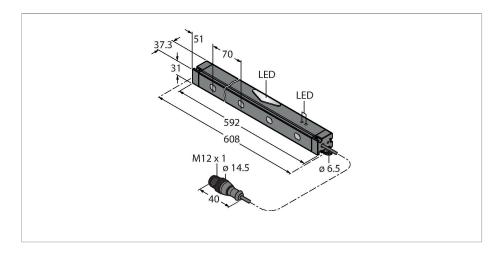


PVL500NQ Pick-to-Light – Placement Sensor Reflex Light Grid



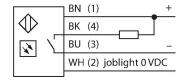
Technical data

Туре	PVL500NQ
ID	3032569
Signal and display data	
Purpose	Pick-to-Light
Function	Retroreflective Sensor
Max. range	1500 mm
Light type	Red
Scan field	500 mm
Number of beams	8
Optical resolution	70 mm
Switch Function	Momentary
Features of color 1	Green, Permanently on
Features of color 2	Red, Flashing
Electrical data	
Operating voltage U _B	1230 VDC
DC rated operating current I _e	≤ 140 mA
Max. current consumption per color	220 mA
Output function	NO contact, NPN
Input type	minus-schaltend
Response time typical	< 2 ms
Mechanical data	
Design	Rectangular, PVL
Dimensions	608 x 31 x 37.3 mm
Housing material	Metal, Anodized AL
Window material	Acrylic, clear

Features

- Scan field: 500mm
- ■8-beam system
- Max. distance to reflector 1.5m
- Operating voltage: 12...30 VDC
- ■Protection class: IP50
- Cable PVC, 2 m, with plug, M12 x 1, 4-pin
- Reflector tape (25 x 280 mm or 25 x 555 mm) included in the scope of delivery
- ■NPN switching output

Wiring diagram



Functional principle

The PVL sensor is a user-friendly one-piece light screen used for assembly, component picking and fault detection tasks. The PVL incorporates emitter and receiver. Together with the reflector, which is included in the delivery, the sensor operates in retroreflective mode. The operating modes need not be configured. The reflector is mounted opposite to the sensor. The automatic set-up routine makes manual adjustments redundant. The work light is triggered externally and is steady green during the assigned signal period. The integrated sensor reports "pick-up" back. Mispick is indicated by the work light flashing red.

The term work light therefore refers to the visual indicator of the bin from which a part should be removed next. The actuation indicator confirms the removal with a different color. The mispick indicator illuminates if a bin was reached into when the work light was not set.

Technical data

Electrical connection	Cable with connector, M12 × 1, 2 m, PVC
Number of cores	5
Ambient temperature	-40+50 °C
Protection class	IP50
Tests/approvals	
Approvals	CE

Accessories

SMBPVL2-500	3084738
	Mounting bracket, for PVL reflector foil, cold-rolled steel, reflector foil included in delivery

SMBPVL1	3026816
o7	Mounting angle, for PVL, side mounting, cold-rolled steel, optional, 2 units required for assembly

SMBPVL4	3026819	SMBPVL5	3026820
	Mounting angle, for PVL, lateral pipe mounting, 28 mm internal diameter, cold-rolled steel, optional, 2 units required for assembly		Mounting angle, for PVL, pipe mounting, 28 mm internal diameter, cold-rolled steel, optional, 2 units required for assembly

Accessories

Dimension drawing	Туре	ID	
M12x1 e15 2 14 + 11.5 5 50 50 50	RKC4.4T-2/TEL	6625013	Connection cable, M12 female connector, straight, 4-pin, cable length: 2 m, jacket material: PVC, black; cULus approval
26.5 14 26.5 14 27.50 14	WKC4.4T-2/TEL	6625025	Connection cable, M12 female connector, angled, 4-pin, cable length: 2 m, jacket material: PVC, black; cULus approval

Accessories

Dimension drawing	Туре	ID	
250	BRT-THG-1-100	3026619	Rectangular reflector band, 25 x 2500 mm, cut to size, reflection factor 0.7, ambient temperature -20 +60 °C, range with PVL light grid 1.5 m





Dimension drawing	Туре	ID	
	BRT-84X84A	3073690	Rectangular reflector, 84 x 84 mm, reflection factor 2, range with PVL light grid 6 m