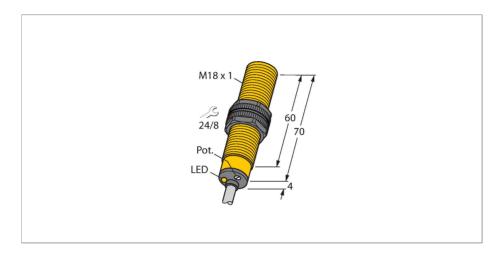


# BCE5-S18-AP6X Capacitive Sensor – With Potentiometer



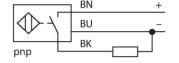
## Technical data

Type	BCE5-S18-AP6X
ID	100026658
Rated switching distance (flush)	5 mm
Rated switching distance (non-flush)	7.5 mm
Secured operating distance	≤ (0.72 × Sn) mm
Hysteresis	120 %
Temperature drift	Typical 20 %
Repeat accuracy	≤ 5 % of full scale
Ambient temperature	-10+60 °C
Electrical data	
Operating voltage U <sub>B</sub>	1030 VDC
Ripple U <sub>ss</sub>	≤ 10 % U <sub>Bmax</sub>
DC rated operating current I <sub>e</sub>	≤ 100 mA
Residual current	≤ 0.1 mA
Switching frequency	0.05 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, PNP
Short-circuit protection	yes/Cyclic
Voltage drop at I <sub>e</sub>	≤ 1.8 V
Wire break/reverse polarity protection	yes/Complete
Tests/approvals	
Approvals	UL

#### **Features**

- ■M18 × 1 threaded barrel
- Plastic, PA12-GF30
- Fine adjustment via potentiometer
- ■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.

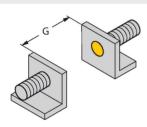


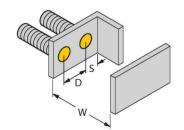
## Technical data

UL registration number	E210608
Mechanical data	
Design	Threaded barrel, M18 x 1
Dimensions	74 mm
Housing material	Plastic, PA12-GF30
Active area material	PA12-GF30, yellow
Admissible pressure on front cap	≤ 6 bar
Max. tightening torque of housing nut	2 Nm
Electrical connection	Cable
Cable quality	Ø 5.2 mm, LifYY, PVC, 2 m
Core cross-section	3 x 0.34 mm²
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP65
MTTF	1080 years acc. to SN 29500 (Ed. 99) 40 °C
Switching state	LED, Yellow

## Mounting instructions

## Product features





Distance D	36 mm
Distance W	15 mm
Distance S	27 mm
Distance G	30 mm
Diameter active area B	Ø 18 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.