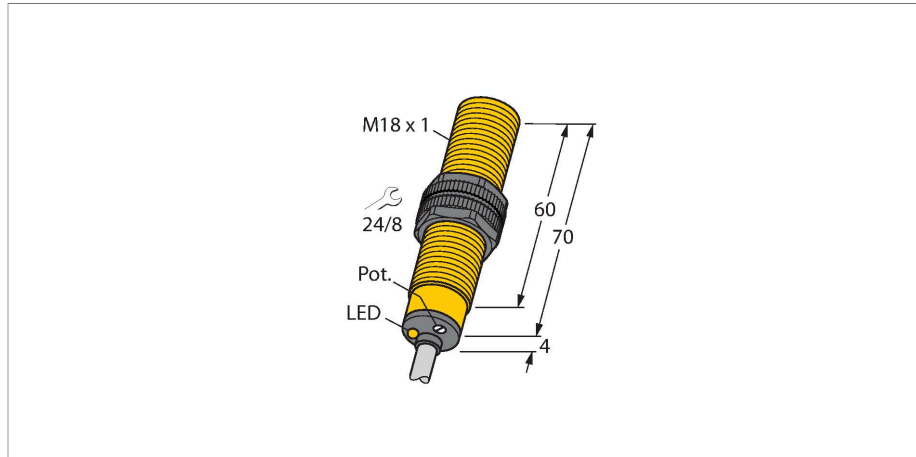


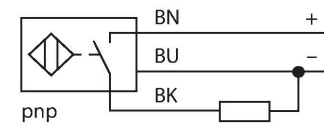
BCF5-S18-AP4X Capacitive Sensor



Features

- M18 × 1 threaded barrel
- Plastic, PA12-GF30
- Fine adjustment via potentiometer
- Increased EMI protection (even with high frequency equipment)
- Suited for highly viscous media
- DC 3-wire, 10...65 VDC
- NO 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.

Technical data

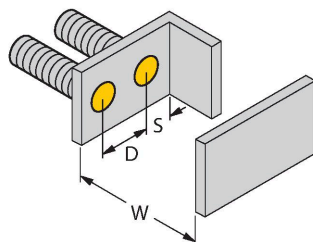
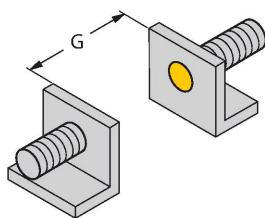
| | |
|---|-------------------------|
| Type | BCF5-S18-AP4X |
| ID no. | 2503011 |
| Rated switching distance (flush) | 5 mm |
| Rated switching distance (non-flush) | 5 mm |
| Secured operating distance | ≤ (0.72 × Sn) |
| Hysteresis | 1...20 % |
| Temperature drift | type 20 % |
| Repeat accuracy | ≤ 2 % of full scale |
| Ambient temperature | -25...+70 °C |
| Electrical data | |
| Operating voltage | 10...65 VDC |
| Residual ripple | ≤ 10 % U _{ss} |
| DC rated operational current | ≤ 200 mA |
| No-load current | ≤ 15 mA |
| Residual current | ≤ 0.1 mA |
| Switching frequency | 0.1 kHz |
| Isolation test voltage | ≤ 0.5 kV |
| Output function | 3-wire, NO contact, PNP |
| Short-circuit protection | yes / Cyclic |
| Voltage drop at I _o | ≤ 1.8 V |
| Wire breakage/Reverse polarity protection | yes / Complete |
| Tests/approvals | |
| Approvals | UL |

Technical data

| | |
|---------------------------------------|--|
| UL registration number | E210608 |
| Mechanical data | |
| Design | Threaded barrel, M18 × 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 | 3 x 0.34 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 |

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.