

DMP2-P11111

DMP2

POSITION FINDERS





Ordering information

| Туре | Part no. |
|-------------|----------|
| DMP2-P11111 | 1016235 |

Other models and accessories → www.sick.com/DMP2



Detailed technical data

Performance

| Target | Reflector |
|---------------------|--|
| Sensing distance | 200 mm 500 mm (PL22) 500 mm 1,200 mm (PL50A) 500 mm 2,000 mm (PL80A) |
| Repeatability | 0.15 mm ¹⁾ |
| Response time | 3 ms |
| Switching frequency | 250 Hz |
| Light source | LED, red |
| Sensing angle | ± 10° ²⁾ |
| Operating mode | Choice of continuous or triggered |

 $^{^{1)}}$ At 300 mm scanning distance.

Interfaces

| Analog output | 2 x Q _A |
|-------------------|--|
| | 2 x 4 mA 20 mA (700 Ω) $^{1)}$ |
| Switching output | 2 x PNP ²⁾ |
| Blanking input AT | Blanked (triggered): PNP: > 18 V > Uv max. Free running: PNP: < 2 V or free running |

 $^{^{1)}}$ Within detection area 4 mA \dots 20 mA, outside detection area 3 mA.

Mechanics/electronics

| Supply voltage V _s | DC 18 V 30 V ¹⁾ |
|-------------------------------|----------------------------|
|-------------------------------|----------------------------|

¹⁾ Limit values, reverse-polarity protected.

 $^{^{2)}\,\}mathrm{In}$ all axis perpendicular to the reflector (PL22, PL50A, PL80A)

 $^{^{2)}}$ PNP: Active = Vs - (< 2 V) / Inactive = 0 V; NPN: Active \leq 2 V / Inactive = Vs.

 $^{^{2)}\,\}mbox{May}$ not fall short of or exceed $\mbox{V}_{\mbox{\scriptsize S}}$ tolerances.

³⁾ Incl. cable.

⁴⁾ Without load.

| Ripple | < 5 V _{pp} ²⁾ |
|-------------------------------|-----------------------------------|
| Connection type | Male connector, M12, 8-pin |
| Weight | 990 g ³⁾ |
| Output current I _A | ≤ 100 mA |
| Current consumption | $<$ 250 mA $^{4)}$ |

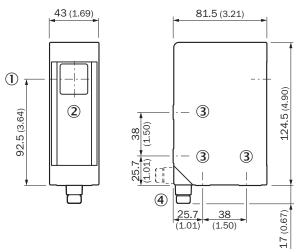
 $^{^{1)}}$ Limit values, reverse-polarity protected.

Ambient data

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

 $^{^{1)}}$ Reference voltage DC 50 V.

Dimensional drawing (Dimensions in mm (inch))



- ① Center of optical axis
- ② Receiver
- ③ Thread borehole M6, 8 mm deep
- ④ Connector M12, 8-pin (rotatable up to 90°)

 $^{^{2)}}$ May not fall short of or exceed $V_{\mbox{\scriptsize S}}$ tolerances.

³⁾ Incl. cable.

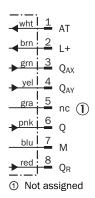
⁴⁾ Without load.

Connection type

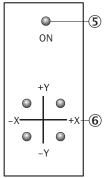
Male connector M12, 8-pin



Connection diagram



Adjustment possible

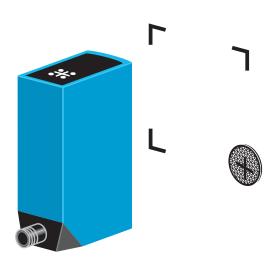


- ⑤ Operating indicator⑥ Adjustment aid

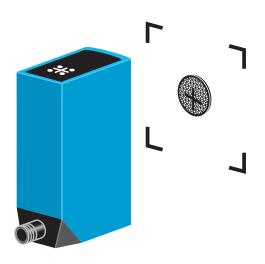
Functional principle

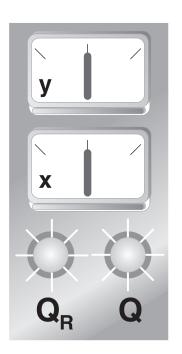
Functional principle: switching status

| Tolerance | ● ○ ○ ○ ○ ○ ○ ○ ○ ○ | • • • • • • • • • • • • • • • • • • • | ○ ● ○ ○ Q-x = 0 Q+x = 1 Q-y = 0 Q+y = 1 |
|-----------|---|---|---|
| | | $Q_{-X} = 1$ $Q_{+X} = 1$ $Q_{-Y} = 1$ $Q_{+Y} = 1$ | $ \begin{array}{c c} $ |
| 1 | $ \begin{array}{c c} $ | $ \begin{array}{c c} $ | $\bigcirc \bigcirc$ \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc |
| | | | Tolerance |









Recommended accessories

Other models and accessories → www.sick.com/DMP2

| | Brief description | Туре | Part no. |
|----------------|---------------------------------|------|----------|
| Terminal and a | Terminal and alignment brackets | | |

| | Brief description | Туре | Part no. |
|---------------|--|----------------|----------|
| | Alignment unit for DMP2, incl. mounting material, steel, zinc coated, mounting hardware included | BEF-GH-DMH2 | 2020796 |
| Plug connecto | ors and cables | | |
| - | Head A: female connector, M12, 8-pin, straight Head B: cable Cable: PVC, shielded, 2 m | DOL-1208-G02MA | 6020633 |
| | Head A: female connector, M12, 8-pin, straight Head B: cable Cable: PVC, shielded, 5 m | DOL-1208-G05MA | 6020993 |
| | Head A: female connector, M12, 8-pin, straight Head B: cable Cable: PVC, shielded, 10 m | DOL-1208-G10MA | 6022152 |
| Reflectors | | | |
| | Rectangular, screw connection, wrench size 48 mm, PMMA/ABS, Screw-on, 2 hole mounting | PL50A | 1000132 |
| | Rectangular, screw connection, 80 mm x 80 mm, PMMA/ABS, Screw-on, 2 hole mounting | PL80A | 1003865 |
| | Round, self-adhesive, PMMA/ABS, self-adhesive | PL22-2 | 1003621 |

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