

CERTIFICATE OF CONFORMITY



1. **HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT PER US REQUIREMENTS**
2. **Certificate No:** FM16US0177X
3. **Equipment:** F0 Series General Purpose Indicators
(Type Reference and Name)
4. **Name of Listing Company:** Fluidwell BV
5. **Address of Listing Company:** Voltaweg 23
5466 AZ Veghel
Netherlands
6. The examination and test results are recorded in confidential report number:

3033306 dated 25 June 2009
7. FM Approvals LLC, certifies that the equipment described has been found to comply with the following Approval standards and other documents:

FM Class 3600:2011, FM Class 3610:2015, FM Class 3810:2005,
ANSI/UL 60079-0:2013, ANSI/UL 60079-11:2014, ANSI/IEC 60529:2004
8. 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.
9. 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.
10. **Equipment Ratings:**

Intrinsically Safe for use in Class I / II / III, Division 1, Groups A, B, C, D, E, F and G
Class I, Zone 0, Group IIC, Hazardous (Classified) Locations

Certificate issued by:



J.E. Marquedant
Manager, Electrical Systems

20 September 2016

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

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11. The marking of the equipment shall include:

IS, Class I, II, III, Division 1, Groups A, B, C, D, E, F, G; T4 Ta = -40°C to +70°C, IP65/IP67

Class I, Zone 0, AEx ia IIC T4 Ta = -40°C to +70°C, IP65/IP67

12. **Description of Equipment:**

The Fluidwell BV FO Series General Purpose Indicators are a range of indicators utilizing a single PCB with one signal input and one signal output besides other options like supply and backlighting. The signal input can be configured for six different signal types, which are reflected in the model suffix. To support all models, there are currently two types of PCB's used: Fb03030 1 and Fb03130 1 accommodating 4 and 2 of the main models of the FO-Series indicator ranges respectively.

The system is a fixed installation device that is intended to be mounted in a vent-free enclosure, meeting the equipment enclosure requirements in accordance to ANSI/ISA-82.02.01 (IEC 61010-1 Mod), where the Approved equipment will be installed.

F0...-XI Series. General Purpose Indicator.

Model No.	Description	Control Drawing
F0xx-A-XI	Indicator with 0(4)...20mA input	FWCD-001
F0xx-A-PL-XI	Indicator with 4...20mA input, input loop powered	FWCD-002
F0xx-P-XI	Indicator with pulse input	FWCD-003
F0xx-U-XI	Indicator with 0...10V input	FWCD-004
F0xx-T-XI	Indicator with PT100 input	FWCD-005
F0xx-H-XI	Indicator with thermocouple input	FWCD-006

xx = software revision

Options:

- PC (Battery supply (internal));
- OT (Passive transistor output);
- ZB (LED backlight);
- PD (External supply input and supply output) [not models -T or -H];
- PX (External supply input)

13. **Specific Conditions of Use:**

1. When the enclosure of the indicator is made of aluminium alloy, when used in a potentially explosive atmosphere requiring apparatus of equipment protection level Ga, the indicator shall be installed so, that even in the event of rare incidents, an ignition source due to impact or friction sparks between the enclosure and iron/steel is excluded.

14. **Test and Assessment Procedure and Conditions:**

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

15. **Schedule Drawings**

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

16. **Certificate History**

Details of the supplements to this certificate are described below:

Date	Description
25 th June 2009	Original Issue.
20 th September 2016	<u>Supplement 1:</u> Report Reference: – 3058895 dated 20 th September 2016. Description of the Change: Addition of battery types SL360 and SL860 for new battery pack types FW-LiBAT-021 and FM-LiBAT-031. 60079-0 is updated to 2013, Edition 6.0. 60079-11 is updated to 2014, Edition 6.0. FM Class 3610 is updated to 2015. IP65, IP67 ratings have been added.

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