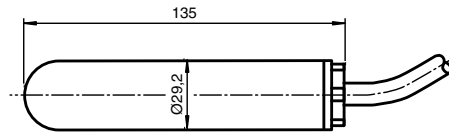


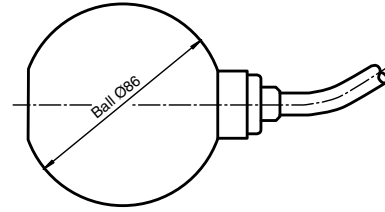
Float switch

Dimensions

Float switches



Sleeve design LFL2-CK-U

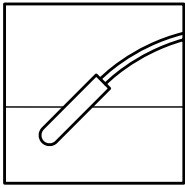


Ball design LFL2-BK-U

Vibration limit switches

LFL2-U

Conductive limit switches



Capacitive limit switches



Features

- Switching element: microswitch
- Determination of limiting values for fluids
- Sleeve design: small diameter, mounting through G1 tap hole possible
- Ball design: high buoyancy

Limit value immersion probes

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 operation ball in the float, which moves along an axis, activates the microswitch.

Continuous immersion probes

Hydrostatic pressure sensors


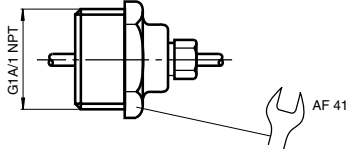
Electrical connection

Connection

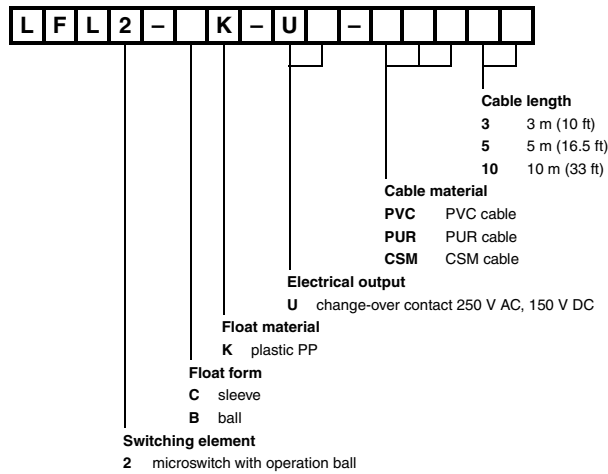
Cable colours		when potential-free
black-brown	=	contact open
black-blue	=	contact closed

	LFL2-U	
Application		Float switches
Description	switching element: microswitch with operation ball, change-over contact	
Auxiliary energy		
Electrical connection	this device may be used with any sequential circuit, as long as the circuit can support the electrical circuit values of the switching elements	
Connectable load	max. 250 V AC, 150 V DC, max. 3 (1) A	
Operating conditions		Vibration limit switches
Mounting conditions		
Installation instructions	<p>range of application and minimum length between mounting and float:</p> <ul style="list-style-type: none"> PVC version: ≥ 50 mm (2 inches), preferred for water, waste water, slightly aggressive liquids PUR version: ≥ 100 mm (4 inches), preferred for fuels, heating oils, oily fluids CSM/CM version: ≥ 100 mm (4 inches), preferred for many acids and lyes <p>mounting:</p> <ul style="list-style-type: none"> the float switch is mounted either from sideways through a cable gland ≥ G1A into the vessel or by means of a counter weight or rods (e. g. float switch assembly) from the top the pivot of the cable should always be horizontal. 	
Ambient conditions		Conductive limit switches
Protection class	DIN EN 60529, IP68	
Process conditions		
Process temperature	PVC version: 5 ... 70 °C (278 ... 343 K) PUR version: 5 ... 70 °C (278 ... 343 K) CSM/CM version: -20 ... +90 °C (253 ... 363 K)	
Process pressure	sleeve design: ≤ 3 bar at 20 °C (293 K) ball design: ≤ 2 bar at 20 °C (293 K)	
Density	sleeve design: ≥ 0.8 g/cm ³ ball design: ≥ 0.6 g/cm ³	Capacitive limit switches
Mechanical construction		
Versions	<ul style="list-style-type: none"> LFL2-CK-U-PVC3 LFL2-CK-U-PUR3 LFL2-CK-U-CSM3 LFL2-BK-U-PVC3 LFL2-BK-U-PUR3 LFL2-BK-U-CSM3 	
Material	float: PP (Polypropylene) cable: PVC version: PVC cable, highly flexible (3 x 0.75 mm ²) PUR version: PUR cable, highly flexible (3 x 0.50 mm ²) CSM/CM version: CSM/CM cable (chlorinated polyethylene, (3 x 0.75 mm ²))	Limit value immersion probes
Switch point	switch angle: upper switching point +25° (±10°), lower switching point -14° (±6°), measured against the horizontal	
General information		Continuous immersion probes
Directive conformity		
Directive 89/336/EC (EMC)	EN 60947-5-2: 1998, EN 60947-5-2 A1: 1999	
Directive 73/23/EC (Low Voltage Directive)	EN 50178: 1997	Hydrostatic pressure sensors
Supplementary information	EC-Type Examination Certificate, Statement of Conformity, Declaration of Conformity and instructions have to be observed. For information see www.pepperl-fuchs.com .	

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Float switches	Accessories	LFL2-U
	Designation	<ul style="list-style-type: none"> LFL-Z231, counter nut, G1A, PVC LFL-Z32, counter weight, grey cast iron with plastic coating (Polycarbonate) LFL-Z33, counter weight, grey cast iron with ECTFE coating (Halar)  <ul style="list-style-type: none"> LFL-Z131, cable gland G1A, PVC LFL-Z132, cable gland G1A, brass LFL-Z431, cable gland 1 NPT, PVC LFL-Z432, cable gland 1 NPT, brass  <p>Cable gland</p>
Vibration limit switches		
Conductive limit switches		

Type code/model number



Capacitive limit switches

Limit value immersion probes

Continuous immersion probes

Hydrostatic pressure sensors

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