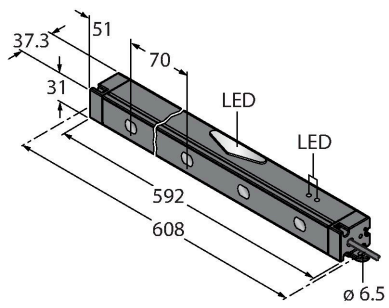
PVL500N
Pick-to-Light – Placement Sensor
Reflex Light Grid



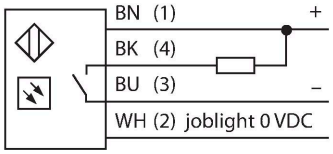
Technical data

Type	PVL500N
ID	3032570
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	12…30 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
- 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, 2 m, PVC
Number of cores	5
Ambient temperature	-40…+50 °C
Protection class	IP50
Tests/approvals	
Approvals	CE

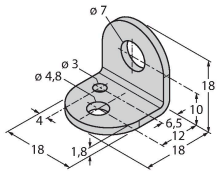
Accessories

SMBPVL2-500	3084738

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

SMBPVL1	3026816

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



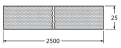
SMBPVL4	3026819

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

SMBPVL5	3026820

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

Accessories

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