Certificate No:
TAM00001AW

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Flexible Mounts for Propulsion or Auxiliary Machinery

with type designation(s)
CM1

Issued to
MARI Technology Holland B.V.
Papendrecht, **Netherlands**

is found to comply with
DNV rules for classification – Ships

Application :

Products approved by this certificate are accepted for installation on all vessels classed by DNV.

Issued at **Høvik** on **2023-09-19**
This Certificate is valid until **2028-09-18**.
DNV local unit: **Netherlands VMC**

Approval Engineer: **Terje Ingvar Arvidsen**

for **DNV**

Øystein Åsheim Alnes
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.

Product description
Conical vibration isolator.

Application/Limitation
The rubber mounts are approved for use in foundation arrangements for marine applications.

Standard cones Item number	Hardness Rubber (Shore A)	Nominal stiffness (N/mm)	Max Marine load (kN)	Max Static load (kN)	Height Adjustable
1010CMRA45	45°	4054	52	62	No
1010CMRA50	50°	4702	57	67	No
1010CMRA55	55°	5459	65	77	No
1010CMRA60	60°	5892	71	84	No
1010CMRA65	65°	7054	81	97	No
1010CMRA70	70°	8444	97	115	No
1010CMRA75	75°	9700	111	132	No

Standard cones Item number	Hardness Rubber (Shore A)	Nominal stiffness (N/mm)	Max Marine load (kN)	Max Static load (kN)	Height Adjustable
1010CMHA45	45°	4054	52	62	Yes
1010CMHA50	50°	4702	57	67	Yes
1010CMHA55	55°	5459	65	77	Yes
1010CMHA60	60°	5892	71	84	Yes
1010CMHA65	65°	7054	81	97	Yes
1010CMHA70	70°	8444	97	115	Yes
1010CMHA75	75°	9700	111	132	Yes

Plus cones Item number	Hardness Rubber (Shore A)	Nominal stiffness (N/mm)	Max Marine load (kN)	Max Static load (kN)	Height Adjustable
1010CMRB45	45°	5950	79	87	No
1010CMRB50	50°	6700	87	98	No
1010CMRB55	55°	7700	95	107	No
1010CMRB60	60°	9000	104	119	No
1010CMRB65	65°	9750	111	128	No
1010CMRB70	70°	11200	127	147	No
1010CMRB75	75°	12800	145	168	No

Plus cones Item number	Hardness Rubber (Shore A)	Nominal stiffness (N/mm)	Max Marine load (kN)	Max Static load (kN)	Height Adjustable
1010CMHB45	45°	5950	79	87	Yes
1010CMHB50	50°	6700	87	98	Yes
1010CMHB55	55°	7700	95	107	Yes
1010CMHB60	60°	9000	104	119	Yes
1010CMHB65	65°	9750	111	128	Yes
1010CMHB70	70°	11200	127	147	Yes
1010CMHB75	75°	12800	145	168	Yes

Type Approval documentation

Tests carried out

Marking of product

The product to be marked with manufacturer's name or trademark, type number identification, manufacturing week and year.

Periodical assessment

For retention of the Type Approval, a DNV surveyor shall perform an assessment after 2 years and after 3.5 years to verify that the conditions of the type approval are complied with. A renewal assessment will be performed at renewal of the certificate.

In cases where the Type Approved product is manufactured at other companies, the Periodical Assessment shall verify that the Type Approval applicant has a quality control system for consistent production at their licensees/subcontractors. Furthermore, Periodical Assessment shall be carried out randomly at these companies.

END OF CERTIFICATE