



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 IBE 22.0016X** Page 1 of 3 [Certificate history:](#)
Status: **Current** Issue No: 0
Date of Issue: 2023-07-24
Applicant: **GEMÜ Gebr. Müller Apparatebau GmbH & Co. KG**
Fritz-Müller-Straße 6-8
74653 Ingelfingen
Germany
Equipment: **Intelligent electro-pneumatic positioner GEMÜ 1441 cPos-X**
Optional accessory:
Type of Protection: **Intrinsic safety 'ib'**
Marking: **Ex ib IIB T4 Gb**
-10 °C ≤ T_a ≤ +60 °C

Approved for issue on behalf of the IECEx
Certification Body:

Dr.-Ing. Peter Cimalla

Position:

Deputy Head of department Certification Body

Signature:
(for printed version)

Date:
(for printed version)

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 www.iecex.com or use of this QR Code.



Certificate issued by:

IBExU Institut für Sicherheitstechnik GmbH
Fuchsmühlenweg 7
09599 Freiberg
Germany





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Manufacturer: **GEMÜ Gebr. Müller Apparatebau GmbH & Co. KG**
Fritz-Müller-Straße 6-8
74653 Ingelfingen
Germany

Manufacturing locations: **GEMÜ Gebr. Müller Apparatebau GmbH & Co. KG**
Fritz-Müller-Straße 6-8
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Germany

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

[IEC 60079-0:2017](#) Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

[IEC 60079-11:2011](#) Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

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:

[DE/IBE/ExTR22.0017/00](#)

Quality Assessment Report:

[DE/IBE/QAR19.0001/03](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The intelligent electropneumatic positioner is supplied intrinsically safe via an analogue 4-20 mA setpoint input or optionally via a HART interface and is used to control pneumatically actuated process valves. It can be combined with single-acting or double-acting linear stroke actuators or rotary actuators. This means that it can be used for diaphragm, seat and diaphragm-seat valves as well as for ball valves and butterfly valves, among others. The positioner consists of a robust plastic housing with a protected LC display for status information.

It offers an analogue and a digital output, a digital input and a connection for an external travel sensor.

The technical data are mentioned in the Annex.

SPECIFIC CONDITIONS OF USE: YES as shown below:

Due to the danger of electrostatic charges, the positioner shall only be cleaned with a damp cloth.

The intrinsically safe parameter are given in the instructions.

The RFID tag shall not be read when an explosive atmosphere is present.

Annex:

[Annex_IBE22.0016X.pdf](#)



IECEX Certificate of Conformity - Annex



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Technical data:

Ambient temperature range: -10 °C...+60 °C

Intrinsically safe parameters for Ex ib IIB:

Input (source with linear characteristic)						
Port	Name	U _i	I _i	P _i	C _i	L _i
XHART IW	IW	30 V	65 mA		150 nF	100 µH
Input (source with rectangular characteristic)						
Port	Name	U _i	I _i	P _i	C _i	L _i
XHART IW	IW	24 V	65 mA		150 nF	100 µH
Passive outputs (source with linear characteristic)						
Port	Name	U _i	I _i	P _i	C _i	L _i
DigIn	DI	30 V	100 mA	1 W	250 nF	150 µH
DigOut	DO	30 V	100 mA	1 W	250 nF	150 µH
Iout	AO	30 V	90 mA	1 W	350 nF	150 µH

Active output (with linear characteristic)						
Port	Name	U _o	I _o	P _o	C _o	L _o
UP	Travel sensor output	6 V	5 mA	30 mW	997 µF	100 µH