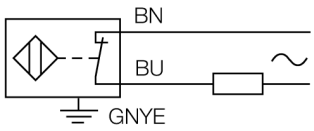
# Capacitive Sensor
# BC 5-M18-RZ3X-0.2M-SB 3T


- Threaded barrel, M18 x 1
- Chrome-plated brass
- Fine adjustment via potentiometer
- AC 2-wire, 20…250 VAC
- NC contact
- Cable connection

**Wiring Diagram**

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|---|---|
| Ident-No (TUSA) | M2305190 |
| Type | BC 5-M18-RZ3X-0.2M-SB 3T |
| ID | 2305190 |
| Rated switching distance (flush) | 5 mm |
| Rated switching distance (non-flush) | 5 mm |
| Secured operating distance | ≤ (0.72 × Sn) mm |
| Hysteresis | 2…20 % |
| Temperature drift | Typical 20 % |
| Repeat accuracy | ≤ 2 % of full scale |
| Ambient temperature | -25…+70 °C |
| **Electrical data** | |
| Operating voltage | 20…250VAC |
| AC rated operational current | ≤ 500 mA |
| Frequency | ≥ 50…≤ 60 Hz |
| Smallest operating current $I_m$ | ≥ 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, NC contact, 2-wire |
| Voltage drop at $I_e$ | ≤ 7 V |
| **Tests/approvals** | |
| Electrical connection | Cable |
| Cable quality | Ø 5.2mm, LifYY, PVC |
| Core cross-section | 3 x 0.5 mm² mm² |
| 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 |

**Functional principle**

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

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