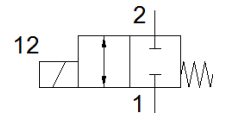
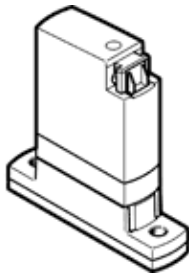


# media separated solenoid valve

## VYKA-F7-M22C-12-PE-5YQ7

Part number: 8170088

FESTO



### Data sheet

| Feature  | Value  |
|--|--|
| Design structure                               | Rocker valve with diaphragm seal   |
| Sealing principle                              | soft   |
| Materials in contact with media                | EPDM<br>PEEK   |
| Food-safe                                      | See Supplementary material information   |
| Valve function                                 | 2/2 closed, monostable   |
| 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   |
| Assembly position                              | Any  |
| Mounting type                                  | With through-hole for M2 screw   |
| Electrical connection 1, connection type       | Plug socket  |
| Electrical connection 1, connection technology | Connection pattern Q7  |
| Electrical connection 1, number of pins/wires  | 2  |
| Size   | 7  |
| Grid dimension                                 | 7.5 mm   |
| Fluid connection                               | Flange   |
| Medium   | Fluid media<br>Gaseous media   |
| Note on the medium                             | Observe resistance of materials that come into contact with media<br>Maximum particle size: 5 µm |
| Internal volume                                | 18 µl fluid chamber valve<br>24 µl valve with fluid connections                                  |
| Temperature of liquid media                    | 0 ... 50 °C  |
| Temperature of gaseous media                   | 0 ... 50 °C  |
| Ambient temperature                            | 0 ... 50 °C  |
| Storage temperature                            | -20 ... 70 °C  |
| Pressure of medium                             | -0.05 ... 0.2 MPa  |
| Medium pressure                                | -0.5 ... 2 bar   |
| Pressure of medium psi                         | -7.25 ... 29 psi   |
| Note on pressure of medium                     | IN:-0,25-2/-0,025-0,2/..<br>OUT:-0,5-1/-0,05-0,1/..  |
| Differential pressure (MPa)                    | 0.2 MPa  |
| Differential pressure                          | 2 bar  |
| Differential pressure (psi)                    | 29 psi   |
| Burst pressure                                 | 2.3 MPa  |
| Bursting pressure                              | 23 bar   |
| Burst pressure                                 | 333.5 psi  |
| Operating voltage range DC                     | 12 ... 26 V  |
| Note on operating voltage range DC             | With electrical E-box VAVE-K1-...  |
| Permissible voltage fluctuation                | +/- 10 %   |
| Electrical power consumption                   | 3.5 W  |

| <b>Feature</b>                             | <b>Value</b>  |
|--|---|
| 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 class                           | B   |
| Duty cycle                                 | 100% with holding current reduction<br>Observe notes on operating the solenoid valves   |
| Max. switching frequency                   | 6 Hz  |
| Note on switching frequency                | Dependent on the ambient temperature and installation state<br>For 100% duty cycle, dependent on the ambient temperature and installation state |
| Response time "on" for liquid media        | 5 ms  |
| Switching time on gaseous media            | 5 ms  |
| Standard nominal flow rate                 | 10 l/min  |
| Information 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 (l/min)                       | 0.3 l/min   |
| Information on flow rate Kv                | For water as medium<br>Pressure difference 1 bar  |
| Water flow rate at max. operating pressure | 0,027 m <sup>3</sup> /h<br>0,45 l/min   |
| Material housing                           | PA-reinforced<br>PEEK<br>PPA amplified  |
| Material membrane                          | EPDM  |
| Material seals                             | EPDM  |
| Materials note                             | Conforms to RoHS  |
| PWIS conformity                            | VDMA24364 zone III  |
| Product weight                             | 10.9 g  |
| Protection class                           | IP40  |
| Note on degree of protection               | in assembled condition  |
| Instructions for use                       | For indoor use only   |
| Corrosion resistance classification CRC    | 0 - No corrosion stress   |