Certificate of Compliance

Certificate:	80126993	**Master Contract:**	153857
Project:	80168899	**Date Issued:**	January 24, 2024

Issued To: **Vega Grieshaber KG**
Am Hohenstein 113
Schiltach, Baden-Württemberg, 77761
Germany

Attention: Klaus Mayer

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.

Issued by: Gordon Neuroth

PRODUCTS

CLASS - C225804 - PROCESS CONTROL EQUIPMENT Intrinsically Safe, Entity - For Hazardous Locations

CLASS - C225884 - PROCESS CONTROL EQUIPMENT - Intrinsically Safe Entity - For Hazardous Locations - Certified to US Standards

VEAGPULS 6X radar level gauge in type of protection intrinsic safety.
Model code PS6X(Z)(*).2*W**B/T/F/C H/G/K/L/N/D******H*C******

Cl. I, Zn 0, AEx/Ex ia IIC T6…T1 Ga
Cl. I, Zn 0/1, AEx/Ex ia IIC T6…T1 Ga/Gb

By additional/optional marking as per CAN/CSA-C22.2 No. 60079-0:19, clause 29.1A; CAN/CSA-C22.2 No. 60079-11:14, Annex HA and UL 60079-0:19, sections 29.18DV through 29.19DV.

I.S. Cl. I, Div. 1, Gp A, B, C, D; T6…T1

VEAGPULS 6X radar level gauge in type of protection intrinsic safety.
PS6X(Z)(*).2*W**B/T/F/C H/G/K/L/N/D******H*H******

Cl. I, Zn 0, AEx/Ex ia IIC T6…T1 Ga
Zn 20 AEx/Ex ia IIIC T_{200} 102 °C Da
Zn 21 AEx/Ex ia IIIC T 111 °C Db

By additional/optional marking as per CAN/CSA-C22.2 No. 60079-0:19, clause 29.1A; CAN/CSA-C22.2 No. 60079-11:14, Annex HA and UL 60079-0:19, sections 29.18DV through 29.19DV.

I.S. Cl. I, Div. 1, Gp A, B, C, D; T6…T1
I.S. Cl. II, Div. 1, Gp E, F, G; T4
I.S. Cl. III, T4

For equipment which is intended to be installed in the boundary wall between an area requiring EPL Ga or Da and a less hazardous area (no additional/optional marking).
Cl. I, Zn 0/1, AEx/Ex ia IIC T6…T1 Ga/Gb
Zn 20/21 AEx/Ex ia IIIC T* °C Da/Db

VEAGPULS 6X radar level gauge in type of protection intrinsic safety.
PS6X(Z)(*).2*W**B/T/F/C H/G/K/L/N/D******A*C******

Cl. I, Zn 0/1, AEx/Ex ia IIC T6…T1 Ga/Gb
Cl. I, Zn 1, AEx/Ex ia IIC T6…T1 Gb

By additional/optional marking as per CAN/CSA-C22.2 No. 60079-0:19, clause 29.1A; CAN/CSA-C22.2 No. 60079-11:14, Annex HA and UL 60079-0:19, sections 29.18DV through 29.19DV.

I.S. Cl. I, Div. 2, Gp A, B, C, D; T6…T1

VEAGPULS 6X radar level gauge in type of protection intrinsic safety.
PS6X(Z)(*).2*W**B/T/F/C H/G/K/L/N/D******A*H******

Cl. I, Zn 1, AEx/Ex ia IIC T6…T1 Gb
Zn 21 AEx/Ex ia IIIC T 111 °C Db

By additional/optional marking as per CAN/CSA-C22.2 No. 60079-0:19, clause 29.1A; CAN/CSA-C22.2 No. 60079-11:14, Annex HA and UL 60079-0:19, sections 29.18DV through 29.19DV.

I.S. Cl. I, Div. 2, Gp A, B, C, D; T6…T1
I.S. Cl. II, Div. 2, Gp E, F, G; T4
I.S. Cl. III, T4

For equipment which is intended to be installed in the boundary wall between an area requiring EPL Ga or Da and a less hazardous area (no additional/optional marking).

Cl. I, Zn 0/1, AEx/Ex ia IIC T6…T1 Ga/Gb
Zn 20/21 AEx/Ex ia IIIC T* °C Da/Db

Electrical data:

Connection	Parameter
Supply circuit…… (terminals 1 and 2)	Type of protection Intrinsic Safety Ex ia IIC resp. Ex ia IIIC (depending on the model code of the equipment) only for connection to a certified intrinsically safe circuit. Maximum values: Ui = 30 V DC Ii = 131 mA Pi = 983 mW Li = 0 µH Ci = 0 µF
Output circuit…….. (terminals 5,6,7 and 8)	Type of protection Intrinsic Safety Ex ia IIC resp. Ex ia IIIC (depending on the model code of the equipment) only for connection to the external display unit VEGADIS 81 (certified under CSA14CA2662675). Maximum values of the connection cable: Lo = 130 µH Co = 600 nF

Certificate: 80126993
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Date Issued: January 24, 2024

APPLICABLE REQUIREMENTS

CAN/CSA-C22.2 No. 61010-1-12	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use, Part 1: General Requirements
CAN/CSA Std. C22.2 No. 60079-0:19	Explosive atmospheres - Part 0: Equipment - General Requirements
CAN/CSA Std. C22.2 No. 60079-11:14	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
CAN/CSA Std. C22.2 No. 60079-26:16	Explosive atmospheres - Part 26: Equipment with Equipment Protection Level (EPL) Ga
UL Std. No. 61010-1 (3rd Edition)	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use, Part 1: General Requirements
UL 60079-0 (7th Edition 2019)	Explosive Atmospheres – Part 0: Equipment - General Requirements
UL 60079-11 (6th Edition 2013)	Explosive Atmospheres – Part 11: Equipment Protection by Intrinsic Safety "i"
UL 60079-26 (3rd Edition 2017)	Explosive atmospheres - Part 26: Equipment with Equipment Protection Level (EPL) Ga

MARKINGS

The manufacturer is required to apply the following markings:

- Products shall be marked with the markings specified by the particular product standard.
- Products certified for Canada shall have all Caution and Warning markings in both English and French.

Additional bilingual markings not covered by the product standard(s) may be required by the Authorities Having Jurisdiction. It is the responsibility of the manufacturer to provide and apply these additional markings, where applicable, in accordance with the requirements of those authorities.

The products listed are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US (indicating that products have been manufactured to the requirements of both Canadian and U.S. Standards) or with adjacent indicator 'US' for US only or without either indicator for Canada only.

Markings are attached by adhesive labels.

- CSA Monogram with C-US indicator.
- Submittor Identification.
- Model Designation.
- Serial Number, Date Code or Month and Year of Manufacture.
- Electrical Ratings.
- Ambient temperature range
- CSA Certificate number: "CSA22CA80126993"
- The marking for Zones as shown in the product section (mandatory).

- The additional marking for Divisions as shown in the product section may also be used (optional addition). For the Division marking the characters “I.S.” preceding the class may be replaced by the characters “IS” or deleted and replaced by the characters “Ex ia” following the temperature class.
- Warnings as shown below in English and French.

- WARNING: POTENTIAL ELECTROSTATIC CHARGING HAZARD – SEE INSTRUCTIONS
- AVERTISSEMENT: RISQUE POTENTIEL DE DECHARGES ELECTROSTATIQUES – VOIR CONSIGNES

Notes:

Products certified under Class C225804, C225884 have been certified under CSA’s ISO/IEC 17065 accreditation with the Standards Council of Canada (SCC). www.scc.ca

Supplement to Certificate of Compliance

Certificate: 80126993 **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
80168899	January 24, 2024	Update to introduce new antenna options, a new supplementary electronics option, a new lacquer type and new sealing materials
80126993	December 19, 2022	Prime North America model certification of the radar level gauge VEGAPULS 6X.

Certificate of Compliance

Certificate:	80126993	**Master Contract:**	153857
Project:	80126993	**Date Issued:**	December 19, 2022

Issued To: **Vega Grieshaber KG**
Am Hohenstein 113
Schiltach, Baden-Württemberg, 77761
Germany

Attention: Klaus Mayer

Issued by: Gordon Neuroth

PRODUCTS

CLASS - C225804 - PROCESS CONTROL EQUIPMENT Intrinsically Safe, Entity - For Hazardous Locations

CLASS - C225884 - PROCESS CONTROL EQUIPMENT - Intrinsically Safe, Entity - For Hazardous Locations - Certified to US Standards

VEAGPULS 6X radar level gauge in type of protection intrinsic safety.
Model code PS6X(Z)(*).2*W**B/T/F/C******H*C******

Cl. I, Zn 0, AEx/Ex ia IIC T6…T1 Ga
Cl. I, Zn 0/1, AEx/Ex ia IIC T6…T1 Ga/Gb

By additional/optional marking as per CAN/CSA-C22.2 No. 60079-0:19, clause 29.1A; CAN/CSA-C22.2 No. 60079-11:14, Annex HA and UL 60079-0:19, sections 29.18DV through 29.19DV.

I.S. Cl. I, Div. 1, Gp A, B, C, D; T6…T1

VEAGPULS 6X radar level gauge in type of protection intrinsic safety.
PS6X(Z)(*).2*W**B/T/F/C******H*H******

Cl. I, Zn 0, AEx/Ex ia IIC T6…T1 Ga
Zn 20 AEx/Ex ia IIIC T_{200} 102 °C Da
Zn 21 AEx/Ex ia IIIC T 111 °C Db

By additional/optional marking as per CAN/CSA-C22.2 No. 60079-0:19, clause 29.1A; CAN/CSA-C22.2 No. 60079-11:14, Annex HA and UL 60079-0:19, sections 29.18DV through 29.19DV.

I.S. Cl. I, Div. 1, Gp A, B, C, D; T6…T1
I.S. Cl. II, Div. 1, Gp E, F, G; T4
I.S. Cl. III, T4

For equipment which is intended to be installed in the boundary wall between an area requiring EPL Ga or Da and a less hazardous area (no additional/optional marking).
Cl. I, Zn 0/1, AEx/Ex ia IIC T6…T1 Ga/Gb
Zn 20/21 AEx/Ex ia IIIC T* °C Da/Db

VEAGPULS 6X radar level gauge in type of protection intrinsic safety.
PS6X(Z)(*).2*W**B/T/F/C******A*C******

Cl. I, Zn 0/1, AEx/Ex ia IIC T6…T1 Ga/Gb
Cl. I, Zn 1, AEx/Ex ia IIC T6…T1 Gb

By additional/optional marking as per CAN/CSA-C22.2 No. 60079-0:19, clause 29.1A; CAN/CSA-C22.2 No. 60079-11:14, Annex HA and UL 60079-0:19, sections 29.18DV through 29.19DV.

I.S. Cl. I, Div. 2, Gp A, B, C, D; T6…T1

VEAGPULS 6X radar level gauge in type of protection intrinsic safety.
PS6X(Z)(*).2*W**B/T/F/C******A*H******

Cl. I, Zn 1, AEx/Ex ia IIC T6…T1 Gb
Zn 21 AEx/Ex ia IIIC T 111 °C Db

By additional/optional marking as per CAN/CSA-C22.2 No. 60079-0:19, clause 29.1A; CAN/CSA-C22.2 No. 60079-11:14, Annex HA and UL 60079-0:19, sections 29.18DV through 29.19DV.

I.S. Cl. I, Div. 2, Gp A, B, C, D; T6…T1
I.S. Cl. II, Div. 2, Gp E, F, G; T4
I.S. Cl. III, T4

For equipment which is intended to be installed in the boundary wall between an area requiring EPL Ga or Da and a less hazardous area (no additional/optional marking).

Cl. I, Zn 0/1, AEx/Ex ia IIC T6…T1 Ga/Gb
Zn 20/21 AEx/Ex ia IIIC T* °C Da/Db

Electrical data:

Connection	Parameter
Supply circuit…… (terminals 1 and 2)	Type of protection Intrinsic Safety Ex ia IIC resp. Ex ia IIIC (depending on the model code of the equipment) only for connection to a certified intrinsically safe circuit. Maximum values: Ui = 30 V DC Ii = 131 mA Pi = 983 mW Li = 0 µH Ci = 0 µF
Output circuit…… (terminals 5,6,7 and 8)	Type of protection Intrinsic Safety Ex ia IIC resp. Ex ia IIIC (depending on the model code of the equipment) only for connection to the external display unit VEGADIS 81 (certified under CSA14CA2662675). Maximum values of the connection cable: Lo = 130 µH Co = 600 nF

Temperature ratings (gas):

The temperature ratings are depending on the model, ambient temperature and process temperature and are as listed below. The certification codes are depending on the characters of the following model code.
PS6X(Z)(*).a-b-c-de-f-g-hi-j-k-l-m-no-p-q-r-s-t-u
If characters are separated by a slash, these are different options for a specific wildcard.
The complete model code options are shown in the description section.

Models:
PS6X(Z)(*).2*W**B*AT/AU/AV**********

Aluminum enclosure – Model code option **j** : A, H, 3, D, S, 4, 9

Temperature Class	Process temperature range (at the antenna in zone 0 / EPL Ga / Division 1)	Ambient temperature range (at the electronics enclosure in zone 0 / EPL Ga / Division 1)
T6	-40°C…+80°C	-40°C…+40°C

Temperature Class	Process temperature range (at the antenna in zone 0 / EPL Ga / Division 1)	Ambient temperature range (at the electronics enclosure in zone 0 / EPL Ga / Division 1)
T5	-40°C…+80°C	-40°C…+58°C
T4 … T1	-40°C…+76°C	-40°C…+76°C

Stainless steel precision casted enclosure – Model code option **j** : V, 5, W

Temperature Class	Process temperature range (at the antenna in zone 0 / EPL Ga / Division 1)	Ambient temperature range (at the electronics enclosure in zone 0 / EPL Ga / Division 1)
T6	-40°C…+80°C	-40°C…+39°C
T5	-40°C…+80°C	-40°C…+57°C
T4 … T1	-40°C…+76°C	-40°C…+76°C

Stainless steel electro-polished enclosure & plastic enclosure - Model code option **j** : 8

Temperature Class	Process temperature range (at the antenna in zone 0 / EPL Ga / Division 1)	Ambient temperature range (at the electronics enclosure in zone 0 / EPL Ga / Division 1)
T6	-40°C…+80°C	-40°C…+38°C
T5	-40°C…+80°C	-40°C…+56°C
T4 … T1	-40°C…+76°C	-40°C…+76°C

Models:
PS6X(Z)(*).2*W**F*AW/AY/A2**********
PS6X(Z)(*).2*W**T*AA/AC/AE/AG/AJ/AL**********

Aluminum enclosure – Model code option **j** : A, H, 3, D, S, 4, 9

Temperature Class	Process temperature range (at the antenna in zone 0 / EPL Ga / Division 1)	Ambient temperature range (at the electronics enclosure in zone 0 / EPL Ga / Division 1)
T6	xx °C…+80°C	-40°C…+32°C
T5	xx °C…+95°C	-40°C…+47°C
T4	xx °C…+130°C	-40°C…+57°C
T3 …T1	xx °C…+150°C	-40°C …+48°C

Stainless steel precision casted enclosure – Model code option **j** : V, 5, W

Temperature Class	Process temperature range (at the antenna in zone 0 / EPL Ga / Division 1)	Ambient temperature range (at the electronics enclosure in zone 0 / EPL Ga / Division 1)
T6	xx °C…+80°C	-40 °C…+30°C
T5	xx °C…+95°C	-40 °C…+45°C

Temperature Class	Process temperature range (at the antenna in zone 0 / EPL Ga / Division 1)	Ambient temperature range (at the electronics enclosure in zone 0 / EPL Ga / Division 1)
T4	xx °C…+130°C	-40 °C…+47°C
T3 …T1	xx °C…+150°C	-40 °C …+34°C

Stainless steel electro-polished enclosure & plastic enclosure - Model code option **j** : 8

Temperature Class	Process temperature range (at the antenna in zone 0 / EPL Ga / Division 1)	Ambient temperature range (at the electronics enclosure in zone 0 / EPL Ga / Division 1)
T6	xx °C…+80°C	-40°C…+29°C
T5	xx °C…+95°C	-40°C…+44°C
T4	xx °C…+130°C	-40°C…+36°C
T3 …T1	xx °C…+150°C	-40°C …+19°C

xx°C: lower temperature at process limited by seal type in use with xx:

AA PEEK / FKM (SHS FPM 70C3 GLT) / **-40**…+150°C
AC PEEK / FFKM (Kalrez 6230) / **-15**…+150°C
AE PEEK / FFKM (Kalrez 6375) / **-20**…+150°C
AG PEEK / FFKM (Perlast G75B) / **-15**…+150°C
AJ PEEK / FFKM (Perlast G74S) / **-15**…+150°C
AL PEEK / EPDM (A+P 70.10-02) / **-55**…+150°C

The lower limit of the process temperature depends on the seal type as per model code option **hi**.
The following lower limits are replacing the wildcard "xx °C" based on the model code option of the seal type.

AA = PEEK / FKM (SHS FPM 70C3 GLT): **-40°C**
AC = PEEK / FFKM (Kalrez 6230): **-15°C**
AE = PEEK / FFKM (Kalrez 6375): **-20°C**
AG = PEEK / FFKM (Perlast G75B): **-15°C**
AJ = PEEK / FFKM (Perlast G74S): **-15°C**
AL = PEEK / EPDM (A+P 70.10-02): **-55°C**

Models:
PS6X(Z)(*).2*W**F*AX/AZ/A3/A4/A5**********
PS6X(Z)(*).2*W**T*AB**********
PS6X(Z)(*).2*W**C*AB**********

Aluminum enclosure – Model code option **j** : A, H, 3, D, S, 4, 9

Temperature Class	Process temperature range (at the antenna in zone 0 / EPL Ga / Division 1)	Ambient temperature range (at the electronics enclosure in zone 0 / EPL Ga / Division 1)
T6	-40°C…+80°C	-40°C …+41°C
T5	-40°C…+95°C	-40°C …+56°C
T4	-40°C…+130°C	-40°C …+72°C
T3…T1	-40°C…+195°C	-40°C …+62°C

Stainless steel precision casted enclosure – Model code option **j** : V, 5, W

Temperature Class	Process temperature range (at the antenna in zone 0 / EPL Ga / Division 1)	Ambient temperature range (at the electronics enclosure in zone 0 / EPL Ga / Division 1)
T6	-40°C…+80°C	-40°C …+40°C
T5	-40°C…+95°C	-40°C …+55°C
T4	-40°C…+130°C	-40°C …+66°C
T3…T1	-40°C…+195°C	-40°C …+49°C

Stainless steel electro-polished enclosure & plastic enclosure - Model code option **j** : 8

Temperature Class	Process temperature range (at the antenna in zone 0 / EPL Ga / Division 1)	Ambient temperature range (at the electronics enclosure in zone 0 / EPL Ga / Division 1)
T6	-40°C…+80°C	-40°C …+41°C
T5	-40°C…+95°C	-40°C …+56°C
T4	-40°C…+130°C	-40°C …+66°C
T3…T1	-40°C…+195°C	-40°C …+47°C

Models:
PS6X(Z)(*).2*W**F*AX/AZ**********

Aluminum enclosure – Model code option **j** : A, H, 3, D, S, 4, 9

Temperature Class	Process temperature range (at the antenna in zone 0 / EPL Ga / Division 1)	Ambient temperature range (at the electronics enclosure in zone 0 / EPL Ga / Division 1)
T6	-196°C…+80°C	-10°C …+41°C
T5	-196°C…+95°C	-10°C …+56°C
T4	-196°C…+130°C	-10°C …+72°C
T3…T1	-196°C…+195°C	-10°C …+62°C

Stainless steel precision casted enclosure – Model code option **j** : V, 5, W

Temperature Class	Process temperature range (at the antenna in zone 0 / EPL Ga / Division 1)	Ambient temperature range (at the electronics enclosure in zone 0 / EPL Ga / Division 1)
T6	-196°C…+80°C	-10°C …+40°C
T5	-196°C…+95°C	-10°C …+55°C
T4	-196°C…+130°C	-10°C …+66°C
T3…T1	-196°C…+195°C	-10°C …+49°C

Stainless steel electro-polished enclosure & plastic enclosure - Model code option **j** : 8

Temperature Class	Process temperature range (at the antenna in zone 0 / EPL Ga / Division 1)	Ambient temperature range (at the electronics enclosure in zone 0 / EPL Ga / Division 1)
T6	-196°C…+80°C	-10°C …+41°C
T5	-196°C…+95°C	-10°C …+56°C
T4	-196°C…+130°C	-10°C …+66°C
T3…T1	-196°C…+195°C	-10°C …+47°C

Models:
PS6X(Z)(*).2*W**C*AA/AC/AE/AG/AJ/AL**********

Aluminum enclosure – Model code option **j** : A, H, 3, D, S, 4, 9

Temperature Class	Process temperature range (at the antenna in zone 0 / EPL Ga / Division 1)	Ambient temperature range (at the electronics enclosure in zone 0 / EPL Ga / Division 1)
T6	xx °C…+80°C	-40°C…+36°C
T5	xx °C…+95°C	-40°C…+51°C
T4	xx °C…+130°C	-40°C…+65°C
T3 …T1	xx °C …+150°C	-40°C …+58°C

Stainless steel precision casted enclosure – Model code option **j** : V, 5, W

Temperature Class	Process temperature range (at the antenna in zone 0 / EPL Ga / Division 1)	Ambient temperature range (at the electronics enclosure in zone 0 / EPL Ga / Division 1)
T6	xx °C…+80°C	-40 °C…+35°C
T5	xx °C…+95°C	-40 °C…+50°C
T4	xx °C…+130°C	-40 °C…+57°C
T3 …T1	xx °C …+150°C	-40 °C …+48°C

Stainless steel electro-polished enclosure & plastic enclosure - Model code option **j** : 8

Temperature Class	Process temperature range (at the antenna in zone 0 / EPL Ga / Division 1)	Ambient temperature range (at the electronics enclosure in zone 0 / EPL Ga / Division 1)
T6	xx °C…+80°C	-40°C…+32°C
T5	xx °C…+95°C	-40°C…+47°C
T4	xx °C…+130°C	-40°C…+46°C
T3 …T1	xx °C …+150°C	-40°C …+33°C

xx°C: lower temperature at process limited by seal type in use with xx:

AA PEEK / FKM (SHS FPM 70C3 GLT) / **-40**…+150°C
AC PEEK / FFKM (Kalrez 6230) / **-15**…+150°C
AE PEEK / FFKM (Kalrez 6375) / **-20**…+150°C
AG PEEK / FFKM (Perlast G75B) / **-15**…+150°C
AJ PEEK / FFKM (Perlast G74S) / **-15**…+150°C
AL PEEK / EPDM (A+P 70.10-02) / **-55**…+150°C

The lower limit of the process temperature depends on the seal type as per model code option **hi**.
The following lower limits are replacing the wildcard "xx °C" based on the model code option of the seal type.

AA = PEEK / FKM (SHS FPM 70C3 GLT): **-40°C**
AC = PEEK / FFKM (Kalrez 6230): **-15°C**
AE = PEEK / FFKM (Kalrez 6375): **-20°C**
AG = PEEK / FFKM (Perlast G75B): **-15°C**
AJ = PEEK / FFKM (Perlast G74S): **-15°C**
AL = PEEK / EPDM (COG AP302): **-40°C**

Models:
PS6X(Z)(*).2*W**C*AD/AF/AH/AK**********
PS6X(Z)(*).2*W**T*AD/AF/AH/AK**********

Aluminum enclosure – Model code option **j** : A, H, 3, D, S, 4, 9

Temperature Class	Process temperature range (at the antenna in zone 0 / EPL Ga / Division 1)	Ambient temperature range (at the electronics enclosure in zone 0 / EPL Ga / Division 1)
T6	xx °C …+80°C	-40°C …+39°C
T5	xx °C …+95°C	-40°C …+54°C
T4	xx °C …+130°C	-40°C …+69°C
T3	xx °C …+195°C	-40°C …+63°C
T2 …T1	xx °C …+250°C	-40°C …+55°C

Stainless steel precision casted enclosure – Model code option **j** : V, 5, W

Temperature Class	Process temperature range (at the antenna in zone 0 / EPL Ga / Division 1)	Ambient temperature range (at the electronics enclosure in zone 0 / EPL Ga / Division 1)
T6	xx °C…+80°C	-40°C …+38°C
T5	xx °C…+95°C	-40°C …+53°C
T4	xx °C…+130°C	-40°C …+65°C
T3	xx °C…+195°C	-40°C …+56°C
T2 …T1	xx °C …+250°C	-40°C …+45°C

Stainless steel electro-polished enclosure & plastic enclosure - Model code option **j** : 8

Temperature Class	Process temperature range (at the antenna in zone 0 / EPL Ga / Division 1)	Ambient temperature range (at the electronics enclosure in zone 0 / EPL Ga / Division 1)
T6	xx °C …+80°C	-40°C …+33°C
T5	xx °C…+95°C	-40°C …+48°C
T4	xx °C…+130°C	-40°C …+59°C
T3	xx °C…+195°C	-40°C …+49°C
T2 …T1	xx °C …+250°C	-40°C …+34°C

The lower limit of the process temperature depends on the seal type as per model code option **hi**.
The following lower limits are replacing the wildcard “xx °C” based on the model code option of the seal type.

AD = PEEK / FFKM (Kalrez 6230): **-15°C**
AF = PEEK / FFKM (Kalrez 6375): **-20°C**
AH = PEEK / FFKM (Perlast G75B): **-15°C**
AK = PEEK / FFKM (Perlast G74S): **-15°C**

Temperature ratings (dust):

Temperature ratings for equipment in EPL Da (maximum surrounding dust layer when installed in zone 20 = 200 mm) or for equipment installed in division 1

Models:
PS6X(Z)(*).2*W**B*AT/AU/AV**********
PS6X(Z)(*).2*W**F*AW/AX/AY/AZ/A2/A3/A4/A5**********
PS6X(Z)(*).2*W**T*AA/AB/AC/AD/AE/AF/AG/AH/AJ/AK/AL**********
PS6X(Z)(*).2*W**C*AA/AB/AC/AD/AE/AF/AG/AH/AJ/AK/AL**********

Electronic enclosure, material and model option code **j**	Process temperature range	Ambient temperature range	Maximum surface temperature
Aluminium A, D, H, S or stainless steel V,W	xx °C…+67°C	xx °C…+67°C	102°C

Temperature ratings for equipment in EPL Db (no surrounding dust layer when installed in zone 21) or for equipment installed in division 2

Models:
PS6X(Z)(*).2*W**B*AT/AU/AV**********
PS6X(Z)(*).2*W**F*AW/AX/AY/AZ/A2/A3/A4/A5**********
PS6X(Z)(*).2*W**T*AA/AB/AC/AD/AE/AF/AG/AH/AJ/AK/AL**********
PS6X(Z)(*).2*W**C*AA/AB/AC/AD/AE/AF/AG/AH/AJ/AK/AL**********

Electronic enclosure, material and model option code **j**	Process temperature range	Ambient temperature range	Maximum surface temperature
Aluminium A, D, H, S or stainless steel V,W	xx °C…+76°C	xx °C…+76°C	111°C

Temperature ratings for equipment in EPL Da/Db (when electronic enclosure is installed in zone 21 and antenna installed in zone 20)

Models:
PS6X(Z)(*).2*W**B*AT/AU/AV**********

Electronic enclosure, material and model option code **j**	Process temperature range at the antenna	Ambient temperature range at the electronics enclosure	Maximum surface temperature (shown as T* in the marking)
Aluminium A, D, H, S	-40°C…+76°C	-40°C…+76 °C	+111 °C
Stainless steel V,W	-40°C…+76°C	-40°C…+76 °C	+111 °C

Models:
PS6X(Z)(*).2*W**F*AW/AY/A2**********
PS6X(Z)(*).2*W**T*AA/AC/AE/AG/AJ/AL**********

Electronic enclosure, material and model option code **j**	Process temperature range at the antenna	Ambient temperature range at the electronics enclosure	Maximum surface temperature (shown as T* in the marking)
Aluminium A, D, H, S	-xx °C…+130°C	-40°C…+57°C	132°C
	-xx °C…+150°C	-40°C…+48°C	152°C
Stainless steel V,W	-xx °C…+130°C	-40°C…+47°C	132°C
	-xx °C…+150°C	-40°C…+34°C	152°C

The lower limit of the process temperature depends on the seal type as per model code option **hi**.
The following lower limits are replacing the wildcard "xx °C" based on the model code option of the seal type.
AA = PEEK / FKM (SHS FPM 70C3 GLT): **-40 °C**
AC = PEEK / FFKM (Kalrez 6230): **-15 °C**
AE = PEEK / FFKM (Kalrez 6375): **-20 °C**
AG = PEEK / FFKM (Perlast G75B): **-15 °C**
AJ = PEEK / FFKM (Perlast G74S): **-15 °C**
AL = PEEK / EPDM (COG AP302): **-40 °C**

Models:
PS6X(Z)(*).2*W**F*AX/AZ/A3/A4/A5**********
PS6X(Z)(*).2*W**T*AB**********
PS6X(Z)(*).2*W**C*AB**********

Electronic enclosure, material and model option code **j**	Process temperature range at the antenna	Ambient temperature range at the electronics enclosure	Maximum surface temperature (shown as T* in the marking)
Aluminium	-40°C…+130°C	-40°C…+72°C	132°C
A, D, H, S	-40°C…+195°C	-40°C…+62°C	197°C
Stainless steel	-40°C…+130°C	-40°C…+66°C	132°C
V,W	-40°C…+195°C	-40°C…+49°C	197°C

PS6X(Z)(*).2*W**C*AA/AC/AE/AG/AJ/AL**********

Electronic enclosure, material and model option code **j**	Process temperature range at the antenna	Ambient temperature range at the electronics enclosure	Maximum surface temperature (shown as T* in the marking)
Aluminium	-xx °C…+130°C	-40°C…+65°C	132°C
A, D, H, S	-xx °C…+150°C	-40°C…+58°C	152°C
Stainless steel	-xx °C…+130°C	-40°C…+57°C	132°C
V,W	-xx °C…+150°C	-40°C…+48°C	152°C

The lower limit of the process temperature depends on the seal type as per model code option **hi**.
The following lower limits are replacing the wildcard "xx °C" based on the model code option of the seal type.
AA = PEEK / FKM (SHS FPM 70C3 GLT): **-40°C**
AC = PEEK / FFKM (Kalrez 6230): **-15°C**
AE = PEEK / FFKM (Kalrez 6375): **-20°C**
AG = PEEK / FFKM (Perlast G75B): **-15°C**
AJ = PEEK / FFKM (Perlast G74S): **-15°C**
AL = PEEK / EPDM (COG AP302): **-40°C**

Models:
PS6X(Z)(*).2*W**C*AD/AF/AH/AK**********
PS6X(Z)(*).2*W**T*AD/AF/AH/AK**********

Electronic enclosure, material and model option code **j**	Process temperature range at the antenna	Ambient temperature range at the electronics enclosure	Maximum surface temperature (shown as T* in the marking)
Aluminium	-xx °C…+130°C	-40°C…+69°C	132°C
A, D, H, S	-xx °C…+195°C	-40°C…+63°C	197°C
	-xx °C…+250°C	-40°C…+55°C	252°C
Stainless steel	-xx °C…+130°C	-40°C…+65°C	132°C
V,W	-xx °C…+195°C	-40°C…+56°C	197°C
	-xx °C…+250°C	-40°C…+45°C	252°C

AD = PEEK / FFKM (Kalrez 6230): **-15°C**

AF = PEEK / FFKM (Kalrez 6375): **-20°C**
AH = PEEK / FFKM (Perlast G75B): **-15°C**
AK = PEEK / FFKM (Perlast G74S): **-15°C**

CONDITIONS OF ACCEPTABILITY

1. Due to the risk of electrostatic discharge the non-metallic parts of the equipment have to be protected from electrostatic charging during installation and operation. This includes but is not limited to prevent friction to the enclosure surface or by the process medium as well as exposition to high voltage fields.

2. To avoid the risk of electrostatic charging of metal parts the equipment must be connected to the equipotential bonding (transition resistance ≤ 1 MΩ) by the use of the equipotential bonding clamp of the equipment.

3. The equipment must be mounted and protected in a way that mechanical processes are avoided which may produce sparks due to friction, impact or abrasion.

4. All parts of the equipment which are in contact with the process medium must only be used in such a medium the materials are sufficiently resistant against.

5. For the equipment types with rinsing connection it must be ensured that a degree of ingress protection of IP67 is provided at the connection to the reflux valve when used as an EPL Ga/Gb equipment. After removing the reflux valve or the rinsing facility on the reflux valve, the opening must be closed with a suitable screwed plug so that the degree of ingress protection of IP67 is sufficiently maintained.

6. For the equipment types with a swivelling holder it must be ensured that a degree of ingress protection of IP67 is sufficiently maintained when operated as an EPL Ga/Gb equipment and after aligning the antenna by using the swivelling holder and after screwing on the tension flange.

APPLICABLE REQUIREMENTS

CAN/CSA-C22.2 No. 61010-1-12	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use, Part 1: General Requirements
CAN/CSA Std. C22.2 No. 60079-0:19	Explosive atmospheres - Part 0: Equipment - General Requirements
CAN/CSA Std. C22.2 No. 60079-11:14	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety “i”
CAN/CSA Std. C22.2 No. 60079-26:16	Explosive atmospheres - Part 26: Equipment with Equipment Protection Level (EPL) Ga
UL Std. No. 61010-1 (3rd Edition)	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use, Part 1: General Requirements
UL 60079-0 (7th Edition 2019)	Explosive Atmospheres – Part 0: Equipment - General Requirements
UL 60079-11 (6th Edition 2013)	Explosive Atmospheres – Part 11: Equipment Protection by Intrinsic Safety "i"
UL 60079-26 (3rd Edition 2017)	Explosive atmospheres - Part 26: Equipment with Equipment Protection Level (EPL) Ga

MARKINGS

The manufacturer is required to apply the following markings:

- Products shall be marked with the markings specified by the particular product standard.
- Products certified for Canada shall have all Caution and Warning markings in both English and

Additional bilingual markings not covered by the product standard(s) may be required by the Authorities Having Jurisdiction. It is the responsibility of the manufacturer to provide and apply these additional markings, where applicable, in accordance with the requirements of those authorities.French.

The products listed are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US (indicating that products have been manufactured to the requirements of both Canadian and U.S. Standards) or with adjacent indicator 'US' for US only or without either indicator for Canada only.

Markings are attached by adhesive labels.

- CSA Monogram with C-US indicator.
- Submittor Identification.
- Model Designation.
- Serial Number, Date Code or Month and Year of Manufacture.
- Electrical Ratings.
- Ambient temperature range
- CSA Certificate number: “CSA22CA80126993”
- The marking for Zones as shown in the product section (mandatory).

- The additional marking for Divisions as shown in the product section may also be used (optional addition). For the Division marking the characters “I.S.” preceding the class may be replaced by the characters “IS” or deleted and replaced by the characters “Ex ia” following the temperature class.
- Warnings as shown below in English and French.

- WARNING: POTENTIAL ELECTROSTATIC CHARGING HAZARD – SEE INSTRUCTIONS
- AVERTISSEMENT: RISQUE POTENTIEL DE DECHARGES ELECTROSTATIQUES – VOIR CONSIGNES

Notes:

Products certified under Class C225804, C225884 have been certified under CSA’s ISO/IEC 17065 accreditation with the Standards Council of Canada (SCC). www.scc.ca