

# S30SN6LPQ

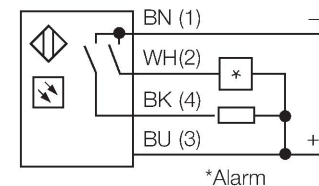
## Photoelectric Sensor – Retroreflective Sensor with Polarizing Filter



### Features

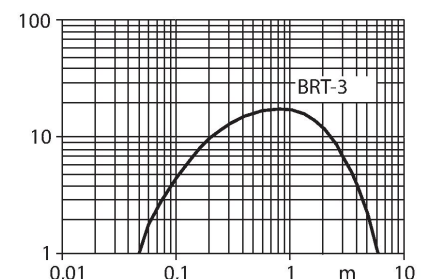
- M12 × 1 male connector, 4-pin
- Protection classes IP67/IP69K
- Ambient temperature: -40 °C...+70 °C
- Operating voltage: 10...30 VDC
- NPN switching output, changeover

### Wiring diagram



### Functional principle

Retro-reflective sensors incorporate emitter and receiver in a single compact housing. The light beam of the emitter is directed towards a reflector which returns the light back to the receiver. An object is detected when it interrupts this beam. Retro-reflective sensors have a high function gain and good contrast performance. Further it is merely required to install and wire a single device. Excess gain curve  
Excess gain in relation to the distance



### Technical data

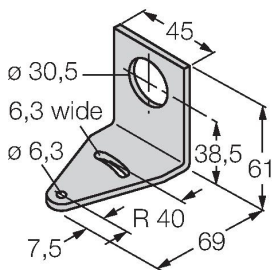
|                                |                                 |
|--------------------------------|---------------------------------|
| Type                           | S30SN6LPQ                       |
| ID no.                         | 3033372                         |
| <b>Optical data</b>            |                                 |
| Function                       | Retroreflective Sensor          |
| Operating mode                 | Polarized                       |
| Reflector included in delivery | no                              |
| Light type                     | Red polarized                   |
| Wavelength                     | 680 nm                          |
| Range                          | 50...6000 mm                    |
| <b>Electrical data</b>         |                                 |
| Operating voltage              | 10...30 VDC                     |
| No-load current                | ≤ 30 mA                         |
| Short-circuit protection       | yes / Cyclic                    |
| Reverse polarity protection    | yes                             |
| Output function                | Connection programmable, NPN    |
| Switching frequency            | ≤ 160 Hz                        |
| Readiness delay                | ≤ 100 ms                        |
| Response time typical          | < 3 ms                          |
| Overcurrent release            | > 220 mA                        |
| <b>Mechanical data</b>         |                                 |
| Design                         | Threaded barrel, S30            |
| Dimensions                     | Ø 30 x 77.5 mm                  |
| Housing material               | Plastic, Thermoplastic material |
| Lens                           | plastic, Acrylic                |
| Electrical connection          | Connectors, M12 × 1, PVC        |
| Number of cores                | 4                               |

## Technical data

|                        |                           |
|------------------------|---------------------------|
| Ambient temperature    | -40...+70 °C              |
| Protection class       | IP69                      |
| Special features       | Encapsulated<br>Wash down |
| Power-on indication    | LED, Green                |
| Switching state        | LED, Yellow               |
| Error indication       | LED, green, Flashing      |
| Excess gain indication | LED                       |
| Alarm display          | LED yellow Flashing       |
| <b>Tests/approvals</b> |                           |
| Approvals              | CE, UL, CSA               |

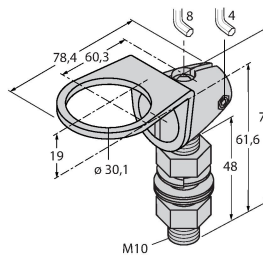
## Accessories

**SMB30A** 3032723



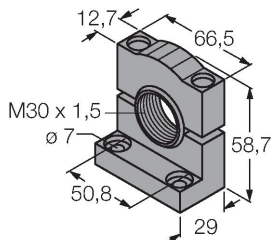
Mounting bracket, rectangular, stainless steel, for sensors with 30mm thread

**SMB30FAM10** 3011185



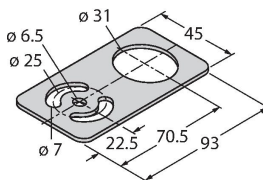
Mounting bracket, stainless steel, for M10 x 1.5 thread, thread length 30 mm

**SMB30SC** 3052521



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

**SMBAMS30P** 3073135

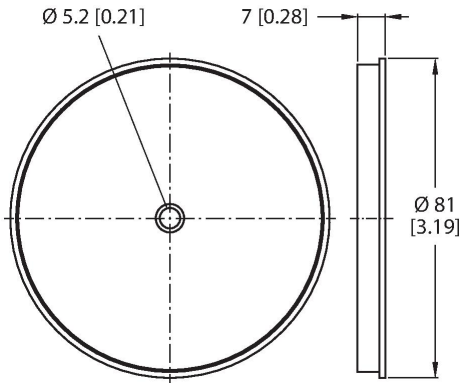


Mounting bracket, stainless steel, for sensors with 30 mm thread

Accessories

| Dimension drawing                                                                 | Type          | ID no.  |                                                                                                                                                                                                                  |
|-----------------------------------------------------------------------------------|---------------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | 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>   |

Accessories

| Dimension drawing                                                                  | Type  | ID no.  |                                                                                                 |
|------------------------------------------------------------------------------------|-------|---------|-------------------------------------------------------------------------------------------------|
|  | BRT-3 | 3016164 | Round reflector, reflection coefficient 1.0, material acrylic, ambient temperature -20...+60 °C |