Product family overview

OD Max

Two sensors in one evaluation unit: very accurate measuring and calculation

DISPLACEMENT MEASUREMENT SENSORS

SICK
Sensor Intelligence.

Technical data overview

Measuring range	24 mm ... 450 mm (depending on type)
Linearity	± 2 µm ... ± 200 µm (depending on type)
Repeatability	0.1 µm 1 µm 5 µm 50 µm
Response time	≥ 0.5 ms
Output time	≥ 0.1 ms
Measuring frequency	≤ 10 kHz
Digital output	5 x PNP/NPN, selectable
Light source	Laser, red
Type of light	Visible red light
Serial	✓, RS-232, optional, over external evaluation unit
Analog output	
Number	2
Type	Current output
Ambient temperature, operation	–10 °C ... +45 °C

Product description

The OD Max is a highly accurate optical measuring system that is able to connect two separate sensors into one common controller. This sensing solution makes it possible to easily calculate two measurement results. Different measurements can be used to determine properties, such as the thickness or height difference of an object, even if its absolute position is fluctuating. With its high precision and speed, the OD Max is the ideal solution for challenging measurement applications.

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 downtimes due to the impressive reliability of the measuring system on any surface
- 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
- Reference measurement helps negate the need for cost-intensive adjustments to the production process
- Comparatively low investment costs for challenging measuring tasks
- Easy and cost-effective commissioning and servicing due to clear LCD display
- Reduced material costs due to the use of distance sensors to control production processes that have an impact on costs

Ordering information

Other models and accessories ➜ www.sick.com/OD_Max

- **Communication interface:** Serial
- **Housing material:** metal
- **Type of analog output:** Current output
- **Connection type:** 0.5 m cable with connector (Can be extended to up to 10 m with extension cable.) (Sensor must be connected to controller unit.)
- **Digital output:** 5 x PNP/NPN, selectable

Laser class	Measuring range	Typ. light spot size (distance)	Type	Part no.
1	24 mm ... 26 mm	25 µm x 35 µm (25 mm)	OD25-01T1	6030977
2	250 mm ... 450 mm	300 µm x 700 µm (350 mm)	OD350-100T1	6028957
	25 mm ... 35 mm	30 µm x 100 µm (30 mm)	OD30-05T1	6028959
	65 mm ... 105 mm	70 µm x 290 µm (85 mm)	OD85-20T1	6028958

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