







# **SOLAS 420RB**

#### **SOLAS RESCUE BOAT SERIES**

With manufacturing facilities in Portugal, the international **Vanguard Marine** group designs and manufactures work and rescue boats for a wide range of users, including companies, clubs, marinas, diving centres, federations, the naval industry, lifeboat and rescue organisations and the defence sector, in addition to SOLAS rescue boats. The design and manufacture processes are strongly focused on building safe, strong and durable products from the highest quality materials.

Vanguard Marine's technical team brings together 30 years of proven experience working on successful business projects and the manufacture of thousands of boats, incorporating new generation techniques and applying modern design and development technologies like Finite Element control.





Engineering and manufacture plant

Motorisation and equipment plant

### **Quality orientated**

Vanguard Marine is *Committed to quality* and follows a strict criteria to ensure high quality, durability and reliability in the design and manufacture of its products, all backed by a rigorous quality control system.

MANUFACTURED BY VANGUARD MARINE LDA.



ISO 9001:2008



### **Materials**

Tubes can be manufactured from Polyurethane PU and Neoprene—Hypalon to meet different user requirements.

Polyurethane PU boats are manufactured using mechanical and robotic systems, together with Thermosealing® technology, an industrial system that ensures consistent quality and is extremely cost effective. The neoprene Hypalon manufacture process uses the traditional manual cold gluing method.





Design, development and

engines to meet customer

specifications.

manufacture of work boats with

outboard, inboard and water-jet



## **SOLAS 420RB**

SOLAS RESCUE BOAT SERIES

Robust, lightweight and high-capacity semi-rigid compact boat, designed, built and tested under the latest standards.

The hull is manufactured from 4mm thick marine aluminium and has a closed cell foam core to ensure it is lightweight and fast while providing excellent stability and low fuel consumption. The tube has five independent air chambers. The boat can be powered by a 25 to 40 hp outboard engine for guick planing.



### Use

The boat is designed to be more than just a man overboard or rescue boat for quickly rescuing crew members that may fall into the sea or a craft for grouping and communicating between life rafts in the event of an accident. It can also be used as a work boat for everyday tasks in operations for transferring crew and equipment, carrying out inspections, and auxiliary tasks.



**Insubmersible:** Even with all its compartments deflated, the boat conserves its buoyancy with crew and equipment.

### **SOLAS Certification**

SOLAS 420 RB has MED B and D certification from Lloyds Register under the Marine Equipment Directive (MED 96/98/EC) and its amendments, as well as the International Convention for Safety of Life at Sea SOLAS 74 and amendments, and IMO LSA Code resolution MSC 48(66) chapter V MSC/Circ.980.

This means the boat can be fitted as a rescue boat in all ships under EU flags and in any country that accepts SOLAS regulations. Each boat is supplied with the corresponding declaration of conformity, identification plate and user/maintenance manual.



Transfer: Transfer of cargo and equipment.



Auxiliary: For supplementary inspection and service tasks

## SOLAS 420RB

#### SOLAS RESCUE BOAT SERIES

Specifications	SOLAS 420RB
Length overall	4,20 m
Length inner	3,19 m
Beam overall	2,03 m
Beam inner	1,05 m
Draft	0,61 m
Tube diameter	0,48m
No. compartments	5
Max. people	6
Craft weight	225 kg
Craft/equipment/engine/tank weight	379 kg
Craft/equipment/engine/tank/crew weight	862 Kg
Power	25 HP/40 HP
Type of shaft L	L
Max. engine weight	100 Kg







#### **SAFETY**

V-hull with a tube with five independent air compartments equipped with safety relief valves to automatically release excess pressure caused by over-inflation, impacts or sudden temperature increases. Complete with an insubmersible hull with radar reflector, anti-spill tank and all other safety equipment required by SOLAS regulations.

#### **DESIGN**

The design is focused on the performance of the product to ensure excellent sailing conditions, ample space inside and easy handling and steering, as well as simple maintenance and servicing. The structures were calculated using finite element control, paying specific attention to hoisting points, which were tested under full load and using a safety factor of 6.

#### **SAVING SPACE**

Deflating the air compartments significantly decreases the volume of the boat, reducing the space required for transport and storage.

#### **PERFORMANCE**

Low fuel consumption with a large tank range, 45 litre anti-spill tank, and 5 hours tank range with a 40 hp engine at an average speed of between 5 and 10 knots.

#### **COMPACT**

Despite having a length of just 4.20 m, the boat is spacious inside with an excellent length-to-beam ratio. It allows easy planing and handling.

#### **FLOTATION**

A tube diameter of 0.48 m provides excellent stability and buoyancy reserve. Innovative design with a pronounced sheer to improve sailing conditions in the most demanding seas. Maximum seakeeping in exposed waters.

#### LIGHTWEIGHT

The exceptionally light aluminium used for the hull reduces the weight of the craft by over 10% compared to most boats on the market, lowering the operation costs of handling, steering, transport and maintenance.

#### **STRENGTH**

The 4 mm thick marine aluminium hull has a robust structure of girders and flooring to provide optimum strength for impacts with any submerged objects and make repairs easier. The structure is also fire resistant.

#### **DURABILITY**

The tubes can be supplied in the classic Neoprene—Hypalon (Orca CSM) manufactured by a manual cold gluing process. They can also be manufactured from polyurethane, a high-tech material that resists abrasion, the elements and tears and scratches.

#### **INDUSTRIAL EFFICIENCY**

The technical benefits of the polyurethane material are complemented by the qualitative advantage of a fully industrialised manufacture process using Thermosealing® technology, based on a double seal supported by internal and external reinforcement bands, forming a single body that is stronger than the original material itself.

#### **SPARE PARTS AND REPAIR SERVICE**

A comprehensive repair and spare parts service with agile and efficient online supply of spare parts throughout the world.



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