



Certificate number: 44514/B1 BV

File number: ACM 145/2314/04

Product code: 2205I

This certificate is not valid when presented without the full attached schedule composed of 7 sections. Full certificate is to be requested to the manufacturer

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TYPE APPROVAL CERTIFICATE

This certificate is issued to

WOUTER WITZEL EUROVALVE B.V.
LOSSER - NETHERLANDS

for the type of product

BUTTERFLY VALVES
ECONAXE W201 & L201

Requirements:

Bureau Veritas Rules for the Classification of Steel Ships
Bureau Veritas Rules for the Classification of Offshore Units
IGC Code as amended by Resolutions MSC.523(106)

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: 12 Nov 2028

For Bureau Veritas Marine & Offshore,
At BV ROTTERDAM, on 28 Aug 2026,
Jan LEIJTEN

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.

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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

ECONAXE W201 & L201

1.1 - Ratings

Type	W201	L201
Size (DN)	DN 50 to DN 600 (2" to 24")	DN 50 to DN 600 (2" to 24")
Pressure Ratings	PN6, PN10, PN16 & Class 150 & JIS 5K, 10K, 16K	PN6, PN10, PN16 & Class 150 & JIS 5K, 10K, 16K
Temperature Range (°C)	- 40 / + 300 - 40 / + 200 (for Aluminium Bronze)	- 40 / + 300 - 40 / + 200 (for Aluminium Bronze)
Connection Type	Flangeless wafer type with centring lugs	Lugged wafer type

The working temperature depends on the media and on the material of the body and seat.

1.2 Material specification

Part	Designation	Material	Standard
Body	GX5CrNiMo19-11-2	1.4408	EN 10213: 2007 + A1:2016
	CF8M	UNS J92900	ASME SA-351: 2023
	CF3M (Mo>2.8%) / CF3M	UNS J92800	ASME SA-351: 2023
	GX2CrNiMo19-11-2 / GX2CrNiMo19-11-2 (Mo>2.8%)	1.4409	EN 10213: 2007 + A1:2016
	GP240GH	1.0619	EN 10213: 2007 + A1:2016
	WCB	UNS J03002	ASME SA-216: 2023
	CuAl10Fe5Ni5-C	CC333G	EN 1982: 2024
	Aluminium Bronze	UNS C95800	ASME SB-148: 2023
Disc	GX5CrNiMo19-11-2	1.4408	EN 10213: 2007 + A1:2016
	CF8M	UNS J92900	ASME SA-351:2023
	CF3M (Mo>2.8%) / CF3M	UNS J92800	ASME SA-351:2023
	GX2CrNiMo19-11-2 / GX2CrNiMo19-11-2 (Mo>2.8%)	1.4409	EN 10213 : 2007 + A1:2016
	CuAl10Fe5Ni5-C	CC333G	EN 1982: 2024
	Aluminium Bronze	UNS C95800	ASME SB-148: 2023
Shaft	X2CrNiMoN 22-5-3	1.4462	EN 10272: 2016
	22Cr DUPLEX	UNS S31803	ASME SA-479: 2023
	X20Cr13	1.4021	EN 10088-3: 2024
	GRADE 420	UNS S42000	ASME SA-276: 2023
	Cu Al 10 NiFe4 – R740	CW307G	EN 12163: 2024
Seat	RTFE 15-12-3	-	-
	X5CrNiMo17-12-2	1.4401	EN 10088-3: 2005
	RTFE 15-12-3 + X5CrNiMo17-12-2 (fire safe)	1.4401	EN 10088-3: 2005
	NiCr22Mo9Nb (Inconel 625)	2.4856	EN 10095: 1999
	NBR / EPDM / FPM (Viton B)	-	ISO 1629: 1995

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

2. DOCUMENTS AND DRAWINGS

- Drawing N° D-DAAA017-AI Rev. AI dated 06/08/2026: *ECONAXE W201/L201 DN50 / DN600*.
- Product data sheet N° PDS03.11.001 dated 30/01/2020: *ECONAXE W201*.
- Product data sheet N° PDS03.12.001 dated 30/01/2020: *ECONAXE L201*.
- Test specifications N° K-010 dated 29/03/2016.
- Dry Fire Test Procedure Rev. 04/2008.

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 - Fire safe test according to DIN EN ISO 10497:2010 witnessed by an IACS member surveyor.

- Test reports:

Test report N°	Date
IBB-1476/LRHAM1573573/1	01/12/2015
IBB-1478/LRHAM1573573/2	01/12/2015
IBB-1480/LRHAM1573573/3	01/12/2015
IBB-1482/LRHAM1573573/4	01/12/2015

Test report N°	Date
IBB-1484/LRHAM1573573/5	01/12/2015
IBB-1486/LRHAM1573573/6	02/12/2015
IBB-1488/LRHAM1573573/7	02/12/2015
IBB-1490/LRHAM1573573/8	02/12/2015

- Inspection certificates:

Inspection certificate N°	Date
HAM1573573/2A1	08/02/2016
HAM1573573/5A1	08/02/2016

Inspection certificate N°	Date
HAM1573573/7A1	08/02/2016
HAM1573573/1A1	08/02/2016

3.2 - Fire safe test according to DIN EN ISO 10497:2010 under dry condition witnessed by an IACS member surveyor.

- Test reports:

Test report N°	Date
IBB-1492/LRHAM1573573/9	02/12/2015
IBB-1496/LRHAM1573573/11	03/12/2015

Test report N°	Date
IBB-1498/LRHAM1573573/12	03/12/2015
IBB-1500/LRHAM1573573/13	03/12/2015

- Inspection certificates:

Inspection certificate N°	Date
HAM1573573/9A1	08/02/2016
HAM1573573/13A1	08/02/2016

Inspection certificate N°	Date
HAM1573573/11A1	08/02/2016
HAM1573573/12A1	08/02/2016

4. APPLICATION / LIMITATION

4.1 - May be used in cargo systems of oil tankers, FLS tankers, chemical tankers and liquefied gas tankers (Design temperature not below minus - 40 °C).

May be also used for the following services on board: Bilge and ballast - Washing and fire extinguishing - Sea water and fresh water cooling - Fuel oil and lubricating oil - Hydraulic oil - Compressed air - Inert gas - Steam - Domestic and sanitary systems - Non essential and ventilation systems.

4.2 - The valves may be installed on Class I, Class II and Class III pressure piping systems according to the relevant requirements stated in *NR 467, Part C, Ch 1, Sec 10, Part D, Ch 8, Sec 5, Part D, Ch 9, Sec 5* and corresponding requirements in *NR 445*. Systems fitted on the ship side and collision bulkhead, and systems fitted on fuel oil and lub oil tanks under static pressure are of Class II.

4.3 - A Charpy V-notch impact test shall be carried at - 196°C for castings made of austenitic steels when the service temperature is below - 105°C, according to *NR 216, Ch 6, Sec 7*. Castings in steel grades 316 and 316L with any design temperature shall be impact tested according to *NR 467, Pt D, Ch 9, Sec 6* and corresponding requirements in *NR 445*. A reduction of the tests may be granted for design temperatures above - 60°C subject to the agreement of the Society.

4.4 - The valve body, disc and seat 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 approval does not include any operating gear for remote control of the valves.

4.6 - The valves intended to be used for handling of Propylene Oxide or Ethylene Oxide / Propylene Oxide mixtures shall be of a fire safe design.

4.7 - Bilge valves will be fitted in association with a non return valve.

4.8 - The valves are to be installed according to the manufacturer's instructions and Bureau Veritas Rules requirements.

4.9 - All valves intended for installation on Bureau Veritas classed vessels shall comply with the requirements of *NR 467, Pt D, Ch 9, Sec 5* and corresponding requirements in *NR 445*. Accordingly, test reports witnessed by Bureau Veritas surveyors must be made available upon request.

4.10 - The use of metallic materials is restricted according to Bureau Veritas Rules *NR 467, Pt C, Ch 1, Sec 10, Table 5* and corresponding requirements in *NR 445*.

4.11 - The use of welded & threaded metallic joints and metallic flange connections in piping systems is to be in accordance with *NR 467, Pt C, Ch 1, Sec 10, Table 15 & Table 16*, respectively and corresponding requirements in *NR 445*.

4.12 - In any event, butterfly valves not fitted with flanges are not to be used for water inlets or overboard discharges unless provisions are made to allow disassembling at sea of the pipes served by these valves without any risk of flooding.

5. PRODUCTION SURVEY REQUIREMENTS

5.1 - The products are to be supplied by **Wouter Witzel EuroValve B.V.** 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 NR 320.

5.3 - Bureau Veritas product certificate is required.

5.4 - Bureau Veritas certificate is required for materials of valve bodies/housings of Class I (DN $\geq$ 50) or Class II (DN $\geq$ 100). Materials of valve bodies/housings for class I (DN $<$ 50) or class II (DN $<$ 100) and for other parts are to be with Work's certificates.

5.5 - Materials are to comply with the approved drawings and the applicable requirements in NR 467, Pt D, Ch 9, Sec 5 and corresponding requirements in NR 445. Charpy impact test is to be as per the Bureau Veritas Rules on materials, and where relevant, in accordance with requirements of IGC Code.

5.6 - Each valve body/housing intended to be use on Class I and Class II pressure piping systems is to be hydraulically pressure tested to 1.5 times the design pressure. Valves intended to be fitted on the shipside below the load waterline are to be tested by hydraulic pressure not less than 0.5 MPa.

5.7 - For information, **Wouter Witzel EuroValve B.V.** has declared to Bureau Veritas the following production site:

Wouter Witzel EuroValve B.V.:

Industrieterrein De Pol 12,

7581 CZ LOSSER,

NETHERLANDS

6. MARKING OF PRODUCT

Each valve shall be permanently marked with at least:

- Manufacturer's name or logo
- Type designation
- Size
- Design pressure
- Design temperature (range)
- Bureau Veritas' Mark

7. OTHERS

It is **Wouter Witzel EuroValve B.V.** 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 N° 44514/B0 BV issued by the Society.

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