



CERTIFICATE NUMBER
EFFECTIVE DATE
EXPIRY DATE
ABS TECHNICAL OFFICE

26-0451521-PDA
13-Feb-2026
12-Feb-2031
Houston SED Structures -
Commercial

CERTIFICATE OF Product Design Assessment

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

UNIVERSAL MOTION COMPONENTS CO., LLC

located at

2920 AIRWAY AVE, , COSTA MESA, CA, United States, 92626-6008

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: **Bollard**
Model: **UMC-30; UMC-KC30; UMC-482; UMC-483; UMC-484**
Endorsements:
Tier: **2 - PDA Issued**

This Product Design Assessment (PDA) Certificate remains valid until 12/Feb/2031 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, Manager

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., LLC

2920 AIRWAY AVE

COSTA MESA CA

United States 92626-6008

Telephone: 714-437-9600

Fax:

Email: rcall@umcproducts.com

Web: https://universalmotioncomponents.com

Tier: 2 - PDA Issued

Product: **Bollard**

Model: **UMC-30; UMC-KC30; UMC-482; UMC-483; UMC-484**

Endorsements:

Intended Service:

Kevel Chocks for Marine Vessels and Offshore Units

Description:

UMC-30: 24" Kevel Chock, ASTM A27, GR 70-36 Cast Steel

UMC-KC30: 30" Kevel Chock, ASTM A27, GR 70-36 Cast Steel

UMC-482: 36" Kevel Chock, ASTM A27, GR 70-36 Cast Steel

UMC-483: 42" Kevel Chock, ASTM A27, GR 70-36 Cast Steel

UMC-484: 48" Kevel Chock, ASTM A27, GR 70-36 Cast Steel

Rating:

Case 1: Dual Turn Full Wrap Perpendicular

Maximum Angle / Constraint: 30° MAX from the vertical centerline.

UMC-30: Safe Working Load of 16.8 t

UMC-KC30: Safe Working Load of 18.5 t

UMC-482: Safe Working Load of 24.4 t

UMC-483: Safe Working Load of 30.8 t

UMC-484: Safe Working Load of 39.7 t

Case 2: Single Turn Full Wrap Axial

Maximum Angle / Constraint: 5° MAX from the horizontal plane.

UMC-30: Safe Working Load of 10.6 t

UMC-KC30: Safe Working Load of 11.7 t

UMC-482: Safe Working Load of 14.6 t

UMC-483: Safe Working Load of 23.3 t

UMC-484: Safe Working Load of 20.0 t

Case 3: Single Turn Half Wrap Perpendicular

Maximum Angle / Constraint: 20° MAX from the vertical axis for each line.

UMC-30: Safe Working Load of 5.5 t

UMC-KC30: Safe Working Load of 9.5 t

UMC-482: Safe Working Load of 10.2 t

UMC-483: Safe Working Load of 16.2 t

UMC-484: Safe Working Load of 14.5 t

Please refer to Drawing No. 01090-301A_FEA, 01090-301A_FEA_Rev.Q, Revision: Q to see the wrappings of each load case.

Service Restriction:

Unit Certification is not required for this product.

The ship should hold a certificate attesting to the strength of the foundations and associated supporting structures, substantiated by detailed engineering analysis and inspection of the installation.

The ship should also hold a copy of the manufacturer's certificate confirming that the fitting is constructed in strict compliance with Oil Companies International Marine Forum (OCIMF) - Mooring Equipment Guidelines (MEG3 & MEG4) (including design load, safety factor, and load application).

UNIVERSAL MOTION COMPONENTS CO., LLC

2920 AIRWAY AVE

COSTA MESA CA

United States 92626-6008

Telephone: 714-437-9600

Fax:

Email: rcall@umcproducts.com

Web: <https://universalmotioncomponents.com>

Tier: 2 - PDA Issued

If the manufacturer or purchaser requests an ABS Certificate for compliance with an alternate specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.

The keel chocks shall not be subject to loads greater than as indicated in the Description of this ABS Certificate.

The safe working loads for these keel chocks shall be in accordance with the loads indicated in case 3 as this is the most stringent case.

Comments:

- 1) The review of the installation plan and hull structural reinforcement in way of the equipment will be required for individual ships.
- 2) The keel chocks should be subject to periodic Surveys and maintained in good order, at the discretion of the attending ABS Surveyor.
- 3) The keel chocks are to be clearly marked with the Safe Working Load (SWL) and shall be in accordance with the loads indicated in case 3. The SWL is to be expressed in metric tonnes (letter "t") to avoid any confusion.
- 4) The Manufacturer has provided a declaration about the control of, or the lack of, Asbestos in this product.

Notes/Drawing/Documentation:

Drawing No. 0110-301A, 01100-301a, Revision: L, Pages: 4

Drawing No. 01080-301A, 01080-301A, Revision: P, Pages: 4

Drawing No. 01090-301A_FEA, 01090-301A_FEA_Rev.Q, Revision: Q, Pages: 3

Drawing No. 01080-301A_FEA, 01080-301A_FEA_Rev.P, Revision: P, Pages: 3

Drawing No. 01081-301A_FEA, 01081-301A_FEA_Rev.A, Revision: A, Pages: 3

Drawing No. 01081-301A, 01081-301a, Revision: E, Pages: 1

Drawing No. Material Certificates, Material Certificates, Revision: -, Pages: 5

Drawing No. 01090-301A, 01090-301a, Revision: P, Pages: 4

Drawing No. 02990-301A_FEA, 02990-301A_FEA_Rev.L, Revision: L, Pages: 3

Drawing No. 01100-301A_FEA, 01100-301A_FEA_Rev.M, Revision: M, Pages: 3

Drawing No. 02990-301A, 02990-301a, Revision: K, Pages: 4

Terms of Validity:

This Product Design Assessment (PDA) Certificate remains valid until 12/Feb/2031 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.

STANDARDS

ABS Rules:

2025 Rules for Conditions of Classification - Ships: 1A-1-4/7.7, 1A-1-A3, 1A-1-A4

2025 Rules for Conditions of Classification - Offshore: 1B-1-4/9.7, 1B-1-A2, 1B-1-A3

2025 Rules for Conditions of Classification - Light and High-Speed Craft: 1C-1-4/11.9, 1C-1-A2, 1C-1-A3

UNIVERSAL MOTION COMPONENTS CO., LLC

2920 AIRWAY AVE

COSTA MESA CA

United States 92626-6008

Telephone: 714-437-9600

Fax:

Email: rcall@umcproducts.com

Web: <https://universalmotioncomponents.com>

Tier: 2 - PDA Issued

National:

NA

International:

Oil Companies International Marine Forum (OCIMF) - Mooring Equipment Guidelines (MEG3 & MEG4)

Government:

NA

EUMED:

NA

OTHERS:

NA