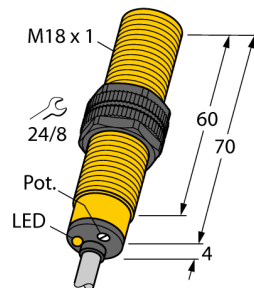
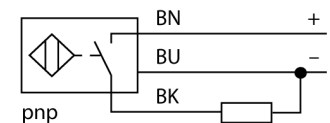


Capacitive Sensor BC5-S18-AP4X 7M



- 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



Functional principle

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

Type	BC5-S18-AP4X 7M
ID	2503007
Rated switching distance (flush)	5 mm
Rated switching distance (non-flush)	7.5 mm
Secured operating distance	$\leq (0.72 \times S_n) \text{ mm}$
Hysteresis	1...20 %
Temperature drift	Typical 20 %
Repeat accuracy	$\leq 2 \%$ of full scale
Ambient temperature	-25...+70 °C
Electrical data	
Ripple U_{ss}	$\leq 10 \% U_{\text{Bmax}}$
DC rated operating current I_{a}	$\leq 200 \text{ mA}$
No-load current I_{o}	$\leq 15 \text{ mA}$
Residual current	$\leq 0.1 \text{ mA}$
Switching frequency	0.1 kHz
Oscillation frequency	According to EN 60947-5-2, 8.2.6.2 Table 9: 0.1... 2.0 MHz
Isolation test voltage	0.5 kV
Output function	3-wire, NO contact, PNP
Short-circuit protection	yes/Cyclic
Voltage drop at I_{a}	$\leq 1.8 \text{ V}$
Wire break/reverse polarity protection	yes/Complete
Tests/approvals	
Approvals	UL
UL registration number	E210608

Mechanical data	
Design	Threaded barrel, M18 x 1
Dimensions	74 mm
Housing material	Plastic, PA12-GF30, PEI
Admissible pressure on front cap	≤ 6 bar
Max. tightening torque of housing nut	2 Nm
Electrical connection	Cable
Cable quality	Ø 5.2mm, LifYY, PVC, 7 m
Core cross-section	3 x 0.34 mm ² 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

Accessories

Type code	Ident-No.		Dimension drawing
BS 18	69471	Mounting clamp for threaded barrel sensors; material: PA66-GF	
BSN 18	69472	Mounting clamp for threaded barrel sensors; material: PA66-GF	
BST-18B	6947214	Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6	
MAP-M18	6950012	Mounting adapter; material: Polypropylene; sensor replacement with filled container possible (adapter remains in container during sensor replacement)	