



# MIS-025CLTP0

## MIS

MAGNETIC SENSORS

**SICK**  
Sensor Intelligence.



## Ordering information

Type	part no.
MIS-025CLTP0	1102692

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



## Detailed technical data

### Features

<b>Product category</b>	Device for reading magnetic-coded tags from SICK
<b>Measurement principle</b>	Magnetic
<b>Scanning range</b>	0 mm ... 3 mm, Distance between sensor and tag <sup>1)</sup>
<b>Working range</b>	
Max. radial displacement between sensor and tag	± 3 mm <sup>2)</sup>
Max. axial displacement between sensor and tag	Typ. 1 mm <sup>2)</sup>
Max. rotational deviation between sensor and tag	± 10 mm, Equal to 13° <sup>2)</sup>

<sup>1)</sup> When using magnetic-coded tags from SICK.

<sup>2)</sup> At 3 mm reading distance and a temperature of 25 °C.

### Mechanics/electronics

<b>Connection type</b>	1 x Cable with M8 male connector, 4-pin, 0.3 m
<b>Connection type Detail</b>	
Deep-freeze property	Do not bend below 0 °C
Conductor size	0.08 mm <sup>2</sup>
Cable diameter	Ø 2.6 mm
Bending radius	With fixed installation > 5 x cable diameter, for flexible use > 10 x cable diameter
Cable outlet	Axial
<b>Supply voltage</b>	12 V DC ... 30 V DC
<b>Housing color</b>	Light blue (RAL 9002)
<b>Enclosure rating</b>	IP67 (EN 60529)
<b>Protection class</b>	III (IEC 61140:2016-1)
<b>Weight</b>	61 g
<b>Dimensions (L x W x H)</b>	40.6 mm x 12.2 mm x 16.8 mm

## Safety-related parameters

<b>MTTF<sub>D</sub></b>	244 years
<b>DC<sub>avg</sub></b>	0%
<b>T<sub>M</sub> (mission time)</b>	20 years

## Performance

<b>Readable code structures</b>	Magnetic-coded tags
<b>Overrun speed</b>	
Radial	≤ 2 m/s
Axial	≤ 0.2 m/s
<b>Detectable object shape</b>	Magnetic-coded tags from SICK
<b>Number of different magnetic-coded tags</b>	15
<b>Sampling rate</b>	6 ms
<b>Repeatability</b>	≤ 0.5 mm

## Interfaces

<b>IO-Link</b>	✓
Function	Parameterization, Tag number output via process datum
<b>Analog output</b>	
Current	4 mA ... 20 mA
Voltage	0 V DC ... 10 V DC
<b>Optical indicators</b>	4 LEDs (ON, Tag detected, IO-Link operation, Output function (current/voltage))

## Ambient data

<b>Electromagnetic compatibility (EMC)</b>	EN 60947-5-2 7
<b>Vibration resistance</b>	IEC 60068-2-6:2007
<b>Shock resistance</b>	IEC 60068-2-27:2008
<b>Ambient operating temperature</b>	-20 °C ... +70 °C
<b>Stray-field immunity of the tag</b>	≤ 85 mT

## Certificates

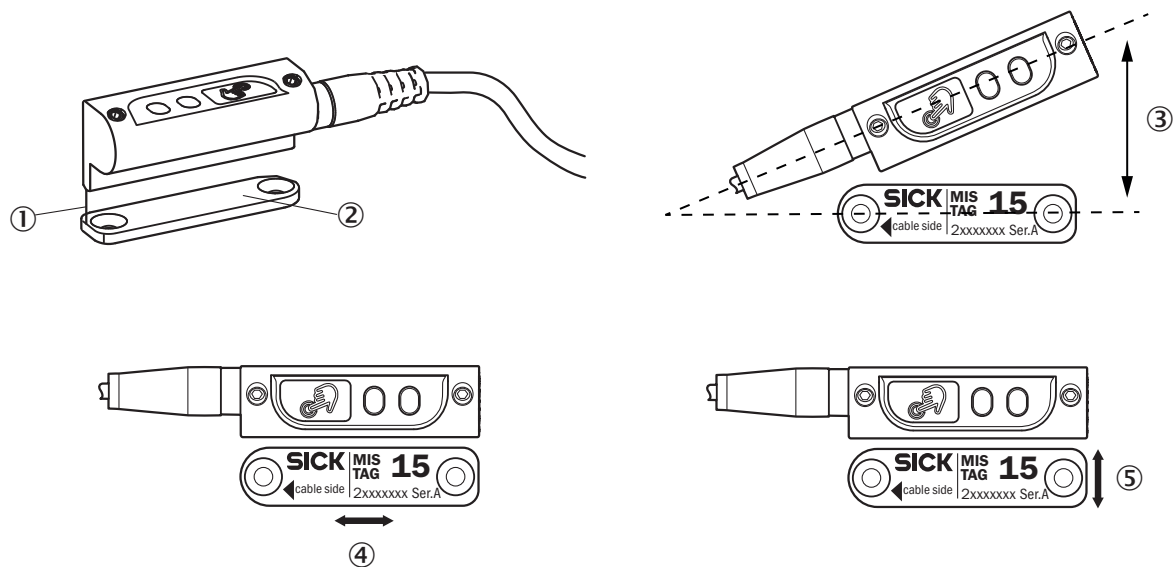
<b>EU declaration of conformity</b>	✓
<b>UK declaration of conformity</b>	✓
<b>ACMA declaration of conformity</b>	✓
<b>Moroccan declaration of conformity</b>	✓
<b>China RoHS</b>	✓
<b>IO-Link certificate</b>	✓

## Classifications

<b>ECLASS 5.0</b>	27280301
<b>ECLASS 5.1.4</b>	27280301
<b>ECLASS 6.0</b>	27280390
<b>ECLASS 6.2</b>	27280390
<b>ECLASS 7.0</b>	27280390

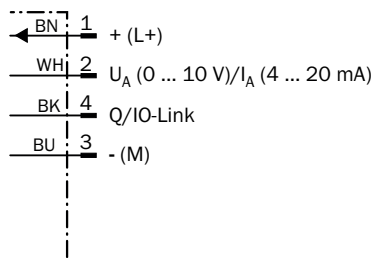
<b>ECLASS 8.0</b>	27280390
<b>ECLASS 8.1</b>	27280390
<b>ECLASS 9.0</b>	27280390
<b>ECLASS 10.0</b>	27280390
<b>ECLASS 11.0</b>	27280390
<b>ECLASS 12.0</b>	27280300

### Installation note Alignment of sensor <> tag



- ① Flush alignment
- ② Cable-side mark
- ③ Max. rotational deviation between sensor and tag
- ④ Axial displacement between sensor and tag
- ⑤ Radial displacement between sensor and tag

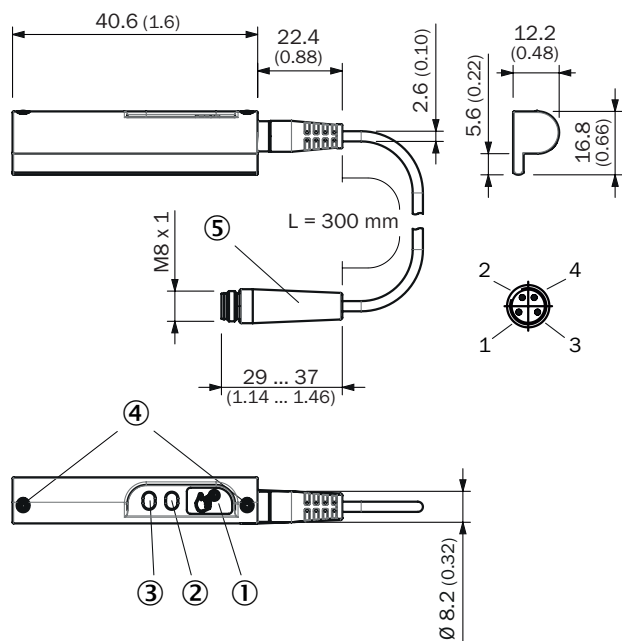
### Connection diagram Cd-357



## Functional principle Analog value assignment to tag number

Tag number	Values for back focal length = 16	Values for back focal length =16
1	5 mA	0.625 V
2	6 mA	1.25 V
3	7 mA	1.875 V
4	8 mA	2.5 V
5	9 mA	3.125 V
6	10 mA	3.75 V
7	11 mA	4.375 V
8	12 mA	5 V
9	13 mA	5.625 V
10	14 mA	6.25 V
11	15 mA	6.875 V
12	16 mA	7.5 V
13	17 mA	8.125 V
14	18 mA	8.75 V
15	19 mA	9.375 V

## Dimensional drawing



Dimensions in mm (inch)

- ① Keyboard
- ② function indicator
- ③ function indicator
- ④ Mounting screws
- ⑤ M8 male connector pigtail

### Recommended accessories

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

	Brief description	Type	part no.
Mounting systems			
	<ul style="list-style-type: none"> <li><b>Description:</b> Mounting bracket for MIS-025CLTP0</li> <li><b>Material:</b> Aluminum</li> <li><b>Details:</b> Aluminum</li> </ul>	BEF-MIS-25G	2111198
Codes			
	<ul style="list-style-type: none"> <li><b>Product family:</b> Magnetic-coded tags</li> <li><b>Description:</b> Magnetic-coded tag for MIS-025CLTP0 sensor</li> <li><b>Items supplied:</b> 1 pieces</li> </ul>	TAG MIS NO. 1	4106746
	<ul style="list-style-type: none"> <li><b>Product family:</b> Magnetic-coded tags</li> <li><b>Description:</b> Magnetic-coded tag for MIS-025CLTP0 sensor</li> <li><b>Items supplied:</b> 1 pieces</li> </ul>	TAG MIS NR. 10	4106755
	<ul style="list-style-type: none"> <li><b>Product family:</b> Magnetic-coded tags</li> <li><b>Description:</b> Magnetic-coded tag for MIS-025CLTP0 sensor</li> <li><b>Items supplied:</b> 1 pieces</li> </ul>	TAG MIS NR. 11	4106756
	<ul style="list-style-type: none"> <li><b>Product family:</b> Magnetic-coded tags</li> <li><b>Description:</b> Magnetic-coded tag for MIS-025CLTP0 sensor</li> <li><b>Items supplied:</b> 1 pieces</li> </ul>	TAG MIS NR. 12	4106757
	<ul style="list-style-type: none"> <li><b>Product family:</b> Magnetic-coded tags</li> <li><b>Description:</b> Magnetic-coded tag for MIS-025CLTP0 sensor</li> <li><b>Items supplied:</b> 1 pieces</li> </ul>	TAG MIS NO. 13	4106758
	<ul style="list-style-type: none"> <li><b>Product family:</b> Magnetic-coded tags</li> <li><b>Description:</b> Magnetic-coded tag for MIS-025CLTP0 sensor</li> <li><b>Items supplied:</b> 1 pieces</li> </ul>	TAG MIS NR. 14	4106759
	<ul style="list-style-type: none"> <li><b>Product family:</b> Magnetic-coded tags</li> <li><b>Description:</b> Magnetic-coded tag for MIS-025CLTP0 sensor</li> <li><b>Items supplied:</b> 1 pieces</li> </ul>	TAG MIS NR. 15	4106760
	<ul style="list-style-type: none"> <li><b>Product family:</b> Magnetic-coded tags</li> <li><b>Description:</b> Magnetic-coded tag for MIS-025CLTP0 sensor</li> <li><b>Items supplied:</b> 1 pieces</li> </ul>	TAG MIS NR. 2	4106747
	<ul style="list-style-type: none"> <li><b>Product family:</b> Magnetic-coded tags</li> <li><b>Description:</b> Magnetic-coded tag for MIS-025CLTP0 sensor</li> <li><b>Items supplied:</b> 1 pieces</li> </ul>	TAG MIS NR. 3	4106748
	<ul style="list-style-type: none"> <li><b>Product family:</b> Magnetic-coded tags</li> <li><b>Description:</b> Magnetic-coded tag for MIS-025CLTP0 sensor</li> <li><b>Items supplied:</b> 1 pieces</li> </ul>	TAG MIS NO. 4	4106749
	<ul style="list-style-type: none"> <li><b>Product family:</b> Magnetic-coded tags</li> <li><b>Description:</b> Magnetic-coded tag for MIS-025CLTP0 sensor</li> <li><b>Items supplied:</b> 1 pieces</li> </ul>	TAG MIS NR. 5	4106750
	<ul style="list-style-type: none"> <li><b>Product family:</b> Magnetic-coded tags</li> <li><b>Description:</b> Magnetic-coded tag for MIS-025CLTP0 sensor</li> <li><b>Items supplied:</b> 1 pieces</li> </ul>	TAG MIS NO. 6	4106751
	<ul style="list-style-type: none"> <li><b>Product family:</b> Magnetic-coded tags</li> <li><b>Description:</b> Magnetic-coded tag for MIS-025CLTP0 sensor</li> <li><b>Items supplied:</b> 1 pieces</li> </ul>	TAG MIS NR. 7	4106752
	<ul style="list-style-type: none"> <li><b>Product family:</b> Magnetic-coded tags</li> <li><b>Description:</b> Magnetic-coded tag for MIS-025CLTP0 sensor</li> <li><b>Items supplied:</b> 1 pieces</li> </ul>	TAG MIS NR. 8	4106753
	<ul style="list-style-type: none"> <li><b>Product family:</b> Magnetic-coded tags</li> <li><b>Description:</b> Magnetic-coded tag for MIS-025CLTP0 sensor</li> <li><b>Items supplied:</b> 1 pieces</li> </ul>	TAG MIS NR. 9	4106754
connectors and cables			
	<ul style="list-style-type: none"> <li><b>Connection type head A:</b> Female connector, M8, 4-pin, straight, A-coded</li> <li><b>Connection type head B:</b> Flying leads</li> <li><b>Signal type:</b> Sensor/actuator cable</li> <li><b>Cable:</b> 5 m, 4-wire, PUR, halogen-free</li> <li><b>Description:</b> Sensor/actuator cable, unshielded</li> <li><b>Application:</b> Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation</li> </ul>	YF8U14-050UA3XLEAX	2094792

## 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)