



Certificate of Compliance

Certificate: 2708418

Master Contract: 256254

Project: 70015398

Date Issued: December 17, 2014

Issued to: **Gems Sensors Inc.**
1 Cowles Road
Plainville, CT 06062
USA

Attention: Mr. Philip I. Draper

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: *Lyn Murray*
Lyn Murray

PRODUCTS

CLASS 2258 02 - PROCESS CONTROL EQUIPMENT – Transducers – For Hazardous Locations

CLASS 2258 82 - PROCESS CONTROL EQUIPMENT – Transducers – For Hazardous Locations. Certified to U.S. Standards

Class I, Division 1, Groups A, B, C and D

Class I, Zone 1, Ex d IIC T4 Gb

Class I, Zone 1, AEx d IIC T4 Gb

- 3XEP Series Pressure Transducer, rated at up to 30 V dc, 28 mA, 2200 bar max, single seal, factory seal, 0.84W max. Temperature Code T4. Ambient temperature range: -40°C to +95°C.

Note: Model specification is 3XEPdaaaaabbcfeegg.

Conditions of Use:

1. The permanently attached cable shall be suitably protected from impact when in use.



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MODEL SPECIFICATION : 3XEPdaaaaabbcfeegg

Where: X = 1 or 2

CODE	Type
1	Standard Duty
2	Heavy Duty

d = Output Code

CODE	DESCRIPTION (Output)	OUTPUT TYPE
B	4-20mA	Current
C	1-6V	Absolute
F	0.1-5.1V	Absolute
G	0.2-10.2V	Absolute
H	1-5V	Absolute
N	0.5-4.5V Non Ratio-metric	Absolute
P	1-10V	Absolute
R	0-5V	Absolute
S	0-10V	Absolute
T	0.5-4.5V Ratio-metric	Ratio-Metric
V	0.5-4V	Absolute
Z	Place Holder	

aaaaa = Pressure Range Code

CODE	PRESSURE RANGE (Bar)
0006G	6 bar Gauge
0010G	10 bar Gauge
0016G	16 bar Gauge
0025G	25 bar Gauge
0040G	40 bar Gauge
0060G	60 bar Gauge
0100S	100 bar Sealed
0160S	160 bar Sealed
0250S	250 bar Sealed
0400S	400 bar Sealed
0600S	600 bar Sealed
1000S	1000 bar Sealed

CODE	PRESSURE RANGE (psi)
100PG	100 psi Gauge
150PG	150 psi Gauge
200PG	200 psi Gauge
300PG	300 psi Gauge
500PG	500 psi Gauge
600PG	600 psi Gauge
750PG	750 psi Gauge
10CPG	1000 psi Gauge
15CPS	1500 psi Sealed
20CPS	2000 psi Sealed
25CPS	2500 psi Sealed
30CPS	3000 psi Sealed
35CPS	3500 psi Sealed
40CPS	4000 psi Sealed
50CPS	5000 psi Sealed
60CPS	6000 psi Sealed
75CPS	7500 psi Sealed
10KPS	10000 psi Sealed



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bb = Pressure Port

CODE	DESCRIPTION (Union Type)	CODE	DESCRIPTION (Union Type)
0H	1/2" NPT	1J	7/16" - 20 UNF 2A SA1926/2 O'RING
02	1/4" - 18 NPT	1P	9/16" - 18UNF 22 A/F
0E	1/4" - 18 NPT Female	4P	G1/2" A 27A/F
4C	1/4" - 18 NPTF Dryseal	05	G1/4" A Integral Face Seal
0A	1/4" - 19 PT (JIS) or 1/4" - 19 BSPT	01	G1/4" A Stud (BS 5380 Port)
4B	1/4" Female (7/16UN with Schraeder Deflator)	0S	G1/8" A Stud (BS 5380 Port)
08	1/8" - 27 NPT	2T	M12x1.5 (6g) High Pressure (Washer Seal)
4D	1/8" - 27 NPTF Dryseal	0L	M12x1.5P (6g) O'Ring to ISO 6149-2
4N	3/8" - 24 UNF Union	1G	Schraeder 7-16" - 20 UN 2B Female
04	7/16" - 20 (37FLARE.SAE J514 SIZE 4)	0K	M14 x 1.5 straight
		ZZ	Place Holder

c = Connector Code

CODE	DESCRIPTION (Electrical Connection)
S	Explosion proof Conduit 1/2" NPT

ee = Cable Length

CODE	DESCRIPTION (Cable Length)
00	NOT FITTED
01	1 METRE
02	2 METRE
03	3 METRE
05	5 METRE
10	10 METRE
ZZ	Place Holder

f = Pressure Restrictor Option

CODE	Type
0	Not Fitted
R	Fitted

gg = Any combination of alpha/numeric characters representing options not affecting Explosion Proof certification



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APPLICABLE REQUIREMENTS

CSA C22.2 No 0-10	General Requirements – Canadian Electrical Code, Part II – Tenth Edition
CSA C22.2 No 30-M1986 (R 2007)	Explosion-Proof Enclosures for Use in Class I Hazardous Locations Industrial Products – Third Edition
CSA C22.2 No 142-M1987 (R 2009)	Process Control Equipment Industrial Products – Third Edition
UL 916	Energy Management Equipment – Fourth Edition
UL 1203	Explosion-Proof and Dust-Ignition-Proof Electrical Equipment for Use in Hazardous (Classified) Locations – Fourth Edition
CSA C22.2 No. 60079-0:2011	Explosive Atmospheres – Part 0: Equipment – General Requirements
CSA C22.2 No. 60079-1:2011	Explosive Atmospheres – Part 1: Equipment Protection by Flameproof Enclosures “d”
UL 60079-0:2009	Explosive Atmospheres – Part 0: Equipment – General Requirements
UL 60079-1:2009	Explosive Atmospheres – Part 1: Equipment Protection by Flameproof Enclosures “d”
ANSI/ISA-12.27.01-2011	Requirements for Process Sealing Between Electrical Systems and Flammable or Combustible Process Fluids

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 following markings are permanently printed on type TCP540S matt silver polyester nameplate attached to the enclosure by means of an acrylic adhesive.

- Company’s name and/or Master Contract Number ‘256254’.
- Model number: As specified in the PRODUCTS section, above.
- Electrical ratings: As specified in the PRODUCTS section, above.
- Manufacturing date in DDDYY format and serial number.
- The CSA Mark with or without “C” and “US” indicators, as shown on the Certificate of Conformity.
- Hazardous Location designation: As specified in the PRODUCTS section, above.
- Temperature code: As specified in the PRODUCTS section, above.
- Rated maximum working pressure, as specified in the PRODUCTS section, above
- Single seal; Factory seal



Supplement to Certificate of Compliance

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*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
70015398	December 17, 2014	Update Certificate of Compliance 2708418 to include correct Marking requirement and Applicable Standard.
2708418	March 25, 2014	Original Certification. 251494 – 2706750

Submittor's Model	Listee's Model
ETX	3XEP