



Confirmation of Product Type Approval

Company Name: BLACKMER, A DOVER RESOURCES COMPANY

Address: 1809 CENTURY AVE SW GRAND RAPIDS MI 49503 United States

Product: Pump

Model(s): ML & MLX 4" Series

Endorsements:

Certificate Type	Certificate Number	Issue Date	Expiry Date
Product Design Assessment (PDA)	24-2499116-PDA	24-JAN-2024	23-JAN-2029
Manufacturing Assessment (MA)	20-4482014	16-OCT-2020	15-OCT-2025
Product Quality Assurance (PQA)	20-4482014-PQA	16-OCT-2020	15-OCT-2025

Tier

4 - Enrolled in PQA Program

Intended Service

Marine & Offshore Application - Transfer and Stripping Pumps for AFFF (Foam), Clean Distillate and Heavy Fuels, Lubes, Oil, Dirty Distillate and Heavy Oils.

Description

Sliding Vane Pumps constructed with Ductile Iron (ASTM 536, 18% Elongation).

Ratings

Performance Data:

MLX4 & MLN4 series: Capacity to 64 to 550 GPM

Speed (RPM): 68 to 600 RPM

Power Capacity: 6.5 to 21.4 HP

Maximum Operating Limits:

MXL4 Series

Flow rate capacity: 590 GPM

Maximum Working Pressure: 250 psi (17.2 bar)

Maximum Differential Pressure: 200 psi (13.8 bar)

Pump Speed: 600 rpm

Maximum Temperature: 300°F (148°C) with EC Metal or EC laminate Vanes

MLN4 Series

Flow rate capacity: 590 GPM

Maximum Working Pressure: 200 psi (13.8 bar)

Maximum Differential Pressure: 150 psi (10.3 bar)

Pump Speed: 600 rpm

Maximum Temperature: 400°F (204°C) with FKM or PTFE O-rings and metal vanes

See "pdf" attachment for Performance Curves.

Service Restrictions

Unit Certification is required for this product if the pumps are used for services listed in Marine Vessel Rules 4-6-1/7.3.1, hydrostatic and capacity testing is to be performed to the satisfaction of the Surveyor as indicated in Marine Vessel Rules 4-6-1/7.3.2 a), b).

Comments

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

Notes, Drawings and Documentation

Drawing No. 106-001 12-2020, ML Series Product Brochure, Revision: 20, Pages: 1

Drawing No. 106-021, ML4 Series Characteristic Curves, Revision: AUG, Pages: 1

Term of Validity

This Product Design Assessment (PDA) Certificate remains valid until 23/Jan/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.

ABS Rules

2024 Rules for Conditions of Classification, 1-1-4/7.7, 1-1-A3, 1-1-A4, which covers the following:

2024 Rules for Building and Classing Marine Vessels, 4-6-1/7.3.1, 4-6-1/7.3.2

2024 Rules for Conditions of Classification, Offshore Units and Structures 1-1-4/9.7, 1-1-A2, 1-1-A3, which

covers the following:

2024 Rules for Building and Classing Mobile Offshore Units, 4-2-2/3

International Standards

NA

EU-MED Standards

NA

National Standards

NA

Government Standards

NA

Other Standards

None



A handwritten signature in dark ink, appearing to read "Joseph W. Wilson".

Corporate ABS Programs
American Bureau of Shipping
Print Date and Time: 17-Jul-2024 12:47

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.