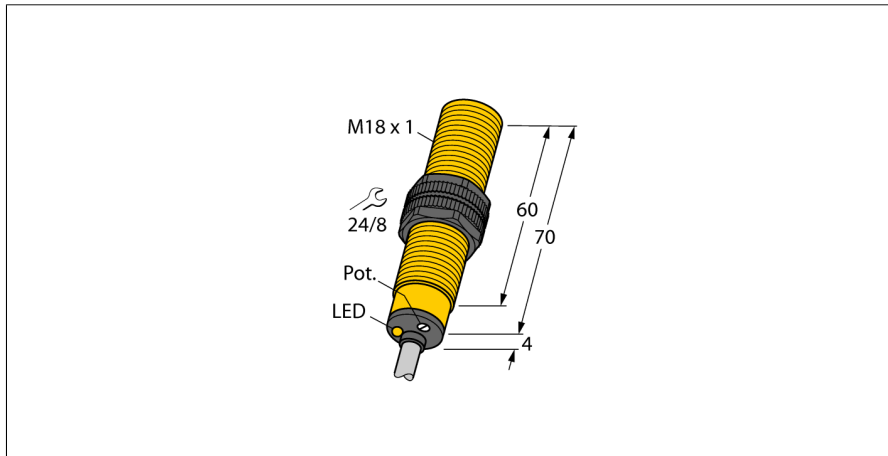


Capacitive sensor BC5-S18-AP4X

TURCK

Industrial
Automation



- Threaded barrel, M18 x 1
- 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 code	BC5-S18-AP4X
Ident no.	25030
Rated switching distance (flush)	5 mm
Rated switching distance (non-flush)	7.5 mm
Assured switching distance	$\leq (0.72 \times S_n)$ mm
Hysteresis	2...20 %
Temperature drift	type 20 %
Repeatability	≤ 2 % of full scale
Ambient temperature	-25...+70 °C
Operating voltage	10...65VDC
Residual ripple	≤ 10 % U_{ss}
DC rated operational current	≤ 200 mA
No-load current I_0	≤ 15 mA
Residual current	≤ 0.1 mA
Switching frequency	0.1 kHz
Rated insulation voltage	≤ 0.5 kV
Output function	3-wire, NO contact, PNP
Short-circuit protection	yes/ cyclic
Voltage drop at I_0	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes/ complete
Construction	threaded barrel, M18 x 1
Dimensions	74 mm
Housing material	plastic, PA
Material active area	plastic, PA, yellow
Admissible pressure on front cap	≤ 6 bar
Max. tightening torque housing nut	2 Nm
Connection	cable
Cable quality	\varnothing 5.2, LiYY, PVC, 2m
Cable 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

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Mounting instructions / Description	minimum distances
Distance D	36 mm
Distance W	15 mm
Distance S	27 mm
Distance G	30 mm

Diameter of the active area B	Ø 18 mm
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The given minimum distances have been checked in compliance with the standard switching distance. Should the sensitivity of the sensors be changed via potentiometer, the data sheet specifications no longer apply.



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Accessories

Type code	Ident no.	Description	Design
BS 18	69471	Mounting bracket for threaded barrel devices; material: PA66-GF	
BSN 18	69472	Fixing clamp; material: PA66-GF	
BST-18B	6947214	Fixing clamp for threaded barrel devices, 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)	