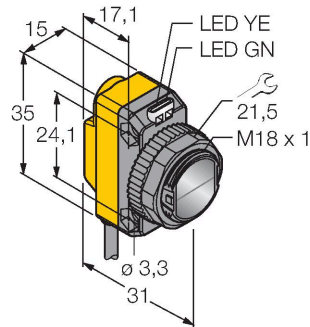


QS18VP6FF125

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



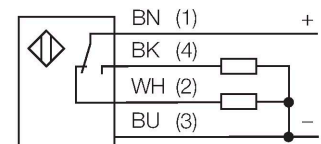
Technical data

Type	QS18VP6FF125
ID	3808322
Optical data	
Function	Proximity switch
Operating mode	Background suppression, non-adjustable
Light type	Red
Wavelength	660 nm
Range	1...125 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
Mechanical data	
Design	Rectangular, QS18
Dimensions	31 x 15 x 35 mm
Housing material	Plastic, ABS
Lens	plastic, Acrylic
Electrical connection	Cable, 2 m, PVC
Number of cores	4
Core cross-section	0.35 mm ²

Features

- Cable, PVC, 2 m
- 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.

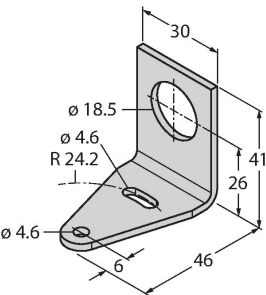
Excess gain curve
Excess gain in relation to the distance

Technical data

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

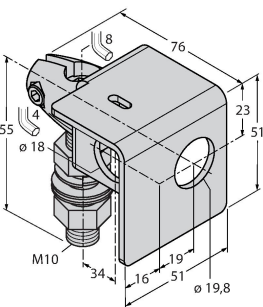
Accessories

SMB18A 3033200



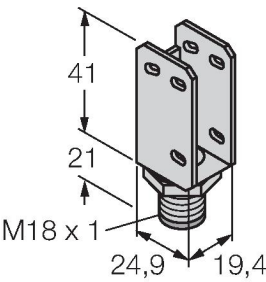
Mounting bracket, rectangular, stainless steel, for sensors with 18 mm thread

SMB18AFAM10 3012558



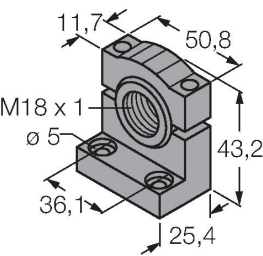
Mounting bracket, material VA 1.4401, for M10 x 1.5 thread, thread length 18 mm

SMBQS18A 3069721



Mounting bracket, stainless steel, for 18 mm thread

SMB18SF 3052519



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