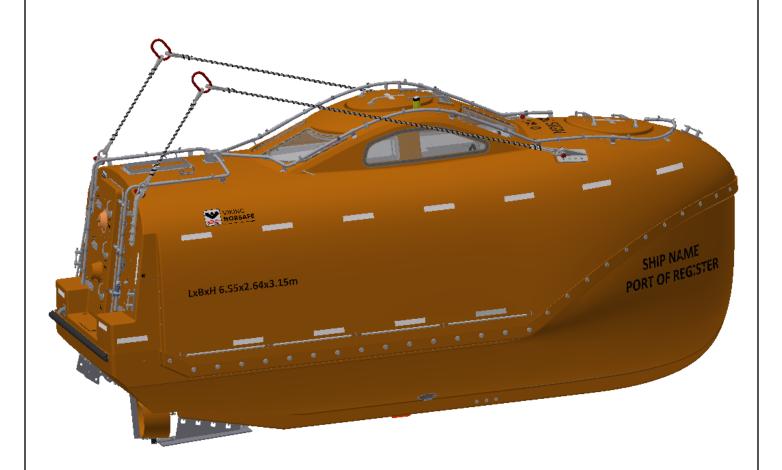




# **GES-21 MKI - Free Fall Lifeboat**



**TECHNICAL SPECIFICATION** 

#### **VIKING Norsafe Life-Saving Equipment Norway AS**

Tybakken 90, N-4818 Faervik P.O. Box 115, N-4852 Faervik Arendal, Norway

Tel: +47 37 05 85 00 Fax: +47 37 05 85 01

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

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## 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

Туре	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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#### 2.3. LIFTING/RELEASE SYSTEM

Release system	Hydraulic model, HRS-10
Lifting arrangement	Lifting slings with 2 lifting links for lifting boat into davit in 35 deg.
Hang off system	SIM MKII plates, that also can be used for testing release system

#### 2.4. 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 canopy
Search light	12 VDC handheld
Cabin lights	12 VDC
Compass light	12 VDC inside compass
Bilge pump	Manual
Alternator	For 12 VDC system
Batteries	Main and secondary start battery
Switches	Main switch / Secondary switch / Electrical consumers switches
42VAC Supply cable(15m)	From starter cabinet to lifeboat supply plug

#### 2.5. 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
Recommended spare parts list	VIKING standard
Operation & Maintenance man.	VIKING standard
Sprinkler system drawing	VIKING standard (tank version only)
Compressed air system drawing	VIKING standard (tank version only)
Lifting arrangement drawing	VIKING standard
Simulated freefall drawing	VIKING standard
SOLAS loose equipment list	VIKING standard
Preservation & storage procedure	VIKING standard

## 3. PACKING

Packing Secured in transport cradle



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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.

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

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



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Fire detector in engine room	
GPS equipment	
HID or LED searchlights	
LED illumination in engine room, instr. panel or cabin	
Loose el. cable for ext. power supply	
Electrical system according to NMD requirements	
SART	
VHF equipment	
Transformer	
DOCUMENTATION	
DOCUMENTATION	
Factory acceptance test procedure	
Factory acceptance test report	
Inspection and test plan	
Shipping, handling and lifting procedure	
Packing & unpacking procedure	
Commissioning procedure	
TAG list	
Fuel system drawing	
Steering system drawing	
Engine, propulsion, exhaust and cooling system drawing	
Bilge system drawing	
Release system drawing	
Noise test report	
Weight and COG datasheet	
Weighing report/certificate	
Other drawings/documentation/procedures	

### **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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