



Marine & Offshore

Certificate number: 24317/C0 BV

File number: ACM 145/2554/01

Product code: 2205I

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

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## TYPE APPROVAL CERTIFICATE

*This certificate is issued to*

**GHIBSON ITALIA SRL**  
ZOLA PREDOSA (BO) - ITALY

*for the type of product*

**BUTTERFLY VALVES**  
Double Eccentric BVHD and BLHD series

### Requirements:

- BUREAU VERITAS Rules for the Classification of Steel Ships
- BUREAU VERITAS Rules for the Classification of Offshore Units
- BUREAU VERITAS Rules for the Classification of Naval 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: 27 Dec 2026**

**For Bureau Veritas Marine & Offshore,**

At BV VENEZIA, on 27 Dec 2021,

Sandro BRUSEGAN



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](http://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.

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BV Mod. Ad.E 530 June 2017

This certificate consists of 4 page(s)

## THE SCHEDULE OF APPROVAL

### 1. PRODUCT DESCRIPTION

#### **Butterfly Valves Double Eccentric BVHD and BLHD series**

##### 1.1 Technical data

Design standard	EN12516
Body seat	Soft seat, metallic seat and "fire safe" seat
Size (mm)	DN 40 to DN 500
Pressure rating (bar)	PN 10 - 16 - 25
Class rating (ANSI)	# 150
Design pressure (bar)	25
End connection	Wafer & Lug

##### 1.2 Temperature range of seats

Seat material	Temperature range (°C)
PTFE	- 55/190
Reinforced PTFE (RTFE)	- 55/230
INCONEL 625 + graphite	- 55/450

##### 1.3 Material specification

Body	Carbon steel ASTM A216 – WCB/GP240GH Carbon steel S355J2GB [EN 10025] Carbon steel A516 Gr.70 Carbon steel P355NH [1.0565] [EN 10028-3] Carbon steem P355NL2 [2.1106] [EN 10028-3] Carbon steel ASTM A352 LCB/G17Mn5 [1.1131] Carbon steel ASTM A352 LCC/G20Mn5 [1.6220] Stainless steel ASTM A351 CF8M [1.4408] [AISI 316] Stainless steel ASTM A351 CF3M [AISI 316L] [1.4409] Stainless steel 6MO ASTM A351 CK-3MCuN [1.4547] [254 SMO] [UNS J93254] Stainless steel Duplex ASTM-A995-Gr.CD3MN [1.4470] [UNS S31803] Stainless steel Super Duplex ASTM-A995-Gr.CE3MN [1.4469] [UNS S23750] Monel K500 Monel 400 Monel ASTM A494 Gr.M35-1 [UNS N24135] Hastelloy ASTM A494 [CW-12MW] - C276 Hastelloy C22 [CW2MW]
Disc	Stainless steel ASTM A351 CF8M [AISI 316] Stainless steel Monel 400 ASTM A494 Gr. M35-1 [UNS N24135] Stainless steel Hastelloy C ASTM A494 CW 12MW [UNS N30002] Stainless steel Duplex ASTM-A995-Gr.CD3MN [1.4470] [UNS S31803] Stainless steel Super Duplex ASTM-A995-Gr.CE3MN [1.4469] [UNS S23750]
Stem	Stainless steel ASTM A564 Gr. 630 Steel Duplex ASTM A182 gr. F51 [UNS S31803] Stainless steel Super Duplex ASTM A182 gr.F55 [UNS S32760] Hastelloy Alloy C-276 [UNS N 10276] Monel Alloy K500 [UNS N05500]
Seat	PTFE RTFE (reinforced PTFE) Inconel 625 + graphite

*When other choices of materials are used per manufacturer's instructions, the BV agreement is to be obtained.*

## **2. DOCUMENTS AND DRAWINGS**

- Brochure HD 04/19 - EN Butterfly Valves Double eccentric HD series (including manual of installation, use and maintenance)
- HDTA application & Body strength rev. 1 March 2021
- Drawings N° TAB-TYP39 Rev.A dated 05/08/2010 : BVHD DN040-500
- Drawings N° TAB-TYP40 Rev.A dated 05/08/2010 : BVHD DN040-500
- Drawings N° TAB-TYP41 Rev.A dated 06/08/2010 : BLHD DN040-500
- Drawings N° TAB-TYP42 Rev.A dated 06/08/2010 : BLHD DN040-500

*No departure from the above documents shall be made without the prior consent of the Society. The manufacturer must inform the Society of any modification or changes to these documents and drawings.*

## **3. TEST REPORTS**

- 3.1 - Tests carried out: shell hydraulic test pressure, seat hydraulic test pressure, seat pneumatic test pressure, opening/closing test according to test report N° 282279/GEN/10/TAC dated 09/05/2011.
- 3.2 - Fire tests carried out in compliance with API 607:2010 / ISO 10497-5:2004, witnessed by the Society's surveyor:
- Test report N° 1344.0AE0202/10 dated 26/10/2010 issued by LAPI. Test specimen BVHD DN 50 mm, seats RTFE+Inconel
  - Test report N° 1345.0AE0202/10 dated 26/10/2010 issued by LAPI. Test specimen BVHD DN 100 mm, seats RTFE+Inconel
  - Test report N° 1346.0AE0202/10 dated 26/10/2010 issued by LAPI. Test specimen BVHD DN 200 mm, seats RTFE+Inconel
  - Test report N° 1347.0AE0202/10 dated 26/10/2010 issued by LAPI. Test specimen BVHD DN 100 mm, seats RTFE+Inconel

## **4. APPLICATION / LIMITATION**

- 4.1 - May be used for the following services on board:
- Shiplside valves - Sea water and fresh water - Bilge and ballast transfer - Compressed air - Cargo oil for tankers - Inert gas systems - Fuel-oil and lubricating oil transfer - Domestic and sanitary systems - washing and fire extinguishing - Hydraulic oil - Deck foam systems - Non-essential systems
- 4.2 - The fire tests have been carried out in compliance with the standards. Installation on board ships where a fire safe design is required remains to be approved on a case by case basis
- 4.3 - The butterfly valves belong to class I, class II and class III according to the relevant requirements stated in Part C, Chapter 1, Sec 10 of the Bureau Veritas rules. Valves fitted on the ship side and collision bulkhead and valves under static pressure on fuel oil tanks or lub oil tanks belong to class II.
- 4.4 - The butterfly valve body, disc and sealing should be suitable for the intended service. In particular the nature of materials, joints included, is to be selected according to the fluid to be conveyed and the temperature.
- 4.5 - The use of stainless steel and grey cast iron is to be restricted as per BUREAU VERITAS Rules.
- 4.6 - The approval does not include any operating gear for remote control of the valves.
- 4.7 - When the butterfly valves are not fitted with flanges their use may be accepted as shiplside valves provided that arrangement are made to allow a possible disassembling at sea of the pipes immediately inboard without any risk of flooding.
- 4.8 - The valve is to be installed according to manufacturer's instructions and Society/s Rule requirements.
- 4.9 - Bilge valves will be fitted in association with a non return valve.

## **5. PRODUCTION SURVEY REQUIREMENTS**

- 5.1 - The products are to be supplied by **GIBSON ITALIA SRL** in compliance with the type and the requirements described in this certificate.
- 5.2 - This type of product is within the category IBV of Bureau Veritas Rule Note NR320.
- 5.3 - BV product certificate is required.
- 5.4 - Bureau Veritas certificates are required for materials of valve housings of class I (DN≥50) and class II (DN≥100). Materials of valve housings of class I (DN<50) and class II (DN<100) and other pressure boundary parts of class II are to be with Work's certificates.
- 5.5 - Each valve housing for class I and class II is to be hydraulically pressure tested to 1.5 times the design pressure.
- 5.6 - For information, **GIBSON ITALIA SRL** has declared to Bureau Veritas the following production site:

**GIBSON ITALIA SRL**  
**Via Giuseppe Dozza, 2 -**  
**40069 ZOLA PREDOSA (BO),**  
**ITALY**

**6. MARKING OF PRODUCT**

The butterfly valve shall be marked with at least:

- Manufacturer's name or logo
- Type designation
- Maximum working Pressure
- Society's brand as relevant

**7. OTHERS**

It is **GIBSON ITALIA SRL** 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.

*This certificate supersedes the Type Approval Certificate No. 24317/B0 BV issued by the Society.*

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