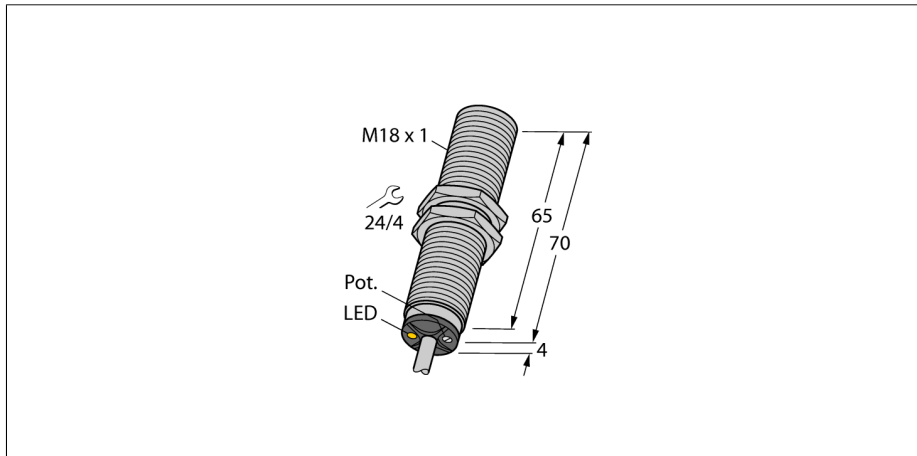


Capacitive sensor BC5-M18-AZ3X

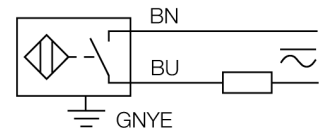
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- Threaded barrel, M18 x 1
- Chrome-plated brass
- Fine adjustment via potentiometer
- AC 2-wire, 20...250 VAC
- NO contact
- Cable connection

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-M18-AZ3X
Ident no.	2305000
Rated operating distance S_n	5 mm
Rated operating distance S_n	5 mm, non-flush mounting
Assured sensing range	$\leq (0.72 \times S_n)$ mm
Hysteresis	2...20 %
Temperaturdrift	type $\leq \pm 20$ %
Repeatability	≤ 2 % of full scale
Ambient temperature	-25...+70 °C
Operating voltage	20...250 VAC
AC rated operational current	≤ 500 mA
Frequency	≥ 50 ... ≤ 60 Hz
Smallest operating current I_m	≤ 5 mA
Residual current	≤ 1.7 mA
Switching frequency	0.02 kHz
Rated insulation voltage	≤ 1.5 kV
Output function	2-wire, NO contact, 2-wire
Voltage drop at I_m	≤ 7 V
Design	threaded barrel, M18 x 1
Dimensions	74 mm
Housing material	Metal, CuZn, chrome-plated
Material active face	Plastic, PBT, yellow
Admissible pressure on front cap	≤ 4 bar
Max. tightening torque housing nut	25 Nm
Connection	cable
Cable quality	$\varnothing 5.2$, LifYY, PVC, 2 m
Cable cross section	3×0.5 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	● yellow

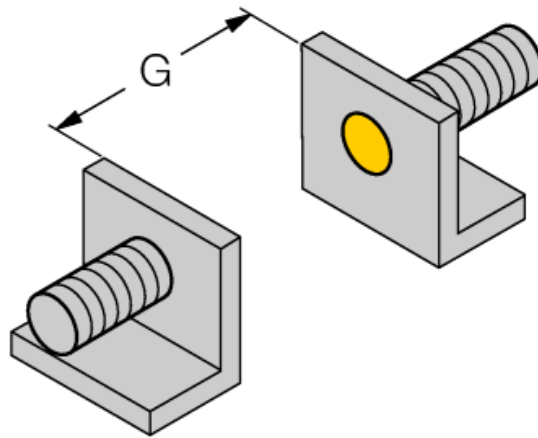
Capacitive sensor BC5-M18-AZ3X

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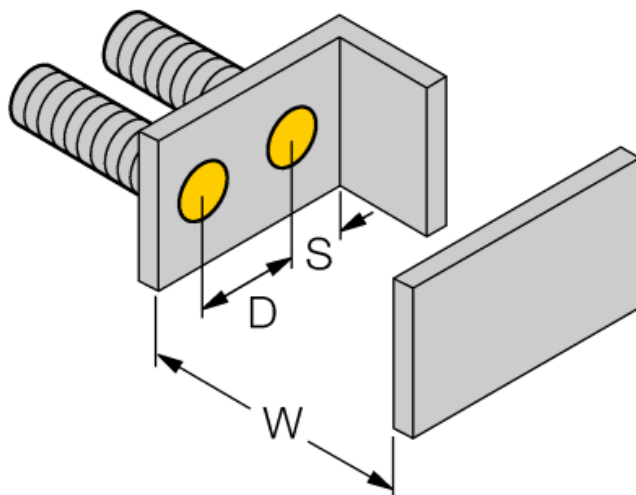
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Mounting instructions / Description	minimum distances
Distance D	36 mm
Distance W	15 mm
Distance S	27 mm
Distance G	30 mm

Diameter of the active area B \varnothing 18 mm



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.



**Capacitive sensor
BC5-M18-AZ3X**

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Accessories

Type code	Ident no.	Description	Dimension drawing
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)	