

Physical Technical Testing Institute, Ostrava-Radvanice National testing authority No 210

Certificate No.: FTZÚ 14 Ex 0004

about verification of non-electrical apparatus for potentially explosive gas atmospheres

This certificate is issued for

Butterfly valves - type series 900

Manufacturer: ABO valve, s.r.o., Dalimilova 285/54, 783 35 Olomouc, Czech Republic

Applicant:

ABO valve, s.r.o., Dalimilova 285/54, 783 35 Olomouc, Czech Republic

Above mentioned product and any of its variant are specified in documentation, list of which is in this certificate.

FTZÚ - National testing authority No. 210 confirms, that product comply with requirements following standards:

EN 13463-1:2009

Manufacturer (or applicant) listed in the certificate is responsible for product conformity assurance in accordance with its specification (documentation) listed in this certificate and for successful performance of all specified routine tests and verification.

Apparatus marking:

II 1/2 GD TX

This certificate is valid till:

30.04.2019

Responsible person:

Dipl. Ing. Lukáš Martinák Head of certification body

Date of issue: 28.08.2014

Page: 1/4 Annexes: --

This certificate is valid only for products described in this certificate and doesn't replace any other documents. This certificate shall not be reproduced except in full without written approval of authorized entity (FTZÚ).



Physical-Technical Testing Institute Ostrava - Radvanice

Supplementary Type Examination Certificate No. 1

about verification of non-electrical apparatus for potentially explosive atmospheres

Type Examination Certificate number:

FTZÚ 14 Ex 0004

Product:

Butterfly valves - type series 900

Manufacturer: ABO valve, s.r.o., Dalimilova 285/54, 783 35 Olomouc, Czech Republic

Applicant:

ABO valve, s.r.o., Dalimilova 285/54, 783 35 Olomouc, Czech Republic

This supplementary certificate extends Certificate No. FTZÚ 14 Ex 0004 to apply to products designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

Physical-Technical Testing Institute, Certification Body No. 3051 accredited by ČIA o.p.s. Prague according to ČSN EN ISO / IEC 17065: 2013 confirms that the above mentioned product is in conformity with the requirements of the following standards:

EN ISO 80079-36:2016, EN IEC 60079-0:2018

Manufacturer (or applicant) listed in the certificate is responsible for product conformity assurance in accordance with its specification (documentation) listed in this certificate and for successful performance of all specified routine tests and verification.

Product marking:

II 1/2G IIC T6 ... Tx* Ga/Gb

II 1/2D IIIC T...* °C Da/Db

*) The actual maximum temperature does not depend on the product itself but on its operating conditions, in particular the operating medium temperature.

This supplementary certificate relates only to verification of non-electrical apparatus for potentially explosive atmospheres. Further requirements can be applied to the manufacturing process and supply of this product. These are not covered by this certificate.

This certificate is valid till:

30.04.2024

Responsible person:

Dipl. Ing. Lukáš Martinák Head of Certification Body

Date of issue: 23.04.2015

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Physical-Technical Testing Institute Ostrava - Radvanice

Supplementary Type Examination Certificate No. 2

about verification of non-electrical apparatus for potentially explosive atmospheres according to the scheme Annex VIII of the Directive 2014/34/EU

Type Examination Certificate number:

FTZÚ 14 Ex 0004

Product:

Butterfly valves - type series 900

Manufacturer: ABO valve, s.r.o.

Address:

Dalimilova 285/54, 783 35 Olomouc, Czech Republic

This supplementary certificate extends Certificate No. FTZÚ 14 Ex 0004 to apply to products designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

Physical-Technical Testing Institute, Certification Body No. 3051 accredited by ČIA o.p.s. Prague according to ČSN EN ISO / IEC 17065: 2013 confirms that the above mentioned product is in conformity with the requirements of the following standards:

EN ISO 80079-36:2016, EN IEC 60079-0:2018

Manufacturer (or applicant) listed in the certificate is responsible for product conformity assurance in accordance with its specification (documentation) listed in this certificate and for successful performance of all specified routine tests and verification.

This supplementary certificate relates only to verification of non-electrical apparatus for potentially explosive atmospheres. Further requirements can be applied to the manufacturing process and supply of this product. These are not covered by this certificate.

This certificate is valid till:

30.04.2024

Responsible person:

Dipl. Ing. Lukáš Martinák Head of Certification Body



Date of issue: 14.12.2021

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Physical-Technical Testing Institute Ostrava – Radvanice

Schedule

Supplementary Type Examination Certificate No. 2 to FTZÚ 14 Ex 0004

about verification of non-electrical apparatus for potentially explosive atmospheres according to the scheme Annex VIII of the Directive 2014/34/EU

Description of product changes:

The subject of this supplementary certificate is:

- extension of the certified product series

The originally certified product series is supplemented by valves with variants of the sealing sleeve made of elastomers EPDM-022, NBR-004/1, ECO-002 and valves with a body made of Al alloy AlSi10Mg (EN AC-43000) or of aluminum bronze 2.0975 (C95800). The valves body can be covered with a conductive coating Alexit Decklack 412-11. Other construction and material design of the product is unchanged.

Maximum service temperature range is -40°C to + 110°C for valves with an aluminum body, -40°C to +130°C for other valves. The specific range is given by the material design of the valves and is stated in the documentation supplied with the product.

Review of recertified product variants:

Coating variant: Without index ... coating ROKOPOX MASTIC RK301-R ... conductive coating ALEXIT DECKLACK 412-11 IIIC Body material: Without index ... ductile iron 0.7040 (GGG40) with epoxy coating ... stainless steel 1.4408 CF8M ... carbon steel 1.0446 (A216 WCB) WCB ... low temperature carbon steel 1.1156 (LCC) LCC ... aluminium EN AC43000 (C95500) Αl ... aluminum bronze 2.0975 (C95800) AlBr Body variant: B ... Wafer type T ... Lug type F ... Double flanged type Disc material: 0 ... Brass 2.0402 2 ... Stainless steel I 1.4308 (CF8) 3 ... Ductile iron 0.7040 (GGG40) 4 ... Stainless steel 1.4408 (CF8M) 5 ... Hastelloy 6 ... Stainless steel I 1.4539 (Uranis B6) Sealing sleeve material: 1 ... NBR-004/1 2 ... EPDM-022 7 ... Epichlorhydrin (ECO-002) 9 ... NBR conductive Type series designation 900

Responsible person

Dipl. Ing. Lukáš Martinák Head of Certification Body Date of issue: 14.12.2021

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Physical-Technical Testing Institute Ostrava – Radvanice

Schedule

Supplementary Type Examination Certificate No. 2 to FTZÚ 14 Ex 0004

about verification of non-electrical apparatus for potentially explosive atmospheres according to the scheme Annex VIII of the Directive 2014/34/EU

Description of product changes: - continuation

Product marking in relation to its variants:

- i) product variants 9xxx; 9xxxx: II 1/2G Ex h IIC T6 ... Tx* Ga/Gb II 1/2D Ex h IIIB T...°C* Da/Db
- ii) product variants 99xxxIIIC (product variants with conductive sealing sleeve and conductive coating): II 1/2G Ex h IIC T6 ... Tx* Ga/Gb II 1/2D Ex h IIIC T...°C* Da/Db
- *) The actual maximum temperature does not depend on the product itself but on its operating conditions, in particular the operating medium temperature.

To determine the surface temperature of the product T in relation to its service temperature T_{service}, the following applies:

 $T_{\text{service}} \le +40^{\circ}\text{C}$: $T = 40^{\circ}\text{C}$ $T_{\text{service}} > +40^{\circ}\text{C}$: $T = T_{\text{service}}$

Assignment of the temperature class in relation to the temperature T:

T6 ... T ≤ +85°C T5 ... T ≤ +100°C T4 ... T ≤ +135°C

Test report No.: 14/0004/2

Specific Conditions of Use: none

Essential conditions for use in hazardous areas:

Unchanged - identical to the conditions specified in the previous Supplementary certificate No. 1.

Responsible person:

Dipl. Ing. Lukáš Martinák Head of Certification Body STAN USERAL USERA USERAL USERAL USERAL USERA USERA USERAL USERAL USERAL USERAL USERAL USERAL USERAL

Date of issue: 14.12.2021

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