

CERTIFICATE OF CONFORMITY



1. **HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT PER US REQUIREMENTS**
2. **Certificate No:** FM22US0054X
3. **Equipment:** NivoGuide NG 3000, NG 8000 series
(Type Reference and Name) Level Transmitter
4. **Name of Listing Company:** UWT GmbH
5. **Address of Listing Company:** Westendstraße 5
Betzigau
D-87488
Germany
6. The examination and test results are recorded in confidential report number:

PR463252 dated 13th September 2022
7. FM Approvals LLC, certifies that the equipment described has been found to comply with the following Approval standards and other documents:

FM Class 3600:2022, FM Class 3610:2021, FM Class 3611:2021, FM Class 3615:2022,
FM Class 3616:2011, FM Class 3810:2021, ANSI/IEC 60529:2004, ANSI/ISA 12.27.01:2011,
ANSI/UL 60079-0:2020, ANSI/UL 60079-1:2015, ANSI/UL 60079-11:2014, ANSI/ISA 60079-26:2017
ANSI/UL 121201:2019, ANSI/ISA 61010-1:2012, ANSI/NEMA 250:2008
8. If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to specific conditions of use specified in the schedule to this certificate.
9. This certificate relates to the design, examination and testing of the products specified herein. The FM Approvals surveillance audit program has further determined that the manufacturing processes and quality control procedures in place are satisfactory to manufacture the product as examined, tested and Approved.

Certificate issued by:

J.E. Marquedant
VP, Manager - Electrical Systems

13 September 2022

Date

To verify the availability of the Approved product, please refer to www.approvalguide.com

THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

FM Approvals LLC. 1151 Boston-Providence Turnpike, Norwood, MA 02062 USA
T: +1 (1) 781 762 4300 F: +1 (1) 781 762 9375 E-mail: information@fmapprovals.com www.fmapprovals.com

SCHEDULE



US Certificate Of Conformity No: FM22US0054X

10. Equipment Ratings:

I. IS (Div. 1) Version

Intrinsically Safe Apparatus for use in Class I, Division 1 or 2, Groups A, B, C & D, Class II, Division 1 or 2, Groups E, F & G, Class III, Division 1 or 2, in accordance with manufacturer's Control Drawing; Equipment protection by Intrinsic Safety AEx ia for use in Class I, Zone 0, Zone 1 or Zone 2, Group IIC, in accordance with manufacturer's Control Drawing, hazardous (classified) locations, indoors and outdoors, Type 4X/6P and IP66/67/68, Dual Seal

II. XP (Div. 1) Version

Explosionproof Equipment for use in Class I, Division 1, Groups A, B, C & D; Flameproof for Class I, Zone 1 AEx db IIC hazardous (classified) locations, indoors and outdoors, Type 4X/6P and IP66/68

III. NI (Div. 2) Version

Nonincendive Equipment for use in Class I, Division 2, Groups A, B, C & D, Class II, Division 2, Groups F & G, Class III, Division 1 or 2 hazardous (classified) locations, indoors and outdoors, Type 4X/6P and IP66/67/68, Dual Seal

IV. DIP (Div. 1) Version

Dust Ignitionproof Equipment for use in Class II, Division 1 or 2, Groups E, F & G; Class III hazardous (classified) locations, indoors and outdoors, Type 4X/6P and IP66/67/68, Dual Seal

11. The marking of the equipment shall include:

I. IS (Div. 1) Version

IS / CL I, DIV 1, GP ABCD / CL II, DIV 1, GP EFG / CL III / CL I, ZN 0, AEx ia IIC T6...T1*** Ga
-40°C ≤ Ta ≤ +60°C

Installation per Dwg 1013248 Entity
IP66/67 or IP66/68, Type 4X/6P*, DUAL SEAL**

WARNING – SUBSTITUTION OF COMPONENTS MAY IMPAIR SUITABILITY FOR CL I, DIV 2 AND
INTRINSIC SAFETY
COATING/PLASTIC PARTS - AVOID ELECTROSTATIC DISCHARGE

II. XP (Div. 1) Version

CL I, DIV 1, GP ABCD
CL I, Zone 0/1 AEx ia/db IIC T6...T1*** Ga/Gb
CL I, Zone 1, AEx db IIC T6...T1*** Gb
Ta = -50°C to +60°C
IP66/68, Type 4X/6P*

WARNING – DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT
SEAL ALL CONDUITS WITHIN 18 INCHES
COATING/PLASTIC PARTS - AVOID ELECTROSTATIC DISCHARGE

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US Certificate Of Conformity No: FM22US0054X

III. NI (Div. 2) Version

CL I, DIV 2, GP ABCD; CL II, III, DIV 2, GP FG, T***, $-40\text{ °C} \leq T_a \leq +60\text{ °C}$
IP66/67 or IP66/68, Type 4X/6P*, DUAL SEAL**

WARNING – SUBSTITUTION OF COMPONENTS MAY IMPAIR SUITABILITY FOR CL I, DIV 2

IV. DIP (Div. 1) Version

CL II, DIV 1, GP EFG, CL III; T***; $T_a = -40\text{ °C} \dots +60\text{ °C}$
IP66/67 or IP66/68, Type 4X/6P*, DUAL SEAL**

WARNING – DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT

Notes:

* Type 6P rating is available only for “Housing” model codes A, D, N

** DUAL SEAL rating is available only for “Housing” model code D

*** T6...T1 based on maximum process temperatures defined in Control Drawings 1013248, 1013249, 1013250 or 1013251 depending on the protection concept version

12. **Description of Equipment:**

General - The NivoGuide NG 3000, NG 8000 Series Level Transmitters employ guided wave radar in order to determine the distance between the surface of a filling material and the sensor by means of high frequency microwave impulses in the GHz range. It emits high frequency microwave impulses that are directed along a measuring rod, respectively measuring cable. The electronic equipment uses the duration of the signals reflected by the surface of the filling material in order to calculate the distance to the surface of the filling material.

Construction - The NivoGuide NG 3000, NG 8000 Series consist of one or two encapsulated electronics inserts assembled in a single or double-chambered housing. The housings are constructed out of Stainless Steel, or Aluminum. All versions of the enclosure provide two options for covers: one with a window for the NivoGuide display and adjustment modul internal display; and the standard solid cover without a window. The standard enclosure contains a single cover on the top, while the double chamber enclosure contains a cover on the top for the electronics and an additional cover mounted on the front that covers the wiring compartment. The internal NivoGuide display and adjustment modul can be mounted on the top, as the standard enclosure, or on the front of the double chamber enclosure. All enclosures include either two ½ NPT or two M20 metric threaded entries that allow the equipment to be wired in accordance with applicable installation requirements.

Ratings - The NivoGuide NG 3000, NG 8000 Level Measurement Series are intended to operate at: 9.6 to 35 VDC for 2-wire 4-20 mA/HART “Electronics” model codes A and B;

I. **IS (Div. 1) Version**

NivoGuide NG 3100 abcdefghijklmnop

a = A

b = Certificate: P

c = Process temperature / Lead-through of probe: One digit alphanumeric variable for suitable seals seal suitable for application including given process temperature, required IP or NEMA rating and environmental conditions.

d = Electronic module: A or B

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US Certificate Of Conformity No: FM22US0054X

ef = Process connection: Two digit alphanumeric variable for connections, which comply with an international, national or industrial standard with pressure ratings

g = 1

h = Type and length of extension: One digit alphanumeric variable for combination of version and material:

Exchangeable cable (ø4mm) / 316

Exchangeable rod (ø6mm) / 316

Exchangeable cable (ø6-11mm) with gravity weight / PA coated (gravity weight is uncoated),

Exchangeable rod (ø16mm)

Material: 316, 316L, Alloy C22 (2.4601), PA coating

i = Display and Adjustment Module / Inspection window in lid: 0, A, F, B

j = reserved, Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

k = Inspection certificate: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

l = Measurement loop identification label: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

m = Cable Entry: A, B, C, D, E, F or single digit representing suitably NRTL rated connection or cable gland

n = Language of operating instruction: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

o = reserved, Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

p = Housing: A, D, N

NivoGuide NG 8100 abcdefghijklmnop

a = A

b = Certificate: P

c = Process temperature / Seconde line of defense / Lead-through of probe: One digit alphanumeric variable for suitable seals seal suitable for application including given process temperature, required IP or NEMA rating and environmental conditions.

d = Electronic module: A or B

ef = Process connection: Two digit alphanumeric variable for connections, which comply with an international, national or industrial standard with pressure ratings

g = 1

h = Type and length of extension: One digit alphanumeric variable for combination of version and material:

Version: Coax with single or multiple hole (ø21.3mm or 42.2mm),

Exchangeable rod (ø8mm – 12mm)

Exchangeable cable (ø2mm – 4mm) without weight, with gravity or centering weight

Exchangeable coated cable (ø4mm) with uncoated centering weight

Material: 304L, 316, 316L, Alloy 400 (2.4360), Alloy C22 (2.4602), Alloy C276 (2.4819),

Duplex (1.4462), PFA coating

i = Display and Adjustment Module / Inspection window in lid: 0, A, F, B

j = Length of rigid part: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

k = Inspection certificate: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

l = Measurement loop identification label: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

m = Cable Entry: A, B, C, D, E, F or single digit representing suitably NRTL rated connection or cable gland

n = Language of operating instruction: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

o = reserved, Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

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US Certificate Of Conformity No: FM22US0054X

p = Housing: A, D, N

NivoGuide NG 8200 abcdefghijklmnop

a = B

b = Certificate: P

c = Process temperature / Seconde line of defense / Lead-through of probe: One digit alphanumeric variable for suitable seals seal suitable for application including given process temperature, required IP or NEMA rating and environmental conditions.

d = Electronic module: A or B

ef = Process connection: Two digit alphanumeric variable for connections, which comply with an international, national or industrial standard with pressure ratings

g = 1

h = Version/Material: One digit alphanumeric variable for combination of version and material:
Version: Coax with single or multiple hole (ø21.3mm or 42.2mm), without or with reference distance,
Exchangeable rod (ø8mm – 16mm)
Exchangeable cable (ø2mm – 4mm) without weight, with gravity or centering weight
Material: 316, 316L, Alloy C22 (2.4602), Alloy C276 (2.4819), Duplex (1.4462)

i = Display and Adjustment Module / Inspection window in lid: 0, A, F, B

j = 0

k = Inspection certificate: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

l = Measurement loop identification label: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

m = Cable Entry: A, B, C, D, E, F or single digit representing suitably NRTL rated connection or cable gland

n = Language of operating instruction: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

o = Approval for steam boiler: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

p = Housing: A, D, N

II. XP (Div. 1) Version

NivoGuide NG 3100 abcdefghijklmnop

a = A

b = Certificate: U

c = Process temperature / Lead-through of probe: One digit alphanumeric variable for suitable seals seal suitable for application including given process temperature, required IP or NEMA rating and environmental conditions.

d = Electronic module: A or B

ef = Process connection: Two digit alphanumeric variable for connections, which comply with an international, national or industrial standard with pressure ratings

g = 1

h = Type and length of extension: One digit alphanumeric variable for combination of version and material:
Exchangeable cable (ø4mm) / 316
Exchangeable rod (ø6mm) / 316
Exchangeable cable (ø6-11mm) with gravity weight / PA coated (gravity weight is uncoated),
Exchangeable rod (ø16mm)
Material: 316, 316L, Alloy C22 (2.4601), PA coating

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US Certificate Of Conformity No: FM22US0054X

- i = Display and Adjustment Module / Inspection window lid: 0, A, F, B
- j = reserved, Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties
- k = Inspection certificate: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties
- l = Measurement loop identification label: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties
- m = Cable Entry: A, B, C, D, E, F or single digit representing suitably NRTL rated connection or cable gland
- n = Language of operating instruction: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties
- o = reserved, Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties
- p = Housing: A or D

NivoGuide NG 8100 abcdefghijklmnop

- a = A
- b = Certificate: U
- c = Process temperature / Seconde line of defense / Lead-through of probe: One digit alphanumeric variable for suitable seals seal suitable for application including given process temperature, required IP or NEMA rating and environmental conditions.
- d = Electronic module: A or B
- ef = Process connection: Two digit alphanumeric variable for connections, which comply with an international, national or industrial standard with pressure ratings
- g = 1
- h = Type and length of extension: One digit alphanumeric variable for combination of version and material:
 - Version: Coax with single or multiple hole (ø21.3mm or 42.2mm),
 - Exchangeable rod (ø8mm – 12mm)
 - Exchangeable cable (ø2mm – 4mm) without weight, with gravity or centering weight
 - Exchangeable coated cable (ø4mm) with uncoated centering weight
 - Material: 304L, 316, 316L, Alloy 400 (2.4360), Alloy C22 (2.4602), Alloy C276 (2.4819), Duplex (1.4462), PFA coating
- i = Display and Adjustment Module / Inspection window in lid: 0, A, F, B
- j = Length of rigid part: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties
- k = Inspection certificate: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties
- l = Measurement loop identification label: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties
- m = Cable Entry:A, B, C, D, E, F or single digit representing suitably NRTL rated connection or cable gland
- n = Language of operating instruction: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties
- o = reserved, Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties
- p = Housing: A or D

NivoGuide NG 8200 abcdefghijklmnop

- a = B
- b = Certificate: U
- c = Process temperature / Seconde line of defense / Lead-through of probe: One digit alphanumeric

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US Certificate Of Conformity No: FM22US0054X

variable for suitable seals seal suitable for application including given process temperature, required IP or NEMA rating and environmental conditions.

d = Electronic module: A or B

ef = Process connection: Two digit alphanumeric variable for connections, which comply with an international, national or industrial standard with pressure ratings

g = 1

h = Version/Material: One digit alphanumeric variable for combination of version and material:

Version: Coax with single or multiple hole ($\varnothing 21.3\text{mm}$ or 42.2mm), without or with reference distance,

Exchangeable rod ($\varnothing 8\text{mm} - 16\text{mm}$)

Exchangeable cable ($\varnothing 2\text{mm} - 4\text{mm}$) without weight, with gravity or centering weight

Material: 316, 316L, Alloy C22 (2.4602), Alloy C276 (2.4819), Duplex (1.4462)

i = Display and Adjustment Module / Inspection window in lid: 0, A, F, B

j = 0

k = Inspection certificate: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

l = Measurement loop identification label: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

m = Cable Entry: A, B, C, D, E, F or single digit representing suitably NRTL rated connection or cable gland

n = Language of operating instruction: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

o = Approval for steam boiler: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

p = Housing: A or D

III. NI (Div. 2) Version

NivoGuide NG 3100 abcdefghijklmnop

a = A

b = Certificate: H

c = Process temperature / Lead-through of probe: One digit alphanumeric variable for suitable seals seal suitable for application including given process temperature, required IP or NEMA rating and environmental conditions.

d = Electronic module: A or B

ef = Process connection: Two digit alphanumeric variable for connections, which comply with an international, national or industrial standard with pressure ratings

g = 1

h = Type and length of extension: One digit alphanumeric variable for combination of version and material:

Exchangeable cable ($\varnothing 4\text{mm}$) / 316

Exchangeable rod ($\varnothing 6\text{mm}$) / 316

Exchangeable cable ($\varnothing 6-11\text{mm}$) with gravity weight / PA coated (gravity weight is uncoated),

Exchangeable rod ($\varnothing 16\text{mm}$)

Material: 316, 316L, Alloy C22 (2.4601), PA coating

i = Display and Adjustment Module / Inspection window in lid: 0, A, F, B

j = reserved, Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

k = Inspection certificate: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

l = Measurement loop identification label: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

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m = Cable Entry: A, B, C, D, E, F or single digit representing suitably NRTL rated connection or cable gland
n = Language of operating instruction: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties
o = reserved, Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties
p = Housing: A, D, N

NivoGuide NG 8100 abcdefghijklmnop

a = A
b = Certificate: H
c = Process temperature / Seconde line of defense / Lead-through of probe: One digit alphanumeric variable for suitable seals seal suitable for application including given process temperature, required IP or NEMA rating and environmental conditions.
d = Electronic module: A or B
ef = Process connection: Two digit alphanumeric variable for connections, which comply with an international, national or industrial standard with pressure ratings
g = 1
h = Type and length of extension: One digit alphanumeric variable for combination of version and material:
Version: Coax with single or multiple hole (ø21.3mm or 42.2mm),
Exchangeable rod (ø8mm – 12mm)
Exchangeable cable (ø2mm – 4mm) without weight, with gravity or centering weight
Exchangeable coated cable (ø4mm) with uncoated centering weight
Material: 304L, 316, 316L, Alloy 400 (2.4360), Alloy C22 (2.4602), Alloy C276 (2.4819), Duplex (1.4462), PFA coating
i = Display and Adjustment Module / Inspection window in lid: 0, A, F, B
j = Length of rigid part: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties
k = Inspection certificate: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties
l = Measurement loop identification label: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties
m = Cable Entry: A, B, C, D, E, F or single digit representing suitably NRTL rated connection or cable gland
n = Language of operating instruction: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties
o = reserved, Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties
p = Housing: A, D, N

NivoGuide NG 8200 abcdefghijklmnop

a = B
b = Certificate: H
c = Process temperature / Seconde line of defense / Lead-through of probe: One digit alphanumeric variable for suitable seals seal suitable for application including given process temperature, required IP or NEMA rating and environmental conditions.
d = Electronic module: A or B
ef = Process connection: Two digit alphanumeric variable for connections, which comply with an international, national or industrial standard with pressure ratings
g = 1
h = Version/Material: One digit alphanumeric variable for combination of version and material:

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US Certificate Of Conformity No: FM22US0054X

Version: Coax with single or multiple hole (\varnothing 21.3mm or 42.2mm), without or with reference distance,
Exchangeable rod (\varnothing 8mm – 16mm)

Exchangeable cable (\varnothing 2mm – 4mm) without weight, with gravity or centering weight

Material: 316, 316L, Alloy C22 (2.4602), Alloy C276 (2.4819), Duplex (1.4462)

i = Display and Adjustment Module / Inspection window in lid: 0, A, F, B

j = 0

k = Inspection certificate: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

l = Measurement loop identification label: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

m = Cable Entry: A, B, C, D, E, F or single digit representing suitably NRTL rated connection or cable gland

n = Language of operating instruction: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

o = Approval for steam boiler: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

p = Housing: A, D, N

IV. DIP (Div. 1) Version

NivoGuide NG 3100 abcdefghijklmnop

a = A

b = Certificate: N

c = Process temperature / Lead-through of probe: One digit alphanumeric variable for suitable seals seal suitable for application including given process temperature, required IP or NEMA rating and environmental conditions.

d = Electronic module: A or B

ef = Process connection: Two digit alphanumeric variable for connections, which comply with an international, national or industrial standard with pressure ratings

g = 1

h = Type and length of extension: One digit alphanumeric variable for combination of version and material:

Exchangeable cable (\varnothing 4mm) / 316

Exchangeable rod (\varnothing 6mm) / 316

Exchangeable cable (\varnothing 6-11mm) with gravity weight / PA coated (gravity weight is uncoated),

Exchangeable rod (\varnothing 16mm)

Material: 316, 316L, Alloy C22 (2.4601), PA coating

i = Display and Adjustment Module / Inspection window in lid: 0, A, F, B

j = reserved, Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

k = Inspection certificate: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

l = Measurement loop identification label: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

m = Cable Entry: A, B, C, D, E, F or single digit representing suitably NRTL rated connection or cable gland

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o = reserved, Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

p = Housing: A or D

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a = A

b = Certificate: N

c = Process temperature / Seconde line of defense / Lead-through of probe: One digit alphanumeric variable for suitable seals seal suitable for application including given process temperature, required IP or NEMA rating and environmental conditions.

d = Electronic module: A or B

ef = Process connection: Two digit alphanumeric variable for connections, which comply with an international, national or industrial standard with pressure ratings

g = 1

h = Type and length of extension: One digit alphanumeric variable for combination of version and material:
Version: Coax with single or multiple hole (ø21.3mm or 42.2mm),
Exchangeable rod (ø8mm – 12mm)
Exchangeable cable (ø2mm – 4mm) without weight, with gravity or centering weight
Exchangeable coated cable (ø4mm) with uncoated centering weight
Material: 304L, 316, 316L, Alloy 400 (2.4360), Alloy C22 (2.4602), Alloy C276 (2.4819),
Duplex (1.4462), PFA coating

i = Display and Adjustment Module / Inspection window in lid: 0, A, F, B

j = Length of rigid part: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

k = Inspection certificate: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

l = Measurement loop identification label: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

m = Cable Entry: A, B, C, D, E, F or single digit representing suitably NRTL rated connection or cable gland

n = Language of operating instruction: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

o = reserved, Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

p = Housing: A or D

NivoGuide NG 8200 abcdefghijklmnop

a = B

b = Certificate: N

c = Process temperature / Seconde line of defense / Lead-through of probe: One digit alphanumeric variable for suitable seals seal suitable for application including given process temperature, required IP or NEMA rating and environmental conditions.

d = Electronic module: A or B

ef = Process connection: Two digit alphanumeric variable for connections, which comply with an international, national or industrial standard with pressure ratings

g = 1

h = Version/Material: One digit alphanumeric variable for combination of version and material:
Version: Coax with single or multiple hole (ø21.3mm or 42.2mm), without or with reference distance,
Exchangeable rod (ø8mm – 16mm)
Exchangeable cable (ø2mm – 4mm) without weight, with gravity or centering weight
Material: 316, 316L, Alloy C22 (2.4602), Alloy C276 (2.4819), Duplex (1.4462)

i = Display and Adjustment Module / Inspection window in lid: 0, A, F, B

j = 0

k = Inspection certificate: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

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US Certificate Of Conformity No: FM22US0054X

l = Measurement loop identification label: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

m = Cable Entry: A, B, C, D, E, F or single digit representing suitably NRTL rated connection or cable gland

n = Language of operating instruction: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

o = Approval for steam boiler: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

p = Housing: A or D

13. Specific Conditions of Use:

I. IS (Div. 1) Version

1. For Division 1, Division 2, Zone 0, Zone 1, and Zone 2 Approvals, the process probes are suitable for connections to Class I, II & III, Division 1, Groups A, B, C, D, E, F & G and Class I, Zone 0, Groups IIC hazardous (classified) locations. The equipment can be installed in the boundary wall between a Zone 0 and Zone 1 location
2. Potential Electrostatic Charging Hazard – The enclosure and process connection is coated with plastic. To prevent the risk of electrostatic sparking the plastic surface should only be cleaned with a damp cloth.
3. Enclosures containing aluminum constitute a potential risk of ignition by impact or friction. Care must be taken into account during installation and use to prevent impact or friction.

II. XP (Div. 1) Version

1. For Division 1 and Division 2 Approvals, the process probes are suitable for connections to Class I, Division 1, Groups A, B, C, & D and Class I, Zone 1, Group IIC hazardous (classified) locations. The equipment can be installed in the boundary wall between a Zone 0 and Zone 1 location.
2. Enclosures containing aluminum constitute a potential risk of ignition by impact or friction. Care must be taken into account during installation and use to prevent impact or friction.

III. NI (Div. 2) Version

1. For Division 2 Approvals, the sensor probes are suitable for connections to Class I, II & III, Division 1, Groups A, B, C, D, E, F & G hazardous (classified) locations.
2. Potential Electrostatic Charging Hazard – The enclosure and process connection is coated with plastic. To prevent the risk of electrostatic sparking the plastic surface should only be cleaned with a damp cloth.
3. Enclosures containing aluminum constitute a potential risk of ignition by impact or friction. Care must be taken into account during installation and use to prevent impact or friction.

IV. DIP (Div. 1) Version

1. For Division 1 and Division 2 Approvals, the sensor probes are suitable for connections to Class II & III, Division 1, Groups E, F & G hazardous (classified) locations.

THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

FM Approvals LLC. 1151 Boston-Providence Turnpike, Norwood, MA 02062 USA

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SCHEDULE



US Certificate Of Conformity No: FM22US0054X

14. **Test and Assessment Procedure and Conditions:**

This Certificate has been issued in accordance with FM Approvals US Certification Requirements.

15. **Schedule Drawings**

A copy of the technical documentation has been kept by FM Approvals.

16. **Certificate History**

Details of the supplements to this certificate are described below:

Date	Description
13 th September 2022	Original Issue.

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