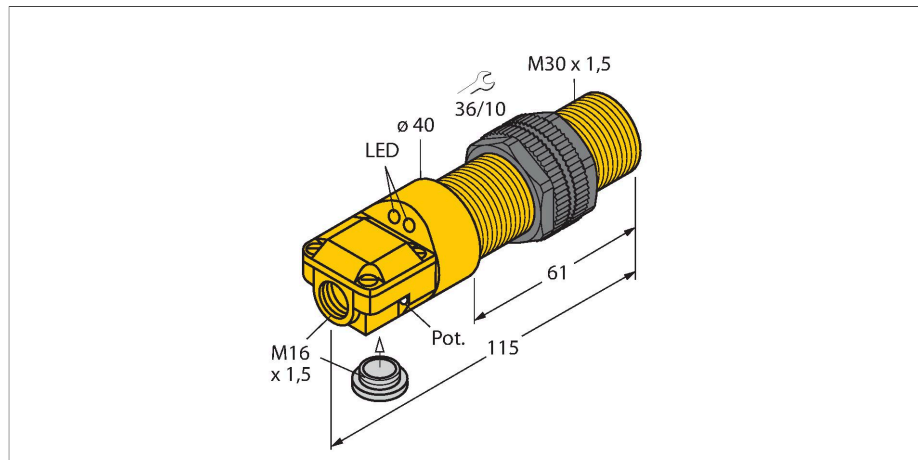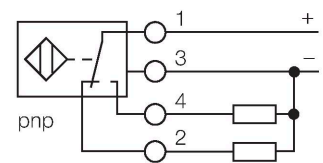# BCE10-P30SR-VP6X2
Capacitive Sensor –   With Potentiometer

Features

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

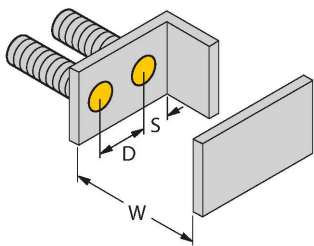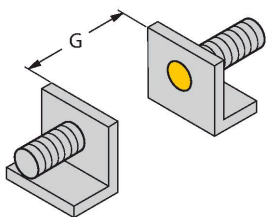## Wiring diagram

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	≤ (0.72 × Sn) mm
Hysteresis	1…20 %
Repeat accuracy	≤ 5 % of full scale
Ambient temperature	-10…+60 °C
Electrical data	
Operating voltage U_B	30 VDC
Ripple U_{ss}	≤ 10 % U_{Bmax}
DC rated operating current I_e	≤ 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_e	≤ 1.8 V
Wire break/reverse polarity protection	yes/Complete
Tests/approvals	
Approvals	UL
UL registration number	E210608
Mechanical data	
Design	Threaded barrel, M30 x 1.5

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
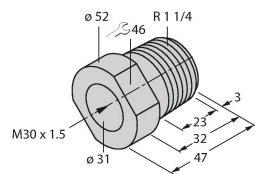
Product features

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.
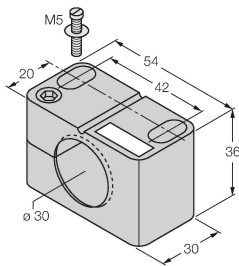
Accessories

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