Certificate Number: 17-HS1653391-PDA 17/AUG/2017



## Confirmation of Product Type Approval

Please refer to the "Service Restrictions" shown below to determine if Unit Certification is required for this product.

This certificate reflects the information on the product in the ABS Records as of the date and time the certificate is printed.

Pursuant to the Rules of the American Bureau of Shipping (ABS), the manufacturer of the below listed product held a valid Manufacturing Assessment (MA) with expiration date of 27-JUL-2022. The continued validity of the Manufacturing Assessment is dependent on completion of satisfactory audits as required by the ABS Rules.

And; a Product Design Assessment (PDA) valid until subject to continued compliance with the Rules or standards used in the evaluation of the product.

The above entitle the product to be called Product Type Approved.

The Product Design Assessment is valid for products intended for use on ABS classed vessels, MODUs or facilities which are in existence or under contract for construction on the date of the ABS Rules used to evaluate the Product.

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.

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.

## Product Name: Pump, Centrifugal Self-Priming Model Name(s): Flomax 30

Presented to: MP PUMPS INC. 34800 BENNETT DRIVE MI 48026 United States			
Intended Service:	Marine & Offshore Application -Bilge Systems, Ballast Systems, Fire Systems, Cooling Water Systems, General Service and Sanitary Systems.		
Description:	Self-Priming Centrifugal Pump with 3" NPT Connections. Pump can be pedestal mounted or close coupled, Cast Iron or Bronze Construction. Size: 3" x 3" (Suction & Discharge) Impeller Diameter: 6.75" ~7" Speed: 3500 RPM		
Tier:	3		
Ratings:	Flow Capacity: up to 480 GPM Total Head: up to 165 feet of water		
Service Restrictions:	<ul> <li>i.) Unit Certification is required for this product if the Pumps are used for services listed in Steel 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 SVR 4-6-1/7.3.2 a), b).</li> <li>ii) Regarding Certification details for Mobile Offshore Drilling Units, please refer to 6-1-6/Table 1.</li> </ul>		
Comments:	<ul> <li>i) The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.</li> <li>ii) Motors are not included in this PDA.</li> </ul>		
Notes / Documentation:	Brochure Capacity Curve Size 3" x 3" @ 3500 rpm, Impeller Dia. 6.75"~7" Dwg. No. 33125, Rev, Flomax 30 Assembly Dwg. No. 31822, Rev, Volute-Mach, MP30 Flomax 30 Brochure		
Term of Validity:	This Product Design Assessment (PDA) Certificate 17-HS1653391-PDA, dated		

	28/Jul/2017 remains valid until 27/Jul/2022 or until the Rules or specifications used in the assessment are revised (whichever occurs first). This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product. Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA. Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.			
ABS Rules:	2017 Steel Vessels Rules 1-1-4/7.7, 1-1-A3, 1-1-A4, 4-6-1/7.3.1, 4-6-1/7.3.2; 2017 Mobile Offshore Drilling Unit Rules 1-1-4/9.7, 1-1-A2, 1-1-A3, 4-2-2/3, 4-2-4/7, 6-1-6/Table 1, 6-1-6/5.11			
National Standards: International Standards: Government Authority: EUMED: Others:				
Model Certificate	Model Certificate No	Issue Date	Expiry Date	
PDA	17-HS1653391-PDA	09-AUG-2017	27-JUL-2022 Ame Delooch	
date and time the certificate was prin manufacturer's quality assurance an Approval. The approvals of Drawing	reparation of this certificate and it repr nted. Type Approval requires Drawing d quality control arrangements. Limite s and Products remain valid as long as d maintain compliance with all other s	Assessment, Prototype Testing d circumstances may allow onl s the ABS Rule, to which they we pecifications to which the produ	product in the ABS Records as of the g and assessment of the y Prototype Testing to satisfy Type	