Certificate of Compliance

Certificate:	80143220	**Master Contract:**	215069
Project:	80289775	**Date Issued:**	2026-03-27
Issued to:	**Endress+Hauser SICK GmbH+Co. KG** **Bergener Ring 27** **Ottendorf-Okrilla, Saxony** **01458** **Germany** **Attention:** Sven-Matthias Scheibe	**Issued by:**	*John Kusi Amoateng* John Kusi Amoateng

The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only.

C US

PRODUCTS

Class 2258 04 PROCESS CONTROL EQUIPMENT - Intrinsically Safe, Entity - For Hazardous Locations
Class 2258 84 PROCESS CONTROL EQUIPMENT - Intrinsically Safe, Entity - For Hazardous Locations - Certified to US Standards

FLOWSIC550 Intrinsically Safe Ultrasonic Flowmeter

CLASS 2258 04

Class I, Division 1, Groups D or C, D or A, B, C, D T4
Ex ia [ia Ga] IIA or IIB or IIC T4 Gb
-40°C ≤ Ta ≤ +70°C (-40°F ≤ Ta ≤ +158°F)

Type 3R IP66
Supply: 8…16V DC. max. 50mA
Power consumption: < 1W
Process: -40°C to +70°C (-40°F ≤ Ta ≤ +158°F), maximum 100bar

CLASS 2258 84

Class I, Division 1, Groups D or C, D or A, B, C, D T4
Class I, Zone 1, AEx ia [ia Ga] IIA or IIB or IIC T4 Gb
-40°C ≤ Ta ≤ +70°C (-40°F ≤ Ta ≤ +158°F)

Type 3R IP66
Supply: 8…16V DC. max. 50mA
Power consumption: < 1W
Process: -40°C to +70°C (-40°F ≤ Ta ≤ +158°F), maximum 100bar

Model code structure:

FL550-	*	*	*	*	*	*	*	*	*	a	*	*	b	*	*	*	*	c	*	*	*	*	*

* = one character determines Reserve → not Ex relevant
* = one character determines RTU → not Ex relevant
* = one character determines conformity → not Ex relevant
* = one character determines I/O → not Ex relevant
* = one character determines Ex certification scheme → not Ex relevant
one character determines power supply
c = A: autarkic with battery pack (5Y)
c = B: external with backup (3 months)
* = one character determines connectors / cable glands → not Ex relevant
* = one character determines preconnected pressure sensor → not Ex relevant
* = one character determines preconnected temperature sensor → not Ex relevant
* = one character determines Sensors for EVC → not Ex relevant
one character determines Gas / Ambient temperature
b = 1: -40 °C … +70 °C
* = one character determines Qmin → not Ex relevant
* = one character determines Qmax → not Ex relevant
one character determines transducer type
a = A: Type 1 – H210
* = one character determines coating / surface treatment → not Ex relevant
* = one character determines meter material certificate → not Ex relevant
* = one character determines meter body material → not Ex relevant
* = one character determines connection temperature sensor → not Ex relevant
* = one character determines connection pressure sensor → not Ex relevant
* = one character determines Mating surface → not Ex relevant
* = one character determines pressure rating / flange standard → not Ex relevant
* = one character determines meter body length → not Ex relevant
* = one character determines nominal size meter body (diameter of piping) → not Ex relevant

Conditions of Acceptability:

HAZLOC

1. Only three supply operation modes are allowed:
   a. External power
   b. External power plus one battery pack (as backup)
   c. Two battery packs without external power (a battery pack serves as a backup)

   The use of all power inputs simultaneously is not allowed. Only Endress+Hauser SICK Part No. 2064018 as a battery pack is allowed.

2. The equipment pressure sensor and ultrasonic transducers that are mounted in the Meterbody contain piezo-electric devices. The equipment installation shall ensure that these devices are suitably protected from impact.

3. The ultrasonic transducers that are mounted in the Meterbody are manufactured from titanium. The equipment installation shall ensure that these devices are suitably protected from impact or friction.

4. The adhesive labels that are fitted to the flowmeter may generate an ignition-capable level of electrostatic discharge under certain conditions. The user shall ensure that the equipment is not installed in a location where it may be subjected to external conditions which might cause a build-up of electrostatic charges on these non-conducting surfaces. Additionally, cleaning of the equipment should be done only with a damp cloth.

5. The flowmeter is considered not capable of passing a 500V r.m.s. a.c. dielectric strength test according to Clause 6.3.13 of CSA C22.2 No. 60079-11:14 / ANSI/UL 60079-11 (2013) between the intrinsically safe circuits that are associated with the Ext. Power, the Service / Bluetooth M12 Connector connections, and its enclosure. This shall be taken into account in any equipment installation. The circuits associated with external connections DO0, DO1, DO2 RS485-1, RS485-2 are isolated from the equipment enclosure, and are considered capable of passing a 500V r.m.s. a.c. dielectric strength test according to Clause 6.3.13 of CSA C22.2 No. 60079-11:14 / ANSI/UL 60079-11 (2013).

6. The flowmeter is considered not capable of passing a 500V r.m.s. a.c. dielectric strength test according to Clause 6.3.13 of Clause 6.3.13 of CSA C22.2 No. 60079-11:14 / ANSI/UL 60079-11 (2013) between the intrinsically safe circuits that are associated with the M8 connectors to which the pressure and/or temperature transmitters are connected, and its enclosure. This shall be taken into account in any equipment installation. When considering this cognizance shall also be taken of Condition 7 b).

7. Conditions associated with the Digital temperature transmitter type EDT 87:
   a. The capacity of free metal parts is C=24pF. This must be taken into account during installing the equipment.
   b. The equipment does not meet the requirements of Clause 6.3 of Clause 6.3.13 of CSA C22.2 No. 60079-11:14 / ANSI/UL 60079-11 (2013), this must be taken into account during installing the equipment.

8. Conditions associated with the Digital temperature transmitter type EDT 96:
   a. Under certain extreme circumstances, the plastic enclosure may store ignition-capable level of electrostatic charge. Therefore, the device shall not be installed in a location where the external conditions conducive to the build-up of electrostatic charge. The equipment shall only be cleaned with a damp cloth.

ORDLOC

1. The device shall only be powered by a power supply unit in accordance with CSA/UL/EN/IEC 61010-1:2010 or class 2 according to CSA 223/UL 1310 with output voltages below the limits of 6.3.1/6.3.2 and 9.4 max. 16 Vdc or with battery pack model 2R20 with output voltages below the limits of 6.3.1/6.3.2 and 9.4.
2. Evaluation for hazardous locations, reliability, endurance or functional safety was not part of this investigation.

3. Equipment shall be mounted to external pipeline in end-use installation.
4. Equipment is only to be installed by trained personnel in accordance with the installation manual.

APPLICABLE REQUIREMENTS

Standards Used	Description
CAN/CSA C22.2 No. 61010-1-12, UPD1:2015, UPD2:2016, AMD1:2018	Safety requirements for electrical equipment for measurement, control, and laboratory use — Part 1: General requirements
CAN/CSA C22.2 No. 60079-0:19	Explosive atmospheres - Part 0: Equipment - General requirements
CAN/CSA-C22.2 No 60079-11:14	Explosive Atmospheres - Part 11: Equipment protection by intrinsic safety 'i'
CSA C22.2 No. 94.2:15 - Second Edition	Enclosures for electrical equipment, environmental considerations
UL 61010-1, 3rd Edition (May 11, 2012)	UL Standard for Safety Electrical Equipment For Measurement, Control, and Laboratory Use; Part 1: General Requirements
ANSI/UL 60079-0-2019	Standard for Safety for Explosive Atmospheres - Part 0: General Requirements
ANSI/UL 60079-11:2013 - Sixth Edition	Explosive Atmospheres - Part 11: Equipment Protection By Intrinsic Safety 'I'
ANSI/UL 913:2013 - Eighth Edition - Including revisions through December 6, 2019	UL Standard for Safety Intrinsically Safe Apparatus and Associated Apparatus for Use in Class I, II, and III, Division 1, Hazardous (Classified) Locations
UL 50E:2015 - Second Edition	UL Standard for Safety Enclosures for Electrical Equipment, Environmental Considerations

Markings

The manufacturer is required to apply the following markings:

- Products shall be marked with the markings specified by the particular product standard.
- Products certified for Canada shall have all Caution and Warning markings in both English and French.

Additional bilingual markings not covered by the product standard(s) may be required by the Authorities Having Jurisdiction. It is the responsibility of the manufacturer to provide and apply these additional markings, where applicable, in accordance with the requirements of those authorities.

The products listed are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US (indicating that products have been manufactured to the requirements of both Canadian and U.S. Standards) or with adjacent indicator 'US' for US only or without either indicator for Canada only.

- CSA Monogram with c us Indicator (The products listed are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only), as shown on the Certificate of Compliance.

- Manufacturers name "Endress+Hauser SICK GmbH+Co. KG", or trademark "**Endress+Hauser SICK**".
- Model designation, as specified in the PRODUCTS section, above.
- Maximum and minimum ambient temperature rating, as specified in the PRODUCTS section, above. The ambient temperature range shall be marked in °C, but may in addition be optionally marked in °F.
- Date code / Serial number traceable to month and year of manufacture.
- Special purpose enclosure designation "Type 3R".
- Ingress Rating "IP66".
- Hazardous locations designation as specified in the PRODUCTS section, above.
- For Canadian Zone marked products, the Certificate Number Reference "22CA80143220" next to the CSA logo or preceded by "CSA" agency name.
- The warning words: - "WARNINGS:"
  "Substitution of components may impair Intrinsic Safety" and "La substitution de composants peut compromettre la sécurité intrinsèque"
  "Install per drawing 9370343" and "Installer selon le dessin 9370343"
  "See operating instructions no. 8029793" and "Voir instructions d'utilisation no. 8029793"
- The words: "Ex ia Intrinsically Safe / Securite Intrinseque"
- The intrinsic safety parameters:
  "U_i / V_{max} = 20V"
  "I_i / I_{max} = 666mA"
  "P_i = 930mW"
  "L_i = 2.64µH"
- The DC symbol ⎓
- Rated supply voltage 8-16 Vdc.
- Rated supply current Max. 50mA.

Nameplate adhesive label material approval information:

Tesa Type SE 6930 PV3 – cUR PGGU2.MH18055

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Project: 80289775 **Date Issued**: 2026-03-27

Notes:

Products certified under Class(es) C225804, C225884 have been certified under CSA's ISO/IEC 17065 accreditation with the Standards Council of Canada (SCC). www.scc.ca

Supplement to Certificate of Compliance

Certificate: 80143220 **Master Contract:** 215069

The products listed, including the latest revision described below, are eligible to be marked in accordance with the referenced Certificate.

Product Certification History

Project	Date	Description
80289775	2026-03-27	Update to cCSAus Report 80143220 for Class I, Division 1, Intrinsically Safe Ultrasonic Flowmeter, FLOWSIC550 to, - Add alternate IR LED - Add alternate Cable Gland Stopping Plug Based upon acceptance of data from a variation to IECEx Certificate, IECEx CSAE 22.0065X for Intrinsically Safe "ia" FLOWSIC550 gas flowmeter.
80249138	2025-08-06	Update to Report 80143220 to assess the following modifications: 1. Change of applicant/manufacturer name from SICK Engineering GmbH to Endress+Hauser SICK GmbH+Co. KG 2. Update to Label design 3. Relocation of power supply values from the IECEx/ATEX label to the Main Unit Label drawing.
80143220	2023-04-26	Original certification, cCSAus Hazloc Approval of FLOWSIC550 Intrinsically Safe Ultrasonic Flowmeter