



## Confirmation of Product Type Approval

**Company Name:** MAX-AIR TECHNOLOGY INC.

**Address:** 114 RESOURCE DRIVE MO 63385 United States

**Product:** Valve, Wafer/ Lug Style Butterfly Valves

**Model(s):** PHB 850, 851, 853, 860, 861, 863, 871

**Endorsements:**

<b>Certificate Type</b>	<b>Certificate Number</b>	<b>Issue Date</b>	<b>Expiry Date</b>
Product Design Assessment (PDA)	22-2273182-PDA	28-JUL-2022	27-JUL-2027
Manufacturing Assessment (MA)	21-4830948	13-JUL-2021	12-JUL-2026
Product Quality Assurance (PQA)	NA	NA	NA

### **Tier**

3 - Type Approved, unit certification not required

### **Intended Service**

Marine and Offshore Applications: Bilge and Ballast, Fresh and Sea Water, Cooling, Sanitary, Fuel, Cargo and Compressor System

### **Description**

800 Series Butterfly Valves (2" through 48"), Class 150, 300, & 600 Double Offset Valves

### **Ratings**

PHB Class 150 (2"- 48")

PHB Class 300 (2"- 24")

PHB Class 600 (3"- 24")

### **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 inspection standards and tolerances, must be clearly defined.
2. Valves are not to be used where materials readily rendered ineffective by heat are not acceptable, unless the fire test report conforming to the latest edition of a recognized standard acceptable to ABS is submitted.
3. 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 as per Marine Vessel Rules 4-6-2/9.13.1

4. Valves for intended for installation on shipside shell, including valves at sea chests, are to be hydrostatically tested (seat leakage), before installation, to a pressure of at least 5 bar, in the presence of the Surveyor. (4-6-2/7.3.2 of the Marine Vessel Rules)
5. Nodular iron or ductile iron will be accepted provided the material has an elongation not less than 12 % in 50mm as indicated in Marine Vessel Rules 4-6-2/3.1.5.
6. Valves are not to exceed the lesser of the pressure-temperature rating of this product or flange rating.
7. The valves may also be used and installed onboard USCG units in category A applications after review and approval requirements for each installation.

### Comments

1. The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.
2. The valves are to bear permanent identification, such as the manufacturer's name or trademark, standard of compliance, material identify, pressure rating, etc. as required by the standard of compliance and at which the manufacturer guarantees the valves to meet the requirements of the standards. Such markings may be cast or forged integral with, stamped on, or securely affixed by nameplate on the component, and are to serve as a permanent means of identification of the valve throughout its service life in accordance with 4-6-1/7.1.4 of Marine Vessel Rules.

### Notes, Drawings and Documentation

Drawing No.- ABS Project Scope, ABS Project Scope, Revision: -, Pages: -

Drawing No. - API , 609 CERTIFICATE, dated 11 August 2020 Revision: -, Pages: 1

Drawing No. - CLASS 150 , CL 150 DWGS, Revision: 1, Pages: 1

Drawing No. - CLASS 300 , CL 150 DWGS, Revision: 1, Pages: 1

Drawing No. - CLASS 600 , CL 600 DWGS, Revision: 1, Pages: 1

Drawing No. - Correspondence, PDA Application Butterfly Valves, Revision: -, Pages: -

Drawing No. - FACTORY MA, FACTORY MA, Revision: 1, Pages: 1

Drawing No. - SCOPE, SCOPE REQUESTED, Revision: 1, Pages: 1

Drawing No. -03-DeltaT\_TechnicalBrochure\_ControlButterflyValves

Drawing No. -01-DeltaT\_TechnicalBrochure\_HighPerformanceButterflyValves

Test Report - API 607\_TUV\_Test certificate PHB-8in CLASS150, dated 19 Aug 2019

Test Report - API607 Test certificate butterfly valve\_4 inch dated 01 Oct 2018

Test Report - API607 Test certificate butterfly valve\_2 inch dated 01 Oct 2018

### Term of Validity

This Product Design Assessment (PDA) Certificate remains valid until 27/Jul/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 Rules for Building and Classing Marine Vessel Rules: 4-6-2/3, 4-6-2/5.11, 4-6-2/5.17, 4-6-2/7.3.2, 4-6-4/13.5.3

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

2022 Rules for Building and Classing Mobile Offshore Unit Rules: 4-2-2/9, 4-2-2/17, 4-2-2/21, 4-2-5/3.9

**International Standards**

API 607 Ed. 7th 2016

**EU-MED Standards**

NA

**National Standards**

NA

**Government Standards**

NA

**Other Standards**

NA



A handwritten signature in black ink, appearing to read 'Joseph W. ...'.

Corporate ABS Programs  
American Bureau of Shipping  
Print Date and Time: 06-Jan-2023 9:38

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.