



[1] EU-TYPE EXAMINATION CERTIFICATE

[2] Equipment or Protective System intended for use in potentially explosive atmospheres - Directive 2014/34/EU Annex III - MODULE B: EU-TYPE EXAMINATION

[3] EU-type Examination Certificate number: **IMQ 13 ATEX 030 X**

[4] PRODUCT: **Drain and ventilation plugs**
TYPE/SERIES: **BDRV...
*BBVP...**

[5] MANUFACTURER: **Bimed Teknik Aletler San ve Tic. A.S.**

[6] ADDRESS: **S.S Bakır ve Piriç Sanayi Sitesi Leylak Cd. No:16 -
34524 Beylikdüzü – İstanbul – Turkey**

[7] This equipment and any acceptable variation thereto are specified in the annex to this certificate and the documents therein referred to.

[8] IMQ, notified body N° 0051, 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 equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in Report No.: **AT20-0053284-01**

[9] Compliance with Essential Health and Safety Requirements, except in respect of those listed at item 18 of the annex, has been assured by compliance with:

EN IEC 60079-0:2018, EN IEC 60079-7:2015 + A1:2018; EN 60079-31:2014

[10] If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe 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 equipment or protective system shall include the following:



II 2 GD

Ex eb IIC Gb

Ex tb IIIC Db

This document is composed of 5 pages including 1 annex

FIRST ISSUE: 2014 | 04 | 30

CURRENT ISSUE: 2020 | 09 | 15

PREVIOUS ISSUE: 2019 | 05 | 29

B.U. PRODUCT CONFORMITY ASSESSMENT
CERTIFICATION SECTOR – MANAGER

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PRD N° 005 B

Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC
Signatory of EA, IAF and ILAC Mutual Recognition Agreements

[13] **Annex**

[14] EU-type Examination Certificate number: **IMQ 13 ATEX 030 X**

[15] **Description of product:**

Drain plug is a device intended for use to evacuate the water generated because of condensation inside the enclosure. Due to the fact that water is accumulated in bottom part of the enclosure, "drain plug" is assembled in the lowest part of the enclosure.

As a principle, no extra pressure is needed to drain the water out of the enclosure. Water will come out with the presence of drain plug device. Degree of ingress protection of drain plug is IP66. IP66 for drain plugs is guarantee if they are installed according to manufacturer instructions.

To maintain the IP level, drain plug membrane is manufactured from sintered material. For the selection of sintered material, working temperature, chemical resistance, aging conditions and atmospheric structure are taken into consideration.

Regarding the material used for internal membrane: brass is used as raw material only.

Ventilation plug Ex eb adjusts the inner pressure of sealed equipment of type of protection "eb" and "tb" to the ambient pressure. It consist of a body with cap of stainless steel and a pressed in membrane. Degree of ingress protection of ventilation plug is detailed in below membrane specification table.

Membrane Specification				
Membrane Type	S	M	H	UH
Description (µm)	0,45	0,8	3	5
Protection Class	IP66, IP68	IP66, IP68	IP66, IP68	IP64
Water Intrusion Pressure bar	0,9	0,5	0,2	-
Average Air flow rate (lt/h) for Δp=70mB	16	25	120	300

[15.1] **Models/Series Identification:**

Drain plug:

Materials:

"B" – Brass

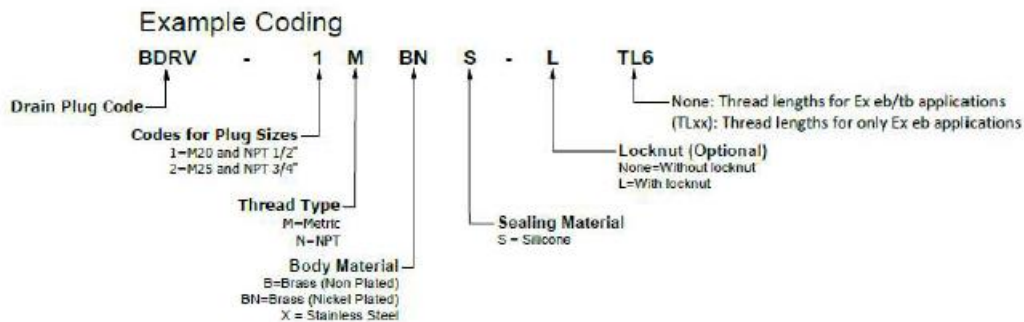
"BN" – Nickel plated brass

"X" – Stainless steel

Threads:

"N" – NPT

"M" – Metric ISO pitch 1,5 (ISO 965/1, ISO 965/2, ISO 965/3)



[13] **Annex**

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Note: (Thread Length) in the key code is mandatory for products having thread length different than the minimum TL for ex eb/tb applications indicated in the assembly tables.

Ventilation plug:

Materials:

- “B” – Brass
- “BN” – Nickel plated brass
- “X” – Stainless steel

Threads:

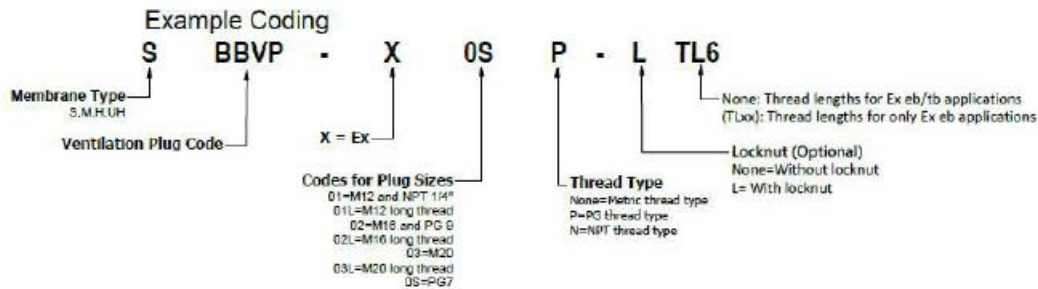
- “N” – NPT
- “M” – Metric ISO pitch 1,5 (ISO 965/1, ISO 965/2, ISO 965/3)

Body, Cap and Ventilation plug ring are made of Stainless type AISI316L (DIN standard no:1.4404, description: X2CrNiMo17-12-2) ; AISI304 (DIN standard no: 1.4301, description:X5CrNi1810); AISI303 (DIN standard no: 1.4305, description: X8CrNi18-9) and other types.

External O-Ring/gasket is made of NBR. It is mandatory for PG threads.

Ventilation Plug sealing is made of PTFE.Membrane is made of Acrylic-Copolymer.

TL dimension in the technical drawings have been calculated as actual thread length plus the thickness of the chamfers and ½ Oring Thickness.



Note: (Thread Length) in the key code is mandatory for products having thread length different than the minimum TL for ex eb/tb applications indicated in the assembly tables.

[15.2] **Ratings:** N/A

[15.3] **Safety Ratings:** N/A

[15.4] **Ambient temperature and temperature classes:**

- 60°C ÷ +85°C (drain plug)
- 40°C ÷ +100°C (ventilation plug)

[15.5] **Degree of protection (IP code):**

- IP66 (drain plug)
- IP66/68 (ventilation plug with membrane S,M,H)
- IP64 (ventilation plug with membrane UH)

[15.6] **Warnings:**

None

[16] **Report:** AT20-0053284-01

[13] Annex

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[16.1] **Routine (factory) tests:**
None

[16.2] **Conformity with the documentation:**

The manufacturer shall carry out the verifications or tests necessary to ensure that the product complies with the documentation.

Marking the equipment in accordance with Clause 29 of EN 60079-0, the manufacturer attests on his own responsibility that:

- the equipment has been constructed in accordance with the applicable requirements of the relevant standards in safety matters;
- the routine verifications and routine tests in 28.1 of EN 60079-0 have been successfully completed with positive results.

[16.3] **Installation conditions:**

Above referred equipment is foreseen to be installed in locations where there are environmental conditions, as clearly specified at clause 1, par. 2 of EN 60079-0.

Installation and use in atmospheric and environmental conditions that are out of above mentioned intervals request special considerations and additional measures by the side of installer or user.

These should be specified to the manufacturer by the user;

It is not a required by applicable standard listed in [9] that the certification body confirm suitability for the adverse conditions.

The drain and ventilation plugs shall be coupled with the enclosure as indicated in the manufacturer instructions in order to not jeopardize the type of protection of the electrical apparatus on which they are installed.

- Degree of protection is guaranteed if the drain and ventilation plugs are installed according to manufacturer instructions.

[17] **Special Condition of use (X):**

- The interfaces between the Plug and associated enclosure is made by threaded joint: it is the user's responsibility to ensure that the appropriate ingress protection degree is maintained, carrying out the installation according to safety manufacturer instructions.

- The temperature class will be dependent on the enclosure into which it is installed, taking into account that at their point of mounting.

- $-60 \div 85$ °C (drain plug)

- $-40 \div 100$ °C (ventilation plug)

- Plain holes shall be than 0,7mm above the major diameter of the drain plug thread and the device shall be secured with locknut.

[18] **Essential Health and safety Requirements:**

This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed in [9].

This Certificate **does not** cover hazards coming from environmental conditions different from those clearly and precisely indicated and covered in clause 1 of EN 60079-0.

ESHR 1.2.7 According Annex VIII of the Directive

ESHR 1.4 Not verified.

ESHR 1.5 Not verified.

ESHR 3 Not applied.

[13] Annex

[14] EU-type Examination Certificate number: **IMQ 13 ATEX 030 X**

In addition to the Essential Health and Safety Requirements (EHSRs) covered by the standards listed at [9], the following are considered relevant to this product, and conformity is demonstrated in the report:
n/a

[19] **Descriptive documents:**

DL-AT20-0053284-01, rev.0 dated 2020-08-04

[20] **Certification Validity Conditions:**

The use of this Certificate is subject to the Certification Scheme and to the Regulation applicable to holders of IMQ Certificates.

The validity of this certificate is subject to the condition that the manufacturer complies with the results of the document review and of the pertinent requirement if any included, recorded in the relevant copy of documentation as per 19.

One copy of the mentioned documentation is kept in IMQ file.

[21] **Variations**

2014, April:

First issue

2016, November:

- The hole on the side of the plug is removed and designed on top of the cap, the hole diameter is smaller.
- The name of the product is changed in drain plug.

2018, November:

- Ventilation plug *BBVP... has been added.

2019, May:

- A typing correction has been applied to Ventilation Plug coding system for metric threads (from *BBVP-X01M to *BBVP-X01L).

2020, September:

- TL option has been added to BDRV and *BBVP types.
- New material for membrane of *BBVP type has been added.
- New sizes (M16x1,5, M20x1,5 and PG9) have been added to *BBVP types.
- Key code for BDRV and *BBVP types have been changed