



Switching automation light grids PLG, PLG3

PLG3-270F431



Model Name > [PLG3-270F431](#)
Part No. > [1029130](#)



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:	10
Detection height:	270 mm

Performance

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

¹⁾ 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

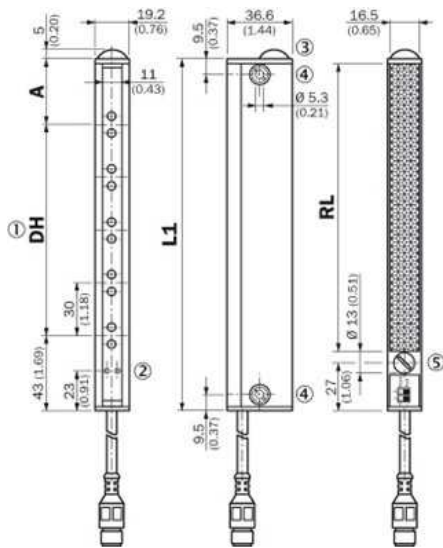
Wave length:	650 nm
Supply voltage V_s ¹⁾ :	DC 15 V ... 30 V
Power consumption sender:	< 45 mA
Current consumption job LED ²⁾ :	10 mA
Ripple:	< 5 Vpp
Output current $I_{max.}$:	100 mA
Output load capacitive:	100 nF
Output load inductive:	1 H
Initialization time:	0.6 s
Dimensions (W x H x D):	35.6 mm x 349 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:	350 g
Front screen:	PMMA
Output mode ³⁾ :	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

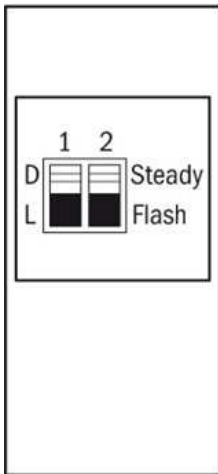
Dimensional drawing



DH	A	L1	RL
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)

- |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

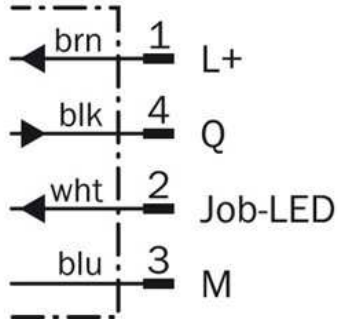
Adjustments



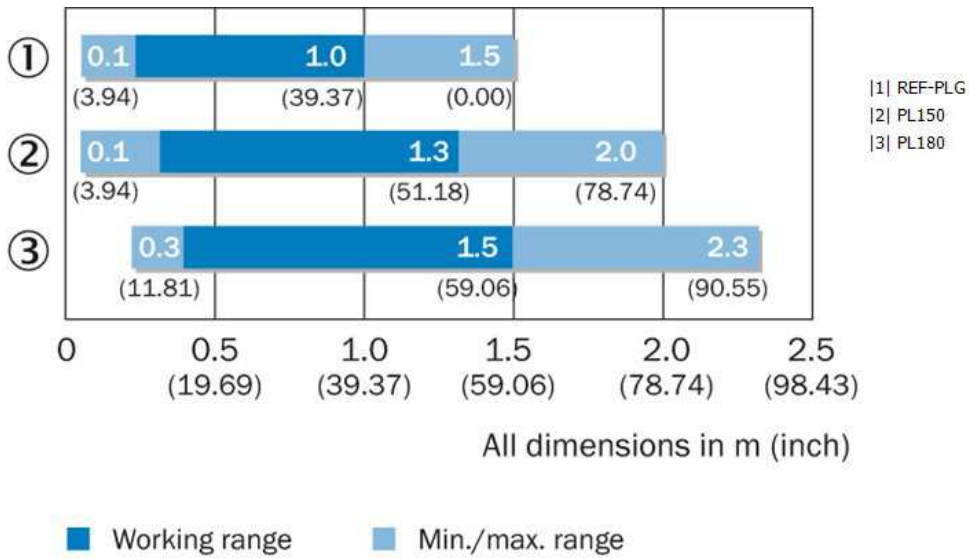
Configuration over switches

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



Characteristic curve: range



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