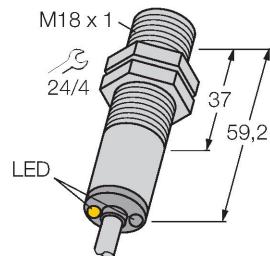


# M18SN6DL W/30

## Photoelectric Sensor – Diffuse Mode Sensor



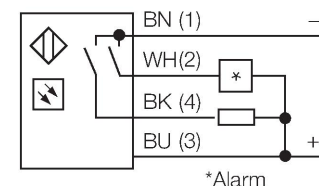
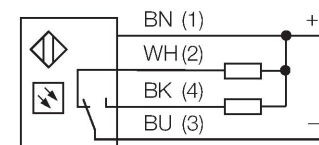
### Technical data

|                             |                              |
|-----------------------------|------------------------------|
| Type                        | M18SN6DL W/30                |
| ID                          | 3050469                      |
| <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, NPN |
| Switching frequency         | ≤ 160 Hz                     |
| Readiness delay             | ≤ 100 ms                     |
| Response time typical       | < 3 ms                       |
| Overcurrent release         | > 220 mA                     |
| <b>Mechanical data</b>      |                              |
| Design                      | Tube, M18                    |
| Dimensions                  | Ø 18 x 59.2 mm               |
| Housing material            | Metal, Stainless steel       |
| Lens                        | plastic, Acrylic             |
| Electrical connection       | Cable, 9 m, PVC              |
| Number of cores             | 4                            |
| Core cross-section          | 0.5 mm <sup>2</sup>          |
| Ambient temperature         | -40...+70 °C                 |

### Features

- Cable, 2 m
- Protection class IP67
- Ambient temperature: -40...+70 °C
- Metal housing
- Selectable light/dark operation or light operation with alarm function
- Operating voltage: 10...30 VDC
- NPN switching output, changeover

### Wiring diagram



### Functional principle

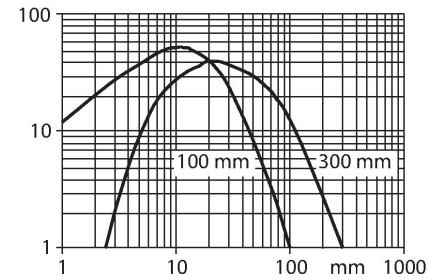
The emitter and receiver are incorporated in a single housing. The light reflection of the target is detected and triggers the sensor to switch. Thus the switching distance largely depends on the reflectivity of the target.

Excess gain curve

Excess gain in relation to the distance

## Technical data

|                        |                                                 |
|------------------------|-------------------------------------------------|
| Protection class       | IP69                                            |
| Special features       | Chemical-resistant<br>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                                              |



## Accessories

