


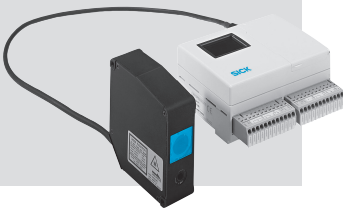
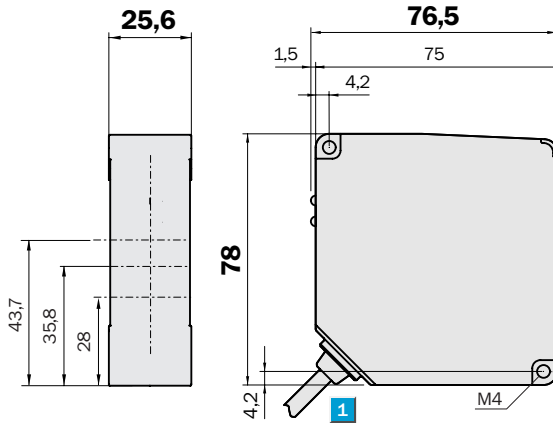
# Displacement Sensor OD Max Transparent, sensor head

	<b>Measurement range</b> <b>25 ± 1 mm</b>
<b>Displacement-Sensor</b>	

- Laser Technology
- Measurement of transparent materials
- High measurement accuracy
- High-End-System: 1 or 2 sensor heads per amplifier unit
- 4 analogue outputs and 5 switching outputs
- RS 232C interface

## Dimensional drawing

OD25-01T1



- 1** Cable Ø 5 mm/0.5 m with 10-pin connector
- 2** Distance indicator LED
- 3** Laser on LED

## Adjustments possible

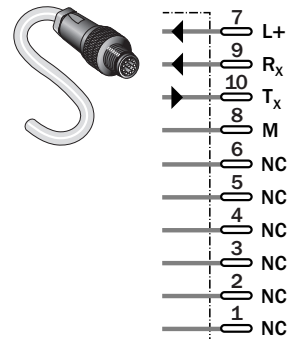
OD25-01T1

Displacement Sensor	
<input type="radio"/>	DISTANCE <b>2</b>
<input type="radio"/>	LASER ON <b>3</b>

## Connection types

OD25-01T1

10 pin



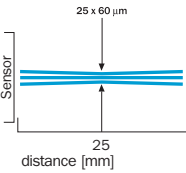
## Accessories

Connectors

Technical Data		OD	25-01T1										
<b>Light source</b>	Red laser diode 1 (II) <sup>1)</sup>												
<b>Measuring range</b>	25 ± 1 mm												
<b>Resolution <sup>2)</sup></b>	0.1 µm												
<b>Reproducibility <sup>3)</sup></b>	0.3 µm												
<b>Accuracy <sup>4)</sup></b>	± 2 µm												
<b>Temperature drift</b>	±0.05 % FS <sup>5)</sup> /°C												
<b>Measuring frequency</b>	10 kHz												
<b>Supply voltage V<sub>s</sub></b>	Supplied from the amplifier unit												
<b>Enclosure rating</b>	IP 67												
<b>VDE protection class</b>	III												
<b>Ambient temperature</b>	Operation -10 °C ... +45 °C <sup>6)</sup> Storage -20 °C ... +60 °C												
<b>Ambient light limit</b>	max. 3,000 lx (fluorescent light) max. 10,000 lx (sun light)												
<b>Vibration resistance</b>	10/s ... 55/s <sup>7)</sup>												
<b>Shock resistance</b>	50 G (500 m/s <sup>2</sup> )												
<b>Weight</b>	250 g (incl. 50 cm cable)												
<b>Material</b>	Sensor head housing: Diecast aluminium												
<b>Connection Type</b>	0.5 m pig tail with connector <sup>8)</sup>												

- <sup>1)</sup> Wavelength 650 nm, max. output 390 µW
- <sup>2)</sup> Averaging; 256 measurement; Object: 90% remission; Distance: middle distance
- <sup>3)</sup> With constant environmental conditions; Averaging: 256 measurements; Object: 90% remission
- <sup>4)</sup> On Glass; Parallel alignment of the active sensor surface to the object surface; Equivalent ± 0.1 % of Full Scale
- <sup>5)</sup> Full Scale : OD25-01T1 = 2 mm
- <sup>6)</sup> Non-condensing
- <sup>7)</sup> Double amplitude 1.5 mm, 2 h for XYZ axes
- <sup>8)</sup> Extendable by max. 10 m

**OD25-01T1: Lightspot diameter**



**Order information**

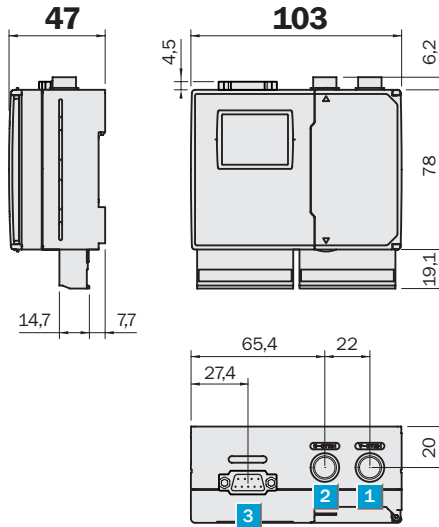
Type	Order no.
OD25-01T1	6030977

**Measurement range**  
 $25 \pm 1 \text{ mm}$

Displacement Sensor

- Laser Technology
- Measurement of transparent materials
- High Measurement
- High-End-System: 1 or 2 sensor heads per amplifier unit
- 4 analogue outputs and 5 switching outputs
- RS 232C interface

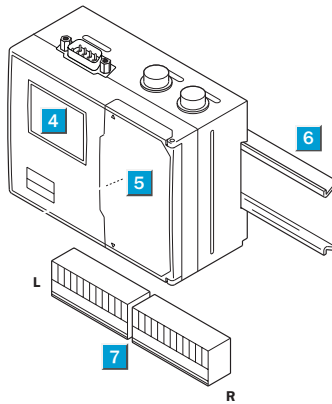
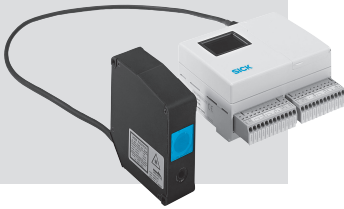
### Dimensional drawing



### Adjustments possible

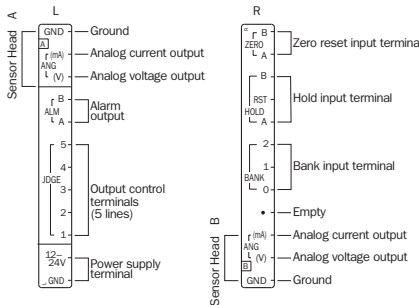
- AODG-P1
- AODG-N1

- 1 Sensor head A connection port
- 2 Sensor head B connection port
- 3 RS 232C interface
- 4 LCD display
- 5 Operation panel
- 6 DIN rail
- 7 Terminal board (detachable)

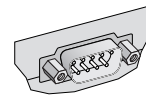


### Connection terminal board

- AODG-P1
- AODG-N1



### Connector pinning RS232C



### Male connector, 9-pin

- 1 DCD – Data Carrier Detect
- 2 RXD – Receive Data
- 3 TXD – Transmit Data
- 4 DTR – Data Terminal Ready
- 5 SG – Signal Ground
- 6 DSR – Data Set Ready
- 7 RTS – Request to Send
- 8 CTS – Clear to Send
- 9 RI – (Ring Indicator)

### Accessories

Connectors

Technical Data		AODG-	P1	N1									
<b>Response time</b> <sup>1)</sup>	0,5 ms												
<b>Output rate</b>	10 kHz												
<b>In- and outputs</b>	PNP												
	NPN												
<b>Outputs</b>													
2 analogue voltage outputs <sup>2)</sup>	-5 ... + 5 V <sup>3)</sup>												
2 analogue current outputs <sup>2)</sup>	4 ... 20 mA <sup>4)</sup>												
5 switching outputs <sup>5)</sup>	max. 100 mA/ 30 V DC <sup>6)</sup>												
2 alarm outputs	To indicate failed measurements												
<b>Data interface</b>	RS 232C												
<b>Inputs</b>													
3 bank inputs	External memory bank selection												
3 hold inputs	Holding the measurement/Laser off												
2 zero reset inputs	To reference the measurement												
<b>Display type</b>	LCD colour display												
<b>Additional features</b>	Arithmetical calculations												
	Averaging functions												
	Frequency filters												
	Autom./manual sensitivity setting												
	Timer functions												
	8 memory banks												
	Hold functions												
<b>Supply voltage V<sub>s</sub></b>	12 ... 24 V DC -5%, + 10%												
<b>Power consumption</b> <sup>7)</sup>	6 W												
<b>Enclosure rating</b>	IP 20												
<b>VDE protection class</b>	III												
<b>Ambient temperature</b>	Operation -10 °C ... +45 °C <sup>8)</sup>												
	Storage -20 °C ... +60 °C												
<b>Vibration resistance</b>	10/s ... 55/s <sup>9)</sup>												
<b>Shock resistance</b>	20 G (196 m/s <sup>2</sup> )												
<b>Weight</b>	240 g (incl. terminal board)												
<b>Material</b>	Housing	Polycarbonate											
	Terminal board	Nylon 66											
<b>Connection type</b>	Terminal board												

<sup>1)</sup> Without averaging and manually selected sensitivity  
<sup>2)</sup> 1 for each sensor head, or 1 for the calculation result

<sup>3)</sup> Output impedance max. 1 kΩ, Resolution 1 mV  
<sup>4)</sup> Output impedance max. 300, Resolution 1.5 µA

<sup>5)</sup> For the calculation result  
<sup>6)</sup> Residual voltage max. 1.8 V  
<sup>7)</sup> When connected with 2 sensor heads. Including analogue current output.

<sup>8)</sup> Non condensing  
<sup>9)</sup> Double amplitude 1.5 mm, 2 h for XYZ axes

Order information	
Amplifier unit OD Max	
Type	Order no.
AODG-P1	6030978
AODG-N1	6030979

Accessories, extension cable		
Type	Order no.	Cable length
DSL-1210-G02M	6028943	2 m
DSL-1210-G05M	6028944	5 m