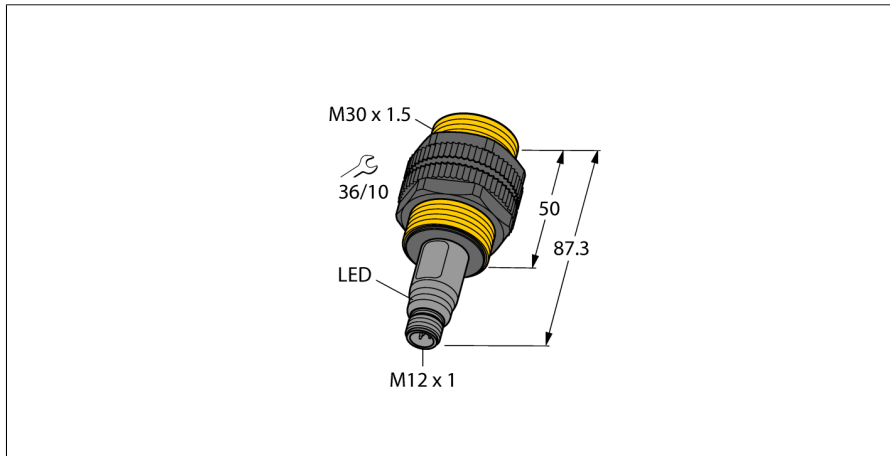


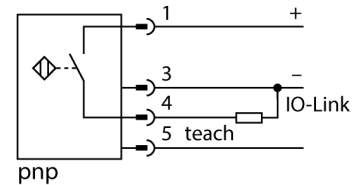
Capacitive sensor

BCT10-S30-UP6X2-H1151



- M30 × 1.5 threaded barrel
- Plastic, PA12-GF30
- Teach-in and configuration via pin 5 and IO-Link

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.

| | |
|---|--|
| Type designation | BCT10-S30-UP6X2-H1151 |
| Ident-No. | 2101700 |
| Remark to product | For remote teaching via pin 5 please use 5-wire cable (e.g. RKC4.5T.../WKC4.5T...) |
| Rated switching distance Sn | 15 mm |
| Mounting conditions | Flush |
| Secured operating distance | ≤ (0.72 × Sn) mm |
| Repeat accuracy | ≤ 2 % of full scale |
| Temperature drift | type 20 % |
| Hysteresis | 2...20 % |
| Ambient temperature | -25...+70 °C |
| Operating voltage | 10...30 VDC |
| Residual ripple | ≤ 10 % U _s |
| DC rated operational current | ≤ 200 mA |
| No-load current I ₀ | ≤ 15 mA |
| Residual current | ≤ 0.1 mA |
| Isolation test voltage | ≤ 0.5 kV |
| Short-circuit protection | yes/ Cyclic |
| Voltage drop at I ₀ | ≤ 2.4 V |
| Wire breakage/Reverse polarity protection | yes/ Complete |
| Output function | 3-wire, NO/NC programmable, PNP |
| Switching frequency | 0.01 kHz |
| Approvals | UL |
| IO-Link | |
| IO-Link Specification | Specified acc. to version 1.1 |
| Programming | FDT/DTM |
| Transmission physics | corresponds to 3-wire physics (PHY2) |
| Process data width | 16 bit |
| Measured value information | 12 bit |
| Frame type | 2.2 |
| Genauigkeit | ± 0.5 % of final value BSL |
| Design | |
| Dimensions | Threaded barrel, M30 × 1.5 87.3 mm |
| Housing material | Plastic, PA12-GF30, PEI |
| Active area material | Plastic, PA12-GF30, yellow |
| End cap | Plastic, PA |
| Admissible pressure on front cap | ≤ 3 bar |
| Max. tightening torque housing nut | 5 Nm |
| Electrical connection | Connector, M12 × 1 |
| Vibration resistance | 55 Hz (1 mm) |
| Shock resistance | 30 g (11 ms) |
| Protection class | IP67/IP69K |
| MTTF | 1080 years acc. to SN 29500 (Ed. 99) 40 °C |
| Packaging unit | 1 |

Capacitive sensor
BCT10-S30-UP6X2-H1151



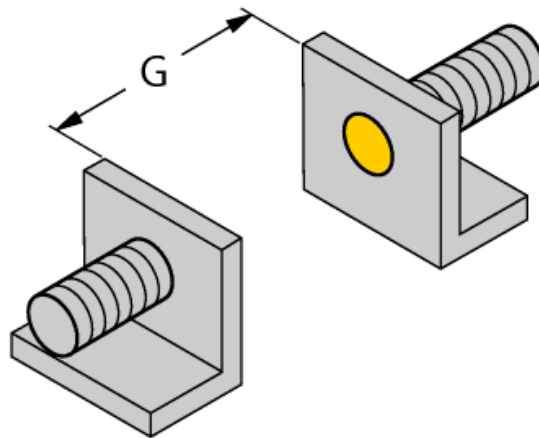
Switching state

LED, Yellow

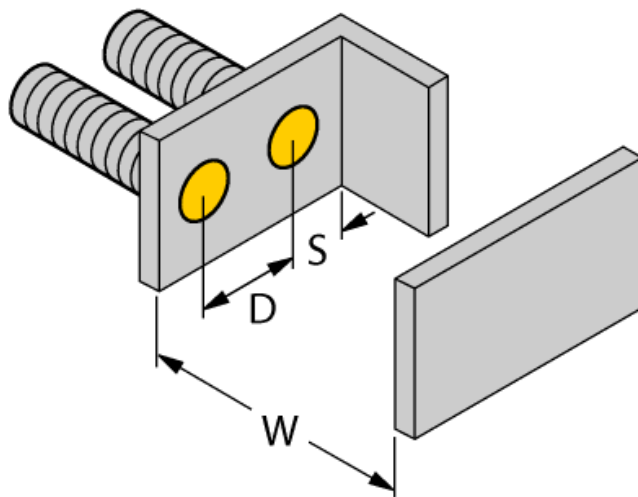
Capacitive sensor
BCT10-S30-UP6X2-H1151

| Mounting instructions/Description | minimum distances |
|-----------------------------------|-------------------|
| 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 sensors be changed via potentiometer, the data sheet specifications no longer apply.



Capacitive sensor
BCT10-S30-UP6X2-H1151



Accessories

| Type code | Ident-No. | Description | |
|-----------|-----------|---|--|
| MAP-M30 | 6950013 | Mounting adapter; material: Polypropylene; sensor replacement with filled container possible (adapter remains in container during sensor replacement) | |
| BST-30B | 6947216 | Fixing clamp for threaded barrel devices, with dead-stop; material: PA6 | |

Wiring accessories

| Type code | Ident-No. | Description | |
|---------------|-----------|--|--|
| RKC4.4T-2/TXL | 6625503 | Connection cable, female M12, straight, 4-pin, cable length: 2 m, sheath material: PUR, black; cULus approval; other cable lengths and qualities available, see www.turck.com | |
| WKC4.4T-2/TXL | 6625515 | Connection cable, female M12, angled, 4-pin, cable length: 2 m, sheath material: PUR, black; cULus approval; other cable lengths and qualities available, see www.turck.com | |
| WKC4.4T-2/TEL | 6625025 | Connection cable, female M12, angled, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com | |

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Capacitive sensor
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Function accessories

| Type code | Ident-No. | Description | |
|--------------|-----------|--|------|
| TX1-Q20L60 | 6967114 | Teach adapter for inductive encoders, linear position, angle, ultrasonic and capacitive sensors | |
| TBEN-S2-4IOL | 6814024 | Compact multiprotocol I/O module, 4 IO-Link Master 1.1 Class A, 4 universal PNP digital channels 0.5 A | |