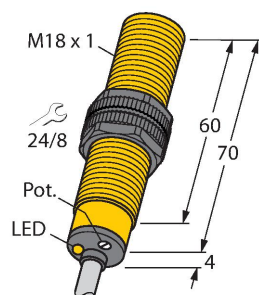


BC5-S18-AP4X

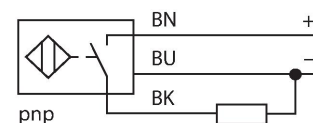
Capacitive Sensor



Features

- M18 × 1 threaded barrel
- Plastic, PA12-GF30
- Fine adjustment via potentiometer
- DC 3-wire, 10...65 VDC
- NO contact, PNP output
- Cable connection

Wiring diagram



Technical data

Type	BC5-S18-AP4X
Ident. no.	25030
Rated switching distance (flush)	5 mm
Rated switching distance (non-flush)	7.5 mm
Secured operating distance	$\leq (0.72 \times S_n)$
Hysteresis	2...20 %
Temperature drift	type 20 %
Repeat accuracy	$\leq 2 \%$ of full scale
Ambient temperature	-25...+70 °C
Electrical data	
Operating voltage	10...65 VDC
Residual ripple	$\leq 10 \%$ U_{ss}
DC rated operational current	≤ 200 mA
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_o	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes / Complete
Approvals	UL

Functional principle

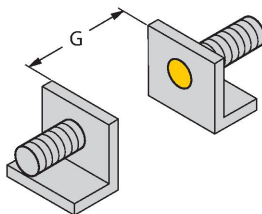
Capacitive proximity switches are designed for non-contact and wear-free detection of electrically conductive as well as non-conductive metal objects.

Technical data

Mechanical data	
Design	Threaded barrel, M18 × 1
Dimensions	74 mm
Housing material	Plastic, PA12-GF30, PEI
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 mm ²
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

The image shows two isometric views of a sensor component. The top view shows the sensor with a yellow circular active area on its top surface. A dimension line labeled 'G' indicates the distance between the top surface of the sensor and the top surface of the mounting plate. The bottom view shows the sensor with a yellow circular active area on its bottom surface. A dimension line labeled 'D' indicates the distance between the bottom surface of the sensor and the bottom surface of the mounting plate. A dimension line labeled 'W' indicates the width of the sensor. A dimension line labeled 'S' indicates the distance between the top surface of the sensor and the top surface of the mounting plate. A dimension line labeled 'B' indicates the diameter of the active area.

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