

SLS Series

Side Mounted Float Level Sensors

- Simple installation
- Durable float
- Stainless steel construction
- Reliability/long switch life

The SLS series side mounted level switches are manufactured specifically for level detection in clean liquids such as oils, water and chemicals. They are designed for horizontal mounting in a tank or vessel through flanged or threaded connections. To suit many different level sensing situations, a wide variety of models are available.

■ Operational Description

The SLS series contains a hermetically sealed reed switch within the stem of the flange, and a permanent magnet in the end of the shaft. As the float rises or falls with the liquid level, the reed switch is activated by the magnet. Switch action can be reversed by changing the mounting orientation.

Applications

The SLS series can be used in any non-hazardous tank or vessel with all liquids compatible with stainless steel or PVC. They work SLS-11 is approved by NK (Japanese ship classification) Approval No. 92 FV 701B

well as high or low level alarm control for light duty applications. By using with intrinsic safety barriers, the SLS may be used in hazardous locations.

■ Sensor Specifications

Material⁽¹⁾

Flange or Plug: 304SS Shaft and Float: 316SS

Housing: Aluminum die cast (ADC)

Mounting Type

SLS-11: Flange

SLS-12: Flange

SLS-13: Plug

SLS-14: Flange

Mounting Connection

SLS-11: JIS 5K1 1/2

\$L\$-12: JIS 5K1 1/2

SLS-13: R1 1/2

SLS-14: JIS 5K1 1/2 **Cable Entry:** G3/4

Output Contact Rating: 50 VA, 0.5 A,

300 VAC max

Enclosure Protection: IP44/NEMA 4

Minimum SG: 0.7

Operating Temperature: -14 to 248°F

(-10 to 120°C)

Maximum Pressure: 362 psi (25 bar)

Weight

SLS-11: 3.3 lb. (1.5 kg)

SLS-12: 3.1 lb. (1.4 kg)

SLS-13: 2.6 lb. (1.2 kg)

SLS-14: 3.5 lb. (1.6 kg⁽³⁾)

Length of Shaft and Float

SLS-11: 5.9 in. (150 mm)

SLS-12: 5.9 in. (150 mm)

SLS-13: 5.9 in. (150 mm)

SLS-14: 7.1 in. (180 mm)(2)

Max. Travel Dimension

SLS-11: 3.5 in. (90 mm)

SLS-12: 5.1 in .(130 mm)

SLS-13: 7.5 in. (190 mm)

SLS-14: 3.5 in. (90 mm)

 $^{(1)}$ Available all PVC wetted parts as SLS-21, -22 and -23 (Max. 2 bar).

- (2) Max. length; 490mm.
- (3) At 180mm length

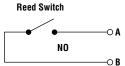




Switching Level

Model	Distance from centerline of flat (SG=1.0)					
SLS-11	Up ON	:	-3 mm ± 3 mm	Down ON	:	+3 mm \pm 3 mm
SLS-13	Down OFF	:	-12 mm \pm 3 mm	Up ON	:	+12 mm \pm 3 mm
SLS-14	Differential	:	$9 \text{ mm} \pm 6 \text{ mm}$	Differential	:	9 mm ± 6mm
	Up ON	:	-15 mm + 10 mm	Down ON	:	-10 mm + 15 mm
SLS-12	Down OFF	:	-15 mm + 10 mm	Up ON	:	-10 mm + 15 mm
	Differential	:	Max. 25 mm	Differential	:	Max 25mm

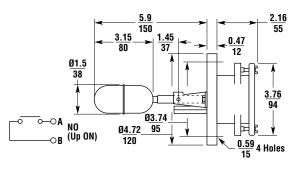
Wiring



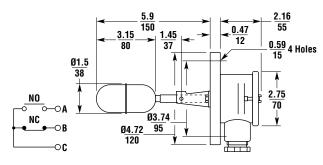
Dimensions

in. mm

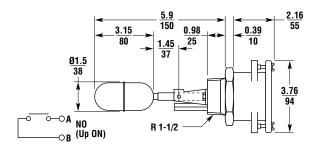
SLS-11



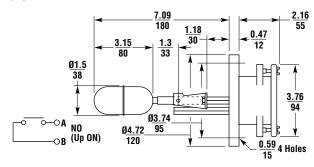
SLS-12



SLS-13



SLS-14



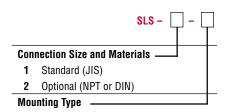
Intrinsic Safety

Any of the STI float switch level controls may be used with STI Intrinsic Safety Barriers (IS) to meet hazardous location requirements for level control device. For STI barriers, see website at www.automationsensors.com/7150.

■ Technical Note

To protect the reed switch from electrical surges, we recommend the use of our relay unit, Model RCU-7000. Complete RCU-7000 specifications are located later in the Controllers section of this catalog.

Ordering Information



- 1 Flange, SPST, general purpose (JIS 5K 1-1/2B FF SS304)
- 2 Flange, 2 x SPST, general purpose
- 3 Plug, SPST, general purpose
- 4 Flange, SPST, extension length probe



For the Latest Information

Try Our Fax Back System at 1/916/431-6544

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