

Q40SP6FF400Q2

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



Features

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

Wiring diagram



Technical data

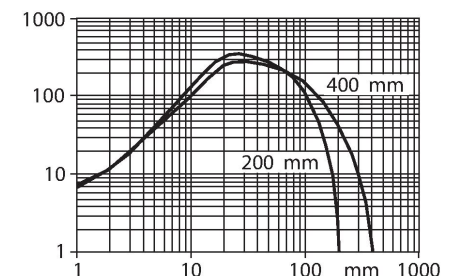
Type	Q40SP6FF400Q2
ID	3036309
Optical data	
Function	Proximity switch
Operating mode	Background suppression, non-adjustable
Light type	IR
Wavelength	880 nm
Range	0...400 mm
Electrical data	
Operating voltage	10...30 VDC
No-load current	≤ 25 mA
Short-circuit protection	yes / Cyclic
Reverse polarity protection	yes
Output function	Connection programmable, PNP
Switching frequency	≤ 160 Hz
Readiness delay	≤ 100 ms
Overcurrent release	> 220 mA
Mechanical data	
Design	Rectangular, Q40
Dimensions	46 x 40.1 x 82.5 mm
Housing material	Plastic, PBT
Lens	plastic, Acrylic
Electrical connection	Connector, M12 × 1
Ambient temperature	-40...+70 °C
Protection class	IP67 IP69K

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

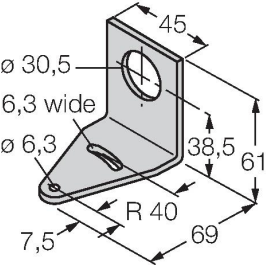


Technical data

Special features	Wash down
Power-on indication	LED, Green
Switching state	LED, Yellow
Error indication	LED, green, Flashing
Alarm display	LED yellow Flashing
Tests/approvals	
MTTF	448 years acc. to SN 29500 (Ed. 99) 40 °C
Approvals	CE, UL, CSA

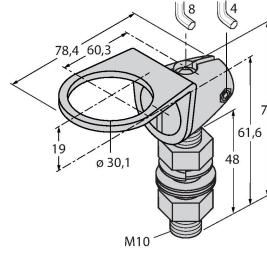
Accessories

SMB30A3032723



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

SMB30FAM103011185



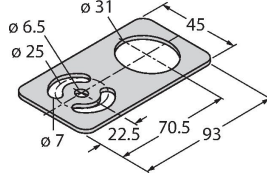
Mounting bracket, stainless steel, for M10 x 1.5 thread, thread length 30 mm

SMB30SC3052521



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

SMBAMS30P3073135



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