



CERTIFICATE NUMBER

09-LD506128-PDA

DATE

09 November 2009

ABS TECHNICAL OFFICE

London Engineering Department

CERTIFICATE OF Design Assessment

This is to Certify that a representative of this Bureau did, at the request of
VENTIQ AS - GJERDSVIKA

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate. It will remain valid as noted below or until the Rules or specifications used in the assessment are revised (whichever occurs first).

PRODUCT: Valve, High Velocity Pressure-Vacuum Relief

MODEL: VQHV-ISO

ABS RULE: 2009 Steel Vessel Rules 1-1-4/7.7, 4-6-2/3.1, 5C-1-7/11.9

OTHER STANDARD IMO MSC/Circ.677 as amended by MSC/Circ. 1009;
ISO 15364:2000;
SOLAS Regulation II-2/4.5.3.3
;

AMERICAN BUREAU OF SHIPPING



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Product: Valve, High Velocity Pressure-Vacuum Relief

Model: VQHV-ISO

Intended Service:

Pressure / vacuum relief valve for cargo tanks of tankers

Description:

Combined pressure-vacuum valve comprising of a high velocity vent and a vacuum valve.

Ratings:

Valve sizes: DN50, DN65, DN80, DN100, DN125, DN150, DN200

Service Restrictions:

- 1) DN50: Minimum pipe diameter 50mm, Maximum pipe length 50m, for products with Maximum Experimental Safe Gap (MESG) minimum 0.9 mm
- 2) DN65: Minimum pipe diameter 65mm, Maximum pipe length 50m, for products with Maximum Experimental Safe Gap (MESG) minimum 0.9 mm
- 3) DN80: Minimum pipe diameter 80mm, Maximum pipe length 50m, for products with Maximum Experimental Safe Gap (MESG) minimum 0.9 mm
- 4) DN100: Minimum pipe diameter 100mm, Maximum pipe length 50m, for products with Maximum Experimental Safe Gap (MESG) minimum 0.9 mm
- 5) DN125: Minimum pipe diameter 125mm, Maximum pipe length 6m, for products with Maximum Experimental Safe Gap (MESG) minimum 0.9 mm
- 6) DN150: Minimum pipe diameter 150mm, Maximum pipe length 6m, for products with Maximum Experimental Safe Gap (MESG) minimum 0.9 mm
- 7) DN200: Minimum pipe diameter 200mm, Maximum pipe length 6m, for products with Maximum Experimental Safe Gap (MESG) minimum 0.9 mm
- 8) Unit Certification is not required for this product. If the manufacturer or purchaser requests an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances must be clearly defined

Comments:

Pressure/vacuum settings, capacity calculations and details of the cargo venting arrangement are to be submitted for each application.

Notes / Drawings / Documentation:

- 1) Ventiq Technical Report no. VQ-2002-DN65-1 dated 05 Sept 2002.
- 2) Ventiq Technical Report no. VQ-2003-ISO-1 dated 30 April 2003.
- 3) Ventiq Technical Report no. VQ-2003-ISO-2 dated 19 May 2003.
- 4) This Product Design Assessment (PDA) is valid only for products intended for use on ABS classed vessels, MODUs or facilities which are in existence or under contract for construction on the date of the ABS Rules used to evaluate the Product

Term of Validity:

This product/model is covered under Product Design Assessment (PDA) Certificate # 09-LD506128-PDA, dated 09/Nov/2009. This PDA Certificate expires 08/Nov/2014. It will remain valid for 5 years from date of issue or until the Rules or specifications used in the assessment are revised (whichever occurs first). It is valid for all vessels contracted on or before the date of the Rules used in this evaluation.

STANDARDS

ABS Rules:

2009 Steel Vessel Rules 1-1-4/7.7, 4-6-2/3.1, 5C-1-7/11.9

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National:

NA

International:

IMO MSC/Circ.677 as amended by MSC/Circ. 1009;
ISO 15364:2000;
SOLAS Regulation II-2/4.5.3.3

Government Authority:

NA

EUMED:

NA

Others:

NA