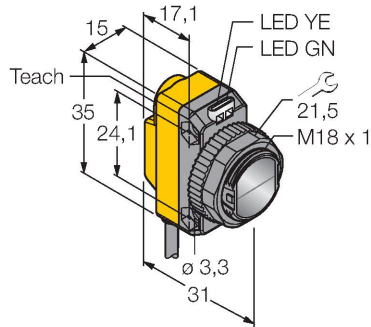


QS18EN6LP

Photoelectric Sensor – Retroreflective Sensor with Polarizing Filter



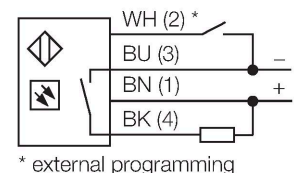
Technical data

Type	QS18EN6LP
ID no.	3068741
Optical data	
Function	Retroreflective Sensor
Operating mode	Polarized
Reflector included in delivery	no
Light type	Red polarized
Wavelength	630 nm
Range	50...3500 mm
Electrical data	
Operating voltage	10...30 VDC
DC rated operational current	≤ 100 mA
No-load current	≤ 35 mA
Reverse polarity protection	yes
Output function	NO contact, NPN
Switching frequency	≤ 833 Hz
Readiness delay	≤ 100 ms
Response time typical	< 0.6 ms
Setting option	Push Button Remote Teach
Mechanical data	
Design	Rectangular with thread, QS18
Dimensions	Ø 18 x 31 x 15 x 35 mm
Housing material	Plastic, ABS
Lens	plastic, PMMA
Electrical connection	Cable, 2 m, PVC

Features

- Cable, PVC, 2 m, 4-wire
- Protection class IP67
- LED all-round visible
- Sensitivity adjusted via teach button
- Operating voltage: 10...30 VDC
- NPN switching output
- Light or dark operation

Wiring diagram



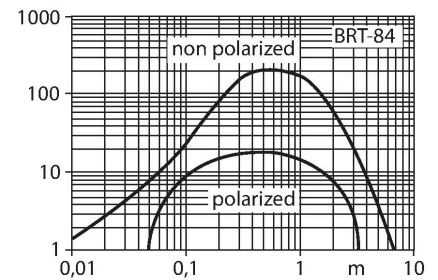
Functional principle

Retro-reflective sensors incorporate emitter and receiver in the same 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 incorporate some of the advantages of opposed mode sensors (good contrast and high excess gain). Further it is merely required to install and wire a single device. A smaller sensing range and susceptibility of devices without polarisation filter can be of disadvantage when shiny objects have to be detected.

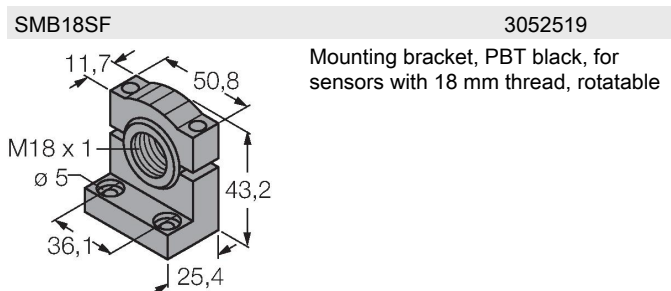
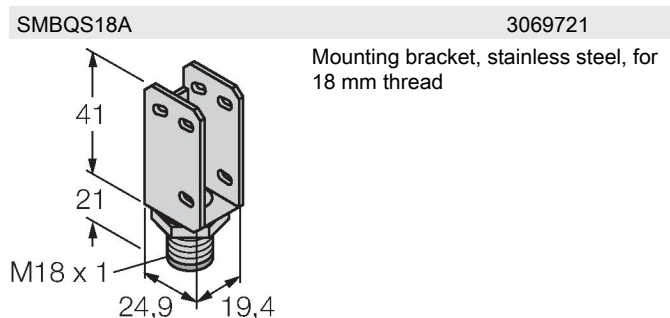
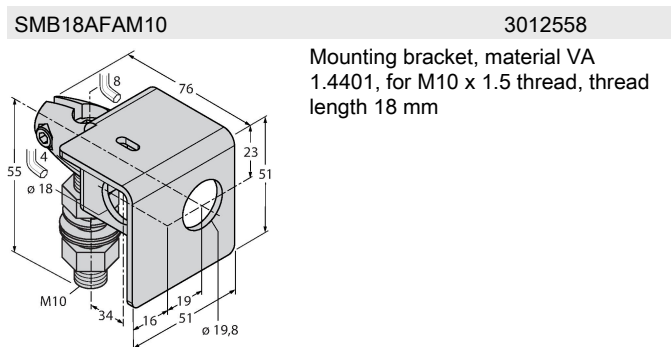
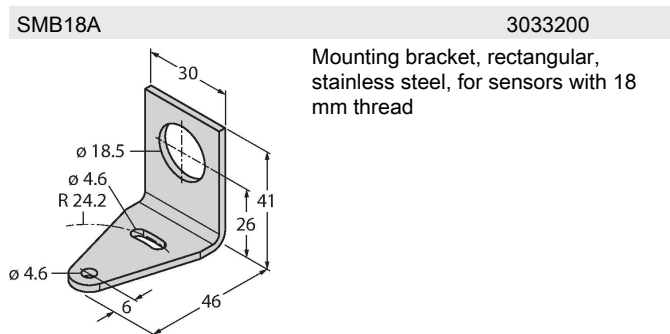
Excess gain curve
Excess gain in relation to the distance (type LP)

Technical data

Number of cores	4
Core cross-section	0.5 mm ²
Ambient temperature	-20...+70 °C
Protection class	IP67
Special features	keep/defer
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, cURus



Accessories



Accessories

Dimension drawing	Type	ID no.	
	BRT-84	3058979	Round reflector, reflection coefficient 1.4, material acrylic, ambient temperature -20 ... +60 °C

