

H40 Level Switch

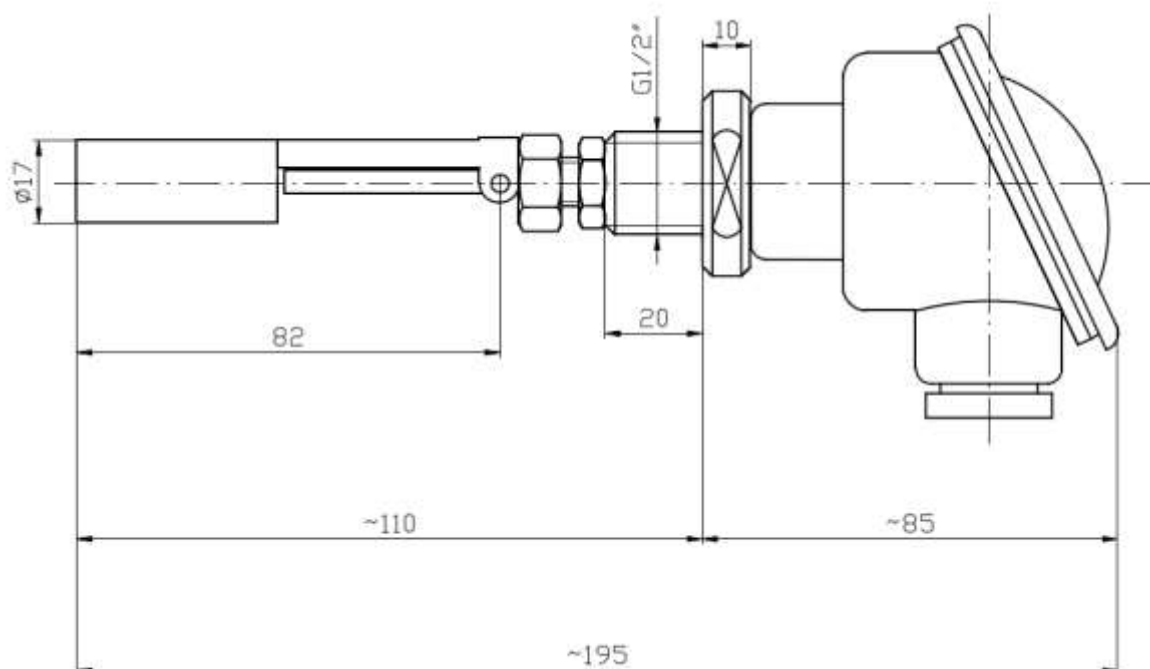
Use

Due to its compact and robust construction, the H40 Level Switch is predestinated to monitor minimum, maximum or any other liquid levels in pressure and non-pressure vessels in the energy, chemical or food industries etc. The advantage of this model is contactless design using a magnetic coupling. The H40 level switch can be used in explosive atmospheres and at extreme temperatures or pressures.

Description

The float is fixed on an arm, which turns round a pin when the medium gets into contact with a float. As a consequence, the contact closes or opens. The H40 Level Switch is to be mounted horizontally on the outside vessel wall.

The terminal box is built into a compact enclosure. We recommend shielding the contacts from capacity or inductive loading as usual.



Technical parameters

Type H40:	SPDT switch-over contact
Type H41:	Contact opens when the float is flooded.
Type H42:	Contact closes when the float is flooded.
Max. voltage:	250 V AC, 200 V DC
Max. switching current:	1 A
Contact loading:	50 W
Operating medium temperature:	- 50 to + 150 °C, on request up to 400 °C

Max. ambient temperature:	- 40 to + 100 °C
Min. medium density:	> 0.4 g/cm ³
Max. operating pressure for stainless steel:	2.5 MPa
Enclosure protection:	IP 55

Usage in explosive atmospheres

The level switch can be installed in the explosion hazard environment with flammable gases and vapors. The part with the float can be used in Zone 0. The part with a head can operate in Zone 2. The level switch is a simple device in accordance with CSN EN 50020 and CSN EN 60079-14. It has to be connected only to intrinsically safe circuits of approved devices (ia category). The maximum input parameters of this level switch are as follows: $U_i=30$ V, $I_i=100$ mA, $L_i=0$, $C_i=0$.

Materials

The parts in contact with media are made of stainless steel or polypropylene.
The connecting pieces such as flanges, threads as well as technical parameters and Ex versions can be customized.

Installation

The level switch is to be installed horizontally.

- 1) Before installing the level switch, check the data on the nameplate if they conform to the properties of measured liquids.
- 2) Check the geometrical accuracy of a connected mating part to protect the level switch construction from extra loading.
- 3) Fasten the level switch using threaded connections. Because of electrical connections we recommend using serrated lock washers.
- 4) Tighten the threaded connections up to the torque value specified for the operating pressure in vessels.
- 5) Every device is pressure tested for a 1.5 multiple of the operating pressure stated in the purchase order.
- 6) Before commissioning, carry out the default revision of electrical equipment.

Ordering

To process your purchase order, we need the following data:

- kind of medium
- concentration in %
- density
- viscosity
- temperature
- pressure
- rated inside diameter (DN) and rated pressure (PN) of connecting flanges or any other connections