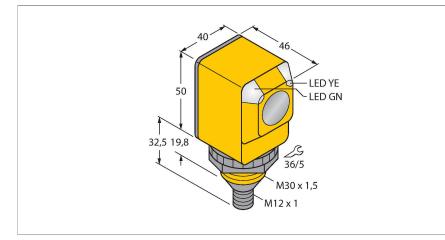


# Q40RW3RQ3 Photoelectric Sensor – Opposed Mode Sensor (Receiver)



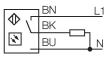
#### Technical data

Туре	Q40RW3RQ3
ID no.	3036987
Optical data	
Function	Opposed mode sensor
Operating mode	Receiver
Light type	IR
Wavelength	950 nm
Range	060000 mm
Electrical data	
Operating voltage	20250 VAC
AC rated operational current	≤ 200 mA
Output function	Dark operation, Relay output
Switching frequency	≤ 40 Hz
Readiness delay	≤ 100 ms
Response time typical	< 16 ms
Mechanical data	
Design	Rectangular, Q40
Dimensions	Ø 30 x 50 x 46 x 40 mm
Housing material	Plastic, Thermoplastic material
Lens	Lexan, Polycarbonate
Electrical connection	Connectors, M12 × 1, PVC
Number of cores	5
Ambient temperature	-40+70 °C
Protection class	IP69
Special features	Encapsulated Wash down
Power-on indication	LED, Green

## Features

M12 × 1 Micro male connector (AC), 4-pin
Protection classes IP67/IP69K
Ambient temperature: -40 °C...+70 °C

#### 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 extremly 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

Switching state	LED, Yellow
Excess gain indication	LED
Tests/approvals	
Approvals	CE, UL, CSA

## Accessories

29

