

Capacitive sensor BC10-S30-Y1X/S90

TURCK

Industrial
Automation



- Threaded barrel, M30 x 1.5
- Plastic, PA12-GF30
- Fine adjustment via potentiometer
- DC 2-wire, nom. 8.2 VDC
- Output acc. to DIN EN 60947-5-6 (NAMUR)
- Cable connection

Wiring diagram



Type code	BC10-S30-Y1X/S90
Ident no.	2010023
Rated switching distance (flush)	10 mm
Rated switching distance (non-flush)	15 mm
Assured sensing range	≤ (0.72 x S _n) mm
Hysteresis	1...20 %
Temperature drift	type ≤ ± 20 %
Repeatability	≤ 2 % of full scale
Ambient temperature	-25...+70 °C
Voltage	Nom. 8.2 VDC
Non-actuated current consumption	≤ 1.2 mA
Actuated current consumption	≥ 2.1 mA
Switching frequency	0.1 kHz
Output function	2-wire, NAMUR
Design	threaded barrel, M30 x 1.5
Dimensions	62.5 mm
Housing material	plastic, PA
Material active area	Plastic, PA, yellow
Admissible pressure on front cap	≤ 3 bar
Max. tightening torque housing nut	5 Nm
Connection	cable
Cable quality	Ø 5.2, blue, LifYY-11Y, PUR, 2 m
Cable cross section	2 x 0.34 mm ²
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	448 years acc. to SN 29500 (Ed. 99) 40 °C
Switching state	LED yellow

Functional principle

Capacitive proximity switches are designed for non-contact and wear-free detection of electrically conductive as well as non-conductive metal objects.

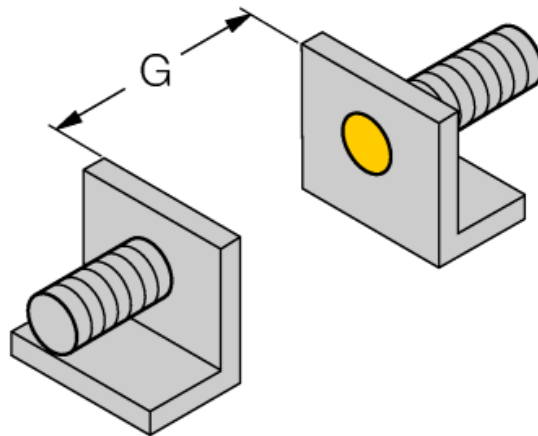
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Mounting instructions / Description	minimum distances
Distance D	60 mm
Distance W	30 mm
Distance S	45 mm
Distance G	60 mm

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.



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Accessories

Type code	Ident no.	Description	Dimension drawing
MAP-M30	6950013	Mounting adapter; material: Polypropylene; sensor replacement with filled container possible (adapter remains in container during sensor replacement)	
BST-30B	6947216	Fixing clamp for threaded barrel devices, with dead-stop; material: PA6	
IM1-22EX-R	7541231	Isolating switching amplifier, dual-channel; 2 relay outputs NO; input NAMUR signal; selectable ON/OFF mode for wire-break and short-circuit monitoring; adjustable signal flow (NO/ NC mode); removable terminal blocks; 18 mm width; universal voltage supply unit	