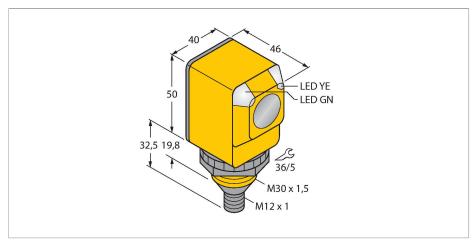
# Q40SN6FF400Q2 Photoelectric Sensor – Diffuse Mode Sensor with Fixed-Field Background Suppression



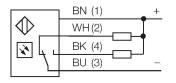
#### Technical data

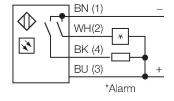
Туре	Q40SN6FF400Q2
ID	3034009
Optical data	
Function	Proximity switch
Operating mode	Background suppression, non-adjustable
Light type	IR
Wavelength	880 nm
Range	0400 mm
Electrical data	
Operating voltage	1030 VDC
No-load current	≤ 25 mA
Short-circuit protection	yes / Cyclic
Reverse polarity protection	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 82.5 mm
Housing material	Plastic, Thermoplastic material
Lens	plastic, Polycarbonate
Electrical connection	Connector, 7/8", PVC
Number of cores	4
Ambient temperature	-40+70 °C

#### **Features**

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

## Wiring diagram



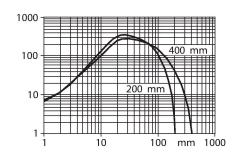


## Functional principle

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

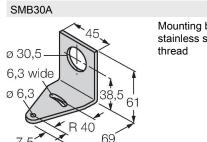
Excess gain in relation to the distance



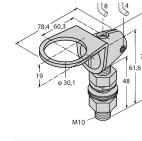
## Technical data

Protection class	IP67 IP69
Special features	Wash down
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



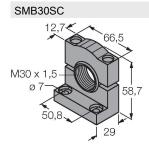
3032723 Mounting bracket, rectangular, stainless steel, for sensors with 30mm



SMB30FAM10

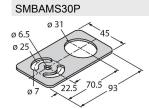
Mounting bracket, stainless steel, for M10 x 1.5 thread, thread length 30 mm  $\,$ 

3011185



Mounting bracket, PBT black, for sensors with 30 mm thread, rotatable

3052521



3073135 Mounting bracket, stainless steel, for sensors with 30 mm thread