Certificate No:
TAM00001AV

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Diesel Engine

with type designation(s)
Mercury/Mariner 90

Issued to
Mercury Marine - Division of Brunswick
Fond Du Lac, WI, USA

is found to comply with
SOLAS 74 as amended, Regulation III/4, III/34 & X/3 and LSA Code
Transport Canada Life Saving Equipment Regulations, TP14475 and TP14612

Application :

outboard propulsion engine for rescue boats and fast rescue boats.
Rating see page two

Issued at **Høvik** on **2023-08-14**
This Certificate is valid until **2028-08-13**.
DNV local unit: **Houston Offshore Services**

Approval Engineer: **Dag Harald Williksen**

for **DNV**

Olaf Drews
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.

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.

Job Id: **262.1-039200-1**
Certificate No: **TAM00001AV**

Product description
4-cylinder, 4-stroke, water cooled, gasoline fuelled outboard engine with electronic controlled fuel injection (EFI)

Engine model	Mercury/Mariner 90	
	Std and CT	SeaPro
Rating, [kW]	67	
Corresponding speed, [rpm]	6000	5500

Place of Production
Mercury Marine, Fond du Lac, WI, Plant 15

Application/Limitation
The engines are approved for use as propulsion engines for:
- Rescue boats and fast rescue boats

This certificate covers the design of the outboard engine. Owner is responsible to cover installation-specific Canadian requirements referred to in the Life Saving Equipment Regulations and TP14475E.

Type Approval documentation
Reference to MED-B approval folder MEDB0000822/344.1-012188
2.1L &_3.0L engine spec and drawings
8M0145552, eng Operation and maintenance manuals in English
8M0127435, fra Operation and maintenance manuals in French
Applicable Mercury outboard brochures

Tests carried out
Passed the following tests for rescue boats propulsion and fast rescue boats propulsion as follows:

- Visual inspection, LSA Code 1.2, 4.4.6; MSC.81(70) 1 /7.7
- Power test, LSA Code 5.1.1.8; MSC.81(70) 1 /7.7.2 - 7.7.3
- Water drench test, LSA Code 5.1.1.8; MSC.81(70) 1 /7.7.4
- Hot start test, LSA Code 5.1.1.8; MSC.81(70) 1 /7.7.5
- Manual start test, LSA Code 5.1.1.8; MSC.81(70) 1 /7.7.6 - 7.7.7
- Cold start test, LSA Code 4.4.6.2; MSC.81(70) 1 /7.7.8 - 7.7.9
- Engine-out-of-water test, LSA Code 4.4.6.2; MSC.81(70) 1 /7.7.10
- Extra test for outboard engine for fast rescue boats, MSC/Circ. 809, 4.1.8

Rescue boat tests were carried out on the 2013-11-28/29 at Brunswick EMEAs premises in Verviers, Belgium and witnessed by personal from DNV Antwerp office, engine type tested 115 Hp, model 1115F23BE, serial no 1B968584, report no BME/JLA 2013/27/11, DNV report ANT13-1391-2.

Marking of product
The product is to be indelibly marked with name, address of manufacturer and type designation.

Periodical assessment
This certificate is only valid if required periodical assessments are carried out with satisfactory results. To check the validity of this certificate, please look it up in https://approvalfinder.dnvgl.com

For retention of the Type Approval, a DNV Surveyor shall perform periodical assessment after two years (+/- 90 days) and after 3.5 years (+/- 90 days) to verify that the conditions for the approval are complied with. Reference is made to DNV-CP-0338.

END OF CERTIFICATE