 psi
Coil characteristics 12 V DC: low-current phase 1 W, high-current phase 3.7 W	DC operating voltage range	12 V
	Permissible voltage fluctuations	-5 % / +10 %
	Coil characteristics	12 V DC: low-current phase 1 W, high-current phase 3.7 W
	Duty cycle	100%

Feature	Value
Max. switching frequency	2 Hz
On switching time	≤20 ms
Switching time off	≤20 ms
Flow rate Kv	0.034 m³/h
Symbol	00997351
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 As per EU RoHS directive
UKCA marking (see declaration of conformity)	To UK instructions for EMC To UK RoHS instructions