



# OD7000-10401031

OD7000

DISPLACEMENT SENSORS

**SICK**  
Sensor Intelligence.



### Ordering information

Type	part no.
OD7000-10401031	6079489

Other models and accessories → [www.sick.com/OD7000](http://www.sick.com/OD7000)



### Detailed technical data

#### Features

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

#### Interfaces

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

## Electronics

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

<sup>1)</sup> With separate power supply unit: AC 100 V ... 240 V, 50 Hz ... 60 Hz.

## Mechanics

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

## Ambient data

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

## Certificates

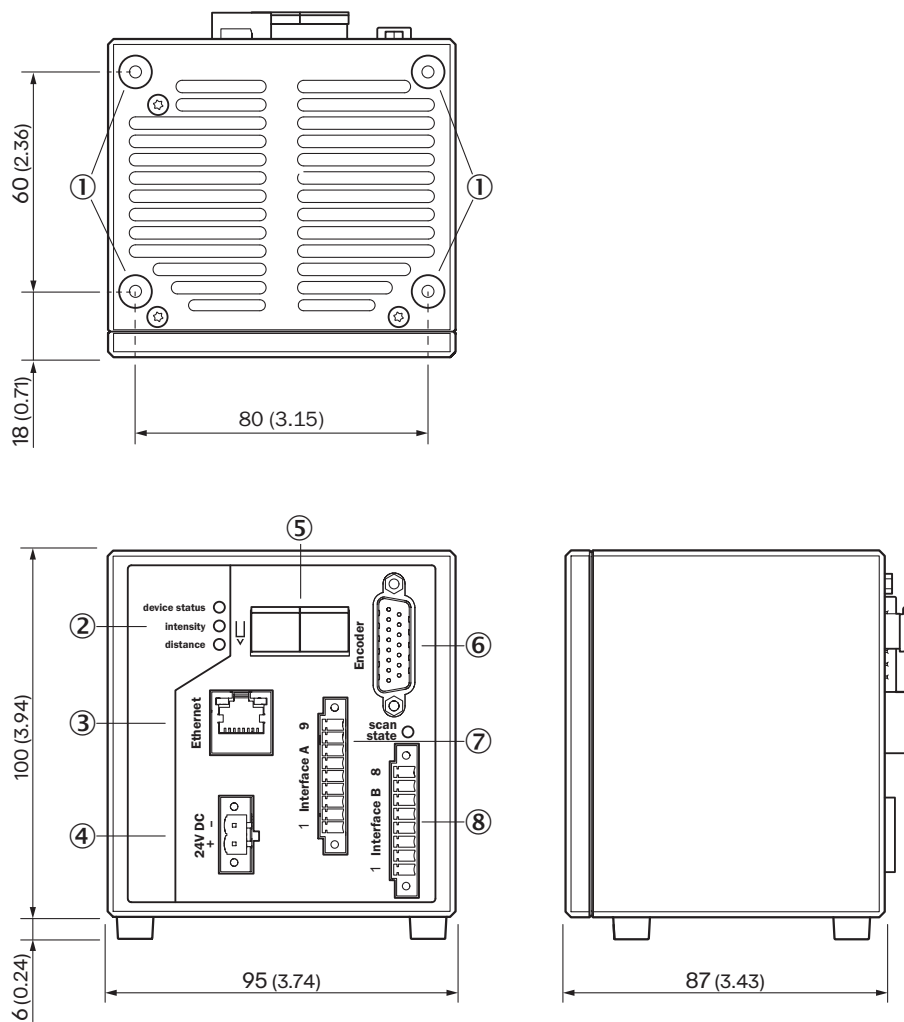
<b>EU declaration of conformity</b>	✓
<b>UK declaration of conformity</b>	✓
<b>ACMA declaration of conformity</b>	✓
<b>Moroccan declaration of conformity</b>	✓
<b>Information according to Art. 3 of Data Act (Regulation EU 2023/2854)</b>	✓

## Classifications

<b>ECLASS 5.0</b>	27270801
<b>ECLASS 5.1.4</b>	27270801
<b>ECLASS 6.0</b>	27270801
<b>ECLASS 6.2</b>	27270801
<b>ECLASS 7.0</b>	27270801
<b>ECLASS 8.0</b>	27270801
<b>ECLASS 8.1</b>	27270801
<b>ECLASS 9.0</b>	27270801
<b>ECLASS 10.0</b>	27270801

<b>ECLASS 11.0</b>	27270801
<b>ECLASS 12.0</b>	27270916
<b>ETIM 5.0</b>	EC001825
<b>ETIM 6.0</b>	EC001825
<b>ETIM 7.0</b>	EC001825
<b>ETIM 8.0</b>	EC001825
<b>UNSPSC 16.0901</b>	41111613

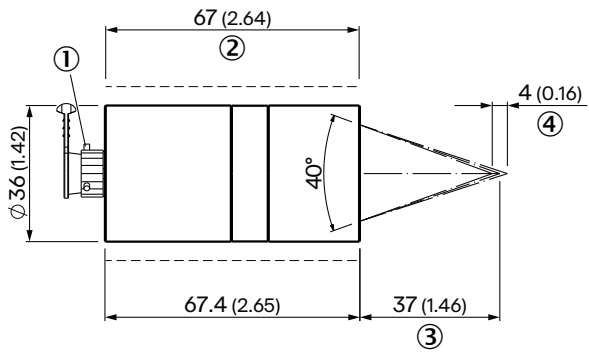
### dimensional drawing, control unit



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)

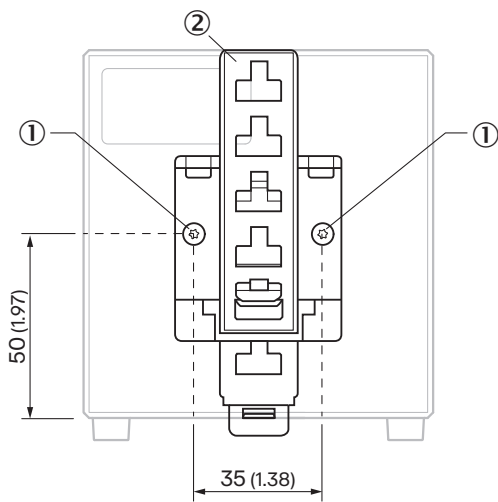
dimensional drawing, sensor head



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

### Recommended accessories

Other models and accessories → [www.sick.com/OD7000](http://www.sick.com/OD7000)

	Brief description	Type	part no.
connectors and cables			
	<ul style="list-style-type: none"> <li><b>Description:</b> Sensor/actuator cable, shielded</li> <li><b>Connection type head A:</b> Female connector, M12, 8-pin</li> <li><b>Connection type head B:</b> Female connector, D-Sub, 15-pin</li> <li><b>Signal type:</b> Sensor/actuator cable</li> <li><b>Cable:</b> 0.46 m, 6-wire, PVC</li> </ul>	YF2A26-C50S01FDSB6	2141182
	<ul style="list-style-type: none"> <li><b>Connection type head A:</b> Male connector</li> <li><b>Connection type head B:</b> Male connector</li> </ul>	FOC03-AM1N	2145018
	<ul style="list-style-type: none"> <li><b>Connection type head A:</b> Male connector</li> <li><b>Connection type head B:</b> Male connector</li> </ul>	FOC10-AM1N	2145019

## 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](http://www.sick.com)