中国船级社
CHINA CLASSIFICATION SOCIETY

证书编号/Certificate No.
LT21PTA00002

型式认可证书
CERTIFICATE OF TYPE APPROVAL

兹证明本证书所述制造厂具备按照下列标准的要求生产本证书所列产品的能力和条件。
This is to certify that the manufacturer stated in the certificate meets the requirements of the standards listed below and is available with the ability and conditions to produce the products described in the certificate.

制造厂/Manufacturer

Wouter Witzel EuroValve B.V.

地址/Address

Industrieterrein De Pol 12, 7581 CZ Losser, Netherlands

产品名称/Product

蝶阀
Butterfly Valve

认可标准/Approval Standard

1. 中国船级社《钢质海船入级规范》（2021）及其修改通报第3篇第2章
Chapter 2, Part Three of China Classification Society Rules for Classification of Sea-Going Steel Ships 2021 and its Amendments

用于/Intended for

船舶与海上设施/Ships and Offshore Installations

产品明细/Product Description

蝶阀/Butterfly Valve(M0001)

名称/Name	属性（值）/Value	单位/Unit
型号/Type	EVS, EVBLS, EVBS, EVTLS, EVUS, EVMS, EVML, EVFS, EVFL, ECV, DYNAXE, EVS-i, EVTLS-i, EVFS-i	
设计压力/Design Pressure	1.0 to 1.6 MPa	
公称压力/Nominal Pressure	1.0 to 1.6 MPa	
公称直径/Nominal Diameter	40 to 2200 mm	
阀体材质/Valve Body Material	Refer to the attached Pages	
适用温度/Applicable Temperature	Refer to the attached Pages	

证书有效期至/This Certificate is valid until **2025年08月26日/ Aug. 26,2025**

发证机构 中国船级社鹿特丹办事处
Issued by CCS Rotterdam Office

签发日期 2021年08月30日
Date Aug. 30,2021

本证书根据中国船级社规范和相关规定签发。所有证书页为一个整体，必须同时使用。纸质证书每页均须由本社盖章方为有效，电子证书含数字签名方为有效，本证书复印件无效。任何单位和个人均不应摘录或节选本证书的部分内容。有关方对所持证书的真实性有疑问时，可以向我社检验机构咨询。
This Certificate is issued pursuant to the Rules of the Society and related regulation. All pages of the certificate are taken as a whole and are used simultaneously. No paper certificate page is valid without bearing the stamp of the Society, no electronic certificates is valid without the digital signature, and no copied form of the certificate is regarded as valid. Any part of the certificate is not to be extracted or abridged by any unit or individual in any form. Related parties who are doubted about the authenticity of the certificate may inquire of the Society or its offices.

批准的图纸/Approved Drawings

图纸批准号/ Drawings Approval No.: NP17A01685,NP20PPP02207

产品认可试验报告/ Approval Test Report

试验报告编号/ Test Report No.： ED901.01.030
试验报告日期/ Test Report Date： 2021-08-25
试验单位/ Laboratory: Wouter Witzel EuroValve B.V.
试验单位地址/ Test Address: Industrieterrein De Pol 12, NL-7581 CZ Losser

试验报告编号/ Test Report No.： QITP-VK034591
试验报告日期/ Test Report Date： 2020-09-16
试验单位/ Laboratory: Wouter Witzel Eurovalve B.V.
试验单位地址/ Test Address: Industrieterrein De Pol 12, NL-7581 CZ Losser

试验报告编号/ Test Report No.： Project No.01.10933.01.719
试验报告日期/ Test Report Date： 2005-08-01
试验单位/ Laboratory: Southwest Reserch Institute
试验单位地址/ Test Address: Houston, USA

试验报告编号/ Test Report No.： 6-1013
试验报告日期/ Test Report Date： 2006-01-18
试验单位/ Laboratory: Southwest Reserch Institute
试验单位地址/ Test Address: Houston,USA

试验报告编号/ Test Report No.： 6-995
试验报告日期/ Test Report Date： 2006-02-02
试验单位/ Laboratory: Southwest Reserch Institute
试验单位地址/ Test Address: Houston,USA

试验报告编号/ Test Report No.： 6-1024
试验报告日期/ Test Report Date： 2006-04-10
试验单位/ Laboratory: Southwest Reserch Institute
试验单位地址/ Test Address: Houston,USA

试验报告编号/ Test Report No.： 01.13537.01.407
试验报告日期/ Test Report Date： 2008-02-22
试验单位/ Laboratory: Southwest Research Institute
试验单位地址/ Test Address: 6220 Culebra RD. 78238-5166. San Antonio, Texas, USA

试验报告编号/ Test Report No.： PCC T/D 0508010
试验报告日期/ Test Report Date： 2005-08-05
试验单位/ Laboratory: PCC EuroValve BV
试验单位地址/ Test Address: Id. De Pol 12, NL-7581 CZ Losser, The Netherlands

试验报告编号/ Test Report No.： 6-1012
试验报告日期/ Test Report Date： 2006-01-18
试验单位/ Laboratory: Southwest Reserch Institute
试验单位地址/ Test Address: Houston,USA

认可后的产品检验方式/ Method of Product Inspection after Approval

认可后的产品检验由制造厂按本社批准的产品检验计划进行，本社在文件审核合格后颁发船用产品证书。
After approval, product inspection should be carried out by the Manufacturer in accordance with the product inspection scheme approved by the Society, and the Marine Product Certificate is issued by the Society upon satisfactory documents review.

认可保持条件/ Maintenance Requirements of Approval

1.型式认可后，如果产品及其重要零部件的设计、所用材料或制造方法有所改变，且影响到产品的主要特性、特征；或产品的性能指标有所更改，且超过认可的范围，则有关图纸和文件应经检验机构审批。并在检验机构认为必要时，经本社检验人员见证有关试验和进行检查，其结果应能证实仍符合认可条件。
After type approval, if there are changes to the design, materials used or manufacturing method of the product and important components and such changes affect major characteristics and properties of

the product, or property indexes of the product are changed and exceed the scope of approval, related drawings and documents are to be examined and approved by the concerned survey office. Where deemed necessary by the survey office, the surveyor to the Society will go to witness relevant tests and conduct inspection and the results should be able to demonstrate compliance with the approval conditions.

2.工厂的质量管理体系应保持有效运行，并且与认可时一致。如果质量管理体系发生改变，应经原体系认证机构审核并报本社批准。

The quality management system of the factory shall be ensure effective operation, and shall be the same as the situation of approval. If there are any changes to the quality management system, auditing of the original certification organization for quality management system and the society's approval shall be obtained.

3.认可证书有效期内，如果出现可能导致本社取消认可的情况，工厂应及时采取有效的纠正措施。

Within the validity of the approval certificate, if cases occur that may cause the Society to withdraw the approval, the manufacturer should take corrective actions in a prompt and effective manner.

4.在认可证书有效期内，本社检验人员可在未经事先通知的情况下对工厂的产品制造过程进行审核，以验证产品的生产是否符合业经本社批准的图纸和文件。工厂应予以配合。

Within the validity of the approval certificate, the surveyor to the Society may pay unannounced audit to the manufacturing process of the product in order to confirm whether it is in compliance with the drawings and documents approved by the Society. The factory should provide an active cooperation and necessary for the surveyor.

5.型式认可A证书获得者应接受本社每年一次的定期审核，定期审核日为认可证书期满之日对应的每一周年日，检查工作应在周年日的前后三个月内进行。

Those who have obtained the certificate of type approval A should be subject to periodical audit every year. The date of periodical audit shall be each anniversary date which corresponds to the date of expiry of the relevant certificate and the periodical audit shall be done within a time span of three months before and after the annual surveillance date.

备注/Remarks

本社已审核了产品厂无石棉声明，但本社的审核不免除产品厂按照合同关系向订货方保证产品无石棉的责任。

The declaration of asbestos-free submitted by manufacturer has been reviewed by the Society. However, liability of the manufacturer to guarantee the products are asbestos-free to purchaser under contract will not be exempted.

本证书由原型式认可证书（No. LT17Q00001）变更并替代原证书。

This Certificate is modified from and supersedes the previous Type Approval Certificate No. LT17Q00001.

中国船级社鹿特丹办事处

CCS Rotterdam Office

注：本证书含有附页，共2页

Note: The certificate is attached with additional 2 page(s)

Product Description

No.	Type	Designation	Nominal Diameter (DN)	Nominal Pressure (PN)	Material/Limitation		
					(Intended services are to be subjected to limitation of relevant parts of CCS Rules)		
					Body	Disc	Lining
1	EVS	Wafer type	50-1400	Max.1.6 (Mpa)	Grey cast iron 5.1301 / JL1040 Ductile cast iron 5.3106 / JS1030 Ductile cast iron 5.3103 / JS1049 Ductile cast iron ASTM A395, 60-40-18 Nickel Aluminum Bronze C95800/CC333G Bronze casting DIN 1705, G-CuSn10Zn Carbon steel casting GP240GH/1.0619/WCB.	Duplex stainless steel forging 1.4462 Stainless steel forging 1.4057 Duplex stainless steel casting 1.4517 Super duplex stainless steel casting 1.4469 Nickel Aluminum Bronze C95800/CC333G.	Rubber types: NBR (0-90° C) EPDM (-30-120° C) FPM (0-110° C)
2	EVBLS	Wafer semi lugged type	50-200				
3	EVBS	Wafer semi lugged type, long	50-300				
4	EVTLS	Wafer lugged type	50-1200				
5	EVUS	Wafer U-section short type	700-2200				
6	EVMS	Mono flanged short type	350-1000				
7	EVML	Mono flanged long type	80-800				
8	EVFS	Double flanged short type	50-2000				
9	EVFL	Double flanged long type	50-1500				
10	ECV	Wafer type	50-600	Max.1.6 (Mpa)	Ductile cast iron 5.3106 / JS1030 Ductile cast iron 5.3103 / JS1049 Ductile cast iron ASTM A395, 60-40-18 Nickel Aluminum Bronze C95800/CC333G Carbon steel casting GP240GH/1.0619/WCB.	Stainless Steel Casting 1.4404. Stainless Steel Casting GX5CrNiMo 19-11-12/1.4408/CF8M. Super duplex stainless steel casting GX2CrNiMoN 26-7-4/1.4469. Nickel Aluminum Bronze C95800/CC333G.	Rubber types: NBR (0-90°) EPDM (-30-120° C) FPM (0-110°)
11	DYNAXE	Wafer type (W201), Flanged Type (F131), Tapped Lug type (L201)	50-600	Max.1.6 (Mpa)	Carbon steel casting GP240GH/1.0619/WCB. Stainless steel casting 1.4408/CF8M. Nickel Aluminum Bronze C95800/CC333G.	Carbon steel forging P250GH/1.0460 Carbon steel casting GP240GH/1.0619/WCB Stainless steel forging 1.4401 Stainless steel casting 1.4408/CF8M Nickel Aluminum Bronze C95800/CC333G.	Soft seat: RPTFE-15-12-3 (Reinforced)
12	EVS-i	Wafer type	400-600	Max.1.6 (Mpa)	Ductile cast iron 5.3106 / JS1030 Ductile cast iron 5.3103 / JS1049 Ductile cast iron ASTM A395, 60-40-18 Nickel Aluminum Bronze C95800/CC333G Bronze casting DIN 1705, G-CuSn10Zn/CC480K Carbon steel casting GP240GH/1.0619/WCB Carbon steel casting LCB.	Duplex stainless steel forging 1.4462 Duplex stainless steel forging F51 Stainless steel forging 1.4057 Duplex stainless steel casting 1.4517 Super duplex stainless steel casting 1.4469 Duplex stainless steel casting 5A Stainless steel casting 1.4408/CF8M Nickel Aluminum Bronze C95800/CC333G	Rubber types: NBR (0-90° C) EPDM (-30-120° C) FPM (0-110° C)
13	EVTLS-i	Wafer lugged type	400-600	Max.1.6 (Mpa)			
14	EVFS-i	Double flanged short type	400-600	Max.1.6 (Mpa)			

Application/Limitation

1. Marine and offshore applications subject to the valves complying with CCS Rules and Regulations for the service.

2. Valves of grey cast iron are not permitted fitted in/on the following:
- Class I and II piping systems
- Media having temperature below 0℃ and above 120 ℃
- Hydraulic piping systems
- Ship's side or bottom and on sea chest
- Collision bulkheads
- Under static head fitted on external wall of fuel oil tanks
- Ballast lines to forward tanks through cargo oil tanks
- Bilge and ballast piping in tunnels in double bottom

3. Valves of cast iron are not permitted fitted in/on the following:
- Media having temperature below 0 ℃
- Class I piping systems

4. The use of nodular cast iron for media having a temperature below 0 ℃ and for class I piping systems will be considered in each case.

5. Valves having EPDM lining are not to be used for hydrocarbon service.

6. When used as ship side valves the disc must not extend outside the hull plating in open position.

7. These valves can be used for bilge suction when fitted in connection with a non-return valve.

8. Bilge valves and ship side valves should always be arranged for manual operation even if these valves are remote controlled. A portable hand pump is not accepted as equivalent to manual operation.

9. Butterfly valves are not to be used as quick closing valves or stop valves on fuel oil tanks.

10. The approval does not include any operating gear for remote control of the valves.

11. The maximum output torque from actuators must not exceed the limit at which the spindle or disc can be damaged if the disc is restrained in any position.