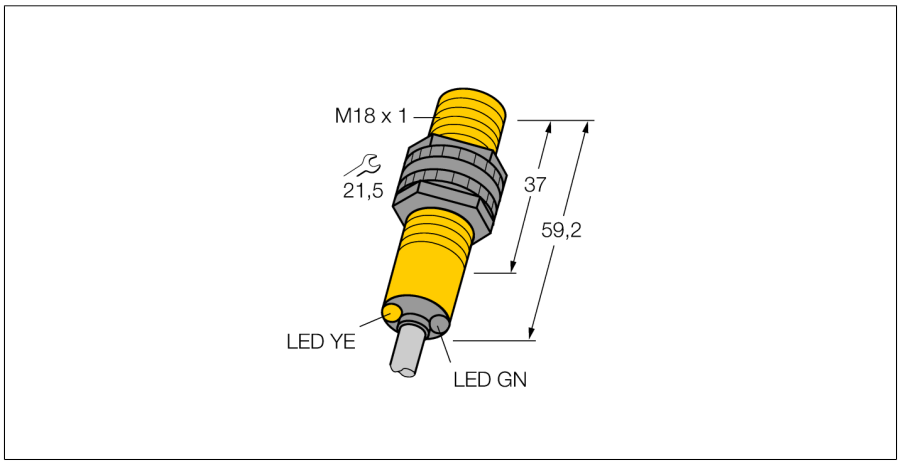
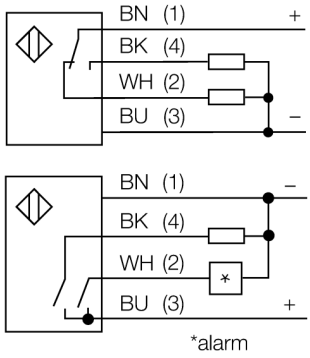
Photoelectric sensor
retroreflective sensor with polarizing filter
S18SP6LP



- **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**
- **PNP switching output, changeover**

Type code	S18SP6LP
Ident no.	3032726
Operating mode	retro-reflective sensor with polarisation filter
Light type	red
Wavelength	680 nm
Range	50…2000 mm
Ambient temperature	-40…+70 °C
Operating voltage	10…30VDC
No-load current I_0	≤ 30 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, 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 mm²
Protection class	IP67
Power-on indication	LED green
Switching state	LED yellow
Error indication	LED green flashing
Alarm display	LED yellow flashing

Wiring diagram

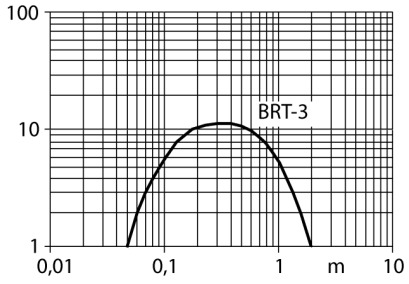


Functional principle

Retro-reflective sensors incorporate emitter and receiver in a single compact housing. The light beam of the emitter is directed towards a reflector which returns the light back to the receiver. An object is detected when it interrupts this beam. Retro-reflective sensors have a high function gain and good contrast performance. Further it is merely required to install and wire a single device.

Excess gain curve

Excess gain in relation to the distance

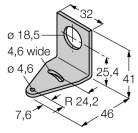
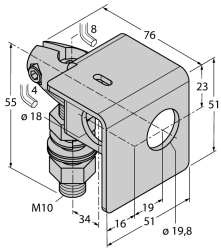
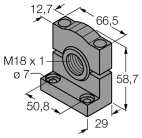
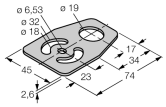


Edition • 2014-04-12T01:01:49+02:00

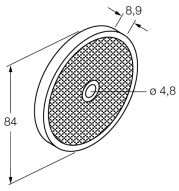
Hans Turck GmbH & Co.KG ● D-45472 Mülheim an der Ruhr ● Witzlebenstraße 7 ● Tel. 0208 4952-0 ● Fax 0208 4952-264 ● more@turck.com ● www.turck.com

Photoelectric sensor
retroreflective sensor with polarizing filter
S18SP6LP

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	

Function accessories

Type code	Ident no.	Description	Dimension drawing
BRT-3	3016164	Round reflector, reflection coefficient 1.0, material acrylic, ambient temperature -20 … +60 °C	

Edition • 2014-04-12T01:01:49+02:00

 Hans Turck GmbH & Co.KG ● D-45472 Mülheim an der Ruhr ● Witzlebenstraße 7 ● Tel. 0208 4952-0 ● Fax 0208 4952-264 ● more@turck.com ● www.turck.com