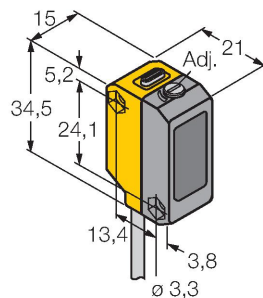


BSO1L150-BQ18-VP6X2

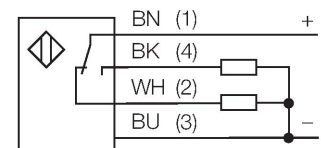
Photoelectric Sensor – Diffuse Mode Laser Sensor with Adjustable Background Suppression



Features

- Cable, PVC, 2 m
- Protection class IP67
- LED, all-round visible
- Cut-off point adjusted via potentiometer

Wiring diagram



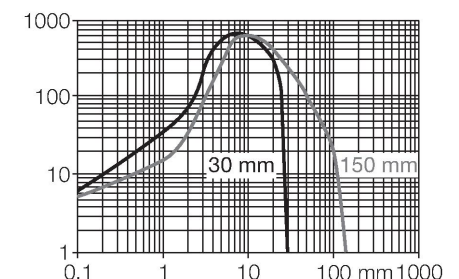
Technical data

Type	BSO1L150-BQ18-VP6X2
ID	7700249
Function	Diffuse mode sensor with adjustable background suppression
Light type	Red
Wavelength	650 nm
Laser class	▲ 1
Beam diameter	1 mm
Range	1...150 mm
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	≤ 700 Hz
Design	Rectangular, QS18
Dimensions	21.1 x 15 x 34.5 mm
Housing material	Plastic, ABS
Lens	plastic, Acryl
Electrical connection	Cable, 2 m, PVC
Number of cores	4
Core cross-section	0.35 mm ²
Ambient temperature	-10...+50 °C
Protection class	IP67

Functional principle

Diffuse mode sensors with background suppression operate with a single emitter and several receiver elements, one for close range and one for long-range. The target's position and the optical structure of the sensor determine which receiver element gets the most light. The optics before the receiver is modified with the adjusting screw shifting this way the boundary between close and long-range. This operation determines whether the reflecting object is in or outside the measuring range.

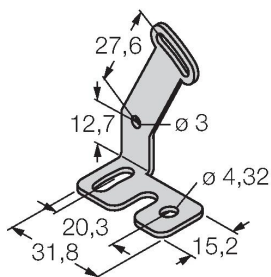
Excess gain curves relating to the nearest and farthest cut-off point



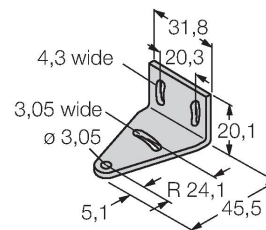
Technical data

Power-on indication	LED, Green
Switching state	LED, Yellow
Error indication	LED, green, flashing
Excess gain indication	LED, yellow, flashing
MTTF	268 years acc. to SN 29500 (Ed. 99) 40 °C

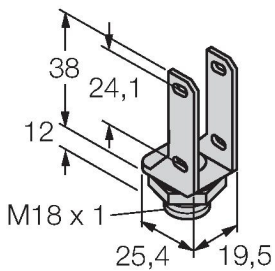
Accessories

TMBBT18BS
7700424


Mounting bracket, stainless steel, for
BSO...-BQ18 and FSO...-BQ18

TMBMIS
7700401


Mounting bracket, stainless steel, for
BT18/BQ18 and ..-MI-..

TMBBT18Y
7700425


Protective housing, stainless steel, for
BQ18