DNV·GL

Certificate No:
TAM00000T4

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Reduction Gear for Propulsion

with type designation(s)
2G23/35F

Issued to
Finnøy Gear & Propeller AS
HARØY, Norway

is found to comply with
DNV GL rules for classification – Ships

Application :

Product approved by this certificate is accepted for installation on all vessels classed by DNV GL.

Input torque	**1910 (N.m)**
Input speed	**1500 RPM**
Reduction ratio	**5,52/1**

Issued at **Høvik** on **2018-01-08**

This Certificate is valid until **2023-01-07**.

DNV GL local station: **Kristiansund N**

Approval Engineer: **Hamid Amini**

for **DNV GL**

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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Product description

Single stage reduction gear with built in hydraulic operated clutch and servo cylinder for CP mechanism.

Application/Limitation

The type approval is valid for the following main data:

Reduction ratio [-]	Engine speed [rpm]	Input Torque [Nm]	Output Torque [Nm]
5,52:1	1500	1910	10543

Application factor: 1,3
Clutch type: Clutch 47-000 Ortlinghaus
Max servo pressure: 24 bar
Max temperature for lub.oil. 60 °C

Marking of product

The product to be marked with the 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.

The objective of the Periodical Assessment is to verify that the conditions for the Type Approval are not altered since the Type Approval Certificate was issued.

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

- The type approval does not cover:
- The flexible coupling
- Ice class notations
- Electric wiring, instrumentation and automation
- Connection to external shaft components.
- Fastening and foundation of the gearbox including chocking calculations

END OF CERTIFICATE