



Marine & Offshore

Certificate number: 40446/B0 BV

File number: ACM 145/2583/1

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*

**Complementos y Valvulas de Mariposa, s.l.**  
VALDEMORO - SPAIN

*for the type of product*

**BUTTERFLY VALVES**

Butterfly Valves elastomer lined type wafer, lug and flange

**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
- BUREAU VERITAS Rules for the Classification of Yachts

*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: 28 Oct 2025**

**For Bureau Veritas Marine & Offshore,**

At BV BILBAO, on 28 Oct 2020,

Juan Jose GUTIERREZ GARCIA



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.

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BV Mod. Ad.E 530 June 2017

This certificate consists of 3 page(s)

## THE SCHEDULE OF APPROVAL

### 1. PRODUCT DESCRIPTION

**Butterfly Valves elastomer lined type wafer, lug and flange designed according to API 609 and ANSI B16.34**

#### 1.1 Design Specifications

Design	API 609, EN 593
Wafer type size	DN 50 - 1200
Lug type size	DN 50 - 400
Flange type size	DN 150 - 1200
Design Pressure DN 650 - 1200 (bar)	10
Design Pressure DN 50 - 600 (bar)	16
Flange rating	PN 6/10/16, ANSI 150, JIS 5K/10K/16K

Seat lining	Design Temperature related to elastomers (°C)
EPDM	-20 to +95
EPDM HT	-20 to +120
BUNA-N	-10 to +100
VITON	-15 to +180
SILICONE	-60 to +160
HYPALON	-20 to +125
EPICHLOROHYDRIN	-40 to +90
FLUCAST	-10 to +130
PTFE	-20 to +250

The maximum service pressure and temperature are not to exceed those specified by the manufacturer.

#### 1.2 Materials

Body	Nodular cast iron GJS400-15 & GJS400-18 & GJS500-7, Carbon steel A216-WCB, Stainless steel A351-CF8M, Hastelloy C276, Duplex A182 F51 Super Duplex A182 F53, Uranus B6, Inconel 625 B564 Gr.N6625, Alloy 31, Bronze RG5/RG10 or Bronze-Aluminium C95500
Shaft	Stainless steel A2716-420 or A276-316
Disc	Nodular cast iron GJS500-7, Carbon steel A216-WCB, Stainless steel A351-CF8M or Aluminium bronze B148-9D
Seat	EPDM, EPDM HT, BUNA-N, VITON, SILICONE, HYPALON, EPICHLOROHYDRIN, FLUCAST, PTFE

Carbon steel shall be Charpy impact tested when the thickness exceed 6mm and the minimum working temperature is -10°C or lower.

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

### 2. DOCUMENTS AND DRAWINGS

- Manufacturer's catalogue including assembly instructions Rev.2-2-09
- Wafer valve DN 250-400 general drawing N° 9-9-0070 Rev.0 dated 12/09/2014
- Wafer valve DN 450-1000 general drawing N° 10-10-0070 Rev.0 dated 11/05/2016
- Wafer valve DN 32-200 general drawing N° 11-11-0070 Rev.0 dated 02/07/2014
- Wafer valve DN 1200 general drawing N° 8-8-0070 Rev.0 dated 11/05/2018
- Flange valve DN 450-1000 general drawing N° 19-19-0070 Rev.0 dated 11/05/2016
- Flange valve DN 250-400 general drawing N° 22-22-0070 Rev.0 dated 12/09/2014
- Flange valve DN 150-200 general drawing N° 23-23-0070 Rev.0 dated 12/09/2014
- Flange valve DN 1200 general drawing N° 18-18-0070 Rev.0 dated 11/05/2018
- Lug valve DN 32-200 general drawing N° 20-20-0070 Rev.0 dated 12/09/2014
- Lug valve DN 250-400 general drawing N° 21-21-0070 Rev.0 dated 12/09/2014
- Bureau Veritas Type Approval, Covalma S.L. dated 24/02/2020

*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

- Hydraulic tests (body pressure test at 1,5 times the design pressure and seat pressure test at 1,1 times the design pressure) dated 27/03/2009

**4. APPLICATION / LIMITATION**

4.1 May be used for the following services on board:

- Sea water and fresh water cooling, fuel oil and lubricating oil, hydraulic oil, inert gas, compressed air, cargo oil for tankers, washing and fire extinguishing, domestic and sanitary systems.

4.2 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 BUREAU VERITAS Rules for the Classification of Steel Ships.
- Part C, Chapter 1, Sec 7 of BUREAU VERITAS Rules for the Classification of Offshore Units.
- Part C, Chapter 1, Sec 10 of BUREAU VERITAS Rules for the Classification of Naval Ships.
- Part C, Chapter 1, Sec 4 of BUREAU VERITAS Rules for the Classification of Yachts.

Valves under static pressure on oil fuel tanks or lubricating oil tanks and valves fitted on the ship side and collision bulkhead belong to Class II.

4.3 The butterfly valve body, disc and sealing shall 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.

4.4 The use of austenitic stainless steel is restricted as per BUREAU VERITAS Rules.

4.5 The use of bronze and aluminum-bronze is 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 shipside 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 valves are to be installed according to the manufacturer's instructions and Society's Rule requirements.

**5. PRODUCTION SURVEY REQUIREMENTS**

5.1 The products are to be supplied by **Complementos y Valvulas de Mariposa, s.l.** 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 BUREAU VERITAS Certificate is required for materials of valve housings of class I (DN $\geq$ 50) or class II (DN $\geq$ 100). Materials of valve housings of class I (DN $<$ 50) or class II (DN $<$ 100) and for other parts are to be with Work's certificates.

5.4 Each valve is to be hydraulically pressure tested to 1.5 times the design pressure.

5.5 BV Product certificate is required.

5.6 For information, Complementos y Valvulas de Mariposa, s.l. has declared to Bureau Veritas the following production site:

**AVDA. DE LAS CANTERAS 90-92 NAVES 11 Y 1  
28340 VALDEMORO (MADRID)  
ATT. DAVID OJEDA  
28340 VALDEMORO  
SPAIN**

**6. MARKING OF PRODUCT**

The product shall be marked with at least:

- Manufacturer's name or logo
- Type designation
- Size
- Pressure class
- Society's brand as relevant

**7. OTHERS**

This approval is given on the understanding that the manufacturer will accept full responsibility for informing shipbuilders or their sub-contractors of the proper methods of fitting and general maintenance of the products and of the conditions of this approval.

*This certificate supersedes the Type Approval Certificate N° 40446/A0 BV issued on 25/02/2015 by the Society.*

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