



Position finders DMP2

DMP2-P11111



Model Name > **DMP2-P11111**
Part No. > **1016235**



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 ¹⁾ :	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 ²⁾ :	$\pm 10^\circ$
Operating mode:	Choice of continuous or triggered

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

Interfaces

Blanking input AT:	Blanked (triggered): PNP: > 18 V ... > Uv max. Free running: PNP: < 2 V or free running
Output type:	2 x PNP ¹⁾

Analog output: $2 \times 4 \text{ mA} \dots 20 \text{ mA} (700 \Omega), 2 \times \text{QA}^{2)}$

¹⁾ PNP: $\text{HIGH} = V_S - \leq 2 \text{ V} / \text{LOW} = \leq 2 \text{ V}$ ²⁾ Within detection area $4 \text{ mA} \dots 20 \text{ mA}$, outside detection area 3 mA

Mechanics/electronics

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

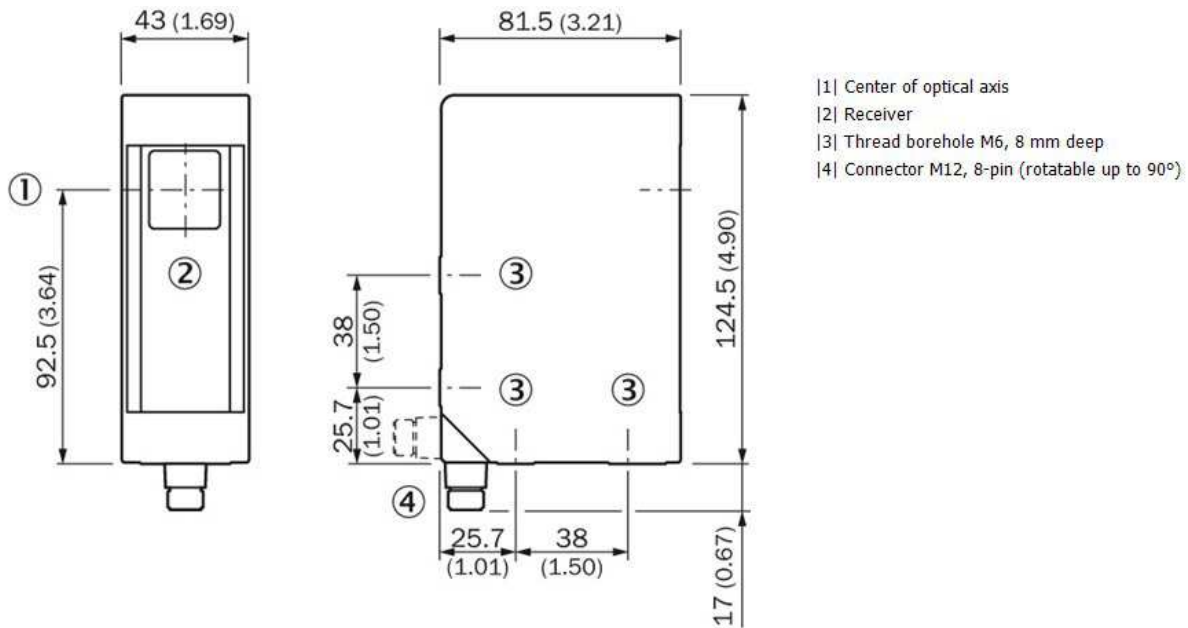
¹⁾ Limit values, reverse-polarity protected ²⁾ May not fall short of or exceed V_S tolerances ³⁾ Incl. cable ⁴⁾ Without load

Ambient data

Enclosure rating: IP 67
 Protection class ¹⁾: II
 Ambient temperature: Operation: $-25 \dots 55 \text{ }^\circ\text{C}$, Storage: $-25 \dots 75 \text{ }^\circ\text{C}$
 Vibration resistance: According to IEC 68

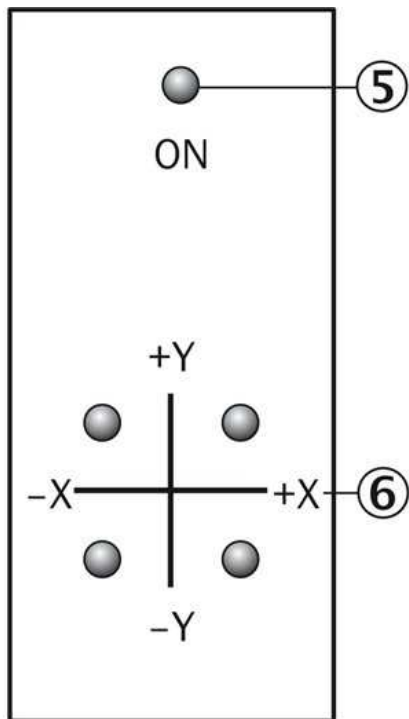
¹⁾ Reference voltage DC 50 V

Dimensional drawing



All dimensions in mm (inch)

Adjustments

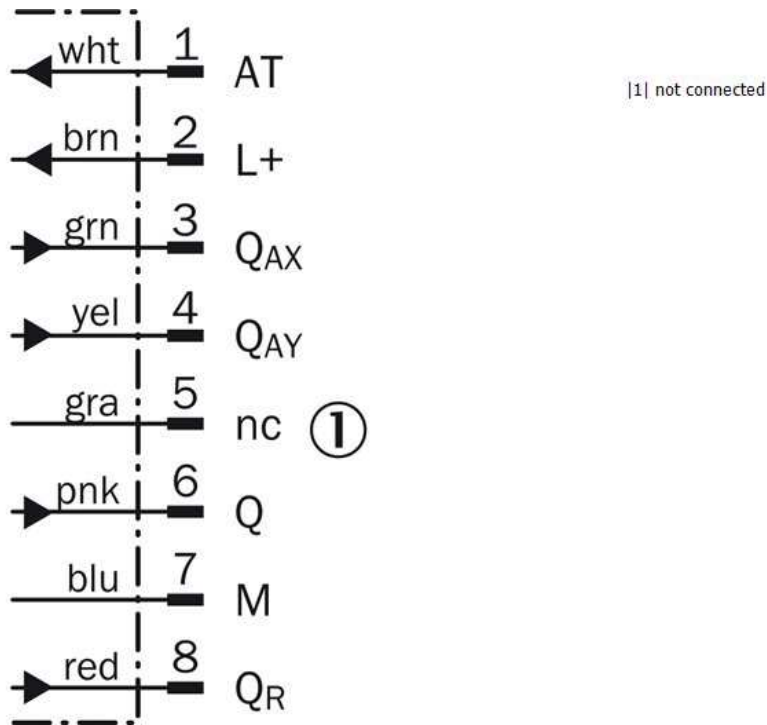


- |5| Operating indicator
- |6| Adjustment aid

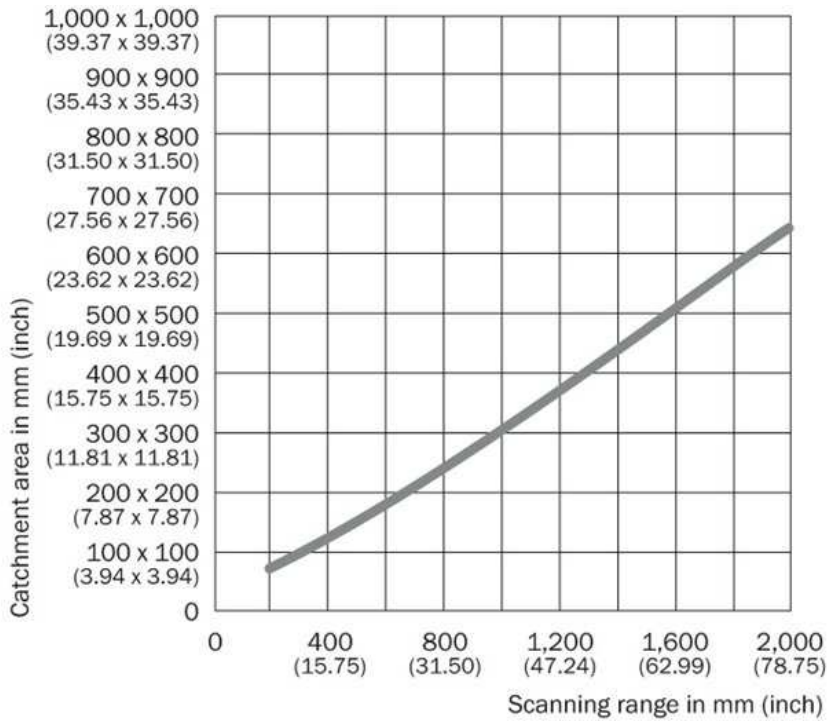
Connection type



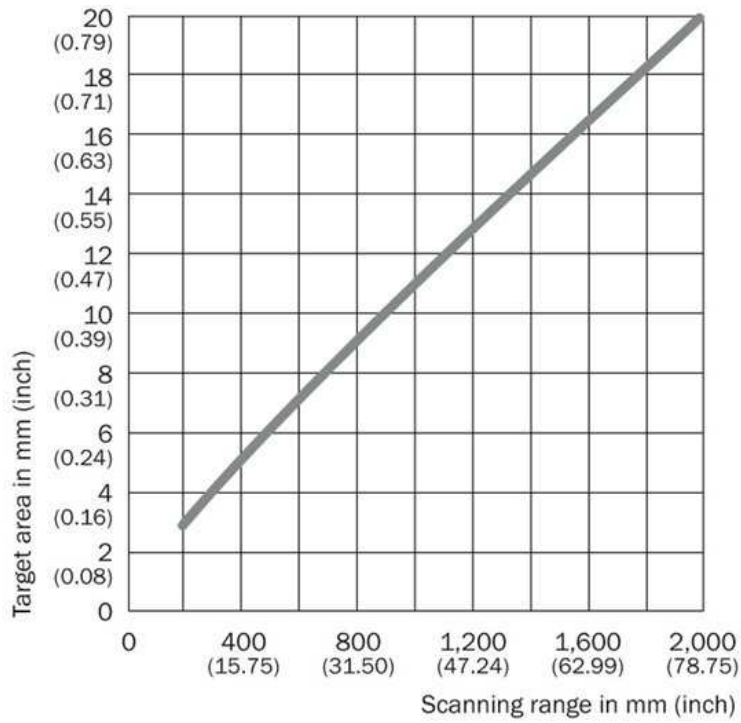
Connection diagram



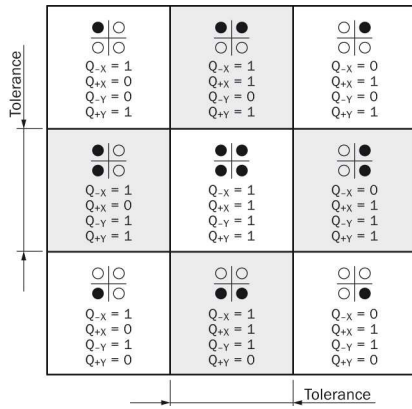
Characteristic curve: catchment area



Characteristic curve: target area



Functional principle: switching status



Australia

Phone +61 3 9457 0600
1800 33 48 02 – 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 marketing@sick.com.br

Canada

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

Česká 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 info@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 +972-4-6881000
E-Mail info@sick-sensors.com

Italia

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

Japan

Phone +81 (0)3 5309 2112
E-Mail support@sick.jp

Magyarország

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

Nederland

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

Norge

Phone +47 67 81 50 00
E-Mail sick@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 sales.gsg@sick.com

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 88 65 878
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