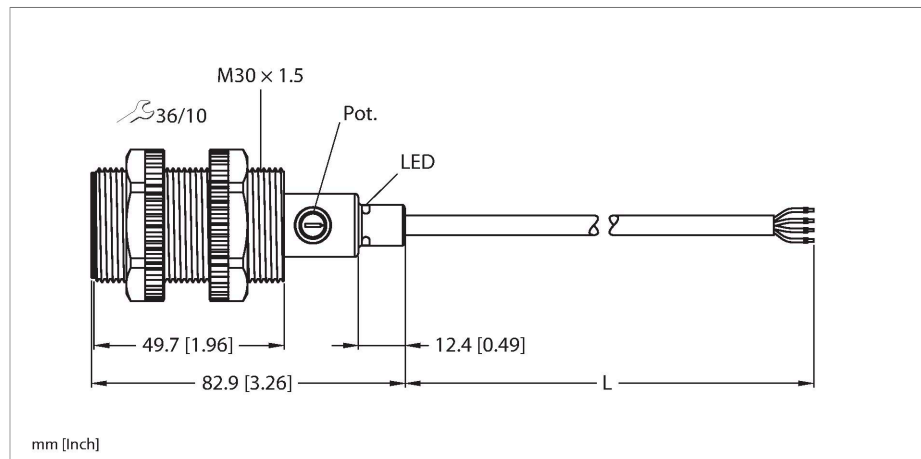


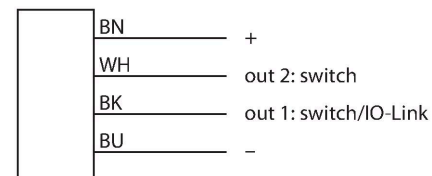
# UC25-S30-IOL Capacitive Sensor



## Features

- M30 × 1.5 threaded barrel
- Plastic, PA12-GF30
- Digital potentiometer
- Three different teach functions
- Can be parameterized via IOL
- Two switching outputs, can be parameterized independently
- Highly visible LED

## Wiring diagram



## Functional principle

Capacitive proximity switches are designed for non-contact and wear-free detection of electrically conductive as well as non-conductive metal objects.

## Technical data

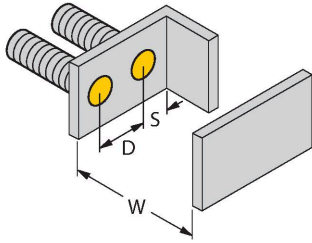
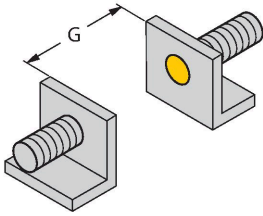
Type	UC25-S30-IOL
ID	100050170
Rated switching distance (flush)	15 mm
Rated switching distance (non-flush)	25 mm
Secured operating distance	$\leq (0.72 \times S_n)$ mm
	The rated operating distance is based on a standard target made of steel. The operating distance may vary depending on the composition of the carbon material.
Hysteresis	1...15 %
Ambient temperature	-40...+60 °C
Storage temperature	-40...+85 °C
<b>Electrical data</b>	
Operating voltage $U_s$	10...30 VDC
	Acc. to IO-Link specification
DC rated operating current $I_s$	$\leq 200$ mA
Switching frequency	0.1 kHz
Communication protocol	IO-Link
Number of digital outputs	2
Output function	NO/NC programmable, PNP/NPN
Short-circuit protection	Cyclic
Voltage drop at $I_s$	$\leq 1$ V
Wire break/reverse polarity protection	yes

## Technical data

Tests/approvals	
IO-Link	
IO-Link specification	V1.1, Smart Sensor Profile
Programming	FDT/DTM
Transmission physics	corresponds to 3-wire physics (PHY2)
Transmission rate	COM 3
Process data width	32 bit
Measured value information	12 bit
Frame type	2.2
Included in the SIDI GSDML	Yes
Mechanical data	
Design	Threaded barrel, M30 x 1.5
Dimensions	82 mm
Housing material	Plastic, PA12-GF30
Admissible pressure on front cap	≤ 4 bar
Max. tightening torque of housing nut	5 Nm
Electrical connection	Stranded wires, Open end
Cable quality	LifYY, 2 m
Core cross-section	4 x 0.34 mm <sup>2</sup>
Protection class	IP67
MTTF	1080 years acc. to SN 29500 (Ed. 99) 40 °C
Switching state	3 × LEDs, Green/yellow/red

## Mounting instructions

## Product features



Distance D	60 mm
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Distance W	30 mm
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Distance S	45 mm
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Distance G	60 mm
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Diameter active area B	Ø 30 mm
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The given minimum distances have been checked against the standard switching distance.  
Should the sensitivity of the sensor be changed, these data sheet specifications no longer apply.