

# DS500/DT500

## Laser sensor measures distances to 30 m – on black material in proximity mode



DS500 – distance sensor with two user taught switch outputs. Suitable for precise and reliable detection of objects – even with black surfaces – at a distance of up to 30 m. The high resolution of the sensor enables exact background suppression even in the presence of bright surfaces in the background.

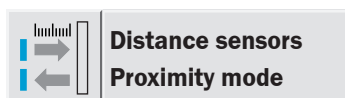
Typical applications are:

- anti-collision control,
- detection of small parts over a large scanning distance,
- part detection in material handling applications.

DT500 – distance sensor with analogue output or, optionally, with CAN Bus. A universal sensor for distance measurement of black objects at a distance of up to 30 m. With a resolution of 1 mm and an accuracy of 3 mm, the DT500 can be used for precise measurement tasks.


Typical applications are:

- contour detection,
- diameter measurement,
- difference measurements,
- positioning of parts,
- stack height measurement/classification.



**T**he sensors within the DS/DT500 series are ideal for applications in rough environmental conditions due to their robust metal housing. Using the time of flight principle, a red laser detects the precise distance to the target object. The measurement laser is clearly visible on the target even at large distances, similar to a laser pointer. An integrated display on the housing of the sensor illustrates the current measurement value and enables easy set-up of switch positions. For outdoor applications, versions are available with integrated heating and a weather protection hood.

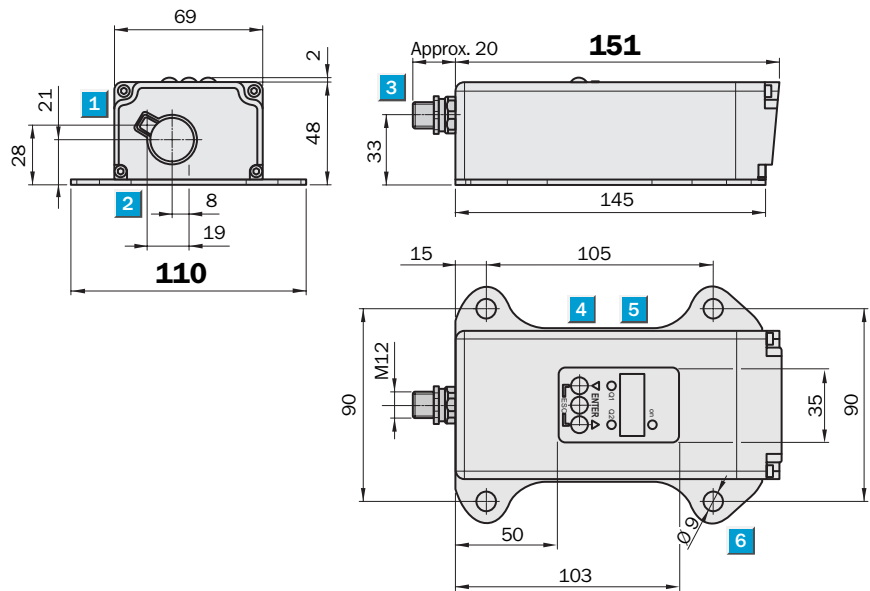
# SICK

 **Measuring range**  
0.2 ... 30 m

Distance sensor

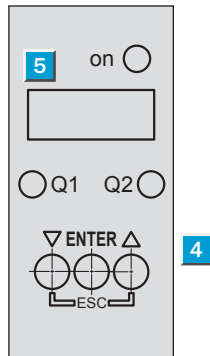
- High measurement accuracy thanks to time of flight measurement
- Simple alignment using red laser light
- Two distance switching outputs
- Metal housing with integral heating option
- Weather protection housing optional
- Alignment bracket optional

**Dimensional drawing**



**Adjustments possible**

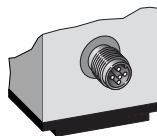
All types



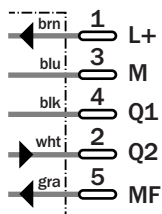
- 1 Optical axis - sender
- 2 Optical axis - receiver
- 3 M12 plug, 5-pin
- 4 Operating components
- 5 Indicator
- 6 Mounting hole

**Connection type**

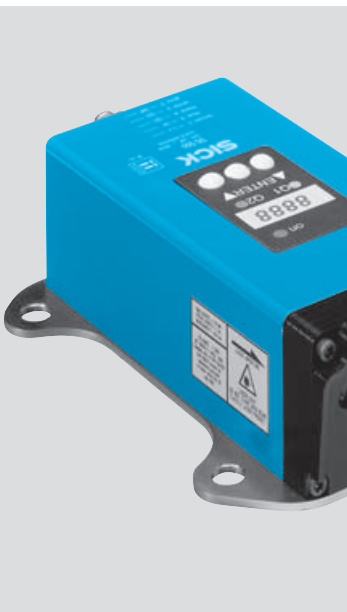
All types



5-pin, M12



Accessories
Cables and connectors
Mounting systems
Special accessories



Technical data		DS500-	P111	P211	N111	N211						
<b>Measuring range</b>	0.2 ... 18 m (black), 6 % remission											
	0.2 ... 30 m (white), 90 % remission											
Light spot diameter	45 mm at 30 m											
<b>Light source <sup>4)</sup>, light type</b>	Laser diode, red light											
Laser class	2 (EN 60825/21 CFR 1040)											
<b>Supply voltage <math>V_s</math> <sup>2)</sup></b>	10 ... 30 V DC <sup>3)</sup>											
Residual ripple <sup>4)</sup>	5 V <sub>PP</sub>											
Power consumption typ. without heating	3 W											
	with heating	22 W										
Response time	250 ms											
Resolution	1 mm											
Accuracy	± 3 mm											
<b>Temperature drift</b>	Typ. 0.05 mm/K											
<b>Switching outputs Q1, Q2</b>	PNP											
	NPN											
<b>Load current</b>	< 100 mA											
<b>Residual voltage</b>	< 2 V											
<b>External Teach via MF <sup>5)</sup></b>	> 12 V < V <sub>S</sub>											
	< 2 V											
<b>VDE protection class <sup>6)</sup></b>	<input type="checkbox"/>											
<b>Enclosure rating</b>	IP 65											
<b>Ambient temperature</b>	without heating	Operation	-10 °C ... +50 °C									
	with heating	Operation	-40 °C ... +50 °C <sup>3)</sup>									
		Storage	-25 °C ... +75 °C									
<b>Weight</b>	Approx. 1000 g											
<b>Initialisation period</b>	Typ. 500 ms											
EMC	EN 61000-6-2, EN 55011											
Mechanical load	Shock: EN 600 86-2-27/-2-29											
	Sine: EN 600 68-2-6											
	Noise: EN 600 68-2-64											


<sup>1)</sup> Average service life 50,000 h at T<sub>A</sub> = +25 °C  
<sup>2)</sup> Reverse-polarity protected

<sup>3)</sup> V<sub>S</sub> ≥ 24 V DC for DS500-P2xx with heating

<sup>4)</sup> May not exceed or fall short of V<sub>S</sub> tolerances  
<sup>6)</sup> Reference voltage 32 V DC

<sup>5)</sup> Extern Teach via MF		
Teach-in	MF active	Model
Q	100 ms	Current measure-
Q̄1	200 ms	ment value is
Q2	300 ms	used as switching
Q̄2	400 ms	threshold
Laser off	> 450 ms	

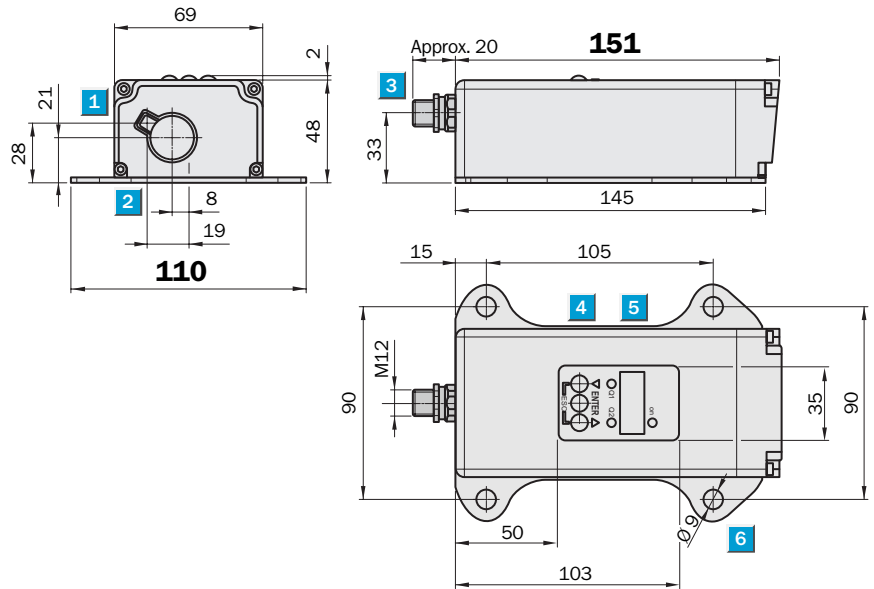
Error performance or no object in measurement range		Order information	
Measurement not possible:		<b>Type</b>	<b>Order no.</b>
Measurement value output display:	0.000	DS500-P111	1026519
Switching outputs:	Switching stage ≅ measurement value 0 m	DS500-P211	1026520
No object in measurement range or laser off:		DS500-N111	1026521
Measurement value output display:	99.99	DS500-N211	1026522
Switching outputs:	Switching stage ≅ measurement value 99.99 m		

 **Measuring range**  
0.2 ... 7 m

Distance sensor

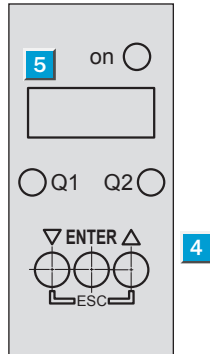
- High measurement accuracy thanks to time of flight measurement
- Simple alignment using red laser light
- Two distance switching outputs
- Metal housing with integral heating option
- Weather protection housing optional
- Alignment bracket optional

**Dimensional drawing**



**Adjustments possible**

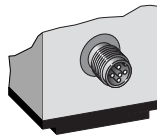
All types



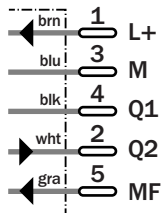
- 1 Optical axis - sender
- 2 Optical axis - receiver
- 3 M12 plug, 5-pin
- 4 Operating components
- 5 Indicator
- 6 Mounting hole

**Connection type**

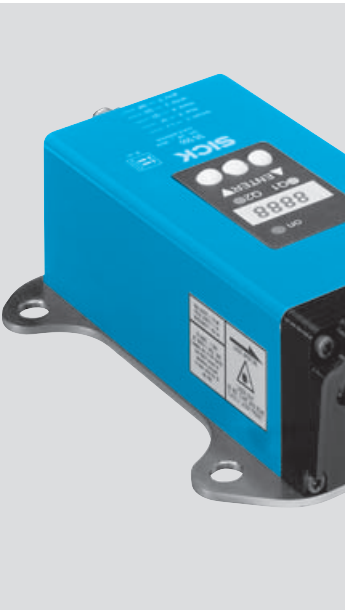
All types



5-pin, M12



Accessories
Cables and connectors
Mounting systems
Special accessories



Technical data		DS500-	P311	P411	N311	N411						
<b>Measuring range</b>	0.2 ... 7 m <sup>1)</sup>											
Light spot diameter	10 mm at 7 m											
<b>Light source<sup>2)</sup>, light type</b>	Laser diode, red light											
Laser class	2 (EN 60825/21 CFR 1040)											
<b>Supply voltage V<sub>S</sub><sup>3)</sup></b>	10 ... 30 V DC <sup>4)</sup>											
Residual ripple <sup>5)</sup>	5 V <sub>PP</sub>											
Power consumption typ. without heating	3 W											
	with heating	22 W										
Response time	150 ms											
Resolution	1 mm											
Accuracy	± 3 mm											
<b>Temperature drift</b>	Typ. 0.05 mm/K											
<b>Switching outputs Q1, Q2</b>	PNP											
	NPN											
<b>Load current</b>	< 100 mA											
<b>Residual voltage</b>	< 2 V											
<b>External Teach ET via MF<sup>6)</sup></b>	> 12 V < V <sub>S</sub>											
	< 2 V											
<b>VDE protection class<sup>7)</sup></b>	<input type="checkbox"/>											
<b>Enclosure rating</b>	IP 65											
<b>Ambient temperature</b>	without heating	Operation	-10 °C ... +50 °C									
	with heating	Operation	-40 °C ... +50 °C <sup>3)</sup>									
		Storage	-25 °C ... +75 °C									
<b>Weight</b>	Approx. 1000 g											
<b>Initialisation period</b>	Typ. 500 ms											
EMC	EN 61000-6-2, EN 55011											
Mechanical load	Shock: EN 600 86-2-27/-2-29											
	Sine: EN 600 68-2-6											
	Noise: EN 600 68-2-64											

1) Accurate to 7 m only  
 2) Average service life 50,000 h at T<sub>A</sub> = +25 °C  
 3) Reverse-polarity protected

4) V<sub>S</sub> ≥ 24 V DC for DS500-P4xx with heating  
 5) May not exceed or fall short of V<sub>S</sub> tolerances

7) Reference voltage 32 V DC

**6) Extern Teach via MF**

Teach-in	MF active	Model
Q	100 ms	Current measure-
Q̄1	200 ms	ment value is
Q2	300 ms	used as switching
Q̄2	400 ms	threshold
Laser off	> 450 ms	


**Error performance or no object in measurement range**

Measurement not possible:  
 Measurement value output display: 0.000  
 Switching outputs: Switching stage ≅ measurement value 0 m

No object in measurement range or laser off:  
 Measurement value output display: 99.99  
 Switching outputs: Switching stage ≅ measurement value 99.99 m

**Order information**

Type	Order no.
DS500-P311	1040477
DS500-P411	1040478
DS500-N311	1040481
DS500-N411	1040482

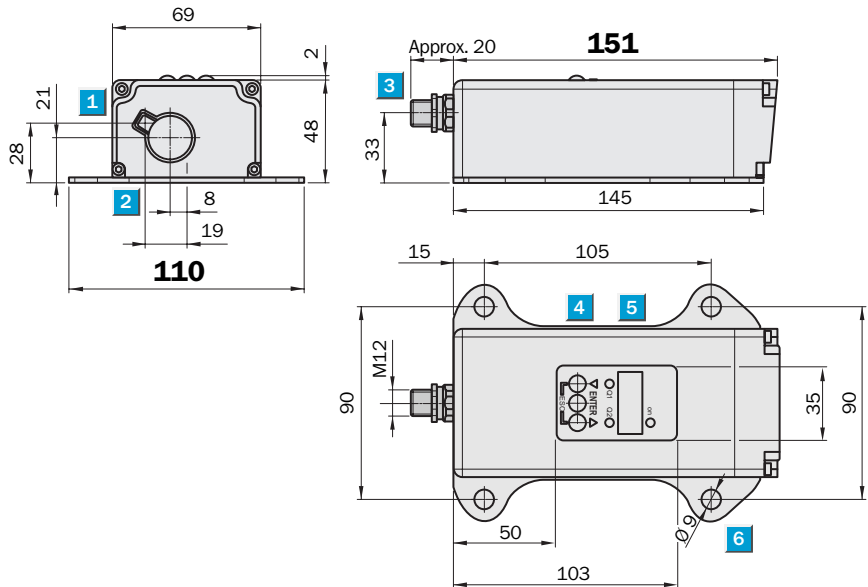


**Measuring range**  
0.2 ... 70 m

Distance sensor

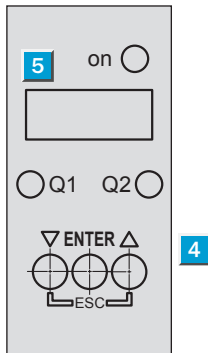
- High measurement accuracy thanks to time of flight measurement
- Simple alignment using red laser light
- Two distance switching outputs
- Metal housing with integral heating option
- Weather protection housing optional
- Alignment bracket optional

## Dimensional drawing



## Adjustments possible

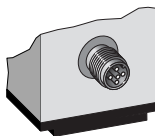
All types



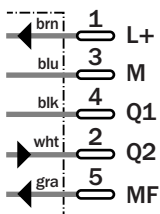
- 1 Optical axis - sender
- 2 Optical axis - receiver
- 3 M12 plug, 5-pin
- 4 Operating components
- 5 Indicator
- 6 Mounting hole

## Connection type

All types

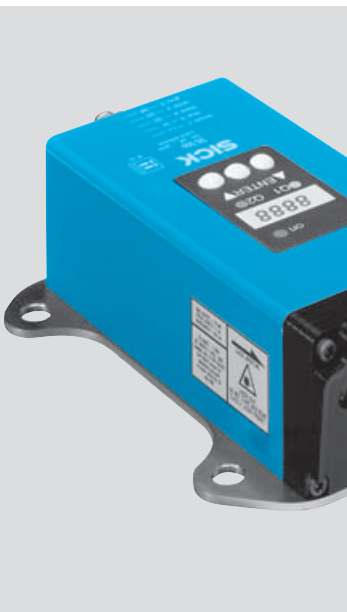


5-pin, M12



## Accessories

- Cables and connectors
- Mounting systems
- Special accessories



Technical data		DS500-	P511	P611	N511	N611						
<b>Measuring range</b>	0.2 ... 30 m (black), 6 % remission											
	0.2 ... 70 m (white), 90 % remission											
Light spot diameter	100 mm at 70 m											
<b>Light source <sup>4)</sup>, light type</b>	Laser diode, red light											
Laser class	2 (EN 60825/21 CFR 1040)											
<b>Supply voltage <math>V_s</math> <sup>2)</sup></b>	10 ... 30 V DC <sup>3)</sup>											
Residual ripple <sup>4)</sup>	5 V <sub>PP</sub>											
Power consumption typ. without heating	3 W											
	with heating 22 W											
Response time	0.15 ... 6 s											
Resolution	1 mm											
Accuracy	± 3 mm											
<b>Temperature drift</b>	Typ. 0.05 mm/K											
<b>Switching outputs Q1, Q2</b>	PNP											
	NPN											
<b>Load current</b>	< 100 mA											
<b>Residual voltage</b>	< 2 V											
<b>External Teach ET via MF <sup>5)</sup></b>	> 12 V < V <sub>S</sub>											
	< 2 V											
<b>VDE protection class <sup>6)</sup></b>	<input type="checkbox"/>											
<b>Enclosure rating</b>	IP 65											
<b>Ambient temperature</b>	without heating	Operation	-10 °C ... +50 °C									
	with heating	Operation	-40 °C ... +50 °C <sup>3)</sup>									
		Storage	-25 °C ... +75 °C									
<b>Weight</b>	Approx. 1000 g											
<b>Initialisation period</b>	Typ. 500 ms											
EMC	EN 61000-6-2, EN 55011											
Mechanical load	Shock:	EN 600 86-2-27/-2-29										
	Sine:	EN 600 68-2-6										
	Noise:	EN 600 68-2-64										

1) Average service life 50,000 h at T<sub>A</sub> = +25 °C  
 2) Reverse-polarity protected

3) V<sub>S</sub> ≥ 24 V DC for DS500-P6xx with heating

4) May not exceed or fall short of V<sub>S</sub> tolerances  
 6) Reference voltage 32 V DC

* Extern Teach via MF		
Teach-in	MF active	Model
Q	100 ms	Current measure-
Q̄1	200 ms	ment value is
Q2	300 ms	used as switching
Q̄2	400 ms	threshold
Laser off	> 450 ms	

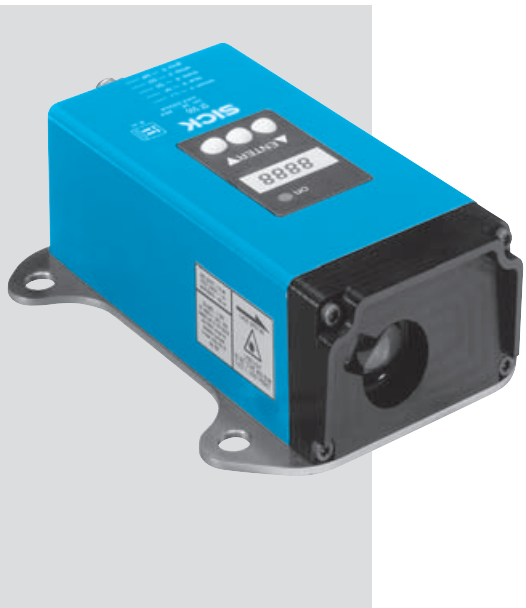
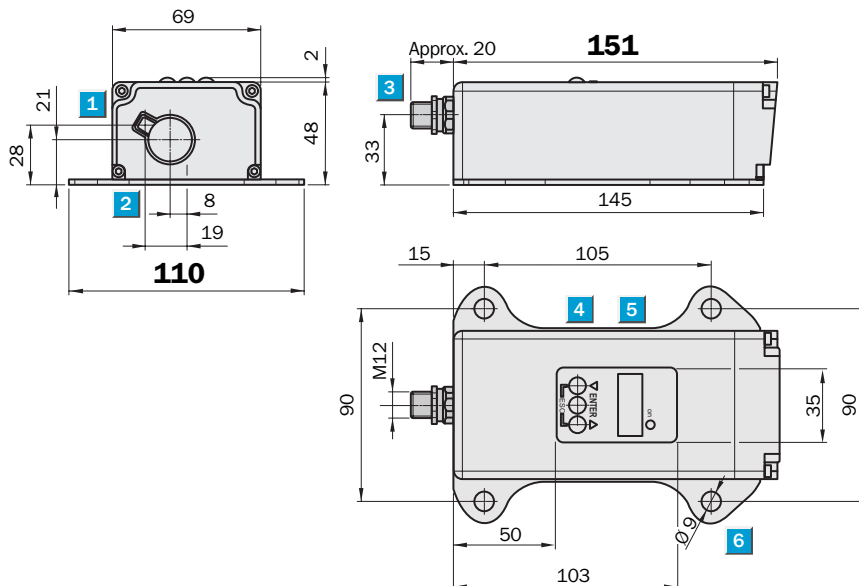
Error performance or no object in measurement range	Order information
Measurement not possible:	<b>Type</b>
Measurement value output display: 0.000	<b>Order no.</b>
Switching outputs: Switching stage ≅ measurement value 0 m	DS500-P511 1040479
No object in measurement range or laser off:	DS500-P611 1040480
Measurement value output display: 99.99	DS500-N511 1040483
Switching outputs: Switching stage ≅ measurement value 99.99 m	DS500-N611 1040484

**Measuring range**  
0.2 ... 30 m

Distance sensor

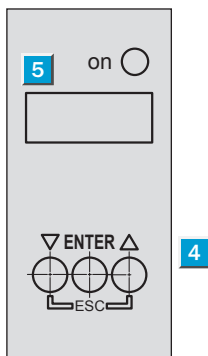
- High measurement accuracy thanks to time of flight measurement
- Simple alignment using red laser light
- Analogue current interface
- CAN Bus
- Metal housing with integral heating option
- Weather protection housing optional
- Alignment bracket optional

**Dimensional drawing**



**Adjustments possible**

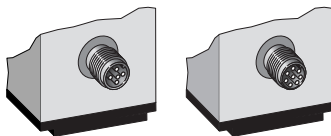
All types



- 1 Optical axis - sender
- 2 Optical axis - receiver
- 3 M12 plug, 5-pin
- 4 Operating components
- 5 Indicator
- 6 Mounting hole

**Connection type**

Analogue (-A .. 1)    CAN (-A .. 3)

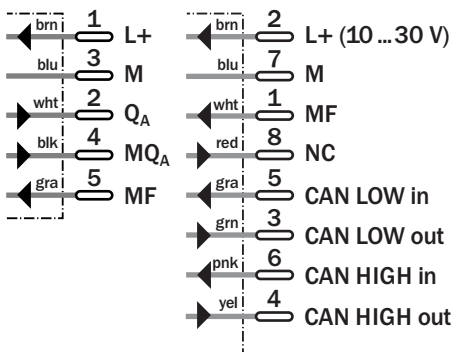


5-pin, M12

8-pin, M12

**Accessories**

Cables and connectors
Mounting systems
Special accessories





Technical data		DT500-	A111	A211	A123	A223						
<b>Measuring range</b>	0.2 ... 18 m (black), 6 % remission											
	0.2 ... 30 m (white), 90 % remission											
<b>Reproducibility <sup>1)</sup></b>	1 mm											
Accuracy	±3 mm											
Temperature drift	Typ. 0.05 mm/K											
<b>Measured value output</b>	250 ms											
Light spot diameter	45 mm at 30 m											
Resolution analogue	12 bit											
Resolution CAN	0.1 mm											
<b>Light source <sup>2)</sup>, light type</b>	Laser diode, red light											
Laser class	2 (EN 60825/21 CFR 1040)											
<b>Supply voltage <math>V_S</math> <sup>3)</sup></b>	10 ... 30 V DC <sup>4)</sup>											
Residual ripple <sup>5)</sup>	5 V <sub>PP</sub>											
Power consumption typ. without heating	3 W											
	with heating	22 W										
<b>External Teach ET via MF <sup>6)</sup></b>	> 12 V											
Laser off via CAN-Bus or MF	> 12 V											
<b>Current output</b>	0 ... 20 mA/4 ... 20 mA											
<b>Interface</b>	CAN (Layer 2)											
<b>VDE protection class <sup>7)</sup></b>	□											
<b>Device connection</b>	M12, 8-pin											
	M12, 5-pin											
<b>Baud rate</b>	20 ... 1000 kbit/s											
<b>CAN Address</b>	11 bits, free selectable											
<b>Enclosure rating</b>	IP 65											
<b>Ambient temperature</b>	without heating	Operation	-10 °C ... +50 °C									
	with heating	Operation	-40 °C ... +50 °C <sup>4)</sup>									
		Storage	-25 °C ... +75 °C									
<b>Weight</b>	Approx. 1000 g											
<b>Initialisation period</b>	Typ. 500 ms											
EMC	EN 61000-6-2, EN 55011											
	EN 60947-5-7:2003-09											
Mechanical load	Shock: EN 600 86-2-27/-2-29											
	Sine: EN 600 68-2-6											
	Noise: EN 600 68-2-64											

<sup>1)</sup> Statistical error 1  $\sigma$ , environmental conditions constant  
<sup>2)</sup> Average service life 50,000 h at  $T_A = +25$  °C

<sup>3)</sup> Reverse-polarity protected  
<sup>4)</sup>  $V_S \geq 24$  V DC for DT500-A2xx with heating

<sup>5)</sup> May not exceed or fall short of  $V_S$  tolerances  
<sup>7)</sup> Reference voltage 32 V DC

#### <sup>6)</sup> Extern Teach via MF

Teach-in	MF active	Model
0 mA	100 ms	Current measure-
4 mA	200 ms	ment value is
20 mA	300 ms	used
Laser off	> 450 ms	

#### Order information

Type	Order no.
DT500-A111	1026515
DT500-A211	1026516
DT500-A123	1040468
DT500-A223	1040469

#### Error performance or no object in measurement range

Measurement not possible:

Measurement value output display: 0.000  
 Analogue interface: 0/3.5 mA  
 CAN Bus: 00000

No object in measurement range or laser off:

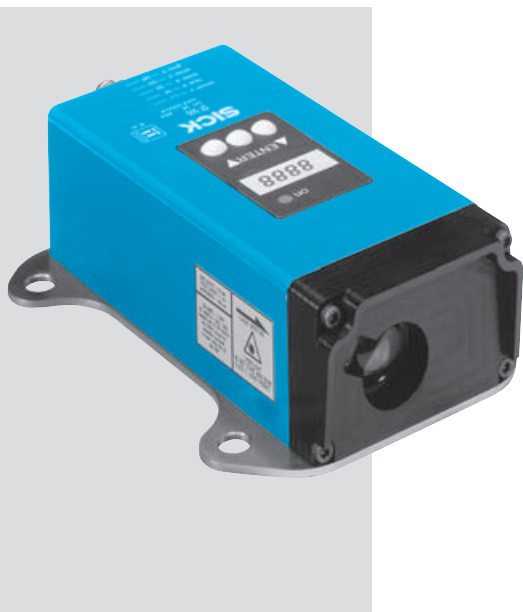
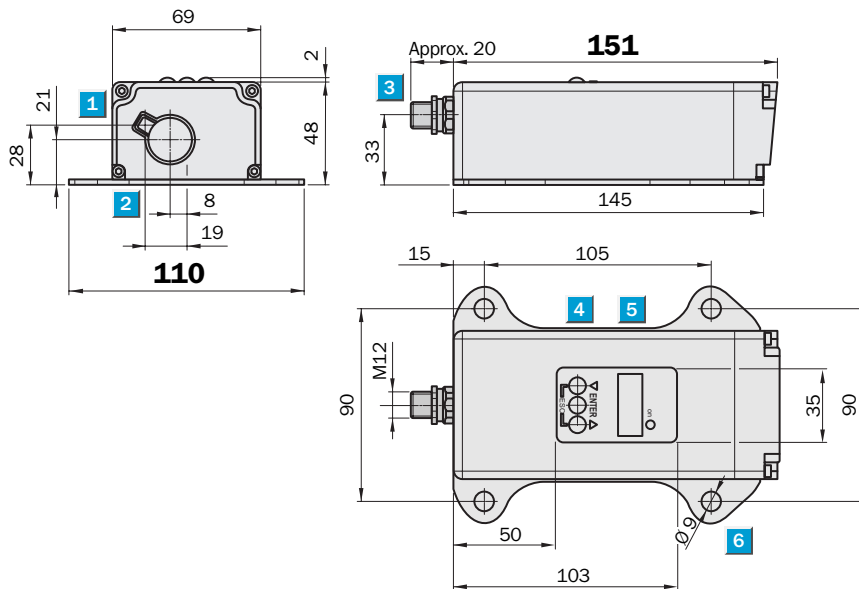
Analogue interface: 20.5 mA  
 CAN Bus: 99999

**Measuring range**  
0.2 ... 7 m

Distance sensor

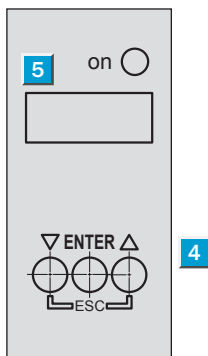
- High measurement accuracy thanks to time of flight measurement
- Simple alignment using red laser light
- Analogue current interface
- CAN Bus
- Metal housing with integral heating option
- Weather protection housing optional
- Alignment bracket optional

**Dimensional drawing**



**Adjustments possible**

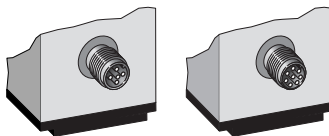
All types



- 1 Optical axis - sender
- 2 Optical axis - receiver
- 3 M12 plug, 5-pin
- 4 Operating components
- 5 Indicator
- 6 Mounting hole

**Connection type**

Analogue (-A .. 1)    CAN (-A .. 3)

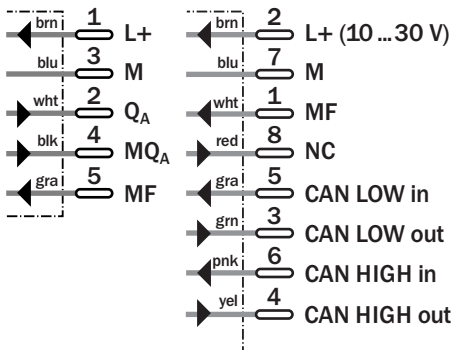


5-pin, M12

8-pin, M12

**Accessories**

- Cables and connectors
- Mounting systems
- Special accessories



Technical data		DT500-	A311	A411	A323	A423						
<b>Measuring range</b>	0.2 ... 7 m <sup>1)</sup>											
	6 ... 90 % remission											
<b>Reproducibility</b> <sup>2)</sup>	1 mm											
Accuracy	±3 mm											
Temperature drift	Typ. 0.05 mm/K											
<b>Measured value output</b>	150 ms											
Light spot diameter	10 mm at 7 m											
Resolution analogue	12 bit											
Resolution CAN	0.1 mm											
<b>Light source</b> <sup>3)</sup> , <b>light type</b>	Laser diode, red light											
Laser class	2 (EN 60825/21 CFR 1040)											
<b>Supply voltage</b> $V_S$ <sup>4)</sup>	10 ... 30 V DC <sup>5)</sup>											
Residual ripple <sup>6)</sup>	5 V <sub>PP</sub>											
Power consumption typ. without heating	3 W											
	with heating	22 W										
<b>External Teach ET via MF</b> <sup>7)</sup>	> 12 V											
Laser off via CAN-Bus or MF	> 12 V											
<b>Current output</b>	0 ... 20 mA/4 ... 20 mA											
<b>Interface</b>	CAN (Layer 2)											
<b>VDE protection class</b> <sup>8)</sup>	□											
<b>Device connection</b>	M12, 8-pin											
	M12, 5-pin											
<b>Baud rate</b>	20 ... 1000 kbit/s											
<b>CAN Address</b>	11 bits, free selectable											
<b>Enclosure rating</b>	IP 65											
<b>Ambient temperature</b> without heating	Operation	-10 °C ... +50 °C										
	with heating	Operation	-40 °C ... +50 °C <sup>4)</sup>									
	Storage	-25 °C ... +75 °C										
<b>Weight</b>	Approx. 1000 g											
<b>Initialisation period</b>	Typ. 500 ms											
EMC	EN 61000-6-2, EN 55011											
	EN 60947-5-7:2003-09											
Mechanical load	Shock: EN 600 86-2-27/-2-29											
	Sine: EN 600 68-2-6											
	Noise: EN 600 68-2-64											

<sup>1)</sup> Accurate to 7 m only

<sup>2)</sup> Statistical error 1  $\sigma$ , environmental conditions constant

<sup>3)</sup> Average service life 50,000 h at  $T_A = +25$  °C

<sup>4)</sup> Reverse-polarity protected

<sup>5)</sup>  $V_S \geq 24$  V DC for DT500-A4xx with heating

<sup>6)</sup> May not exceed or fall short of  $V_S$  tolerances

<sup>8)</sup> Reference voltage 32 V DC

#### 7) Extern Teach via MF

Teach-in	MF active	Model
0 mA	100 ms	Current measure-
4 mA	200 ms	ment value is
20 mA	300 ms	used
Laser off	> 450 ms	

#### Order information

Type	Order no.
DT500-A311	1040475
DT500-A411	1040465
DT500-A323	1040470
DT500-A423	1040471

#### Error performance or no object in measurement range

Measurement not possible:

Measurement value output display: 0.000


Analogue interface: 0/3.5 mA

CAN Bus: 00000

No object in measurement range or laser off:

Analogue interface: 20.5 mA

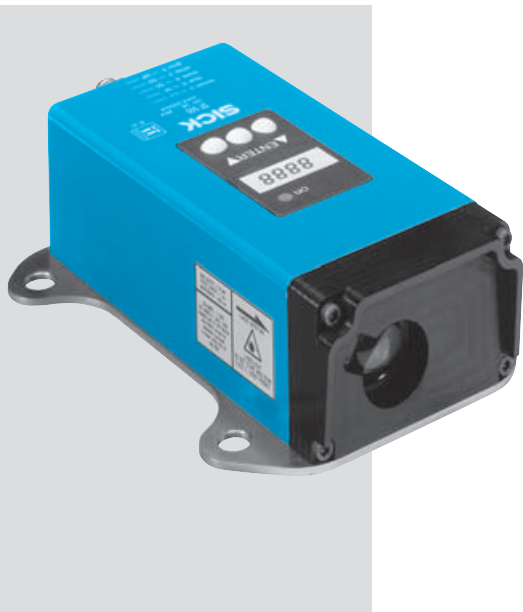
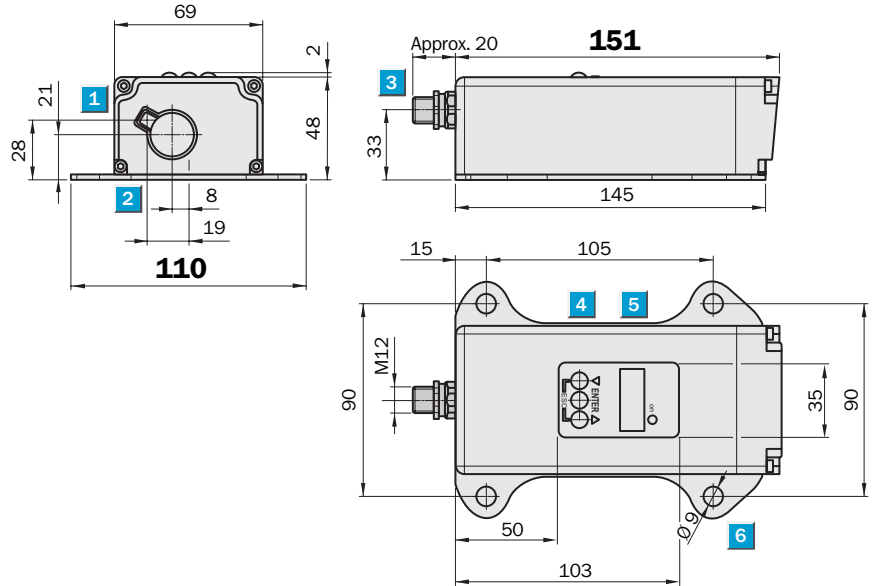
CAN Bus: 99999

 **Measuring range**  
0.2 ... 70 m

**Distance sensor**

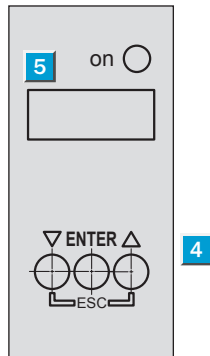
- High measurement accuracy thanks to time of flight measurement
- Simple alignment using red laser light
- Analogue current interface
- CAN Bus
- Metal housing with integral heating option
- Weather protection housing optional
- Alignment bracket optional

**Dimensional drawing**



**Adjustments possible**

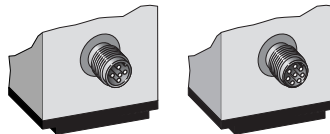
All types



- 1 Optical axis - sender
- 2 Optical axis - receiver
- 3 M12 plug, 5-pin
- 4 Operating components
- 5 Indicator
- 6 Mounting hole

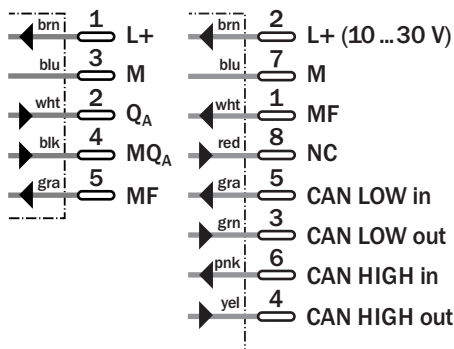
**Connection type**

Analogue (-A .. 1)    CAN (-A .. 3)



5-pin, M12

8-pin, M12



**Accessories**

Cables and connectors

Mounting systems

Special accessories

Technical data		DT500-	A511	A611	A523	A623						
<b>Measuring range</b>	0.2 ... 30 m (black), 6 % remission											
	0.2 ... 70 m (white), 90 % remission											
<b>Reproducibility <sup>1)</sup></b>	1 mm											
Accuracy	±3 mm											
Temperature drift	Typ. 0.05 mm/K											
<b>Measured value output</b>	150 ms – 6 s											
Light spot diameter	10 mm at 7 m											
Resolution analogue	12 bit											
Resolution CAN	0.1 mm											
<b>Light source <sup>2)</sup>, light type</b>	Laser diode, red light											
Laser class	2 (EN 60825/21 CFR 1040)											
<b>Supply voltage <math>V_S</math> <sup>3)</sup></b>	10 ... 30 V DC <sup>4)</sup>											
Residual ripple <sup>5)</sup>	5 V <sub>PP</sub>											
Power consumption typ. without heating	3 W											
	with heating	22 W										
<b>External Teach ET via MF <sup>6)</sup></b>	> 12 V											
Laser off via CAN-Bus or MF	> 12 V											
<b>Current output</b>	0 ... 20 mA/4 ... 20 mA											
<b>Interface</b>	CAN (Layer 2)											
<b>VDE protection class <sup>7)</sup></b>	□											
<b>Device connection</b>	M12, 8-pin											
	M12, 5-pin											
<b>Baud rate</b>	20 ... 1000 kbit/s											
<b>CAN Address</b>	11 bits, free selectable											
<b>Enclosure rating</b>	IP 65											
<b>Ambient temperature</b>	without heating	Operation	-10 °C ... +50 °C									
	with heating	Operation	-40 °C ... +50 °C <sup>4)</sup>									
		Storage	-25 °C ... +75 °C									
<b>Weight</b>	Approx. 1000 g											
<b>Initialisation period</b>	Typ. 500 ms											
EMC	EN 61000-6-2, EN 55011											
	EN 60947-5-7:2003-09											
Mechanical load	Shock: EN 600 86-2-27/-2-29											
	Sine: EN 600 68-2-6											
	Noise: EN 600 68-2-64											

<sup>1)</sup> Statistical error 1  $\sigma$ , environmental conditions constant

<sup>2)</sup> Average service life 50,000 h at  $T_A = +25$  °C

<sup>3)</sup> Reverse-polarity protected

<sup>4)</sup>  $V_S \geq 24$  V DC for DT500-A6xx with heating

<sup>5)</sup> May not exceed or fall short of  $V_S$  tolerances

<sup>7)</sup> Reference voltage 32 V DC

#### <sup>6)</sup> Extern Teach via MF

Teach-in	MF active	Model
0 mA	100 ms	Current measurement value is used
4 mA	200 ms	
20 mA	300 ms	
Laser off	> 450 ms	

#### Order information

Type	Order no.
DT500-A511	1040466
DT500-A611	1040467
DT500-A523	1040472
DT500-A623	1040473

#### Error performance or no object in measurement range

Measurement not possible:

Measurement value output display: 0.000

Analogue interface: 0/3.5 mA

CAN Bus: 00000

No object in measurement range or laser off:

Analogue interface: 20.5 mA

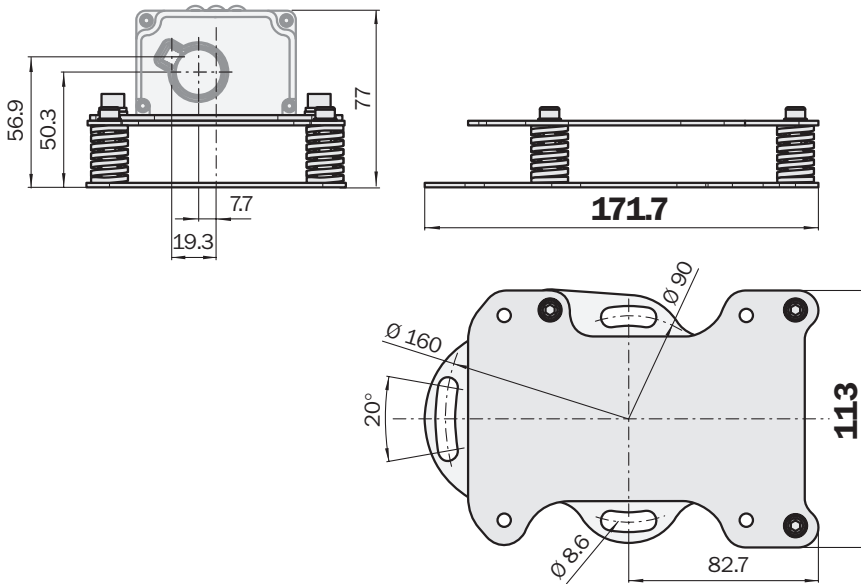
CAN Bus: 99999

## Dimensional drawings and order information

### Special accessories

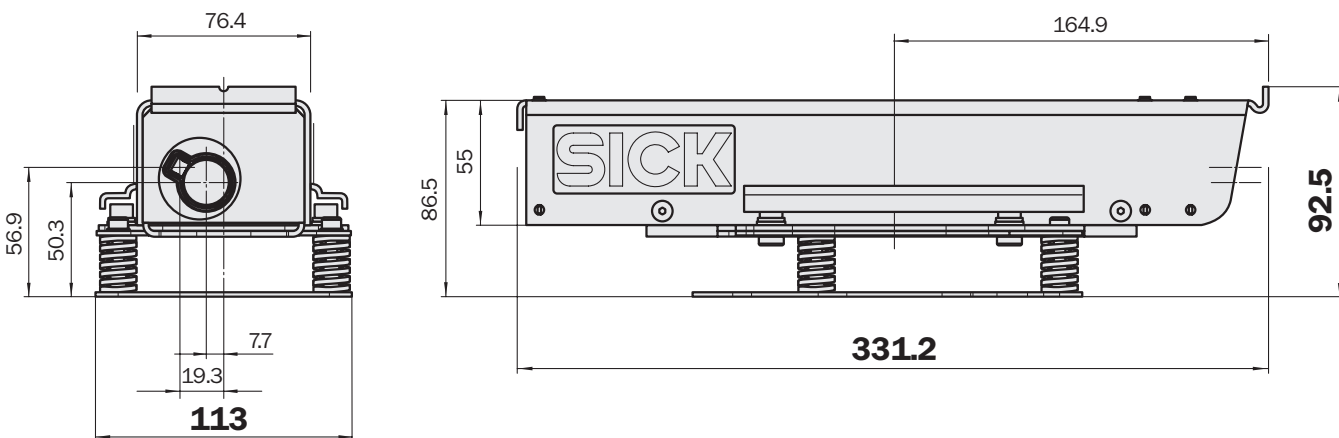
#### Alignment bracket

Type	Order no.
BEF-DSDT	2 031 377



#### Weather protection hood

Type	Order no.
WSG-DSDT	2 031 376



Dimensional drawings and order information

Cables and connectors

SENSICK screw-in system M12, 4- or 5-pin, enclosure rating IP 67

Female connector M12, 4- or 5-pin, straight

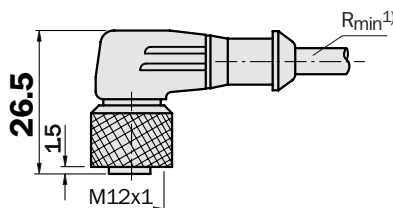
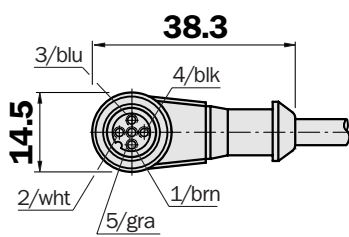
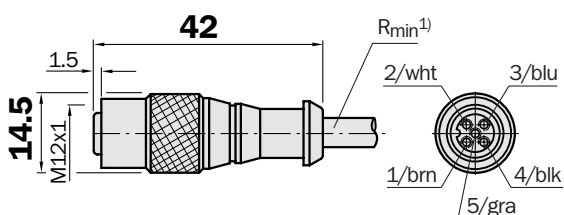
Cable diameter 5/6 mm, 4/5 x 0.25 mm<sup>2</sup>, sheath PVC

Type	Order no.	Contacts	Cable length
DOL-1204-G02M	6009382	4	2 m
DOL-1204-G05M	6009866	4	5 m
DOL-1204-G10M	6010543	4	10 m
DOL-1204-G15M	6010753	4	15 m
DOL-1205-G02M	6008899	5	2 m
DOL-1205-G05M	6009868	5	5 m
DOL-1205-G10M	6010544	5	10 m

Female connector M12, 4- or 5-pin, right angle

Cable diameter 5/6 mm, 4/5 x 0.25 mm<sup>2</sup>, sheath PVC

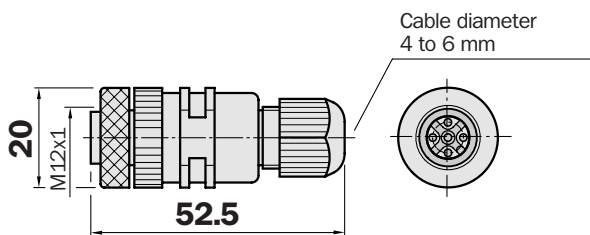
Type	Order no.	Contacts	Cable length
DOL-1204-W02M	6009383	4	2 m
DOL-1204-W05M	6009867	4	5 m
DOL-1204-W10M	6010541	4	10 m
DOL-1205-W02M	6008900	5	2 m
DOL-1205-W05M	6009869	5	5 m
DOL-1205-W10M	6010542	5	10 m



1) Minimum bend radius in dynamic use  
 $R_{min} = 20 \times \text{cable diameter}$

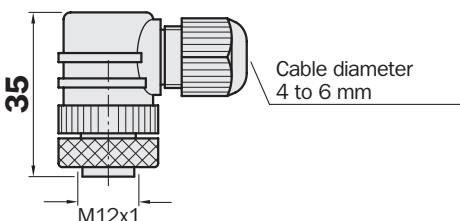
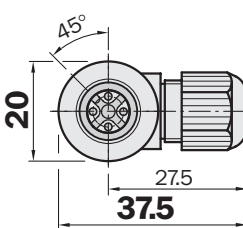
Female connector M12, 4- or 5-pin, straight

Type	Order no.	Contacts
DOS-1204-G	6007302	4
DOS-1205-G	6007719	5



Female connector M12, 4- or 5-pin, right angle

Type	Order no.	Contacts
DOS-1204-W	6007303	4
DOS-1205-W	6007720	5

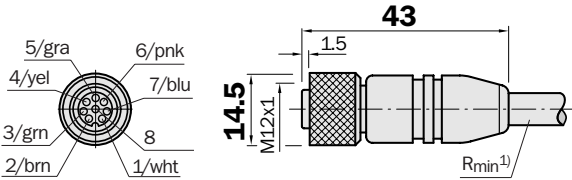


Accessories

Cables and connectors

Female connector M12, 8-pin, cable, shielded via knurled nut, PUR

Type	Order no.	Cable length
DOL-1208-G02MAH1	6032448	2 m
DOL-1208-G05MAH1	6032449	5 m
DOL-1208-G10MAH1	6032450	10 m
DOL-1208-G20MAH1	6032451	20 m



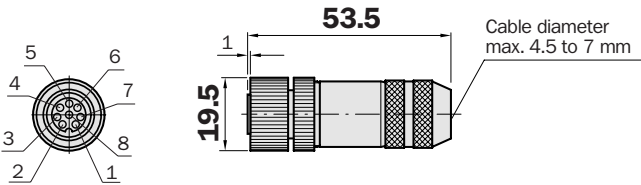
1) Minimum bend radius in dynamic use  
 $R_{min} = 20 \times \text{cable diameter}$

Female connector, 8-pin, can be assembled, PG9

Type	Order no.
DOS-1208-G	6028369

Cable, 8-pin

Type	Order no.
LTG-3108-MW	6032456



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