



OD7000-10061031  
OD7000

DISPLACEMENT MEASUREMENT SENSORS

**SICK**  
Sensor Intelligence.



## Ordering information

Type	Part no.
OD7000-10061031	6079486

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



## Detailed technical data

### Features

<b>Measuring range</b>	6.2 mm ... 6.8 mm
<b>Measuring range</b>	0.6 mm
<b>Target</b>	Natural objects
<b>Resolution</b>	Axial 25 nm Lateral 2 µm
<b>Linearity</b>	≥ 0.198 µm
<b>Number of measuring channels</b>	1
<b>Light source</b>	LED Visible white light
<b>Type of light</b>	Visible white light
<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>Indication</b>	4 status LEDs
<b>Enclosure rating</b>	IP20 (IEC 60529)
<b>Protection class</b>	III (IEC 61140)
<b>Electrical safety</b>	IEC 61010

<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
<b>Connection type</b>	Female connector, RJ-45 Terminal strip, 9-pin Terminal strip, 8-pin Terminal strip, 15-pin

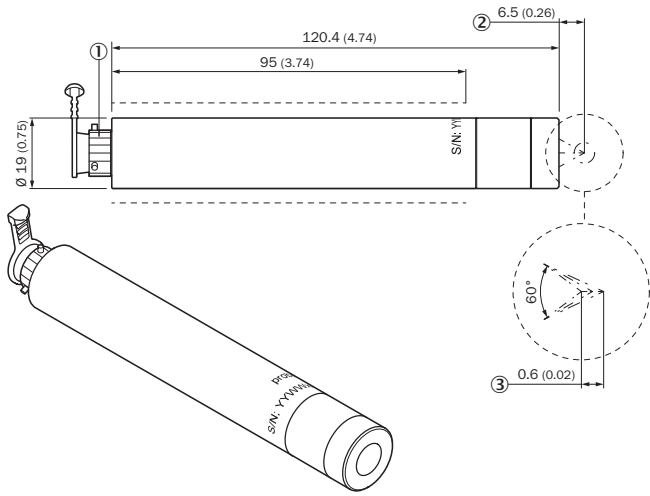
## Ambient data

<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

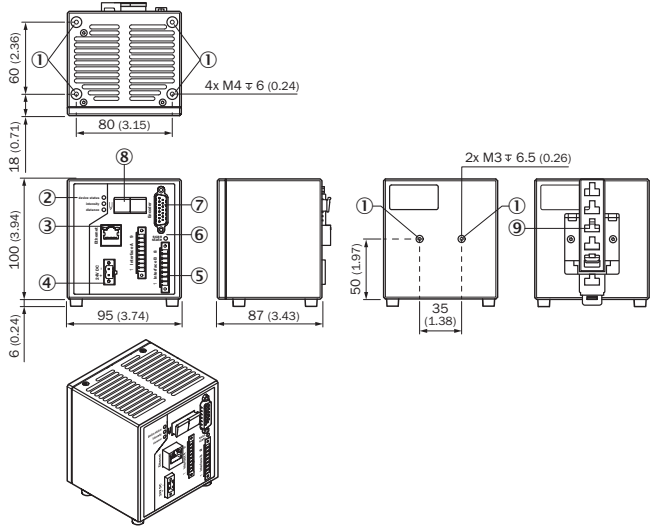
## Classifications

<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 (Dimensions in mm (inch))




- ① Optical fiber connection
- ② Average measuring distance (typical)
- ③ Measuring range



- ① M4 threaded mounting hole
- ② Status LEDs
- ③ Ethernet connection
- ④ Connecting the voltage supply
- ⑤ Connection strip interface B (analog outputs, digital inputs, digital outputs)
- ⑥ Terminal strip interface A (serial interface RS422 / RS232, trigger)
- ⑦ Encoder connection
- ⑧ Optical fiber connection
- ⑨ Mounting rail adapter

## Recommended accessories

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

	Brief description	Type	Part no.
Others			
	<ul style="list-style-type: none"> <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> <li>• <b>Description:</b> Sensor/actuator cable, shielded</li> </ul>	YF2A26-C50S01FDSB6	2141182

## 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)