

# S30RW3FF600 W/30

## Photoelectric Sensor – Diffuse Mode Sensor with Fixed-Field Background Suppression

### Technical data

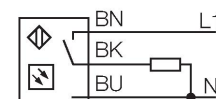
|                              |   |
|------------------------------|---|
| Type                         | S30RW3FF600 W/30  |
| ID no.                       | 3034567   |
| <b>Optical data</b>          |   |
| Function                     | Diffuse mode sensor with fixed-field background suppression |
| Light type                   | IR  |
| Wavelength                   | 880 nm  |
| Range                        | 0...600 mm  |
| <b>Electrical data</b>       |   |
| Operating voltage            | 20...250 VAC  |
| AC rated operational current | ≤ 200 mA  |
| Output function              | Dark operation, Relay output                                |
| Switching frequency          | ≤ 40 Hz   |
| Readiness delay              | ≤ 100 ms  |
| Response time typical        | < 16 ms   |
| <b>Mechanical data</b>       |   |
| Design                       | Threaded barrel, S30  |
| Dimensions                   | Ø 30 mm   |
| Housing material             | Plastic, PBT  |
| Lens                         | plastic, Acrylic  |
| Electrical connection        | Cable, 9 m, PVC   |
| Number of cores              | 3   |
| Ambient temperature          | -40...+70 °C  |
| Protection class             | IP67  |
| Special features             | Wash down   |
| Power-on indication          | LED, Green  |
| Switching state              | LED, Yellow   |
| Excess gain indication       | LED   |
| <b>Tests/approvals</b>       |   |
| MTTF                         | 448 years acc. to SN 29500 (Ed. 99) 40 °C                   |
| Approvals                    | CE, UL, CSA   |



### Features

- Cable, 2 m
- Protection class IP67
- Ambient temperature: -40...+70 °C

### Wiring diagram

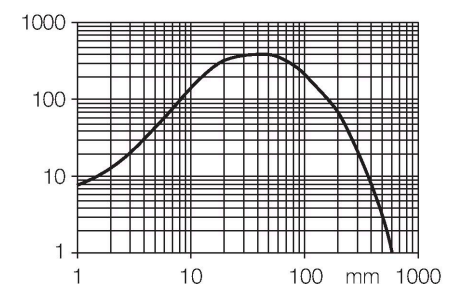


### Functional principle

The emitter and receiver are incorporated in a single housing. The light reflection of the target is detected and triggers the sensor to switch. Thus the switching distance largely depends on the reflectivity of the target.

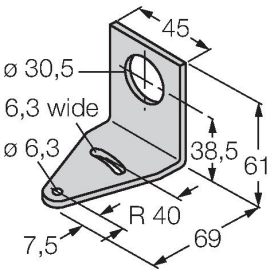
Excess gain curve

Excess gain in relation to the distance



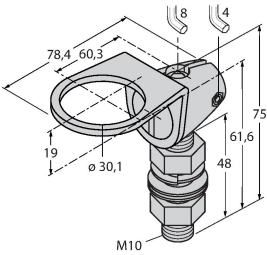
Accessories

SMB30A 3032723



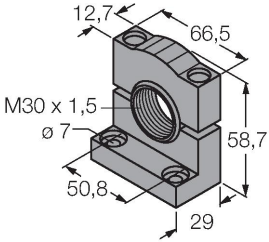
Mounting bracket, rectangular, stainless steel, for sensors with 30mm thread

SMB30FAM10 3011185



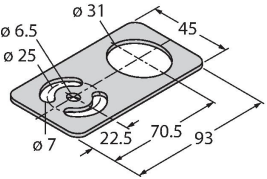
Mounting bracket, stainless steel, for M10 x 1.5 thread, thread length 30 mm

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