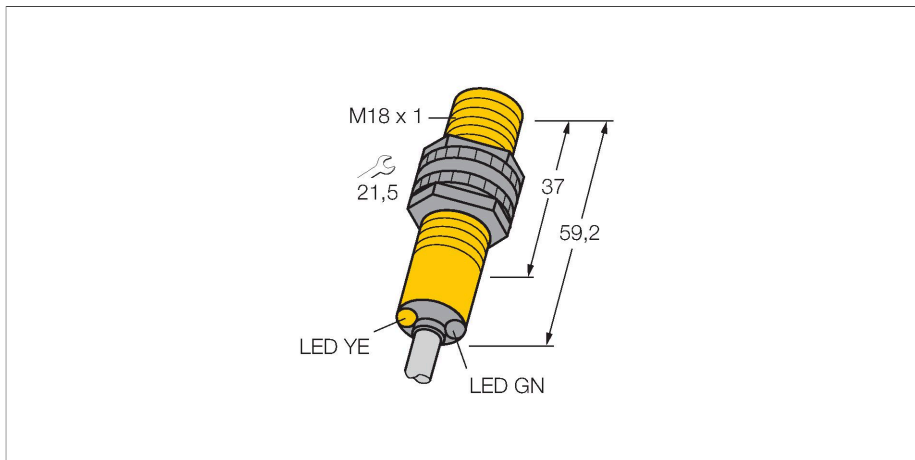


S18SP6L W/30

Photoelectric Sensor – Retroreflective Sensor



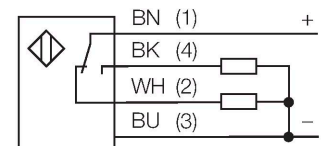
Technical data

Type	S18SP6L W/30
ID no.	3030810
Optical data	
Function	Retroreflective Sensor
Operating mode	Unpolarized
Reflector included in delivery	no
Light type	IR
Wavelength	950 nm
Range	50...2000 mm
Electrical data	
Operating voltage	10...30 VDC
No-load current	≤ 25 mA
Short-circuit protection	yes / Cyclic
Reverse polarity protection	yes
Output function	Complementary contact, PNP
Readiness delay	≤ 100 ms
Response time typical	< 3 ms
Mechanical data	
Design	Threaded barrel, S18
Dimensions	Ø 18 x 59.2 mm
Housing material	Plastic, Thermoplastic material
Lens	plastic, Acrylic
Electrical connection	Cable, 9 m, PVC
Number of cores	4
Core cross-section	0.5 mm ²
Ambient temperature	-40...+70 °C
Protection class	IP67

Features

- Cable, 9 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, light and dark operation

Wiring diagram



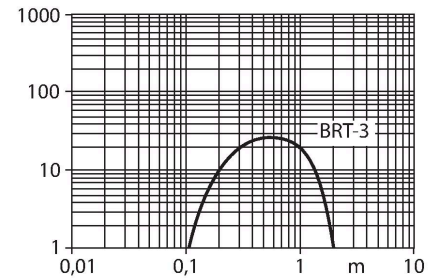
Functional principle

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.

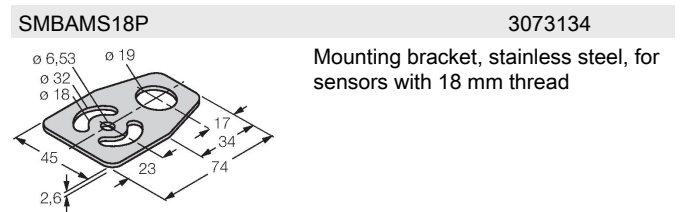
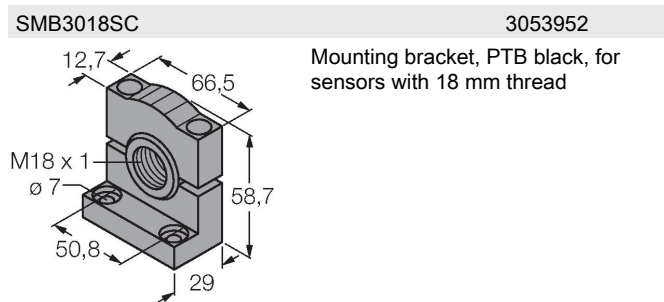
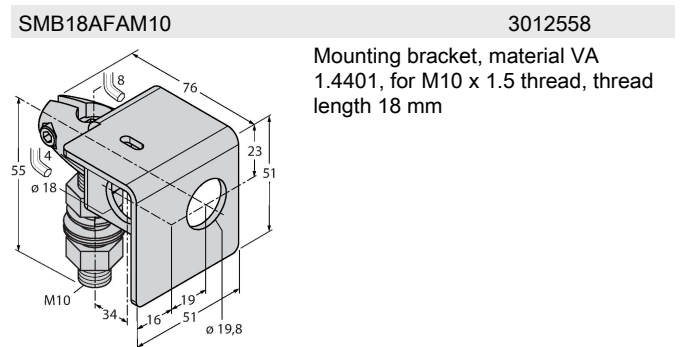
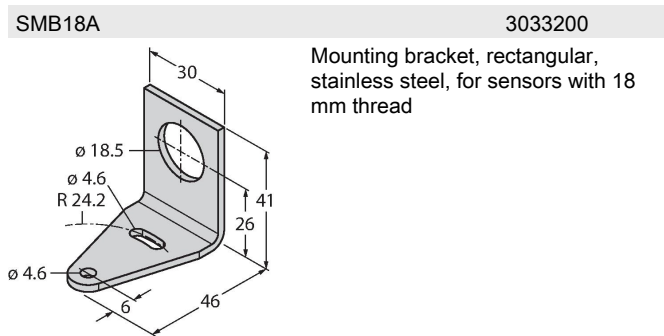
Excess gain curve
Excess gain in relation to the distance

Technical data

	IP69
Special features	Encapsulated Wash down
Power-on indication	LED, Green
Switching state	LED, Yellow
Error indication	LED, green, Flashing
Excess gain indication	LED
Alarm display	LED yellow Flashing
Tests/approvals	
Approvals	CE, UL, CSA



Accessories



Accessories

Dimension drawing	Type	ID no.	
<p>Technical drawing of a round reflector. The drawing shows a top view and a side view. The top view is a circle with a diameter of 81 mm (3.19 inches) and a central hole with a diameter of 5.2 mm (0.21 inches). The side view shows a thickness of 7 mm (0.28 inches).</p>	BRT-3	3016164	Round reflector, reflection coefficient 1.0, material acrylic, ambient temperature -20...+60 °C