



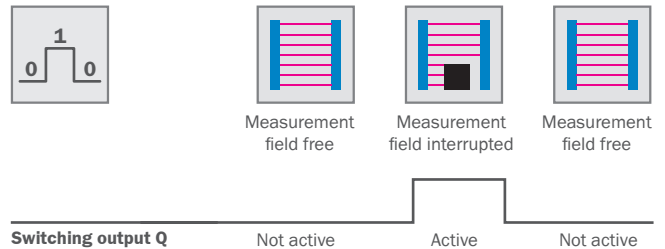
Standard Automation Light Grids

Easily detect, inspect or count with standard automation light grids

Standard automation light grids – the switching solution suitable for your application



Standard automation light grids operate using the switching principle. They detect an object at any point in the measurement field and transfer the information “measurement field free” or “measurement field interrupted” to the switching output, Q. Unlike a measuring light grid, it can signal the presence of an object but not indicate its position or size.



An overview of your advantages



WLG

- Reliably detects small, irregular shaped objects
- Also available as a measuring variant



HLG

- Fastest detection, also for flat objects like letters
- Easy installation thanks to mounting groove on the housing



ELG

- High immunity to ambient light
- Working range up to 12 m allow reliable use at longer distances



PLG

- Integrated 360° job LED for error-free picking
- Easy mounting and alignment thanks to the use of a reflector

WLG – reject control



Typical applications for the **WLG12** reflection light grid include counting small parts, including metallic items. Retro-reflective light grids are mainly used in packaging, pressing and stamping technology.



Recommended product	WLG (see page 8)
Limiting range	1.5 m
Resolution (beam separation)	12.5 mm
Detection height	87.5 mm
Response time	0.6 ms (parallel beam)



HLG – edge control



In mail sorting systems, different shaped objects run on conveyor belts at high speed. To determine their exact length, the leading edge of the object must be reliably detected. Thanks to its high resolution and fast response time across the entire width of the conveyor belt, the **HLG** is the ideal solution for this application.



Recommended product	HLG (see page 14)
Limiting range	2 m
Resolution (beam separation)	2 mm
Detection height	50 mm
Response time	3 ms (parallel beam)

ELG Short Range – separation control



At airports, suitcases must be arranged on conveyor belts before arriving in the passenger area so that they do not collide. The **ELG Short Range** can reliably detect the edges of objects and the leading edge of different suitcases.



Recommended product	ELG Short Range (see page 20)
Limiting range	4 m ^{*)}
Resolution (beam separation)	10 mm / 30 mm
Detection height	90 mm ... 930 mm
Response time	14 ms ^{*)}

^{*)} Type-dependent.

ELG Long Range – monitoring industrial doors

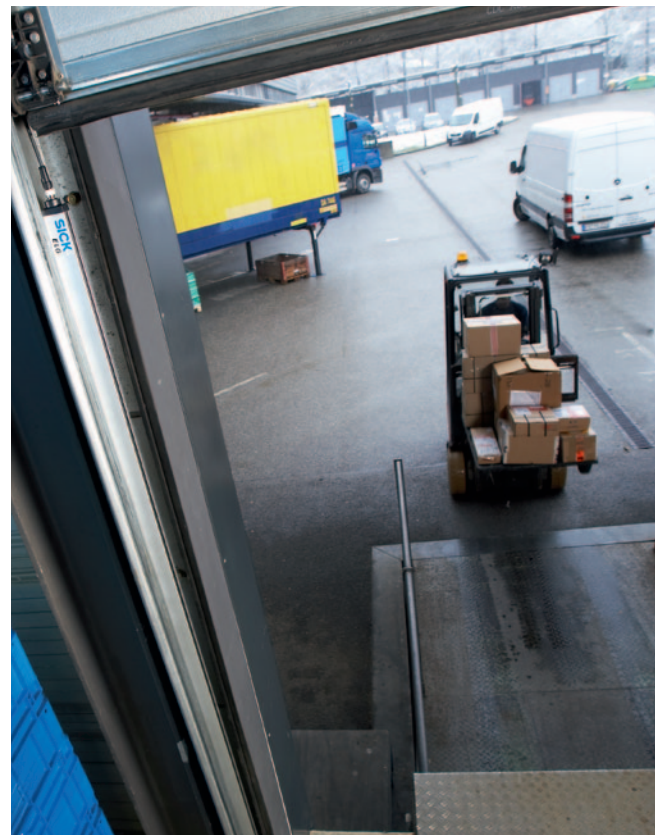


The **ELG Long Range** offers high immunity to ambient light and a wide working range for monitoring industrial doors. The ELG Long Range is also the ideal solution for large detection heights.

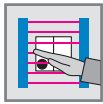


Recommended product	ELG Long Range (see page 28)
Limiting range	17 m
Resolution (beam separation)	30 mm / 60 mm
Detection height	150 mm ... 3,330 mm
Response time	28 ms ^{*)}

^{*)} Type-dependent.



PLG – pick-to-light for error-free commissioning



Task

When commissioning a production order (e.g., final assembly or engine production in the automotive industry) or a sales order in warehouses or distribution centers, various sub-quantities may have to be put together to complete the order or process. The objective is to ensure error-free picking and to reliably guide the machine operator.

Process

The PLG3 and PLG6 sensors are located in each storage bay and have an integrated job LED for displaying the picking position, confirming correct access or indicating an incorrect pick. A strip of reflective tape on the back side of every PLG3 and PLG6 sensor also serves as the reflector for the next PLG in the neighboring storage bay. The row also requires another strip of reflective tape.

Solutions



Thanks to an integrated polarizing filter, the **PLG3** is highly immune to glare. It has a 30 mm beam separation and is available with various detection heights. The integrated green job LED reduces order-picker search time.



With a beam separation of 60 mm, the **PLG6** is particularly suitable for short detection heights. At the front of the housing, it has an integrated red job LED that is visible to the worker at a 360° angle and can draw the worker's attention to the correct "picking" position or to faulty engagement.

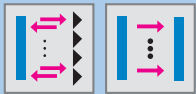





Selection guide

Light grid type	Page			Limiting range in m	Beam separation in mm	Detection height in mm	Job LED
PLG3	38						Green, visible from 360°
PLG6	44						Red, visible from 360°
SPL	1)						Green, across entire light grid length at sender and receiver, visible from 180°

1) For more information, see www.mysick.com/en/SPL or product information „Smart Light Grids“ (8014658).







Product family overview

			
	WLG	HLG	ELG Short Range
	Versatile, compact, reflex light grid	High-resolution and high-speed detection of the smallest objects	Reliable detection and counting

Technical data overview				
Beam separation	12.5 mm	2 mm	10 mm 30 mm	
Minimum detectable object (MDO)	Parallel beam: ≥ 6 mm ... 12 mm	Parallel beam: ≥ 2 mm	Parallel beam: ≥ 15 mm ... 65 mm Cross beam: ≥ 10 mm ... 35 mm	
Working range	1.5 m	1.5 m	2 m 3 m 5 m	
Detection height	87.5 mm	50 mm	90 mm ... 1,050 mm	
Response time	Parallel beam: 0.6 ms	Parallel beam: 3 ms	Parallel beam: 14 ms ... 100 ms	
Switching output	8 x PNP (Q and alarm) 1 x PNP (/Q) 2 x PNP (Q and /Q)	2 x PNP (Q and /Q) 2 x NPN (Q and /Q)	2 x PNP (Q and /Q) 2 x NPN (Q and /Q)	
Connection type	Connector M12, 5-pin Cable 12-pin	Connector M12, 8-pin	Connector M12, 4-pin Cable 5 m	

At a glance				
	<ul style="list-style-type: none"> The direct output of individual beams for measuring and switching Response time 0.6 ms Eight visible transmission LEDs Eight PNP switching outputs and one alarm output Sensitivity can be set via a potentiometer Polarizing filter to prevent reflexions for reflective surfaces 	<ul style="list-style-type: none"> 2 mm beam separation Response time 3 ms Detection height 50 mm Cable synchronization PNP or NPN with both Q and Qnot outputs (NO/NC) 1 x test, 1 x teach-in input Connector M12, 8-pin 	<ul style="list-style-type: none"> Up to 16 beams with 10 mm and 112 with 30 mm beam separation Range up to 5 m Potentiometer for sensitivity setting Ambient light up to 150,000 lux Tough, aluminum housing PNP/NPN output and a test input Optical synchronization 	

Further information				
Applications				
Detailed information	→ 8	→ 14	→ 20	

 <p>ELG Long Range</p>	 <p>PLG3</p>	 <p>PLG6</p>
<p>The tough automation light grid</p>	<p>Simply clever order picking verification</p>	<p>Increase pick rates in compact installations</p>
<p>30 mm 60 mm</p>	<p>30 mm</p>	<p>60 mm</p>
<p>Parallel beam: ≥ 35 mm ... 65 mm Cross beam: ≥ 20 mm ... 35 mm</p>	<p>Parallel beam: ≥ 35 mm</p>	<p>Parallel beam: ≥ 70 mm</p>
<p>9 m 12 m</p>	<p>1.5 m</p>	<p>0.35 m</p>
<p>150 mm ... 3,330 mm Parallel beam: 28 ms ... 390 ms</p>	<p>120 mm ... 420 mm Parallel beam: > 80 ms</p>	<p>60 mm Parallel beam: 5 ms</p>
<p>2 x PNP (Q and /Q) 2 x NPN (Q and /Q) Relay (DC 60 V, AC 25 V)</p>	<p>PNP (Q)</p>	<p>PNP (Q)</p>
<p>Connector M12, 4-pin Connector M12, 5-pin Cable 5 m Cable 15 m</p>	<p>Short cable (0.28 m) with connector M12, 4-pin</p>	<p>Short cable (0.28 m) with connector M12, 4-pin</p>
<ul style="list-style-type: none"> • Up to 128 beams • Different beam separations 30 mm and 60 mm • High functional reserve (gain) for ranges up to 12 m • Potentiometer for sensitivity setting • Ambient light up to 150,000 lux • Tough, aluminum housing • PNP/NPN/relay output and a test input • Optical synchronization 	<ul style="list-style-type: none"> • 360° visible job LED • Range up to 2 m • Flexible detection heights from 120 mm to 420 mm • Immune to reflected and ambient light • Switchable job LED: permanently lit or flashing • Optically confirms the right bin was picked • Bus connection possible 	<ul style="list-style-type: none"> • 360° visible job LED • Detection height 60 mm • Optically confirms the right bin was picked • Bus connection possible • The smallest pick-to-light light grid
 <p>→ 28</p>	 <p>→ 38</p>	 <p>→ 44</p>

Versatile, compact, reflex light grid



Product description

The WLG is a retro-reflective light grid with a 100 mm detection height and 8 LEDs. Detecting damaged pallets, checking the edges of material webs and detecting and sorting bottles are ideal

applications for the WLG. It is possible to detect objects which are only 6 mm in size at a distance of 0.4 m. Transparent objects and reflective surfaces can also be detected reliably.

At a glance

- The direct output of individual beams for measuring and switching
- Response time 0.6 ms
- Eight visible transmission LEDs
- Eight PNP switching outputs and one alarm output
- Sensitivity can be set via a potentiometer
- Polarizing filter for reflective surfaces

Your benefits

- The WLG's fast response time keeps up with increased conveyor speeds, increasing throughput
- Detects translucent and semi-transparent objects for consistent detection of most objects
- Retro-reflective sensor saves space, installation time and cost
- Polarized retro-reflective light grids are designed to detect difficult reflective targets, such as stretch wrap and other thin films
- Visible red light reduces assembly time
- Multiple output versions indicate detection position and size of the object for closed loop process feedback and inspection



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→ www.mysick.com/en/WLG

Detailed technical data

Features

Technology	Retro-reflective light grid
Task	Switching light grid
Minimum detectable object (MDO)	Parallel beam: ≥ 6 mm ... 12 mm
Number of beams	8
Resolution (adjustable) ¹⁾	6 mm to 12.5 mm

¹⁾ Dependence of the range.

Performance

Maximum range	1.5 m
Minimum range	≥ 100 mm
Response time ¹⁾	Parallel beam: 0.6 ms

¹⁾ With resistive load.

Interfaces

Connection type	Connector M12, 5-pin Cable 12-pin
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Mechanics/electronics

Wave length	650 nm
Supply voltage V_s ¹⁾	DC 15 V ... 30 V
Power consumption	< 80 mA
Ripple	< 5 V _{PP}
Output current I_{max}	100 mA
Output load capacitive	100 nF
Output load inductive	1 H
Initialization time	0.6 s
Dimensions (W x H x D)	62 mm x 106 mm x 46.6 mm
Housing material	Plastic housing
Indication	LED
Enclosure rating	IP 67
Circuit protection	V_s connections reverse-polarity protected Output Q short-circuit protected Interference suppression
Weight	230 g
Front screen	PMMA
Output mode ²⁾	Q dark switching
Teach input	PNP

¹⁾ Typical values.

²⁾ Q = active in case one beam is interrupted; /Q = active in case all beams are free.

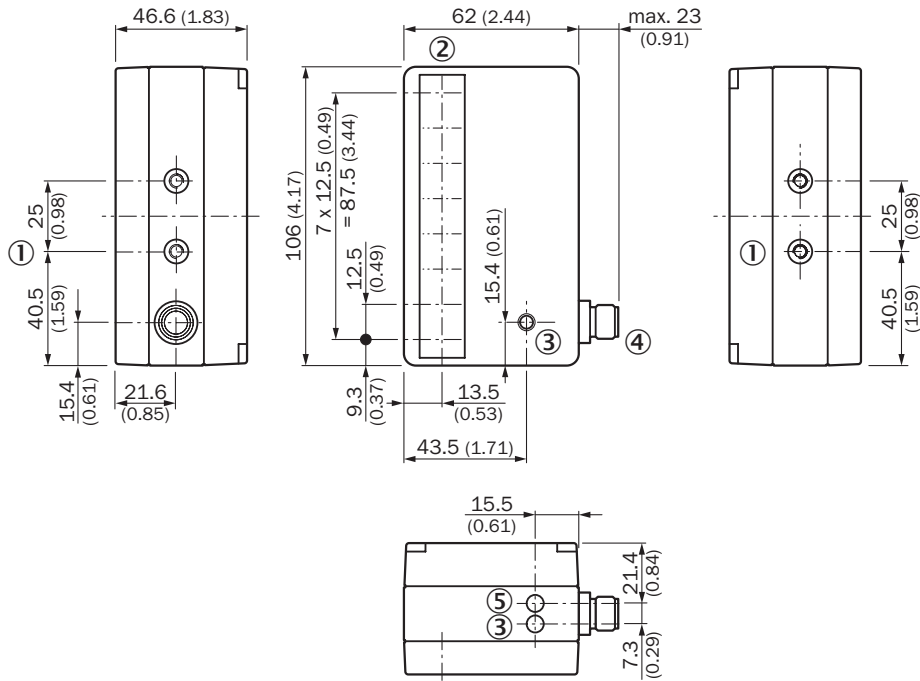
Ambient data

Protection class	II
EMC	EN 60947-5-2
Ambient temperature	Operation: -25 °C ... $+55$ °C Storage: -20 °C ... $+70$ °C
Vibration resistance	5 g, 10 Hz ... 55 Hz (IEC 68-2-6)
Shock load	10 g / DIN EN 60068-2-29 / 16 ms

Ordering information

Beam separation	Working range	Detection height	Switching output	Model name	Part no.
12.5 mm	1.5 m	87.5 mm	8 x PNP (Q and alarm)	WLG12-G137	1016046
			1 x PNP (/Q)	WLG12-V537	1016045
			2 x PNP (Q and /Q)	WLG12-P537	1015798

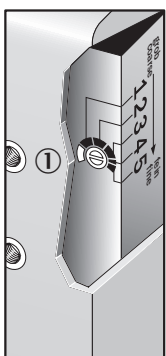
Dimensional drawing



All dimensions in mm (inch)

- ① M5 threaded mounting hole, 6 mm deep
- ② Optic
- ③ Multi-function indicators at front and top: reception indicator, contamination indicator, teach-in error
- ④ Connector M12, 5-pin or cable 2 m
- ⑤ Operating indicator

Adjustments



Choice of sensitivity range, dimensions in mm/m (inch)

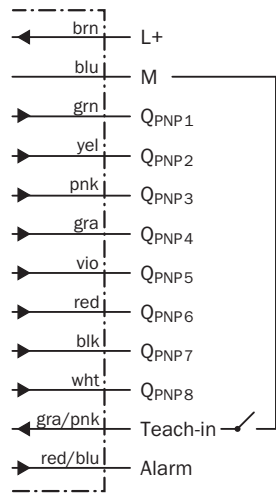
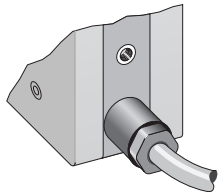
Potentiometer setting	Resolution	Working range	Reflector
1	> 12.5 mm (0.49)	1.5 m (59.06)	2 x PL80A/PL40A
2	> 10 mm (0.39)	1.2 m (47.24)	2 x PL80A/PL40A
3	> 9 mm (0.35)	1.0 m (39.37)	PL180E01
4	> 7 mm (0.28)	0.8 m (31.50)	PL180E01
5	> 6 mm (0.24)	0.4 m (15.75)	PL180E01

- ① Potentiometer for sensitivity adjustment

Connection type and diagram

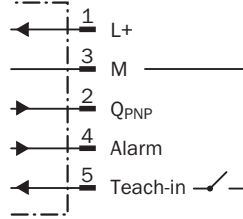
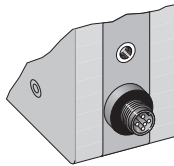
WLG12-G137

Cable
12-pin



WLG12-V537 / WLG12-P537


Connector
M12, 5-pin



Recommended accessories

Complete accessories for the WLG include: 1 female connector, 1 bracket and 1 reflector.
Please take note of the number of pins on the connector when choosing connection cables.



Mounting brackets/plates

	Brief description	Model name	Part no.
	Mounting bracket for WLG12, steel, zinc coated, including mounting material	BEF-WN-WLG12	2017567

Reflectors

	Brief description	Model name	Part no.
	Reflector, 18 mm x 150 mm, plastic, self-adhesive	PL150	5315548
	Reflector, 40 mm x 180 mm, plastic, 2-hole mounting	PL180E01	1013289
	Reflector, 40 mm x 60 mm, plastic, 2-hole mounting	PL40A	1012720
	Reflector, 80 mm x 80 mm, plastic, 2-hole mounting	PL80A	1003865

Plug connectors and cables

	Brief description	Model name	Part no.
 Illustration may differ	Female connector, M12, 5-pin, straight, 2 m, PVC	DOL-1205-G02M	6008899
	Female connector, M12, 5-pin, straight, 5 m, PVC	DOL-1205-G05M	6009868
	Female connector, M12, 5-pin, straight, 10 m, PVC	DOL-1205-G10M	6010544
 Illustration may differ	Female connector, M12, 5-pin, angled, 2 m, PVC	DOL-1205-W02M	6008900
	Female connector, M12, 5-pin, angled, 5 m, PVC	DOL-1205-W05M	6009869
	Female connector, M12, 5-pin, angled, 10 m, PVC	DOL-1205-W10M	6010542

For additional accessories including dimensional drawings, please see page 50.

High-resolution and high-speed detection of the smallest objects



Product description

The high-resolution HLG light grid from SICK is the ideal solution for all applications in which very flat or small objects need to be detected. The HLG is particularly useful when the packages do not have a uniform leading or trailing edge, such as pillow and wedge-shaped

objects (bags and single serving size food packages). Its 2 mm resolution, fast 3 ms response time, and low switching hysteresis are ideal for fast mail handling systems, packaging machines with high throughput, and part ejection verification on molding and stamping machines.

At a glance

- 2 mm resolution
- Response time 3 ms
- Detection height 50 mm
- Cable synchronization
- PNP or NPN with both Q and Qnot outputs (NO/NC)
- 1 x test, 1 x teach-in input
- Connector M12, 8-pin

Your benefits

- Reliable object detection throughout the entire working range ensures consistent and reliable operation
- High availability thanks to its ability to detect very flat objects
- The HLG's short response time allows the use of higher conveyor speeds directly leading to higher throughput
- Cable synchronization provides more reliable use and higher machine uptime
- Highest measurement resolution provides smallest minimum detectable object size, for exact counting and true leading edge detection of conveyed objects, for more machine control and increased throughput



Additional information

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→ www.mysick.com/en/HLG

Detailed technical data

Features

Technology	Sender/receiver
Task	Switching light grid
Minimum detectable object (MDO)	Parallel beam: ≥ 2 mm
Number of beams	26

Performance

Maximum range	2 m
Minimum range	≥ 0 mm
Response time ¹⁾	Parallel beam: 3 ms

¹⁾ With resistive load.

Interfaces

Connection type	Connector M12, 8-pin
-----------------	----------------------

Mechanics/electronics

Wave length	950 nm
Supply voltage V_s ¹⁾	DC 15 V ... 30 V
Power consumption sender ¹⁾	< 100 mA
Power consumption receiver ¹⁾	< 100 mA
Ripple	< 5 V_{pp}
Output current $I_{max.}$	100 mA
Output load capacitive	100 nF
Output load inductive	1 H
Initialization time	0.8 s
Dimensions (W x H x D)	34 mm x 123 mm x 29 mm
Housing material	Aluminum
Indication	LED
Synchronization	Cable
Enclosure rating	IP 54
Circuit protection	V_s connections reverse-polarity protected Output Q short-circuit protected Interference suppression
Weight	135 g
Front screen	PMMA
Output mode ²⁾	Q dark switching
Teach input	PNP

¹⁾ Typical values.

²⁾ Q = active in case one beam is interrupted; /Q = active in case all beams are free.

Ambient data

Protection class	III
EMC	EN 60947-5-2
Ambient temperature	Operation: -25 °C ... +55 °C Storage: -40 °C ... +70 °C
Ambient light safety ¹⁾	Indirect: ≤ 50,000 lux
Vibration resistance	5 g, 10 Hz ... 55 Hz (IEC 68-2-6)
Shock load	10 g / DIN EN 60068-2-29 / 16 ms

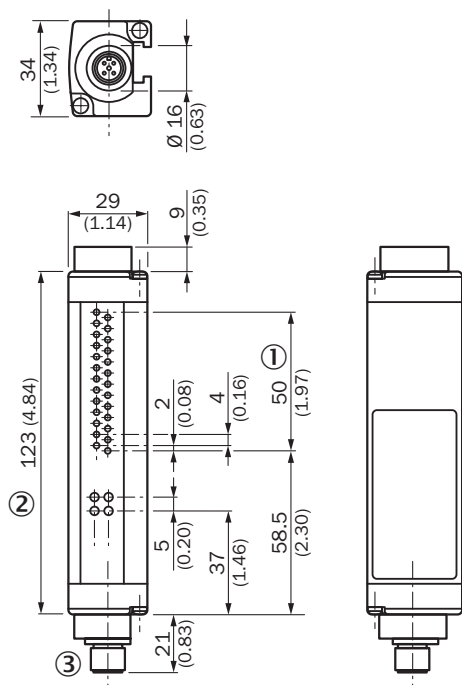
¹⁾ Sunlight.

Ordering information

Please note: Sender and receiver are only offered as a pair.

Beam separation	Working range	Detection height	Switching output	Model name	Part no.
2 mm	1.5 m	50 mm	2 x PNP (Q and /Q)	HLG2-050F811	1029853
			2 x NPN (Q and /Q)	HLG2-050E811	1041849

Dimensional drawing

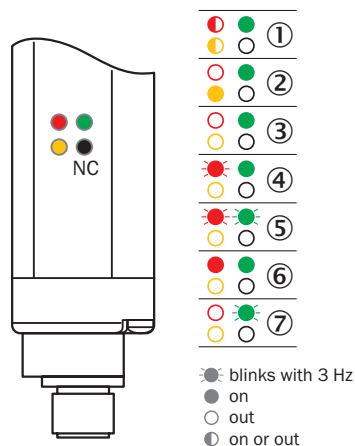


All dimensions in mm (inch)

- ① Detection height: 50 mm
- ② Status indicator/power on
- ③ Connector M12, 8-pin

Adjustments

Receiver, LED indication

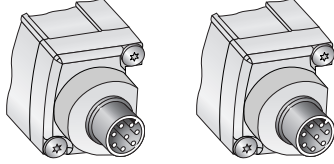


- ① Supply voltage
- ② No object in the light path
- ③ Light path interrupted
- ④ Synchronization error
- ⑤ Less received signal during teach-in
- ⑥ Device error
- ⑦ Activated teach-in procedure

Connection type and diagram

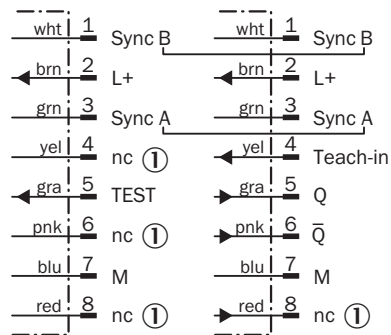
**Sender
Connector
M12, 8-pin**

**Receiver
Connector
M12, 8-pin**



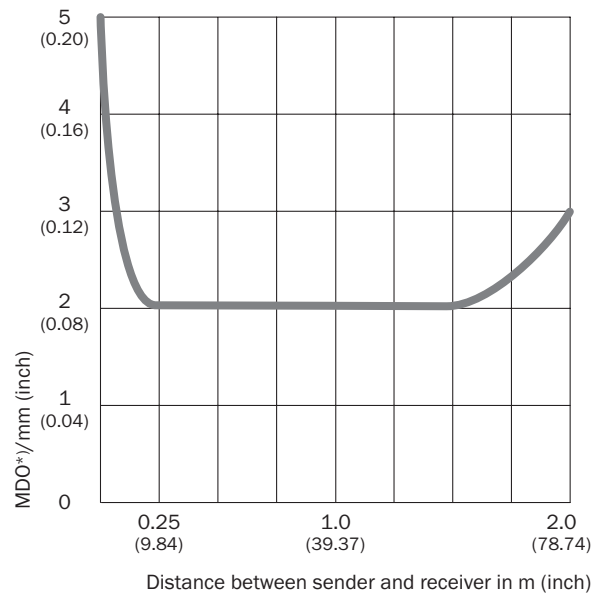
Sender

Receiver



① Not connected

Characteristic curve: MDO




*) MDO: Minimum detectable object size measured in a direction parallel to the HLG

Recommended accessories



Complete accessories for the HLG include: 1 female connector, 1 bracket, 1 t-junction and 1 connection cable.

Please take note of the number of pins on the connector when choosing connection cables.





Adapters/distributors (without cable)

	Brief description	Model name	Part no.
	T-junction, 1 x connector M12, 8-pin, and 2 x socket M12, 8-pin	SB0-02F12-SM	6029306

Mounting brackets/plates

	Brief description	Model name	Part no.
	Mounting kit 1, adjustable, swivel mount, for all detection heights in small housings, plastic, without mounting material, 4 pcs	BEF-2SMKEAKU4	2019649
	Mounting bracket, steel, zinc coated, without mounting material, 4 pcs	BEF-WK-XLG	2029100

Plug connectors and cables

	Brief description	Model name	Part no.
 Illustration may differ	Female connector, M12, 8-pin, straight, 2 m, PVC, shielded	DOL-1208-G02MA	6020633
	Female connector, M12, 8-pin, straight, 5 m, PVC, shielded	DOL-1208-G05MA	6020993
	Female connector, M12, 8-pin, straight, 10 m, PVC, shielded	DOL-1208-G10MA	6022152
 Illustration may differ	Female connector, M12, 8-pin, angled, 5 m, PVC, shielded	DOL-1208-W05MA	6021033
	Female connector, M12, 8-pin, straight, shielded	DOS-1208-GA	6028369
	Connection cable, M12, 8-pin, connector straight/socket straight, 1 m, PUR halogen free, shielded	DSL-1208-G01MAC	6026625
	Connection cable, M12, 8-pin, connector straight/socket straight, 2 m, PUR halogen free, shielded	DSL-1208-G02MAC	6030121
	Connection cable, M12, 8-pin, connector straight/socket straight, 5 m, PUR halogen free, shielded	DSL-1208-G05MAC	6032325

For additional accessories including dimensional drawings, please see page 50.

Reliable detection and counting



Product description

SICK offers the ELG Short Range (up to 3 m), an extremely tough switching automation light grid, with 10 and 30 mm beam separations and up to a 3,300 mm detection height. It is used in logistics for detecting the front edges of

objects and counting boxes. The cross beam function enables the detection of smaller parts. The ELG Short Range was developed for simple switching applications.

At a glance

- Up to 16 beams with 10 mm and 112 with 30 mm beam separation
- Range up to 5 m
- Potentiometer for sensitivity setting
- Ambient light up to 150,000 lux
- Tough, aluminum housing
- PNP/NPN output and a test input
- Optical synchronization

Your benefits

- Efficient and effective way to combine multiple sensors in one housing with one connector
- Simple commissioning thanks to a larger optical aperture angle and manual fine adjustment option
- Optical synchronization enables quick installation and cost-effective connection
- The ELG Short Range reliably detects objects, even under challenging ambient conditions



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→ www.mysick.com/en/ELG_Short_Range

Detailed technical data

Features

Technology	Sender/receiver
Task	Switching light grid
Minimum detectable object (MDO)	Parallel beam: ≥ 15 mm ... 65 mm Cross beam: ≥ 10 mm ... 35 mm
Number of beams	4 ... 36

Performance

Maximum range	7 m
Minimum range	≥ 0 mm
Response time ¹⁾	Parallel beam: 14 ms ... 100 ms Cross beam: depending on type

¹⁾ With resistive load.

Interfaces

Connection type	Connector M12, 4-pin Cable 5 m
Test input	PNP

Mechanics/electronics

Wave length	880 nm
Supply voltage V_s ¹⁾	DC 15 V ... 30 V
Power consumption sender ¹⁾	< 100 mA
Power consumption receiver ¹⁾	< 100 mA
Ripple	< 5 V_{pp}
Output current I_{max}	100 mA
Output load capacitive	100 nF
Output load inductive	1 H
Initialization time	1 s
Dimensions (W x H x D)	34 mm x 187 mm x 29 mm ... 34 mm x 1,126 mm x 29 mm
Housing material	Aluminum
Indication	LED
Enclosure rating	IP 65
Circuit protection	V_s connections reverse-polarity protected Output Q short-circuit protected Interference suppression
Weight	700 g ... 2,900 g
Pulse rate	500 kHz 250 kHz
Front screen	PMMA
Output mode ²⁾	Q dark switching

¹⁾ Typical values.

²⁾ Q = active in case one beam is interrupted; /Q = active in case all beams are free.

Ambient data

Protection class	III
EMC	EN 60947-5-2
Ambient temperature	Operation: -25 °C ... +55 °C Storage: -40 °C ... +70 °C
Ambient light safety ¹⁾	Indirect: ≤ 150,000 lux
Vibration resistance	5 g, 10 Hz ... 55 Hz (IEC 68-2-6)
Shock load	10 g / DIN EN 60068-2-29 / 16 ms

¹⁾ Sunlight.

Specific data

Beam separation	Model name	Ordering information
10 mm	ELG1	22
30 mm	ELG3	22

Ordering information

The type code on page 23 helps describe the coding of the ELG types. Further variants only upon request.

Please note: Sender and receiver are only offered as a pair.

ELG1

- Beam separation: 10 mm

Working range	Evaluation beams	Detection height	Switching output	Model name	Part no.
3 m	Multiple scan	100 mm	2 x PNP (Q and /Q)	ELG1-0100P533	1026808
		150 mm	2 x PNP (Q and /Q)	ELG1-0150P533	1026809
			2 x NPN (Q and /Q)	ELG1-0150N533	1029596
	Parallel beam	100 mm	2 x PNP (Q and /Q)	ELG1-0100P531	1026807
			2 x NPN (Q and /Q)	ELG1-0100N531	1053096
		150 mm	2 x PNP (Q and /Q)	ELG1-0150P531	1026741
5 m	Parallel beam	150 mm	2 x PNP (Q and /Q)	ELG1-0150P571	1028333

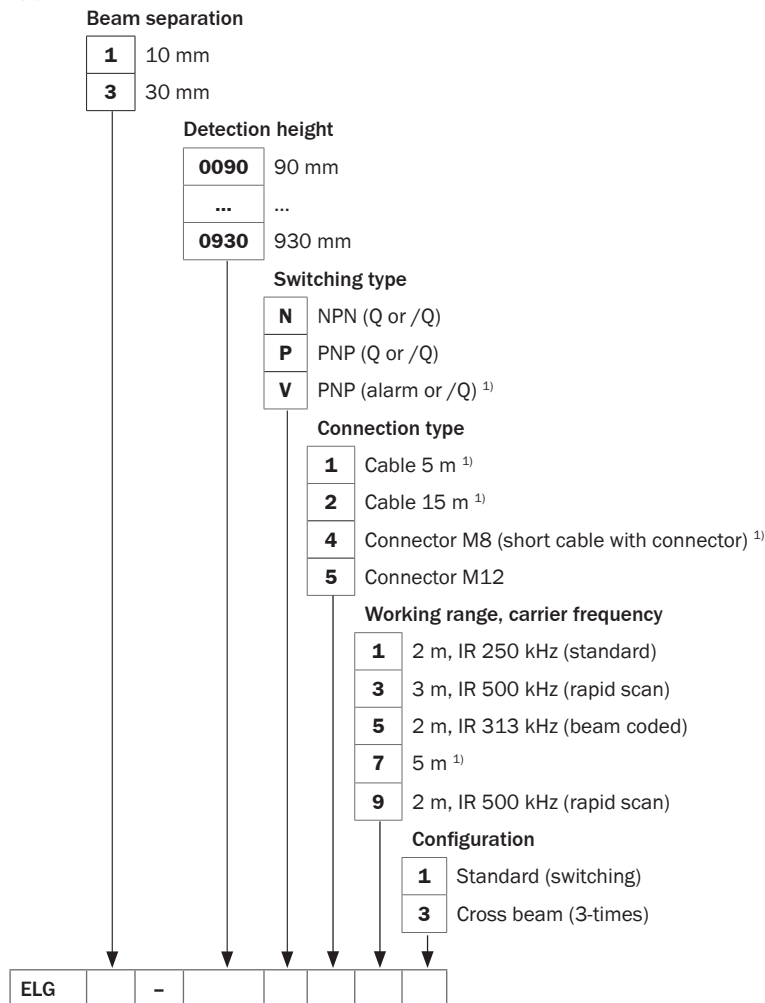
ELG3

- Beam separation: 30 mm

Working range	Evaluation beams	Detection height	Switching output	Model name	Part no.
2 m	Parallel beam	90 mm	2 x PNP (Q and /Q)	ELG3-0090P511	1024290
			2 x NPN (Q and /Q)	ELG3-0090N511	1041095
		210 mm	2 x PNP (Q and /Q)	ELG3-0210P511	1025510
		330 mm	2 x PNP (Q and /Q)	ELG3-0330P511	1025575
			2 x NPN (Q and /Q)	ELG3-0330N511	1042302
			2 x PNP (Q and /Q)	ELG3-0330P591	1042613
		390 mm	2 x PNP (Q and /Q)	ELG3-0390P591	1042615
		450 mm	2 x PNP (Q and /Q)	ELG3-0450P511	1025490
			2 x NPN (Q and /Q)	ELG3-0450P591	1029489
		570 mm	2 x PNP (Q and /Q)	ELG3-0570P511	1025501
		690 mm	2 x PNP (Q and /Q)	ELG3-0690P511	1025499
			2 x NPN (Q and /Q)	ELG3-0690N511	1041956

Working range	Evaluation beams	Detection height	Switching output	Model name	Part no.
2 m	Parallel beam	930 mm	2 x PNP (Q and /Q)	ELG3-0930P511	1025492
		1,050 mm	2 x PNP (Q and /Q)	ELG3-1050P511	1025452
	Multiple scan	90 mm	2 x PNP (Q and /Q)	ELG3-0090P513	1025443
		150 mm	2 x PNP (Q and /Q)	ELG3-0150P513	1025578
		210 mm	2 x PNP (Q and /Q)	ELG3-0210P513	1025438
			2 x NPN (Q and /Q)	ELG3-0210N513	1052378
		330 mm	2 x PNP (Q and /Q)	ELG3-0330P113	1040134
				ELG3-0330P513	1025576

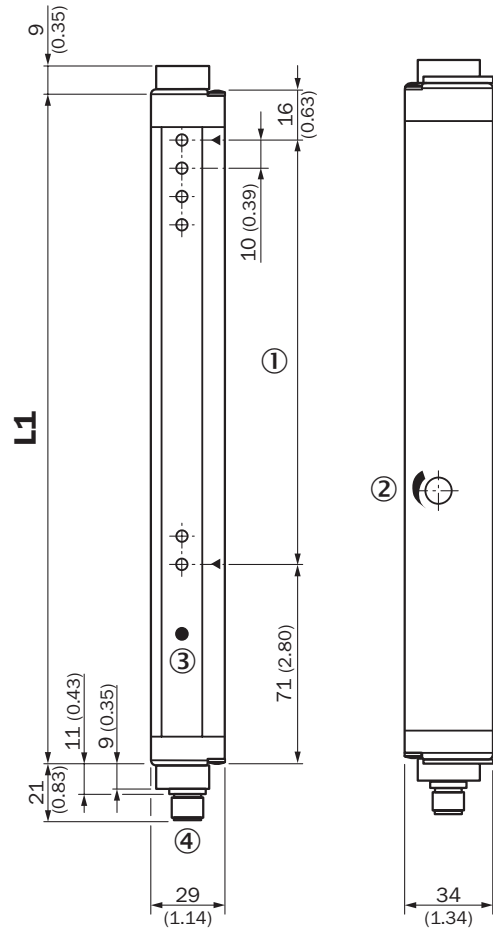
Type code



¹⁾ On demand.

Dimensional drawings

ELG1



Dimensions in mm (inch)

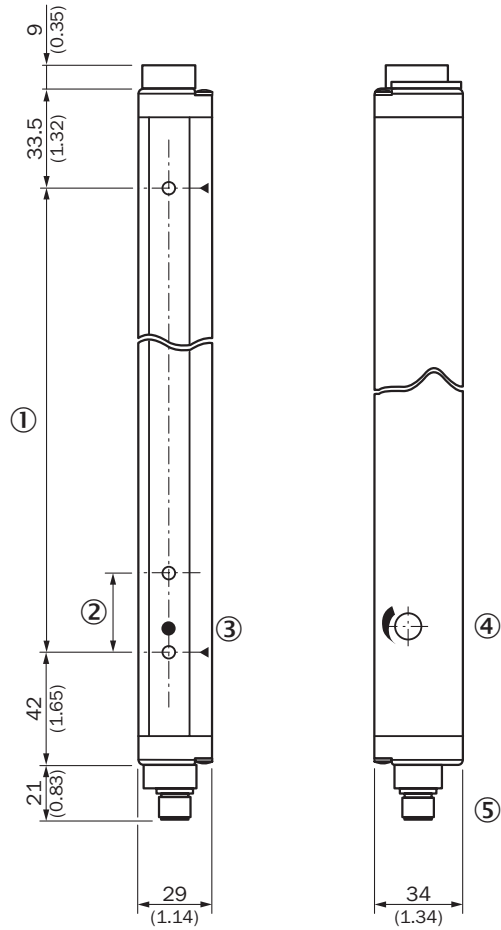
L1

① 100 mm	187 (7.36)
① 150 mm	237 (9.33)

All dimensions in mm (inch)

- ① Detection height
- ② Sensitivity adjustment
- ③ Status indicator (ELGE)/power on (ELGS)
- ④ Connector M12, 4-pin

ELG3

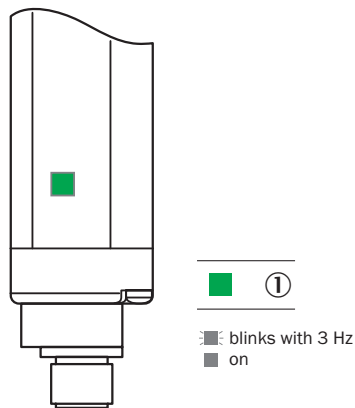


All dimensions in mm (inch)

- ① Detection height
- ② Beam separation ELG3: 30 mm
- ③ Status indicator (ELGE)/power on (ELGS)
- ④ Sensitivity adjustment
- ⑤ Connector M12, 4-pin

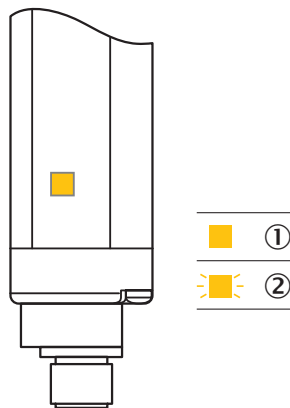
Adjustments

LED display sender



- ① Supply voltage

LED display receiver

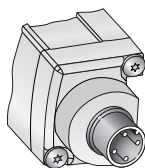
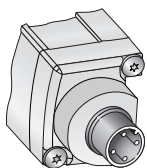


- ① No object in the light path
- ② Pollution indication

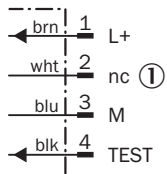
Connection type and diagram

**Sender
Connector
M12, 4-pin**

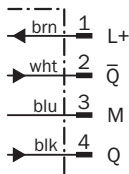
**Receiver
Connector
M12, 4-pin**



Sender



Receiver



① Not connected

Recommended accessories

Complete accessories for the ELG Short Range include: 2 female connector cables and 1 bracket.

Please take note of the number of pins on the connector when choosing connection cables.

Mounting brackets/plates

	Brief description	Model name	Part no.
	Mounting kit 1, adjustable, swivel mount, for all detection heights in small housings, plastic, without mounting material, 4 pcs	BEF-2SMKEAKU4	2019649
	Mounting kit, side bracket including four sliding nuts for MLG/ELG/HLG, 4 pcs	BEF-NUT-MLG	2023696
	Mounting bracket, steel, zinc coated, without mounting material, 4 pcs	BEF-WK-XLG	2029100

Plug connectors and cables

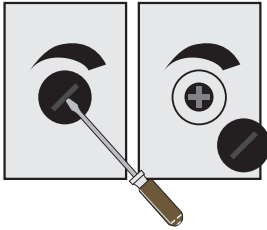
	Brief description	Model name	Part no.
 Illustration may differ	Female connector, M12, 4-pin, straight, 2 m, PVC	DOL-1204-G02M	6009382
	Female connector, M12, 4-pin, straight, 5 m, PVC	DOL-1204-G05M	6009866
	Female connector, M12, 4-pin, straight, 10 m, PVC	DOL-1204-G10M	6010543
 Illustration may differ	Female connector, M12, 4-pin, angled, 2 m, PVC	DOL-1204-W02M	6009383
	Female connector, M12, 4-pin, angled, 5 m, PVC	DOL-1204-W05M	6009867
	Female connector, M12, 4-pin, angled, 10 m, PVC	DOL-1204-W10M	6010541

For additional accessories including dimensional drawings, please see page 50.

Special functions

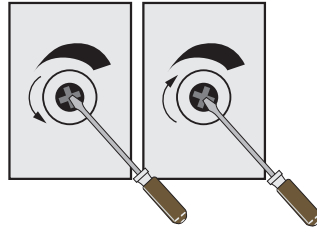
Sensitivity adjustment

1. Remove cap



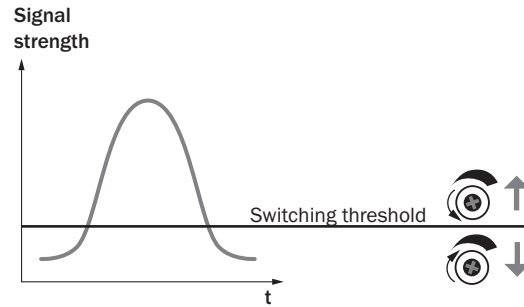
Remove cap with screw driver.

2. Potentiometer adjustment

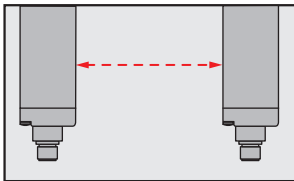


Turn left = for a lower range.
Turn right = for a higher range.

Sensitivity adjustment



Optical synchronisation



The light grid communicates via the light beams. A cable is not necessary for the optical synchronisation.

The tough automation light grid



Product description

The ELG Long Range (up to 12 m) automation light grid is extremely tough and offers different detection heights and beam separations. The ELG is immune to glare caused by light. It is used in logistics for checking for overhang on

pallets and counting boxes. The ELG is used mainly for the protection of industrial roller shutter gates and outdoors to separate vehicles. The ELG is available with up to 128 beams and with a minimum beam resolution of 30 mm.

At a glance

- Up to 128 beams
- Different beam separations 30 mm and 60 mm
- High functional reserve (gain) for ranges up to 12 m
- Potentiometer for sensitivity setting
- Ambient light up to 150,000 lux
- Tough, aluminum housing
- PNP/NPN/relay output and a test input
- Optical synchronization

Your benefits

- Insensitive to ambient light when exposed to direct sunlight, strobe lights, and highly reflective objects, eliminating false trips
- High functional reserve (excess gain) ensures operation even if it gets dirty, dusty, or misaligned, reducing maintenance costs
- Efficient and effective way to combine multiple sensors in one housing with one connector
- Simple commissioning thanks to a larger optical aperture angle and manual fine adjustment option
- Optical synchronization enables quick installation and cost-effective connection
- The sensitivity adjustment can be used to detect or ignore translucent materials to reduce production problems



Additional information

Detailed technical data 29

Ordering information 30

Dimensional drawings 33

Adjustments 34

Connection type and diagram 34

Recommended accessories 35

Special functions 36

Accessories 50

Dimensional drawings accessories . 56

→ www.mysick.com/en/ELG_Long_Range

Detailed technical data

Features

Technology	Sender/receiver
Task	Switching light grid
Minimum detectable object (MDO)	Parallel beam: ≥ 15 mm ... 65 mm Cross beam: ≥ 10 mm ... 35 mm
Number of beams	6 ... 80

Performance

Maximum range	13 m ... 17 m
Minimum range	≥ 0 mm ... ≥ 900 mm
Response time ¹⁾	Parallel beam: 28 ms ... 390 ms Cross beam: depending on type

¹⁾ With resistive load.

Interfaces

Connection type	Connector M12, 4-pin Connector M12, 5-pin Cable 5 m Cable 15 m
Test input	PNP

Mechanics/electronics

Wave length	880 nm
Supply voltage V_s ¹⁾	DC 15 V ... 30 V
Power consumption sender ¹⁾	< 100 mA
Power consumption receiver ¹⁾	< 100 mA
Ripple	< 5 V_{pp}
Output current I_{max}	100 mA
Output load capacitive	100 5F
Output load inductive	1 H
Initialization time	1 s
Dimensions (W x H x D)	34 mm x 226 mm x 29 mm ... 34 mm x 3,196 mm x 29 mm
Housing material	Aluminum
Indication	LED
Enclosure rating	IP 65
Circuit protection	V_s connections reverse-polarity protected Output Q short-circuit protected Interference suppression
Weight	800 g ... 7,700 g
Pulse rate	250 kHz 500 kHz 313 kHz
Front screen	PMMA
Output mode ²⁾	Q dark switching ²⁾ , light switching ³⁾

¹⁾ Typical values.

²⁾ ELG3/6: Q = active in case one beam is interrupted; /Q = active in case all beams are free.

³⁾ ELG3/6-Relay: NC = closed in case one beam is interrupted, NO = closed in case all beams are free.

Ambient data

Protection class	III
EMC	EN 60947-5-2
Ambient temperature	Operation: -25 °C ... +55 °C Storage: -40 °C ... +70 °C
Ambient light safety ¹⁾	Indirect: ≤ 150,000 lux
Vibration resistance	5 g, 10 Hz ... 55 Hz (IEC 68-2-6)
Shock load	10 g / DIN EN 60068-2-29 / 16 ms

¹⁾ Sunlight.

Specific data

Beam separation	Model name	Ordering information
30 mm	ELG3	30
	ELG3-Relay	31
60 mm	ELG6	31
	ELG6-Relay	32

Ordering information

The type code on page 32 helps describe the coding of the ELG types. Further variants only upon request.

Please note: Sender and receiver are only offered as a pair.

ELG3

- Beam separation: 30 mm

Working range	Evaluation beams	Detection height	Switching output	Model name	Part no.
9 m	Parallel beam	210 mm	2 x NPN (Q and /Q)	ELG3-0210N541	1047484
		210 mm	2 x PNP (Q and /Q)	ELG3-0210P561	1046812
12 m	Parallel beam	450 mm	2 x PNP (Q and /Q)	ELG3-0450P561	1027894
		150 mm	2 x PNP (Q and /Q)	ELG3-0150P521	1026475
			2 x NPN (Q and /Q)	ELG3-0150N521	1047932
		210 mm	2 x PNP (Q and /Q)	ELG3-0210P521	1025574
			2 x NPN (Q and /Q)	ELG3-0210N521	1025613
		450 mm	2 x PNP (Q and /Q)	ELG3-0450P521	1025440
			2 x NPN (Q and /Q)	ELG3-0450N521	1025614
		570 mm	2 x PNP (Q and /Q)	ELG3-0570P521	1025885
		690 mm	2 x PNP (Q and /Q)	ELG3-0690P521	1025568
			2 x NPN (Q and /Q)	ELG3-0690N521	1025615
		810 mm	2 x PNP (Q and /Q)	ELG3-0810P521	1025577
		930 mm	2 x PNP (Q and /Q)	ELG3-0930P521	1025511
			2 x NPN (Q and /Q)	ELG3-0930N521	1025616
		1,050 mm	2 x PNP (Q and /Q)	ELG3-1050P521	1025570
		1,170 mm	2 x PNP (Q and /Q)	ELG3-1170P521	1025579
			2 x NPN (Q and /Q)	ELG3-1170N521	1025617
1,410 mm	2 x PNP (Q and /Q)	ELG3-1410P521	1025502		
	2 x NPN (Q and /Q)	ELG3-1410N521	1025618		
1,650 mm	2 x PNP (Q and /Q)	ELG3-1650P521	1025503		
	2 x NPN (Q and /Q)	ELG3-1650N521	1025620		

Working range	Evaluation beams	Detection height	Switching output	Model name	Part no.
12 m	Parallel beam	1,890 mm	2 x PNP (Q and /Q)	ELG3-1890P521	1025504
			2 x NPN (Q and /Q)	ELG3-1890N521	1025621
		2,070 mm	2 x PNP (Q and /Q)	ELG3-2070P521	1025505
		2,370 mm	2 x PNP (Q and /Q)	ELG3-2370P521	1025573
	Multiple scan	810 mm	2 x PNP (Q and /Q)	ELG3-0810P523	1026177
			2 x PNP (Q and /Q)	ELG3-1170P523	1040580
			2 x PNP (Q and /Q)	ELG3-1410P523	1026179
			2 x PNP (Q and /Q)	ELG3-1890P523	1026826
			2 x PNP (Q and /Q)	ELG3-2070P523	1025572
			2 x PNP (Q and /Q)	ELG3-2370P523	1026178

ELG3-Relay

- Beam separation: 30 mm

Working range	Evaluation beams	Detection height	Switching output	Model name	Part no.
12 m	Parallel beam	450 mm	Relay (DC 60 V, AC 25 V)	ELG3-0450R221	1024268
			Relay (DC 60 V, AC 25 V)	ELG3-0930R121	1025785
		930 mm	Relay (DC 60 V, AC 25 V)	ELG3-0930R221	1026176
			Relay (DC 60 V, AC 25 V)	ELG3-0930R521	1025449
	1,890 mm	Relay (DC 60 V, AC 25 V)	ELG3-1890R121	1026180	
	Multiple scan	930 mm	Relay (DC 60 V, AC 25 V)	ELG3-0930R523	1026537

ELG6

- Beam separation: 60 mm

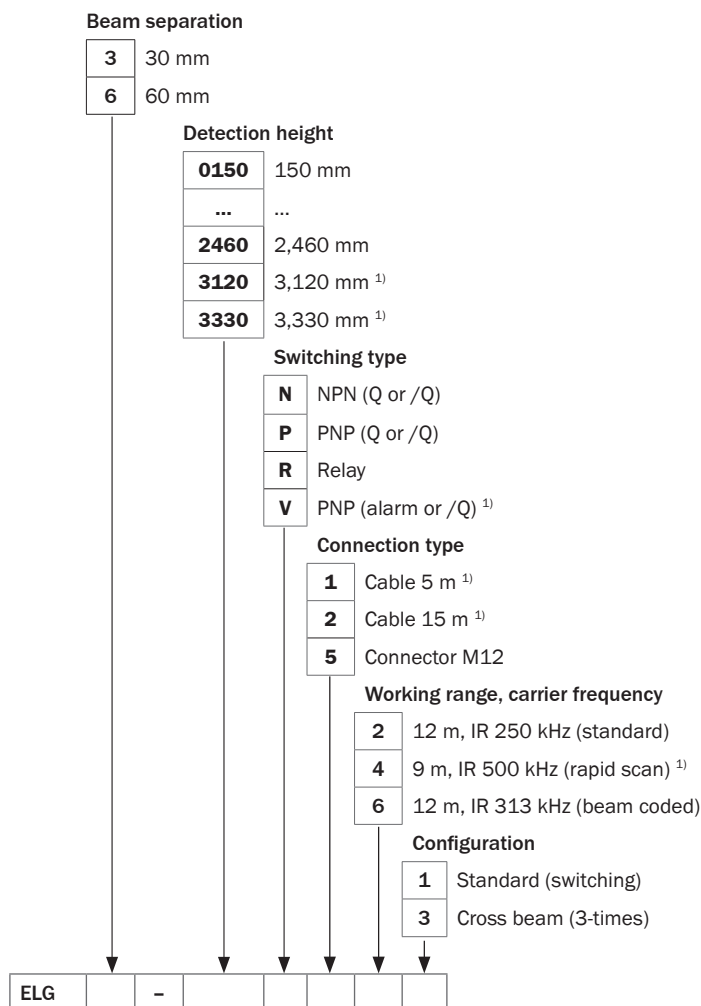
Working range	Evaluation beams	Detection height	Switching output	Model name	Part no.
9 m	Parallel beam	900 mm	2 x NPN (Q and /Q)	ELG6-0900N541	1041568
12 m	Parallel beam	900 mm	2 x PNP (Q and /Q)	ELG6-0900P521	1025447
		1,080 mm	2 x PNP (Q and /Q)	ELG6-1080P521	1025586
		1,200 mm	2 x PNP (Q and /Q)	ELG6-1200P561	1044292
		1,380 mm	2 x PNP (Q and /Q)	ELG6-1380P521	1043870
			2 x PNP (Q and /Q)	ELG6-1380P561	1025587
		1,620 mm	2 x PNP (Q and /Q)	ELG6-1620P521	1040686
		1,860 mm	2 x PNP (Q and /Q)	ELG6-1860P521	1025589
		2,340 mm	2 x PNP (Q and /Q)	ELG6-2340P521	1025596
		3,120 mm	2 x PNP (Q and /Q)	ELG6-3120P521	1047475
		Multiple scan	1,380 mm	2 x PNP (Q and /Q)	ELG6-1380P523
	2 x PNP (Q and /Q)			ELG6-1860P523	1025593
	2 x PNP (Q and /Q)			ELG6-2040P523	1025594
	2 x PNP (Q and /Q)			ELG6-2460P523	1024293

ELG6-Relay

- Beam separation: 60 mm

Working range	Evaluation beams	Detection height	Switching output	Model name	Part no.
12 m	Parallel beam	900 mm	Relay (DC 60 V, AC 25 V)	ELG6-0900R521	1026181
		1,860 mm	Relay (DC 60 V, AC 25 V)	ELG6-1860R521	1026182
		2,460 mm	Relay (DC 60 V, AC 25 V)	ELG6-2460R521	1026183
	Multiple scan	900 mm	Relay (DC 60 V, AC 25 V)	ELG6-0900R523	1025453
		1,380 mm	Relay (DC 60 V, AC 25 V)	ELG6-1380R523	1025451
		1,860 mm	Relay (DC 60 V, AC 25 V)	ELG6-1860R523	1026458

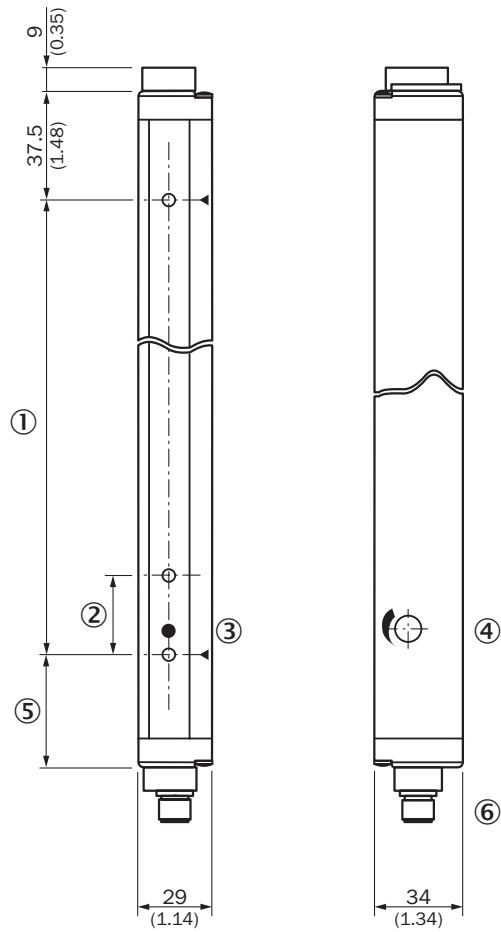
Type code



¹⁾ On demand.

Dimensional drawings

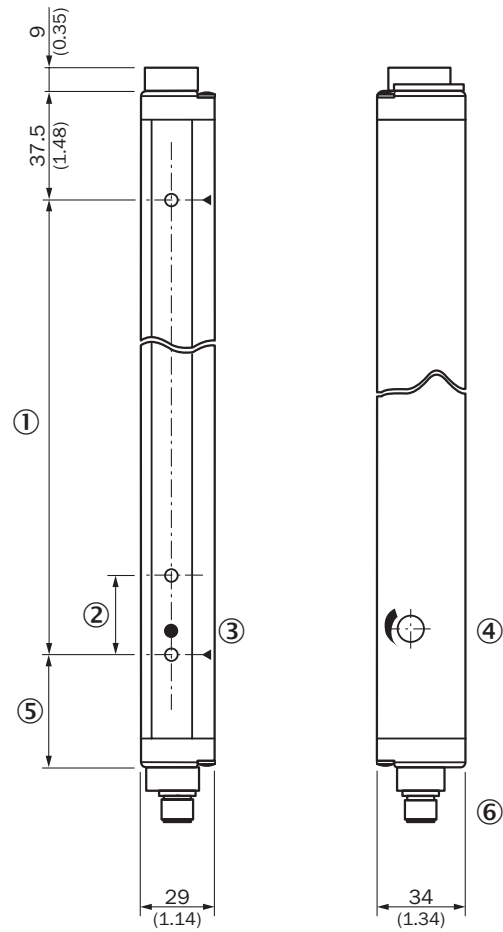
ELG3/ELG6



All dimensions in mm (inch)

- ① Detection height
- ② Beam separation ELG3: 30 mm/ELG6: 60 mm
- ③ Status indicator (ELGE)/power on (ELGS)
- ④ Sensitivity adjustment
- ⑤ Distance to first beam ELG3: 38.5 mm/ELG6: 68.5 mm
- ⑥ Connector M12, 4-pin

ELG3-Relay/ELG6-Relay

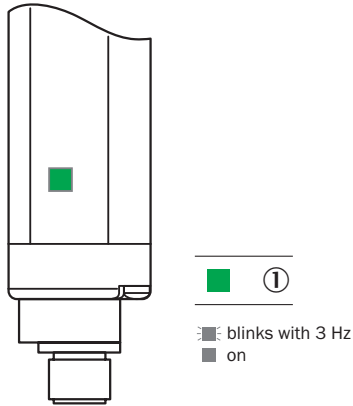


All dimensions in mm (inch)

- ① Detection height
- ② Beam separation ELG3: 30 mm/ELG6: 60 mm
- ③ Status indicator (ELGE)/power on (ELGS)
- ④ Sensitivity adjustment
- ⑤ Distance to first beam ELG3: 38.5 mm/ELG6: 68.5 mm
- ⑥ Connector M12, 5-pin

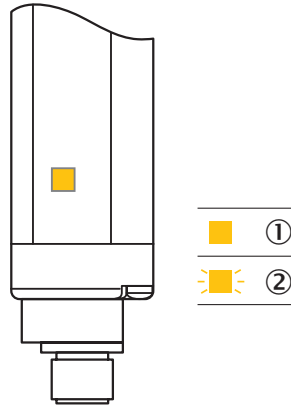
Adjustments

LED display sender



① Supply voltage

LED display receiver



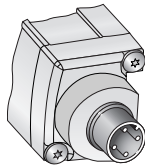
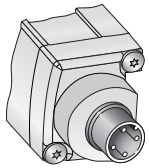
① No object in the light path
 ② Pollution indication

Connection type and diagram

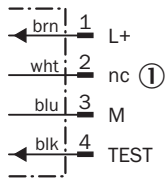
ELG3/ELG6

Sender Connector
M12, 4-pin

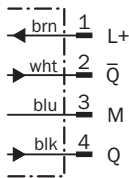
Receiver Connector
M12, 4-pin



Sender



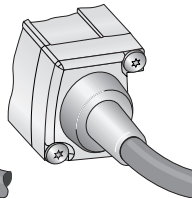
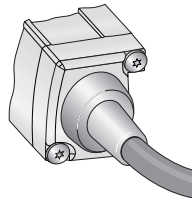
Receiver



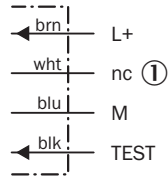
ELG3-Relay

Sender Cable
4-pin

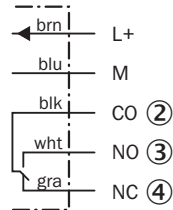
Receiver Cable
5-pin



Sender



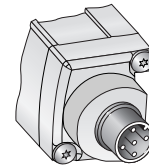
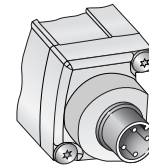
Receiver



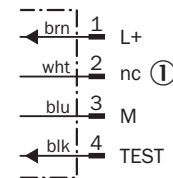
ELG3-Relay/ELG6-Relay

Sender Connector
M12, 4-pin

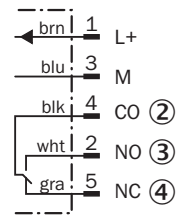
Receiver Connector
M12, 5-pin



Sender



Receiver






- ① Not connected
- ② Change over
- ③ Normally open
- ④ Normally closed

Recommended accessories



Complete accessories for the ELG Long Range include: 2 female connector cables and 1 bracket.

Please take note of the number of pins on the connector when choosing connection cables.

Mounting brackets/plates

	Brief description	Model name	Part no.
	Mounting kit 1, adjustable, swivel mount, for all detection heights in small housings, plastic, without mounting material, 4 pcs	BEF-2SMKEAKU4	2019649
	Mounting kit, side bracket including four sliding nuts for MLG/ELG/HLG, 4 pcs	BEF-NUT-MLG	2023696
	Mounting bracket, steel, zinc coated, without mounting material, 4 pcs	BEF-WK-XLG	2029100

Plug connectors and cables

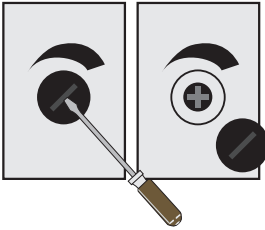
	Brief description	Model name	Part no.
 Illustration may differ	Female connector, M12, 4-pin, straight, 2 m, PVC	DOL-1204-G02M	6009382
	Female connector, M12, 4-pin, straight, 5 m, PVC	DOL-1204-G05M	6009866
	Female connector, M12, 4-pin, straight, 10 m, PVC	DOL-1204-G10M	6010543
	Female connector, M12, 4-pin, straight, 15 m, PVC	DOL-1204-G15M	6010753
 Illustration may differ	Female connector, M12, 4-pin, angled, 2 m, PVC	DOL-1204-W02M	6009383
	Female connector, M12, 4-pin, angled, 5 m, PVC	DOL-1204-W05M	6009867
	Female connector, M12, 4-pin, angled, 10 m, PVC	DOL-1204-W10M	6010541

For additional accessories including dimensional drawings, please see page 50.

Special functions

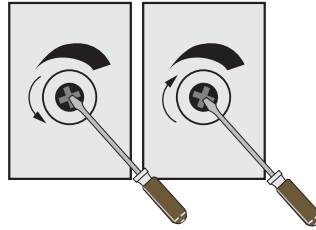
Sensitivity adjustment

1. Remove cap



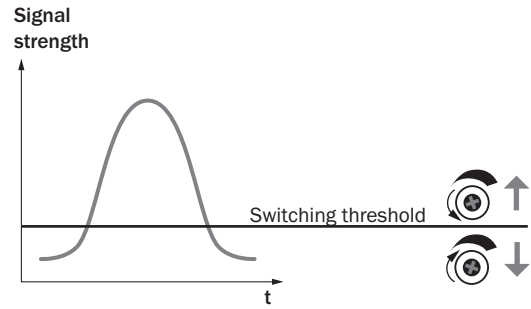
Remove cap with screw driver.

2. Potentiometer adjustment

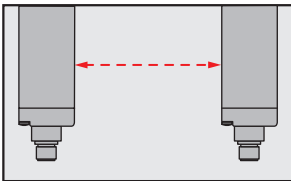


Turn left = for a lower range.
Turn right = for a higher range.

Sensitivity adjustment



Optical synchronisation



The light grid communicates via the light beams. A cable is not necessary for the optical synchronisation.

Simply clever order picking verification



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Product description

Using sensors for order picking has become standard in the automotive and logistics industries. Using the PLG automation light grid for order picking offers significant advantages over conventional, manual order picking technology. The PLG is mounted at each storage bay and

has an integrated job LED to display pick position.

The PLG's single-sided strip of reflective tape saves space in the bin and reduces damage and installation costs. Thanks to an integrated polarizing filter, the PLG won't be fooled by shiny or reflective clothing.

At a glance

- 360° visible job LED
- Range up to 2 m
- Flexible detection heights from 120 mm to 420 mm
- Immune to reflected and ambient light
- Switchable job LED: permanently lit or flashing
- Optically confirms the right bin was picked
- Bus connection possible

Your benefits

- The integrated job LED reduces the order picker's search time
- Low assembly costs thanks to the PLG's clever design
- High availability thanks to an integrated polarizing filter
- Tough aluminum housing ensures that sensor damage is kept to a minimum and helps reduce repair costs
- Reflective tape on the sensor avoids additional assembly and cabling costs

→ www.mysick.com/en/PLG3

Detailed technical data

Features

Technology	Retro-reflective light grid
Task	Switching light grid
Minimum detectable object (MDO)	Parallel beam: ≥ 35 mm
Number of beams	5 ... 15

Performance

Maximum range (reflective tape REF-PLG)	1.5 m
Maximum range (PL150)	2 m
Minimum range	≥ 100 mm
Working range (reflective tape REF-PLG)	1 m
Working range (PL150)	1.3 m
Response time ¹⁾	Parallel beam: > 100 ms

¹⁾ With resistive load.

Interfaces

Connection type	Short cable (0.28 m) with connector M12, 4-pin
Job LED input	PNP
Input current	12 mA

Mechanics/electronics

Wave length	650 nm
Supply voltage V_s ¹⁾	DC 15 V ... 30 V
Power consumption	< 45 mA
Ripple	$< 5 V_{PP}$
Output current I_{max}	100 mA
Output load capacitive	100 nF
Output load inductive	1 H
Initialization time	0.6 s
Dimensions (W x H x D)	35.6 mm x 199 mm x 19 mm ... 35.6 mm x 499 mm x 19 mm
Housing material	Aluminum
Indication	LED
Enclosure rating	IP 54
Circuit protection	V_s connections reverse-polarity protected Output Q short-circuit protected Interference suppression
Weight	200 g ... 500 g
Front screen	PMMA
Output mode ²⁾	Q dark switching
Current consumption job LED ¹⁾	10 mA

¹⁾ Typical values.

²⁾ Q = active in case one beam is interrupted; /Q = active in case all beams are free.

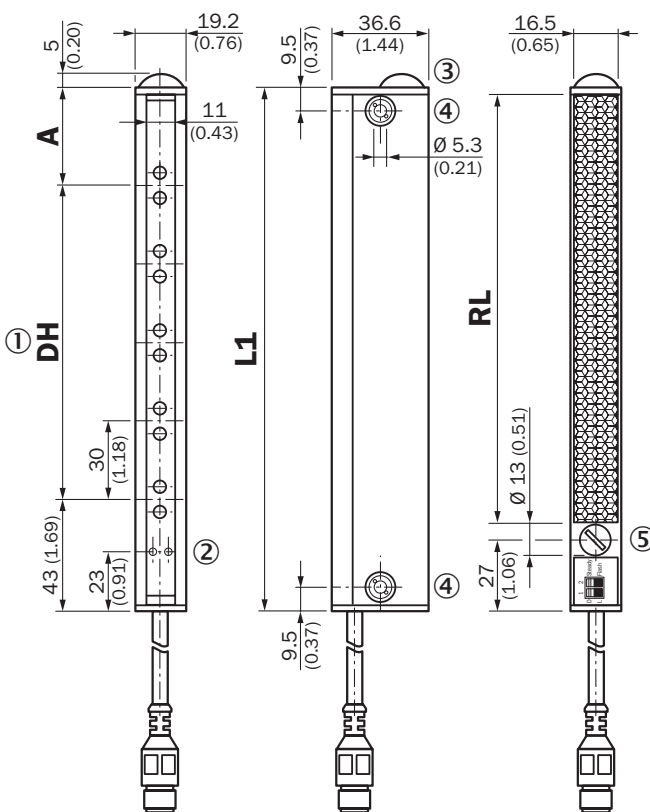
Ambient data

Protection class	III
EMC	EN 60947-5-2
Ambient temperature	Operation: -10 °C ... +55 °C Storage: -40 °C ... +70 °C
Vibration resistance	5 g, 10 Hz ... 55 Hz (IEC 68-2-6)
Shock load	10 g / DIN EN 60068-2-29 / 16 ms

Ordering information

Beam separation	Detection height	Switching output	Model name	Part no.
30 mm	120 mm	1 x PNP (Q)	PLG3-120F431	1028953
	210 mm	1 x PNP (Q)	PLG3-210F431	1028548
	270 mm	1 x PNP (Q)	PLG3-270F431	1029130
	360 mm	1 x PNP (Q)	PLG3-360F431	1029131
	420 mm	1 x PNP (Q)	PLG3-420F431	1029132

Dimensional drawing



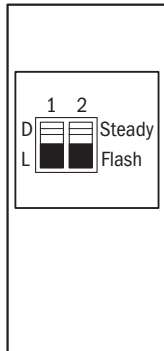
Dimensions in mm (inch)

DH	A	L1	RL
120 (4.72)	36 (1.42)	199 (7.83)	162 (6.38)
210 (8.27)	26 (1.02)	279 (10.98)	242 (9.53)
270 (10.63)	36 (1.42)	349 (13.74)	312 (12.28)
360 (14.17)	26 (1.02)	429 (16.89)	392 (15.43)
420 (16.54)	36 (1.42)	499 (19.65)	462 (18.19)

All dimensions in mm (inch)

- ① Detection height (DH) 120 to 420 mm
- ② Indicator power on: green; beam status: yellow
- ③ Job-LED, green
- ④ Mounting hole, Ø 5.3 mm
- ⑤ Configuration switches

Adjustments

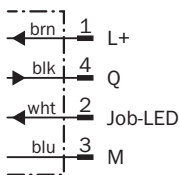
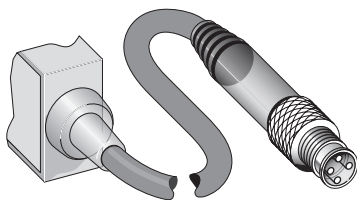


Configuration over switches

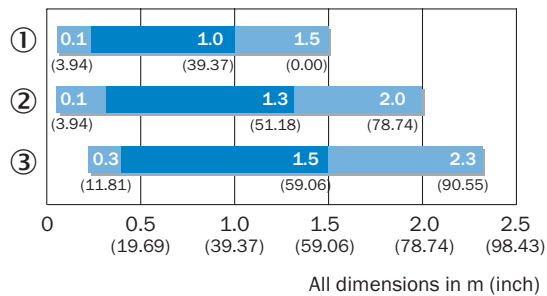
Switch 1	D	Output active, in case of blocked beams
	L	Output inactive, in case of blocked beams
Switch 2	Steady	Job-LED steady
	Flash	Job-LED flashes, 3 Hz

Connection type and diagram

Connector M12, 4-pin



Characteristic curve: range



■ Working range ■ Min./max. range




- ① REF-PLG
- ② PL150
- ③ PL180

Recommended accessories



Complete accessories for the PLG3 include: 1 female connector cable, 1 bracket and 1 reflector.

Please take note of the number of pins on the connector when choosing connection cables.


Mounting brackets/plates

	Brief description	Model name	Part no.
	Sliding nuts with spring metal sheet for Bosch profile, 2 x slot 8 and slot 10, including mounting material	BEF-NSBO-PLG	2041049
	Sliding nuts with spring metal ball for ITEM profile, 2 x slot 6 and slot 8, including mounting material	BEF-NSIT-PLG	2041045
	Round rod holder for round rods and tubes, including mounting material, 2 pcs	BEF-RD30-PLG	2040541

Reflectors

	Brief description	Model name	Part no.
	Reflector, 18 mm x 150 mm, plastic, self-adhesive	PL150	5315548
	Reflective tape on aluminum profile for PLG, 16.5 mm x 194.3 mm, 2-hole mounting	REF-PLG120	1029196
	Reflective tape on aluminum profile for PLG, 16.5 mm x 274.3 mm, 2-hole mounting	REF-PLG210	1029197
	Reflective tape on aluminum profile for PLG, 16.5 mm x 344.3 mm, 2-hole mounting	REF-PLG270	1029198
	Reflective tape on aluminum profile for PLG, 16.5 mm x 424.3 mm, 2-hole mounting	REF-PLG360	1029199
	Reflective tape on aluminum profile for PLG, 16.5 mm x 494.3 mm, 2-hole mounting	REF-PLG420	1029200

Plug connectors and cables

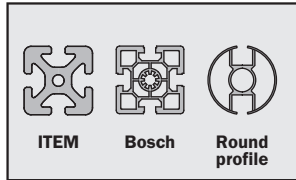
	Brief description	Model name	Part no.
 Illustration may differ	Female connector, M12, 4-pin, straight, 2 m, PVC	DOL-1204-G02M	6009382
	Female connector, M12, 4-pin, straight, 5 m, PVC	DOL-1204-G05M	6009866
	Female connector, M12, 4-pin, straight, 10 m, PVC	DOL-1204-G10M	6010543

For additional accessories including dimensional drawings, please see page 50.

Special functions

Easy installation

1. Easy mounting on to different profiles



The light grid can be mounted on different profiles, e.g. ITEM, Bosch, round profile.

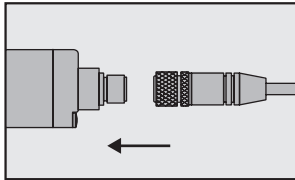
2. Easy installation with slot nuts



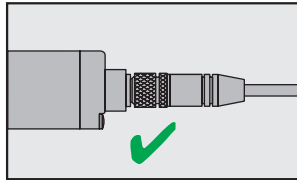
The PLG can easily be mounted on the profile with slot nuts.

Plug & play

1. Plug in and tighten the ring of the connector



2. Device is ready for use



Increase pick rates in compact installations



Product description

Using sensors for order picking has become standard in the automotive and logistics industries. Using the PLG automation light grid for order picking offers significant advantages over conventional, manual order picking technology. The

PLG is mounted at each storage bay and has an integrated job LED to display pick position.

The PLG's single-sided strip of reflective tape saves space in the bin and reduces damage and installation costs.

At a glance

- 360° visible job LED
- Detection height 60 mm
- Optically confirms the right bin was picked
- Bus connection possible
- The smallest pick-to-light light grid

Your benefits

- The integrated job LED reduces the order picker's search time
- Low assembly costs thanks to the PLG's clever design
- Tough aluminum housing ensures that sensor damage is kept to a minimum and helps reduce repair costs
- Reflective tape on the sensor avoids additional assembly and cabling costs



Additional information

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→ www.mysick.com/en/PLG6

Detailed technical data

Features

Technology	Retro-reflective light grid
Task	Switching light grid
Minimum detectable object (MDO)	Parallel beam: 70 mm
Number of beams	2

Performance

Maximum range	0.5 m
Minimum range	60 mm
Working range (reflective tape REF-PLG)	0.35 m
Response time ¹⁾	Parallel beam: 5 ms

¹⁾ With resistive load.

Interfaces

Connection type	Short cable (0.28 m) with connector M12, 4-pin
Job LED input	PNP
Input current	< 30 mA

Mechanics/electronics

Wave length	660 nm
Supply voltage V_s ¹⁾	DC 15 V ... 30 V
Power consumption	< 50 mA
Ripple	< 5 V_{pp}
Output current I_{max}	50 mA
Initialization time	< 1 s
Dimensions (W x H x D)	36.6 mm x 130 mm x 32 mm
Housing material	Aluminum
Indication	LED
Enclosure rating	IP 40
Circuit protection	V_s connections reverse-polarity protected Output Q short-circuit protected Interference suppression
Weight	< 500 g
Front screen	PMMA
Output mode ²⁾	Q dark switching
Current consumption job LED ¹⁾	< 30 mA

¹⁾ Typical values.

²⁾ Q = active in case one beam is interrupted; /Q = active in case all beams are free.

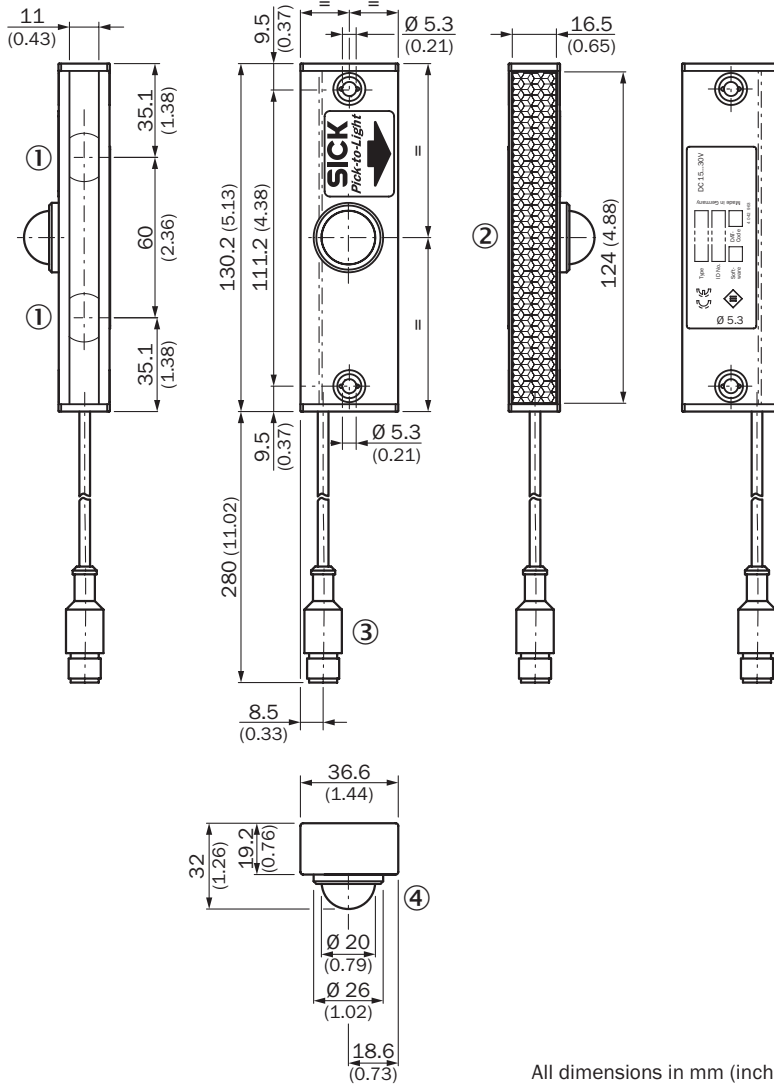
Ambient data

Protection class	III
EMC	EN 60947-5-2
Ambient temperature	Operation: -10 °C ... +50 °C Storage: -25 °C ... +70 °C
Vibration resistance	5 g, 10 Hz ... 55 Hz (IEC 68-2-6)
Shock load	10 g / DIN EN 60068-2-29 / 16 ms

Ordering information

Beam separation	Detection height	Switching output	Model name	Part no.
60 mm	60 mm	1 x PNP (Q)	PLG6-060F434	1051978

Dimensional drawing

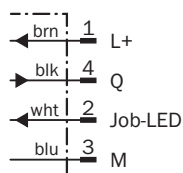
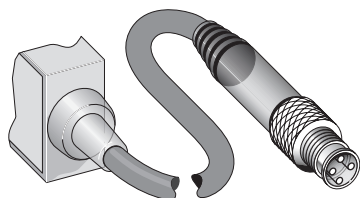


All dimensions in mm (inch)

- ① Reflection light barrier
- ② Reflective tape
- ③ Connector M12, 4-pin
- ④ Job LED, red

Connection type and diagram

Connector M12, 4-pin



Recommended accessories

Complete accessories for the PLG6 include: 1 female connector cable, 1 bracket and 1 reflector.

Please take note of the number of pins on the connector when choosing connection cables.

Mounting brackets/plates

	Brief description	Model name	Part no.
	Sliding nuts with spring metal sheet for Bosch profile, 2x slot 8 and slot 10, including mounting material	BEF-NSBO-PLG	2041049
	Sliding nuts with spring metal ball for ITEM profile, 2x slot 6 and slot 8, including mounting material	BEF-NSIT-PLG	2041045
	Round rod holder for round rods and tubes, including mounting material, 2 pcs	BEF-RD30-PLG	2040541

Reflectors

	Brief description	Model name	Part no.
	Reflector, 18 mm x 150 mm, plastic, self-adhesive	PL150	5315548
	Reflective tape on aluminum profile for PLG, 16.5 mm x 194.3 mm, 2-hole mounting	REF-PLG060	1048996

Plug connectors and cables

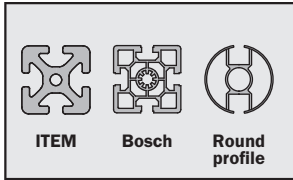
	Brief description	Model name	Part no.
 Illustration may differ	Female connector, M12, 4-pin, straight, 2 m, PVC	DOL-1204-G02M	6009382
	Female connector, M12, 4-pin, straight, 5 m, PVC	DOL-1204-G05M	6009866
	Female connector, M12, 4-pin, straight, 10 m, PVC	DOL-1204-G10M	6010543

For additional accessories including dimensional drawings, please see page 50.

Special functions

Easy installation

1. Easy mounting on to different profiles



The light grid can be mounted on different profiles, e.g. ITEM, Bosch, round profile.

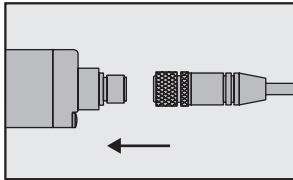
2. Easy installation with slot nuts



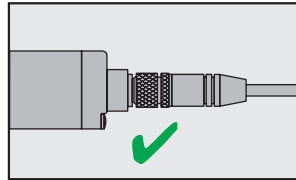
The PLG can easily be mounted on the profile with slot nuts.

Plug & play

1. Plug in and tighten the ring of the connector







2. Device is ready for use




Accessories


Adapters/distributors (without cable)

	Brief description	Model name	Part no.	WLG	HLG	ELG Short Range	ELG Long Range	ELG Long Range Relay	PLG3	PLG6
	Sensor/actuator box, 4x M12, 5-pin, cable, 5 m, PUR halogen free	SBL-04D12-KC05	6028394	-	-	-	-	-	●	●
	Sensor/actuator box, 8x M12, 5-pin, cable, 5 m, PUR halogen free	SBL-08D12-KC05	6028396	-	-	-	-	-	●	●
	T-junction, 1x plug M12, 8-pin, and 2x socket M12, 8-pin	SBO-02F12-SM	6029306	-	●	-	-	-	-	-
	Y-junction, coupling M12 x 1 - 2x plug M12 x 1	SYL-1205-G0M3	6043534	-	-	-	-	-	●	●


Cleaning agent





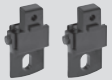






	Brief description	Model name	Part no.	WLG	HLG	ELG Short Range	ELG Long Range	ELG Long Range Relay	PLG3	PLG6
	Plastic cleaner and care product, anti-static	Plastic cleaner	5600006	●	●	●	●	●	●	●

Lens cloths




	Brief description	Model name	Part no.	WLG	HLG	ELG Short Range	ELG Long Range	ELG Long Range Relay	PLG3	PLG6
	-	Optical cleaning cloth	4003353	●	●	●	●	●	●	●

Mounting brackets/plates










	Brief description	Model name	Part no.	WLG	HLG	ELG Short Range	ELG Long Range	ELG Long Range Relay	PLG3	PLG6
	Mounting kit, mounting bracket, adjustable, 1 set = 4 pcs	BEF-1SHABAAL4	2017751	-	-	●	●	●	-	-











	Brief description	Model name	Part no.	WLG	HLG	ELG Short Range	ELG Long Range	ELG Long Range Relay	PLG3	PLG6
	Omega bracket (24 mm), mounting position: front side, aluminum, 2 pcs	BEF-2SMKEAAL2	2045884	-	-	●	●	●	-	-
	Omega bracket (24 mm), mounting position: front side, aluminum, 4 pcs	BEF-2SMKEAAL4	2044848	-	-	●	●	●	-	-
	Mounting bracket, adjustable, stainless steel, for all detection heights, 4 pcs	BEF-2SMKEAES4	2030288	-	-	●	●	●	-	-
	Mounting kit 1, adjustable, swivel mount, for all detection heights in small housings, plastic, without mounting material, 4 pcs	BEF-2SMKEAKU4	2019649	-	●	●	●	●	-	-
	Mounting kit, mounting bracket, rigid, L-shaped, for all detection heights, 4 pcs	BEF-3WNGBAST4	7021352	-	-	●	●	●	-	-
	Mounting kit, side bracket including four sliding nuts for MLG/ELG/HLG, 4 pcs	BEF-NUT-MLG	2023696	-	-	●	●	●	-	-
	Sliding nuts with spring metal sheet for Bosch profile, 2x slot 8 and slot 10, including mounting material	BEF-NSBO-PLG	2041049	-	-	-	-	-	●	●
	Sliding nuts with spring metal ball for ITEM profile, 2x slot 6 and slot 8, including mounting material	BEF-NSIT-PLG	2041045	-	-	-	-	-	●	●
	Sliding nuts, M5, 4 pcs	Sliding nuts	2017550	-	-	●	●	●	-	-
	Round rod holder for round rods and tubes, including mounting material, 2 pcs	BEF-RD30-PLG	2040541	-	-	-	-	-	●	●
	Mounting bracket, steel, zinc coated, without mounting material, 4 pcs	BEF-WK-XLG	2029100	-	●	●	●	●	-	-
	Mounting bracket for WLG12, steel, zinc coated, including mounting material	BEF-WN-WLG12	2017567	●	-	-	-	-	-	-




Others

	Brief description	Model name	Part no.	WLG	HLG	ELG Short Range	ELG Long Range	ELG Long Range Relay	PLG3	PLG6
	Alignment aid for various sensors, 60 m sensing range, laser class 2	Laser alignment aid AR60	1015741	-	●	●	●	●	-	-
	Acrylic glass tube as protective housing with screwable aluminum end cap	ALG IP housing	On demand	-	-	●	●	●	-	-
	Housing column for automation light grids, protection for outdoor applications	ALG protection housing	On demand	-	-	●	●	●	-	-

Plug connectors and cables



	Brief description	Model name	Part no.	WLG	HLG	ELG Short Range	ELG Long Range	ELG Long Range Relay	PLG3	PLG6
 Illustration may differ	Female connector, M12, 4-pin, straight, 2 m, PVC	DOL-1204-G02M	6009382	-	-	●	●	●	●	●
	Female connector, M12, 4-pin, straight, 5 m, PVC	DOL-1204-G05M	6009866	-	-	●	●	●	●	●
	Female connector, M12, 4-pin, straight, 10 m, PVC	DOL-1204-G10M	6010543	-	-	●	●	●	●	●
	Female connector, M12, 4-pin, straight, 15 m, PVC	DOL-1204-G15M	6010753	-	-	●	●	●	●	●
	Female connector, M12, 4-pin, straight, 2 m, PUR halogen free	DOL-1204-G02MC	6025900	-	-	●	●	●	●	●
	Female connector, M12, 4-pin, straight, 5 m, PUR halogen free	DOL-1204-G05MC	6025901	-	-	●	●	●	●	●
	Female connector, M12, 4-pin, straight, 10 m, PUR halogen free	DOL-1204-G10MC	6025902	-	-	●	●	●	●	●
	Female connector, M12, 4-pin, straight, 15 m, PUR halogen free	DOL-1204-G15MC	6034749	-	-	●	●	●	●	●
 Illustration may differ	Female connector, M12, 4-pin, angled, 2 m, PVC	DOL-1204-W02M	6009383	-	-	●	●	●	●	●
	Female connector, M12, 4-pin, angled, 5 m, PVC	DOL-1204-W05M	6009867	-	-	●	●	●	●	●
	Female connector, M12, 4-pin, angled, 10 m, PVC	DOL-1204-W10M	6010541	-	-	●	●	●	●	●
	Female connector, M12, 4-pin, angled, 2 m, PUR halogen free	DOL-1204-W02MC	6025903	-	-	●	●	●	●	●
	Female connector, M12, 4-pin, angled, 5 m, PUR halogen free	DOL-1204-W05MC	6025904	-	-	●	●	●	●	●
	Female connector, M12, 4-pin, angled, 10 m, PUR halogen free	DOL-1204-W10MC	6025905	-	-	●	●	●	●	●
	Female connector, M12, 4-pin, angled, 15 m, PUR halogen free	DOL-1204-W15MC	6034752	-	-	●	●	●	●	●
 Illustration may differ	Female connector, M12, 5-pin, straight, 2 m, PVC	DOL-1205-G02M	6008899	●	-	-	-	●	-	-
	Female connector, M12, 5-pin, straight, 5 m, PVC	DOL-1205-G05M	6009868	●	-	-	-	●	-	-
	Female connector, M12, 5-pin, straight, 10 m, PVC	DOL-1205-G10M	6010544	●	-	-	-	●	-	-
	Female connector, M12, 5-pin, straight, 15 m, PVC	DOL-1205-G15M	6029215	●	-	-	-	●	-	-
	Female connector, M12, 5-pin, straight, 2 m, PUR halogen free	DOL-1205-G02MC	6025906	●	-	-	-	●	-	-
	Female connector, M12, 5-pin, straight, 5 m, PUR halogen free	DOL-1205-G05MC	6025907	●	-	-	-	●	-	-
	Female connector, M12, 5-pin, straight, 10 m, PUR halogen free	DOL-1205-G10MC	6025908	●	-	-	-	●	-	-
 Illustration may differ	Female connector, M12, 5-pin, straight, 2 m, PVC, food specification	DOL-1205-G02MN	6028140	●	-	-	-	●	-	-
	Female connector, M12, 5-pin, straight, 5 m, PVC, food specification	DOL-1205-G05MN	6028141	●	-	-	-	●	-	-
	Female connector, M12, 5-pin, straight, 10 m, PVC, food specification	DOL-1205-G10MN	6028142	●	-	-	-	●	-	-
 Illustration may differ	Female connector, M12, 5-pin, angled, 2 m, PVC	DOL-1205-W02M	6008900	●	-	-	-	●	-	-
	Female connector, M12, 5-pin, angled, 5 m, PVC	DOL-1205-W05M	6009869	●	-	-	-	●	-	-
	Female connector, M12, 5-pin, angled, 10 m, PVC	DOL-1205-W10M	6010542	●	-	-	-	●	-	-
	Female connector, M12, 5-pin, angled, 2 m, PUR halogen free	DOL-1205-W02MC	6025909	●	-	-	-	●	-	-
	Female connector, M12, 5-pin, angled, 5 m, PUR halogen free	DOL-1205-W05MC	6025910	●	-	-	-	●	-	-
	Female connector, M12, 5-pin, angled, 10 m, PUR halogen free	DOL-1205-W10MC	6025911	●	-	-	-	●	-	-

	Brief description	Model name	Part no.	WLG	HLG	ELG Short Range	ELG Long Range	ELG Long Range Relay	PLG3	PLG6
 <p>Illustration may differ</p>	Female connector, M12, 8-pin, straight, 2 m, PVC, shielded	DOL-1208-G02MA	6020633	-	●	-	-	-	-	-
	Female connector, M12, 8-pin, straight, 5 m, PVC, shielded	DOL-1208-G05MA	6020993	-	●	-	-	-	-	-
	Female connector, M12, 8-pin, straight, 10 m, PVC, shielded	DOL-1208-G10MA	6022152	-	●	-	-	-	-	-
	Female connector, M12, 8-pin, straight, 15 m, PVC, shielded	DOL-1208-G15MA	6022153	-	●	-	-	-	-	-
	Female connector, M12, 8-pin, straight, 5 m, PUR halogen free, shielded	DOL-1208-G05MACR	6037517	-	●	-	-	-	-	-
	Female connector, M12, 8-pin, straight, 10 m, PUR halogen free, shielded	DOL-1208-G10MAC	6038832	-	●	-	-	-	-	-
 <p>Illustration may differ</p>	Female connector, M12, 8-pin, angled, 2 m, PVC, shielded	DOL-1208-W02MA	6020992	-	●	-	-	-	-	-
	Female connector, M12, 8-pin, angled, 5 m, PVC, shielded	DOL-1208-W05MA	6021033	-	●	-	-	-	-	-
	Female connector, M12, 4-pin, straight	DOS-1204-G	6007302	-	-	●	●	●	●	●
	Female connector, M12, 4-pin, angled	DOS-1204-W	6007303	-	-	●	●	●	●	●
	Female connector, M12, 5-pin, straight	DOS-1205-G	6009719	●	-	-	-	●	-	-
	Female connector, M12, 5-pin, angled	DOS-1205-W	6009720	●	-	-	-	●	-	-
	Female connector, M12, 8-pin, straight, shielded	DOS-1208-GA	6028369	-	●	-	-	-	-	-
	Female connector, M12, 8-pin, angled, shielded	DOS-1208-WA	6043358	-	●	-	-	-	-	-
 <p>Illustration may differ</p>	Connection cable, M12, 4-pin, plug straight/socket straight, 0.6 m, PVC	DSL-1204-G0M6	6022565	-	-	●	●	●	●	●
	Connection cable, M12, 4-pin, plug straight/socket straight, 2 m, PVC	DSL-1204-G02M	6022567	-	-	●	●	●	●	●
	Connection cable, M12, 4-pin, plug straight/socket straight, 5 m, PVC	DSL-1204-G05M	6022569	-	-	●	●	●	●	●
	Connection cable, M12, 4-pin, plug straight/socket straight, 10 m, PVC	DSL-1204-G10M	6034406	-	-	●	●	●	●	●
	Connection cable, M12, 4-pin, plug straight/socket straight, 15 m, PVC	DSL-1204-G1M5	6034822	-	-	●	●	●	●	●
	Connection cable, M12, 4-pin, plug straight/socket straight, 20 m, PVC	DSL-1204-G20M	6034407	-	-	●	●	●	●	●
	Connection cable, M12, 4-pin, plug straight/socket straight, 1 m, PUR halogen free	DSL-1204-G01MC	6033244	-	-	●	●	●	●	●
	Connection cable, M12, 4-pin, plug straight/socket straight, 2 m, PUR halogen free	DSL-1204-G02MC	6025927	-	-	●	●	●	●	●
	Connection cable, M12, 4-pin, plug straight/socket straight, 5 m, PUR halogen free	DSL-1204-G05MC	6033245	-	-	●	●	●	●	●
	Connection cable, M12, 4-pin, plug straight/socket straight, 10 m, PUR halogen free	DSL-1204-G10MC	6033698	-	-	●	●	●	●	●







	Brief description	Model name	Part no.	WLG	HLG	ELG Short Range	ELG Long Range	ELG Long Range Relay	PLG3	PLG6
	Connection cable, M12, 5-pin, plug straight/socket straight, 1 m, PUR halogen free	DSL-1205-G01MC	6029280	●	-	-	-	●	-	-
	Connection cable, M12, 5-pin, plug straight/socket straight, 1.5 m, PUR halogen free	DSL-1205-G1M5C	6029281	●	-	-	-	●	-	-
	Connection cable, M12, 5-pin, plug straight/socket straight, 2 m, PUR halogen free	DSL-1205-G02MC	6025931	●	-	-	-	●	-	-
	Connection cable, M12, 5-pin, plug straight/socket straight, 5 m, PUR halogen free	DSL-1205-G05MC	6029282	●	-	-	-	●	-	-
	Connection cable, M12, 5-pin, plug straight/socket straight, 10 m, PUR halogen free	DSL-1205-G10MC	6038954	●	-	-	-	●	-	-
	Connection cable, M12, 8-pin, plug straight/socket straight, 1 m, PUR halogen free, shielded	DSL-1208-G01MAC	6026625	-	●	-	-	-	-	-
	Connection cable, M12, 8-pin, plug straight/socket straight, 2 m, PUR halogen free, shielded	DSL-1208-G02MAC	6030121	-	●	-	-	-	-	-
	Connection cable, M12, 8-pin, plug straight/socket straight, 5 m, PUR halogen free, shielded	DSL-1208-G05MAC	6032325	-	●	-	-	-	-	-
	Connection cable, M12, 8-pin, plug straight/socket straight, 10 m, PUR halogen free, shielded	DSL-1208-G10MAC	6034901	-	●	-	-	-	-	-
	Male connector, M12, 4-pin, straight	STE-1204-G	6009932	-	-	●	●	●	●	●

Reflectors

	Brief description	Model name	Part no.	WLG	HLG	ELG Short Range	ELG Long Range	ELG Long Range Relay	PLG3	PLG6
	Reflector, 18 mm x 150 mm, plastic, self-adhesive	PL150	5315548	●	-	-	-	-	●	●
	Reflector, 40 mm x 180 mm, plastic, 2-hole mounting	PL180E01	1013289	●	-	-	-	-	●	●
	Reflector, 40 mm x 60 mm, plastic, 2-hole mounting	PL40A	1012720	●	-	-	-	-	-	-
	Reflector, 80 mm x 80 mm, plastic, 2-hole mounting	PL80A	1003865	●	-	-	-	-	-	-
	Reflective tape, 749 mm x 914 mm sheet, self-adhesive	REF-DG	5320565	-	-	-	-	-	●	●
	Reflective tape, assembled, self-adhesive	REF-DG-K	4019634	-	-	-	-	-	●	●

	Brief description	Model name	Part no.	WLG	HLG	ELG Short Range	ELG Long Range	ELG Long Range Relay	PLG3	PLG6
	Reflective tape on aluminum profile for PLG, 16.5 mm x 124.3 mm, 2-hole mounting	REF-PLG060	1048996	-	-	-	-	-	-	●
	Reflective tape on aluminum profile for PLG, 16.5 mm x 194.3 mm, 2-hole mounting	REF-PLG120	1029196	-	-	-	-	-	●	-
	Reflective tape on aluminum profile for PLG, 16.5 mm x 274.3 mm, 2-hole mounting	REF-PLG210	1029197	-	-	-	-	-	●	-
	Reflective tape on aluminum profile for PLG, 16.5 mm x 344.3 mm, 2-hole mounting	REF-PLG270	1029198	-	-	-	-	-	●	-
	Reflective tape on aluminum profile for PLG, 16.5 mm x 424.3 mm, 2-hole mounting	REF-PLG360	1029199	-	-	-	-	-	●	-
	Reflective tape on aluminum profile for PLG, 16.5 mm x 494.3 mm, 2-hole mounting	REF-PLG420	1029200	-	-	-	-	-	●	-
	Reflective tape, cut to length, width 25 mm, roll length max. 22.8 m, self-adhesive	REF-PLUS-25-K	4051184	-	-	-	-	-	●	●

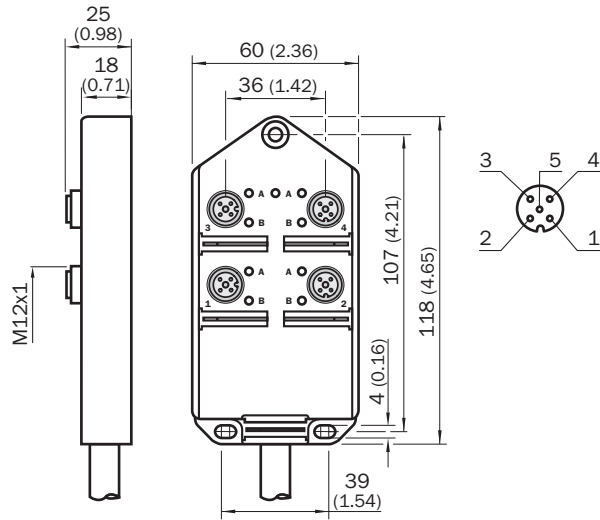
Terminal and alignment brackets

	Brief description	Model name	Part no.	WLG	HLG	ELG Short Range	ELG Long Range	ELG Long Range Relay	PLG3	PLG6
	Plate G for universal bar clamp, steel, zinc coated, incl. universal bar clamp and mounting material	BEF-KHS-G01	2022464	-	-	●	●	●	-	-
	Universal bar clamp, steel, zinc, die-cast	BEF-KHS-KH1	2022726	-	-	●	●	●	-	-
	Mounting rod, straight, 300 mm, steel, zinc coated, without mounting material	BEF-MS12G-B	4056055	-	-	●	●	●	-	-
	Mounting rod, straight, 200 mm, stainless steel, without mounting material	BEF-MS12G-NA	4058914	-	-	●	●	●	-	-
	Mounting rod, straight, 300 mm, stainless steel, without mounting material	BEF-MS12G-NB	4058915	-	-	●	●	●	-	-
	Mounting rod, L-shaped, 150 mm x 150 mm, steel, zinc coated, without mounting material	BEF-MS12L-A	4056052	-	-	●	●	●	-	-
	Mounting rod, L-shaped, 250 mm x 250 mm, steel, zinc coated, without mounting material	BEF-MS12L-B	4056053	-	-	●	●	●	-	-
	Mounting rod, L-shaped, 150 mm x 150 mm, stainless steel, without mounting material	BEF-MS12L-NA	4058912	-	-	●	●	●	-	-
	Mounting rod, L-shaped, 250 mm x 250 mm, stainless steel, without mounting material	BEF-MS12L-NB	4058913	-	-	●	●	●	-	-
	Mounting rod, L-shaped, 150 mm x 70 mm x 150 mm, steel, zinc coated, without mounting material	BEF-MS12Z-A	4056056	-	-	●	●	●	-	-
	Mounting rod, L-shaped, 150 mm x 70 mm x 250 mm, steel, zinc coated, without mounting material	BEF-MS12Z-B	4056057	-	-	●	●	●	-	-
	Mounting rod, L-shaped, 100 mm x 150 mm x 200 mm, steel, zinc coated, without mounting material	BEF-MS12Z-C	4064563	-	-	●	●	●	-	-
	Mounting rod, L-shaped, 150 mm x 70 mm x 150 mm, stainless steel, without mounting material	BEF-MS12Z-NA	4058916	-	-	●	●	●	-	-
	Mounting rod, L-shaped, 150 mm x 70 mm x 250 mm, stainless steel, without mounting material	BEF-MS12Z-NB	4058917	-	-	●	●	●	-	-
	Rod bar clamp for rod diameter of 12 mm, aluminum, 2 screws M6 x 30, 2 spring discs	BEF-RMC-D12	5321878	-	-	●	●	●	-	-

Dimensional drawings accessories

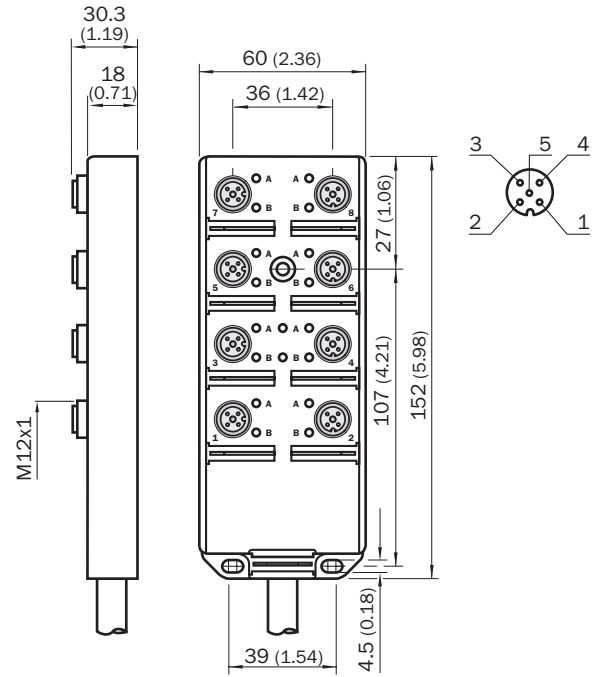
Adapters/distributors (without cable)

SBL-04D12-KC05



Dimensions in mm (inch)

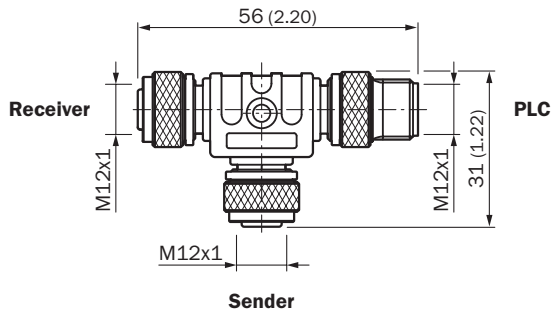
SBL-08D12-KC05



Dimensions in mm (inch)

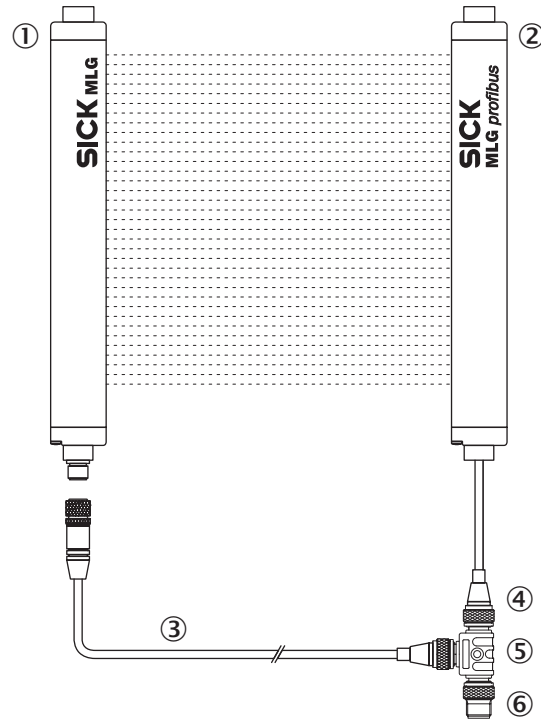
SB0-02F12-SM

Dimensional drawing



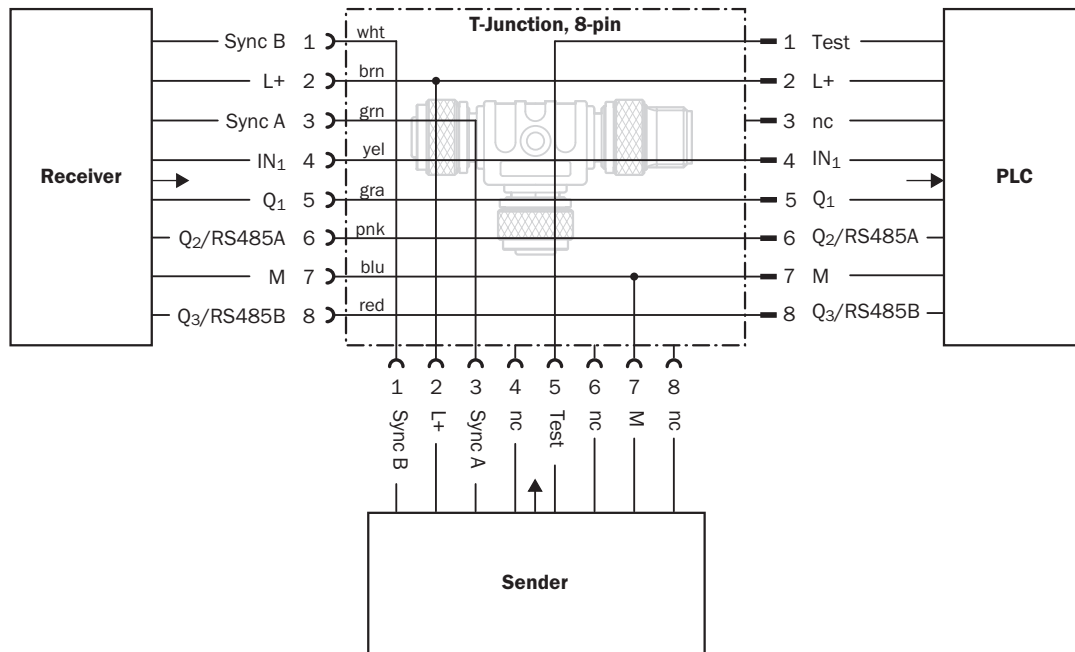
All dimensions in mm (inch)

Connection type

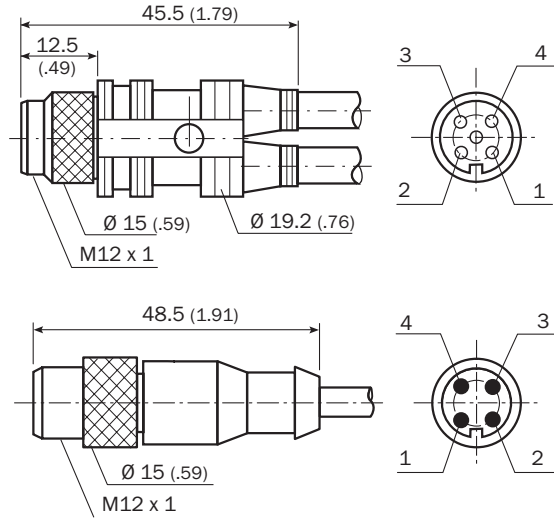


- ① MLG sender
- ② MLG receiver
- ③ Connection cable
- ④ MLG connection
- ⑤ T-piece
- ⑥ Supply Q1

Connection diagram



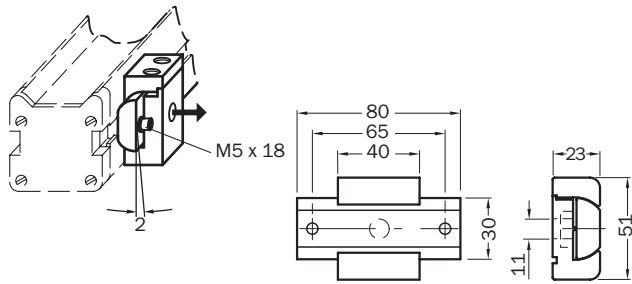
SYL-1205-G0M3



All dimensions in mm (inch)

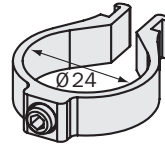
Mounting brackets/plates

BEF-1SHABAAL4



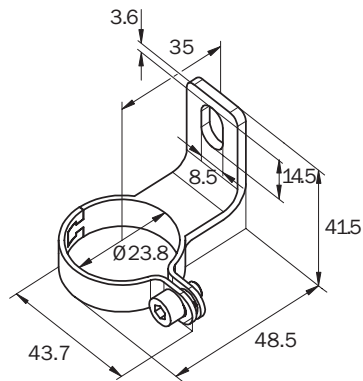
All dimensions in mm

BEF-2SMKEAAL2
BEF-2SMKEAAL4



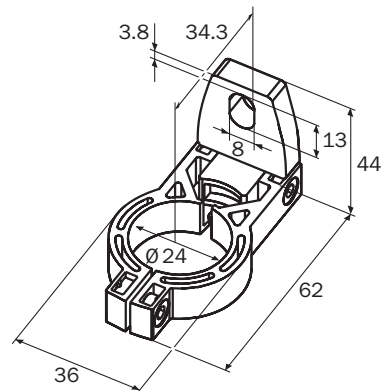
All dimensions in mm

BEF-2SMKEAES4



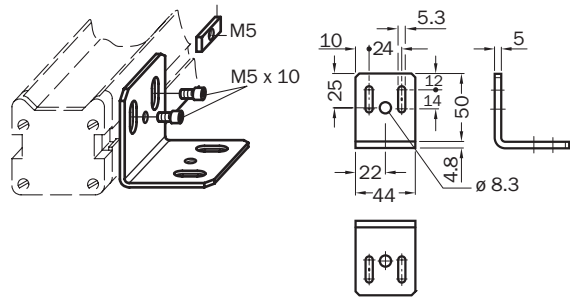
All dimensions in mm

BEF-2SMKEAKU4



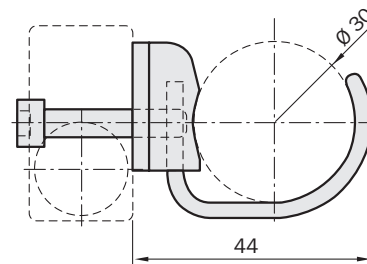
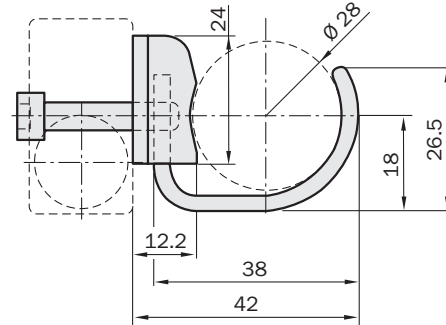
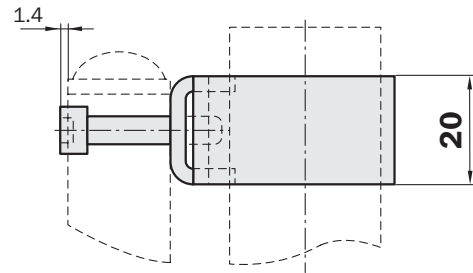
All dimensions in mm

BEF-3WNGBAST4



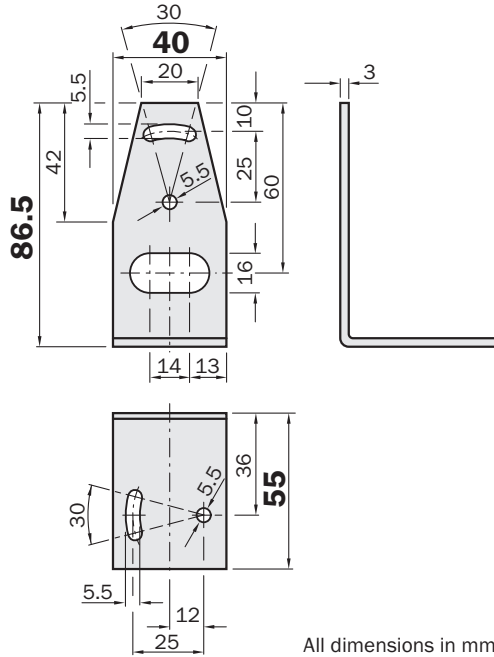
All dimensions in mm

BEF-RD30-PLG

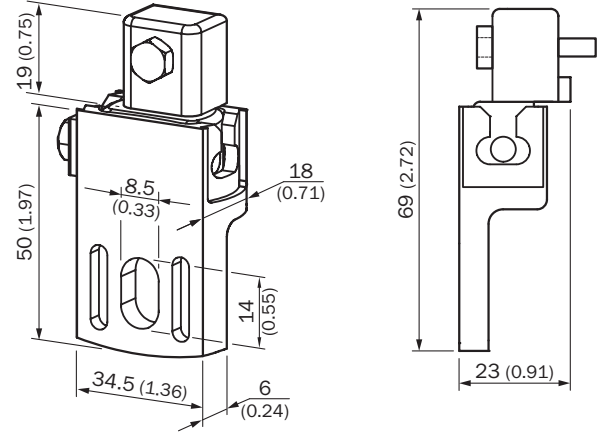


All dimensions in mm

BEF-WN-WLG12

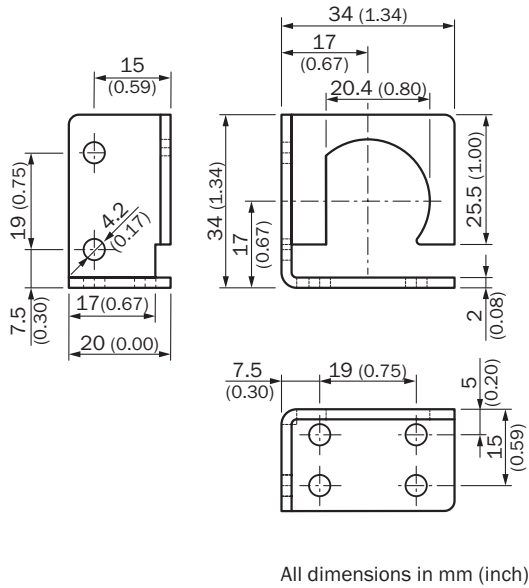


BEF-NUT-MLG



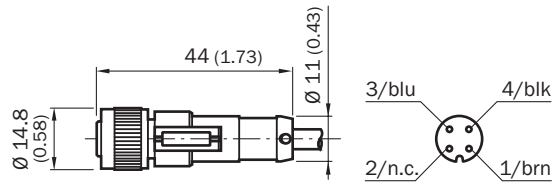
All dimensions in mm (inch)

BEF-WK-XLG



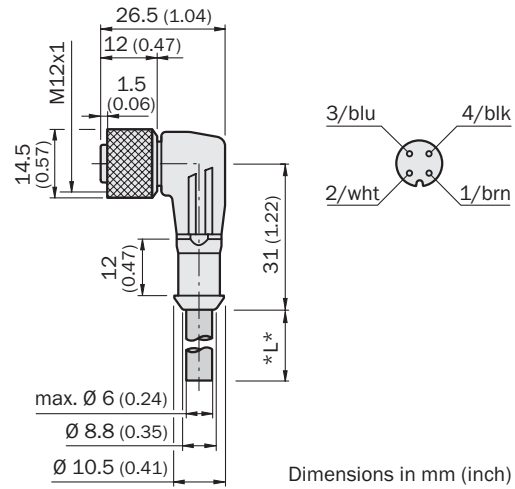
Plug connectors and cables

- DOL-1204-G02M/DOL-1204-G02MC**
- DOL-1204-G05M/DOL-1204-G05MC**
- DOL-1204-G10M/DOL-1204-G10MC**
- DOL-1204-G15M/DOL-1204-G15MC**



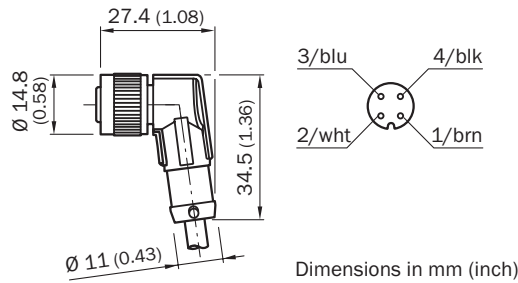
Dimensions in mm (inch)

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



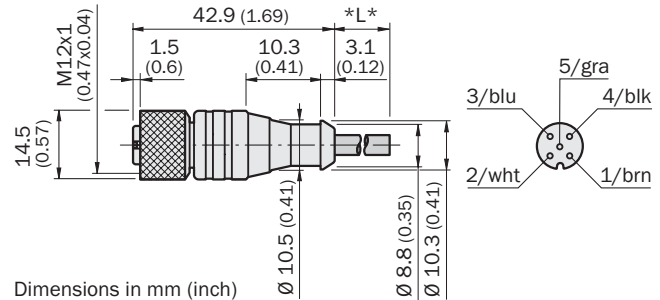
Dimensions in mm (inch)

- DOL-1204-W02MC/DOL-1204-W05MC**
- DOL-1204-W10MC/DOL-1204-W15MC**



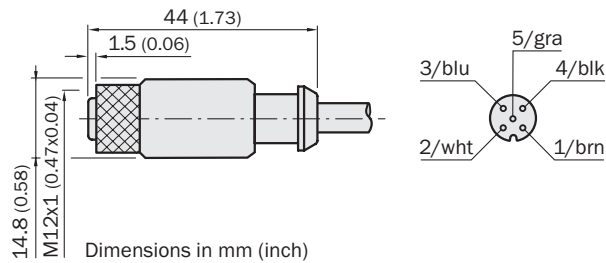
Dimensions in mm (inch)

- DOL-1205-G02M/DOL-1205-G05M**
- DOL-1205-G10M/DOL-1205-G15M**



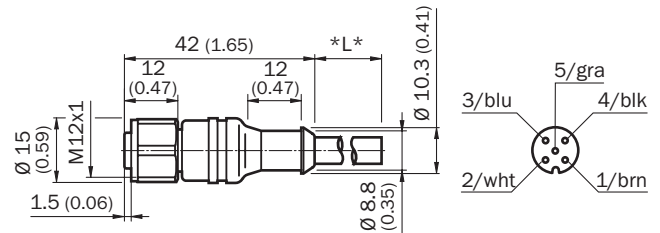
Dimensions in mm (inch)

- DOL-1205-G02MC**
- DOL-1205-G05MC**
- DOL-1205-G10MC**



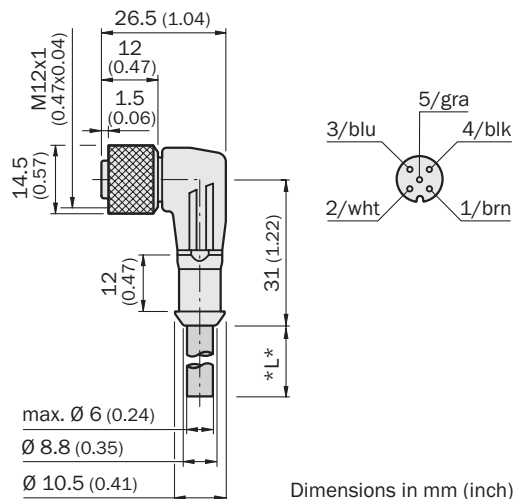
Dimensions in mm (inch)

- DOL-1205-G02MN**
- DOL-1205-G05MN**
- DOL-1205-G10MN**

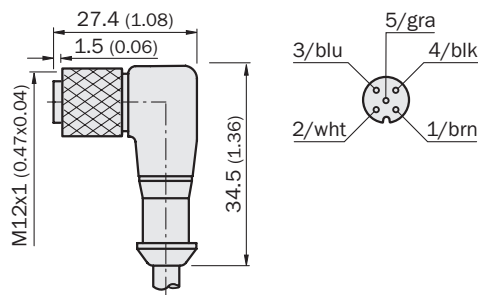


Dimensions in mm (inch)

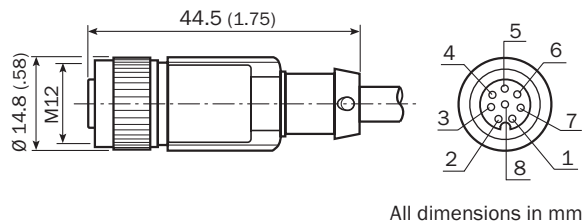
DOL-1205-W02M
DOL-1205-W05M
DOL-1205-W10M



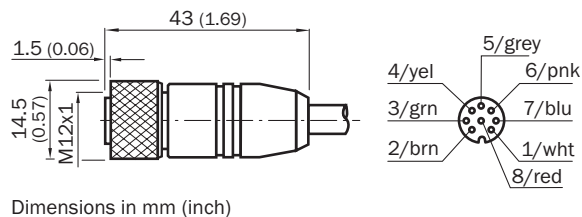
DOL-1205-W02MC
DOL-1205-W05MC
DOL-1205-W10MC



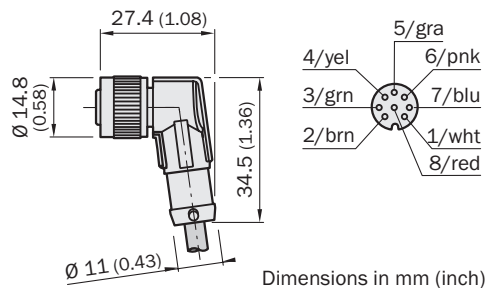
DOL-1208-G02MA/DOL-1208-G05MA
DOL-1208-G10MA/DOL-1208-G10MAC
DOL-1208-G15MA



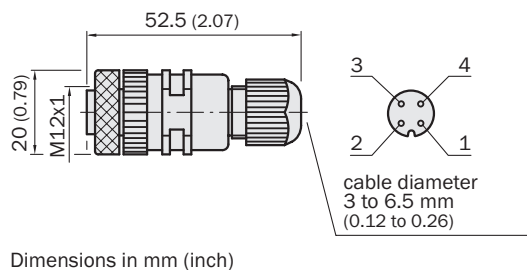
DOL-1208-G05MACR



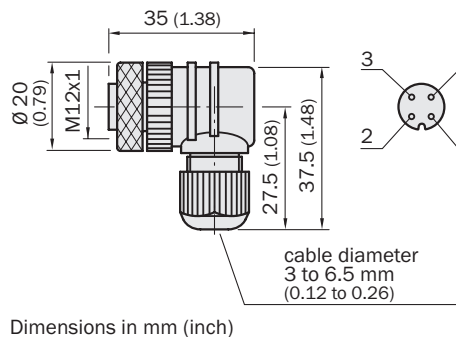
DOL-1208-W02MA
DOL-1208-W05MA



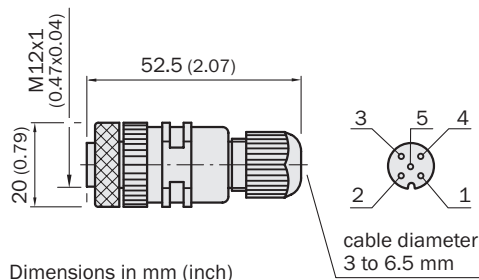
DOS-1204-G



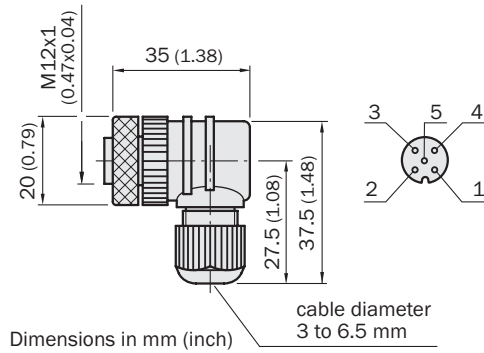
DOS-1204-W



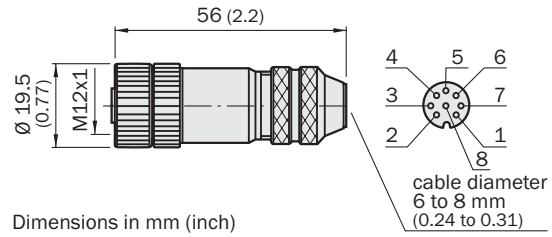
DOS-1205-G



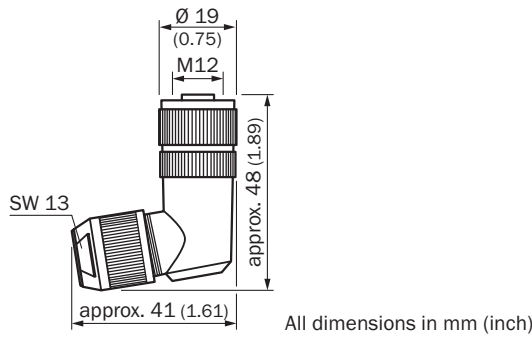
DOS-1205-W



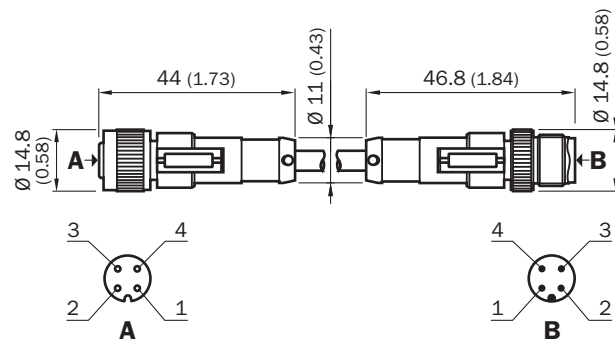
DOS-1208-GA



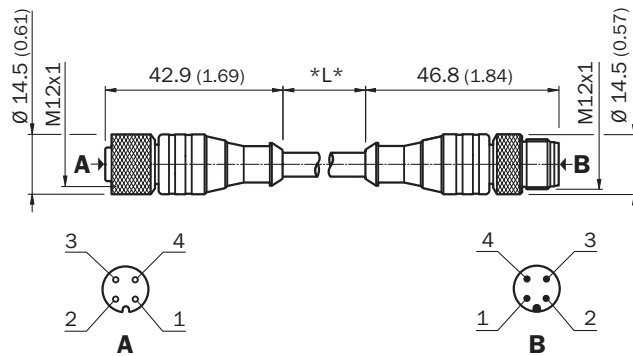
DOS-1208-WA



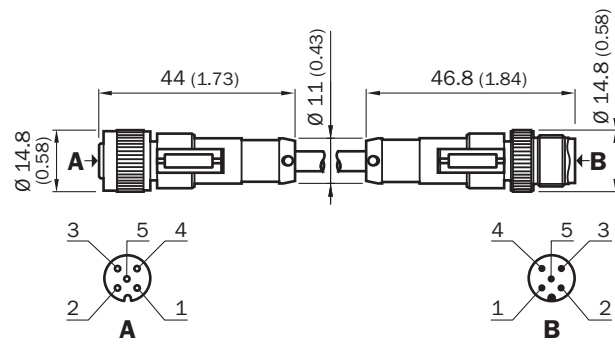
DSL-1204-G01MC/DSL-1204-G02MC
DSL-1204-G05MC/DSL-1204-G10MC



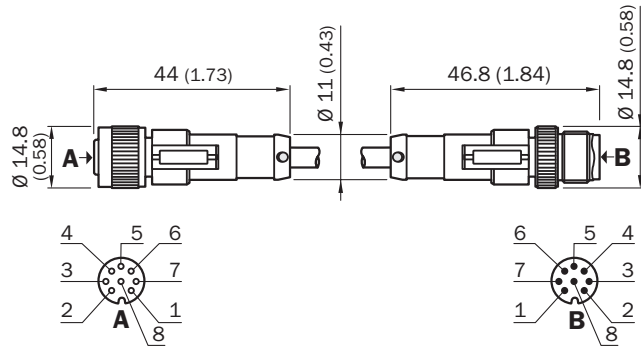
DSL-1204-G0M6/DSL-1204-G1M5
DSL-1204-G02M/DSL-1204-G05M
DSL-1204-G10M/DSL-1204-G20M



DSL-1205-G01MC/DSL-1205-G1M5C
DSL-1205-G02MC/DSL-1205-G05MC
DSL-1205-G10MC

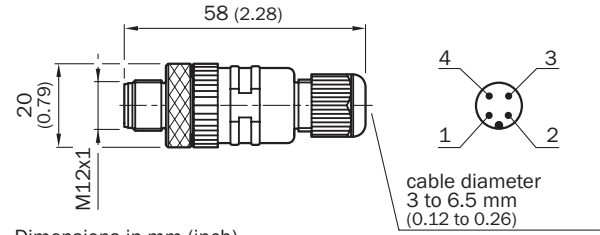


DSL-1208-G01MAC/DSL-1208-G02MAC
DSL-1208-G05MAC/DSL-1208-G10MAC



Dimensions in mm (inch)

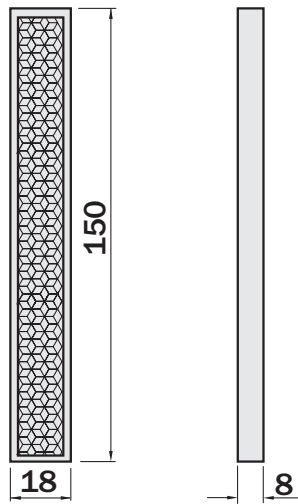
STE-1204-G



Dimensions in mm (inch)

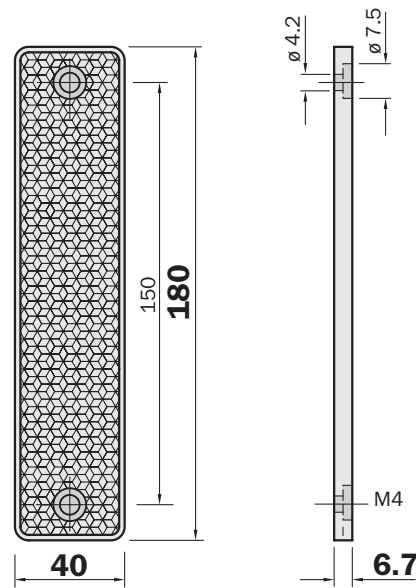
Reflectors

PL150



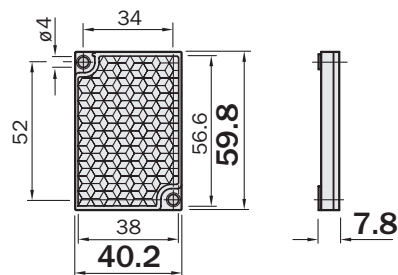
All dimensions in mm

PL180E01



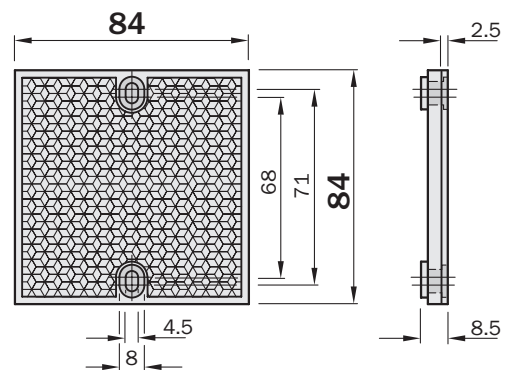
All dimensions in mm

PL40A



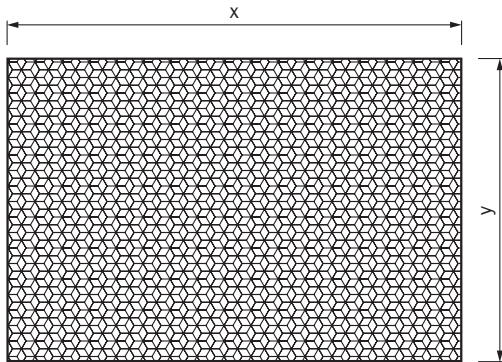
All dimensions in mm

PL80A

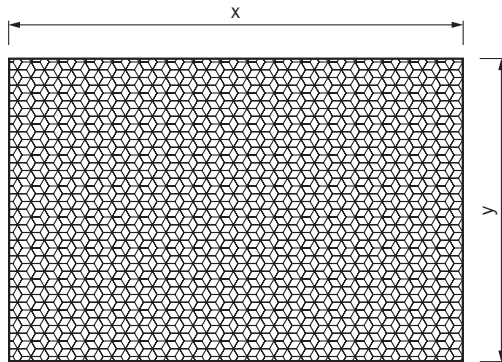


All dimensions in mm

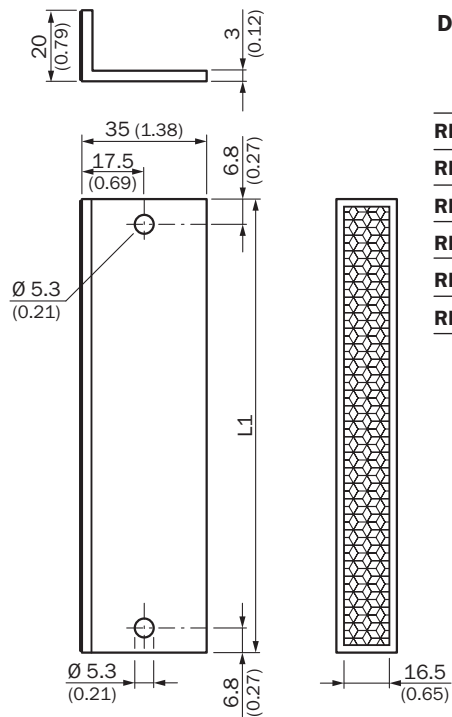
REF-DG



REF-DG-K



REF-PLG060/REF-PLG120
REF-PLG210/REF-PLG270
REF-PLG360/REF-PLG420



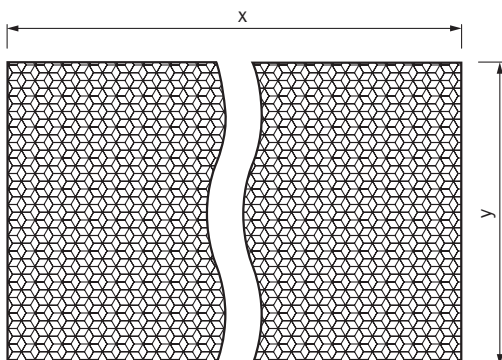
Dimensions in mm (inch)

L1

REF-PLG060	124.3 (4.89)
REF-PLG120	194.3 (7.65)
REF-PLG210	274.3 (10.79)
REF-PLG270	344.3 (13.56)
REF-PLG360	424.3 (16.70)
REF-PLG420	494.3 (19.46)

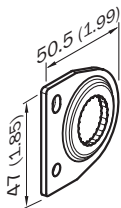
All dimensions in mm (inch)

REF-PLUS-25-K



Terminal and alignment brackets

BEF-KHS-G01

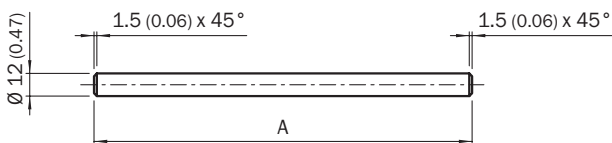


All dimensions in mm (inch)

BEF-MS12G-B (size A = 300 mm)

BEF-MS12G-NA (size A = 200 mm)

BEF-MS12G-NB (size A = 300 mm)



All dimensions in mm (inch)

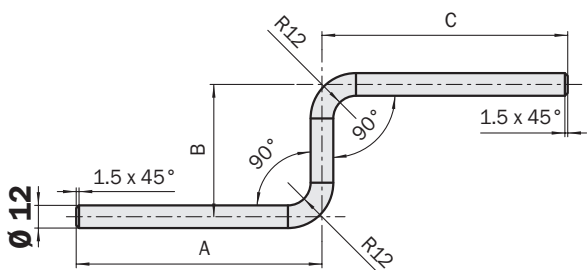
BEF-MS12Z-A (size A/C = 150 mm, B = 70 mm)

BEF-MS12Z-B (size A = 150 mm, B = 70 mm, C = 250 mm)

BEF-MS12Z-C (size A = 100 mm, B = 150 mm, C = 200 mm)

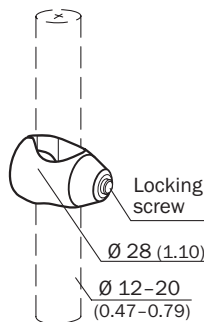
BEF-MS12Z-NA (size A/C = 150 mm, B = 70 mm)

BEF-MS12Z-NB (size A = 150 mm, B = 70 mm, C = 250 mm)



All dimensions in mm

BEF-KHS-KH1



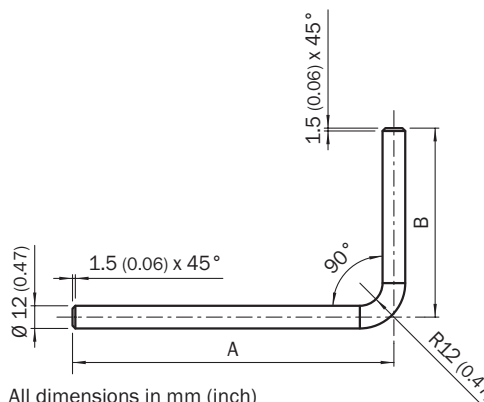
All dimensions in mm (inch)

BEF-MS12L-A (size A/B = 150 mm)

BEF-MS12L-B (size A/B = 250 mm)

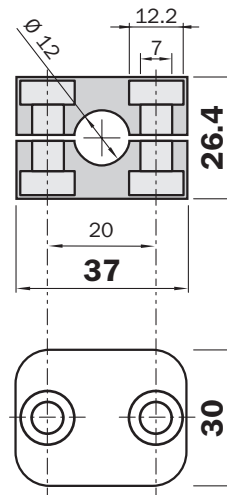
BEF-MS12L-NA (size A/B = 150 mm)

BEF-MS12L-NB (size A/B = 250 mm)



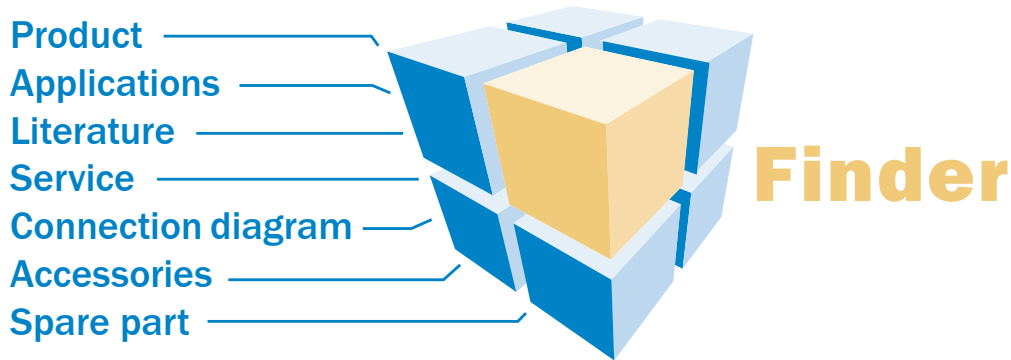
All dimensions in mm (inch)

BEF-RMC-D12



All dimensions in mm

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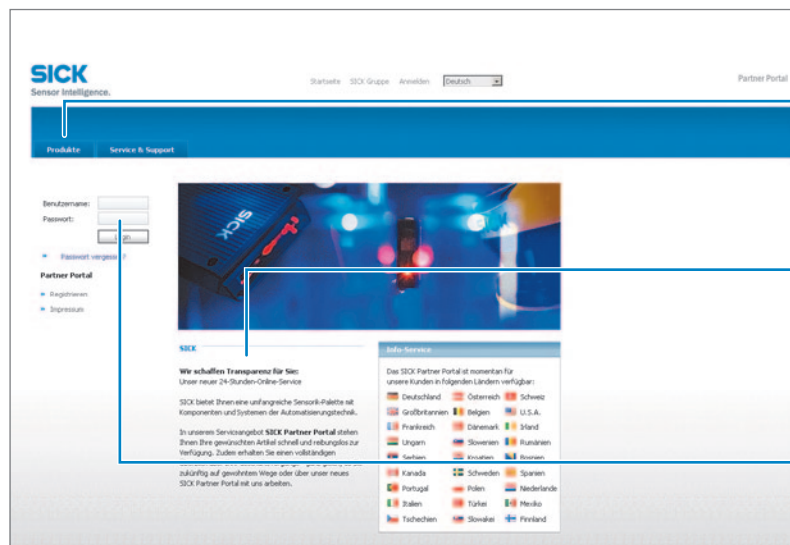
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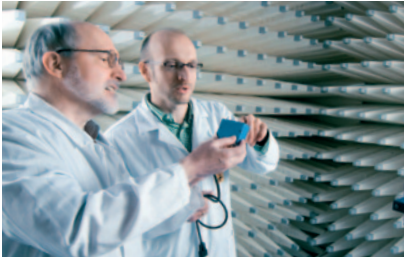
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