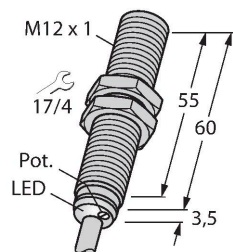


BC3-M12-AN6X

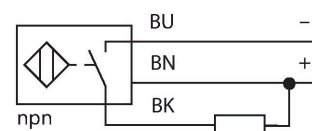
Capacitive Sensor



Features

- M12 × 1 threaded barrel
- Chrome-plated brass
- Fine adjustment via potentiometer
- DC 3-wire, 10...30 VDC
- NO contact, NPN output
- Cable connection

Wiring diagram



Technical data

| | |
|---|--------------------------------|
| Type | BC3-M12-AN6X |
| Ident. no. | 2601100 |
| Rated switching distance (flush) | 3 mm |
| Rated switching distance (non-flush) | 3 mm |
| Secured operating distance | $\leq (0.72 \times \text{Sn})$ |
| Hysteresis | 2...20 % |
| Temperature drift | type 20 % |
| Repeat accuracy | $\leq 2 \%$ of full scale |
| Ambient temperature | -25...+70 °C |
| Electrical data | |
| Operating voltage | 10...30 VDC |
| Residual ripple | $\leq 10 \%$ U_{ss} |
| DC rated operational current | $\leq 200 \text{ mA}$ |
| No-load current | $\leq 15 \text{ mA}$ |
| Residual current | $\leq 0.1 \text{ mA}$ |
| Switching frequency | 0.1 kHz |
| Isolation test voltage | $\leq 0.5 \text{ kV}$ |
| Output function | 3-wire, NO contact, NPN |
| Short-circuit protection | yes / Cyclic |
| Voltage drop at I_o | $\leq 1.8 \text{ V}$ |
| Wire breakage/Reverse polarity protection | yes / Complete |
| Approvals | UL |

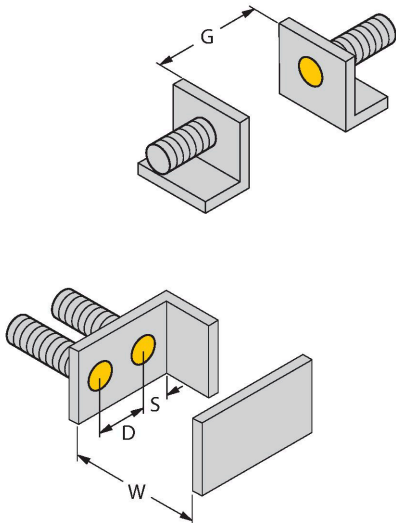
Functional principle

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, M12 × 1 |
| Dimensions | 63.5 mm |
| Housing material | Metal, CuZn, Chrome-plated |
| Active area material | ABS, yellow |
| Admissible pressure on front cap | ≤ 5 bar |
| Max. tightening torque of housing nut | 10 Nm |
| Electrical connection | Cable |
| Cable quality | Ø 4 mm, LifYY, PVC, 2 m |
| Core cross-section | 3 x 0.25 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 | 24 mm |
| | Distance W | 9 mm |
| | Distance S | 18 mm |
| | Distance G | 18 mm |
| | Diameter active area B | Ø 12 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. | |