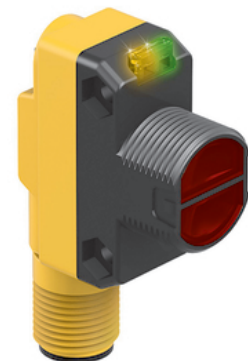
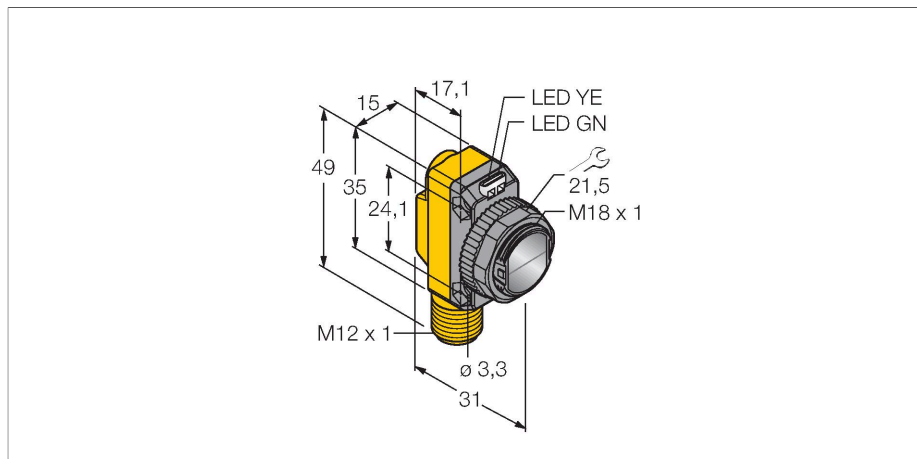


QS18VN6FF150Q8

Photoelectric Sensor – Diffuse Mode Sensor with Fixed-Field Background Suppression



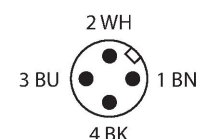
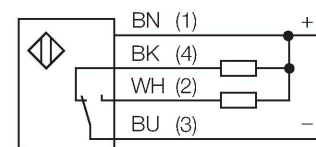
Technical data

Type	QS18VN6FF150Q8
ID no.	3801156
Optical data	
Function	Diffuse mode sensor with fixed-field background suppression
Light type	Red
Wavelength	660 nm
Range	0...150 mm
Electrical data	
Operating voltage	10...30 VDC
Residual ripple	< 10 % U _{ss}
DC rated operational current	≤ 100 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Output function	NO/NC, NPN
Current output	100 mA
Switching frequency	≤ 625 Hz
Mechanical data	
Design	Rectangular, QS18
Dimensions	31 x 15 x 35 mm
Housing material	Plastic, ABS
Lens	plastic, Acrylic
Electrical connection	Connectors, M12 × 1
Ambient temperature	-20...+70 °C
Protection class	IP67
Power-on indication	LED, Green

Features

- Male M12 × 1, 4-pin
- Protection class IP67
- LED all-round visible
- Operating voltage: 10...30 VDC
- NPN switching output, changeover

Wiring diagram



Functional principle

Diffuse mode sensors with background suppression operate with a single emitter and several receiver elements. The target position and the photoelectric structure of the sensor determine which of the receiving elements receives the most light. The sensor electronics determine whether the reflecting object is within or outside the measuring range. These sensors come with a fixed cut-off point.

Excess gain curve
Excess gain in relation to the distance

Technical data

Switching state	LED, Yellow
Error indication	LED, green, Flashing
Excess gain indication	LED, yellow, flashing
Tests/approvals	
MTTF	965 years acc. to SN 29500 (Ed. 99) 40 °C
Approvals	CE, cURus

Accessories

	<p>SMB18A 3033200</p> <p>Mounting bracket, rectangular, stainless steel, for sensors with 18 mm thread</p>		<p>SMB18AFAM10 3012558</p> <p>Mounting bracket, material VA 1.4401, for M10 x 1.5 thread, thread length 18 mm</p>
	<p>SMBQS18A 3069721</p> <p>Mounting bracket, stainless steel, for 18 mm thread</p>		<p>SMB18SF 3052519</p> <p>Mounting bracket, PBT black, for sensors with 18 mm thread, rotatable</p>

Accessories

Dimension drawing	Type	ID no.	
	<p>RKC4.4T-2/TEL</p>	<p>6625013</p> <p>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</p>	
	<p>WKC4.4T-2/TEL</p>	<p>6625025</p> <p>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</p>	