



2100

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, 5-pin | Female connector M12, 5-pin (RES, EDM, ADO, IO-Link, cascading, smart presence detection, muting) | 2100 | 2093098 |

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



Detailed technical data

Features

| | |
|-----------------------|-------------|
| System part | System plug |
| Function range | SP2 |
| Items supplied | System plug |

Functions

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

Interfaces

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

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

Electrical data

| | |
|--|-----------------------------|
| Protection class | III (IEC 61140) |
| Supply voltage V_s | 24 V DC (19.2 V ... 28.8 V) |
| Ripple | ≤ 10 % |

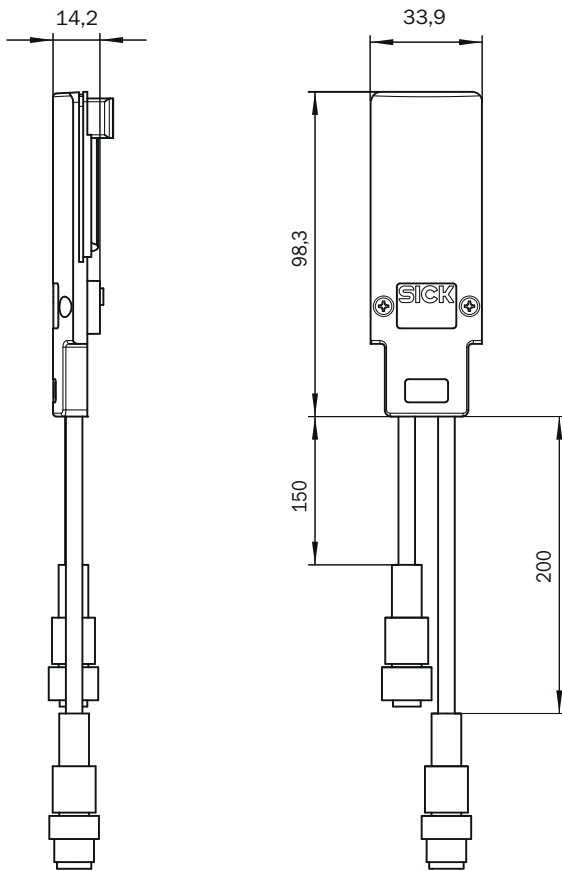
Ambient data

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

Classifications

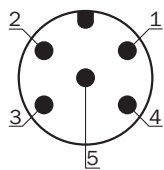
| | |
|-----------------------|----------|
| ECLASS 5.0 | 27272704 |
| ECLASS 5.1.4 | 27272704 |
| ECLASS 6.0 | 27272704 |
| ECLASS 6.2 | 27272704 |
| ECLASS 7.0 | 27272704 |
| ECLASS 8.0 | 27272704 |
| ECLASS 8.1 | 27272704 |
| ECLASS 9.0 | 27272704 |
| ECLASS 10.0 | 27272704 |
| ECLASS 11.0 | 27272704 |
| ECLASS 12.0 | 27272704 |
| ETIM 5.0 | EC002549 |
| ETIM 6.0 | EC002549 |
| ETIM 7.0 | EC002549 |
| ETIM 8.0 | EC002549 |
| UNSPSC 16.0901 | 46171620 |

Dimensional drawing (Dimensions in mm (inch))



Pin assignment

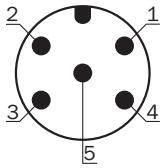
deTem4 A/P system connection



| Pin | Active unit |
|-----|-------------|
| 1 | +24 V DC |
| 2 | OSSD1 |
| 3 | 0 V DC |
| 4 | OSSD2 |
| 5 | N. c. |

For details see operating instructions

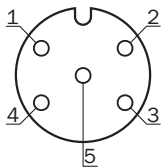
deTec4 system connection



| Pin | Sender | Receiver |
|-----|-----------------------------------|----------|
| 1 | +24 V DC | +24 V DC |
| 2 | In2 Laser alignment aid button | OSSD1 |
| 3 | 0 V DC | 0 V DC |
| 4 | In1 Laser alignment aid switch | OSSD2 |
| 5 | MFP1 | MFP1 |

For details see operating instructions

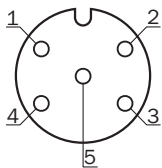
deTem4 A/P extension connection



| 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 |

| Pin | Sender | Receiver |
|--|--------|------------------------|
| | | RES Muting |
| 5 | MFP2 | MFP2 ADO IO-Link |
| For details see operating instructions | | |

Recommended accessories

Other models and accessories → www.sick.com/deTec

| | Brief description | Type | Part no. |
|---|--|-----------------------------------|----------|
| Connection modules | | | |
|  | 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 |
| Distributors | | | |
|  | <ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 5-pin, A-coded • Connection type head B: Male connector, M12, 5-pin, A-coded • Connection type head C: Female connector, M12, 5-pin, A-coded • Description: T-piece for simultaneous connection to sender and receiver, splits the cable from the control cabinet to the sender and receiver • Note: 5-pin | DSC-1205T000025KM0 | 6030664 |
| Sensor Integration Gateway | | | |
|  | <ul style="list-style-type: none"> • Further functions: 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 • Connection CONFIG: 1 x M8, 4-pin female connector, USB 2.0 (USB-A) • Logic editor: yes • Communication interface: IO-Link, USB, Ethernet, PROFINET, REST API • Product category: IO-Link Master | SIG200-0A0412200 | 1089794 |
|  | <ul style="list-style-type: none"> • Description: 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. • Further functions: 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 • Connection CONFIG: 1 x M8, 4-pin female connector, USB 2.0 (USB-A) • Logic editor: yes • Communication interface: IO-Link, USB, Ethernet, EtherNet/IP™, REST API • Product category: IO-Link Master | SIG200-0A0512200 | 1089796 |

| | Brief description | Type | Part no. |
|---|--|------------------|----------|
|  | <ul style="list-style-type: none">• Further functions: 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• Connection CONFIG: 1 x M8, 4-pin female connector, USB 2.0 (USB-A)• Logic editor: yes• Communication interface: IO-Link, USB, Ethernet, REST API• Product category: IO-Link Master | 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