

# Contrinex Photoelectric Sensor

# molex

**Robust, self-contained photoelectric sensors with an integrated IO-link, feature compact housings, large sensing range and patented UV technology making it ideal for limited-space applications and challenging environments**

## Features and Advantages

### Excellent color and contrast recognition

Provides improved object detection

### IP67 rated, Ecolab approved enclosure

Enables use in outdoor applications

### Sensors available in cubic and cylindrical housing working on diffuse, reflex and through-beam operating principles

Offers design flexibility

### Smart communication system

- Contains integrated IO-link
- Continuously monitors process data
- Continuously diagnoses sensor status
- Offers advanced parameter settings and sensitivity adjustment
- Makes check of sensor ID easy to ensure sensor position

### ASIC technology

- Offers first-class sensing ranges, trimmed in production
- Regulates emitting current
- Provides mutual interference immunity
- Allows adjustment processing via potentiometer or teach button
- Stabilizes alarm processing
- Contains integrated IO-link



Photoelectric Sensors



Cubic Photoelectric sensor



Cylindrical Photoelectric sensor



Subminiature Photoelectric sensor

### Diffuse sensor with background suppression

- Has a 300mm sensing range on white and gray; 250mm on black background
- Uses a dual output with stability alarm
- Provides mutual interference immunity
- Features pinpoint LED

### UV light technology for transparent object detection

- Extends sensing range up to 1200mm on special reflectors
- Enables safe detection of thinnest transparent materials
- With its auto-collimated, polarized UV light beam eliminates the blind zone, allowing detection of targets close to sensor
- Makes adjustments by teach button or IO-link easy
- Provides mutual interference immunity

### Smallest opto sensor with fully integrated electronics

Detects objects in narrow spaces, using the D4 and M5 versions

## Markets and Applications

### Industrial Automation

- Packaging machines
- Food and beverage
- Filling plant
- Textile
- Machine tools
- Logistics



Food and Beverage



Textile



Machine Tools



Logistics

## Specifications

### REFERENCE INFORMATION

Mounting: Embeddable  
Designed In: Millimeters  
RoHS: Yes  
REACH: Yes  
Type of Light: UV  
Sensitivity adjustment: Potentiometer

### ELECTRICAL

Voltage (max.): 36V DC  
Current (max.): 200mA  
Output: Light-ON/Dark-ON  
Polarity: PNP/NPN  
Response time: 0.80 to 4.80 milliseconds

### MECHANICAL

Sensing distance (mm): 1 to 50,000  
Switching Frequency: 5 kHz  
Sensing speed: 1 to 5 kHz

### PHYSICAL

Housing size (mm): C12, C23, 4155, M4, M5, M12, M18, M18 Plastic  
Connection:  
Cable — (PVC 2m), (PVC 2m, 3 Wire), (PVC 2m, 4 Wire)  
Connector — M12, (M8, 3-Pin), (M12, 4-Pin), (M12, 5-Pin)  
Pigtail — (PVC 0.2m, M8, 3-Pin)  
Operating Temperature: -25 to +55°C

## Ordering Information

Series No.	Product Description	Sensing Distance (mm)
120254	Photoelectric Sensor	1.00 to 50,000