# 中国船级社
# CHINA CLASSIFICATION SOCIETY
# 型式认可证书
# CERTIFICATE OF TYPE APPROVAL

证书编号/Certificate No.
**QD25PTB00121**

**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**

**青岛亿克斯阀门有限公司**
**Qingdao Exsafe Valve Co., Ltd.**

**地址/Address**

山东省青岛市城阳区流亭街道王家女姑社区103号
No.103, Wangjia Nongu Community, Liuting Street, Chengyang District, Qingdao City, Shandong Province

**产品名称/Product**

**高速透气阀**
High Velocity Vent Valve

**附加标志/Notations**

无/Nil.

**认可标准/Approval Standard**

1. 1974 年国际海上人命安全公约及其修正案第II-2章第4.5.3条、第11.6条
Regulations 4.5.3&11.6, Chapter II-2 of International Convention for the Safety of Life at Sea, 1974, as Amended.
2、 MSC.1/Circ.677/Rev.1 Revised standards for the design, testing and locating of devices to prevent the passage of flame into cargo tanks in tankers.
MSC.1/Circ.677/Rev.1《经修订的液货船上防止火焰进入液货舱的设备的设计、测试和定位标准》。
3. MSC/Circ.1009《有关阻止火焰进入油船液货舱的装置设计、试验及安装的修订标准（MSC/Circ.677）的修正案》
MSC/Circ.1009 Amendments for the Revised standards for the design, testing and locating of devices to prevent the passage of flame into cargo tanks in tankers(MSC/Circ.677).
4. MSC.1/Circ.1324《阻止火焰进入液货舱的装置设计、试验及安装的修订标准(经MSC/Circ.1009修正的MSC/Circ.677)的修正案》
MSC.1/Circ.1324 Amendments for the Revised standards for the design, testing and locating of devices to prevent the passage of flame into cargo tanks in tankers(MSC/Circ.677, as amended by MSC/Circ.1009)
5.中国船级社《钢质海船入级规范》第3篇第5章第6节
Section 6, Chapter 5,Part Three of China Classification Society Rules For Classification Of Sea-Going Steel Ships
6.中国船级社《散装运输危险液体化学品船舶构造与设备规范》第8、15章
Chapter 8 &15 of China Classification Society Rules For Construction and Equipment of Ships Carrying Dangerous Liquid Chemicals in Bulks
7. 中国船级社《内河散装运输危险化学品船舶构造与设备规范》(2008)第8章
Chapter 8 of China Classification Society Rules For Construction and Equipment of Inland Ships Carrying Chemicals in Bulks 2008.
8. 中国船级社《钢质内河船舶建造规范》第2篇第10章
Chapter 10, Part Two of China Classification Society Rules For Construction of Inland Steel Ships.
9. ISO 15364：2021《船舶与海上技术-货油舱压力/真空阀》
ISO 15364:2021 Ships and marine technology - Pressure/vacuum valves for cargo tanks
10、ISO80079-49：2024 Flame arresters -Performance requirements, test methods and limits for use.
ISO80079-49：2024《阻火器-性能要求，测试方法及使用限制》

**证书有效期至/This Certificate is valid until** **2030年07月17日/ Jul. 17,2030**

发证机构 中国船级社青岛分社
Issued by CCS Qingdao Branch

签发日期 2026年01月15日
Date Jan. 15,2026

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.

## 用于/Intended for

油船、化学品船舶货舱透气配套/ Oil And Chemical Tanker Cargo Tank Venting
船舶/Ships

## 产品明细/Product Description

**压力真空阀/Pressure Vacuum Valve**(M0001)

| 名称/Name | 属性（值）/Value | 单位/Unit |
|---|---|---|
| 产品名称/Product Name | 高速透气阀/High Velocity Vent Valve | |
| 型号/Type | 型号及产品明细见附页 Model Numbers And Product Details: See Attached Sheet. | |
| 最大试验安全间隙/Maximum Experimental Safe Gap | ≥0.65 | mm |

## 批准的图纸/Approved Drawings

图纸批准号/ Drawings Approval No.: NP25PPP05564

## 产品认可试验报告/ Approval Test Report

试验报告编号/ Test Report No.： EX202507
试验报告日期/ Test Report Date： 2025-07-17

试验报告编号/ Test Report No.： 202519000941
试验报告日期/ Test Report Date： 2025-07-17

试验报告编号/ Test Report No.： EX202601
试验报告日期/ Test Report Date： 2026-01-12

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

按规范认可后应进行产品检验的产品/The product should be inspected in term of the rules:
认可后的产品检验应由本社验船师根据本社规范规定按批准的产品检验计划进行检验，经检验合格后由本社颁发船用产品证书。
After approval, product inspection should be carried out by the Surveyor of the Society in accordance with the approved product inspection scheme, and the Marine Product Certificate will be issued by the Society upon satisfactory inspection.

## 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.如果属于获得型式认可B 模式证书，且无需颁发船用产品证书/等效证明文件的情况，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。
If belong to the situation of the product has type approval mode B certificate, and marine product certificate/equivalent document is not necessary, those who have obtained the certificate 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

1. 本证书由原型式认可证书（No. QD25PTB00033）变更并替代原证书。
This Certificate is modified and supersedes from the previous Type Approval Certificate No.QD25PTB00033.
2.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.
3.用于油船、化学品船舶货舱透气配套，但：
Intended for Oil and Chemical Tanker cargo tank venting,but:
1）仅适用于最大试验安全间隙（MESG）不小于0.65mm（IIA&IIB）的介质。
Only intended for the mediam with MESP not less than0.65mm(IIA&IIB)
2）使用前，应确认产品材料与拟使用化学品介质相容。
Before using，it should be confirmed that the material of these products is compatible with the Chemical cargo.
4.产品生产地址/The production address：山东省青岛市城阳区青大工业园/Qingda Industrial Park, Chengyang District, Qingdao City, Shandong Province
5.按MSC/Circ.677第2.5.1条的规定：安装上船时，各型号压力/真空阀应进行压力损失计算，并考虑下列参数：
① 装载/卸载速度；
② 气体析出；
③ 经过装置后（考虑阻力系数）的压力损失；
④ 透气管系中的压力损失；
⑤ 使用高速透气阀时阀的设定压力；
⑥ 饱和蒸汽/空气混和气的密度；和
⑦ 为补偿阻火器可能的污垢，在装置安装的压力降计算中使用其额定性能的70%。
According to paragraph 2.5.1 of MSC/Circ.677: When being installed on board, pressure loss calculations shall be performed for each type of pressure/vacuum valve, with the following parameters taken into consideration:
① Loading/Discharge Rates;
② Gas Evolution;
③ Pressure Loss Across Devices, Taking Into Account The Resistance Coefficient;
④ Pressure Loss In The Vent Piping System;
⑤ Pressure At Which The Vent Opens If a High Velocity Valve Is Used;
⑥ Density Of The Saturated Vapour/Air Mixture; And
⑦ To Compensate For Possible Fouling Of a Flame Arrester, 70% Of Its Rated Performance Is To Be Used In the Pressure Drop Calculation Of The Installation

**中国船级社青岛分社**
**CCS Qingdao Branch**

# 产品明细/Product Description

| 型号/Type | | EM-50A | EM-65A | EM-80A | EM-100A | EM-125A | EM-150A | EM-200A | EM-250A | EM-300A |
|---|---|---|---|---|---|---|---|---|---|---|
| 公称通径/Nominal Diameter(mm) | | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 | 300 |
| 最大管长/Max. Vent Pipe Length（m） | | ≤291 | ≤291 | ≤291 | ≤291 | ≤291 | ≤291 | ≤44 | ≤5 | ≤5 |
| 允许冰层厚度/Permissible Ice Thickness（mm） | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| 额定流量/Rated flow ($m^3/h$) | 压力阀/Pressure Valve | 700 | 800 | 1250 | 2400 | 3750 | 5000 | 15600 | 20710 | 64200 |
| | 真空阀/Vacuum Valve | 600 | 600 | 800 | 900 | 1500 | 1900 | 2700 | 6950 | 13800 |
| | 透气盖/Gas Freeing Cover | 850 | 850 | 1150 | 1900 | 2900 | 3800 | 24000 | 42900 | 121000 |
| 设定开启压力/Set Opening Pressure (kPa) | 压力阀/Pressure Valve | 13~21 | | | | | | | | |
| | 真空阀/Vacuum Valve | -3.5~ -7 | | | | | | | | |
| 额定工作压力/Rated Working Pressure (kPa) | 压力阀/Pressure Valve | 21 | | | | | | | | |
| | 真空阀/Vacuum Valve | -7 | | | | | | | | |
| 压力阀出口流速/ Outlet Velocity of Pressure Valve(m/s) | | ≥30 | | | | | | | | |
| 本体材料/Body Material | | FCD400-15, SC450, SUS304, SUS316L | | | | | | | | |
| 密封材料/Seal Material | | 石墨垫片/Graphite Gasket、氟橡胶/Viton | | | | | | | | |
| 防火网/Flame Screen | | DN50—DN200:结构/Structure:40目/Mess, 丝径/Diameter:0.25mm, 双层/Two Layers, 层间距/Layer Spacing:10mm,材料/Material:316L<br>DN250—DN300:结构/Structure:30目/Mess, 丝径/Diameter:0.25mm, 双层/Two Layers, 层间距/Layer Spacing:10mm,材料/Material:316L | | | | | | | | |
| | | 安装位置/Installation Position:阀体真空端/Vacum Side, 透气盖/Gas Freeing Cover | | | | | | | | |
| 最小/Min. MESG(mm) | | ≥0.65 | | | | | | | | |
| 适用货品的组别/Applying Product Group | | IIA&IIB | | | | | | | | |



***结束/The End***