

EU - TYPE EXAMINATION CERTIFICATE

Equipment or Protective System Intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

- 1 EU - Type Examination Certificate Number: **SGS26ATEX0010X**
- 2 Product: **MM-Ex E1WB ** ** ** Series Barrier Cable Glands**
- 3 This certificate is held by: **METALMECH ENGINEERING**
- 4 Address: **Plot No. 4246, GIDC, Dared, Phase - III, Road No. E, Jamnagar, Gujarat 361 004, India**
- 5 This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- 6 SGS Fimko Oy, Notified Body number 0598, 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.
- 7 The examination and test results are recorded in confidential Report No. GB/SGS/ExTR26.0018/00
- 8 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 EN IEC 60079-31:2024
except in respect of those requirements listed at item 18 of the Schedule.
- 9 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.
- 10 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.
- 11 The marking of the product shall include the following:

 II 2 GD

Ex db IIC Gb (-40°C ≤ Ta ≤ +85°C)

Ex eb IIC Gb (-40°C ≤ Ta ≤ +85°C)

Ex tb IIC Db (-40°C ≤ Ta ≤ +85°C)

SGS Fimko Oy Customer Reference No. **7311**

Project File No. **24/0551**

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S003 (EN ISO/IEC 17065)



Mikko Välimäki
SGS Fimko Oy

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Schedule

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Certificate Number SGS26ATEX0010X

15 Description of Product

The MM-Ex E1WB ** ** ** series barrier cable glands are designed for the installation of cables into associated Ex enclosures with either threaded or plain entries.

The barrier cable gland assembly comprises the following components:

1. Locknut (optional) made of Brass/SS
2. IP Washer made of PTFE
3. Entry component made of Brass/SS
4. Sealing pot seal made of Silicon
5. Sealing pot made of Brass/SS
6. Inner retaining ring made of PPS
7. Deluge seal (O-ring) made of Silicon
8. Armour cone made of Brass/SS
9. Reversible armour ring made of Brass/SS
10. Middle nut made of Brass/SS
11. Back nut made of Brass/SS
12. Outer seal made of Silicon
13. Outer retaining ring made of PPS

The front threaded entry component of the cable gland is intended to be screwed into the entry point of the associated enclosure and is provided with a sealing pot forming a cylindrical joint. The sealing pot is filled with epoxy putty compound, creating a compound seal around the individual cable cores.

Barrier cable glands are designed for use with all types of armoured cables, including wire braid armour, steel tape armour (STA), aluminium strip armour (ASA), steel wire armour (SWA), aluminium wire armour (AWA), pliable wire armour (PWA), and steel wire braided armour (SWB).

The barrier cable glands are manufactured in either: brass, naval grade brass, lead free brass or stainless steel SS304 / SS 316L grade material. All brass components can be optionally nickel plated.

For non-threaded entry points in Increased Safety (Ex e) and Dust Ignition Protected (Ex t) enclosures, metric or NPT threaded cable glands are installed using a locking nut.

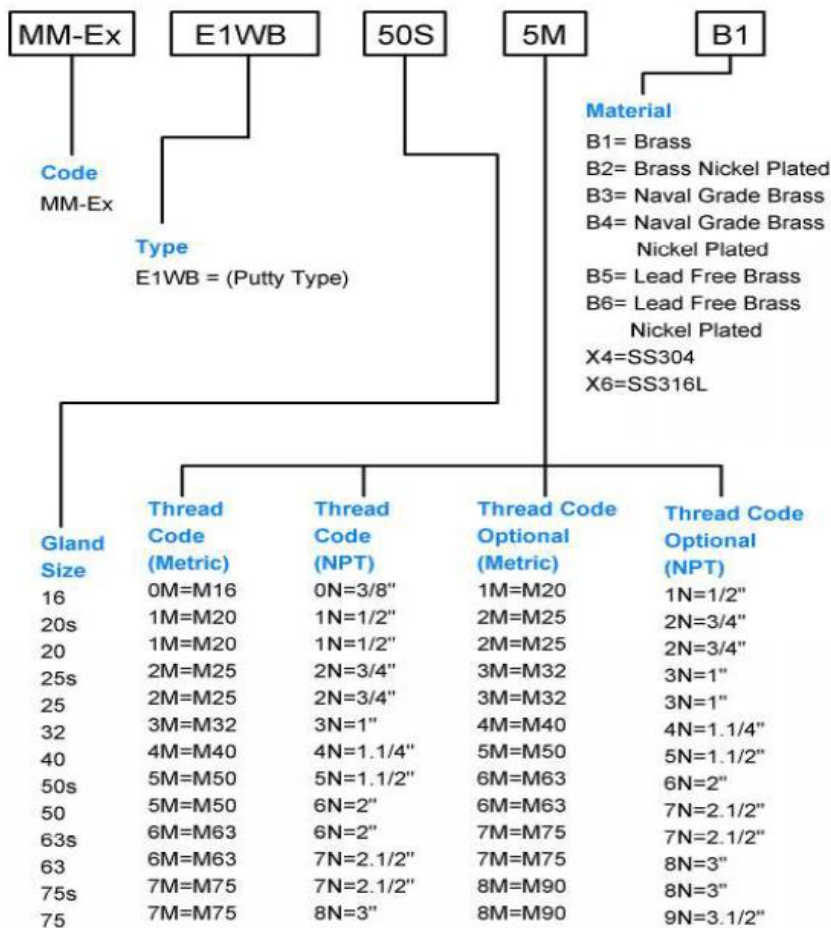
An Ingress protection of IP66/68 (5 meters, 10 hours) in accordance with EN 60529 and EN 60079-0 standard is maintained when the cable glands are installed in accordance with the manufacturer's instructions.

Cable Gland Selection Table:

Gland Size	Entry Thread			Max Inner Sheath Dia. (mm)	Max. diameter over cores (mm)	Max. No. of cores	Outer Sheath Cable Diameter in mm	
	Standard (Metric)	Optional					Minimum (mm)	Maximum (mm)
		Metric	NPT					
16	M16 x 1.5	M20 X 1.5	3/8” or 1/2”	9.00	8.00	12	6.20	13.10
20S	M20 X 1.5	M25 X 1.5	1/2” or 3/4”	10.00	8.90	12	9.60	15.50
20	M20 X 1.5	M25 X 1.5	1/2” or 3/4”	12.00	10.70	15	12.50	20.90
25S	M25 X 1.5	M32 X 1.5	3/4” or 1”	17.00	15.20	30	14.00	21.50

25	M25 X 1.5	M32 X 1.5	3/4" or 1"	17.00	15.20	30	18.30	25.60
32	M32 X 1.5	M40 X 1.5	1" or 1 1/4"	23.40	20.90	42	23.70	33.40
40	M40 X 1.5	M50 X 1.5	1 1/4" or 1 1/2"	30.00	26.80	60	28.00	39.50
50S	M50 X 1.5	M63 X 1.5	1 1/2" or 2"	35.00	31.30	70	35.20	46.00
50	M50 X 1.5	M63 X 1.5	2" or 2 1/2"	39.60	35.40	80	40.50	52.40
63S	M63 X 1.5	M75 X 1.5	2" or 2 1/2"	45.50	40.60	90	45.60	58.50
63	M63 X 1.5	M75 X 1.5	2 1/2" or 3"	51.00	45.60	100	54.60	64.50
75S	M75 X 1.5	M90 X 2.0	2 1/2" or 3"	57.00	50.90	110	59.00	70.40
75	M75 X 1.5	M90 X 2.0	3" or 3 1/2"	62.50	55.90	120	66.70	76.30

Model Designation:



16 Report Number

GB/SGS/ExTR26.0018/00

17 Specific Conditions of Use

- The installation of barrier gland should be done on fixed installations with circular cables only and must be tightened with the rated torque as specified in the instructions.
- The Barrier cable glands shall be installed taking into consideration the service temperature range of -40°C to +85°C.
- The manufacturer has maintained higher flame path length and more stringent flame path gap than required by the standard, the user must refer to manufacturer before carrying out any repairs or refurbishment to the equipment.

4. When the cores will be fitted inside the sealing pot by epoxy putty compound, the mounting should guarantee a sufficient quantity of compound around each single core to ensure the sealing of the cemented joint.
5. In the case of NPT connecting threads, the end-user must ensure that the necessary IP protection is guaranteed; this can be done using a suitable thread sealing agent appropriate to minimum ambient temperature and temperature class of the equipment on which it is installed.
6. In case of metric connecting threads, when 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 and the threads shall be a medium fit thread.
7. User shall refer to the type identification in certificate / instructional manual for the details of thread form & size of the cable gland and the permitted range of cable diameters.
8. When the cable glands 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 cable glands must be secured with a locknut.
9. Barrier glands can be used with braid armour cables when the purpose of the braid armour is mechanical protection of the cable and the braid armour must be clamped by means of armour cone and reversible ring with a correct orientation as specified in the instructions to ensure effective clamping of the cable.

18 Essential Health and Safety Requirements

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

Clause	Subject
1.2.7	Protection against other hazards e.g. LVD type requirements
1.2.8	Overloading of equipment (protection relays, etc.)
1.4.1	External effects
1.4.2	Aggressive substances, etc.

19 Drawings and Documents

Number	Sheet	Issue	Date	Description
MM-Ex-E1WB-000000	6	00	07/10/2025	Schedule Drawing of E1WB Barrier Cable Gland

Drawings are common to IECEx SGS 26.0002X