

## Lifeboat - Freefall - Dry cargo - 680 DC (type JY-FN-6.8)

### Specifications:

|                        |               |            |
|------------------------|---------------|------------|
| Length:                | 6,80          | (meters)   |
| Height:                | 3,22          | (meters)   |
| Width:                 | 2,70          | (meters)   |
| Max persons:           | 31            |            |
| Weight boat:           | 3672          | (kilogram) |
| Weight davit system:   | 6439,5        | (kilogram) |
| Certified drop height: | 22,00         | (meters)   |
| Propulsion type:       | Propeller     |            |
| Engine type:           | BUKH DV29 RME |            |
| Towing force:          | 2,8kN         |            |
| Speed:                 | 6             | (knots)    |
| Length of ramp:        | 8,20          | (meters)   |

### General:

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

### Used materials:

The boat is made out of fire-retardant glass fiber reinforced polyester, also known as GRP. The main parts are laminated independent molds. 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.

|                               |       |
|-------------------------------|-------|
| 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: JX-2

### Free-fall operations:

The free-fall hook is located at the stern of the boat. The helmsman controls the release device. One set of emergency release system is also provided. 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:             | 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:       | 14V, 50 Amp, 700 W                           |
| Starter:          | 12 V, 1,36 hp (1,0 kW)                       |
| Optional engines: | 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-insulating 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
- 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-insulating 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.

## 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 independent batteries of maintenance free type with capacity 90Ah. The batteries are stowed in a GRP compartment with a ventilation pipe led to the outside.
- Main battery control switch
- CD4212.2 type battery charger, connected with the Ladix cable system for external power supply. Contacts are of quick release type.
- Canopy light
- Hand held searchlight
- Marking/positioning light
- Compass with illumination
- Switch panel with integrated fuses

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

## 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 (Free fall lifeboat 680DC ,JY-FN 6.8) fully complies with the latest SOLAS requirements and LSA Code and resolution MSC.274(85) and MSC.272(85)

The (Free fall lifeboat 680DC ,JY-FN 6.8) 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 heater
- Cabin heater
- EPIRB (Emergency position indicating radio beacon)
- SART (Search and rescue transponder)
- Electrical bilge pump
- Bow thruster
- Intercom system

### Standard equipment according to SOLAS:

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