



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
Supply voltage	12 V DC ... 30 V DC
Housing color	Light blue (RAL 9002)
Enclosure rating	IP67 (EN 60529)
Protection class	III (IEC 61140:2016-1)
Weight	61 g
Dimensions (L x W x H)	40.6 mm x 12.2 mm x 16.8 mm

Safety-related parameters

MTF_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

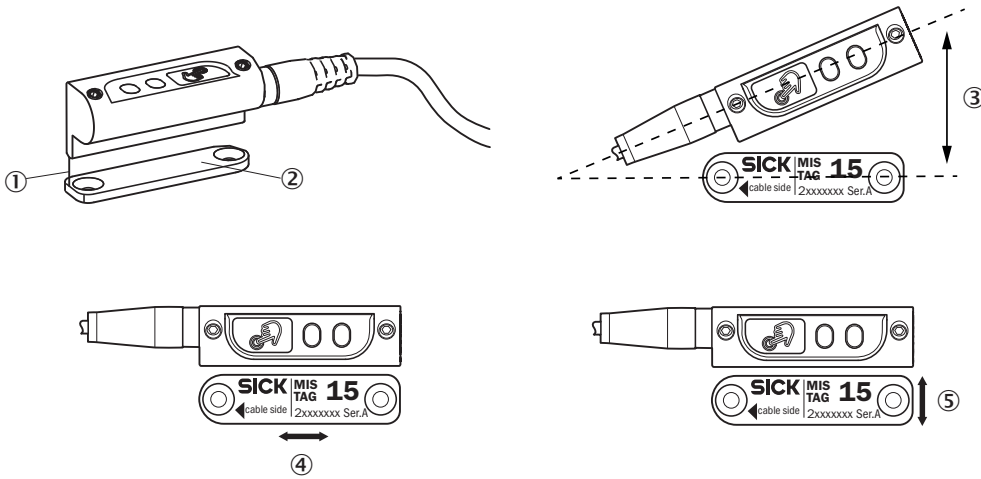
Electromagnetic compatibility (EMC)	EN 60947-5-2 7
Vibration resistance	IEC 60068-2-6:2007
Shock resistance	IEC 60068-2-27:2008
Ambient operating temperature	-20 °C ... +70 °C
Stray-field immunity of the tag	≤ 85 mT

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

Installation note

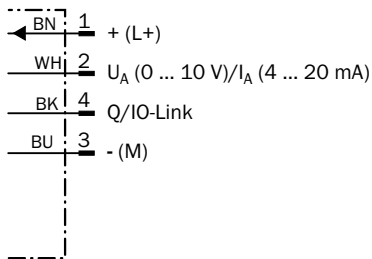
Alignment of sensor <> tag



- 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

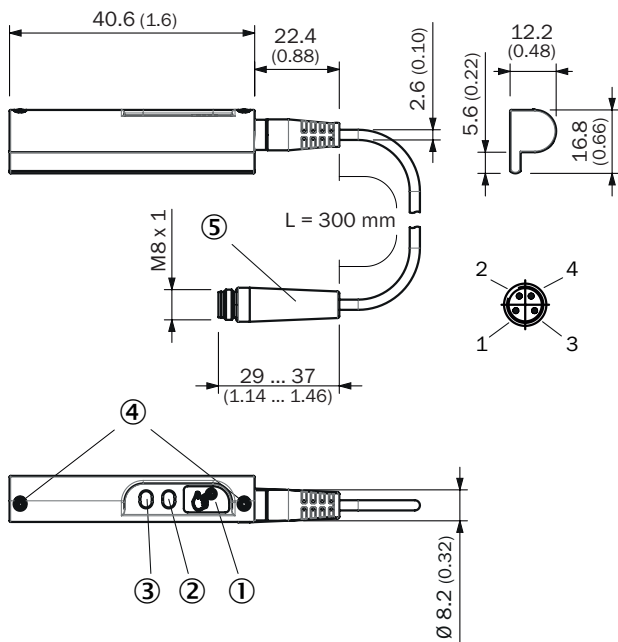


Functional principle

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.
Codes			
	Magnetic-coded tag for MIS-025CLTP0 sensor	TAG MIS NO. 1	4106746
		TAG MIS NO. 13	4106758
		TAG MIS NO. 4	4106749
		TAG MIS NO. 6	4106751
		TAG MIS NR. 10	4106755
		TAG MIS NR. 11	4106756
		TAG MIS NR. 12	4106757

	Brief description	Type	Part no.
		TAG MIS NR. 14	4106759
		TAG MIS NR. 15	4106760
		TAG MIS NR. 2	4106747
		TAG MIS NR. 3	4106748
		TAG MIS NR. 5	4106750
		TAG MIS NR. 7	4106752
		TAG MIS NR. 8	4106753
		TAG MIS NR. 9	4106754
Mounting brackets and plates			
	Mounting bracket for MIS-025CLTPO, Aluminum	BEF-MIS-25G	2111198
Others			
	<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: Zones with oils and lubricants, Drag chain operation, Robot 	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