

- **Solid-state sensor - no moving parts**
- **Applicable for wide range of industrial liquids**
- **Up to 120 °C temperature range**
- **Hygienic applications available**
- **12...24 VAC/DC supply voltage**
- **8A/250 VAC direct relay output**

DESCRIPTION

The operation of BASI level sensor series BLCSO is based on the changing of light reflection when liquid covers an optical sensor, mounted on the top of the probe. This model can be used as a single level switch for sensing presence or absence of liquid. It is applicable for the most of the low-viscose industrial liquids as well as the liquids in food industry, thanks to its stainless steel casing and polysulphone light sensor. The BLCSO switch can be equipped with either PNP/NPN transistor output, or contact relay output. The power supply voltage can vary from 12 to 24 VDC/AC, providing convenient application. Two variants are available according to the electrical connection: connector-type (for side mounting) and cable-type (for side mounting and submersible usage). Because of its operating principle, power output, and low price, BLCSO can be very useful in applications where float and conductive sensors are not applicable and capacitive or pressure sensors are too expensive.



TECHNICAL SPECIFICATIONS

Sensing element : solid-state optical sensor
Sensing parameter : presence or absence of liquid
Liquid type : low-viscose
Repeatability : 1 mm
Hysteresis : 1 mm (depending on liquid)

OUTPUT

Output type : Relay or transistor
Output relay : NO or NC 8 A at 250 VAC
Consumption (output ON) : max 100mA
Output transistor : PNP or NPN 100mA
Consumption (output ON) : max 150mA
Voltage drop (output ON) : max 2V
Response time (level ON) : < 100 ms
Response time (level OFF) : < 1 s
Function : Change-over
Relay live : 10⁷ operations

INSTALLATION

Power supply : 12-24VAC/DC
Maximum ripple : 10% p-p at 50Hz
Ambient temp : -20 to +75°C RH 0-95%
Storage temperature: -40-85 °C
Media temperature : -40 to + 120 °C
Media pressure : max 25 bar
Protection : IP68
Mounting : In process 3/8" , 1/2" G or NPT
Casing : Stainless steel
Other (no cable) : Stainless steel
Sensing element : Polysulfone
EMC : EN 50081-1, EN 50082-2, EN 61010-1
 73/23/EEC & 89/336/EEC



ORDER INFORMATION

BLCSO TYPE	OUTPUT	CABLE	CONNECTION
Z Specify	A Relay (NO)	Z Specify	Z Specify
1 Connector	B Relay (NC)	1 1m	Q3 G 3/8"
2 Cable	E NPN (NO)	2 2m	Q4 G1/2"
	F PNP (NO)	3 3m	Q9 3/8" NPT
	G NPN (NC)	4 4m	Q10 1/2" NPT
	H PNP (NC)	5 5m	
		X none	

MECHANICAL SPECIFICATION

Variant	with connector	with cable	
Specifications			
Mounting applications	side mounting	side mounting	submersible
Media temperature	-40...120 °C	-40...120 °C	-20...75 °C
Media pressure	max. 25 Bar	max. 25 Bar	max. 6 Bar
Electrical connection	connector DIN43650	silicone cable 1...10 m	
Wetted parts protection	IP68	IP68	
Enclosure protection	IP65		