



CERTIFICATE NUMBER  
15-HS1376260-PDA

DATE  
30 Jun 2015

ABS TECHNICAL OFFICE  
Houston SED Machinery - Piping  
& Electrical Sys.

# CERTIFICATE OF DESIGN ASSESSMENT

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

## **VIKING CORPORATION**

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: **Fire Sprinkler**

Model: **VK300, VK302, VK310, VK350, VK352 & VK354**


This Product Design Assessment (PDA) Certificate 15-HS1376260-PDA, dated 30/Jun/2015 remains valid until 29/Jun/2020 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product.

Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA.

Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

AMERICAN BUREAU OF SHIPPING

  
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Tim Kimble  
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 the terms and conditions as contained in ABS Rules 1-1-A/3/5 9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010).

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**Tier: 3 - Type Approved, unit certification not required**

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**Product:** Fire Sprinkler

**Model:** VK300, VK302, VK310, VK350, VK352 & VK354

**Intended Service:**

Automatic Sprinkler Heads - Heat Activated - for Fire Control and Suppression.

**Description:**

VK300 - Quick Response, Standard Orifice, Upright Sprinkler with ½" NPT Threads.  
VK302-Quick Response, Standard Orifice, Pendent Sprinkler with ½" NPT Threads.  
VK310 - Quick Response, Standard orifice, Conventional Sprinkler with ½" NPT Threads.  
VK350 - Quick Response, Large Orifice, Upright Sprinkler with ¾" NPT Threads.  
VK352- Quick Response, Large Orifice, Pendent Sprinkler with ¾" NPT Threads.  
VK354 - Quick Response, Large Orifice, Conventional Sprinkler with ¾" NPT Threads

**Rating:**

Minimum operating pressure 7 psi  
Maximum Operating Pressure: 175 psi  
Temperature ratings of : 135°F, 155°F, 175°F, 200°F, 286°F, 360°F in brass chrome and white poly finishes.

Refer to attached Manufacturer's Data Sheet for all Technical Data of Specific Models.

**Service Restriction:**

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.

Details of the temperature ratings and location, where sprinklers are fitted are to be submitted for review with the vessel specific sprinkler system drawings.

Sprinkler heads tested in accordance with UL199. Acceptance of UL 199 is to be confirmed with the appropriate Administration of the Vessel's Registry.

**Comments:**

The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

**Notes/Drawing/Documentation:**

Drawing No. Drawings Revision: -, Pages: 1  
Drawing No. UL Report, UL Report, Revision: -, Pages: 1  
See Attachment Drawing.

**Terms of Validity:**

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**STANDARDS**

**ABS Rules:**

Rules for Conditions of Classification, Part 1 2015 Steel Vessels Rules 1-1-4/7.7, 1-1-A3, 1-1-A4, which covers the following:

Steel Vessel 4-7-3/9.5;

**National:**

UL 199, 11th Ed. (4 Nov, 2005), Revision 20 February 2013; NFPA 13 (2013); UL Report 4786313090 (4 September 1981)(Revised 26 March 2014)

**International:**

BS-EN12259-1(1999), Amend. A1 (2001), Amend. A2 (2004) and Amend. A3 (2006)

**Government:**

NA

**EUMED:**

NA

**OTHERS:**

Manufacturers Data Sprinkler as per the following:

F\_022514 - Rev 15.1

F\_033014 - Rev 15.1

F\_033214 - Rev 14.2

F\_033314 - Rev 15.1

F\_033414 - Rev 14.2

F\_052114 - Rev 15.1