

CERTIFICATE NUMBER EFFECTIVE DATE EXPIRY DATE ABS TECHNICAL OFFICE 24-2515788-PDA 06-Mar-2024 05-Mar-2029 Houston ESD - Piping

CERTIFICATE OF

Product Design Assessment

This is to certify that a representative of this Bureau did, at the request of

VIKING CORPORATION

located at

210 NORTH INDUSTRIAL PARK ROAD, , HASTINGS, MI, United States. 49058

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.

Product: Valve, Alarm Check

Model: J-1

Endorsements:

Tier: 2 - PDA Issued

This Product Design Assessment (PDA) Certificate remains valid until 05/Mar/2029 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

American Bureau Of Shipping

John Vincent Ules John Vingent Bog-Acon Ulep, Senior Principal Engineer

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010)

VIKING CORPORATION

210 NORTH INDUSTRIAL PARK ROAD

HASTINGS MI

United States 49058 Telephone: 269-945-9501

Fax:

Email: rgridley@vikingcorp.com Web: www.vikinggroupinc.com

Tier: 2 - PDA Issued

Product: Valve, Alarm Check

Model: J-1

Endorsements:

Intended Service:

Marine & Offshore Application - Fire Protection Service.

Valve is used in Wet Sprinkler System to lock water pressure fluctuations while providing the capabilities of initiating alarm.

Description:

The Alarm Check Valves' body is manufactured with ductile iron, ASTM A536 (65-45-12), and are available with flanged or grooved inlets and outlets.

Valve may be installed in Vertical or Horizontal Position.

Rating:

Alarm Check Valve Sizes: 3" (DN80), 4" (DN100), 6" (DN150), & 8" (DN200)

Maximum Allowable Working Pressure (MAWP): 300 psi (20.7 bar)

Service Restriction:

1. Unit Certification is not required for this product. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.

Comments:

- 1. The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product
- 2. All the components are to bear the Manufacturer's Trademark and Identification legibly stamped or cast on the exterior of the component and also the Primary Pressure Rating.

Notes/Drawing/Documentation:

Drawing No. 08737, Valve Assy, 3" J-1 Alarm, Revision: 27, Pages: 1 Drawing No. 08738, Valve Assy, 4" J-1 Alarm, Revision: 27, Pages: 1 Drawing No. 08739, Valve Assy, 6" J-1 Alarm, Revision: 28, Pages: 1 Drawing No. 08740, Valve Assy, 8" J-1 Alarm, Revision: 27, Pages: 1: Drawing No. F_062293, Installation Instructions, Revision: 18, Pages: 1

Terms of Validity:

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STANDARDS

VIKING CORPORATION

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ABS Rules:

2024 Rules for Conditions of Classification: 1A-1-4/7.7, 1A-1-A3, 1A-1-A4, which covers the following: 2024 Rules for Building and Classing Marine Vessels: 4-6-2 / 5.11;

2024 Rules for Conditions of Classification - Offshore Units and Structures: 1B-1-4/9.7, 1B-1-A2, 1B-1-A3, which covers the following:

2024 Rules for Building and Classing Mobile Offshore Units: 4-2-2/9.1.1

National:

UL 193 (February 2016) FM 1041(February 2006)

International:

NA

Government:

NA

EUMED:

NA

OTHERS:

NA