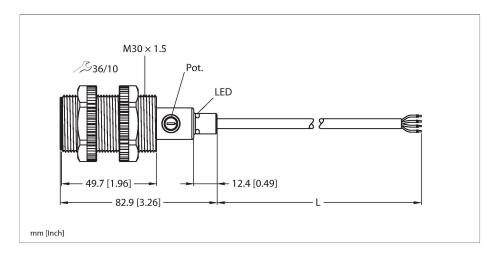


UC25-S30-IOL Preliminary Data Sheet



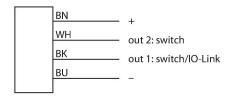
Technical data

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 115 % Ambient temperature -40+60 °C Storage temperature -40+85 °C Electrical data Operating voltage U₀ 1030 VDC Acc. to IO-Link specification DC rated operating current I₀ ≤ 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 I₀ ≤ 1 V Wire break/reverse polarity protection yes Tests/approvals IO-Link Programming FDT/DTM	Туре	UC25-S30-IOL		
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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 115 % Ambient temperature -40+80 °C Storage temperature -40+85 °C Electrical data Operating voltage U ₈ 1030 VDC Acc. to IO-Link specification DC rated operating current I ₈ ≤ 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 ₈ ≤ 1 V Wire break/reverse polarity protection yes Tests/approvals IO-Link IO-Link IO-Link FDT/DTM	Rated switching distance (non-flush)	25 mm		
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Storage temperature -40+85 °C Electrical data Operating voltage U _B 1030 VDC Acc. to IO-Link specification DC rated operating current I _B 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 _B Wire break/reverse polarity protection Tests/approvals IO-Link IO-Link IO-Link Programming FDT/DTM	Hysteresis	115 %		
Electrical data Operating voltage U _B 1030 VDC Acc. to IO-Link specification DC rated operating current I _B Switching frequency 0.1 kHz Communication protocol Number of digital outputs 2 Output function NO/NC programmable, PNP/NPN Short-circuit protection Cyclic Voltage drop at I _B Vire break/reverse polarity protection Tests/approvals IO-Link IO-Link IO-Link specification V1.1, Smart Sensor Profile Programming FDT/DTM	Ambient temperature	-40+60 °C		
Operating voltage U _B 1030 VDC Acc. to IO-Link specification DC rated operating current I _B ≤ 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 _B ≤ 1 V Wire break/reverse polarity protection yes Tests/approvals IO-Link IO-Link specification V1.1, Smart Sensor Profile Programming FDT/DTM	Storage temperature	-40+85 °C		
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DC rated operating current Ie ≤ 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 Ie ≤ 1 V Wire break/reverse polarity protection yes Tests/approvals IO-Link IO-Link V1.1, Smart Sensor Profile Programming FDT/DTM	Operating voltage U _B	1030 VDC		
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Number of digital outputs 2 Output function NO/NC programmable, PNP/NPN Short-circuit protection Cyclic Voltage drop at I₀ ≤ 1 V Wire break/reverse polarity protection yes Tests/approvals IO-Link IO-Link V1.1, Smart Sensor Profile Programming FDT/DTM	Switching frequency	0.1 kHz		
Output function NO/NC programmable, PNP/NPN Short-circuit protection Cyclic Voltage drop at I₀ ≤ 1 V Wire break/reverse polarity protection yes Tests/approvals IO-Link IO-Link specification V1.1, Smart Sensor Profile Programming FDT/DTM	Communication protocol	IO-Link		
Short-circuit protection Cyclic Voltage drop at I₀ ≤ 1 V Wire break/reverse polarity protection Tests/approvals IO-Link IO-Link specification V1.1, Smart Sensor Profile Programming FDT/DTM	Number of digital outputs	2		
Voltage drop at I₀ ≤ 1 V Wire break/reverse polarity protection yes Tests/approvals IO-Link IO-Link specification V1.1, Smart Sensor Profile Programming FDT/DTM	Output function	NO/NC programmable, PNP/NPN		
Wire break/reverse polarity protection yes Tests/approvals IO-Link IO-Link specification V1.1, Smart Sensor Profile Programming FDT/DTM	Short-circuit protection	Cyclic		
Tests/approvals IO-Link IO-Link specification V1.1, Smart Sensor Profile Programming FDT/DTM	Voltage drop at I _e	≤ 1 V		
IO-Link IO-Link specification V1.1, Smart Sensor Profile Programming FDT/DTM	Wire break/reverse polarity protection	yes		
IO-Link specification V1.1, Smart Sensor Profile Programming FDT/DTM	Tests/approvals			
Programming FDT/DTM	IO-Link			
	IO-Link specification	V1.1, Smart Sensor Profile		
Transmission physics corresponds to 3-wire physics (PHY2)	Programming	FDT/DTM		
Transmission physics (FTT2)	Transmission physics	corresponds to 3-wire physics (PHY2)		

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.

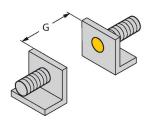


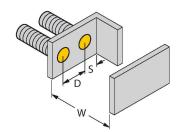
Technical data

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

Should the sensitivity of the sensor be changed, these data sheet specifications no longer apply.



Accessories

Dimension drawing	Туре	ID	
M12x1 o 15 \$\infty\$ 14	RKC4.4T-2/TXL	6625503	Connection cable, M12 female connector, straight, 4-pin, cable length: 2 m, jacket material: PUR, black; cULus approval
0 15 M12 x 1 26.5 26.5 32	WKC4.4T-2/TXL	6625515	Connection cable, M12 female connector, angled, 4-pin, cable length: 2 m, jacket material: PUR, black; cULus approval
0 15 M12 x 1 26.5 14	WKC4.4T-2/TEL	6625025	Connection cable, M12 female connector, angled, 4-pin, cable length: 2 m, jacket material: PVC, black; cULus approval
M12x1 e 15 14 + 11.5 + 50	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	Туре	ID	
	USB-2-IOL-0002	6825482	IO-Link Master with integrated USB port

