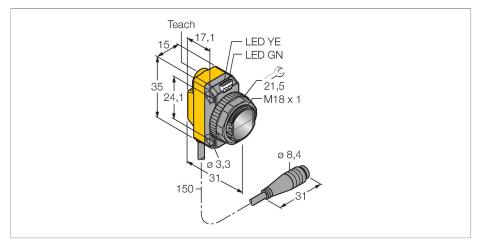


QS18VN6XLPQ

Photoelectric Sensor – Retroreflective Sensor with Polarizing Filter for Clear Object Detection





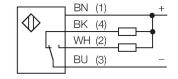
| Туре | QS18VN6XLPQ |
|------------------------------|---|
| ID | 3801266 |
| Optical data | |
| Function | Retroreflective Sensor |
| Operating mode | Polarized (coaxial) |
| Wavelength | 625 nm |
| Range | 03000 mm |
| Electrical data | |
| Operating voltage | 1030 VDC |
| Residual ripple | < 10 % U _{ss} |
| DC rated operational current | ≤ 100 mA |
| Short-circuit protection | yes |
| Reverse polarity protection | yes |
| Output function | NO/NC, NPN |
| Current output | 100 mA |
| Readiness delay | ≤ 100 ms |
| Response time typical | < 0.4 ms |
| Setting option | Potentiometer |
| Mechanical data | |
| Design | Rectangular with thread, QS18 |
| Dimensions | Ø 18 x 31 x 15 x 35 mm |
| Housing material | Plastic, ABS |
| Lens | plastic, PMMA |
| Electrical connection | Cable with connector, M8 × 1, 0.15 m, PVC |
| Number of cores | 4 |



Features

- Cable with male end, PVC, M8 × 1, 4-pin, 150 mm
- Protection class IP67
- ■LED, all-round visible
- Coaxial optics
- Sensitivity adjusted via potentiometer
- Operating voltage: 10...30 VDC
- ■NPN switching output, changeover

Wiring diagram





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. This device is sensitive enough to detect clear film, glass bottles and other transparent objects. The blind zone is reduced through the coaxial optics. The built-in polarizing filter also provides for the detection of high-gloss objects. With the help of three different limit values it is possible

Technical data

| Ambient temperature | -40+70 °C |
|------------------------|-----------------------------------|
| Protection class | IP67 |
| Special features | Clear object detection keep/defer |
| Power-on indication | LED, Green |
| Switching state | LED, Yellow |
| Error indication | LED, green, Flashing |
| Excess gain indication | LED, yellow, flashing |
| Alarm display | LED yellow Flashing |
| Tests/approvals | |
| Approvals | CE, cURus |
| | |

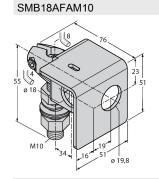
it can react to objects that differ in their transparency. The devices are self-regulating to reduce influences by dirt and dust.

Excess gain curve Excess gain in relation to the distance (LP-type)

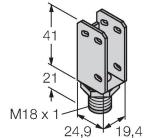
Accessories

Ø 18.5 Ø 4.6 R 24.2 Ø 4.6

3033200 Mounting bracket, rectangular, stainless steel, for sensors with 18 mm thread

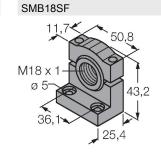


3012558 Mounting bracket, material VA 1.4401, for M10 x 1.5 thread, thread length 18 mm



Mounting bracket, stainless steel, for 18 mm thread

3069721



Mounting bracket, PBT black, for sensors with 18 mm thread, rotatable

3052519

Accessories

SMBQS18A

Dimension drawing Type ID
PKG4M-2/TEL 6625061



Connection cable, female M8, straight, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com



Dimension drawing Type ID
PKW4M-2/TEL 6625067



Connection cable, female M8, angled, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com