

T18RP6RQ Photoelectric Sensor – Opposed Mode Sensor (Receiver)



Technical data

Туре	T18RP6RQ		
ID no.	3044382		
Optical data			
Function	Opposed mode sensor (receiver)		
Range	020000 mm		
Electrical data			
Operating voltage	1030 VDC		
No-load current	≤ 25 mA		
Short-circuit protection	yes / Cyclic		
Reverse polarity protection	yes		
Output function	Connection programmable, PNP		
Switching frequency	≤ 160 Hz		
Overcurrent release	> 220 mA		
Mechanical data			
Design	Rectangular with thread, T18		
Dimensions	30 x 30 x 54 mm		
Housing material	Plastic, PBT		
Lens	plastic, Lexan		
Electrical connection	Connectors, M12 × 1		
Ambient temperature	-40+70 °C		
Protection class	IP67 IP69K		
Special features	Wash down		
Power-on indication	LED, Green		
Switching state	LED, Yellow		
Error indication	LED, green, Flashing		
Alarm display	LED yellow Flashing		

Features

M12 × 1 male connector, 4-pin

- Protection classes IP67/IP69K
- Ambient temperature: -40 °C...+70 °C
- Selectable light/dark operation or light oper-
- ation with alarm function
- Operating voltage: 10...30 VDC
- PNP switching output, changeover

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 extremly 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

Tests/approvals

Approvals

CE, UL, CSA

Accessories



Accessories

Dimension drawing	Туре	ID no.	
M12 x 1 0 15 /2 14	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
0 15 M12 x1 26.5 	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