

CERTIFICATE



Italia

[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:

TÜV IT 17 ATEX 052 X

[4] Equipment or Protective System: Flameproof / Increased Safety/Dust Protection Stopping Plug
Type: EXBP-** Series

[5] Manufacturer: Shimada Electric Co.,Ltd.

[6] Address: 2-29-6 Nakaikegami Ota-ku, Tokyo, 146-0081
Japan

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

[8] TÜV Italia, notified body no. 0948 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. R 17 EX 038.

[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 60079-7: 2015 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 product shall include the following:



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

This certificate may only be reproduced in its entirety and without any change, schedule included.

Issue date: 24th February 2018



PRD N° 081B

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



**TÜV Italia S.r.l.
Notified Body N° 0948**

Paolo Marcone
Paolo Marcone

**Industry Service - Real Estate & Infrastructure
Technical Manager**

TÜV Italia has been authorized by Italian government to operate as notified body for the certification of equipment or protective system intended for use in potentially explosive atmospheres. This document is not valid without official signature and logo. The internal reference code is 722146451/1



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[13]

SCHEDULE

[14]

**EU-TYPE EXAMINATION CERTIFICATE
No. TÜV IT 17 ATEX 052 X**

Certificate History

Revision:	Description:	Report no:	Issue Date:
-	First Emission	-	24.02.2018

[15] **Description of equipment**

The stopping plugs of the series EXBP-** are designed for use in explosive atmospheres classified as Gas Zone 1 and Zone 2 and as Dust Zone 21 and Zone 22. The stopping plugs are IP 66 rated and IP tested according to the European explosion proof standard EN/IEC 60079-0.

The stopping plugs include M, NPT and G threads. The body material is steel(SS), brass (C3604) or stainless steel(304,316,316L). M and G threads are with sealing rings, NPT threads are without sealing ring.

The M and NPT thread stopping plugs are protected by flameproof enclosure (Ex db), increased safety (Ex eb) and dust ignition protection by enclosure (Ex tb). G thread-versions are protected by increased safety (Ex eb) and dust ignition protection by enclosure (Ex tb) only.

The type and thread covered are as follow:

Type	Metric	NPT	G Thread
EXBP-16	-	-	G1/2
EXBP-1/2	-	1/2 NPT	-
EXBP-M16	M16	-	-
EXBP-M20	M20	-	-
EXBP-22	-	-	G3/4
EXBP-3/4	-	3/4 NPT	-
EXBP-M25	M25	-	-
EXBP-28	-	-	G1
EXBP-1	-	1 NPT	-
EXBP-M32	M32	-	-
EXBP-36	-	-	G1-1/4
EXBP-11/4	-	1-1/4 NPT	-
EXBP-M40	M40	-	-
EXBP-42	-	-	G1-1/2
EXBP-11/2	-	1-1/2 NPT	-
EXBP-M50	M50	-	-
EXBP-54	-	-	G2
EXBP-2	-	2 NPT	-
EXBP-M63	M63	-	-
EXBP-70	-	-	G2-1/2
EXBP-21/2	-	2-1/2 NPT	-
EXBP-M75	M75	-	-
EXBP-82	-	-	G3

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EXBP-3	-	3 NPT	-
EXBP-M85	M85	-	-

Relationship between thread and Ex marking are as following:

Thread	Ex marking
M, NPT	Ex db IIC Gb, Ex eb IIC Gb, Ex tb IIIC Db
G	Ex eb IIC Gb, Ex tb IIIC Db

Rated characteristics

Service Temperature (Ts)	-20°C ≤ Ts ≤ +80°C
Protection Degree	IP66 (according EN/IEC 60079-0)

Warning label

N/A

[16] **Report no.** R 17 EX 038

Routine tests

N/A

[17] **Special conditions for safe use**

- The equipment is intended for use in temperature ranges from -20°C to +80°C (Ts).
- The equipment shall be installed according to the instruction manual provided by the manufacturer.
- The stopping plugs with G thread are only suitable as protection type "Ex eb" and "Ex tb". When it is used as "Ex db", additional testing is required and this is not covered by the TÜV SÜD certification with no. TÜV IT 17 ATEX 052 X.
- "Ex eb", "Ex tb": To maintain the min. IP requirement, all thread types of stopping plugs shall be made wrench tight. The M and G thread type stopping plugs require at least 5 threads engaged, when this requirement can't be met an additional screw nut is required inside the enclosure to ensure the effective compressing of the TPS Nylon packings. For NPT threads, the thread engaged must be at least 3 1/2 threads.
- "Ex db": To maintain the flameproof properties, the M thread type stopping plugs requires at least 5 threads engaged. For NPT threads, they shall be made wrench tight and the threads length engaged shall be not less as the "L2" dimension according ANSI/ASME B1.20.1. When this cannot be realised at the final installation, the stopping plugs cannot be used for "Ex db" applications.

[18] **Essential Health and Safety Requirements**

Assured by compliance with the standards set out in the [9].



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[19] **Drawings and Documents**

Listed documents (prot. 722146451/1)

Title:	Description:	Pages:	Rev:	Date:
GB60076	Flameproof/Increased Safety Type Stopping Plug	1	0	2017-09-1
GB60076A	Nylon Washer	1	0	2017-09-1
NIK16011901	Material Report	1	-	2017-12-26
TS20138E	Operating Instruction	2	2	2018-02-16

One copy of all documents is kept in TÜV Italia files.