# **PRO:ZERO BOATS**



Military - Police - Work



# REMOTE CONTROLED WORKBOAT



We can provide the ProZero series, delivered with a system that makes the vessels autonomous and remote controlled.

The system can be embedded into a wide variety of boats in the ProZero series, making them self-piloting, increasing productivity and keeping personnel safe from potential harm.

At the current time Tuco Marine Group offers the system in the:

Prozero DCW 9 m Arctic workboat ProZero DCW 15 m ROV Support vessel ProZero 11 m Patrol Vessel ProZero 11 m Pulling drone

Sea Machines Robotics provides technology, which safely replaces human crews with unmanned systems. The autonomous control system and Unmanned workboats provide the ability to perform repetitive and quantifiable marine tasks more reliable when compared to direct human control, therefore improving the quality of operations."

The new system, called RC NXT, can be incorporated into an existing or newly build ProZero model. With the RX NXT installed in the boat, it can be controlled wirelessly from shore or from a mother vessel.

The Command System, provides PLC-based wireless control of the workboat and is well suited for day-vessel operations such as workboats, tugs, and launches operating within 1000 m of the pilot.

The Autonomous Navigation System, uses vesselbased sensors and proprietary algorithms to give the boat a degree of self-awareness, enabling her to efficiently self-motor from point-to-point while avoiding active and passive obstacles or collaborate in tandem with another vessel.





This daughter craft has both aft and fore deck accessed through doors in the cabin.

The unique ProZero system with a flexible attached cabin reducing both noise and vibrations from hull and engines.

The design of the ProZero cabin ensure a huge amount of daylight, this also improve the personal comfort. Benefits by being significantly lighter than market average is lower fuel consumption.

# PRO:ZERO 10.0m DCW

Design: 2014 | 5000-03-06 Length overall: 10,85m Beam overall: 3,85m Daft (full load): 0,75m

Engines: Double inboard diesel

Length, Overall: 10,85 m

Beam Overall (with fender): 3,85 m Draught (lightweight), approx.: 0,65 m Draft (full load, hull), approx.: 0,75 m

Height above waterline (mast top), approx.: 4,04 m Height keel-mast top (transport), approx.: 4,79 m

Displacement Light weight approx. (d=0.65 m): 5.100 kg Displacement Full load approx. (d=0.75 m): 7.000 kg

Maximum capacity: 12 persons

Maximum Load: 500 kg

### **OPERATIONAL FEATURES:**

Speed (max): +30 kt Speed (cruise): 20 kt Fuel capacity: 600 l

### **HULL, DECK AND SUPERSTRUCTURE:**

The boat is made of a combination of glass- and carbon fibber as sandwich construction with PVC as core material. This core material act as a natural buoyancy reserve material, due to its ightweight and zero water-absorption. Moreover, the sandwich construction avoids the use of internal stiffeners, increasing the usable internal space and offers a natural insulation capability, improving the comfort in the cabin and manned compartments.

### **FENDER:**

The fender is constructed of closed cell polyethylene foam. Not deflating with solid core that cannot lose buoyancy or absorb water. Damage is strictly cosmetic keeping crew safe. Fender system absorbs major impacts and retains integrity and shape. ProZero fender's profile gives substantially more interior room than a comparable RIB.

### **DECK:**

Deck and cabin are self-bailing.

Benches for additional passengers in fwd deck.

Forward storage for mooring equipment

4 x mooring bites.

Aft platform over the water jets

4 x lifting points in the hull sides.

### **CABIN & COCKPIT:**

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

Hinged door in the aft and front of the cabin. Hatch to access the mast.

Double hatch in cabin floor / main deck to access the engine room for service and maintenance.

Windshield wiper with interval relay.

Defreeze system for windows with hot air blowers.

Led lights in cabin and cockpit.

Chart table and lamp with white and red light.

Comfort insulation in the cabin. Air conditioning and heating system.

### **ENGINES, PROPULSION, STEERING & MANOUVERING:**

2 x inboard diesel engines

2 x water iets

### TANKS:

2 x independent 300 litre diesel tank with hatch and filling protection.

### **ELECTRICAL SYSTEM & LIGHTING:**

All electrical wiring in marine cable.

Shore power with control lamp, marked fuses, earth connection and 20 m shore cable.

12-volt electrical system

Main switches with separate battery systems for start, navigation and consumption.

Battery charger with indicator

2 x searchlight on cabin roof, manual operated

Navigational lights.

2 x floodlight on the working aft deck

#### **NAVIGATION & ELECTRONIC EQUIPMENT:**

Electric engine controls. Complete engine instruments with RPM, temperature, oil pressure and voltmeter for start batteries supplied by engine manufacturer.

Fuel gauge.

Control panel for all lighting and other electrical equipment.

1 x magnetic Compass

1 x GPS

1 x portable VHF

### **SECURITY EQUIPMENT:**

- 1 x manual bilge pump
- 2 x electrical emergency pump in bilge, manual start, in the bilge and in the engine room
- 2 x high water level alarm in bilge and engine room.
- 4 x portable fire extinguishers
- 1 x automatic fire extinguisher system in engine room.
- 1 x medical First Aid box

### **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.

# PRO:ZERO 8.0m FRB- NAVY RIB



This police multipurpose vessel is designed as a platform that can fulfill patrol and custom duties.

Benefits by being significantly lighter than market average is lower fuel consumption.

Supporting the great and proven sailing capabilities

# PRO:ZERO 8.0m FRB

Design: 2014 | 5000-01-05 Length overall: 8,14m

Beam overall: 2,84m Daft (full load): 0,58m

Engines: Single inboard diesel

Length, Overall: 8,14 m Length hull: 7.35 m

Beam Overall (with fender): 2,84 m Beam (without fender): 2,34 m Draught (lightweight): 0,47 m Draft (full load, hull): 0,58 m

Freeboard Amidships(full load): 660 mm Freeboard –Bow (full load): 980 mm

Height above waterline (console roof): 2,56 m Height keel-console (roof folded, transport): 2,62 m Displacement Light weight aprox. (d=0.45 m): 1.800 kg Displacement Full load aprox. (d=0.56 m): 3.000 kg

Crew: 2

Capacity: 6 Passengers Maximum Load: 720 kg

# **OPERATIONAL FEATURES:**

Speed (max): 45 kt Speed (cruise): 30 kt Range: 170 nm @ 28 kt

# **HULL, DECK AND SUPERSTRUCTURE:**

The boat is made of a combination of glass- and carbon fibber as sandwich construction with PVC as core material. This core material act as a natural buoyancy reserve material, due to its lightweight and zero water-absorption.

**FENDER:** The fender is constructed of closed cell polyethylene foam. Not deflating with solid core that cannot lose buoyancy or absorb water. Damage is strictly cosmetic, keeping the crew safe. ProZero fenders profile gives substantially more interior room than a comparable RIB.

### **DECK:**

Self bailing deck.

Aft platform in level with the main deck.

Open transom (with security rope line between railings).

Low profile hinged engine cover with assist gas struts.

Large working area in the aft deck.

Multiple storage spaces, above and below deck.

4 x mooring bites.

Foldable towing strongpoint in the aft.

Foldable diving ladder integrated into the aft platform.

2 x Crew shock absorbing seats.

6 x Passengers detachable shock absorbing seats

4 Lifting points

Steering consoled with rugged construction, frontal windshield and foldable roof for deploying lights and electronic devices. The roof is fitted with a length adjustable railing for deployed a protection canvas able to offer weather protection to the 2 first rows of seats. The console has aluminium railings all around and several hatches to access the electronics and storage compartments.

### **ENGINES, PROPULSION, STEERING & MANOUVERING:**

- 1 x Castoldi Waterjet
- 1 x Yanmar V8 inboard diesel engine

**TANKS:** 1 x independent detachable diesel tank

### **ELECTRICAL SYSTEM & LIGHTING:**

24-volt electrical system.

Main switches with separate battery systems for start, navigation and consumption.

Shore 230 VAC power supply for battery charger and heating starting systems.

Battery charger with indicator.

Heating system in engine room.

Heating system in steering console electronics compartment.

Navigational lights.

- 4 x floodlight on the steering console roof pointed front, aft and both sides.
- 2 x searchlights, manually operated, 1 of them detachable and handheld opearable.
- 2 x blue rotating enforcement lights.

### **NAVIGATION & ELECTRONIC EQUIPMENT**

- 1 x Radar
- 2 x Chart Plotter
- 1 x Echo sounder with transducer
- 1 x GPS compass

Electric engine controls. Complete engine instruments with RPM, temperature, oil pressure and voltmeter for start batteries supplied by engine manufacturer.

Fuel gauge.

Control panel for all lighting and other electrical equipment.

- 1 x Fixed VHF with DSC
- 1 x AIS
- 1 x Magnetic Compass
- 1 x Foghorn

### **SECURITY EQUIPMENT:**

- 1 x Manual bilge pump
- 2 x Electrical emergency pump with manual start, in the bilge and in the engine room
- 1 x Fire extinguisher at helmsman station
- 1 x Automatic fire extinguisher system in engine room.
- 1 x Medical First Aid box
- 1 x Lifebuoy
- 10 x Lifejackets

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.

The hull and structure have a 2 years warranty since delivery.

The equipments and devices fitted in the boat have a 1 year's warranty since delivery.



This daughter craft is designed to meet the requirements of the Police for a patrol boat.

The unique ProZero system with a flexible attached cabin reducing both noise and vibrations from hull and engines.

The design of the ProZero cabin ensure a huge amount of daylight, this also improve the personal comfort. Benefits by being significantly lighter than market average is lower fuel consumption.

# PRO:ZERO 9.0m DC

Design: 2014 | 5000-02-03

Length overall: 9m Beam overall: 2,69m Daft (full load): 0,55m

Engines: Single inboard diesel

Length, Overall: 9,00 m

Beam Overall (with fender): 2,69 m

Draft (full load, hull): 0.55 m

Freeboard Amidships(full load): 645 mm Height above waterline (cabin roof): 2,20 m

Displacement Light weight: 2.500 kg Displacement Full load: 3.500 kg

Crew: 3

Capacity: 3 Passengers

OPERATIONAL FEATURES: Speed (max): +30 kt | Fuel capacity: 320 l

### **HULL. DECK AND SUPERSTRUCTURE:**

The boat is unsinkable. It is made from a combination of glass- and carbon fiber as sandwich construction with PVC as core material. The core material act as a natural buoyancy reserve, due to its lightweight and zero water absorption. The sandwich construction avoids the use of internal stiffeners, increasing exploitation of internal space while working as insulation, improving comfort in the cabin.

**FENDER:** The fender is composed of closed cell polyethylene foam. Non-deflating with a solid core that cannot lose buoyancy or absorb water. Damage to the fender is strictly cosmetic keeping crew safe. The fender system absorbs impact protecting the vessel from damaging deformation. The design of the fender allows it to fit on to the docking station of ocean wind mills, enabling safe transfer between mill and vessel.

### DECK:

Decks are self-bailing.

Hinged engine room cover with gas struts to assist in opening / closing.

Foldable Mast.

Storage for mooring equipment.

4 x mooring bites.

4 x mooring lines stored in the forward compartment.

1 x anchor.

Watertight Storage in forward compartments.

Deck lights on aft deck.

Aft platform integrated in the transom.

### **CABIN & COCKPIT:**

Cabin fixed through anti-vibration blocks to hull.

3 Seats for crew.

Hinged door in the aft of the cabin.

Sliding doors in both sides of the cabin.

Toilet and Wash facilities.

All windows are glued into the structure.

Windshield wiper with interval relay.

Hot air blowers to demist and defrost the windows.

Forward sliding windows in both sides.

2 x hatches in the cabin roof.

Lights in cockpit with dual mode white / red light.

Chart lamp with white and red light.

Comfort insulation in the cabin, both thermal and acoustical.

Autonomous diesel Heating system.

### **ENGINES, PROPULSION, STEERING & MANOUVERING:**

- 1 x inboard diesel engine
- 1 x sterndrive

### **TANKS:**

- 1 x independent 320 litre diesel tank with hatch and filling protection.
- 1 x 100 I fresh water tank with pressurizing system.
- 1 x 100 I dark water tank with odour filter.

All systems are pressure tested.

### **ELECTRICAL SYSTEM & LIGHTING:**

All electrical wiring in marine cable.

Shore power with control lamp, marked fuses, earth connection and 20 m shore cable. Isolation transformer with earth plate for protection of galvanic corrosion.

12-volt electrical system.

Independent built in drive shaft generator.

Main switches with 2 separate battery systems for start, and navigation.

Navigational lights.

### **NAVIGATION & ELECTRONIC EQUIPMENT:**

- 1 x chart plotter with 12 inch screen type Garmin 6000 / 7000 series or similar.
- 1 x Digital radar.
- 1 x class B AIS transponder.
- 1 x echo sounder.
- 1 x radar reflector.
- 1 x magnetic compass
- 1 x fixed master station VHF Sailor 6210
- 1 x handheld VHF Sailor 6210
- 1 x loudhailer with foghorn function
- 2 x law enforcement rotating blue lights
- 2 x 3 m Fiberglas antennas
- 2 x binoculars stored in the cabin

### **SECURITY EQUIPMENT:**

- 1 x manual bilge pump.
- 1 x electrical emergency pump in bilge, manual start.
- 1 x electrical bilge pump in the engine room.
- 1 x fire extinguisher at helmsman station.
- 6 x life jackets.
- 1 x emergency Toolbox.
- 1 x submersible pump.
- 1 x first aid kit.
- 1 x handheld portable loudhailer.
- 1 x alarm + Fire/Smoke detector + Fire fighting system in the engine room compartment.



This boat is specially designed for high speed service.

It has the capacity to carry up to 4 persons inside the cabin in shock mitigating seats, with a toilet and a kitchen to ensure maximum comfort.

he ProZero cabin offers a big amount of daylight an excellent acoustical and thermal insulation, improving crew and passengers comfort.

### PRO:ZERO DC 9.0m RHIB

Design: 2015 | 5000-02-08 Length overall: 9,45 m Beam overall: 2,99 m Daft (full load): 0,85 m

Engines: 2 x Outboard petrol engine

Length overall, approx.: 9,45 m Length hull, approx..: 8,30 m Beam overall, approx.: 2,99 m Draft, approx. (sterndrive): 0,85 m

Crew: 2

Passengers: 2

Payload: 300 kg (including passengers)

### **OPERATIONAL FEATURES:**

Speed (lightweight condition) approx..: +45kt.

Cruise speed: 35 kt.

**HULL, DECK AND SUPERSTRUCTURE:** The boat is made of a combination of glass- and carbon fibre as sandwich construction with PVC as 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 a natural insulation capability, improving the comfort in the cabin and manned compartments.

**FENDER:** The fender is inflatable and made of Hypalon. It has 6 independent air chambers with overpressure relief valves. The fender has and outer rubber fender on top of the tube for additional protection. Damage is strictly cosmetic keeping crew safe. Fender system absorbs major impacts and retains integrity and shape.

### DECK:

Deck and cabin are self-bailing.

Modular and easy detachable aluminium railings.

Lashing points on aft deck for equipment.

Aluminium frame on the aft with strong points for towing and equipment attachment.

Protection bar on the transom for engines protection.

1 x Fix diving ladder

### CABIN:

Hinged door in the aft of the cabin.

Windshield wiper.

Led lights in cabin and cockpit.

Chart table and lamp with white and red light.

Comfort insulation in the cabin.

2 x Shock absorbing seats for crew.

2 x Shock absorbing seats for passengers.

Toilet with WC and sink

Kitchen, with sink, stove and microwave.

AC and heating system.

### **MOORING EQUIPMENT:**

- 1 x Main anchor (stored inside a box in the bow)
- 1 x Electrical winch
- 4 x Metallic mooring cleats

### **ENGINES, PROPULSION, STEERING & MANOUVERING:**

2 x 300hp Outboard petrol engines

1 x 6,5 kVA 240 V 50 Hz Petrol generator

1 x Firefighting pump

### TANKS:

1 x 700 l Petrol tank with hatch and filling protection.

1 x 60 l Fresh water tank

1 x 60 l Black water tank

### **ELECTRICAL SYSTEM & LIGHTING:**

All electrical wiring in marine cable.

Shore power with control lamp, marked fuses, earth connection and shore cable.

12-volt DC system electrical system

240-volt AC system for AC system and kitchen

Shore power connection

Main switches with separate battery systems for start, navigation and consumption.

Battery charger with indicator

Searchlight on cabin roof, manual operated

Navigational lights.

Floodlights on the aft deck

### **NAVIGATION & ELECTRONIC EQUIPMENT:**

Electric engine controls. Complete engine instruments with RPM, temperature, oil pressure and voltmeter for start batteries supplied by engine manufacturer.

Fuel gauge.

Control panel for all lighting and other electrical equipment.

Led navigation lights

1 x magnetic Compass

1 x electric horn

1 x10" multifunction plotter with GPS

VHF

### **SECURITY EQUIPMENT:**

Manual bilge pump Electrical emergency pump High water level alarm in bilge. Portable fire extinguishers 2 x Life-buoys SOLAS compliance equipment

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.



A special designed vessel that allows safe and comfortable transfer up to 12 pax.

The unique ProZero system with a flexible attached cabin reducing both noise and vibrations from hull and engines.

The design of the ProZero cabin ensure a huge amount of daylight, this also improve the personal comfort.

Benefits by being significantly lighter than market average is lower fuel consumption. Supporting the great and proven sailing capabilities.

### PRO:ZERO 10.0m DCW

Design: 2015 | 5000-03-10 Length overall: 11,4m

Beam overall: 4m Daft (full load): 0,6m

Engines: Double inboard diesel

Length, Overall: 11,40 m

Length without aft platform: 10,55 m Beam Overall (with fender): 4,00 m Beam (without fender): 3,50 m Draft (full load, hull): 0,60 m

Freeboard Amidships(full load): 895 mm Freeboard –Bow (full load): 1360 mm Height above waterline (cabin roof): 2,90 m Height keel-roof top (transport): 3,50 m

Displacement Light weight (d=0.50 m): 3.075 kg Displacement Full load (d=0.60 m): 4.600 kg

Crew: 2

Capacity: 12 Passengers Maximum Load: 1000 kg

### **OPERATIONAL FEATURES:**

Speed (max): +25 kt

Range: 10 hours cruise speed.

Fuel capacity: 600 I

### **HULL, DECK AND SUPERSTRUCTURE:**

The boat is unsinkable. The boat is made of a combination of glass- and carbon fibber as sandwich construction with PVC as core material. This core material act as a natural buoyancy reserve material, due to its lightweight and zero water-absorption. The sandwich construction avoids use of internal stiffeners, increasing usability of internal space.

### **FENDER:**

The fender consists of closed cell polyethylene foam. Non deflating with a solid core that cannot lose buoyancy or absorb water. Damage is strictly cosmetic keeping crew safe.

Fender system absorbs major impacts and retains avoiding damaging deformation.

The fender could be easily detached and attached for transport and maintenance.

### DECK:

Railings.

Decks are self bailing, both interior and aft deck.

Easily removable deck sections to access fuel tank.

Double engine hatch in the interior of the cabin, with a main hatch to take out the engines plus a small inspection hatch for maintenance.

Foldable Mast.

Storage for mooring equipment.

4 mooring bites.

2 Towing hooks in both side of the bow to pull the boat onto the mother vessels ramp.

Bow stepped boarding access with support railings.

Aft platform integrated into the hull.

### **CABIN & COCKPIT:**

12 Seats for passengers + 1 for crew.

Sliding door in the starboard side of the cabin.

Hinged door in the aft of the cabin.

Windshield wiper with interval relay.

Comfort insulation in the cabin.

### **ENGINES, PROPULSION, STEERING & MANOUVERING:**

2 x inboard diesel engine

2 x water jet.

1 x bow thruster

### **FUEL TANK:**

2 x structural 300 litre diesel tank with hatch and filling protection.

All fuel systems are pressure tested.

#### **ELECTRICAL SYSTEM & LIGHTING:**

All electrical wiring in marine cable.

Shore power with control lamp, marked fuses, earth connection and shore cable.

Isolation transformer with earth plate for protection of galvanic corrosion.

12-volt electrical system.

Main switches with separate battery systems for start, navigation and consumption.

Battery charger with indicator.

220 V-outlets in cabin.

1 x searchlight on cabin roof, manual operated.

Navigational lights.

1 x floodlight on the working aft deck

### **NAVIGATION & ELECTRONIC EQUIPMENT:**

1 x chart plotter FURUNO RDP 076

1 x GPS FURUNO 30

Electric engine controls. Complete engine instruments with RPM, temperature, oil pressure and voltmeter for start batteries supplied by engine manufacturer.

Fuel gauge.

Control panel for all lighting and other electrical equipment.

1 x magnetic compass.

1 x fixed VHF radio (Jotron TRON)

2 x VHF Radio (SAILOR RT 2048)

1 x echo sounder

1 x magnetic Compass

### **SECURITY EQUIPMENT:**

- 1 x manual bilge pump.
- 2 x electrical emergency pump in bilge, manual start, in the bilge and in the engine room.
- 1 x fire extinguisher at helmsman station.
- 1 x medical First Aid box.
- 1 x inflatable life raft 14 pax.



This daughter craft is developed to deploy different equipment and perform a wide range of tasks in its large aft deck.

The hull shape in bow and stern has been specially designed to allow navigation through a thin ice layer in artic areas.

The design of the ProZero cabin ensure a huge amount of daylight, this also improve the personal comfort. Benefits by being significantly lighter than market average are lower fuel consumption and lighter lifting equipment on mother vessel

### PRO:ZERO 10.0m DCW

Design: Rev.24-08-2016 | 5000-03-49

Length overall: 10,08m Beam overall: 3,75m Daft (full load): 1,22m

Engines: Single inboard dies

### **BENEFITS:**

This daughter craft is developed to deploy different equipment and perform a wide range of tasks in its large aft deck.

The hull shape in bow and stern has been specially designed to allow navigation through a thin ice layer in artic areas.

The design of the ProZero cabin ensure a huge amount of daylight, this also improve the personal comfort. Benefits by being significantly lighter than market average are lower fuel consumption and lighter lifting equipment on mother vessel.

### **OPERATIONAL FEATURES:**

Speed (cruise): 12 kts

Range: 8 hours at cruise speed.

Fuel capacity: 600 I

### **HULL, DECK AND SUPERSTRUCTURE:**

The boat is made of a combination of glass- and carbon fibre as sandwich construction with PVC as core material.

This core material act as a natural buoyancy reserve material, due to its lightweight and zero waterabsorption.

Moreover, the sandwich construction avoids the use of internal stiffeners, increasing the usable internal space and offers a natural insulation capability, improving the comfort in the cabin and manned compartments.

### **FENDER:**

Lifting frame ready for single point lifting hook.

Deck and cabin are self-bailing.

Large working area in the aft deck.

Storage compartments on the side of the cabin.

5 mooring bites.

Detachable modular black anodized aluminium railings in the aft deck.

Black anodized aluminium railings around cabin

Rounded aft platform to enable reversing in ice areas

### **CABIN & COCKPIT:**

Toilet with WC and washbasin.

2 comfort seats for crew.

Hinged door in the aft of the cabin.

Defreeze system for windows with hot air blowers.

All windows are glued into the structure.

Led lights in cabin and cockpit.

Comfort insulation in the cabin.

Heating system.

### ENGINES, PROPULSION, STEERING etc.

Engine electric heater connected to shore power.

1 x inboard diesel engine

1 x fixed pitch propeller

### **TANKS:**

Structural diesel tank with hatch and filling protection.

Independent fresh water tank.

Independent dark water tank with odourless filter.

### **ELECTRICAL SYSTEM & LIGHTING:**

All electrical wiring in marine cable.

Shore power with control lamp, marked fuses, earth connection.

Isolation transformer with earth plate for protection of galvanic corrosion.

24-volt electrical system.

Main switches with separate battery systems for start, navigation and consumption.

Battery charger with indicator.

1 x searchlight on cabin roof, manual operated.

Navigational lights.

2 x floodlight on the working foredeck

### **NAVIGATION & ELECTRONIC EQUIPMENT:**

Complete engine instruments supplied by engine manufacturer.

Fuel gauge.

Control panel for all lighting and other electrical equipment.

1 x magnetic compass

### **SECURITY EQUIPMENT:**

Bilge pumps

Fire extinguisher at helmsman station

Automatic fire extinguisher system in engine roo



# PRO:ZERO 10m DCW RESEARCH BOAT



This vessel is a research workboat with a large aft deck.

The design of the ProZero cabin ensure a huge amount of daylight, this also improve the personal comfort. Benefits by being significantly lighter than market average are lower fuel consumption and lighter lifting equipment on mother vessel.

Supporting the great and proven sailing capabilities

### PRO:ZERO 10.0m DCW

Design: 2014 | 5000-03-11

Length overall: 10m Beam overall: 3,85m Daft (full load): 0,70m

Engines: Single inboard diesel

Length, Overall: 10,0 m Length hull: 9.3 m

Beam Overall (with fender): 3,85 m Beam (without fender): 3,50 m Draught (lightweight): 0,60 m Draft (full load, hull): 0,70 m

Height above waterline (lifting frame): 2,40 m Displacement Light weight (d=0.62 m): 4.830 kg Displacement Full load (d=0.70 m): 6.100 kg

Crew: 2

Capacity: 10 Passengers Maximum Load: 1200 kg

### **OPERATIONAL FEATURES:**

Fuel capacity: 400 I

### **HULL, DECK AND SUPERSTRUCTURE:**

The boat is unsinkable. The boat is made of a combination of glass- and carbon fibber as sandwich construction with PVC as core material.

### **FENDER:**

The fender is constructed of closed cell polyethylene foam. Non deflating with a solid core that cannot lose buoyancy or absorb water. Damage is strictly cosmetic, keeping crew safe.

#### DECK:

Lifting frame with single point lifting hook.

Removable railings to deploy a sun shade canvas protection in the aft deck.

Large working area in aft deck.

Independent flush hatches to access the engine and water jet.

Bracket for an auxiliary 30 hp engine in the port side of the transom.

Rotary beam to lift up to 500 kg load from water into the boat.

Hydraulic winch, with drum capacity for 200 m Ø 12 mm wire an able to lift loads through the boom.

Railings for security.

### CABIN, COCKPIT & FORECASTLE:

Pantry with washbasin and 30l fridge.

Toilet with WC and washbasin.

Forecastle with 2 bunk beds of 2000 x 700 mm and able to accommodate 8 seating persons.

Main access to forecastle through the cabin and emergency exit through roof hatch.

Windshield wiper with interval relay.

Comfort insulation in the cabin and forecastle.

HVAC system in both cabin and forecastle.

### **ENGINES, PROPULSION, STEERING & MANOUVERING:**

- 1 x inboard diesel engine
- 1 x hydraulic pump coupled to the main engine.
- 1 x water jet.
- 1 x independent diesel generator.

### TANKS:

1 x structural 400 litre diesel tank with hatch and filling protection.

All fuel systems are pressure tested.

1 x 100 litre independent fresh water tank.

1 x 100 litre independent dark water tank with odourless filter.

### **ELECTRICAL SYSTEM & LIGHTING:**

All electrical wiring in marine cable.

Shore power with control lamp, marked fuses, earth connection and shore cable.

Isolation transformer with earth plate for protection of galvanic corrosion.

12-volt electrical system.

Main switches with separate battery systems for start, navigation and consumption.

Battery charger with indicator.

2 x searchlight on cabin roof, manual operated.

2 x floodlight on the working aft deck

Navigational lights.

### **NAVIGATION & ELECTRONIC EQUIPMENT:**

1 x 14" Chart plotter

1 x GPS

1 x 1 kw sounder

Electric engine controls. Complete engine instruments with RPM, temperature, oil pressure and voltmeter for start batteries supplied by engine manufacturer.

Fuel gauge.

Control panel for all lighting and other electrical equipment.

- 1 x magnetic compass.
- 1 x fixed VHF radio
- 1 x echo sounder

### **SECURITY EQUIPMENT:**

- 1 x manual bilge pump
- 2 x electrical emergency pump in bilge, manual start, in the bilge and in the engine room
- 1 x fire extinguisher at helmsman station
- 1 x automatic fire extinguisher system in engine room.
- 1 x medical First Aid box
- 12 x lifejackets
- 1 x inflatable life raft 25pax

# **PRO:ZERO 10M FRB Diving Support Boat**



This open boat has is a full covered steering console and a large aft working deck with tent frame.

The design of the ProZero cabin ensure a huge amount of daylight, this also improve the personal comfort. Benefits by being significantly lighter than market average is lower fuel consumption.

Supporting the great and proven sailing capabilities.

# PRO:ZERO 10.0m FRB

Design: 2015 | 5000-01-02 Length overall: 9,98m Beam overall: 2,65m Daft (full load): 0,50m

Engines: Double outboard petrol

Length, Overall: 9,98 m Length hull: 9,08 m

Beam Overall (with fender): 3,85 m Beam (without fender): 2,75 m Draught (lightweight): 0,40 m Draft (full load, hull): 0,50 m

Freeboard Amidships(full load): 540 mm Freeboard –Bow (full load): 1070 mm Height above waterline (cabin roof): 2,49 m Height keel-cabin roof (transport): 2,89 m

Displacement Light weight aprox. (d=0.40 m): 1.800 kg Displacement Full load aprox. (d=0.50 m): 2.750 kg

Crew: 2

Capacity: 6 Passengers Maximum Load: 600 kg

### **OPERATIONAL FEATURES:**

Speed (max): 30 kt Speed (cruise): 25 kt

Range: 3 hours at full power.

Fuel capacity: 160 I

### **HULL, DECK AND SUPERSTRUCTURE:**

The boat is unsinkable. The boat is made of a combination of glass- and carbon fibber as sandwich construction with PVC as 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 a natural insulation capability, improving the comfort in the cabin and manned compartments.

**FENDER:** The fender is constructed of closed cell polyethylene foam. Not deflating with solid core that cannot lose buoyancy or absorb water. Damage is strictly cosmetic keeping crew safe. Fender system absorbs major impacts and retains integrity and shape. ProZero fender's profile gives substantially more interior room than a comparable RIB.

### **DECK:**

Removable railings to deploy a sun shade canvas protection in the aft deck.

Deck and cabin are self-bailing.

Large working area in the aft deck.

Stowage for mooring equipment

4 aluminium mooring bites.

Aluminium railings in aft deck and around the cabin.

Foldable diving ladder in the starboard side.

### **CABIN & COCKPIT:**

2 x 3 seats foldable benches plus 2 x pilot seats.

Windshield wiper with interval relay.

Defreeze system for windows with hot air blowers.

All windows are glued into the structure.

Led lights in cabin and cockpit.

Chart lamp with white and red light.

# **ENGINES, PROPULSION, STEERING & MANOUVERING:**

2 x Suzuki DF 140 outboard engines

TANKS: 2 x independent 80l petrol tanks

### **ELECTRICAL SYSTEM & LIGHTING:**

All electrical wiring in marine cable.

2 x independents petrol generators Honda EU30i

Shore power with control lamp, marked fuses, earth connection and 20 m shore cable.

Isolation transformer with earth plate for protection of galvanic corrosion.

12-volt electrical system.

Main switches with separate battery systems for start, navigation and consumption.

Battery charger with indicator.

Navigational lights.

4 x floodlight on the working deck and fore deck

### **NAVIGATION & ELECTRONIC EQUIPMENT:**

1 x Radar BB-4G Simrad

2 x chart Plotter Simrad NSO 12

1 x GPS - compass HS70

1 x echo sounder BSM1 with a transducer P79

Electric engine controls. Complete engine instruments with RPM, temperature, oil pressure and voltmeter for start batteries supplied by engine manufacturer.

Fuel gauge.

Control panel for all lighting and other electrical equipment.

1 x VHF Simrad RS12

1 x AIS Class B Simrad NAIS400 + NSPL400

1 x magnetic Compass

1 x foghorn

### **SECURITY EQUIPMENT:**

- 1 x manual bilge pump
- 2 x electrical emergency pump in bilge, manual start, in the bilge and in the engine room
- 1 x fire extinguisher at helmsman station
- 1 x automatic fire extinguisher system in engine room.
- 1 x medical First Aid box
- 10 x lifejackets
- 1 x SOLAS approved inflatable life raft.

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.

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.



This police multipurpose vessel is designed as a platform that can fulfill patrol and custom duties.

The design of the ProZero cabin ensures a huge amount of daylight, this also improves the personal comfort. Benefits from being significantly lighter than market average by having lower fuel consumption.

Supporting the great and proven sailing capabilities.

# PRO:ZERO 10.0m WBW

Design:2014 / 5000-05-01 Length overall:10,99m Beam overall:3,60m Daft (full load):0,70m

Engines: Double inboard diesel

Length, Overall: 10,99 m Length hull: 10,33 m

Beam Overall (with fender): 3,60 m Beam (without fender): 3,50 m Draught (lightweight): 0,60 m Draft (full load, hull): 0,70 m

Freeboard Amidships(full load): 1112 mm Height above waterline (roof top): 3,00 m Height keel-lifting hook (roof top): 3,70 m

Displacement Light weight aprox. (d=0.65 m): 5.500 kg Displacement Full load aprox. (d=0.75 m): 7.500 kg

Crew: 2

Capacity: 13 Passengers Maximum Load: 3000 kg

### **OPERATIONAL FEATURES:**

Speed (max): +35 kt Speed (cruise): 22 kt Fuel capacity: 800 l

**HULL, DECK AND SUPERSTRUCTURE:** The boat is unsinkable. The boat is made of a combination of glass- and carbon fibber as sandwich construction with PVC as core material. This core material act as a natural buoyancy reserve material, due to its lightweight and zero water-absorption.

**DECK:** Decks are self bailing in interior cabin, aft deck and foredeck.

Foldable platform integrated in the transom with cylinder hydraulic struts.

- 2 x detachable folding benches, for 4 persons.
- 2 x detachable racks for 5 twin diving bottle sets.
- 1 x detachable Helo Hebekran 900 kg manual crane.
- 1 x detachable towing bollard in the aft deck.
- 1 x detachable diving ladder in the transom.

Large working area in aft deck.

Stowage for mooring equipment

5 x mooring bites

Railings

### **SECURITY EQUIPMENT:**

- 1 x manual bilge pump
- 2 x electrical emergency pump in bilge, automatic start, in the bilge and in the engine room
- 2 x portable submersible pumps, Grindex Solid 230 V
- 1 x fire extinguisher at helmsman station
- 1 x automatic fire extinguisher system in engine room, with smoke and fire detector.
- 1 x medical First Aid box
- 15 x lifejackets

### **ENGINES, PROPULSION, STEERING & MANOUVERING:**

- 2 x inboard diesel engines.
- 2 x Z drive.
- 1 x independt diesel generator of 4 KVA.
- 1 x 70 kg Bow Thruster

**FENDER:** The fender is composed for 2 parallel lines of a D section fender of 50 x 50 mm glued to the hull.

### **CABIN & COCKPIT & FORECASTLE:**

Sliding doors in both sides of the cabin and in the aft of the cabin.

Windshield wiper with interval relay.

Defrosting system with hot air blowers.

All windows are glued into the structure.

Sun shadow stores in all the windows.

Lights in cockpit with dual mode white / red light.

Chart lamp with white and red light.

Comfort insulation in the cabin.

Rack for store a stretcher in the aft.

2 Ullman Atlantic pilot seats.

Pantry with washbasin, 30l fridge and microwave.

5 Seats bench.

Main access through the cabin and emergency exit to the roof glazed hatch.

### TANKS:

1 x structural 800 litre diesel tank with hatch and filling protection.

1 x 60 litre independent fresh water tank.

1 x 60 litre independent grey water tank with odourless filter.

### **ELECTRICAL SYSTEM & LIGHTING:**

All electrical wiring in marine cable.

Shore power with control lamp, marked fuses, earth connection and 20 m shore cable.

Isolation transformer with earth plate for protection of galvanic corrosion.

12-volt electrical system.

6 x 12 V outlets in the cabin.

6 x 230 V outlets in the cabin.

Main switches with separate battery systems for start, navigation and consumption.

Battery charger with indicator.

2 x searchlight on cabin roof, manual operated.

Navigational lights.

2 x floodlight on the working aft deck

### **NAVIGATION & ELECTRONIC EQUIPMENT:**

2 x 19" Simrad M019-T Chart plotters

1 x radar Simrad 4G

1 x GPS Simrad GS25

1 x remote control module Simrad OP40

1 X gyro-stabilized 618CS System research FLIR M

1 x echosound Simrad SonarHub with sonde Airmar B744

2 x processors Simrad NSO evo MPU

1 x Wifi Module-1. Simrad

1 x return videocamera

Electric engine controls. Complete engine instruments with RPM, temperature, oil pressure and voltmeter for start batteries supplied by engine manufacturer.

Fuel gauge.

Control panel for all lighting and other electrical equipment.

1 x fixed VHF radio

1 x echo sounder

1 x magnetic Compass

# PRO:ZERO 11.0m DCW - TRANSFER



This daughter craft is developed for wind farm service, with a specially designed fender for safe transfers.

The design of the ProZero cabin ensures a huge amount of daylight, this also improves the personal comfort.

Benefits from being significantly lighter than market average by having lower fuel consumption and lighter lifting equipment on mother vessel.

### PRO:ZERO 11.0m DCW - TRANSFER

Design: 2015 | 5000-03-03 Length overall: 11,48m Beam overall: 3,85m Daft (full load): 0,73m

Engines: Double inboard diesel

Length, Overall: 11,48 m Length hull: 10.34 m

Beam Overall (with fender): 3,85 m Beam (without fender): 3,50 m Draught (lightweight): 0,60 m Draft (full load, hull): 0,73 m

Freeboard Amidships(full load):1095 mm Freeboard –Bow (full load): 1600 mm Height above waterline (lifting hook): 3,17 m Height keel-lifting hook (transport): 3,90 m

Displacement Light weight aprox. (d=0.60 m): 4.750 kg Displacement Full load aprox. (d=0.73 m): 6.850 kg

Crew: 2

Capacity: 8 Passengers Maximum Load: 500 kg

### **OPERATIONAL FEATURES**

Speed (max): +30 kt Speed (cruise): 25 kt

Range: 8 hours at cruise speed.

Fuel capacity: 600 I

# **HULL, DECK AND SUPERSTRUCTURE:**

The boat is unsinkable. The boat is made of a combination of glass- and carbon fibber as sandwich construction with PVC as 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 a natural insulation capability, improving the comfort in the cabin and manned compartments.

### **FENDER:**

The fender is constructed of closed cell polyethylene foam. Not deflating with solid core that cannot lose buoyancy or absorb water. Damage is strictly cosmetic keeping crew safe. Fender system absorbs major impacts and retains integrity and shape. ProZero fender's profile gives substantially more interior room than a comparable RIB. The fender has a special profile in the boat shaped to fit into the docking station of the wind mills, enabling a safe transfer between this one and the boat. Also, the frontal section is a separate wearing part bolted to a special reinforced composite profile in the bow, so it can be easily replaced.

### **DECK:**

Single point lifting hook.

Deck and cabin are self-bailing.

Large working area in the fore deck.

Transfer raised platform in the bow with stepped transition between this one and the main deck, and with a rest area in both sides of the gate to accommodate an assistant during transfers.

Stowage for mooring equipment

6 mooring bites.

Railings in aft and fore deck.

Modular detachable railing on deck on the way cabin's door – bow gate to enable safe operation in rough seas.

Aft platform over the water jets

### **CABIN & COCKPIT:**

Toilet with WC and washbasin.

8 comfort seats for passengers plus 2 pilot seat.

The seats are fixed to a special railing system on cabin's floor that allows to easily remove or add seats, thus enabling to use the boat with different configurations according to each situation requirements.

Hinged door in the aft of the cabin.

Hinged door in the front of the cabin.

Glazed hatch to access the mast.

Composite hatch to access the lifting hoof.

Double hatch in roof and cabin floor / main deck to access the engine room.

Windshield wiper with interval relay.

Defreeze system for windows with hot air blowers.

All windows are glued into the structure.

Led lights in cabin and cockpit.

Chart lamp with white and red light.

Comfort insulation in the cabin.

Heating system.

# **ENGINES, PROPULSION, STEERING & MANOUVERING**

2 x inboard diesel engine

2 x water jet.

### TANKS:

1 x structural 600 litre diesel tank with hatch and filling protection.

1 x 100 litre independent fresh water tank.

1 x 100 litre independent dark water tank with odourless filter.

### **ELECTRICAL SYSTEM & LIGHTING:**

All electrical wiring in marine cable.

Shore power with control lamp, marked fuses, earth connection and 20 m shore cable.

Isolation transformer with earth plate for protection of galvanic corrosion.

24-volt electrical system.

Main switches with separate battery systems for start, navigation and consumption.

Battery charger with indicator.

1 x searchlight on cabin roof, manual operated.

Navigational lights.

2 x floodlight on the working foredeck

### **NAVIGATION & ELECTRONIC EQUIPMENT**

- 1 x Raymarine E series chart plotter
- 1 x GPS
- 1 x echo sounder
- 1 x 24 nm range radar

Electric engine controls. Complete engine instruments with RPM, temperature, oil pressure and voltmeter for start batteries supplied by engine manufacturer.

Fuel gauge.

Control panel for all lighting and other electrical equipment.

- 1 x fixed Sailor VHF radio
- 1 x magnetic compass

### **SECURITY EQUIPMENT:**

- 1 x manual bilge pump
- 2 x electrical emergency pump in bilge, manual start, in the bilge and in the engine room
- 1 x fire extinguisher at helmsman station
- 1 x automatic fire extinguisher system in engine room.
- 1 x medical First Aid box
- 10 x lifejackets
- 1 x lifebuoy
- 1 x SOLAS approved inflatable life raft.



# PRO:ZERO 11.0m DCW - TRANSFER



This daughter craft is developed for wind farm service, with a specially designed fender for safe transfers.

The design of the ProZero cabin ensures a huge amount of daylight, this also improves the personal comfort.

Benefits from being significantly lighter than market average by having lower fuel consumption and lighter lifting equipment on mother vessel.

### PRO:ZERO 11.0m DCW - TRANSFER

Design: 2015 | 5000-03-38 Length overall: 11,48m Beam overall: 3,85m Daft (full load): 0,73m

Engines: Double inboard diesel

Design: 2015 | 5000-03-03 Length overall, approx.: 11,48 m Beam overall, approx.: 3,85 m Draft (full load), approx.: 0,73 m

Displacement (full load) approx.: 9.500 kg

Capacity: 10 persons Maximum load: 1.000 kg Engines: 2 x inboard diesel

### **BENEFITS:**

This daughter craft is developed for wind farm service, with a specially designed fender for safe transfers. The design of the ProZero cabin ensure a huge amount of daylight, this also improve the personal comfort. Benefits by being significantly lighter than market average are lower fuel consumption and lighter lifting equipment on mother vessel. Supporting the great and proven sailing capabilities.

### **OPERATIONAL FEATURES:**

Speed: 25-30 kt (with 3 persons)

Speed (cruise): 25 kt

Range: 8 hours at cruise speed.

Fuel capacity: 600 I

**DESCRIPTION:** The boat has been built to meet the requirements from the competent authorities, and features a redundant propulsion system.

### **HULL, DECK AND SUPERSTRUCTURE:**

The boat is made of a combination of glass- and carbon fibre as sandwich construction with PVC as 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 a natural insulation capability, improving the comfort in the cabin and manned compartments.

**FENDER:** The fender is constructed of closed cell polyethylene foam. Not deflating with solid core that cannot lose buoyancy or absorb water. Damage is strictly cosmetic keeping crew safe. Fender system absorbs major impacts and retains integrity and shape. ProZero fender's profile gives substantially more interior room than a comparable RIB. The fender has a special profile in the boat shaped to fit into the docking station of the wind mills, enabling a safe transfer between this one and the boat. Also, the frontal section is a separate wearing part bolted to a special reinforced composite profile in the bow, so it can be easily replaced.

### DECK:

Equipped for single point lifting hook.

Deck and cabin are self-bailing.

Large working area in the fore deck.

Transfer raised platform in the bow with stepped transition between this one and the main deck.

6 mooring bites.

Aluminium railings in aft and fore deck.

Aft platform over the water jets

### **CABIN & COCKPIT:**

Toilet with WC and washbasin.

8 comfort seats for passengers plus 2 pilot seat.

Hinged door in the aft of the cabin.

Hinged door in the front of the cabin.

Defreeze system for windows with hot air blowers.

All windows are glued into the structure.

Led lights in cabin and cockpit.

Comfort insulation in the cabin.

# ENGINES, PROPULSION, STEERING etc.

2 x inboard diesel engine 2 x water jet. Engine room split for redundancy Redundant propulsion system

### TANKS:

Structural diesel tank with hatch and filling protection.

Independent fresh water tank.

Independent dark water tank with odourless filter.

### **ELECTRICAL SYSTEM & LIGHTING:**

All electrical wiring in marine cable.

Shore power with control lamp, marked fuses, earth connection.

Isolation transformer with earth plate for protection of galvanic corrosion.

24-volt electrical system.

Main switches with separate battery systems for start, navigation and consumption.

Battery charger with indicator.

1 x searchlight on cabin roof, manual operated.

Navigational lights.

2 x floodlight on the working foredeck

# **NAVIGATION & ELECTRONIC EQUIPMENT:**

Complete engine instruments supplied by engine manufacturer.

Fuel gauge.

Control panel for all lighting and other electrical equipment.

1 x magnetic compass

### **SECURITY EQUIPMENT:**

Bilge pumps

Fire extinguisher at helmsman station

Automatic fire extinguisher system in engine room.



This daughter craft is designed to fulfill requirements from pilots, and allow accessed both fore and aft from the cabin.

The unique ProZero system with a flexible attached cabin reducing both noise and vibrations from hull and engines.

The design of the ProZero cabin ensure a huge amount of daylight, this also improve the personal comfort. Benefits by being significantly lighter than market average is lower fuel consumption

#### PRO:ZERO 12.0m DCW - LIGHT PILOT

Design: 2014 | 5000-02-04 Length overall: 12,00m Beam overall: 3,00m Daft (full load): 0.55m

Engines: Single inboard diesel

Length, Overall: 12,00 m

Beam Overall (with fender): 3,00 m

Draft (full load, hull): 0,55 m

Freeboard Amidships(full load): 645 mm

Height above waterline: 2,34 m

Height keel-roof top (transport): 2,89 m Displacement Light weight: 4.000 kg Displacement Full load: 4.850 kg

Crew: 2

Capacity: 3 Pilots Maximum Load: 100 kg

#### **OPERATIONAL FEATURES:**

Speed (max): +30 kt Range: 4 hours full power Fuel capacity: 400 I

## **HULL, DECK AND SUPERSTRUCTURE:**

The boat is unsinkable. The boat is made of a combination of glass- and carbon fibber as sandwich construction with PVC as core material.

#### **FENDER:**

The fender is constructed of closed cell polyethylene foam. Not deflating with solid core that cannot lose buoyancy or absorb water. Damage is strictly cosmetic keeping crew safe.

#### **DECK:**

Railings and transfer ladders.

Decks are self bailing, both interior and aft deck.

Removable deck sections to access fuel tank.

Hinged engine room cover with gas struts to assist in opening / closing.

Foldable Mast.

Stowage for mooring equipment.

5 mooring bites.

Watertight Stowage in forward compartments.

Benches in both sides forward deck.

Deck lights on aft deck.

#### **CABIN & COCKPIT:**

Cabin fixed through anti vibration blocks to hull.

5 Seats for crew and passengers.

Hinged door in the front of the cabin.

Hinged door in the aft of the cabin.

Windshield wiper with interval relay.

All windows are glued into the structure.

Comfort insulation in the cabin.

Air Conditioning / Heating system.

#### **ENGINES, PROPULSION, STEERING & MANOUVERING:**

1 x inboard diesel engine

1 x sterndrive

#### **FUEL TANK:**

2 x independent 150 litre diesel tank with hatch and filling protection.

#### **ELECTRICAL SYSTEM & LIGHTING:**

All electrical wiring in marine cable.

12-volt electrical system.

Main switches with separate battery systems for start, navigation and consumption.

Battery charger with indicator.

220 V-outlets in cabin.

1 x searchlight on cabin roof, manual operated.

Navigational lights.

1 x floodlight on the working aft deck

#### **NAVIGATION & ELECTRONIC EQUIPMENT:**

1 x chart plotter Ray Marine E120 / Lowrance HD10

1 x digital radar

1 x class B AIS.

Fuel gauge.

1 x magnetic compass.

1 x VHF

## **SECURITY EQUIPMENT:**

1 x manual bilge pump.

1 x electrical emergency pump in bilge, manual start.

1 x fire extinguisher at helmsman station.

**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, equivalent at least to this specification. Photographs may contain items that are extra equipment.

The hull and structure have a 2 years warranty since delivery.

The equipments and devices fitted in the boat have a 1 year warranty from time of delivery.



This daughter craft is developed for deploying and recovering heavy equipment from sea.

The design of the ProZero cabin ensure a huge amount of daylight, this also improve the personal comfort.

Benefits by being significantly lighter than market average are lower fuel consumption and lighter lifting equipment on mother vessel. Supporting the great and proven sailing capabilities.

## PRO:ZERO 12.0m DCW

Design:5003-03-47 Length overall:12,13m Beam overall:3,92m Daft (full load):0,95m

Engines: Double inboard diesel

Design: Rev. 29-08-2016 | 5000-03-47

Length overall, approx.: 12,13 m Beam overall, approx.: 3,92 m

Draft (full load, drive), approx.: 0,95 m

Capacity: 4 persons Maximum load: 2.000 kg Engines: 2 x inboard diesel

Drive: 2 x Sterndrive

#### **BENEFITS:**

This daughter craft is developed for deploying and recovering heavy equipment from sea.

The design of the ProZero cabin ensure a huge amount of daylight, this also improve the personal comfort. Benefits by being significantly lighter than market average are lower fuel consumption and lighter lifting equipment on mother vessel. Supporting the great and proven sailing capabilities.

#### **OPERATIONAL FEATURES:**

Speed (max, lightweight condition): 25 kt

Speed (cruise): 20 kt Fuel capacity: 700 l

## **HULL, DECK AND SUPERSTRUCTURE:**

The boat is made of a combination of glass- and carbon fibre as sandwich construction with PVC as 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 a natural insulation capability, improving the comfort in the cabin and manned compartments.

#### **FENDER:**

The fender is constructed of closed cell polyethylene foam. Not deflating with solid core that cannot lose buoyancy or absorb water. Damage is strictly cosmetic keeping crew safe.

Fender system absorbs major impacts and retains integrity and shape. ProZero fender's profile gives substantially more interior room than a comparable RIB.

#### DECK:

Deck and cabin are self-bailing.

Large working area in the aft deck.

5 mooring bites.

Aluminium railings in aft deck and around the cabin with rollers for handling over heavy loads.

Open transom.

Lifting A-Frame.

#### **CABIN & COCKPIT:**

Toilet with WC and washbasin.

4 comfort seats for crew.

Console for 2 crew members in port side.

Pantry with sink, tap, fridge and coffee machine.

Hinged door in the aft of the cabin.

Defreeze system for windows with hot air blowers.

All windows are glued into the structure.

Led lights in cabin and cockpit.

Comfort insulation in the cabin.

## ENGINES, PROPULSION, STEERING etc.

2 x inboard diesel engine

2 x stern drives.

Redundant propulsion system

#### TANKS:

Structural diesel tank with hatch and filling protection.

Independent fresh water tank.

Independent dark water tank with odourless filter

#### **ELECTRICAL SYSTEM & LIGHTING:**

All electrical wiring in marine cable.

Shore power with control lamp, marked fuses, earth connection.

Isolation transformer with earth plate for protection of galvanic corrosion.

24-volt electrical system.

Main switches with separate battery systems for start, navigation and consumption.

Battery charger with indicator.

1 x searchlight on cabin roof, manual operated.

Navigational lights.

2 x floodlight on the working foredeck

2 x floodlight on the working aft deck

### **NAVIGATION & ELECTRONIC EQUIPMENT:**

Complete engine instruments supplied by engine manufacturer.

Fuel gauge.

Control panel for all lighting and other electrical equipment.

1 x magnetic compass

1 x fixed VHF

## **SECURITY EQUIPMENT:**

Bilge pumps (2 x electrical + 1 manual)

Fire extinguisher at helmsman station

Automatic fire extinguisher system in engine room.

Life jackets





This daughter craft is designed to fulfill requirements from pilots, and allow accessed both fore and aft from the cabin.

The unique ProZero system with a flexible attached cabin reducing both noise and vibrations from hull and engines. The design of the ProZero cabin ensure a huge amount of daylight, this also improve the personal comfort. Benefits by being significantly lighter than market average is lower fuel consumption.

Supporting the great and proven sailing capabilities

#### PRO:ZERO 12.0m DCW

Design:2014 | 5000-03-01

Length overall:12m Beam overall:4m Daft (full load):0,7m

Engines:Double inboard diesel

Length, Overall: 12,35 m Length hull: 11,40 m

Beam Overall (with fender): 4,00 m Beam (without fender): 3,50 m Draught (full load, hull): 0,70 m Displacement Light weight: 5.200 kg Displacement Full load: 7.000 kg

Crew: 2

Capacity: 12 Passengers Maximum Load: 1200 kg

#### **DESCRIPTION:**

The boat is unsinkable. It is made from a combination of glass- and carbon fiber as sandwich construction with PVC as core material. The core material act as a natural buoyancy reserve, due to its lightweight and zero water absorption. The sandwich construction avoids the use of internal stiffeners, increasing exploitation of internal space while working as insulation, improving comfort in the cabin.

#### **FENDER:**

The fender is composed of closed cell polyethylene foam. Non deflating with a solid core that cannot lose buoyancy or absorb water. Damage to the fender is strictly cosmetic keeping crew safe. The fender system absorbs impact protecting the vessel from damaging deformation. The design of the fender allows it to fit on to the docking station of ocean wind mills, enabling safe transfer between mill and vessel.

#### DECK:

Decks are self-bailing in interior cabin, aft deck and foredeck.

Stepped deck with forward raised area to ease the transfer of the pilots between the boat and the ships.

Stepped transition from aft deck to foredeck.

Storage for mooring equipment

6 x mooring bites

Aft platform integrated in the hull.

Railings

#### **ENGINES, PROPULSION, STEERING & MANOUVERING:**

2 x inboard diesel engines

2 x sterndrive

#### **FUEL TANK:**

1 x Structural 600 litre diesel tank with hatch and filling protection.

#### **ELECTRICAL SYSTEM & LIGHTING:**

All electrical wiring in marine cable.

Shore power with control lamp, marked fuses, earth connection and 20 m shore cable.

Isolation transformer with earth plate for protection of galvanic corrosion.

24-volt electrical system.

Main switches with separate battery systems for start, navigation and consumption.

Battery charger with indicator.

2 x searchlight on cabin roof, manual operated.

Navigational lights.

2 x floodlight on the working aft deck

#### **NAVIGATION & ELECTRONIC EQUIPMENT**

1 x 10" Chart plotter

1 x GPS

1 x radar

1 x Echo sounder

Electric engine controls. Complete engine instruments with RPM, temperature, oil pressure and voltmeter for start batteries supplied by engine manufacturer.

Fuel gauge.

Control panel for all lighting and other electrical equipment.

1 x fixed VHF radio

1 x magnetic Compass

#### **SECURITY EQUIPMENT:**

- 1 x manual bilge pump
- 2 x electrical emergency pump in bilge, manual start, in the bilge and in the engine room
- 1 x fire extinguisher at helmsman station
- 1 x automatic fire extinguish system in engine room.



14 x lifejackets







This boat has been designed to meet the requirements for patrol / SAR and customs service boats.

Benefits from being significantly lighter than market average by having lower fuel consumption. Supporting the great and proven sailing capabilities.

## PRO:ZERO 12.0m FRB PATROL

Design: 2015 | 5000-01-09

Length overall: 12m Beam overall: 2,69m Daft (full load): 0,65m

Engines: Double inboard diesel + Water Jet

Length, Overall: 12.02 m

Beam Overall (with fender): 2.69 m Beam (without fender): 2.34 m Draft (full load, hull): 0.65 m Height above waterline: 1.90 m

Height keel-console top (transport): 2.55 m Displacement Light weight aprox.: 4.500 kg Displacement Full load aprox.: 8.000 kg

Crew: 3

Capacity:11 passengers

Maximum Load: 2500 kg (including passengers)

#### **OPERATIONAL FEATURES**

Speed (max): 60 kt Speed (cruise): 40 kt Range: 400 Nm

#### **HULL, DECK AND SUPERSTRUCTURE:**

The boat is made of a combination of glass- and carbon fibber as sandwich construction with PVC as core material.

This core material act as a natural buoyancy reserve material, due to its lightweight and zero waterabsorption. Moreover, the sandwich construction avoids the use of internal stiffeners, increasing the usable internal space.

**FENDER:** The fender is composed of a inflatable collar with 9 independent sections to guarantee maximum buoyancy even if one of them is punctured.

The fender has a D shape profile to increase the internal usable beam. In both sides of the boat there is hand grab line along the fender allowing a person easily climbs into the deck from the water.

#### DECK:

Deck is self bailing.

- 3 x Shock absorbing jockey seat for the crew, with backrest and cushion.
- 11 x Easily removable jockey seats, each one with backrest and cushion. Multiple possibilities of distribution and configuration.
- 1 x Steering console of rugged construction with railings all around, windscreen, and an upper structure to deploy a weather protection for the crew.
- 1 x Forward storage compartment.
- 2 x Huge hinged engine room hatches with gas struts to assist in opening / closing.
- 1 x Aft + 1 x Front bed for mounting machine guns.

Foldable radar mast on top of the steering console.

Forwad Storage for mooring equipment and anchor.

6 x Stainless steel mooring bites.

Watertight Stowage in forward compartments.

Aft platform integrated into the hull with inspection hatches for the water jets.

#### **ENGINES, PROPULSION, STEERING & MANOUVERING**

- 2 x Inboard diesel engines
- 2 x Water jet drives.

#### **FUEL TANK:**

1 x Structural diesel tanks integrated into the hull, with hatch and filling protection and properly sized to meet the required range.

All fuel systems are pressure tested.

#### **ELECTRICAL SYSTEM & LIGHTING:**

All electrical wiring in marine cable.

Shore power with control lamp, marked fuses, earth connection and 20 m shore cable.

Isolation transformer with earth plate for protection of galvanic corrosion.

24-volt DC electrical system.

Main switches with separate battery systems for start, navigation and consumption.

Battery charger with indicator.

Outlets distributed in

4 x Floodlights on the top of the steering console, covering

all the working deck space, 360° around.

Navigational lights.

#### **NAVIGATION & ELECTRONIC EQUIPMENT**

- 1 x 12" Chart plotter Ray Marine
- 1 x Digital radar RayMarine 24 NM range
- 1 x Echo-sounder
- 1 x Magnetic compass.
- 1 x Fixed VHF Ray Marine

# The boat is wired, but not equipped, for FLIR cameras and tactical and internal radio communication devices.

Electric engine controls. Complete engine instruments with RPM, temperature, oil pressure and voltmeter for start batteries supplied by engine manufacturer.

Fuel gauge.

Control panel for all lighting and other electrical equipment.

#### **SECURITY EQUIPMENT:**

- 2 x Manual bilge pump (1 in the hull's bilge and 1 in the engine room).
- 1 x Electrical emergency pump in bilge, manual start.
- 1 x Fire extinguisher at helmsman station.
- 1 x Fire alarm with smoke detector and 1 fixed fire fighting system in engine room.
- 2 x Life rafts class B with 8 person capacity each one.
- 1 x Air filling pump + 1 deflating pump for the fender collar.



This daughter craft is developed for carrying cargo and passengers, with a specially designed fender for safe transfers.

The design of the ProZero cabin ensures a huge amount of daylight, this also improves the personal comfort. Benefits from being significantly lighter than market average by having lower fuel consumption and lighter lifting equipment on mother vessel.

Supporting the great and proven sailing capabilities.

#### PRO:ZERO 13.0m DCW

Design:Rev.29-08-2016 | 5000-03-44

Length overall:13,1m Beam overall:3,9m Daft (full load):-

Engines:Double inboard diesel

Design: Rev. 29-08-2016 | 5000-03-44

Length, Overall: 13,1 m

Beam Overall (with fender): 3,90 m Displacement fully loaded: 12.000 kg

Crew: 2

Capacity: 10 Passengers Maximum Load: 1.000 kg

#### **OPERATIONAL FEATURES:**

Speed (max): +25 kt

**Fuel Capacity** 

#### **DESCRIPTION:**

The boat has been built to meet the requirements from the competent authorities.

**HULL, DECK AND SUPERSTRUCTURE:** The boat is made of a combination of glass- and carbon fibber as sandwich construction with PVC as core material. This core material act as a natural buoyancy reserve material.

**FENDER:** The fender is constructed of closed cell polyethylene foam. Not deflating with solid core that cannot lose buoyancy or absorb water. Damage is strictly cosmetic keeping crew safe. The fender profile in the bow is custom shape to fit with the landing station of the windmills, ensuring an easy and safe transfer of technicians in between both.

#### DECK:

Black anodized aluminium railings.

Aluminium ladder to access the transfer platform from foredeck.

Decks are self-bailing.

Decks are painted with anti-skid finishing.

Storage for mooring equipment.

6 x mooring bites.

Aft ladder to bow bow platform.

Raised platform in the bow for personal transfer.

Aft platform.

Attachment for single point lifting hook.

Step access to hook in front of the cabin.

Hydraulic crane.

## **CABIN & COCKPIT:**

10 Seats for crew and 2 seats for passengers.

Hinged door in the front of the cabin.

Hinged door in the aft of the cabin.

Windshield wiper with interval relay.

All windows are glued into the structure.

Lights in cockpit with dual mode white / red light.

Chart lamp with white and red light.

Comfort insulation in the cabin.

Toilet with WC and sink.

### **CABIN & FORECASTLE:**

Hinged door in the aft of the cabin.

Toilet with WC, sink and shower, with direct access from working deck though a hinge door on the cabin aft.

Hatch to access the mast.

Windshield wiper.

Led lights in cabin and cockpit.

Chart table and lamp with white and red light.

Comfort insulation in the cabin.

2 x Comfort seats for crew.

10 x Comfort seats for passengers inside the cabin.

Hatch to access the foredeck from the forecastle.

Heating system in both cabin and forecastle.

### **ENGINES, PROPULSION, STEERING & MANOUVERING:**

2 x Inboard diesel engines

2 x Waterjets

1 x Hydraulic pump

#### TANKS:

Fuel tanks with hatch and filling protection.

Fresh water tank

Black water tank with odour filter.

#### **NAVIGATION & ELECTRONIC EQUIPMENT:**

Electric engine controls. Complete engine instruments with RPM, temperature, oil pressure and voltmeter for start batteries supplied by engine manufacturer.

Fuel gauge.

Control panel for all lighting and other electrical equipment.

Magnetic Compass

**GPS** 

VHF

#### **SECURITY EQUIPMENT:**

Manual bilge pump

Electrical emergency pump

High water level alarm in bilge.

Portable fire extinguishers

**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 quality and the equipment standard, however, are equivalent at least to this specification.

## PRO:ZERO 13.0m DCW



A special designed vessel that allows safe and comfortable transfer up to 12 pax. The unique ProZero system with a flexible attached cabin reducing both noise and vibrations from hull and engines.

The design of the ProZero cabin ensures a huge amount of daylight, this also improves the personal comfort.

Benefits from being significantly lighter than market average by having lower fuel consumption.

Supporting the great and proven sailing capabilities.

## PRO:ZERO 13.0m DCW

Design:2014 | 5000-03-07 Length overall:12,98m Beam overall:3,85m Daft (full load):0,70m

Engines: Double inboard diesel

Length, Overall: 12,98 m Length hull: 11,97 m

Beam Overall (with fender): 3,85 m Beam (without fender): 3,50 m Draught (lightweight): 0,60 m Draft (full load, hull): 0,70 m

Freeboard Amidships(full load): 1015 mm Freeboard –Bow (full load): 1550 mm Height above waterline (mast top): 4,04 m Height keel-mast top (transport): 4,79 m

Displacement Light weight aprox. (d=0.60 m): 5.500 kg Displacement Full load aprox. (d=0.70 m): 7.500 kg

Crew: 2

Passengers: 12 Load: 1200 kg

#### **OPERATIONAL FEATURES:**

Speed (max): 35 kt Speed (cruise): 20 kt

#### **HULL, DECK AND SUPERSTRUCTURE:**

The boat is unsinkable. The boat is made of a combination of glass- and carbon fiber as sandwich construction with PVC as 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 a natural insulation capability, improving the comfort in the cabin and manned compartments.

**FENDER:** The fender is constructed of closed cell polyethylene foam. Not deflating with solid core that cannot lose buoyancy or absorb water. Damage is strictly cosmetic keeping crew safe. Fender system absorbs major impacts and retains integrity and shape. ProZero fender's profile gives substantially more interior room than a comparable RIB.

#### **DECK:**

Deck and cabin are self-bailing.

Forward storage for mooring equipment and 4 x mooring bites.

Aluminium railings in aft and fore deck.

Aft platform over the water jets.

Bow ladder to facilitate the transfer between the boat and the pier.

Inspection hatches in the aft deck over the water jets.

## **SECURITY EQUIPMENT:**

- 1 x manual bilge pump
- 2 x electrical emergency pump in bilge, manual start, in the bilge and in the engine room
- 4 x portable fire extinguishers
- 1 x automatic fire extinguisher system in engine room.
- 2 x 8 persons SOLAS approved life rafts.

### **CABIN & COCKPIT:**

The cabin is linked to the hull with anti vibration supports that reduce the noise inside the cabin and allows to remove the cabin for main engine overhaul.

2 x suspension seats for the crew.

12 x suspension seats for the passengers.

Hinged doors in the aft and front of the cabin.

Hatch to access the mast.

Windshield wiper with interval relay.

Defreeze system for windows with hot air blowers.

All windows are glued into the structure.

Led lights in cabin and cockpit.

Chart table and lamp with white and red light.

## **ENGINES, PROPULSION, STEERING & MANOUVERING:**

2 x Volvo D6

2 x Castoldi water jets.

#### TANKS:

1 x structural diesel tank with hatch and filling protection.

1 x fresh water tank

1 x black water tank

#### **ELECTRICAL SYSTEM & LIGHTING:**

All electrical wiring in marine cable.

Shore power with control lamp, marked fuses, earth connection and 20 m shore cable.

Isolation transformer with earth plate for protection of galvanic corrosion.

24-volt electrical system

240 volt outlets in cabin

Main switches with separate battery systems for start, navigation and consumption.

Battery charger with indicator

1 x searchlight on cabin roof, manual operated

Navigational lights.

4 x floodlight on the forward and aft deck

#### **NAVIGATION & ELECTRONIC EQUIPMENT:**

Electric engine controls. Complete engine instruments with RPM, temperature, oil pressure and voltmeter for start batteries supplied by engine manufacturer.

Fuel gauge.

Control panel for all lighting and other electrical equipment.

1 x 10 " Chart plotter

1 x radar

1 x magnetic Compass

1 x GPS

1 x fix VHF



This daughter craft is developed for transfer of up to 25 persons and offers the possibility to mount armour panels for crew and passengers protection.

Optionally, it can also be fitted with bulletproof glass.

The design of the ProZero cabin ensure a huge amount of daylight, this also improve the personal comfort.

Benefits by being significantly lighter than market average are lower fuel consumption and lighter lifting equipment on mother vessel. Supporting the great and proven sailing capabilities.

## PRO:ZERO 13.0m DCW

Design:2016 | 5000-03-50 Length overall:12,90m Beam overall:3,75m Daft (full load):-

Engines: Double outboard petrol engines

Design: 2016 | 5000-03-50 Length overall, approx.: 12,90 m Beam overall, approx.: 3,75 m

Capacity: 25 persons

Maximum load (including pax.): 2.500 kg Engines: 2 x Outboard petrol engines

#### **BENEFITS:**

This daughter craft is developed for transfer of up to 25 persons and offers the possibility to mount armour panels for crew and passengers protection. Optionally, it can also be fitted with bulletproof class.

The design of the ProZero cabin ensure a huge amount of daylight, this also improve the personal comfort. Benefits by being significantly lighter than market average are lower fuel consumption and lighter lifting equipment on mother vessel. Supporting the great and proven sailing capabilities.

#### **OPERATIONAL FEATURES:**

Speed max.: 25 kt Speed (cruise): 20 kt

Range: 8 hours at cruise speed.

**DESCRIPTION:** The boat has been built to meet the requirements from the competent authorities.

### **HULL, DECK AND SUPERSTRUCTURE:**

The boat is made of a combination of glass- and carbon fibre as sandwich construction with PVC as 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 a natural insulation capability, improving the comfort in the cabin and manned compartments.

**FENDER:** The fender is constructed of a hard rubbed holed profile, glued to the hull.

#### **DECK:**

Deck and cabin are self-bailing.

Transfer raised platform in the bow with ladder between this one and the main deck.

6 mooring bites.

Aluminium railings in aft and fore deck.

#### **CABIN & FORECASTLE:**

Toilet with WC and washbasin.

Benches for 18 passengers in forecastle.

Benches for 7 passengers & 1 crew member in cabin.

1 x Pilot comfort seat in cabin.

1 x Hinged door in the aft of the cabin.

1 x Hinged door in the forecastle front.

Defreeze system for windows with hot air blowers.

All windows are glued into the structure.

Led lights in cabin and forecastle

## ENGINES, PROPULSION, STEERING etc.: 2 x Outboard petrol engines

#### TANKS:

Independent petrol tanks with hatch and filling protection. Independent fresh water tank. Independent dark water tank with odourless filter

#### **ELECTRICAL SYSTEM & LIGHTING:**

All electrical wiring in marine cable.

Shore power with control lamp, marked fuses, earth connection.

Isolation transformer with earth plate for protection of galvanic corrosion.

24-volt electrical system.

Main switches with separate battery systems for start, navigation and consumption.

Battery charger with indicator.

Navigational lights.

2 x floodlight on the foredeck.

2 x floodlights on the aft deck.

#### **NAVIGATION & ELECTRONIC EQUIPMENT:**

Complete engine instruments supplied by engine manufacturer.

Fuel gauge.

Control panel for all lighting and other electrical equipment.

1 x magnetic compass

1 x fixed VHF radio

#### **ECURITY EQUIPMENT:**

Bilge pumps Fire extinguisher at helmsman station Fire extinguisher in the aft deck



## PRO:ZERO 13.0m DCW - TRANSFER



This daughter craft is developed for wind farm service, with a specially designed fender for safe transfers.

The design of the ProZero cabin ensures a huge amount of daylight, this also improves the personal comfort.

Benefits from being significantly lighter than market average by having lower fuel consumption and lighter lifting equipment on mother vessel.

Supporting the great and proven sailing capabilities.

## PRO:ZERO 13.0m DCW - TRANSFER

Design:2014 | 5000-03-02 Length overall:13,16m Beam overall:3,85m Daft (full load):0,73m

Engines: Double inboard diesel

Length, Overall: 13,16 m

Beam Overall (with fender): 3,85 m

Draft (full load, hull): 0,73 m

Freeboard Amidships(full load): 1095 mm

Height above waterline: 3,24 m

Height keel-lifting hook (transport): 3,97 m Displacement Light weight: 6.000 kg Displacement Full load: 8.500 kg

Crew: 2

Capacity: 8 passengers Maximum Load: 1500 kg

#### **OPERATIONAL FEATURES:**

Speed (max): +30 kt Range: min. 8 hours. Fuel capacity: 1050 l

#### **DESCRIPTION:**

The boat is unsinkable. Made from a combination of glass- and carbon fiber as sandwich construction with PVC as core material. The core material act as a natural buoyancy reserve, due to its lightweight and zero water absorption. The sandwich construction avoids the use of internal stiffeners, increasing exploitation of internal space while working as insulation, improving comfort in the cabin.

**FENDER:** The fender is composed of closed cell polyethylene foam. Non deflating with a solid core that cannot lose buoyancy or absorb water. Damage to the fender is strictly cosmetic keeping crew safe. The fender system absorbs impact protecting the vessel from damaging deformation. The design of the fender allows it to fit on to the docking station of ocean wind mills, enabling safe transfer between mill and vessel.

#### **DECK:**

Single point lifting hook.

Deck and cabin are self-bailing.

Large working area in the fore deck.

Raised Transfer platform in the bow with stepped transition between deck and ocean mill.

Storage for mooring equipment

6 mooring bites.

Railings on aft and fore deck.

Aft platform over the water jets

#### **ENGINES, PROPULSION, STEERING & MANOUVERING:**

2 x inboard diesel engines

2 x water jets

### **FUEL TANK:**

- 1 x structural 1200 litre diesel tank with hatch and filling protection.
- 1 x 100 litre independent fresh water tank.
- 1 x 100 litre independent dark water tank with odourless filter.

#### **ELECTRICAL SYSTEM & LIGHTING:**

All electrical wiring in marine cable.

Shore power with control lamp, marked fuses, earth connection and shore cable.

Isolation transformer with earth plate for protection of galvanic corrosion.

24-volt electrical system.

Main switches with separate battery systems for start, navigation and consumption.

Battery charger with indicator.

1 x searchlight on cabin roof, manual operated.

Navigational lights.

2 x floodlight on the working foredeck

#### **NAVIGATION & ELECTRONIC EQUIPMENT:**

- 1 x 12" chart plotter
- 1 x GPS
- 1 x echo sounder
- 1 x 24 nm range radar

Electric engine controls. Complete engine instruments with RPM, temperature, oil pressure and voltmeter for start batteries supplied by engine manufacturer.

Fuel gauge.

Control panel for all lighting and other electrical equipment.

- 1 x fixed Sailor VHF radio
- 1 x magnetic Compass

#### **SECURITY EQUIPMENT:**

- 1 x manual bilge pump
- 2 x electrical emergency pump in bilge, manual start, in the bilge and in the engine room
- 1 x fire extinguisher at helmsman station
- 1 x automatic fire extinguish system in engine room.
- 1 x medical First Aid box
- 10 x lifejackets
- 1 x SOLAS approved inflatable life raft



This vessel has been designed for multipurpose with a hydraulic wide bow door and a crane for lifting equipment.

The unique ProZero system with a flexible attached cabin reducing both noise and vibrations from hull and engines. The design of the ProZero cabin ensure a huge amount of daylight, this also improve the personal comfort. Benefits by being significantly lighter than market average is lower fuel consumption.

Supporting the great and proven sailing capabilities.

## PRO:ZERO 10.3m WC

Design:2014 | 5000-06-01

Length overall:13m Beam overall:5,3m Daft (full load): -

Engines: Double inboard diesel

Length, Overall: 13 m

Beam Overall (with fender): 5,3 m Beam (without fender): 5,0 m

Crew: 4

Capacity: 12 Passengers Maximum Load: 4.000 kg

#### **OPERATIONAL FEATURES:**

Speed (max): 24 kt Speed (cruise): 20 kt Fuel capacity: 1400 l

#### **HULL, DECK AND SUPERSTRUCTURE:**

The boat is unsinkable. The boat is made of a combination of glass- and carbon fibber as sandwich construction with PVC as 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 a natural insulation capability, improving the comfort in the cabin and manned compartments.

**FENDER:** The fender is constructed from a "D" profile of hard polyurethane rubber disposed in two parallel lines along the hull sides reinforced with vertical lines in between them. The bow door is fitted with a fender all around the edges plus 3 additional vertical lines. The bow fenders are protected additionally by nylon detachable strips.

**DECK:** Stepped deck with anti skid surface.

- 1 x foldable bow door with 2,8 m clear opening and hydraulic driving system controlled from the wheelhouse and from a secondary station in the bow.
- 1 x hydraulic crane with 4,5 ton lifting capacity and 11 m outreach. Deck and cabin are self-bailing.
- 4 x mooring bites and railings in the aft deck. Aft platform
- 2 x engine main flush hatches in the fore deck (with a guiding system to facilitate the movement of the engines between the foundations and the installation position below the hatches) and 2 engine service hatches.
- 2 x hull hinge side doors with 1 m wide clear opening
- 1 x hull hinge aft door with 1 m wide clear opening

#### **CABIN & COCKPIT:**

The cabin is linked to the hull with anti vibration supports that reduce the noise inside the cabin. Sliding doors in both sides of the cabin.

- 2 x pilot seats with damping and joystick steering system integrated in the armrest.
- 1 x corner bench with cushions and capacity for 4 persons.
- 1 x pantry with sink, freezer, stove and microwave.
- 1 x chart table and foldable mess table. Hatch to access the mast.
- 1 x toilet with a hinged door and access from the aft deck, fitted with WC and washbasin.
- 1 x rainwear cabinet with 2 x hinged doors and access from the aft deck. Comfort insulation, air conditioning and heating system.

#### **ENGINES, PROPULSION, STEERING & MANOUVERING:**

- 2 x Volvo D13 engines fitted with heating system, with 2 x Fix pitch propellers and 2 x Rudders with hydraulic steering system.
- 1 x Diesel Genset of 4,5 kW / 230 V / 50 Hz capacity
- 2 x hydraulic 8 kW bow thrusters
- 1 x water pump with 240 l/min 2 bar capacity, with a 5 m length hose and couplings to use as bilge pump

#### TANKS:

2 x structural 700 l diesel tanks

1 x 100 l fresh water tank, 1 x 50 l black water tank

1 x 30 I hot water thermo

#### **ELECTRICAL SYSTEM & LIGHTING:**

All electrical wiring in marine cable.

Shore power with control lamp, marked fuses, earth connection and 20 m shore cable.

Isolation transformer with earth plate for protection of galvanic corrosion.

24-volt electrical system with 230-volt outlets in the wheelhouse and engine rooms. Main switches with separate battery systems for start, navigation and consumption. Battery charger with indicator 2 x searchlight on cabin roof, manual operated

Navigational lights.2 x floodlights on the working bow and aft deck

#### **NAVIGATION & ELECTRONIC EQUIPMENT:**

Electric engine controls. Complete engine instruments with RPM, temperature, oil pressure and voltmeter for start batteries supplied by engine manufacturer.

Fuel gauge.

Control panel for all lighting and other electrical equipment.

- 2 x Ray Marine E165 chart plotter
- 1 x radar, 1 x echosound, 1 x AIS class B, 1 x autopilot
- 1 x magnetic compass, 1 x GPS ,1 x fix VHF with DSC, 1 x foghorn
- 1 x intercom system between the wheelhouse and a bow station
- 4 x surveillance TV-cameras in the bow, aft and both engine rooms

#### **SECURITY EQUIPMENT:**

- $2 \times 10^{-2}$  x electrical emergency pump in bilge, manual start, in the bilge and in the engine room and  $1 \times 10^{-2}$  manual bilge pump.
- 2 x high water level alarm in bilge and engine room.
- 4 x portable fire extinguishers, 2 x Automatic fire extinguisher system in engine room (one in each one).
- 1 x medical first aid box and 16 x lifejackets.
- 1 x SOLAS 16 person capacity approved inflatable life raft.

**DESCRIPTION:** The boat has been built to meet the requirements from the Norwegian Boat Standard for commercial boats below 15 m length.



#### **DIVING SUPPORT VESSEL**

This boat is specially designed for diving operations support. The cabin can accommodate up to 8 crew members and divers. The ProZero cabin offers a big amount of daylight an excellent acoustical and thermal insulation, improving crew and passengers comfort.

There are multiple storage and technical compartments below deck and in the aft of the cabin for diving equipment. Also, the boat has redundant power generation system for feeding all systems when is on stand-by.

#### PRO:ZERO 14.0m DCW - DIVING SUPPORT VESSEL

Design:2015 | 5000-03-26 Length overall:14,25m Beam overall:3,95m Daft (full load):0,6m

Engines: Double inboard diesel

Length overall, approx.: 14,25 m Beam overall, approx.: 3,95 m

Draft, approx. 0,60 m

Crew: 2

Capacity: 6 persons Payload: 1000 kg

#### **OPERATIONAL FEATURES:**

Speed approx. (cruise): 20kt.

Range: 150 nm.

#### **HULL, DECK AND SUPERSTRUCTURE:**

The boat is made of a combination of glass- and carbon fibre as sandwich construction with PVC as 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 a natural insulation capability, improving the comfort in the cabin and manned compartments.

**FENDER:** The fender is constructed of closed cell polyethylene foam. Not deflating with solid core that cannot lose buoyancy or absorb water. Damage is strictly cosmetic keeping crew safe. Fender system absorbs major impacts and retains integrity and shape. ProZero fender's profile gives substantially more interior room than a comparable RIB.

#### **DECK:**

Deck and cabin are self-bailing.

Metallic mooring bites.

Spacious aft working deck.

Bow transfer area with railing pulpit and ladder.

Aluminium railings.

Manually operated A-Frame.

Lashing points on aft deck for equipment.

Foldable benches in aft deck sides.

Foldable diving ladder in the stern.

Detachable railings in aft deck for canvas deployment.

Multiple hatches to access to storage and technical spaces below deck, both in aft and fore deck.

#### **CABINS:**

Hinged door in the aft of the cabin.

Hinged door in the front of the cabin.

Toilet with WC and sink.

Storages spaces in aft part with access from outside.

Windshield wiper.

Led lights in cabin and cockpit.

Chart table and lamp with white and red light.

Comfort insulation in the cabin.

2 x Comfort seats for crew.

6 x Comfort seats for passengers inside the cabin.

AC and heating system.

#### **TANKS:**

Structural diesel tanks with hatch and filling protection.

1 x 100 I fresh water tank

1 x 100 l black water tank with odour filter.

#### **ELECTRICAL SYSTEM & LIGHTING:**

All electrical wiring in marine cable.

Shore power with control lamp, marked fuses, earth connection and shore cable.

24-volt DC system and 380-volt 3 phase 60 Hz AC system

Main switches with separate battery systems for start, navigation and consumption.

Battery charger with indicator

Searchlight on cabin roof, manual operated

Navigational lights.

Floodlights on the aft deck

#### **NAVIGATION & ELECTRONIC EQUIPMENT:**

Electric engine controls. Complete engine instruments with RPM, temperature, oil pressure and voltmeter for start batteries supplied by engine manufacturer.

Fuel gauge.

Control panel for all lighting and other electrical equipment.

1 x magnetic Compass

1 x electric horn

1 x autopilot

1 x AIS transponder

**GPS** 

VHF

#### **SECURITY EQUIPMENT:**

Manual bilge pump Electrical emergency pump High water level alarm in bilge. Portable fire extinguishers

**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.

The boat has been built to meet the IACS standard.



## **DIVING SUPPORT VESSEL**

This boat is specially designed for support diving operations and transport of up to 12 persons.

It has a large aft working deck and an A-frame to launch or recover heavy equipment or the divers.

The ProZero cabin offers a big amount of daylight an excellent acoustical and thermal insulation, improving crew and passengers comfort.

## PRO:ZERO 15.0m DCW - DIVING SUPPORT VESSEL

Design:2015 | 5000-03-26 Length overall:14,25m Beam overall:3,95m Daft (full load):0,6m

Engines: Double inboard diesel

Length overall, approx. 14,88 m Beam overall, approx.: 3,90 m Draft, approx. (hull): 0,70 m

Crew: 2

Capacity: 12 persons Payload: 2000 kg

OPERATIONAL FEATURES: Speed approx. (cruise): 20kt.

**DESCRIPTION:** The boat has been built to meet the requirements from the competent authorities.

### **HULL, DECK AND SUPERSTRUCTURE:**

The boat is made of a combination of glass- and carbon fibre as sandwich construction with PVC as 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 a natural insulation capability, improving the comfort in the cabin and manned compartments.

**FENDER:** The fender is constructed of closed cell polyethylene foam. Not deflating with solid core that cannot lose buoyancy or absorb water. Damage is strictly cosmetic keeping crew safe. Fender system absorbs major impacts and retains integrity and shape. ProZero fender's profile gives substantially more interior room than a comparable RIB.

#### DECK:

Deck and cabin are self-bailing.

Metallic mooring bites.

Spacious aft working deck.

Black anodized aluminium railings.

Open transom.

A-frame.

Electric winch.

Diving ladder

Shower with fresh water.

Storage cabinet in the aft of the cabin with access from the aft deck.

#### **CABIN & FORECASTLE:**

Hinged door in the aft of the cabin.

Toilet with WC, sink and shower.

Windshield wiper.

Led lights in cabin and cockpit.

Chart table and lamp with white and red light.

Comfort insulation in the cabin.

2 x Comfort seats for crew.

12 x Comfort seats for passengers, 4 in the cabin and 8 in the forecastle.

3 x Tables, 1 in the cabin and 2 in the forecastle, built in marine plywood.

1 x Pantry with sink, stove and fridge.

Hatch to access the foredeck from the forecastle.

Heating system in both cabin and forecastle.

#### **ENGINES, PROPULSION, STEERING & MANOUVERING:**

- 1 x Inboard diesel engine, Caterpillar C9 Acert, rated at 567hp.
- 1 x Fixed pitch propeller.
- 1 x Electric bowthruster
- 1 x Electric winch on deck.
- 1 x Air compressor for refilling air bottles, below deck.

#### TANKS:

Structural diesel tanks with hatch and filling protection.

1 x 100 l fresh water tank.

1 x 100 l black water tank with odour filter.

#### **ELECTRICAL SYSTEM & LIGHTING:**

All electrical wiring in marine cable.

Shore power with control lamp, marked fuses, earth connection and shore cable.

24-volt electrical system.

Main switches with separate battery systems for start, navigation and consumption.

Battery charger with indicator.

Searchlight on cabin roof, manual operated.

Navigational lights.

Floodlights on the aft deck.

Floodlights on the foredeck.

#### **NAVIGATION & ELECTRONIC EQUIPMENT:**

Electric engine controls. Complete engine instruments with RPM, temperature, oil pressure and voltmeter for start batteries supplied by engine manufacturer.

Fuel gauge.

Control panel for all lighting and other electrical equipment.

1 x magnetic Compass

**GPS** 

VHF

## **SECURITY EQUIPMENT:**

Manual bilge pump

Electrical emergency pump in engine room

Electrical emergency pump in bilge.

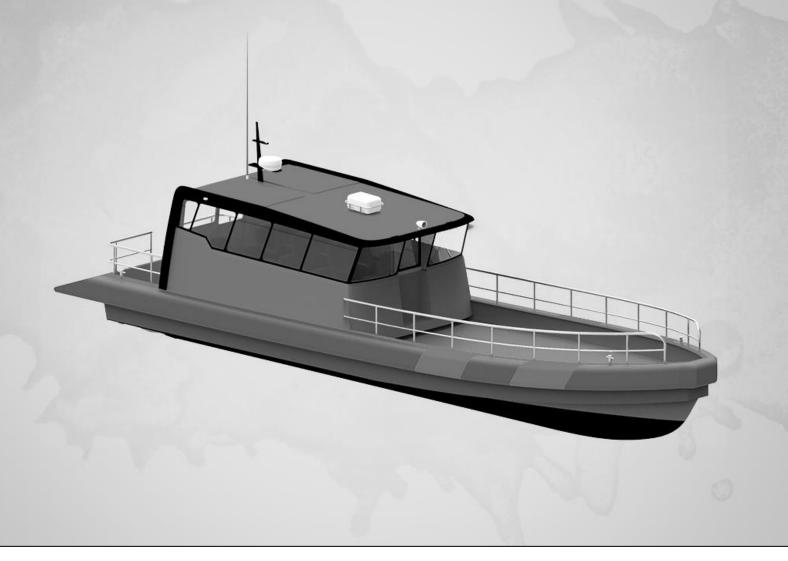
High water level alarm in engine room and bilge.

Portable fire extinguishers in cabin, forecastle and engine room.

**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.

## PRO:ZERO 15.0m DCW - TRANSFER



A special designed vessel that allows safe and comfortable transfer up to 12 pax.

The unique ProZero system with a flexible attached cabin reducing both noise and vibrations from hull and engines.

The design of the ProZero cabin ensure a huge amount of daylight, this also improve the personal comfort. Benefits by being significantly lighter than market average is lower fuel consumption.

## PRO:ZERO 15.0m DCW

Design:2015 | 5000-03-12

Length overall:15m Beam overall:4m Daft (full load):0,8m

Engines:Double inboard diesel

Length, Overall: 15,00 m

Beam Overall (with fender): 4,00 m

Draft (full load, hull): 0,80 m

Freeboard Amidships(full load): 960 mm Height above waterline (cabin roof): 2,92 m Height keel-roof top (transport): 3,72 m

Displacement Light weight (d=0.65 m): 8.500 kg Displacement Full load (d=0.80 m): 13.500 kg

Crew: 2

Capacity: 12 Passengers Maximum Load: 4000 kg

#### **OPERATIONAL FEATURES:**

Speed (max): +20 kt

Range: 10 hours cruise speed.

Fuel capacity: 1400 I

## **HULL, DECK AND SUPERSTRUCTURE:**

The boat is unsinkable. The boat is made of a combination of glass- and carbon fibber as sandwich construction with PVC as core material. This core material act as a natural buoyancy reserve material

**FENDER:** The fender is constructed of closed cell polyethylene foam. Not deflating with solid core that cannot lose buoyancy or absorb water. Damage is strictly cosmetic keeping crew safe.

#### DECK:

Railings.

Decks are self bailing.

Easily removable deck sections to access fuel tank.

Double engine hatch between the inner cabin and the engine room, to access this last.

Foldable Mast.

Storage for mooring equipment.

4 x mooring bites.

Deck lights on aft deck.

Bow stepped boarding access.

Aft platform integrated into the hull.

#### **CABIN & COCKPIT:**

12 Seats for crew and 2 seats for passengers.

Hinged door in the front of the cabin.

Hinged door in the aft of the cabin.

Windshield wiper with interval relay.

All windows are glued into the structure.

Lights in cockpit with dual mode white / red light.

Chart lamp with white and red light.

Comfort insulation in the cabin.

#### **ENGINES, PROPULSION, STEERING & MANOUVERING:**

- 2 x inboard diesel engine
- 2 x propulsion water jet.

#### **FUEL TANK:**

2 x structural 700 litre diesel tank with hatch and filling protection.

All fuel systems are pressure tested.

#### **ELECTRICAL SYSTEM & LIGHTING:**

All electrical wiring in marine cable.

Shore power with control lamp, marked fuses, earth connection and 20 m shore cable.

Isolation transformer with earth plate for protection of galvanic corrosion.

12-volt electrical system.

Main switches with separate battery systems for start, navigation and consumption.

Battery charger with indicator.

220 V-outlets in cabin.

1 x searchlight on cabin roof, manual operated.

Navigational lights.

1 x floodlight on the working aft deck

#### **NAVIGATION & ELECTRONIC EQUIPMENT:**

1 x chart plotter FURUNO RDP 076

1 x GPS FURUNO 30

Electric engine controls. Complete engine instruments with RPM, temperature, oil pressure and voltmeter for start batteries supplied by engine manufacturer.

Fuel gauge.

Control panel for all lighting and other electrical equipment.

- 1 x magnetic compass.
- 1 x fixed VHF radio (Jotron TRON)
- 2 x VHF Radio (SAILOR RT 2048)
- 1 x echo sounder
- 1 x magnetic Compass

#### **SECURITY EQUIPMENT:**

- 1 x manual bilge pump.
- 2 x electrical emergency pump in bilge, manual start, in the bilge and in the engine room.
- 1 x fire extinguisher at helmsman station.
- 1 x medical First Aid box.
- 1 x inflatable life raft 37pax.
- 1 x EPIRP (Kannad 406 WH).



This daughter craft is designed to fulfill requirements from pilots, with transfer area in the bow.

The unique ProZero system with a flexible attached cabin reducing both noise and vibrations from hull and engines.

The design of the ProZero cabin ensure a huge amount of daylight, this also improve the personal comfort.

Benefits by being significantly lighter than market average is lower fuel consumption.

Supporting the great and proven sailing capabilities.

# PRO:ZERO 14.0m DCW PILOT

Design:2015 | 5000-03-17 Length overall:14,5m Beam overall:4m Daft (full load):0,7m

Engines: Double inboard diesel

Length, Overall approx.: 14,5 m

Beam Overall (with fender) approx.: 3,90 m

Beam (without fender): 3,50 m

Draught (full load, hull)approx.: 0,70 m

Displacement design, full load, approx.: 8.500 kg

Capacity: 6 Persons

#### **DESCRIPTION:**

It is made from a combination of glass- and carbon fiber as sandwich construction with PVC as core material. The core material act as a natural buoyancy reserve, due to its lightweight and zero water absorption. The sandwich construction avoids the use of internal stiffeners, increasing exploitation of internal space while working as insulation, improving comfort in the cabin.

**FENDER:** The fender is composed of closed cell polyethylene foam. Non deflating with a solid core that cannot lose buoyancy or absorb water. Damage to the fender is strictly cosmetic keeping crew safe. The fender system absorbs impact protecting the vessel from damaging deformation.

#### **DECK:**

Decks are self-bailing in interior cabin, aft deck and foredeck.

Bow deck fitted with two transfer ladders for easy transfer for pilots. Safety railing along the cabin ensures the pilot to safely move around the cabin to the transfer ladders in front. Safety railing in the aft fitted with a gate for access to enclosed aft deck.

Storage for mooring equipment.

6 x mooring bites.

Aft platform integrated in the hull.

Railings.

#### **CABIN & COCKPIT:**

Cabin fixed through anti vibration blocks to hull.

Seats for crew and passengers.

Hinged door in the aft of the cabin.

Windshield wiper with interval relay.

All windows are glued into the structure.

Comfort insulation in the cabin.

Heating system.

Toilet with washbasin and WC.

Pantry with fridge, sink and microwave (optional).

Rack for pilot bags.

# **ENGINES, PROPULSION, STEERING & MANOUVERING:**

2 x inboard diesel engines.

2 x sterndrive / waterjet

# **TANKS:**

1 x structural diesel tank with hatch and filling protection. Fresh water tank. Black water tank.

# **ELECTRICAL SYSTEM & LIGHTING:**

All electrical wiring in marine cable.

Shore power with control lamp, marked fuses, earth connection.

Isolation transformer with earth plate for protection of galvanic corrosion.

24-volt electrical system.

Main switches with separate battery systems for start, navigation and consumption.

Battery charger.

Searchlight on cabin roof, manual operated.

Navigational lights.

Floodlight on the working aft deck.

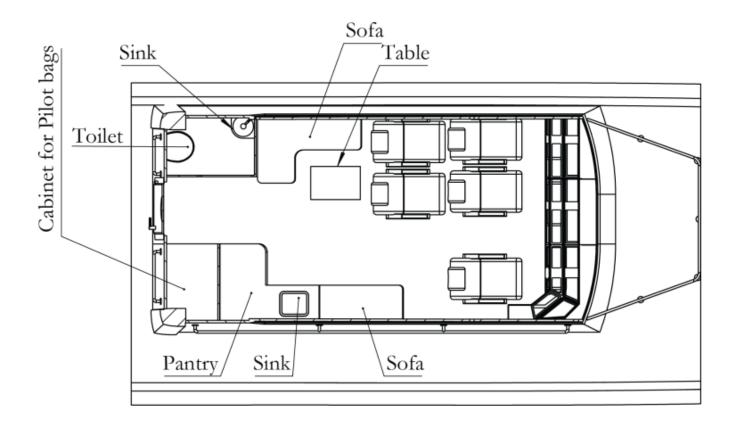
# **SECURITY EQUIPMENT:**

Manual bilge pump.

Electrical emergency pump in bilge, manual start, in the bilge and in the engine room.

Fire extinguisher at helmsman station.

Automatic fire extinguish system in engine room.





This boat has been designed to meet the requirements for patrol / SAR and customs service boats.

Benefits by being significantly lighter than market average is lower fuel consumption. Supporting the great and proven sailing capabilities.

The boat has been built to meet the requirements from the MCA MGN 280 for small commercial vessels.

# PRO:ZERO 7.5m FRB

Design: 2014 | 5000-01-03 Length overall: 8,20m

Beam overall: 2,96m Daft (full load): 0,54m

Engines: Double outboard petrol

Length, Overall: 8,20 m Length hull: 7,26 m

Beam Overall (with fender): 2,84 m Beam (without fender): 2,34 m Draught (lightweight): 0,45 m Draft (full load, hull): 0,55 m

Freeboard Amidships(full load): 700 mm Freeboard–Bow (full load): 990 mm

Height above waterline (frame top): 2,03 m Height keel-console top (transport): 2,35 m

Displacement Light weight aprox. (d=0.45 m): 1.650 kg Displacement Full load aprox. (d=0.55 m): 2.600 kg

Crew: 2

Capacity: 4 Passengers Maximum Load: 400 kg

#### **OPERATIONAL FEATURES:**

Speed (max): 40 kt Speed (cruise): 25 kt Fuel capacity: 360 L

# **HULL, DECK AND SUPERSTRUCTURE:**

The boat is unsinkable.

The boat is made of a combination of glassand carbon fiber as sandwich construction with PVC as core material.

This core material act as a natural buoyancy reserve material, due to its lightweight and zero waterabsorption.

Moreover, the sandwich construction avoids the use of internal stiffeners, increasing the usable. The hull has a 100 mm width stainless steel plate over the keel for landing protection.

**FENDER:** The fender is made from Hypalon and has 5 independent compartments with pressure relief valves.

The fender has attached in its most outwards part a hard rubber strip for additional protection. Moreover, it has an external and an internal lifeline and 6 paddle holders in the topsides.

Fender system absorbs major impacts and retains integrity and shape.

ProZero fender's profile gives substantially more interior room than a comparable RIB.

- 1 x self righting system with inflatable bag, CO2 bottle and firing system in the transom.
- 1 x manual bilge pump
- 2 x life buoys, one of them with buoyant line
- 1 x SOLAS life raft class B for 6 persons
- 1 x electrical emergency pump in bilge
- 3 x fire extinguisher at the steering console
- 1 x medical First Aid box
- 6 x lifejackets

# **DECK:**

Deck is self-bailing.

Deck has a non skid finish and 6 lashing points, 2 in the bow and 4 in the aft.

Bow cover for increased weather protection.

Stowage for mooring equipment in the bow area.

Storage space below deck in the front area.

Steering console with windscreen, handrails and wide enough for two persons, with storage space inside.

- 2 x storage lockers in the aft in both sides of the engines well.
- 6 x shock absorbing seats of which the 4 placed in the aft are detachable.
- 2 x stainless steel towing eyes in the transom.
- 1 x stainless steel towing eye in the bow.
- 1 x Foldable diving ladder in the transom.
- 4 x aluminum mooring cleats.
- 1 x airlead in the bow.
- 1 x Samson post in the bow.
- 1 x A-Frame in the aft with a self righting device and an electronics platform.

# ENGINES, propulsion, STEERING & MANOUVERING 2 x outboard petrol engines

**TANKS:** 2 x independent 180 L petrol tanks made in stainless steel.

#### **ELECTRICAL SYSTEM & LIGHTING:**

All electrical wiring in marine cable.

Shore power with control lamp, marked fuses, earth connection and 20 m shore cable.

Isolation transformer with earth plate for protection of galvanic corrosion.

12-volt electrical system.

3 x 12-V outlets, 1 on the console and 2 on the A-Frame

Main switches with separate battery systems for start, navigation and consumption.

Battery charger with indicator.

Navigational lights.

- 2 x floodlight on the aft deck.
- 2 x searchlights on the A-Frame
- 1 x blue rotating law enforcement light

#### **NAVIGATION & ELECTRONIC EQUIPMENT:**

- 1 x radar
- 1 x echo sounder
- 1 x RayMarine C125 Chart Plotter
- 1 x GPS compass HS70
- 1 x echo sounder BSM1 with a transducer P79
- 1 x VHF with DSC
- 1 x handheld VHF
- 1 x AIS transponder class B
- 1 x magnetic Compass
- 1 x loudhailer with Foghorn and siren function



The boat has been built to meet the requirements for crafts by the police marine service.

Benefits by being significantly lighter than market average is lower fuel consumption.

Supporting the great and proven sailing capabilities

The boat has been built to meet the requirements from DNV for crafts and the requirement from ANR (Romanian Naval Authority).

# PRO:ZERO 7.5m FRB

Design: 2014 | 5000-01-06 Length overall: 7,50m Beam overall: 2,69m

Daft (full load): 0,50m

Engines: Single inboard diesel

Length, Overall: 7,85 m

Beam Overall (with fender): 2,70 m Beam (without fender): 2,34 m Draft (full load, hull): 0,50 m

Draft (full load, outboard engine): 0,82 m Freeboard Amidships(full load): 710 mm Freeboard–Bow (full load): 1045 mm Height above waterline: 1,80 m

Height keel-roof top (transport): 2,30 m Displacement Light weight: 1.235 kg Displacement Full load: 2.235 kg

Crew: 2

Capacity: 6 passengers

Maximum Load (incl. Pass.): 600 kg

## **OPERATIONAL FEATURES:**

Speed (max): +40 kt Speed (cruise): 32 kt

Range: 3 hours at full power

Fuel capacity: 180 L

# **HULL, DECK AND SUPERSTRUCTURE:**

The boat is made of a combination of glass- and carbon fibber as sandwich construction with PVC as core material. This core material acts as a natural buoyancy reserve material, due to its lightweight and zero water-absorption.

#### **FENDER:**

The fender is constructed of closed cell polyethylene foam. Not deflating with solid core that cannot lose buoyancy or absorb water. Damage is strictly cosmetic keeping crew safe.

Fender system absorbs major impacts and retains integrity and shape. ProZero fender's profile gives substantially more interior room than a comparable RIB.

The fender could be easily detached and attached for transport and maintenance.

- 1 x manual bilge pump
- 1 x electrical emergency pump in bilge, manual start.
- 1 x fire extinguisher at helmsman station
- 1 x fire extinguisher close to the engine
- 1 x life-buoy with rope
- 9 x life-jackets
- 1 x first-aid kit

# DECK:

Deck is self bailing.

2 x shock absorbing jockey seat for the crew, with backrest and cushion.

6 x easily removable folding seats distributed between both sides in the forward deck area.

1 x steering console of rugged construction with railings all around, windscreen, and an upper structure to deploy a weather protection canvas for the crew.

The console has a storage compartment of  $600 \times 400 \times 600$  mm (w x I x h), an electronics rack compartment, and a chart table of  $600 \times 400$  mm (w x I) with dimmable lights.

Forward Storage for mooring equipment and anchor

4 x stainless steel mooring bites Watertight Stowage in forward compartments

Railings in the stern and in the aft of both side

**TANKS:** 1 x independent 180 litre petrol tank with hatch and filling protection. All fuel systems are pressure tested.

ENGINES, PROPULSION, STEERING & MANOUVERING: 1 x outboard Engine

#### **ELECTRICAL SYSTEM & LIGHTING:**

All electrical wiring in marine cable.

Shore power with control lamp, marked fuses, earth connection and 20 m shore cable.

Isolation transformer with earth plate for protection of galvanic corrosion.

12-volt DC electrical system

Main switches with separate battery systems for start, navigation and consumption.

Battery charger with indicator

1 x 12 V Outlet in steering console

1 x 12 V 150 w handheld searchlights

Navigational lights

#### **NAVIGATION & ELECTRONIC EQUIPMENT:**

- 1 x 7" chart plotter multifunction Screen
- 1 x digital radar with 24 NM range
- 1 x echo-sounder 1 x magnetic compass
- 1 x fixed VHF with GMDSS 2 x handheld VHF
- 1 x portable loudhailer speaker with foghorn function
- 1 x portable night vision eye glasses 1 x naval Binocular
- 10 x 50 Electric engine controls.

Complete engine instruments with RPM, temperature, oil pressure and voltmeter for start batteries supplied by engine manufacturer.

Fuel gauge.

Control panel for all lighting and other electrical equipment.

The boat is built as a standard according to the technical specification and our general quality standard. The specification is valid when being printed. The quality and the equipment standard, however, are equivalent at least to this specification. Photographs may contain items that are extra equipment.



The boat has been built to meet the requirements for crafts by the police marine service.

Benefits by being significantly lighter than market average is lower fuel consumption.

Supporting the great and proven sailing capabilities

The boat has been built to meet the requirements from DNV for crafts and the requirement from ANR (Romanian Naval Authority).

# PRO:ZERO 7.8m FRB

Design: 2015 | 5000-01-01 Length overall: 7,80m Beam overall: 2,69m Daft (full load): 0.54m

Engines: Single inboard diesel

Length, overall: 7,78 m Length, hull: 6,94 m

Beam overall (with fender): 2,70 m Beam (without fender): 2,34 m Draft (full load, hull): 0,54 m

Draft (full load, outboard engine): 0,82 m Freeboard amidships(full load):580 mm Freeboard –bow (full load): 800 mm Height above waterline (arch top): 2,12 m Height keel-console (transport): 2,05 m Displacement light weight aprox: 1.500 kg Displacement full load aprox: 2.700 kg

Crew: 2

Capacity:12 passengers

Maximum load (incl. pass.): 900 kg

OPERATIONAL FEATURES: Speed (max): +24 kt

Speed (cruise): 20 kt

Range: 3 hours at full power.

Fuel capacity: 180 I

# **HULL, DECK AND SUPERSTRUCTURE:**

The boat is made of a combination of glass- and carbon fibber as sandwich construction with PVC as core material. This core material acts as a natural buoyancy reserve material, due to its lightweight and zero water-absorption.

# **FENDER:**

The fender is constructed of closed cell polyethylene foam. Not deflating with solid core that cannot lose buoyancy or absorb water. Damage is strictly cosmetic keeping crew safe.

Fender system absorbs major impacts and retains integrity and shape.

ProZero fender's profile gives substantially more interior room than a comparable RIB.

# **SECURITY EQUIPMENT:**

1 x manual bilge pump

1 x electrical emergency pump in bilge, manual start.

1 x fire extinguisher at helmsman station

14 x life-jackets

1 x first-aid kit

# **DECK:**

Deck is self bailing.

2 x shock absorbing jockey seat for the crew, with backrest and cushion.

1 x steering console of rugged construction with railings all around, windscreen, and an upper structure to deploy a weather protection canvas for the crew.

The console has a storage compartment and an electronics rack compartment.

Forward storage for mooring equipment and anchor

3 x mooring bites

Watertight stowage in forward compartments

1 x single point lifting hook.

1 x inflatable self-righting system fitted in a folding arch.

1 x engine cover with integrated seating with backrest for up to 6 passengers.

1 x aft platform.

2 x hand operated search lights.

1 x towing strongpoint in the bow.

# **ENGINES, PROPULSION, STEERING & MANOUVERING**

1 x inboard Diesel engine

1 x water jet

**FUEL TANK:** 1 x integrated 180 litre diesel tank with hatch and filling protection.

## **ELECTRICAL SYSTEM & LIGHTING:**

All electrical wiring in marine cable.

Shore power with control lamp, marked fuses, earth connection and 20 m shore cable.

Isolation transformer with earth plate for protection of galvanic corrosion.

12-volt DC electrical system

Main switches with separate battery systems for start, navigation and consumption.

Battery charger with indicator

1 x 12 V outlet in steering console

Navigational lights

# **NAVIGATION & ELECTRONIC EQUIPMENT**

1 x 7" chart plotter multifunction Screen

1 x magnetic compass

1 x fixed VHF

Electric engine controls. Complete engine instruments with RPM, temperature, oil pressure and voltmeter for start batteries supplied by engine manufacturer.

Fuel gauge.

Control panel for all lighting and other electrical equipment.

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.

The boat is built as a standard according to the technical specification and our general quality standard. The specification is valid when being printed. The quality and the equipment standard, however, are equivalent at least to this specification. Photographs may contain items that are extra equipment.



The boat has been designed to meet the specific requirements for navy units to transport up to 10 men or 1,5 tons of load.

Benefits from being significantly lighter than market average by having lower fuel consumption. Supporting the great and proven sailing capabilities.

# PRO:ZERO 11.5m FRB OPEN NAVY

Design: 2014 | 5000-01-07 Length overall: 11,50m Beam overall: 2,96m Daft (full load): 0,55m

Engines: Double inboard diesel

Length, Overall: 11,5 m

Beam Overall (with fender): 2.96 m

Draft (full load, hull): 0,55 m

Freeboard Amidships(full load): 645 mm

Height above waterline: 2,34 m

Height keel-roof top (transport): 2,89 m Displacement Light weight: 4.000 kg Displacement Full load: 4.850 kg

Crew: 2

Capacity: 10 passengers Maximum Load: 1600 kg

#### **OPERATIONAL FEATURES:**

Speed (max): +40 kt Range: 150 Nm

Fuel capacity: 600 I

# **HULL, DECK AND SUPERSTRUCTURE:**

The boat is unsinkable. The boat is made of a combination of glass- and carbon fibber as sandwich construction with PVC as core material

**FENDER:** The fender is composed of an inflatable collar with 9 independent sections to guarantee maximum buoyancy even in case of puncture. The fender has a D shape profile to increase the internal usable beam.

#### DECK:

The deck is self bailing.

2 x shock absorbing jockey seat for the crew, with backrest and cushion.

10 x easily removable jockey seats, each with backrest, cushion and a internal storage space. Multiple possibilities of distribution and configuration.

- 1 x steering console of rugged construction with railings all around, windscreen, and an upper structure to deploy a weather protection for the crew.
- 1 x easily removable railing structure to deploy a canvas for weather protection over deck.
- 1 x forward storage compartment of 250 I of capacity.
- 2 x huge hinged engine room hatches with gas struts to assist in opening / closing.
- 2 x aft beds for mounting machines guns.

Foldable tripod mast.

Forwad Storage for mooring equipment and anchor.

6 x mooring bites.

Watertight Storage in forward compartments.

1 x sail winch with SWL 250 kg on the top of the engine room, working over both sides.

Aft platform integrated into the hull with inspection hatches for the water jets.

## **ENGINES, PROPULSION, STEERING & MANOUVERING**

- 2 x inboard diesel engines
- 2 x water jets
- 2 x trim tabs.

#### **FUEL TANK:**

2 x independent 300 litre diesel tanks with hatch and filling protection. All fuel systems are pressure tested.

#### **ELECTRICAL SYSTEM & LIGHTING:**

1 x genset of 4 Kw, 230 V AC.

All electrical wiring in marine cable.

Shore power with control lamp, marked fuses, earth connection and shore cable.

Isolation transformer with earth plate for protection of galvanic corrosion.

28-volt DC electrical system.

Main switches with separate battery systems for start, navigation and consumption.

Battery charger with indicator.

4 x floodlights on the top of the steering console, covering

all the working deck space, 360° around.

Navigational lights.

#### **NAVIGATION & ELECTRONIC EQUIPMENT**

- 2 x 12" Chart plotters GARMIN 4012
- 1 x digital radar GARMIN GMR24HD
- 1 x GARMIN GMI 10
- 1 x echo-sounder
- 1 x magnetic compass.
- 1 x VHF Sailor 6215 + GMDSS System
- 2 x handheld VHF Sailor 6215
- 3 x antennas 3 m height.
- 1 x hailer speaker with foghorn function.

- 2 x manual bilge pump (1 in the hull's bilge and 1 in the engine room).
- 1 x electrical emergency pump in bilge, manual start.
- 1 x fire extinguisher at helmsman station.
- 1 x fire alarm with smoke detector and 1 fixed fire fighting system in engine room.
- 2 x life rafts with 8 person capacity each one.
- 1 x air filling pump + 1 deflating pump for the fender collar.



This daughter craft is developed for wind farm service, with a specially designed fender for safe transfers.

The design of the ProZero cabin ensures a huge amount of daylight, this also improves the personal comfort.

Benefits from being significantly lighter than market average by having lower fuel consumption and lighter lifting equipment on mother vessel.

# PRO:ZERO 10.0m DCW - TRANSFER

Design: 2015 | 5000-03-19 Length overall: 10,5m Beam overall: 3,85m Daft (full load): 0,70m

Engines: Double inboard diesel engines

Length, Overall: 10,59 m Length hull: 9,29 m

Beam Overall (with fender): 3,85 m Beam (without fender):3,50 m Draft (full load, hull): 0,80 m

Freeboard Amidships(full load):1095 mm Height keel-lifting hook (transport): 3,90 m

Displacement Full load aprox. (d=0.70 m): 6.500 kg

Crew: 2

Capacity: 4 Passengers Maximum Load: 500 kg

#### **OPERATIONAL FEATURES**

Speed (max): +30 kt Speed (cruise): 25 kt

Range: 8 hours at cruise speed.

Fuel capacity: 600 I

## **HULL, DECK AND SUPERSTRUCTURE:**

The boat is made of a combination of glass- and carbon fiber as sandwich construction with PVC as 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 a natural insulation capability, improving the comfort in the cabin and manned compartments.

## **FENDER:**

The fender is constructed of closed cell polyethylene foam. Not deflating with solid core that cannot lose buoyancy or absorb water. Damage is strictly cosmetic keeping crew safe. Fender system absorbs major impacts and retains integrity and shape. ProZero fender's profile gives substantially more interior room than a comparable RIB. The fender has a special profile in the boat shaped to fit into the docking station of the wind mills, enabling a safe transfer between this one and the boat. Also, the frontal section is a separate wearing part bolted to a special reinforced composite profile in the bow, so it can be easily replaced.

# **DECK**

Single point lifting hook.

Deck and cabin are self-bailing.

Large working area in the fore deck.

Transfer raised platform in the bow with stepped transition between this one and the main deck, and with a rest area in both sides of the gate to accommodate an assistant during transfers with antiskid surface.

Stowage for mooring equipment

6 mooring bites.

Railings in aft and fore deck.

Modular detachable railing on deck on the way cabin's door – bow gate to enable safe operation in rough seas.

Aft platform over the water jets

#### **CABIN & COCKPIT:**

Toilet with WC and washbasin.

4 comfort seats for passengers plus 2 pilot seats

The seats are fixed to a special railing system on cabin's floor that allows to easily remove or add seats, thus enabling to use the boat with different configurations according to each situation requirements.

Hinged door in the aft of the cabin AND Hinged door in the front of the cabin.

Glazed hatch to access the mast.

Composite hatch to access the lifting hoof.

Double hatch in roof and cabin floor / main deck to access the engine room.

Windshield wiper with interval relay.

Defreeze system for windows with hot air blowers.

All windows are glued into the structure.

Led lights in cabin and cockpit.

Chart lamp with white and red light.

Comfort insulation in the cabin.

Heating system.

# **ENGINES, PROPULSION, STEERING & MANOUVERING**

Redundant propulsion system with two independent engine rooms.

2 x inboard diesel engine AND 2 x water jet.

**TANKS:** 1 x structural 600 litre diesel tank with hatch and filling protection.

1 x 50 litre independent fresh water tank.

1 x 50 litre independent dark water tank with odourless filter.

## **ELECTRICAL SYSTEM & LIGHTING:**

All electrical wiring in marine cable.

Shore power with control lamp, marked fuses, earth connection and 20 m shore cable.

Isolation transformer with earth plate for protection of galvanic corrosion.

24-volt electrical system.

Battery charger with indicator.

1 x searchlight on cabin roof, manual operated.

Navigational lights.

2 x floodlight on the working foredeck

#### **NAVIGATION & ELECTRONIC EQUIPMENT**

1 x Chart plotter - 1 x GPS - 1 x echo sounder - 1 x 24 nm range radar

Electric engine controls. Complete engine instruments with RPM, temperature, oil pressure and voltmeter for start batteries supplied by engine manufacturer.

Control panel for all lighting and other electrical equipment.

1 x fixed Sailor VHF radio

1 x magnetic Compass

- 1 x manual bilge pump
- 2 x electrical emergency pump in bilge, manual start, in the bilge and in the engine room
- 1 x fire extinguisher at helmsman station
- 1 x automatic fire extinguisher system in engine room.
- 1 x medical First Aid box
- 10 x lifejackets
- 1 x lifebuoy
- 1 x SOLAS approved inflatable life raft.

# PRO:ZERO DCW 10.0m Harbor Service Boat



This daughter craft has a large aft deck working area which is accessed from the cabin.

The design of the ProZero cabin ensure a huge amount of daylight, this also improve the personal comfort. Benefits by being significantly lighter than market average is lower fuel consumption.

Supporting the great and proven sailing capabilities

# PRO:ZERO 10.0m DCW

Design: 2014 | 5000-03-05 Length overall: 9,98m Beam overall: 3,85m Daft (full load): 0,65m

Engines: Single inboard diesel

Length, Overall: 9,98 m Length hull: 9.27 m

Beam Overall (with fender): 3,85 m Beam (without fender): 3,50 m Draught (lightweight): 0,60 m Draft (full load, hull): 0,65 m

Freeboard Amidships(full load): 1175 mm Freeboard –Bow (full load): 1600 mm Height above waterline (cabin roof): 3,45 m Height keel-cabin roof (transport): 4,20 m

Displacement Light weight aprox. (d=0.60 m): 4.500 kg Displacement Full load aprox. (d=0.65 m): 5.400 kg

Crew: 2

Maximum Load: 1200 kg

#### **OPERATIONAL FEATURES:**

Speed (max): 20 kt

Range: 5 hours full power.

Fuel capacity: 300 I

# **HULL, DECK AND SUPERSTRUCTURE:**

The boat is unsinkable. The boat is made of a combination of glass- and carbon fibber as sandwich construction with PVC as core material.

This core material act as a natural buoyancy reserve material, due to its lightweight and zero waterabsorption. Moreover, the sandwich construction avoids the use of internal stiffeners, increasing the usable internal space and offers a natural insulation capability, improving the comfort in the cabin and manned compartments.

#### **FENDER:**

The fender is constructed of closed cell polyethylene foam. Not deflating with solid core that cannot lose buoyancy or absorb water. Damage is strictly cosmetic keeping crew safe.

Fender system absorbs major impacts and retains integrity and shape. ProZero fender's profile gives substantially more interior room than a comparable RIB. The fender could be easily detached and attached for transport and maintenance.

# **DECK:**

Decks are self bailing in interior cabin, aft deck and foredeck.
Large working area in aft deck.
Stepped transition from aft deck to foredeck.
Stowage for mooring equipment
6 x mooring bites
Aft platform over the sterndrive
Arch with and horizontal winch on top
Electric winch.
Aluminium railings

## **CABIN, COCKPIT & FORECASTLE:**

Hinged door in the aft of the cabin.

Forecastle with large storage space.

Main access to forecastle through the cabin and emergency exit through roof hatch.

Windshield wiper with interval relay.

Lights in cockpit with dual mode white / red light.

Chart lamp with white and red light.

Comfort insulation in the cabin.

# **ENGINES, PROPULSION, STEERING & MANOUVERING:**

1 x Volvo Penta D6 Inboard diesel engine

1 x Volvo stern drive.

#### TANKS:

1 x structural 300 litre diesel tank with hatch and filling protection.

#### **ELECTRICAL SYSTEM & LIGHTING:**

All electrical wiring in marine cable.

Shore power with control lamp, marked fuses, earth connection and 20 m shore cable.

Isolation transformer with earth plate for protection of galvanic corrosion.

24-volt electrical system.

Main switches with separate battery systems for start, navigation and consumption.

Battery charger with indicator.

4 x floodlights on cabin roof.

Navigational lights.

# **NAVIGATION & ELECTRONIC EQUIPMENT**

Electric engine controls. Complete engine instruments with RPM, temperature, oil pressure and voltmeter for start batteries supplied by engine manufacturer.

Fuel gauge.

Control panel for all lighting and other electrical equipment.

- 1 x fixed VHF radio
- 1 x echo sounder
- 1 x magnetic Compass

- 1 x manual bilge pump
- 2 x electrical emergency pump in bilge, manual start, in the bilge and in the engine room
- 1 x fire extinguisher at helmsman station
- 1 x automatic fire extinguisher system in engine room.
- 1 x medical First Aid box
- 4 x lifejackets