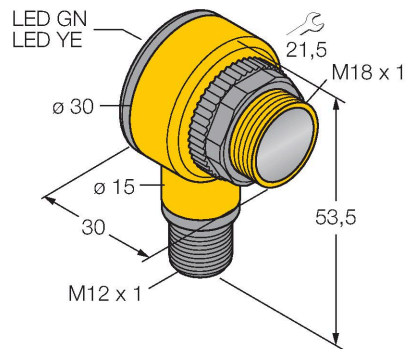


# T18-2VNRL-Q8

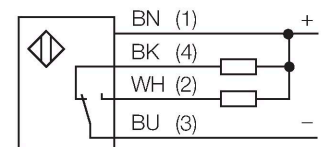
## Photoelectric Sensor – Opposed Mode Sensor (Receiver)



### Features

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

### Wiring diagram

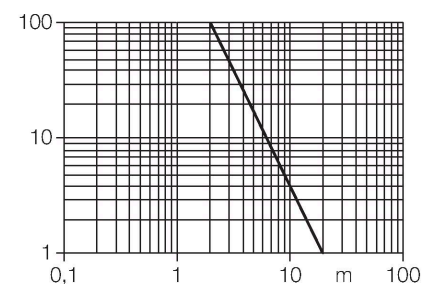


### Technical data

Type	T18-2VNRL-Q8
ID no.	3802604
<b>Optical data</b>	
Function	Opposed mode sensor
Operating mode	Receiver
Wavelength	624 nm
Range	0...20000 mm
<b>Electrical data</b>	
Operating voltage	10...30 VDC
No-load current	≤ 25 mA
Short-circuit protection	yes / Cyclic
Reverse polarity protection	yes
Output function	Complementary contact, NPN
Readiness delay	≤ 500 ms
Response time typical	< 1.5 ms
Overcurrent release	> 220 mA
<b>Mechanical data</b>	
Design	Rectangular with thread, T18
Dimensions	30 x 30 x 54 mm
Housing material	Plastic, Thermoplastic material
Lens	plastic, Acrylic
Electrical connection	Connectors, M12 × 1
Number of cores	4
Ambient temperature	-40...+70 °C
Protection class	IP67 IP68 IP69
Special features	Chemical-resistant

### 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

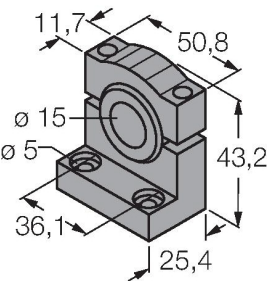


Technical data

	Encapsulated Wash down Resistant to chemicals
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

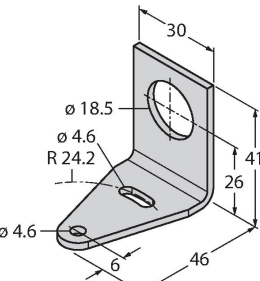
Accessories

SMB1815SF 3053279



Mounting bracket, PBT black, for PICO-GUARD points

SMB18A 3033200

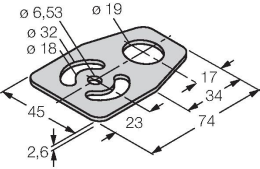


Mounting bracket, rectangular, stainless steel, for sensors with 18 mm thread

SMB18FM 3079421

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

SMBAMS18P 3073134



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

Accessories

Dimension drawing	Type	ID no.	
	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 <a href="http://www.turck.com">www.turck.com</a>
	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 <a href="http://www.turck.com">www.turck.com</a>