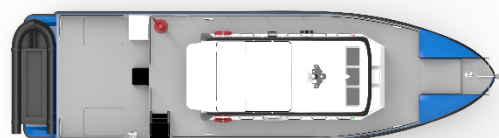




PRO:ZERO 18M ASV



PRO:ZERO

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PRO:ZERO – 18M ASV- SPECIFICATION

DIMENSIONS:

Length Overall, approx.: 18,90 m
Beam Overall (with fender): 5,20 m
Draught, approx. (full load, IPS drives): 1,20m
Displacement Light weight approx.: 16.500 kg
Displacement Full load approx.: 21.500 kg
Crew: 3

OPERATIONAL FEATURES:

Speed (max): +30 kt
Speed (cruise): +21 kt

DESCRIPTION:

The boat has been built to meet all relevant requirements from Danish regulatory agencies.
Hull scantling built according to DNV HSLC Code.

HULL, DECK AND SUPERSTRUCTURE:

The boat is made of carbon fiber as sandwich construction with PVC as a core material. This core material act as a natural buoyancy reserve material, due to its lightweight and zero water-absorption. Moreover, the sandwich construction avoids the use of internal stiffeners, increasing the usable internal space and offers natural insulation capability, improving the comfort in the cabin and manned compartments. The hull will be painted in a dark blue colour, the superstructure in white, and the deck in grey, as shown on the drawings.

FENDER:

The fender is made of hard PUR rubber and has a D profile with a dimension of approx. 100 x 100 mm. The fender is glued to the hull and protects the hull all around and the aft platform. Additionally, on the starboard side, there are 10 stripes with the same D profile for extra protection.

DECK:

Stepped deck with three levels: fore deck, main deck and aft working deck. Deck has an anti-skid surface finishing.

The working space on deck comprises approx. 17 m² in the aft deck plus 10 m² on the aft of the main deck, behind the cabin.

Flush main engine hatches.

Strong points in the main deck to attach loads or non-permanent modular equipment.

Decks are self-bailing.

6 x mooring cleats.

Black aluminium railings.

Heating in rails and deck surrounding the wheel house

Aft platform with ladder for boat access from the water and MOB operations. For man-over-board incidents there is a rail-mounted semi-rigid rescue net (Dacon Rescue Scoop) operated by the deck crane.

1 x Hydraulic marine crane with winch (500kg, 36m 6mm wire), mod. FASSI F50A.0.24, with a lifting capacity of 355 kg at 9,15 m reach and 590 kg at 6,45 m reach, installed on the aft main deck, port side.

1 x Power block with sheave and warping head for hauling, mod Hydema KB-04. 400kg capacity, installed on the aft deck, starboard side.

Service hatch with raised coaming for access to engine room.

Hatch with raised coaming for access to cargo hold in the bow.

Storage box in front of the cabin.

Raised transfer platform on the main deck aft starboard side built in black anodized aluminium.

There is a secondary steering station outside in the aft starboard side of the cabin in a recess with Volvo Penta "Joystick Docking", alarm panel and bow thruster control.

1 x Hydraulic anchor winch installed in the fore deck, type Maxwell.

1 x Flushing outlet with quick coupling on the aft deck, connected to a flushing pump. Feed with water from the fresh water tank.

CABIN & COCKPIT:

The cabin is connected to the hull with anti-vibration supports that reduce the noise inside the cabin.

Comfort seats for the crew and inspectors.

1 x Weathertight door in the starboard side leading to wheelhouse.

1 x Weathertight door in the aft leading to the changing room.

Steering console in the starboard side of the wheelhouse.

Work desk, according to GA.

Chart table behind the steering console, with lamp with white and red light.

1 x fixed mounted GSM telephone adjacent to chart table (with external antenna mounted on the roof)

Staircase to accommodation area below deck

Windshield wipers, heavy duty type, with interval relay.

Defreeze system for windows with hot air blowers.

Electrical heated windows in the front and foremost sides.

Solar blinds for all the windows in the wheelhouse.

All windows are glued into the structure.

4 x 240 V double outlets in the wheelhouse

1 x 12 V outlet in the steering console.

Led lights in cabin and cockpit.

Comfort insulation in the cabin and heating system.

Changing room in the aft of the cabin of approx. 2 x 3 m with washbasin, washing machine with dryer function and 2 cabinets of approx. 600 x 750 (w x l), with one of them fitted with a heater for drying of wet clothes.

3 x 240 V double outlet in the changing room.

1 x 240 V double outlet on aft deck

ACCOMODATION:

The accommodation below main deck includes:

3 x Cabins, each of them double. With a bunk bed of 2,10 x 0,80 m and a Pullman bed on top. Additionally, each cabin includes a cabinet with min. 600 l capacity.

Each cabin is fitted additionally with a work light, a network connection and 2 x 240 V outlet, 1 main light and 1 bed light. All the three cabins have a window with shutter blind for natural light.

Two of three cabins have a dedicated toilet with WC and washbasin.

1 x Toilet, with WC, washbasin and separate shower, with door and lowered shower plate of 0,80 X 0,80m. 1 x 240 V double outlet.

1 x mess room – kitchen, with a U shaped bench with capacity for 5 persons and a table. There is additionally a 42" TV with satellite connection, a book shelf and a cabinet for crockery storage, together with 4 x 240 V double outlets. The kitchen is placed in the SB front corner and includes a sink, a microwave, fridge, dishwasher and a stove. There is 1 x 240 V double outlet at the kitchen. In the passage from the staircase to the mess room one freezer and one washing machine with dryer function will be located.

Wheelhouse, changing room and all accommodation has comfort insulation with mineral wool and a heating, ventilation and air

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conditioning system of proper size and capacity. System installed is based on a central system with air handlers in each compartment.
1 secondary heating system, type Eberspracher, comprising of 2 x Hydronic units. One unit for heating of 1 x D6, 1 x D3 and preferably the hot water termo bottle, and one unit for heating of 1 x D6, 15 kVA generator and accommodation.

SECURITY EQUIPMENT:

1 x manual bilge pump
4 x electrical bilge pump, manual start and with high water level alarm in the engine room, accommodation space, cargo space and fore peak.
1 x fire extinguisher system in engine room.
1 x fire extinguisher system in accommodation area
2 x 14 persons SOLAS class B approved life rafts.
Additionally, all necessary safety equipment to meet the requirements from the "Forskrift om redningsredskaper på skip"

TECHNICAL:

ENGINES, PROPULSION, STEERING & MANOUVERING:

2 x IPS 600 units, each of them comprising:
1 x IPS1 Drive system
1 x Volvo Penta D6 engines rated at 320 kw

1 x Volvo Penta D3 rated at 140 kw
1 x Hydraulic pump, run by the D3 engine and for feeding the fan, crane, line hauler, winch and bow thruster.
1 x 630 DWDI lifting fan
1 x 15 kVA diesel generator, supplying 240V 1phase el. power.
1 x Hydraulic bow thruster, approx. 9,5kW
1 x Flushing pump for seawater.
2 x 240V double outlet in engine room
Integrated heating / AC unit.
Collecting basin/tray under all engines to control oil spill
Collecting basin/tray under all water separator filters

TANKS:

1 x 1.400l Structural diesel tanks with hatch and filling protection.
1 x 1.400l Fresh water tank
1 x 1.000l Grey water tank
1 x 200l Black water tank
1 x 100l Hot water termo bottle.

NAVIGATION & ELECTRONIC EQUIPMENT:

2 x joy-stick operated searchlight on cabin roof (1 to be controlled from inspector's desk), boarding light, fixed bow lights, manual operated navigational lights.
4 x floodlight on the forward and aft deck,
Electric engine controls. Complete engine instruments with RPM, temperature, oil pressure and voltmeter for start batteries supplied by engine manufacturer.
7" Volvo Penta display and VP "Joystick Driving" also enabling DPS (with SC-30 GPS gyro)
Fuel gauge + gauges for all tanks
Control panel for all lighting and other electrical equipment.
1 x 24" Furuno DRS4D-NXR radome RADAR antenna
1 x 15" screen for CCTV cameras and FLIR
1 x GMDSS A1 system, including 1 Sailor 6222 VHF with DSC class A and 2 handheld GMDSS VHF.
1 x EPIRB

1 x AIS SART
1 x Furuno GP-33 GPS
1 x Furuno NavPilot 711C Autopilot system with Volvo Penta IPS gateway
1 x Furuno DFF1 Echosounder module with Airmar B260 transducer
1 x Furuno FA-170 class A AIS
1 x Sailor 6210 VHF at the inspector's desk.
3 x CCTV camera on the aft and fore deck and engine room
1 x Anti robbery alarm system.
1 x Satellite TV antenna usable in high latitudes (up to N71°)
1 x Internet WiFi system.

Additionally, all necessary safety equipment to meet the requirements from regulations and pertinent authorities.

The engine room will have fire protection insulation according to regulations. Additional there is a separate technical compartment in the foremost part of the engine room, damping the sound towards the accommodation space.

ELECTRICAL SYSTEM & LIGHTING:

All electrical wiring in marine cable. Shore power with control lamp, marked fuses, earth connection and 40 m shore cable.
Isolation transformer with earth plate for protection of galvanic corrosion.
24V DC and 240 V AC electrical system w/separate locker for fuses (24V system and 240V system)
Main switches with separate battery systems for start, navigation and consumption. Battery charger with indicator.

DELIVERY:

All boats are launched, tested and calibrated and has gone through a scrupulous quality control at the yard in Denmark.
Delivery, hand over, test drive and technical review with customer at yard in Denmark. All boats are delivered with a complete owner's manual.

GENERAL:

The boat is built as a standard according to the technical specification and our general quality standard. The specification is valid when being printed. Details in construction, design and equipment can be changed as a result of the experience from the use of the boats. The quality and the equipment standard, however, are equivalent at least to this specification. Photographs may contain items that are extra equipment.

subject to change without notice, 06-01-2017