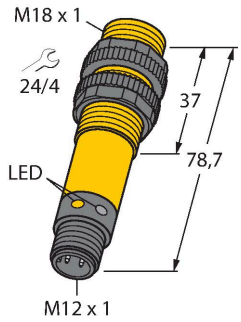
S18RW3LQ1
Photoelectric Sensor – Retroreflective Sensor



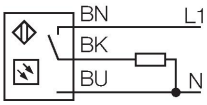
Technical data

Type	S18RW3LQ1
ID	3035151
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	20…250 VAC
AC rated operational current	≤ 200 mA
Output function	Dark operation, Relay output
Switching frequency	≤ 40 Hz
Readiness delay	≤ 100 ms
Response time typical	< 16 ms
Mechanical data	
Design	Tube, S18
Dimensions	Ø 18 x 78.7 mm
Housing material	Plastic, Thermoplastic material
Lens	plastic, Acrylic
Electrical connection	Connector, 1/2", PVC
Number of cores	4
Ambient temperature	-40…+70 °C
Protection class	IP67 IP69
Special features	Encapsulated Wash down

Features

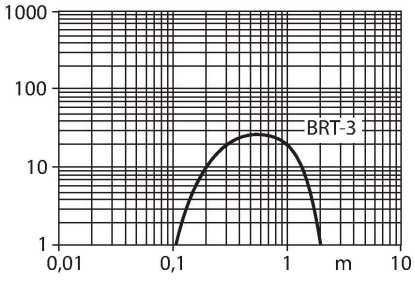
- M12 × 1 male connector, 4-pin
- Protection classes IP67/IP69K
- Ambient temperature: -40 °C…+70 °C
- Selectable light/dark operation or light operation with alarm function

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

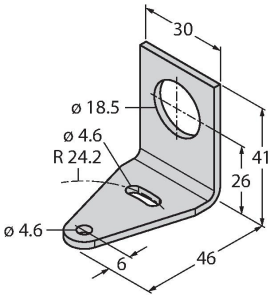


Technical data

Power-on indication	LED, Green
Switching state	LED, Yellow
Excess gain indication	LED
Tests/approvals	
Approvals	CE, UL, CSA

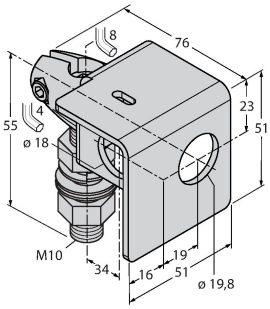
Accessories

SMB18A	3033200



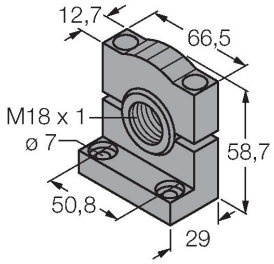
Mounting bracket, rectangular, stainless steel, for sensors with 18 mm thread

SMB18AFAM10	3012558



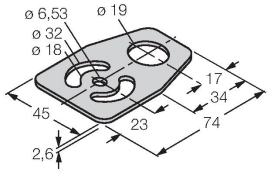
Mounting bracket, material VA 1.4401, for M10 x 1.5 thread, thread length 18 mm

SMB3018SC	3053952



Mounting bracket, PTB black, for sensors with 18 mm thread

SMBAMS18P	3073134



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

Accessories

Dimension drawing	Type	ID	
	BRT-3	3016164	Round reflector, reflection coefficient 1.0, material acrylic, ambient temperature -20…+60 °C