

# EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate no.:  
**MEDB00004HN**  
Revision No:  
**3**

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 AS under the authority of the Government of Norway.

## This is to certify:

**that the Rigid rescue boats**

with type designation(s)

**Midget-530 MKI / Midget-530 MKII with waterjet/propeller**

issued to

**VIKING Life-Saving Equipment Norway AS**  
**FÆRVIK, Norway**

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

Regulation (EU) 2024/1975,

**item No. MED/1.18. SOLAS 1974 as amended, Reg. III/4, III/21, III/31, III/34 & X/3, LSA Code, 2000 HSC Code 8 and IMO Res. MSC.481(102), IMO MSC.1/Circ.1631, IMO MSC/Circ.1006**

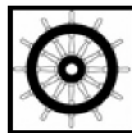
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2030-02-23**.

Issued at **Høvik** on **2025-02-24**

DNV local unit:  
**West Norway CMC**

Approval Engineer:  
**Tessa Bieber**



Notified Body  
No.: **0575**



for **DNV AS**

Digitally Signed By:  
**Christine Mydlak-Röder**  
Location: **DNV Høvik, Norway**

**Mydlak-Röder, Christine**  
**Head of Notified Body**



The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU.

This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV AS of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled.

Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.

## Product description

“Midget-530 MKI / Midget-530 MKII with waterjet/propeller”

a rigid rescue boat equipped with inboard engine with either waterjet or propeller and self-righting arrangement, with a single point lifting hook. MKI has a foam fender, while MKII has a PVC fender.

Material specification:

Material	Generic name	Type	Manufacturer
Polyester resin:	Polyester resin	FL-918 OR ETERSET 2929PT	Jiangsu Fullmark Chemical Co., Ltd. OR Eternal Materials Co.Ltd.
Gelcoat:		Enguard series: Enguard GE XXXXXS/HZ, Enguard TM XXXXXS/HZ	Ashland (Changzhou) Specialty Chemical Co., Ltd. .
Gelcoat/topcoat		FL-NCxxxxG	Jiangsu Fullmark Chemicals Co., Ltd
Glass Fiber:	CSM	P-100g/m <sup>2</sup> – P-900g/m <sup>2</sup> , chopped strand mat - powder bound	Jiangsu Changhai Composite Materials Holding Co., Ltd
		EMC (powder type), EMCL (emulsion type)	Taishan Fiberglass Inc.
Buoyant material:	Rigid polyurethane foam	Rigid polyurethane foam,	Jiangyin Tongqi Allied Chemical Factory OR
		Rigid polyurethane foam, LM-206A/LM-206B	Qingdao Lianmei Chemical Co. Ltd..

Length over all:	5.32 m
Breadth over all:	2.07 m
Depth:	0.76 m
Weight of boat, fully equipped:	1155 kg
Weight of boat, fully manned (82.5 kg/person):	1815 kg

Hook manufacturer and type:

Viking Life-Saving Equipment Norway K4-D/K4-D FM, off-load

Hook SWL: 4000 kg

Hull material: FRP

Propulsion system: Inboard engine with waterjet/propeller

Engine manufacturer and type: NLDE-3 <sup>(1)</sup>

SABB L3.139LB <sup>(2)</sup>

SABB L4.186TLB <sup>(3)</sup>

Steyr-MO94 <sup>(4)</sup>

Yanmar 4JH110 <sup>(5)</sup>

Waterjet type: Alamarin-160 <sup>(a)</sup>

Alamarin-185 <sup>(b)</sup>

Bollard pull: 4.1 kN <sup>(1)</sup>

4.0 kN <sup>(2)</sup>

5.2 kN <sup>(3)</sup>

5.2 kN <sup>(4a)</sup>

2.8 kN <sup>(5b)</sup>

## Application/Limitation

Approved engine power, max: 20.6 kW <sup>(1)</sup>

21.6 kW <sup>(2)</sup>

40.2 kW <sup>(3)</sup>

66.0 kW <sup>(4)</sup>

81.0 kW <sup>(5)</sup>

Number of persons, max: 8

Maximum load of persons (82.5 kg/person): 660 kg

Approved colour:

Orange

Rescue boat equipment and marking/instructions to be inspected after installation onboard the ship. Equipment shall comply with LSA Code and IMO Res.MSC.81(70).

The rescue boat is fitted with a release hook without on-load release capabilities, in accordance with LSA Code 4.4.7.6.17. Hence, if it is to be combined with launching appliances with permanent high-speed tensioning device (LSA Code 6.1.7.3), compatibility must be assured.

The design assessment is based on IMO Res. MSC.48(66) as amended by IMO Res. MSC.207(81), IMO Res. MSC.218(82), IMO Res. MSC.272(85), IMO Res. MSC.320(89) and IMO Res. MSC.481(102).

Production and installation testing shall be carried out according to IMO Res. MSC. 81.(70), part 2 as amended.

For the rescue boat equipped with engine with power of more than 36.8 kW there shall be a hardware means limiting the maximum speed of the boat to maximum 20 knots (ref. MarED Approved Recommendation LSA-075).

### Type Examination documentation

Drawings	Date
S-521974 Rev.0 - Lamination drawing hull Midget 530 MKII (waterjet)	2004-09-15
A-510812 Rev.3 - Lamination drawing liner Midget 530 (MKI and MKII) (waterjet)	2012-09-06
D-500551 Rev.0 - Control table for laminate thickness hull Midget 530 (MKI and MKII) (waterjet)	2004-11-05
D-500552 Rev.0 - Control table for laminate thickness liner Midget 530 (MKI and MKII) (waterjet)	2004-11-05
R-506104 Rev.1 - Buoyancy calculation Midget 530 MKII	2013-02-23
R-506105 Rev.1 - Buoyancy calculation Midget 530 MKII	2013-02-23
S-510672 Rev.1 - Moulding of steering console and lifting structure Midget 530 (MKI and MKII) (waterjet)	2004-09-30
R-507178 Rev.1 - Details of console bolting and suspension Midget 530 (MKI and MKII) (waterjet)	2013-02-20
D-500587 Rev.0 - Control table for laminate thickness in console Midget 530 (MKI and MKII)	2005-01-27
S-524860 Rev.0 - Lamination drawing hull Midget 530 MKII Propeller	2010-07-21
S-524861 Rev.0 - Lamination drawing liner Midget 530 MKII Propeller	2010-07-21
A-500647 Rev.2 - Painter release hook, 4.6T9	2022-11-09
R-501031 Rev.2 - Midget-530 MKII Rescue Boat Seating Plan (8 persons)	2020-07-30
A-505707 Rev.2 - Midget-530, fuel tank, 57 liters	2004-10-14
A-509257 Rev.0 - Midget-530, Fuel tank, 35 liters (NLDE-4)	2010-08-13
E-501421 Rev.8 - Electrical circuit diagram Midget-530 MKII waterjet/Merlin-615 waterjet	2025-01-16
E-503164 Rev.3 - Electrical circuit diagram Midget-530 MKII propeller	2020-07-28
E-503199 Rev.3 - Electrical circuit diagram Midget-530 MKII with NLDE engine	2025-01-16
G-500475 Rev.7 - Midget-530 MKII Propeller, K4-D FM, Rescue boat	
G-500687 Rev.4 - Midget-530 MKII Waterjet, K4-D FM, Rescue boat	2019-05-22
<b>Calculations</b>	
CAL-0352 Rev.2 - Midget-530 MKII, Calculation report	2023-05-04
<b>Reports</b>	<b>Date</b>
REP-1149 Rev.0 - Midget-530 Prototype Test report witnessed by BV	2012-11-09
REP-1154 Rev.0 - Midget-530 Prototype Test report witnessed by BV	2015-09-01.
REP-1208 Rev.0 - Midget-530 Prototype Test Report witnessed by DNV	2003.03-31
REP-1209 Rev.0 - Midget-530 Prototype Test Report witnessed by DNV	2005-04-26
REP-1210 Rev.0 - Midget-530 Prototype Test Report witnessed by BV	2007-12-26.
REP-1221 Rev.0 - Midget-530 Prototype Test Report witnessed by ABS	2007-05-29.
REP-1357 Rev.0 - Midget-530 Prototype Test Report witnessed by BV	2007-05-29
REP-1358 Rev.0 - Midget-530 Prototype Test Report witnessed by BV	2012-11-09
REP-1716 Rev.0 - Midget-530 Prototype Test Report witnessed by BV	2010-07-04
REP-1761 Rev.0 - Midget-530 Prototype Test Report witnessed by DNVGL	2020-01-17
REP-1509 Rev.0 - Test report No. 2018-07-M012 from Shanghai R&D Center for Polymer Materials, Fire test for laminate iaw IMO MSC/Circ.1006	2018-07-30
REP-1218 Rev.0 - Test report No. 2016-05-M002 from Shanghai R&D Center for Polymer Materials, Fire test for laminate iaw IMO MSC/Circ.1006	2016-06-21
REP-1510 Rev.0 - Test report No. 2018-07-M011 from Shanghai R&D Center for Polymer Materials, Fire test for laminate iaw IMO MSC/Circ.1006	2018-07-30
REP-1511 Rev.0 - Test report No. 2018-07-M014 from Shanghai R&D Center for Polymer Materials, Fire test for laminate iaw IMO MSC/Circ.1006	2018-07-27

REP-1512 Rev.0 - Test report No. 2018-07-M013 from Shanghai R&D Center for Polymer Materials, Fire test for laminate iaw IMO MSC/Circ.1006	2018-07-30
REP-1219 Rev.0 – Test report No. 2016-06-0435 from Shanghai R&D Center for Polymer Materials, Fire test for laminate iaw IMO MSC/Circ.1006	2016-06-02
<b>Other</b>	<b>Date</b>
MAN-0338 Rev. 9 - Midget-530 Waterjet, K4-D / K4-D-FM, Operation and maintenance manual	2024-11-13
MAN-0349 Rev. 5 - Midget-530 MKII Propeller, K4-D / K4-D-FM, Operation and maintenance manual	2024-11-13
Document Index No. 12415 Rev.0 - Components data sheets and approval certificates	2017-05-27
Document Index No. 23387 Rev. A - Alternative Polyester Resin ETERSET 2929PT	2021-03-01

### Tests carried out

Tests are documented in accordance with recommendation on testing of Lifesaving Appliances, IMO Res. MSC.81(70) Part 1, as amended by IMO Res. MSC.226(82), IMO Res. MSC.274(85), IMO Res. MSC.321(89), IMO Res. MSC.323(89), IMO MSC/Circ.1006 and IMO Res. MSC.481(102) – Type II.

### Marking of product

The product is to be indelibly marked with name and address of manufacturer, boat model and serial number, month and year of manufacturer, number of persons approved for and operational restrictions, if any, according to LSA code item 4.4.1.2 and the MED Mark of Conformity (see page 1).

List of rescue boat equipment to be posted in the boat.