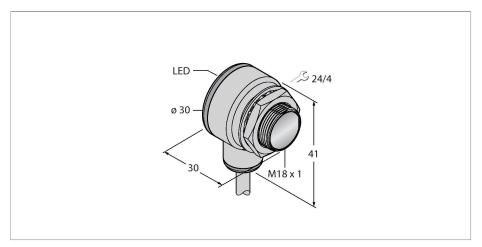


TM18VN6DV Photoelectric Sensor – Diffuse Mode Sensor





Technical data

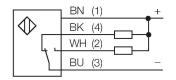
| Туре | TM18VN6DV |
|-----------------------------|--|
| ID no. | 3018035 |
| Optical data | |
| Function | Proximity switch |
| Operating mode | Diffuse |
| Light type | Red |
| Wavelength | 880 nm |
| Range | 500 mm |
| Electrical data | |
| Operating voltage | 1030 VDC |
| No-load current | ≤ 25 mA |
| Short-circuit protection | yes / Cyclic |
| Reverse polarity protection | yes |
| Output function | Complementary contact, NPN |
| Readiness delay | ≤ 100 ms |
| Response time typical | < 3 ms |
| Overcurrent release | > 220 mA |
| Mechanical data | |
| Design | Rectangular with thread, TM18 |
| Dimensions | Ø 18 x 30 x 30 x 41 mm |
| Housing material | Metal, Zinc Die-Cast with Nickel-Plating |
| Lens | plastic, Acrylic |
| Electrical connection | Cable, 2 m, PVC |
| Number of cores | 4 |
| Core cross-section | 0.5 mm² |
| Ambient temperature | -40+70 °C |
| Protection class | IP67 |

Features

- Cable, 2 m
- ■Protection class IP67
- ■Ambient temperature: -40...+70 °C
- Metal housing
- ■500 mm range
- Operating voltage: 10...30 VDC
- NPN switching output, light and dark opera-

tion

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

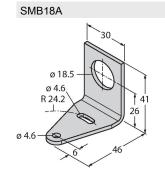


Technical data

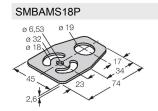
| Special features | Encapsulated Wash down |
|------------------------|---------------------------|
| Power-on indication | LED, Green |
| Switching state | LED, Yellow |
| Error indication | LED, green, Flashing |
| Excess gain indication | LED |
| Alarm display | LED yellow Flashing |
| Tests/approvals | |
| Approvals | CE, UL |

Accessories

| SMBT18Y | 3069554 |
|---------|---|
| | mounting bracket, rectangular, for sensors with 18 mm thread, 15.3 mm cable feedthrough or M12 x 1 male |



3033200 Mounting bracket, rectangular, stainless steel, for sensors with 18 mm thread



3073134 Mounting bracket, stainless steel, for sensors with 18 mm thread