



CERTIFICATE NUMBER

14-HS1245148-PDA

DATE

27 October 2014

ABS TECHNICAL OFFICE

Houston SED - Ship Equipment

## CERTIFICATE OF DESIGN ASSESSMENT

This is to Certify that a representative of this Bureau did, at the request of  
**OCV CONTROL VALVES, LLC. - TULSA**

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, Control**

MODEL: **65, 66 & 74 Series**


This Product Design Assessment (PDA) Certificate 14-HS1245148-PDA, dated 27/Oct/2014 remains valid until 26/Oct/2019 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

  
Mohamed C Boukamcha

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-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010).

## OCV CONTROL VALVES, LLC.

7400 EAST 42ND PLACE

TULSA

OK 74145

United States

Telephone: 918-610-2596

Fax: 918-622-8916

Email: jkmetz@controlvalves.com

Web: www.controlvalves.com

Tier: 2

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**Product:** Valve, Control

**Model:** 65, 66 & 74 Series

### Intended Service:

Series 65 / 74 - Fire Protection Systems in Marine, Offshore, (Freshwater or Seawater): Pressure Reducing, Fire Pump Pressure Relief, Fire Pump Suction Control, Deluge and Pre Action for Foam/Water Type Sprinkler Feed systems.

Series 65 / 66 - Other ABS Systems: Fueling Systems, Fuel Storage, Ballasting systems, Cooling Water Systems, Bilge Pumps.

### Description:

Temperatures Ranges are from -20 °F to 230 °F (-28.9 °C to 110 °C) (Elastomers determine this temperature allowance). Pressure Ratings range from 0 to 750 psi (0 to 51.7 bars) depending on the materials and end connections be utilized.

#### Valve Series Functions:

The OCV Series 65 is a hydraulically operated globe or angle valve actuated via an internal spool assembly and nylon reinforced diaphragm. The valve functions on a simple principle of pressure differential and uses this DP to control the valve position. The valve can be used to perform a simple on-off function, or with the proper pilot system, a pressure/flow/level modulating function. This valve is UL listed 3" - 10" and approved for use in fire mains.

- Series 65: 1.25", 1.5", 2", 2.5" 3", 4", 6", 8", 10", 12" (DN32 - DN300)

The OCV Series 66 is primarily used in ON/OFF applications with low differential pressure or dirty fluid. The body configuration is the same as the Series 65. This valve can use an external pressure supply to actuate the line size valve opened or closed.

- Series 66: 1.25", 1.5", 2", 2.5" 3", 4", 6", 8", 10", 12" (DN32 - DN300)

The OCV Series 74FC is a hydraulically-operated, diaphragm-actuated valve and is intended primarily for use in deluge on/off fire protection systems. It is available in the globe configuration and is UL Listed 3" - 10".

- Series 74: 3", 4", 6", 8", 10" (DN80 - DN250)

All valve materials and coatings are properly selected for intended services.

### Ratings:

See attachment for pressures, temperatures, and materials.

### Service Restrictions:

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.

All valves are intended for use in incompressible fluids.

Fittings for use on grooved ended valves are to be ABS approved as per Steel Vessel Rules 4-6-2/5.9.

Valves with the taper-threaded joints for class I and II piping system are subject to the size and pressure limitation in in Steel Vessel Rules 4-6-2/5.5.5(a).

Classes I and II piping systems having nominal diameters exceeding 50 mm (2 in.) are to have flanged ends as per Steel Vessel Rules 4-6-2/5.11.3 and MODU 4-2-2/9.3.

Materials readily rendered ineffective by heat are not to be used for fire mains and hydrants unless adequately protected as per Steel Vessel Rules 4-7-3/1.11.1.

Valves sizes 1.25" to 10" with Buna Elastomer are accepted as passing a recognized fire test and are not considered readily rendered ineffective by heat.

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### Tier: 2

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For Fuel and Lube Oil: Cast iron valves are not permitted. These valves cannot be used as the valve on the fuel tank or the shell. Valves are to be of steel or other approved material.

For MODU: All valves are to be subjected by the manufacturer to a hydrostatic test at a pressure equal to that stipulated by the American National Standards Institute or other recognized standard. They are to bear the trademark of the manufacturer legibly stamped or cast on the exterior of the valve and also the primary pressure rating at which the manufacturer guarantees the valve to meet the requirements of the standards.

For Water Spray Systems for Process Equipment: The valves are to be capable of being actuated both automatically by a fire detection system and manually as per 3-8/5.1.4(a)iii of the Facilities On Offshore Installations Rules.

For fluid temperatures above 100 °F (38 °C), consult the factory for maximum allowable pressure.

### Comments:

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

### Notes / Drawings / Documentation:

#### Supporting Data:

Fire test report No. TJ2074-1/2/3 dated 25 July 2014

UL Report Project No. 13CA25085

#### 65 Series Assembly Dwgs:

Dwg No. 2900, 1-1/4"-1-1/2" Basic Valve, Rev -

Dwg No. 2800, 2-1/2" Valve Assembly, Rev A

Dwg No. 2642, 2" Basic Valve, Rev -

Dwg No. 3100, 3" Basic Valve Assembly, Rev -

Dwg No. 4400, 4" Basic Valve Assembly, Rev -

Dwg No. 6190, 6" Basic Valve, Rev B

Dwg No. 3200, 8" Basic Valve, Rev A

Dwg No. 3800, 10" Basic Valve, Rev -

Dwg No. 1550, 12" Basic Valve, Rev -

#### 66 Series Assembly Dwgs:

Dwg No. 2645, 2" Power Actuated Valve Assembly, Rev -

Dwg No. 2850, 2-1/2" Power Actuated Valve Assembly, Rev -

Dwg No. 3150, 3" 3100 Power Actuated Valve Assembly, Rev -

Dwg No. 4450, 4" 4400 Power Actuated Valve Assembly, Rev -

Dwg No. 6195, 6" Power Actuated Valve, Rev A

Dwg No. 269007, 8" Power Actuated Valve Assembly, Rev -

Dwg No. 3800, 10" Power Actuated Valve Assembly, Rev -

Dwg No. 1575, 12" Power Actuated Valve Assembly, Rev -

#### 74 Series Assembly Dwgs:

Dwg No. 7403, BV 3" 74 Series, Rev -

Dwg No. 7404, BV 4" 74 Series, Rev -

Dwg No. 7406, BV 6" 74 Series, Rev -

Dwg No. 7408, BV 8" 74 Series, Rev B

Dwg No. 7410, BV 10" 74 Series, Rev -

### Term of Validity:

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**STANDARDS**

**ABS Rules:**

Rules for Conditions of Classification, Part 1 - 2014 Steel Vessels Rules 1-1-4/7.7, 1-1-A3, 1-1-A4, which covers the following:

Steel Vessels 4-6-2/5.11, 4-6-2/5.15;

Rules for Conditions of Classification, Part 1 - 2014 Offshore Units and Structures 1-1-4/9.7, 1-1-A2, 1-1-A3, which covers the following:

Mobile Offshore Drilling Units 4-2-2/9;

Facilities On Offshore Installations 3-8/5.1.4(a)iii;

**National:**

ASTM B16.34 (CS, SS, Monel, Hastelloy); UL Certificate of Compliance Certificate Number 20131011-EX5114, Burst Pressure Test according to UL 260:95 (65 and 74 series)

**International:**

ISO 19921 Fire Test

**Government Authority:**

NA

**EUMED:**

NA

**Others:**

NA