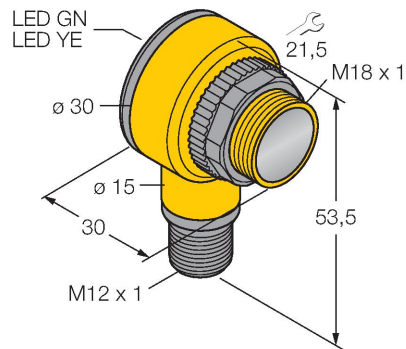


T18-2VPRL-Q8

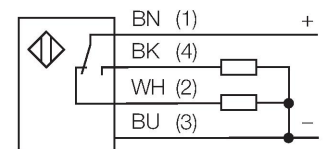
Photoelectric Sensor – Opposed Mode Sensor (Receiver)



Features

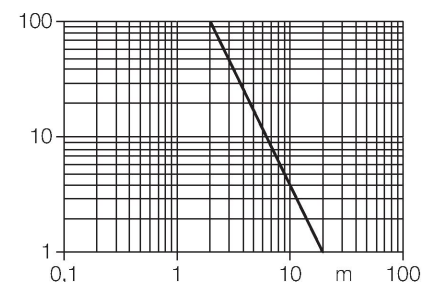
- M12 × 1 male connector, 4-pin
- Protection classes IP67/IP69K
- Ambient temperature: -40 °C...+70 °C
- Operating voltage: 10...30 VDC
- PNP switching output, light and dark operation

Wiring diagram



Functional principle

Opposed mode sensors consist of an emitter and receiver. They are installed opposite each other so that the light from the emitter is aimed directly at the receiver. When an object interrupts or weakens the light beam, the sensor switches. Opposed mode sensors are the most reliable photoelectric sensors for detection of opaque targets. An excellent contrast between light and dark conditions and an extremely high excess gain are typical of this sensing mode, thus allowing operation over larger distances and under difficult conditions. Excess gain curve
Excess gain in relation to the distance



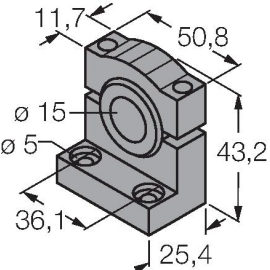
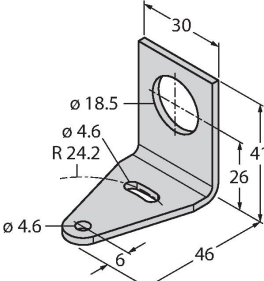
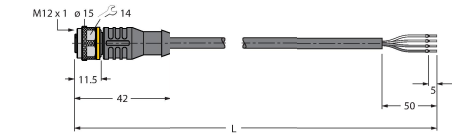
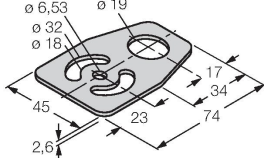
Technical data

Type	T18-2VPRL-Q8
ID	3802607
Optical data	
Function	Opposed mode sensor
Operating mode	Receiver
Wavelength	624 nm
Range	0...20000 mm
Electrical data	
Operating voltage	10...30 VDC
No-load current	≤ 25 mA
Short-circuit protection	yes / Cyclic
Reverse polarity protection	yes
Output function	Complementary contact, PNP
Readiness delay	≤ 500 ms
Response time typical	< 1.5 ms
Mechanical data	
Design	Tube, T18
Dimensions	30 x 30 x 54 mm
Housing material	Plastic, Thermoplastic material
Lens	plastic, Acrylic
Electrical connection	Connector, M12 × 1
Number of cores	4
Ambient temperature	-40...+70 °C
Protection class	IP67 IP68 IP69
Special features	Chemical-resistant Encapsulated Wash down

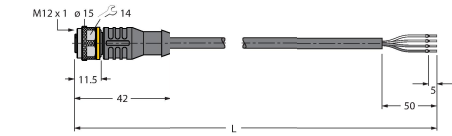
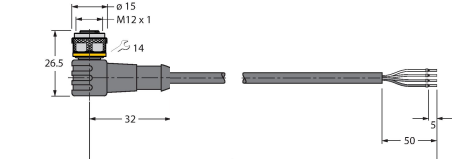
Technical data

	Resistant to chemicals
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, UL, CSA

Accessories

SMB1815SF	3053279	SMB18A	3033200
	Mounting bracket, PBT black, for PICO-GUARD points		Mounting bracket, rectangular, stainless steel, for sensors with 18 mm thread
SMB18FM	3079421	SMBAMS18P	3073134
	mounting bracket, black, M22 x1.5 mm, male thread, female thread M18 x 1, for sensors with 18 mm thread		Mounting bracket, stainless steel, for sensors with 18 mm thread

Accessories

Dimension drawing	Type	ID	
	RKC4.4T-2/TEL	6625013	Connection cable, female M12, straight, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com
	WKC4.4T-2/TEL	6625025	Connection cable, female M12, angled, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com