



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

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

Certificate No.: **IECEX BKI 07.0030** issue No.:2

Status: **Current**

Certificate history:
Issue No. 2 (2011-9-21)
Issue No. 1 (2010-4-6)
Issue No. 0 (2007-8-1)

Date of Issue: **2011-09-21** Page 1 of 4

Applicant: **Magnetrol International N. V.**
Heikenstraat 6 B-9240 Zele
Belgium
Belgium

Electrical Apparatus: **Magnetostrictive Level Transmitter**
Optional accessory: **Jupiter**


Type of Protection: **General requirements, Flameproof enclosure**

Marking: **Ex d IIC T6**

Approved for issue on behalf of the IECEX Certification Body: **Janos FEJES**

Position: **Director**

Signature:
(for printed version)



2011-09-21

- 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](http://www.iecex.com).

Certificate issued by:

Testing Station for Explosion Proof Equipment
H 1037 BUDAPEST
MIKOVINY S.u. 2-4
Hungary





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Manufacturer: **ORION Instruments Inc.**
6646 Complex Drive
Baton Rouge, LA 70809
United States of America

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 : 2004 Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
Edition: 4.0

IEC 60079-1 : 2001 Electrical apparatus for explosive gas atmospheres - Part 1: Flameproof enclosures 'd'
Edition: 4

*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:

[HU/BKI/ExTR07.0029/01](#)

[HU/BKI/ExTR07.0029/02](#)

Quality Assessment Report:

[CA/CSA/QAR06.0004/01](#)

[CA/CSA/QAR06.0004/05](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

Jupiter liquid level transmitters are 12-32 V DC, loop powered liquid level transmitters, utilizing the engineering principle of magnetostriction and the effect of a magnetic field on the magnetostrictive wire.
See details in Addendum to IECEx BKI 07.0030

CONDITIONS OF CERTIFICATION: NO



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

Correction of the mistake in Addendum to IECEx BKI 07.0030. (EEx d IIC to Ex d IIC) See Addendum to IECEx BKI 07.0030 a.2

Annexe: Addendum to IECEX BKI 07.0030 a.2.pdf, Addendum to IECEX BKI 07.0030 a.1..pdf, Addendum to IECEX BKI 07.0030.p

1. Description

Jupiter liquid level transmitters are 12-32 V DC, loop powered liquid level transmitters, utilizing the engineering principle of magnetostriction and the effect of a magnetic field on the magnetostrictive wire. Jupiter is available as a direct insertion transmitter or as an external mounted transmitter on a Magnetic Level Indicator. The unit can be designed for liquid level and / or liquid-liquid interface measurement.

The enclosure is orienting dual compartments / wiring and electronics /in the same plane and angled to maximize ease of wiring, configuration, set-up and data display.

This apparatus consists of

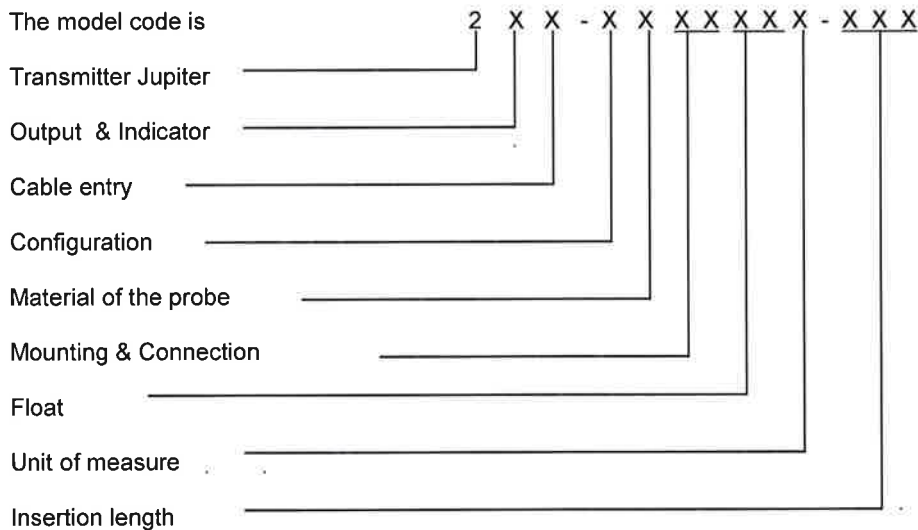
- an aluminium alloy or stainless steel housing. Two covers of which one is provided with a window are screwed to this housing.
- a sensor screwed on the base of the housing by means of one or several threaded adapters
- a probe with extension tube foreseen to be fixed to a float device containing permanent magnets

This apparatus bears the type designation: 2 X X - X X X X X X X - X X X

The cable entries and the plugs shall be Ex d IIC certified.

2. Type assortment

The model code is



3. General parameters

- Power: 12 – 32 V DC
 Signal Output: 4 - 20 mA
 Housing material: Aluminium or stainless steel
 Ingress protection: IP66
 Ambient temperature: - 40 °C to + 70 °C

Instructions for manufacture and operation

The magnetostrictive transmitter is to be fitted into an enclosure meeting the requirements of a recognized type of protection in compliance with IEC 60079-0:2004 section 1. and 2.

The equipment is fitted into an enclosure of the type of protection flameproof enclosure „d” according to IEC 60079-1:2001.

The component may be used in group II.

The manufacturer shall make the routine verifications and tests necessary to ensure that the electrical apparatus produced complies with the specification submitted to the testing station together with the prototype.



ADDENDUM TO IECEx CERTIFICATE OF CONFORMITY
Amendment 2 to IECEx BKI 07.0030

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Drawings:

Title: Jupiter magnetostrictive

Number: 99-7205 of 29.05.2002. / Revision D: 06.2007 / signed on 25.06.2007. / 3 sheets /

Report, Bulletin:

Summary of the Test Report No.: ISSeP 05170 dated	21.02.2006.
Summary of the Report No.: ISSeP 06065 dated	18.08.2006.
The installation and operating manual Ref. Bulletin No.:BE 46-648.5 dated	03.2006.
Test of Ignition Transmission – Testsheet No.: 07004g dated	12.07.2007
Determination of the reference pressure – Testsheet No.: 07004b dated	20.07.2007.
Overpressure testing – Testsheet No.: 07004s dated	23.07.2007.