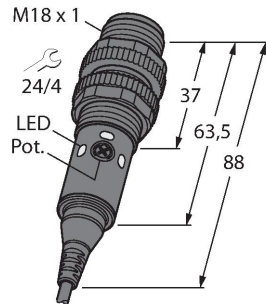


M18-3VPLPC-2M

Photoelectric Sensor – Retroreflective Sensor with Polarizing Filter



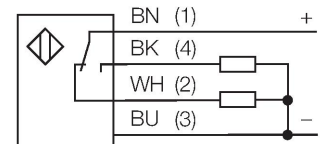
Technical data

Type	M18-3VPLPC-2M
ID	3092545
Optical data	
Function	Retroreflective Sensor
Operating mode	Polarized
Reflector included in delivery	no
Light type	Red polarized
Wavelength	624 nm
Range	150...6000 mm
Electrical data	
Operating voltage	10...30 VDC
No-load current	≤ 16 mA
Short-circuit protection	yes / Cyclic
Reverse polarity protection	yes
Output function	Complementary contact, PNP
Readiness delay	≤ 100 ms
Response time typical	< 1.5 ms
Setting option	Potentiometer
Mechanical data	
Design	Tube, M18
Dimensions	Ø 18 x 88 mm
Housing material	Metal, Nickel-plated brass
Lens	Acrylic
Electrical connection	Cable, 2 m, PVC
Number of cores	4
Core cross-section	0.5 mm ²

Features

- Cable, 2 m
- Protection classes IP67 IP69K
- Ambient temperature: -40...+70 °C
- Operating voltage: 10...30 VDC
- PNP switching output, changeover

Wiring diagram



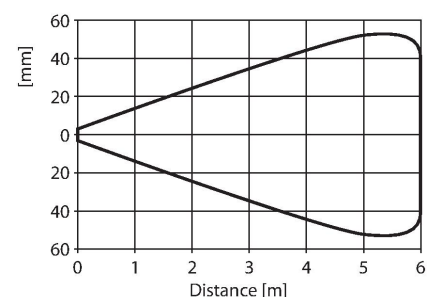
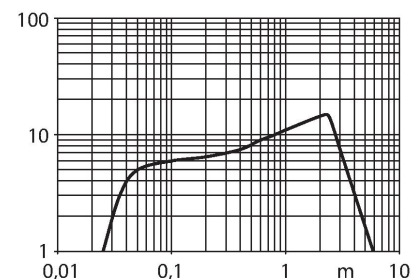
Functional principle

Retroreflective sensors have emitter and receiver incorporated in the same housing. The light beam of the emitter is directed towards a reflector which returns the light back to the receiver. A target is captured when it interrupts this beam. Retroreflective sensors have good contrast features and excess gain. Furthermore, only one device has to be installed and wired.

Technical data

Ambient temperature	-40...+70 °C
Protection class	IP67 IP69
Special features	Wash down
Power-on indication	LED, Green
Switching state	2 × LEDs, Yellow
Error indication	Flashing
Excess gain indication	LED
Alarm display	Flashing
Tests/approvals	
Approvals	CE, cULus

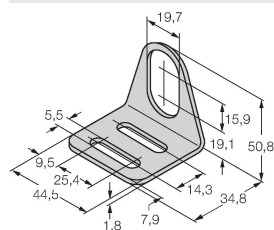
Excess Gain Curve



Accessories

MW-18

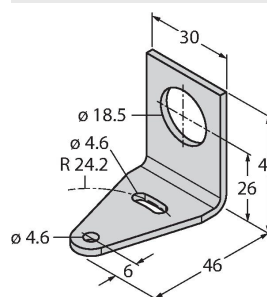
6945004



Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)

SMB18A

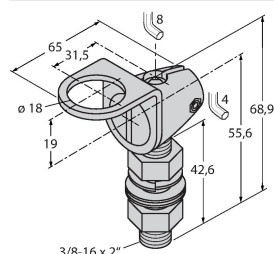
3033200



Mounting bracket, rectangular, stainless steel, for sensors with 18 mm thread

SMB18FAM10

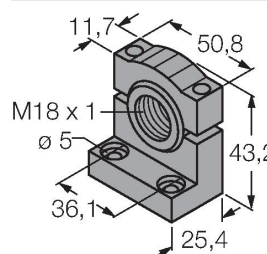
3011184



Mounting bracket, material VA 1.4401, for M10 x 1.5 thread, thread length 18 mm

SMB18SF

3052519



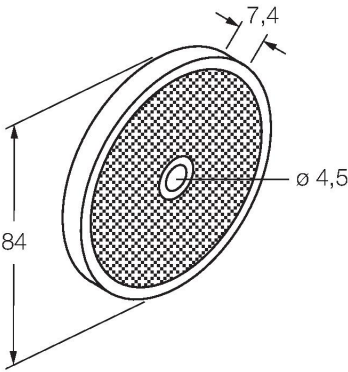
Mounting bracket, PBT black, for sensors with 18 mm thread, rotatable

SMBS18-2-1

3085931

Accessories

Dimension drawing	Type	ID	
	BRT-84	3058979	Round reflector, reflection coefficient 1.4, material acrylic, ambient temperature -20 ... +60 °C



BRT-60X40C

3044997

Rectangular reflector, reflection coefficient 1.48, material: acrylic, ambient temperature -20...+60 °C

