



DATA SHEET

DS60-P21211

Dx60
Time-of-flight sensors

SICK

Sensor Intelligence



TIME-OF-FLIGHT SENSORS

DS60-P21211

ORDERING INFORMATION

Type	part no.
DS60-P21211	1016396

Further device versions and accessories at www.sick.com/Dx60

DETAILED TECHNICAL DATA

FEATURES

Measuring range	80 mm ... 6,000 mm, 90% remission factor ¹⁾ 80 mm ... 4,600 mm, 18% reflection factor ¹⁾ 80 mm ... 2,400 mm, 6% remission factor ¹⁾
Target	Natural objects
Response time	10 ms
Switching frequency	50 Hz
Light source	Laser, red
Typ. light spot size (distance)	9 mm x 9 mm (at 4.5 m)
Additional function	Invertable digital output
Average laser service life (at 25 °C)	50,000 h
General notes	
Life cycle phase	Discontinued

¹⁾ Teach-in from 200 ... 6,000 mm.

ELECTRONICS

Supply voltage U _B	DC 18 V ... 30 V ¹⁾
Power consumption	≤ 3 W ²⁾
Ripple	≤ 5 V _{pp} ³⁾
Enclosure rating	IP67 (EN 60529)
Protection class	II

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

²⁾ Without load.

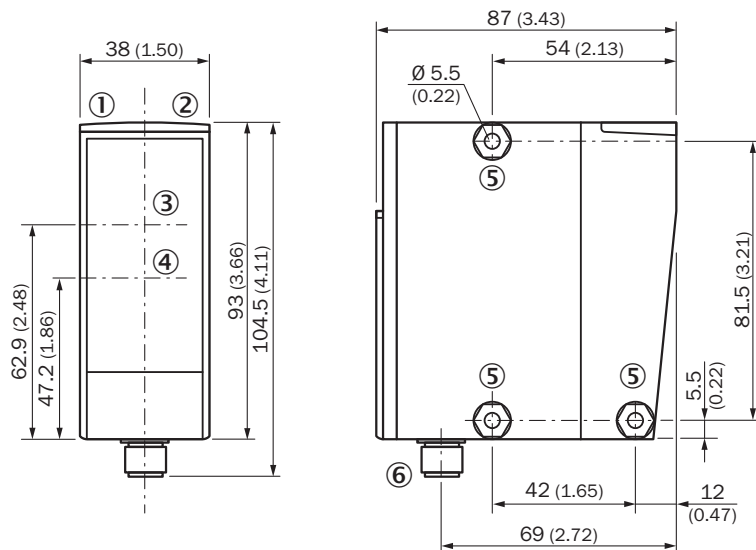
³⁾ May not fall short of or exceed V_B tolerances.

MECHANICS

Connection type	Male connector, M12, 5-pin
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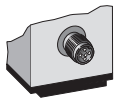
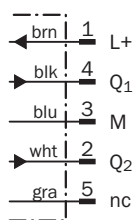
AMBIENT DATA

Ambient temperature, operation	-25 °C ... +55 °C
Ambient temperature, storage	-25 °C ... +75 °C
Electromagnetic compatibility (EMC)	EN 61000-6-2 EN 60947-5-2

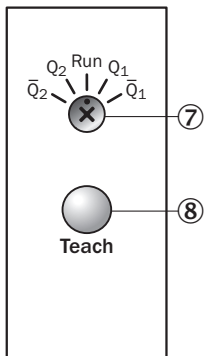
DIMENSIONAL DRAWING

Dimensions in mm (inch)

- ① status indicator digital output 1
- ② status indicator switching output 2
- ③ optical axis, sender
- ④ optical axis, receiver
- ⑤ Mounting hole, Ø 5.2 mm
- ⑥ Plug, M12, 5-pin

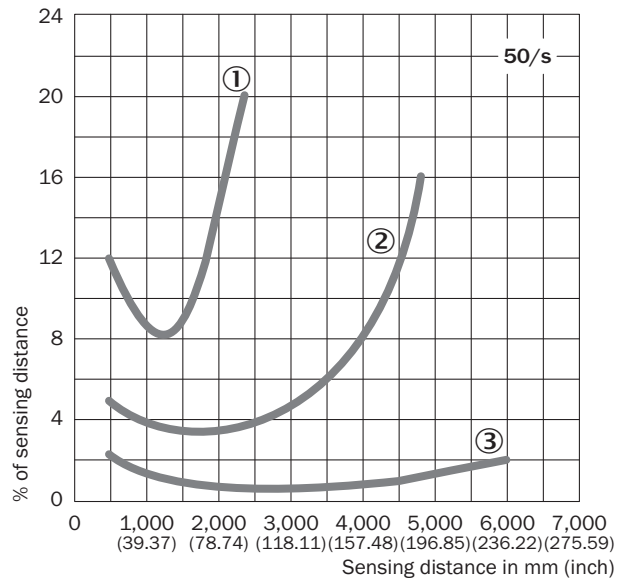
CONNECTION TYPE PLUG, M12, 5-PIN**CONNECTION DIAGRAM**

ADJUSTMENT POSSIBLE



- ⑦ rotary switch
- ⑧ Control element

SENSING DISTANCE



- ① 6 % / 90 %
- ② 18 % / 90 %
- ③ 90 % / 90 %

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/1016396



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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