



## Position finders DMP2

DMP2-N21111



**Model Name** > **DMP2-N21111**  
**Part No.** > **1016238**



**At a glance**

- Distances between 200 mm and 2,000 mm
- 0.15 mm repeatability
- Analog output 4 mA ... 20 mA
- Relative positioning on a reflector
- Switching and analog outputs available
- 90° rotatable connector
- Field of view  $\pm 10^\circ$  in each direction
- Easy alignment

**Your benefits**

- Increased productivity due to automated storage and retrieval processes
- Highest reliability in storage and retrieval applications due to relative positioning, which automatically compensates for mechanical rack deviations
- Increased positioning accuracy - relative positioning eliminates temperature-dependent deviations
- Improved process quality and positioning accuracy - sensor compensates for travel inconsistencies in storage and retrieval units
- Fast commissioning and setup due to easy teach-in procedure



**Performance**

|                               |  |
|-------------------------------|--|
| Target:                       | Reflector  |
| Repeatability <sup>1)</sup> : | 0.15 mm  |
| Sensing distance:             | 200 mm ... 500 mm (PL22), 500 mm ... 1,200 mm (PL50A), 500 mm ... 2,000 mm (PL80A) |
| Response time:                | 3 ms   |
| Switching frequency:          | 250 Hz   |
| Light source:                 | LED, red   |
| Sensing angle <sup>2)</sup> : | $\pm 10^\circ$   |
| Operating mode:               | Choice of continuous or triggered  |

<sup>1)</sup> At 300 mm scanning distance    <sup>2)</sup> In all axis perpendicular to the reflector (PL22, PL50A, PL80A)

**Interfaces**

|                    |  |
|--------------------|--|
| Blanking input AT: | Blanked (triggered): NPN: 0V ... Uv - ( $\geq 18$ V)<br>Free running: NPN: Uv- ( $\leq 2$ V) or free running |
| Output type:       | 5 x NPN <sup>1)</sup>  |

1) NPN: HIGH =  $\leq 2\text{ V}$  / LOW =  $V_S$

### Mechanics/electronics

|                        |                                |
|------------------------|--------------------------------|
| Supply voltage $V_S$ : | DC 18 V ... 30 V <sup>1)</sup> |
| Ripple <sup>2)</sup> : | < 5 Vpp                        |
| Connection type:       | Male connector M12, 8-pin      |
| Weight:                | 990 g <sup>3)</sup>            |
| Current consumption:   | < 250 mA <sup>4)</sup>         |
| Output current $I_A$ : | $\leq 100\text{ mA}$           |

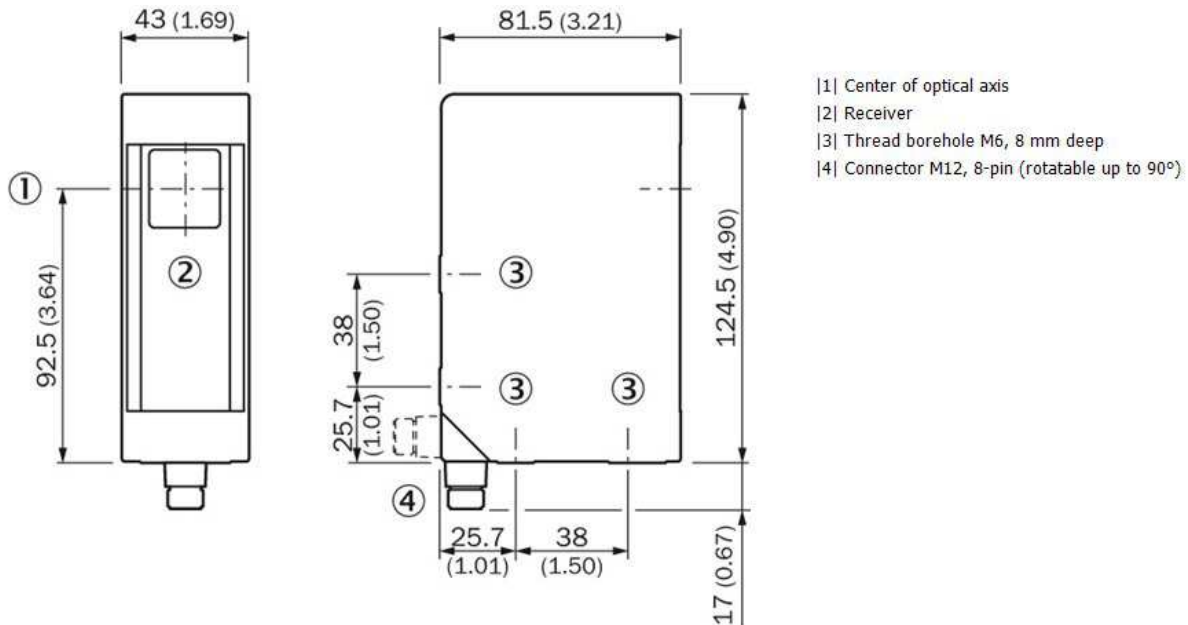
1) Limit values, reverse-polarity protected 2) May not fall short of or exceed  $V_S$  tolerances 3) Incl. cable 4) Without load

### Ambient data

|                                  |  |
|----------------------------------|--|
| Enclosure rating:                | IP 67  |
| Protection class <sup>1)</sup> : | II   |
| Ambient temperature:             | Operation: -25 ... 55 °C, Storage: -25 ... 75 °C |
| Vibration resistance:            | According to IEC 68                              |

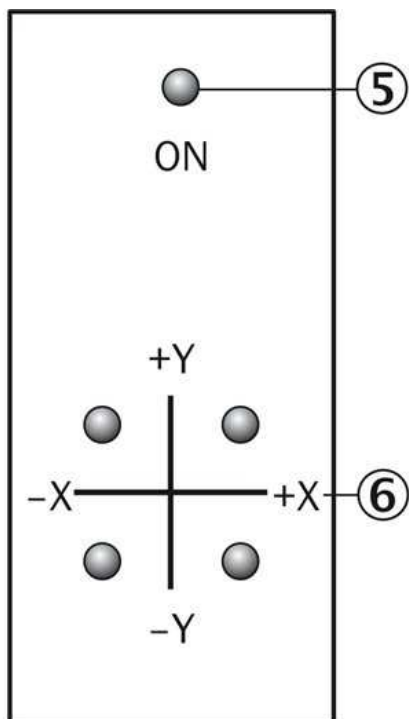
1) Reference voltage DC 50 V

### Dimensional drawing



All dimensions in mm (inch)

## Adjustments

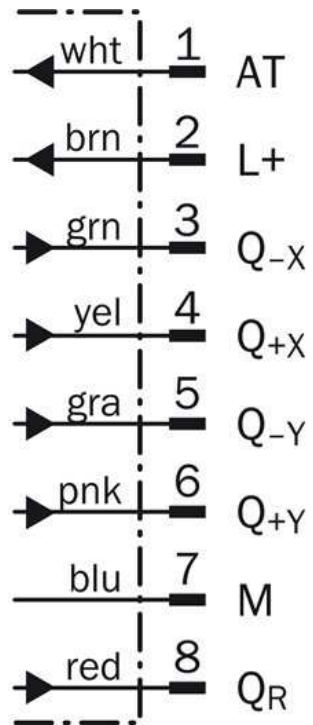


- |5| Operating indicator
- |6| Adjustment aid

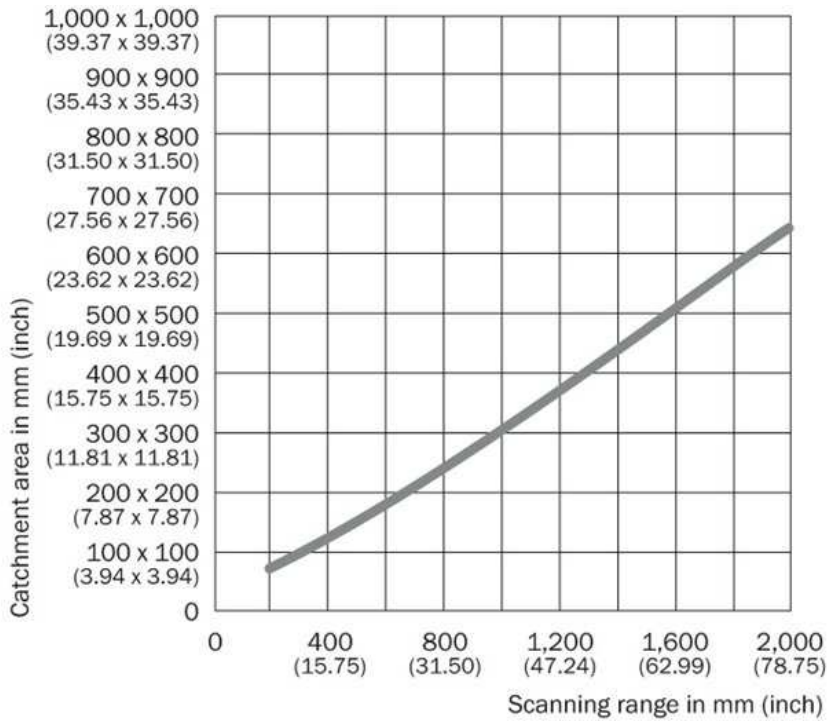
## Connection type



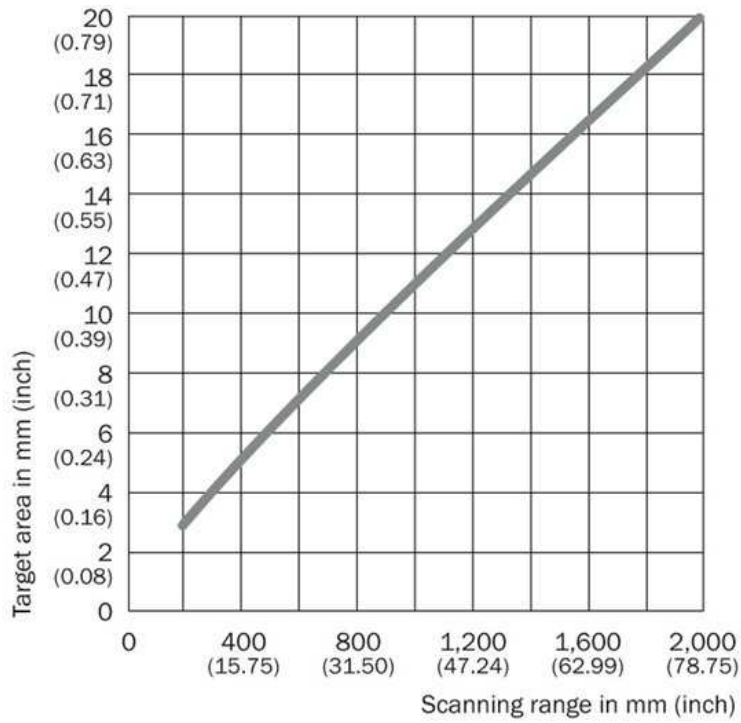
Connection diagram



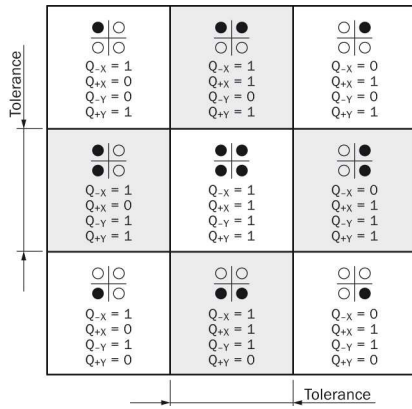
Characteristic curve: catchment area



**Characteristic curve: target area**



**Functional principle: switching status**



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