

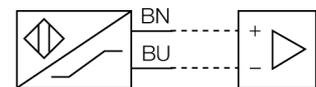
Capacitive sensor BC5-S185-Y0X/S90 4M

TURCK

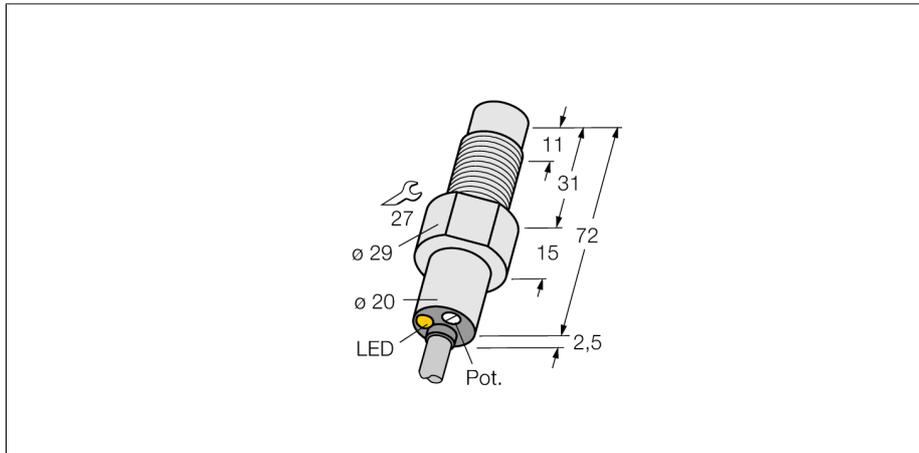
Industrial
Automation

- Threaded barrel, M18 x 1
- Plastic, PVDF
- Fine adjustment via potentiometer
- DC 2-wire, nom. 8.2 VDC
- Output acc. to DIN EN 60947-5-6 (NAMUR)
- Cable connection

Wiring diagram



Functional principle



Type	BC5-S185-Y0X/S90 4M
Ident-No.	2003522
Rated operating distance Sn	5 mm, flush mounting
Rated operating distance Sn	7.5 mm, non-flush mounting
Assured sensing range	$\leq (0.72 \times S_n)$ mm
Hysteresis	1...20 %
Temperaturdrift	type $\leq \pm 20$ %
Repeatability	≤ 2 %
Ambient temperature	-25...+70 °C
Voltage	Nom. 8.2 VDC
Non-actuated current consumption	≤ 1.2 mA
Actuated current consumption	≥ 2.1 mA
Switching frequency	0.1 kHz
Output function	2-wire, NAMUR
Design	threaded barrel, M18 x 1
Dimensions	74.5 mm
Housing material	Plastic, PVDF, teflon-coated
Material active face	Plastic, PVDF, yellow
Max. tightening torque housing nut	2 Nm
Connection	cable
Cable quality	$\varnothing 4$, LifYY-11Y, PUR, 4 m
Cable cross section	2 x 0.25 mm ²
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	448years acc. to SN 29500 (Ed. 99) 40 °C
Switching state	LED yellow

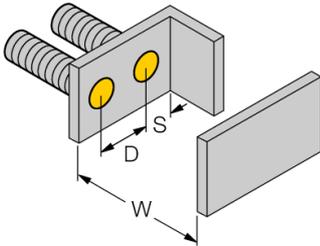
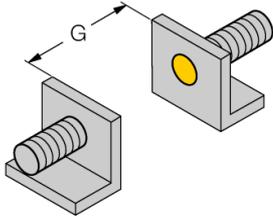
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Mounting instructions	minimum distances
Distance D	36 mm
Distance W	15 mm
Distance S	27 mm
Distance G	30 mm

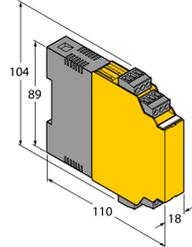
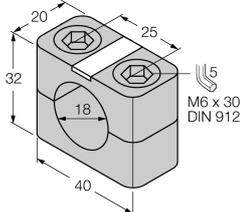
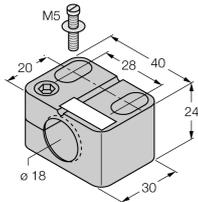
Diameter of the active area B	Ø 18 mm
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The given minimum distances have been checked in compliance with the standard switching distance. Should the sensitivity of the sensors be changed via potentiometer, the data sheet specifications no longer apply.

Capacitive sensor
BC5-S185-Y0X/S90 4M

Accessories

Type code	Ident-No.	Short text	Dimension drawing
IM1-22EX-R	7541231	Isolating switching amplifier, dual-channel; 2 relay outputs NO; input NAMUR signal; selectable ON/OFF mode for wire-break and short-circuit monitoring; adjustable signal flow (NO/ NC mode); removable terminal blocks; 18 mm width; universal voltage supply unit	 <p>Technical drawing of the IM1-22EX-R isolating switching amplifier. It shows a yellow and grey rectangular device with dimensions: total height 104 mm, mounting height 89 mm, total width 110 mm, and a specific width of 18 mm.</p>
BSN 18	69472	Fixing clamp; material: PA66-GF	 <p>Technical drawing of the BSN 18 fixing clamp. It is a grey rectangular component with dimensions: height 20 mm, width 25 mm, depth 32 mm, and a circular hole with a diameter of 18 mm. It features an M6 x 30 DIN 912 screw hole.</p>
BST-18B	6947214	Fixing clamp for threaded barrel devices, with dead-stop; material: PA6	 <p>Technical drawing of the BST-18B fixing clamp. It is a grey rectangular component with dimensions: height 20 mm, width 28 mm, depth 40 mm, and a circular hole with a diameter of 18 mm. It includes an M5 screw hole and a depth of 24 mm for the main body.</p>