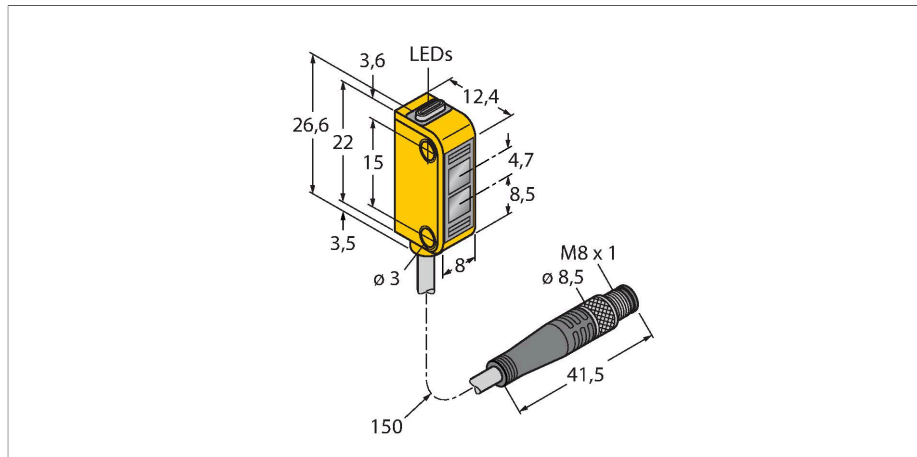


Q126EQ3

Photoelectric Sensor – Opposed Mode Sensor (Emitter) Miniature Sensor



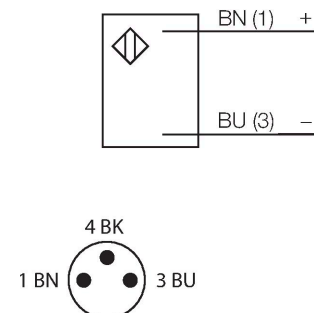
Technical data

Type	Q126EQ3
ID	3074192
Optical data	
Function	Opposed mode sensor
Operating mode	Emitter
Light type	Red
Wavelength	640 nm
Range	0...2000 mm
Electrical data	
Operating voltage	10...30 VDC
Residual ripple	< 10 % U _{ss}
Short-circuit protection	yes
Reverse polarity protection	yes
Readiness delay	≤ 120 ms
Response time typical	< 1.3 ms
Mechanical data	
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	3
Core cross-section	0.34 mm ²
Ambient temperature	-20...+55 °C
Protection class	IP67

Features

- Cable, PVC, 150 mm, with M8 × 1 male end, 3-pin
- Protection class IP67
- LED all-round visible
- Operating voltage: 10...30 VDC

Wiring diagram



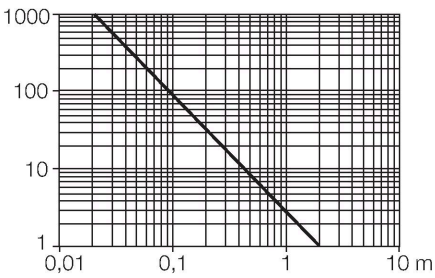
Functional principle

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

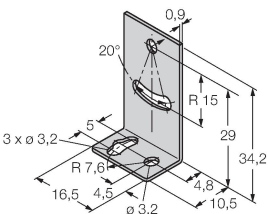
Technical data

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



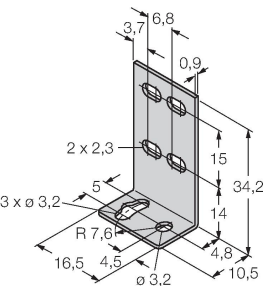
Accessories

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	
	PKG3M-2/TEL	6625058	Connection cable, female M8, straight, 3-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com



PKW3M-2/TEL 6625064

Connection cable, female M8, angled, 3-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com

