



DATA SHEET

OD350-100T1

OD Max
Displacement measurement sensors

SICK Sensor Intelligence

DISPLACEMENT MEASUREMENT SENSORS

OD350-100T1

ORDERING INFORMATION

Type	part no.
OD350-100T1	6028957

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



DETAILED TECHNICAL DATA

FEATURES

System part	Sensor head
Measuring range	250 mm ... 450 mm ¹⁾
Repeatability	50 µm ²⁾
Linearity	± 200 µm ²⁾
Response time	≥ 0.5 ms ³⁾
Measuring frequency	≤ 10 kHz
Output time	≥ 0.1 ms
Emitted beam	
	Light source Laser, red
	Typ. light spot size (distance) 300 µm x 700 µm (350 mm)
Key laser figures	
	Normative reference IEC 60825-1:2014, EN 60825-1:2014
	Laser class 2 ⁴⁾
	⁵⁾
General notes	
	Note on use OD Max sensor head OD25-x is only to be used with AODG-P/N1; All other types (OD350-x, OD85-x, OD30-x) are to be used with AOD-P/N1

¹⁾ 6% ... 90% remission factor.

²⁾ Measurement on 90 % remission (ceramic, white), for OD25-x measurement on mirror; averaging set to: 256; constant ambient conditions.

³⁾ Dependent on the set average or sensitivity.

⁴⁾ Wavelength: 650 nm, max. output: 390 µW (laser class 1) / 1 mW (laser class 2).

⁵⁾ Do not intentionally look into the laser beam. Never point the laser beam at people's eyes.

INTERFACES

Serial	Type of fieldbus integration	✓, RS-232 Optional, over external evaluation unit AOD
Digital output	Number	5 ¹⁾
	Type	PNP/NPN, selectable
	Maximum output current I _A	≤ 100 mA
Analog output	Number	2 ¹⁾
	Type	Current output
	Current	4 mA ... 20 mA, ≤ 300 Ω

¹⁾ Optional over evaluation unit AOD.

ELECTRONICS

Warm-up time	≤ 5 min
Display	LEDs, 1.4" color display on evaluation unit
Enclosure rating	IP67
Protection class	III
Connection type	0.5 m cable with connector

MECHANICS

Dimensions (W x H x D)	25.9 mm x 71.5 mm x 53.2 mm
Housing material	Metal (Aluminum)
Window material	Glass
Weight	250 g ¹⁾

¹⁾ Includes 0.5 m cable.

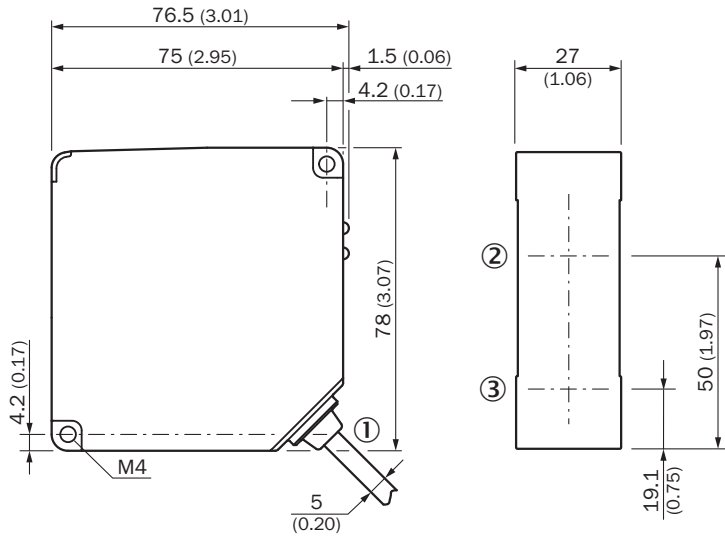
AMBIENT DATA

Ambient temperature, operation	-10 °C ... +45 °C
Ambient temperature, storage	-20 °C ... +60 °C
Relative air humidity (non-condensing)	35 % ... 85 %
Temperature drift	± 0.01 % FS/K (FS = Full Scale = Measuring range of sensor)
Typ. Ambient light immunity	Artificial light: ≤ 3,000 lx Sunlight: ≤ 10,000 lx
Vibration resistance	10 Hz ... 55 Hz (amplitude 1.5 mm, x-, y-, z-axis 2 hours each)
Shock resistance	50 G (x, y, z axis 3 times each)

CERTIFICATES

EU declaration of conformity	✓
ACMA declaration of conformity	✓
China RoHS	✓
China Compulsory Product Certification (CCC) exempt	✓

DIMENSIONAL DRAWING OD350-100T1



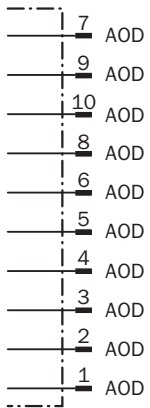
Dimensions in mm (inch)

- ① Cable Ø 5 mm, 0.5 m with connector, 10-pin
- ② optical axis, receiver
- ③ optical axis, sender

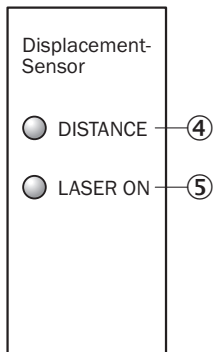
CONNECTION TYPE SENSOR HEAD HIROSE CONNECTOR 10-PIN



CONNECTION DIAGRAM

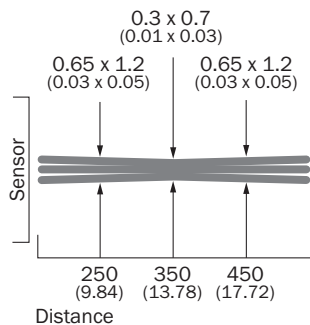


ADJUSTMENT POSSIBLE



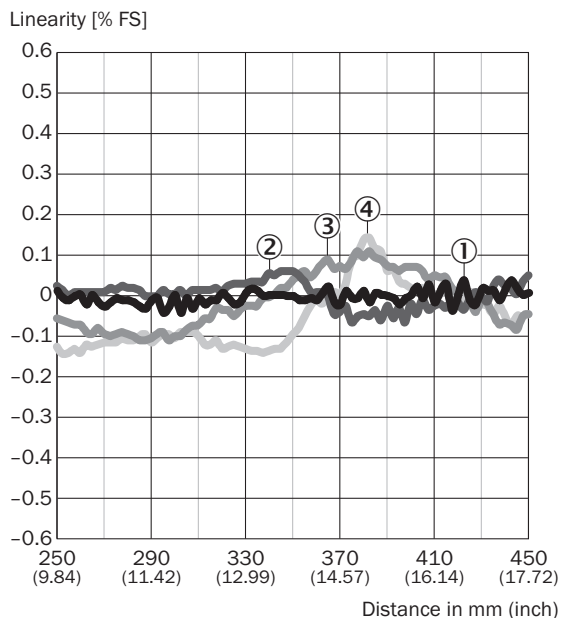
- ④ Distance indicator
- ⑤ Status indicator laser (laser on)

LIGHT SPOT SIZE OD350-100T1



All dimensions in mm (inch)

LINEARITY



- ① White ceramic
- ② Gray ceramic
- ③ Aluminum
- ④ black rubber

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/6028957



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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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