ELECTRA   SLO

Optical level-sensor

CE

GENERAL CHARACTERISTICS

The optical sensors, SLO series, are a valid solution for level control of liquids, even for applications in small tanks. The optical sensor is located in a metallic body which includes a polysulfone prism inside of which there is inserted an infrared transceiver. As soon as the sensor is immersed in the liquid, the refraction index of the prism is changed and a large part of the infrared beam is dispersed in the liquid, causing the output to change state. The sensor is particularly suitable to be side mounted for control of translucent liquids even colored.

- No moving parts.
- Hermetic construction, sealed electronics.
- Minimum protection degree IP65.

TECHNICAL DATA   Tab.1

Description	Characteristics	
Power supply	15 – 35 Vcc	
Current consumption	10 mA	
Electrical output	Push Pull - Max. load 3W	
Sensor	Infrared transceiver	
Electrical connection	**S1** Connector DIN 43650	**IP65**
	S3 Plug M12x1, 4 poles	**IP67**
Max. pressure	260 bar (25°C) 200 bar (85°C)	
Media temperature range	-40 / +85 °C	

WIRING

OUTPUT LOW IN NO LEVEL CONDITION   OUTPUT HIGH IN NO LEVEL CONDITION

15–35Vdc   GND   15–35Vdc   GND

S1

OUTPUT LOW IN NO LEVEL CONDITION   OUTPUT HIGH IN NO LEVEL CONDITION

OUT   GND   OUT   GND

15–35Vdc   15–35Vdc

S3

MATERIALS   Tab.2

Body - Flat gasket	**O**	Brass	NBR
	S	AISI-316	Viton
Sensor prism lens	**PS**	Polysulfone	

F		Male thread	
DN	**Connection**	**G**	**N**
010	3/8"	Gas UNI 228/1	NPT
015	1/2"		on request

DIMENSIONS - mm.

Ø 30   CH 24   Ø 29

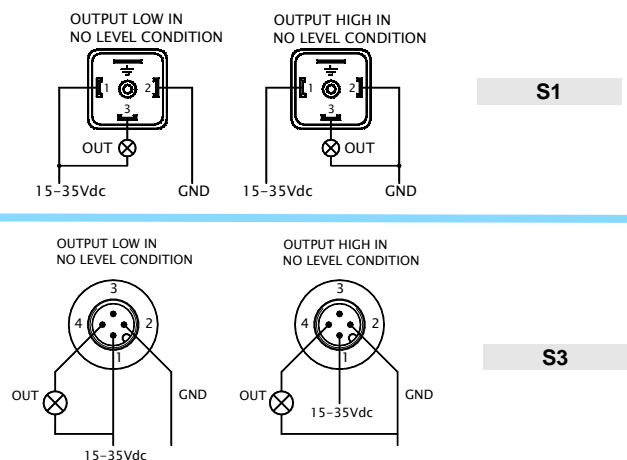82   68   9   10   F

M 12x 1   72   57.5   9   10   F

MAINTENANCE

The only caution to be observed is a periodic check of the status of the sensor lens. If necessary proceed to the cleaning of the same, with non-corrosive liquids.
In case of vertical installation make sure that drops of liquid not adhere to the prism surface, causing false switching.
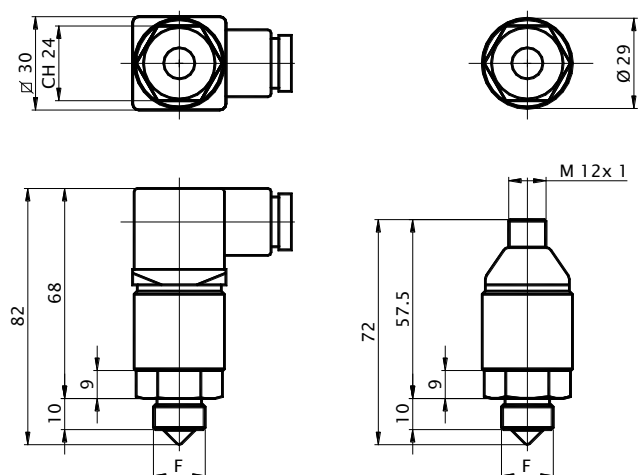
NOMENCLATURE

SLO	010	GO	PS	S1	IP65		
●							Optical level-sensor
	●					Tab.2	Process connection dimension.
		●				Tab.2	Process connection thread and material.
			●			Tab.2	Prism material
				●		Tab.1	Electrical output
					●	Tab.1	Protection degree