



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

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

Certificate No.: **IECEX INE 24.0023X** Page 1 of 3 [Certificate history:](#)
Status: **Current** Issue No: 0
Date of Issue: 2024-06-24
Applicant: **BIFFI ITALIA S.r.l**
Strada Biffi, 165
Fiorenzuola d'Arda 29017
Italy
Equipment: **Linear Piston Actuators**
Optional accessory:
Type of Protection: **Ex h**
Marking: **Ex h IIB or IIC T6...T4 Gb**
Ex h IIIC T85°C...T135°C Db

Approved for issue on behalf of the IECEx
Certification Body:

Position:

Signature:
(for printed version)

Date:
(for printed version)



Thierry HOUÉIX

Ex Certification Officer

2024-06-24

Signé électroniquement
Digitally signed by
Thierry HOUÉIX
Ex Certification Officer
Délégué Certification

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Certificate issued by:

INERIS
Institut National de l'Environnement Industriel et des Risques
BP n2 / Parc Technologique ALATA
F-60550 Verneuil-en-Halatte
France



controlling risks
for sustainable development



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Manufacturer: **BIFFI ITALIA S.r.l**
Strada Biffi, 165
Fiorenzuola d'Arda 29017
Italy

Manufacturing locations: **BIFFI ITALIA S.r.l**
Strada Biffi, 165
Fiorenzuola d'Arda 29017
Italy

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 equipment 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

ISO 80079-36:2016 Explosive atmospheres - Part 36: Non-electrical equipment for explosive atmospheres - Basic methods and requirements
Edition:1.0

ISO 80079-37:2016 Explosive atmospheres - Part 37: Non-electrical equipment for explosive atmospheres - Non electrical type of protection constructional safety "c", control of ignition source "b", liquid immersion "k"
Edition:1.0

This Certificate **does not** indicate compliance with 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:

[FR/INE/ExTR24.0028/00](#)

Quality Assessment Report:

[FR/INE/QAR08.0005/16](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The LINEAR Actuators are based on the linear mechanism. This mechanism provides the linear motion of the pneumatic/hydraulic cylinder piston or spring connected to the stem valve.

The LINEAR actuators can be in double-acting or single-acting versions.

The double-acting version is composed of a pneumatic/hydraulic cylinder and a mounting pedestal complete with a joint for the coupling to the valve stem of actuator output stem. The actuator pedestal has a flange with threaded holes to fix the actuator to the valve.

The single-acting version is composed of a pneumatic/hydraulic cylinder, a spring cartridge and a mounting pedestal complete with a joint for the coupling to the valve stem of actuator output stem. The valve is actuated in opening and in closing position by the actuator pneumatic/hydraulic cylinder in one direction and by the spring unit in the other direction.

On actuators can be installed the following manual override:

- MHW = manual hand wheel
- MRHW = manual hand wheel with reducer
- MHP = manual handpump

SPECIFIC CONDITIONS OF USE: YES as shown below:

For the risk from electrostatic discharge, the user shall read the instructions.

The equipment is intended to be used in an ambient temperatures range from -60°C to +75°C (for T6/T85°C), -60°C to +90°C (for T5/T100°C) and -60°C to +100°C (for T4/T135°C), depending the model and used gasket

Annex:

[IECEX INE 24.0023X-00_Annex.pdf](#)



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PARAMETERS RELATING TO THE SAFETY

Actuators type PLA/PLA-QA or Bettis GVO LP-DA

Pressure Rating Max: 12 bar depending the model

Max allowable thrust [N]: from 25K to 5800K

Actuators type PLAS/PLAS-QA or Bettis GVO LP-SR/FS

Pressure Rating Max: 12 bar depending the model

Max allowable thrust [N]: from 6K to 555K

Spring action: CL (closing action) / OP (opening action)

Spring ending thrust [N]: up to 555K

Spring starting thrust [N]: up to 1.000K

Actuators type HLA or Bettis GVO HP-DA

Pressure Rating Max: 350 bar depending of the model

Max allowable thrust [N]: from 15K to 8000K

Actuators type HLAS/HLAS-QA or Bettis GVO HP-SR/FS

Pressure Rating Max: 350 bar depending of the model

Max allowable thrust [N]: from 15K to 555K

Spring action: CL (closing action) / OP (opening action)

Spring ending thrust [N]: up to 555K

Spring starting thrust [N]: up to 1.000K

Actuators type HLAS-C

Pressure Rating Max: 350bar depending of the model

Max allowable thrust [N]: from 15K to 555K

Spring action: CL (closing action) / OP (opening action)

Spring ending thrust [N]: up to 555K

Spring starting thrust [N]: up to 1.000K

Actuators type HLDA

Pressure Rating Max: 350 bar depending of the model

Max allowable thrust [N]: from 15K to 8.000K

Actuators type HLDAS

Pressure Rating Max: 350 bar depending of the model

Max allowable thrust [N]: from 15K to 555K

Spring action: CL (closing action) / OP (opening action)

Spring ending thrust [N]: up to 555K

Spring starting thrust [N]: up to 1.000K



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Actuators type HYGLA

Pressure Rating Max: 105 bar depending of the model
Max allowable thrust [N]: from 15K to 3.700K

Actuators type GIL

Pressure Rating Max: 105 bar depending of the model
Max allowable thrust [N]: from 15K to 3.700K

Actuators type GILS

Pressure Rating Max: 105 bar depending of the model
Max allowable thrust [N]: from 15K to 450K
Spring action: CL (closing action) / OP (opening action)
Spring ending thrust [N]: up to 450K
Spring starting thrust [N]: up to 540K

CONDITIONS OF MANUFACTURE

Equipment with painting thickness not exceeding 0.2 mm could be certified for gas group IIC, equipment with painting thickness between 0.2 mm and 2 mm are certified for gas group IIB.

Actuators could be fitted with the following manual override:

- MHW = manual hand wheel
- MRHW = manual hand wheel with reducer
- MHP = manual handpump

MARKING

Marking has to be readable and indelible; it has to include the following indications:

- BIFFI ITALIA S.r.l
- Strada Biffi, 165
- Fiorenzuola d'Arda 29017 - Italy
- PLA/PLA-QA or Bettis GVO LP-DA, PLAS/PLAS-QA or Bettis GVO LP-SR/FS, HLA or Bettis GVO HP-DA, HLAS/HLAS-QA or Bettis GVO HP-SR/FS, HLAS-C, HLDA, HLDAS, HYGLA, GIL, GILS⁽¹⁾
- IECEx INE 24.0023X
- (Serial number)
- Ex h IIB or IIC⁽²⁾ T6...T4 Gb
- Ex h IIIC T85°C...T135°C Db
- IP66/67M
- Tamb.⁽³⁾
- WARNING – POTENTIAL ELECTROSTATIC CHARGING HAZARD – SEE INSTRUCTIONS

⁽¹⁾ The type is completed by numbers and/or letters in accordance with the manufacturing variations

⁽²⁾ According to conditions of manufacture

⁽³⁾ Within the temperature range -60°C to +75°C (for T6/T85°C)
-60°C to +90°C (for T5/T100°C)
-60°C to +100°C (for T4/T135°C)

ROUTINE EXAMINATIONS AND TESTS

None.