



Member of the FM Global Group

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CERTIFICATE OF COMPLIANCE

HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT

This certificate is issued for the following equipment:

UFM3030 K/...-DIV1 Ultrasonic Compact Flowmeter (Altosonic III -K / Div 1 /Div 2)

XP-AIS / I / 1 / ABCD Ta = 60°C; DIP / II, III / 1 / EFG Ta = 60°C; control drawing-8.30675.14; Type 4X, Type 6

The UFM3030K is the integration of the UFC 030 F Ultrasonic Flowmeter Signal Converter and the UFS 3000 F Flow Tube Primary Head

UFS 3000 FI...-DIV1/DIV2, VN514abcdefgh00 (DN 25-65) Ultrasonic Primary Head

IS / I, II, III / 1 / ABCDEFG Ta = 60°C – control drawing no.8.30675.14; Type 4X, Type 6

- a = nominal diameter code... 4 – 8
- b = nominal pressure code... 3, 5, 6, 7, A, B, D, E, M, N, W, X
- c = design / protect. Class... 1 – 5
- d = Ex approval... 3, 6
- e = cable connection... 1, 3
- f = tube / flange material... 2
- g = cable... 0 – 5
- h = calibration... 0, 2

UFS 3000 FI...-DIV1/DIV2, VN524abcdefgh00 (DN 80-300) Ultrasonic Primary Head

IS / I, II, III / 1 / ABCDEFG Ta = 60°C – control drawing no.8.30675.14; Type 4X, Type 6

- a = nominal diameter code... A – G
- b = nominal pressure code... 2 - 6, A, B, M, N
- c = design / protect. Class... 1 – 5
- d = Ex approval... 3, 6
- e = cable connection... 1, 3
- f = tube / flange material... 1, 2, A, B
- g = cable... 0 – 5
- h = calibration... 0, 2

UFS 3000 FI...-DIV1/DIV2, VN534abcdefgh00 (DN 350-2000) Ultrasonic Primary Head

IS / I, II, III / 1 / ABCDEFG Ta = 60°C – control drawing no.8.30675.14; Type 4X, Type 6

- a = nominal diameter code... H, K, L, M, N, P, R, S, T, U, V, W, X, Y
- b = nominal pressure code... 1 - 6, A, B, M, N, W
- c = design / protect. Class... 1 – 3
- d = Ex approval... 3, 6
- e = cable connection... 1, 3 - 5

f = tube / flange material..... 3 -5, C, D, E
 g = cable..... 0 – 5
 h = calibration..... 0, 2

UFS-III/F-DIV1/DIV2, UFS-III/F/XT-DIV1/DIV2 VN564abcdefghijkl000 Altosonic Primary Head

IS / I, II, III / 1 / ABCDEFG Ta = 60°C – 8.30675.14; Type 4X, Type 6
 a = Nominal diameter code... 7, A, B, D, E, F, G, H, K, L, M, N, P, R, S or T
 b = Nominal pressure code... 2, 3, 4, 5, A, B, D, E, U, V, X or Y
 c = System design / cable connection... 2 or A.
 d = Ex approval..... 4 or 5
 e = Protection class..... 0.
 f = Tube / flange material..... B
 g = cable length..... 0, 1, 2, 3, 4 or 5
 h = calibration..... 0, 1, 2, 3, 4 or 5
 i = Special..... 0 or 1.
 j = Private label..... 0 or 1.
 k = Finish..... 1 or 3.
 l = Sensors..... 0.

UFC-III/F-DIV1/DIV2, VN554abcdefghi000 Altosonic Signal Converter

XP-AIS / I / 1 / ABCD Ta = 60°C - 8.30675.14; DIP / II, III / 1 / EFG Ta = 60°C - 8.30675.14; Type 4X, Type 6

a = type..... 4 or H.
 b = power supply..... D or 4.
 c = Ex approval..... 4 or 5
 d = Ex-I output..... 0
 e = Instr. Manual language... 1, 2, 3, 4, 5, 6 or 7.
 f = cable connection..... 4
 g = converter housing..... 2
 h = private label..... 0 or 1
 i = Reynold's Curve..... 0 or 1

UFC 030 F-DIV1/DIV2 VN504abcdefghij, Ultrasonic Signal Converter.

XP-AIS / I / 1 / ABCD Ta = 60°C - 8.30675.14 (3-beam) or 8.30675.87 (1 or 2-beam);
 DIP / II, III / 1 / EFG Ta = 60°C - 8.30675.14 (3-beam) or 8.30675.87 (1 or 2-beam); Type 4X, Type 6

a = type..... 1, 2, 4, 5, 7, 8, A, B, D, E
 b = power supply..... D
 c = Ex approval..... 3, 4
 d = Ex-I output..... 0, 1, 2, B
 e = Instr. Manual language..... 1 - 7
 f = cable connection..... 2
 g = converter housing..... 1, 2
 h = private label – not safety relevant
 i = custody transfer – not safety relevant
 j = output signal..... 0, 1

UFM3030 K/i...-DIV1/DIV2 Ultrasonic Compact Flowmeter

XP-AIS / I / 1 / ABCD Ta = 60°C - 8.30675.73; DIP / II, III / 1 / EFG Ta = 60°C; - 8.30675.73; Type 4X, Type 6

The UFM3030 K/i is the integration of the UFC 030i Ultrasonic Flowmeter Signal Converter and the UFS 3000 Flow Tube Primary Head

UFS 3000 F/XT...-DIV1/DIV2 Ultrasonic Primary Head

IS / I, II, III / 1 / ABCDEFG Ta = 60°C - 8.30675.73; Type 4X, Type 6

VN514abcdefgh00 (DN 25-65) Ultrasonic Primary Head

- a = nominal diameter code... 4 – 8
- b = nominal pressure code... 3, 5, 6, 7, A, B, D, E, M, N, Y, X
- c = design / protect. Class... 1 – 5
- d = Ex approval... 3, 6
- e = cable connection... 1, 3
- f = tube / flange material... 2
- g = cable... 0 – 5
- h = calibration... 0, 2

VN524abcdefgh00 (DN 80-300) Ultrasonic Primary Head

- a = nominal diameter code... A – G
- b = nominal pressure code... 2 - 6, A, B, M, N
- c = design / protect. Class... 1 – 5
- d = Ex approval... 3, 6
- e = cable connection... 1, 3
- f = tube / flange material... 1, 2, A, B
- g = cable... 0 – 5
- h = calibration... 0, 2

VN534abcdefgh00 (DN 350-2000) Ultrasonic Primary Head

- a = nominal diameter code... H, K, L, M, N, P, R, S, T, U, V, W, X, Y
- b = nominal pressure code... 1 - 6, A, B, M, N, W
- c = design / protect. Class... 1 – 3
- d = Ex approval... 3, 6
- e = cable connection... 1, 3 - 5
- f = tube / flange material... 3 -5, C, D, E
- g = cable... 0 – 5
- h = calibration... 0, 2

UFC 030 F/i-DIV1/DIV2 VN504abcdefgh000. Ultrasonic Signal Converter.

XP-AIS / I / 1 / ABCD Ta = 60°C - 8.30675.73 (3-beam) or 8.30675.87 (1 or 2-beam);
 DIP / II, III / 1 / EFG Ta = 60°C - 8.30675.73 (3-beam) or 8.30675.87 (1 or 2-beam); Type 4X, Type 6

- a = type... 1, 2, 4, 5, 7, 8, A, B, D, E
- b = power supply... D or 4
- c = Ex approval... 3, 6
- d = Ex-I output... 0, 1, 2, B
- e = Instr. Manual language... 1 - 7
- f = cable connection... 2
- g = converter housing... 1, 2
- h = calibration... 0, 2

UFM 530 K-DIV1. Ultrasonic Compact Flowmeter.

XP-AIS / I / 1 / ABCD Ta = 60°C - 8.30675.14;
 DIP / II, III / 1 / EFG Ta = 60°C - 8.30675.14, Type 4X, 6

VN504abcdefgh000 + V39abcdeAfg or V39abcdeBfg

Special Conditions for Use:

The UFM 530 K-DIV1 is the integration of UFC 030 Ultrasonic Flowmeter Signal Converter and the Flow Tube Primary Head Model UFS 500 (1 or 2-beam) products. The devices keep their respective model numbers as described above.

UFM 530 K-DIV2. Ultrasonic Compact Flowmeter.

XP-AIS / I / 1 / ABCD Ta = 60°C - 8.30675.14;
 DIP / II, III / 1 / EFG Ta = 60°C - 8.30675.14, Type 4X, 6

VN504abcdefg000 + V39abcdeAfg or V39abcdeBfg

Special Conditions for Use:

The UFM 530 K-DIV2 is the integration of UFC 030 Ultrasonic Flowmeter Signal Converter and the Flow Tube Primary Head Model UFS 500 (1 or 2-beam) products. The devices keep their respective model numbers as described above.

UFM 530 K/i-DIV1. Ultrasonic Compact Flowmeter.

XP-AIS / I / 1 / ABCD Ta = 60°C - 8.30675.73;

DIP / II, III / 1 / EFG Ta = 60°C - 8.30675.73; Type 4X, 6

VN504abcdefg000 + V39abcdeAfg or V39abcdeBfg

Special Conditions for Use:

The UFM 530 K/i-DIV1 is the integration of UFC 030 F/i Ultrasonic Flowmeter Signal Converter and the Flow Tube Primary Head Model UFS 500 (1 or 2-beam) products. The devices keep their respective model numbers as described above.

UFM 530 K/i-DIV2. Ultrasonic Compact Flowmeter.

XP-AIS / I / 1 / ABCD Ta = 60°C - 8.30675.73;

DIP / II, III / 1 / EFG Ta = 60°C - 8.30675.73; Type 4X, 6

VN504abcdefg000 + V39abcdeAfg or V39abcdeBfg

Special Conditions for Use:

The UFM 530 K/i-DIV2 is the integration of UFC 030 F/i Ultrasonic Flowmeter Signal Converter and the Flow Tube Primary Head Model UFS 500 (1 or 2-beam) products. The devices keep their respective model numbers as described above.

UFS 500 F/HT V3944abcdefgh. Ultrasonic Flow Tube Primary Head.

IS / I,II,III / 1 / ABCDEFG - 8.30488.03 (UFC 500) or 8.30675.87 (UFC 030); Entity;

NI / I / 2 / ABCD; S / II,III / 2 / FG; Type 6

a = Size: 4, 5, 6, 7 or A.

b = Nom. pressure: 5, 6, 7, A, or B.

c = I & O manual: 0, 1, 2, 3 or 4.

d = Approval: 4.

e = Cable connection: 3, 4 or 5.

f = Flange material: D.

g = Special: 0.

h = Private label: 1.

UFS 500 F/HT V3954abcdefgh. Ultrasonic Flow Tube Primary Head.

IS / I, II, III / 1 / ABCDEFG- 8.30488.03 (UFC 500) or 8.30675.87 (UFC 030); Entity;

NI / I / 2 / ABCD; S / II,III / 2 / FG

a = Size: B, C, D, E, F, or G.

b = Nom. pressure: 2, 3, 4, 5, 6, A, B or D.

c = I & O manual: 0, 1, 2, 3, or 4.

d = Approval: 4.

e = Cable connection: 3, 4 or 5.

f = Flange material: D.

g = Special: 0.

h = Private label: 1.



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Equipment Ratings:

Explosionproof for use in Class I, Division 1, Groups A, B, C and D, Ta = 60°C with Intrinsically Safe sensor outputs in accordance with the applicable control drawing; Dust-Ignitionproof for use in Class II and III, Division 1, Groups E, F and G Ta = 60°C; indoor and outdoor, Type 4X Type 6 Hazardous (Classified) Locations

FM Approved for:

Krohne Inc.
7 Dearborn Road
Peabody MA 01960

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

Class 3600	1998
Class 3610	1999
Class 3611	2004
Class 3615	1989
Class 3810	1989
Including Supplement #1	1995
ANSI/NEMA 250	1991

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Subsequent Revision Reports / Date Approval Amended

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FM Approvals LLC



 George A. Smith
 Assistant Vice President

2/17/06

 Date