



CERTIFICATE NUMBER
EFFECTIVE DATE
EXPIRY DATE
ABS TECHNICAL OFFICE

23-2436233-PDA
23-Aug-2023
22-Aug-2028
Houston Ship Engineering

CERTIFICATE OF Product Design Assessment

This is to certify that a representative of this Bureau did, at the request of

BAIER MARINE COMPANY, INC.

located at

**ENGINEERING AND GENERAL OPERATIONS, 2920 AIRWAY
AVENUE, , COSTA MESA, CA, United States, 92626**

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.


Product: Hatch, Flush Watertight
Model: BFHR8A/A, BFHR8A/S
Endorsements:
Tier: 2 - PDA Issued

This Product Design Assessment (PDA) Certificate remains valid until 22/Aug/2028 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.

American Bureau Of Shipping


Subramani Ragunathan, Engineer/Consultant

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010)

BAIER MARINE COMPANY, INC.

ENGINEERING AND GENERAL OPERATIONS

2920 AIRWAY AVENUE

COSTA MESA CA

United States 92626

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Web: www.baiermarine.com

Tier: 2 - PDA Issued

Product: Hatch, Flush Watertight**Model:** BFHR8A/A, BFHR8A/S**Endorsements:****Intended Service:**

Marine & Offshore Application - Flush Hatch for Marine Vessels and Offshore Installations.

Description:

8" diameter round flush hatch with T-Hatch operation to open and close. A threaded strongback on the underside of the hatch provides clamping mechanism to securely tighten the hatch down.

Cover is of 0.3" thick permanent mold aluminum, material ASTM B108, alloy 356, the modulus of elasticity $E = 10 \times 10^6$ psi.

Deck Rings are of Cast Steel BFHR8A/S, material ASTM A27, GR 70 - 36 or Cast Aluminum BFHR8A/A, material ASTM B108, alloy 356.

VGroove gasket forms a Watertight Seal between the Deck Ring and Hatch Cover Edge Ring.

BFHR8A/A, BFHR8A/S clear openings are 8" round.

Rating:

Load Rating in Head of Water (top side of Hatch only): Pressure Heads of 10 feet for hatch cover or any similar style hatch with sizes equal to or less than the sizes listed, but with the same thickness.

Service Restriction:

- 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.
- This product is NOT to be installed on the exposed fore deck of vessels over 80 meter (263 ft) in length L (L is the scantling length of a ship), within the forward 0.25L, where the deck in way of the hatch is less than 0.1L or 22 meter (72.2 ft) above the summer load line, whichever is less, as per ABS Marine Vessel Rules 3-2-15/13.
- This product is NOT for use in watertight bulkheads, internal decks and external openings below damage waterline (see ABS Marine Vessel Rules 3-2-9, 3-2-15/17).
- When installing a Hatch, consideration is to be given to preventing corrosion arising from using dissimilar metals. Hatch covers are tested as per 3-7-1/Table 1 (Item 16) of ABS Marine Vessel Rules, upon installation. Aluminum casting material tests to be in accordance with ABS Rules for Materials and Welding 2-5-10. Steel casting material tests to be in accordance with ABS Rules for Materials and Welding 2-1-5.

Comments:

- The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.
- For each installation, drawings are to be submitted for review for verification that the cover Scantlings, Materials and Arrangements, including closing arrangements are acceptable for the proposed location.
- Deck mounting Ring is to be welded on both sides to the Structure in which the Hatch is installed. Hatch installation and operation to be in accordance with the Manufacturer's Instructions. Where aluminum will be joined to other materials, each faying surface is to be suitably coated to minimize corrosion. In addition, when one or both sides of aluminum to dissimilar metal joints are exposed to weather, sea water or wet spaces, a minimum of 0.5 mm (0.02 in.) of suitable insulation shall be installed between faying surfaces and extend beyond the edge of the joint.

Notes/Drawing/Documentation:

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

Terms of Validity:

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STANDARDS**ABS Rules:**

ABS Rules for Conditions of Classification, Part 1 - 2023 Marine Vessels Rules 1-1-4/7.7, 1-1-A3, 1-1A4

ABS Rules for Building and Classing, Part 3 - 2023 Marine Vessel Rules 3-2-15/3.3, 3-2-15/9

ABS Rules for Conditions of Classification, Part 1 - 2023 Light and High Speed Craft Rules 1-1-4/11.9, 1-1-4/A2, 1-1-4/A3

ABS Rules for Building and Classing, Part 3 - 2023 High Speed Craft Rules 3-2-4/1

ABS Rules for Conditions of Classification, Part 1 - 2023 Mobile Offshore Units Rules 1-1-4/9.7, 1-1-A2, 1-1A3,

ABS Rules for Building and Classing, Part 3 - 2023 Mobile Offshore Units Rules 3-2-5/11

ABS Rules for Materials and Welding 2-5-5/Table 7

National:

NA

International:

NA

Government:

NA

EUMED:

NA

OTHERS:

NA