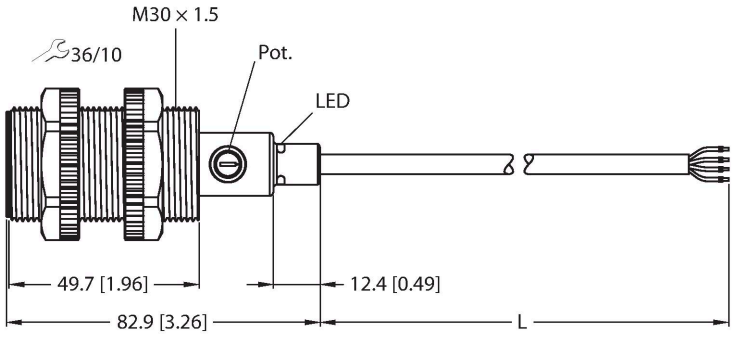
UC25-S30-IOL
Preliminary Data Sheet

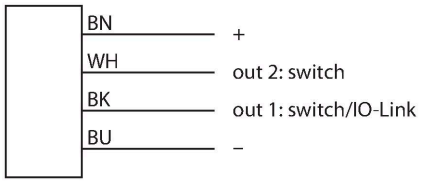


mm [Inch]

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

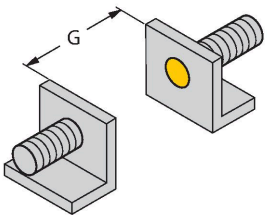
Type	UC25-S30-IOL
ID	100050170
Rated switching distance (flush)	15 mm
Rated switching distance (non-flush)	25 mm
Secured operating distance	≤ (0.72 × Sn) mm
	The rated operating distance is based on a standard target made of steel. The operating distance may vary depending on the composition of the carbon material.
Hysteresis	1…15 %
Ambient temperature	-40…+60 °C
Storage temperature	-40…+85 °C
Electrical data	
Operating voltage U_B	10…30 VDC
	Acc. to IO-Link specification
DC rated operating current I_e	≤ 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_e	≤ 1 V
Wire break/reverse polarity protection	yes
Tests/approvals	
IO-Link	
IO-Link specification	V1.1, Smart Sensor Profile
Programming	FDT/DTM
Transmission physics	corresponds to 3-wire physics (PHY2)

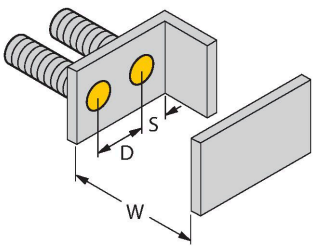
Technical data

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 mm²
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

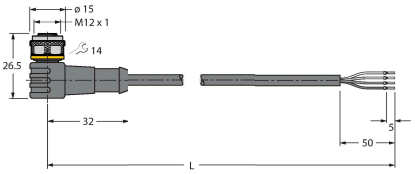
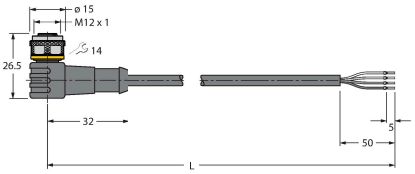
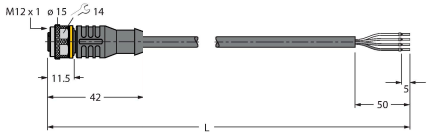




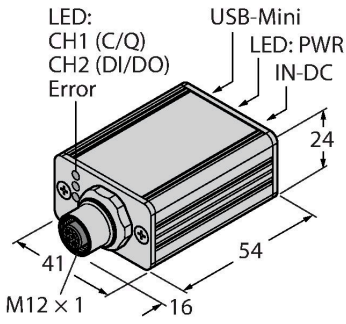
Distance D	60 mm
Distance W	30 mm
Distance S	45 mm
Distance G	60 mm
Diameter active area B	Ø 30 mm

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.

Accessories

Dimension drawing	Type	ID	
	RKC4.4T-2/TXL	6625503	Connection cable, M12 female connector, straight, 4-pin, cable length: 2 m, jacket material: PUR, black; cULus approval
	WKC4.4T-2/TXL	6625515	Connection cable, M12 female connector, angled, 4-pin, cable length: 2 m, jacket material: PUR, black; cULus approval
	WKC4.4T-2/TEL	6625025	Connection cable, M12 female connector, angled, 4-pin, cable length: 2 m, jacket material: PVC, black; cULus approval
	RKC4.4T-2/TEL	6625013	Connection cable, M12 female connector, straight, 4-pin, cable length: 2 m, jacket material: PVC, black; cULus approval

Accessories

Dimension drawing	Type	ID	
	USB-2-IOL-0002	6825482	IO-Link Master with integrated USB port