Lifeboat – Totally Enclosed – Tanker version - 850 TV(type JY-QFN-8.50)

Specifications:

Length:	8,50	(meters)
Height:	3,10	(meters)
Width:	3,10	(meters)
Max persons:	63	(82,5 kilogram)
Weight boat:		(kilogram)
Weight davit system:	9942,5	(kilogram)
Hook distance:	7,50	(meter*)
Propulsion type:	Propeller	
Engine type:	BUKH DV29 RME	
Speed:	6	(knots)
Towing force:	3,0 kN	

Totally Enclosed Lifeboat (TELB) is designed and built according to SOLAS 83, Amendment 96, LSA Code.

General Description:

This totally enclosed Lifeboat (TELB) dry cargo version, is equipped with an inboard diesel engine.

Hull and super structure:

The boat is made out of fire-retardant 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 waves during sailing. 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.

External steel parts quality:	316 L
Inside steel parts quality:	304

Color:

Hull outside:	Gel coat resin with orange colour.
Hull inside:	Painted in grey white colour.

Hook system:

FF Hook system: JXN-1B

Lifting Arrangement:

The lifeboat is equipped with certified, according to Resolution MSC.320 and MSC.321, on-load release hooks (stainless steel) fore and aft. The hooks will be released simultaneously through the flexible cables controlled from the helmsman's position. Hooks can be released either, when the boat is waterborne or when there is no load on the hooks. In emergency the hooks can be released during load by breaking a safety glass and remove the safety pin (as per SOLAS and LSA Code 4.4.7.6).

Engine specifications:

Maker:	BUKH
Model:	DV29 RME
Type:	Direct injection, 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:	14 V, 50 Amp, 700 W
Starter:	12 V, 1,36 hp (1,0 kW)
Optional engine's:	ZHENJIANG SIYANG 380J-3 or YANMAR 3JH30A

Spare parts and tools of one set with contents of:

- Adjustable spanner
- Adjustable plier
- Double spanner 8mm x 10mm, 13mm x 17mm , 19mm x 22mm, 24mm x 27mm
- Screwdriver
- Allen key , 10mm , 8mm , 5mm , 4mm
- Oil can 0,3ltr
- 1 X V- belt
- 1 x fuel filter insert
- 1 x lube oil filter

Transmission: Disengage able shaft coupling

- 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.
- Closed 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.

Operation:

The main operation of the boat is carried out from the helmsman's position behind the console system fitted mid-ship.
The following equipment is fitted on the console:

- 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 heath –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.

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 aluminium 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 flexible steering cable, the rudder may be directly controlled by a stainless emergency tiller which is stowed close to the steering rod.

Equipment:

The equipment required by LSA regulation is provided.

Electrical equipment:

Electrical Equipment:
The following electrical equipment is installed in the free fall lifeboat:

- Two separate batteries of free maintenance type with 90 AH. The batteries are stowed in a GRP container with a ventilation pipe, led to the outside.
- Main battery switch
- CD4212.2, 42V type charger connected with Ladix cable system to external power supply. Contacts are of quick release type.
- Canopy light, Hand held searchlight, marking light
- Compass with compass light
- Switch panel with integrated fuses

The electric equipment within the lifeboat is built to IP56 standard.

Standard equipment:

- Release hook system
- Painter release hook (operated from inside lifeboat)
- Skates (synthetic rubber)
- Steering gear (push-pull system)
- Buoyant lifeline (port. and starboard side)
- Bilge pump (manual)
- Drain plug
- Ventilation caps (manual operated)
- Safety belts (each seat)
- SOLAS equipment standard equipment according LSA code

Water-spraying system:

The lifeboat has been completed with a pump, which has been connected with a belt to the main engine. A clutch-control handle system will operate the function of the pump. A number of sprinklers will spray the lifeboat with water.

Air supply system:

The lifeboat is fitted with an air supply system to provide life support for the passengers in the enclosed lifeboat. Further the available air will provide also the combustion air for the engine when fire and smoke is around the lifeboat Air supply capacity is for 10 minutes at full speed with the total number of persons. The available cylinders will be controlled by a valve system close to the helmsmen.

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.

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, or 12 months from delivery to vessel or owner.

Regulations:

The (lifeboat 850X DC (Type JY-QFP-850) fully complies with the latest SOLAS requirements and LSA Code.
The (Lifeboat 850X DC (Type JY-QFP-850) will be certified and approved by various classification bureaus (on request) and European Council Directive 96/98 EC on Marine Equipment (M.E.D).
1996 amendments to the International Convention for the safety of Life at Sea 1974 and LSA Code.MSC.218(82), MSC.226(82), MSC.272(85).

Optional:

- VHF Radio
- Engine heather
- Cabin heather
- EPIRB (Emergency position indicating radio beacon)
- SART (Search and rescue transponder)
- Electrical bilge pump
- Bow thruster
- Intercom system
- Nadiro drop- in ball hook system

LIFESAVING

Standard equipment according to SOLAS:

Item name :	Qty :	Remarks:
Rowing oar	2	wood and length 2.8m
Clutch for oar	2	fitted on hull (stainless steel)
Boat hook		Length 2,5m (wood)
Buoyant bailer	1	with lanyard (plastic)
Bucket	2	with lanyard (plastic)
Survival manual	1	English/ flag state language
Magnetic compass	1	fitted on hull (with illumination)
Sea anchor	1	-
Painter	2	synthetic rope (20mm Dia. .x 50m)
Hatchet	2	with lanyard (galv. Forced steel)
Fresh water		3ltr /person
Dipper		with lanyard (rustproof)
Drinking cup	1	with graduate (plastic)
Emerg. Food ration	-	10000 KJ/ Person
Rock. Parachute sign.	4	-
Hand flare	6	-
Buoyant smoke sign	2	-
Waterpr Elec. torch	1	with 1 spare bulb and 1 set of spare batteries
Daylight signal mirror	1	with instruction
Life saving sin.table	1	waterproof paper
Whistle	1	or equivalent (plastic)
First aid kit	1	1 set (in plastic waterproof container or bag)
Anti-seasickness medicine	-	12 doses / person
Seasickness bags	-	1 pcs / person
Jack knife	1	with lanyard
Tin opener	3	galv. .steel
Buoyant rescue quoit	2	plastic polypropylene rope (4mm dia.x30m)
Manual pump	1	fitted on hull
Fishing tackle	1	-
Portable extinguisher	1	dry powder type (oil extinguishing)
Search light	1	portable type fitted on hull
Radar Reflector	1	-
Thermal protective aid	-	15% of lifeboat capacity
Rain water tank	1	5 liter capacity
Boarding ladder	1	wood synthetic rope