

S18RW3L

Photoelectric Sensor – Retroreflective Sensor



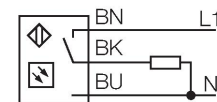
Technical data

Type	S18RW3L
ID no.	3029820
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	Threaded barrel, S18
Dimensions	Ø 18 x 59.2 mm
Housing material	Plastic, Thermoplastic material
Lens	plastic, Acrylic
Electrical connection	Cable, 2 m, PVC
Number of cores	3
Core cross-section	0.5 mm ²
Ambient temperature	-40...+70 °C
Protection class	IP67 IP69

Features

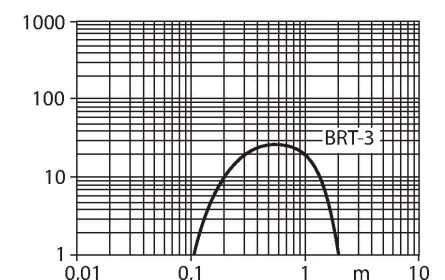
- Cable, 2 m
- Protection class IP67
- Ambient temperature: -40...+70 °C
- Selectable light/dark operation or light operation with alarm function

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

Special features	Encapsulated Wash down
Power-on indication	LED, Green
Switching state	LED, Yellow
Excess gain indication	LED
Tests/approvals	
Approvals	CE, UL, CSA

Accessories

	<p>SMB18A 3033200</p> <p>Mounting bracket, rectangular, stainless steel, for sensors with 18 mm thread</p>		<p>SMB18AFAM10 3012558</p> <p>Mounting bracket, material VA 1.4401, for M10 x 1.5 thread, thread length 18 mm</p>
	<p>SMB3018SC 3053952</p> <p>Mounting bracket, PTB black, for sensors with 18 mm thread</p>		<p>SMBAMS18P 3073134</p> <p>Mounting bracket, stainless steel, for sensors with 18 mm thread</p>

Accessories

Dimension drawing	Type	ID no.	
	<p>BRT-3</p>	<p>3016164</p>	<p>Round reflector, reflection coefficient 1.0, material acrylic, ambient temperature -20...+60 °C</p>