

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



Description:

The flow switches model DPS10 transmit the flow-dependent displacement of the paddle installed in the piping by means of a bellows and a spring-loaded rocker mechanically connected to a heavy-duty micro switch.

The switching point can be changed by adjusting the spring preload. The three standard paddles can be used in piping with nominal size of 1" to 3". A fourth paddle can be used for larger nominal sizes or to reduce the switching values through appropriate shortening to the desired length.

In addition, the DPS10 is available in a design with a reduced adjustment range, so that it can also be used for minimum switching values.

Typical applications:

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

Typical applications areas are: monitoring of cooling and lubrication circuits, dry-running protection for pumps or for monitoring loss of flow. Their sturdy construction allows them to be reliably used in many industrial applications.

Models:

Material combination:

The standard version DPS10.1 is suitable for monitoring non-caustic / non-corrosive liquids. DPS10.1 has a brass housing, a bellows made of red brass and 4 variably adjustable paddles made of 1.4301 stainless steel.

The stainless steel version DPS10.2 is suitable 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 brass connection plate, a brass paddle holder and a paddle suitable for flow velocities of 1-8 m/s in stainless steel 1.4401. All versions have an ABS plastic housing

Adjustment range: Measuring ranges for the standard version and the version with a reduced measuring range are listed in the table below:

Pipe diameter [mm]	Type	Factory setting off / on [m³/h]	max. adjustment 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 male, 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

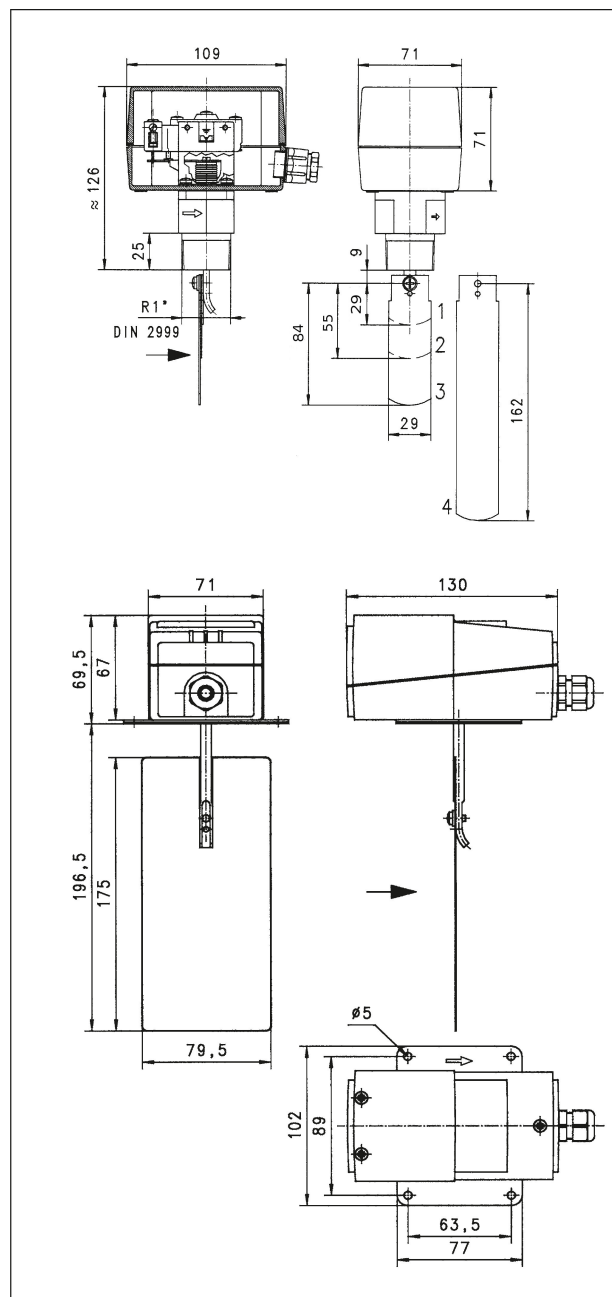
Material combination:

1 = brass connection R 1 male, st. steel paddle for liquids
 2 = st. steel connection R 1 male, st. steel paddle for liquids
 3 = brass mounting plate, 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

Flow



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