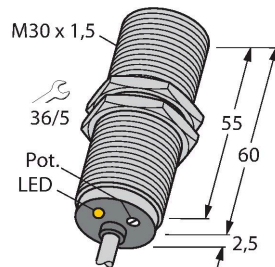


BC10-M30K-AZ3X

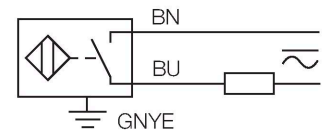
Capacitive Sensor



Features

- M30 × 1.5 threaded barrel
- Chrome-plated brass
- Fine adjustment via potentiometer
- AC 2-wire, 20...250 VAC
- NO contact
- 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

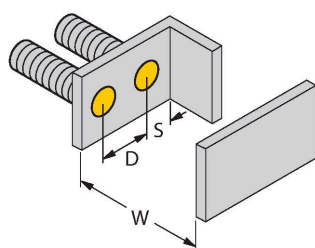
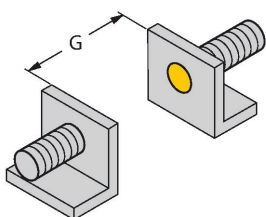
| | |
|--------------------------------------|---|
| Type | BC10-M30K-AZ3X |
| ID | 2503031 |
| Rated switching distance (flush) | 10 mm |
| Rated switching distance (non-flush) | 10 mm |
| Secured operating distance | $\leq (0.72 \times S_n)$ |
| Hysteresis | 2...20 % |
| Temperature drift | Typical 20 % |
| Repeat accuracy | $\leq 2 \%$ of full scale |
| Ambient temperature | -25...+70 °C |
| Electrical data | |
| Operating voltage | 20...250 VAC |
| AC rated operational current | ≤ 500 mA |
| Frequency | $\geq 50... \leq 60$ Hz |
| Smallest operating current | ≥ 5 mA |
| Residual current | ≤ 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, NO contact, 2-wire |
| Voltage drop at I_e | ≤ 7 V |
| Tests/approvals | |
| Mechanical data | |
| Design | Threaded barrel, M30 x 1.5 |
| Dimensions | 62.5 mm |
| Housing material | Metal, CuZn, Chrome-plated |
| Active area material | PA12-GF30, yellow |

Technical data

| | |
|---------------------------------------|--|
| Admissible pressure on front cap | ≤ 3 bar |
| Max. tightening torque of housing nut | 25 Nm |
| Electrical connection | Cable |
| Cable quality | Ø 5.2 mm, LifYY, PVC, 2 m |
| Core cross-section | 3 x 0.5 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 |
| Power-on indication | Green |
| Switching state | LED, Red |

Mounting instructions

Product features



| | |
|------------|-------|
| Distance D | 60 mm |
|------------|-------|

| | |
|------------|-------|
| Distance W | 30 mm |
|------------|-------|

| | |
|------------|-------|
| Distance S | 45 mm |
|------------|-------|

| | |
|------------|-------|
| Distance G | 60 mm |
|------------|-------|

| | |
|------------------------|---------|
| Diameter active area B | Ø 30 mm |
|------------------------|---------|

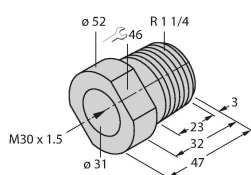
The given minimum distances have been checked against the standard switching distance.
Should the sensitivity of the sensors be changed via potentiometer, the data sheet specifications no longer apply.

Accessories

MAP-M30

6950013

Mounting adapter; material: Polypropylene; sensor replacement with filled container possible (adapter remains in container during sensor replacement)



BST-30B

6947216

Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6

