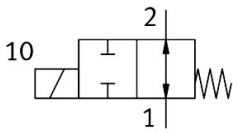
Media separated solenoid valve
VYKA-F7-M22U-12-PF-5YQ7

Part number: 8170089





Data sheet

Feature	Value
Design	Rocker valve with diaphragm seal
Sealing principle	Soft
Material in contact with the medium	FFPM PEEK
Valve function	2/2-way, single solenoid, open
Nominal size	1.2 mm
Flow direction	Reversible with restrictions
Type of actuation	Electrical
Type of piloting	Direct
Type of reset	Mechanical spring
Manual override	None
Mounting position	Any
Type of mounting	Via through-hole for M2 screw
Electrical connection 1, connection type	Socket
Electrical connection 1, connector system	Plug pattern Q7
Electrical connection 1, number of connections/cores	2
Size	7
Grid dimension	7.5 mm
Fluid connection	Flange
Medium	Liquid media Gaseous media
Note on the medium	Observe resistance of materials that come into contact with the media Maximum particle size 5 µm
Internal volume	18 µl fluid chamber valve 24 µl valve with fluid connections
Media temperature for fluids	15 °C...50 °C
Medium temperature gaseous media	15 °C...50 °C
Ambient temperature	15 °C...50 °C
Storage temperature	-20 °C...70 °C
Medium pressure	-0.05 MPa...0.2 MPa -0.5 bar...2 bar -7.25 psi...29 psi
Note on the medium pressure	IN: -0.25 – 2 bar / -0.025 – 0.2 MPa / -3.625 – 29 psi

Feature	Value
	OUT: -0.5 - 0.5 bar / -0.05 - 0.05 MPa / -7.25 - 7.25 psi
Pressure difference	0.2 MPa 2 bar 29 psi
Burst pressure	2.3 MPa 23 bar 333.5 psi
Operational voltage range DC	12 V...26 V
Note on operational voltage range DC	With electrical sub-base VAVE-K1-...
Permissible voltage fluctuations	+/-10%
Electrical power consumption	3.5 W
Information on power consumption	Low-current phase 0.3 W, high-current phase 3.5 W for 60 ms, in combination with VAVE-K1-...
Characteristic coil data	12 - 26 V DC: low-current phase 0.06 W, high-current phase 2.2 W
Insulation material class	B
Duty cycle	100% in conjunction with holding current reduction Observe the notes on operating the solenoid valves.
Max. switching frequency	6 Hz
Note on switching frequency	Dependent on the ambient temperature and installation state At 100% duty cycle depending on ambient temperature and installation condition. Higher switching frequencies possible with duty cycle < 100%.
Switch-off time for fluids	9 ms
Switching time off gaseous media	9 ms
Note on switching time	Switching time depends on medium, temperature, medium pressure and individual operating conditions The switching behaviour of the FFPM can be slower at temperatures below room temperature
Standard nominal flow rate (standardised to DIN 1343)	10 l/min
Note on standard nominal flow rate	In case of a pressure drop of 1 -> 0 bar (gaseous media)
Flow rate Kv	0.018 m³/h 0.3 l/min
Note on flow rate Kv	For water as medium Pressure difference 1 bar
Water flow rate at max. operating pressure	0.024 m³/h 0.40 l/min
Material housing	Reinforced PA PEEK Reinforced PPA
Material membrane	FFPM
Material seals	FFPM
Note on materials	RoHS compliant
LABS (PWIS) conformity	VDMA24364 zone III
Product weight	10.9 g
Degree of protection	IP40
Note on degree of protection	In mounted state
Instructions on use	For indoor use only
Corrosion resistance class CRC	0 - No corrosion stress