

# S18SP6DLQPMA

## Photoelectric Sensor – Diffuse Mode Sensor



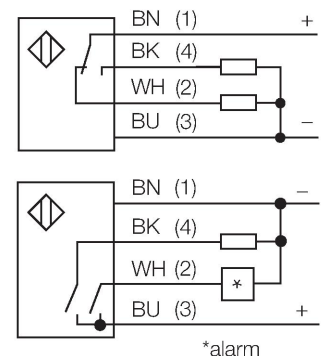
### Technical data

|                             |                                            |
|-----------------------------|--------------------------------------------|
| Type                        | S18SP6DLQPMA                               |
| ID                          | 3076430                                    |
| <b>Optical data</b>         |                                            |
| Function                    | Proximity switch                           |
| Operating mode              | Diffuse                                    |
| Light type                  | IR                                         |
| Wavelength                  | 880 nm                                     |
| Range                       | 2...300 mm                                 |
| <b>Electrical data</b>      |                                            |
| Operating voltage           | 10...30 VDC                                |
| No-load current             | ≤ 25 mA                                    |
| Short-circuit protection    | yes / Cyclic                               |
| Reverse polarity protection | yes                                        |
| Output function             | Connection programmable, PNP               |
| Switching frequency         | ≤ 160 Hz                                   |
| Readiness delay             | ≤ 100 ms                                   |
| Response time typical       | < 3 ms                                     |
| Overcurrent release         | > 220 mA                                   |
| <b>Mechanical data</b>      |                                            |
| Design                      | Tube, S18                                  |
| Dimensions                  | Ø 18 x 78.7 mm                             |
| Housing material            | Plastic, Thermoplastic material            |
| Lens                        | plastic, Acrylic                           |
| Electrical connection       | Cable with connector, M12 × 1, 0.15 m, PUR |
| Number of cores             | 4                                          |
| Ambient temperature         | -40...+70 °C                               |

### Features

- M12 × 1 male connector, 4-pin
- Protection classes IP67/IP69K
- Ambient temperature: -40 °C...+70 °C
- Selectable light/dark operation or light operation with alarm function
- Operating voltage: 10...30 VDC
- PNP switching output, changeover

### Wiring diagram



### Functional principle

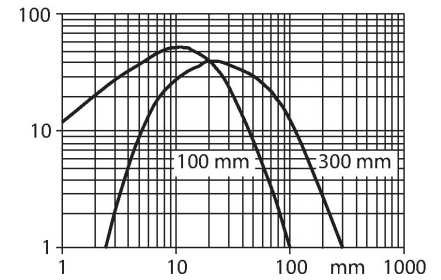
The emitter and receiver are incorporated in a single housing. The light reflection of the target is detected and triggers the sensor to switch. Thus the switching distance largely depends on the reflectivity of the target.

Excess gain curve

Excess gain in relation to the distance

## Technical data

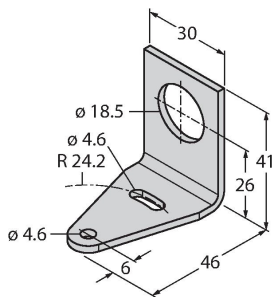
|                        |                      |
|------------------------|----------------------|
| Protection class       | IP67<br>IP69         |
| Special features       | Wash down            |
| Power-on indication    | LED, Green           |
| Switching state        | LED, Yellow          |
| Error indication       | LED, green, Flashing |
| Excess gain indication | LED                  |
| Alarm display          | LED yellow Flashing  |
| Tests/approvals        |                      |
| Approvals              | CE, UL, CSA          |



## Accessories

SMB18A

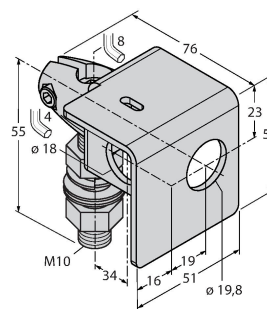
3033200



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

SMB18AFAM10

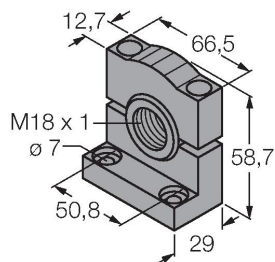
3012558



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

SMB3018SC

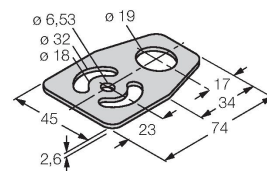
3053952



Mounting bracket, PTB black, for  
sensors with 18 mm thread

SMBAMS18P

3073134



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