

Rosemount™ 2130 Level Switch

Vibrating Fork



1 Product certifications

Rev 4.28

1.1 European directive information

A copy of the EU Declaration of Conformity can be found at the end of the document. The most recent revision of the EU Declaration of Conformity can be found at [Emerson.com/Rosemount](https://www.emerson.com/Rosemount).

1.2 Ordinary location certification

As standard, the device has been examined and tested to determine that the design meets the basic electrical, mechanical, and fire protection requirements by a nationally recognized test laboratory (NRTL) as accredited by the Federal Occupational Safety and Health Administration (OSHA).

1.3 Environmental conditions

Table 1-1: Environmental Conditions (Ordinary Location and Low Voltage Directive (LVD))

Type	Description
Location	Indoor or outdoor use, wet
Maximum altitude	6562 ft. (2000 m)
Ambient temperature	-40 to 176 °F (-40 to 80 °C)
Electrical supply / load	20-264 Vac 50-60Hz, 20-60Vdc, 500 mA
Mains supply voltage fluctuations	Safe at ±10%
Overvoltage category	II @ 264 Vmax, III @ 150 Vmax
Pollution degree	4

1.4 Marine approvals

American Bureau of Shipping (ABS) Type Approval

Certificate	22-2288029-PDA
Intended Service	Marine and Offshore Application - Level detection system used for high level or overflow alarm functions fitted on board of ACC and ACCU vessels.

Det Norske Veritas (DNV) Type Approval

Certificate	TAA00001RX
Intended Use	DNV rules for classification – Ships, offshore units, and high speed and light craft.

Korean Register (KR) Type Approval

Certificate	SGP34681-AE004
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1.5 Overfill approval

DIBt Certificate (Germany)	Z-65.11-519
SVTI Certificate (Switzerland)	KVU 302.044

TÜV-tested and approved for overfill protection according to the German DIBt/WHG regulations. Certified under safety devices for tanks and piping related to water pollution control.

1.6 NAMUR approval

The NAMUR NE95 type test report is available upon request. Complies with NAMUR NE21.

1.7 Safety Integrity Level (SIL) certification

The Rosemount 2130 has been independently certified to IEC 61508 as required by IEC 61511. Certification was conducted by Exida. The Rosemount 2130 is SIL2-certified and is SIL3 capable.

1.8 U.S.A.

1.8.1 G5 Ordinary Location certification

Certificate	FM20NUS0006
Standards	FM Class 3810:2011; ANSI/NEMA 250:1991
Markings	4X

1.8.2 I5 Intrinsic Safety (IS) and Non-incendive (NI)

Certificate	FM17US0355X
Standards	FM Class 3600:2018; FM Class 3610:2010; FM Class 3611:2004; FM 3810:2005; ANSI/ISA 60079-0:2005; ANSI/ISA 60079-11:2009
Markings	Class I, Division 1, Groups A, B, C, and D IS: Class I, Zone 0, AEx ia IIC NI: Class I, Zone 2, IIC T5 (See control drawings)

Specific Instructions:

See [Instructions for hazardous area installations \(I5 and I6\)](#)

Specific condition of use (X):

WARNING - Potential Electrostatic Charging Hazard - The enclosure is constructed from plastic. To prevent the risk of electrostatic sparking the plastic surface should only be cleaned with a damp cloth.

1.8.3 E5 Explosion proof (XP)

Certificate	FM20US0047
Standards	FM Class 3600:2018; FM 3615:2018; FM3810:2005; ANSI/NEMA 250:1991
Markings	Class I, Division 1, Groups A, B, C, and D T6 (See safety instructions) Type 4X

Specific Instructions:

See [Instructions for hazardous area installations \(E5 and E6\)](#)

1.9 Canada

1.9.1 G6 Ordinary location

Certificate	80096118
Standards	CAN/CSA-C22.2 No. 61010-1-04; CAN/CSA-C22.2 No. 94-M91
Markings	4X. Single process seal.

1.9.2 I6 Intrinsic Safety (IS) and Non-Incendive (NI)

Certificate	80051772
Standards	CSA Std C22.2 No. 0-M91(R 2006); CSA C22.2 No. 157-M1992 (R 2006); CSA Std C22.2 No. 30-M1986 (R 2003); CAN/CSA-C22.2 No. 94-M91 (R 2006); CSA Std C22.2 No. 142-M1987 (R 2004); CAN/CSA E60079-11:02; ANSI/ISA - 12.27.01-2003
Markings	Class I, Division 1, Groups A, B, C, and D IS: Class I, Zone 0, Ex ia IIC NI: Class I, Division 2, Groups A, B, C, and D T5 (See control drawings and safety instructions)

Specific Instructions:

See [Instructions for hazardous area installations \(I5 and I6\)](#)

1.9.3 E6 Explosion-proof (XP)

Certificate	80051772
Standards	CSA Std C22.2 No. 0-M91(R 2006); CSA C22.2 No. 157-M1992 (R 2006); CSA Std C22.2 No. 30-M1986 (R 2003); CAN/CSA-C22.2 No. 94-M91 (R 2006); CSA Std C22.2 No. 142-M1987 (R 2004); CAN/CSA E60079-11:02; ANSI/ISA - 12.27.01-2003
Markings	Class I, Division 1, Groups A, B, C, and D T6 (See safety instructions) 4X. Single process seal.

Specific Instructions:

See [Instructions for hazardous area installations \(E5 and E6\)](#)


1.9.4 Canadian Registration Number (CRN)

Certificate	0F04227.2C
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The requirements of CRN are met when a Rosemount 2130 CSA-approved vibrating fork level detector model is configured with 316/316L stainless steel (1.4401/1.4404) process-wetted parts and either NPT threaded or 2-in. to 4-in. ASME B16.5 flanged process connections.

1.10 Europe

1.10.1 I1 ATEX Intrinsic Safety (IS)

Certificate	Sira 05ATEX2130X
Standards	EN IEC 60079-0:2018; EN 60079-11:2012; EN 60079-26:2015
Markings	 II 1 G D Ex ia IIC T5...T2 Ga Ex ia IIIC T ₂₀₀ 85°C...T ₂₀₀ 265°C Da IP66


Specific Instructions:

See [Instructions for hazardous area installations \(I1 and I7\)](#)

Specific condition of use (X):

1. When the Vibrating Fork Liquid Level Sensor is used with process mediums that have a temperature in excess 80°C, then the internal temperature of the electronics enclosure shall not exceed this value.
2. The following precautions are applicable dependent upon the material used to construct the enclosure:
 Metallic enclosures - The metallic alloy used for the enclosure material may be at the accessible surface of this equipment; in the event of rare incidents, ignition sources due to impact and friction sparks could occur. This shall be considered when the Vibrating Fork Liquid Level Sensor is being installed in locations that specifically require group II, category 1G equipment.
3. The temperature class and the maximum surface temperature for dust (T**°C) are defined by the appropriate ambient temperature and process temperature and are given in the charts presented in the Specific Instructions.

1.10.2 E1 ATEX Flameproof

Certificate	Sira 05ATEX1129X
Standards	EN IEC 60079-0:2018/AC:2020-02; EN 60079-1:2014/AC:2018-09; EN 60079-26:2015; EN 60079-31:2014
Markings	 II 1/2 G D Ex db IIC T6...T2 Ga/Gb

Ex tb IIIC T85°C...T265°C Db

Specific Instructions:

See [Instructions for hazardous area installations \(E1 and E7\)](#)

1.11 International

1.11.1 I7 IECEx Intrinsic Safety (IS)

Certificate	IECEx SIR 06.0070X
Standards	IEC 60079-0:2017; IEC 60079-11:2011
Markings	Ex ia IIC T5...T2 Ga Ex ia IIIC T ₂₀₀ 85°C...T ₂₀₀ 265°C Da

Specific Instructions:

See [Instructions for hazardous area installations \(I1 and I7\)](#)

Specific condition of use (X):

1. When the Vibrating Fork Liquid Level Sensor is used with process mediums that have a temperature in excess 80°C, then the internal temperature of the electronics enclosure shall not exceed this value.
2. The following precautions are applicable dependent upon the material used to construct the enclosure:
Metallic enclosures - The metallic alloy used for the enclosure material may be at the accessible surface of this equipment; in the event of rare incidents, ignition sources due to impact and friction sparks could occur. This shall be considered when the Vibrating Fork Liquid Level Sensor is being installed in locations that specifically require group II, category 1G equipment.
3. The temperature class and the maximum surface temperature for dust (T**°C) are defined by the appropriate ambient temperature and process temperature and are given in the charts presented in the Specific Instructions.

1.11.2 E7 IECEx Flameproof (FLP) and Dust

Certificate	IECEx SIR 06.0051X
Standards	IEC 60079-0:2017; IEC 60079-1:2014-06; IEC 60079-26:2014-10; IEC 60079-31:2013
Markings	Ex db IIC T6...T2 Ga/Gb

Ex tb IIIC T85°C...T265°C Db

Specific Instructions:

See [Instructions for hazardous area installations \(E1 and E7\)](#)

Specific condition of use (X):

1. The temperature class is defined by the appropriate ambient temperature and the process temperature given in the charts presented in the Specific Instructions.
2. When coated with a non-standard paint the enclosure is non-conducting and may generate an ignition-capable level of electrostatic charges under certain extreme conditions. The user should 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 non-conducting surfaces. Additionally, cleaning of the equipment should be done only with a damp cloth.

1.12 Republic of Korea

1.12.1 IP KTL Intrinsic Safety (IS)

Certificate	20-KA4BO-0963X or 20-KA4BO-0964X
Markings	Ex ia IIC T5...T3 Ta (see table in the certificate)

1.12.2 EP KTL Flameproof (FLP)

Certificate	20-KA4BO-0965X or 20-KA4BO-0966X
Markings	Ex db IIC T6...T3 Ga/Gb or Ex db IIC T6...T2 Ga/Gb Ta (see table in the certificate)

1.13 China

1.13.1 I3 NEPSI Intrinsic Safety (IS)

Certificate	GYJ20.1358X (CCC)
Markings	Ex ia IIC T5...T2 Ga – All Models Ex ia IIIC T ₂₀₀ 85°C...T ₂₀₀ 265°C Da – NAMUR Models fitted in either metallic or non-metallic housings Ex ia IIIC T ₂₀₀ 85°C...T ₂₀₀ 265°C Da – 8/16mA Models fitted in metallic housings only

Specific Instructions:

See certificate

Specific condition of use (X):

See certificate

1.13.2 E3 NEPSI Flameproof and dust

Certificate	GJ20.1359X (CCC)
Markings	Ex db IIC T6...T2 Ga/Gb Ex tb IIIC T85°C...T265°C Db

Specific Instructions:

See certificate

Specific condition of use (X):

See certificate

1.14 Japan

1.14.1 I4 Japan Intrinsic Safety

Certificate	CML 23JPN2030X
Standards	JNIOH-TR-46-1:2020, JNIOH-TR-46-6:2015
Markings	Ex ia IIC T5...T2 Ga Ta (see table in the certificate)

Specific condition of use (X):

See certificate

1.14.2 E4 Japan Flameproof

Certificate	CML 22JPN1264X
Standards	JNIOH-TR-46-1:2020, JNIOH-TR-46-2:2018
Markings	Ex db IIC T6...T2 Ga/Gb Ta (see table in the certificate)

Specific condition of use (X):

See certificate

1.15 Technical Regulations Customs Union (TR-CU)



TR CU 020/2011 "Electromagnetic Compatibility of Technical Products"

TR CU 004/2011 "On safety of low-voltage equipment"

TR TC 032/2013 "On the safety equipment of high pressure"

Certificate EAЭC KZ 7500525.01.01.01708



TR CU 012/2011 "On safety of equipment intended for use in explosive atmospheres"

1.15.1 IM Technical Regulations Customs Union (EAC) Intrinsic Safety

Certificate EAЭC KZ 7500525.01.01.01906

Markings for 2130*M** 0Ex ia IIC T5...T3 Ga X
Ex ia IIIC T₂₀₀85°C...T₂₀₀185°C Da X
Ta (see table in the certificate)

Markings for 2130*E** 0Ex ia IIC T5...T2 Ga X
Ex ia IIIC T₂₀₀85°C...T₂₀₀265°C Da X
Ta (see table in the certificate)

Specific condition of use (X):

See certificate

1.15.2 EM Technical Regulations Customs Union (EAC) explosion proof

Certificate EAЭC KZ 7500525.01.01.01906

Markings for 2130*M** 0/1Ex db IIC T6...T3 Ga/Gb X
Ex tb IIIC T85°C...T190°C Db X
Ta (see table in the certificate)

Markings for 2130*E** 0/1Ex db IIC T6...T2 Ga/Gb X
Ex tb IIIC T85°C...T265°C Db X
Ta (see table in the certificate)

Specific condition of use (X):

See certificate

1.16 Brazil**1.16.1 I2 INMETRO Intrinsic Safety (IS)**

Certificate	UL-BR 18.0441X (Sweden), UL-BR 23.0981X (USA)
Standards	ABNT NBR IEC 60079-0:2020, ABNT NBR IEC 60079-11:2013, ABNT NBR IEC 60079-26:2016
Markings	Ex ia IIC T5...T2 Ga Ex ia IIIC T85°C...T265°C Da

Specific Instructions:

See certificate

Specific condition of use (X):

See certificate

1.16.2 E2 INMETRO Flameproof (FLP)

Certificate	UL-BR 18.0284X (Sweden), UL-BR 23.0982X (USA)
Standards	ABNT NBR IEC 60079-0:2020, ABNT NBR IEC 60079-1:2020, ABNT NBR IEC 60079-26:2016, ABNT NBR IEC 60079-31:2014
Markings	Ex db IIC T6...T2 Ga/Gb Ex tb IIIC T85°C...T265°C Db

Specific Instructions:

See certificate

Specific condition of use (X):

See certificate

1.17 United Arab Emirates**1.17.1 Flameproof**

Certificate	23-11-22694/Q23-11-048838/NB0002, 23-11-22710/Q23-11-048839/NB0002
Markings	Same as IECEx (I7)

Specific Conditions of Use (X):

Same as IECEx (I7)

1.17.2 Intrinsic Safety

Certificate 23-11-22694/Q23-11-048838/NB0002,
23-11-22710/Q23-11-048839/NB0002

Markings Same as IECEx (I7)

Specific Conditions of Use (X):

Same as IECEx (I7)

1.18 India**1.18.1 IW Intrinsic Safety**

Certificate PESO P590190

Markings Ex ia IIC T5...T2 Ga

1.18.2 EW Flameproof

Certificate PESO P575772

Markings Ex db IIC T6...T2 Ga/Gb

1.19 Instructions for hazardous area installations (E5 and E6)

Model numbers covered:

2130**9E*****E5***

2130**9E*****E6***

2130**9M*****E5***

2130**9M*****E6***

("*" indicates options in construction, function, and materials).

The following instructions apply to equipment covered by Product Certification codes E5 and E6:

1. The equipment may be used with flammable gases and vapors within apparatus Class 1, Division 1, Groups A, B, C, and D.
2. Explosion-proof approved versions of the 2130***E are certified for use in ambient temperatures of -58 °F to 167 °F (-50 °C to 75 °C), and with a maximum process temperature of 500 °F (260 °C).

Explosion-proof approved versions of the 2130***M are certified for use in ambient temperatures of -40 °F to 167 °F (-40 °C to 75 °C), and with a maximum process temperature of 356 °F (180 °C).

3. Installation of this equipment shall be carried out by suitably trained personnel, in accordance with the applicable code of practice.
4. Inspection and maintenance of this equipment shall be carried out by suitably trained personnel, in accordance with the applicable code of practice.
5. The user should not repair this equipment.
6. The certification of this equipment relies upon the following materials used in its construction:

Body:	Aluminum alloy (ASTM B85 360.0) or 316 stainless steel
Cover:	Aluminum alloy (ASTM B85 360.0) or 316 stainless steel
Probe:	316 stainless steel, or Alloy C276 (UNS N10276) and alloy C (UNS N10002)
Probe filling:	Perlite
Cover seal:	Silicone

If equipment is likely to come into contact with aggressive substances, it is the user's responsibility to take suitable precautions that prevent it from being adversely affected, thus ensuring the type of protection is not compromised.

Aggressive substances: Acidic liquids or gases that may attack metals or solvents that may affect polymeric materials.

Suitable precautions: Regular checks as part of routine inspections or establishing from a material's data sheet that it is resistant to specific chemicals.

The metallic alloy used for the enclosure material may be at the accessible surface of this equipment; in the event of rare accidents, ignition sources due to impact and friction sparks could occur. This shall be considered when the Rosemount 2130 is installed in locations that specifically require Class 1, Division 1 equipment.

7. It is the responsibility of the user to ensure:
 - a. The voltage and current limits for this equipment are not exceeded.

- b. The joint requirements between the probe and the vessel tank are compatible with the process media.
 - c. The joint tightness is correct for the joint material used.
 - d. Only suitably certified cable entry devices will be utilized when connecting this equipment.
 - e. That any unused cable entries are sealed with suitably certified stopping plugs.
8. The probe fork is subjected to small vibration stresses as part of its normal function. As this provides a partition wall, it is recommended that the fork should be inspected every two years for signs of defects.

9. Technical data

- a. Coding: Class I, Division 1, Groups A, B, C, and D
- b. Temperature:

2130**9E*****E5***,
 2130**9E*****E6***:

Temperature classes	Maximum ambient air temperature (T _a)	Maximum process temperature (T _p)
T6,T5,T4,T3,T2,T1	75 °C	80 °C
T5,T4,T3,T2,T1	74 °C	95 °C
T4,T3,T2,T1	73 °C	125 °C
T3,T2,T1	69 °C	185 °C
T2, T1	65 °C	260 °C

Minimum ambient air temperature (T_a) = -50 °C

Minimum process temperature (T_p) = -70 °C

2130**9M*****E5***,
 2130**9M*****E6***:

Temperature classes	Maximum ambient air temperature (T _a)	Maximum process temperature (T _p)
T6,T5,T4,T3,T2,T1	75 °C	75 °C
T5,T4,T3,T2,T1	70 °C	90 °C
T4,T3,T2,T1	65 °C	125 °C
T3,T2,T1	50 °C	180 °C

Minimum ambient air temperature (T_a) = -40 °C
 Minimum process temperature (T_p) = -40 °C

- c. Must not exceed the rating of the coupling/flange fitted.
- d. For electrical details and pressure ratings, refer to the Rosemount 2130 [Product Data Sheet](#).
- e. Year of manufacture: Printed on the product label.

10. Cable selection

- a. It is the responsibility of the user to ensure that suitably temperature rated cable is used.
 2130**9E*****E5*** and
 2130**9E*****E6***;

T class	Cable temperature rating
T6	Above 185 °F (85 °C)
T5	Above 212 °F (100 °C)
T4	Above 275 °F (135 °C)
T3	Above 320 °F (160 °C)

1.20 Instructions for hazardous area installations (I5 and I6)

Model numbers covered:

2130N*****I5***

2130N*****I6***

2130M*****I5***

2130M*****I6***

("*" indicates options in construction, function, and materials).

The following instructions apply to equipment covered by Product Certification codes I5 and I6:

1. The intrinsically safe approved versions of the Rosemount 2130 may be used in hazardous locations with flammable gases and vapors Class 1 Division 1 Groups A, B, C, and D, and Class 1 Zone 0 Group IIC when installed in accordance with control drawings 71097/1154, 71097/1314, 71097/1179, or 71097/1315.

2. The Non-Incendive (NI) approved versions of the Rosemount 2130 may be used in hazardous locations with flammable gases and vapors Class 1 Division 2 Groups A, B, C, and D when installed in accordance with Control Drawing 71097/1179 or 71097/1315.
3. The apparatus electronics is only certified for use in ambient temperatures in the range of -58 to 176 °F (-50 to 80 °C). It should not be used outside this range. However, the probe may be located in the process medium which may be at a higher temperature than the electronics but must not be higher than the Temperature Class for the respective process gas/medium.
4. It is a condition of the approval that the electronics temperature is in the range of -58 to 176 °F (-50 to 80 °C). It must not be used outside this range. Limit the external ambient temperature when the process temperature is high.
5. Suitably trained personnel shall carry out installation in accordance with the applicable code of practice.
6. The user should not repair this equipment.
7. If equipment is likely to come into contact with aggressive substances, it is the user's responsibility to take suitable precautions that prevent it from being adversely affected, thus ensuring the type of protection is not compromised.
Aggressive substances: Acidic liquids or gases that may attack metals or solvents that may affect polymeric materials.
Suitable precautions: Regular checks as part of routine inspections or establishing from a material's data sheet that it is resistant to specific chemicals.
The metallic alloy used for the enclosure material may be at the accessible surface of this equipment; in the event of rare accidents, ignition sources due to impact and friction sparks could occur. This shall be considered when the Rosemount 2130 is installed in locations that specifically require Class 1, Division 1 equipment.
8. If the enclosure is made of an alloy or plastic material, the following precautions must be observed:
 - a. The metallic alloy used for the enclosure material may be at the accessible surface of this equipment; in the event of rare accidents, ignition sources due to impact and friction sparks could occur.
 - b. Under certain extreme circumstances, the non-metallic parts incorporated in the enclosure of the Rosemount 2130 may generate an ignition-capable level of

electrostatic charge. Therefore, when they are used for applications that specifically require group II, category 1 equipment, the Rosemount 2130 shall not be installed in a location where the external conditions are conducive to the build-up of electrostatic charge on such surfaces. Additionally, the Rosemount 2130 shall only be cleaned with a damp cloth.

9. Technical data

- a. Intrinsic Safety (I5 and I6) coding:
 Class I, Division 1, Groups A, B, C, and D
 Class I, Zone 0, AEx ia IIC
 Non-Incendive (I6) coding:
 Class I, Division 2, Groups A, B, C, and D
- b. Input parameters:
 NAMUR electronics:
 $U_i=15\text{ V}$, $I_i=32\text{ mA}$, $P_i=0.1\text{ W}$, $C_i=211\text{ nF}$, $L_i=0.06\text{ mH}$
 8/16 mA electronics:
 $U_i=30\text{ V}$, $I_i=93\text{ mA}$, $P_i=0.65\text{ W}$, $C_i=12\text{ nF}$, $L_i=0.035\text{ mH}$
- c. Materials: Refer to the Rosemount 2130 [Product Data Sheet](#).
- d. Year of manufacture: Printed on the product label.

1.21 Instructions for hazardous area installations (E1 and E7)

Model numbers covered:

- 2130*A2E*****E1****
- 2130*S2E*****E1****
- 2130*A2E*****E7****
- 2130*S2E*****E7****
- 2130*A2M*****E1****
- 2130*S2M*****E1****
- 2130*A2M*****E7****
- 2130*S2M*****E7****

("*" indicates options in construction, function, and materials).

The following instructions apply to equipment covered by Product Certification codes E1 and E7:

1. The equipment may be used with flammable gases and vapours within apparatus groups IIA, IIB and IIC and temperature classes T1, T2, T3, T4, T5 and T6 (IECEx: in Zones 1 and 2. The probe may be installed into a Zone 0 vessel). The temperature class of the installation will be determined from the highest process or ambient temperature.
2. The equipment may be used with explosive dusts within apparatus groups IIIC, IIIB, and IIIA. The temperature class of the installation will be determined from the highest process or ambient temperature.
3. The equipment is suitable for installation across the boundary between an area that specifically requires Equipment Protection Level Ga (Zone 0) and an area that specifically requires Equipment Protection Level Gb or Db (Zone 1 or 21). The probe forks (and extension tube) are the only parts to be installed in Zone 0.
4. The equipment has not been assessed as a safety related device (ATEX: as referred to by directive 2014/34/EU Annex II, clause 1.5).
5. Installation of this equipment shall be carried out by suitably trained personnel, in accordance with the applicable code of practice.
6. Inspection and maintenance of this equipment shall be carried out by suitably trained personnel, in accordance with the applicable code of practice.
7. The user should not repair this equipment.
8. The certification of this equipment relies upon the following materials used in its construction:

Housing:	Aluminum alloy (ASTM B85 360.0) or 316C12 stainless steel
Cover:	Aluminum alloy (ASTM B85 360.0) or 316 stainless steel
Materials of construction: process connection/ fork:	316L or 316/316L stainless steel, or Alloy C276 (UNS N10276) and alloy C (UNS N10002 or N30002)
Probe filling:	Perlite
Cover seal:	Silicone

9. If equipment is likely to come into contact with aggressive substances, it is the user's responsibility to take suitable precautions that prevent it from being adversely affected, thus ensuring the type of protection is not compromised.
 Aggressive substances: Acidic liquids or gases that may attack metals or solvents that may affect polymeric materials.
 Suitable precautions: Regular checks as part of routine inspections or establishing from a material's data sheet that it is resistant to specific chemicals.

10. It is the responsibility of the user to ensure:
 - a. The voltage and current limits for this equipment are not exceeded.
 - b. The joint requirements between the probe and the vessel tank are compatible with the process media.
 - c. The joint tightness is correct for the joint material used.
 - d. Only suitably certified cable entry devices will be utilized when connecting this equipment.
 - e. That any unused cable entries are sealed with suitably certified stopping plugs.

11. The probe fork is subjected to small vibration stresses as part of its normal function. As this provides a partition wall, it is recommended that the fork should be inspected every two years for signs of defects.

12. Technical data
 - a. ATEX coding:
 II 1/2 GD
 Ex db IIC T6...T2 Ga/Gb
 Ex tb IIIC T85 °C...T265 °C Db
 IECEx coding:
 Ex db IIC T6...T2 Ga/Gb
 Ex tb IIIC T85 °C...T265 °C Db
 - b. Temperature:
 2130*A2E*****E1****,
 2130*S2E*****E1****,
 2130*A2E*****E7****,
 2130*S2E*****E7****:

Temperature classes	Maximum surface temperature (T)	Maximum ambient air temperature (T _a)	Maximum process temperature (T _p)
T6,T5,T4,T3,T2,T1	T85 °C	75 °C	80 °C
T5,T4,T3,T2,T1	T100 °C	74 °C	95 °C
T4,T3,T2,T1	T120 °C	73 °C	115 °C
T3,T2,T1	T190 °C	69 °C	185 °C
T2,T1	T265 °C	65 °C	260 °C

Minimum ambient air temperature (T_a) = -40 °C

Minimum process temperature (T_p) = -70 °C

2130*A2M*****E1****,

2130*S2M*****E1****,

2130*A2M*****E7****,

2130*S2M*****E7****:

Temperature classes	Maximum surface temperature (T)	Maximum ambient air temperature (T _a)	Maximum process temperature (T _p)
T6,T5,T4,T3,T2,T1	T85 °C	75 °C	75 °C
T5,T4,T3,T2,T1	T100 °C	70 °C	90 °C
T4,T3,T2,T1	T135 °C	65 °C	125 °C
T3,T2,T1	T190 °C	50 °C	180 °C

Minimum ambient air temperature (T_a) = -40 °C

Minimum process temperature (T_p) = -40 °C

- c. Must not exceed the rating of the coupling/flange fitted.
- d. For electrical details and pressure ratings, refer to the Rosemount 2130 [Product Data Sheet](#).
- e. Year of manufacture: Printed on the product label.

13. Cable selection

- a. The cable entry temperature may exceed 70 °C.
- b. It is the responsibility of the user to ensure that suitably temperature rated cable is used.
- c. 2130**9E*****E5*** and 2130**9E*****E6***:

T class	Cable temperature rating
T6	Above 185 °F (85 °C)
T5	Above 212 °F (100 °C)
T3	Above 374 °F (190 °C)

14. Special conditions of use

- a. The user is to ensure the probe assembly is installed in such a way to prevent any damage due to impact or ignition source due to friction.
- b. When coated with a non-standard paint, the enclosure is non- conducting and may generate an ignition-capable level of electrostatic charges under certain extreme conditions. The user should 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 non- conducting surfaces. The equipment shall only be wiped clean with a damp cloth.
- c. The user is to ensure the ambient air temperature (Ta) and the process temperature (Tp) are within the range detailed above for the T class of the specific flammable gases or vapors present.
- d. The user is to ensure the ambient air temperature (Ta) and the process temperature (Tp) are within the range detailed above for the maximum surface temperature of the specific flammable dusts present.

1.22 Instructions for hazardous area installations (I1 and I7)

Model numbers covered:

- 2130M**E*****I1****
- 2130M**M*****I1****
- 2130M**E*****I7****
- 2130M**M*****I7****
- 2130N**E*****I1****
- 2130N**M*****I1****
- 2130N**E*****I7****

2130N**M*****I7****

("*" indicates options in construction, function, and materials).

The following instructions apply to equipment covered by Product Certification codes I1 and I7:

1. The Intrinsically Safe (IS) approved version of the Rosemount 2130 may be used in a hazardous area with explosive gases and vapors within apparatus groups IIC, IIB, and IIA, and temperature classes T1, T2, T3, T4, and T5 [IECEx: in Zone 0, 1, and 2].
2. The equipment may be used with explosive dusts within apparatus groups IIIC, IIIB, and IIIA [IECEx: in Zone 20, 21, and 22].
3. It is a special condition of the certification that the temperature of the electronics housing is in the range of -50 to 80 °C. The Rosemount 2130 must not be used outside this range. Limit the external ambient temperature if the process temperature is high.
4. Installation of this equipment shall be carried out by suitably trained personnel, in accordance with the applicable code of practice.
5. The user should not repair this equipment.
6. If equipment is likely to come into contact with aggressive substances, it is the user's responsibility to take suitable precautions that prevent it from being adversely affected, thus ensuring the type of protection is not compromised.
 Aggressive substances: Acidic liquids or gases that may attack metals or solvents that may affect polymeric materials.
 Suitable precautions: Regular checks as part of routine inspections or establishing from a material's data sheet that it is resistant to specific chemicals.
7. The Rosemount 2130 meets the requirements of clause 6.3.12 (Isolation of circuits from earth or frame) in EN 60079-11 (IEC 60079-11).
8. Technical data
 - a. ATEX coding:
 - II 1 GD
 - Ex ia IIC T5...T2 Ga
 - Ex ia IIIC T₂₀₀85°C...T₂₀₀265°C Da
 - IECEx coding:
 - Ex ia IIC T5...T2 Ga

Ex ia IIIC T₂₀₀85°C...T₂₀₀265°C Da

b. Temperature:

2130N**E*****I1****,

2130N**E*****I7****:

Gas (Ga) and Dust (Da)			
Temperature classes	Maximum surface temperature (T)	Maximum ambient air temperature (T _a)	Maximum process temperature (T _p)
T5,T4,T3,T2,T1	T ₂₀₀ 85 °C	80 °C	80 °C
T4,T3,T2,T1	T ₂₀₀ 120 °C	77 °C	115 °C
T3,T2,T1	T ₂₀₀ 190 °C	71 °C	185 °C
T2,T1	T ₂₀₀ 265 °C	65 °C	260 °C

Minimum ambient air temperature (T_a) = -50 °C

Minimum process temperature (T_p) = -70 °C

2130N**M*****I1****,

2130N**M*****I7****:

Gas (Ga) and Dust (Da)			
Temperature classes	Maximum surface temperature (T)	Maximum ambient air temperature (T _a)	Maximum process temperature (T _p)
T5,T4,T3,T2,T1	T ₂₀₀ 85 °C	80 °C	80 °C
T4,T3,T2,T1	T ₂₀₀ 120 °C	69 °C	115 °C
T3,T2,T1	T ₂₀₀ 185 °C	50 °C	180 °C

Minimum ambient air temperature (T_a) = -50 °C

Minimum process temperature (T_p) = -40 °C

2130M**E*****I1****,

2130M**E*****I7****:

Gas (Ga)		
Temperature classes	Maximum ambient air temperature (T _a)	Maximum process temperature (T _p)
T5,T4,T3,T2,T1	80 °C	80 °C
T4,T3,T2,T1	77 °C	115 °C
T3,T2,T1	71 °C	185 °C
T2,T1	65 °C	260 °C

Dust (Da)			
Temperature classes	Maximum surface temperature (T)	Maximum ambient air temperature (T _a)	Maximum process temperature (T _p)
T5,T4,T3,T2,T1	T ₂₀₀ 85 °C	64 °C	80 °C
T4,T3,T2,T1	T ₂₀₀ 120 °C	64 °C	115 °C
T3,T2,T1	T ₂₀₀ 190 °C	64 °C	185 °C
T2, T1	T ₂₀₀ 265 °C	64 °C	260 °C

Minimum ambient air temperature (T_a) = -50 °C

Minimum process temperature (T_p) = -70 °C

2130M**M*****I1****,

2130M**M*****I7****:

Gas (Ga)		
Temperature classes	Maximum ambient air temperature (T _a)	Maximum process temperature (T _p)
T5,T4,T3,T2,T1	80 °C	80 °C
T4,T3,T2,T1	69 °C	115 °C
T3,T2,T1	50 °C	180 °C

Dust (Da)			
Temperature classes	Maximum surface temperature (T)	Maximum ambient air temperature (T _a)	Maximum process temperature (T _p)
T5,T4,T3,T2,T1	T ₂₀₀ 85 °C	64 °C	80 °C
T4,T3,T2,T1	T ₂₀₀ 120 °C	64 °C	115 °C
T3,T2,T1	T ₂₀₀ 185 °C	50 °C	180 °C

Minimum ambient air temperature (T_a) = -50 °C

Minimum process temperature (T_p) = -40 °C

- c. Input parameters:
 NAMUR electronics:
 V_{max}=15 V, I_{max}=32 mA, P_i=0.1 W, C_i=12 nF, L_i=0.06 mH
 8/16 mA electronics:
 V_{max}=30 V, I_{max}=93 mA, P_i=0.65 W, C_i=12 nF, L_i=0.035 mH
- d. Materials: See the Rosemount 2130 [Product Data Sheet](#).
- e. Year of manufacture: Printed on the product label.
- f. Special conditions of use
 - 1. If the enclosure is made of an alloy or plastic material, the following precautions must be observed:
 - a. The metallic alloy used for the enclosure material may be at the accessible surface of this equipment; in the event of rare accidents, ignition sources due to impact and friction sparks could occur. This shall be considered when the Rosemount 2130 is installed in locations that specifically require Equipment Protection Level Ga or Da [ATEX: Group II, Category 1G or 1D equipment] [IECEx: in Zone 0 or 20 locations].
 - b. Under certain extreme circumstances, the non- metallic parts incorporated in the enclosure of the Rosemount 2130 may generate an ignition-capable level of electrostatic charge. Therefore, when they

are used for applications that specifically require Equipment Protection Level Ga or Da [ATEX: Group II, Category 1G or 1D equipment] [IECEX: in Zone 0 or 20 locations], the Rosemount 2130 shall not be installed in a location where the external conditions are conducive to the build-up of electrostatic charge on such surfaces. The equipment shall only be wiped clean with a damp cloth.

2. The user is to ensure the ambient air temperature (T_a) and the process temperature (T_p) are within the range detailed above for the T class of the specific flammable gases or vapors present.
3. The user is to ensure the ambient air temperature (T_a) and the process temperature (T_p) are within the range detailed above for the maximum surface temperature of the specific flammable dusts present.

1.23 Control drawings

Figure 1-1: 71097/1154 – FM Intrinsically Safe Control Drawing

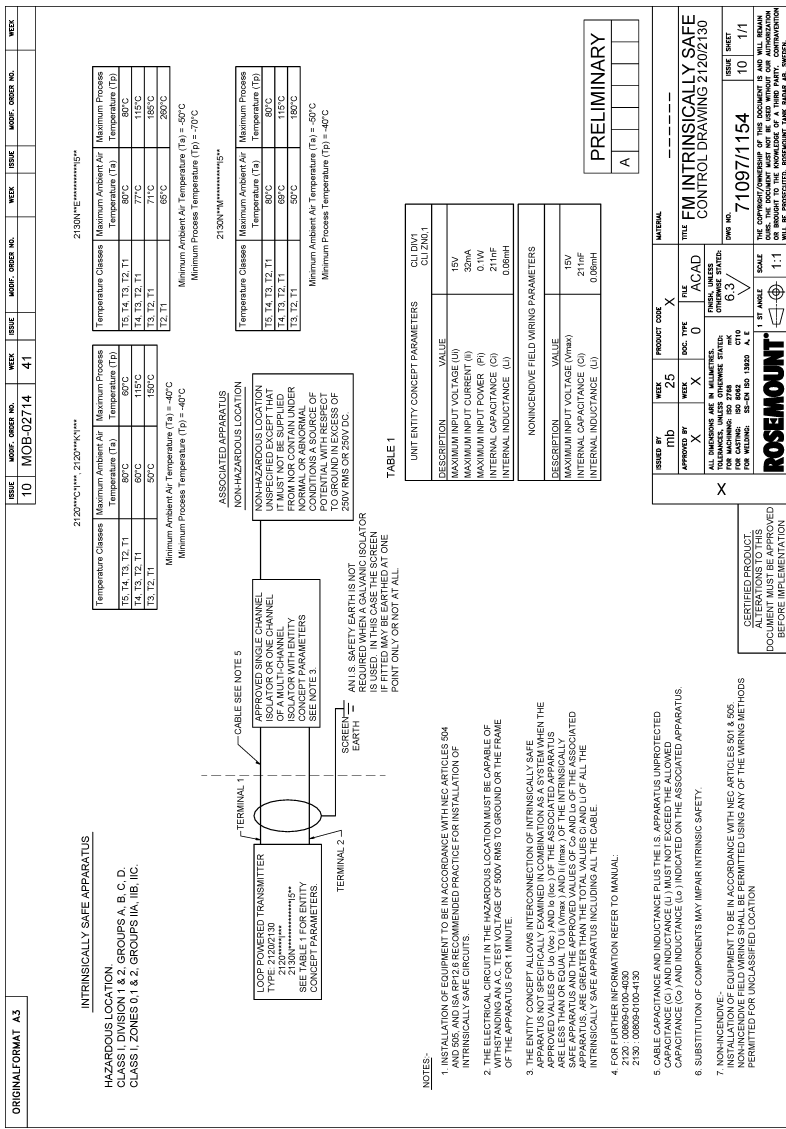


Figure 1-4: 71097/1315 – CSA Intrinsically Safe Control Drawing

ORIGINAL-FORMAT A3	3 MBY-03927 26	WEEK 26	WEEK 26	WEEK 26	WEEK 26
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INTRINSICALLY SAFE APPARATUS

2100P*****ig*

Temperature Classes	Maximum Ambient Air Temperature (Ta)	Maximum Process Temperature (Tb)
15, 14, 13, 12, 11	60°C	150°C
14, 13, 12, 11	70°C	150°C
13, 12, 11	50°C	150°C

Minimum Ambient Air Temperature (Ta) = -40°C
Minimum Process Temperature (Tb) = 40°C

2100P*****ig*

Temperature Classes	Maximum Ambient Air Temperature (Ta)	Maximum Process Temperature (Tb)
15, 14, 13, 12, 11	60°C	150°C
14, 13, 12, 11	70°C	150°C
13, 12, 11	50°C	150°C

Minimum Ambient Air Temperature (Ta) = -50°C
Minimum Process Temperature (Tb) = 50°C

2100P*****ig*

Temperature Classes	Maximum Ambient Air Temperature (Ta)	Maximum Process Temperature (Tb)
15, 14, 13, 12, 11	60°C	150°C
14, 13, 12, 11	70°C	150°C
13, 12, 11	50°C	150°C

Minimum Ambient Air Temperature (Ta) = -50°C
Minimum Process Temperature (Tb) = 50°C

DESCRIPTION	VALUE
MAXIMUM INPUT VOLTAGE (Ui)	30V
MAXIMUM INPUT CURRENT (Ii)	0.05mA
MAXIMUM INPUT POWER (Pi)	0.00W
INTERNAL CAPACITANCE (Ci)	12pF
INTERNAL INDUCTANCE (Li)	0.05mH

UNIT ENTITY CONCEPT PARAMETERS CL1 D1/C1 Z1/1

DESCRIPTION	VALUE
MAXIMUM INTRINSICALLY SAFE VOLTAGE (Uis)	30V
INTERNAL CAPACITANCE (Cis)	12pF
INTERNAL INDUCTANCE (Lis)	0.05mH

UNIT ENTITY CONCEPT PARAMETERS CL1 D1/C1 Z1/2

LOOP POWERED TRANSMITTER

TYPE: 2100P*****ig*

SEE TABLE FOR ENTITY CONCEPT PARAMETERS

NON-HAZARDOUS LOCATION EQUIPMENT

SEE NOTE 2

TERMINAL 1

CABLE SEE NOTE 6

SEE NOTE 3

SEE NOTE 5

TERMINAL 2

ASSOCIATED CERTIFIED APPARATUS (SEE NOTE 10)

UNCLASSIFIED LOCATION

SCREEN

EARTH

NOTE 7

6. CABLE CAPACITANCE AND INDUCTANCE PLUS THE U.S. APPARATUS UNPROTECTED (CO OR CI) AND INDUCTANCE (LO OR LI) INDICATED ON THE ASSOCIATED CERTIFIED APPARATUS FOR THE HAZARDOUS LOCATION.

7. AN U.S. SAFETY EARTH IS NOT REQUIRED WHEN A GALVANIC ISOLATOR IS USED. IN THIS CASE THE ISOLATOR IS FITTED/MAY BE EXHIBITED AT ONE POINT ONLY, NOT AT ALL.

8. WARNING: CONNECTION OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY.

9. A SUBSTITUTION OF COMPONENTS PEUT COMPROMETRE LA SECURITE INTRINSEQUE.

10. CLASS 1 DIVISION 2, CLASS 2, CLASS 3, AND CLASS 4 HAZARDOUS LOCATIONS

11. THIS APPARATUS MAY BE INSTALLED IN NON-HAZARDOUS CIRCUITS WITH NON-INTRINSIC FIELD WIRING. REFERENCE TO INTRINSICALLY SAFE (I.S.) REPLACED WITH NON-INTRINSIC.

12. THE ISOLATOR CAN BE REPLACED BY A REGULATED POWER SOURCE

1. INSTALLATION OF EQUIPMENT INCLUDING ANY GROUNDING ARRANGEMENT TO BE MADE SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE FOR INSTALLATION OF INTRINSICALLY SAFE CIRCUITS, OR THE INTRINSICALLY SAFE EQUIPMENT INSTALLATION PRACTICE IN THE COUNTRY OF USE.

2. UNCLASSIFIED LOCATION: UNSPECIFIED EXCEPT THAT IT MUST NOT BE A SOURCE OF POTENTIAL WITH RESPECT TO GROUND IN EXCESS OF 250V RMS OR 250V DC.

3. EITHER:

- A) ANY APPROVED SINGLE CHANNEL ISOLATOR OR ONE CHANNEL OF A MULTI-CHANNEL ISOLATOR WHOSE ENTITY CONCEPT PARAMETERS MEET THE REQUIREMENTS IN TABLE
- B) ANY ASSOCIATED CERTIFIED EQUIPMENT WITH AN INTRINSICALLY SAFE OUTPUT WHOSE ENTITY CONCEPT PARAMETERS MEET THE REQUIREMENTS IN TABLE

4. THE ELECTRICAL CIRCUIT IN THE HAZARDOUS LOCATION MUST BE CAPABLE OF WITHSTANDING AN AC TEST VOLTAGE OF 500V RMS TO GROUND ON THE FRAME OF THE APPARATUS FOR 1 MINUTE.

5. THE ENTITY CONCEPT ALLOWS INTERCONNECTION OF INTRINSICALLY SAFE APPARATUS, NOT INCLUDING THE ISOLATOR, WITH OTHER INTRINSICALLY SAFE APPARATUS WHOSE U_{is} (V_{is}) AND I_{is} (mA) OF THE INTRINSICALLY SAFE APPARATUS AND THE APPROVED ISOLATOR (WHEN USED) DO NOT EXCEED THE TOTAL VOLTAGE AND CURRENT RATES OF THE TOTAL VOLTAGES AND CURRENTS OF ALL THE INTRINSICALLY SAFE APPARATUS INCLUDING ALL THE CABLE.

ISSUED BY	AREA	PROJECT CODE	REV.	DOC. TYPE	FILE	ACAD
GP	37		X			
APPROVED BY	X		X	0		ACAD

THE CSA INTRINSICALLY SAFE CONTROL DRAWING	2120/2130
8/16mM	
71097/1315	
3	1/1

ISSUED BY	AREA	PROJECT CODE	REV.	DOC. TYPE	FILE	ACAD
GP	37		X			
APPROVED BY	X		X	0		ACAD

THE CSA INTRINSICALLY SAFE CONTROL DRAWING	2120/2130
8/16mM	
71097/1315	
3	1/1

ISSUED BY	AREA	PROJECT CODE	REV.	DOC. TYPE	FILE	ACAD
GP	37		X			
APPROVED BY	X		X	0		ACAD

THE CSA INTRINSICALLY SAFE CONTROL DRAWING	2120/2130
8/16mM	
71097/1315	
3	1/1

ISSUED BY	AREA	PROJECT CODE	REV.	DOC. TYPE	FILE	ACAD
GP	37		X			
APPROVED BY	X		X	0		ACAD

THE CSA INTRINSICALLY SAFE CONTROL DRAWING	2120/2130
8/16mM	
71097/1315	
3	1/1

ISSUED BY	AREA	PROJECT CODE	REV.	DOC. TYPE	FILE	ACAD
GP	37		X			
APPROVED BY	X		X	0		ACAD

THE CSA INTRINSICALLY SAFE CONTROL DRAWING	2120/2130
8/16mM	
71097/1315	
3	1/1

ISSUED BY	AREA	PROJECT CODE	REV.	DOC. TYPE	FILE	ACAD
GP	37		X			
APPROVED BY	X		X	0		ACAD

THE CSA INTRINSICALLY SAFE CONTROL DRAWING	2120/2130
8/16mM	
71097/1315	
3	1/1

ISSUED BY	AREA	PROJECT CODE	REV.	DOC. TYPE	FILE	ACAD
GP	37		X			
APPROVED BY	X		X	0		ACAD

THE CSA INTRINSICALLY SAFE CONTROL DRAWING	2120/2130
8/16mM	
71097/1315	
3	1/1

ISSUED BY	AREA	PROJECT CODE	REV.	DOC. TYPE	FILE	ACAD
GP	37		X			
APPROVED BY	X		X	0		ACAD

THE CSA INTRINSICALLY SAFE CONTROL DRAWING	2120/2130
8/16mM	
71097/1315	
3	1/1

ISSUED BY	AREA	PROJECT CODE	REV.	DOC. TYPE	FILE	ACAD
GP	37		X			
APPROVED BY	X		X	0		ACAD

THE CSA INTRINSICALLY SAFE CONTROL DRAWING	2120/2130
8/16mM	
71097/1315	
3	1/1

ISSUED BY	AREA	PROJECT CODE	REV.	DOC. TYPE	FILE	ACAD
GP	37		X			
APPROVED BY	X		X	0		ACAD

THE CSA INTRINSICALLY SAFE CONTROL DRAWING	2120/2130
8/16mM	
71097/1315	
3	1/1

ISSUED BY	AREA	PROJECT CODE	REV.	DOC. TYPE	FILE	ACAD
GP	37		X			
APPROVED BY	X		X	0		ACAD

THE CSA INTRINSICALLY SAFE CONTROL DRAWING	2120/2130
8/16mM	
71097/1315	
3	1/1

ISSUED BY	AREA	PROJECT CODE	REV.	DOC. TYPE	FILE	ACAD
GP	37		X			
APPROVED BY	X		X	0		ACAD

THE CSA INTRINSICALLY SAFE CONTROL DRAWING	2120/2130
8/16mM	
71097/1315	
3	1/1

ISSUED BY	AREA	PROJECT CODE	REV.	DOC. TYPE	FILE	ACAD
GP	37		X			
APPROVED BY	X		X	0		ACAD

THE CSA INTRINSICALLY SAFE CONTROL DRAWING	2120/2130
8/16mM	
71097/1315	
3	1/1

ISSUED BY	AREA	PROJECT CODE	REV.	DOC. TYPE	FILE	ACAD
GP	37		X			
APPROVED BY	X		X	0		ACAD

THE CSA INTRINSICALLY SAFE CONTROL DRAWING	2120/2130
8/16mM	
71097/1315	
3	1/1

ISSUED BY	AREA	PROJECT CODE	REV.	DOC. TYPE	FILE	ACAD
GP	37		X			
APPROVED BY	X		X	0		ACAD

THE CSA INTRINSICALLY SAFE CONTROL DRAWING	2120/2130
8/16mM	
71097/1315	
3	1/1

ISSUED BY	AREA	PROJECT CODE	REV.	DOC. TYPE	FILE	ACAD
GP	37		X			
APPROVED BY	X		X	0		ACAD

THE CSA INTRINSICALLY SAFE CONTROL DRAWING	2120/2130
8/16mM	
71097/1315	
3	1/1

ISSUED BY	AREA	PROJECT CODE	REV.	DOC. TYPE	FILE	ACAD
GP	37		X			
APPROVED BY	X		X	0		ACAD

THE CSA INTRINSICALLY SAFE CONTROL DRAWING	2120/2130
8/16mM	
71097/1315	
3	1/1

ISSUED BY	AREA	PROJECT CODE	REV.	DOC. TYPE	FILE	ACAD
GP	37		X			
APPROVED BY	X		X	0		ACAD

THE CSA INTRINSICALLY SAFE CONTROL DRAWING	2120/2130
8/16mM	
71097/1315	
3	1/1

ISSUED BY	AREA	PROJECT CODE	REV.	DOC. TYPE	FILE	ACAD
GP	37		X			
APPROVED BY	X		X	0		ACAD

THE CSA INTRINSICALLY SAFE CONTROL DRAWING	2120/2130
8/16mM	
71097/1315	
3	1/1

ISSUED BY	AREA	PROJECT CODE	REV.	DOC. TYPE	FILE	ACAD
GP	37		X			
APPROVED BY	X		X	0		ACAD

THE CSA INTRINSICALLY SAFE CONTROL DRAWING	2120/2130
8/16mM	
71097/1315	
3	1/1

ISSUED BY	AREA	PROJECT CODE	REV.	DOC. TYPE	FILE	ACAD
GP	37		X			
APPROVED BY	X		X	0		ACAD

THE CSA INTRINSICALLY SAFE CONTROL DRAWING	2120/2130
8/16mM	
71097/1315	
3	1/1

ISSUED BY	AREA	PROJECT CODE	REV.	DOC. TYPE	FILE	ACAD
GP	37		X			
APPROVED BY	X		X	0		ACAD

THE CSA INTRINSICALLY SAFE CONTROL DRAWING	2120/2130
8/16mM	
71097/1315	
3	1/1

ISSUED BY	AREA	PROJECT CODE	REV.	DOC. TYPE	FILE	ACAD
GP	37		X			
APPROVED BY	X		X	0		ACAD

THE CSA INTRINSICALLY SAFE CONTROL DRAWING	2120/2130
8/16mM	
71097/1315	
3	1/1

ISSUED BY	AREA	PROJECT CODE	REV.	DOC. TYPE	FILE	ACAD
GP	37		X			
APPROVED BY	X		X	0		ACAD

THE CSA INTRINSICALLY SAFE CONTROL DRAWING	2120/2130
8/16mM	
71097/1315	
3	1/1


ISSUED BY	AREA	PROJECT CODE	REV.	DOC. TYPE	FILE	ACAD
GP	37		X			
APPROVED BY	X		X	0		ACAD

THE CSA INTRINSICALLY SAFE CONTROL DRAWING	2120/2130
8/16mM	
71097/1315	
3	1/1


ISSUED BY	AREA	PROJECT CODE	REV.	DOC. TYPE	FILE	ACAD
GP	37		X			
APPROVED BY	X		X	0		ACAD

1.24 EU Declaration of Conformity

Figure 1-5: EU Declaration of Conformity



Declaration of Conformity



Rev. #4

We,

Rosemount Tank Radar AB
Layoutvägen 1
S-435 33 MÖLNLYCKE
Sweden

declare under our sole responsibility that the product,


Rosemount™ 2130 Series Vibrating Fork Liquid Level Switch

manufactured by,

Rosemount Tank Radar AB
Layoutvägen 1
S-435 33 MÖLNLYCKE
Sweden

to which this declaration relates, is in conformity with the provisions of the European Union Directives, including the latest amendments, as shown in the attached schedule.

Assumption of conformity is based on the application of the harmonized standards and, when applicable or required, a European Union notified body certification, as shown in the attached schedule.



(signature)

Dajana Prastalo
(name)

Sr. Manager Product Approvals

(function)

24-Jan-25; Mölnlycke
(date of issue & place)

Page 1 of 5



Declaration of Conformity

EMC Directive (2014/30/EU)

Rosemount 2130N***** (Namur cassette)
 Harmonized Standards:
 EN 61326-1:2013;
 EN 61326-2-3:2013;
 EN 60947-5-6:2001
 Other Standards used
 EN 61326-3-1 :2008

Rosemount 2130D***** (Relay Mains cassette)
 Rosemount 2130P***** (PNP/PLC cassette)
 Rosemount 2130M***** (8/16mA cassette)
 Rosemount 2130F***** (Fault Relay cassette)
 Harmonized Standards:
 EN 61326-1:2013;
 EN 61326-2-3:2013
 Other Standards used:
 EN61326-3-1 :2008

Rosemount 2130L***** (Direct Load cassette)
 Harmonized Standards:
 EN 61326-1:2013;
 EN 61326-2-3:2013

Other Standards used :
 IEC 61326-1:2020

ATEX Directive (2014/34/EU)

Sira 05ATEX2130X – Intrinsically safe (Gas & Dust)

Rosemount 2130N*****II (Namur cassette)
 Equipment Group II, Category 1GD
 Ex ia IIC T5...T2 Ga
 Ex ia IIIC T85°C...T265°C Da

Rosemount 2130M*****II (8/16mA cassette)
 Equipment Group II, Category 1GD
 Ex ia IIC T5...T2 Ga
 Ex ia IIIC T200 85°C...T200 265°C Da (Metallic housings)
 Ex ia IIIC T200 90°C...T200 265°C Da (Non-metallic housings)



Declaration of Conformity

Rosemount 2130N*****18 ;
 Rosemount 2130N*****11*R2364 (Namur cassette) ;
 Rosemount 2130M*****18 ;
 Rosemount 2130M*****18*R2634 (8/16mA cassette)
 Equipment Group II, Category 1/2G
 Ex ib IIC T5...T2 Ga/Gb
 Equipment Group II, Category 2D
 Ex ib IIIC T85°C...T265°C Db

Harmonized Standards:
 EN IEC 60079-0:2018 ;
 EN 60079-11:2012,
 EN 60079-26:2015

Sira 05ATEX1129X – Flameproof

Rosemount 2130*A2*****E1;
 Rosemount 2130*S2*****E1
 (All cassettes, M20 conduits)
 Equipment Group II, Category 1/2G
 Ex db IIC T6...T2 Ga/Gb
 Equipment Group II, Category 2D
 Ex tb IIIC T85°C...T265°C Db

Harmonized Standards:
 EN IEC 60079-0:2018/AC:2020;
 EN 60079-1:2014/AC:2018;
 EN 60079-26:2015;
 EN 60079-31:2014

LV Directive (2014/35/EU)

Rosemount 2130D***** (Relay Mains cassette);
 Rosemount 2130L***** (Direct Load cassette)
 Rosemount 2130F***** (Fault Relay cassette)

Harmonized Standards:
 EN 61010-1:2010 + A1:2019 + AC:2019:04;



Declaration of Conformity

RoHS Directive (2011/65/EU)

The Model 2130 is in conformity with Directive 2011/65/EU of the European Parliament and of the Council on the restriction of the use of certain hazardous substances in electrical and electronic equipment.



(Minor variations in design to suit the application and/or mounting requirements are identified by alpha/numeric characters where indicated * above)



Declaration of Conformity **CE**

ATEX Directive Notified Body

CSA Group Netherlands B.V. [Notified Body Number: 2813]
Utrechtseweg 310, 6812 AR,
Arnhem, Netherlands

ATEX Notified body for Quality Assurance

DNV Product Assurance AS [Notified Body Number: 2460]
Veritasveien 3
1363 Høvik
Norway



1.25 China RoHS

含有China RoHS管控物质超过最大浓度限值的部件型号列表 Rosemount 2130
List of Rosemount 2130 Parts with China RoHS Concentration above MCVs

部件名称 Part Name	有害物质 / Hazardous Substances					
	铅 Lead (Pb)	汞 Mercury (Hg)	镉 Cadmium (Cd)	六价铬 Hexavalent Chromium (Cr +6)	多溴联苯 Polybrominated biphenyls (PBB)	多溴联苯醚 Polybrominated diphenyl ethers (PBDE)
电子组件 Electronics Assembly	X	O	O	O	O	O
壳体组件 Housing Assembly	O	O	O	X	O	O
传感器组件 Sensor Assembly	X	O	O	O	O	O

本表格系依据SJ/T11364的规定而制作。

This table is proposed in accordance with the provision of SJ/T11364.

O: 意为该部件的所有均质材料中该有害物质的含量均低于GB/T 26572所规定的限量要求。

O: Indicate that said hazardous substance in all of the homogeneous materials for this part is below the limit requirement of GB/T 26572.

X: 意为在该部件所使用的的所有均质材料里，至少有一类均质材料中该有害物质的含量高于GB/T 26572所规定的限量要求。

X: Indicate that said hazardous substance contained in at least one of the homogeneous materials used for this part is above the limit requirement of GB/T 26572.



Product Certifications
00825-0200-4130, Rev. AG
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For more information: [Emerson.com/global](https://www.emerson.com/global)

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