

ABS

CERTIFICATE NUMBER

04-HS415201A/1-PDA

DATE

02 February 2009

ABS TECHNICAL OFFICE

Houston SED - Ship Systems

CERTIFICATE OF Design Assessment

This is to Certify that a representative of this Bureau did, at the request of
NORRISEAL Controls - Houston

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 Performance Butterfly

MODEL: Series M285 & R285

ABS RULE: 2009 Steel Vessels Rules 1-1-4/7.7, 4-6-2/5.11, 4-6-2/7.3.2, 4-6-2/9.13

OTHER STANDARD: API 609, AWWA C504-70, ANSI 16.34, MSS SP-67, BS 3952; MIL-V-22133C, 16468;

AMERICAN BUREAU OF SHIPPING

Hans P. Haendler

Engineering Type Approval Co-ordinator

NORRISEAL Controls

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Telephone: 713-466-3552
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Product: Valve, High Performance Butterfly

Model: Series M285 & R285

Intended Service:

Salt & Fresh Water Cooling Ssystems, Cargo Oil Lines, Bilge Suctions for Holds in Bulk Carriers, Discharge system

Description:

M285 Series: Metal Lined, R285 Series: Elastomer Lined

Ratings:

Sizes: 2" - 36" ; Pressure: 285 psi (ANSI 150); Temperature: -40°F to +350°F (Metal Lined); -20°F to +250°F (Elastomer Lined)

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.

1. Valves intended for installation on the side shell or below the deepest load waterline, including those at sea chests, are to be hydrostatically tested in the presence of the Surveyor, before installation, to a pressure of at least 5 bar.g. 2. Valves are not to be used at collision bulkhead; at the shell of the vessel; fitted outside a fuel oil, lube oil, cargo or hydraulic oil tank where the valve may be subjected to a head of oil; mounted on a boiler except as permitted for heating boilers; in cargo oil piping on weather decks for pressures exceeding 16 bar (232 psi); in cargo oil manifolds for connection to cargo handling hoses; in fixed gas fire extinguishing systems; in fire main or in any other type of firefighting system. 3. Applications other than those listed above are subject to individual approval. 5. Cast iron valves may only be use in Class III piping systems.

Comments:

All valves are to bear the trademark of the manufacturer legibly stamped or cast on the exterior of the valves and also the primary pressure rating and temperature rating at which the manufacturer guarantees the valve to meet the requirements of the standards.

Notes/Documentation:

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 Design Assessment Certificate number 04-HS415201A/1-PDA, dated 02/Feb/2009 will expire on 01/Feb/2014 or at an earlier date should there be alterations to the product's design or changes to the referenced ABS Rules and other specifications, which affect the product. Product use on or after 1 January 2010, will be subject to compliance with the ABS Rules or specifications in effect when the vessel, MODU or facility is contracted. The product's acceptability on board ABS-classed vessels or facilities is defined in the service restrictions of this certificate.

STANDARDS

ABS Rules:

2009 Steel Vessels Rules 1-1-4/7.7, 4-6-2/5.11, 4-6-2/7.3.2, 4-6-2/9.13

National:

ANSI 150, ANSI 150.1, ANSI 150.1.1, ANSI 150.1.2, ANSI 150.1.3, ANSI 150.1.4, ANSI 150.1.5, ANSI 150.1.6, ANSI 150.1.7, ANSI 150.1.8, ANSI 150.1.9, ANSI 150.1.10, ANSI 150.1.11, ANSI 150.1.12, ANSI 150.1.13, ANSI 150.1.14, ANSI 150.1.15, ANSI 150.1.16, ANSI 150.1.17, ANSI 150.1.18, ANSI 150.1.19, ANSI 150.1.20, ANSI 150.1.21, ANSI 150.1.22, ANSI 150.1.23, ANSI 150.1.24, ANSI 150.1.25, ANSI 150.1.26, ANSI 150.1.27, ANSI 150.1.28, ANSI 150.1.29, ANSI 150.1.30, ANSI 150.1.31, ANSI 150.1.32, ANSI 150.1.33, ANSI 150.1.34, ANSI 150.1.35, ANSI 150.1.36, ANSI 150.1.37, ANSI 150.1.38, ANSI 150.1.39, ANSI 150.1.40, ANSI 150.1.41, ANSI 150.1.42, ANSI 150.1.43, ANSI 150.1.44, ANSI 150.1.45, ANSI 150.1.46, ANSI 150.1.47, ANSI 150.1.48, ANSI 150.1.49, ANSI 150.1.50, ANSI 150.1.51, ANSI 150.1.52, ANSI 150.1.53, ANSI 150.1.54, ANSI 150.1.55, ANSI 150.1.56, ANSI 150.1.57, ANSI 150.1.58, ANSI 150.1.59, ANSI 150.1.60, ANSI 150.1.61, ANSI 150.1.62, ANSI 150.1.63, ANSI 150.1.64, ANSI 150.1.65, ANSI 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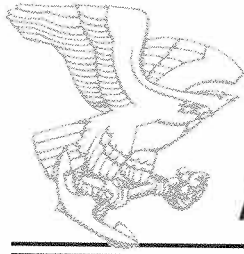
NORRISEAL Controls

11122 West Little York
P.O. Box 40525
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Texas 77240-0525
United States
Telephone: 713-466-3552
Fax: 713-896-7386

API 609, AWWA C504-70, ANSI 16.34, MSS SP-67, BS 3952

Others:

MIL-V-22133C, 16468



CERTIFICATE NUMBER

04-HS415201B/1-PDA

DATE

02 February 2009

ABS TECHNICAL OFFICE

Houston SED - Ship Systems

CERTIFICATE OF Design Assessment

This is to Certify that a representative of this Bureau did, at the request of
NORRISEAL Controls - Houston

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, Butterfly Damper

MODEL: Series D200 (Metal Lined)

ABS RULE: 2009 Steel Vessels Rules 1-1-4/7.7, 4-6-2/5.11, 4-6-2/7.3.2, 4-6-2/9.13

OTHER STANDARD: API 609, AWWA C504-70, MSS SP-67, BS 3952; MIL-V-22133C, 16468;

AMERICAN BUREAU OF SHIPPING


Hans P. Haendler

Engineering Type Approval Co-ordinator

NORRISEAL Controls

11122 West Little York
P.O. Box 40525
Houston
Texas 77240-0525
United States
Telephone: 713-466-3552
Fax: 713-896-7386

Product: Valve, Butterfly Damper

Model: Series D200 (Metal Lined)

Intended Service:

Salt & Fresh Water Cooling Ssystems, Cargo Oil Lines, Bilge Suctions for Holds in Bulk Carriers, Discharge system

Description:

Series D200 Metal Lined.

Ratings:

Sizes: 2" - 36"; Pressure: 200 psi; Temperature: -40 °F to +400 °F

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.

1. Valves intended for installation on the side shell or below the deepest load waterline, including those at sea chests, are to be hydrostatically tested in the presence of the Surveyor, before installation, to a pressure of at least 5 bar.g. 2. Valves are not to be used at collision bulkhead; at the shell of the vessel; fitted outside a fuel oil, lube oil, cargo or hydraulic oil tank where the valve may be subjected to a head of oil; mounted on a boiler except as permitted for heating boilers; in cargo oil piping on weather decks for pressures exceeding 16 bar (232 psi); in cargo oil manifolds for connection to cargo handling hoses; in fixed gas fire extinguishing systems; in fire main or in any other type of firefighting system. 3. Applications other than those listed above are subject to individual approval. 5. Cast iron valves may only be use in Class III piping systems.

Comments:

All valves are to bear the trademark of the manufacturer legibly stamped or cast on the exterior of the valves and also the primary pressure rating and temperature rating at which the manufacturer guarantees the valve to meet the requirements of the standards.

Notes/Documentation:

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 Design Assessment Certificate number 04-HS415201B/1-PDA, dated 02/Feb/2009 will expire on 01/Feb/2014 or at an earlier date should there be alterations to the product's design or changes to the referenced ABS Rules and other specifications, which affect the product. Product use on or after 1 January 2010, will be subject to compliance with the ABS Rules or specifications in effect when the vessel, MODU or facility is contracted. The product's acceptability on board ABS-classed vessels or facilities is defined in the service restrictions of this certificate.

STANDARDS**ABS Rules:**

2009 Steel Vessels Rules 1-1-4/7.7, 4-6-2/5.11, 4-6-2/7.3.2, 4-6-2/9.13

National:

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