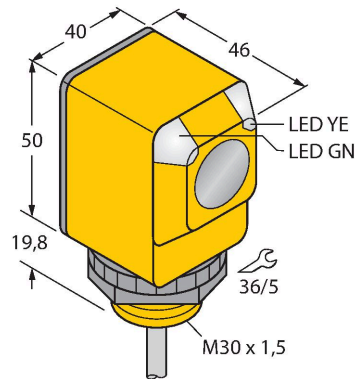


Q40SN6FF400 W/30

Photoelectric Sensor – Diffuse Mode Sensor with Fixed-Field Background Suppression



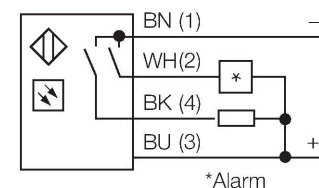
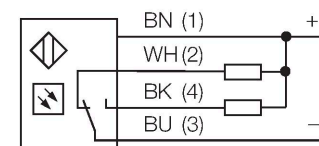
Technical data

Type	Q40SN6FF400 W/30
ID	3033904
Optical data	
Function	Proximity switch
Operating mode	Background suppression, non-adjustable
Light type	IR
Wavelength	880 nm
Range	0...400 mm
Electrical data	
Operating voltage	10...30 VDC
No-load current	≤ 25 mA
Short-circuit protection	yes / Cyclic
Reverse polarity protection	yes
Output function	Connection programmable, NPN
Switching frequency	≤ 160 Hz
Readiness delay	≤ 100 ms
Response time typical	< 3 ms
Overcurrent release	> 220 mA
Mechanical data	
Design	Rectangular, Q40
Dimensions	Ø 30 x 46 x 40.1 x 69.8 mm
Housing material	Plastic, Thermoplastic material
Lens	plastic, Polycarbonate
Electrical connection	Cable, 9 m, PVC
Number of cores	4
Core cross-section	0.5 mm ²

Features

- Cable, 2 m
- Protection class IP67
- Ambient temperature: -40...+70 °C
- Operating voltage: 10...30 VDC
- NPN switching output, changeover

Wiring diagram



Functional principle

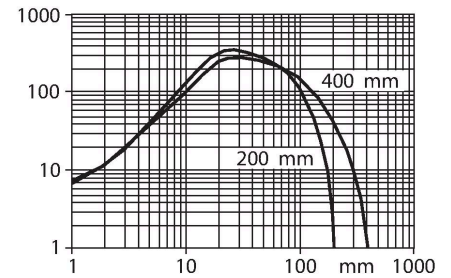
The emitter and receiver are incorporated in a single housing. The light reflection of the target is detected and triggers the sensor to switch. Thus the switching distance largely depends on the reflectivity of the target.

Excess gain curve

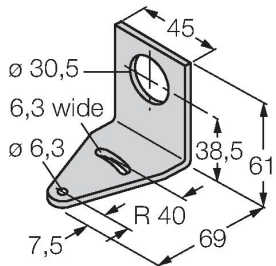
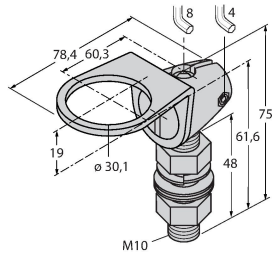
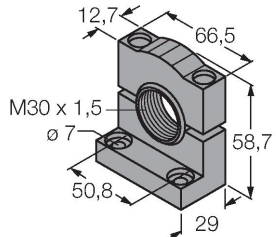
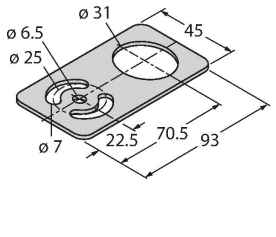
Excess gain in relation to the distance

Technical data

Ambient temperature	-40...+70 °C
Protection class	IP67
Special features	Encapsulated
Power-on indication	LED, Green
Switching state	LED, Yellow
Error indication	LED, green, Flashing
Excess gain indication	LED
Alarm display	LED yellow Flashing
Tests/approvals	
MTTF	448 years acc. to SN 29500 (Ed. 99) 40 °C
Approvals	CE, UL, CSA



Accessories

SMB30A	3032723	SMB30FAM10	3011185
	Mounting bracket, rectangular, stainless steel, for sensors with 30mm thread		Mounting bracket, stainless steel, for M10 x 1.5 thread, thread length 30 mm
SMB30SC	3052521	SMBAMS30P	3073135
	Mounting bracket, PBT black, for sensors with 30 mm thread, rotatable		Mounting bracket, stainless steel, for sensors with 30 mm thread