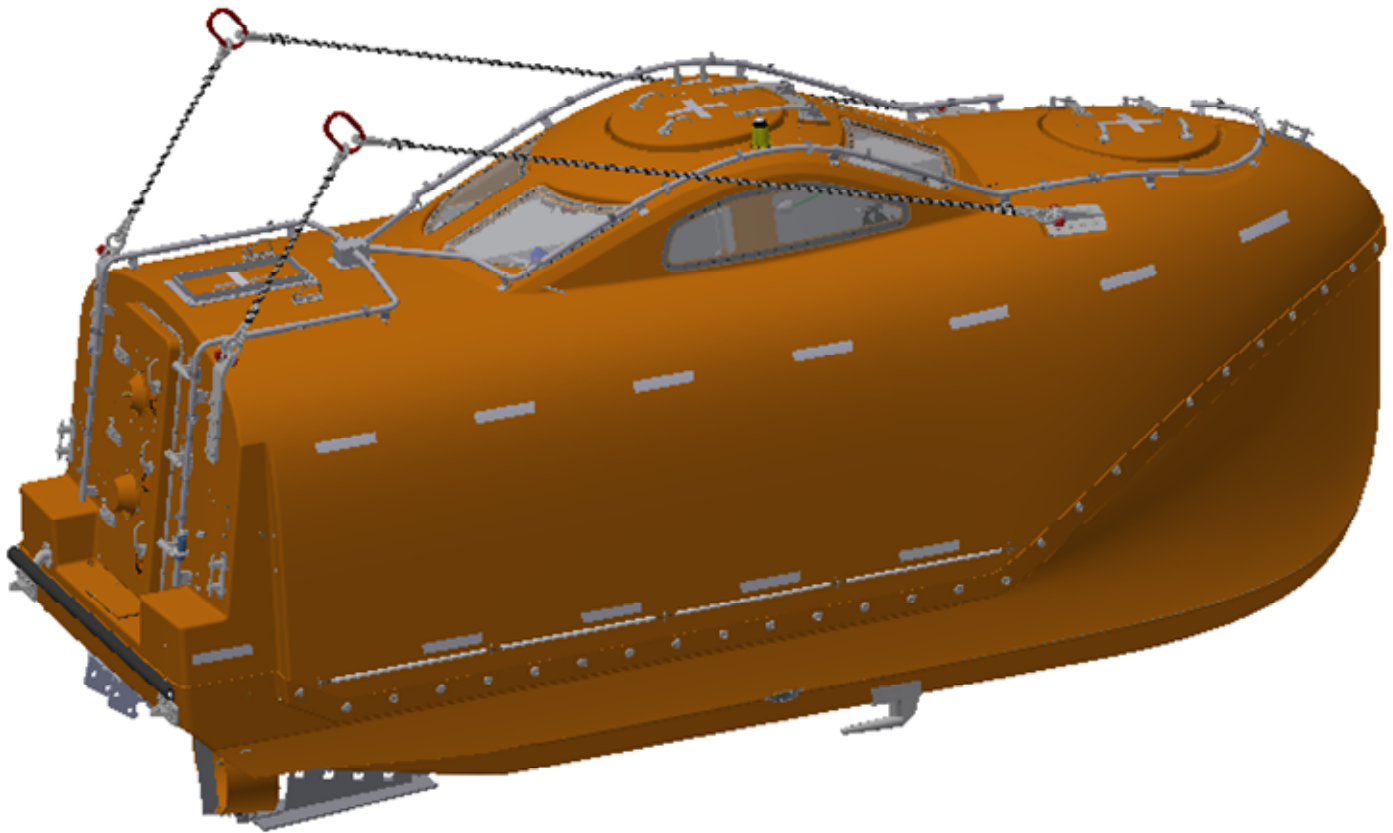




**VIKING
NORSAFE**
Boats and davits

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

GES-21 MKI - Free Fall Lifeboat



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-0071

Rev. Date: 14.11.2019

Rev. No: 4

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	Totally Enclosed Free fall lifeboat
Model	GES-21 MKI T
Length overall	6,55 m
Beam	2,64 m
Height	3,15 m
Depth	1,25m
Maximum installation height[m]	20,0 m
Launching ramp length and angle	7,4 m, 35°
Capacity, maximum	26 persons
Weight, fully equipped	4.155 kg
Davit load, with 26 pers @82,5 kg	6.300 kg
Color external	Orange (RAL 2004)
Color internal	Grey (RAL 7032)
Operation temperature:	-15°C to +40°C (other range on request)
Hull/deck material	Fire retardant glass reinforced polyester (GRP)
Buoyancy material	Polyurethane foam
Windows	Polycarbonate
Bollards/towing	Aft bollard port and starboard side, bollard in bow
Steering	Hydraulic
Fender	Rubber fender at stern of boat
Hatches	1 aft door / 1 top hatch / 1 front top hatch
Seat belt type	4-point adjustable seat harness
Sprinkler pipe system (tank ver.)	Seawater resistant aluminum piping, stainless steel deflectors
Sprinkler pump (tank ver.)	Belt connection to engine
Sprinkler shut-off valve (tank ver.)	Ball valve 4"
Compressed air system (tank ver.)	3 x 50L air bottles, air regulator and high-pressure hoses
Under/overpressure valves	Automatic spring loaded on canopy
Loose equipment	According to SOLAS



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Totally Enclosed Free Fall Lifeboat designed and manufactured according to latest SOLAS requirements.

The lifeboat provides a secure and protected means of escape for persons onboard vessels or platforms.

The lifeboat is for skid launch by a specific davit. Design and construction fulfil the need for reliable, low maintenance standby and operation.

The space between hull and hull liner, and between deck and deck liner, is filled with polyurethane buoyancy form. In fully flooded and loaded condition, the lifeboat is self-righting. If damaged below the waterline, buoyancy is sufficient to float the boat at safe level.

Free fall release is activated by either of two, fully independent, hydraulic pump arrangements both located on the transom. Primary release pump control handle is located at the helmsman's position. Secondary release pump is located within reach of one of the aft seating positions. During launch, the hydraulic pump lifts the aft of the boat until the hook disengages the securing bar on the davit.

The boat is equipped with lifting sling to allow retrieval of the boat with a crew of three persons after launch.

Embarkation is through the aft door. Seats are positioned on each side of the central aisle. All seats are anatomically shaped and angled, rear facing and fitted with a 4-point harness to provide optimum safety and comfort during free fall launch.

There is a forward hatch on top of the canopy and one at the helmsman's position.

The lifeboat is equipped with hydraulic steering. A steering nozzle gives optimum maneuverability and increased bollard pull. The steering position is at the aft of the boat.

2.2 PROPULSION AND PERFORMANCE

Propulsion	Diesel engine with gearbox, shaft, propeller and propeller nozzle
Engine	NLDE-3(380J-3), 20,6 kW
Gearbox	ZF12M
Propeller	Brass, 18 inches
Propeller nozzle	GRP
Speed	Minimum 6 knots in calm water
Bollard pull, approx.	475 kg
Instrument gauges:	Fuel level, Tachometer (subject to standard engine type), audible alarm for temperature and oil pressure
Cooling system	Fresh water cooling with header tank and external cooling loop
Exhaust system	Dry exhaust with water lock to prevent water ingress
Fuel tank	175L, Seawater resistant aluminum
Fuel valves	Shut off on top of fuel tank & tank drain

Typical data – subject to variation in engine installation and specified equipment. Engines of at least 20,6kW can be installed. Please note that boat weight and bollard pull are only for reference and may vary with several factors.



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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.

GENERAL BOAT	
Spare parts for 1 year, 2 years, 5 years or 10 years	<input type="checkbox"/>
Sprinkler system in stainless steel	<input type="checkbox"/>
Remote sprinkler operation	<input type="checkbox"/>
De-humidifier	<input type="checkbox"/>
HVAC connection	<input type="checkbox"/>
SIM MK II free fall simulation system	<input type="checkbox"/>
Compressed air filling hose	<input type="checkbox"/>
Labelling in dual language	<input type="checkbox"/>
Plastic shrink wrap	<input type="checkbox"/>
Handrails in stainless steel	<input type="checkbox"/>
Winterization package / cold climate heating / defroster	<input type="checkbox"/>
All hatches hinges stainless	<input type="checkbox"/>
Other options on request	<input type="checkbox"/>
PROPULSION AND PERFORMANCE	
Oil pressure instruments	<input type="checkbox"/>
Water temp. instruments	<input type="checkbox"/>
Rudder pos. instruments	<input type="checkbox"/>
Spring starter	<input type="checkbox"/>
Dual filter	<input type="checkbox"/>
Stainless steel fuel tank	<input type="checkbox"/>
Alternative engine with equal or higher power	<input type="checkbox"/>
ELECTRIC SYSTEM AND NAVIGATION	
AIS system	<input type="checkbox"/>
12V outlet in console	<input type="checkbox"/>
Ex plug for ext. power supply	<input type="checkbox"/>
Ex cover over marking light	<input type="checkbox"/>
EX battery box	<input type="checkbox"/>
Bilge water detector in engine room	<input type="checkbox"/>
Crew finder	<input type="checkbox"/>
Echo sounder	<input type="checkbox"/>
Cabin heater	<input type="checkbox"/>
Engine heater	<input type="checkbox"/>
EPIRB	<input type="checkbox"/>



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Fire detector in engine room	<input type="checkbox"/>
GPS equipment	<input type="checkbox"/>
HID or LED searchlights	<input type="checkbox"/>
LED illumination in engine room, instr. panel or cabin	<input type="checkbox"/>
Loose el. cable for ext. power supply	<input type="checkbox"/>
Electrical system according to NMD requirements	<input type="checkbox"/>
SART	<input type="checkbox"/>
VHF equipment	<input type="checkbox"/>
Transformer	<input type="checkbox"/>

DOCUMENTATION

Factory acceptance test procedure	<input type="checkbox"/>
Factory acceptance test report	<input type="checkbox"/>
Inspection and test plan	<input type="checkbox"/>
Shipping, handling and lifting procedure	<input type="checkbox"/>
Packing & unpacking procedure	<input type="checkbox"/>
Commissioning procedure	<input type="checkbox"/>
TAG list	<input type="checkbox"/>
Fuel system drawing	<input type="checkbox"/>
Steering system drawing	<input type="checkbox"/>
Engine, propulsion, exhaust and cooling system drawing	<input type="checkbox"/>
Bilge system drawing	<input type="checkbox"/>
Release system drawing	<input type="checkbox"/>
Noise test report	<input type="checkbox"/>
Weight and COG datasheet	<input type="checkbox"/>
Weighing report/certificate	<input type="checkbox"/>
Other drawings/documentation/procedures	<input type="checkbox"/>

5. POSSIBLE DAVIT SOLUTIONS

The VIKING Norsafe GES-21 MKI fits below davit models and variants.

HD-21
Others on request.

6. YARD SUPPLY / RESPONSIBILITY

Transport	Depending on contract
Fuel	Marine diesel oil according to engine manual specification
Installation of 42VAC Supply cable	From starter cabinet to lifeboat supply plug
Testing according to regulation after installation onboard	
Preservation and maintenance after boat arrived yard and installed	



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