



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

Endorsements:

Certificate Type	Certificate Number	Issue Date	Expiry Date
Product Design Assessment (PDA)	22-2330239-PDA	02-DEC-2022	01-DEC-2027
Manufacturing Assessment (MA)	21-4588822	08-JAN-2021	09-FEB-2026
Product Quality Assurance (PQA)	NA	NA	NA

Tier

3 - Type Approved, unit certification not required

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 Marine Vessels Rules and 4-3-1 of the Mobile Offshore Units 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 Marine Vessels Rules has not been carried out. Usage is limited by 4-6-3/Table 1 of the Marine 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 Marine 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 - 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 Marine Vessels Rules.

4- Piping made from this marine compound has passed 2010 FTP Code, Annex I, Part 2 and Part 5 adopted on 3 December 2010.

Notes, Drawings and Documentation

Drawing No. Declaration of Conformity, Revalidation for 18-HS1712480-1-PDA, Revision: -, Pages: 1

Drawing No. SWRI Test Report 201392, SWRI Test Report 201392 Dated May 25, 2016, Revision: -, Pages: 1

Term of Validity

This Product Design Assessment (PDA) Certificate remains valid until 01/Dec/2027 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.

ABS Rules

2022 Rules for Conditions of Classification, Part 1 - 1-1-4/7.7, 1-1-A3, 1-1-A4, which covers the following:

2022 Marine Vessel Rules: 4-6-3/Table 1, 4-6-3/5, 4-6-3/9, 4-6-3/11.3.1;

2022 Rules for Conditions of Classification, Part 1-1-4/9.7, 1-1-A2, 1-1-A3, which covers the following:

2022 Mobile Offshore Unit Rules: 4-2-2/7

International Standards

IMO International Code for Application of Fire Test Procedures (FTP Code), Annex 1, Part 2 and Part 5 (2010)

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 (2020)

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, (2012)

Government Standards

Transport Canada, Vessel Fire Safety Regulations. Products meet the requirements of Annex I of the FTP Code (Part 2 Smoke And Toxicity, and Part 5 Surface Flammability) required by the Vessel Fire Safety Regulations, Section 114 (Smoke Generation Potential and Toxicity) and Section 226 (Plastic Piping) (2021)

Other Standards

NA



Corporate ABS Programs
American Bureau of Shipping
Print Date and Time: 13-Feb-2023 11:04

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.