

T18RP6LP

Photoelectric Sensor – Retroreflective Sensor with Polarizing Filter



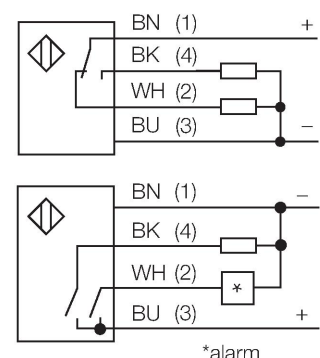
Technical data

Type	T18RP6LP
ID	3044386
Optical data	
Function	Retroreflective Sensor
Operating mode	Polarized
Reflector included in delivery	no
Light type	Red polarized
Wavelength	680 nm
Range	50...2000 mm
Electrical data	
Operating voltage	10...30 VDC
No-load current	≤ 30 mA
Short-circuit protection	yes / Cyclic
Reverse polarity protection	yes
Output function	Connection programmable, PNP
Switching frequency	≤ 160 Hz
Readiness delay	≤ 100 ms
Overcurrent release	> 220 mA
Mechanical data	
Design	Tube, T18
Dimensions	30 x 30 x 41.5 mm
Housing material	Plastic, PBT
Lens	plastic, Acrylic
Electrical connection	Cable, 2 m, PVC
Number of cores	4
Core cross-section	0.5 mm ²

Features

- Cable, 2 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, changeover

Wiring diagram



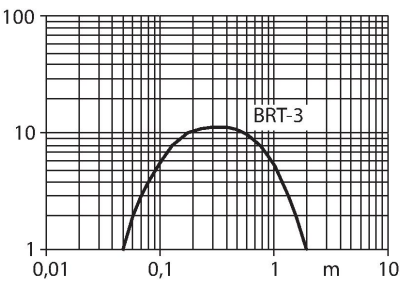
Functional principle

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

Ambient temperature	-40...+70 °C
Protection class	IP67
Special features	Wash down
Power-on indication	LED, Green
Switching state	LED, Yellow
Error indication	LED, green, Flashing
Alarm display	LED yellow Flashing
Tests/approvals	
Approvals	CE, UL, CSA



Accessories

SMB1815SF3053279

Mounting bracket, PBT black, for PICO-GUARD points

SMB18FM3079421

mounting bracket, black, M22 x1.5 mm, male thread, female thread M18 x 1, for sensors with 18 mm thread

SMB18A3033200

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

SMBAMS18P3073134

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