Bilge float switch For the shipbuilding industry Model RLS-5000 (model with approval: SR 6)

WIKA data sheet LM 50.08



For further approvals see page 3

Applications

- Shipbuilding
- Bilge water management
- Applications with strong mechanical loading
- Contaminated media

Special features

- Robust stainless steel case to protect against mechanical damage
- Durable and resistant marine cable
- With manual test device (optional)



Bilge float switch with test device, model RLS-5000

Description

The model RLS-5000 bilge float switch is used for the monitoring of limit levels in shipbuilding (e.g. in bilge water tanks) and industrial applications. The robust stainless steel case and the durable marine cable outlet protect the float system even under high mechanical loading, e.g. due to flotsam such as sticks and pieces of wood. Inside the stainless steel case, a permanent magnet built into the float triggers, with its magnetic field, the potential-free reed contact built into the pipe.

The triggering of the reed contact by the permanent magnet is contact-free and thus free from wear. The reed switch function is freely definable as normally closed, normally open or change-over contact. In the event of maintenance, the optionally available test device enables the manual triggering of the float by a movable wire bracket.

With its optimised mechanical design and certification in accordance with the leading maritime standards, the RLS-5000 is particularly suitable for long-term and reliable use in shipbuilding applications.

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Specifications

Bilge float switch, model RLS-5000			
Measuring principle	Potential-free switching reed contact is triggered by a magnet in the float.		
Switching output	Alternatively normally open (NO), normally closed (NC) or change-over (SPDT) contact - on rising level		
Switch position	see "Dimensions in mm [in]"		
Switching power	Normally open, normally closed: AC 230 V; 100 VA; 1 A DC 230 V; 50 W; 0.5 A Change-over contact: AC 230 V; 40 VA; 1 A DC 230 V; 20 W; 0.5 A		
Test device	For manual triggering of the float/switch contact (optional)		
Accuracy	±3 mm switch point accuracy incl. hysteresis, non-repeatability		
Electrical connection	Cable outlet, IP68 (8 m [26.2 ft]) Cable length freely definable in in m/ft		
Protection class	И		
Mounting position	Vertical ±30°		
Process connection	Surface mounting lug with 2 drilled holes D = 7.0 mm [0.3 in] Hole centre spacing = 34 mm [1.3 in]		
Material Case, pipe, surface mounting lug, float Cable	Stainless steel 316Ti Marine cable, sheath material polyolefin		
 Permissible temperatures Medium Ambient Storage 	-40 +80 °C [-40 +176 °F] -40 +80 °C [-40 +176 °F] -40 +80 °C [-40 +176 °F]		
Process pressure	max. 16 bar [232 psi]		
Medium density	≥ 750 kg/m³ [46.8 lbs/ft³]		

Connection diagram

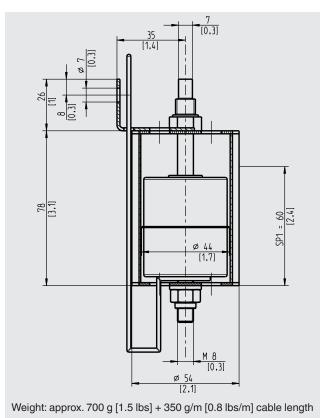
Cable outlet					
		Normally open/normally closed (NO/NC)			Change-over contact (SPDT)
2		BU BN			BK BN GY
Legend					
SP1 - SP4	Switch points	6	BU	Blue	
WH	White		RD	Red	
BN	Brown		BK	Black	
GN	Green		VT	Violet	
YE	Yellow		GYPK	Grey/Pink	
GY	Grey		RDBU	Red/Blue	

Electrical safety	
Insulation voltage	DC 2,120 V

Pink

ΡK

Dimensions in mm [in]



Approvals

Logo	Description	Country	
CE	EU declaration of conformity	Europäische Union	
	Low voltage directive		
	RoHS directive		
DNV-BL DNV-BL	DNV GL Schiffe, Schiffbau (z. B. Offshore)	International	

Approvals and certificates, see website

Manufacturer's information and certificates

Logo	Description
-	China-RoHS-Richtlinie

Ordering information Model / Switching function / Cable length / Test device (optional)

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