

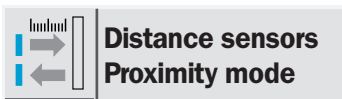
# DT 200: Laser analog sensor that measures distances up to 2000 mm



The sturdy metal housing with M12 connector makes it possible to use the equipment even in difficult environmental conditions.

Typical applications are:

- sag (loop) control,
- contour detection,
- diameter detection of coils, for example,
- difference measurements for determining the thickness of parts.



**D**T 200 – Distance sensor for measurement distances up to 2 m. The DT 200, which operates according to the principle of time-of-flight measurement, provides a resolution of 1 mm via a precise, analog power output.

*Stocked, Distributed, and Supported by*

**SENSORS**  
**INCORPORATED**

507 Kelsey Street • Delano, MN 55328  
Phone 763-972-1040 Fax 763-972-1041  
Toll Free 888-920-0939  
Sensorsincorporated.com

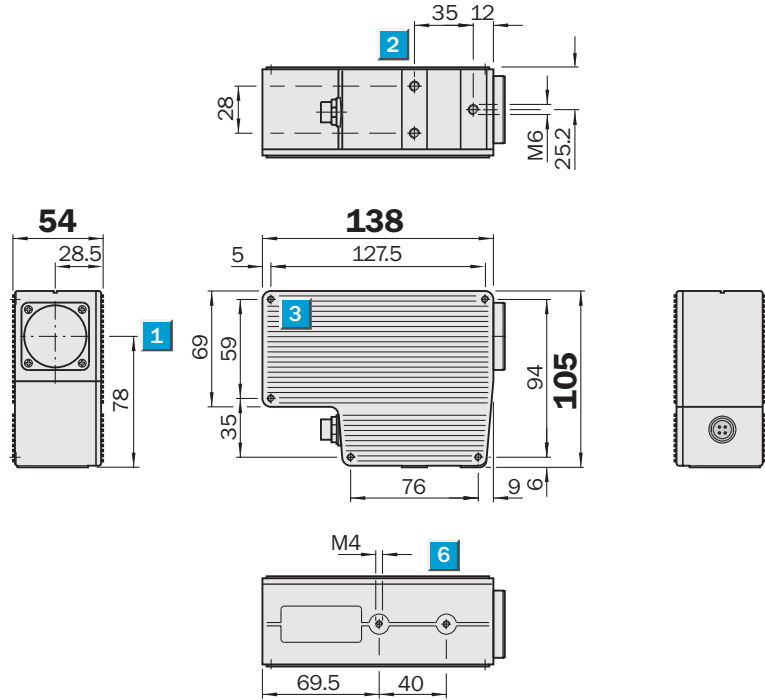
The red measurement laser enables precise alignment to an object. Small parts are detected precisely even at a distance of 2 m thanks to the small light spot, which is similar to that of a laser pointer.

**SICK**

	<b>Measurement range</b> 100...2000 mm
<b>Distance Sensor</b>	

- Good measurement accuracy thanks to time-of-flight measurement
- Analog output
- Easy adjustment using red laserlight
- Eye-safe, laser class 2

**Dimensional drawing**

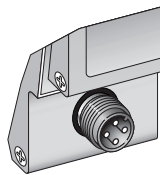


- 1 Centre of optical axis
- 2 M6 threaded mounting hole, 10 mm deep
- 3 M4 threaded mounting hole, 14 mm deep (this side only)
- 4 M4 threaded mounting hole, 6 mm deep

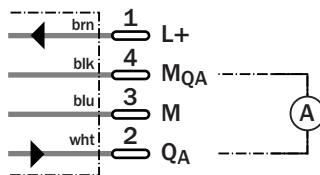


**Connection type**

DT 200-111



4-pin, M12



Laser class 2

Technical Data		DT 200-	111	111A01								
<b>Measurement range<sup>1)</sup></b>	100 ... 2000 mm											
<b>Accuracy</b>												
Object with 90 % remission	± 5 mm											
Object with 18 % remission	± 11 mm											
Object with 6 % remission	± 65 mm											
<b>Reproducibility</b>												
Object with 90 % remission	1 mm											
Object with 18 % remission	3 mm											
Object with 6 % remission	25 mm											
<b>Light source<sup>2)</sup>, light type</b>	Laser diode, red light											
Laser category	2 (IEC 825-1/EN 60825-1)											
	CDRH											
<b>Supply voltage V<sub>s</sub></b>	18 ... 30 V DC <sup>3)</sup>											
Ripple <sup>4)</sup>	< 5 V <sub>pp</sub>											
Power consumption <sup>5)</sup>	≤ 6 W											
<b>Analog output</b>	0 ... 20 mA (0.01 mA/mm)											
Response time	8 x 30 ms											
Temperature drift	0.4 mm/K											
<b>Connection type</b>	M12 plug, 4-pin											
<b>VDE protection class<sup>6)</sup></b>	<input type="checkbox"/>											
<b>Enclosure rating</b>	IP 67											
<b>Ambient temperature T<sub>A</sub></b>	Operation - 10 °C ... + 45 °C											
	Storage - 25 °C ... + 75 °C											
<b>Weight</b>	Approx. 980 g											

<sup>1)</sup> Falling below of the measurement range results in values < 0.1 mA  
Exceeding the measurement range results in ambiguous values  
(Example: Scanning distance of 3 m  $\hat{=}$  10 mA with sufficient reflectance)

<sup>2)</sup> Average service life 50,000 h  
at T<sub>A</sub> = + 25 °C

<sup>3)</sup> Limit values, reverse-polarity protected

<sup>4)</sup> May not exceed or fall short of V<sub>s</sub> tolerances

<sup>5)</sup> Without load

<sup>6)</sup> Reference voltage DC 50 V

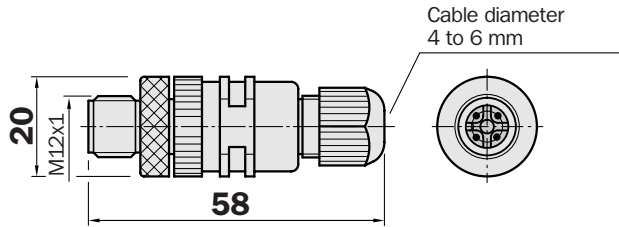
Order Information	
Type	Part no.
DT 200-111	1 022 938
DT 200-111A01	1 022 946

## Dimensional drawings and order information

### SENSICK screw-in system M12, 4-pin, enclosure rating IP 67

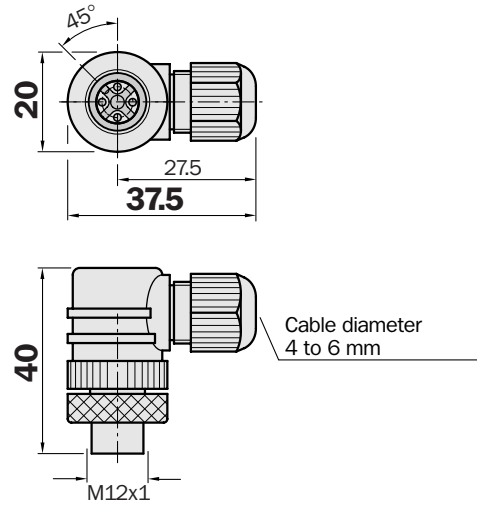
#### Male connector M12, 4-pin, straight

Type	Part no.	Contacts
STE-1204-G	6 009 932	4



#### Male connector M12, 4-pin, right angle

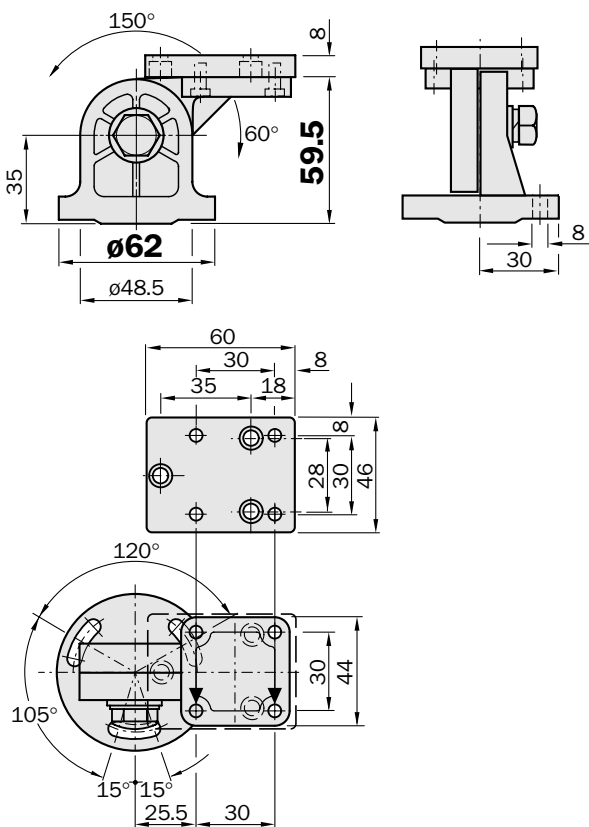
Type	Contacts
STE-1204-W	4



Dimensional drawings and order information

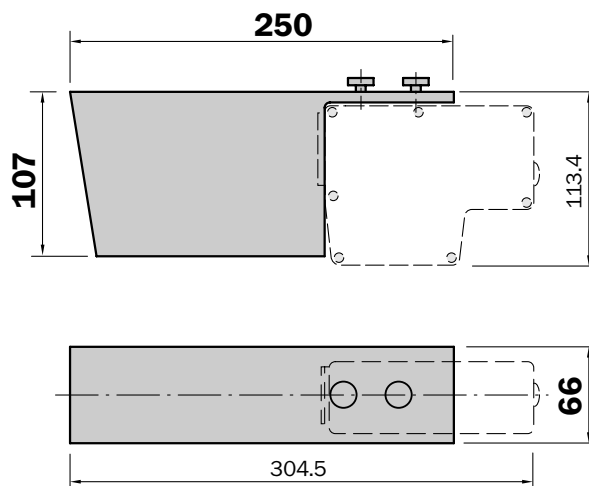
**Articulated mounting**

Type	Part no.
BEF-GH-DME	2 015 229



**Dust protection tube for DT 200**

Type	Part no.
OBS-DME	2 014 458



Contact:

**A u s t r a l i a**

Phone +61 3 9497 4100  
1800 33 48 02 – tollfree  
E-Mail sales@sick.com.au

**B e l g i u m / L u x e m b o u r g**

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

**B r a s i l**

Phone +55 11 5091-4900  
E-Mail sac@sick.com.br

**C e s k á R e p u b l i k a**

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

**C h i n a**

Phone +852-2763 6966  
E-Mail ghk@sick.com.hk

**D a n m a r k**

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

**D e u t s c h l a n d**

Phone +49 (0)2 11 53 01-250  
E-Mail vzdinfo@sick.de

**E s p a ñ a**

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

**F r a n c e**

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

**G r e a t B r i t a i n**

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

**I t a l i a**

Phone +39 02 27 40 93 19  
E-Mail ced@sick.it

**J a p a n**

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

**K o r e a**

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

**N e d e r l a n d s**

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

**N o r g e**

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

**Ö s t e r r e i c h**

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

**P o l s k a**

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

**S c h w e i z**

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

**S i n g a p o r e**

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

**S u o m i**

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

**S v e r i g e**

Phone +46 8 680 64 50  
E-Mail info@sick.se

**T a i w a n**

Phone +886 2 2365-6292  
E-Mail sickgrc@ms6.hinet.net

**U S A / C a n a d a / M é x i c o**

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

More representatives and agencies  
in all major industrial nations at  
[www.sick.com](http://www.sick.com)

The SICK logo consists of the word "SICK" in a bold, blue, sans-serif font. The letters are closely spaced and have a slight shadow effect.