



**VIKING
NORSAFE**
Boats and davits

Enterprise No.: NO940411696
www.VIKING-life.com

Mako-655 Waterjet



TECHNICAL SPECIFICATION

VIKING Norsafe Life-Saving Equipment Norway AS
Tybakken 90, N-4818 Faervik
P.O. Box 115, N-4852 Faervik
Arendal, Norway

VIKING Project No.: TBA

VIKING Doc. No.: TSB-0022

Rev. Date: 16.06.2020

Rev. No: 12

Tel: +47 37 05 85 00

Fax: +47 37 05 85 01

E-mail: VIKING-Norsafe@VIKING-life.com

1. REGULATION AND CERTIFICATION

Applicable rules and regulations	In accordance with IMO/ SOLAS requirements, LSA Code and European Council Directive 2014/90/EU on Marine Equipment (MED)
Certificate	MED
Other certificate	Class certificate or flag acceptance on request

2. BOAT SPECIFICATION

2.1. GENERAL BOAT

Type	Fast Rescue Boat
Model	Mako-655 Waterjet
Length overall	6,75 m
Length on fender	6,55 m
Beam	2,70 m
Height	2,26 m
Capacity, SOLAS minimum	6 Persons
Capacity, SOLAS maximum	15 Persons
Weight, fully equipped	2.062 kg
Davit load, with 6 pers @82,5 kg	2.557kg (Davit load with 15pers @82,5kg = 3.300kg)
Color	Orange (RAL 2004)
Operation temperature:	-20°C till +40°C
Hull/deck material	Fire retardent glass reinforced polyester (GRP)
Buoyancy material	Polyurethane foam
Self-righting frame	Fire retardent glass reinforced polyester (GRP)
Bollards/towing	Aft bollard P & S, painter hook in bow
Steering	Hydraulic
Fender	Polyethylene closed cell foam fender with double skinned heavy duty PVC cover
Deck	Self-bailing
Console cover	PVC
Loose equipment	According to SOLAS

Fast rescue boat designed and manufactured according to latest SOLAS requirements.

The rescue boat has excellent reliability, maneuverability, and sea keeping abilities in order to fulfil its prime function - to provide an effective means of search and recovery for persons missing at sea. Design and construction fulfil the need for reliable, low maintenance standby and operation. When installed with an approved davit, the boat fulfils the requirements for fast rescue boats on offshore installations and standby vessels, and is fully compliant with latest requirements for Ro-Ro ships.

The boat is further designed to serve the patrol, boarding and inspection role, with deck layout allowing the crew to operate efficiently and comfortably over long time periods. The layout and performance of the boat ensures optimum diving support, survey and work boat duties.



VIKING Project No.: TBA

VIKING Doc. No.: TSB-0022

Rev. Date: 16.06.2020

Rev. No: 12

Two longitudinal bulkheads along the length of the hull, transverse bulkheads and spray rails provide structural strength. The hull is a fully planning, deep-V type with transom, giving optimum sea keeping ability at all speeds in all sea conditions.

The space between hull and inner liner is filled with polyurethane buoyancy foam. If damaged below the waterline, the boat will float at safe level in fully flooded and loaded condition. The boat is self-bailing through two drainage outlets at the stern. The deck has an anti-slip surface. Lifelines are fitted on the gunwale.

A heavy duty fender protects the hull by absorbing impacts. The foam fender is protected by a double skin of reinforced PVC, secured with sail tracks at gunwale and chine level.

Lifting is made by a single point arrangement. An approved Off Load release hook, with connection ring for davit hook, is installed on top of the console reinforced with backing plates and structural connections down to each side in the console and bolted in to the deck. There is a painter hook in bow and bollards on each side astern.

The boat has been designed to provide a protected and safe working environment for the crew, engine and equipment. Console with a large spacious engine room makes service and maintenance easier and more comfortable. All electrical equipment are placed inside the console.

2.2 PROPULSION AND PERFORMANCE

Propulsion	Inboard diesel engine with waterjet
Engine	Bukh R210J
Waterjet	Alamarin-230
Gearbox	N/A
Speed, with 3 persons	Approx. 30 knots
Bollard pull	Approx. 550 kg
Waterjet protection frame	Aluminium
Instrument gauges	Fuel level, tachometer, (subject to standard engine type), audible alarm for temperature and oil pressure
Engine cooling	Engine fresh water cooling with header tank and heat exchanger as primary circuit. Secondary sea water circuit cooling heat exchanger with supply from waterjet
Engine freshwater flushing	Connectors and valves installed for flushing of secondary circuit
Exhaust system	Seawater cooled
Fuel tank	160 L, Seawater resistant Aluminium
Fuel valves	Shut-off on top of fuel tank and tank drain

Typical data – subject to variation in engine installation and specified equipment. Engines of at least 117kW can be installed. Please note that boat weight, bollard pull, speed and personnel capacity are only for reference and may vary with several factors.



2.3. ELECTRIC SYSTEM AND NAVIGATION

Electric power supply to boat	42 VAC male and female connectors included (Power delivered from VIKING Norsafe davit starter cabinet)
Electric system voltage	12 VDC
Cables type	Marine type, flame retardant halogen free
Position light	12 VDC on top of self-righting frame
Search light	12 VDC handheld
Navigation lights	Port and starboard
Compass light	12 VDC inside compass
Bilge pump	Electrical and manual
Alternator	For 12 VDC system
Batteries	Main and secondary start battery
Switches	Main switch / Secondary switch / Electrical consumers switches

2.4. DOCUMENTATION

Technical specification boat	According to contract specification
General arrangement drawing	According to contract specification
Seating plan	According to contract specification
Electrical system drawing	According to contract specification
Product certificate	According to contract specification
Lubrication oil chart	VIKING standard
Spare parts list	VIKING standard
Operation & Maintenance man.	VIKING standard
Lifting arrangement drawing	VIKING standard
SOLAS loose equipment list	VIKING standard
Preservation & storage procedure	VIKING standard

3. PACKING

Packing

Secured in transport cradle



VIKING
NORSAFE

VIKING Project No.: TBA

VIKING Doc. No.: TSB-0022

Rev. Date: 16.06.2020

Rev. No: 12

4. OPTIONS

Note: Some options influence weight and performance, some option combinations may be incompatible. Maximum certified weight must not be exceeded.

marking means to be supplied by maker, marking means not supplied by maker.

RELEASE SYSTEM

Release hook K4-D (Height 1.99m)



5. YARD SUPPLY / RESPONSIBILITY

Transport	Depending on contract
Fuel	Marine diesel oil according to engine manual specification
Connection cable	From starter cabinet to rescue boat supply plug



**VIKING
NORSAFE**

VIKING Project No.: TBA

VIKING Doc. No.: TSB-0022

Rev. Date: 16.06.2020

Rev. No: 12