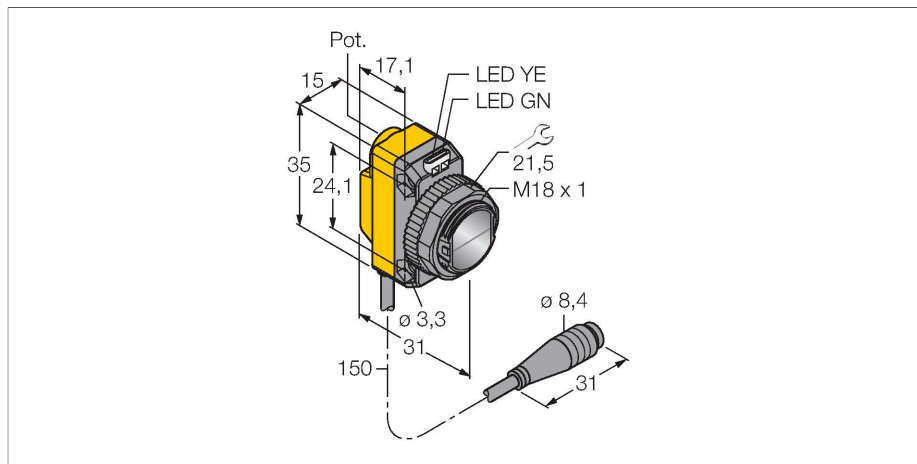


QS18VP6FF100Q

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



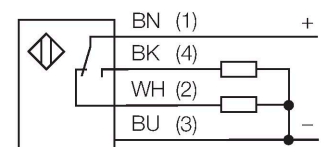
Technical data

Type	QS18VP6FF100Q
ID	3071885
Optical data	
Function	Proximity switch
Operating mode	Background suppression, non-adjustable
Light type	Red
Wavelength	630 nm
Range	0...100 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, PNP
Current output	100 mA
Switching frequency	≤ 625 Hz
Readiness delay	≤ 100 ms
Response time typical	< 0.85 ms
Mechanical data	
Design	Rectangular with thread, QS18
Dimensions	Ø 18 x 31 x 15 x 35 mm
Housing material	Plastic, ABS
Lens	plastic, Acrylic
Electrical connection	Cable with connector, M8 × 1, 0.15 m, PVC

Features

- Cable with male end, 4-pin, PVC, 150 mm, 8 mm
- Protection class IP67
- LED all-round visible
- Operating voltage: 10...30 VDC
- PNP 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

Dimension drawing

Type
PKW4M-2/TELID
6625067

Connection cable, female M8, angled,
4-pin, cable length: 2 m, sheath
material: PVC, black; cULus approval;
other cable lengths and qualities
available, see www.turck.com

