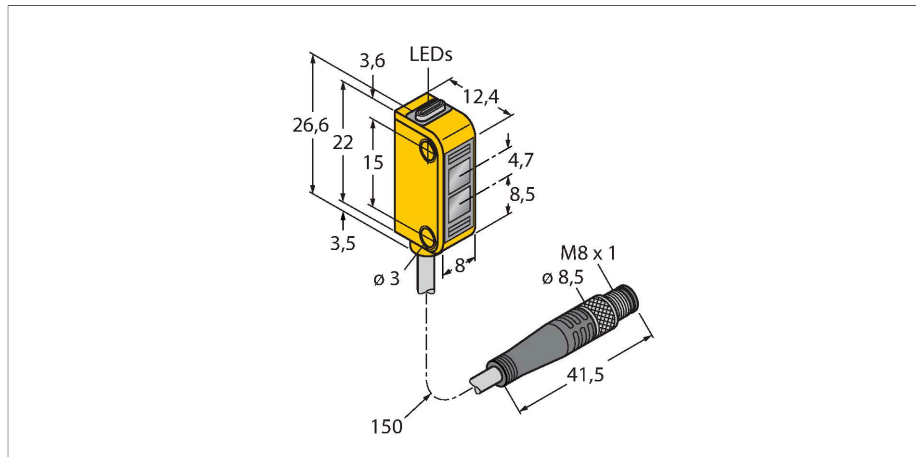


# Q126EQ

## Photoelectric Sensor – Opposed Mode Sensor (Emitter)

### Miniature Sensor



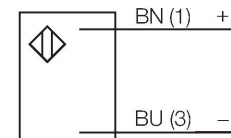
#### Technical data

Type	Q126EQ
ID	3072141
<b>Optical data</b>	
Function	Opposed mode sensor
Operating mode	Emitter
Light type	Red
Wavelength	640 nm
Range	0...2000 mm
<b>Electrical data</b>	
Operating voltage	10...30 VDC
Residual ripple	< 10 % U <sub>ss</sub>
Short-circuit protection	yes
Reverse polarity protection	yes
Readiness delay	≤ 120 ms
Response time typical	< 1.3 ms
<b>Mechanical data</b>	
Design	Rectangular, Q12
Dimensions	12.4 x 8 x 26.6 mm
Housing material	Plastic, Thermoplastic material, Yellow
Lens	plastic, Polycarbonate
Electrical connection	Cable with connector, M8 × 1, 0.15 m, PVC
Number of cores	4
Core cross-section	0.34 mm <sup>2</sup>
Ambient temperature	-20...+55 °C
Protection class	IP67

#### Features

- Cable, PVC, 150 mm, with M8 × 1 male end, 4-pin
- Protection class IP67
- LED all-round visible
- Operating voltage: 10...30 VDC

#### Wiring diagram



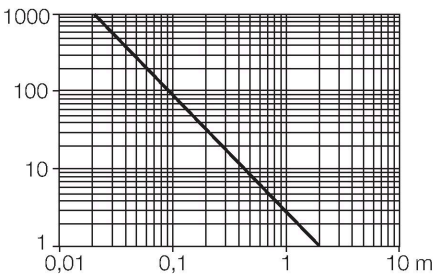
#### Functional principle

Opposed mode sensors consist of an emitter and receiver. They are installed opposite each other so that the light from the emitter is aimed directly at the receiver. When an object interrupts or weakens the light beam, the sensor switches. Opposed mode sensors are the most reliable photoelectric sensors for detection of opaque targets. An excellent contrast between light and dark conditions and an extremely high excess gain are typical of this sensing mode, thus allowing operation over larger distances and under difficult conditions.

Excess gain curve  
Excess gain in relation to the distance

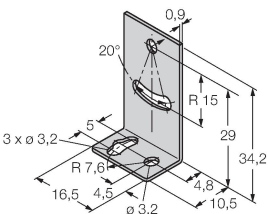
Technical data

Power-on indication	LED, Green
Excess gain indication	LED, yellow
Tests/approvals	
MTTF	145 years acc. to SN 29500 (Ed. 99) 40 °C
Approvals	CE, cURus



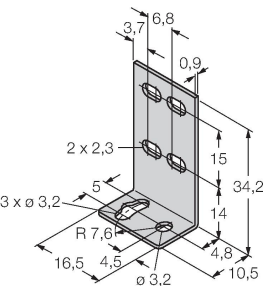
Accessories

SMBQ12A 3074341



Mounting bracket; material VA 1.4401, for photoelectric sensor, Q12 series

SMBQ12T 3073722



Mounting bracket; material VA 1.4401, for photoelectric sensor, Q12 series

Accessories

Dimension drawing	Type	ID	
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PKW4M-2/TEL 6625067

Connection cable, female M8, angled, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see [www.turck.com](http://www.turck.com)



PKG4M-2/TEL 6625061

Connection cable, female M8, straight, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see [www.turck.com](http://www.turck.com)