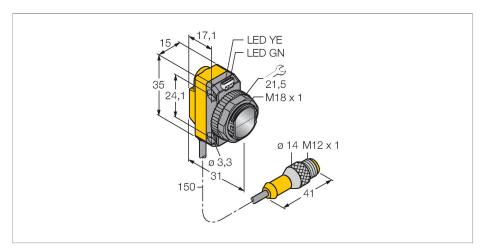
QS18VP6FF50QPMA| 19-01-2022 02-12 | Technical modifications reserved



QS18VP6FF50QPMA Photoelectric Sensor – Diffuse Mode Sensor with Fixed-Field Background Suppression





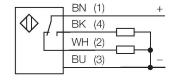
Туре	QS18VP6FF50QPMA
ID	3075198
Optical data	
Function	Proximity switch
Operating mode	Background suppression, non-adjustable
Light type	Red
Wavelength	630 nm
Range	050 mm
Electrical data	
Operating voltage	1030 VDC
Residual ripple	< 10 % U _{ss}
DC rated operational current	≤ 100 mA
Short-circuit protection	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, M12 × 1, 0.15 m, PUR

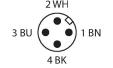


Features

- Cable with male end, M12 × 1, 4-pin, PVC, 150 mm
- ■Protection class IP67
- ■LED all-round visible
- Operating voltage: 10...30 VDC
- ■PNP switching output, changeover

Wiring diagram





Functional principle

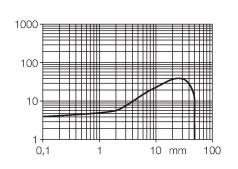
Diffuse mode sensors with background suppression operate with a single emitter and several receiver elements. The target position and the photoelectric structure of the sensor determine which of the receiving elements receives the most light. The sensor electronics determine whether the reflecting object 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



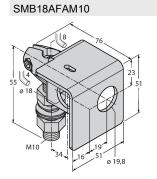
Technical data

Number of cores	4
Ambient temperature	-20+70 °C
Protection class	IP67
Power-on indication	LED, Green
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

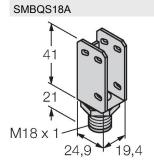


Accessories

3033200 Mounting bracket, rectangular, stainless steel, for sensors with 18 mm thread

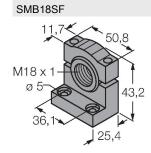


3012558 Mounting bracket, material VA 1.4401, for M10 x 1.5 thread, thread length 18 mm



Mounting bracket, stainless steel, for 18 mm thread

3069721



3052519 Mounting bracket, PBT black, for sensors with 18 mm thread, rotatable