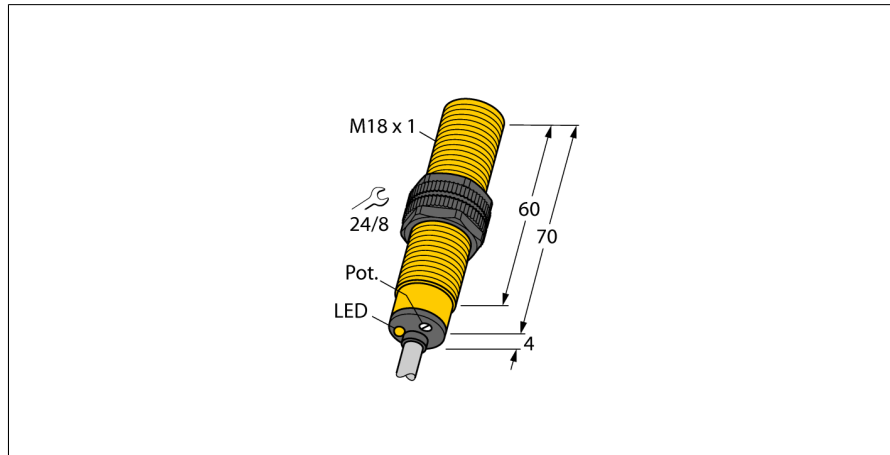
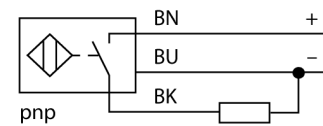


Capacitive Sensor BC5-S18-AP4X 7M



- M18 × 1 threaded barrel
- Plastic, PA12-GF30
- Fine adjustment via potentiometer
- DC 3-wire, 10...65 VDC
- NO contact, PNP output
- Cable connection

Wiring Diagram



| | |
|--------------------------------------|-------------------------------|
| Type | BC5-S18-AP4X 7M |
| ID | 2503007 |
| Rated switching distance (flush) | 5 mm |
| Rated switching distance (non-flush) | 7.5 mm |
| Secured operating distance | ≤ (0.72 × S _n) mm |
| Hysteresis | 1...20 % |
| Temperature drift | Typical 20 % |
| Repeat accuracy | ≤ 2 % of full scale |
| Ambient temperature | -25...+70 °C |

Functional principle

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

| | |
|---|--|
| Electrical data | |
| Operating voltage | 10...65 VDC |
| Residual ripple | ≤ 10 % U _{in} |
| DC rated operational current | ≤ 200 mA |
| No-load current I ₀ | ≤ 15 mA |
| Residual current | ≤ 0.1 mA |
| Switching frequency | 0.1 kHz |
| Oscillation frequency | According to EN 60947-5-2, 8.2.6.2 Table 9: 0.1... 2.0 MHz |
| Isolation test 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 |

| | |
|------------------------|---------|
| Tests/approvals | |
| Approvals | UL |
| UL registration number | E210608 |

| Mechanical data | |
|---------------------------------------|--|
| Design | Threaded barrel, M18 x 1 |
| Dimensions | 74 mm |
| Housing material | Plastic, PA12-GF30, PEI |
| Admissible pressure on front cap | ≤ 6 bar |
| Max. tightening torque of housing nut | 2 Nm |
| Electrical connection | Cable |
| Cable quality | Ø 5.2mm, LifYY, PVC, 7 m |
| Core cross-section | 3 x 0.34 mm ² 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 |

Accessories

| Type code | Ident-No. | | Dimension drawing |
|-----------|-----------|---|-------------------|
| BS 18 | 69471 | Mounting clamp for threaded barrel sensors; material: PA66-GF | |
| BSN 18 | 69472 | Mounting clamp for threaded barrel sensors; material: PA66-GF | |
| BST-18B | 6947214 | Mounting clamp for threaded barrel sensors, 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) | |