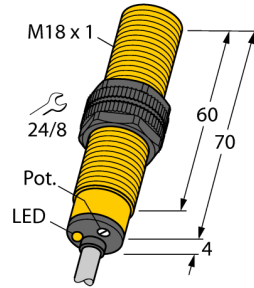


# Capacitive sensor BCF5-S18-RP4X/S90

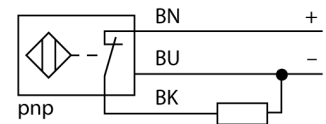
**TURCK**

Industrial  
Automation



- Threaded barrel, M18 x 1
- Plastic, PA12-GF30
- Fine adjustment via potentiometer
- Increased RFI protection (even with high frequency equipment)
- Suited for highly viscous media
- DC 3-wire, 10...65 VDC
- NC 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.

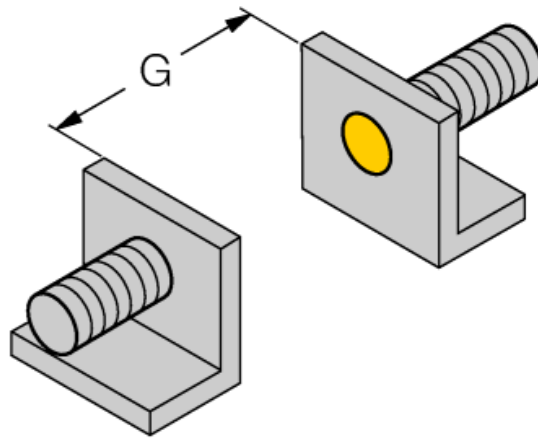
<b>Type code</b>	BCF5-S18-RP4X/S90
Ident no.	2503006
<b>Rated operating distance Sn</b>	5 mm
Rated operating distance Sn	5 mm, non-flush mounting
Assured sensing range	≤ (0.72 x Sn) mm
Hysteresis	2...20 %
Temperaturdrift	type ≤ ± 20 %
Repeatability	≤ 2 % of full scale
Ambient temperature	-25...+70 °C
<b>Operating voltage</b>	10...65VDC
	10...30 VDC for use in China
Residual ripple	≤ 10 % U <sub>ss</sub>
DC rated operational current	≤ 200 mA
No-load current I <sub>0</sub>	≤ 15 mA
Residual current	≤ 0.1 mA
Switching frequency	0.1 kHz
Rated insulation voltage	≤ 0.5 kV
Output function	3-wire, NC contact, PNP
Short-circuit protection	yes/ cyclic
Voltage drop at I <sub>0</sub>	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes/ complete
<b>Design</b>	threaded barrel, M18 x 1
Dimensions	74 mm
Housing material	Plastic, PA
Material active face	Plastic, PA, yellow
Admissible pressure on front cap	≤ 6 bar
Max. tightening torque housing nut	2 Nm
Connection	cable
Cable quality	Ø 5.2, LifYY-11Y, PUR, 2 m
Cable cross section	3 x 0.34 mm <sup>2</sup>
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
<b>Switching state</b>	● yellow

# Capacitive sensor BCF5-S18-RP4X/S90

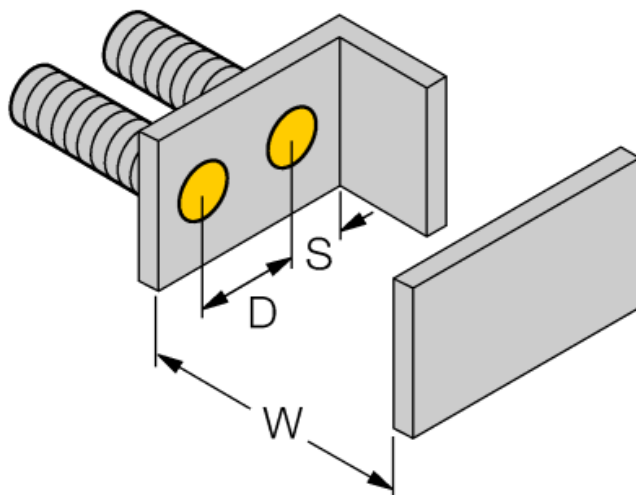
Mounting instructions / Description	minimum distances
Distance D	36 mm
Distance W	15 mm
Distance S	27 mm
Distance G	30 mm

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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  
BCF5-S18-RP4X/S90**

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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)	