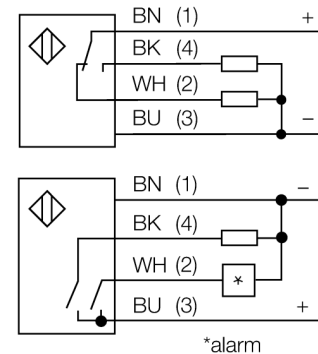


**Photoelectric sensor**  
**diffuse mode sensor with fixed-field background suppression**  
**S18SP6FF50**

- Cable, 2 m
- Protection class IP67
- Ambient temperature: -40...+70 °C
- Connecting cable, 2 m

**Wiring diagram**

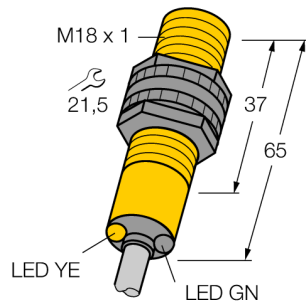
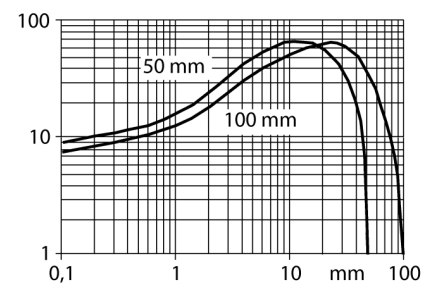


**Functional principle**

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



<b>Type code</b>	S18SP6FF50
Ident no.	3030325
<b>Operating mode</b>	diffuse mode sensor with fixed-field background suppression
Light type	IR
Wavelength	880 nm
Range	0...50 mm
Ambient temperature	-40...+70 °C
<b>Operating voltage</b>	10...30VDC
No-load current I <sub>0</sub>	≤ 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
<b>Design</b>	cylindrical/threaded, S18
Dimensions	65 mm
Housing diameter	18 mm
Housing material	plastic, PBT
Lens	plastic, acrylic
Connection	cable
Cable length	2 m
Cable cross section	4 x 0.5 mm <sup>2</sup>
Protection class	IP67
MTTF	448 years acc. to SN 29500 (Ed. 99) 40 °C
<b>Power-on indication</b>	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  
S18SP6FF50**

**Accessories**

Type code	Ident no.	Description	Dimension drawing
SMB18A	3033200	Mounting bracket, 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	