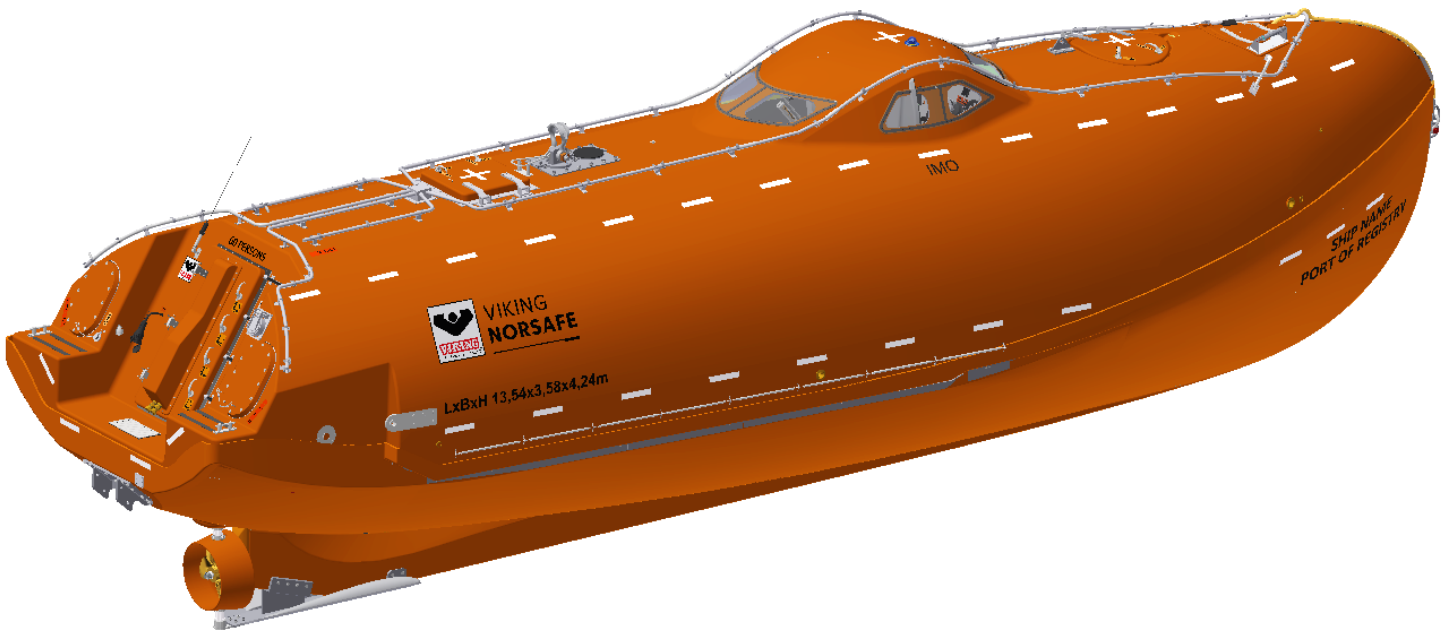




**VIKING  
NORSAFE**  
Boats and davits

Enterprise No.: NO940411696  
[www.VIKING-life.com](http://www.VIKING-life.com)

## GES-45 NO – Free-Fall Lifeboat



### TECHNICAL SPECIFICATION

**VIKING Norsafe Life-Saving Equipment Norway AS**  
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VIKING Project No.: TBA  
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VIKING Doc. No.: TSB-0211  
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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), DNV-ST-E406.
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-45 NO
Length overall	13,59 m
Beam	3,58 m
Height	4,24 m
Maximum installation height [m]	40 m
Launching ramp length and angle	13,54 m, 35°
Capacity, maximum	60 persons
Weight, fully equipped	15.212 kg
Davit load, with 60 pers@82,5 kg	20.162 kg
Davit load, with 60 pers@100 kg	21.212 kg
Color external	Orange (RAL 2004)
Color internal	Grey (RAL 7032)
Operation temperature:	-20°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	None
Hatches	1 aft door 1 top hatch 1 front top hatch
Seat belt type	5-point adjustable seat harness
Sprinkler pipe system (tank ver.)	Seawater resistant aluminum piping, stainless steel deflectors
Sprinkler pump (tank ver.)	Shaft driven from engine
Sprinkler shut-off valve (tank ver.)	Butterfly valve 4"
Compressed air system (tank ver.)	4 x 50L air bottles, air regulator and high-pressure hoses
Under/overpressure valves	Automatic spring loaded overpressure valve on aft door, Automatic under pressure mechanism on aft door
Loose equipment	According to SOLAS
Remote towline release system	Release handle in cockpit and additional release handle on outside port side of lifeboat



**HVAC connection****HVAC connection on aft of lifeboat****Remote sprinkler system activator**

Handle for opening of sprinkler water intake valve from cockpit

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 foam. 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 and secondary release pump control handles are located at the helmsman's positions in cockpit. 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 single point lifting plug (SPLP) 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 single point lifting plug aft on the top of the canopy.

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

## 2.2 PROPULSION AND PERFORMANCE

<b>Propulsion</b>	<b>Diesel engine with gearbox, shaft, propeller and propeller nozzle</b>
<b>Engine</b>	Steyr 286E40, 205 kW
<b>Gearbox</b>	ZF 63 (for Steyr 286E40 engine)
<b>Propeller</b>	Bronze, 23 inches in diameter
<b>Propeller nozzle</b>	GRP
<b>Speed</b>	Minimum 6 knots in calm water
<b>Bollard pull, approx.</b>	17450 N (for Steyr 286E40 engine)
<b>Instrument gauges:</b>	Tachometer, Fuel level, Battery level, Oil pressure with audible alarm and Water temperature



<b>Cooling system</b>	Engine freshwater cooling with header tank and heat exchanger as primary circuit. Secondary sea water circuit cooling heat exchanger with supply from ballast tank by belt driven water pump.
<b>Exhaust system</b>	Dry exhaust with water lock to prevent water ingress
<b>Fuel tank</b>	200 L, Seawater resistant aluminum
<b>Fuel valves</b>	Shut off on top of fuel tank & tank drain

*Typical data – subject to variation in engine installation and specified equipment. Please note that boat weight and bollard pull are only for reference and may vary with several factors.*

### 2.3. LIFTING/RELEASE SYSTEM

<b>Release system</b>	<b>Hydraulic model, HRS-30</b>
<b>Lifting arrangement</b>	Single point lifting plug with lifting sling for lifting boat into davit in 35 deg.
<b>Hang-off system</b>	Turnbuckles
<b>Simulated free-fall system</b>	SIM MKII extension plates

### 2.4. ELECTRIC SYSTEM AND NAVIGATION

<b>Electric power supply to boat</b>	<b>42 VAC EX male and female connectors included (Power delivered from VIKING davit starter cabinet)</b>
<b>Electric system voltage</b>	12 VDC
<b>Cables type</b>	Marine type, flame retardant halogen free
<b>Position light</b>	12 VDC on top of canopy
<b>Search light</b>	12 VDC handheld
<b>Cabin lights</b>	12 VDC
<b>Compass light</b>	12 VDC inside compass
<b>Bilge pump</b>	2 x Manual, 1 x electric
<b>Alternator</b>	For 12 VDC system
<b>Batteries</b>	Main and secondary start battery, 2 x consumption batteries
<b>Switches</b>	Main switch / Secondary switch / Electrical consumption switches
<b>Rudder indicator</b>	12 VDC
<b>VHF</b>	Fixed VHF with headset

### 2.5. DOCUMENTATION

<b>Technical specification boat</b>	<b>According to contract specification</b>
<b>General arrangement drawing</b>	According to contract specification
<b>Seating plan</b>	According to contract specification
<b>Electrical system drawing</b>	According to contract specification
<b>Product certificate</b>	According to contract specification
<b>Lubrication oil chart</b>	VIKING standard
<b>Spare parts list</b>	VIKING standard
<b>Operation &amp; Maintenance man.</b>	VIKING standard
<b>Sprinkler system P&amp;ID drawing</b>	VIKING standard



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<b>Compressed air system P&amp;ID drawing</b>	VIKING standard
<b>Lifting instructions drawing</b>	VIKING standard
<b>SOLAS loose equipment list</b>	VIKING standard
<b>Preservation &amp; storage procedure</b>	VIKING standard

### 3. PACKING

<b>Packing</b>	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.*

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

#### GENERAL BOAT

<b>Spare parts for 1 year, 2 years, 5 years or 10 years</b>	<input type="checkbox"/>
<b>Sprinkler system in stainless steel</b>	<input type="checkbox"/>
<b>Test connection for testing of sprinkler system in davit</b>	<input type="checkbox"/>
<b>De-humidifier</b>	<input type="checkbox"/>
<b>Aft door with two gas springs</b>	<input type="checkbox"/>
<b>Compressed air filling hose</b>	<input type="checkbox"/>
<b>Labelling in dual language</b>	<input type="checkbox"/>
<b>Plastic shrink wrap</b>	<input type="checkbox"/>
<b>Winterization package / cold climate heating / defroster / heat tracing of hatches and aft door</b>	<input type="checkbox"/>
<b>Other options on request</b>	<input type="checkbox"/>

#### PROPULSION AND PERFORMANCE

<b>Stainless steel fuel tank</b>	<input type="checkbox"/>
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#### ELECTRIC SYSTEM AND NAVIGATION

<b>AIS system</b>	<input type="checkbox"/>
<b>12V outlet in console</b>	<input type="checkbox"/>
<b>Ex plug for ext. power supply</b>	<input type="checkbox"/>
<b>Crew finder</b>	<input type="checkbox"/>
<b>Echo sounder</b>	<input type="checkbox"/>
<b>Cabin heater</b>	<input type="checkbox"/>
<b>EPIRB</b>	<input type="checkbox"/>
<b>Fire detector in engine room</b>	<input type="checkbox"/>
<b>GPS equipment</b>	<input type="checkbox"/>
<b>HID or LED searchlights</b>	<input type="checkbox"/>
<b>LED illumination in engine room, instr. panel or cabin</b>	<input type="checkbox"/>



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Loose el. cable for ext. power supply	<input type="checkbox"/>
<b>SART</b>	<input type="checkbox"/>
Portable VHF radio	<input type="checkbox"/>
Air quality mitigation control	<input type="checkbox"/>
UHF radio	<input type="checkbox"/>
PAGA system	<input type="checkbox"/>
<b>DOCUMENTATION</b>	
Factory acceptance test procedure	<input type="checkbox"/>
Factory acceptance test report	<input type="checkbox"/>
Inspection and test plan	<input type="checkbox"/>
Shipping and handling procedure	<input type="checkbox"/>
Packing & unpacking procedure	<input type="checkbox"/>
Commissioning procedure	<input type="checkbox"/>
TAG list	<input type="checkbox"/>
Fuel system P&ID drawing	<input type="checkbox"/>
Steering system P&ID drawing	<input type="checkbox"/>
Bilge and ballast system P&ID drawing	<input type="checkbox"/>
Release system P&ID 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-45 NO fits below davit models and variants.

**DAVIT** **HD-45 / SW-45**

Others on request.

## 6. YARD SUPPLY / RESPONSIBILITY

Transport (depending on contract)

Marine diesel fuel according to engine manual specification

Installation of 42 VAC 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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