Certificate No: LR2536328TA
Issue Date: 06/06/2025
Expiry Date: 05/06/2030

Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

Manufacturer	**Pres-Vac Engineering A/S**
Address	Svanevang 3-5, Allerød, 3450, Denmark
Place of Production	Pres-Vac Engineering A/S Svanevang 3-5, Allerød, 3450, Denmark
Type	Pressure/Vacuum Relief Valve
Description	High-velocity pressure & vacuum valve with optional heating
Trade Name	PV-ECO, PV-VOC, PV-ECO-VAC & PV-VOC-VAC
Application	For marine use at the vent outlets of inerted and non-inerted cargo and fuel tanks. The high-velocity pressure valve and the vacuum valve may be combined or mounted separately. Products for which the valves are suitable include methanol, alcohol and ammonia.
Specified Standard	LR Rules and Regulations for Classification of Ships, July 2024 LR Rules and Regulations for Classification of Inland Waterway Ships July 2024 IMO MSC/Circ. 677 as amended by MSC/Circ. 1009, MSC.1/Circ. 1324, MSC.1/Circular. 1621, ISO 15364:2021 and EN ISO 16852:2016 LR Type Approval System Procedure TA14 Version 04 (September 2020)

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A member of the Lloyd's Register group

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Ratings See Appendix LR2536328TA

Other Conditions

1. The high-velocity pressure valve and vacuum valve pressure drop/ flow characteristic curves of the manufacturers shall be taken into consideration.
2. The high-velocity pressure / vacuum valves may be delivered with heating arrangements and may be accepted on ships classed by the Society, provided the valves and their electrical heating system and heating control system comply with the applicable requirements of the Rules.
3. High-velocity pressure / vacuum valves with electrical heating arrangements fitted in hazardous areas are to be of an intrinsically safe design in compliance with the Rules.
4. The electrical heating system and heating control system do not form part of this approval.
5. The high-velocity pressure valves may be fitted with or without resilient seal.
6. The vacuum valves may be combined with integrated gas freeing cover type GF.
7. Each device shall be permanently marked indicating the following:

- manufacturer's name or trademark
- designation type reference and serial number
- size of the outlet/inlet
- approved location for installation and apparatus group assigned
- direction of flow through the device
- test laboratory and report numbers
- pressure/vacuum/pressure-vacuum setting
- compliance with the requirements of IMO MSC/Circ. 677

This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid Certificate.

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The Design Appraisal Document LR2536328TA and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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