

What kind of Point level switch is right for your application?

Point level switch indicates whether a medium is above or below a specific point. Often a point level switch is used as a warning indicator, triggering an alert in situations where a fluid level is either too high or too low and maintains level between two points.

Float level sensors are straightforward, and work on a simple principle. In most cases, a float containing a magnet travels freely along a stem as the level of liquid rises or falls, and a switch is activated based on the magnetic field that is generated. Reed switches are often used in float level sensors due to their durable construction.

Vibrating tuning fork point level sensor produce vibration in the tuning fork element at a specific frequency and receive electronic feedback. When the probe element is sensed by material presence the output state changes to indicate the material's presence.

Vibrating probe work on a frequency change which triggers the switch. It's ideal for applications where: the dielectric constant is low. Vibration helps shake off build up.

Capacitive level sensors work very well for reflective, sticky, or viscous fluids. The switch works well in mediums with reasonably high dielectric constants or conductive solutions

RF Admittance level switch consists of a guard section, upper insulation, main probe and grounding. The guard section is designed to overcome possible medium attachment. The upper main probe, guard, and grounding are all insulated. The level of the medium can be detected by the increasing of admittance when medium reaches the main probe. The grounding and the main probe are insulated; thus, the device will still function accurately and not cause false alarms when the medium attaches the probe.

Rotary paddle level switch detects the presence of solid/powder. During normal operation (no material present) a synchronous motor rotates the paddle at RPM. When this paddle rotation is impeded by material, surrounding the paddle, motor will stall and cause the Micro-switch to change state (indicating an alarm or control).

Optical liquid level switch design is based on light and uses the principle of total reflection in a prism. Reflection or penetration is the basis of the level alarm output. When the sensor is surrounded by air, the angle of incidence is greater than the critical angle and thus total reflection occurs. Totally reflected light can be transmitted to the receiver. Conversely, when the sensor is surrounded by Liquid, due to the refractive index of the liquid and the sensor tip material, almost all light will penetrate the front of the sensor. The receiver can detect and determine a light reflected or penetrated state and determines the circuit output.

Liquid

1. Cable float

- Float type cable float, **FT-FAPC**

2. Conductivity

- Conductivity type Elettrosonda **DB series (5)**
- Conductivity type Elettrosonda **Q series (3)**
- Conductivity type Elettrosonda **Z8-Z11 (3)**

3. Heavy duty bilge switch

- Bilge switch with lifting bracket **BR-LCG-1036-A1**

4. Heavy duty side mounted float

- Float type horizontal mount SS **LHS series**

5. Horizontal mounted mini float

- Float switch Horizontal mount **LKS-3310/3610**
- Float switch Horizontal mount **LKS-3312, DIN**
- Float type horizontal mount plastic, **FT-FCH**
- Float type horizontal mount plastic, **LS-7 series**

6. Magnetic float

- Float type vertical mount single & multi-level

7. Optical

- SD20
- ELS1100 series

8. Tuning fork

- SCX2 Tuning Fork Level Switch

9. Vertical mounted mini float

- Float type single point, **LS-1700/1800/1950**
- vertical mount miniature plastic, **FT-FCV**
- vertical mount PP, Nylon, Buna N, **LS-3**
- vertical mount SS switch, **BR-LCN**

Solid and liquid

1. Capacitance for liquid/solid

- Capacitance level switch **SAX series**

2. RF Capacitance / admittance

- Level switch for liquid/solid – **SBx**

3. Rotary paddle for solids

- Rotary paddle level switch **SEx series**

4. Tuning fork for Powder and liquid

- Tuning Fork Level Switch – **SCX2 series**

Bilge LCG-1036



Elettrosonda
DB / Q / Z8-Z11



FAPC



FCH / LS-7



LS-3



LKS-3310/3610/3312



LHS



LCN



Tailor-made



LS-1700/1800/1950



FCV



SAX



SBx



SEx



SCX2



SCX1



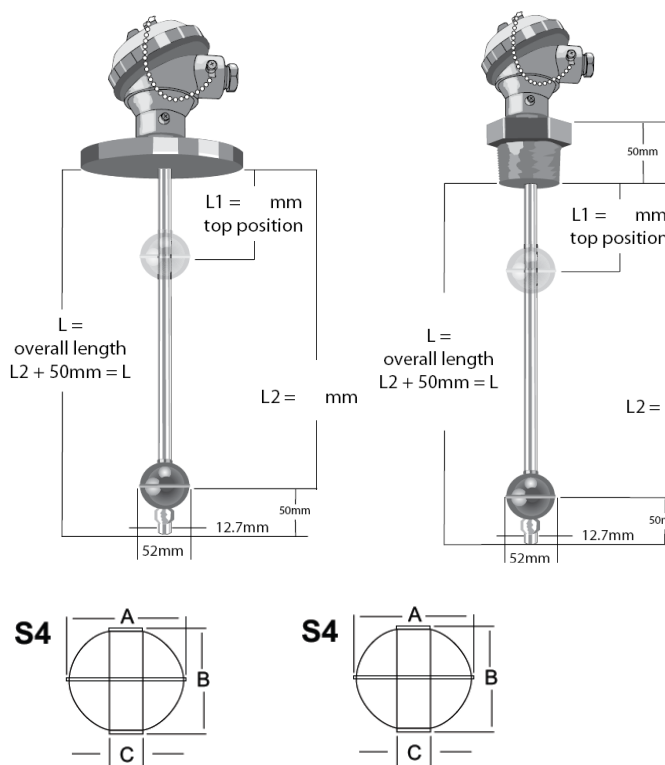
Bilge switch with lifting bracket BR-LCG-1036-A1



Slosh shield material	Acrylic Ø 60 x 4 t
Float & stem material	SUS316 & SUS 304
Maximum Temperature	-20°C to +80°C
Maximum Pressure	20 bar
Float S.G	0.7
Minimum fluid S.G	0.8
Contact form	Form A, SPST
Switching power max. VA	50W (70VA)
Switching voltage	240 VAC /200 VDC
Switching current	0.5 A
Electrical connection	FEP jacket cable 1M
IP protection	IP 68

Application: Hydraulic and diesel oil tank, bilge wells, sump tank

ECEFast, custom sensor



Overall length	Max. 1500mm
Process Connection	1" and 2" BSP nipple / flange
Termination Head	Aluminium
Float type	S1 / S4
Wetted parts	SS316
Max temperature	95°C
S1 type	A=28mm; B=28mm, C=8mm
S4 type	Max. pressure=10bar A=52mm; B=52mm, C=15mm Max. pressure=30bar
Ordering information	Total length; Number of floats; Distance between floats; Process connection

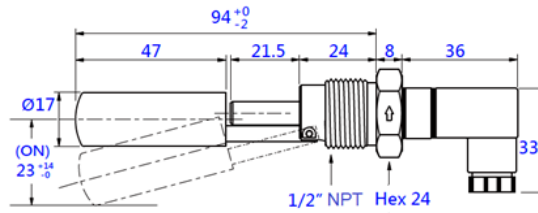
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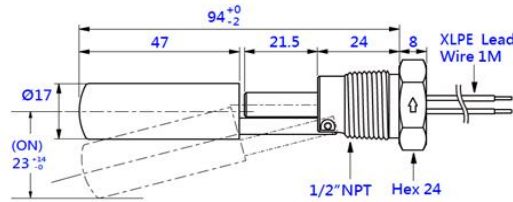
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BR-LKS-3312 (DIN connector)

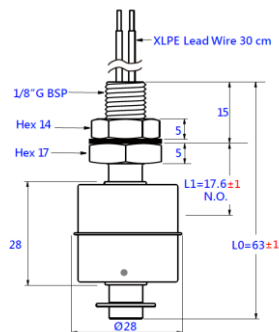


BR-LKS-3310 (lead wire)

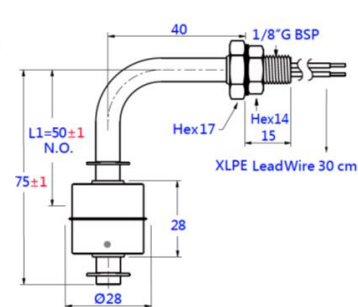


Mounting style	External	Max pressure	10 bar
Mounting thread	½" NPT	Liquid S.G	0.8
Stem material	SUS304	Contact form/rating	NO/NC,SPST,50W,240VAC/200VDC
Float material, size	SUS16, Ø17x47	Switching current max	0.5A
Operating Temp	-10°C to +120°C	Carry current max	1.0A

BR-LCN 1119



BR-LCN-5119



	BR-LCN-1119	BR-LCN-5119
Mounting style		Internal
Mounting thread		1/8" G BSP
Stem material		SUS316
Float material		SUS 316L
Max operating Temp.		-20°C to +120°C
Max pressure		10 bar
Liquid S.G		0.8
Contact form/rating VA		SPST,50W,240VAC/200VDC
Switching current max		0.5A
Carry current max		1.0A
Lead wire		LPE AWG 22 x 30 cm

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LHS series



LHS-3052RHJIS	1½" PT, 41mmØ float
LHS-3151RHJIS	2" PT, 50mmØ float
LHS-5052JIS	1½" x 5Kg/cm² flange, 41mmØ float
LHS-705I	92 x 92 square flange, 50mmØ float
LHS-705IRH	92 x 92 square flange, 50mmØ float
Temperature range: -10 to 200°C / -10 to 100°C	
Pressure max: 20 bar/30 bar; S.G.: to 0.65 /0.55	
Wetted parts: SS304; Housing: Aluminum, IP65	

Rotary paddle



SE1 - Standarda	Rectangular 100x30	<i>Cover diameter</i>	98mm Ø
	Shovel shaped type	<i>Material density</i>	0.5g/cm²
	Rectangular type, one sided	<i>Power consumption</i>	3W
	Scimitar shaped type	<i>LED Indication</i>	NO
	Folding type	<i>Rotary speed</i>	1 RPM
SE3-Mini type	Hinged type	<i>IP rating</i>	IP65
	Cross bladed type PC	<i>Cover diameter</i>	79mm Ø
	Scimitar shaped PC	<i>Material density</i>	0.3g/cm²
	Rectangular 100x30 SUS304	<i>Power consumption</i>	1.5W
	Hinged 80x20 SUS304	<i>LED Indication</i>	YES
		<i>Rotary speed</i>	1 RPM
		<i>IP rating</i>	IP65
Temperature: -20°C to 70°C; Power supply: 240VAC			

Tuning fork



For water the trigger point is about 23mm from the fork tip. the trigger point will go down when the S.G is large than water.

SC14 Standard: 2 x ½" NPT Conduit connection

SC24 Lite type: DIN/ M12 / cable wire type; Magnetic test function feature Fork:100mm

SC28 Mini type: DIN/ M12 / cable wire type; Magnetic test function feature; Fork:40mm

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Conductivity type



Model No	ED22000000
Supply voltage	230 VAC – 50/60Hz
Inter-electrode voltages	24V
Power consumption	10VA max
Operate resistance	0–20 K Ω
Contact Rating	Resistive: 5A to 250VAC Inductive: 2A 250VAC
Contact rating alarm relays	Resistive: 0.5amps 250V
Release resistance	>20 K Ω
Response time	100 ms
Operating temperature	-10 to +55°C



Model No	FT-ELC00CR0003 FT-ELQ220R0003	EQ3SFR1000 EQ3SCR1003
Supply voltage		24VDC or 230 VAC
Inter-electrode voltages		10V
Power consumption		3VA max
Operate resistance		0–100 K Ω
Contact Rating		Resistive: 5A to 250VAC Inductive: 2A 250VAC/5A 30VDC
Contact rating alarm relays		Resistive: 0.5amps 250V
Dielectric strength		2000V
Response time		100 ms
Operating temperature		-10 to +50°C



Model:	Z8 NS model 230VAC Z8 SR model 230VAC	FT-EZ08Y000Z3 FT-EZ08YR00Z3
Supply voltage		24VDC or 230VAC
Inter-electrode voltages		10V
Power consumption		5VA max
Operate resistance		5.6 K Ω (NS), 0–100 K Ω (SR),
Contact Rating		Resistive: 5A to 250VAC Inductive: 2A 250VAC/5A 30VDC
Dielectric strength		2000V
Response time		100 ms
Operating temperature		-10 to +50°C

Z series are particularly good for their reduced sizes. They are available in the three versions: normal sensitivity (NS), high sensitivity (AS) and adjustable sensitivity (SR).