



MIS-025CLTP0

MIS

MAGNETIC SENSORS

SICK
Sensor Intelligence.



Ordering information

Type	part no.
MIS-025CLTPO	1102692

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



Detailed technical data

Features

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

¹⁾ When using magnetic-coded tags from SICK.

²⁾ At 3 mm reading distance and a temperature of 25 °C.

Mechanics/electronics

Connection type	1 x Cable with M8 male connector, 4-pin, 0.3 m
Connection type Detail	
Deep-freeze property	Do not bend below 0 °C
Conductor size	0.08 mm ²
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
Electrical wiring	DC 4-wire
Supply voltage	12 V DC ... 30 V DC
Housing material	Plastic
Housing color	Light blue (RAL 9002)
Enclosure rating	IP67 (EN 60529)
Protection class	III (IEC 61140:2016-1)

Weight	61 g
Dimensions (W x H x D)	40.6 mm x 16.8 mm x 12.2 mm

Safety-related parameters

MTTF_D	244 years
DC_{avg}	0%
T_M (mission time)	20 years

Performance

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

Interfaces

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

Ambient data

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

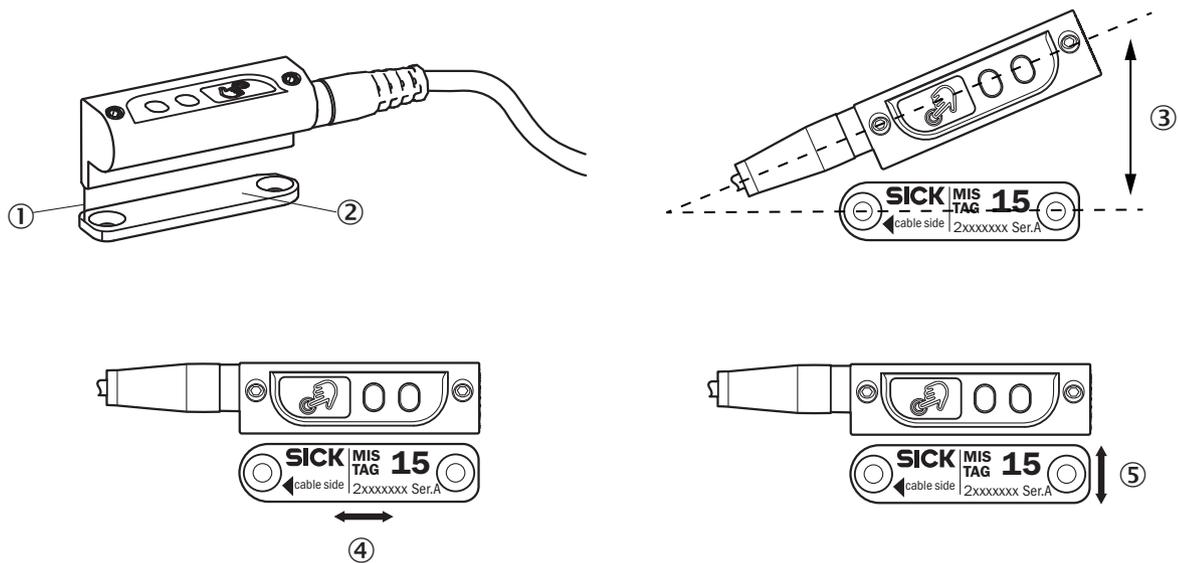
Classifications

ECLASS 5.0	27280301
ECLASS 5.1.4	27280301
ECLASS 6.0	27280390
ECLASS 6.2	27280390
ECLASS 7.0	27280390
ECLASS 8.0	27280390
ECLASS 8.1	27280390
ECLASS 9.0	27280390
ECLASS 10.0	27280390
ECLASS 11.0	27280390
ECLASS 12.0	27280300

Certificates

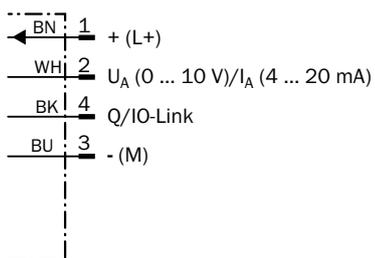
EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓
IO-Link certificate	✓

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

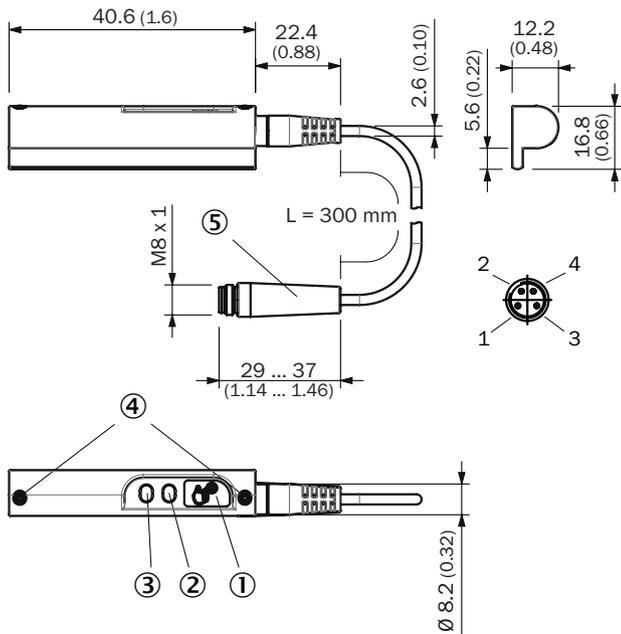
Connection diagram Cd-357



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

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