



Confirmation of Product Type Approval

Please refer to the "Service Restrictions" shown below to determine if Unit Certification is required for this product. This certificate reflects the information on the product in the ABS Records as of the date and time the certificate is printed.

Pursuant to the Rules of the American Bureau of Shipping (ABS), the manufacturer of the below listed product held a valid Manufacturing Assessment (MA) with expiration date of 20/AUG/2017. The continued validity of the Manufacturing Assessment is dependent on completion of satisfactory audits as required by the ABS Rules.

And; a Product Design Assessment (PDA) valid until 19/NOV/2017 subject to continued compliance with the Rules or standards used in the evaluation of the product.

The above entitle the product to be called Product Type Approved.

The Product Design Assessment is valid 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.

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.

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.

Product Name: Valve, Resilient Seated Butterfly Valves
Model Name(s): Series OCB, OSB, OS & OC

Presented to:

A-T CONTROLS
9955 INTERNATIONAL BOULEVARD
United States

Intended Service:

Marine & Offshore Applications - various piping systems.

Description:

A-T Controls Manual and Automated Resilient Seated Wafer or Lug Style Butterfly Valves, body manufactured with Ductile Iron, Cast Iron and 316 Stainless Steel, Disc with Nickle plated ductile iron, 316 Stainless Steel, Aluminum Bronze, Stem with 416 Stainless Steel and 316 Stainless Steel and Seat with Buna-N, EPDM, Viton and PTFE over EPDM.

Tier:

3

Ratings:

Wafer and Lug Style Sizes: 2"-12" (50mm to 305mm) Pressure Rating: to 200 psi
Seat Temperature Ratings: Buna-N 0°F to 200 °F; EPDM -20 °F to 250 °F; PTFE over EPDM 0° F to 275 °F; Viton® -10° F to 325 °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. i) Wafer type butterfly valves are not to be used for any connections to the vessel's shell; Lug or flanged type valves may be used for shell connections only if fire tested. ii) Grey Cast Iron valves not to be used as shell valves and shut-off valve for fuel oil tanks. Nodular iron or Ductile Iron will be accepted provided the material has an elongation not less than 12% in 50mm as indicated in SVR 4-6-2/3.1.4. iii) All valves to maintain a 4:1 burst test ratio minimum for intended use. iv) All butterfly valves are not to be used on oil tanks (including cargo oil tanks) having a static head of flammable oil. v) Resilient seated

valves may be considered for use on flammable services, provided the proposed valves are capable of passing an appropriate fire test. vi) The material for the body, disc, stem and seat are to be suitable for the intended service. vii) Not suitable for Firefighting systems viii) All valves intended for installation on the side shell at or below the deepest load waterline, including those at sea chests, are to be hydrostatically tested in presence of the Surveyor in accordance with SVR 4-6-2/7.3.2

Comments:

i) The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product. ii) All valves are to be subjected by the manufacturer to a hydrostatic test at pressure equal to that stipulated by the American National Standards Institute or other recognized standard. The manufacturer's trademark, pressure/temperature rating and material identification, as applicable, must be stamped or cast on the component as indicated in MODU Rules 4-2-2/9.5 iii) The manufacturer of a valve is to guarantee that the valve is constructed to the standard and conforming to the identification to which it is marked. The manufacturer is to guarantee also that the valve has been tested before shipment to the pressure required by the pressure rating of the valve. The certificate of test is to be submitted upon request as indicated in SVR 4-6-2/5.11.4

Notes / Documentation:

Identifying Data: Brochure 201210118BFV LIT0031 - AT Manual and Automated Resilient Seated Butterfly Valves; Certificate of Performance dated 4 October 2012; Inspection & Test Procedures dated 4 October 2012; Tianjin Guang-Hui Valve Co. File YD-02222007- Material Test Reports dated 25 Sept 2012; Certificate of Registration number 00014-1; Simulation of XX-W1-1200 Body dated 11 October 2012;

Term of Validity:

This Product Design Assessment (PDA) Certificate 12-HS957294-1-PDA, dated 20/Nov/2012 remains valid until 19/Nov/2017 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:

2014 Steel Vessels Rules 1-1-4/7.7, 1-1-Appendix 3, 4-6-2/3.1.4, 5.11; 2014 MODU Rules 4-2-2/9.1.1.

National Standards:

API 598, API 609, MSS-SP-67, ASME B16.34

International Standards:**Government Authority:****EUMED:****Others:**

Model Certificate	Model Certificate No	Issue Date	Expiry Date
PDA	12-HS957294-1-PDA	20/NOV/2012	19/NOV/2017



ABS Programs

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 was printed. Type Approval requires Drawing Assessment, Prototype Testing and assessment of the manufacturer's quality assurance and quality control arrangements. Limited circumstances may allow only Prototype Testing to satisfy Type Approval. The approvals of Drawings and Products remain valid as long as the ABS Rule, to which they were assessed, remains valid. ABS cautions manufacturers to review and maintain compliance with all other specifications to which the product may have been assessed. Further, unless it is specifically indicated in the description of the product; Type Approval does not necessarily waive witnessed inspection or survey procedures (where otherwise required) for products to be used in a vessel, MODU or facility intended to be ABS classed or that is presently in class with ABS. 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.