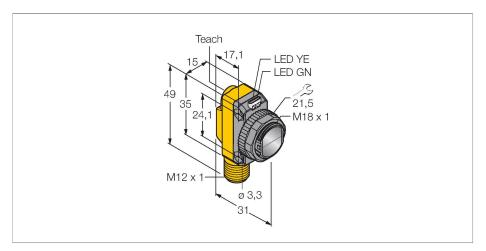


QS18EN6DQ8 Photoelectric Sensor – Diffuse Mode Sensor



Technical data

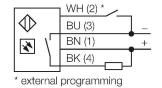
Туре	QS18EN6DQ8
ID	3071994
Optical data	
Function	Proximity switch
Operating mode	Diffuse
Light type	IR
Wavelength	940 nm
Range	0800 mm
Electrical data	
Operating voltage	1030 VDC
DC rated operational current	≤ 100 mA
No-load current	≤ 35 mA
Reverse polarity protection	yes
Output function	NO contact, 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 with thread, QS18
Dimensions	Ø 18 x 31 x 15 x 35 mm
Housing material	Plastic, ABS
Lens	plastic, PMMA
Electrical connection	Connector, M12 × 1, PVC
Number of cores	4
Ambient temperature	-20+70 °C



Features

- Male M12 × 1; 4-pin
- ■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



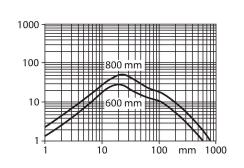
Functional principle

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).

Excess gain curve Excess gain in relation to the distance

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



Accessories

SMB18A 3033200

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

3012558 Mounting bracket, material VA 1.4401, for M10 x 1.5 thread, thread length 18 mm

M18 x 1 24,9 19,4

Mounting bracket, stainless steel, for 18 mm thread

3069721

SMB18SF 11,7 50,8 M18 x 1 Ø 5 43,2 36,1 25,4

Mounting bracket, PBT black, for sensors with 18 mm thread, rotatable

3052519

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



