



Marine & Offshore

Certificate number: 49933/B0 BV

File number: ACM182/2310/1

Product code: 0021H

*This certificate is not valid when presented without the full attached schedule composed of 7 sections*

www.veristar.com

## TYPE APPROVAL CERTIFICATE

*This certificate is issued to*

**Aplicaciones Mecanicas del Caucho, S.A.**  
ASTEASU - SPAIN

*for the type of product*

**FLEXIBLE MOUNTS**  
Vibration Damper BSB, BRB, Marine

### Requirements:

Bureau Veritas Rules for the Classification of Steel Ships

*This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.*

**This certificate will expire on: 04 Dec 2028**

**For Bureau Veritas Marine & Offshore,**

At BV VIGO, on 04 Dec 2023,

Ricardo IPARRAGUIRRE LIMON

***This certificate was created electronically and is valid without signature***



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

The electronic version is available at: <http://www.veristarm.com/veristarnb/jsp/viewPublicPdfTypepec.jsp?id=w1hzn2ldsb>

BV Mod. Ad.E 530 June 2017

This certificate consists of 5 page(s)

## THE SCHEDULE OF APPROVAL

### 1. **PRODUCT DESCRIPTION :**

Elastomer vibration dampers, **Type: BRB, BSB, Marine**

Rubber antivibration mounts

#### - **BRB/BSB**

Sizes : 45, 50, 60, 65, 70, 80, 95, 110, 125, 150, 180, 220

#### - **Marine**

Sizes : small, medium, large, XL

Characteristics are given in the following table :

<b>Type</b>	<b>Maximum Load (kg)</b>	<b>Stiffness (Shore A)</b>	<b>Code</b>
BRB 45	12	40	135137
	18	50	135138
	25	60	135139
BRB 50	20	40	135451
	40	50	135453
	60	60	135455
	80	70	135457
BRB 60	30	40	135101
	45	50	135405
	65	60	135103
	75	70	135104
BRB 65 M10	50	40	135421
	75	50	135422
	120	60	135423
	140	70	135424
BRB 65 M12	50	40	135431
	75	50	135432
	120	60	135433
	140	70	135434
BRB 70	50	40	135251
	75	50	135252
	120	60	135253
	140	70	135254
BRB 80 M10	80	40	135231
	130	50	135232
	175	60	135233
	235	70	135234
BRB 80 M12	80	40	135275
	130	50	135276
	175	60	135277
	235	70	135278
BRB 95 M10	150	40	135771
	260	50	135772
	330	60	135773
	390	70	135774
BRB 95 M12	150	40	135761

	260	50	135762
	330	60	135763
	390	70	135764
BRB 110 M12	200	40	135241
	305	50	135242
	420	60	135243
	450	70	135244
BRB 110 M16	200	40	135331
	305	50	135332
	420	60	135333
	450	70	135334
BRB 125	310	40	135618
	500	50	135620
	700	60	135622
	900	70	135624
BRB 150 S.B.	450	40	135205
	570	50	135206
	800	60	135207
	1000	70	135208
BRB 150	450	40	135161
	570	50	135162
	800	60	135163
	1000	70	135164
BRB 180	875	40	135391
	1200	50	135392
	1700	60	135393
	2400	70	135394
BRB 220	1600	40	135201
	2400	50	135200
	3400	60	135202
	4200	70	135203

Type	Maximum Load (kg)	Stiffness (Shore A)	Code
BSB 60	70	40	135106
	130	50	135109
	170	60	135107
	245	70	135108
BSB 80 M10	110	40	135261
	160	50	135262
	231	60	135263
	300	70	135264
BSB 80 M12	110	40	135265
	160	50	135266
	230	60	135267
	300	70	135268
BSB 95 M10	180	40	135311

	230	50	135312
	270	60	135313
	330	70	135314
BSB 95 M12	180	40	135315
	230	50	135316
	270	60	135317
	330	70	135318
BSB 110 M12	250	40	135335
	350	50	135336
	450	60	135337
	550	70	135338
BSB 110 M16	250	40	135150
	350	50	135151
	450	60	135152
	550	70	135153
BSB 125	450	40	135351
	550	50	135352
	690	60	135353
	900	70	135354
BSB 150 B.C.	750	40	135371
	950	50	135372
	1300	60	135373
	1650	70	135374
BSB 150	750	40	135361
	950	50	135362
	1300	60	135363
	1650	70	135364
BSB 160	900	40	135381
	1200	50	135382
	1600	60	135383
	2300	70	135384
BSB 180	1300	40	135181
	1750	50	135184
	2100	60	135182
	2900	70	135183
BSB 220	2500	40	135301
	3200	50	135302
	4000	60	135303
	5000	70	135304

Type	Maximum Load (kg)	Stiffness (Shore A)	Code
SMALL	35	35	136001
	45	45	136002
	70	55	136003
	95	65	136004
	110	75	136005
MEDIUM	95	35	136021

	120	45	136022
	220	55	136023
	280	65	136024
	400	75	136025
LARGE	350	45	136041
	525	55	136042
	800	65	136043
	1080	75	136044
XL	950	40	136061
	1400	50	136062
	2200	60	136063
	3000	70	136064

## **2. DOCUMENTS AND DRAWINGS :**

See Appendix.

## **3. TEST REPORTS :**

NA.

## **4. APPLICATION / LIMITATION :**

4.1 - The flexible mounts are to be installed according to the Manufacturer's instructions and BUREAU VERITAS Rules requirements.

4.2 - The flexible mounts will be selected according to the procedure as mentioned in the Manufacturer's catalogue and regarding Material datasheet.

4.3 - When a flexible mount for a particular engine is produced the first time, a Technical data sheet has to be submitted for information.

## **5. PRODUCTION SURVEY REQUIREMENTS :**

5.1 - The **BSB, BRB & Marine flexible mounts** are to be supplied by **Aplicaciones Mecanicas del Caucho, S.A.** in compliance with the type described in this certificate.

5.2 - This type of product is within the category HBV of Bureau Veritas Rule Note NR320 and as such does not require a BV product certificate.

5.3 - **Aplicaciones Mecanicas del Caucho, S.A.** has to make the necessary arrangements to have its works recognised by Bureau Veritas in compliance with the requirements of NR320 for HBV products.

5.4 - For information, **Aplicaciones Mecanicas del Caucho, S.A.** has declared to Bureau Veritas the following production site :

**Aplicaciones Mecanicas del Caucho, S.A.**

**Pol. Zona A - Parc. 35**

**20159 ASTEASU**

**SPAIN**

## **6. MARKING OF PRODUCT :**

- Type designation

- Dealer/Manufacturer

## **7. OTHERS :**

7.1 - It is **Aplicaciones Mecanicas del Caucho, S.A.**'s responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.

7.2 - This Certificate supersedes the Type Approval Certificate N°49933/A0 BV issued on 30/07/2018 by the Society.

\*\*\* END OF CERTIFICATE \*\*\*

Appendix to TAC 49933/B0 BV

<b>Drawing reference</b>	<b>Date</b>
BRB 45 SUPPORT	04/03/2016
BRB 50 SUPPORT	15/09/2017
BRB 60 SUPPORT	31/08/2016
BRB 65 M10 SUPPORT	10/03/2017
BRB 65 M12 SUPPORT	14/11/2017
BRB 70 SUPPORT	08/04/2016
BRB 80 M10 SUPPORT	26/11/2015
BRB 80 M12 SUPPORT	26/11/2015
BRB 95 M10 SUPPORT	13/02/2017
BRB 95 M12 SUPPORT	13/02/2017
BRB 110 M12 SUPPORT	26/08/2016
BRB 110 M16 SUPPORT	22/01/2016
BRB 125 SUPPORT	26/07/2016
BRB 150 SUPPORT SQUARE BASE	18/01/2016
BRB 150 SUPPORT	26/08/2016
BRB 180 SUPPORT	13/11/2015
BRB 220 SUPPORT	18/05/2016
BSB 60 SUPPORT	25/08/2016
BSB 80 M10 SUPPORT	10/06/2016
BSB 80 M12 SUPPORT	25/06/2015
BSB 95 M10 SUPPORT	02/10/2015
BSB 95 M12 SUPPORT	10/02/2017
BSB 110 M12 SUPPORT	07/03/2016
BSB 110 M16 SUPPORT	02/05/2017
BSB 125 SUPPORT	30/07/2015
BSB 150 SUPPORT SQUARE BASE	07/03/2016
BSB 150 SUPPORT	10/06/2016
BSB 160 SUPPORT	16/07/2015
BSB 180 SUPPORT	05/08/2015
BSB 220 SUPPORT	18/05/2016
MARINE SUPPORT LARGE	02/02/2016
MARINE SUPPORT MEDIUM	30/06/2015
MARINE SUPPORT SMALL	22/07/2016
MARINE SUPPORT XL	11/07/2016