Freefall Lifeboat 490 DC (type JY-FN-4.9)

Specifications:

Overall length: 4,90 (meters)
Height: 3,10 (meters)
Overall breadth: 2,40 (meters)
Depth: 0,86 (meters)
Max persons: 16
Weight boat: 2500 (kilogram)
Weight with 16 persons and equipment as lifeboat: 3963 (kilogram)
Certified drop height: 16 m
Propulsion type: Propeller
Engine type: BUKH DV29 RME
Speed: 6 (knots)

Length of ramp: 5.90 mtr

General:

This fully enclosed free fall lifeboat dry cargo version is equipped with an inboard diesel engine.

Used material:

The boat is made out of fireproof glass fiber reinforced polyester, also known as GRP. The main parts are laminated independent moulds. To assure buoyancy and strength, foam is injected into certain areas between the inner liner and the hull. Longitude bulkheads and transverse bulkheads, secure the strength of the hull. Extra strengthening is built in to the bow area to absorb the forces from water during diving.

The boat is made with anti-skid on all walking surfaces, inside and outside. A fender made out of synthetic rubber is mounted on port and starboard side. Stainless steel screws connect this fender to the hull.

Color:
Hull outside: Gel coat resin with orange color.
Hull inside: painted in grey white color.

External steel parts quality: 316 L

Inside steel parts quality: 304

Up & down

The freefall hook is located at the stern of the boat. The release device is controlled by the helmsman. One set of emergency release system is provided to. The two systems operate independent of each other. The primary release device is located in the boat cabin next to the helmsman; the emergency release device is located next to the entrance door.

The hoisting and gravity lowering are operated by two double wire ropes attached to three lifting eyes mounted on top of the superstructure

The hook is crafted out of galvanized steel, with stainless steel as an option

Engine specifications:

Maker: BUKH
Model: DV29 RME
Type: Turbocharged, 4 stroke, 2 cylinders
Power: 29 hp (21.3 kW)
Fuel quality: BS 2869 Class A
Fuel consumption: 7,8 L/H
Fuel capacity: 180 ltr
Starting method: Electric starting/ emergency manual starting
Alternator: 14V, 50 Amp, 700 W
Starter: 12 V, 1,36 hp (1,0 kW)
Spare parts: One set
Transmission: Disengage able shaft coupling
Instrument panel:

- Electric start/stop
- Power indicator
- High cooling temperature alarm
- Low oil pressure alarm

Cooling: Fresh water and keel cooling system with anti-freeze liquid.

The engine is supplied with two independent starting batteries. It can be reached through a removable inspection cover, made out of fire retardant and heat-insulting material. The engine is installed with a silencer and exhaust pipe which is made out of stainless steel and is wrapped with heat-insulating material. The speed of the engine and the control of ahead and astern are all controlled through a cable by the helmsman from the helmsman's position.

Electrical Equipment:

The following electrical equipment is installed in the FFL:

- Two independent batteries of free maintenance type with capacity 90 AH. The batteries are stowed in a GRP container with a ventilation pipe led to the outside.

- Battery control switch
- CD4212.2 type charger connected with the Ladix cable system to the external power supply. Contacts are of quick release type.
- Canopy light
- Handheld search light
- Position indicating light
- Compass
- Switch panel with integrated fuses

The electric equipment in the LBT is built to IP 56 standard.

Fuel:

The fuel oil tank is made out of stainless or galvanized steel. The capacity of the fuel tank is sufficient to run the fully loaded lifeboat at 6 knots for a period of net less than 24 hours. The tank is also fitted with an exhaust outlet led to the outside of the boat.

Propeller and shaft

The shaft is crafted out of stainless steel; its couplings and support at the two ends are made out of bronze. The propeller is made out of nickel aluminum bronze and is protected by a GRP duct. All the parts and the propelling system are protected.

Steering system:

Steering can be achieved by turning a duct rudder that surrounds the propeller. This duct is made out of GRP and will also protect the propeller. The steering rod and its supports are made out of stainless steel. The duct rudder can be operated through a cable by the wheel from the helmsman's position. In case of failure of the steering flexible cable, the rudder may be directly controlled by a stainless emergency tiller this rudder is stowed close to the steering rod.

Fitting and equipment on lifeboat:

-	Release hook	1 pce
-	Painter release device operated from inside lifeboat	1 set
-	Fender (synthetic rubber)	1 set
-	Steering gear (push-pull type)	1 set
-	Ventilator (manual closing type when capsizing)	1 pce
-	Equipment according to SOLAS/LSA	1 set
-	Bouyant lifeline around the gunwall	2 pcs
-	Bilgepump – Manual	1 pce
-	Drain plug	1 pce

Identification:

The identification plate is fitted next to the helmsman's position. This identification plate describes the following: Type of boat, inspection mark, serial number, main dimensions number of persons, fully loaded weight, date of completion, name of manufacturer.

The ship's name, port of registry and number of persons are marked on port and starboard bow. The call sign and boat number are located on top of the enclosure. Retro-reflective tapes are fitted on top, on the sides and on the stern of the enclosure. There are symbols of life-saving appliances provided in the vicinity of the helmsman's position and nearby each storage compartment.

Rescue equipment:

A full set of rescue equipment will be delivered including the lifeboat following class approval

Transport cradle:

Each lifeboat will be delivered with a steel boat cradle

Documentation:

The following documents are submitted after delivery:

- Product specifications
- General arrangement drawings
- User instruction manuals
- Instructions for on-board maintenance of lifeboat

Warranty:
The warranty period is normally limited to max. 18 months from delivery of equipment of 12 months from delivery of vessel to owner, whichever comes first.

Regulations:

The (name of the freefall lifeboat) fully complies with the latest SOLAS requirements and LSA Code. The (name of the freefall lifeboat) will be certified in accordance with the European Council Directive 96/98 EC on Marine Equipment (M.E.D).