

# Media separated solenoid valve VYKA-F7-M22C-12-PE-5YQ7

FESTO

Part number: 8170088



[PDF](#) General operating condition

## Data sheet

Feature	Value
Design	Rocker valve with diaphragm seal
Sealing principle	Soft
Material in contact with the medium	PEEK
Suitable for use with food	See supplementary material information
Valve function	2/2-way, closed, monostable
Nominal size	1.2 mm
Flow direction	Reversible with restrictions
Type of actuation	Electric
Type of piloting	Direct
Type of reset	Mechanical spring
Manual override	None
Mounting position	optional
Type of mounting	Via through-hole for M2 screw
Electrical connection 1, connection type	Socket
Electrical connection 1, connector system	Connection pattern Q7
Electrical connection 1, number of connections/cores	2
Electrical connection 1, connection pattern	00997312
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	0 °C ... 50 °C
Medium temperature gaseous media	0 °C ... 50 °C
Ambient temperature	0 °C ... 50 °C
Storage temperature	-20 °C ... 70 °C
Medium pressure	-0.05 MPa ... 0.2 MPa
Medium pressure	-0.5 bar ... 2 bar
Medium pressure	-7.25 psi ... 29 psi
Note on the medium pressure	IN: -0.25 – 2 bar / -0.025 – 0.2 MPa / -3.625 – 29 psi OUT: -0.5 - 1 bar / -0.05 - 0.1 MPa / -7.25 - 14.5 psi
Pressure difference	0.2 MPa

Feature	Value
Pressure difference	2 bar
Pressure difference	29 psi
Burst pressure	2.3 MPa
Burst pressure	23 bar
Burst pressure	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-on time for fluids	5 ms
Switching time on gaseous media	5 ms
Note on switching time	Switching time depends on medium, temperature, medium pressure and individual operating conditions
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 m <sup>3</sup> /h
Flow rate Kv	0.3 l/min
Note on flow rate Kv	For medium water Pressure difference 1 bar
Water flow rate at max. operating pressure	0.45 l/min
Symbol	00992884
Material housing	PEEK PPA reinforced
Material membrane	EPDM
Material seals	EPDM
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 assembled state
Instructions on use	For indoor use only
Corrosion resistance class CRC	0 - No corrosion stress