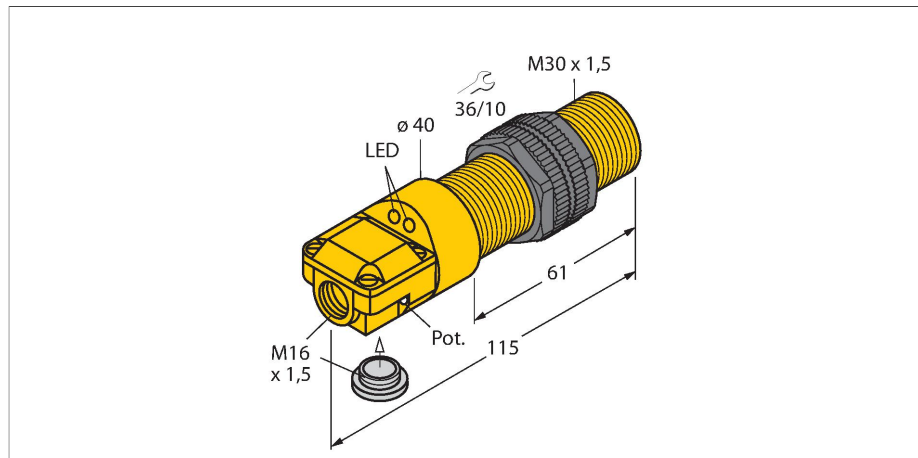


# BCE10-P30SR-VP6X2

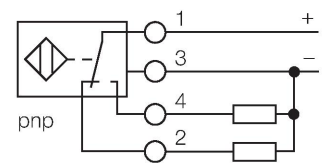
## Capacitive Sensor – With Potentiometer



### 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



### Technical data

|                                        |                                                           |
|----------------------------------------|-----------------------------------------------------------|
| Type                                   | BCE10-P30SR-VP6X2                                         |
| ID                                     | 100026664                                                 |
| Rated switching distance (flush)       | 10 mm                                                     |
| Rated switching distance (non-flush)   | 15 mm                                                     |
| Secured operating distance             | $\leq (0.72 \times S_n)$ mm                               |
| Hysteresis                             | 1...20 %                                                  |
| Repeat accuracy                        | $\leq 5$ % of full scale                                  |
| Ambient temperature                    | -10...+60 °C                                              |
| <b>Electrical data</b>                 |                                                           |
| Operating voltage $U_B$                | 30 VDC                                                    |
| Ripple $U_{ss}$                        | $\leq 10$ % $U_{Bmax}$                                    |
| DC rated operating current $I_e$       | $\leq 100$ mA                                             |
| No-load current                        | $\leq 15$ mA                                              |
| Residual current                       | $\leq 0.1$ 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 $I_e$                  | $\leq 1.8$ V                                              |
| Wire break/reverse polarity protection | yes/Complete                                              |
| <b>Tests/approvals</b>                 |                                                           |
| Approvals                              | UL                                                        |
| UL registration number                 | E210608                                                   |
| <b>Mechanical data</b>                 |                                                           |
| Design                                 | Threaded barrel, M30 x 1.5                                |

### Functional principle

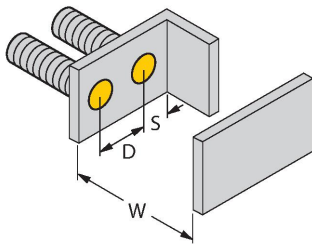
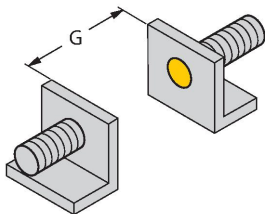
Capacitive proximity switches are designed for non-contact and wear-free detection of electrically conductive as well as non-conductive metal objects.

Technical data

|                                       |                                            |
|---------------------------------------|--------------------------------------------|
| Dimensions                            | 115 mm                                     |
| 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

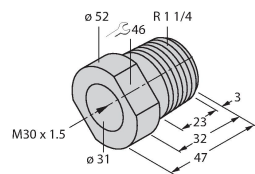


|                        |         |
|------------------------|---------|
| Distance D             | 60 mm   |
| Distance W             | 30 mm   |
| Distance S             | 45 mm   |
| Distance G             | 60 mm   |
| Diameter active area B | Ø 30 mm |

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.

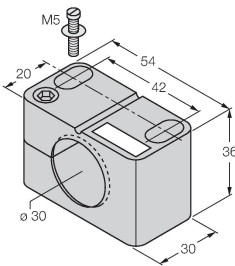
Accessories

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