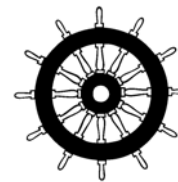




SPECIFICATION HYDRAULIC PIVOTING DAVIT PRH Series



1. General

The NED-DECK MARINE hydraulic pivoting davits have been designed for long time operation under adverse and extreme conditions in a highly corrosive marine environment. The hydraulic pivoting davits of the PRH series are so-called “plug-in and play units” all guaranteeing easy installation on board.

The PRH davit is a freestanding deck mounted davit consisting of a base frame, davit arm, cylinders, winch and hydraulic power pack unit.

The system has been designed to meet the latest IMO requirements and is suitable for safe and efficient launching and recovery of a fully manned fast rescue boat even under severe and adverse weather conditions (wind force 6 on the Beaufort-scale, in association with a significant wave height of at least 3 m).

The PRH series are all provided with a constant wire tensioning system and hydro-pneumatic shock absorber.

The launching procedure can be controlled in two (2) ways, i.e.:

1. From control stand (normal procedure for rescue operations);
2. From inside the rescue boat (emergency operations).

During normal operations, all system functions are hydraulically controlled and actuated from the davit's operating console which is placed on deck near the railing.

In case of an emergency, pivoting out the rescue boat from its stowed into launch position is realised by means of so-called “stored-power” obtained from an accumulator.

Lowering is realised by means of gravity.

Both motions, pivoting and lowering are controlled from within the rescue boat by means of remote control pull wires.

Recovery of the rescue boat is realised by means of the hydraulic driven winch.

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

Since the safe working load and outreach of the davit are normally determined by the size of the rescue boat, NED-DECK MARINE have chosen for a limited range of standard designs which can be adapted to some extent in order to meet individual and specific needs.

The PRH series meets the latest IMO/SOLAS requirements and recommendations on Ro-Ro Passenger ships, LSA Code and the European Council Directive 96/98 EC on Marine Equipment (M.E.D.).

2. Main Components:

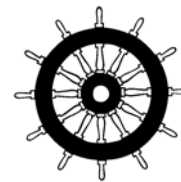
Base frame

The base frame is a welded steel construction, built up from hollow sections and steel plates to a stiff rigid frame in order to transfer the system forces to the deck structure.

Each frame is provided with all necessary provisions for fastening of relevant accessories such as hydraulic cylinders, power pack unit with starter box and accumulator.



SPECIFICATION HYDRAULIC PIVOTING DAVIT PRH Series



Davit arm

The davit arm is built up of hollow sections and steel plates and provided with all necessary provisions for fastening of relevant accessories such as hydraulic cylinders, winch foundation, sheaves and remote control parts.

For transportation reasons, the davit arm consists of a base part and an upper part which are easily built together by means of a hinge/flange connection.

The davit arm does also incorporate the boat chocks with D-fenders.

Hydraulic cylinders

Each davit 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)

Winch

The davit will be supplied with a hydraulic driven winch built onto the davit arm.

The winch is a standard item and consists of the following main components:

- Winch frame
- Closed planetary gear casing;
- Built-on high pressure hydraulic motor
- Fail-safe multi disc brake;
- Grooved winch drum with separate section for remote control wire;
- Hand hoist unit.

Electric-Hydraulic power unit

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

- Hydraulic tank with integrated hydraulic pump driven by an electric motor;
- Electric Starter box provided with main switch, emergency stop button, "power-on" indicator, and failure signalling indicators.
- Nitrogen pre-charged accumulator.

Operating console

Each davit will be supplied with 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.

3. Accessories:

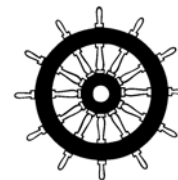
Each davit system will be supplied with the following accessories:

Wire rope

- Galvanised non-rotating steel wire rope provided with thimble at one end, and of sufficient length for lowering the rescue boat into the water;



SPECIFICATION HYDRAULIC PIVOTING DAVIT PRH Series



Remote control parts

- Stainless steel remote control wires of sufficient length for both pivoting out and lowering;
- Handgrips for operating from within the rescue boat;
- Remote control sheaves;
- Loose items such as wire rope clips and shackles;

Lashing system

- In order to secure the rescue boat in stowed position, each davit system will be supplied with an adequate lashing system consisting of two lashing straps with ratchet spanners.

Ladder

- For easy access of rescue boat in stowed position, each davit system will be supplied with a galvanised ladder which should be welded on deck by yard.

4. Conservation

Unless agreed otherwise, all steelwork will be shot blasted to SA 2,5 and coated with one layer of 2-component epoxy primer of brand **SIGMA**. Dry film thickness 60-80 microns.
This conservation is not suitable for outdoor storage for a long period of time.

5. Optional accessories

The following accessories are to be seen as non-standard but can be supplied optionally:

- Anti-pendulum device (docking head);
- Painter line boom.
- Additional outer chocks to support the rescue boat.