

### INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:	CEx FMG 09.0005X	ssue No: 2	2 C	Certificate histo	ry:
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Issue No. 2 (2014-04-22) Issue No. 1 (2010-04-01) Issue No. 0 (2009-06-18)

Date of Issue: 2014-04-22

Applicant: Expro Meters, Inc.

50 Barnes Park North Wallingford, CT 06492 **United States of America** 

Electrical Apparatus: Series QEX1000 ActiveSONAR Flowmeter System

Optional accessory: Consisting of Flow Transmitter, Junction Box, and Transducer Assemblies

Type of Protection: Ex d mb IIB T6...T4 -45°C(-50°C)≤Ta≤+60°C Gb IP66/67

Marking: Flow Transmitter Assy:

Ex d IIB T6...T4 -50°C≤Ta≤+60°C Gb IP66

Junction Box Assy:

Ex d IIB T6...T4 -50°C≤Ta≤+60°C Gb IP66

Transducer Assy:

Ex mb IIB T6...T4 -45°C≤Ta≤+60°C Gb IP67

Approved for issue on behalf of the IECEx J. E. Marquedant

Certification Body:

Position: Manager, Electrical Systems

Signature:

(for printed version)

Date:

- 1. This certificate and schedule may only be reproduced in full.
- 2. This certificate is not transferable and remains the property of the issuing body.
- 3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

FM Approvals LLC 1151 Boston-Providence Turnpike Norwood, MA 02062 United States of America





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Manufacturer: Expro Meters, Inc.

50 Barnes Park North Wallingford, CT 06492 **United States of America** 

Additional Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

### STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2011 Explosive atmospheres - Part 0: General requirements

Edition:6.0

IEC 60079-1: 2007-04 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"

Edition:6

IEC 60079-18 : 2009 Explosive atmospheres Part 18: Equipment protection by encapsulation "m"

Edition:3

This Certificate does not indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.

### **TEST & ASSESSMENT REPORTS:**

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

### Test Report:

US/FMG/ExTR09.0011/00 US/FMG/ExTR09.0011/01 US/FMG/ExTR09.0011/02

US/FMG/ExTR09.0011/03

Quality Assessment Report:

US/FMG/QAR09.0006/00 US/FMG/QAR09.0006/01 US/FMG/QAR09.0006/02



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Schedule

### **EQUIPMENT:**

Equipment and systems covered by this certificate are as follows:

### QEX1000a-b-B ActiveSONAR Flowmeter System consisting of the following electrical sub-assemblies

a = alphanumeric string indicating general configuration and application (Not Ex safety related)

b = alphanumeric. Operational process temperature [never exceeding+125°C] (Not Ex safety related)

### TA1000-aaa-bbb-cc-de-Agh-ii-1-k-B. Transducer Assy

- a = alphanumeric indicating pipe (Not Ex safety related)
- b = alphanumeric indicating the set of transducer components (limited to those elements listed in ECD00020)
- c = alphanumeric indicating primary transducer interface (Not Ex safety related)
- d = 1 or 2 Protective cover material
- e = alphanumeric indicating cover features (Not Ex safety related)
- g = 1,2,3,4,5,6,7,8,9,A,B,C,D,E,F,G,H,J,K,L,M,N,P,Q,R,S,or T. Cable gland
- h = alphanumeric indicating cable length(Not Ex safety related)
- i = alphanumeric indicating language (Not Ex safety related)
- k = alphanumeric. Operational process temperature [never exceeding+125°C] (Not Ex safety related)

### JB1000-Ebc-1-e-ff-1-h-B. Junction Box Assy

- b = alphanumeric indicating non-Ex safety-related enclosure options
- c = A, B, C, or D. Ex safety-related enclosure options.
- e = alphanumeric indicating bracket (Not Ex safety related)
- f = alphanumeric indicating language (Not Ex safety related)
- h = alphanumeric. Operational process temperature [never exceeding+125°C] (Not Ex safety related)

### FT1000-aa-Ecd-Afg-hh-i-jj-1-B. Flow Transmitter Assy

- a = alphanumeric indicating software (Not Ex safety related)
- c = alphanumeric indicating non-Ex safety-related enclosure options
- d = A or B. Ex safety-related enclosure options.
- $f = 1,2,3,4,5,6,7,8,9,A,B,C,D,E,F,G,H,J,K,L,M,N,P,Q,R,S,or\ T.$  Cable gland
- g = alphanumeric indicating cable length(Not Ex safety related)
- h = alphanumeric indicating electronics option(Not Ex safety related)
- i = alphanumeric indicating communication protocol (Not Ex safety related)
- j = alphanumeric indicating language (Not Ex safety related)

### CONDITIONS OF CERTIFICATION: YES as shown below:

### Specific Conditions of Use:

- 1. Special temperature measurements are required if process temperatures can exceed 100°C. See instructions in ECD00022 or ECD00062.
- 2. Special gland and cable selection requirements may apply. See instructions in ECD00022 or ECD00062.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Issue 2: