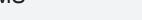




Float Switch

LFL2-CK-U-PUR5-EMS



- Switch element: microswitch, mercury-free
- Limit value detection for fluids
- Sleeve design: small diameter, mounting through G1 tap hole possible



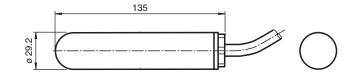
Function

The microswitch (change-over contact) is integrated in a PP float and is activated in the event of deviations from the horizontal position. The switching ball in the float, which moves along an axis, activates the microswitch.

Connection

 BU	
ВK	
ΒN	

Dimensions



Technical Data

Electrical specifications	
Contact loading	250 V AC/3 A; 150 V DC/0.25 A resistive load; 60 V DC/1 A resistive load
Rated insulation voltage	300 V

Float Switch

LFL2-CK-U-PUR5-EMS

Operating conditions Installation conditions Installation instructions range of application and minimum length between mounting and float: ≥ 100 mm (4 inch), preferred for fuels, heating oils, oily fluids mounting: - The float switch is mounted either from sidewards through a cable gland ≥ G1A into the vessel or - by means of a counter weight or rods (e. g. float switch combination) from the top. The process pressure (static pressure) Process pressure (static pressure) ≤ 3 bar (43.5 psi) at 20 °C (68 °F) Density ≥ 0.8 g/cm³ Ambient conditions -25 70 °C (41 158 °F) Storage temperature 5 70 °C (41 158 °F) Altitude ≤ 2000 m above MSL Mechanical specifications IP68 Cable IP68 Cable IP68 Material 5 m	Technical Data		
Electrical life ≥ 5 × 10 ⁴ switching cycles Directive conformity Electrical life Low voltage Electrical life Directive 2014/35/EU EN 60947-5-1:2004 + Cor.:2005 + A1:2009 Conformity Electrical life Degree of protection IEC 60529:2001 Application microswitch with switching ball, change-over contact Function and system design Equipment architecture Equipment architecture This device may be used with any sequential circuit, as long as the circuit can support the electrical circuit values of the switching elements. Operating conditions range of application and minimum length between mounting and float: \$ 100 mm (4 inch), preferred for fuels, heating oils, olly fluids mounting: Installation instructions range of application and minimum length between mounting and float: \$ 100 mm (4 inch), preferred for fuels, heating oils, olly fluids Process conditions - The float switch is mounted either from sidewards through a cable gland ≥ G1A into the vasel or counter weight or rods (e. g. float switch combination) from the top. The pivot of the cable should always be horizontal. Process pressure (static pressure) ≤ 3 bar (43.5 psi) at 20 °C (68 °F) Density ≥ 0.8 g/cm³ Ambient conditions -25 70 °C (41 158 °F) Storage temperature 5 70 °C (41 158	Pulse withstand voltage		4 kV
Directive conformity Low voltage Image: Second Secon	Ũ		
Low voltage Image: Conformity Directive 2014/35/EU EN 60947-5-1:2004 + Cor.:2005 + A1:2009 Conformity IEC 60529:2001 Application IEC 60529:2001 Application microswitch with switching ball, change-over contact Function and system design Equipment architecture Equipment architecture This device may be used with any sequential circuit, as long as the circuit can support the teleptrical circuit values of the switching elements. Operating conditions Installation conditions Installation conditions range of application and minimum length between mounting and float: 2 100 mm (4 inch), preferred for fuels, heating oils, oily fluids mounting: - The float switch is mounted either from sidewards through a cable gland ≥ G1A into the vessel or - The pivot of the cable should always be horizontal. Process pressure (static pressure) ≤ 3 bar (43.5 psi) at 20 °C (68 °F) Density ≥ 0.8 g/cm³ Ambient temperature 5 70 °C (41 158 °F) Attitude ≤ 2000 m above MSL Mechanical specifications Image of protection Degree of protection IP68 Cable Image of protection Length L 5 m			
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Altitude ≤ 2000 m above MSL Mechanical specifications IP68 Cable I Length L Sm Mechanical construction Material float: PP (Polypropylene)	Ambient temperature		5 70 °C (41 158 °F)
Mechanical specifications Degree of protection IP68 Cable I Length L 5 m Mechanical construction ID68 Material ID68 ID68	Storage temperature		-25 70 °C (-13 158 °F)
Degree of protection IP68 Cable IP68 Length L Sm Mechanical construction Material float: PP (Polypropylene)	Altitude		≤ 2000 m above MSL
Cable Length L 5 m Mechanical construction float: PP (Polypropylene)	Mechanical specifications		
Length L 5 m Mechanical construction float: PP (Polypropylene)	Degree of protection		IP68
Mechanical construction float: PP (Polypropylene)	Cable		
Material float: PP (Polypropylene)	Length	L	5 m
	Mechanical construction		
cable: PUR, nignly flexible (3 x 0.50 mm ²)	Material		float: PP (Polypropylene) cable: PUR, highly flexible (3 x 0.50 mm²)
Switching point switch angle, measured against the horizontal: - upper switch point +25° ±10° - lower switch point -14° ±10°	Switching point		- upper switch point $+25^{\circ} \pm 10^{\circ}$
General information	General information		
Supplementary information Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see www.pepper fuchs.com.	Supplementary information		instructions have to be observed where applicable. For information see www.pepperl-

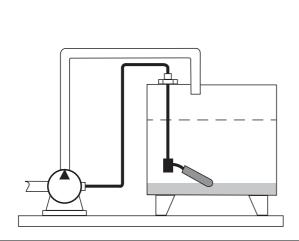
Accessories

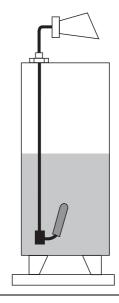
ALLES	301165		
	LFL-Z132-EMS	Gland screw connection	
- 7 -	LFL-Z32-EMS	Ballast weight for float switch	

Application

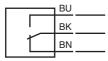
Level control via pump

Level message via switching signal

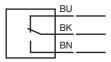




Minimum fail safe mode connection



Maximum fail safe mode connection



Mounting

Mount the float switch in the following way:

- Insert the float switch into the tank through a tapped hole G1A.
- Srcew the float switch with the gland screw connection G1A.
- If it is installed from above, use the counter weight LFL-Z32 or LFL-Z33 for mounting.



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The fulcrum of the cable should always be horizontal.

The cable length between the fixture and the floating body is dependent on the cable type. When using the counter weight, place an extra strain relief (e. g. a knot in the cable) behind the gland screw connection – on the outside of the tank.

ООО "РусАвтоматизация"