

Level switch H – 40



Usage

Compact and robust construction predestine Level switch H-40 to guard minimal, maximal or any other level of liquids in pressure and in non pressure vessels in energetic, chemical or food industry etc. The advantages of this variant is touchless design of contact done by magnetic connector. It is possible to be used in environment with danger of explosion or with extreme temperatures or pressures.

Description

The float is fixed on arm, which turns around peg during the contact of media with float, which leads to closing or opening of contact. Level switch H – 40 is fixed horizontally to external side of vessel.

Terminal box of switch is built in massive shell. We recommend to protect contacts as usual for capacity or inductive loading.

Technical parameters

Type H 41:	Contact is opened with overflowing of float
Type H 42:	Contact is closed with overflowing of float
Max. tension:	250 V AC, 200 V DC
Max. closing power:	0,8 A
Loading of contacts:	25 W
Operating temperature of media:	- 40 to + 140 °C, on request up to 400 °C
Max. temperature of environment:	- 40 to + 100 °C
Min. density of measured media:	> 0,4 g/cm ³
Max. operating pressure for stainless steel:	2,5 MPa
Coverage:	IP 55
Labelling for the environment with danger of explosion:	⊕ II (1)3 GD T6

Usage in the environment with danger of explosion

The switch is possible to install in the environment with danger of explosion of inflammable gases and vapors. The part with the float is possible to run within area zone 0, the part with head is possible within area zone 2. It is easy device according to appropriate requirements ČSN EN 50020, ČSN EN 60079-14. The switch has to be connected only to spark safe network of approved device category ia. Maximal input parameters of the switch are $U_i=30\text{ V}$, $I_i=100\text{ mA}$, $L_i=0$, $C_i=0$.

Material design

Material design of parts in contact with media is stainless steel, eventually polypropylene.

Method of connection – flanges, thread, same as different technical parameters, Ex version is possible to modify according to the request of customer.

Installation

The level switch is installed horizontally.

- 1) Before the installation it is necessary to check the data on nameplate, if they correspond with characteristic of measured liquid
- 2) Also to check geometrical accuracy of connected mating part, to avoid the construction of level switch from added loading
- 3) The installation is done by connecting bolting. Because of electrical connection we recommend to use frond liners.
- 4) Bolted connections need to be tighten by loose gyroscopic moment destined for particular operating pressure in vessels.
- 5) Each device is pressure tested by 1,5 multiple of operational pressure, wchid is noted in order.
- 6) Before usiage it is necessary to make initial revision of electrical devices.

Ordering

For the supply is necessary to give this information:

- Kind of media
- Concentration in %
- density
- viscosity
- temperature
- pressure
- standard inside diameter DN and standard pressure PN of connecting flanges or any other connection