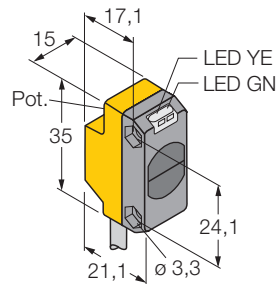


**photoelectric sensor
diffuse mode sensor
QS18VP6DB**

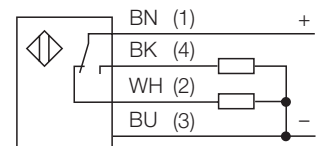
TURCK

Industrial
Automation



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

Wiring diagram

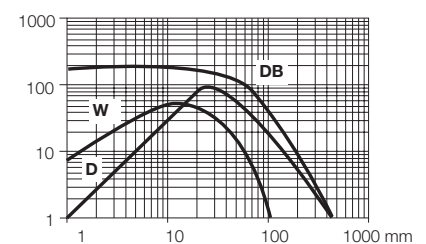


Functional principle

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	QS18VP6DB
Ident-No.	3061666
Operating mode	diffuse mode sensor
Light type	IR
Wavelength	940 nm
Max. sensing range [mm]	0... 450 mm
Ambient temperature	-20...+ 70 °C
Operating voltage	10... 30VDC
DC rated operational current	≤ 100 mA
No-load current I_0	≤ 32 mA
Short-circuit protection	yes / cyclic
Reverse polarity protection	yes
Output function	normally open / normally closed, pnp
Switching frequency	≤ 800 Hz
Readiness delay	≤ 100 ms
Housing	rectangular, QS18
Dimensions	21.1 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