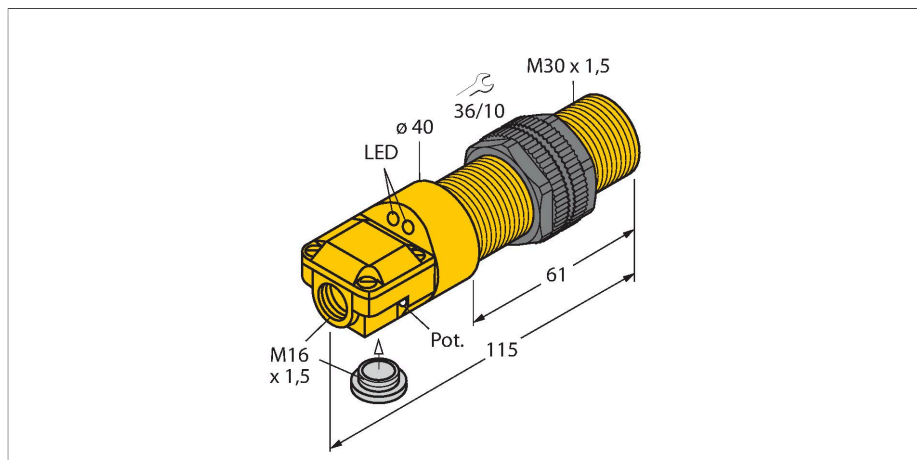


BCE10-P30SR-VP6X2

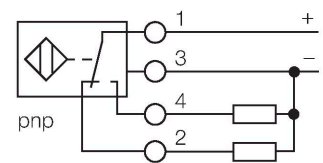
Capacitive Sensor – With Potentiometer



Features

- M30 × 1.5 threaded barrel
- Plastic, ABS
- Fine adjustment via potentiometer
- DC 4-wire, 10...30 VDC
- Complementary contact, PNP output
- Terminal chamber

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

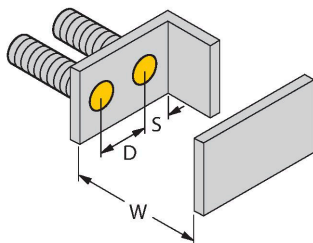
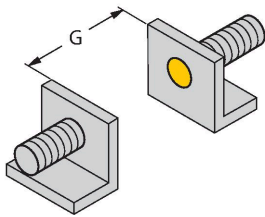
| | |
|---|---|
| Type | BCE10-P30SR-VP6X2 |
| ID | 100026664 |
| Rated switching distance (flush) | 10 mm |
| Rated switching distance (non-flush) | 15 mm |
| Secured operating distance | $\leq (0.72 \times S_n)$ |
| Hysteresis | 1...20 % |
| Temperature drift | Typical 20 % |
| Repeat accuracy | $\leq 5 \%$ of full scale |
| Ambient temperature | -10...+60 °C |
| Electrical data | |
| Operating voltage | 10...30 VDC |
| Residual ripple | $\leq 10 \%$ U_{ss} |
| DC rated operational current | ≤ 100 mA |
| No-load current | ≤ 15 mA |
| Residual current | ≤ 0.1 mA |
| Switching frequency | 0.05 kHz |
| Oscillation frequency | According to EN 60947-5-2, 8.2.6.2 Table 9: 0.1...2.0 MHz |
| 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 |
| Mechanical data | |
| Design | Threaded barrel, M30 × 1.5 |
| Dimensions | 115 mm |

Technical data

| | |
|---------------------------------------|--|
| Housing material | Plastic, ABS |
| Active area material | ABS, yellow |
| Admissible pressure on front cap | ≤ 3 bar |
| Max. tightening torque of housing nut | 5 Nm |
| Electrical connection | Terminal chamber |
| Vibration resistance | 55 Hz (1 mm) |
| Shock resistance | 30 g (11 ms) |
| Protection class | IP65 |
| MTTF | 1080 years acc. to SN 29500 (Ed. 99) 40 °C |
| Switching state | 2 × LEDs, Yellow |

Mounting instructions

Product features



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

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

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

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

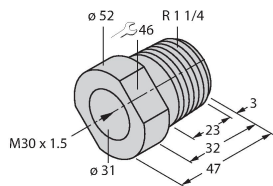
| | |
|------------------------|---------|
| Diameter active area B | Ø 30 mm |
|------------------------|---------|

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

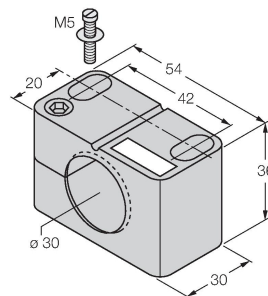
6950013



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