



CERTIFICATE NUMBER	24-0092892-PDA
EFFECTIVE DATE	14-Nov-2024
EXPIRY DATE	13-Nov-2029
ABS TECHNICAL OFFICE	Houston Ship Engineering

CERTIFICATE OF Product Design Assessment

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

UNIVERSAL MOTION COMPONENTS CO., INC.

located at

2920 AIRWAY AVE, , 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 Cover
Model: 01210-101A (carbon steel, painted finish), 01210-101B (carbon steel, galvanized finish), 01210-101S (stainless steel)
 01220-101A (carbon steel, painted finish), 01220-101S (stainle...
Endorsements:
Tier: 2 - PDA Issued

This Product Design Assessment (PDA) Certificate remains valid until 13/Nov/2029 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

Subraman 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)

UNIVERSAL MOTION COMPONENTS CO., INC.

2920 AIRWAY AVE

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United States 92626

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Web: https://www.umcproducts.com

Tier: 2 - PDA Issued

Product: Hatch Cover
Model: 01210-101A (carbon steel, painted finish), 01210-101B (carbon steel, galvanized finish),
01210-101S (stainless steel)
01220-101A (carbon steel, painted finish), 01220-101S (stainless steel)
03800-101A (carbon steel, painted finish), 03800-101S (stainless steel)

Endorsements:

Intended Service:

Marine Application - Watertight Hatch Cover for Marine Vessels

Description:

18" circular, unstiffened, 18-8 stainless steel, T-Bolt type watertight hatch with nitrile rubber gasket. Hatch cover is 0.374 inch (9.50 mm) nominal thickness.

24" circular, unstiffened, 304 stainless steel, T-Bolt type watertight hatch with nitrile rubber gasket. Hatch cover is 0.380 inch (9.65 mm) nominal thickness.

18" x 24" 4-dog, oval, raised, ASTM A240 Type 304 stainless steel hatch with nitrile rubber gasket. Hatch cover is 0.310 inch (7.87 mm) nominal thickness.

Rating:

Watertight to a pressure head of 40.0 ft (12.2 m) for hatch cover 18" or any similar style hatch with sizes equal to or less than the sizes listed, but with the same thickness.

Watertight to a pressure head of 22.0 ft (6.71 m) for hatch cover 24" or any similar style hatch with sizes equal to or less than the sizes listed, but with the same thickness.

Watertight to a pressure head of 23.0 ft (7.01 m) for hatch cover 18" x 24" or any similar style hatch with sizes equal to or less than the sizes listed, but with the same thickness.

Service Restriction:

1. Unit Certification is not required for this product.
2. 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.
3. The hatch cover scantlings were reviewed for the pressure head, as indicated in the Ratings section. For each installation, drawings are to be submitted for review for verification that the materials, arrangements and coaming height and thickness, including closing arrangements are acceptable for the proposed location.
4. These fittings are difficult to maintain gastight, and are not to be in cargo or fuel tanks where lack of gastight seal possess a serious hazard.
5. The hatches are not to be located on the exposed fore deck within the forward 0.25L on vessels with length, L, as defined in 3-1-1/3.1, of 80m (263 feet) or more where the height of the exposed deck in way of the hatch is less than 0.1L or 22 m(72.2 ft) above the summer load waterline, whichever is less.
6. This Product is not to be used as a Means of Escape or on fire-rated boundaries.
7. The gasket rating to be minimum 17.8 psi for the 18" circular hatch and 10.2 psi for the 24" circular hatch and the 18"x24" hatch.

Comments:

The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

Notes/Drawing/Documentation:

Drawing No. 01210-101A, Revision: M, "Hatch Assy, Flush 18" Painted (430-18D)", Pages: 2

Drawing No. 01220-101A, Revision: H, "Hatch Assy, Flush 24" (430-24)", Pages: 3

Drawing No. 03800-101A, Revision: L, "Hatch Sub DF-464-5-SSHD", Pages: 3

Drawing No. 1220-101S, Revision: A, "Hatch Assy, Flush 24" (430-24) SS", Pages: 9

Drawing No. 1220-102A, Revision: E, "Cover Assy, Flush 24" (430-24-CO)", Pages: 3

Drawing No. 1220-401A, Revision: F, "Cover Weldment, Flush Hatch 24"", Pages: 3

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Drawing No. 03800-101S, Revision: C, "Hatch Assy, Rsd Std ROT 18 x 24 SS Hatch (DF-464-5-SS Hatch)", Pages: 1

Drawing No. 03800-203B, Revision: B, "Cover, Hatch SS 18 x 24", Pages: 2

Drawing No. 03800-203A, Revision: D, "Cover, Hatch 18 x 24", Pages: 1

Drawing No. 01210-101S, Revision: A, "Hatch Assy, Flush 18" S.S. (430-18D)", Pages: 3

Drawing No. 04210-101S, Revision: A, "Cover Assy, Flush Hatch 18" S.S. (430-18-CD)", Pages: 3

Drawing No. N/A, Revision: N/A, "N/A", Pages: 4

Drawing No. 01210-101B, Revision: E, "Hatch Assy, Flush 18" Galvanized (430-18D)", Pages: 3

Drawing No. 04210-101B, Revision: C, "Cover Assy, Flush Hatch 18" Galvanized (430-18-CD)", Pages: 3

Drawing No. 04210-101A, Revision: J, "Cover Assy, Flush Hatch 18" (430-18-CD)", Pages: 3

Terms of Validity:

This Product Design Assessment (PDA) Certificate remains valid until 13/Nov/2029 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).

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STANDARDS

ABS Rules:

ABS Rules for Conditions of Classification (2024) 1A-1-4/7.7, 1A-1-A3, 1A-1-A4, which covers the following:
ABS Rules for Building and Classing Marine Vessels (2024): 3-2-9/9.3.1, 3-2-9/9.3.2, 3-2-15/3.3, 3-2-15/9.1

National:

NA

International:

NA

Government:

NA

EUMED:

NA

OTHERS:

NA