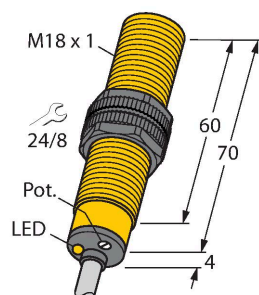


# BC5-S18-RZ3X

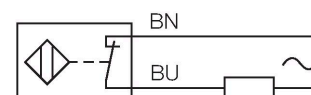
## Capacitive Sensor



### Features

- M18 × 1 threaded barrel
- Plastic, PA12-GF30
- Fine adjustment via potentiometer
- AC 2-wire, 20...250 VAC
- NC contact
- Cable connection

### Wiring diagram



### Technical data

Type	BC5-S18-RZ3X
ID	2305400
Rated switching distance (flush)	5 mm
Rated switching distance (non-flush)	7.5 mm
Secured operating distance	$\leq (0.72 \times S_n)$ mm
Hysteresis	2...20 %
Temperature drift	Typical 20 %
Repeat accuracy	$\leq 2$ % of full scale
Ambient temperature	-25...+70 °C
<b>Electrical data</b>	
Operating voltage $U_s$	20...250 VAC
AC rated operational current	$\leq 500$ mA
Frequency	$\geq 50... \leq 60$ Hz
Smallest operating current	$\geq 5$ mA
Residual current	$\leq 1.7$ mA
Switching frequency	0.02 kHz
Oscillation frequency	According to EN 60947-5-2, 8.2.6.2 Table 9: 0.1...2.0 MHz
Isolation test voltage	1.5 kV
Output function	2-wire, NC contact, 2-wire
Voltage drop at $I_s$	$\leq 7$ V
<b>Tests/approvals</b>	
Approvals	UL
UL registration number	E210608

### Functional principle

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

Technical data

Mechanical data	
Design	Threaded barrel, M18 x 1
Dimensions	74 mm
Housing material	Plastic, PA12-GF30, PEI
Active area material	PA12-GF30, yellow
Admissible pressure on front cap	≤ 6 bar
Max. tightening torque of housing nut	2 Nm
Electrical connection	Cable
Cable quality	Ø 5.2 mm, LifYY, PVC, 2 m
Core cross-section	2 x 0.34 mm²
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
Power-on indication	Green
Switching state	LED, Red

Mounting instructions

Product features		
	Distance D	36 mm
	Distance W	15 mm
	Distance S	27 mm
	Distance G	30 mm
	Diameter active area B	Ø 18 mm

The given minimum distances have been checked against the standard switching distance.  
Should the sensitivity of the sensors be changed via potentiometer, the data sheet specifications no longer apply.