Certificate of Compliance

Certificate: 2515397 (LR 108043) **Master Contract:** 153857

Project: 70027899 **Date Issued:** April 23, 2015

Issued to: **Vega Grieshaber KG**

Am Hohenstein 113
Schiltach, 77761
Germany
Attention: Nick Ilchovski

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

Jelena Dzeletovic

Issued by: Jelena Dzeletovic

PRODUCTS

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

CLASS 2258 04 - PROCESS CONTROL EQUIPMENT - Intrinsically Safe, Entity - For Hazardous Locations

CLASS 2258 82 - PROCESS CONTROL EQUIPMENT - For Hazardous Locations - Certified to US Standards

CLASS 2258 02 - PROCESS CONTROL EQUIPMENT - For Hazardous Locations

Class I Div 1 Groups A, B, C and D; Class II Div 1 Groups E, F and G; Class III Ex d IIC Gb; Class I Zone 1 AEx d IIC Gb

VEGAFLEX 80 Series Level Measuring Equipment, Models VEGAFLEX 81, VEGAFLEX 82 and VEGAFLEX 86

Supply Voltage:

Electronics A/H 9.6…35 Vdc;

Electronics P/F 9.0...32 Vdc

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Enclosure Type 4X; IP66/67; Ambient temperature range -50ºC to +60ºC, T6...1;

Process Pressure: Depends on the Process connection and on the Sensor Version, for details refer to the Safety Instructions and manual.

VEGAFLEX model	Process temperature	Ambient temperature	Temperature Code
All	85 °C max	60 °C max	T6
All	100 °C max	60 °C max	T5
All	135 °C max	60 °C max	T4
FLEX 81and 82	200 °C max*	60 °C max	T2
FLEX 86	450 °C max*	60 °C max	T1

*Depends on the version, for details refer to the manual and safety instructions

FX81(a).bcdefghijklm

a = Optional electable parameter for internal information, options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

b = Certification: C (CSA)

c = Approval: E or Q

d = Version/Material: A, B, C, D, E, F, I, J, K, L, M, N, O, P, Q, S, U, V, W, X, Y, Z or 6

ef = Process Fitting/Material: Two digit alphanumeric variable for connections, which represents a TRI-CLAMP, DN or ASME industry type flange with pressure ratings, and any type of process connections which comply with an international or equivalent national standard

g = Seal/Process Temperature: G, J, L, M, N, P, Q, R or S

h = Electronics: A, H, P or F

i = Supplementary Electronics: X

j = Housing/Protection: A, H, V

k = Cable Entry/Connection: 6*, 8*, D, N, O* or P*

l = Indicating/Adjustment Module PLICSCOM: A or X

m = Additional certificates: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

FX82(a).bcdefghijklm

a = Optional electable parameter for internal information, options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

b = Certification: C (CSA)

c = Approval: E or Q

d = Version/Material: A, E, F, G, H, X, Y or T

ef = Process Fitting/Material: Two digit alphanumeric variable for connections, which represents a TRI-CLAMP, DN or ASME industry type flange with pressure ratings, and any type of process connections which comply with an international or equivalent national standard

g = Seal/Process Temperature: F, H or K

h = Electronics: A, H, P or F

i = Supplementary Electronics: X

j = Housing/Protection: A, H, V

k = Cable Entry/Connection: 6*, 8*, D, N, O* or P*

l = Indicating/Adjustment Module PLICSCOM: A or X

m = Additional certificates: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

FX86(a).bcdefghijklm

a = Optional electable parameter for internal information, options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

b = Certification: C (CSA)

c = Approval: E or Q

d = Version/Material: 4, A, B, C, D, H, P, I, J, T, R, X, E or L

ef = Process Fitting/Material: Two digit alphanumeric variable for connections, which represents a TRI-CLAMP, DN or ASME industry type flange with pressure ratings, and any type of process connections which comply with an international or equivalent national standard

g = Seal/Process Temperature: 1, 2 or 3

h = Electronics: A, H, P or F

i = Supplementary Electronics: X

j = Housing/Protection: A, H or V

k = Cable Entry/Connection: 6*, 8*, D, N, O* or P*

l = Indicating/Adjustment Module PLICSCOM: A or X

m = Additional certificates: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

Note : 1. For FX80 series without barrier and also for FLEX FX 80H with 2-chamber housing and implemented Auxiliary Electronics PLICSZEKX

2. For FX80 series connected to other passive instruments (e.g. VEGADIS61/81) certified for the location and using appropriate wiring method.

3. * Cable glands only allowed for zone applications

Class I Div 1 Groups A, B, C and D; Class II Div 1 Groups E, F and G; Class III

Ex d ia IIC Gb; Class I Zone 1 AEx d ia IIC Gb

VEGAFLEX 80 Series Level Measuring Equipment, Models VEGAFLEX 81, VEGAFLEX 82, VEGAFLEX 83 and VEGAFLEX 86 with barriers, providing intrinsically safe output per Installation Control Drawing 43252, Ambient temperature range -50ºC to +60ºC, T6-1; IP66/67, Enclosure Type 4X; Dual seal*

Supply Voltage 14…35 V dc for FX80 with 2-Wire Barrier (Supplementary Electronics PLICSZEBH);

Supply Voltage 9.6…48 V dc/ 2W or 20…42 V ac/ 4VAforFX80 with 4-Wire Barrier Low Voltage version (Supplementary Electronics PLICSZEBVL)

Supply Voltage 90…253 V ac/ 4VA forFX80 with 4-Wire Barrier High Voltage version (Supplementary Electronics PLICSZEBVH)

Supply Voltage 8 … 32 V DC for FX80 with 4-Wire Barrier ModBus (Supplementary Electronics PLICSZE-MB)

Process Pressure: Depends on the Process connection and on the Sensor Version, for details refer to the Safety Instructions and manual.

Gb applications (Ex d ia IIC):

VEGAFLEX model	Process temperature	Ambient temperature	Temperatur Code
All	85°C max	46°C max	T6
All	100°C max	60°C max	T5
All	135°C max	60°C max	T4
FLEX 83	150°C max**	60°C max	T3, T2, T1
FLEX 81/82 and 86	200°C max**	60°C max	T3, T2, T1
FLEX 86	300°C max**	60°C max	T2
FLEX 86	450°C max**	60°C max	T1

* Dual seal – only dual chamber housings

**Depends on the version, for details refer to the manual and safety instructions

Certificate: 2515397 (LR 108043) **Master Contract:** 153857

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FX81(a).bcdefghijklm

a = Optional electable parameter for internal information, options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

b = Certification: C (CSA)

c = Approval: D or P

d = Version/Material: A, B, C, D, E, F, K, L, M, P, X, Y, Z, J, U, I, G, 6, S, W, O, V, H, Q, N or R

ef = Process Fitting/Material: Two digit alphanumeric variable for connections, which represents a TRI-CLAMP, DN or ASME industry type flange with pressure ratings, and any type of process connections which comply with an international or equivalent national standard

g = Seal/Process Temperature: A, B, D, F, G, H, I, J, L, M, N, O, P or K

h = Electronics: A, B, H, P, F, I or U

i = Supplementary Electronics: X

j = Housing/Protection: D, W or S

k = Cable Entry/Connection: 6*, 8*, D, N, O* or P*

l = Indicating/Adjustment Module PLICSCOM: A or X

m = Additional certificates: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

FX82(a).bcdefghijklm

a = Optional electable parameter for internal information, options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

b = Certification: C (CSA)

c = Approval: D or P

d = Version/Material: A, E, F, G, H, X, Y or T

ef = Process Fitting/Material: Two digit alphanumeric variable for connections, which represents a TRI-CLAMP, DN or ASME industry type flange with pressure ratings, and any type of process connections which comply with an international or equivalent national standard

g = Seal/Process Temperature: A, B, F, H or K

h = Electronics: A, B, H, P, F, I or U

i = Supplementary Electronics: X

j = Housing/Protection: D, W or S

k = Cable Entry/Connection: 6*, 8*, D, N, O* or P*

l = Indicating/Adjustment Module PLICSCOM: A or X

m = Additional certificates: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

FX83(a).bcdefghijklm

a = Optional electable parameter for internal information, options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

b = Certification: C (CSA)

c = Approval: D or P

d = Version/Material: B, E, F, G, H or I

ef = Process Fitting/Material: Two digit alphanumeric variable for connections, which represents a TRI-CLAMP, DN or ASME industry type flange with pressure ratings, and any type of process connections which comply with an international or equivalent national standard

g = Seal/Process Temperature: C, E or X

h = Electronics: A, B, H, P, F, I or U

i = Supplementary Electronics: X

j = Housing/Protection: D, W or S

k = Cable Entry/Connection: 6*, 8*, D, N, O* or P*

l = Indicating/Adjustment Module PLICSCOM: A or X

m = Additional certificates: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

Certificate:	2515397 (LR 108043)	**Master Contract:**	153857
Project:	70027899	**Date Issued:**	April 23, 2015

FX86(a).bcdefghijklm

a = Optional electable parameter for internal information, options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

b = Certification: C (CSA)

c = Approval: D, or P

d = Version/Material: 4, A, B, C, D, H, P, I, J, T, R, X, E or L

ef = Process Fitting/Material: Two digit alphanumeric variable for connections, which represents a TRI-CLAMP, DN or ASME industry type flange with pressure ratings, and any type of process connections which comply with an international or equivalent national standard

g = Seal/Process Temperature: 1, 2 or 3

h = Electronics: A, B, H, P, F, I or U

i = Supplementary Electronics: X

j = Housing/Protection: D, W or S

k = Cable Entry/Connection: 6*, 8*, D, N, O* or P*

l = Indicating/Adjustment Module PLICSCOM: A or X

m = Additional certificates: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

Note: * Cable glands only allowed for zone applications

Class I Div 2, Groups A, B, C and D; Class II Div 2, Groups E, F and G; Class III

Ex nA Gc, Class I Zone 2 AEx nA Gc

VEGAFLEX 80 Series Level Measuring Equipment, Models VEGAFLEX 81, VEGAFLEX 82, VEGAFLEX 83 and VEGAFLEX 86, Supply Voltage: Electronics A/H = 9.6…35 V dc**;** Electronics P/F = 9.0…32 V dc**;** Electronics I = 9.6...48VDC/20...42VAC; Electronics B = 90...253VAC 50/60Hz; Modbus = 8.0...32Vdc; Enclosure Type 4X, IP66/67; Ambient temperature range -50ºC to +60ºC, T6-T1; Dual seal*

Certificate: 2515397 (LR 108043) **Master Contract:** 153857

Project: 70027899 **Date Issued:** April 23, 2015

Process Pressure: Depends on the Process connection and on the Sensor Version, for details refer to the Safety Instructions and manuals.

VEGAFLEX model	Process temperature	Ambient temperature	Temperature Code
All	85 °C max	60 °C max	T6
All	100 °C max	60 °C max	T5
All	135 °C max	60 °C max	T4
FLEX 83	150 °C max**	60 °C max	T3
FLEX 81and 82	200 °C max**	60 °C max	T2
FLEX 86	450 °C max**	60 °C max	T1

* Dual seal – only dual chamber housings

** Depends on the version, for details refer to the manual and safety instructions

FX81(a).bcdefghijklm

a = Optional electable parameter for internal information, options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

b = Certification: C (CSA)

c = Approval: A or N

d = Version/Material: A, B, C, D, E, F, K, L, M, P, X, Y, Z, J, U, I, G, 6, S, W, O, V, H, Q, N or R

ef = Process Fitting/Material: Two digit alphanumeric variable for connections, which represents a TRI-CLAMP, DN or ASME industry type flange with pressure ratings, and any type of process connections which comply with an international or equivalent national standard

g = Seal/Process Temperature: A, B, D, F, G, H, I, J, L, M, N, O, P or K

h = Electronics: A, B, H, P, F, I or U

i = Supplementary Electronics: X, Z

j = Housing/Protection: 3, 4, 5, 8, A, B, C, D, K, Q, H, R, V, W, X, Y or S

k = Cable Entry/Connection: 6*, 8*, D, N, O* or P*

l = Indicating/Adjustment Module PLICSCOM: A or X

m = Additional certificates: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

FX82(a).bcdefghijklm

a = Optional electable parameter for internal information, options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

b = Certification: C (CSA)

c = Approval: A or N

d = Version/Material: A, E, F, G, H, X, Y or T

ef = Process Fitting/Material: Two digit alphanumeric variable for connections, which represents a TRI-CLAMP, DN or ASME industry type flange with pressure ratings, and any type of process connections which comply with an international or equivalent national standard

g = Seal/Process Temperature: F, H or K

h = Electronics: A, B, H, P, F, I or U

i = Supplementary Electronics: X or Z

j = Housing/Protection: 3, 4, 5, 8, A, B, C, D, K, Q, H, R, V, W, X, Y or S

k = Cable Entry/Connection: 6*, 8*, D, N, O* or P*

l = Indicating/Adjustment Module PLICSCOM: A or X

m = Additional certificates: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

FX83(a).bcdefghijklm

a = Optional electable parameter for internal information, options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

b = Certification: C (CSA)

c = Approval: A or N

d = Version/Material: B, E, F, G or I

ef = Process Fitting/Material: Two digit alphanumeric variable for connections, which represents a TRI-CLAMP, DN or ASME industry type flange with pressure ratings, and any type of process connections which comply with an international or equivalent national standard

g = Seal/Process Temperature: C, E or X

h = Electronics: A, B, H, P, F, I or U

i = Supplementary Electronics: X, Z

j = Housing/Protection: 3, 4, 5, 8, A, B, C, D, K, Q, H, R, V, W, X, Y or S

k = Cable Entry/Connection: 6*, 8*, D, N, O* or P*

l = Indicating/Adjustment Module PLICSCOM: A or X

m = Additional certificates: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

FX86(a).bcdefghijklm

a = Optional electable parameter for internal information, options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

b = Certification: C (CSA)

c = Approval: A or N

d = Version/Material: 4, A, B, C, D, H, P, I, J, T, R, X, E or L

ef = Process Fitting/Material: Two digit alphanumeric variable for connections, which represents a TRI-CLAMP, DN or ASME industry type flange with pressure ratings, and any type of process connections which comply with an international or equivalent national standard

g = Seal/Process Temperature: 1, 2 or 3

h = Electronics: A, B, H, P, F, I or U

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i = Supplementary Electronics: X, Z

j = Housing/Protection: 3, 4, 5, 8, A, B, C, D, K, Q, H, R, V, W, X, Y or S

k = Cable Entry/Connection: 6*, 8*, D, N, O* or P*

l = Indicating/Adjustment Module PLICSCOM: A or X

m = Additional certificates: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

Notes:

1. For FX80 series connected to other passive instruments (e.g. VEGADIS61/81) certified for the location and using

appropriate wiring method.

2. Cable glands only allowed for zone applications

Class II Div 1 Groups E, F and G; Class III

Ex ta IIIC T72°C…120°C Da; Ex tb IIIC T72°C…120°C Db; Ex tc IIIC T72°C…120°C Dc;

Zone 20 AEx ta IIIC T72°C…120°C Da; Zone 21 AEx tb IIIC T72°C…120°C Db; Zone 22 AEx tc IIIC T72°C…120°C Dc

VEGAFLEX 80 Series Level Measuring Equipment, Models VEGAFLEX 81, VEGAFLEX 82, VEGAFLEX 83 and VEGAFLEX 86, Supply Voltage: Electronics A/H = 9.6…35 V dc**;** Electronics P/F = 9.0…32 V dc**;** Electronics I = 9.6...48VDC/20...42VAC; Electronics B = 90...253VAC 50/60Hz; Modbus = 8.0…32Vdc; Enclosure Type 4X IP66/67; Ambient temperature range -50ºC to +60ºC, T6-T1; Dual seal*

Process Pressure: Depends on the Process connection and on the Sensor Version, for details refer to the Safety Instructions and manuals.

VEGAFLEX model	Process temperature	Ambient temperature	Temperature Code
All	85 °C max	60 °C max	T6
All	100 °C max	60 °C max	T5
All	135 °C max	60 °C max	T4

FLEX 83	150 °C max**	60 °C max	T3
FLEX 81and 82	200 °C max**	60 °C max	T2
FLEX 86	450 °C max**	60 °C max	T1

* Dual seal – only dual chamber housings

** Depends on the version, for details refer to the manual and safety instructions

FX81(a).bcdefghijklm

a = Optional electable parameter for internal information, options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

Y = Yokogawa distributor

b = Certification: C (CSA)

c = Approval: R

d = Version/Material: A, B, C, D, E, F, K, L, M, P, X, Y, Z, J, U, I, G, 6, S, W, O, V, H, Q, N or R

ef = Process Fitting/Material: Two digit alphanumeric variable for connections, which represents a TRI-CLAMP, DN or ASME industry type flange with pressure ratings, and any type of process connections which comply with an international or equivalent national standard

g = Seal/Process Temperature: A, B, D, F, G, H, I, J, L, M, N, O, P or K

h = Electronics: P, F, A, B, I, H or U

i = Supplementary Electronics: X, Z

j = Housing/Protection: A, H, V, D, 3, 4, S or W

k = Cable Entry/Connection: 6*, 8*, D, N, O* or P*

l = Indicating/Adjustment Module PLICSCOM: A or X

m = Additional certificates: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

Certificate:	2515397 (LR 108043)	**Master Contract:**	153857
Project:	70027899	**Date Issued:**	April 23, 2015

FX82(a).bcdefghijklm

a = Optional electable parameter for internal information, options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

Y = Yokogawa distributor

b = Certification: C (CSA)

c = Approval: R

d = Version/Material: A, E, F, G, H, X, Y or T

ef = Process Fitting/Material: Two digit alphanumeric variable for connections, which represents a TRI-CLAMP, DN or ASME industry type flange with pressure ratings, and any type of process connections which comply with an international or equivalent national standard

g = Seal/Process Temperature: F, H or K

h = Electronics: P, F, A, B, I, H or U

i = Supplementary Electronics: X or Z

j = Housing/Protection: A, H, V, D, 3, 4, S or W

k = Cable Entry/Connection: 6*, 8*, D, N, O* or P*

l = Indicating/Adjustment Module PLICSCOM: A or X

m = Additional certificates: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

FX83(a).bcdefghijklm

a = Optional electable parameter for internal information, options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

Y = Yokogawa distributor

b = Certification: C (CSA)

c = Approval: R

d = Version/Material: B, E, F, G or I

ef = Process Fitting/Material: Two digit alphanumeric variable for connections, which represents a TRI-CLAMP, DN or ASME industry type flange with pressure ratings, and any type of process connections which comply with an international or equivalent national standard

g = Seal/Process Temperature: C, E or X

h = Electronics: P, F, A, B, I, H or U

i = Supplementary Electronics: X, Z

j = Housing/Protection: A, H, V, D, 3, 4, S or W

k = Cable Entry/Connection: 6*, 8*, D, N, O* or P*

l = Indicating/Adjustment Module PLICSCOM: A or X

m = Additional certificates: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

FX86(a).bcdefghijklm

a = Optional electable parameter for internal information, options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

Y = Yokogawa distributor

b = Certification: C (CSA)

c = Approval: R

d = Version/Material: 4, A, B, C, D, H, P, I, J, T, R, X, E or L

ef = Process Fitting/Material: Two digit alphanumeric variable for connections, which represents a TRI-CLAMP, DN or ASME industry type flange with pressure ratings, and any type of process connections which comply with an international or equivalent national standard

g = Seal/Process Temperature: 1, 2 or 3

h = Electronics: P, F, A, B, I, H or U

i = Supplementary Electronics: X, Z

j = Housing/Protection: A, H, V, D, 3, 4, S or W

k = Cable Entry/Connection: 6*, 8*, D, N, O* or P*

l = Indicating/Adjustment Module PLICSCOM: A or X

m = Additional certificates: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

Notes:

1. For FX80 series connected to other passive instruments (e.g. VEGADIS61/81) certified for the location and using

appropriate wiring method.

2. Cable glands only allowed for zone applications

CLASS 2258 04 - PROCESS CONTROL EQUIPMENT - Intrinsically Safe, Entity - For Hazardous Locations

CLASS 2258 84 - PROCESS CONTROL EQUIPMENT - Intrinsically Safe, Entity - For Hazardous Locations

- Certified to US Standards

Class I Div 1 Groups A, B, C and D; Class II Div 1 Groups E, F and G; Class III

Ex ia IIC Ga; Class I Zone 0 AEx ia IIC Ga

Ex ia IIC Gb; Class I Zone 1 AEx ia IIC Gb

VEGAFLEX 80 Series Level Measuring Equipment, Models VEGAFLEX 81, VEGAFLEX 82, VEGAFLEX 83 and VEGAFLEX 86 without barrier when installed per Installation Control Drawing 43251, ambient temperature range -50ºC to +60ºC, T6-1; IP66/67 Enclosure Type 4X; Dual seal*

Entity parameters:

Ui = 30 V

Ii = 131 mA Pi = 983 mW

Ci = 0 µF Li = 5 µH Version with fixed cable: L = 0.55 µH/m, Ci wire/wire = 58 pF / m, Ci wire / screen = 270 pF / m

Indicating and adjustment circuit for connection of a DIS61/81

	Without DIS61/81 connected	With DIS61/81 connected
Uo =	6V	6 V
Io =	214 mA	473 mA
Po =	321 mW	
Co =	1,4 µF	2 µF
Lo =	1,2 mH	310 µH

Process Pressure: Depends on the Process connection and on the Sensor Version for details refer to the Safety Instructions and manual

Ga applications (Ex ia IIC):

VEGAFLEX model	Process temperature	Ambient temperature	Temperatur Code
All	60°C max	42°C max	T5
All	60°C max	60°C max	T4, T3, T2, T1

Gb applications (Ex ia IIC):

VEGAFLEX model	Process temperature	Ambient temperature	Temperatur Code
All	85°C max	46°C max	T6
All	100°C max	61°C max	T5
All	135°C max	70°C max	T4
FLEX 83	150°C max**	70°C max	T3, T2, T1
FLEX 81/82 and 86	200°C max**	70°C max	T3, T2, T1
FLEX 86	300°C max**	70°C max	T2
FLEX 86	450°C max**	70°C max	T1

* Dual seal – only dual chamber housings

**Depends on the version, for details refer to the manual and safety instructions

FX81(a).bcdefghijklm

a = Optional electable parameter for internal information, options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

b = Certification: C (CSA)

c = Approval: C or O

d = Version/Material: A, B, C, D, E, F, K, L, M, P, X, Y, Z, J, U, I, G, 6, S, W, O, V, H, Q, N or R

ef = Process Fitting/Material: Two digit alphanumeric variable for connections, which represents a TRI-CLAMP, DN or ASME industry type flange with pressure ratings, and any type of process connections which comply with an international or equivalent national standard

g = Seal/Process Temperature: A, B, D, F, G, H, I, J, L, M, N, O, P or K

h = Electronics: A, H, P or F

i = Supplementary Electronics: X, Z

j = Housing/Protection: 3, 4, 5, 8, A, B, C, D, K, Q, H, R, V, W, X, Y or S

k = Cable Entry/Connection: 6, 8, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, R, W or Z

l = Indicating/Adjustment Module PLICSCOM: A, B or X

m = Additional certificates: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

FX82(a).bcdefghijklm

a = Optional electable parameter for internal information, options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

b = Certification: C (CSA

c = Approval: C or O

d = Version/Material: A, E, F, G, H, X, Y or T

ef = Process Fitting/Material: Two digit alphanumeric variable for connections, which represents a TRI-CLAMP, DN or ASME industry type flange with pressure ratings, and any type of process connections which comply with an international or equivalent national standard

g = Seal/Process Temperature: F, H or K

h = Electronics: A, H, P or F

i = Supplementary Electronics: X, Z

j = Housing/Protection: 3, 4, 5, 8, A, B, C, D, K, Q, H, R, V, W, X, Y or S

k = Cable Entry/Connection: 6, 8, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, R, W or Z

l = Indicating/Adjustment Module PLICSCOM: A, B or X

m = Additional certificates: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

FX83(a).bcdefghijklm

a = Optional electable parameter for internal information, options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

b = Certification: C (CSA)

c = Approval: C or O

d = Version/Material: B, E, F, G, H or I

ef = Process Fitting/Material: Two digit alphanumeric variable for connections, which represents a TRI-CLAMP, DN or ASME industry type flange with pressure ratings, and any type of process connections which comply with an international or equivalent national standard

g = Seal/Process Temperature: C, E or X

h = Electronics: A, H, P or F

i = Supplementary Electronics: X, Z

j = Housing/Protection: 3, 4, 5, 8, A, B, C, D, K, Q, H, R, V, W, X, Y or S

k = Cable Entry/Connection: 6, 8, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, R, W or Z

l = Indicating/Adjustment Module PLICSCOM: A, B or X

m = Additional certificates: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

FX86(a).bcdefghijklm

a = Optional electable parameter for internal information, options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

b = Certification: C (CSA)

c = Approval: C or O

d = Version/Material: 4, A, B, C, D, H, P, I, J, T, R, X, E or L

ef = Process Fitting/Material: Two digit alphanumeric variable for connections, which represents a TRI-CLAMP, DN or ASME industry type flange with pressure ratings, and any type of process connections which comply with an international or equivalent national standard

g = Seal/Process Temperature: 1, 2 or 3

h = Electronics: A, H, P or F

i = Supplementary Electronics: X, Z

j = Housing/Protection: 3, 4, 5, 8, A, B, C, D, K, Q, H, R, V, W, X, Y or S

k = Cable Entry/Connection: 6, 8, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, R, W or Z

l = Indicating/Adjustment Module PLICSCOM: A, B or X

m = Additional certificates: Options not affecting safety, one digit alphanumeric variable referring to non-electrical properties

Certificate: 2515397 (LR 108043) **Master Contract:** 153857

Project: 70027899 **Date Issued:** April 23, 2015

Note: For FX80 series without barrier and also for FLEX FX 80H with 2-chamber housing and implemented Auxiliary Electronics PLICSZEKX

APPLICABLE REQUIREMENTS

CSA Std. C22.2 No 0	-	General Requirements - Canadian Electrical Code, Part II
CAN/CSA-C22.2 No. 61010-1-04	-	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use, Part 1: General Requirements
CSA Std. C22.2 No 94-M91(R 2006)	-	Special Purpose Enclosures
CSA STD C22.2 No. 25-1966 (R2009)	-	Enclosures for Use in Class II Groups E, F and G Hazardous Locations
CSA Std. C22.2 No. 30 M1986 (R 2012)	-	Explosion-Proof Enclosures for Use in Class Hazardous Locations
CSA Std. C22.2 No 157-92 (R 2006)	-	Intrinsically Safe and Non-Incendive Equipment for Use in Hazardous Locations
CSA Std C22.2 No. 213-M1987 (R 2008)	-	Non-Incendive Electrical Equipment for Use in Class I, Division 2 Hazardous Locations
CAN/CSA-C22.2 No. 60079-0:11	-	Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
CAN/CSA-C22.2 No. 60079-1:11	-	Electrical apparatus for explosive gas atmospheres - Part 1: Flameproof Enclosure “d”
CAN/CSA-C22.2 No. 60079-11:11	-	Electrical apparatus for explosive gas atmospheres - Part 11: Intrinsic safety "i"
CAN/CSA-C22.2 No. 60079-15:12	-	Electrical Apparatus for Explosive Gas Atmospheres□□Part 15: Type of Protection "n"
UL Std. No. 61010-1 (2nd Edition)	-	Safety Requirements for Electrical Equipment for Measurement,

	Control, and Laboratory Use - Part 1: General Requirements
UL Std No. 913 (4th Ed.)	- Intrinsically Safe and Associated Apparatus For Use In Class I, II, and III, Division 1, Hazardous (Classified) Locations
ANSI/ISA 12.12.01	- Nonincendive Electrical Equipment for Use in Class I and II, Division 2 and Class III, Division 1 and 2 Hazardous (Classified) Locations
UL Std No. 50 (Edition 10)	- Enclosures for Electrical Equipment
UL Std No. 1203, Ed 4 (2006)	- Explosion-Proof and Dust-Ignition-ProofElectrical Equipment for Use in Hazardous (Classified) Locations
ANSI/UL 60079-0 (5th Ed. 2009)	- Explosive Atmospheres – Part 0: Equipment - General Requirements
ANSI/UL 60079-1 (6th Ed. 2009)	- Explosive Atmospheres – Part 1: Equipment Protection by Flameproof Enclosures “d”
ANSI/UL 60079-11(5th Ed. 2009)	- Explosive Atmospheres – Part 11: Equipment Protection by Intrinsic Safety "i"
ANSI/ISA 60079-15 (5th Ed. 2009)	- Electrical Apparatus for Explosive Atmospheres. Part 15: Electrical Apparatus with Type of Protection ”n”

Supplement to Certificate of Compliance

Certificate: 2515397 **Master Contract:** 153857

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

Product Certification History

Project	Date	Description
70027899	Apr 23, 2015	Update to include dual seal, electronics B, I and housings 3, 4 to DIP version, supplementary electronics Z to IS FX83 and to remove PA and FF electronics from XP-IS version, Class II and III from NI version.
70006756	Mar 26, 2015	Update to report 2515397 to add housing options "H".
2747968	Oct 10, 2014	Update to include separation of Class I, Div 2 and Class II, Div 1 versions, revised drawings and model code update.
2718065	May 7, 2014	Update to include revised drawings, label and model code update.
2701668	Mar 5, 2014	Revise the existing report 2679759 in order to separate Ordinary Locations certification from the Hazloc certificate.
2679759	Dec 5, 2013	Update to include PAFF electronics.
2662673	Oct 24, 2013	Update to include PLICSZE-ZSA second current output electronics.
2666254	Sep 27, 2013	Certification of Vegaflex 80 Series to the 61010 requirements

History

2591398	February 26, 2013	Update to add all models under letter "c=Approval:" the letter X to show Ordinary (Non-hazardous) locations approval and type 4X enclosure.
2570276 version	October 26, 2012	Update to remove seals A, B, D, F, H, I and O which will not use with Exd of VEGAFlex 81.
2515397	August 24, 2012	CSAc-us certification of VegaFlex 80 Series level measurement.