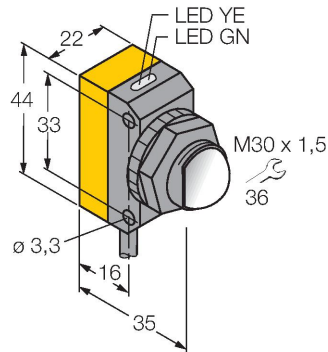


QS30EX

Photoelectric Sensor – Opposed Mode Sensor (Emitter)



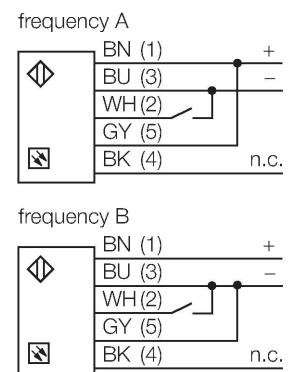
Technical data

Type	QS30EX
ID	3071559
Optical data	
Function	Opposed mode sensor
Operating mode	Emitter
Light type	IR
Wavelength	875 nm
Range	0...213000 mm
Electrical data	
Operating voltage	10...30 VDC
Residual ripple	< 10 % U _{ss}
No-load current	≤ 70 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Readiness delay	≤ 100 ms
Response time typical	< 30 ms
Mechanical data	
Design	Rectangular with thread, QS30
Dimensions	Ø 30 x 35 x 22 x 49 mm
Housing material	Plastic, Thermoplastic material, Yellow
Lens	plastic, Zeonex
Electrical connection	Cable, 2 m, PVC
Number of cores	4
Core cross-section	0.5 mm ²
Ambient temperature	-20...+60 °C
Protection class	IP67
Special features	Encapsulated

Features

- Cable, PVC, 2 m
- Protection class IP67
- LED all-round visible
- Selectable operating frequency, protection against crosstalk
- Emitter LED, switchable
- Operating voltage: 10...30 VDC

Wiring diagram



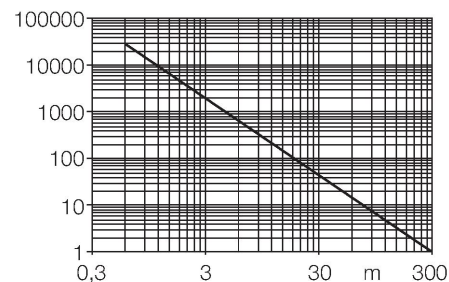
Functional principle

Opposed mode sensors consist of an emitter and receiver. They are installed opposite to 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. Large distance operation is possible due to an excellent light/dark contrast and an extremely high excess gain. Excess gain curve

Excess gain in relation to the distance

Technical data

Power-on indication	LED, Green
Excess gain indication	LED
Tests/approvals	
MTTF	402 years acc. to SN 29500 (Ed. 99) 40 °C
Approvals	CE



Accessories

