1. EU-TYPE EXAMINATION CERTIFICATE

- 2. Equipment or Protective System Intended for use in Potentially explosive atmospheres
 Directive 2014/34/EU
- 3. EU-Type Examination Certificate Number: **EESF 19 ATEX 025X**

4. Product: VZ... series blanking elements; DK... series drain plugs, VK... series breather plugs;

adapters: AV... series adapters, NV... series nipples and bushings, RZ... and TS... series

fitting joints

Certified types: VZ..., DK..., VK..., AV..., NV..., RZ..., TS...

Manufacturer: ZAVOD GORELTEX Co. Ltd.

6. Address: 195176, Saint Petersburg, Revolutsii road, 18, lit. A

Russian Federation

- 7. This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- 8. Eurofins Expert Services Oy, Notified Body number 0537, 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 confidential report No. RU/CCVE/ExTR18.0013/00.

9. Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0:2012/A11:2013 EN 60079-1:2014 EN 60079-15:2010 EN 60079-31:2014

EN IEC 60079-7:2015/A1:2018

- 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:



II 2 G Ex db IIC Gb
II 2 G Ex db IIB Gb
II 2 G Ex eb IIC Gb
II 3 G Ex nR IIC Gc
II 2 D Ex tb IIIC Db
IP66/IP67

Espoo, 25.6.2019

Eurofins Expert Services Oy

Kari Koskela Expert Ilkka Riihimäki Expert

This document is digitally signed.







13. Schedule

14. EU-Type Examination Certificate EESF 19 ATEX 025X

15. Description of Product

Equipment and systems covered by this certificate are as follows:

VZ... series blanking elements are intended for closing pipes and unused entries.

DK... series drain plugs, VK... series breather plugs are intended for condensate removal, release of gas or correction of atmospheric pressure differential. DKUV drain plug is installed vertically on the bottom of the enclosure. VKU breather plugs shall be oriented vertically and shall be installed on the top of the enclosure.

AV... series adapters are intended for connection of equipment, pipes and entries of various diameters and various types of thread, as well as for adapting female thread to male and vice versa. For AV... series adapters encapsulation with compound is permitted. In this case AV... series adapters may be used for separation of gas mixture during its passage through conduit from one part of electrical equipment to another, as well as for separation of internal volume of the explosion-proof enclosure and the internal space of electrical conduit.

NV... series nipples and bushings are intended for coupling of equipment: NVN nipples – for coupling of equipment with female thread, NVV bushings – for coupling of equipment with male thread. For NV... series nipples and bushings encapsulation with compound is permitted. In this case NV... series nipples and bushings may be used for separation of gas mixture during its passage through conduit from one part of electrical equipment to another, as well as for separation of internal volume of the explosion-proof enclosure and the internal space of electrical conduit.

RZ... series fitting joints are intended for separation of gas mixture during its passage through conduit from one part of electrical equipment to another, as well as for separation of internal volume of the explosion-proof enclosure and the internal space of electrical conduit. For RZ... series fitting joints encapsulation with compound is permitted.

TS... series fitting joints are intended for conduit entry. TSVN... fitting joints have male-female thread, TSNN... fitting joints have male-male thread, TSVV... fitting joints have female-female thread.

The range of available threads of components and possible materials of construction are given in Annex.

16. Report Number

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17. Specific Conditions of Use

- British Standard Pipe Parallel thread (G) is not applicable to explosion protection type "flameproof enclosures
 "d"
- 2. Maximum temperature of the breather surface, taking into account the safety factor: $16 \text{ K x } 1.2 = 19.2 ^{\circ}\text{C}$, which must be taken into account when determining the temperature class or maximum surface temperature.
- 3. An explosion-proof drain plug DKUV and breather plug VKU must be installed in the enclosure with reference pressure of not more than 2 MPa.

18. Essential Health and Safety Requirements

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

19. Drawings and Documents

Drawings and documents are listed in the confidential report RU/CCVE/ExTR18.0013/00.







Annex

Technical characteristics

Type of product	Materials	Ex-marking	Degree of protection (EN 60529)	Range of available threads	
				Metric	NPT, G
VZN	- aluminum;			M12 ÷ M100	1⁄4" ÷ 4"
VZV	- stainless steel; - galvanized steel; - brass; - nickel-plated brass	 	IP66/IP67	M20 ÷ M100	½" ÷ 4"
DKUV	stainless steel;galvanized steel;brass;nickel-plated brass		IP66	M16 ÷ M20	3/8" ÷ ½"
DKUE	- aluminum; - stainless steel; - galvanized steel; - brass; - nickel-plated brass	II 2 G Ex eb IIC GbII 2 D Ex tb IIIC Db		M20	1/2"
VKU	- stainless steel; - galvanized steel; - brass; - nickel-plated brass	II 2 G Ex db IIC GbII 2 G Ex eb IIC GbII 2 D Ex tb IIIC Db		M16 ÷ M20	3/8" ÷ ½"
AV	aluminum;stainless steel;galvanized steel;brass;nickel-plated brass	 	IP66/IP67	M12 ÷ M90	½" ÷ 3"





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NVN NVV	- aluminum; - stainless steel; - galvanized steel; - brass; - nickel-plated brass	 ⑤ II 2 G Ex db IIC Gb ⑥ II 2 G Ex eb IIC Gb ⑥ II 3 G Ex nR IIC Gc ⑥ II 2 D Ex tb IIIC Db 	IP66/IP67	M12 ÷ M100	1⁄4" ÷ 4"
RZV	- aluminum;			M20 ÷ M100	½" ÷ 4"
RZG	- stainless steel			M20 ÷ M100	½" ÷ 4"
TSVNA TSVVA TSNNA	- aluminum; - stainless steel; - galvanized steel; - brass; - nickel-plated brass		IP66/IP67	M20 ÷ M100	½" ÷ 4"
TSVN TSVV TSNN	- aluminum; - stainless steel; - galvanized steel; - brass; - nickel-plated brass	II 2 G Ex db IIB GbII 2 G Ex eb IIC GbII 2 D Ex tb IIIC Db	IP66/IP67	M20 ÷ M100	½" ÷ 4"

Service temperature, T_s - 60 °C ... + 130 °C



