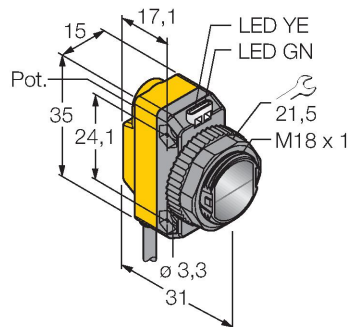


DO1L300-BT18-VP6X2

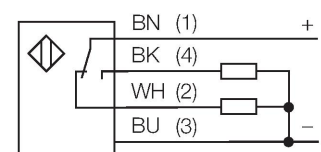
Photoelectric Sensor – Diffuse Mode Laser Sensor



Features

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

Wiring diagram



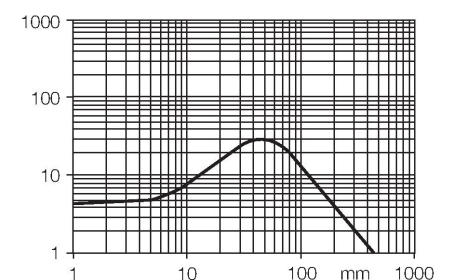
Technical data

Type	DO1L300-BT18-VP6X2
ID	7700255
Function	Laser-Reflexionslichttaster
Light type	Red
Wavelength	650 nm
Laser class	▲ 1
Beam diameter	1 mm at 300 mm
Range	0...300 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	31 x 15 x 35 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	-20...+70 °C
Protection class	IP67
Special features	Laser
Power-on indication	LED, Green

Functional principle

Like retroreflective sensors, diffuse mode sensors also contain emitter and receiver circuitry in the same housing. However, diffuse mode sensors do not capture the interruption of a light beam but the reflection of a target. A target is captured if it reflects sufficient light back to the receiver. The switching distance of diffuse mode sensors thus largely depends on the object's reflectivity.

Excess gain curve
Excess gain in relation to distance



Technical data

Switching state	LED, Yellow
Error indication	LED, green, flashing
Excess gain indication	LED, yellow, flashing
MTTF	17 years acc. to SN 29500 (Ed. 99) 40 °C

Accessories

TMBM18FA

7700395

Mounting bracket; material VA 1.4401, for 18 mm thread

TMB18SF

7700396

Mounting bracket, PBT black, for 10 mm thread

TMB3018SC

7700397

Mounting bracket, PBT black, for 18 mm thread

TMBMIS

7700401

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

TMBBT18Y

7700425

Protective housing, stainless steel, for BQ18