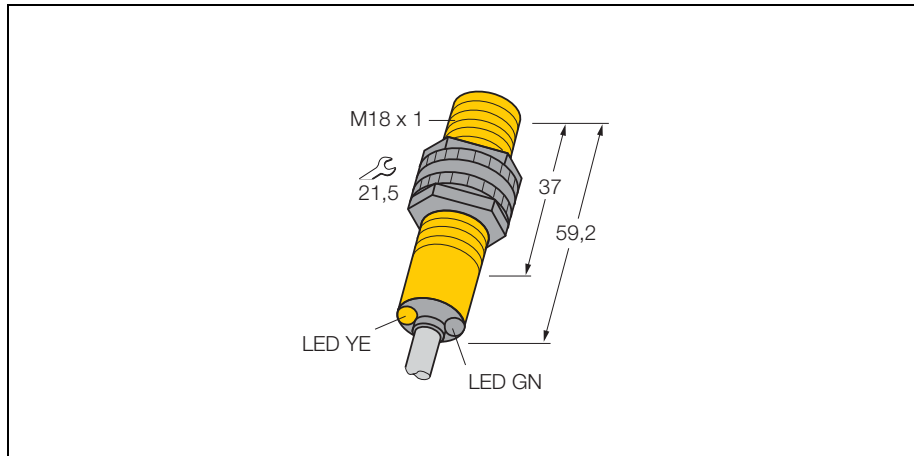


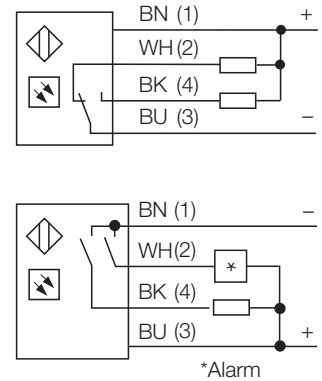
**photoelectric sensor  
receiver  
S18SN6R**



<b>Type</b>	S18SN6R
Ident-No.	3029408
<b>Operating mode</b>	opposed mode sensor (receiver)
Range	0... 20000 mm
Ambient temperature	-40...+ 70°C
<b>Operating voltage</b>	10... 30 VDC
DC rated operational current	≤ 150 mA
No-load current I <sub>0</sub>	≤ 25 mA
Short-circuit protection	yes / cyclic
Reverse polarity protection	yes
Output function	connection programmable, NPN
Switching frequency	≤ 0.16kHz
Switching frequency	≤ 160Hz
Readiness delay	≤ 100 ms
Overcurrent release	>220 mA
<b>Housing</b>	cylindrical/threaded, S18
Dimensions	59.2mm
Housing diameter	Ø 18mm
Housing material	Plastic, PBT
Lens	plastic, Lexan
Electrical connection	cables
Cable length	2 m
Cable cross section:	4 x 0.5mm <sup>2</sup>
Protection class	IP68 / IP69K
<b>Operating voltage</b>	LED green
Switching state	LED yellow
Error indication	LED green flashing
Alarm display	LED yellow flashing

- selectable light or dark operation or light operation with alarm function
- Connection cable, 2 m
- degree of protection IP68 - IP69K

**Wiring diagram**



**Functional principle**

Opposed mode sensors consist of an emitter and receiver. They are installed opposite each other so that the light from the emitter is aimed directly at the receiver. When an object interrupts or weakens the light beam, the sensor switches. Opposed mode sensors are the most reliable photoelectric sensors for detection of opaque targets. An excellent contrast between light and dark conditions and an extremely high excess gain are typical of this sensing mode, thus allowing operation over larger distances and under difficult conditions.

**Excess gain curve**

Excess gain in relation to the distance

