



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 CSAE 24.0043X	Page 1 of 3	Certificate history:
Status:	Current	Issue No: 0	
Date of Issue:	2025-08-27		
Applicant:	Endress+Hauser SICK GmbH+Co. KG Bergener Ring 27 01458 Ottendorf-Okrilla Germany		
Equipment:	Connection device for commissioning and service, Model: CDUSB100		
Optional accessory:			
Type of Protection:	Intrinsic Safety 'i'		
Marking:	[Ex ia Ga] IIC -40 °C ≤ Ta ≤ +70 °C		

Approved for issue on behalf of the IECEx
Certification Body:

Michelle Halliwell

Position:

Senior Director of Operations

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:

CSA Group Testing UK Ltd
Unit 6, Hawarden Industrial Park
Hawarden, Deeside CH5 3US
United Kingdom





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Manufacturer: **Endress+Hauser SICK GmbH+Co. KG**
Bergener Ring 27
01458 Ottendorf-Okrilla
Germany

Manufacturing locations: **Endress+Hauser SICK GmbH+Co. KG**
Bergener Ring 27
01458 Ottendorf-Okrilla
Germany

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 60079-11:2023](#) Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:7.0

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:

[GB/CSAE/ExTR25.0063/00](#)

Quality Assessment Report:

[DE/TUN/QAR09.0005/13](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The CDUSB100 is a connection device for commissioning and service purposes, which provides a physical USB-C interface on one side, and on the other side an Rx/D/TxD data interface via an M12 connection is provided. The intended use is to provide a bridge for communication between a host device such as a flowmeter and a service device such as a notebook. By using this connection, the host device can be parameterized, and status and service data can be read from the flowmeter.

The CDUSB100 is classified as an associated apparatus and is designed for installation and use in non-hazardous areas. The host device (e.g., a flowmeter) typically provides an Ex i interface for data transfer. To maintain the explosion protection properties of the host device, the CDUSB100 must feature an intrinsically safe interface on the flowmeter side. The CDUSB100 is also usable with host devices that do not provide an intrinsically safe interface.

Ambient Temperature Range: -40 °C to +70 °C

Entity Parameters:

M12 Plug, when connected with intrinsically safe host device, entity parameters, in type of protection Ex ia IIC:

$U_i = 12 \text{ V}$

$I_i = 3.33 \text{ A}$

$P_i = 1.1 \text{ W}$

$C_i = 1.41 \text{ }\mu\text{F}$

$L_i = 0 \text{ }\mu\text{H}$

M12 Plug, when connected to a non-intrinsically safe host device: $U_m = 60 \text{ V}$

Maximum voltage across galvanic isolation between USB-C connector and M12 connector: $U_m = 60 \text{ V}$

Maximum voltage allowed to be applied to USB-C connector: 5.5 V

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. The CDUSB100 is designated for use in ambient temperature range from -40 °C to +70 °C.
2. Nominal supply voltage on USB side is $U_{nom} = 5 \text{ VDC} \pm 10 \%$.
3. The personal computing device, which is connected via USB, must be supplied by SELV/PELV/ES1 equipment with $U_m = 60 \text{ V}$ (USB interface side).
4. The temperature at the connection point of the M12 plug shall not exceed the allowed ambient temperature range.