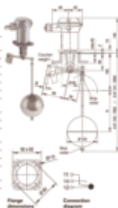


Top-mounted level switches for level alarm or pump control applications

Type	A 01 140 (S, L) A 01 141 (S, L)
Function	0 point contact pump or 1 switching point alarm
Nominal pressure	PN 10 bar, G-DIN2626
Operating temperature	0 to 80°C
Ambient temperature	0 to 70°C
Density of the liquid	
• Pump control	max. 2.5 kg/m ³
• Alarm	max. 6.0 kg/m ³
Operating differential	A 01 140: 10 to 1200 mm A 01 141: 10 to 2000 mm
Wetted material	stainless steel (AISI316)
Mounting material	stainless steel or cast aluminium
Flange dimensions	approx. 50 x 50 mm, PN10 PN16
Switch element	Microswitch SPDT with silver contacts
Switch rating	250 VAC, 5 A; 30 VDC, 5 A
Endusers	PN10
Weight	A 01 140 approx. 2.0 kg A 01 141 approx. 2.7 kg
Approvals	ATEX, CE, IECEx, SIL, LVD, EMC, RoHS



Setting the switching differential

1. For pump control (2 switch points)

The required differential is set by fixing the two stop collars to the appropriate positions on the rod. The counterweight has to be adjusted to compensate for the rod weight (without float), until the cross-arm is balanced. The float slides up and down the rod with the liquid level and activates the switch at the set position of the stop collars. The switch remains latched between the two positions, which are for applications such as pump control where the contact will usually need to remain energized throughout the pumping cycle.

2. For alarm operation (1 switch point)

Only the lower collar is fixed on the rod (below the float). Within the limit of the rod length, the height of the alarm point can be chosen as required. The counterweight has to be set, to balance the rod (without float). The alarm switching differential is 10 mm.

Adjustment of float

The level switches are factory set for pump control. Clearance 0 = 10 mm (Type 140), = 20 mm (Type 141). If the rods have to be shortened or the switch has to be used for alarm purposes, the position of the counter-weight has to be adjusted, as described on the back page.

Installation

Clear open tanks or vessels are selected. On closed tanks use the manifold connection with the float mounted from the inside. In the absence of a manifold, i.e. the float can not be inserted from the inside, an outer manifold flange with an inside diameter of min. 120 mm of flange material and a 120/120 or 140/140" should be used. Preferential access, the rod should be guided freely at the lower end.

Certificates

- Material certificate acc. to EN 10204-2.2 and EN 10204-2.1
- Test records of hydraulic pressure and force-load tests
- Test records of material tests