



1 **EC TYPE-EXAMINATION CERTIFICATE**

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 94/9/EC

3 Certificate Number: **BAS 02ATEX1274X** Sira Issue: **1**

4 Equipment: **Flexidip Portable Gauging Tape Type D-2401-2****

5 Applicant: **MMC International Corporation**

6 Address: **60 Inip Drive
Inwood
Long Island
New York 11696
USA**

7 This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8 Sira Certification Service, notified body number 0518 in accordance with Article 9 of Directive 94/9/EC of 23 March 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 14.2.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule to this certificate, has been assured by compliance with the following documents:

EN 60079-0:2006

EN 60079-11:2007

EN 60079-26:2007

10 If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

11 This EC type-examination certificate relates only to the design and construction of the specified equipment. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.

12 The marking of the equipment shall include the following:



II 1G

Ex ia IIC T4 Ga

Ta = -20°C ≤ T_a ≤ +40°C

Project Number 23626

C Ellaby
Deputy Certification Manager

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SCHEDULE

EC TYPE-EXAMINATION CERTIFICATE

BAS 02ATEX1274X

Sira Issue 1

13 DESCRIPTION OF EQUIPMENT

A Flexidip Portable Gauging Tape Type D-2401-2** is designed to provide ullage, interface and temperature indications for liquids in a tank. Various models provide either all three indications, or combinations of just two out of the three.

It comprises a probe head fitted to the end of a graduated flexible tape wound on drum, so that the probe may be lowered to the required depth in the tank. The tape incorporates two conductors in addition to the graduated tape. Electronic circuits on printed circuit boards are fitted both in the probe and in the centre of the drum, and a liquid crystal display and push buttons are mounted on the drum.

A terminal for connection of an earth wire is provided on the main unit and the steel tape provides earth continuity to the probe head.

This certificate covers various model numbers of the form D-2401-2**. The ** signifies combinations of letters which cover the exact combination of temperature, ullage, or interface options provided.

Use only battery type:-

- Duracell Procell Alkaline-Manganese MN1604 (6LR61)

Sira Variation 1 - This variation introduced the following changes:

- Following appropriate re-assessment to demonstrate compliance with the requirements of the EN 60079 series of standards, the documents previously listed in section 9, EN 50014:1997 (amendments A1 to A2), EN 50020:1994 and EN 50284:1999, were replaced by those currently listed, the markings in section 12 were updated accordingly.
- The removal of battery type options, Kodak Ultralife Lithium Type U9VL and Zinc-Carbon Type 6F22 or Zinc-Chloride Type 6F22P.
- The gas group was changed from IIB to IIC.
- A new Condition of Certification/Manufacture was added.
- The Special Conditions for Safe Use were amended.

14 DESCRIPTIVE DOCUMENTS

14.1 Drawings

Refer to Certificate Annexe.

14.2 Associated Sira Reports and Certificate History

Issue	Date	Report no.	Comment
0	30 September 2002	02(C)0176	The release of the prime certificate.
1	27 September 2011	R23626A/00	This Issue covers the following changes: <ul style="list-style-type: none">• All previously issued certification was rationalised into a single certificate, Issue 1, Issue 0 referenced above is only intended to reflect the history of the previous certification and has not been issued as a document in this format.• The introduction of Sira Variation 1.

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Sira Issue 1

- 15 **SPECIAL CONDITIONS FOR SAFE USE** (denoted by X after the certificate number)
- 15.1 The user's attention is drawn to the fact that there may be a possible hazard created by electrostatic charges that may be held by the liquid being measured, the user shall therefore operate this instrument in accordance with the necessary precautions detailed in CENELEC Technical Report Number CLC/TR 50404, June 2003, Electrostatics - Code of practice for the avoidance of hazards due to static electricity.
- 16 **ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II (EHSRs)**
- The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in the reports listed in Section 14.2.
- 17 **CONDITIONS OF CERTIFICATION**
- 17.1 The use of this certificate is subject to the Regulations Applicable to Holders of Sira Certificates.
- 17.2 Holders of EC type-examination certificates are required to comply with the production control requirements defined in Article 8 of directive 94/9/EC.
- 17.3 Safety resistor R1 shall have a minimum power rating of 2 Watts at an upper ambient temperature of +40°C. Additionally safety resistor R2 shall have a minimum power rating of 0.33 Watts at an upper ambient temperature of +40°C.

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Certificate Annexe

Certificate Number: BAS 02ATEX1274X
Equipment: Flexidip Portable Gauging Tape Type D-2401-2**
Applicant: MMC International Corporation



Issue 0

Drawing no.	Sheets	Rev.	Date	Title
71097/878	1 of 1	3	09 Sep 02	General Assembly
71097/687	1 of 1	4	09 Sep 02	Hub & Battery Cap Sub-assy, B/D 2401/2U
71097/875	1 of 1	2	30 Jan 01	Hub & Battery Cap Sub-assy, B/D 2401/2U & B/D 2401/2UT
71097/559	1 of 1	3	Nov 94	Circuit Diagram, Trimode (Ullage/Interface/Temperature)
71097/689	1 of 1	C	03 Jan 95	Circuit Diagram, Ullage/Interface
71097/840	1 of 1	B	02 Jan 95	Circuit Diagram, Ullage/Temperature
71097/898	1 of 1	2	10 May 96	Circuit Diagram, 2MHz Probe
71097/884	1 of 1	2	09 Sep 02	Probe Assembly, Trimode and Ullage/Interface
71097/841	1 of 1	A	27 Jul 93	Probe Assembly, Ullage/Temperature
71097/583	1 of 1	6	04 Sep 02	Label Details, MMC
71097/916	1 of 1	2	29 Aug 02	Probe and PCB Assembly

Issue 1

Drawing no.	Sheets	Rev.	Date (Sira stamp)	Title
71097/878	1 of 1	3	22 Jul 11	General Assembly Portable Gauging Tapes
71097/559	1 of 1	4	22 Jul 11	Circuit Diagram, Trimode (Ullage/Interface/Temperature)
71097/689	1 of 1	D	12 Aug 11	Combined Ullage and Interface Gauging Tape Circuit Diagram
71097/840	1 of 1	C	12 Aug 11	Combination Ullage and Temperature Gauging Tape Circuit Diagram
71097/583/UTI	1 of 1	7	22 Jul 11	Ullage-temperature Interface ATEX Approval Label
71097/583/UT	1 of 1	7	22 Jul 11	Ullage-temperature ATEX Approval Label
71097/583/UI	1 of 1	7	22 Jul 11	Ullage-interface ATEX Approval Label

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