

[1]

EU-TYPE EXAMINATION CERTIFICATE

- [2] Product Intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU
- [3] EU-Type Examination Certificate Number: **Presafe 20 ATEX 24571X** **Issue 0**
- [4] Product: **Stopping Plugs, Reducers & Adaptors**
- [5] Manufacturer: **METALMECH ENGINEERING**
- [6] Address: **Plot No. 4246, Road-E , GIDC, Phase-III, Dared, Jamnagar- 361 004, Gujarat, INDIA.**
- [7] This product 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 and Article 21 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 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 60079-7: 2015 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] 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 in accordance to the Directive 2014/34/EU. 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 GD

Ex db IIC Gb

Ex eb IIC Gb

Ex tb IIIC Db



Date of issue:
2021-03-03



Asle Kaastad
For DNV Product Assurance AS
The Certificate has been digitally signed.
See www.dnv.com/digitalsignatures for info

[13] **Schedule**

[14] **EU-Type Examination Certificate No:** Presafe 20 ATEX 24571X **Issue 0**

[15] **Description of Product**

Stopping plugs, Type MM-EX PLG** ** are manufactured in brass or stainless steel SS304 / SS 316L grade material comprises a solid plug with an external thread form as indicated in below type nomenclature.

MM-EX PLG *M ** type stopping plugs are mushroom head plugs used for blanking un-used metric entries in the Ex certified equipment. The head plug is tightened with the use of an Allen key on the external hexagon recess. The mushroom head stopping plug is fitted with silicone O-ring secured in a groove under the head of the stopping plug for ingress protection IP66 / IP68.

MM-EX PLG *N ** type stopping plugs are shoulder less cylindrical plugs with external threads along their length used for blanking un-used NPT entries in the Ex certified equipment. The head contains hexagonal recessed socket to allow fitting and removal.

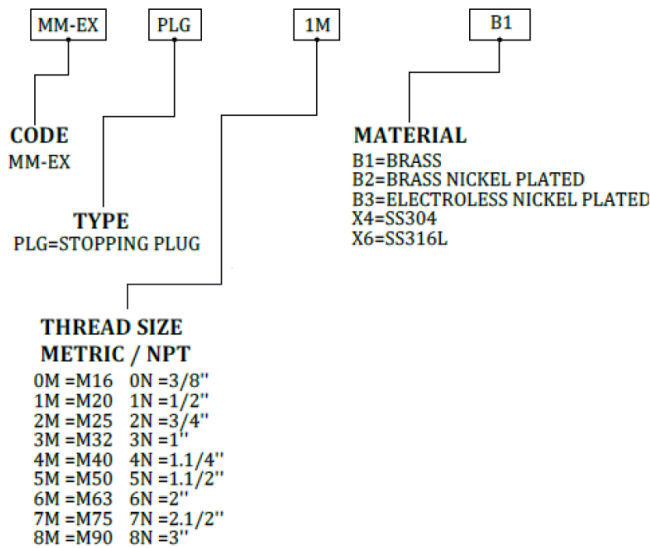
Adaptors Type MM-EX AD** ** ** and Reducers Type MM-EX RD** ** ** are manufactured in brass or stainless steel SS304 / SS 316L grade material comprises a hollow hexagonal body with male and female coaxial threads.

When structured as an adaptor, the female thread is larger than the male thread. When structured as a reducer the female thread is smaller than the male thread.

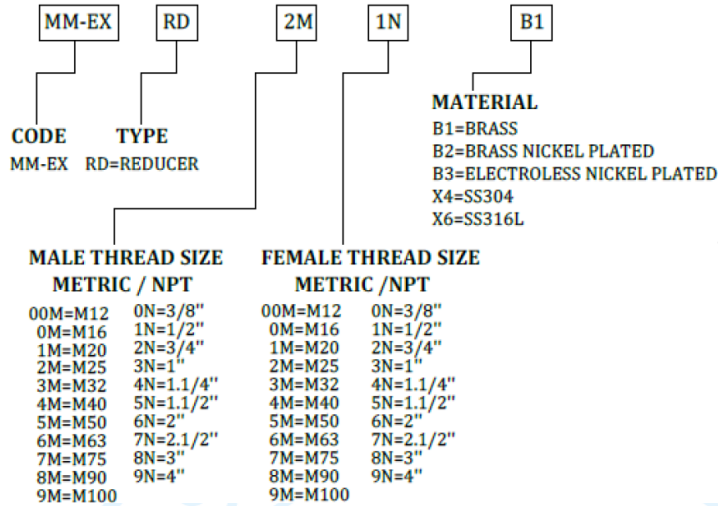
The adaptors and reducers with male cylindrical metric threads are fitted with an O ring mounted in a groove in the face of the hexagon on the male thread side for ingress protection IP66/ IP68.

Type designation

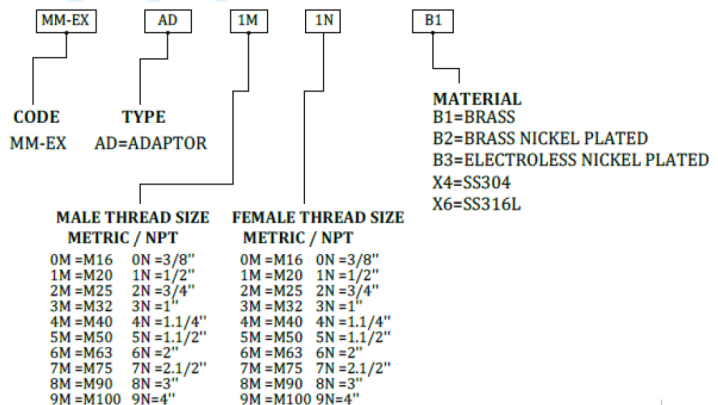
1. MM-EX PLG ** **



2. MM-EX RD ** ** **



3. MM-EX AD ** ** **



Electrical Data

Not Applicable

Degrees of protection (IP Code)

IP66/ IP68 (1.5 meter, 2 Hours)

Ambient temperature:

-55°C to +160°C

Routine tests

N/ A

[16] **Report No.:** 2020-9621
Project No.: PRJN-182328-2020-PA-IND

[17] Specific Conditions of Use

1. Stopping plugs must not be used with a thread adaptor or reducer in flameproof applications.
2. O ring must be trapped between the enclosure face and the head of the mushroom head metric threaded stopping plugs and hexagonal face of the metric threaded reducers and adaptors to ensure ingress protection level of IP66/ IP68 (1.5 meter below the surface of water for 2 hours).
3. The service temperature of the stopping plugs, reducers and adaptors is limited to -55°C to + 160°C.
4. The stopping plugs, reducers and adaptors should be tightened to the torque declared in the installation instructions.
5. When the stopping plugs, reducers and adaptors are used for increased safety or dust protection in a plain hole, the hole in the enclosure must not be greater than 0.5mm above the major diameter of the male thread and the stopping plugs, reducer and adaptor must be secured with a locknut. The female threads of the reducer and adaptor are to be sealed, in accordance with IEC 60079-14, to maintain the ingress protection rating of the associated enclosure.
6. When the stopping plugs, reducers and adaptors are fitted in threaded holes, the sealing face of the enclosure shall be smooth, the threaded hole shall be perpendicular to the wall of the enclosure, The female threads of the reducer and adaptor are to be sealed, in accordance with IEC 60079-14, to maintain the ingress protection rating of the associated enclosure.

[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-EX-PLUG	Technical Drawing of Stopping Plug (1 Sheet)	0	06.08.2019
MM-EX-REDUCER	Technical Drawing of Reducer (2 Sheets)	0	06.08.2019
MM-EX-ADAPTOR	Technical Drawing of Adaptor (2 Sheets)	0	06.08.2019

[20] Certificate History

Issue	Description	Issue date	Report no.
0	Original issue	2021-03-03	2020-9621

END OF CERTIFICATE