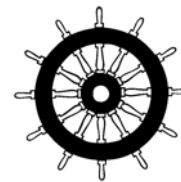




SPECIFICATION HYDRAULIC FENDER DAVIT FD - Series



A. General data:

- Drawing references : A-101664, A-101764, A-101907, A-102197
- Safe Working Load (SWL) : 25 kN up to approx. 150 kN per davit system
- Maximum system height : According drawing
- Lowering height : To be advised, standard supply is with 25,00 meter cable
- Trim/list conditions : 05°/10°
- Lowering : Hydraulically, speed approx. 5-10 m/min
- Hoisting : Hydraulically, speed approx. 5-10 m/min

B. General description:

The NED-DECK MARINE fender davits have been designed for long time operation under adverse and extreme conditions in a highly corrosive marine environment.

The FD-series is a freestanding deck mounted davit consisting of two davit arms each supported by a base frame, hydraulic power pack unit and two hydraulically operated winches (one per davit arm).

The system has been designed especially for safe and efficient launching/recovery of a (pneumatic) fender even under severe and adverse weather conditions.

Optionally the FD-series can be provided with a constant wire tensioning system and hydro-pneumatic shock absorbers.

All system functions are hydraulically controlled and actuated from the davit's HPU or operating console which is placed on deck near the railing (depending on FD-series).

Lowering and recovery of the fender is realised by means of two independent hydraulic driven winches. These winches are actuated by means of a hand control valve (joy stick) or from the HPU (depending on FD-series). In case this valve is not operated, it will automatically return into '0' position and the multi-disc brakes of the winch become activated and the hoisting or lowering motion stops immediately (dead man's brake).

In case of a power failure or malfunctioning of the electric system, hoisting can also be done manually by means of ratchet handles.

C. Main Components:

Davit arms

The davit system consists of two davit arms of a box welded construction each supported by a base frame.

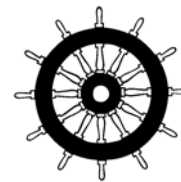
The davit arms are provided with wire rope sheaves, winch foundations and all necessary provisions for fastening of relevant accessories, such as cylinders and shock absorbers.

Base frames

The davit system consists of two base frames, each supporting a davit arm. These base frames are built up from hollow sections and steel plates to a stiff rigid frame in order to transfer the system forces to the deck structure.



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Hydraulic cylinders

Each davit set will be supplied with two high quality double acting hydraulic cylinders provided with dual over-centre valves. The cylinder rods are made of stainless steel (1.4057)

Winches

Each davit arm will be provided with an hydraulic driven winch consisting of the following main components:

- Winch frame
- Closed planetary gear casing;
- Built-on high pressure hydraulic motor
- Fail-safe multi disc brake (dead man's brake);
- Winch drum;
- Hand hoist unit.

Electric-Hydraulic power unit

Each davit set will be supplied with a sophisticated electric/hydraulic power pack unit which has been fully adjusted in our workshop guaranteeing easy installation onboard. This power unit consists of the following main components:

- Hydraulic tank provided with two (2) integrated hydraulic pumps, both driven by an electric motor and of which each pump is suitable to supply 100% of the total capacity;
 - ✓ Motor types : Squirrel cage induction motors, flange mounted,
 - ✓ Execution : Marine execution
 - ✓ Motor Bearings : Maintenance free, life-time greased
 - ✓ Ambient working temperature : Max. -20 - + >45 °C
 - ✓ Electric Power Supply : 380-400V/3ph/50Hz or 440-480V/3ph/60Hz
 - ✓ Enclosure : IP56 TEFC
 - ✓ Insulation class : H
 - ✓ Temperature rise class : F
 - ✓ Power consumption : Approx. kW depend on FD-series
 - ✓ Anti-condensation heater : 230V
- Electric Starter box provided with main switch, emergency stop button, anti-condensation heating (230V), "power-on" indicator, running signalling and extra terminal for remote indication and failure signalling indicators.
Colour of Switch board as per Owner's request.

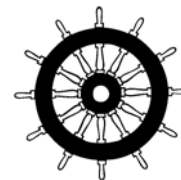
All external controls will be IP56 rated.

D. Hydraulic tubing/fittings:

The davit systems will be supplied Stainless steel tubes and normal fittings covered with DENZO tape.



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E. Accessories:

Each davit system can be supplied with the following accessories:

Wire ropes

One set galvanised non-rotating steel wire rope falls of sufficient length for lowering the boat into the water;

Shock absorbers

Hydro-pneumatic shock absorbers (one per davit arm)

Counter foundation/adapter

The davit will be delivered with a counter foundation/adapter (height = 600 mm) for welding onto the deck. This counter foundation will be supplied c/w bolts, nuts and washers (galvanised).

F. Conservation:

The steelwork will be shot blasted to SA 2,5 cleaned and coated with a 3-layer, customer to specify end color.

G. Option:

Operating console, depending on FD-series:

A stainless steel operating console which should be placed near the railing enabling the operator to have full view over the entire launching and hoisting procedure. From this console all system functions can be controlled.