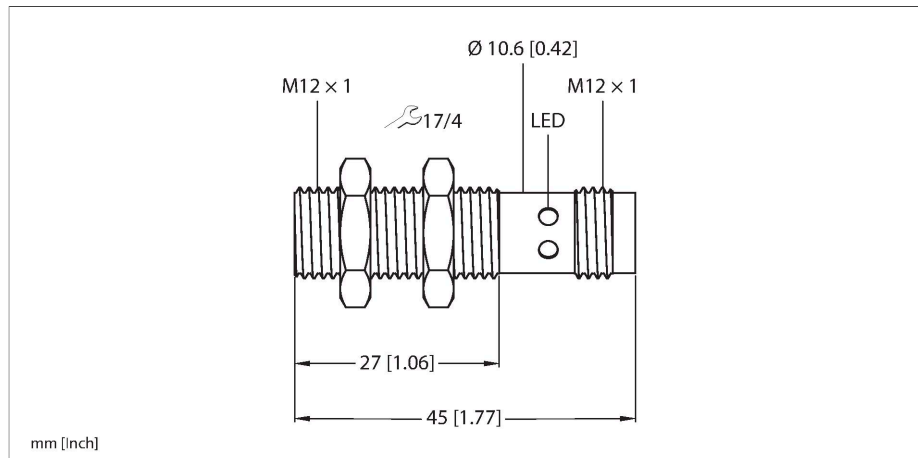


BCT4-M12-IOL-H1141

Capacitive Sensor



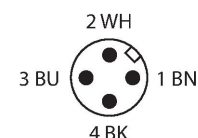
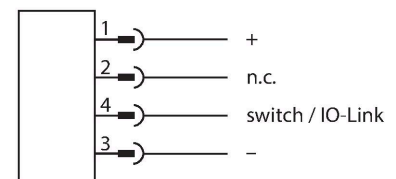
Technical data

Type	BCT4-M12-IOL-H1141
ID	100027492
Hysteresis	10...20 %
Ambient temperature	-25...+70 °C
Medium temperature	-25...+70 °C
Electrical data	
Operating voltage U_B	18...30 VDC
	In IO-Link mode
DC rated operating current I_o	≤ 100 mA
Switching frequency	0.2 kHz
Isolation test voltage	0.5 kV
Communication protocol	IO-Link
SIO mode-compatible	Yes
Number of digital outputs	1
Output function	4-pin, NO/NC programmable, PNP/NPN
Voltage drop at I_o	≤ 2 V
Insulation class	III
Tests/approvals	
IO-Link	
IO-Link specification	V 1.1
Programming	FDT/DTM
Transmission physics	corresponds to 3-wire physics (PHY2)
Transmission rate	COM 2/38.4 kbps
Process data width	16 bit
Measured value information	12 bit
Frame type	2.2
Included in the SIDI GSDML	Yes



Features

- Detection of metallic and non-metallic objects
- Detection of liquids, powders and solid materials
- All functions can be parameterized via IO-Link
- Three different types of object teaching (one value, two value, dynamic) possible
- Available counting function whose content can be called up via IO-Link
- Switching status indicated by four LEDs arranged all around the device
- M12 × 1 male connector, 4-pin
- Robust, compact housing made of nickel-plated brass
- M12 threaded design, flush, switching distance = 4 mm



Technical data

Mechanical data	
Design	Threaded barrel, M12 x 1
Dimensions	45 mm
Housing material	Metal, Nickel-plated brass
Active area material	yellow
Electrical connection	Connector, M12 × 1
Protection class	IP67
MTTF	1080 years acc. to SN 29500 (Ed. 99) 40 °C
Switching state	LED, 4 × yellow

Mounting instructions

Product features

The image contains two isometric line drawings. The top drawing shows a rectangular mounting plate with a circular hole in the center. A threaded rod is shown passing through the hole. A dimension line labeled 'G' indicates the distance from the front face of the plate to the center of the hole. A dimension line labeled 'D' indicates the length of the threaded rod. The bottom drawing shows the same mounting plate with the threaded rod inserted. A dimension line labeled 'W' indicates the width of the plate. A dimension line labeled 'S' indicates the distance from the front face of the plate to the front face of the rod. A dimension line labeled 'D' indicates the length of the threaded rod.

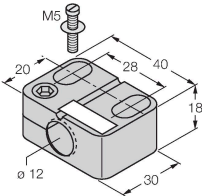
Distance D	24 mm
Distance W	9 mm
Distance S	18 mm
Distance G	18 mm
Diameter active area B	Ø 12 mm

The given minimum distances have been checked against the standard switching distance.
Should the sensitivity of the sensors be changed, these data sheet specifications no longer apply.

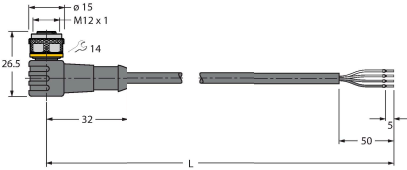
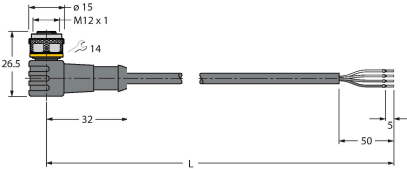
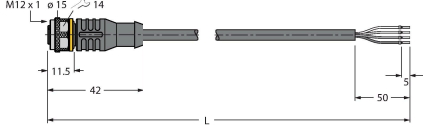
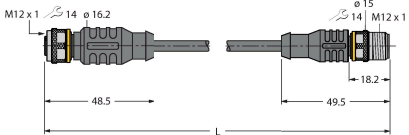
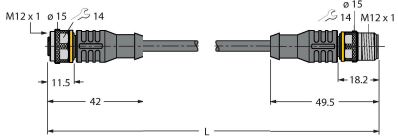
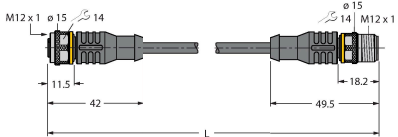
Accessories

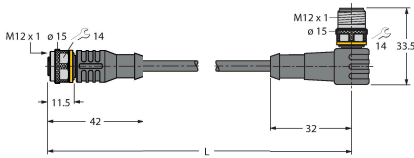
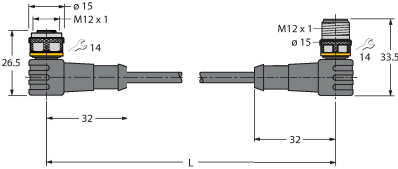
BST-12B	6947212
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Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6

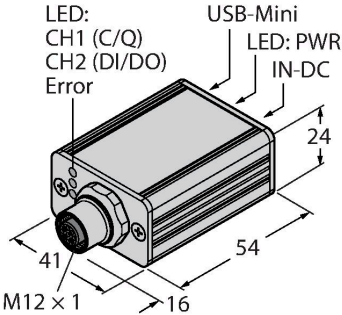


Accessories

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
	RKC4.4T-P7X2-2-RSC4.4T/TEL	6627320	Extension cable, M12 female connector with LED (PNP, YE, GN), straight, 4-pin to M12 male connector, straight, 4-pin; cable length: 2 m, jacket material: PVC, black
	RKC4.4T-2-RSC4.4T/TEL	6625208	Extension cable, M12 female connector, straight, 4-pin to M12 male connector, straight, 4-pin, cable length: 2 m, jacket material: PVC, black; cULus approval
	RKC4.4T-2-RSC4.4T/TXL	6625608	Extension cable, M12 female connector, straight, 4-pin to M12 male connector, straight, 4-pin; cable length: 2 m, jacket material: PUR, black; cULus approval

Dimension drawing	Type	ID	
	RKC4.4T-2-WSC4.4T/TXL	6625624	Extension cable, M12 female connector, straight, 4-pin to M12 male connector, angled, 4-pin; cable length: 2 m, jacket material: PUR, black; cULus approval
	WKC4.4T-2-WSC4.4T/TXL	6625656	Extension cable, M12 female connector, angled, 4-pin to M12 male connector, angled, 4-pin; cable length: 2 m, jacket material: PUR, black; cULus approval

Accessories

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