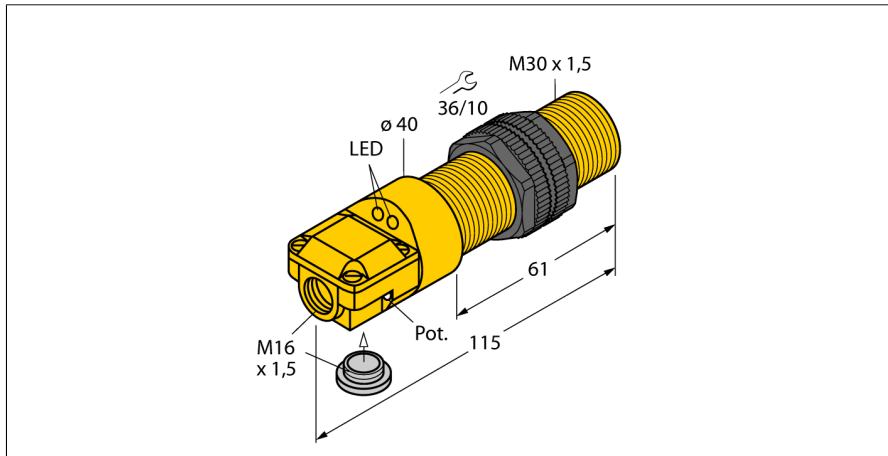


Capacitive sensor BC10-P30SR-FDZ3X

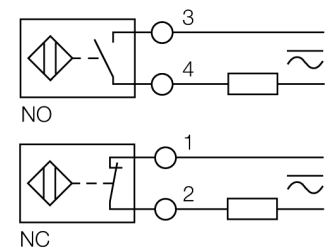
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Industrial
Automation



- 2 cable entries (axial, radial)
- Threaded barrel, M30 x 1.5
- Plastic, ABS
- Fine adjustment via potentiometer
- AC 2-wire, 20...250 VAC
- DC 2-wire, 3...320 VDC
- Programmable connection (NC/NO)
- 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.

Type code	BC10-P30SR-FDZ3X
Ident no.	22030
Rated switching distance (flush)	10 mm
Rated switching distance (non-flush)	15 mm
Assured sensing range	$\leq (0.72 \times S_n)$ mm
Hysteresis	2...20 %
Temperature drift	type $\leq \pm 20$ %
Repeatability	≤ 2 % of full scale
Ambient temperature	-25...+70 °C
Operating voltage	20...250 VAC
Operating voltage	20...320VDC
AC rated operational current	≤ 200 mA
DC rated operational current	≤ 200 mA
Frequency	$\geq 50... \leq 60$ Hz
Smallest operating current I_m	≤ 3 mA
Residual current	≤ 1.7 mA
Switching frequency	0.02 kHz
Rated insulation voltage	≤ 1.5 kV
Output function	2-wire, connection programmable, 2-wire
Voltage drop at I_m	≤ 7 V
Design	threaded barrel, M30 x 1.5
Dimensions	115 mm
Housing material	plastic, ABS
Material active area	Plastic, ABS, yellow
Admissible pressure on front cap	≤ 3 bar
Max. tightening torque housing nut	5 Nm
Connection	terminal chamber
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	1080 years acc. to SN 29500 (Ed. 99) 40 °C
Switching state	LED yellow
Included in scope of supply	blank plug

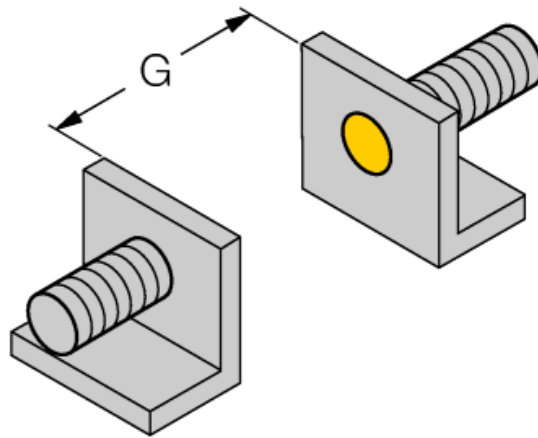
Capacitive sensor BC10-P30SR-FDZ3X

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Mounting instructions / Description	minimum distances
Distance D	60 mm
Distance W	30 mm
Distance S	45 mm
Distance G	60 mm

Diameter of the active area B \varnothing 30 mm



The given minimum distances have been checked in compliance with the standard switching distance. Should the sensitivity of the sensors be changed via potentiometer, the data sheet specifications no longer apply.

