



## Position finders DMP2

DMP2-N11111



**Model Name** > **DMP2-N11111**  
**Part No.** > **1016236**



**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
Working 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) Free running: NPN: Uv- ( $\leq 2$ V) or free running
Output type:	2 x NPN <sup>1)</sup>

Analog output: 2 x 4 mA ... 20 mA (700 Ω), 2 x QA <sup>2)</sup>

<sup>1)</sup> NPN: HIGH =  $\leq 2 \text{ V}$  / LOW =  $V_S$  <sup>2)</sup> Within detection area 4 mA ... 20 mA, outside detection area 3 mA

### Mechanics/electronics

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

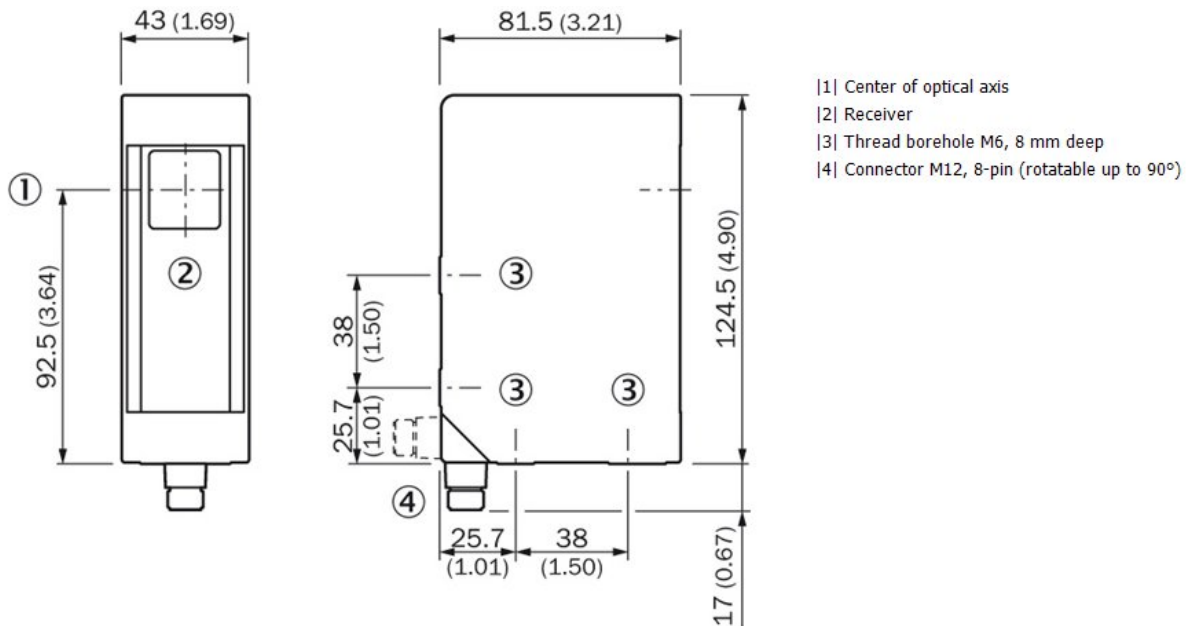
<sup>1)</sup> Limit values, reverse-polarity protected <sup>2)</sup> May not fall short of or exceed  $V_S$  tolerances <sup>3)</sup> Incl. cable <sup>4)</sup> Without load

### 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

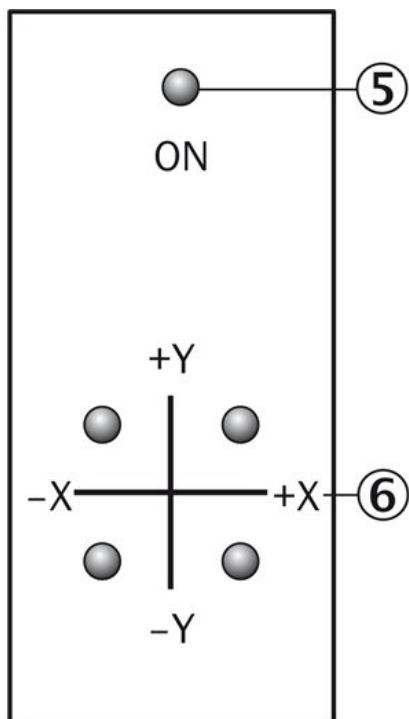
<sup>1)</sup> Reference voltage DC 50 V

### Dimensional drawing



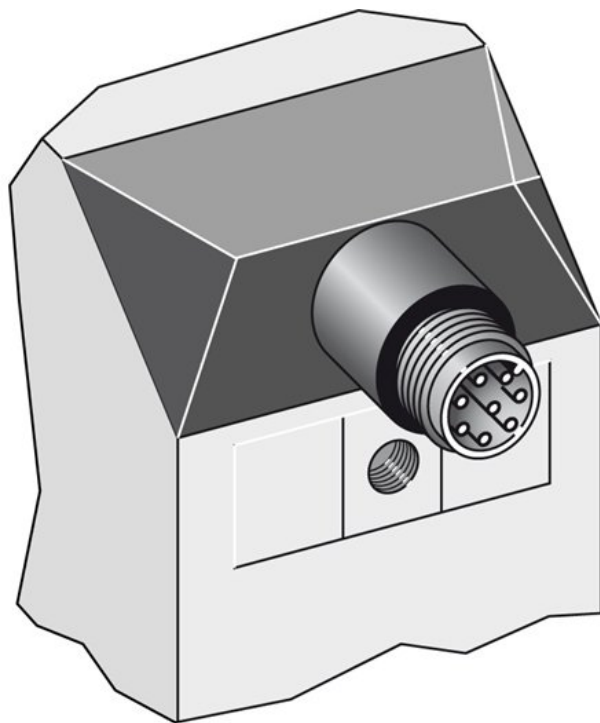
All dimensions in mm (inch)

## Adjustments

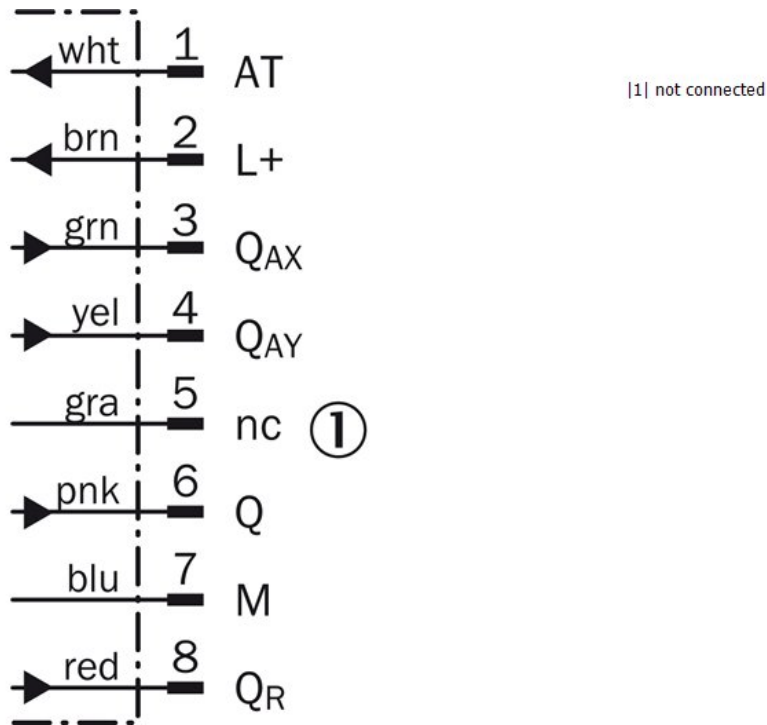


|5| Operating indicator  
|6| Adjustment aid

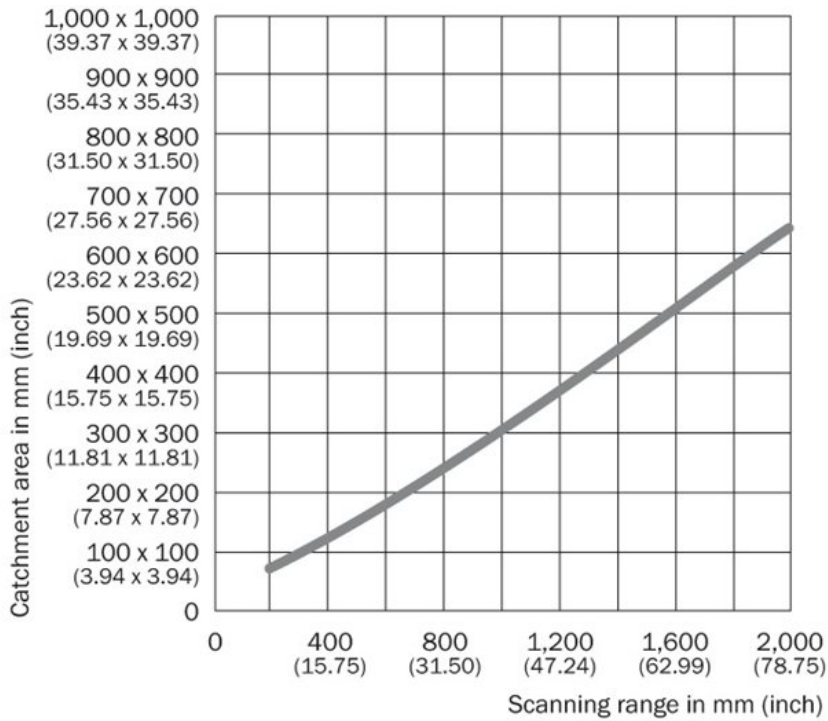
## Connection type



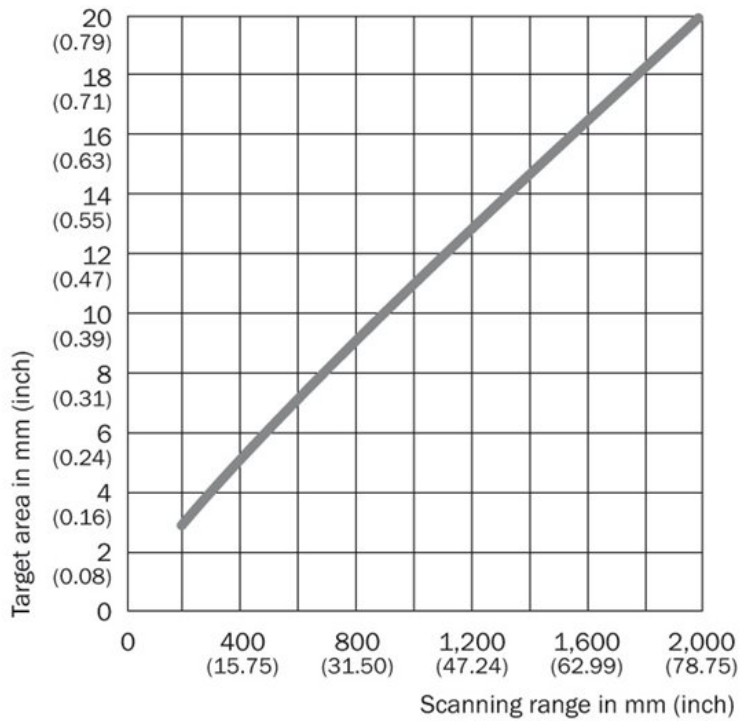
Connection diagram



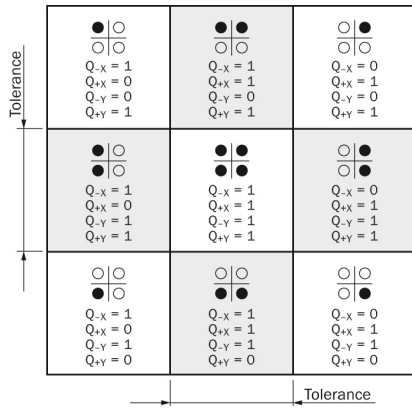
Characteristic curve: catchment area



**Characteristic curve: target area**



**Functional principle: switching status**



**Australia**

Phone +61 3 9457 0600  
1800 334 802 – tollfree  
E-Mail sales@sick.com.au

**Belgium/Luxembourg**

Phone +32 (0)2 466 55 66  
E-Mail info@sick.be

**Brasil**

Phone +55 11 3215-4900  
E-Mail sac@sick.com.br

**Canada**

Phone +1 905 771 14 44  
E-Mail information@sick.com

**Ceská Republika**

Phone +420 2 57 91 18 50  
E-Mail sick@sick.cz

**China**

Phone +86 4000 121 000  
E-Mail info.china@sick.net.cn  
Phone +852-2153 6300  
E-Mail ghk@sick.com.hk

**Danmark**

Phone +45 45 82 64 00  
E-Mail sick@sick.dk

**Deutschland**

Phone +49 211 5301-301  
E-Mail kundenservice@sick.de

**España**

Phone +34 93 480 31 00  
E-Mail info@sick.es

**France**

Phone +33 1 64 62 35 00  
E-Mail info@sick.fr

**Great Britain**

Phone +44 (0)1727 831121  
E-Mail info@sick.co.uk

**India**

Phone +91-22-4033 8333  
E-Mail info@sick-india.com

**Israel**

Phone +972-4-6801000  
E-Mail info@sick-sensors.com

**Italia**

Phone +39 02 27 43 41  
E-Mail info@sick.it

**Japan**

Phone +81 (0)3 3358 1341  
E-Mail support@sick.jp

**Magyarország**

Phone +36 1 371 2680  
E-Mail office@sick.hu

**Nederlands**

Phone +31 (0)30 229 25 44  
E-Mail info@sick.nl

**Norge**

Phone +47 67 81 50 00  
E-Mail austefjord@sick.no

**Österreich**

Phone +43 (0)22 36 62 28 8-0  
E-Mail office@sick.at

**Polska**

Phone +48 22 837 40 50  
E-Mail info@sick.pl

**România**

Phone +40 356 171 120  
E-Mail office@sick.ro

**Russia**

Phone +7-495-775-05-30  
E-Mail info@sick.ru

**Schweiz**

Phone +41 41 619 29 39  
E-Mail contact@sick.ch

**Singapore**

Phone +65 6744 3732  
E-Mail admin@sicksgp.com.sg

**Slovenija**

Phone +386 (0)1-47 69 990  
E-Mail office@sick.si

**South Africa**

Phone +27 11 472 3733  
E-Mail info@sickautomation.co.za

**South Korea**

Phone +82 2 786 6321/4  
E-Mail info@sickkorea.net

**Suomi**

Phone +358-9-25 15 800  
E-Mail sick@sick.fi

**Sverige**

Phone +46 10 110 10 00  
E-Mail info@sick.se

**Taiwan**

Phone +886-2-2375-6288  
E-Mail sales@sick.com.tw

**Türkiye**

Phone +90 (216) 528 50 00  
E-Mail info@sick.com.tr

**United Arab Emirates**

Phone +971 (0) 4 8865 878  
E-Mail info@sick.ae

**USA/México**

Phone +1(952) 941-6780  
1 800-325-7425 – tollfree  
E-Mail info@sickusa.com

More representatives and agencies  
at [www.sick.com](http://www.sick.com)