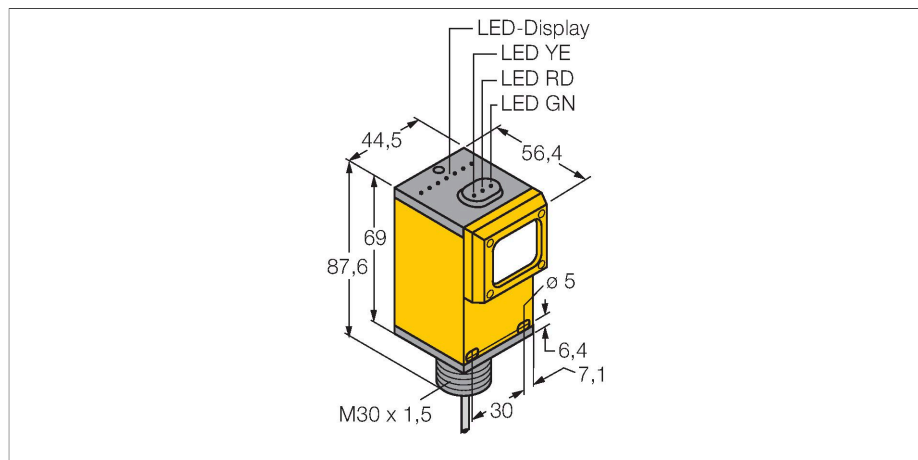


LO2L70M-Q45-ANP6X2

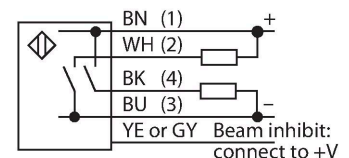
Photoelectric Sensor – Retroreflective Laser Sensor



Features

- Retroreflective laser sensor
- Laser class 2
- Reflector BRT-2X2 included in delivery
- Sensitivity adjusted via potentiometer
- Operating voltage: 10...30 VDC
- Switching output, bipolar
- Light or dark operation, adjusted via switch

Wiring diagram

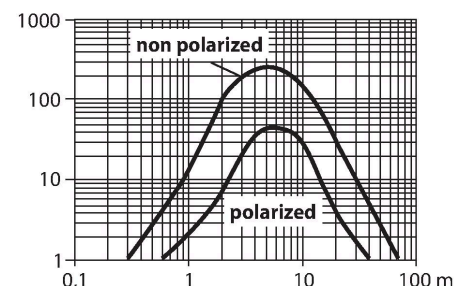


Technical data

| | |
|------------------------------|------------------------|
| Type | LO2L70M-Q45-ANP6X2 |
| ID | 7700553 |
| Function | Retroreflective sensor |
| Light type | Red |
| Wavelength | 655 nm |
| Laser class | ▲ 2 |
| Beam diameter | (elliptic) 2.5 mm |
| Range | 80...70000 mm |
| Operating voltage | 10...30 VDC |
| Residual ripple | < 10 % U _{ss} |
| DC rated operational current | ≤ 250 mA |
| No-load current | ≤ 50 mA |
| Short-circuit protection | yes / Cyclic |
| Reverse polarity protection | yes |
| Output function | NO contact, PNP/NPN |
| Switching frequency | ≤ 250 Hz |
| Overcurrent release | > 220 mA |
| Design | Rectangular, Q45 |
| Dimensions | 56.4 x 44.5 x 87.6 mm |
| Housing material | Plastic, PBT |
| Lens | plastic, Acryl |
| Electrical connection | Cable, 2 m, PVC |
| Number of cores | 5 |
| Core cross-section | 0.34 mm ² |
| Ambient temperature | -10...+40 °C |
| Protection class | IP67 |
| Special features | Laser |

Functional principle

Retroreflective sensors have emitter and receiver incorporated in the same housing. The light beam of the emitter is directed towards a reflector which returns the light back to the receiver. A target is captured when it interrupts this beam. Retroreflective sensors feature some of the advantages of opposed mode sensors, such as good contrast and high excess gain. Furthermore, only one device has to be installed and wired. Devices without polarizing filter have a smaller sensing range and are more susceptible to disturbances caused by shiny objects. Excess gain curve Excess gain in relation to distance



Technical data

| | |
|------------------------|--|
| Power-on indication | LED, Green |
| Switching state | LED, Yellow |
| Error indication | LED, green, flashing |
| Excess gain indication | LED, red |
| MTTF | 20 years acc. to SN 29500 (Ed. 99) 40 °C |

Accessories

| | | | |
|------------------------|--|-------------------------|--|
| <p>TMBM30FA</p> | <p>7700398</p> <p>Mounting bracket, stainless steel, for 30 mm thread</p> | <p>TMB30RAVK</p> | <p>7700399</p> <p>Mounting bracket, stainless steel, for sensors with 30 mm thread, for cylinders Ø 28 mm</p> |
| <p>TMB30SC</p> | <p>7700400</p> <p>Mounting bracket, PBT black; 30 mm thread; with 4 screws M5 x 0.8</p> | | |

Accessories

| Dimension drawing | Type | ID | |
|-------------------|-----------|---------|---|
| | T-BRT-2X2 | 7700368 | Round reflector, reflection coefficient 1.0, material acrylic, ambient temperature -20 ... +50 °C |

