

[1]

EU-TYPE EXAMINATION CERTIFICATE

[2] Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014

[3] EU-Type Examination Certificate Number: **DNV 25 ATEX 18020U** **Issue 0**

[4] Component: **Drain Plug/Breather**
Type: MM BD * * * Series

[5] Manufacturer: **METALMECH ENGINEERING**

[6] Address: **Plot No. 4246, GIDC, Dared, Phase - III, Road No. E, Jamnagar, Gujarat 361 004, India**

[7] This component and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

[8] DNV Product Assurance AS, notified body number 2460, 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 component 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 reports listed in item 16.

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with: **EN IEC 60079-0:2018, EN 60079-1:2014, EN IEC 60079-7:2015+A1:2018 and EN 60079-31:2014**

Where additional criteria beyond those given here have been used, they are listed at item 18 in the Schedule.

[10] The sign "U" placed behind the certificate number indicates that this certificate should not be confused with certificates issued for equipment or protective systems. This partial certification may be used as a basis for certification of an equipment or protective systems. "Schedule of limitations" is listed under item 17 of this certificate.

[11] This EU-TYPE EXAMINATION CERTIFICATE relates only to the technical design of the specified component in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this component. These are not covered by this certificate.

[12] The marking of the component shall include the following:


II 2 G **Ex db IIC Gb**
II 2 D **Ex eb IIC Gb**
Ex tb IIIC Db



Date of issue:
2026-03-19



Asle Kaastad
For DNV Product Assurance AS
The Certificate has been digitally signed.

[13]

Schedule

[14]

EU-Type Examination Certificate No:

DNV 25 ATEX 18020U

Issue 0

[15]

Description of Component

The MM BD * * * * Series Drain Plug / Breathers for breathing and draining functions are qualified for Ex 'd', Ex 'e' and Ex 't' protection concepts.

Stainless steel sintered element is press fitted in to the main body and secured with a screwed plug. The main body and screwed plug are made from various grades of brass materials with nickel plating or stainless steel SS304 / SS 316L grade material.

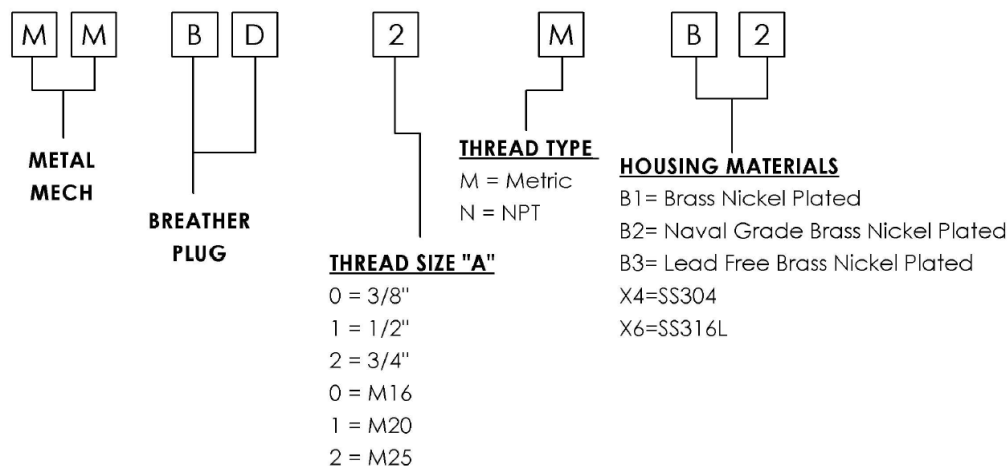
The drain plug / breather has the following basic thread size options: M16X1.5, M20X1.5, M25X1.5, 3/8" NPT, 1/2" NPT and 3/4" NPT.

It can be used with threaded entries. Metric versions of the drain plugs / breathers are fitted with PTFE washer and NPT versions of the drain plug / breathers are used with thread sealant to ensure efficient sealing to an associated enclosure and meets the requirements of IP66 to the IEC 60529 standard;

It can be used with flameproof enclosures of volume up to 4.4 litres and up to 15.5 litres for gas group IIC.

At the point of mounting, drain plugs / breathers are suitable for a service temperature range of -60°C to +160°C.

Type designation



Electrical Data

Not Applicable

Degrees of protection (IP Code)

IP 66

Temperature range:

-60°C ≤ Ta ≤ +160°C

Routine tests

A routine over-pressure test in accordance with IEC 60079-1:2014 Clause 15.2.3 shall be carried out by the manufacturer on each drain Plug / breather at a pressure of 60 bar for a period of at least 10 seconds and must be recorded. No deformation or damage to the drain plug / breather shall occur

[16] **Report No.:** 2025-8006
Project No.: PRJN-814834

[17] Schedule of Limitations

1. The Drain Plug/ Breathers are only suitable for bottom entry applications.
2. The drain plugs / breathers must not be used with an adaptor / reducer in Ex 'd' applications
3. When the drain plugs / breathers with metric threads are fitted in threaded entries, the sealing face of the enclosure shall be smooth, the threaded hole shall be perpendicular to the wall of the enclosure and shall be a medium fit thread.
4. The drain plugs / breathers shall be tightened to a torque value specified in the instruction manual.
5. MM BD * * * * Series drain plugs / breathers have undergone overpressure test at 60 bar (1.5 X 40 bar) Hence, it can be used on a flameproof enclosure not exceeding a reference pressure of 40 bar.
6. For flameproof applications with MM BD * * * * Series drain plugs / breathers, in determining the temperature class of the Ex d equipment to which the drain plug/ breather is fitted, following maximum surface temperature rise of the sinters which includes safety factor of 1.2 should be considered.

Enclosure volume up to 4.4 litres	40.08 K
Enclosure volume up to 15.5 litres	97.32 K

7. The service temperature range of PTFE washer is -60°C to +160°C
8. Dust layers shall be prevented from building up on the outside surface of the drain plugs / breathers, and the drain plugs / breathers shall be routinely cleaned.
9. MM BD * * * * Series Drain Plug / Breather can only be used with threaded entries. When versions with NPT threads are fitted in threaded entries, the end-user must ensure that the necessary IP protection is guaranteed; this can be done by using a suitable thread sealing agent appropriate to minimum ambient temperature and temperature class of the equipment on which it is installed.
10. User shall refer to the type identification in certificate / instructional manual for the details of thread form and size.

[18] Essential Health and Safety Requirements

Met by compliance with the requirements mentioned in item 9.

[19] Drawings and documents

Number	Title	Rev.	Date
MM-BD-PLG-00	Drain Plug/ Breather	00	30/04/2025

[20] Certificate History

Issue	Description	Issue date	Report no.
0	Original issue	2026-03-19	2025-8006

Compliance of the component with the applicable safety requirements of the relevant industrial standards has not been verified and is not covered by this certificate.

END OF CERTIFICATE