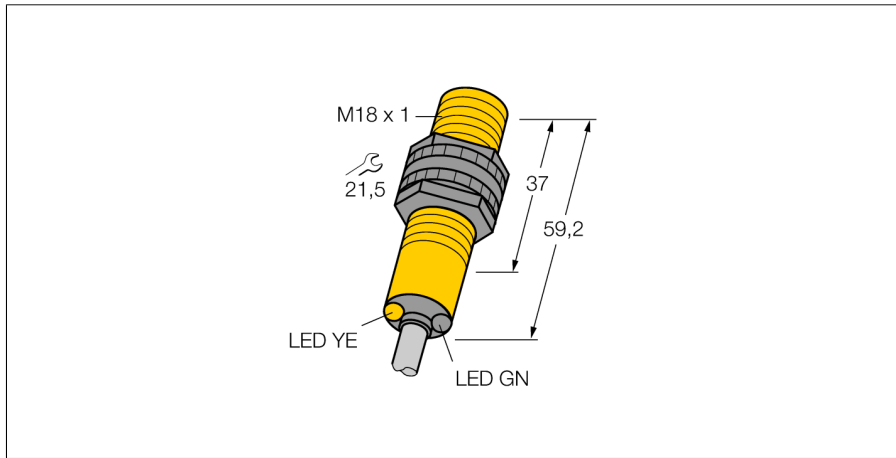
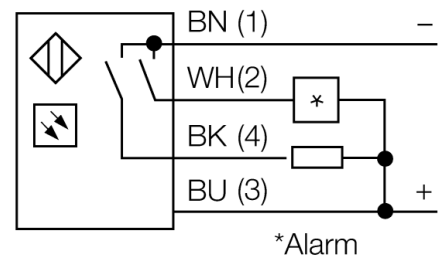
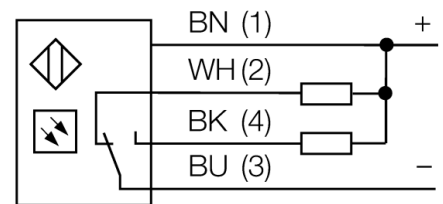


**Photoelectric sensor
diffuse mode sensor
S18SN6D**



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

Wiring diagram



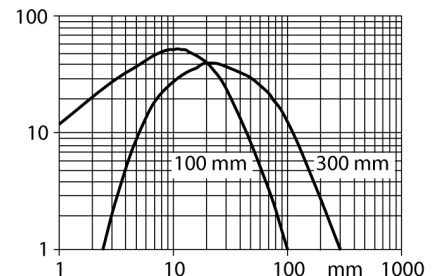
Type code	S18SN6D
Ident no.	3029407
Operating mode	diffuse mode sensor
Light type	IR
Wavelength	880 nm
Range	0...100 mm
Ambient temperature	-40...+70 °C
Operating voltage	10...30VDC
No-load current I ₀	≤ 25 mA
Short-circuit protection	yes/ cyclic
Reverse polarity protection	yes
Output function	connection programmable, NPN
Switching frequency	≤ 160 Hz
Readiness delay	≤ 100 ms
Overcurrent release	> 220 mA
Design	cylindrical/threaded, S18
Dimensions	59.2 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 ²
Protection class	IP67
Power-on indication	LED green
Switching state	LED yellow
Error indication	LED green flashing
Alarm display	LED yellow flashing

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.

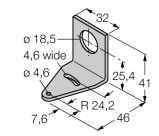
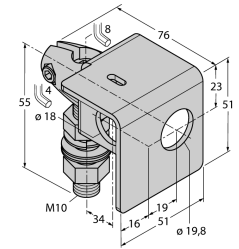
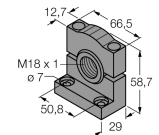
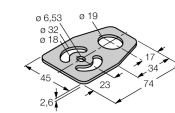
Excess gain curve

Excess gain in relation to the distance



Photoelectric sensor
diffuse mode sensor
S18SN6D

Accessories

Type code	Ident no.	Description	Dimension drawing
SMB18A	3033200	Mounting bracket, stainless steel, for sensors with 18 mm thread	 <p>Technical drawing of the SMB18A mounting bracket. Dimensions include: top width 32, hole diameter $\phi 18.5$, hole diameter $\phi 4.6$ wide, hole diameter $\phi 4.6$, hole offset 25.4, hole offset 41, bottom width 46, hole offset 7.6, and radius R 24.2.</p>
SMB18AFAM10	3012558	Mounting bracket, material VA 1.4401, for M10 x 1.5 thread, thread length 18 mm	 <p>Technical drawing of the SMB18AFAM10 mounting bracket. Dimensions include: top width 76, hole diameter $\phi 18$, hole offset 55, hole offset 8, hole offset 4, hole offset 19, hole offset 16, hole offset 51, hole offset 19.8, hole offset 34, and hole offset 16.</p>
SMB3018SC	3053952	Mounting bracket, PTB black, for sensors with 18 mm thread	 <p>Technical drawing of the SMB3018SC mounting bracket. Dimensions include: top width 12.7, top width 66.5, hole diameter $\phi 18 \times 1$, hole diameter $\phi 7$, hole offset 50.8, hole offset 29, and hole offset 58.7.</p>
SMBAMS18P	3073134	Mounting bracket, stainless steel, for sensors with 18 mm thread	 <p>Technical drawing of the SMBAMS18P mounting bracket. Dimensions include: hole diameter $\phi 6.53$, hole diameter $\phi 19$, hole diameter $\phi 32$, hole diameter $\phi 18$, hole offset 45, hole offset 23, hole offset 17, hole offset 34, hole offset 74, and hole offset 2.6.</p>