SICK.COM



DATA SHEET

OD7000-10401031

OD7000
Displacement Sensors

SICK Sensor Intelligence



DISPLACEMENT SENSORS

OD7000-10401031

ORDERING INFORMATION

Type	part no.
OD7000-10401031	6079489

Further device versions and accessories at www.sick.com/OD7000

DETAILED TECHNICAL DATA

FEATURES

Measuring range	35.5 mm ... 39.5 mm
Measuring range	4 mm
Resolution	Axial 0.18 µm Lateral 8 µm
Linearity	± 1.4 µm
Number of measuring channels	1
Measuring frequency	≤ 10 kHz
Emitted beam Light source	 LED
Special task	Coating thickness measurement
LED risk group	Risk group 1 IEC 62471

INTERFACES

Serial Data transmission rate	✓ , RS-232, RS-422 RS-232: max. 1.8 MBaud, RS-422: max. 10 MBaud
Ethernet Data transmission rate	✓ , TCP/IP 100 Mbit/s
Digital input	2
Digital output Number	 2
Analog output Number Type Current Voltage	 2 Current output / voltage output –10 mA ... 10 mA –10 V ... 10 V
Trigger input	1
Trigger output	1
Encoder input	3

ELECTRONICS

Supply voltage U_B	DC 24 V, ± 10 % [1]
Power consumption	4 W
Warm-up time	30 min
Display	4 status LEDs
Enclosure rating	IP20 (IEC 60529)
Protection class	III (IEC 61140)
Electrical safety	IEC 61010
Connection type	
Ethernet	Female connector, RJ-45
Interface A	Terminal strip, 9-pin
Interface B	Terminal strip, 8-pin
Encoders	D-SUB plug, 15-pin

[1] With separate power supply unit: AC 100 V ... 240 V, 50 Hz ... 60 Hz.

MECHANICS

Dimensions (W x H x D)	95 mm x 106 mm x 95 mm
Weight	550 g
Optical fiber length	3 m

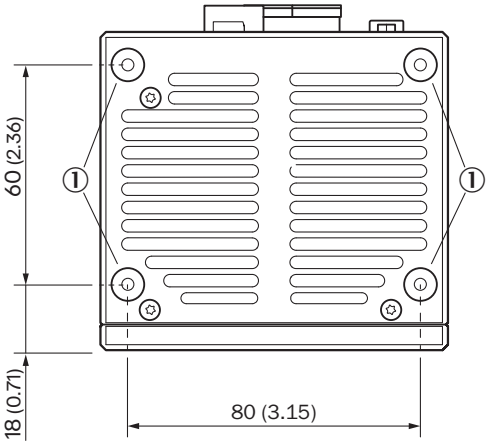
AMBIENT DATA

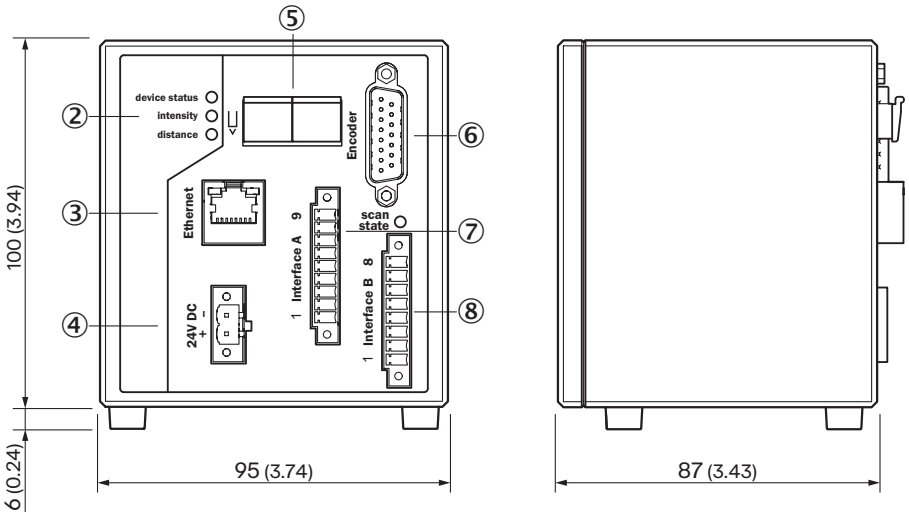
Ambient temperature, operation	0 °C ... +50 °C
Ambient temperature, storage	–20 °C ... +70 °C
Relative air humidity (non-condensing)	30 % ... 75 %
Electromagnetic compatibility (EMC)	Radiated emission: EN 61326-1

CERTIFICATES

EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
Information according to Art. 3 of Data Act (Regulation EU 2023/2854)	✓

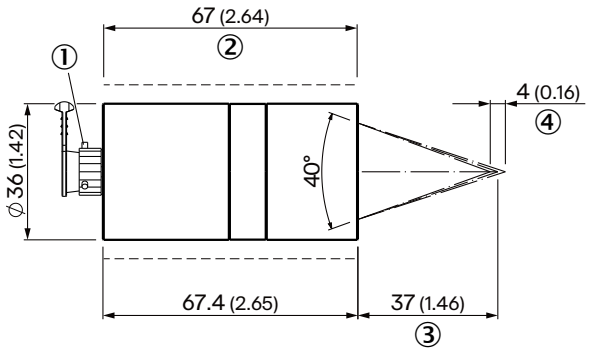
DIMENSIONAL DRAWING, CONTROL UNIT





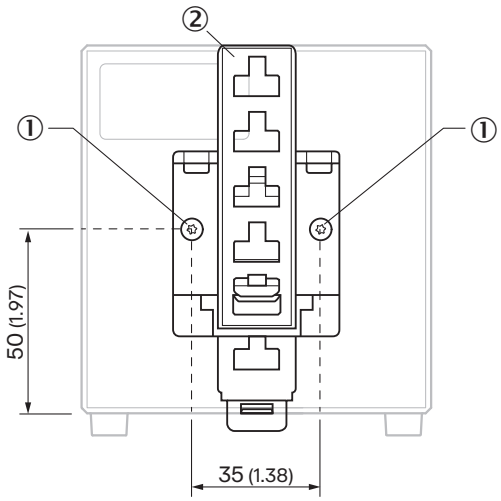
Dimensions in mm (inch)
① M4 threaded mounting hole
② status LEDs
③ Ethernet connection
④ Connecting the voltage supply
⑤ Optical fiber connection
⑥ Encoder connection
⑦ Terminal strip interface A (serial interface RS422 / RS232, trigger)
⑧ Connection strip interface B (analog outputs, digital inputs, digital outputs)

DIMENSIONAL DRAWING, SENSOR HEAD



Dimensions in mm (inch)
① Optical fiber connection
② recommended clamping range
③ Average measuring distance (typical)
④ Measuring range

ASSEMBLY NOTE



① Threaded mounting hole M3
② Mounting rail adapter

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/6079489

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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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