



## Short range distance sensors (displacement) OD Max

OD30-05T1



**Model Name** > [OD30-05T1](#)  
**Part No.** > [6028959](#)

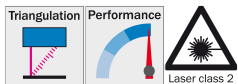


**At a glance**

- Several measurement ranges from 24 ... 26 mm up to 250 mm ... 450 mm
- CMOS receiving element for measurement independent of surface
- High measurement frequency and high linearity
- Variety of selectable integrated calculations based on values from two sensors
- Laser technology for precise measurement or detection of very small objects
- Several output options

**Your benefits**

- Minimum machine downtime due to its reliability on any surface, regardless of brightness or color
- Highly accurate measurement, even during the production process, ensures high product quality
- High measuring frequency of 10 kHz increases processing speeds and reduces cycle times
- Reduce the cost to change your process by making a reference measurement using two sensors
- Comparatively low investment costs for challenging measuring tasks
- An easy-to-read LC display and simple push-button keypad programming ensures simple setup and servicing
- Reduced material costs, when using the distance sensors to control costrelevant production processes



**Features**

System part: Sensor head

**Performance**

Measuring range:	25 mm ... 35 mm, 6 % ... 90 % remission
Resolution:	1 µm <sup>1)</sup>
Repeatability:	3 µm <sup>2)</sup>
Linearity:	± 10 µm <sup>3)</sup>
Response time <sup>4)</sup> :	0.5 ms
Measuring frequency:	10 kHz
Light source:	Laser, red
Laser protection class:	2 (EN 60825-1) <sup>5)</sup>
Typ. light spot size (distance):	30 µm x 100 µm (30 mm)
Note:	Requires AOD-x

1) Measurement on 90 % remission (ceramic, white), for OD25-x measurement on mirror; averaging set to: 256 2) Measurement on 90 % remission (ceramic, white), for OD25-x measurement on mirror; averaging set to: 256; constant ambient conditions 3) Measurement on 90 % remission (ceramic, white), for OD5-25x measurement on mirror 4) Automatic sensitivity adjustment  $\leq 2$  ms 5) Wavelength 650 nm, max. output 1 mW

**Mechanics/electronics**

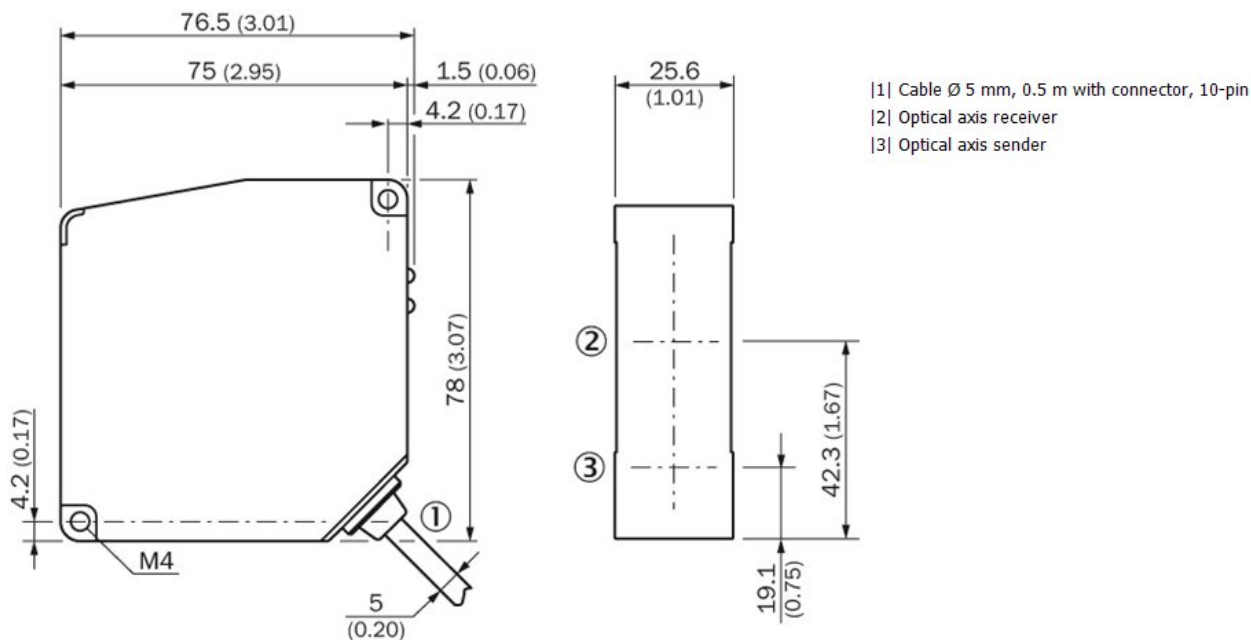
Connection type:: 0.5 m cable with connector 1) 2)  
 Warm-up time:  $\leq 5$  min  
 Indication: LEDs, 1.4" color-display on controller unit  
 Weight: 250 g 3)  
 Housing material: Aluminum housing with glass lens

1) Extendable by cable to max. 10 m 2) Sensor must be connected to controller unit 3) Inclusive 0.5 m cable

**Ambient data**

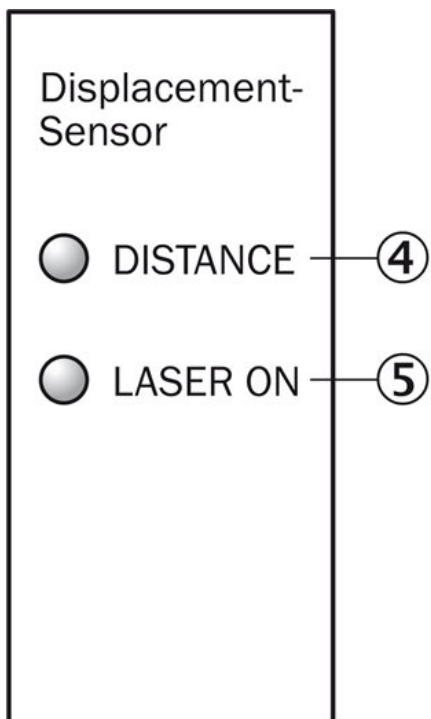
Enclosure rating: IP 67  
 Protection class: III  
 Ambient temperature: Operation: -10 ... 45 °C, Storage: -20 ... 60 °C  
 Temperature drift:  $\pm 0.01$  % FS/K (FS = Full Scale = Measuring range of sensor)  
 Typ. ambient light safety: Artificial light:  $\leq 3,000$  lx  
 Sunlight:  $\leq 10,000$  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)  
 Relative humidity (not condensing): 35 % ... 85 %

**Dimensional drawing**



**Adjustment possible**

---



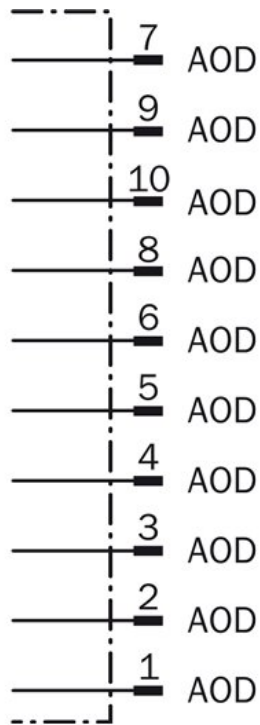
- |4| Distance indicator
- |5| Status indicator laser (laser on)

**Connection type**

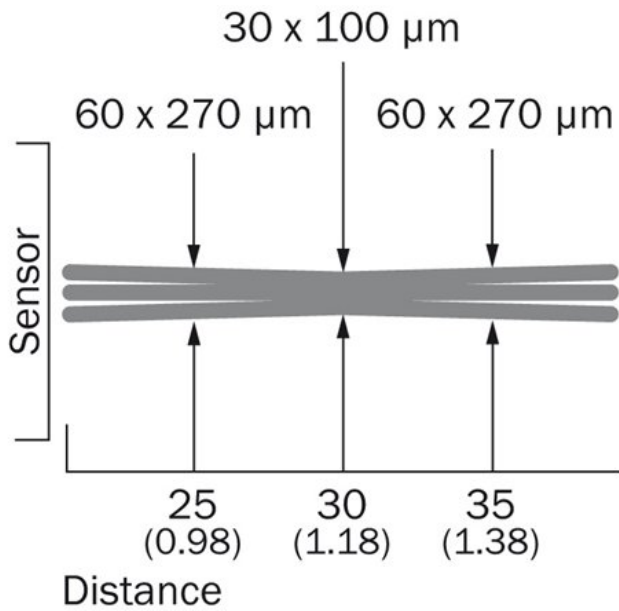
---



Connection diagram

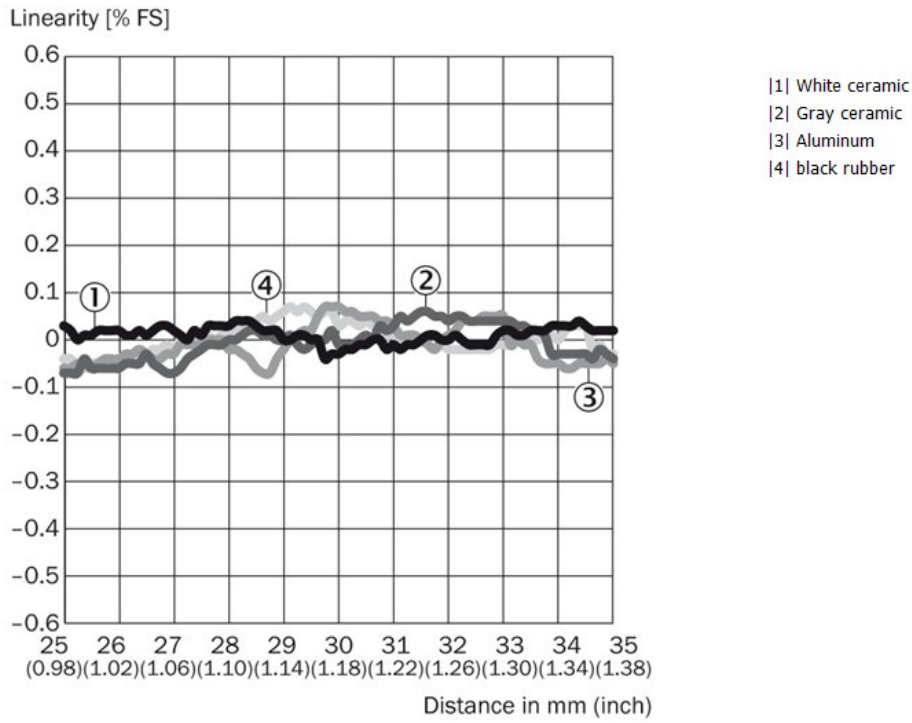


Light spot size



All dimensions in mm (inch)

# Linearity



**Australia**

Phone +61 3 9457 0600  
1800 334 802 – tollfree  
E-Mail sales@sick.com.au

**Belgium/Luxembourg**

Phone +32 (0)2 466 55 66  
E-Mail info@sick.be

**Brasil**

Phone +55 11 3215-4900  
E-Mail sac@sick.com.br

**Canada**

Phone +1 905 771 14 44  
E-Mail information@sick.com

**Ceská Republika**

Phone +420 2 57 91 18 50  
E-Mail sick@sick.cz

**China**

Phone +86 4000 121 000  
E-Mail info.china@sick.net.cn  
Phone +852-2153 6300  
E-Mail ghk@sick.com.hk

**Danmark**

Phone +45 45 82 64 00  
E-Mail sick@sick.dk

**Deutschland**

Phone +49 211 5301-301  
E-Mail kundenservice@sick.de

**España**

Phone +34 93 480 31 00  
E-Mail info@sick.es

**France**

Phone +33 1 64 62 35 00  
E-Mail info@sick.fr

**Great Britain**

Phone +44 (0)1727 831121  
E-Mail info@sick.co.uk

**India**

Phone +91-22-4033 8333  
E-Mail info@sick-india.com

**Israel**

Phone +972-4-6801000  
E-Mail info@sick-sensors.com

**Italia**

Phone +39 02 27 43 41  
E-Mail info@sick.it

**Japan**

Phone +81 (0)3 3358 1341  
E-Mail support@sick.jp

**Magyarország**

Phone +36 1 371 2680  
E-Mail office@sick.hu

**Nederlands**

Phone +31 (0)30 229 25 44  
E-Mail info@sick.nl

**Norge**

Phone +47 67 81 50 00  
E-Mail austefjord@sick.no

**Österreich**

Phone +43 (0)22 36 62 28 8-0  
E-Mail office@sick.at

**Polska**

Phone +48 22 837 40 50  
E-Mail info@sick.pl

**România**

Phone +40 356 171 120  
E-Mail office@sick.ro

**Russia**

Phone +7-495-775-05-30  
E-Mail info@sick.ru

**Schweiz**

Phone +41 41 619 29 39  
E-Mail contact@sick.ch

**Singapore**

Phone +65 6744 3732  
E-Mail admin@sicksgp.com.sg

**Slovenija**

Phone +386 (0)1-47 69 990  
E-Mail office@sick.si

**South Africa**

Phone +27 11 472 3733  
E-Mail info@sickautomation.co.za

**South Korea**

Phone +82 2 786 6321/4  
E-Mail info@sickkorea.net

**Suomi**

Phone +358-9-25 15 800  
E-Mail sick@sick.fi

**Sverige**

Phone +46 10 110 10 00  
E-Mail info@sick.se

**Taiwan**

Phone +886-2-2375-6288  
E-Mail sales@sick.com.tw

**Türkiye**

Phone +90 (216) 528 50 00  
E-Mail info@sick.com.tr

**United Arab Emirates**

Phone +971 (0) 4 8865 878  
E-Mail info@sick.ae

**USA/México**

Phone +1(952) 941-6780  
1 800-325-7425 – tollfree  
E-Mail info@sickusa.com

More representatives and agencies  
at [www.sick.com](http://www.sick.com)