



Position finders DMP2

DMP2-P111111



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
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 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 ... > U _v max. Free running: PNP: < 2 V or free running
Output type:	2 x PNP ¹⁾

Analog output:

2 x 4 mA ... 20 mA (700 Ω), 2 x QA ²⁾

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

Mechanics/electronics

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

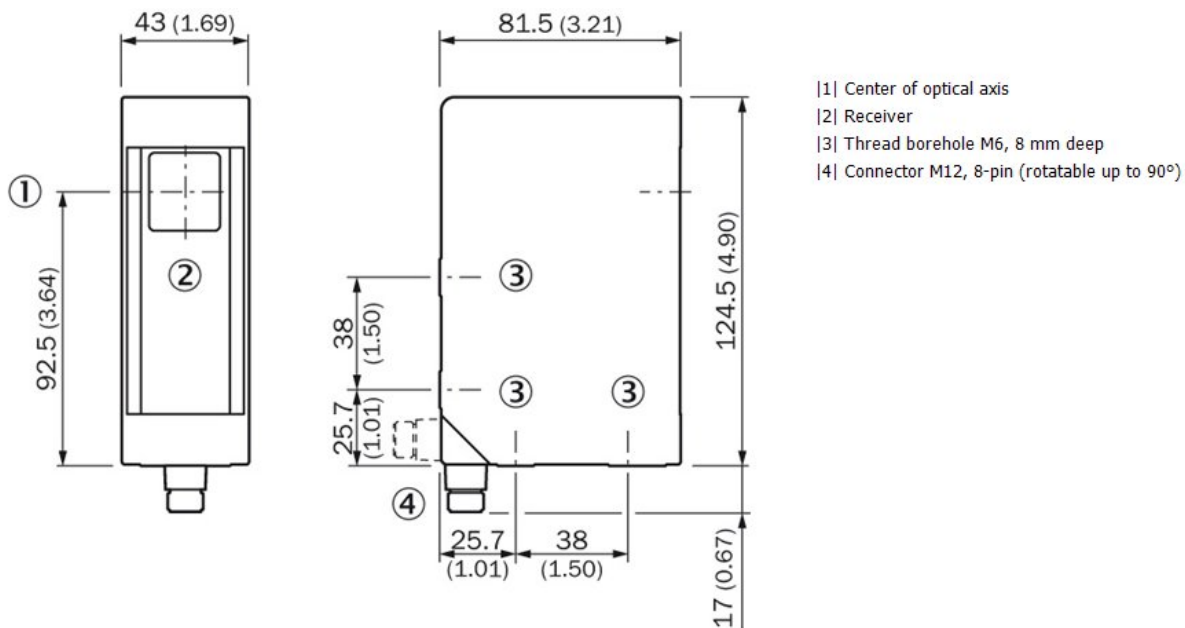
¹⁾ Limit values, reverse-polarity protected ²⁾ May not fall short of or exceed V_S tolerances ³⁾ Incl. cable ⁴⁾ Without load

Ambient data

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

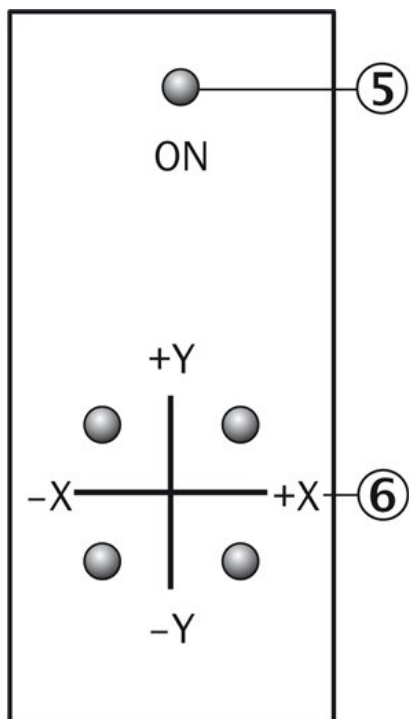
¹⁾ Reference voltage DC 50 V

Dimensional drawing



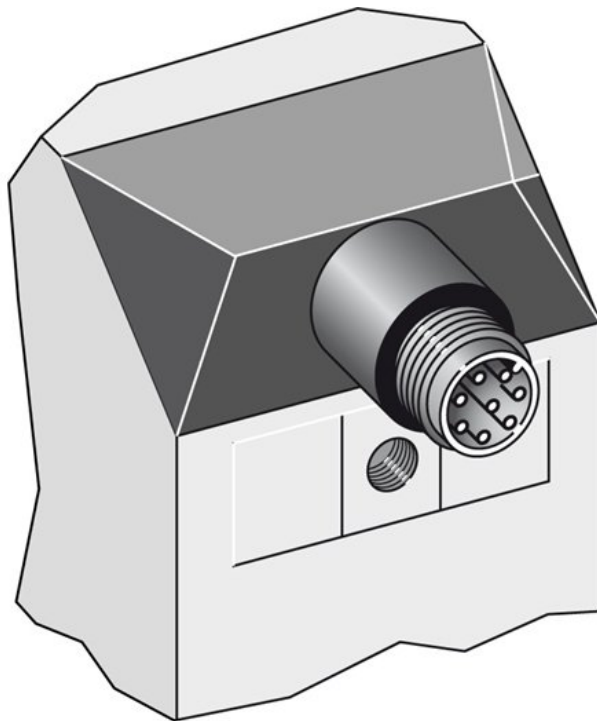
All dimensions in mm (inch)

Adjustments

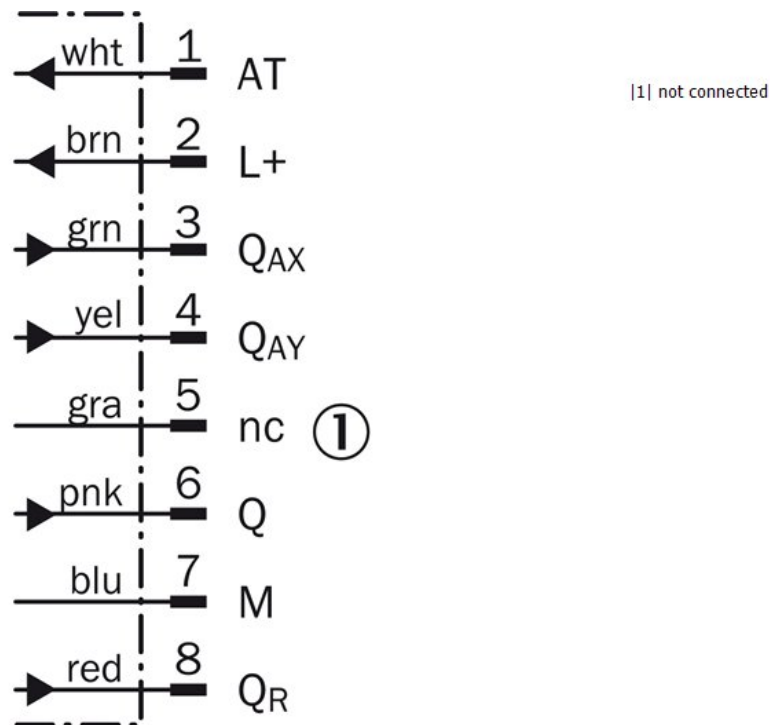


|5| Operating indicator
|6| Adjustment aid

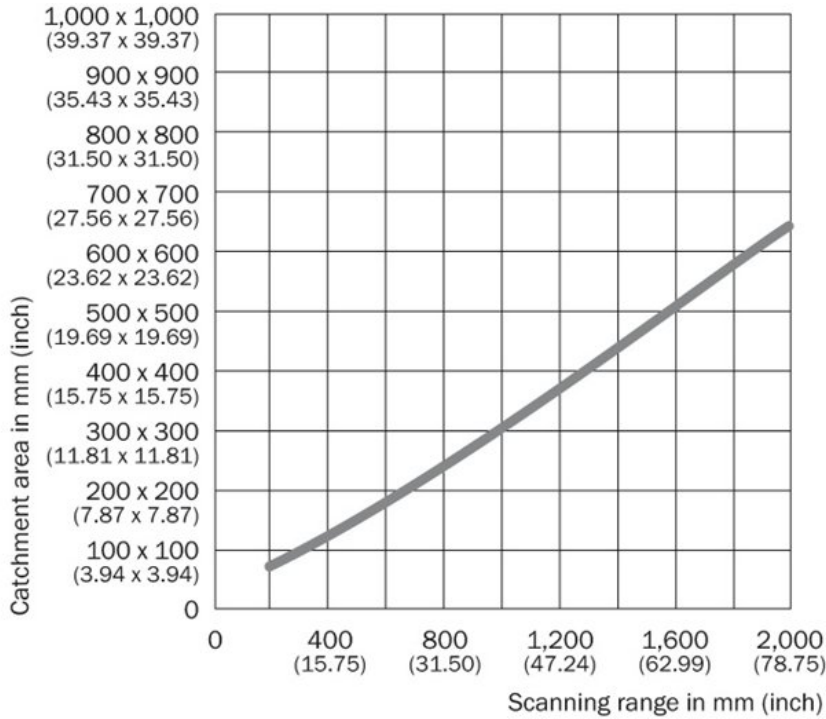
Connection type



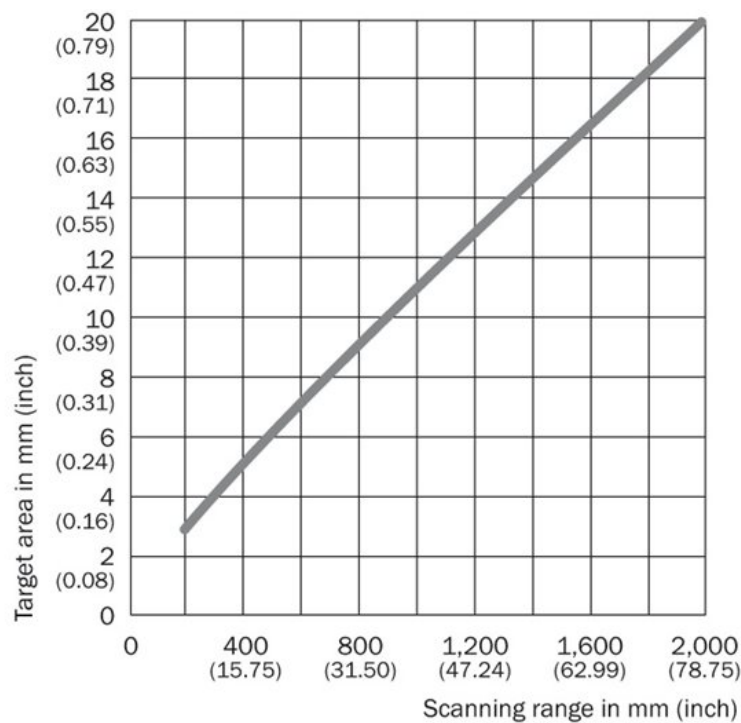
Connection diagram



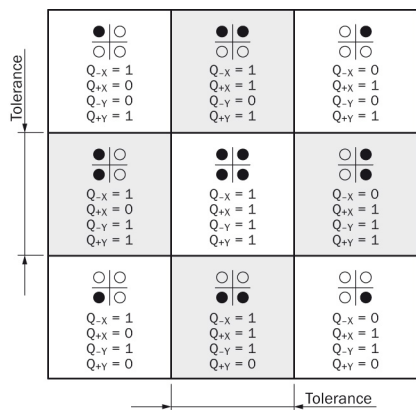
Characteristic curve: catchment area



Characteristic curve: target area



Functional principle: switching status



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