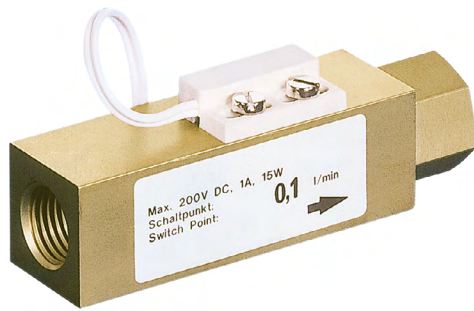




DK-01



Low-Cost Piston Type Flow Switch for Low Flow Volumes with Cable Connection

Description:

The DK-01 series of compact piston type flowswitches operates according to a modified variable area principle and is used for monitoring the flow of low-viscosity fluids. In this method, a piston equipped with a built-in permanent magnet, is held in a defined position by a spring. Depending on the rate of flow, the medium slides the piston against the strength of the spring. If the flow exceeds or drops below of the present set-point, the reed switch outside the medium is activated without contact via the permanent magnet.

Features

- / For low-viscosity fluids
- / Fixed factory-set setpoint
(between 0.1 and 2.5 l/min)
- / Compact construction
- / Easy to install
- / Cost effective
- / Mounting in any position
- / Reed contact output

Application:

The DK-01 series is used for monitoring the flow of low-viscosity fluids in pipes. They offer a reliable solution for ensuring the minimum flow rate and thereby protecting high-quality systems and installations from damage. For applications with contaminated media or media with ferritic components, we recommend the use of strainers (for example the FT-01, a strainer with or without magnetic separator in the section accessories) of our catalogue.

Typical applications are:

- / Coolant circulation systems
- / Lubricant circulation systems
- / Water circulation systems



Technical Specifications:

Set-point range /	0.1 .. 2.5 l/min
Switching hysteresis /	ca. 0.1 l/min
max. Pressure /	25 bar, higher on request
max. Media temp. /	+100°C
max. Ambient temp. /	+70°C
Process connection /	R 1/4"-female thread or hose nozzle for 8 mm flexible tube, other on request
Mounting position /	any
Materials (wetted parts) /	
Body housing:	brass or stainless steel, other on request
Piston:	POM
Spring:	stainless steel 1.4410
Magnet:	hard ferrite OX 300

Electrical Specifications:

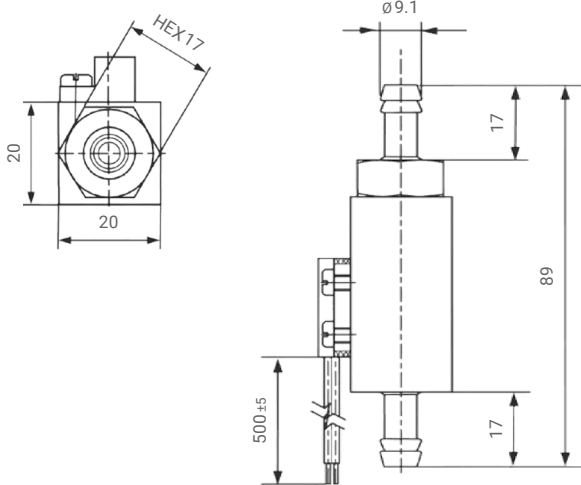
Electrical connection /	stranded wire 2-core, 0.5m cable
Contact /	reed contact, NO-contact
max. Switching voltage /	200 V
max. Switching current /	1 A
max. Switching load /	15 W

Handling:

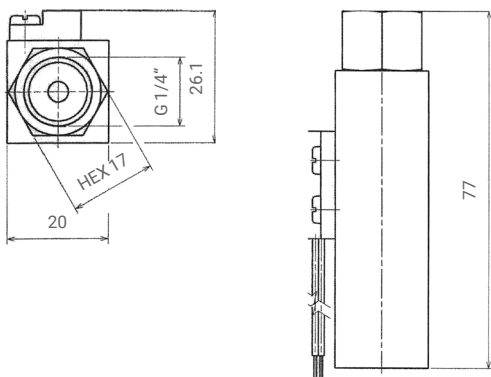
- / It must be ensured, that the values given for voltage, current, and power are not exceeded.
- / When switched on, a load must be connected in series.
- / The electrical details apply to resistive loads. Capacitive, inductive and lamp loads must be operated using a protective circuit.

Dimensions in mm:

Piston type flowswitch with 8 mm hose nozzle at both sides



Piston type flowswitch with R 1/4" female thread at both sides



- / An inflow section of 10 times and an outflow section of 5 times of the nominal pipe diameter is recommended. Therefore our „BE-01 - Inflow and Outflow Sections for Flowmeters“ may be used.

Ordering Codes:

Order number	DK-01.	4.	1.	S[1][.][2].	0
DK-01 Piston-Type Flowswitch					
Process connection /					
1 = inlet G 1/4"-female thread, outlet G 1/4"-female thread					
2 = inlet G 1/4"-female thread, outlet hose nozzle 8 mm					
3 = inlet hose nozzle 8 mm, outlet R 1/4"-female thread					
4 = inlet hose nozzle 8 mm, outlet hose nozzle 8 mm					
9 = customer-specific					
Material housing /					
1 = brass					
2 = stainless steel					
Switching point (please specify) /					
S [] [.] [] = 0.1 .. 2.5 l/min - for increasing flow ⁽¹⁾					
F [] [.] [] = 0.1 .. 2.5 l/min - for decreasing flow ⁽¹⁾					
Options /					
0 = none					
9 = please specify in detailed text					

⁽¹⁾ Set-point ranges are applicable for water 20°C, vertical mounting position. Upward flow direction. Example: Preset set-point at 1.2 l/min for increasing flow » S [1] [.] [2]