



OD7000-10401031
OD7000

DISPLACEMENT MEASUREMENT SENSORS

SICK
Sensor Intelligence.



Ordering information

Type	part no.
OD7000-10401031	6079489

Other models and accessories → www.sick.com/OD7000



Detailed technical data

Features

Measuring range	35.5 mm ... 39.5 mm
Measuring range	4 mm
Target	Natural objects
Resolution	Axial 180 nm Lateral 8 µm
Linearity	≥ 1.4 µm
Number of measuring channels	1
Light source	LEDVisible white light
Type of light	Visible white light
Special task	Coating thickness measurement
LED risk group	Risk group 1 IEC 62471

Interfaces

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

Trigger output	1
Encoder input	3

Electronics

Supply voltage U_B	DC 24 V, $\pm 10\%$ ¹⁾
Power consumption	4 W
Warm-up time	30 min
Indication	4 status LEDs
Enclosure rating	IP20 (IEC 60529)
Protection class	III (IEC 61140)
Electrical safety	IEC 61010

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
Connection type	Female connector, RJ-45 Terminal strip, 9-pin Terminal strip, 8-pin Terminal strip, 15-pin

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

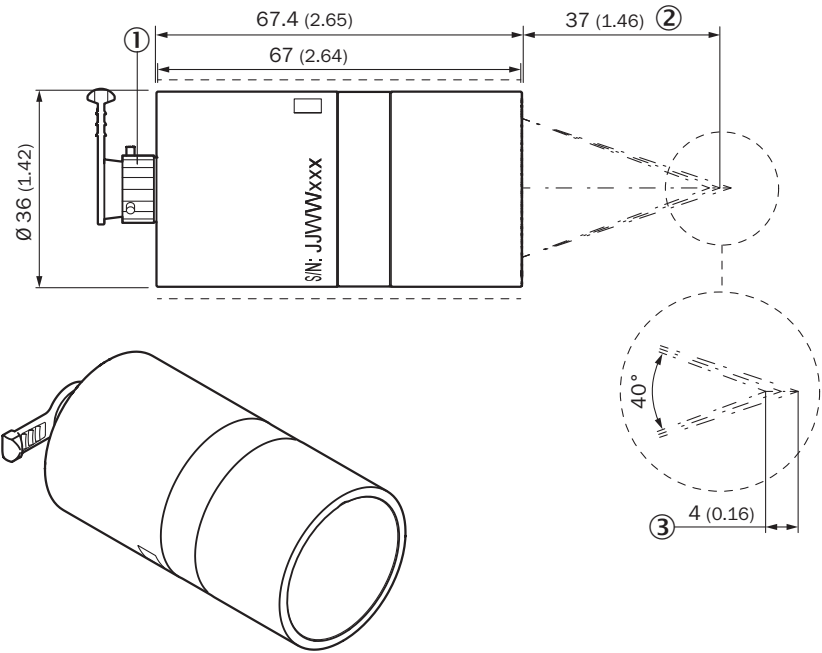
EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓

Classifications

ECLASS 5.0	27270801
ECLASS 5.1.4	27270801
ECLASS 6.0	27270801
ECLASS 6.2	27270801
ECLASS 7.0	27270801
ECLASS 8.0	27270801
ECLASS 8.1	27270801
ECLASS 9.0	27270801
ECLASS 10.0	27270801
ECLASS 11.0	27270801

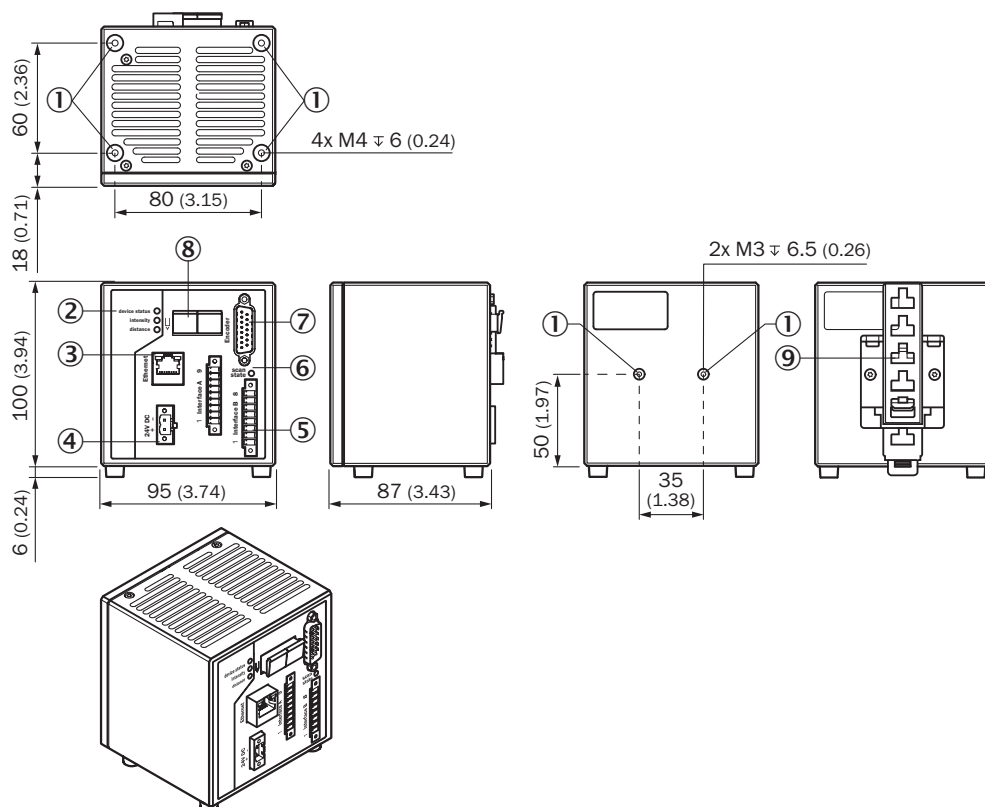
ECLASS 12.0	27270916
ETIM 5.0	EC001825
ETIM 6.0	EC001825
ETIM 7.0	EC001825
ETIM 8.0	EC001825
UNSPSC 16.0901	41111613

Dimensional drawing



- Dimensions in mm (inch)
- ① Optical fiber connection
 - ② Average measuring distance (typical)
 - ③ measuring range

Dimensional drawing



Dimensions in mm (inch)

- 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

	Brief description	Type	part no.
connectors and cables			
	Connection type head A: Female connector, M12, 8-pin Connection type head B: Female connector, D-Sub, 15-pin Signal type: Sensor/actuator cable Cable: 0.46 m, 6-wire, PVC Description: Sensor/actuator cable, shielded	YF2A26-C50S01FDSB6	2141182
	Connection type head A: Male connector Connection type head B: Male connector	FOC03-AM1N	2145018
	Connection type head A: Male connector Connection type head B: Male connector	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