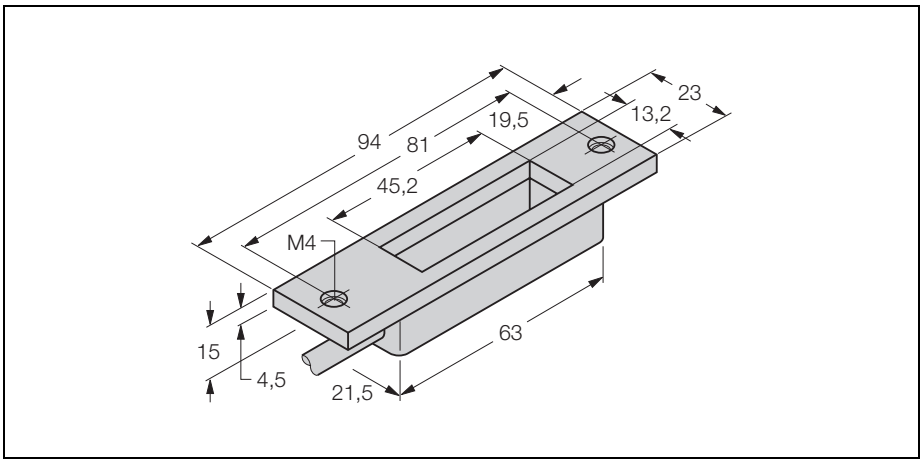
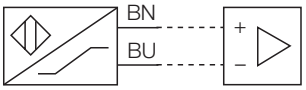
# Inductive sensor
# as electronic door switch
# Bi6R-TS1-YO




- **Door switch, 23 mm height**
- **Plastic, PBT-GF30-V0**
- **Ring sensor for mounting in locking plate**
- **Active zone in ring sensor for detection of locking bar**
- **For using in ex-areas with connection to switch amplifier with intrinsically safe input circuits**
- **2-wire DC, nom. 8.2 VDC**
- **output according to DIN EN 60947-5-6 (NAMUR)**
- **cable connection**

**Wiring diagram**

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|---|---|
| **Type** | Bi6R-TS1-YO |
| Ident-No. | 1400701 |
| **Mounting mode** | flush |
| Hysteresis H | 1... 10 % |
| Min. repeat accuracy | ≤ 2 % |
| Temperature drift | ≤ ± 10 % |
| Operation temperature | -25...+ 70 °C |
| **Voltage** | nom. 8,2 VDC |
| Current consumption (off-state) | ≥ 2,1 mA |
| Current consumption (on-state) | ≤ 1,2 mA |
| Max. switching frequency | ≤ 0,5 kHz |
| Output function | 2-wire, NAMUR |
| **Housing style** | ring sensor; TS1 |
| Dimensions | 94 x 23 x 15 mm |
| Housing material | plastic, PBT-GF30-V0 |
| Wiring | cable |
| Cable | Ø 4, LifYY, PVC, 2 m |
| Cable cross section | 2 x 0,25 $mm^2$ |
| Coil form | Plastic, PBT GF30 |
| Vibration resistance | 55 Hz (1 mm) |
| Shock resistance | 30 x g (11 ms) |
| Degree of protection | IP67 |

**Function principles**

Inductive sensors serve for wear-free and non contact detection of metal objects. They operate with a high frequency electromagnetic AC field which interacts with the target. With conventional sensors, this field is generated by a LC-resonance circuit with a ferrite core coil.



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