



# IECEX Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.: IECEx CES 13.0022X Issue No: 0 Certificate history:  
Issue No. 0 (2014-03-14)

Status: **Current** Page 1 of 3

Date of Issue: **2014-03-14**

Applicant: **Bimed Teknik Aletler Sanayi Ve Ticaret A.S.**  
S.S Bakir Pirinç Sanayi Sitesi Leylak Caddesi no:15  
TR - 34524 Beylikdüzü - İstanbul  
**Turkey**

Electrical Apparatus: **Adaptors and Plugs, series B-RA., B-RB., B-RM., B-RN. and B-TS...**  
*Optional accessory:*

Type of Protection: **Flameproof enclosures 'd'; increased safety 'e'; Dust ignition protection 't'**

Marking: **Ex d IIC Gb  
Ex e IIC Gb  
Ex tb IIIC Db  
IP 66/68**

Approved for issue on behalf of the IECEx  
Certification Body:

Mirko Balaz

Position:

Head of IECEx CB

Signature:  
(for printed version)

Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

**CESI**  
**Centro Elettrotecnico**  
**Sperimentale Italiano S.p.A.**  
**Via Rubattino 54**  
**20134 Milano**  
**Italy**



# IECEx Certificate of Conformity

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Date of Issue: 2014-03-14 Page 2 of 3  
Manufacturer: **Bimed Teknik Aletler Sanayi Ve Ticaret A.S.**  
S.S Bakir Piriç Sanayi Sitesi Leylak Caddesi no:15  
TR - 34524 Beylikdüzü - İstanbul  
**Turkey**

Additional Manufacturing  
location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

#### STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

<b>IEC 60079-0 : 2011</b> Edition:6.0	Explosive atmospheres - Part 0: General requirements
<b>IEC 60079-1 : 2007-04</b> Edition:6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
<b>IEC 60079-31 : 2008</b> Edition:1	Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure "t"
<b>IEC 60079-7 : 2006-07</b> Edition:4	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

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

#### TEST & ASSESSMENT REPORTS:

*A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in*

Test Report:

[IT/CES/ExTR13.0023/00](#)

Quality Assessment Report:

[IT/CES/QAR12.0003/02](#)



# IECEx Certificate of Conformity

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## Schedule

### EQUIPMENT:

*Equipment and systems covered by this certificate are as follows:*

The Adaptors series B-RA.., B-RB.., B-RM.. and B-RN.. are used to match equipments, pipes and hubs having different threaded or plane entry sizes. Attachment of the Adaptors to an enclosure is by means of the male threaded portion on the male body.  
The series of available Adaptors are:

The male Plugs series B-TS.. are suitable for closing female hubs or unused openings on Ex d pipes or Ex d or Ex e enclosures.

The adaptors and plugs characteristics are further described in the Annexe of this certificate

### CONDITIONS OF CERTIFICATION: YES as shown below:

- -40°C to +100°C for adaptors and plugs made of brass and stainless steel;

### Annex:

[IECEx CES 13.0022X Issue 0 ANNEX- Adaptors\\_Plugs BIMED.pdf](#)

Prot: B4008948

**Annex to certificate:** IECEx CES 13.0022X Issue No.:0 of 2014-03-14

**Applicant:** Bimed Teknik Aletler Sanayi Ve Ticaret A.S.  
S.S Bakir Piriñç Sanayi Sitesi Leylak Caddesi no:15;  
TR-34520 Beylikdüzü - Istanbul - Turkey

**Apparatus:** Adaptors and Plugs, series B-RA., B-RB., B-RM., B-RN.. and B-TS...

## Description of the equipment:

The Adaptors series **B-RA.**, **B-RB.**, **B-RM.** and **B-RN.** are used to match equipment's, pipes and hubs having different taper threaded or plane entry sizes. Attachment of the Adaptors to an enclosure is by means of the male threaded portion on the body.

The typical uses of this series of adaptors are:

- **B-RA** – they reduce a female hub or increase a male hub.
- **B-RB** – they increase a female hub or reduce a male hub.
- **B-RM** – they vary the diameter of a male hub by transforming it into a female hub.
- **B-RN** – they vary the diameter of a female hub by transforming it into a male hub.

The male Plugs series B-TS.. are suitable for closing female hubs or unused openings on Ex d pipes or Ex d or Ex e enclosures. Attachment of the male plugs to an enclosure is by means of the male threaded portion on the body.

To guarantee the IP 66/68 degree of protection the Adaptors series B-RA., B-RB., B-RM., B-RN.. and male Plugs series B-TS.. with cylindrical threads have a sealing edge machined for fitting an elastomeric gasket, while for all other threads the IP 66/68 degree of protection is achieved with sealant put at least on two complete threads engaged of the threaded coupling.

The Adaptors and male plugs are generally made in Brass (CuZn39Pb3 EN 12164). The following alternative material can be supplied on demand:

- Galvanized carbon steel type FE36; FE37 UNI 10233/4.
- Stainless steel type AISI316; AISI304; AISI303.

All the Adaptors and male plugs are suitable for a service temperature range between -40°C and +100°C with the exception of the Adaptors and male plugs made of galvanized carbon steel which are restricted to the lower temperature range of -20°C.

The Adaptors and male plugs standard threads types are NPT ANSI/ASME B1.20.1 from 3/8" up to 4" and cylindrical ISO Metric 965/1 and ISO 965/3 from M16x1.5 up to M110X1.5. Alternative available tapered threads are GAS UNI ISO 7/1 or Gk (CEI EN 60079-1, Annex 1) while cylindrical threads are GAS UNI ISO 228/1, NPSM ANSI/ASME B1.20.1 and type PG DIN 40430. Thread type PG DIN 40430 can be used for "Ex e" execution only.

## Constructional characteristics

Degree of protection (IEC 60529): IP 66 / IP 68 (50 m for 30 min.).

Service temperature range: -40°C to +100°C for adaptors and plugs made of brass and stainless steel;  
-20°C to +100°C for adaptors and plugs made of galvanized carbon steel.

Prot: B4008948

**Annex to certificate:** IECEx CES 13.0022X Issue No.:0 of 2014-03-14

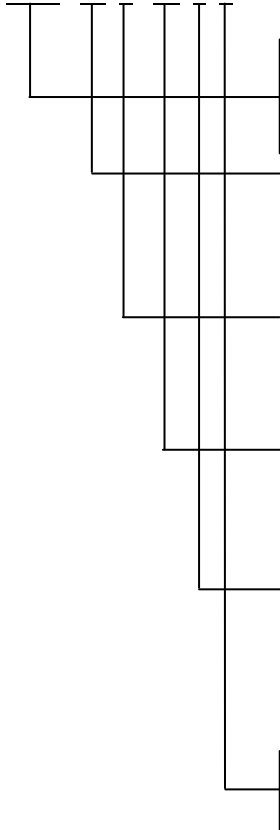
**Applicant:** Bimed Teknik Aletler Sanayi Ve Ticaret A.S.  
S.S Bakir Pirinç Sanayi Sitesi Leylak Caddesi no:15;  
TR-34520 Beylikdüzü - Istanbul - Turkey

**Apparatus:** Adaptors and Plugs, series B-RA., B-RB., B-RM., B-RN.. and B-TS...

### Identification of adaptors and plugs

The Adaptors are identified by a code as follows:

\*\*\*\* \*\* \* \*\* \* \*



Code which identifies the type:

- **B-RA**: male-female hub reducer
- **B-RB**: female-male hub reducer
- **B-RM**: female-female hub coupling or reducer adaptor
- **B-RN**: male-male nipple

Size of first Adaptor thread (see table 1)

Type of first Adaptor thread (Male/Female):

- **N**: NPT ANSI/ASME B1.20.1
- **P**: PG DIN 40430 (assessed for Ex e protection mode only)
- **M**: UNI ISO 261 pitch 1,5
- **C**: GAS UNI ISO 228-1
- **S**: NPSM ANSI/ASME B1.20.1
- **G**: GAS UNI ISO 7-1
- **X**: Gk (CEI EN 60079-1, Annex 1)

Size of second Adaptor thread (see table 1)

Type of second Adaptor thread (Male/Female):

- **N**: NPT ANSI/ASME B1.20.1
- **P**: PG DIN 40430 (assessed for Ex e protection mode only)
- **M**: UNI ISO 261 pitch 1,5
- **C**: GAS UNI ISO 228-1
- **S**: NPSM ANSI/ASME B1.20.1
- **G**: GAS UNI ISO 7-1
- **X**: Gk (CEI EN 60079-1, Annex 1)

Type of material:

- **B**: brass
- **X**: stainless steel
- **Z**: galvanized carbon steel

The Adaptors type **B-RM** and **B-RN** have both NPT threads or both Metric threads or coupling NPT-Metric threads.

The part number and standard thread types and sizes of Adaptors are listed on the following Table 1:

**Table 1:**

B-RA., B-RB., B-RM.. and B-RN..				
Adaptors size	NPT	ISO pitch 1,5	GAS UNI ISO 228-1	PG DIN 40430
01	3/8"	M 16	3/8"	-
1	1/2"	M 20	1/2"	-
2	3/4"	M 25	3/4"	9
3	1"	M 32	1"	11
4	1 1/4"	M 40	1 1/4"	13,5
5	1 1/2"	M 50	1 1/2"	16
6	2"	M 63	2"	21
7	2 1/2"	M 75	2 1/2"	29
8	3"	M 90	3"	36
9	-	-	-	42
10	4"	M 110	4"	48

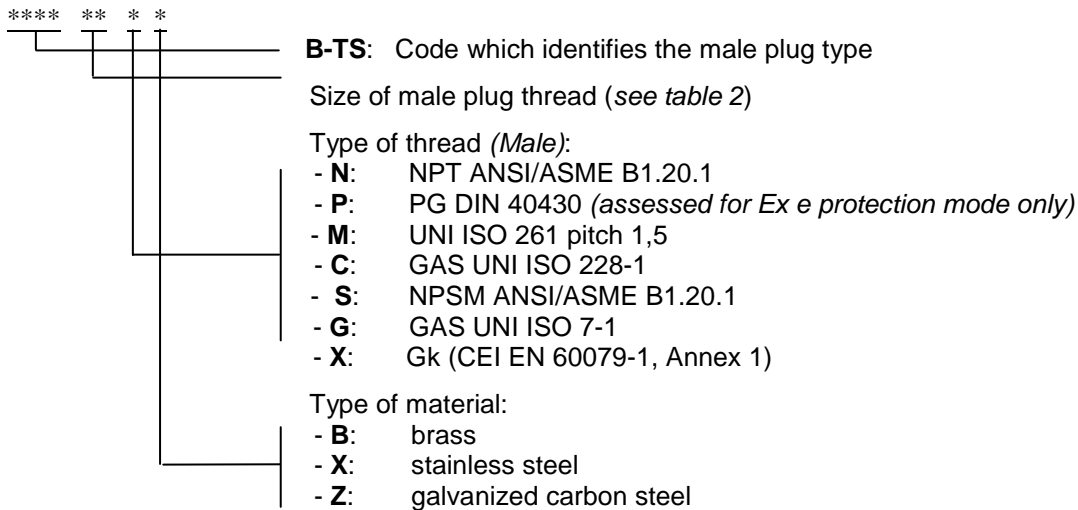
The **B-RB..**, **B-RM..** and **B-RN..** Adaptors may be made with two different thread types and sizes combinations or with the same combinations.

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 S.S Bakir Pirinç Sanayi Sitesi Leylak Caddesi no:15;  
 TR-34520 Beylikdüzü - Istanbul - Turkey

**Apparatus:** Adaptors and Plugs, series B-RA., B-RB., B-RM., B-RN.. and B-TS...

The male Plugs are identified by a code as follows:



The part number and thread type and size of the Plugs are listed on table 2 below:

**Table 2:**

<b>B-TS..</b>				
<b>Male plugs size</b>	<b>NPT</b>	<b>ISO pitch 1,5</b>	<b>GAS UNI ISO 228-1</b>	<b>PG DIN 40430</b>
01	3/8"	M 16	3/8"	-
1	1/2"	M 20	1/2"	-
2	3/4"	M 25	3/4"	9
3	1"	M 32	1"	11
4	1 1/4"	M 40	1 1/4"	13,5
5	1 1/2"	M 50	1 1/2"	16
6	2"	M 63	2"	21
7	2 1/2"	M 75	2 1/2"	29
8	3"	M 90	3"	36
9	-	-	-	42
10	4"	M 110	4"	48