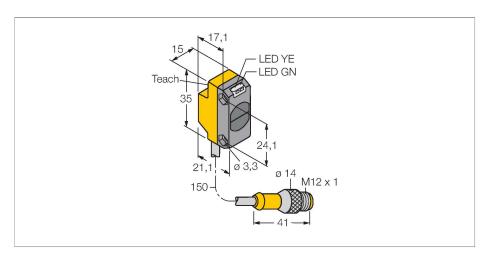


QS18EN6WQ5 Photoelectric Sensor – Diffuse Mode Sensor





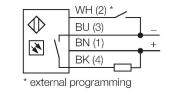
_	00.4051/01/05	
Type	QS18EN6WQ5	
ID no.	3069215	
Optical data		
Function	Proximity switch	
Operating mode	Divergent	
Light type	IR	
Wavelength	940 nm	
Range	0300 mm	
Electrical data		
Operating voltage	1030 VDC	
DC rated operational current	≤ 100 mA	
No-load current	≤ 35 mA	
Reverse polarity protection	yes	
Output function	NO contact, NPN	
Switching frequency	≤ 833 Hz	
Readiness delay	≤ 100 ms	
Response time typical	< 0.6 ms	
Setting option	Push Button Remote Teach	
Mechanical data		
Design	Rectangular, QS18	
Dimensions	21.1 x 15 x 35 mm	
Housing material	Plastic, ABS	
Lens	plastic, PMMA	
Electrical connection	Cable with connector, M12 × 1, 0.15 m, PVC	
Number of cores	4	
Ambient temperature	-20+70 °C	

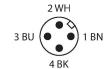


Features

- Cable with male end, M12 × 1, 4-pin, PVC, 150 mm
- ■Protection class IP67
- ■LED all-round visible
- Sensitivity adjusted via teach button
- Operating voltage: 10...30 VDC
- ■NPN switching output
- ■Light or dark operation

Wiring diagram





Functional principle

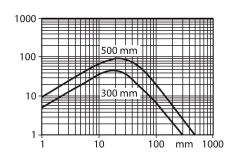
Identical to retro-reflective sensors, emitter and receiver circuitry are incorporated in the same housing of the diffuse mode sensors. However, diffuse mode sensors do not detect the interruption of the light beam but the reflection of the target. A target is detected if it reflects sufficient light back to the receiver. The switching distance of diffuse mode sensors thus largely depends on the reflectivity of the target. This type of sensor is especially suited for detection of transparent objects (diffuse mode sensor with or without background suppression or convergent mode sensors).



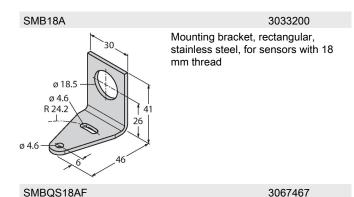
Technical data

Protection class	IP67	
Special features	keep/defer	
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, cURus	

Excess gain curve Excess gain in relation to the distance



Accessories



SMBQS18A

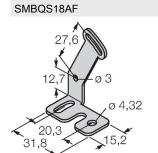
3069721

Mounting bracket, stainless steel, for 18 mm thread

M18 x 1

24,9

19,4



Mounting bracket, stainless steel, for 18 mm thread



Accessories

Dimension drawing	Туре	ID no.	
M12x1 015 50 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
015 M12×1 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