

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Torsional Vibration Dampers**

with type designation(s)

Cummins part no 193552 for VTA28-D, Cummins part no 3077985 for VTA28-D, Cummins part no 4987064 for NT855-D

Issued to

**Hodek Vibration Technologies Pvt. Ltd.
PUNE, MAHARASHTRA, India**

is found to comply with

DNV GL rules for classification – Ships**DNV GL rules for classification – High speed and light craft****DNV GL rules for classification – Offshore units****Application :****The torsional vibration damper is approved for use on diesel engines for propulsion and auxiliary purpose.****Products approved by this certificate are accepted for installation on all vessels classed by DNV GL.**Issued at **Høvik** on **2018-09-20**This Certificate is valid until **2023-09-19**.for **DNV GL**DNV GL local station: **Mumbai NB & CMC**Approval Engineer: **Terje Ingvar Arvidsen****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.



Job Id: **262.1-029113-1**
Certificate No: **TAM00000YB**

Product description

Hodek torsional vibration dampers for Cummins diesel engines.

Application/Limitation

The dampers are approved for use on diesel engines for propulsion and auxiliary duty.

Damper data:

Engine Model no.	NT855	VTA-28-DM	VTA-28-DM
Ring inertia (kg m ²)	0.207	0.224	1.097
Casing inertia (kg m ²)	0.145	0.143	0.175
Viscous damping Coefficient (Nms/rad)	186	567	Not Available
Viscosity of silicone	6,00,000 CST	3,00,000 CST	Rubber Damper
Tested rpm	3250	3250	2100
Tested power (kW)	356	559	603

Type Approval documentation

Tests carried out

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, both referring to the issue date of the type approval certificate 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

DNVGL Product Certification is not required.

END OF CERTIFICATE