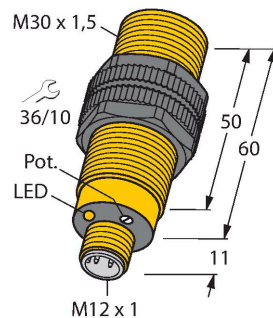


BCF10-S30-VP4X-H1141

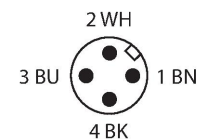
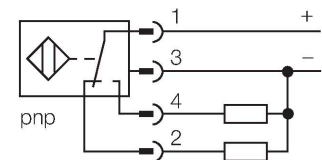
Capacitive Sensor



Features

- M30 × 1.5 threaded barrel
- Plastic, PA12-GF30
- Fine adjustment via potentiometer
- Increased EMI protection (even with high frequency equipment)
- Suited for highly viscous media
- DC 4-wire, 10...65 VDC
- Complementary contact, PNP output
- M12 × 1 connector

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

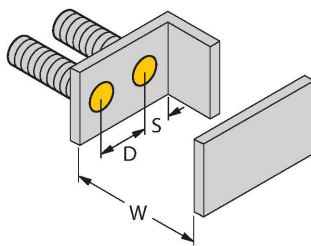
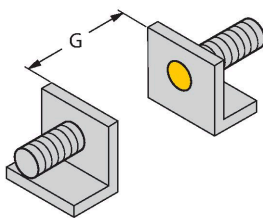
| | |
|---|------------------------------------|
| Type | BCF10-S30-VP4X-H1141 |
| ID | 2506117 |
| Rated switching distance (flush) | 10 mm |
| Rated switching distance (non-flush) | 10 mm |
| Secured operating distance | ≤ (0.72 × Sn) |
| Hysteresis | 1...20 % |
| Temperature drift | Typical 20 % |
| Repeat accuracy | ≤ 2 % of full scale |
| Ambient temperature | -25...+70 °C |
| Electrical data | |
| Operating voltage | 10...65 VDC |
| Residual ripple | ≤ 10 % U _{ss} |
| DC rated operational current | ≤ 200 mA |
| No-load current | ≤ 15 mA |
| Residual current | ≤ 0.1 mA |
| Switching frequency | 0.1 kHz |
| Isolation test voltage | ≤ 0.5 kV |
| Output function | 4-wire, Complementary contact, PNP |
| Short-circuit protection | yes / Cyclic |
| Voltage drop at I _o | ≤ 1.8 V |
| Wire breakage/Reverse polarity protection | yes / Complete |
| Tests/approvals | |
| Approvals | UL |
| UL registration number | E210608 |
| Mechanical data | |
| Design | Threaded barrel, M30 × 1.5 |

Technical data

| | |
|---------------------------------------|--|
| Dimensions | 60 mm |
| Housing material | Plastic, PA12-GF30, PEI |
| Active area material | PA12-GF30, yellow |
| Admissible pressure on front cap | ≤ 3 bar |
| Max. tightening torque of housing nut | 5 Nm |
| Electrical connection | Connector, M12 × 1 |
| Vibration resistance | 55 Hz (1 mm) |
| Shock resistance | 30 g (11 ms) |
| Protection class | IP67 |
| MTTF | 1080 years acc. to SN 29500 (Ed. 99) 40 °C |
| Switching state | LED, Yellow |

Mounting instructions

Product features



| | |
|------------|-------|
| Distance D | 60 mm |
|------------|-------|

| | |
|------------|-------|
| Distance W | 30 mm |
|------------|-------|

| | |
|------------|-------|
| Distance S | 45 mm |
|------------|-------|

| | |
|------------|-------|
| Distance G | 60 mm |
|------------|-------|

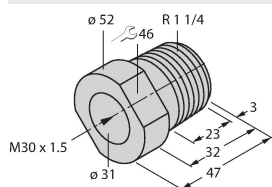
| | |
|------------------------|---------|
| Diameter active area B | Ø 30 mm |
|------------------------|---------|

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

Accessories

MAP-M30

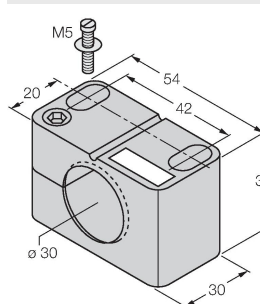
6950013



Mounting adapter; material: Polypropylene; sensor replacement with filled container possible (adapter remains in container during sensor replacement)

BST-30B

6947216



Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6

Accessories

| Dimension drawing | Type | ID | |
|-------------------|-----------------------|---------|---|
| | 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 |
| | RKC4.4T-2/TEL | 6625013 | Connection cable, female M12, straight, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com |
| | RKC4.4T-P7X2-10/TXL | 6626184 | Connection cable, female M12, angled, 4-pin, cable length: 10m, sheath material: PUR, black; cULus approval; other cable lengths and qualities available, see www.turck.com |
| | RKC4.4T-2-RSC4.4T/TEL | 6625208 | Connection cable, M12 female plug, straight, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com |
| | 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; other cable lengths and versions available, see www.turck.com |

| Dimension drawing | Type | ID | |
|-------------------|-----------------------|---------|--|
| | RKC4.4T-2-WSC4.4T/TXL | 6625624 | Extension cable, M12 female connector, straight, 4-pin; M12 male connector, angled, 4-pin; cable length: 2 m, jacket material: PUR, black; cULus approval; other cable lengths and qualities available, see www.turck.com |
| | WKC4.4T-2-WSC4.4T/TXL | 6625656 | Extension cable, M12 female connector, angled, 4-pin; M12 connector, angled, 4-pin; cable length: 2 m, jacket material: PUR, black; cULus approval; other cable lengths and qualities available, see www.turck.com |