

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Diesel Engine

with type designation(s)
6NY16L-DN/DW-HN/HW-UN/UW-SN/SW-EN/EW

Issued to

Yanmar Co., Ltd. Amagasaki Plant
Amagasaki Hyogo Pref, Japan

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

Application :

The approval is given for auxiliary duty.

Rating See page 2

This Certificate is valid until **2020-12-31**.

Issued at **Høvik** on **2016-02-02**

DNV GL local station: **Kobe**

for **DNV GL**

Approval Engineer: **Tage Olav Alexander Strøm**

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: **262.1-011521-4**
Certificate No: **TAM000005A**

Product description

Four stroke diesel engine

Cylinder bore: 160 mm
Piston stroke: 200 mm
No. of cylinders: 6 in-line

Application/Limitation

The approval is given for auxiliary duty and is based on the following main data:

	6NY16L-				
	HN/HW	DN/DW	UN/UW	SN/SW	EN/EW
Mean indicated press., [bar]:	11,1/12,2	13,4/14,0	14,6/15,9	16,6/17,8	18,7/19,5
Max. cylinder pressure, [bar]:	147	147	147	147	147
Rated cont. output, [kW]:	200/265	245/310	270/355	310/400	353/441
Corresponding to, [rpm]:	1000/1200	1000/1200	1000/1200	1000/1200	1000/1200

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 a survey every second year and before the expiry date of this certificate. This to verify that the conditions of the type approval are complied with and 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

Foundation arrangement to be submitted for each installation according to the Rules, Pt. 4 Ch.3 Sec.1 [1.4] - Documentation of arrangement.

Torsional vibration calculations to be submitted for each installation according to the Rules Pt.4 Ch.2 Sec.2 - Torsional Vibrations.

Signboards according to the Rules Pt.4 Ch.3 Sec.1 [2.3.6] - Warning Notice.

Flexible hoses with couplings to be type approved by DNV GL.

Engine safety, control and monitoring systems, including sensors and actuators are not covered by this type approval certificate. Documentation for engine safety, control including speed governing and monitoring systems shall be submitted for approval according to the rules Pt.4 Ch.9 Sec.1 Table 5 - Documentation requirements.

Electric cables and cabling are not covered by this approval and must be verified to comply to the rules Pt.4 Ch.8 - Electrical Installation.

END OF CERTIFICATE