

DPS10

Paddle-Bellows Flow Switch

- for liquids and gases
- proven technology
- easy mounting
- low pressure loss
- brass or stainless steel version
- installation in any position
- switching ranges: 0,6...2 m³/h to 38,6...90,8 m³/h
- P_{max}: 30 bar, T_{max}: 120 °C



Description:

The flow switches of the DPS10 series mechanically transmit the flow-proportional movement of the paddle installed in the pipeline via a bellows and a spring-loaded rocker to a high-load microswitch.

The switching point can be changed by adjusting the spring preload. The three standard paddles supplied can be used for a nominal width range from 1" to 3".

A fourth paddle can be shortened to the desired length for larger nominal widths or to reduce the switching values.

Typical applications:

The DPS10 paddle switches are used wherever reliable monitoring of liquid or air flows is required. The switches are used for both minimum and maximum flow monitoring.

Typical areas of application are the monitoring of cooling and lubrication circuits, the dry-running protection of pumps or as a deficiency protection. The robust design of the DPS10 series allows it to be used throughout industry.

Models:

Material combinations:

The standard device DPS10.1 is suitable for monitoring non-aggressive liquids. It has a process connection and bellows made of brass as well as four variable paddles made of stainless steel 1.4401.

The stainless steel version DPS10.2 is used for monitoring aggressive liquids.

The device has a connection and bellows made of stainless steel 1.4301, as well as four variable paddles made of stainless steel 1.4401.

The DPS10.3 version is suitable for monitoring air. It has a galvanized steel connection plate, a brass paddle holder and a stainless steel 1.4401 paddle suitable for flow velocities of 1-8 m/s. All versions have an ABS plastic housing.

Adjustment range: Measuring ranges for the standard version can be found in the table below

Pipe diameter [mm]	Type	Factory setting off / on [m³/h]	Max. setting off / on [m³/h]	Paddle
25	DPS10.1 and DPS10.2	0,6 / 1,0	2,0 / 2,1	1
32	DPS10.1 and DPS10.2	0,8 / 1,3	2,8 / 3,0	1
40	DPS10.1 and DPS10.2	1,1 / 1,7	3,7 / 4,0	1
50	DPS10.1 and DPS10.2	2,2 / 3,1	5,7 / 6,1	1 and 2
65	DPS10.1 and DPS10.2	2,7 / 4,0	6,5 / 7,0	1 and 2
80	DPS10.1 and DPS10.2	4,3 / 6,2	10,7 / 11,4	1 and 2 and 3
100	DPS10.1 and DPS10.2	6,1 / 8,0	17,3 / 18,4	1,2,3 and 4 (cut to 92 mm)
125	DPS10.1 and DPS10.2	9,3 / 12,9	25,2 / 26,8	1,2,3 and 4 (cut to 117 mm)
150	DPS10.1 and DPS10.2	12,3 / 16,8	30,6 / 32,7	1,2,3 and 4 (cut to 143 mm)
200	DPS10.1 and DPS10.2	38,6 / 46,5	90,8 / 94,2	1,2,3 and 4 (uncut)
25-300*	DPS10.3	1-8 m/s air 1 bar switching off		

* for ventilation ducts

Technical Data:

Max. pressure: 11 bar (brass), 30 bar (st. steel)
Max. medium temp.: 120 °C (DPS10.3: 85 °C)
Max. environment temp: 85 °C
Mounting position: any
Process connection: DPS10.1 and DPS10.2: R 1 A, DPS10.3: mounting plate
Pressure loss: 0,06 to 0,08 bar
Hysteresis: depending on switching value at least 0,1 l/min

Order Code:

Order number:

DPS10. 1. 1

Paddle-bellows flow switch

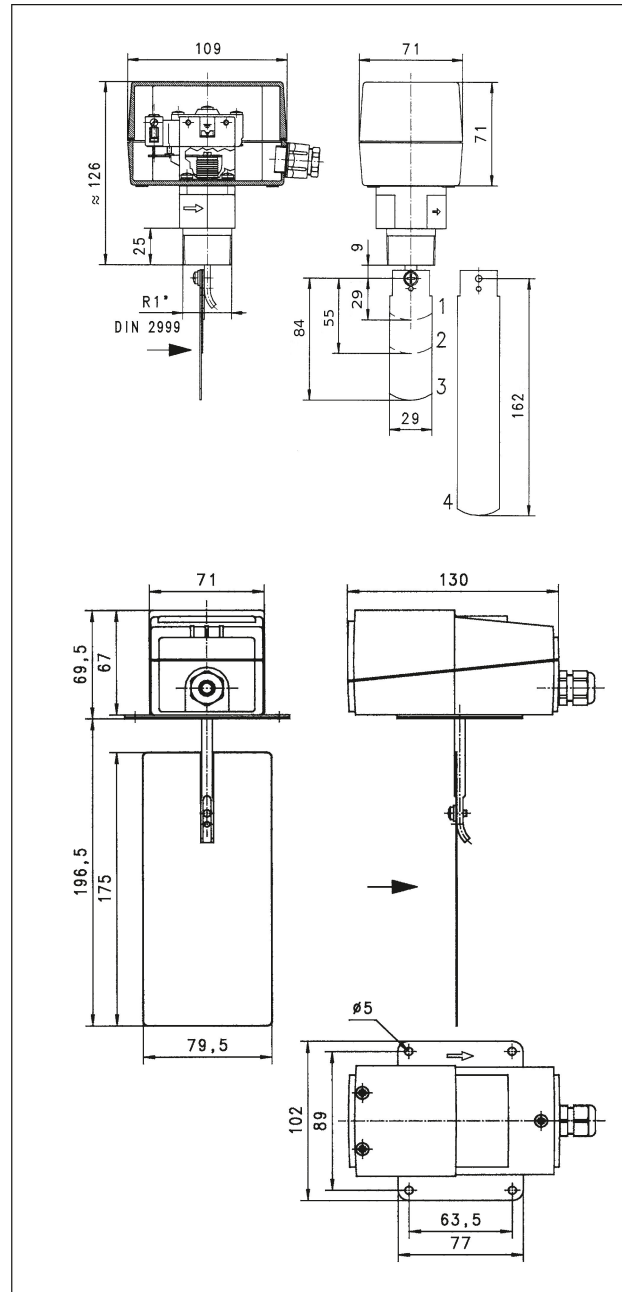
Material combinations:

1 = brass connection. R 1 male, 4 st. steel paddle for liquids
 2 = st. steel connection. R 1 male, 4 st. steel paddle for liquids
 3 = connection plate made of galv. steel, st. steel paddle for air

Models:

1 = standard

Dimensions:



Electrical Data:

Switch output: micro switch, SPDT, 250 VAC, 15 A (8 A inductive)
Screwing: M20 x 1,5
Prot. class: IP65