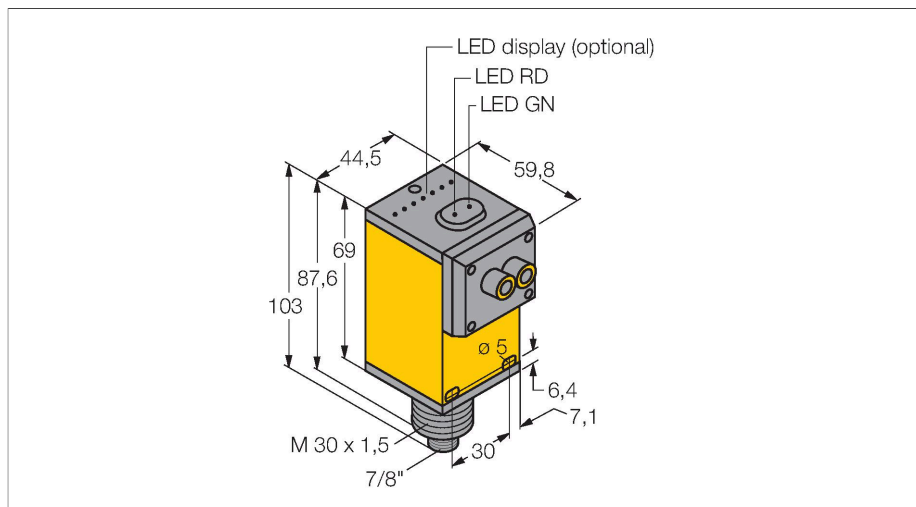


Q45VR3FVQ

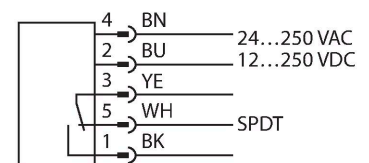
Photoelectric Sensor – Photoelectric Sensor for Glass Fibers



Features

- Male connector 7/8"
- Protection class IP67
- Sensitivity adjusted via potentiometer
- Operating voltage: 12...250 VDC or 24...250 VAC
- Relay output, changeover (SPDT)
- Light or dark operation, adjusted via selector switch

Wiring diagram



Technical data

| | |
|------------------------|---------------------------------------|
| Type | Q45VR3FVQ |
| ID no. | 3054313 |
| Optical data | |
| Function | Photoelectric sensor for glass fibers |
| Fiber-optic type | glass |
| Light type | IR |
| Wavelength | 880 nm |
| Electrical data | |
| Operating voltage | 12...250 VDC |
| Operating voltage | 24...250 VAC |
| Output function | Complementary contact, Relay output |
| Switching frequency | ≤ 33 Hz |
| Readiness delay | ≤ 100 ms |
| Response time typical | < 15 ms |
| Setting option | Potentiometer |
| Mechanical data | |
| Design | Rectangular, Q45 |
| Dimensions | 60.5 x 44.5 x 101.6 mm |
| Housing material | Plastic, Thermoplastic material |
| Lens | plastic, Acrylic |
| Electrical connection | Connectors, 7/8", PVC |
| Number of cores | 5 |
| Ambient temperature | -25...+55 °C |
| Relative humidity | 0...90 % |
| Protection class | IP67 |
| Special features | keep/defer |

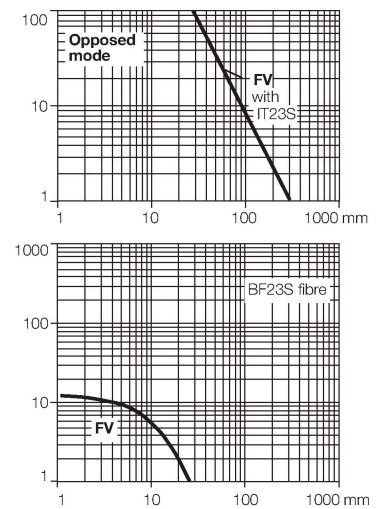
Functional principle

Glass or fibre optic sensors are the optimum choice for high temperature or space restricted applications. Fibre optics transfer the light from the sensor to a remote object. Individual fibre optics are used for opposed mode sensing, whereas bifurcated fibre optics are suited for retro-reflective or diffuse mode operation.

Excess gain curve
Excess gain in relation to the distance

Technical data

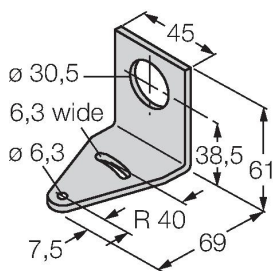
| | |
|------------------------|--|
| | Wash down |
| Power-on indication | LED, Green |
| Switching state | LED, Yellow |
| Error indication | LED, green |
| Excess gain indication | LED, red |
| Tests/approvals | |
| MTTF | 67 years acc. to SN 29500 (Ed. 99) 40 °C |
| Approvals | CE, cURus, CSA |



Accessories

SMB30A

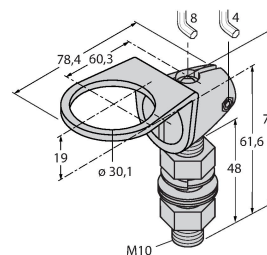
3032723



Mounting bracket, rectangular, stainless steel, for sensors with 30mm thread

SMB30FAM10

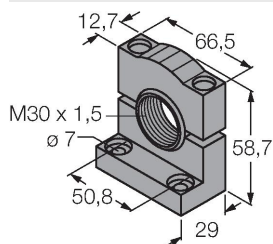
3011185



Mounting bracket, stainless steel, for M10 x 1.5 thread, thread length 30 mm

SMB30SC

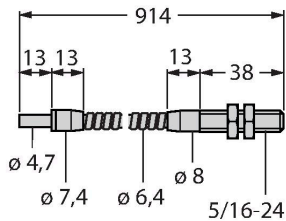
3052521



Mounting bracket, PBT black, for sensors with 30 mm thread, rotatable

Accessories

| Dimension drawing | Type | ID no. | |
|-------------------|-------|---------|---|
| | IT23S | 3017355 | Glass fiber, sensing mode: Opposed mode, threaded sleeve (brass), bundle diameter 3.2 mm, flexible stainless steel jacket, ambient temperatures -140... +250 °C |



BT23S

3017276

Glass fiber, sensing mode: Diffuse mode, threaded sleeve (brass), bundle diameter 3.2 mm, flexible stainless steel jacket, ambient temperatures -140... +250 °C

