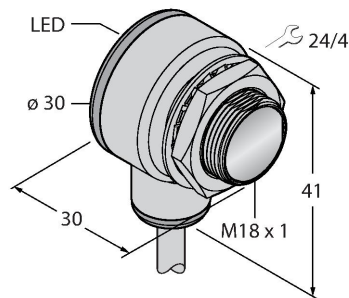


TM18VN6DV

Photoelectric Sensor – Diffuse Mode Sensor



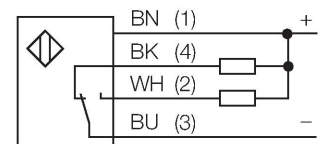
Technical data

Type	TM18VN6DV
ID	3018035
Optical data	
Function	Proximity switch
Operating mode	Diffuse
Light type	Red
Wavelength	880 nm
Range	500 mm
Electrical data	
Operating voltage	10...30 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	Tube, 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 mm ²
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 operation

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

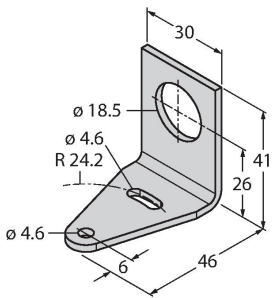
3069554

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

SMB18A

3033200

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



SMBAMS18P

3073134

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

Technical drawing of the SMBAMS18P mounting bracket. It is a rectangular stainless steel bracket for sensors with 18 mm thread. The drawing shows a top view with dimensions: a total width of 45 mm, a total height of 74 mm, and a central rectangular cutout with a width of 23 mm and a height of 17 mm. There are four circular holes: two on the left with diameters of $\varnothing 6.53$ and $\varnothing 32$, and two on the right with diameters of $\varnothing 19$ and $\varnothing 18$. A dimension of 2.6 mm is shown for the thickness of the bracket.