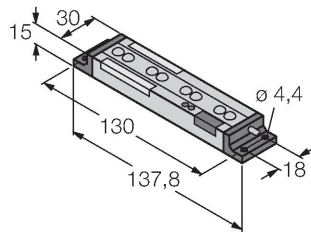


PVD100Q

Pick-to-Light – Placement Sensor

Light Grid



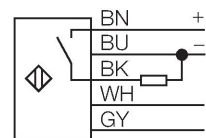
Features

- 4-beam system, beam spacing 28.6 mm
- Scan field 111 mm
- Range max. 2 m with reflector and max. 400 mm in diffuse mode
- Protection class IP62
- Cable with male end M12 x 1, 5-pin, 2 m
- Job light: green
- Mispick: red
- Operating voltage 12...30 VDC
- Non-actuated current consumption: < 20 mA, < 70 mA with activated job light
- DIP switches for adjustment of PNP/NPN switching output, NO/NC output and work light
- SMBPVA1 mounting bracket kit included in delivery
- No reflector tape included

Technical data

Type	PVD100Q
ID	3070989
Signal and display data	
Purpose	Pick-to-Light
Function	Retroreflective sensor or proximity switch
Max. range	400 mm
Light type	Red
Scan field	100 mm
Number of beams	4
Optical resolution	28.6 mm
Switch Function	Momentary
Features of color 1	Green, Permanently on, 12 lm
Features of color 2	Red, 2.5 lm
Electrical data	
Operating voltage U_B	12...30 VDC
DC rated operating current I_a	≤ 80 mA
Max. current consumption per color	88 mA
Output function	NO/NC, PNP/NPN
Input type	Bipolar (PNP/NPN)
Response time typical	< 400 ms
Mechanical data	
Design	Rectangular, PVD
Dimensions	137.8 x 30 x 15 mm
Housing material	Metal, AL, Black
Window material	Acrylic, clear

Wiring diagram



Functional principle

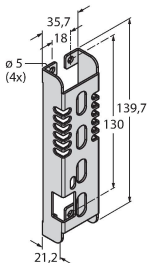
The PVD sensor is a user-friendly one-piece light screen used for assembly, component picking and fault detection tasks. The compact emitter/receiver design of the PVD sensor operates in diffuse or retroreflective mode. The operating modes need not be configured. If a reflector is mounted directly opposite the sensor, the device will operate in retroreflective mode. Otherwise it will operate in diffuse mode. The automatic set-up routine makes manual adjustments redundant. If it is blocked, the sensor automatically adapts to the sensing conditions after 15 seconds. The sensing range is smaller if no reflector is installed.

Technical data

Electrical connection	Cable with connector, M12 × 1, 2 m, PVC
Number of cores	5
Ambient temperature	0...+50 °C
Relative humidity	0...90 %
Protection class	IP62
Tests/approvals	
Approvals	CE, cURus

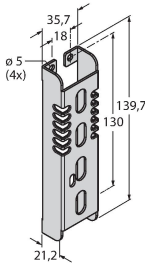
Accessories

SMBPVD100A 3071338



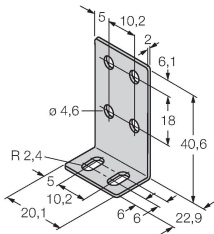
Mounting bracket, for PVD100, cold-rolled steel, cut-out for DIP switch block

SMBPVD100AB 3071339



Mounting bracket, for PVD100, cold-rolled steel, no cut-out for DIP switch block

SMBPVA1 3056884



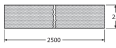
Mounting bracket, for PVA and PVD, stainless steel; set consisting of two brackets and screws

Accessories

Dimension drawing	Type	ID	
	RKC4.5T-2/TEL	6625016	Connection cable, M12 female connector, straight, 5-pin, cable length: 2 m, jacket material: PVC, black; cULus approval
	WKC4.5T-2/TEL	6625028	Connection cable, M12 female connector, angled, 5-pin, cable length: 2 m, jacket material: PVC, black; cULus approval

Dimension drawing	Type	ID	
	RKC4.4T-2/TEL	6625013	Connection cable, M12 female connector, straight, 4-pin, cable length: 2 m, jacket material: PVC, black; cULus approval
	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	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