



DS30-P2241S03

Dx30

MID RANGE DISTANCE SENSORS

SICK
Sensor Intelligence.



Ordering information

Type	Part no.
DS30-P2241S03	1048443

Other models and accessories → www.sick.com/Dx30



Detailed technical data

Performance

Measuring range	200 mm ... 2,000 mm, 6 % remission 200 mm ... 3,000 mm, 18 % remission 200 mm ... 3,000 mm, 90 % remission
Resolution	10 mm, Teach resolution ¹⁾
Response time	10 ms
Switching frequency	50 Hz
Light source	Laser, infrared ²⁾
Laser class	1 (EN 60825-1)
Typ. light spot size (distance)	20 mm x 20 mm (at 2 m)
Additional function	Window teach
Laser service life (MTTF at 25 °C)	100,000 h

¹⁾ 6 % ... 90 % remission.

²⁾ Wave length: 850 nm.

Interfaces

Switching output	2 x PNP (100 mA) ^{1) 2) 3)}
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¹⁾ Output Q short-circuit protected.

²⁾ PNP: HIGH = V_S - (< 2 V) / LOW = 0 V.

³⁾ Complementary switching outputs (Q, Q̄)

Mechanics/electronics

Supply voltage V_s	DC 10 V ... 30 V ¹⁾
Ripple	≤ 5 V _{pp} ²⁾
Warm-up time	≤ 5 min
Connection type	Male connector, M12, 4-pin
Indication	2 x LED

¹⁾ Limit values, reverse-polarity protected, operation in short-circuit protected network: max. 8 A.

²⁾ May not fall short of or exceed V_S tolerances.

Weight	120 g
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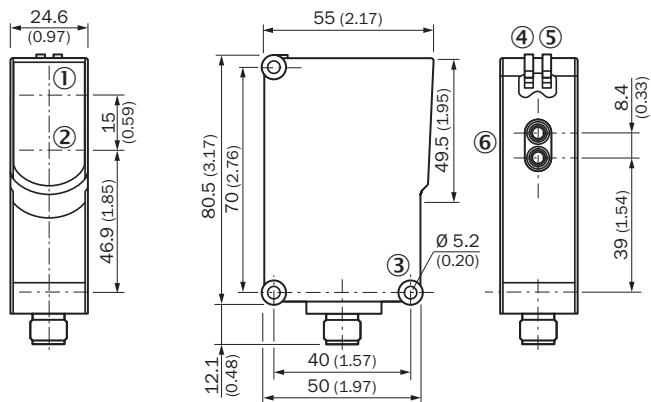
- 1) Limit values, reverse-polarity protected, operation in short-circuit protected network: max. 8 A.
- 2) May not fall short of or exceed V_S tolerances.

Ambient data

Enclosure rating	IP 65
Protection class	II ¹⁾
Electromagnetic compatibility (EMC)	EN 61000-6-2:2005-08, EN 61000-6-3:2001-10 + A11:2004-07 EN 60947-5-2:1998-10 + A1:1999-08 + A2:2004-02
Ambient temperature	Operation: -40 °C ... +55 °C Storage: -40 °C ... +75 °C

¹⁾ Reference voltage DC 50 V.

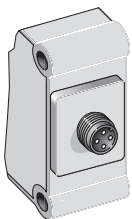
Dimensional drawing (Dimensions in mm (inch))



- ① Optical axis, sender
- ② Optical axis, receiver
- ③ Mounting hole \varnothing 5.2 mm
- ④ LED indicator 1
- ⑤ LED indicator 2
- ⑥ Sensing distance adjustment: teach-in button

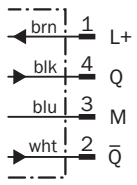
Connection type

DS30-xx241

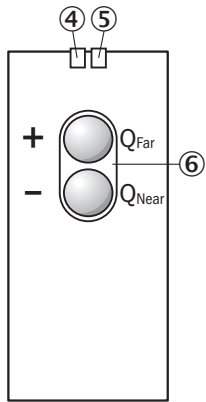


Connection diagram

DS30-xx241






Adjustment possible



- ④ LED indicator 1
- ⑤ LED indicator 2
- ⑥ Sensing distance adjustment: teach-in button

Recommended accessories

Other models and accessories → www.sick.com/Dx30

	Brief description	Type	Part no.
Mounting brackets and mounting plates			
	Mounting bracket, steel, zinc coated, mounting hardware included	BEF-WN-W23	2019085
	Mounting bracket with hinged arm, steel, zinc coated, mounting hardware included	BEF-WN-W27	2009122
Plug connectors and cables			
	Head A: female connector, M12, 5-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1205-G02M	6008899
	Head A: female connector, M12, 5-pin, straight Head B: cable Cable: PVC, unshielded, 5 m	DOL-1205-G05M	6009868

	Brief description	Type	Part no.
	Head A: female connector, M12, 5-pin, straight Head B: cable Cable: PVC, unshielded, 10 m	DOL-1205-G10M	6010544
	Head A: female connector, M12, 5-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-1205-W02M	6008900
	Head A: female connector, M12, 5-pin, angled Head B: cable Cable: PVC, unshielded, 5 m	DOL-1205-W05M	6009869
	Head A: female connector, M12, 5-pin, angled Head B: cable Cable: PVC, unshielded, 10 m	DOL-1205-W10M	6010542

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com