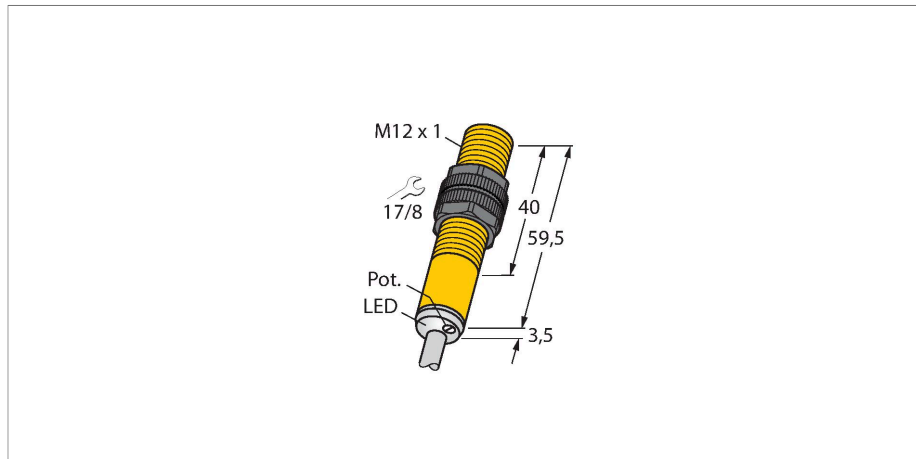


# BC3-S12-AP6X/S100

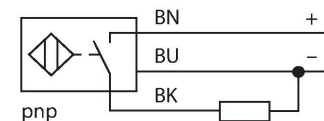
## Capacitive Sensor – With Increased Temperature Range



### Features

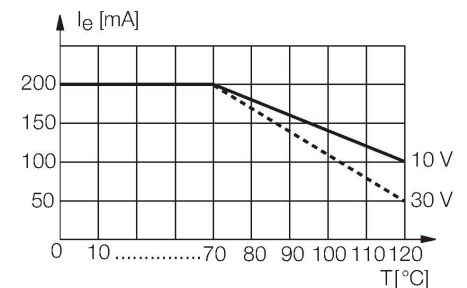
- M12 × 1 threaded barrel
- Plastic, PA12-GF30
- Fine adjustment via potentiometer
- For temperatures up to 100°C
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- Cable connection

### 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. Special capacitive sensor versions can be used at temperatures of up to +100°C.



### Technical data

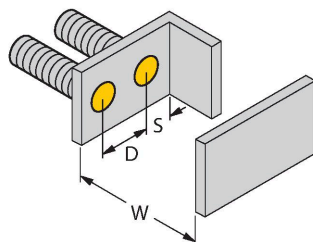
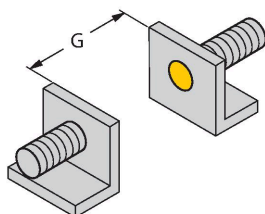
Type	BC3-S12-AP6X/S100
Ident. no.	2601201
Rated switching distance (flush)	3 mm
Rated switching distance (non-flush)	4.5 mm
Secured operating distance	≤ (0.72 × Sn)
Hysteresis	2...20 %
Temperature drift	type 20 %
Repeat accuracy	≤ 2 % of full scale
Ambient temperature	-25...+100 °C
<b>Electrical data</b>	
Operating voltage	10...30 VDC
Residual ripple	≤ 10 % U <sub>ss</sub>
DC rated operational current	≤ 200 mA
Rated operational current	See derating curve
No-load current	≤ 15 mA
Residual current	≤ 0.1 mA
Switching frequency	0.1 kHz
Isolation test voltage	≤ 0.5 kV
Output function	3-wire, NO contact, PNP
Short-circuit protection	yes / Cyclic
Voltage drop at I <sub>o</sub>	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes / Complete

## Technical data

Mechanical data	
Design	Threaded barrel, M12 × 1
Dimensions	63 mm
Housing material	Plastic, PA12-GF30
Active area material	PA12-GF30, yellow
Admissible pressure on front cap	≤ 8 bar
Max. tightening torque of housing nut	1 Nm
Electrical connection	Cable
Cable quality	Ø 4 mm, LifYY-11Y, PUR, 2 m
Core cross-section	3 x 0.25 mm <sup>2</sup>
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
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Distance W	9 mm
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Distance S	18 mm
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Distance G	18 mm
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Diameter active area B	Ø 12 mm
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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.