

FLOAT LEVEL SWITCH REED LSR Series



DESCRIPTION

The level switch LSR Series consists in one or more reed contact inserted in a stainless steel tube. On the outside a float containing a magnet acts on the reed contact when the liquid level reaches the switching point.

The instrument can be top or side mounted on the tank or it can be supplied inside a chamber.

FEATURES

- Complete production control fully integrated inside the company and highly competent local suppliers.
- Completely customizable on client's needs thanks to the support of our technical and sales departments.
- Over 60 years company experience with instruments installed in the entire world.
 - Long working life ensured by high quality materials.
 - Easy installation due to the wide variety of process connections.
 - Suitable for mounting in hazardous areas.

TECHNICAL SPECIFICATIONS

- Fixed contact position
- Suitable for fluid density > 600 kg/m3 and lower values on request
- Up to six switching points
- Float and rod in SS 316 / 316L dual grade
- Rod length up to 6 m and over on request
- Ambient temperature range -40 / +85 °C
- Suitable up to 120 °C and 80 barg

PROCESS CONNECTIONS

The level switch LSR Series in his standard version is top mounted on the tank with the following process connections:

- Flanged
 - o ANSI B16.5
 - o EN 1092/1
- Threated
 - o NPT-M
 - o GAS-M

On request a curved rod version is available for side mounting

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CHAMBER VERSION - CHA

On request the level switch LSR Series can be supplied inside of a chamber Officine Orobiche CHA Series for an external mounting.

- Body in carbon steel or SS 316 and other materials on request
- Socket or full-penetrations welds options
- Flanged, threaded or welded connections with drain and vent options
- External Side-Side or Side-Bottom mounting
- Standard Officine Orobiche paintings or compliant to customer specifications.

For more information see the Officine Orobiche CHA Series chamber catalogue.

SWITCHING POINTS

The level switch LSR Series can be provided with up to six switching points, each with its own float.

The standard minimum distance between each switching point is [Float Diameter + 25] mm, but it can reduced on request.



FLOATS

The float choice is based on the fluid density and on the connection dimension.

CODE	MATERIAL	DIMENSIONS
G1 ¹	SS 316	28 x 28 mm
G2	SS 316	40 x 35 mm
G3	SS 316	52 x 52 mm
G8 ²	NBR for corrosive fluids	40 x 40 mm
G9 ³	SS 316	52 x 52 mm

1- Max 2 intervention points for SPST contact or 1 intervention point for SPDT contact 2- Version for corrosive fluids or very high pressure

3- High pressure version, up to 64 bar

CONTACTS

CODE	CONTACT	RATING
1	SPST	1000V, 1A, 100W
2	SPDT	175V, 0.5A, 10W

All tension and current combinations should not exceed the power value

HOUSINGS

The instrument is available with the following housing materials

- Die-cast painted aluminium
- Stainless steel (on request)



ELECTRICAL CONNECTIONS

- 1/2" NPT F
- M20 x 1.5 ISO
- 1/2" GAS F (on request)
- Double electrical connection option
- Cable gland option
- Adapters on request



APPROVALS

- On request the following approvals are available:
- NACE MR-0175 and MR-0103
- ATEX instrinsically safe or explosion proof: II 2G Ex ia IIC T6 Gb / II 2G Ex db IIC T6 Gb / II 2D Ex tb IIIC T85°C Db
- EAC 1 Ex d IIC T6 / Ex tb IIIC T85°C Db
- IECEx Ex db IIC T6 Gb / Ex tb IIIC T85°C Db
- IEC 61508 SIL 2



MODEL CODE AND SPARES PARTS

LSR	A	-	BB	-	L CCCC	-	DD	-	EE	-	F	-	G	-	Н

EAC





A	Number of switching points (from 1 to 6)						
BB	Rod material	JL	SS 316L				
CCCC	Rod length in mm (L0 in drawing)						
DD		20	3/4" GAS M				
		25	1" GAS M				
		26	1" NPT M				
	Process connection	30	1 1/4" GAS M				
	FIOCESS CONNECTION	40	1 1/2" GAS M				
		50	2" GAS M				
		51	2" NPT M				
		FS	Flanged				
E	Floats, see table						
F	Contacts, see table						
0	Housing type	S	WP IP 66				
u	riousing type	Е	Explosion-proof				
Н		1	ISO M20 x 1.5				
	Electrical connection	11	N°2 ISO M20 x 1.5				
		2	1/2" NPT-F				
		22	N°2 1/2" NPT-F				
XX	Any variation from standard						

Our company database contains information about the instruments manufactured in 60 years, to request spare parts for an installed instrument or a complete instrument state the F number written in the top-right of the label:



Our technical and commercial departments are available to discuss any variation or customization not mentioned in this catalogue.

F.

Officine Orobiche S.r.l.

MODEL

Via Paglia, 22 - 24050 Zanica (Bergamo) - Italy Tel. +39 035 4530 211



www.officineorobiche.it info@officineorobiche.it