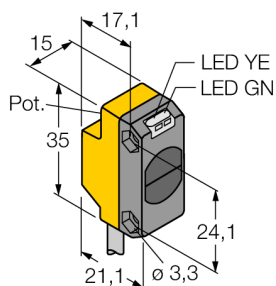


Photoelectric Sensor

Diffuse Mode Sensor

QS18VP6W W/30



Type	QS18VP6W W/30
ID	3061662

Optical data	
Function	Proximity switch
Operating mode	Divergent
Light type	IR
Wavelength	940 nm
Range	0...100 mm

Electrical data	
Operating voltage U_s	10...30 VDC
Residual ripple	< 10 % U_s
DC rated operating current I_s	≤ 100 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Output function	NO/NC, PNP
Switching frequency	≤ 800 Hz
Readiness delay	≤ 100 ms
Response time typical	< 0.6 ms

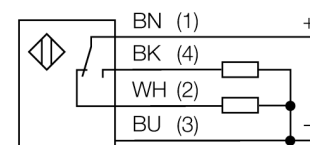
Mechanical data	
Design	Rectangular, QS18
Housing material	Plastic, ABS
Lens	plastic, Acrylic
Electrical connection	Cable, 9 m, PVC
Number of cores	4
Core cross-section	0.35 mm ²
Ambient temperature	-20...+70 °C
Protection class	IP67

Power-on indication	LED, Green
Switching state	LED, Yellow
Error indication	LED, green, Flashing
Excess gain indication	LED, yellow, flashing

Tests/approvals	
Approvals	CE, cURus

- Cable, PVC, 2 m
- Protection class IP67
- LED all-round visible
- Sensitivity adjusted via potentiometer
- Operating voltage: 10...30 VDC
- PNP switching output, changeover

Wiring Diagram

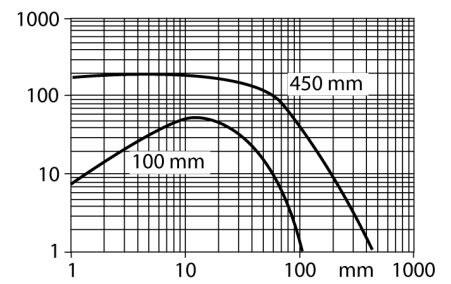


Functional principle

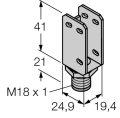
Identical to retro-reflective sensors, emitter and receiver circuitry are incorporated in the same housing of the diffuse mode sensors. However, diffuse mode sensors do not detect the interruption of the light beam but the reflection of the target. A target is detected if it reflects sufficient light 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



Accessories

Type code	Ident no.		Dimension drawing
SMBQS18A	3069721	Mounting bracket, stainless steel, for 18 mm thread	
SMBQS18AF	3067467	Mounting bracket, stainless steel, for 18 mm thread	