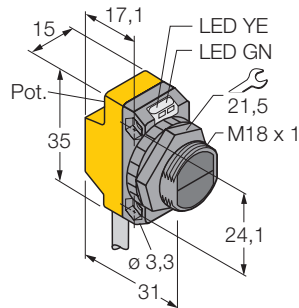


photoelectric sensor
diffuse mode laser sensor
QS18VP6LD

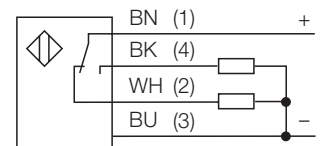
TURCK

Industrial
Automation



- Operating voltage 10...30 VDC
- indication of insufficient excess gain
- LED visible from all sides
- laser class 1
- sensitivity adjustable via potentiometer
- light/dark operation
- crosstalk protection
- cable, 2m

Wiring diagram

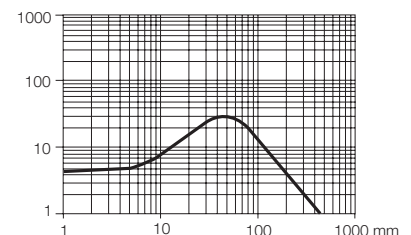


Functional principle

Identical to retro-reflective sensors, emitter and receiver circuitry are incorporated in the same housing of the diffuse mode sensors. However, diffuse mode sensors do not detect the interruption of the light beam but the reflection of the target. A target is detected if it reflects a sufficient amount of light back to the receiver. The switching distance of diffuse mode sensors thus largely depends on the reflectivity of the target.

Excess gain curve

Excess gain in relation to the distance



Type	QS18VP6LD
Ident-No.	3073040
Operating mode	diffuse mode sensor
Light type	red
Wavelength	650 nm
Laser class	1 (EN 60825, IEC 60825)
Beam diameter	1 mm at 300 mm
Max. sensing range [mm]	0... 300 mm
Ambient temperature	-10...+ 50 °C
Operating voltage	10... 30VDC
DC rated operational current	≤ 100 mA
No-load current I_0	≤ 15 mA
Short-circuit protection	yes / cyclic
Reverse polarity protection	yes
Output function	normally open / normally closed, pnp
Switching frequency	≤ 700 Hz
Readiness delay	≤ 200 ms
Housing	rectangular, QS18
Dimensions	31 x 15 x 35 mm
Housing material	plastic, ABS
Lens	plastic, acrylic
Connection	cables
Cable length	2 m
Cable cross section:	4 x 0.35mm ²
Degree of protection	IP67
Operating voltage display	LED green
Display switch state	LED yellow
Error indication	LED green flashing
Excess gain indication	LED yellow flashing