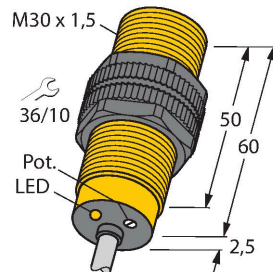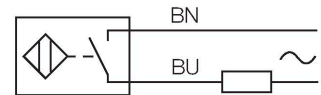# BC10-S30-AZ3X
Capacitive Sensor

Features

- M30 × 1.5 threaded barrel
- Plastic, PA12-GF30
- Fine adjustment via potentiometer
- AC 2-wire, 20…250 VAC
- NO contact
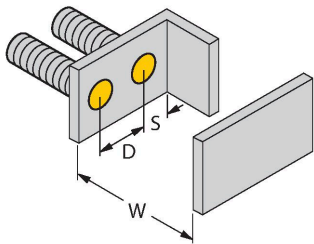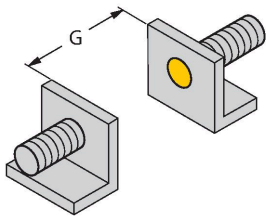- Cable connection

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	BC10-S30-AZ3X
ID	2310700
Rated switching distance (flush)	10 mm
Rated switching distance (non-flush)	15 mm
Secured operating distance	≤ (0.72 × Sn)
Hysteresis	2…20 %
Temperature drift	Typical 20 %
Repeat accuracy	≤ 2 % of full scale
Ambient temperature	-25…+70 °C
Electrical data	
Operating voltage	20…250 VAC
AC rated operational current	≤ 500 mA
Frequency	≥ 50…≤ 60 Hz
Smallest operating current	≥ 5 mA
Residual current	≤ 1.7 mA
Switching frequency	0.02 kHz
Oscillation frequency	According to EN 60947-5-2, 8.2.6.2 Table 9: 0.1…2.0 MHz
Isolation test voltage	≤ 1.5 kV
Output function	2-wire, NO contact, 2-wire
Voltage drop at I_e	≤ 7 V
Tests/approvals	
Mechanical data	
Design	Threaded barrel, M30 x 1.5
Dimensions	62.5 mm
Housing material	Plastic, PA12-GF30, PEI
Active area material	PA12-GF30, yellow

Technical data

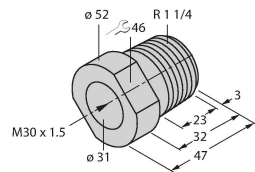|	
Admissible pressure on front cap	≤ 3 bar
Max. tightening torque of housing nut	5 Nm
Electrical connection	Cable
Cable quality	Ø 5.2 mm, LifYY, PVC, 2 m
Core cross-section	2 x 0.34 mm²
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	1080 years acc. to SN 29500 (Ed. 99) 40 °C
Power-on indication	Green
Switching state	LED, Red

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.
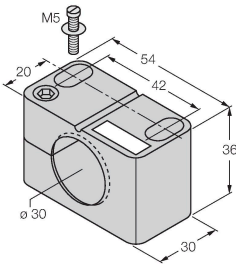
Accessories

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