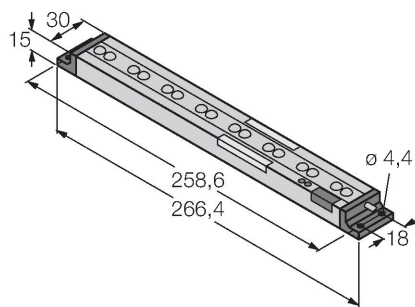


# PVD225 W/30'

## Pick-to-Light – Placement Sensor

### Light Grid



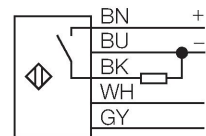
#### Features

- 8-beam system, beam spacing 28.6 mm
- Scan field 240 mm
- Range max. 2 m with reflector and max. 400 mm in diffuse mode
- Protection class IP62
- Cable 9m
- 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                               | PVD225 W/30'                               |
| ID                                 | 3074765                                    |
| Signal and display data            |                                            |
| Purpose                            | Pick-to-Light                              |
| Function                           | Retroreflective sensor or proximity switch |
| Max. range                         | 400 mm                                     |
| Light type                         | Red                                        |
| Scan field                         | 225 mm                                     |
| Number of beams                    | 8                                          |
| 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                         | 266.4 x 30 x 15 mm                         |
| Housing material                   | Metal, AL, Black                           |
| Window material                    | Acrylic, clear                             |

#### Wiring diagram



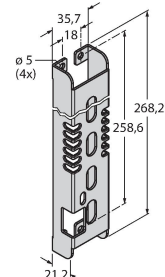
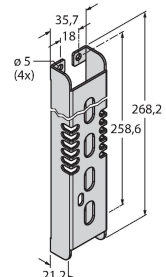
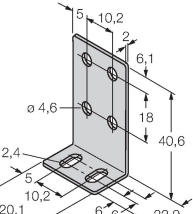
#### Functional principle

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, 9 m, PVC |
| Number of cores        | 5               |
| Ambient temperature    | 0...+50 °C      |
| Relative humidity      | 0...90 %        |
| Protection class       | IP62            |
| <b>Tests/approvals</b> |                 |
| Approvals              | CE, cURus       |

## Accessories

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>SMBPVD225A</b></p>  <p>Technical drawing of the SMBPVD225A mounting bracket. It is a vertical, U-shaped bracket made of cold-rolled steel. Dimensions include a top width of 35.7, a top flange width of 18, a mounting hole diameter of 5 (4x), a total height of 268.2, a mounting hole offset of 258.6, and a base thickness of 21.2.</p> <p><b>3071340</b></p> <p>Mounting bracket, for PVD225, cold-rolled steel, cut-out for DIP switch block</p>                                                                                                                                         | <p><b>SMBPVD225AB</b></p>  <p>Technical drawing of the SMBPVD225AB mounting bracket. It is a vertical, U-shaped bracket made of cold-rolled steel, similar to the SMBPVD225A but without the DIP switch cut-out. Dimensions include a top width of 35.7, a top flange width of 18, a mounting hole diameter of 5 (4x), a total height of 268.2, a mounting hole offset of 258.6, and a base thickness of 21.2.</p> <p><b>3071341</b></p> <p>Mounting bracket, for PVD225, cold-rolled steel, no cut-out for DIP switch block</p> |
| <p><b>SMBPVA1</b></p>  <p>Technical drawing of the SMBPVA1 mounting bracket. It is a horizontal, L-shaped bracket made of stainless steel. Dimensions include a top flange width of 5, a top flange length of 10.2, a mounting hole offset of 2, a mounting hole diameter of 4.6, a total height of 40.6, a base thickness of 22.9, a base width of 6, a base length of 20.1, a base hole offset of 10.2, a base hole diameter of 6, and a base hole radius of R 2.4.</p> <p><b>3056884</b></p> <p>Mounting bracket, for PVA and PVD, stainless steel; set consisting of two brackets and screws</p> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

## 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 |