

Translation

EU-Type Examination Certificate Supplement 1

Equipment intended for use in potentially explosive atmospheres
Directive 2014/34/EU

EU-Type Examination Certificate Number: **BVS 18 ATEX E 082 X**

Product: **Pressure transducer type iWU-2x-**-*****_****_*******

Manufacturer: **WIKA Alexander Wiegand SE & Co. KG**

Address: **Alexander-Wiegand-Straße 30, 63911 Klingenberg, Germany**

This supplementary certificate extends EU-Type Examination Certificate No. BVS 18 ATEX E 082 X to apply to products designed and constructed in accordance with the specification set out in the appendix of the said certificate but having any acceptable variations specified in the appendix to this certificate and the documents referred to therein.

DEKRA Testing and Certification GmbH, Notified Body number 0158, 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 Report No. BVS PP 18.2180 EU.

The Essential Health and Safety Requirements are assured in consideration of:

EN IEC 60079-0:2018
EN 60079-11:2012

General requirements
Intrinsic Safety "i"

If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Special Conditions for Use specified in the appendix to this certificate.

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.

The marking of the product shall include the following:

 **II 1G Ex ia IIC T4 Ga**

DEKRA Testing and Certification GmbH
Bochum, 2022-02-01

Signed: Jörg-Timm Kilisch

Managing Director

13 **Appendix**

14 **EU-Type Examination Certificate**

**BVS 18 ATEX E 082 X
Supplement 1**

15 **Product description**

15.1 **Subject and type**

Pressure transducer type iWU-2x-**-*****-****-*****

The complete type designation

iWU-2x- ** - ***** - **** - ** ***

Electrical connection

M4Circular connector M12x1

DLFlying lead (Fixed cable)

includes further letters and numerals to indicate different variations of the Pressure transducer.

The asterisks which are not explained here denote type characteristics which have no influence on explosion protection or are otherwise marked on the apparatus.

15.2 **Description**

Reason for the supplement:

- Updating the current standards version
- Addition of an alternative membrane
- Update of sensor capsule contour (not ex related changes)

Description of Product

The iWU-2x-**-*****-****-***** is an intrinsically safe pressure transducer providing a high media cleanliness level for UHP (Ultra High Purity) applications, e.g. in semiconductor manufacturing industry. One end of the iWU-2x provides the process connection.

The enclosure consists of stainless steel. The parts of the enclosure are welded.

The electronic is mounted on two PCB's. The electrical connection is a M12x1 plug connector or a cable with flying leads. The electronic is protected by the enclosure with a degree of protection of IP64 (for models with connector M12x1) or IP67 (for models with cable).

Listing of all components used referring to older standards

None

15.3 Parameters

15.3.1 Connector "U+" and "U-"

Maximum input voltage	U_i	DC	30	V
Maximum input current	I_i		130	mA
Maximum input power	P_i		835	mW
Maximum internal capacitance	C_i			
For type IWU-2*-**_*****-****-M4***:			19.5	nF
For type IWU-2*-**_*****-****-DL***:			21.9	nF
Maximum internal inductance	L_i			
For type IWU-2*-**_*****-****-M4***:				negligible
For type IWU-2*-**_*****-****-DL***:			12	μ H

15.3.2 Ambient temperature range

For type IWU-2*-**_*****-****-M4***:	T_a	-20 °C to +85 °C
For type IWU-2*-**_*****-****-DL***:	T_a	-20 °C to +65 °C

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BVS PP 18.2180 EU, as of 2022-02-01

17 Special Conditions for Use

- 17.1 The danger of ignition due to propagating brush discharges must be avoided by mounting the apparatus in areas without intensive electrostatic charging mechanism.
- 17.2 The circuits are limited to overvoltage Category III as defined in IEC 60664-1.

18 Essential Health and Safety Requirements

The Essential Health and Safety Requirements are covered by the standards listed under item 9.

19 Drawings and Documents

Drawings and documents are listed in the confidential report.

We confirm the correctness of the translation from the German original.
In the case of arbitration only the German wording shall be valid and binding.

DEKRA Testing and Certification GmbH
Bochum, 2022-02-01
BVS-Hil/Mu A20211320


Managing Director