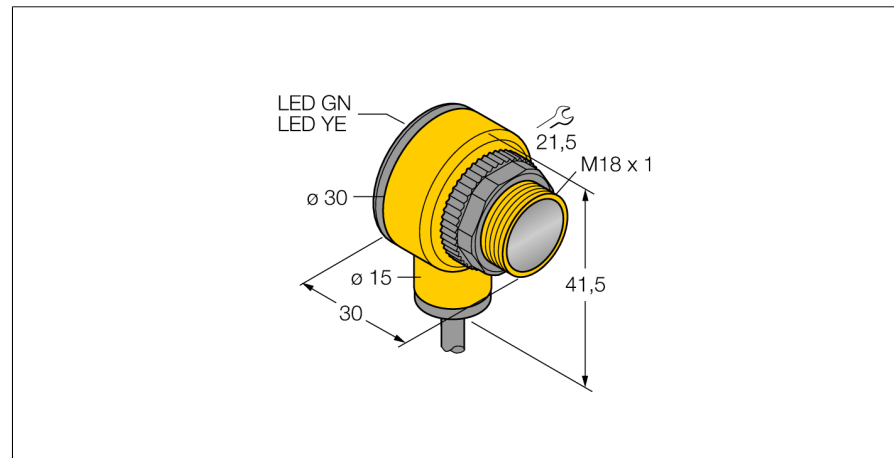


Photoelectric sensor
diffuse mode sensor with fixed-field background suppression
T18SP6FF100



- Cable, 2 m
- Protection class IP67
- Ambient temperature: -40...+70 °C
- Operating voltage: 10...30 VDC
- PNP switching output, changeover

Wiring diagram

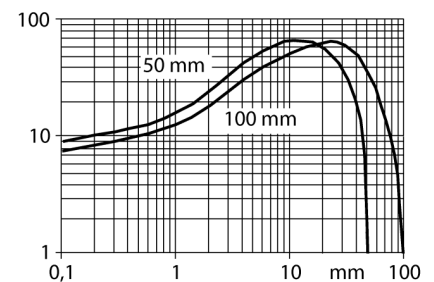


Functional principle

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

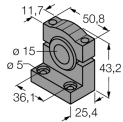
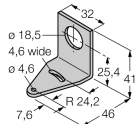
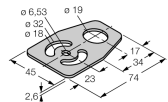
Excess gain in relation to the distance



Type code	T18SP6FF100
Ident no.	3032471
Operating mode	diffuse mode sensor with fixed-field background suppression
Light type	IR
Wavelength	880 nm
Range	0...100 mm
Ambient temperature	-40...+70 °C
Operating voltage	10...30VDC
No-load current I ₀	≤ 35 mA
Short-circuit protection	yes/ cyclic
Reverse polarity protection	yes
Output function	connection programmable, PNP
Switching frequency	≤ 160 Hz
Readiness delay	≤ 100 ms
Overcurrent release	> 220 mA
Design	cylindrical/threaded, T18
Dimensions	30 x 30 x 41.5 mm
Housing material	plastic, PBT
Lens	plastic, acrylic
Connection	cable
Cable length	2 m
Cable cross section	4 x 0.5 mm ²
Protection class	IP67
MTTF	448 years acc. to SN 29500 (Ed. 99) 40 °C
Power-on indication	LED green
Switching state	LED yellow
Error indication	LED green flashing
Alarm display	LED yellow flashing

**Photoelectric sensor
diffuse mode sensor with fixed-field background suppression
T18SP6FF100**

Accessories

Type code	Ident no.	Description	Dimension drawing
SMB1815SF	3053279	Mounting bracket, PBT black, for PICO-GUARD points	 <p>Technical drawing showing dimensions for SMB1815SF: 11.7, 50.8, 43.2, 25.4, 36.1, 0.5, 0.5, 15.</p>
SMB18A	3033200	Mounting bracket, stainless steel, for sensors with 18 mm thread	 <p>Technical drawing showing dimensions for SMB18A: 32, 18.5, 4.6 wide, 4.5, 25.4, 41, 7.6, R 24.2, 46.</p>
SMB18FM	3079421	mounting bracket, black, M22 x1.5 mm, male thread, female thread M18 x 1, for sensors with 18 mm thread	
SMBAMS18P	3073134	Mounting bracket, stainless steel, for sensors with 18 mm thread	 <p>Technical drawing showing dimensions for SMBAMS18P: 6.53, 19, 32, 16, 45, 23, 74, 17, 34, 2.0.</p>