



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:	IECEx TUN 14.0038	Page 1 of 4	<u>Certificate history:</u>
Status:	Current	Issue No: 2	Issue 1 (2022-03-07) Issue 0 (2015-01-13)
Date of Issue:	2024-09-26		
Applicant:	Sick AG Erwin-Sick-Str. 1 79183 Waldkirch Germany		
Equipment:	Magnetic NAMUR-cylinder sensor type MZT8-2V*-N-K**		
Optional accessory:			
Type of Protection:	Intrinsic Safety "Ex ia"		
Marking:	Ex ia IIC T4 Ga Ex ia III C T ₂₀₀ 135°C Da		

Approved for issue on behalf of the IECEx
Certification Body:

Christian Roder

Position:

Head of IECEx Certification Body

Signature:
(for printed version)

Date:
(for printed version)

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Certificate issued by:

TÜV NORD CERT GmbH
Hanover Office
Am TÜV 1, 30519 Hannover
Germany





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Date of issue: 2024-09-26

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Manufacturer: **Sick AG**
Erwin-Sick-Str. 1
79183 Waldkirch
Germany

Manufacturing
locations:

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

[IEC 60079-0:2017](#) Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

[IEC 60079-11:2011](#) Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Report:

[DE/TUN/ExTR14.0051/02](#)

Quality Assessment Report:

[DE/TUN/QAR13.0008/11](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

Description:

The magnetic NAMUR-cylinder sensor type MZT8-2V*-N-K** is designed to detect magnetic fields in hazardous areas.

Electrical and thermal data:

See Attachment to IECEx TUN 14.0038 issue No.2

SPECIFIC CONDITIONS OF USE: NO



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Proof of conformity of the magnetic NAMUR-cylinder sensor type MZT8-MZT8-2V*-N-K** with a variant having 0.015 m cable length to the current versions of the standards IEC 60079-0:2017 and IEC 60079-11:2011.

A new sensor variant MZT8-2V7-N-KWDS44 will be introduced. The internal design of this sensor does not differ to the existing sensors. The difference is that the new variant uses a different cable length (0.015 m) and the sensor is calibrated to 2.7 mT instead of 2.8 mT (magnetic sensitivity).

The existing safety concept, which considered sensors with up to 10 m cable, also covers this new sensor variant.

Annex:

[Attachment to IECEx TUN 14.0038 issue No.2 .pdf](#)

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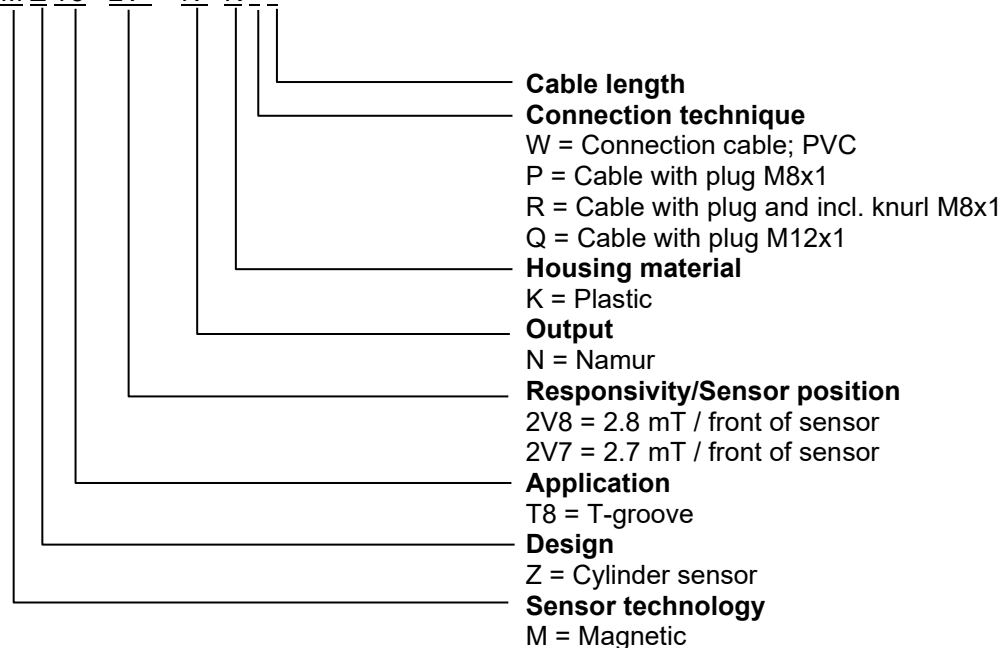
General product information:

Description:

The magnetic NAMUR-cylinder sensor type MZT8-2V*-N-K** is designed to detect magnetic fields in hazardous areas.

Type code:

M Z T8 - 2V* - N - K **



Cable variants:	
MZT8-2V8-N-KW 0	2 m cable
MZT8-2V8-N-KW A	3 m cable
MZT8-2V8-N-KW B	5 m cable
MZT8-2V8-N-KW DS01	6 m cable
MZT8-2V8-N-KW DS02	7 m cable
MZT8-2V8-N-KW DS03	10 m cable
MZT8-2V7-N-KW DS44	0.015 m cable
Cable and plug variants	
MZT8-2V8-N-KP0	M8-plug + 0.3 m cable
MZT8-2V8-N-KR0	M8- plug inclusive knurl + 0.5 m cable
MZT8-2V8-N-KQ0	M12-plug + 0.3 m cable

Electrical data:

Signal and supply circuit
(Cable tail or plug)

In type of protection Intrinsic Safety Ex ia IIC/IIIC
Only for the connection to certified intrinsically safe circuits.
Maximum values:

U_i = 20 V
I_i = 60 mA
P_i = 100 mW
C_i = 130 nF
L_i = 10 µH

Effective internal capacitance
Effective internal inductances

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Thermal data:

Permissible ambient temperature range during operation: $-25\text{ °C} \leq T_a \leq +80\text{ °C}$

Details of change (applicable only when revising an existing ExTR package):

Proof of conformity of the magnetic NAMUR-cylinder sensor type MZT8-2V*-N-K** with a variant having 0.015 m cable length to the current versions of the standards IEC 60079-0:2017 and IEC 60079-11:2011.

A new sensor variant MZT8-2V7-N-KWDS44 will be introduced. The internal design of this sensor does not differ to the existing sensors. The difference is that the new variant uses a different cable length (0.015 m) and the sensor is calibrated to 2.7 mT instead of 2.8 mT (magnetic sensitivity).

The existing safety concept, which considered sensors with up to 10 m cable, also covers this new sensor variant.

Specific Conditions of Use:

None.