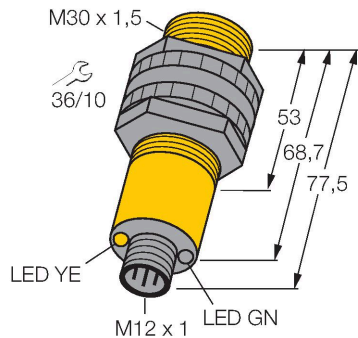


# S306EQ

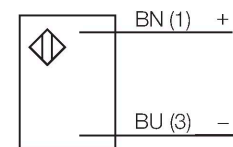
## Photoelectric Sensor – Opposed Mode Sensor (Emitter)



### Features

- M12 × 1 male connector, 4-pin
- Protection classes IP67/IP69K
- Ambient temperature: -40 °C...+70 °C
- Operating voltage: 10...30 VDC

### Wiring diagram



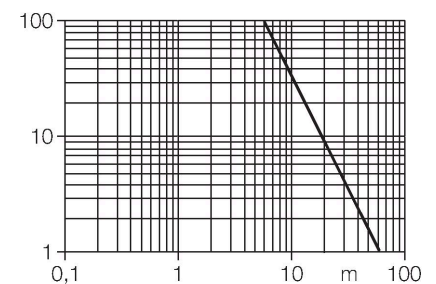
### Technical data

|                        |                                 |
|------------------------|---------------------------------|
| Type                   | S306EQ                          |
| ID                     | 3033376                         |
| <b>Optical data</b>    |                                 |
| Function               | Opposed mode sensor             |
| Operating mode         | Emitter                         |
| Light type             | IR                              |
| Wavelength             | 950 nm                          |
| Range                  | 0...60000 mm                    |
| <b>Electrical data</b> |                                 |
| Operating voltage      | 10...30 VDC                     |
| Residual ripple        | < 10 % U <sub>ss</sub>          |
| Readiness delay        | ≤ 100 ms                        |
| <b>Mechanical data</b> |                                 |
| Design                 | Tube, S30                       |
| Dimensions             | Ø 30 x 77.5 mm                  |
| Housing material       | Plastic, Thermoplastic material |
| Lens                   | plastic, Acrylic                |
| Electrical connection  | Connector, M12 × 1, PVC         |
| Number of cores        | 4                               |
| Ambient temperature    | -40...+70 °C                    |
| Protection class       | IP69                            |
| Special features       | Encapsulated<br>Wash down       |
| Power-on indication    | LED, Green                      |
| Excess gain indication | LED                             |
| <b>Tests/approvals</b> |                                 |
| Approvals              | CE, UL, CSA                     |

### Functional principle

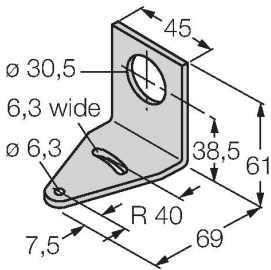
Opposed mode sensors consist of an emitter and receiver. They are installed opposite to each other so that the light from the emitter is aimed directly at the receiver. When an object interrupts or weakens the light beam, the sensor switches. Opposed mode sensors are the most reliable photoelectric sensors for detection of opaque targets. The excellent light/dark contrast and the high excess gain allow operation over larger distances and under difficult conditions.

Excess gain curve  
Excess gain in relation to the distance



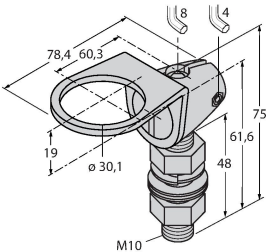
Accessories

SMB30A 3032723



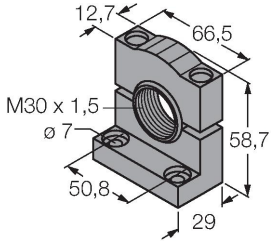
Mounting bracket, rectangular, stainless steel, for sensors with 30mm thread

SMB30FAM10 3011185



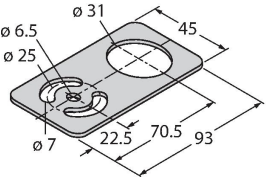
Mounting bracket, stainless steel, for M10 x 1.5 thread, thread length 30 mm

SMB30SC 3052521



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

SMBAMS30P 3073135



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

Accessories

| Dimension drawing | Type          | ID      |                                                                                                                                                                                                                  |
|-------------------|---------------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                   | 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 <a href="http://www.turck.com">www.turck.com</a> |
|                   | 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 <a href="http://www.turck.com">www.turck.com</a>   |