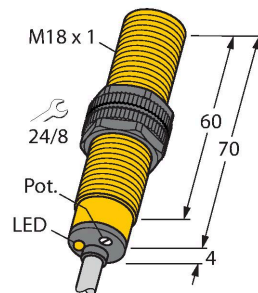


BCF5-S18-AN4X

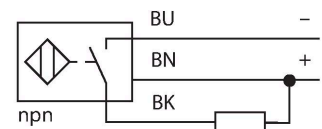
Capacitive Sensor



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, NPN 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

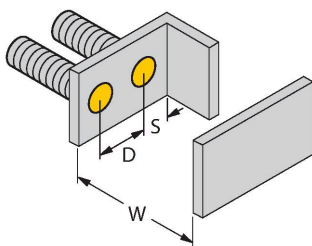
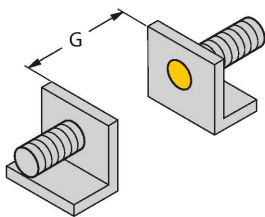
| | |
|---|---------------------------|
| Type | BCF5-S18-AN4X |
| ID | 2503012 |
| Rated switching distance (flush) | 5 mm |
| Rated switching distance (non-flush) | 5 mm |
| Secured operating distance | $\leq (0.72 \times S_n)$ |
| Hysteresis | 1...20 % |
| Temperature drift | Typical 20 % |
| Repeat accuracy | $\leq 2 \%$ of full scale |
| Ambient temperature | -25...+70 °C |
| Electrical data | |
| Operating voltage | 10...65 VDC |
| Residual ripple | $\leq 10 \%$ 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, NPN |
| Short-circuit protection | yes / Cyclic |
| Voltage drop at I_o | ≤ 1.8 V |
| Wire breakage/Reverse polarity protection | yes / Complete |
| Tests/approvals | |
| Approvals | UL |
| UL registration number | E210608 |
| Mechanical data | |
| Design | Threaded barrel, M18 × 1 |

Technical data

| | |
|---------------------------------------|--|
| 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 |
|------------|-------|

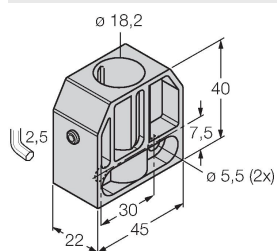
| | |
|------------------------|---------|
| Diameter active area B | Ø 18 mm |
|------------------------|---------|

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.

Accessories

BS 18

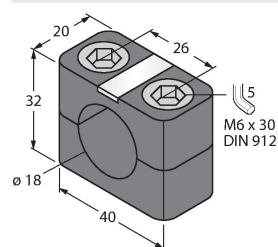
69471



Mounting clamp for threaded barrel sensors; material: PA66-GF

BSN 18

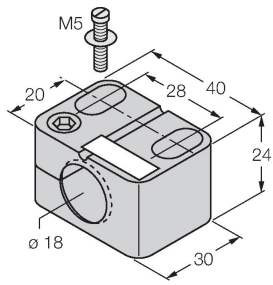
69472



Mounting clamp for threaded barrel sensors; material: PA66-GF

BST-18B

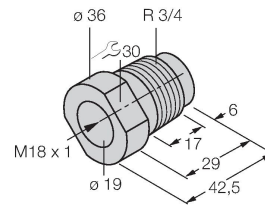
6947214



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)