Technical data sheet
Magnetically coded sensor
Part no.: 63001057
MC336-S1-C02M12-A

Figure can vary

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Technical data

Basic data

Series	MC336

Functions

Functions	Integration in control circuits up to category 4 in accordance with EN ISO 13849-1
	Safety system in combination with an evaluation unit such as the MSI-MC310 safety relay or the MSI 400 safety controller.

Characteristic parameters

Mission time T_M	20 years, EN ISO 13849-1
Category	Up to 4, depending on evaluation, 1 sensor connected, EN ISO 13849-1
$B10_d$	20,000,000 number of cycles

Electrical data

Protective circuit	Current limitation
	Short circuit protected, Via e.g. MSI-MC310, MSI 400
Contact allocation	1NC + 1NO
Contact type	Reed contacts (magnetically sensitive)
Requirement on the voltage supply when used acc. to cULus (UL 508)	Class 2 Circuits

Outputs

Max. switching voltage	27 V AC/DC
Switching current, max.	500 mA

Timing

Response time	3 ms

Connection

Number of connections	1 Piece(s)

Connection 1

Function	Contact connection
Type of connection	Cable with connector
Cable length	200 mm
Sheathing material	PVC
Cable color	Gray
Thread size	M12
Material	Metal
No. of pins	4 -pin

Mechanical data

Design	Cubic
Dimension (W x H x L)	26.2 mm x 13 mm x 36 mm
Housing material	Plastic
Plastic housing	Glass fiber reinforced (PPS), self-extinguishing
Net weight	94 g
Housing color	Red
Type of fastening	Through-hole mounting
Installation position	Arbitrary, provided housing markings are aligned
Switch type	Type 4 interlock device, contactless actuation, EN ISO 14119
Approach actuation directions	3-dimensional
Mechanical life time	10,000,000 actuation cycles
External actuator	Magnetically coded
Cut-out point (OFF), min.	8 mm
Assured cut-out distance (Sar), min.	11 mm
Assured cut-in distance (Sao), max.	3 mm
Switching tolerance (without ferromagnetic materials in immediate vicinity)	-1 ... 1 mm
Distance to other magnetic sensors, min.	50 mm
Approach speed, min.	0.05 m/s

Environmental data

Ambient temperature, operation	-20 ... 70 °C
Degree of contamination, external	3, EN 60947-1

Certifications

Degree of protection	IP 67
Certifications	c UL US
	TÜV Süd
Test procedure for EMC in accordance with standard	EN 60947-5-3
	EN 61000-6-2
	EN 61000-6-3
Test procedure for oscillation in accordance with standard	EN 60947-5-3
Test procedure for shock in accordance with standard	EN 60947-5-3

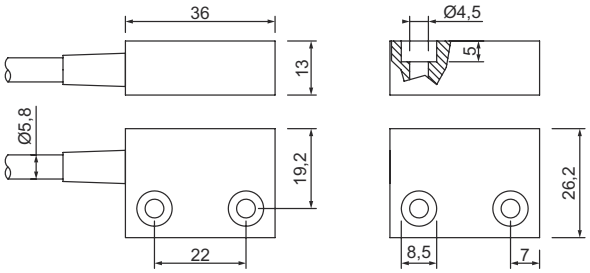
Classification

Customs tariff number	90328900
eCl@ss 5.1.4	27272402
eCl@ss 8.0	27272402
eCl@ss 9.0	27272402
eCl@ss 10.0	27272402
eCl@ss 11.0	27272402
ETIM 5.0	EC002544
ETIM 6.0	EC002544
ETIM 7.0	EC002544

Dimensioned drawings

All dimensions in millimeters

Dimensions of sensor and actuator

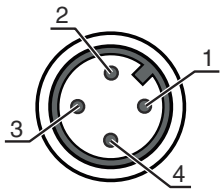


Electrical connection

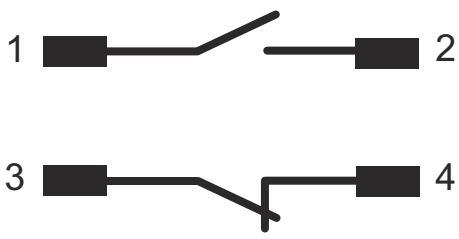
Connection 1

Function	Contact connection
Type of connection	Cable with connector
Cable length	200 mm
Sheathing material	PVC
Cable color	Gray
Wire cross section	0.35 mm²
Thread size	M12
Type	Male
Material	Metal
No. of pins	4 -pin
Encoding	A-coded
Assignment	Representation of contacts without activation by actuator

Pin	Pin assignment	Conductor color
1	NO	Brown
2	NO	White
3	NC	Blue
4	NC	Black



Circuit diagrams



1 Brown
2 White
3 Blue
4 Black

Notes

	Observe intended use!
	↳ The product may only be put into operation by competent persons. ↳ Only use the product in accordance with its intended use.

	ATTENTION!
	↳ The sensor has no internal error detection and cannot assume a safe state in the case of failure. ↳ To use the sensor in accordance with DIN EN 60947-5-3, a suitable evaluation unit must be connected. ↳ In combination with a suitable evaluation unit, the sensor can be integrated in the control technology of safety systems up to Cat. 4 / PL e in accordance with EN ISO 13849-1 and SIL CL3 in accordance with IEC 62061.