



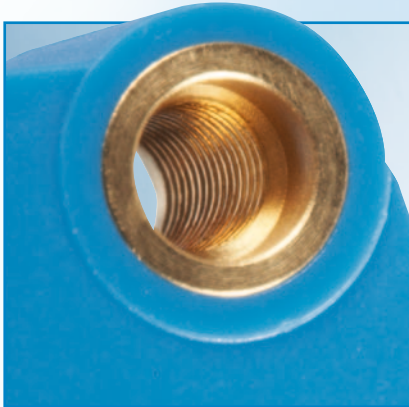
## G6 – Global Sensor

Beyond the standard  
Global sensor – the economic way to business class

# Beyond the standard – G6 Global Sensor



**EASY MONITORING**  
■ BRIGHT INDICATOR LEDS



**EASY MOUNTING**  
■ METAL INSERTS



**EASY ALIGNMENT**  
■ PinPoint





## EASY ADJUSTMENT

- BIG POTENTIOMETER

## ROBUSTNESS IN THE FIELD

- IP 67

## PERFORMANCE AND RELIABILITY

- SICK ASIC




[www.sick.com/globalsensor](http://www.sick.com/globalsensor)

## EASY SELECTION

- CABLE & PLUG

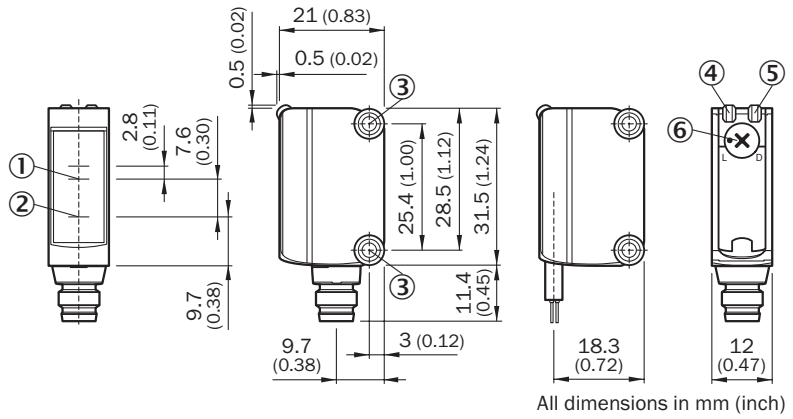


 Sensing distance  
250 mm

Photoelectric proximity sensor

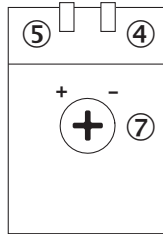
- PinPoint LED for a precise and highly visible light spot
- Metal inserts with threads for robustness and easy mounting
- SICK ASIC-chip for ambient light and cross talk immunity
- Larger potentiometer for easy adjustment
- Bright indicator LEDs for easy installation

## Dimensional drawing



## Adjustment

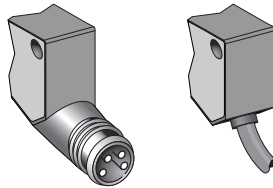
All types



- ① Optical axis receiver
- ② Optical axis sender
- ③ M3 threaded mounting hole
- ④ Indicator LED green, power supply
- ⑤ Indicator LED yellow, light received
- ⑥ Light/dark rotary switch:  
L = light switching  
D = dark switching
- ⑦ Sensing distance adjuster

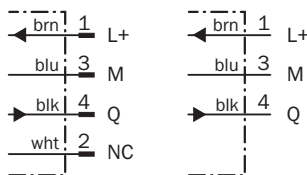
## Connection types

GTB6-P4212	GTB6-P1211
GTB6-N4212	GTB6-N1211
GTB6-P4211	GTB6-P1212
GTB6-N4211	GTB6-N1212



4-pin, M8

3 x 0.14 mm<sup>2</sup>



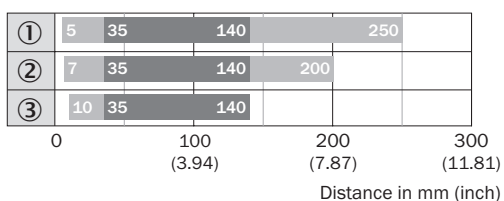
## Accessories

- Cables and connectors
- Mounting systems
- Reflectors

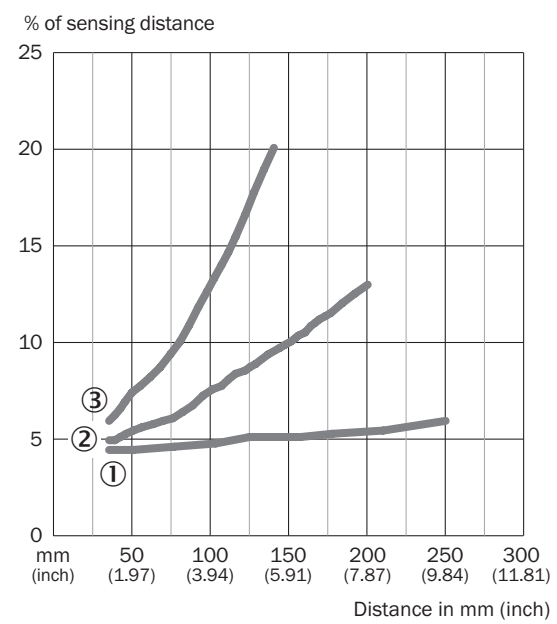
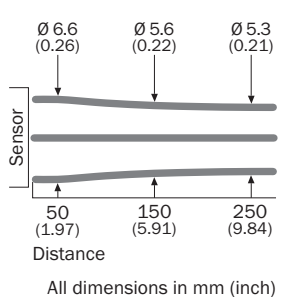
Technical data		GTB6-	N1211	N1212	N4211	N4212	P1211	P1212	P4211	P4212
<b>Sensing distance, typ. max.</b>	250 mm <sup>1)</sup>									
<b>Operating distance</b>	140 mm									
Adjustment of operating distance	Potentiometer									
<b>Light source, light type</b>	LED, red light, 650 nm <sup>2)</sup>									
Light spot diameter	6 mm at 100 mm distance									
<b>Supply voltage V<sub>S</sub></b>	10 ... 30 V DC <sup>3)</sup>									
Residual ripple	± 10 % <sup>4)</sup>									
Power consumption	≤ 30 mA <sup>5)</sup>									
<b>Switching outputs</b>	NPN: open collector: Q									
	PNP: Q									
Signal voltage PNP HIGH/LOW	V <sub>S</sub> - (≤ 3 V)/approx. 0 V									
Signal voltage NPN HIGH/LOW	Approx. V <sub>S</sub> /≤ 3 V									
Switching mode	Light/dark switching via rotary switch									
Output current I <sub>A</sub> max.	100 mA <sup>6)</sup>									
Response time	< 625 μs <sup>7)</sup>									
Switching frequency	Typ. 1 kHz <sup>8)</sup>									
<b>Connection type</b>	Cable, PVC, 2 m <sup>9)</sup>									
	Connector M8, 4-pin									
<b>Protection class</b>	⚡									
<b>Circuit protection</b>	V <sub>S</sub> connections reverse-polarity protected									
	In-/outputs short-circuit protected									
	Outputs overcurrent protected									
<b>Enclosure rating</b>	IP 67									
<b>Ambient temperature T<sub>A</sub></b>	Operation -25 °C ... +55 °C									
	Storage -40 °C ... +70 °C									
<b>Weight</b>	With plug M8, approx. 20 g									
	With cable 2 m, approx. 60 g									
<b>Housing material</b>	ABS, PC, PMMA									
<b>Included with delivery</b>	Mounting bracket, screws									

1) Object with 90 % remission (based on standard white to DIN 5033)  
 2) Average service life 100,000 h at T<sub>A</sub> = +25 °C  
 3) Limit values, operation in short-circuit protected network max. 8 A  
 4) May not exceed or fall short of V<sub>S</sub> tolerances  
 5) Without load  
 6) Signal transit time with resistive load  
 7) When V<sub>S</sub> > 24 V and ambient temperature > 49 °C, I<sub>A</sub> max. = 50 mA  
 8) With light/dark ratio 1:1  
 9) Do not bend below 0 °C

**Sensing distance and operating reserve** **Ordering information**




- ① Typ. max. sensing distance
- ② Operating range
- ① Sensing distance on white, 90 %/90 % remission
- ② Sensing distance on grey, 18 %/90 % remission
- ③ Sensing distance on black, 6 %/90 % remission



Model name	Part no.
GTB6-N1211	1052441
GTB6-N1212	1052445
GTB6-N4211	1052439
GTB6-N4212	1052443
GTB6-P1211	1052440
GTB6-P1212	1052444
GTB6-P4211	1052438
GTB6-P4212	1052442

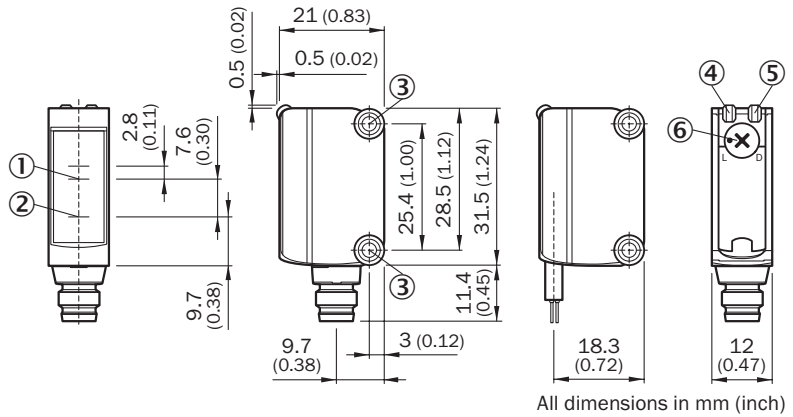
# GTE6 Photoelectric proximity sensor, energetic

 Sensing distance  
300 mm

Photoelectric proximity sensor

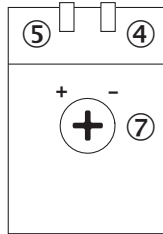
- PinPoint LED for a precise and highly visible light spot
- Metal inserts with threads for robustness and easy mounting
- SICK ASIC-chip for ambient light and cross talk immunity
- Larger potentiometer for easy adjustment
- Bright indicator LEDs for easy installation

## Dimensional drawing



## Adjustments

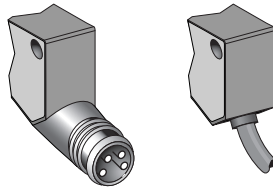
All types



- ① Optical axis receiver
- ② Optical axis sender
- ③ M3 threaded mounting hole
- ④ Indicator LED green, power supply
- ⑤ Indicator LED yellow, light received
- ⑥ Light/dark rotary switch:  
L = light switching  
D = dark switching
- ⑦ Sensing distance adjuster

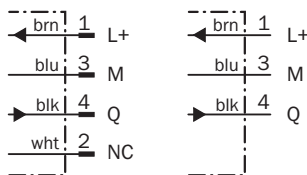
## Connection types

GTE6-N4211	GTE6-N1211
GTE6-N4212	GTE6-N1212
GTE6-P4211	GTE6-P1211
GTE6-P4212	GTE6-P1212



4-pin, M8

3 x 0.14 mm<sup>2</sup>



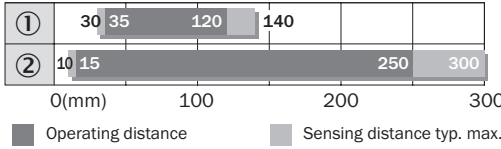
## Accessories

Cables and connectors  
Mounting systems

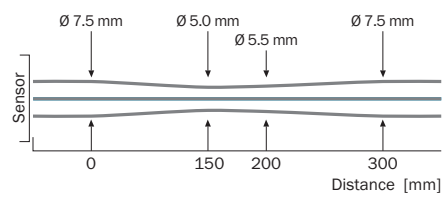
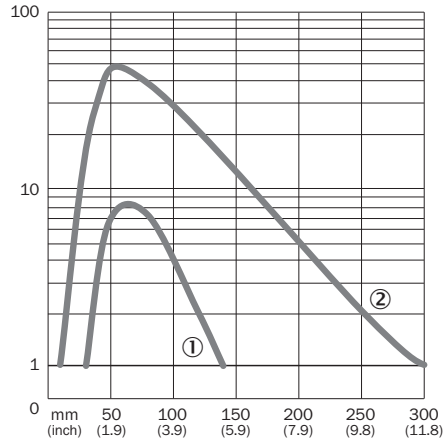
Technical data		GTE6-	N1211	N1212	N4211	N4212	P1211	P1212	P4211	P4212
<b>Sensing distance, typ. max.</b>	300 mm <sup>1)</sup>									
<b>Operating distance</b>	250 mm <sup>1)</sup>									
Adjustment of operating distance	Potentiometer									
<b>Light source, light type</b>	LED, red light, 650 nm <sup>2)</sup>									
Light spot diameter	7 mm at 90 mm distance									
<b>Supply voltage V<sub>S</sub></b>	10 ... 30 V DC <sup>3)</sup>									
Residual ripple	± 10 % <sup>4)</sup>									
Power consumption	≤ 30 mA <sup>5)</sup>									
<b>Switching outputs</b>	NPN: open collector: Q									
	PNP: Q									
Signal voltage PNP HIGH/LOW	V <sub>S</sub> - (≤ 3 V)/approx. 0 V									
Signal voltage NPN HIGH/LOW	Approx. V <sub>S</sub> /≤ 3 V									
Switching mode	Light/dark switching via rotary switch									
Output current I <sub>A</sub> max.	100 mA									
Response time	< 1,250 μs <sup>6)</sup>									
Switching frequency <sup>7)</sup>	Typ. 500 Hz									
<b>Connection type</b>	Cable, PVC, 2 m <sup>8)</sup>									
	Connector M8, 4-pin									
<b>Protection class</b>	⊕									
<b>Circuit protection</b>	V <sub>S</sub> connections reverse-polarity protected									
	In-/outputs short-circuit protected									
	Outputs overcurrent protected									
<b>Enclosure rating</b>	IP 67									
<b>Ambient temperature T<sub>A</sub></b>	Operation -25 °C ... +55 °C									
	Storage -40 °C ... +70 °C									
<b>Weight</b>	With plug M8, approx. 20 g									
	With cable 2 m, approx. 60 g									
<b>Housing material</b>	ABS, PC, PMMA									
<b>Included with delivery</b>	Mounting bracket, screws									

- <sup>1)</sup> Object with 90 % remission (based on standard white to DIN 5033)
- <sup>2)</sup> Average service life 100,000 h at T<sub>A</sub> = +25 °C
- <sup>3)</sup> Limit values, operation in short-circuit protected network max. 8 A
- <sup>4)</sup> May not exceed or fall short of V<sub>S</sub> tolerances
- <sup>5)</sup> Without load
- <sup>6)</sup> Signal transit time with resistive load
- <sup>7)</sup> With light/dark ratio 1:1
- <sup>8)</sup> Do not bend below 0 °C

**Sensing distance and operating reserve**




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



**Ordering information**

Model name	Part no.
GTE6-N1211	1050713
GTE6-N1212	1051784
GTE6-N4211	1050711
GTE6-N4212	1051782
GTE6-P1211	1050712
GTE6-P1212	1051783
GTE6-P4211	1050710
GTE6-P4212	1051781

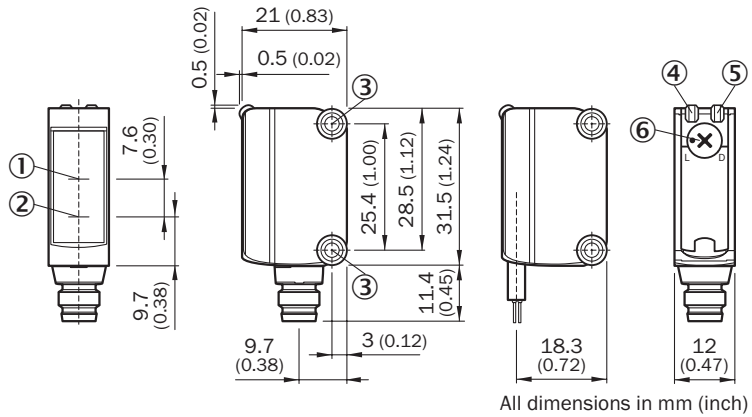
# GL6 Photoelectric reflex sensor

 **Sensing range**  
7.2 m

**Photoelectric reflex sensor**

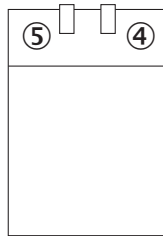
- PinPoint LED for a precise and highly visible light spot
- Metal inserts with threads for robustness and easy mounting
- SICK ASIC-chip for ambient light and cross talk immunity
- Larger potentiometer for easy adjustment
- Bright indicator LEDs for easy installation

## Dimensional drawing



## Adjustment

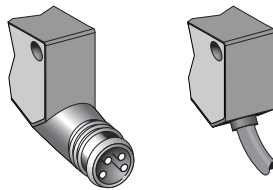
All types



- ① Optical axis receiver
- ② Optical axis sender
- ③ M3 threaded mounting hole
- ④ Indicator LED green, power supply
- ⑤ Indicator LED yellow, light received
- ⑥ Light/dark rotary switch:  
L = light switching  
D = dark switching

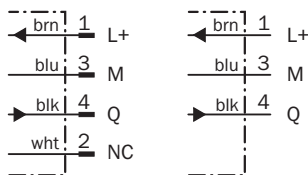
## Connection types

GL6-N4111	GL6-N1111
GL6-N4112	GL6-N1112
GL6-P4111	GL6-P1111
GL6-P4112	GL6-P1112



4-pin, M8

3 x 0.14 mm<sup>2</sup>



## Accessories

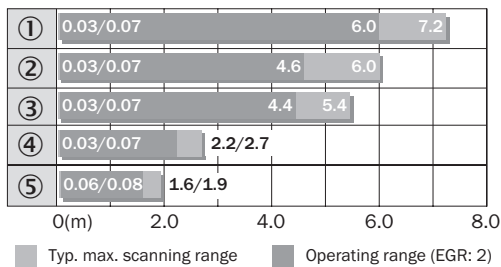
- Cables and connectors
- Mounting systems
- Reflectors



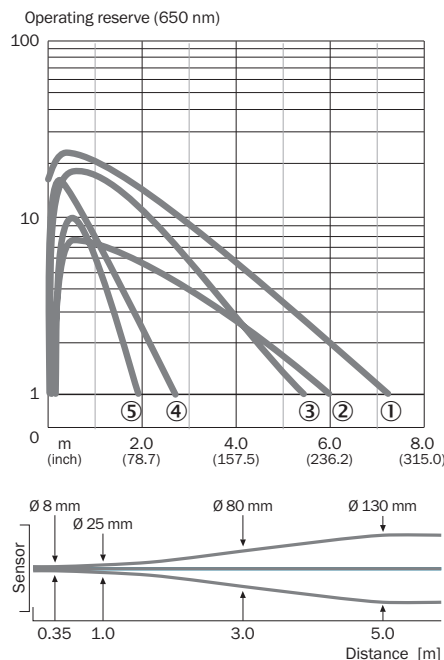
Technical data		GL6-	N1111	N1112	N4111	N4112	P1111	P1112	P4111	P4112
<b>Sensing range, typ. max.</b>	7.2 m									
<b>Operating range</b>	6 m									
Relating to	Reflector PL80A									
<b>Light source, light type</b>	LED, red light, 650 nm <sup>1)</sup>									
Light spot diameter	8 mm at 350 mm distance									
Polarization filter	✓									
<b>Supply voltage V<sub>S</sub></b>	10 ... 30 V DC <sup>2)</sup>									
Residual ripple	± 10 % <sup>3)</sup>									
Power consumption	≤ 30 mA <sup>4)</sup>									
<b>Switching outputs</b>	NPN: open collector: Q									
	PNP: Q									
Signal voltage PNP HIGH/LOW	V <sub>S</sub> - (≤ 3 V)/approx. 0 V									
Signal voltage NPN HIGH/LOW	Approx. V <sub>S</sub> /≤ 3 V									
Switching mode	Light/dark switching via rotary switch									
Output current I <sub>A</sub> max.	100 mA <sup>5)</sup>									
Response time	< 625 μs <sup>6)</sup>									
Switching frequency	Typ. 1 kHz <sup>7)</sup>									
<b>Connection type</b>	Cable, PVC, 2 m <sup>8)</sup>									
	Connector M8, 4-pin									
<b>Protection class</b>	◆									
<b>Circuit protection</b>	V <sub>S</sub> connections reverse-polarity protected									
	In-/outputs short-circuit protected									
	Outputs overcurrent protected									
<b>Enclosure rating</b>	IP 67									
<b>Ambient temperature T<sub>A</sub></b>	Operation -25 °C ... +55 °C									
	Storage -40 °C ... +70 °C									
<b>Weight</b>	With plug M8, approx. 20 g									
	With cable 2 m, approx. 60 g									
<b>Housing material</b>	ABS, PC, PMMA									
<b>Included with delivery</b>	Reflector P250, mounting bracket									

- 1) Average service life 100,000 h at T<sub>A</sub> = +25 °C  
 2) Limit values, operation in short-circuit protected network max. 8 A  
 3) May not exceed or fall short of V<sub>S</sub> tolerances  
 4) Without load  
 5) When V<sub>S</sub> > 24 V and ambient temperature > 49 °C, I<sub>A</sub> max. = 50 mA  
 6) Signal transit time with resistive load  
 7) With light/dark ratio 1:1  
 8) Do not bend below 0 °C

**Sensing range and operating reserve**



Reflector type	Operating range
① PL80A	0.07 ... 6.0 m
② PL40A	0.07 ... 4.6 m
③ P250	0.07 ... 4.4 m
④ PL20A	0.07 ... 2.2 m
⑤ Reflective tape Diamond Grade	0.08 ... 1.6 m



**Ordering information**

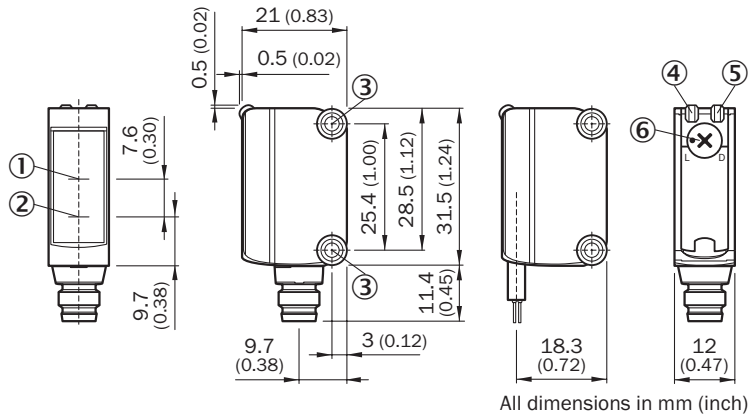
Model name	Part no.
GL6-N1111	1050709
GL6-N1112	1051780
GL6-N4111	1050707
GL6-N4112	1051778
GL6-P1111	1050708
GL6-P1112	1051779
GL6-P4111	1050706
GL6-P4112	1051777

**Sensing range**  
7.2 m

Photoelectric reflex sensor

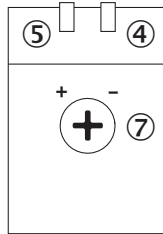
- PinPoint LED for a precise and highly visible light spot
- Metal inserts with threads for robustness and easy mounting
- SICK ASIC-chip for ambient light and cross talk immunity
- Receiver sensitivity adjustment via 270° potentiometer
- For detection of critical surfaces and shiny objects

### Dimensional drawing



### Adjustment

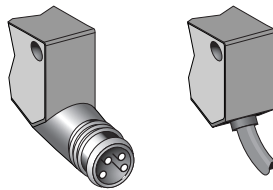
All types



- ① Optical axis receiver
- ② Optical axis sender
- ③ M3 threaded mounting hole
- ④ Indicator LED green, power supply
- ⑤ Indicator LED yellow, light received
- ⑥ Light/dark rotary switch:  
L = light switching  
D = dark switching
- ⑦ Receiver sensitivity adjustment

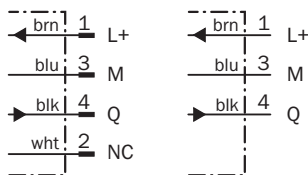
### Connection types

GL6-P4211	GL6-P1211
GL6-N4211	GL6-P1212
	GL6-N1211
	GL6-N1212



4-pin, M8

3 x 0.14 mm<sup>2</sup>



### Accessories

- Cables and connectors
- Mounting systems
- Reflectors

Technical data		GL6-	N1211	N1212	N4211	P1211	P1212	P4211				
<b>Sensing range, typ. max.</b>	7.2 m											
<b>Operating range</b>	6 m											
Adjustment of receiver sensitivity	270° potentiometer											
Relating to	Reflector PL80A											
<b>Light source, light type</b>	LED, red light, 650 nm <sup>1)</sup>											
Light spot diameter	8 mm at 350 mm distance											
Polarization filter	✓											
<b>Supply voltage V<sub>S</sub></b>	10 ... 30 V DC <sup>2)</sup>											
Residual ripple	± 10 % <sup>3)</sup>											
Power consumption	≤ 30 mA <sup>4)</sup>											
<b>Switching outputs</b>	NPN: open collector: Q											
	PNP: Q											
Signal voltage PNP HIGH/LOW	V <sub>S</sub> - (≤ 3 V)/approx. 0 V											
Signal voltage NPN HIGH/LOW	Approx. V <sub>S</sub> /≤ 3 V											
Switching mode	Light/dark switching via rotary switch											
Output current I <sub>A</sub> max.	100 mA <sup>5)</sup>											
Response time	< 625 μs <sup>6)</sup>											
Switching frequency	Typ. 1 kHz <sup>7)</sup>											
<b>Connection type</b>	Cable, PVC, 2 m <sup>8)</sup>											
	Connector M8, 4-pin											
<b>Protection class</b>	◆◆											
<b>Circuit protection</b>	V <sub>S</sub> connections reverse-polarity protected											
	In-/outputs short-circuit protected											
	Outputs overcurrent protected											
<b>Enclosure rating</b>	IP 67											
<b>Ambient temperature T<sub>A</sub></b>	Operation -25 °C ... +55 °C											
	Storage -40 °C ... +70 °C											
<b>Weight</b>	With plug M8, approx. 20 g											
	With cable 2 m, approx. 60 g											
<b>Housing material</b>	ABS, PC, PMMA											
<b>Included with delivery</b>	Reflector P250, mounting bracket											

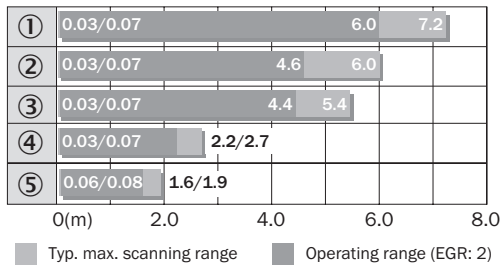
<sup>1)</sup> Average service life 100,000 h at T<sub>A</sub> = +25 °C

<sup>2)</sup> Limit values, operation in short-circuit protected network max. 8 A  
<sup>3)</sup> May not exceed or fall short of V<sub>S</sub> tolerances

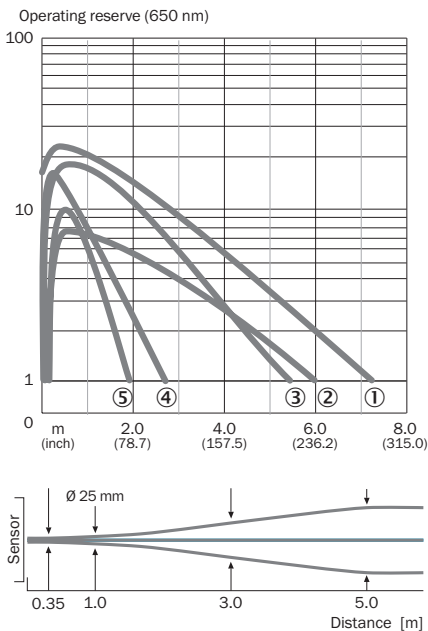
<sup>4)</sup> Without load  
<sup>5)</sup> At V<sub>S</sub> > 24 V or ambient temperature > 49 °C, I<sub>A</sub> max = 50 mA  
<sup>6)</sup> Signal transit time with resistive load

<sup>7)</sup> With light/dark ratio 1:1  
<sup>8)</sup> Do not bend below 0 °C

**Sensing range and operating reserve**



Reflector type	Operating range
① PL80A	0.07 ... 6.0 m
② PL40A	0.07 ... 4.6 m
③ P250	0.07 ... 4.4 m
④ PL20A	0.07 ... 2.2 m
⑤ Reflective tape Diamond Grade	0.08 ... 1.6 m



**Ordering information**

Model name	Part no.
GL6-P1211	1059922
GL6-P1212	1060815
GL6-P4211	1059241
GL6-N1211	1059923
GL6-N1212	1060814
GL6-N4211	1059631

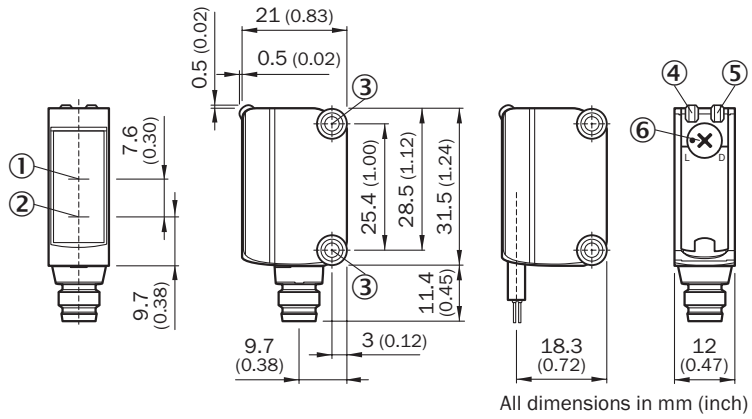
# GL6G Photoelectric reflex sensor

**Sensing range**  
7.2 m

Photoelectric reflex sensor

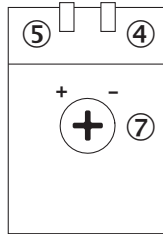
- PinPoint LED for a precise and highly visible light spot
- Metal inserts with threads for robustness and easy mounting
- SICK ASIC-chip for ambient light and cross talk immunity
- Receiver sensitivity adjustment via 270° potentiometer
- For detection of transparent objects

## Dimensional drawing



## Adjustment

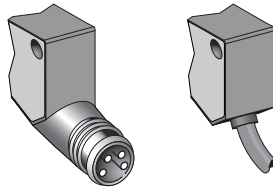
All types



- ① Optical axis receiver
- ② Optical axis sender
- ③ M3 threaded mounting hole
- ④ Indicator LED green, power supply
- ⑤ Indicator LED yellow, light received
- ⑥ Light/dark rotary switch:  
L = light switching  
D = dark switching
- ⑦ Receiver sensitivity adjustment

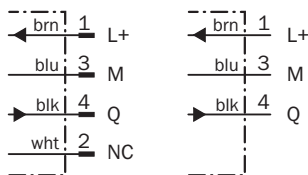
## Connection types

GL6G-P4211	GL6G-P1211
GL6G-P4212	GL6G-P1212
GL6G-N4211	GL6G-N1211
GL6G-N4212	GL6G-N1212



4-pin, M8

3 x 0.14 mm<sup>2</sup>



## Accessories

- Cables and connectors
- Mounting systems
- Reflectors

Technical data		GL6G-	N1211	N1212	N4211	N4212	P1211	P1212	P4211	P4212
<b>Sensing range, typ. max.</b>	7.2 m									
<b>Operating range</b>	6 m									
Adjustment of receiver sensitivity	270° potentiometer									
Relating to	Reflector PL80A									
<b>Light source, light type</b>	LED, red light, 650 nm <sup>1)</sup>									
Light spot diameter	8 mm at 350 mm distance									
Polarization filter	✓									
<b>Supply voltage V<sub>S</sub></b>	10 ... 30 V DC <sup>2)</sup>									
Residual ripple	± 10 % <sup>3)</sup>									
Power consumption	≤ 30 mA <sup>4)</sup>									
<b>Switching outputs</b>	NPN: open collector: Q									
	PNP: Q									
Attenuation along light beam	> 20%									
Special design	for transparent objects <sup>5)</sup>									
Signal voltage PNP HIGH/LOW	V <sub>S</sub> - (≤ 3 V)/approx. 0 V									
Signal voltage NPN HIGH/LOW	Approx. V <sub>S</sub> /≤ 3 V									
Switching mode	Light/dark switching via rotary switch									
Output current I <sub>A</sub> max.	100 mA <sup>6)</sup>									
Response time	< 625 μs <sup>7)</sup>									
Switching frequency	Typ. 1 kHz <sup>8)</sup>									
<b>Connection type</b>	Cable, PVC, 2 m <sup>9)</sup>									
	Connector M8, 4-pin									
<b>Protection class</b>	⚡									
<b>Circuit protection</b>	V <sub>S</sub> connections reverse-polarity protected									
	In-/outputs short-circuit protected									
	Outputs overcurrent protected									
<b>Enclosure rating</b>	IP 67									
<b>Ambient temperature T<sub>A</sub></b>	Operation -25 °C ... +55 °C <sup>10)</sup>									
	Storage -40 °C ... +70 °C									
<b>Weight</b>	With plug M8, approx. 20 g									
	With cable 2 m, approx. 60 g									
<b>Housing material</b>	ABS, PC, PMMA									
<b>Included with delivery</b>	Reflector P250, mounting bracket									

- 1) Average service life 100,000 h at T<sub>A</sub> = +25 °C
- 2) Limit values, operation in short-circuit protected network max. 8 A
- 3) May not exceed or fall short of V<sub>S</sub> tolerances

- 4) Without load
- 5) requires minimum attenuation in the light beam of 20 %
- 6) At V<sub>S</sub> > 24 V or ambient temperature > 49 °C, I<sub>A</sub> max = 50 mA
- 7) Signal transit time with resistive load

- 8) With light/dark ratio 1:1
- 9) Do not bend below 0 °C
- 10) Temperature stability after adjustment ±10 °C

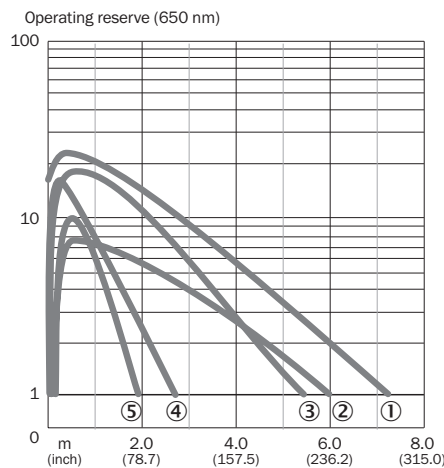
**Sensing range and operating reserve**

①	0.03/0.07	6.0	7.2
②	0.03/0.07	4.6	6.0
③	0.03/0.07	4.4	5.4
④	0.03/0.07	2.2/2.7	
⑤	0.06/0.08	1.6/1.9	

0(m) 2.0 4.0 6.0 8.0

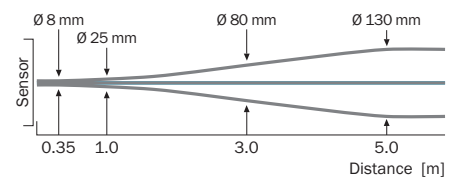
■ Typ. max. scanning range ■ Operating range (EGR: 2)

	Reflector type	Operating range
①	PL80A	0.07 ... 6.0 m
②	PL40A	0.07 ... 4.6 m
③	P250	0.07 ... 4.4 m
④	PL20A	0.07 ... 2.2 m
⑤	Reflective tape Diamond Grade	0.08 ... 1.6 m




**Ordering information**

Model name	Part no.
GL6G-P1211	1059924
GL6G-P1212	1060812
GL6G-P4211	1059632
GL6G-P4212	1060810
GL6G-N1211	1059925
GL6G-N1212	1060811
GL6G-N4211	1059633
GL6G-N4212	1060809



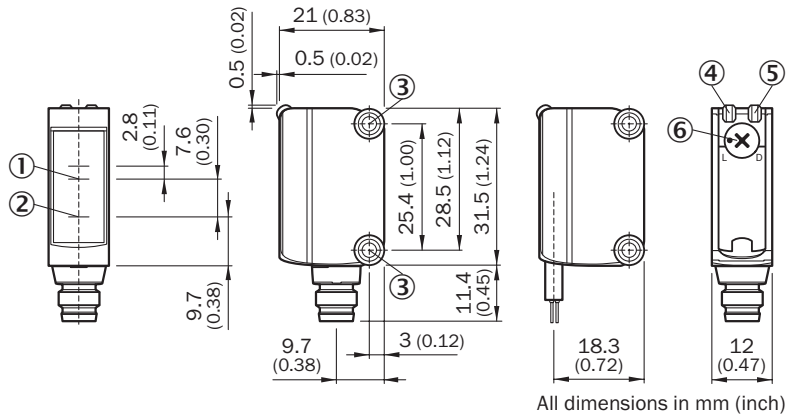
# GSE6 Through-beam photoelectric sensor

 **Sensing range**  
15 m

Through-beam photoelectric sensor

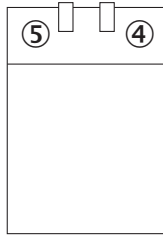
- PinPoint LED for a precise and highly visible light spot
- Metal inserts with threads for robustness and easy mounting
- Larger potentiometer for easy adjustment
- Bright indicator LEDs for easy installation

## Dimensional drawing



## Adjustments

All types

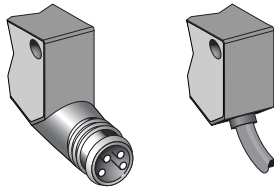


- ① Optical axis receiver
- ② Optical axis sender
- ③ M3 threaded mounting hole
- ④ Indicator LED green, power supply
- ⑤ Indicator LED yellow, light received
- ⑥ Light/dark rotary switch:  
L = light switching  
D = dark switching



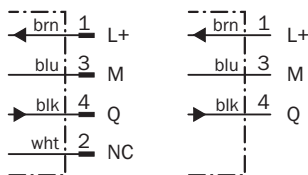
## Connection types

GSE6-P4111	GSE6-P1111
GSE6-N4111	GSE6-N1111
GSE6-P4112	GSE6-P1112
GSE6-N4112	GSE6-N1112



4-pin, M8

3 x 0.14 mm<sup>2</sup>



## Accessories

- Cables and connectors
- Mounting systems



Technical data		GSE6-	N1111	N1112	N4111	N4112	P1111	P1112	P4111	P4112
<b>Sensing range, typ. max.</b>	15 m									
<b>Operating range</b>	10 m									
<b>Light source, light type</b>	LED, red light, 650 nm <sup>1)</sup>									
Light spot diameter	375 mm at 12 m distance									
<b>Supply voltage V<sub>S</sub></b>	10 ... 30 V DC <sup>2)</sup>									
Residual ripple	± 10 % <sup>3)</sup>									
Power consumption	≤ 30 mA <sup>4)</sup>									
<b>Switching outputs</b>	NPN: open collector: Q									
	PNP: Q									
Signal voltage PNP HIGH/LOW	V <sub>S</sub> - (≤ 3 V)/approx. 0 V									
Signal voltage NPN HIGH/LOW	Approx. V <sub>S</sub> /≤ 3 V									
Switching mode	Light/dark switching via rotary switch									
Output current I <sub>A</sub> max.	100 mA <sup>5)</sup>									
Response time	≤ 500 μs <sup>6)</sup>									
Switching frequency	Typ. 1,000 Hz <sup>7)</sup>									
<b>Connection type</b>	Cable, PVC, 2 m <sup>8)</sup>									
	Connector M8, 4-pin									
<b>Protection class</b>	◊									
<b>Circuit protection</b>	V <sub>S</sub> connections reverse-polarity protected									
	In-/outputs short-circuit protected									
	Outputs overcurrent protected									
<b>Enclosure rating</b>	IP 67									
<b>Ambient temperature T<sub>A</sub></b>	Operation -25 °C ... +55 °C									
	Storage -40 °C ... +70 °C									
<b>Weight</b>	With plug M8, approx. 40 g									
	With cable 2 m, approx. 170 g									
<b>Housing material</b>	ABS, PC, PMMA									
<b>Included with delivery</b>	Mounting bracket, screws									

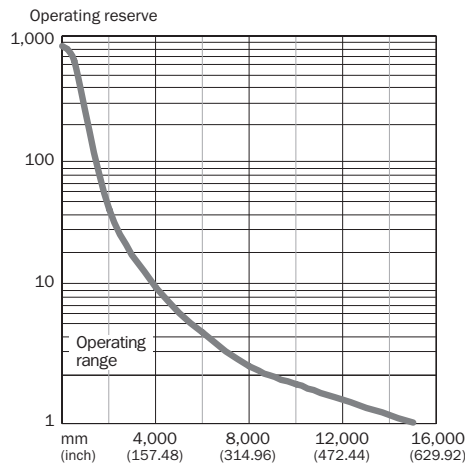
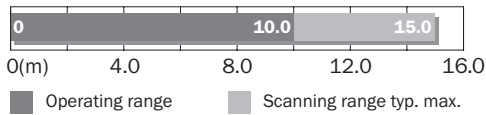
1) Average service life 100,000 h at T<sub>A</sub> = +25 °C  
 2) Limit values, operation in short-circuit protected network max. 8 A

3) May not exceed or fall short of V<sub>S</sub> tolerances  
 4) Without load

5) When V<sub>S</sub> > 24 V and ambient temperature > 49 °C, I<sub>A</sub> max. = 50 mA  
 6) Signal transit time with resistive load  
 7) With light/dark ratio 1:1

8) Do not bend below 0 °C

**Sensing range and operating reserve**



**Ordering information**

Model name	Part no.
GSE6-N1111	1052449
GSE6-N1112	1052453
GSE6-N4111	1052447
GSE6-N4112	1052451
GSE6-P1111	1052448
GSE6-P1112	1052452
GSE6-P4111	1052446
GSE6-P4112	1052450

## Dimensional drawings and Ordering information

### Cables and connectors

#### SENSICK screw-in system M8, 3- or 4-pin, enclosure rating IP 67

##### Female connector M8, 3- or 4-pin, straight

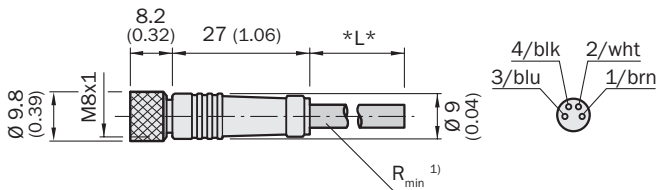
3 x 0.34 mm<sup>2</sup> or 4 x 0.25 mm<sup>2</sup>, sheath PVC

Model name	Part no.	Contacts	Cable length
DOL-0803-G02M	6010785	3	2 m
DOL-0803-G05M	6022009	3	5 m
DOL-0803-G10M	6022011	3	10 m
DOL-0804-G02M	6009870	4	2 m
DOL-0804-G05M	6009872	4	5 m
DOL-0804-G10M	6010754	4	10 m

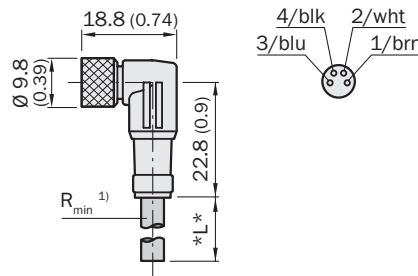
##### Female connector M8, 3- or 4-pin, right angle

3 x 0.34 mm<sup>2</sup> or 4 x 0.25 mm<sup>2</sup>, sheath PVC

Model name	Part no.	Contacts	Cable length
DOL-0803-W02M	6008489	3	2 m
DOL-0803-W05M	6022010	3	5 m
DOL-0803-W10M	6022012	3	10 m
DOL-0804-W02M	6009871	4	2 m
DOL-0804-W05M	6009873	4	5 m
DOL-0804-W10M	6010755	4	10 m



All dimensions in mm (inch)



All dimensions in mm (inch)

<sup>1)</sup> Minimum bend radius in dynamic use  
 $R_{min} = 20 \times \text{cable diameter}$

##### Female connector M8, 3- or 4-pin, straight

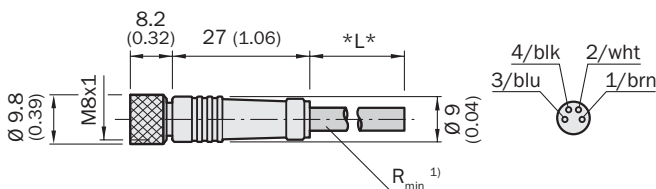
3/4 x 0.34 mm<sup>2</sup>, sheath PUR halogen free

Model name	Part no.	Contacts	Cable length
DOL-0803-G02MC	6025888	3	2 m
DOL-0803-G05MC	6025889	3	5 m
DOL-0803-G10MC	6025890	3	10 m
DOL-0804-G02MC	6025894	4	2 m
DOL-0804-G05MC	6025895	4	5 m
DOL-0804-G10MC	6025896	4	10 m

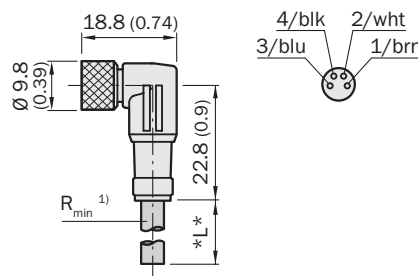
##### Female connector M8, 3- or 4-pin, right angle

3/4 x 0.34 mm<sup>2</sup>, sheath PUR halogen free

Model name	Part no.	Contacts	Cable length
DOL-0803-W02MC	6025891	3	2 m
DOL-0803-W05MC	6025892	3	5 m
DOL-0803-W10MC	6025893	3	10 m
DOL-0804-W02MC	6025897	4	2 m
DOL-0804-W05MC	6025898	4	5 m
DOL-0804-W10MC	6025899	4	10 m



All dimensions in mm (inch)



All dimensions in mm (inch)

<sup>1)</sup> Minimum bend radius in dynamic use  
 $R_{min} = 20 \times \text{cable diameter}$



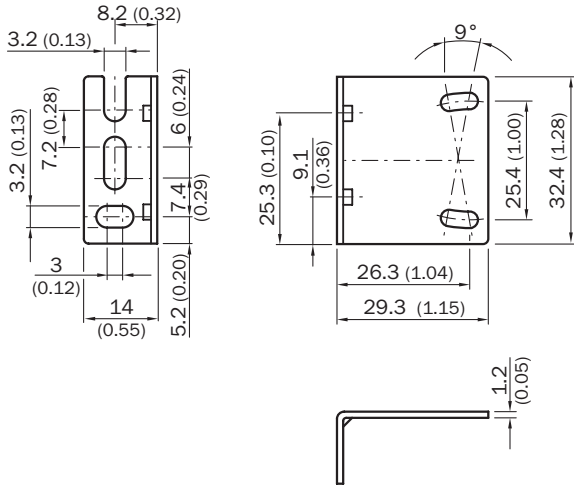
Dimensional drawings and Ordering information

Mounting systems

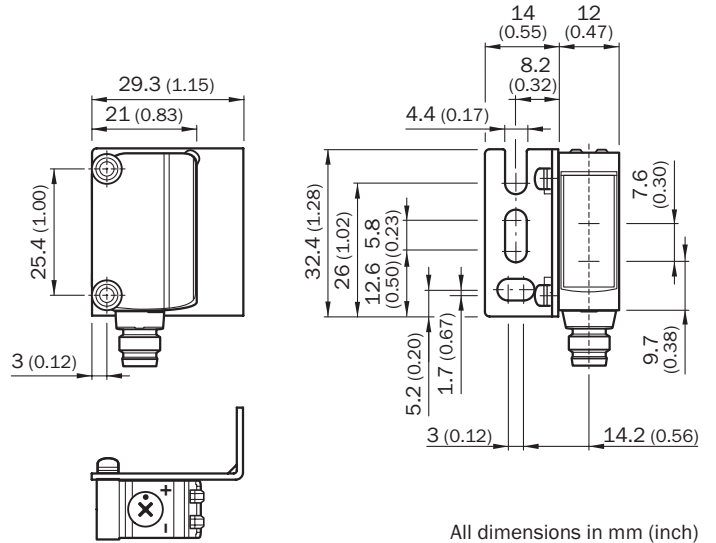
Mounting bracket, wall mounting for G6

Model name	Part no.	Material
BEF-W100-A	5311520	Stainless steel

Mounting



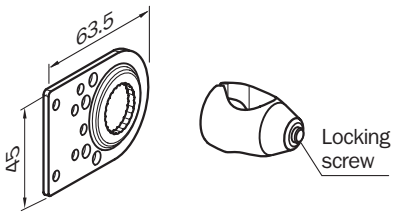
All dimensions in mm (inch)



All dimensions in mm (inch)

Mounting plate for universal bar clamp

Model name	Part no.	Mounting plate
BEF-KHS-L01	2023057	L



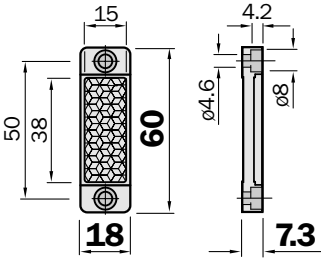
L

## Dimensional drawings and Ordering information

### Reflectors, plastic design for temperatures up to 65 °C

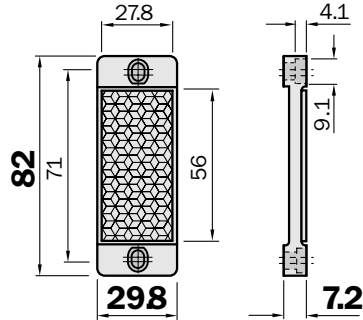
#### Reflector 20 x 40 mm

Model name	Part no.
PL20A	1012719



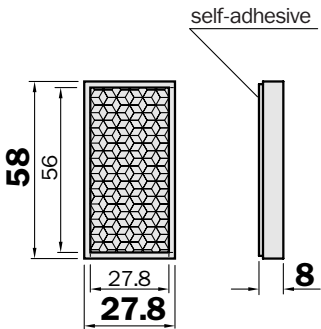
#### Reflector 30 x 50 mm

Model name	Part no.
PL30A	1002314



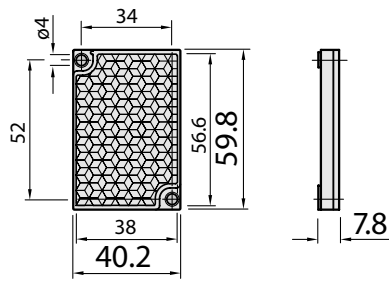
#### Reflector 30 x 50 mm

Model name	Part no.
PL31A	1002315



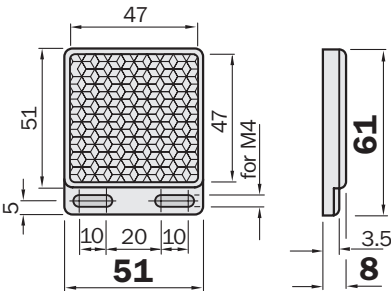
#### Reflector 40 x 60 mm

Model name	Part no.
PL40A	1012720



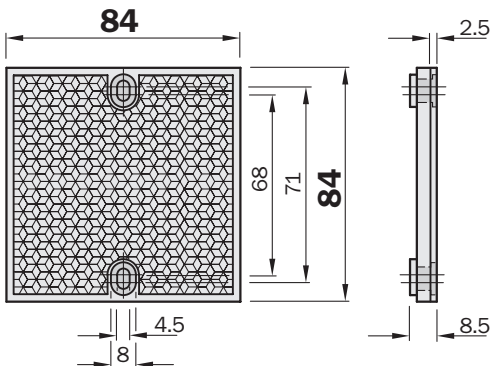
#### Reflector 47 x 47 mm<sup>1)</sup>

Model name	Part no.
P250	5304812



#### Reflector 80 x 80 mm

Model name	Part no.
PL80A	1003865



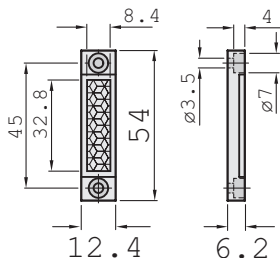
<sup>1)</sup> Included with delivery GL6 standard types

Dimensional drawings and Ordering information

Reflectors, plastic design for temperatures up to 65 °C

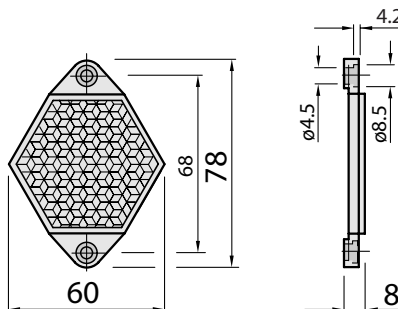
Reflector 32.8 x 8.4 mm, screwable

Model name	Part no.
P45A	5308002



Reflector 6-sided, width across flats 52 mm, screwable

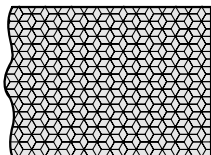
Model name	Part no.
PL50A	1000132



Self-adhesive reflective tape for photoelectric sensors with polarization filter

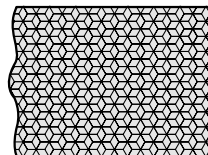
Reflective tape "Diamond Grade"

Cut to size	
Model name	Part no.
REF-DG-K	4019634

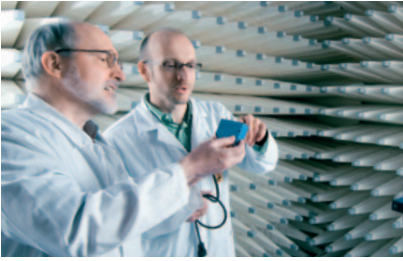


Reflective tape, self-adhesive, length of roll 22.8 m

Model name	Part no.	Width
REF-PLUS-R25	5319929	25 mm
REF-PLUS-R50	5319981	50 mm



## SICK at a glance



### Leading technologies

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



### Unique product range

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



### Comprehensive services

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

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France  
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India  
Israel  
Italia  
Japan

México  
Nederland  
Norge  
Österreich  
Polska  
România  
Russia  
Schweiz  
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South Korea  
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