

Warranty and Support

.....
serial number

.....
manufacturing date

QC check mark(passed)
(stamp)

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Warranty

COMECO warrants this product to be free from defects in materials and workmanship for 1 year. If your unit is found to be defective within that time, we will promptly repair or replace it. This warranty does not cover accidental damage, wear or tear, or consequential or incidental loss. This warranty does not cover any defects caused by wrong transportation, storage, installation, or operating (see 'Specifications').

Technical support

In the unlikely event that you encounter a problem with your COMECO device, please call your local dealer or contact directly our support team.

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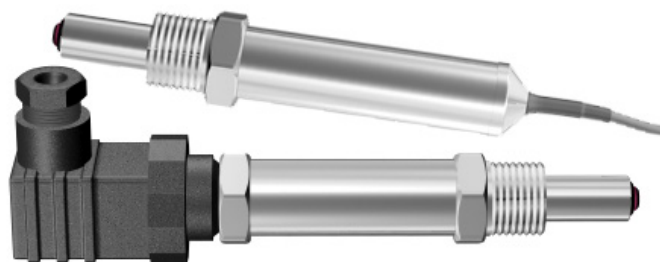


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OPTICAL LEVEL SWITCH

LCSO

OPERATION MANUAL



Please read this Operation Manual before mounting and operating!
Save the Manual for future references!

Overview

The LCSO level sensor can be used as a single level switch for sensing presence or absence of liquid. It is suitable for the most of the low-viscose industrial liquids and – thanks to its stainless steel casing and polysulphone light sensor – for hygienic applications too. This switch is especially useful in cases, in which float and conductive sensors are not applicable, and capacitive and pressure sensors are too expensive.

Specifications

Sensing Element	polysulphone solid-state optical sensor
Liquid Type	low-viscose
Repeatability	1 mm
Hysteresis	1 mm (depending on liquid)
Output	☐ relay 5A/250VAC with NO contact, ☐ relay 5A/250VAC with NC contact, ☐ transistor NPN 0.1A/60V with NO action, ☐ transistor NPN 0.1A/60V with NC action, ☐ transistor PNP 0.1A/60V with NO action, ☐ transistor PNP 0.1A/60V with NC action, ☐ MOS gate 0.1A/60V, optically isolated
Transistor Voltage Drop (output ON)	max. 2 V
Response Time (level ON)	< 100 ms
Response Time (level OFF)	< 1 s
Power Supply	12...24 VAC/DC $\pm$ 10% p-p at 50 Hz
Consumption (output ON)	☐ 100 mA, ☐ 150 mA ☐ G $\frac{3}{8}$ ", ☐ G $\frac{1}{2}$ ", ☐ $\frac{3}{8}$ " NPT, ☐ $\frac{1}{2}$ " NPT,
Connection Thread	☐ cable m
Medium Temperature	-40...120 °C; submersed: -20...75 °C
Medium Pressure	max. 25 bar; submersed: max. 6 bar
Ambient Temperature / Humidity	-20...75 °C / 0...95% RH
Storage Temperature	-40...85 °C
Wetted Parts	stainless steel; IP68
Enclosure	stainless steel; ☐ IP65, ☐ IP68
Wiring	☐ DIN43650 connector, ☐ cable m

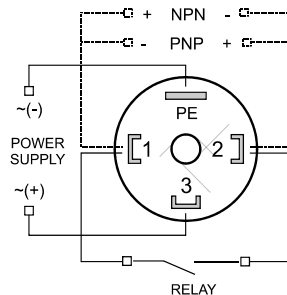
Mounting and Wiring

Mounting

- ◆ The LCSO with connector (LCSO1) is designed for side mounting, while the variant with cable (LCSO2) can also be used submersed.
- ◆ To mount the switch on a vessel wall, use the connection thread (see 'Specifications') and an appropriate gasket.

Wiring

- ◆ Wire LCSO1 via its connector, following the diagram on the left.
- ◆ When wiring an LCSO2, mind the wiring diagram and the pin-to-wire correspondence for the different output types.



	Pin #	Relay	PNP/NPN
Wire colors	1	red	red
	2	red	black
	3	white	white
	PE	white	white

Waste Disposal



Do not dispose of electronic devices together with household waste material!

If disposed of within European Union, this product should be treated and recycled in accordance with the laws of your jurisdiction implementing the WEEE Directive 2012/19 on the Waste Electrical and Electronic Equipment.