



2300  
deTec

SAFETY LIGHT CURTAINS

**SICK**  
Sensor Intelligence.



### Ordering information

System plugs for deTec4, deTec4 HG, deTec4 Ex II 3GD

Functions	System connection	Extension connection	Type	Part no.
SP2	Male connector M12, 8-pin (RES, EDM, ADO, muting)	Female connector M12, 5-pin (RES, EDM, ADO, IO-Link, cascading, smart presence detection, muting)	2300	2093100

The system plug is suitable for deTec and deTem. Additional information can be found in the technical data.

Other models and accessories → [www.sick.com/deTec](http://www.sick.com/deTec)



### Detailed technical data

#### Features

<b>System part</b>	System plug
<b>Function range</b>	SP2
<b>Items supplied</b>	System plug

#### Functions

<b>Protective operation</b>	✓
<b>Automatic calibration of the protective field width</b>	✓
<b>Restart interlock</b>	✓
<b>External device monitoring (EDM)</b>	✓
<b>Cascading</b>	✓
<b>Smart presence detection</b>	✓
<b>Reduced resolution</b>	✓
<b>Dynamic protective field width during operation</b>	✓
<b>Sender with reduced scanning range</b>	✓
<b>Differentiation between person and material</b>	
2-signal muting	✓
Smart Box Detection	✓

#### Interfaces

<b>System connection</b>	Male connector M12, 8-pin
PIN assignment	See table in "Pin assignment" graphic
Length of cable	200 mm
Cable diameter	5 mm
<b>Extension connection</b>	Female connector M12, 5-pin

Length of cable	150 mm
Cable diameter	5 mm
<b>Configuration method</b>	DIP switch
<b>Application diagnostic output (ADO)</b>	✓
<b>IO-Link</b>	✓

#### Electrical data

<b>Protection class</b>	III (IEC 61140)
<b>Supply voltage <math>V_s</math></b>	24 V DC (19.2 V ... 28.8 V)
<b>Ripple</b>	≤ 10 %

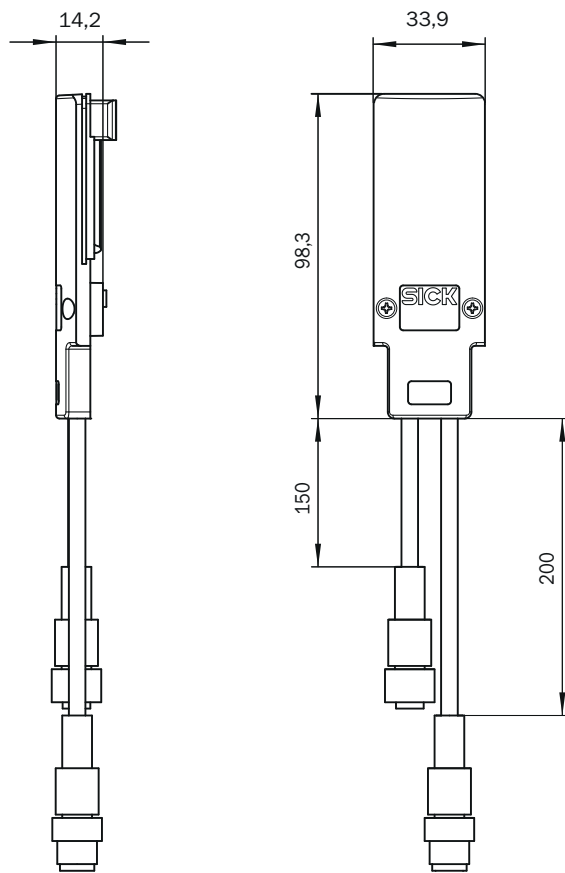
#### Ambient data

<b>Ambient operating temperature</b>	-30 °C ... +55 °C
<b>Storage temperature</b>	-30 °C ... +70 °C
<b>Air humidity</b>	15 % ... 95 %, Non-condensing
<b>Vibration resistance</b>	5 g, 10 Hz ... 55 Hz (IEC 60068-2-6)
<b>Shock resistance</b>	10 g, 16 ms (IEC 60068-2-27)

#### Classifications

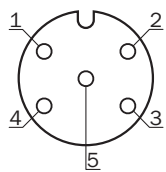
<b>ECLASS 5.0</b>	27272704
<b>ECLASS 5.1.4</b>	27272704
<b>ECLASS 6.0</b>	27272704
<b>ECLASS 6.2</b>	27272704
<b>ECLASS 7.0</b>	27272704
<b>ECLASS 8.0</b>	27272704
<b>ECLASS 8.1</b>	27272704
<b>ECLASS 9.0</b>	27272704
<b>ECLASS 10.0</b>	27272704
<b>ECLASS 11.0</b>	27272704
<b>ECLASS 12.0</b>	27272704
<b>ETIM 5.0</b>	EC002549
<b>ETIM 6.0</b>	EC002549
<b>ETIM 7.0</b>	EC002549
<b>ETIM 8.0</b>	EC002549
<b>UNSPSC 16.0901</b>	46171620

**Dimensional drawing** (Dimensions in mm (inch))



**Pin assignment**

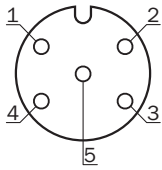
deTem4 A/P extension connection



Pin	Active unit
1	+24 V Out
2	In1 EDM Muting
3	0 V Out
4	In2 RES Muting
5	MFP2 ADO IO-Link

For details see operating instructions

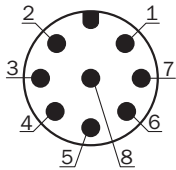
deTec4 extension connection



Pin	Sender	Receiver
1	+24 V Out	+24 V Out
2	N. c.	In1 EDM Muting
3	0 V Out	0 V Out
4	Sync-Out	In2 RES Muting
5	MFP2	MFP2 ADO IO-Link

For details see operating instructions

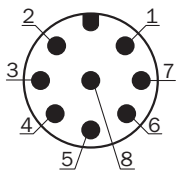
deTem4 A/P system connection



Pin	Active unit
1	In3 RES Override
2	+24 V DC
3	MFP3 ADO
4	In4 EDM Muting
5	OSSD1
6	OSSD2
7	0 V DC
8	N. c.

For details see operating instructions

deTec4 system connection










Pin	Sender	Receiver
1	N. c.	In3 RES Override
2	+24 V DC	+24 V DC
3	N. c.	MFP3 ADO
4	N. c.	In4 EDM Muting
5	In2 Laser alignment aid button	OSSD1
6	In1 Laser alignment aid switch	OSSD2
7	0 V DC	0 V DC
8	MFP1	MFP1

For details see operating instructions

## Recommended accessories

Other models and accessories → [www.sick.com/deTec](http://www.sick.com/deTec)

Brief description	Type	Part no.
<b>Connection modules</b>		
 IO-Link V1.1 Class A port, USB2.0 port, optional external power supply 24V / 1A	IOLA2US-01101 (SiLink2 Master)	1061790
 Connector for connecting an IO-Link master and up to 2 muting sensors to a safety light curtain or a multiple light beam safety device	IO-Link connector	2092757
 Connector for connecting 2 muting sensors and a muting lamp to a safety light curtain or a multiple light beam safety device	Muting connector	2092758
<b>Distributors</b>		
 <ul style="list-style-type: none"> <li>• <b>Connection type head A:</b> Female connector, M12, 8-pin, A-coded</li> <li>• <b>Connection type head B:</b> Female connector, M12, 8-pin, A-coded</li> <li>• <b>Connection type head C:</b> Male connector, M12, 8-pin, A-coded</li> <li>• <b>Description:</b> T-distributor for simultaneous connection to sender and receiver, splits the cable from the control cabinet between the sender and receiver</li> <li>• <b>Note:</b> 8-pin</li> </ul>	DSC-1208T000025KM0	6058647
<b>Sensor Integration Gateway</b>		
 <ul style="list-style-type: none"> <li>• <b>Further functions:</b> Web server integrated, USB connection for easy configuration of the SIG200 Sensor Integration Gateway with SOPAS ET, the engineering tool from SICK, logic editor is available for easy configuration of logic functions</li> <li>• <b>Connection CONFIG:</b> 1 x M8, 4-pin female connector, USB 2.0 (USB-A)</li> <li>• <b>Logic editor:</b> yes</li> <li>• <b>Communication interface:</b> IO-Link, USB, Ethernet, PROFINET, REST API</li> <li>• <b>Product category:</b> IO-Link Master</li> </ul>	SIG200-0A0412200	1089794

	Brief description	Type	Part no.
	<ul style="list-style-type: none"> <li>• <b>Description:</b> The SIG200 Sensor Integration Gateway is an IO-Link master with 4 configurable ports through which the IO-Link devices or standard inputs or standard outputs can be connected to a PLC or cloud application using the REST API.</li> <li>• <b>Further functions:</b> Web server integrated, USB connection for easy configuration of the SIG200 Sensor Integration Gateway with SOPAS ET, the engineering tool from SICK, logic editor is available for easy configuration of logic functions</li> <li>• <b>Connection CONFIG:</b> 1 x M8, 4-pin female connector, USB 2.0 (USB-A)</li> <li>• <b>Logic editor:</b> yes</li> <li>• <b>Communication interface:</b> IO-Link, USB, Ethernet, EtherNet/IP™, REST API</li> <li>• <b>Product category:</b> IO-Link Master</li> </ul>	SIG200-0A0512200	1089796
	<ul style="list-style-type: none"> <li>• <b>Further functions:</b> Web server integrated, USB connection for easy configuration of the SIG200 Sensor Integration Gateway with SOPAS ET, the engineering tool from SICK, logic editor is available for easy configuration of logic functions</li> <li>• <b>Connection CONFIG:</b> 1 x M8, 4-pin female connector, USB 2.0 (USB-A)</li> <li>• <b>Logic editor:</b> yes</li> <li>• <b>Communication interface:</b> IO-Link, USB, Ethernet, REST API</li> <li>• <b>Product category:</b> IO-Link Master</li> </ul>	SIG200-0A0G12200	1102605

## 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](http://www.sick.com)