

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Authority. This Certificate is issued by DNV GL AS under the authority of the Government of the Kingdom of Norway.

This is to certify:

That the Winches for survival craft and rescue boats

with type designation(s)
DW168S

Issued to

Vanguard (Nantong) F.R.P. Co., Ltd.
Nantong Jiangsu, China

is found to comply with the requirements in the following Regulations/Standards:

Regulation **(EU) 2015/559,**

Annex A.1, item No. A.1/1.41a and Annex B, Module B in the Directive; SOLAS 74 as amended, Regulation III/4, III/16, III/17, III/23, III/24, III/34, X/3, LSA Code and 2000 HSC Code

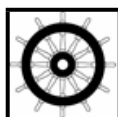
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2022-02-05**.

Issued at **Høvik** on **2017-02-06**

DNV GL local station:
Nantong CMC

Approval Engineer:
Sorina Thompson



Notified Body
No.: **0575**

for **DNV GL AS**

Vidar Dolonen
Head of Notified Body



Product description

Lifeboat Winch with;

- Maximum Working Load, MWL = 168 kN (3 layers)
- Maximum Hoisting Load, MHL = 168 kN (equally split between 2 drums)
- Wire Rope Diameter = 30 mm

Application/Limitation

- Grades of materials as stated on drawings are to be delivered with makers product certificates (3.1).
- The various components transferring the load like wires, shackles, hooks, etc. are to comply with international standards or codes and are to be delivered with manufacturer's certificate, confirming a safety factor minimum 6 compared to the sustained load.
- Falls to be used with the launching appliance shall be of rotation-resistant and corrosion-resistant steel wire rope.
- Installation, onboard testing (MSC.81(70) part.2), support to the deck structure, and connection to power supply are not included in this examination and shall be accepted by attending surveyor in each case.
- The hydraulic cylinders are limited to 15000 life cycles.

Type Examination documentation

Physicochemical properties of material for main parts

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Job Id: **344.1-006522-1**
Certificate No: **MEDB000026S**

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2016/8/15

Tests carried out

Prototype testing according to IMO Resolution MSC 81(70) carried out 2016-11-10 and witnessed by DNV GL Shanghai.

Marking of product

Marking shall be implemented in accordance with the LSA Code, item 1.2.2.9:

- Type designation, manufacturer name and serial number
- Maximum Working Load, MWL

END OF CERTIFICATE