

Dx30 Time-of-flight sensors

The logo for SICK Sensor Intelligence. The word "SICK" is in a large, bold, blue sans-serif font. To its right, the words "Sensor Intelligence" are written in a smaller, blue sans-serif font.



TIME-OF-FLIGHT SENSORS

DS30-N1241

ORDERING INFORMATION

Type	part no.
DS30-N1241	1042181

Further device versions and accessories at www.sick.com/Dx30

DETAILED TECHNICAL DATA

FEATURES

Measuring range	200 mm ... 2,000 mm, 6% remission factor 200 mm ... 2,000 mm, 18% reflection factor 200 mm ... 2,000 mm, 90% remission factor
Target	Natural objects
Resolution	10 mm, Teach resolution ¹⁾
Response time	10 ms
Switching frequency	50 Hz
Light source	Laser, infrared ²⁾
Typ. light spot size (distance)	20 mm x 20 mm (at 2 m)
Average laser service life (at 25 °C)	100,000 h

¹⁾ 6% ... 90% remission factor.

²⁾ Wave length: 850 nm.

ELECTRONICS

Supply voltage U _B	DC 10 V ... 30 V ¹⁾
Ripple	≤ 5 V _{pp} ²⁾
Warm-up time	≤ 5 min
Display	2 x LED
Enclosure rating	IP65 (EN 60529)
Protection class	II

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

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

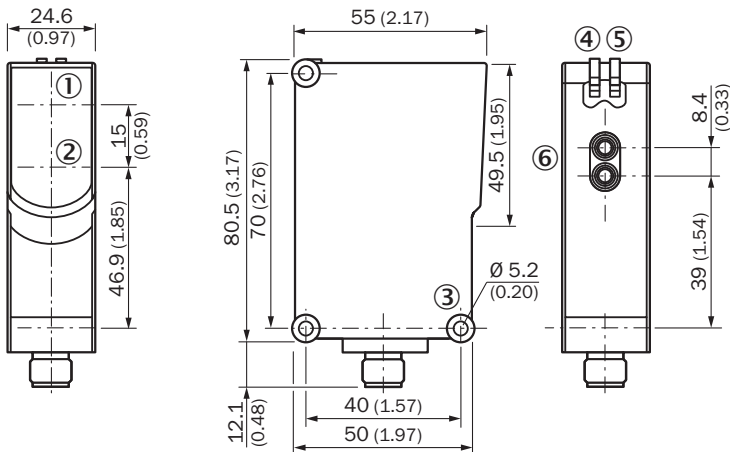
MECHANICS

Connection type	Male connector, M12, 4-pin
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AMBIENT DATA

Ambient temperature, operation	-40 °C ... +55 °C
Ambient temperature, storage	-40 °C ... +75 °C
Electromagnetic compatibility (EMC)	EN 61000-6-2:2005-08, EN 61000-6-3:2001-10 + A1:2004-07 EN 60947-5-2:1998-10 + A1:1999-08 + A2:2004-02

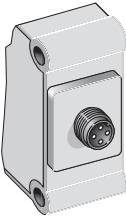
DIMENSIONAL DRAWING



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

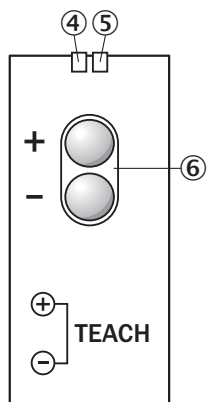
CONNECTION TYPE DS30-XX241



CONNECTION DIAGRAM DS30-XX241



ADJUSTMENT POSSIBLE DS30-XX241



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

Further information as well as suitable accessories, example applications and downloads such as CAD dimensional models, operating instructions and software can be found at www.sick.com/1042181



SICK AG
WALDKIRCH
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SICK AT A GLANCE

SICK is a leading global technology company for intelligent sensors and integrated solutions in industrial automation. Our technologies set benchmarks, making your industrial processes more efficient, safer and more sustainable – both in logistics and manufacturing operations.

SICK combines sensor intelligence with industry expertise and certified consulting services. We provide the ideal foundation for scalable as well as tailor-made automation solutions and create added value along the entire value chain. Our close partnerships with our customers are more than just a promise: Together, we optimize productivity, improve quality, protect health and safety, and help build a sustainable future. All with empathy and trust.

Since 1946, we have been developing innovative technologies with passion and a pioneering spirit. With a global network in around 40 countries, SICK has a global presence and is always close by. The company's headquarters are located in Waldkirch near Freiburg, Germany. Our customers benefit from our understanding of both local and global requirements, which enables us to deliver tailor-made solutions

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