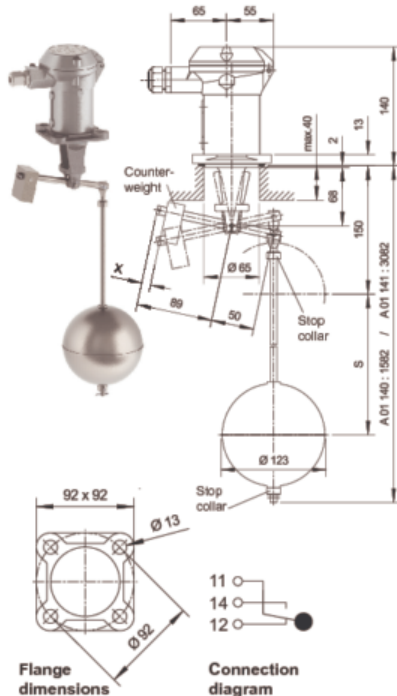


Top mounted level switches for level alarm or pump control applications

Type	A 01 140 (SIL 1) A 01 141 (SIL 1)
Function	2-point control (pump) or 1 switching point (alarm)
Nominal pressure	PN 16 acc. to EN/DIN
Operating temperature	0 to 300°C
Ambient temperature	0 to 70°C
Density of the liquid	
> Pump control	min. 0.45 kg/dm ³
> Alarm	min. 0.30 kg/dm ³
Operating differential	A 01 140: 12 to 1340 mm, A 01 141: 12 to 2840 mm
Wetside material	stainless steel (CrNiMo)
Housing material	seawater resistant die cast aluminium
Flange dimensions	square 92 x 92 mm, PCD 92 mm
Switch element	Microswitch SPDT with silver contacts
Switch rating	250 VAC, 5 A / 30 VDC, 5 A
Enclosure	IP65
Weight	A 01 140: approx. 2,5 kg, A 01 141: approx. 2,7 kg
Approvals	ABS, BV, DNV, GL, LRS, RINA, RMRS



Setting the switching differential

1. For pump control (2 switch points)

The required differential is set by fixing the two stop collars in 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 actuates 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 contactor coil would 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 outweigh the rod (without float). The alarm switching differential is 12 mm.

Adjustment at factory

The level switches are factory set for pump control. Distance X = 32 mm (Type 140), = 29 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

Over open tanks or sumps on a bracket. On closed tanks on the manhole cover with the float mounted from the inside. In the absence of a manhole, i.e. the float can not be mounted from the inside, an intermediate flange with an inside diameter of min. 125 mm of flange modules acc. to EN/DIN DN125 or ANSI DN5" should be used. If turbulence occurs, the rod should be guided loosely at the lower end.

Certificates

- Material certificates acc. to EN 10204-2.2 and EN 10204 3.1
- Test records of hydraulic pressure- and functional tests
- Test records of material tests