

CERTIFICATE OF CONFORMITY



- HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT PER US REQUIREMENTS**
- Certificate No:** FM17US0087X
- Equipment:** Model Series DPG-1a and DPG-1a-BSPT Digital Pressure Gauges
(Type Reference and Name)
- Name of Listing Company:** Dwyer Instruments Inc.
- Address of Listing Company:** 102 Indiana Hwy 212
Michigan City, IN 60090
USA
- The examination and test results are recorded in confidential report number:

3016071 dated 23rd May 2003
- FM Approvals LLC, certifies that the equipment described has been found to comply with the following Approval standards and other documents:

FM Class 3600:2018, FM Class 3610:2010, FM Class 3810:2018, ANSI/ISA 61010-1:2016
ANSI/NEMA 250:1991
- If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to specific conditions of use specified in the schedule to this certificate.
- This certificate relates to the design, examination and testing of the products specified herein. The FM Approvals surveillance audit program has further determined that the manufacturing processes and quality control procedures in place are satisfactory to manufacture the product as examined, tested and Approved.
- Equipment Ratings:**

Intrinsically Safe for Class I, Division 1, Groups A, B, C and D; T4 hazardous (classified) locations, Type 4X with a maximum ambient temperature +55°C.

Certificate issued by:



J.E. Marquedant
VP, Manager - Electrical Systems

1 April 2020

Date

To verify the availability of the Approved product, please refer to www.approvalguide.com

THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

FM Approvals LLC. 1151 Boston-Providence Turnpike, Norwood, MA 02062 USA
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SCHEDULE



US Certificate Of Conformity No: FM17US0087X

11. The marking of the equipment shall include:

Intrinsically Safe for Class I Division 1, Groups A, B, C, D; T4 Ta = -20°C to +55°C; Type 4X

12. **Description of Equipment:**

The DPG-1a and DPG-1a-BSPT Digital Pressure Gauge is a self powered unit used for measuring pressure and displaying the process pressure on a LCD. There are four switches accessible to the operator. The unit's electronics operate on two alkaline manganese batteries, size AAA. Each cell has a voltage of 1.65 volts. The units consist of two multilayer circuit boards and housed within an extruded aluminium enclosure with plastic end caps. One end-cap has a window for viewing the LCD and four cutouts for the operator switches. The LCD and switches are protected from external environment by a plastic membrane that covers the end-cap. The maximum ambient operating temperature of the DPG-1a and DPG-1a-BSPT Digital Pressure Gauge is +55°C. The maximum working pressure rating for the DPG-1a and DPG-1a-BSPT Digital Pressure Gauge is 3000psi (20684kPa).

DPG-1a, DPG-1a-BSPT. Digital Pressure Gauge.

a = Pressure range: 01, 02, 03, 04, 05, 06, 07, 08, 09, 10.

13. **Specific Conditions of Use:**

1. Batteries may only be replaced in an unclassified area.
2. For use with two Duracell MN2400 AAA alkaline batteries only.
3. **WARNING!** The apparatus enclosure contains aluminum and is considered to constitute a potential risk of ignition by impact or friction. Care must be taken into account during installation and use to prevent impact or friction.
4. Part of the enclosure is constructed from plastic. To prevent the risk of electrostatic sparking the plastic surface should only be cleaned only with a damp cloth..

Test and Assessment Procedure and Conditions:

This Certificate has been issued in accordance with FM Approvals US Certification Requirements.

Schedule Drawings

A copy of the technical documentation has been kept by FM Approvals.

Certificate History

Details of the supplements to this certificate are described below:

Date	Description
23 rd May 2003	Original Issue.

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Member of the FM Global Group

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10 th March 2017	<p><u>Supplement 3:</u> Report Reference: – RR208219 Dated 10th March 2017. Description of the Change: Assignment of Certificate number, change wording for Specific Conditions of Use and reformat certificate to new style.</p>
1 st April 2020	<p><u>Supplement 4:</u> Report Reference: – PR454956 Dated 1st April 2020. Description of the Change:</p> <ol style="list-style-type: none">1) Certificate updated due to process pressure testing required for lead frame construction update.2) FM3600 and FM3810 updated to latest edition (2018)3) ANSI/ISA 61010-1:2016 added to Standards list

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