

Certificate No: TAM000013J

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Flexible Mounts for Propulsion or Auxiliary Machinery

with type designation(s) V11XX, VT41XX, VT42XX, VT44XX, VT4090

Issued to

Vibratec Akustikprodukter AB Blidö, Stockholms Län, Sweden

is found to comply with **DNV GL rules for classification - Ships** DNV GL rules for classification - High speed and light craft

Application:

The flexible mounts are approved for use for suspension of diesel engines.

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

Issued at Høvik on 2019-08-12

This Certificate is valid until 2024-06-30. DNV GL local station: Sweden CMC

Approval Engineer: Tage Olav Alexander Strøm



for **DNV GL**

Digitally Signed By: Williksen, Dag Harald Location: DNV GL Høvik, Norway Signing Date: 12.08.2019 , on behalf of

Oddvar Deinboll 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.



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Job Id: **262.1-005578-4** Certificate No: **TAM000013J**

Product description

All metal flexible vibration isolators

Application/Limitation

The flexible vibration isolators are approved for suspension of diesel engines, main or auxiliary.

Type Approval documentation

Data sheet for VT4211 – 4213, Data sheet for VT4103 – 4128
Data sheet for V1114, 1115, 1116, 1133, 1134, 1135, 1136
Data sheet for VT4425, VT4430
Data sheet for VT4412-VT4414, Data sheet for VT4421-VT4424
Spring stiffness data given in e-mail from Vibratc dated 04-03-16
Drawing: 0711081DJ Sammanställning Isolator VT41XX (dated 2007-11-19)).
Drawing: 98-0302: 1 rev. D Sammanstälning ny marinisolator typ VT421X

and other documentation received with documents g:\vtec\prosjekt\dv klassning\isolator vt42xx.doc, g:\vtec\prosjekt\dv klassning\isolator vt41xx.doc and letter from Vibratec dated 04-03-16. Documentation for VT4090 received with e-mail from Vibratec dated 2014-11-05.

Tests carried out

Tests mentioned in type approval documentation

Marking of product

The product to be marked with manufacturer's name or trademark and type number identification

Periodical Assessment

For retention of the type approval, a DNV GL 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.

Other conditions

DNV-GL product certificate is not required.

END OF CERTIFCATE

Form code: TA 251 Revision: 2016-12 www.dnvgl.com Page 2 of 2