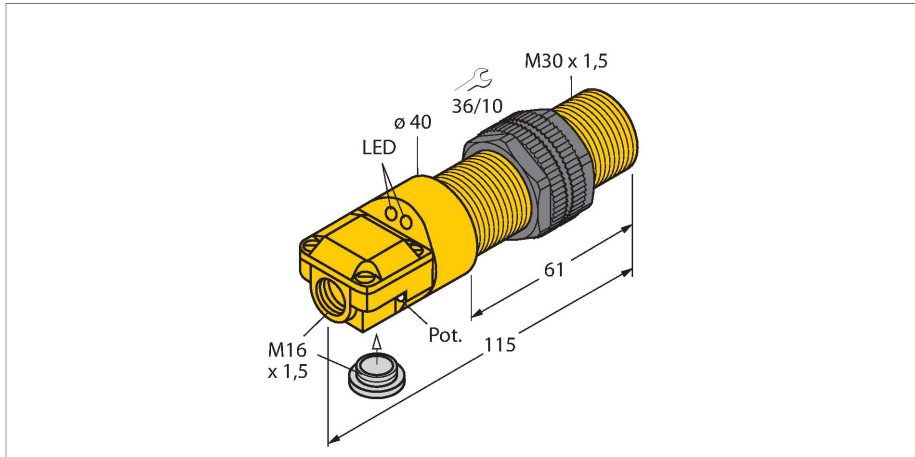


BCE10-P30SR-VP6X2

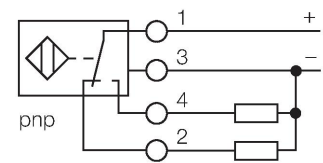
Capacitive Sensor – With Potentiometer



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 %
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

Technical data

Tests/approvals	
Mechanical data	
Design	Threaded barrel, M30 x 1.5
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
Power-on indication	Green
Switching state	2 × LEDs, Yellow

Mounting instructions

Product features

An isometric diagram showing two views of a sensor mounting. The top view shows a square plate with a central circular hole and a threaded rod passing through it. A dimension line labeled 'G' indicates the distance from the center of the hole to the edge of the plate. The bottom view shows a similar plate with a threaded rod passing through it. A dimension line labeled 'D' indicates the distance from the center of the hole to the edge of the plate. A dimension line labeled 'W' indicates the width of the plate. A dimension line labeled 'S' indicates the distance from the center of the hole to the edge of the plate. A dimension line labeled 'B' indicates the diameter of the active area.

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