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CERTIFICATE OF COMPLIANCE

HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT

This certificate is issued for the following equipment:

N7230-Sbcddefgh. 7200 Series Radar Tank Gauge

IS/I,II,III/1/ABCDEFGH/T*;I/O/AEx ia IIC T*; Entity, NI/II/2/ABCD/T*; DIP/III/III/1/EFH/T*; Type 4X,
Antenna Type 6P. *Refer to Control Drawing for Temperature Class.

Maximum entity parameters:

For e = A, B, K: $V_{max} = 30$ Vdc, $I_{max} = 300$ mA, $P_i = 1$ W, $C_i = 13$ nF, $L_i = 0$;

For e = C, D, L: Profibus PA (FISCO): $V_{max} = 17.5$ Vdc, $I_{max} = 500$ mA, $P_i = 5.5$ W, $C_i = 5$ nF, $L_i = 10$ μ H;
or $V_{max} = 24$ V, $I_{max} = 250$ mA, $P_i = 1.2$ W, $C_i = 5$ nF, $L_i = 10$ μ H.

For e = E, F, M: Foundation Fieldbus (FISCO): $V_{max} = 17.5$ Vdc, $I_{max} = 500$ mA, $P_i = 5.5$ W, $C_i = 5$ nF, $L_i = 10$ μ H;
or $V_{max} = 24$ V, $I_{max} = 250$ mA, $P_i = 1.2$ W, $C_i = 5$ nF, $L_i = 10$ μ H.

For e = A, B and f = D: $V_{max} = 30$ Vdc, $I_{max} = 273$ mA, $P_i = 1$ W, $C_i = 13$ nF, $L_i = 0$;

For e = C, D and f = D: Profibus PA (FISCO): $V_{max} = 17.5$ V dc, $I_{max} = 273$ mA, $P_i = 1.2$ W, $C_i = 5$ nF, $L_i = 10$ μ H
 $V_{max} = 24$ V, $I_{max} = 250$ mA, $P_i = 1.2$ W, $C_i = 5$ nF, $L_i = 10$ μ H

For e = E, F and f = D: Foundation Fieldbus (FISCO): $V_{max} = 17.5$ V dc, $I_{max} = 273$ mA, $P_i = 1.2$ W, $C_i = 5$ nF, $L_i = 10$ μ H;
or $V_{max} = 24$ V, $I_{max} = 250$ mA, $P_i = 1.2$ W, $C_i = 5$ nF, $L_i = 10$ μ H

b = Antenna size; any single letter or number.

c = Type of sealing, temperature; any single letter or number (e.g.: E, V, K, D, F, G, H, L or M).

ddd = Process connections, any three letter / number combination representing standard industrial process connections.

e = Output and Operation:

A,B: (4..20 mA HART with/without display VU331),

C,D: (Profibus PA with/without display VU331),

E,F: (Foundation Fieldbus with/without display VU331),

K: (4..20 mA HART prepared for FHX40),

L: (Profibus PA prepared for display FHX40),

M: (Foundation Fieldbus prepared for display FHX40), or

x: (special version not relevant for safety e.g. software adjustment; any not used letter or number).

f = A, B, or D.

g = Cable entry 1 (PG 13.5), 2 (M20x1.5), 3 (G1/2), 4 (NPT 1/2), 5 (M12 PA plug), 6 (7/8" FF plug)
or x = special version.

h = Additional options not relevant to safety; any single letter or number.

N7231-Sbccccdefgh. 7200 Series Radar Tank Gauge

IS/I,II,III/1/ABCDEFGH/T*/I/0/AEx ia IIC T*; Entity, NI/II/2/ABCD/T*; DIP/III/III/1/EFG/T*; Type 4X, Antenna Type 6P. *Refer to Control Drawing for Temperature Class.

Maximum entity parameters:

For d = A, B, K: $V_{max} = 30 \text{ Vdc}$, $I_{max} = 300 \text{ mA}$, $P_i = 1 \text{ W}$, $C_i = 13 \text{ nF}$, $L_i = 0$;

For d = C, D, L: Profibus PA (FISCO): $V_{max} = 17.5 \text{ Vdc}$, $I_{max} = 500 \text{ mA}$, $P_i = 5.5 \text{ W}$, $C_i = 5 \text{ nF}$, $L_i = 10 \mu\text{H}$;
or $V_{max} = 24 \text{ V}$, $I_{max} = 250 \text{ mA}$, $P_i = 1.2 \text{ W}$, $C_i = 5 \text{ nF}$, $L_i = 10 \mu\text{H}$.

For d = E, F, M: Foundation Fieldbus (FISCO): $V_{max} = 17.5 \text{ Vdc}$, $I_{max} = 500 \text{ mA}$, $P_i = 5.5 \text{ W}$, $C_i = 5 \text{ nF}$, $L_i = 10 \mu\text{H}$;
or $V_{max} = 24 \text{ V}$, $I_{max} = 250 \text{ mA}$, $P_i = 1.2 \text{ W}$, $C_i = 5 \text{ nF}$, $L_i = 10 \mu\text{H}$.

For d = A, B and e = D: $V_{max} = 30 \text{ Vdc}$, $I_{max} = 273 \text{ mA}$, $P_i = 1 \text{ W}$, $C_i = 13 \text{ nF}$, $L_i = 0$;

For d = C, D and e = D: Profibus PA (FISCO): $V_{max} = 17.5 \text{ Vdc}$, $I_{max} = 273 \text{ mA}$, $P_i = 1.2 \text{ W}$, $C_i = 5 \text{ nF}$, $L_i = 10 \mu\text{H}$;
 $V_{max} = 24 \text{ V}$, $I_{max} = 250 \text{ mA}$, $P_i = 1.2 \text{ W}$, $C_i = 5 \text{ nF}$, $L_i = 10 \mu\text{H}$

For d = E, F and e = D: Foundation Fieldbus (FISCO): $V_{max} = 17.5 \text{ Vdc}$, $I_{max} = 273 \text{ mA}$, $P_i = 1.2 \text{ W}$, $C_i = 5 \text{ nF}$, $L_i = 10 \mu\text{H}$;
or $V_{max} = 24 \text{ V}$, $I_{max} = 250 \text{ mA}$, $P_i = 1.2 \text{ W}$, $C_i = 5 \text{ nF}$, $L_i = 10 \mu\text{H}$

b = Type of antenna, gasket, inactive length; A, B (PPS antenna, alternate length), E, F (PTFE antenna, alternate length), H, J, (PTFE antenna, antistatic, alternate length) or x (special, e.g.: length).

ccc = Process connections, any three letter / number combination representing standard industrial process connections.

d= Output and Operation:

A,B: (4..20 mA HART with/without display VU331),

C,D: (Profibus PA with/without display VU331),

E,F: (Foundation Fieldbus with/without display VU331),

K: (4..20 mA HART prepared for FHX40),

L: (Profibus PA prepared for display FHX40),

M: (Foundation Fieldbus prepared for display FHX40), or

x: (special version not relevant for safety e.g. software adjustment; any not used letter or number)

e = A, B, or D.

f = Cable entry 1 (PG 13.5), 2 (M20x1.5), 3 (G1/2), 4 (NPT 1/2), 5 (M12 PA plug), 6 (7/8" FF plug)
or x = special version.

g = Gas tight feed through A (without) or C (gas tight feed through).

h = Additional options not relevant to safety; any single letter or number.

N7232-Sbccccdefg. 7200 Series Radar Tank Gauge

IS/I,II,III/1/ABCDEFGH/T*/I/0/AEx ia IIC T*; Entity, NI/II/2/ABCD/T*; DIP/III/III/1/EFG/T*; Type 4X, Antenna Type 6P. *Refer to Control Drawing for Temperature Class.

Maximum entity parameters:

For d = A, B, K: $V_{max} = 30 \text{ Vdc}$, $I_{max} = 300 \text{ mA}$, $P_i = 1 \text{ W}$, $C_i = 13 \text{ nF}$, $L_i = 0$;

For d = C, D, L: Profibus PA (FISCO): $V_{max} = 17.5 \text{ Vdc}$, $I_{max} = 500 \text{ mA}$, $P_i = 5.5 \text{ W}$, $C_i = 5 \text{ nF}$, $L_i = 10 \mu\text{H}$;
or $V_{max} = 24 \text{ V}$, $I_{max} = 250 \text{ mA}$, $P_i = 1.2 \text{ W}$, $C_i = 5 \text{ nF}$, $L_i = 10 \mu\text{H}$.

For d = E, F, M: Foundation Fieldbus (FISCO): $V_{max} = 17.5 \text{ Vdc}$, $I_{max} = 500 \text{ mA}$, $P_i = 5.5 \text{ W}$, $C_i = 5 \text{ nF}$, $L_i = 10 \mu\text{H}$;
or $V_{max} = 24 \text{ V}$, $I_{max} = 250 \text{ mA}$, $P_i = 1.2 \text{ W}$, $C_i = 5 \text{ nF}$, $L_i = 10 \mu\text{H}$.

For d = A, B and e = D: $V_{max} = 30 \text{ Vdc}$, $I_{max} = 273 \text{ mA}$, $P_i = 1 \text{ W}$, $C_i = 13 \text{ nF}$, $L_i = 0$;

For d = C, D and e = D: Profibus PA (FISCO): $V_{max} = 17.5 \text{ Vdc}$, $I_{max} = 273 \text{ mA}$, $P_i = 1.2 \text{ W}$, $C_i = 5 \text{ nF}$, $L_i = 10 \mu\text{H}$;
 $V_{max} = 24 \text{ V}$, $I_{max} = 250 \text{ mA}$, $P_i = 1.2 \text{ W}$, $C_i = 5 \text{ nF}$, $L_i = 10 \mu\text{H}$

For d = E, F and e = D: Foundation Fieldbus (FISCO): $V_{max} = 17.5 \text{ Vdc}$, $I_{max} = 273 \text{ mA}$, $P_i = 1.2 \text{ W}$, $C_i = 5 \text{ nF}$, $L_i = 10 \mu\text{H}$;
or $V_{max} = 24 \text{ V}$, $I_{max} = 250 \text{ mA}$, $P_i = 1.2 \text{ W}$, $C_i = 5 \text{ nF}$, $L_i = 10 \mu\text{H}$

b= Antenna type; any single letter or number.

ccc = Process connections, any three letter / number combination representing standard industrial process connections.

d= Output and Operation:

A,B: (4..20 mA HART with/without display VU331),

C,D: (Profibus PA with/without display VU331),

E,F: (Foundation Fieldbus with/without display VU331),

K: (4..20 mA HART prepared for FHX40),

L: (Profibus PA prepared for display FHX40),
M: (Foundation Fieldbus prepared for display FHX40), or
x: (special version not relevant for safety e.g. software adjustment; any not used letter or number).

e = A, B, or D.

f = Cable entry 1 (PG 13.5), 2 (M20x1.5), 3 (G1/2), 4 (NPT 1/2), 5 (M12 PA plug), 6 (7/8" FF plug)
or x = special version.

g = Additional options not relevant to safety; any single letter or number.

N7233-Sbccccdefg. 7200 Series Radar Tank Gauge

IS/I,II,III/1/ABCDEFG/T*;I/O/AEx ia IIC T*; Entity, NI/I/2/ABCD/T*; DIP/II/III/1/EFG/T*; Type 4X,
Antenna Type 6P. *Refer to Control Drawing for Temperature Class.

Maximum entity parameters:

For d = A, B, K: $V_{max} = 30 \text{ Vdc}$, $I_{max} = 300 \text{ mA}$, $P_i = 1 \text{ W}$, $C_i = 13 \text{ nF}$, $L_i = 0$;

For d = C, D, L: Profibus PA (FISCO): $V_{max} = 17.5 \text{ Vdc}$, $I_{max} = 500 \text{ mA}$, $P_i = 5.5 \text{ W}$, $C_i = 5 \text{ nF}$, $L_i = 10 \mu\text{H}$;
or $V_{max} = 24 \text{ V}$, $I_{max} = 250 \text{ mA}$, $P_i = 1.2 \text{ W}$, $C_i = 5 \text{ nF}$, $L_i = 10 \mu\text{H}$.

For d = E, F, M: Foundation Fieldbus (FISCO): $V_{max} = 17.5 \text{ Vdc}$, $I_{max} = 500 \text{ mA}$, $P_i = 5.5 \text{ W}$, $C_i = 5 \text{ nF}$, $L_i = 10 \mu\text{H}$;
or $V_{max} = 24 \text{ V}$, $I_{max} = 250 \text{ mA}$, $P_i = 1.2 \text{ W}$, $C_i = 5 \text{ nF}$, $L_i = 10 \mu\text{H}$.

For d = A, B and e = D: $V_{max} = 30 \text{ Vdc}$, $I_{max} = 273 \text{ mA}$, $P_i = 1 \text{ W}$, $C_i = 13 \text{ nF}$, $L_i = 0$;

For d = C, D and e = D: Profibus PA (FISCO): $V_{max} = 17.5 \text{ Vdc}$, $I_{max} = 273 \text{ mA}$, $P_i = 1.2 \text{ W}$, $C_i = 5 \text{ nF}$, $L_i = 10 \mu\text{H}$
 $V_{max} = 24 \text{ V}$, $I_{max} = 250 \text{ mA}$, $P_i = 1.2 \text{ W}$, $C_i = 5 \text{ nF}$, $L_i = 10 \mu\text{H}$

For d = E, F and e = D: Foundation Fieldbus (FISCO): $V_{max} = 17.5 \text{ Vdc}$, $I_{max} = 273 \text{ mA}$, $P_i = 1.2 \text{ W}$, $C_i = 5 \text{ nF}$, $L_i = 10 \mu\text{H}$;
or $V_{max} = 24 \text{ V}$, $I_{max} = 250 \text{ mA}$, $P_i = 1.2 \text{ W}$, $C_i = 5 \text{ nF}$, $L_i = 10 \mu\text{H}$

b= Antenna type; any single letter or number.

ccc = Process connections, any three letter / number combination representing standard industrial process connections.

d= Output and Operation:

A,B: (4..20 mA HART with/without display VU331),

C,D: (Profibus PA with/without display VU331),

E,F: (Foundation Fieldbus with/without display VU331),

K: (4..20 mA HART prepared for FHX40),

L: (Profibus PA prepared for display FHX40),

M: (Foundation Fieldbus prepared for display FHX40), or

x: (special version not relevant for safety e.g. software adjustment; any not used letter or number).

e = A, B, or D.

f = Cable entry 1 (PG 13.5), 2 (M20x1.5), 3 (G1/2), 4 (NPT 1/2), 5 (M12 PA plug), 6 (7/8" FF plug)
or x = special version.

g = Additional options not relevant to safety; any single letter or number.

N7240-Sbcdeeeefghi. 7200 Series Radar Tank Gauge

IS/I,II,III/1/ABCDEFG/T*;I/O/AEx ia IIC T*; Entity, NI/I/2/ABCD/T*; DIP/II/III/1/EFG/T*; Type 4X,
Antenna Type 6P. *Refer to Control Drawing for Temperature Class.

Maximum entity parameters:

For f = A, B, K: $V_{max} = 30 \text{ Vdc}$, $I_{max} = 300 \text{ mA}$, $P_i = 1 \text{ W}$, $C_i = 13 \text{ nF}$, $L_i = 0$;

For f = C, D, L: Profibus PA (FISCO): $V_{max} = 17.5 \text{ Vdc}$, $I_{max} = 500 \text{ mA}$, $P_i = 5.5 \text{ W}$, $C_i = 5 \text{ nF}$, $L_i = 10 \mu\text{H}$;
or $V_{max} = 24 \text{ V}$, $I_{max} = 250 \text{ mA}$, $P_i = 1.2 \text{ W}$, $C_i = 5 \text{ nF}$, $L_i = 10 \mu\text{H}$.

For f = E, F, M: Foundation Fieldbus (FISCO): $V_{max} = 17.5 \text{ Vdc}$, $I_{max} = 500 \text{ mA}$, $P_i = 5.5 \text{ W}$, $C_i = 5 \text{ nF}$, $L_i = 10 \mu\text{H}$;
or $V_{max} = 24 \text{ V}$, $I_{max} = 250 \text{ mA}$, $P_i = 1.2 \text{ W}$, $C_i = 5 \text{ nF}$, $L_i = 10 \mu\text{H}$.

For f = A, B and g = D: $V_{max} = 30 \text{ Vdc}$, $I_{max} = 273 \text{ mA}$, $P_i = 1 \text{ W}$, $C_i = 13 \text{ nF}$, $L_i = 0$;

For f = C, D and g = D: Profibus PA (FISCO): $V_{max} = 17.5 \text{ Vdc}$, $I_{max} = 273 \text{ mA}$, $P_i = 1.2 \text{ W}$, $C_i = 5 \text{ nF}$, $L_i = 10 \mu\text{H}$
 $V_{max} = 24 \text{ V}$, $I_{max} = 250 \text{ mA}$, $P_i = 1.2 \text{ W}$, $C_i = 5 \text{ nF}$, $L_i = 10 \mu\text{H}$

For f = E, F and g = D: Foundation Fieldbus (FISCO): $V_{max} = 17.5 \text{ Vdc}$, $I_{max} = 273 \text{ mA}$, $P_i = 1.2 \text{ W}$, $C_i = 5 \text{ nF}$, $L_i = 10 \mu\text{H}$;
or $V_{max} = 24 \text{ V}$, $I_{max} = 250 \text{ mA}$, $P_i = 1.2 \text{ W}$, $C_i = 5 \text{ nF}$, $L_i = 10 \mu\text{H}$

- b = Antenna size; any single letter or number.
and 7 = mm Wave Guide Antenna
8 = inch Wave Guide Antenna
- c = Type of antenna, sealing, temperature, any single letter or number.
Standard: up to 150°C,
with Wave Guide up to 200°C
- ddd = Process connections, any three letter / number combination representing standard industrial process connections.
- f = Output and Operation:
A,B: (4..20 mA HART with/without display VU331),
C,D: (Profibus PA with/without display VU331),
E,F: (Foundation Fieldbus with/without display VU331),
K: (4..20 mA HART prepared for FHX40),
L: (Profibus PA prepared for display FHX40),
M: (Foundation Fieldbus prepared for display FHX40), or
x: (special version not relevant for safety e.g. software adjustment; any not used letter or number).
- g = A, B, or D.
- h = Cable entry 1 (PG 13.5), 2 (M20x1.5), 3 (G1/2), 4 (NPT 1/2), 5 (M12 PA plug), 6 (7/8" FF plug) or x = special version.
- i = Additional options not relevant to safety; any single letter or number.

N7244-Sbcddefgh. 7200 Series Radar Tank Gauge

IS/I,II,III/1/ABCDEFG/T*;I/O/AEx ia IIC T*; Entity; NI/II/2/ABCD/T*; DIP/III/III/1/EFG/T*; Type 4X, Antenna 6P.
*Refer to Control Drawing for Temperature Class.

Maximum entity parameters:

- For e = A, B, K: $V_{max} = 30 \text{ Vdc}$, $I_{max} = 300 \text{ mA}$, $P_i = 1 \text{ W}$, $C_i = 13 \text{ nF}$, $L_i = 0$;
- For e = C, D, L: Profibus PA (FISCO): $V_{max} = 17.5 \text{ Vdc}$, $I_{max} = 500 \text{ mA}$, $P_i = 5.5 \text{ W}$, $C_i = 5 \text{ nF}$, $L_i = 10 \mu\text{H}$;
or $V_{max} = 24 \text{ V}$, $I_{max} = 250 \text{ mA}$, $P_i = 1.2 \text{ W}$, $C_i = 5 \text{ nF}$, $L_i = 10 \mu\text{H}$.
- For e = E, F, M: Foundation Fieldbus (FISCO): $V_{max} = 17.5 \text{ Vdc}$, $I_{max} = 500 \text{ mA}$, $P_i = 5.5 \text{ W}$, $C_i = 5 \text{ nF}$, $L_i = 10 \mu\text{H}$;
or $V_{max} = 24 \text{ V}$, $I_{max} = 250 \text{ mA}$, $P_i = 1.2 \text{ W}$, $C_i = 5 \text{ nF}$, $L_i = 10 \mu\text{H}$.
- For e = A, B and f = D: $V_{max} = 30 \text{ Vdc}$, $I_{max} = 273 \text{ mA}$, $P_i = 1 \text{ W}$, $C_i = 13 \text{ nF}$, $L_i = 0$;
- For e = C, D and f = D: Profibus PA (FISCO): $V_{max} = 17.5 \text{ Vdc}$, $I_{max} = 273 \text{ mA}$, $P_i = 1.2 \text{ W}$, $C_i = 5 \text{ nF}$, $L_i = 10 \mu\text{H}$
 $V_{max} = 24 \text{ V}$, $I_{max} = 250 \text{ mA}$, $P_i = 1.2 \text{ W}$, $C_i = 5 \text{ nF}$, $L_i = 10 \mu\text{H}$
- For e = E, F and f = D: Foundation Fieldbus (FISCO): $V_{max} = 17.5 \text{ Vdc}$, $I_{max} = 273 \text{ mA}$, $P_i = 1.2 \text{ W}$, $C_i = 5 \text{ nF}$, $L_i = 10 \mu\text{H}$; or $V_{max} = 24 \text{ V}$, $I_{max} = 250 \text{ mA}$, $P_i = 1.2 \text{ W}$, $C_i = 5 \text{ nF}$, $L_i = 10 \mu\text{H}$

- b = Antenna size; any single letter or number.
- c = Type of antenna, sealing, temperature, any single letter or number.
- ddd = Process connections, any three letter / number combination representing standard industrial process connections.
- e = Output and Operation:
A,B: (4..20 mA HART with/without display VU331),
C,D: (Profibus PA with/without display VU331),
E,F: (Foundation Fieldbus with/without display VU331),
K: (4..20 mA HART prepared for FHX40),
L: (Profibus PA prepared for display FHX40),
M: (Foundation Fieldbus prepared for display FHX40), or
x: (special version not relevant for safety e.g. software adjustment; any not used letter or number).
- f = A, B or D.
- g = Cable entry 1 (PG 13.5), 2 (M20x1.5), 3 (G1/2), 4 (NPT 1/2), 5 (M12 PA plug), 6 (7/8" FF plug) or x = special version.
- h = Additional options not relevant to safety; any single letter or number.

N7245-Sbcccdefg. 7200 Series Radar Tank Gauge

IS/I,II,III/1/ABCDEFG/T*/I/O/AEx ia IIC T*; Entity; NI/II/2/ABCD/T*; DIP/II/III/1/EFG/T*; Type 4X, Antenna 6P.

*Refer to Control Drawing for Temperature Class.

Maximum entity parameters:

For d = A, B, K: $V_{max} = 30 \text{ Vdc}$, $I_{max} = 300 \text{ mA}$, $P_i = 1 \text{ W}$, $C_i = 13 \text{ nF}$, $L_i = 0$;

For d = C, D, L: Profibus PA (FISCO): $V_{max} = 17.5 \text{ Vdc}$, $I_{max} = 500 \text{ mA}$, $P_i = 5.5 \text{ W}$, $C_i = 5 \text{ nF}$, $L_i = 10 \mu\text{H}$;
or $V_{max} = 24 \text{ V}$, $I_{max} = 250 \text{ mA}$, $P_i = 1.2 \text{ W}$, $C_i = 5 \text{ nF}$, $L_i = 10 \mu\text{H}$.

For d = E, F, M: Foundation Fieldbus : $V_{max} = 17.5 \text{ Vdc}$, $I_{max} = 500 \text{ mA}$, $P_i = 5.5 \text{ W}$, $C_i = 5 \text{ nF}$, $L_i = 10 \mu\text{H}$;

For d = A, B and e = D: $V_{max} = 30 \text{ Vdc}$, $I_{max} = 273 \text{ mA}$, $P_i = 1 \text{ W}$, $C_i = 13 \text{ nF}$, $L_i = 0$;

For d = C, D and e = D: Profibus PA (FISCO): $V_{max} = 17.5 \text{ V dc}$, $I_{max} = 273 \text{ mA}$, $P_i = 1.2 \text{ W}$, $C_i = 5 \text{ nF}$, $L_i = 10 \mu\text{H}$
 $V_{max} = 24 \text{ V}$, $I_{max} = 250 \text{ mA}$, $P_i = 1.2 \text{ W}$, $C_i = 5 \text{ nF}$, $L_i = 10 \mu\text{H}$

For d = E, F and e = D: Foundation Fieldbus (FISCO): $V_{max} = 17.5 \text{ V dc}$, $I_{max} = 273 \text{ mA}$, $P_i = 1.2 \text{ W}$, $C_i = 5 \text{ nF}$, $L_i = 10 \mu\text{H}$; or $V_{max} = 24 \text{ V}$, $I_{max} = 250 \text{ mA}$, $P_i = 1.2 \text{ W}$, $C_i = 5 \text{ nF}$, $L_i = 10 \mu\text{H}$

b = Antenna size; any single letter or number (e.g., 50mm/2", 80mm/3").

ccc = Process connections, any three letter / number combination representing standard industrial process connections.

d= Output and Operation:

A,B: (4..20 mA HART with/without display VU331),

C,D: (Profibus PA with/without display VU331),

E,F: (Foundation Fieldbus with/without display VU331),

K: (4..20 mA HART prepared for FHX40),

L: (Profibus PA prepared for display FHX40),

M: (Foundation Fieldbus prepared for display FHX40), or

x: (special version not relevant for safety e.g. software adjustment; any not used letter or number).

e = A, B or D.

g = Cable entry 1 (PG 13.5), 2 (M20x1.5), 3 (G1/2), 4 (NPT 1/2), 5 (M12 PA plug), 6 (7/8" FF plug) or x = special version.

h = Additional options not relevant to safety; any single letter or number.

N7230-TbccddeCgh. 7200 Series Radar Tank Gauge

XP-IS/II/1/ABCD/T*;XP/II/1/IIC/T*; Antenna I/O/AEx ia IIC T6; NI/II/2/ABCD/T*;

DIP/II/III/1/EFG/T*;Type 4X, Antenna 6P.

*Refer to Control Drawing for Temperature Class.

b = Antenna size; any single letter or number.

c = Type of sealing, temperature; any single letter or number (e.g.: E, V, K, D, F, G, H, L or M).

ddd = Process connections, any three letter / number combination representing standard industrial process connections.

e = Output and Operation:

A,B: (4..20 mA HART with/without display VU331),

C,D: (Profibus PA with/without display VU331),

E,F: (Foundation Fieldbus with/without display VU331),

K: (4..20 mA HART prepared for FHX40),

L: (Profibus PA prepared for display FHX40),

M: (Foundation Fieldbus prepared for display FHX40), or

x: (special version not relevant for safety e.g. software adjustment; any not used letter or number).

g = Cable entry 2 (M20x1.5), 3 (G 1/2), 4 (NPT 1/2) or x = special version.
h = Additional options not relevant to safety; any single letter or number.

N7231-TbccccCfg. 7200 Series Radar Tank Gauge

XP-IS//1/ABCD/T*;XP//1/IIC/T*; Antenna I/O/AEx ia IIC T6; NI//2/ABCD/T*;
DIP//III/III/1/EFG/T*;Type 4X, Antenna 6P.

*Refer to Control Drawing for Temperature Class.

b = Type of antenna, gasket, inactive length; A, B (PPS antenna, alternate length), E, F (PTFE antenna, alternate length), H, J, (PTFE antenna, antistatic, alternate length) or x (special, e.g.: length).

ccc = Process connections, any three letter / number combination representing standard industrial process connections.

d= Output and Operation:

A,B: (4..20 mA HART with/without display VU331),

C,D: (Profibus PA with/without display VU331),

E,F: (Foundation Fieldbus with/without display VU331),

K: (4..20 mA HART prepared for FHX40),

L: (Profibus PA prepared for display FHX40),

M: (Foundation Fieldbus prepared for display FHX40), or

x: (special version not relevant for safety e.g. software adjustment; any not used letter or number).

f = Cable entry 2 (M20x1.5), 3 (G 1/2), 4 (NPT 1/2) or x = special version.

g = Gas tight feed through A (without) or C (gas tight feed through).

h = Additional options not relevant to safety; any single letter or number.

N7232-TbccccCfg. 7200 Series Radar Tank Gauge

XP-IS//1/ABCD/T*;XP//1/IIC/T*; Antenna I/O/AEx ia IIC T6; NI//2/ABCD/T*;
DIP//III/III/1/EFG/T*;Type 4X, Antenna 6P.

*Refer to Control Drawing for Temperature Class.

b= Antenna type; any single letter or number.

ccc = Process connections, any three letter / number combination representing standard industrial process connections.

d= Output and Operation:

A,B: (4..20 mA HART with/without display VU331),

C,D: (Profibus PA with/without display VU331),

E,F: (Foundation Fieldbus with/without display VU331),

K: (4..20 mA HART prepared for FHX40),

L: (Profibus PA prepared for display FHX40),

M: (Foundation Fieldbus prepared for display FHX40), or

x: (special version not relevant for safety e.g. software adjustment; any not used letter or number).

f = Cable entry 2 (M20x1.5), 3 (G 1/2), 4 (NPT 1/2) or x = special version.

g = Additional options not relevant to safety; any single letter or number.

N7233-TbccccCfg. 7200 Series Radar Tank Gauge

XP-IS//1/ABCD/T*;XP//1/IIC/T*; Antenna I/O/AEx ia IIC T6; NI//2/ABCD/T*;
DIP//III/III/1/EFG/T*;Type 4X, Antenna 6P.

*Refer to Control Drawing for Temperature Class.

b= Antenna type; any single letter or number.
ccc = Process connections, any three letter / number combination representing standard industrial process connections.
d= Output and Operation:
A,B: (4..20 mA HART with/without display VU331),
C,D: (Profibus PA with/without display VU331),
E,F: (Foundation Fieldbus with/without display VU331),
K: (4..20 mA HART prepared for FHX40),
L: (Profibus PA prepared for display FHX40),
M: (Foundation Fieldbus prepared for display FHX40), or
x: (special version not relevant for safety e.g. software adjustment; any not used letter or number).
f = Cable entry 2 (M20x1.5), 3 (G 1/2), 4 (NPT 1/2) or x = special version.
g = Additional options not relevant to safety; any single letter or number.

N7240-TbcdeefChi. 7200 Series Radar Tank Gauge

XP-IS//1/ABCD/T*;XP//1/IIC/T*; Antenna I/O/AEx ia IIC T6; NI//2/ABCD/T*;
DIP//III/1/EFG/T*;Type 4X, Antenna 6P.

*Refer to Control Drawing for Temperature Class.

b= Antenna size; any single letter or number.
and 7 = mm Wave Guide Antenna
8 = inch Wave Guide Antenna
c = Type of antenna, sealing, temperature, any single letter or number.
Standard: up to 150°C
with Wave guide: up to 200°C
d= Antenna extension; any single letter or number.
eee = Process connections, any three letter / number combination representing standard industrial process connections.
f = Output and Operation:
A,B: (4..20 mA HART with/without display VU331),
C,D: (Profibus PA with/without display VU331),
E,F: (Foundation Fieldbus with/without display VU331),
K: (4..20 mA HART prepared for FHX40),
L: (Profibus PA prepared for display FHX40),
M: (Foundation Fieldbus prepared for display FHX40), or
x: (special version not relevant for safety e.g. software adjustment; any not used letter or number).
h = Cable entry 2 (M20x1.5), 3 (G 1/2), 4 (NPT 1/2) or x = special version.
i = Additional options not relevant to safety; any single letter or number.

N7244-TbcddeCgh. 7200 Series Radar Tank Gauge

XP-IS//1/ABCD/T*;XP//1/IIC/T*; Antenna I/O/AEx ia IIC T6; NI//2/ABCD/T*;
DIP//III/1/EFG/T*;Type 4X, Antenna 6P.

*Refer to Control Drawing for Temperature Class.

b = Antenna size; any single letter or number.
c = Type of antenna, sealing, temperature, any single letter or number.
ddd = Process connections, any three letter / number combination representing standard industrial process connections.
e = Output and Operation:
A,B: (4..20 mA HART with/without display VU331),
C,D: (Profibus PA with/without display VU331),



E,F: (Foundation Fieldbus with/without display VU331),
K: (4..20 mA HART prepared for FHX40),
L: (Profibus PA prepared for display FHX40),
M: (Foundation Fieldbus prepared for display FHX40), or
x: (special version not relevant for safety e.g. software adjustment; any not used letter or number).

g = Cable entry 2 (M20x1.5), 3 (G 1/2), 4 (NPT 1/2) or x = special version.

h = Additional options not relevant to safety; any single letter or number.

N7245-TbccccCfg. 7200 Series Radar Tank Gauge

XP-IS/II/1/ABCD/T*;XP/II/1/IIC/T*; Antenna I/O/AEx ia IIC T6; NI/II/2/ABCD/T*;
DIP/III/III/1/EFG/T*;Type 4X, Antenna 6P.

*Refer to Control Drawing for Temperature Class.

b = Antenna size; any single letter or number (e.g., 50mm/2", 80mm/3").

ccc = Process connections, any three letter / number combination representing standard industrial process connections.

d = Output and Operation:

A,B: (4..20 mA HART with/without display VU331),

C,D: (Profibus PA with/without display VU331),

E,F: (Foundation Fieldbus with/without display VU331),

K: (4..20 mA HART prepared for FHX40),

L: (Profibus PA prepared for display FHX40),

M: (Foundation Fieldbus prepared for display FHX40), or

x: (special version not relevant for safety e.g. software adjustment; any not used letter or number).

f = Cable entry 2 (M20x1.5), 3 (G 1/2), 4 (NPT 1/2) or x = special version.

g = Additional options not relevant to safety; any single letter or number.

Special conditions of use:

1. Refer Control Drawing for installation instructions and table of Temperature Identification Numbers which apply to specific models, ambient temperatures (Ta), and process medium temperatures (Tmed)

Equipment Ratings:

Intrinsically safe apparatus for Class I,II and III Division 1, Groups A, B, C, D, E, F, and G; alternatively Class I, Zone 0, GP IIC in accordance with entity requirements when installed per Control Drawings 960417-1065, 960417-1066, 960417-1087, 960417-1069, 960417-1070, 960417-1071, 960417-1072, 960417-1073, and 960417-1074; dust-ignitionproof for Class II, III, Division 1, Groups E, F and G; non-incendive for Class I, Division 2, Groups A, B, C and D hazardous (classified) outdoor (Enclosure Type 4X; Antenna Type 6P) locations.

Explosionproof with intrinsically safe antenna for Class I, Division 1, Group A, B, C, D; alternatively for use in Class I, Zone 1, Group IIC; dust-ignitionproof for Class II, III, Division 1, Groups E, F and G; nonincendive for Class I, Division 2; Groups A, B, C and D hazardous (classified) outdoor (Enclosure Type 4X, AntennaType 6P) locations when installed in accordance with Control Drawing 960417-1067.

Approved for:

Varec, Inc.
5834 Peachtree Corners East
Norcross, GA 30092, USA



This certifies that the equipment described has been found to comply with the following FM Approval Standards and other documents:

Class 3600	1998
Class 3610	1999
Class 3611	1999
Class 3615	1989
Class 3810	1989
Including Supplement #1	1995
ANSI/ NEMA-250	1991

Original Project ID: 3020345

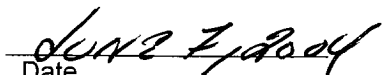
FM Approval Granted: June 7, 2004

Subsequent Revision Reports / Date FM Approval Amended

Report Number	Date	Report Number	Date
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FM Global Technologies LLC


 Robert L. Martell, Jr.
 Assistant Vice President


 Date