



## Switching automation light grids PLG, PLG3

PLG3-360F431



**Model Name** > [PLG3-360F431](#)  
**Part No.** > [1029131](#)



**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



**Features**

Technology:	Retro-reflective light grid
Task:	Switching light grid
Minimum detectable object (MDO):	Parallel beam, 35 mm
Beam separation:	30 mm
Number of beams:	13
Detection height:	360 mm

**Performance**

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

<sup>1)</sup> With resistive load

**Interfaces**

Output type:	1 x PNP (Q)
Connection type:	Short cable (0.28 m) with connector M12, 4-pin
Input current:	12 mA
Job LED input:	PNP

### Mechanics/electronics

---

Wave length:	650 nm
Supply voltage $V_s$ <sup>1)</sup> :	DC 15 V ... 30 V
Power consumption sender:	< 45 mA
Current consumption job LED <sup>2)</sup> :	10 mA
Ripple:	< 5 Vpp
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 429 mm x 19 mm
Housing material:	Aluminum
Indication:	LED
Enclosure rating:	IP 54
Circuit protection:	Output Q short-circuit protected Interference suppression VS connections reverse-polarity protected
Weight:	450 g
Front screen:	PMMA
Output mode <sup>3)</sup> :	Q dark switching

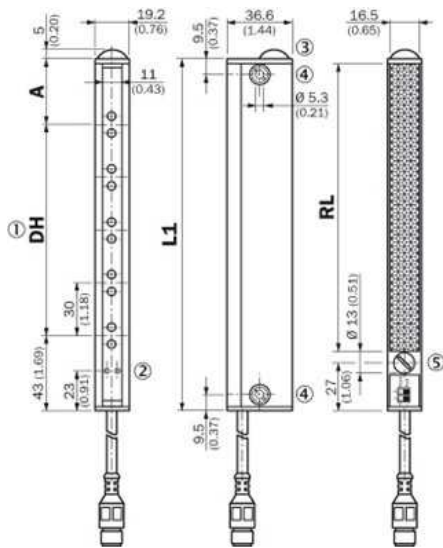
1) 2) Typical value    3) Q = active in case one beam is interrupted, /Q = active in case all beam are free

### Ambient data

---

Protection class:	III
EMC:	EN 60947-5-2
Ambient temperature:	Operation: -10 ... +55 °C Storage: -40 ... +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

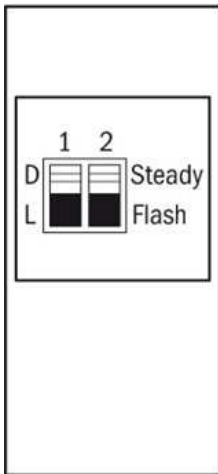
## Dimensional drawing



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

- [1] Detection height (DH)
- [2] Indicator Power on: green; beam status: yellow
- [3] Job-LED, green
- [4] Mounting hole,  $\varnothing$  5.3 mm
- [5] Configuration switches

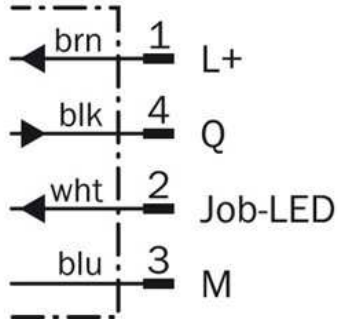
## Adjustments



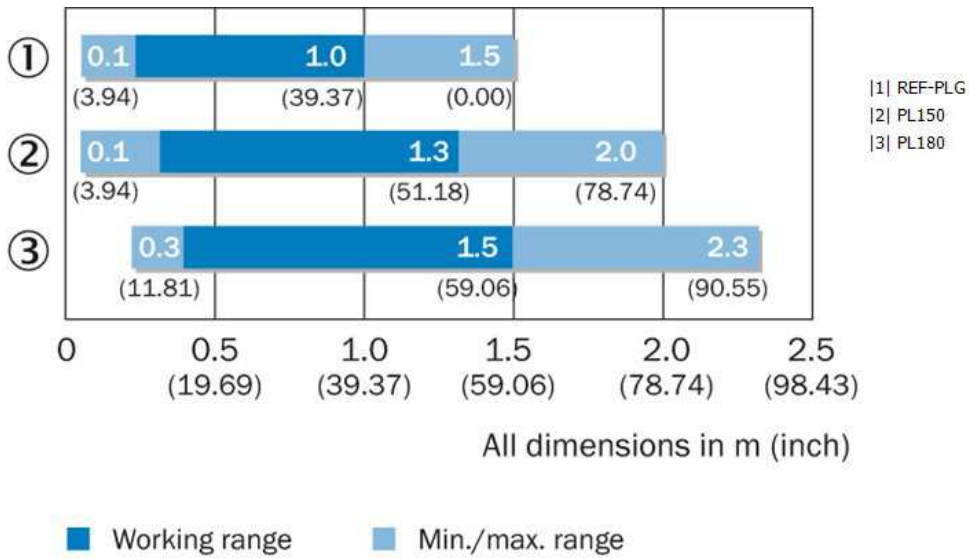
### Configuration over switches

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

Connection type and diagram



Characteristic curve: range



**Australia**

Phone +61 3 9457 0600  
1800 33 48 02 – tollfree  
E-Mail sales@sick.com.au

**Belgium/Luxembourg**

Phone +32 (0)2 466 55 66  
E-Mail info@sick.be

**Brasil**

Phone +55 11 3215-4900  
E-Mail marketing@sick.com.br

**Canada**

Phone +1 905 771 14 44  
E-Mail information@sick.com

**Česká republika**

Phone +420 2 57 91 18 50  
E-Mail sick@sick.cz

**China**

Phone +86 4000 121 000  
E-Mail info.china@sick.net.cn  
Phone +852-2153 6300  
E-Mail ghk@sick.com.hk

**Danmark**

Phone +45 45 82 64 00  
E-Mail sick@sick.dk

**Deutschland**

Phone +49 211 5301-301  
E-Mail info@sick.de

**España**

Phone +34 93 480 31 00  
E-Mail info@sick.es

**France**

Phone +33 1 64 62 35 00  
E-Mail info@sick.fr

**Great Britain**

Phone +44 (0)1727 831121  
E-Mail info@sick.co.uk

**India**

Phone +91-22-4033 8333  
E-Mail info@sick-india.com

**Israel**

Phone +972-4-6881000  
E-Mail info@sick-sensors.com

**Italia**

Phone +39 02 27 43 41  
E-Mail info@sick.it

**Japan**

Phone +81 (0)3 5309 2112  
E-Mail support@sick.jp

**Magyarország**

Phone +36 1 371 2680  
E-Mail office@sick.hu

**Nederland**

Phone +31 (0)30 229 25 44  
E-Mail info@sick.nl

**Norge**

Phone +47 67 81 50 00  
E-Mail sick@sick.no

**Österreich**

Phone +43 (0)22 36 62 28 8-0  
E-Mail office@sick.at

**Polska**

Phone +48 22 837 40 50  
E-Mail info@sick.pl

**România**

Phone +40 356 171 120  
E-Mail office@sick.ro

**Russia**

Phone +7-495-775-05-30  
E-Mail info@sick.ru

**Schweiz**

Phone +41 41 619 29 39  
E-Mail contact@sick.ch

**Singapore**

Phone +65 6744 3732  
E-Mail sales.gsg@sick.com

**Slovenija**

Phone +386 (0)1-47 69 990  
E-Mail office@sick.si

**South Africa**

Phone +27 11 472 3733  
E-Mail info@sickautomation.co.za

**South Korea**

Phone +82 2 786 6321/4  
E-Mail info@sickkorea.net

**Suomi**

Phone +358-9-25 15 800  
E-Mail sick@sick.fi

**Sverige**

Phone +46 10 110 10 00  
E-Mail info@sick.se

**Taiwan**

Phone +886 2 2375-6288  
E-Mail sales@sick.com.tw

**Türkiye**

Phone +90 (216) 528 50 00  
E-Mail info@sick.com.tr

**United Arab Emirates**

Phone +971 (0) 4 88 65 878  
E-Mail info@sick.ae

**USA/México**

Phone +1(952) 941-6780  
1 (800) 325-7425 – tollfree  
E-Mail info@sickusa.com

More representatives and agencies  
at [www.sick.com](http://www.sick.com)