

EC-TYPE EXAMINATION CERTIFICATE

Application of: Council Directive 96/98/EC of 20 December 1996 on Marine Equipment as amended by directive 2014/93/EU, issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Directorate. 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 Fast rescue boats**with type designation(s)
MP 660 Springer

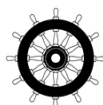
Issued to

Nils S. Hansen Mek. Verksted AS
HARØY, Norway

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

Annex A.1, item No. A.1/1.20 and Annex B, Module B in the Directive. SOLAS 1974 as amended, Reg. III/4 & III/34. IMO Res.MSC.48(66) as amended.

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

Høvik, 2015-11-16
for **DNV GL AS**This Certificate is valid until
2020-11-15Notified Body No.: **0575**-----
Vidar Dolonen
Head of DepartmentDNV GL local office:
Ålesund-----
Helge Bjørnara
Surveyor

Product description

MP 660 Springer, rigid fast rescue boat with single point lifting hook and inflatable bag for re-righting after capsizing. The rigid fast rescue boat comes in two versions:

- Twin outboard engine
- Inboard engine w/ waterjet

Twin outboard version:

Length:	6.45 m
Breadth:	2.72 m
Depth (moulded, amidships):	0.59 m
Weight of boat, fully equipped:	1860 kg
Weight of boat, fully manned (82.5 kg):	3100 kg

Inboard engine w/ waterjet version:

Length:	6.60 m
Breadth:	2.72 m
Depth:	0.32 m
Weight of boat, fully equipped:	2260 kg
Weight of boat, fully manned 82.5 kg:	3500 kg

Inboard engine w/ waterjet version:

Hook manufacturer and type:	HMK 3.5 or 5.0, offload
Hook SWL:	3500 or 5000 kg
Hull material:	Aluminium

Propulsion system:	Twin outboard engine
Engine manufacturer and type:	2 x Yamaha 90A
Bollard pull (measured for 2 x 66 kW engine):	7.8 kN

Propulsion system:	Inboard engine w/ waterjet
Engine manufacturer and type:	Yanmar 4LHA-STP
	Volvo Penta D3-170
	Volvo Penta D3-200
	Volvo Penta D3-220

Waterjet types:	Hamilton 213
	Vosper PP90

Bollard pull (measured for 147 kW engine):	6.6 kN
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Application/Limitation

Approved engine power:	177 kW for Yanmar 4LHA-STP
	125 kW for Volvo Penta D3-170
	147 kW for Volvo Penta D3-200
	162 kW for Volvo Penta D3-220
	2 x 66 kW for Yamaha 90A

Number of persons, max:	15
Maximum load of persons 82.5 kg:	1238 kg

- Fast 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 fast rescue boat is fitted with a release hook without on-load release capabilities, in accordance with LSA Code 4.4.7.6.9. 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 normal equipment of the fast rescue boat to include a hands-free and watertight VHF radio communication set, in addition to the ones required on the bridge.
- 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) and IMO Res. MSC.320(89).
- Production and installation testing shall be carried out according to IMO Res. MSC.81(70), Part 2.

Type Examination documentation

Basis for approval:

MP 660 Springer

- Technical documentation for Springer MP 660
- Technical documentation for Springer MP 741 2000-10-10
- List of drawings 2000-07-04
- Sales spec. for RB, MP-Design Type MP 741 Springer, no 940622
- Letter of type approval from NMD 2000-01-27
- Prototype test reports approved by NMD 1994-12-07

MP 660 Springer Twin Outboard

- Technical documentation for Springer MP 660 Twin Outboard
- Sales spec. for Rescue Boat, MP-Design Type MP 660 Springer Twin Outboard 2002-01-04
- Approved drawings as detailed in our letter 2003-03-31

Additional documentation for new lifting frame:

- Doc. No. MP-2013-02, Rev.0, Strength analysis of lifting frame 2013-09-25
- Doc. No. MP-2013-06, Rev.0, Strength analysis of offshore lifting of FRB hull and attachment 2013-11-01
- Dwg. No. E01-080, Rev.A, Lifting Frame NORSOK 5T MP Boats 2013-09-13
- Dwg. No. 741.002, Rev.A, 741 Springer Construction Plan 2013-09-12
- Dwg. No. -, Rev.-, Seating Plan – 15 Pers. 2013-11-05

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) and IMO Res. MSC.323(89).

Marking of product

The product is to be indelibly marked with name of manufacturer, type designation, dimensions and date of manufacture, according to LSA code item 4.4.1.2 and the mark of conformity. In addition, the manufacturer shall affix the Mark of Conformity followed by DNV Notified Body No. and the two last digits of the production year.

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

Mark of Conformity

The manufacturer is allowed to affix the Mark of Conformity according to Article 11 in the Council Directive 96/98/EC on Marine Equipment and shall issue a Declaration of Conformity, only when the module D or F of Annex B in the same directive is fully complied with.

Module D: The quality system for production and testing shall be approved by the Notified Body.

Module F: Compliance of the products to type as described in this EC Type-Examination Certificate must be verified by the Notified Body who also shall issue a Certificate of Conformity.