



DP-10LC

Vane operated Flowswitch



Features

- / Proven technology
- / Easy to install
- / Low pressure drop
- / Brass and stainless steel
- / Good repeatability
- / Low cost
- / For water or air

Description:

The DP-10LC series of flowswitches transmits the movement of the vane mounted in the pipe which is proportional to the flow over a spring-supported rocker mechanically to a high-performance micro-switch. The setpoint can be modified by customizing the spring tension. The 3 standard vanes can be deployed for a nominal diameter range of 1" to 3". A fourth vane can be customized for larger nominal diameters or for reducing the switching values by shortening it to a desired length. In addition, the DP-10LC can be supplied designed for a reduced adjustment range so that it can be deployed also for minimum switching values.

Application:

The DP-10LC vane switches are used wherever fluid or air flows need to be reliably monitored. The switches are used for monitoring minimum as well as maximum flow. Typical areas of application include monitoring of coolant and lubricating circulation, protection against dry-runs in pumps or safeguard against defects. The DP-10LC is designed as robust device to allow its use across the entire industry.



Technical Specifications:

max. Pressure /	DP-10LC.1/3.x: 11 bar DP-10LC.2.x: 30 bar
max. Media temp. /	DP-10LC.1/2.x: -40...+120°C DP-10LC.3.1: -10...+85°C
max. Ambient temp. /	DP-10LC.1/2.x: -40...+85°C DP-10LC.3.1: -10...+85°C
Materials /	see table 1.2
Mounting position /	any, vane to the top not recommended, mounting position affects setpoint
Process connection /	DP-10LC.1/2.x: R1"-male DP-10LC.3.1: flange 89 x 63,5 mm
Media /	DP-10LC.1/2.x: water DP-10LC.3.1: air
Range of adjustment /	see table 1.1
Weight /	DP-10LC.x.x: 0,95 kg

Table 1.1 - Adjustable range

DP-10LC.1.x and DP-10LC.2.x:

Pipe Ø DN	Qmax. in m³/h	Adjustable range in m³/h	Adjustable range reduced in m³/h	Vane
25	3,6	0,6...2,0	0,2...1,0	1
32	6,0	0,8...2,8	0,25...1,4	1
40	9,0	1,1...3,7	0,5...1,6	1
50	15	2,2...5,7	0,9...3,6	1, 2*
65	24	2,7...6,5	1,2...4,9	1, 2*
80	36	4,3...10,7	2,1...7,4	1, 2, 3*
100	60	11,4...27,7 6,1...17,3	4,9...17,1 3,3...11,6	1, 2, 3* 1, 2, 3, 4*
125	90	22,9...53,3 9,3...25,2	9,7...34,0 5,0...17,5	1, 2, 3* 1, 2, 3, 4*
150	120	35,9...81,7 12,3...30,6	13,6...47,6 6,1...21,4	1, 2, 3* 1, 2, 3, 4*
200	240	72,6...165,7 38,6...90,8	25,7...90,1 21,7...55,3	1, 2, 3* 1, 2, 3, 4*

Adjustable range is indicated for horizontally decreasing flow (medium water),
*have to be installed together.

DP-10LC.3.1

min. cut-out value (m/s)	max. cut-out value (m/s)	min. cut-in value (m/s)	max. cut-in value (m/s)
1.0	8.0	2.5	9.2

If the switchpoint is above 5 m/s the paddle has to be cut off at the marking.

The lowest switch-off value will then increase to 2,5 m/s flow velocity.

Switch range for air at 1 bar abs. & 20°C m/s.

Table 1.2 - Materials:

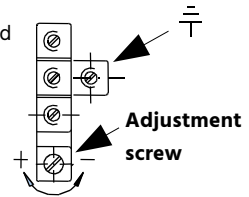
Type	DP-10LC.1.x	DP-10LC.2.x
Device body	Brass	Stainless steel AISI 316L
Housing	ABS-lower part (VO) with polycarbonate cover	ABS-lower part (VO) with polycarbonate cover
Vane	Stainless steel AISI 316L	Stainless steel AISI 316L

Type	DP-10LC.3.1
Housing	ABS-lower part (VO) with polycarbonate cover
Vane	Stainless steel 1.4571
Mounting plate	Brass

Electrical Specifications:

Electrical output /	micro-switch, change-over contact, 250 VAC, 15 A (8 A inductive)
Cable gland /	DP-10LC.x.x: M20 x 1,5
Protection class /	IP65 with protective conductor conn.

Adjustment: untighten screws and remove cap, use screw to set to demanded setpoint, remount cap.



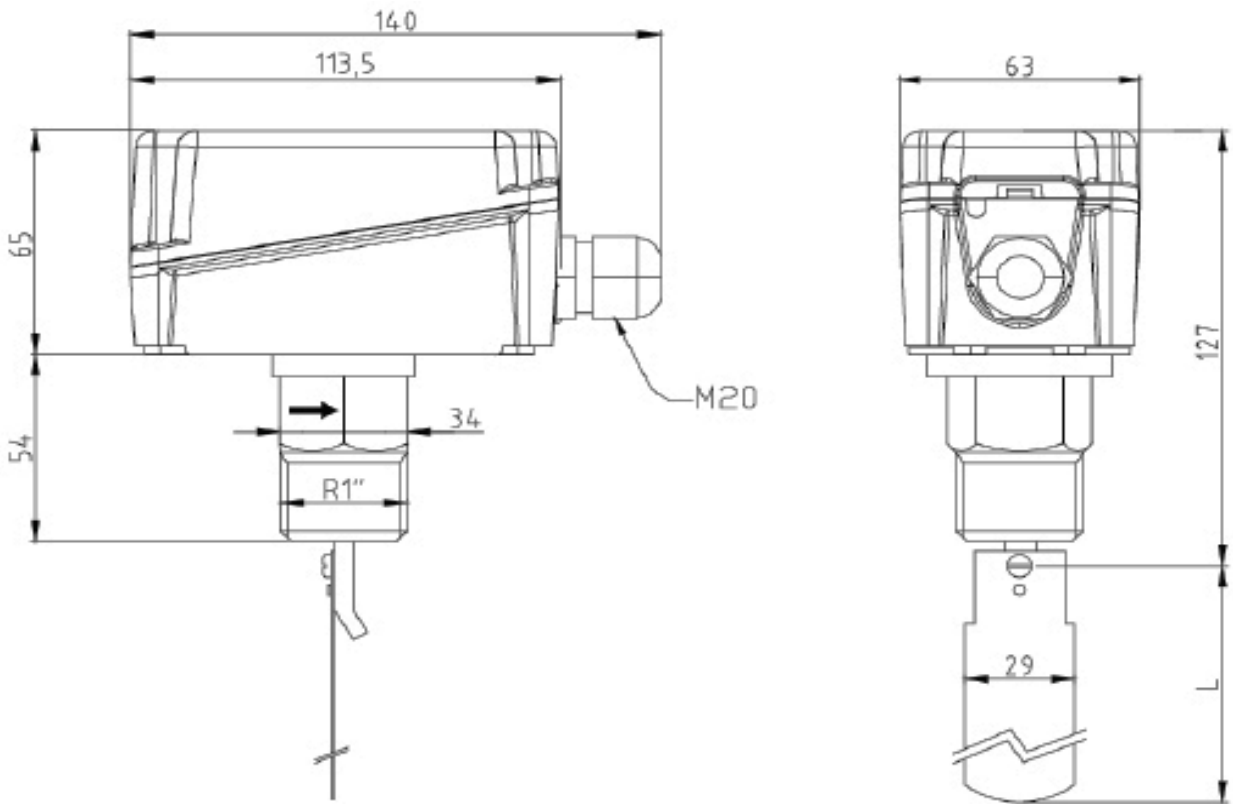
Ordering Codes:

Order number	DP-10LC.	1.	1
DP-10LC Vane operated Flowswitch			
Version /	1 = brass 2 = stainless steel 3 = air		
Adjustment range /	1 = standard 2 = reduced (only for DP-10LC.1 and DP-10LC.2)		



Dimensions in mm:

Type: DP-10LC.1.x and DP-10LC.2.x:



Type: DP-10LC.3.1

