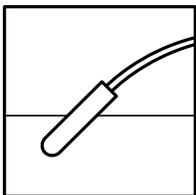


## Float Switch



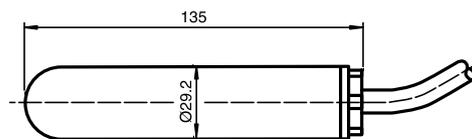
## LFL2-\*\*-U



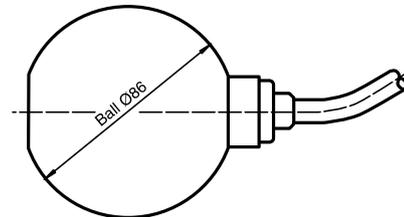
## Features

- Switch element: Micro switch, **mercury-free**
- Limit value detection for fluids
- Sleeve design: small diameter, mounting through G1 tap hole possible
- Ball design: high buoyancy

## Dimensions



Sleeve design LFL2-CK-U



Ball design LFL2-BK-U

## 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.

## Electrical connection

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

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For pricing or any further information, please contact Omni Instruments Ltd.

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Dundee, DD4 7RH, UK

**Technical data****Float Switch  
LFL2-\*\*-U**

<b>Application</b>	
Description	microswitch with switching ball, change-over contact
<b>Function and system design</b>	
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.
<b>Auxiliary energy</b>	
Supply voltage	max. 250 V AC, 150 V DC
Current consumption	max. 3 (1) A
<b>Operating conditions</b>	
<b>Installation conditions</b>	
Installation instructions	<p>range of application and minimum length between mounting and float:</p> <ul style="list-style-type: none"> <li>- PVC version: <math>\geq 50</math> mm (2 in), preferred for water</li> <li>- PUR version: <math>\geq 100</math> mm (4 in), preferred for fuels, heating oils, oily fluids</li> <li>- CSM/CM version: <math>\geq 100</math> mm (4 in), preferred for many acids and lyes</li> </ul> <p>mounting:</p> <ul style="list-style-type: none"> <li>- The float switch is mounted either from sideways through a cable gland <math>\geq G1A</math> into the vessel or</li> <li>- by means of a counter weight or rods (e. g. float switch assembly) from the top.</li> <li>- The pivot of the cable should always be horizontal.</li> </ul>
<b>Process conditions</b>	
Process temperature	<p>PVC version: 5 ... 70 °C (278 ... 343 K)</p> <p>PUR version: 5 ... 70 °C (278 ... 343 K)</p> <p>CSM/CM version: -20 ... 90 °C (253 ... 363 K)</p>
Process pressure (static pressure)	<p>sleeve design: <math>\leq 3</math> bar at 20 °C (68 °F)</p> <p>ball design: <math>\leq 2</math> bar at 20 °C (68 °F)</p>
Density	<p>sleeve design: <math>\geq 0.8</math> g/cm<sup>3</sup></p> <p>ball design: <math>\geq 0.6</math> g/cm<sup>3</sup></p>
<b>Mechanical specifications</b>	
Protection degree	IP68
<b>Mechanical construction</b>	
Versions	<p>sleeve design: LFL2-CK-U-PVC3, LFL2-CK-U-PUR3, LFL2-CK-U-CSM3</p> <p>ball design: LFL2-BK-U-PVC3, LFL2-BK-U-PUR3, LFL2-BK-U-CSM3</p>
Material	<p>float: PP (Polypropylene)</p> <p>cable:</p> <ul style="list-style-type: none"> <li>- PVC version: PVC cable, highly flexible (3 x 0.75 mm<sup>2</sup>)</li> <li>- PUR version: PUR cable, highly flexible (3 x 0.50 mm<sup>2</sup>)</li> <li>- CSM/CM version: CSM/CM cable (chlorinated polyethylene, (3 x 0.75 mm<sup>2</sup>))</li> </ul>
Switching point	switch angle: upper switching point +25° ( $\pm 10^\circ$ ), lower switching point -14° ( $\pm 16^\circ$ ), measured against the horizontal
<b>General information</b>	
Directive conformity	
Directive 73/23/EEC (Low Voltage Directive)	EN 50178
Directive 89/336/EEC (EMC)	EN 60947-5-2, EN 60947-5-2 A1
Conformity	
Protection degree	EN 60529
Supplementary information	Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a> .

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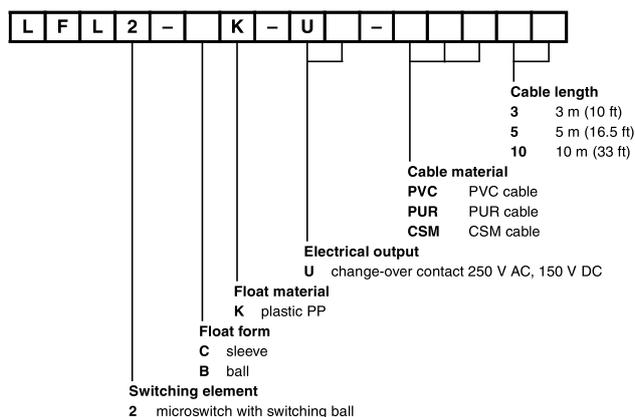
Accessories

- 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)



- LFL-Z131, cable gland G1A, PVC
- LFL-Z132, cable gland G1A, brass
- LFL-Z161, cable gland G2A, PVC
- LFL-Z431, cable gland 1 NPT, PVC
- LFL-Z432, cable gland 1 NPT, brass
- LFL-Z461, cable gland 2 NPT, PVC

Type code/model number



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