


## MultiPac MultiTask photoelectric sensors

MultiPac – for extreme detection

MultiPac - for extreme detection

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**Product description**

The MultiPac photoelectric proximity sensor is designed for challenging applications which require detection of very shiny and irregular targets. Some examples are PET Bottles, food & beverage packets, glass or metal surfaces. These surfaces redirect the emitted light away from the sensor causing signal interruption. Using two independent receivers coupled with the newest chip technology, the MultiPac delivers reliable detec-

tion of these targets. Additionally, film wrapped pallets and other targets in the logistics branch can be detected using a higher angle of incidence. This removes the typical mounting restrictions associated with detecting these products. Thanks to its twin detection technology and flexible mounting, the MultiPac eliminates machine downtime due to loss of detection.

**At a glance**

- Two redundant receiver arrays from SICK
- The newest SICK chip technology
- Intense, visible red HighPower LED
- Sensing distance up to 500 mm
- Fast and precise commissioning thanks to the highly visible light spot

**Your benefits**

- Redundant receiver arrays provide reliable detection of shiny, gloss, dark, or irregular shaped objects without signal interruptions
- Products can be detected using a higher angle of incidence. This removes the typical mounting restrictions associated with detecting these products.
- In applications involving plastic wrapped bottles, the MultiPac replaces current solutions which require expensive mechanical height adjustment
- Allows overhead detection of product that is transported on a single conveyor belt but separated into multiple lanes

→ [www.mysick.com/en/MultiPac](http://www.mysick.com/en/MultiPac)

For more information, just enter the link or scan the QR code and get direct access to technical data, CAD design models, operating instructions, software, application examples and much more.



## Detailed technical data

### Features

<b>Sensor principle</b>	Photoelectric proximity sensor
<b>Detection principle</b>	Background suppression
<b>Dimensions (W x H x D)</b>	24.6 mm x 80.6 mm x 54.8 mm
<b>Housing design (light emission)</b>	Rectangular
<b>Sensing range max. <sup>1)</sup></b>	30 mm ... 500 mm
<b>Sensing range</b>	100 mm ... 500 mm
<b>Type of light</b>	Visible red light
<b>Light source <sup>2)</sup></b>	HighPower LED
<b>Light spot (distance)</b>	Ø 12 mm (500 mm)
<b>Wave length</b>	625 nm

<sup>1)</sup> Object with 90 % reflectance (referred to standard white DIN 5033)

<sup>2)</sup> Average service life 100,000 h at Ta = +25 °C.

### Mechanics/electronics

<b>Supply voltage <sup>1)</sup></b>	10 V DC ... 30 V DC
<b>Residual ripple <sup>2)</sup></b>	≤ 5 V <sub>pp</sub>
<b>Power consumption <sup>3)</sup></b>	≤ 55 mA
<b>Switching output</b>	NPN, Light/dark-switching, Complementary PNP, Light/dark-switching, Complementary (depending on type)
<b>Signal voltage PNP HIGH / LOW</b>	Approx. V <sub>S</sub> - 2.5 V / 0 V
<b>Signal voltage NPN HIGH / LOW</b>	Approx. VS / < 2.5 V
<b>Output current I<sub>max.</sub></b>	≤ 100 mA
<b>Response time <sup>4)</sup></b>	≤ 5 ms
<b>Switching frequency <sup>5)</sup></b>	100 Hz
<b>Connection type</b>	Connector
<b>Circuit protection</b>	A <sup>6)</sup> B <sup>7)</sup> C <sup>8)</sup>
<b>Protection class <sup>9)</sup></b>	II
<b>Weight</b>	150 g
<b>Housing material</b>	ABS Plastic
<b>Optics material</b>	PMMA
<b>Enclosure rating</b>	IP 66 / IP 67
<b>Ambient operating temperature</b>	-30 °C ... +60 °C
<b>Ambient storage temperature</b>	-40 °C ... +75 °C
<b>UL File-No.</b>	UL No. NRKH.E181493 & cUL No. NRKH7.E181493

<sup>1)</sup> Limit values, operation in short-circuit protected network max. 8 A.

<sup>2)</sup> May not exceed or fall short of V<sub>S</sub>.

<sup>3)</sup> Without load.

<sup>4)</sup> Signal transit time with resistive load.

<sup>5)</sup> With light/dark ratio 1:1.

<sup>6)</sup> A = V<sub>S</sub> connections reverse-polarity protected.

<sup>7)</sup> B = inputs and output reverse-polarity protected.

<sup>8)</sup> C = interference suppression.

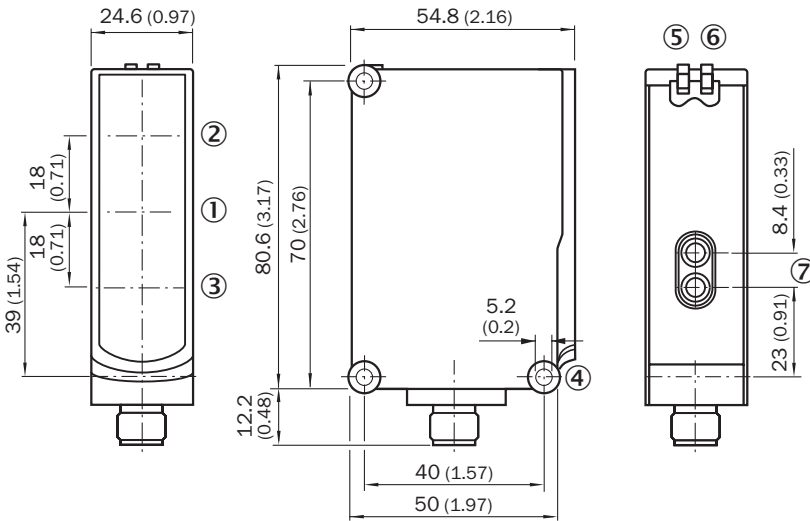
<sup>9)</sup> Reference voltage 50 V DC.

### Ordering information

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** Background suppression
- **Sensing range max.:** 30 mm ... 500 mm (Object with 90 % reflectance (referred to standard white DIN 5033))
- **Switching mode:** Light/dark-switching
- **Connection:** Connector M12, 4-pin

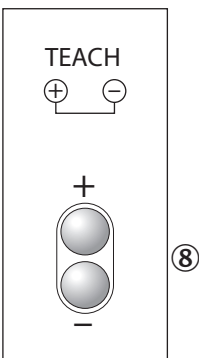
Switching output	Connection diagram	Type	Part no.
NPN	Cd-083	WTB27-3N2483	1056385
PNP	Cd-083	WTB27-3P2483	1056384

### Dimensional drawings



- ① Optical axis, sender
- ② Optical axis, receiver 1
- ③ Optical axis, receiver 2
- ④ Mounting hole  $\varnothing$  5.2 mm
- ⑤ Status indicator LED green: power on
- ⑥ Status indicator LED, yellow: Status of received light beam
- ⑦ Sensing distance adjustment, double Teach button

### Adjustments



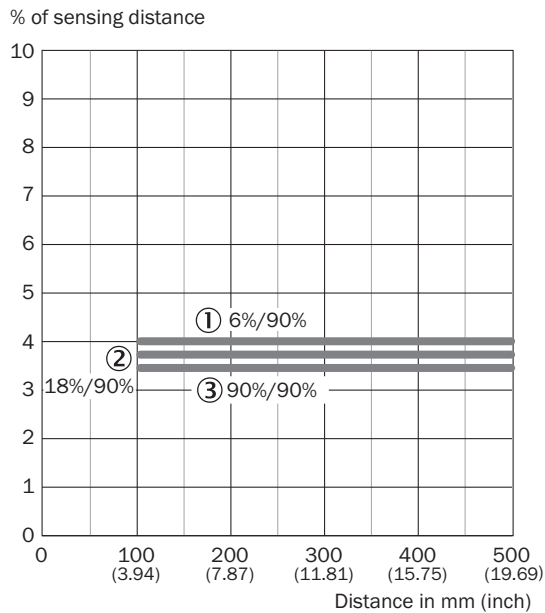
⑧ Sensing distance adjustment, double Teach button

### Connection diagram

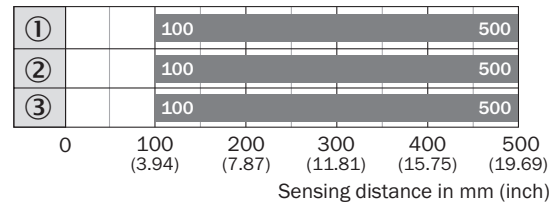
#### Cd-083



## Characteristic curve photoelectric proximity sensors




## Bar diagram photoelectric proximity sensors



- ① Sensing distance on black, 6 % remission
- ② Sensing distance on grey, 18 % remission
- ③ Sensing distance on white, 90 % remission

## Recommended accessories

### Mounting brackets/plates

Figure	Accessory type	Material	Model name	Part no.
	Mounting brackets	Steel, zinc coated	BEF-WN-W27	2009122



### Terminal and alignment brackets

Figure	Accessory type	Material	Model name	Part no.
	Universal terminal systems	Steel, zinc coated	BEF-KHS-A01	2022458

### Plug connectors and cables

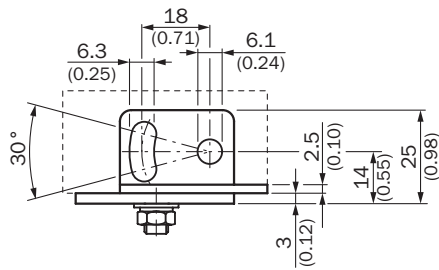
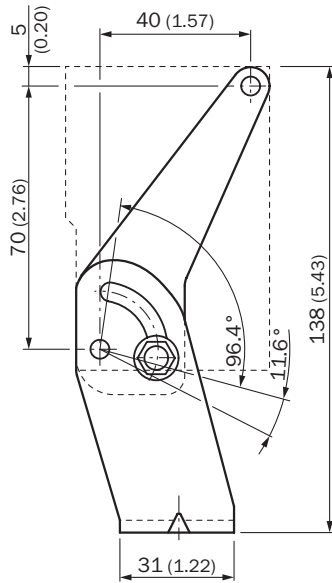
#### Connector M12, 4-pin

- Connector type: Female connector
- Enclosure rating: IP 67
- Sheath material: PVC

Figure	Flying leads	Cable length	Model name	Part no.
	Straight	2 m	DOL-1204-G02M	6009382
		5 m	DOL-1204-G05M	6009866
		10 m	DOL-1204-G10M	6010543
	Angled	2 m	DOL-1204-W02M	6009383
		5 m	DOL-1204-W05M	6009867
		10 m	DOL-1204-W10M	6010541

Mounting brackets/plates

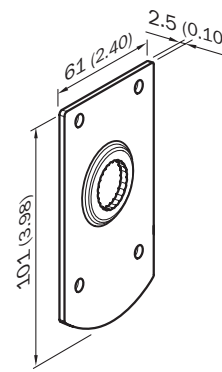
**BEF-WN-W27**



All dimensions in mm (inch)

Terminal and alignment brackets

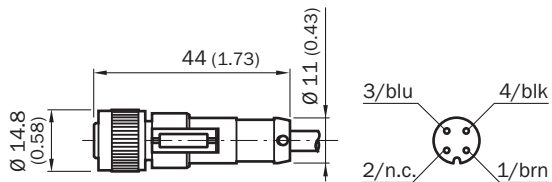
**BEF-KHS-A01**



All dimensions in mm (inch)

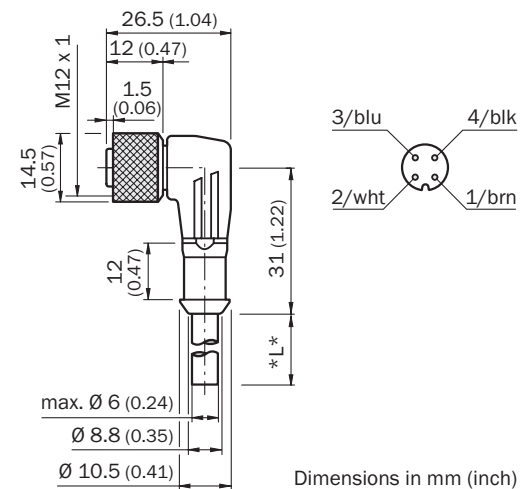
Plug connectors and cables

**DOL-1204-G02M**  
**DOL-1204-G05M**  
**DOL-1204-G10M**



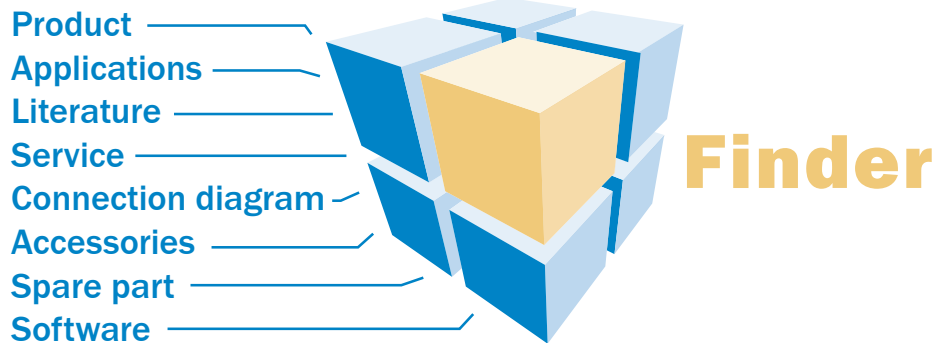
Dimensions in mm (inch)

**DOL-1204-W02M**  
**DOL-1204-W05M**  
**DOL-1204-W10M**



Dimensions in mm (inch)

## Search online quickly and safely with the SICK „Finders“



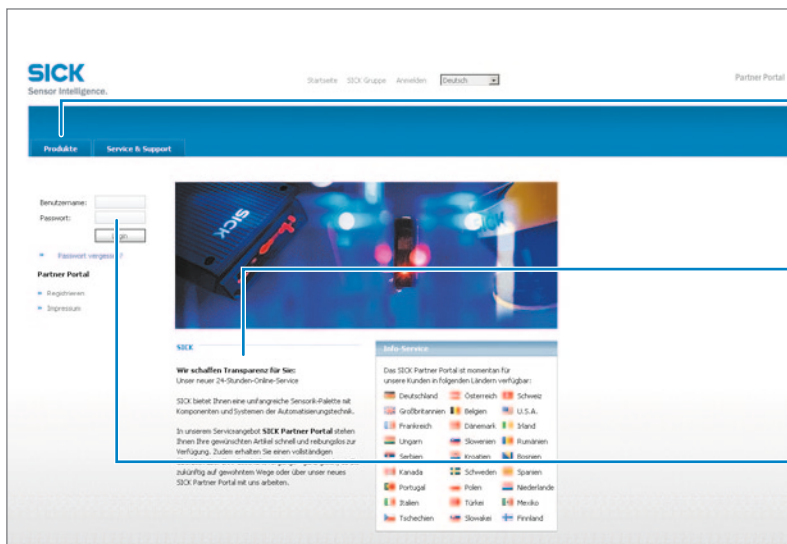
**Product Finder:** We can help you to quickly target the product that best matches your application.

**Applications Finder:** Select the application description on the basis of the challenge posed, industrial sector, or product group.

**Literature Finder:** Go directly to the operating instructions, technical information, and other literature on all aspects of SICK products.

These and other Finders at [www.mysick.com](http://www.mysick.com)

## Efficiency – with SICK e-commerce tools



**Clearly structured:** You can find everything you need for your sensor planning under the menu items Products, Information, and My Account.

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### Find out prices and availability

Determine the price and possible delivery date of your desired product simply and quickly at any time.

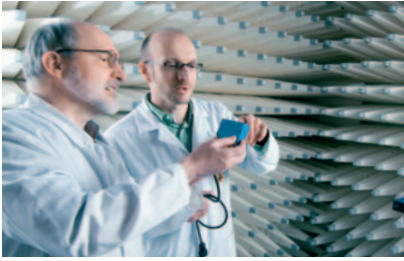
### Order online

You can go through the ordering process in just a few steps.

### Request or view a quote

You can have a quote generated online here. Every quote is confirmed to you via e-mail.

## SICK at a glance



### Leading technologies

With a staff of more than 5,000 and over 50 subsidiaries and representations worldwide, SICK is one of the leading and most successful manufacturers of sensor technology. The power of innovation and solution competency have made SICK the global market leader. No matter what the project and industry may be, talking with an expert from SICK will provide you with an ideal basis for your plans – there is no need to settle for anything less than the best.



### Unique product range

- Non-contact detecting, counting, classifying, positioning and measuring of any type of object or media
- Accident and operator protection with sensors, safety software and services
- Automatic identification with bar code and RFID readers
- Laser measurement technology for detecting the volume, position and contour of people and objects
- Complete system solutions for analysis and flow measurement of gases and liquids



### Comprehensive services

- SICK LifeTime Services – for safety and productivity
- Application centers in Europe, Asia and North America for the development of system solutions under real-world conditions
- E-Business Partner Portal [www.mysick.com](http://www.mysick.com) – price and availability of products, requests for quotation and online orders

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Canada  
China  
Danmark  
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España  
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India  
Israel  
Italia  
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Nederland  
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