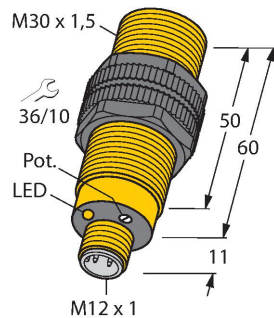


# BCE10-S30-VP6X-H1141

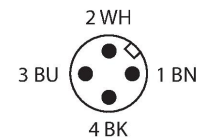
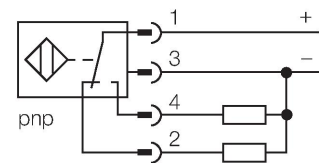
## Capacitive Sensor – With Potentiometer



### Features

- M30 × 1.5 threaded barrel
- Plastic, PA12-GF30
- Fine adjustment via potentiometer
- DC 4-wire, 10...30 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                                      | BCE10-S30-VP6X-H1141               |
| ID no.                                    | 100026662                          |
| 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                         | type 20 %                          |
| Repeat accuracy                           | $\leq 5 \%$ of full scale          |
| Ambient temperature                       | -10...+60 °C                       |
| <b>Electrical data</b>                    |                                    |
| Operating voltage                         | 10...30 VDC                        |
| Residual ripple                           | $\leq 10 \%$ $U_{ss}$              |
| DC rated operational current              | $\leq 100$ mA                      |
| No-load current                           | $\leq 15$ mA                       |
| Residual current                          | $\leq 0.1$ mA                      |
| Switching frequency                       | 0.05 kHz                           |
| Isolation test voltage                    | $\leq 0.5$ kV                      |
| Output function                           | 4-wire, Complementary contact, PNP |
| Short-circuit protection                  | yes / Cyclic                       |
| Voltage drop at $I_o$                     | $\leq 1.8$ V                       |
| Wire breakage/Reverse polarity protection | yes / Complete                     |
| <b>Tests/approvals</b>                    |                                    |
| Approvals                                 | UL                                 |

Technical data

|                                       |                                            |
|---------------------------------------|--------------------------------------------|
| UL registration number                | E210608                                    |
| Mechanical data                       |                                            |
| Design                                | Threaded barrel, M30 × 1.5                 |
| Dimensions                            | 60 mm                                      |
| Housing material                      | Plastic, PA6-GF30                          |
| 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                      | IP65                                       |
| 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.

BCE10-S30-VP6X-H1141| 09/14/2021 11-11 | technical changes reserved