



SMALL SENSORS FOR TIGHT SPACES



ULTRA-SMALL PHOTOELECTRIC SENSORS

R2 SERIES



Technical data

TECHNICAL DATA

Effective detection range	Retroreflective sensor Thru-beam sensor	1000 mm 2 m / 200 mm
Detection range	Background suppression sensor Background evaluation sensor	15 mm, 20 mm, 30 mm, 40 mm, 50 mm, 80 mm 15 mm, 30 mm, 50 mm
Light source	Visible red light, 630 nm	
Angle of divergence	± 2°	
Operating voltage	10 VDC ... 30 VDC	
No-load current	< 10 mA	
Switching type	Normally open / normally closed	
Switching output	NPN, PNP	
Switching frequency	800 Hz	
Response time	600 µs	
Operating temperature	-13 °F ... 140 °F (-25 °C ... 60 °C)	
Protection degree	IP67	
Connection	PUR 2 m fixed cable or pigtail, 4-pin, M8 with 200 mm cable	
Dimensions (mm)	24 mm x 7.5 mm x 11.2 mm	
Approvals	 	

TYPES

■ OBE2000-R2 – Thru-beam sensor

With advanced Teach-in capabilities, a selectable emitter LED, and best-in-class sensing performance, R2 Series thru-beam sensors are an all-in-one solution for a wide array of applications.

■ OBR1000-R2 – Polarized retroreflective sensor

R2 Series retroreflective sensors offer long-distance sensing and exceptional reliability, regardless of object color, texture, or shape and without the added expense of a thru-beam sensor.

■ OBTxx-R2 – Background suppression sensor

R2 Series background suppression sensors detect object presence with precise control, superior color independence and high repeatability while ignoring objects in the background.

■ OBTxx-R2-xx-1T – Background evaluation sensor

Utilizing a fixed background (e.g., conveyor, machine part) as a reference, R2 Series background evaluation sensors are a unique alternative to retroreflective sensors, reliably detecting objects regardless of color, texture, or shape and without the need for a reflector.

Sensing Ranges by Type



Background Evaluation — 15 mm, 30 mm, 50 mm

Background Suppression — 15 mm, 20 mm, 30 mm, 40 mm, 50 mm, 80 mm

Polarized Retroreflective — 1000 mm

Thru-beam — 200 mm (high precision) 2000 mm (high power)

ACCESSORIES

Mounting Brackets



MH-R2-01



MH-R2-02



MH-R2-03



MH-R2-04

Reflectors



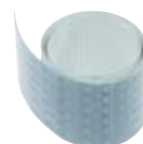
REF-H40



REF-H23



REF-MA21



RT1 X 2

Cordsets



V31-GM-BK2M-PUR-U



V31-WM-BK2M-PUR-U

YOUR APPLICATION. OUR CHALLENGE.

PROCESS INTERFACES

- Intrinsic Safety Barriers
- Signal Conditioners
- FieldConnex Fieldbus Infrastructure
- Remote I/O Systems
- HART Interface Solutions
- Level Measurement
- Purge+Pressurization Systems
- Industrial Monitors+HMI Solutions
- Explosion Protection Equipment
- Solutions for Process Interfaces
- Wireless Solutions

INDUSTRIAL SENSORS

- Proximity Sensors
- Photoelectric Sensors
- Industrial Vision
- Ultrasonic Sensors
- Rotary Encoders
- Positioning Systems
- Inclination and Acceleration Sensors
- AS-Interface
- Identification Systems
- Logic Control Units
- Cordsets



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