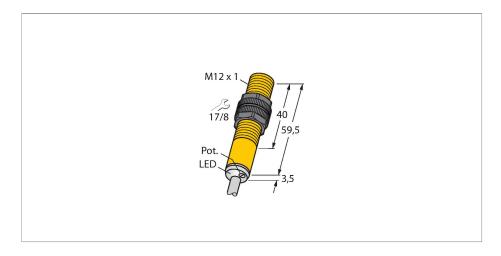
BC3-S12-AN6X 5M | 22-02-2025 05-38 | Technical modifications reserved

BC3-S12-AN6X 5M Capacitive Sensor



Technical data

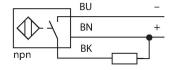
Type	BC3-S12-AN6X 5M
ID	100006069
Rated switching distance (flush)	3 mm
Rated switching distance (non-flush)	4.5 mm
Secured operating distance	≤ (0.72 × Sn) mm
Hysteresis	120 %
Temperature drift	Typical 20 %
Repeat accuracy	≤ 2 % of full scale
Ambient temperature	-25+70 °C
Electrical data	
Operating voltage U _B	30 VDC
Ripple U _{ss}	≤ 10 % U _{Bmax}
DC rated operating current I _e	≤ 200 mA
No-load current	≤ 15 mA
Residual current	≤ 0.1 mA
Switching frequency	0.1 kHz
Oscillation frequency	According to EN 60947-5-2, 8.2.6.2 Table 9: 0.12.0 MHz
Isolation test voltage	0.5 kV
Output function	3-wire, NO contact, NPN
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



Features

- ■M12 × 1 threaded barrel
- ■Plastic, PA12-GF30
- Fine adjustment via potentiometer
- ■DC 3-wire, 10...30 VDC
- ■NO contact, NPN output
- 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.



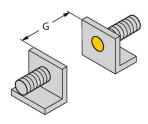
PRELIMINARY

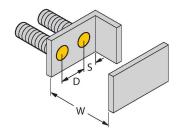
Technical data

Mechanical data	
Design	Threaded barrel, M12 x 1
Housing material	Plastic, PA12-GF30
Active area material	PA12-GF30
Admissible pressure on front cap	≤ 8 bar
Max. tightening torque of housing nut	1 Nm
Electrical connection	Cable
Cable quality	Ø 4 mm, LifYY, PVC, 5 m
Core cross-section	3 x 0.25 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
Switching state	LED, Yellow

Mounting instructions

Product features





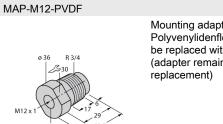
Distance D	24 mm
Distance W	9 mm
Distance S	18 mm
Distance G	18 mm
Diameter active area B	Ø 12 mm

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-M12-PP	6950016
ø 36 R 3/4	Mounting adapter; material: Polypropylene; sensor replacement with filled container possible (adapter remains in container during sensor replacement)



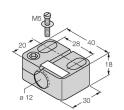
Mounting adapter; material: Polyvenylidenflourid; sensor can be replaced with filled container (adapter remains in container during replacement)

6950017



PRELIMINARY

BST-12B 6947212



Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6