



- [1] **EU-TYPE EXAMINATION CERTIFICATE - Translation**
- [2] Equipment or protective systems intended for use in potentially explosive atmospheres, Directive 2014/34/EU
- [3] EU-type examination certificate number **IBExU23ATEX1002 X** | Issue 0
- [4] Product: **Intelligent electropneumatic positioner**
Type: GEMÜ 1441 cPos-X
- [5] Manufacturer: GEMÜ Gebr. Müller Apparatebau GmbH & Co. KG
- [6] Address: Fritz-Müller-Straße 6-8
74653 Ingelfingen
GERMANY
- [7] This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- [8] IBExU Institut für Sicherheitstechnik GmbH, notified body number 0637 in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the essential health and safety requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.
- The examination and test results are recorded in the confidential test report IB-20-3-0064.
- [9] Compliance with the essential health and safety requirements has been assured by compliance with: EN IEC 60079-0:2018 and EN 60079-11:2012 except in respect of those requirements listed at item [18] of the schedule.
- [10] If the sign "X" is placed after the certificate number, it indicates that the product is subject to the specific conditions of use specified in the schedule to this certificate.
- [11] This EU-type examination certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.
- [12] The marking of the product shall include the following:

Ex II 2G Ex ib IIB T4 Gb
-10 °C ≤ T_a ≤ +60 °C

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By order

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Certificates without signature and seal are not valid. Certificates may only be duplicated completely and unchanged. In case of dispute, the German text shall prevail.

Freiberg, 2023-07-24

[13] **Schedule**

[14] **Certificate number IBExU23ATEX1002 X | Issue 0**

[15] **Description of product**

The intelligent electropneumatic positioner is supplied intrinsically safe via an analogue 4-20 mA set-point 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.

Technical data:

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

Intrinsically safe parameter 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		65 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		65 nF	100 µH
passive output (source with linear characteristic)						
		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
lout	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

[16] **Test report**

The test results are recorded in the confidential test report IB-20-3-0064 of 2023-07-24. The test documents are part of the test report and they are listed there.

Summary of the test results

The intelligent electropneumatic positioner complies with the requirements of explosion protection for equipment of group II, category 2G in type of protection intrinsic safety "ib".

[17] **Specific conditions of use**

- 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.

[18] **Essential health and safety requirements**


In addition to the essential health and safety requirements (EHSRs) covered by the standards listed at item [9], the following are considered relevant to this product, and conformity is demonstrated in the test report:
None

[19] Drawings and Documents

The documents are listed in the test report.

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