



Confirmation of Product Type Approval 12/JUL/2012

Please refer to the "Service Restrictions" shown below to determine if Unit Certification is required for this product.

This is to certify that, 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 31/JUL/2014. 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 27/FEB/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.

MILWAUKEE VALVE CO., INC. Model Name(s): Series HW, Wafer

Presented to:

MILWAUKEE VALVE CO., INC.
16550 WEST STRATTON DRIVE
NEW BERLIN
United States

Intended Service:

Marine and Offshore - Fresh Water, Seawater, Fuel Oil, Lube Oil, Air, Inert Gases, Petroleum Products.

Description:

Butterfly valves Series HW with wafer type bodies, constructed with a body manufactured with Cast iron (ASTM A126 class B) and Ductile iron (ASTM A536), with a disc materials of Ductile iron, Nickel plated or Nylon coated, Aluminum Bronze or Stainless Steel and liner materials with Buna-N, EPDM, Hypalon, Neoprene, Viton, or PTFE.

Ratings:

Sizes: 2" thru 12" (50 mm thru 300 mm) Pressure rating: 250 psi (1725 kPa) See attached "pdf" for construction and materials details.

Service Restrictions:

Unit Certification is not required for this product. If the manufacturer or purchaser's 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) Gray Cast Iron valves not to be used as shell valves, at to the collision bulkhead and shutoff valve for fuel oil tanks. Nodular iron or ductile iron will be accepted provided the material has an elongation not less than 12%. iii) All butterfly valves are not to be used on oil tanks (including cargo, oil tanks) having a static head of flammable oil. iv) The material for the body, disc, stem and seat are to be suitable for the intended service. v) Butterfly valves of Ductile iron are not to be used for temperature above 350 °C. vi) Not to be used where fire test requirements apply.

Comments: Manufacturer states valves are designed and tested in accordance with API 609 and MSS SP 67.

Notes / Documentation: Supporting Documentation: Butterfly Valve HW Series Datasheet BFV-7 Email confirming no changes (statement)

Term of Validity: This Product Design Assessment (PDA) Certificate 00-HS151713E-1-PDA, dated 28/Feb/2012 remains valid until 27/Feb/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: 2012 Steel Vessels Rules 1-1-4/7.7, 1-1-Appendix 3, 4-6-2 / 5.11.1; 2012 ABS MODU Rules 4-2-2/9.1.1

National Standards:
International Standards:
Government Authority:
EUMED:
Others: None

| Model Certificate | Model Certificate No | Issue Date | Expiry Date |
|-------------------|----------------------|-------------|-------------|
| PDA | 00-HS151713E-1-PDA | 28/FEB/2012 | 27/FEB/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.