

# OEM float switch

## Miniature design, horizontal installation

### Model RLS-8000

WIKA data sheet LM 50.12

#### Applications

- Limit level measurement in machine building
- Dry run monitoring in mobile working machines
- Monitoring of hydraulic power packs and chillers
- Overfill measurement in water technology
- Specifically developed for OEM customers (minimum lot size: 50 pieces)

#### Special features

- From customisation to design-in solution
- Low variance by local adjustment of the normally open/ normally closed switching function via rotation of the float
- Various materials and up to  $10^9$  switching cycles guarantee a long service life

#### Description

The model RLS-8000 is a small and economical float switch with a single switch point, designed specifically for the needs of OEM customers. With its compact dimensions, it is particularly suitable for monitoring dry running or the overfilling of small tanks. The miniature float switch from plastic combines solid performance with high mechanical robustness and an attractive price.

#### Tailored to your machines

To ensure that the model RLS-8000 float switch is perfectly matched to the application on site, WIKA offers design-in solutions. Whether customer-specific tank connection, individualised electrical connections or designs: We adapt the model RLS-8000 for original equipment manufacturers to their respective requirements. This minimises the effort and cost of installation and maintenance, with maximum safety and compatibility.



Fig. top: Model RLS-8000 with G ½, installation from outside

Fig. bottom: Model RLS-8000 with M16 x 2, installation from inside

#### Change of function through 180° rotation

The reduction of variance and thus logistical effort is central in OEM production. For this reason, the model RLS-8000 miniature float switch, by rotating it through 180°, can be alternated from a normally open into a normally closed contact. Thus there is no need to keep a second float switch in stock.

#### Maximum reliability at a minimum cost

The model RLS-8000 is available in a variety of chemically resistant and robust plastics with very low water absorption. In addition, high-quality reed contacts guarantee up to one billion switching cycles, depending on the application. The use of the float switch is highly efficient in a multitude of applications thanks to its long-term, reliable performance and low “total cost of ownership”.

# Specifications

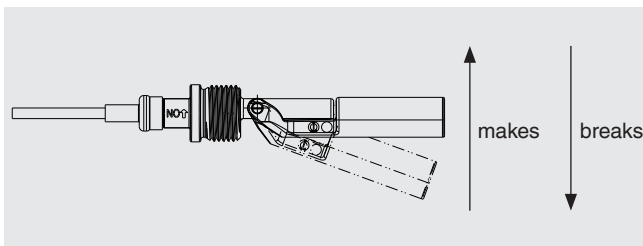
Float switch, model RLS-8000		
<b>Measurement principle</b>	Potential-free switching reed contact is triggered by a magnet in the float.	
<b>Output signal</b>	1 switch point	
<b>Switching function <sup>1)</sup></b>	Normally open (NO) - on rising level Can be used as normally closed (NC) contact by a 180° rotation of the float	
<b>Switching power</b>	AC 230 V; 10 VA; 0.5 A; 50 ... 60 Hz DC 230 V; 10 W; 0.5 A	
<b>Accuracy</b>	≤ 3 mm switch point accuracy incl. hysteresis, non-repeatability	
<b>Mounting position</b>	±30°	
<b>Material</b>		
Wetted	<ul style="list-style-type: none"> <li>■ Polypropylene (PP)</li> <li>■ Polyamide PA6.6</li> <li>■ Polyamide PA12</li> </ul>	
Non-wetted	PVC	
<b>Permissible temperatures</b>	Polypropylene (PP)	Polyamide PA6.6
Medium	-25 ... +80 °C [-13 ... +176 °F]	-25 ... +100 °C [-13 ... +212 °F]
Ambient	-25 ... +80 °C [-13 ... +176 °F]	-25 ... +100 °C [-13 ... +212 °F]
Storage	-25 ... +80 °C [-13 ... +176 °F]	-25 ... +80 °C [-13 ... +176 °F]
<b>Operating pressure</b>	≤ 4 bar [≤ 58.0 psi]	
<b>Density</b>		
Polypropylene (PP)	≥ 700 kg/m <sup>3</sup> [43.7 lbs/ft <sup>3</sup> ]	
Polyamide PA6.6	≥ 750 kg/m <sup>3</sup> [46.8 lbs/ft <sup>3</sup> ]	

1) Change-over contact on request

Electrical connections	Ingress protection per IEC/EN 60529	Protection class	Material	Cable length
Cable outlet	IP67	II	PVC	1 m [3.3 ft]

Other lengths and materials as well as M8 x 1 connector on request

## Operating principle



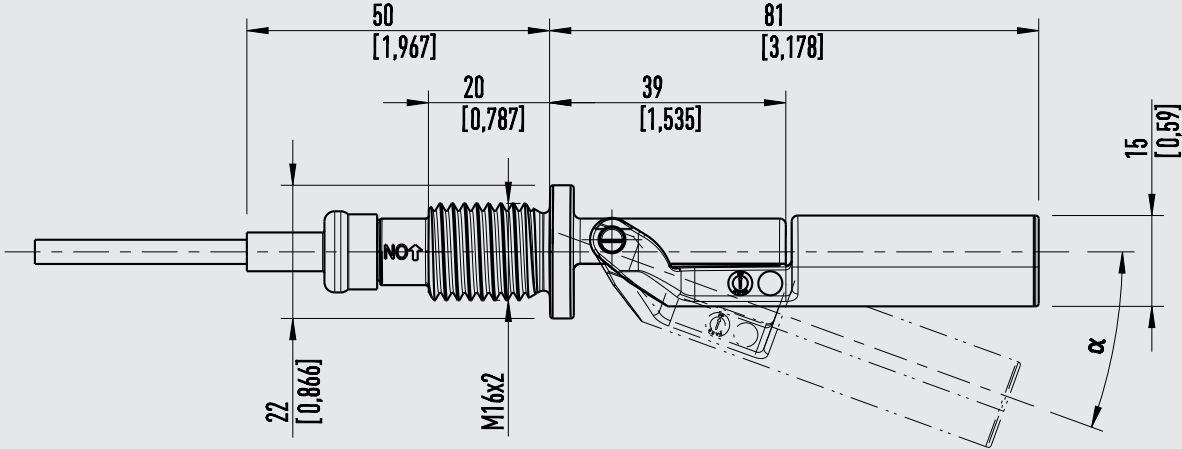
## Connection diagram



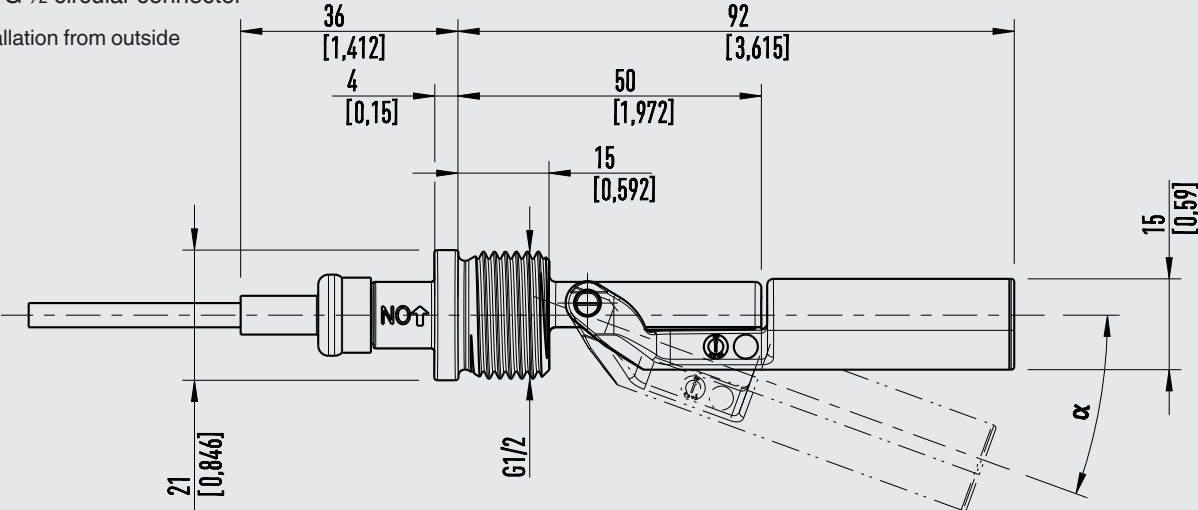
Legend  
 WH White  
 BN Brown

# Dimensions in mm [in]

with M16 x 2 circular connector  
 Installation from inside



with G 1/2 circular connector  
 Installation from outside



Switch point with angular position  $\alpha = 12^\circ \pm 4^\circ$

## Approvals

Logo	Description	Country
	<b>EU declaration of conformity</b> <ul style="list-style-type: none"><li>■ Low voltage directive</li><li>■ RoHS directive</li></ul>	European Union

## Manufacturer's information and certificates

Logo	Description
-	<b>China RoHS directive</b>

Approvals and certificates, see website

## Order numbers

Model	Order number
<b>Float switch from polypropylene (PP)</b> 1 m cable from PVC, M16 x 2	14319875
<b>Float switch from polypropylene (PP)</b> 1 m cable from PVC, G ½	14319876
<b>Float switch from polyamide PA6.6</b> 1 m cable from PVC, M16 x 2	14319877
<b>Float switch from polyamide PA6.6</b> 1 m cable from PVC, G ½	14319878

Lot size: 50 pieces

## Ordering information

To order the described product the order number is sufficient.