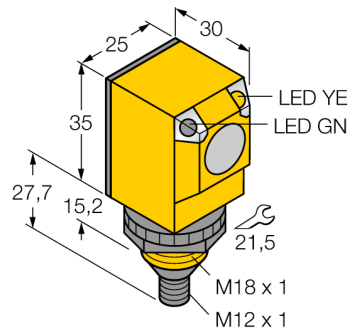
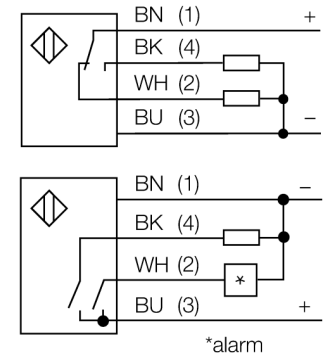


Photoelectric Sensor diffuse mode sensor with fixed-field background suppression Q25SP6FF100Q



- M12 × 1 male connector, 4-pin
- Protection classes IP67/IP69K
- Ambient temperature: -40 °C...+70 °C
- Operating voltage: 10...30 VDC
- PNP switching output, changeover

Wiring Diagram

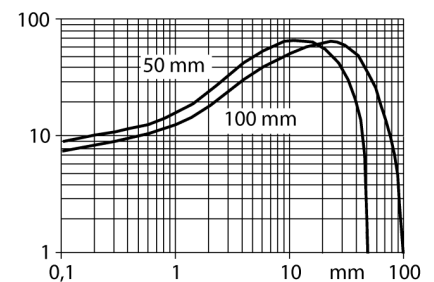


Functional principle

The emitter and receiver are incorporated in a single housing. The light reflection of the target is detected and triggers the sensor to switch. Thus the switching distance largely depends on the reflectivity of the target.

Excess gain curve

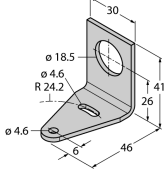
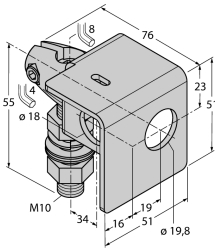
Excess gain in relation to the distance



Type designation	Q25SP6FF100Q
Ident no.	3031941
Function	Proximity switch
Light type	IR
Wavelength	880 nm
Range	0...100 mm
Ambient temperature	-40...+70 °C
Operating voltage	10...30 VDC
No-load current I ₀	≤ 35 mA
Short-circuit protection	yes/ Cyclic
Reverse polarity protection	yes
Output function	Connection programmable, PNP
Switching frequency	≤ 160 Hz
Readiness delay	≤ 100 ms
Readiness delay	≤ 100 ms
Response time typical	< 3 ms
Overcurrent release	> 220 mA
Approvals	CE, UL, CSA
Design	Rectangular, Q25
Dimensions	30 mm x 25 mm x 62.7 mm
Housing diameter	18 mm
Housing material	Plastic, Thermoplastic
Lens	plastic, Acryl
Electrical connection	Connectors, M12 × 1, PVC
Core cross-section	4 mm ²
Protection class	IP69K
MTTF	448 years acc. to SN 29500 (Ed. 99) 40 °C
Special features	Encapsulated
Power-on indication	Wash down
Switching state	LED, Green
Error indication	LED, Yellow
Excess gain indication	LED green Flashing
Alarm display	LED
	LED yellow Flashing

Photoelectric Sensor
diffuse mode sensor with fixed-field background suppression
Q25SP6FF100Q

Accessories

Type code	Ident no.	Description	Dimension drawing
SMB18A	3033200	Mounting bracket, rectangular, stainless steel, for sensors with 18 mm thread	
SMB18AFAM10	3012558	Mounting bracket, material VA 1.4401, for M10 x 1.5 thread, thread length 18 mm	
SMB18SF	3052519	Mounting bracket, PBT black, for sensors with 18 mm thread, rotatable	