

Confirmation of Product Type Approval

Company Name: SPEARS MANUFACTURING COMPANY

Address: 15853 OLDEN STREET CA 91342 United States

Product: Valve, Ball and Butterfly

Model(s): CPVC TU 2000 Standard/Industrial Ball, Ball Check & Butterfly/Wafer Butterfly Valves

Certificate Type	Certificate Number	Issue Date	Expiry Date
Product Design Assessment (PDA)	18-HS1712480-PDA	05-FEB-2018	28-JAN-2023
Manufacturing Assessment (MA)	15-LA3050588	17-DEC-2015	09-FEB-2021
Product Quality Assurance (PQA)	NA	NA	NA

Tier

3

Intended Service

Marine and Offshore Application - For Non-Essential Systems including Fresh Water, Sea Water, Potable Water, Drains, Sanitary, Vents, and Brine in Services requiring No Fire Endurance Testing, No Smoke and Toxicity Testing or Electrical Conductivity.

Description

CPVC True Union 2000 Standard Ball Valves, Industrial Ball Valves and Industrial Ball Check Valves in sizes 1/2 " to 4" with socket, thread or flanged end connections and CPVC Standard and Wafer Butterfly Valve in sizes 1-1/2" to 6" with flanged end connections.

Ratings

Spears ® CPVC Ball Valve and Ball Check Valves Rated Pressure:

235 psi (1.62 MPa) for water @ 73°F (23°C) for sizes 1/2" through 2";

150 psi (1.03 MPa) for water @ 73°F (23°C) for sizes 2-1/2" through 4";

Spears ® CPVC Butterfly Valves Rated Pressure:

150 psi (1.03 MPa) for water @ 73°F (23°C) for sizes 1-1/2" through 6";

See attachment for de-rated pressures for higher temperatures.

Service Restrictions

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 specification standards and tolerances, must be clearly defined.

2 - Not to be used in fire main or areas classified as "hazardous" in accordance with 4-8-4/27 of the Steel Vessels Rules and 4-3-1 of the MODU Rules.

3 - Not to be used for compressed air or gas.

4 - Check Valves shall not be considered backflow prevention devices and shall not be used for the protection of a potable water supply.

5 - Fire Endurance Testing in accordance with 4-6-3/5.11 of the Steel Vessels Rules has not been carried out. Usage is limited by 4-6-3/Table 1 of the Steel Vessels Rules.

Comments

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

2 - All valves are to be hydrostatically tested by the manufacturer, in accordance with 4-6-3 of the Steel Vessels Rules, and are to bear the trademark of the manufacturer legibly stamped, labeled, or cast on the exterior of the valves as well as the pressure rating.

3- Valves intended for installation on the side shell at or below the deepest load waterline, including those at the sea chests, are to be hydrostatically tested in the presence of the Surveyor, before installation, to a pressure of at least 5 bar as per 4-6-2/7.3.2 of the Steel Vessels Rules.

4 - Where plastic pipes are to be utilized for any installation within tanks or other locations which may be subject to a vacuum condition inside the pipe or a head of liquid on the outside of the pipe, external pressure is to be considered. The pipe is to be designed for an external pressure of not less than the sum of the pressure imposed by the maximum potential head of liquid outside the pipe plus full vacuum of 14.5 psi (1 bar) inside the pipe. The maximum external pressure for a pipe is to be determined by dividing the collapse test pressure by a safety factor of 3. The collapse test pressure may be verified experimentally or determined by a combination of testing and calculation methods which are to be submitted to ABS for approval, in accordance with 4-6-3/5.3 of the Steel Vessels Rules.

Notes, Drawings and Documentation

Doc. No. J-00100376, NSF International Test Report, SP2200 CPVC Plaques, dated 30 Aug. 2011, Sylmar, CA;

Doc. No. J-00101442, NSF International Test Report, True Union 2000 Industrial Ball Check Valves - 4" Check Valves, dated 06 Jun. 2012, Sylmar, CA;

Doc. No. J-00101440, NSF International Test Report, True Union 2000 Industrial Ball Check Valves - 2" Check Valves, dated 13 Jun. 2012, Sylmar, CA;

Doc. No. J-00101438, NSF International Test Report, True Union 2000 Industrial Ball Valves - 2" Ball Valves, dated 13 Jun. 2012, Sylmar, CA;

Doc. No. J-00111987, NSF International Test Report, True Union 2000 Industrial Ball Valves - 4" Ball Valves rated 150 psi at 73 °F, dated 13 Jul. 2012, Sylmar, CA;

Doc. No. J-00113464, NSF International Test Report, Spears Butterfly Valves, Standard Style - 6" Butterfly Valves rated 150 psi at 73 °F, dated 01 Aug. 2012, Sylmar, CA;

Spears Valve Impact Test Report, Stamped 31 Oct. 2012, Sylmar, CA;

Spears Supplemental Burst Test Report, Stamped 31 Oct. 2012, Sylmar, CA;

Catalog Shts. - for CPVC TU 2000 Ball, Ball Check & Butterfly Valves;

Spears CPVC Valve Material Data sheet;

Term of Validity

This Product Design Assessment (PDA) Certificate 18-HS1712480-PDA, dated 29/Jan/2018 remains

valid until 28/Jan/2023 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.

ABS Rules

Rules for Conditions of Classification, Part 1 - 2018 Steel Vessels Rules 1 - 1 - 4/7.7, 1 - 1 - A3, 1 - 1 - A4, which covers the following:

2018 Steel Vessels 4-6-3/Table 1, 4-6-3/5, 4-6-3/9, 4-6-3/11.3.1;

Rules for Conditions of Classification, Part 1 - 2018 Offshore Units and Structures 1-1-4/9.7, 1-1-A2, 1-1-A3, which covers the following:

2018 Mobile Offshore Drilling Units 4-2-2/7;

International Standards

NA

EU-MED Standards NA

National Standards

ASTM D1784 - 11, Standard Specification for Rigid Poly (Vinyl Chloride) (PVC) Compounds and Chlorinated Poly (Vinyl Chloride) (CPVC) Compounds, Published 04/01/2011;

ASTM F1970 - 12e1, Standard Specification for Special Engineered Fittings, Appurtenances or Valves for use in Poly (Vinyl Chloride) (PVC) or Chlorinated Poly (Vinyl Chloride) (CPVC) Systems, Published 11/01/2012;

Government Standards

Other Standards NA



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ABS has used due diligence in the preparation of this certificate, and it represents the information on the product in the ABS Records as of the date and time the certificate is printed.

If the Rules and/or standards used in the PDA evaluation are revised or if there is a design modification (whichever occurs first), a PDA revalidation may be necessary.

The continued validity of the MA is dependent on completion of satisfactory audits as required by the ABS Rules. The validity of both PDA and MA entitles the product to receive a **Confirmation of Product Type Approval**.

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 prior to the effective date of the ABS Rules and standards applied at the time of PDA issuance. ABS makes no representations regarding Type Approval of the Product for use on vessels, MODUs or facilities built after the date of the ABS Rules used for this evaluation.

Type Approval requires Drawing Assessment, Prototype Testing and assessment of the manufacturer's quality assurance and quality control arrangements. The manufacturer is responsible to maintain compliance with all specifications applicable to the product design assessment. Unless specifically indicated in the description of the product, certification under type approval does not waive requirements for witnessed inspection or additional survey for product use on a vessel, MODU or facility intended to be ABS classed or that is presently in class with ABS.

Due to wide variety of specifications used in the products ABS has evaluated for Type Approval, it is part of our contract that; whether the standard is an ABS Rule or a non-ABS Rule, the Client has full responsibility for continued compliance with the standard.

Questions regarding the validity of ABS Rules or the need for supplemental testing or inspection of such products should, in all cases, be addressed to ABS.