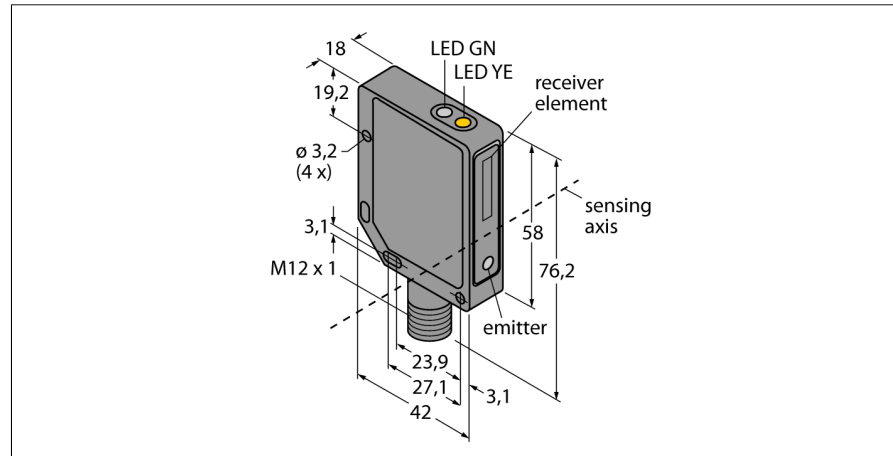
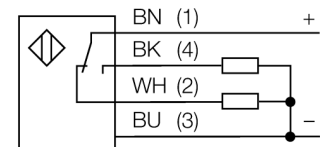


Photoelectric sensor
diffuse mode sensor with fixed-field background suppression
QMT42VP6FF2000Q

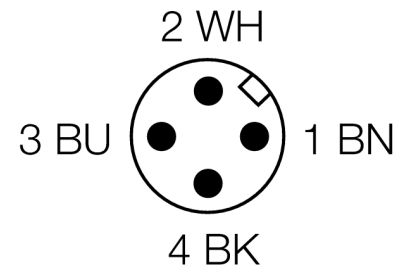


- Male M12 x 1, 4-pin
- Metal housing, ZN, black
- Protection class IP67
- Operating voltage 10...30 VDC
- PNP switching output
- Light/dark operation

Wiring diagram



| | |
|--------------------------------|---|
| Type code | QMT42VP6FF2000Q |
| Ident no. | 3049238 |
| Operating mode | diffuse mode sensor with fixed-field background suppression |
| Light type | IR |
| Wavelength | 880 nm |
| Range | 50...2000 mm |
| Ambient temperature | -20...+55 °C |
| Operating voltage | 10...30VDC |
| Residual ripple | < 10 % U _s |
| DC rated operational current | ≤ 100 mA |
| No-load current I ₀ | ≤ 50 mA |
| Short-circuit protection | yes |
| Reverse polarity protection | yes |
| Output function | NO/NC , PNP |
| Switching frequency | ≤ 500 Hz |
| Readiness delay | ≤ 100 ms |
| Overcurrent release | > 150 mA |
| Design | rectangular, QMT42 |
| Dimensions | 42 x 18 x 76.2 mm |
| Housing material | metal, ZN, black lacquer |
| Lens | plastic, acrylic |
| Connection | male, M12 x 1 |
| Protection class | IP67 |
| Power-on indication | LED green |
| Switching state | LED yellow |
| Error indication | LED green flashing |
| Alarm display | LED yellow flashing |

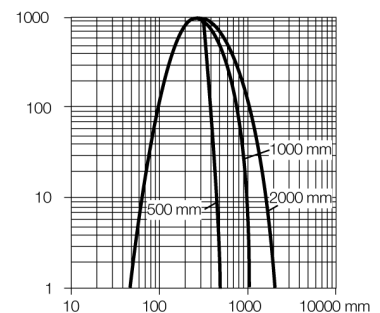


Functional principle

Diffuse mode sensors with background suppression operate with a single emitter and several receiver elements. The target position and the photoelectric structure of the sensor determine which of the receiving elements receives the most light. The sensor electronics determine whether the reflecting object is within or outside the measuring range. These sensors come with a fixed cut-off point.

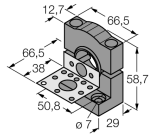
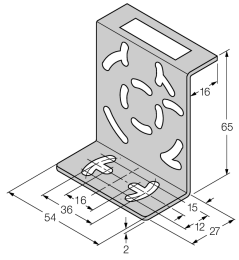
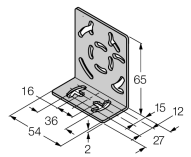
Excess gain curve

Excess gain in relation to the distance

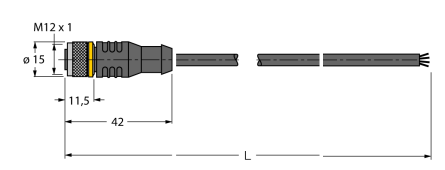
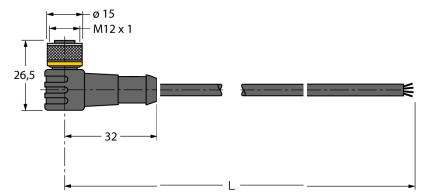


**Photoelectric sensor
diffuse mode sensor with fixed-field background suppression
QMT42VP6FF2000Q**

Accessories

| Type code | Ident no. | Description | Dimension drawing |
|-----------|-----------|--|---|
| SMB30SK | 3052523 | Mounting bracket, PBT black, with mounting plate, stainless steel, for types with 18 mm thread, QM42/QMT42 |  |
| SMB46S | 3048748 | Mounting bracket, stainless steel, for QS18, QS30, MINI-BEAM, QM42/QMT42 |  |
| SMB46L | 3048747 | Mounting bracket, stainless steel, for QS18, QS30, MINI-BEAM, QM42/QMT42 |  |

Wiring accessories

| Type code | Ident no. | Description | Dimension drawing |
|---------------|-----------|---|---|
| RKC4.4T-2/TEL | 6625013 | Connection cable, female M12, straight, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com |  |
| WKC4.4T-2/TEL | 6625025 | Connection cable, female M12, angled, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com |  |