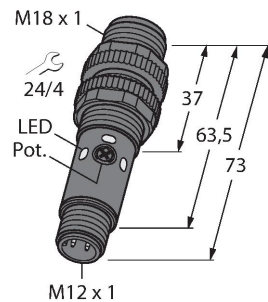


S18-2VPDS-Q8

Photoelectric Sensor – Diffuse-Mode Sensor



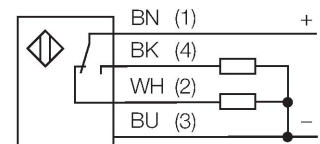
Technical data

Type	S18-2VPDS-Q8
ID	3042177
Optical data	
Function	Proximity switch
Operating mode	Diffuse
Light type	Red
Wavelength	624 nm
Range	1...300 mm
Electrical data	
Operating voltage	10...30 VDC
Residual ripple	< 10 % U _{ss}
No-load current	≤ 16 mA
Short-circuit protection	yes / Cyclic
Reverse polarity protection	yes
Output function	Complementary contact, PNP
Readiness delay	≤ 100 ms
Response time typical	< 1.5 ms
Setting option	Potentiometer
Mechanical data	
Design	Tube, S18
Dimensions	Ø 18 x 73 mm
Housing material	Plastic, Thermoplastic material
Lens	Acrylic
Electrical connection	Connector, M12 × 1, PVC
Number of cores	4
Ambient temperature	-40...+70 °C
Protection class	IP67

Features

- Male connector, M12 × 1, 4-pin
- Protection class IP67
- Ambient temperature: -40 °C...+70 °C
- Sensitivity adjusted via potentiometer
- Visible red LED light
- Operating voltage: 10...30 VDC
- PNP switching output, changeover

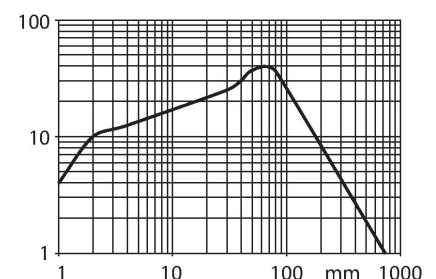
Wiring diagram



Functional principle

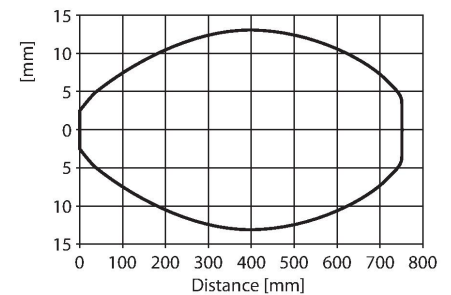
Emitter and receiver are incorporated in the same housing. The light reflected by the target is detected and causes the sensor to switch. The switching distance thereby depends largely on the reflectivity of the target.

Excess Gain Curve

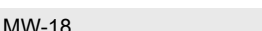
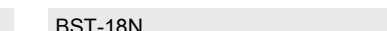


Technical data

Power-on indication	LED, Green
Switching state	2 × LEDs, Yellow
Error indication	Flashing
Excess gain indication	LED
Alarm display	Flashing
Tests/approvals	
Approvals	CE



Accessories

	MW-18 6945004 Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)		BST-18N 6947215 Mounting clamp for threaded barrel sensors, without dead-stop; material: PA6
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Accessories

Dimension drawing	Type	ID	
	RKC4.5T-2/TEL	6625016	Connection cable, female M12, straight, 5-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com
	WKC4.5T-2/TEL	6625028	Connection cable, female M12, angled, 5-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com
	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

Dimension drawing	Type	ID	
	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