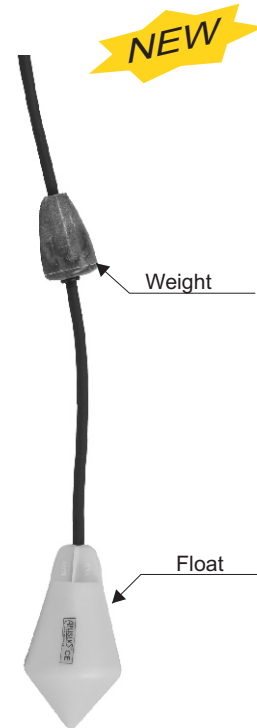


Float level switch ERH-01-18

- ✓ Min/max signalization
- ✓ Range change possible by changing weight position
- ✓ Direct control of low power pumps
- ✓ Chemical resistance to most common media
- ✓ High mechanical and electrical resistance

Technical data

Minimal signalization range	350mm ±15%
Max. medium temperature	85°C
Max. pressure	0,35 MPa
Nominal current I_{nc}	20 A
Power supply	250V AC-50/60Hz
Contacts	filling - black – blue emptying - black – brown
Ambient temperature	-25...+80 °C
Ingress protection class	IP68
Cable length	10 or 20 m
Cable type	Neoprene HR HY H07RN8-F 3x1mm ²
Float material	Copolymer polypropylene
Additional accessories	Weight



Ordering procedure

ERH-01-18 / L = ... m/...

Cable length

Optional: weight

Magnetic level switches ERH-xx-20

Description

Level signalling of the medium having minimum density 0,70 g/cm³. The basic version, mounted from the top, is available with 92x92mm flange connector, head made from aluminium alloy and M20x1,5 cable gland with casing protection degree IP68. Other versions of mechanic or threaded flange connectors - according to the ordering code. There is also a possibility of ordering the level switch with connector according to the requirements, e. g. with flange acc. to DIN or ANSI standard. The level switch can also be ordered in version fully made from acidproof steel, with additional cover protecting the float, as well as with certified cable of optional length.

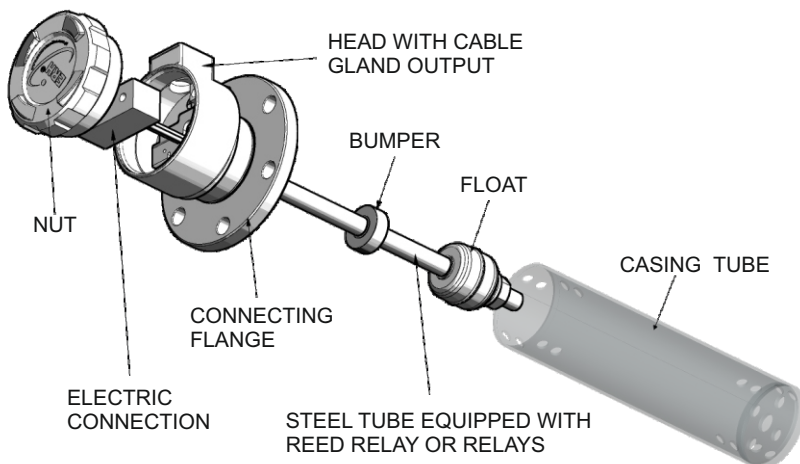
Technical data

Min. medium density	0,70 g/cm ³
Max. process pressure	1,0 MPa
Ambient temperature	-25 °C...+ 60°C
Medium temperature	-25 °C...+ 80°C
Switching points	1,2 or 3
Switching rate	230 V AC; 100VA; 1A 230 V DC; 50W; 0,5A
Hysteresis	10mm
Ingress Protection	IP68
Material of the wet part	acidproof steel 316L
Material of the dry part	aluminium alloy or acidproof steel 316
Floating element	Φ40x35mm
Protection tube	Φ60
Weight of the level switch **	0,3...8,5 kg
Weight of the cable	0,15 kg/mb

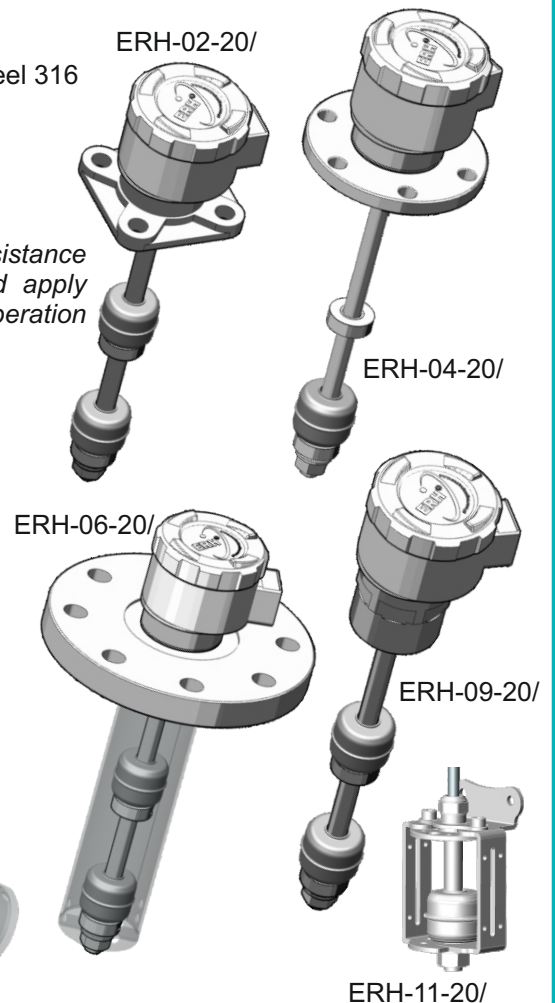
* maximum parameters of the reed relays apply to the loads of resistance character; for inductive loads such as relay coils, one should apply adequate protecting systems (detailed pieces of information in Operation Manual)

** it depends on the version

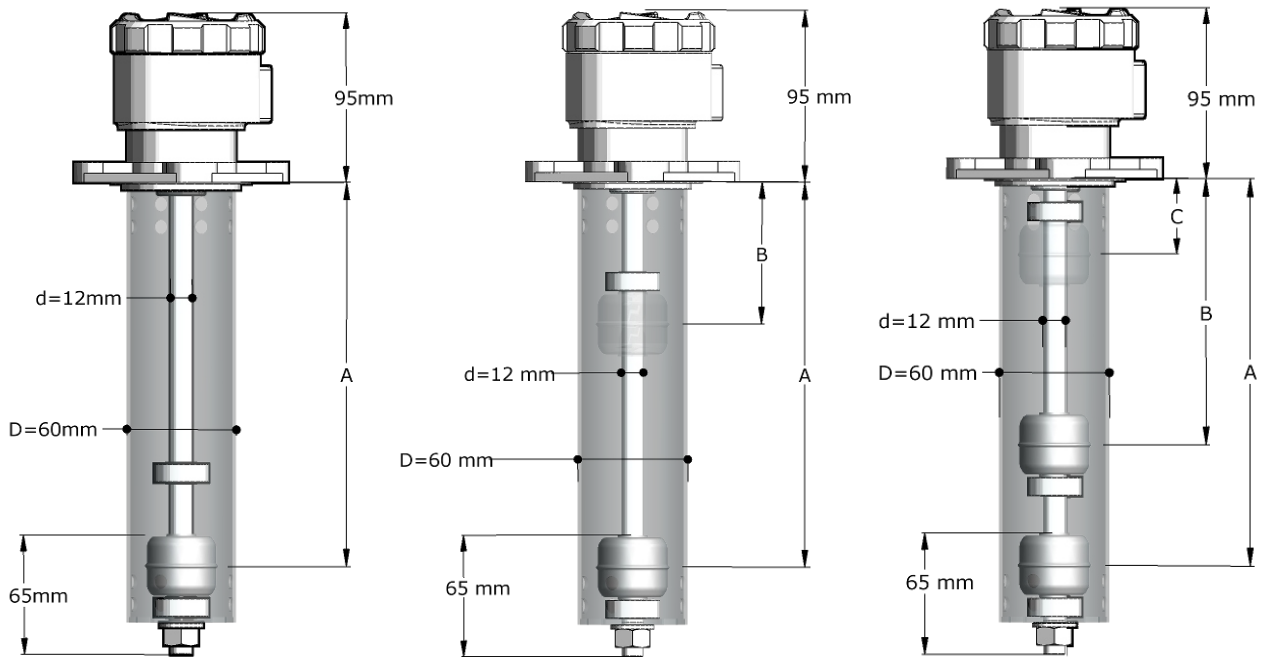
Design



Examples of level switches

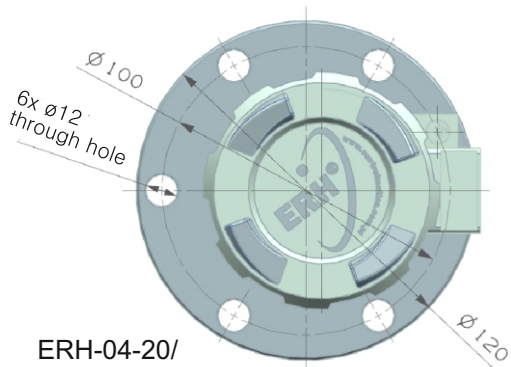
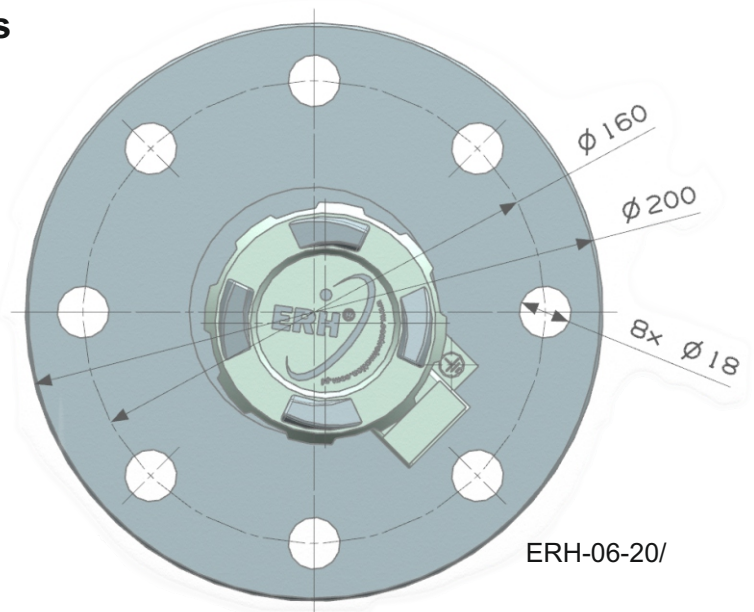
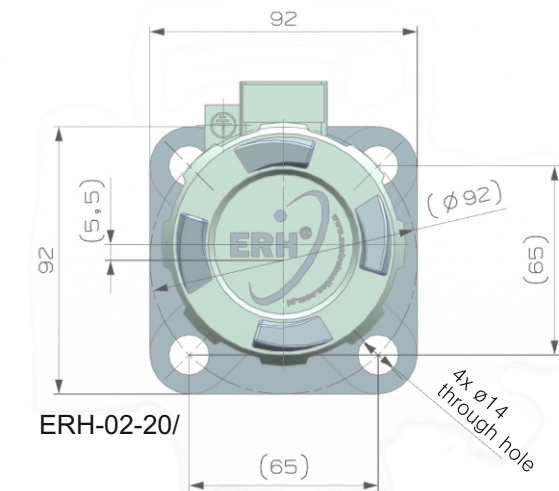


Dimensions



The dimensions A, B and C depend on the ordered version. For one signalling point: A min. 50mm, A max. 1000mm. For two signalling points: A min. 150mm, A max 1000mm; B min. 50mm, B max 900mm; (A – B) min. 100mm. For three signalling points: A min. 250mm, A max 1000mm; B min. 150mm, B max 900mm; C min. 50mm, C max 800mm; (A – B) min. 100mm, (B – C) min. 100mm.

Dimensions of flange connectors



Flanges for special version *

Flange marking	Outside diameter	Number of holes	Hole diameter	Spacing of holes
CON-14/340	Φ 130mm	4	Φ 15mm	Φ 105mm
CON-14/346	Φ 160mm	4	Φ 14mm	Φ 130mm
CON-14/287	Φ 170mm	8	Φ 14mm	Φ 138mm
CON-14/347	Φ 190mm	4	Φ 18mm	Φ 150mm
CON-14/348	Φ 220mm	8	Φ 18mm	Φ 180mm

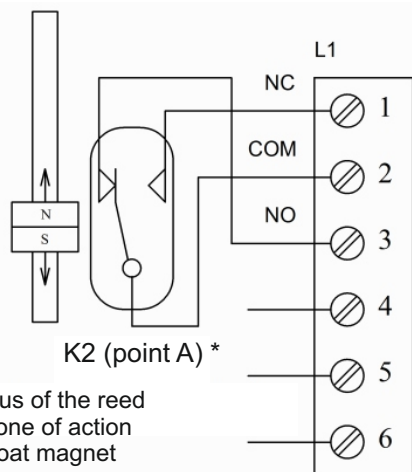
* other versions of flanges after mutual agreement

Electric diagram

One switching point (one float)

The diagram shows state of reed relay at minimum level of medium – magnetic field of the float interacts the reed relay.

Reed relay without activation of magnetic field of the float at so-called normal state is configured as normally open NO.



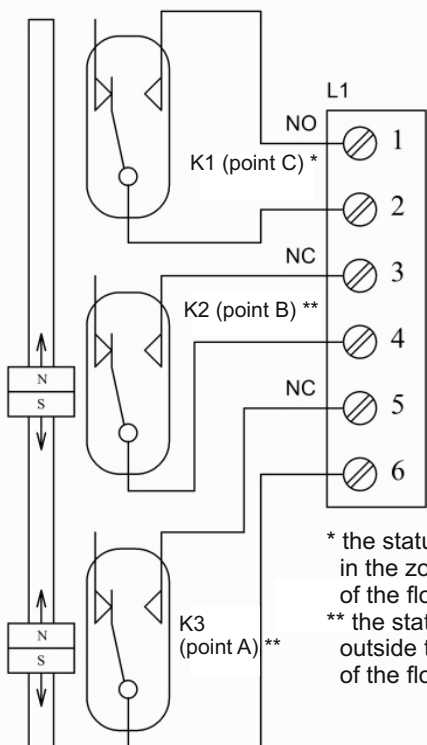
* the status of the reed in the zone of action of the float magnet

Three switching points (two floats) *

The diagram shows state of reed relays at minimum level of medium - magnetic fields of the float interact the reed relays K2 and K3.

Reed relays without activation of magnetic field of the float at so-called normal state are configured as:

- K1 - normally open NO
- K2 - normally closed NC
- K3 - normally closed NC



* the status of the reed in the zone of action of the float magnet

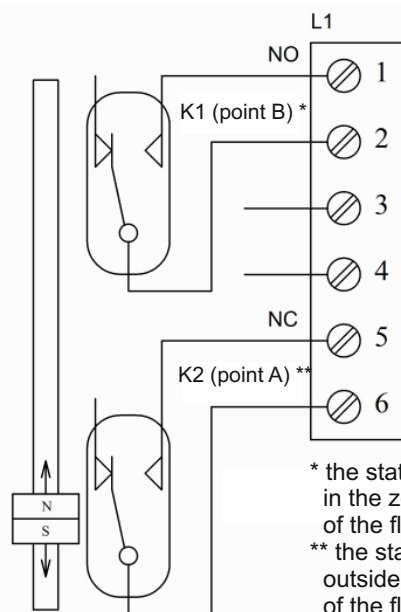
** the status of the reed outside the operation of the float magnet

Two switching point (one float)*

The diagram shows state of reed relays at minimum level of medium - magnetic fields of the float interact the reed relay K2.

Reed relays without activation of magnetic field of the float at so-called normal state are configured as:

- K1 - normally open NO
- K2 - normally closed NC



* the status of the reed in the zone of action of the float magnet

** the status of the reed outside the operation of the float magnet

* there is a possibility of other than given configurations of leadouts – after agreement

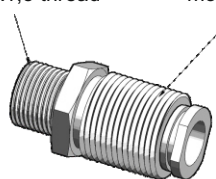
Electric connectors

The level switch is equipped with standard gland providing the casing protection degree IP68, at pressures up to 1MPa. In this version the controller can be ordered with cable, or without cable.

The level switch can also be equipped with special gland, marked ER2-1593, which gives possibility of mounting the casing tube of cable (it is not the equipment element). In such version the controller can be ordered exclusively with cable.

Gland from the side of head M20x1,5 thread

Conical thread 3/4" for mounting of cable casing



Electric connector ER2-1593

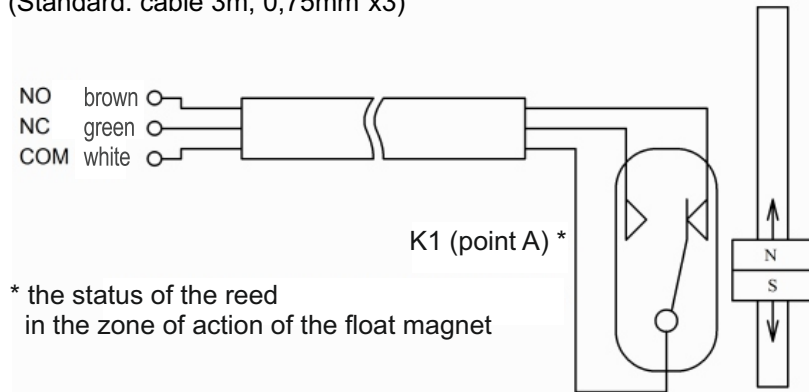
Magnetic level switch with mounting clamp in mini version

Features of level switch in mini version:

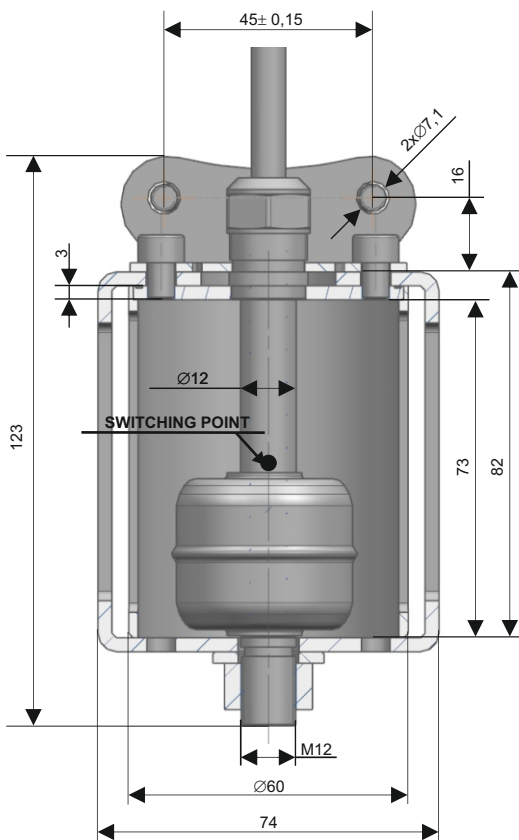
- Realized functions: close, open, switched
- Switching point - approximately in the middle of tube length
- Fully made from acidproof steel
- Possibility of easy mounting, e. g. by means of mounting clamp (2" clamp is attached to the complete set)

Electric diagram

(Standard: cable 3m; 0,75mm²x3)



Dimensions



Fixing by means of 2" clamp

