

Ranger 9.9

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Technical specifications

• LOA	9.93	m
• LWL	6.40	m
• BOA	2.45	m
• Draught	1.30	m
• Draught hull	0.37	m
• Weight	2.0	ton
• Engine power	13	hp
• Volume diesel tank	35	l
• Volume water tank	60	l
• Height above CWL	12.35	m
• Righting moment at 1 degree	49	kgm
• Righting moment max. at 50 degrees	1192	kg
• Mainsail	23.50	m ²
• Genoa 105%	17.35	m ²
• Gennaker	65	m ²
• I	9.75	m
• J	3.30	m
• P	10.25	m
• E	3.85	m



Hull

Built in vinylester/GRP sandwich-composite with glass fibre reinforcement and a 15 mm PVC construction foam core. Total thickness is 22 mm. The keelson, stem and transom, as well as the area surrounding the keel suspension consist of a full-glass construction.

The outer laminate is laminated with vinylester and an ISO mpg gelcoat.

The ISO mpg gelcoat is standard available in the colour: cream white (RAL 9001). Other colours are optional.

Deck, superstructure and cockpit

Like the hull, the construction is a GRP sandwich composite with glass fibre and a 15 mm PVC foam core. Where fittings are located, the foam core is internally reinforced for solid fastening.

The deck is glued to the hull with epoxy, forming a stiff construction in combination with the interior bulkheads. The interior is also completely glued together with epoxy. Antiskid areas have been integrated into the surface in the gelcoat top layer. The colour of the deck, superstructure and cockpit is cream white (RAL 9001). Other colours are optional.

The anchor locker in the foredeck is closed off by means of a hatch and has a through-hull fitting for drainage. The access hatch to the aft equipment locker on the aft deck is suitable for storing sails and other accessories. Another equipment /wet/gear locker is located in the port cockpit seat. This is also closed off with an access hatch. All the above-mentioned hatches are fitted with a draining channel with outlet. The cockpit floor also features a synthetic hatch that gives access to the engineroom.

The cockpit is closed off with a sliding hatch and vertical partitions made of okoume with teak veneer. The sliding hatch is protected from weather influences and other difficult conditions by a garage, which is mounted over the sliding hatch. There is an escape hatch on the foredeck.

Bottom

The *Ranger's* keel consists of a fixed section and a lead extension. The hull section is a fixed sump that forms a whole with the hull. Around this sump the boat consists of a full-glass construction. In order to make this sump extra strong various floors have been glued together athwartships, which run all the way across the bottom of the boat.

The extension is made of solid lead with antimony added for extra strength. Its overall weight is 800 kg. The shape has been especially designed for this yacht, with the aim of full optimisation. The result is an elliptically shaped bulb. The extension is fastened to the sump by means of four stainless steel M20 bolts.

The boat has a balanced rudder, which consists exclusively of epoxy and glass fibre. The Jeva rudder shaft is made of aluminium. It is cast as part of the rudder blade and rotates in synthetic needle bearings. The tiller is made of teak.

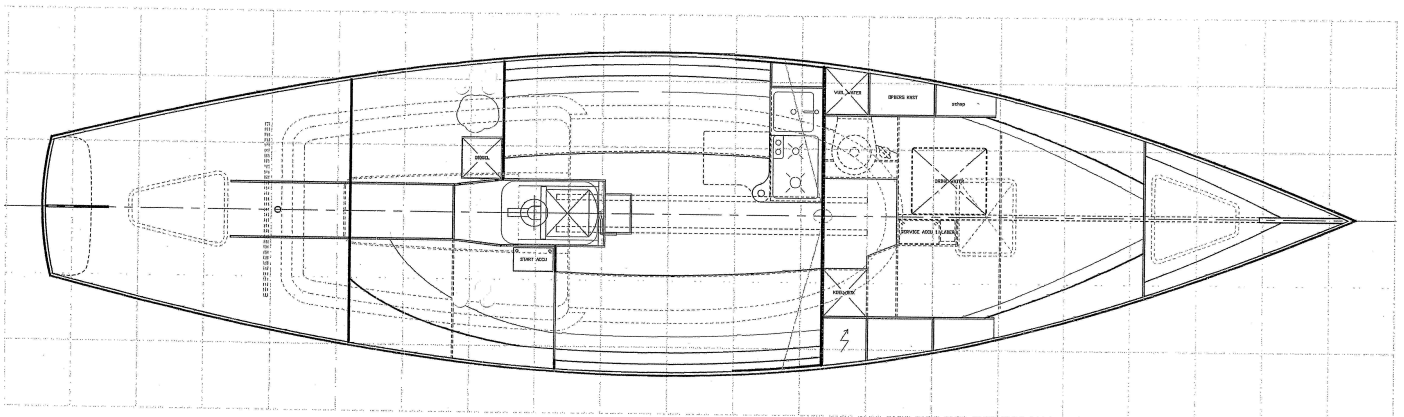
Interior

Executed in thin plain-sawn okoume WBP sheets with mahogany veneer and solid Sipo mahogany frames. The entire interior is glued together with epoxy against the hull and deck to form a single unit. The forecabin features a built-in double bed with a cupboard on port and a wardrobe and fuse box on starboard. There is storage space below the bed. A settee at the front end of the bed provides more storage space underneath. Across from the settee a drytoilet is located, which can be hidden from view by means of a mahogany lid. The inside of the hull is finished with solid mahogany planking.

The main bulkhead consists of 15 mm okoumé. Serving as a web frame, it is reinforced with solid mahogany sheathing. The web frame absorbs the forces of mast compression, the tensile forces of the rigging, and the suspension of the front section of the keel. The main bulkhead has a cream white (RAL 9001) finish.

The cabin features two settees which convert into berths. The rear berth on starboard is 1.6 m long and has a storage shelf fitted against the hull. The settees and the rear berth have hatches with storage space underneath. The galley is fitted with a Wallas diesel stove with a ceramic hot plate, a wash basin and cold running water. A drawer for cooking utensils and cutlery is accessible from the side. Other cooking attributes may be stored in the cabinet located against the hull and the main bulkhead, on the galley top, which is made of Wilsonart synthetic material.

Underneath the cushion of the starboard settee a standard may be fitted to house the leg of a swivel table. The table top can also be used in the cockpit. Above the backrests the hull has a planking finish, just like further forward. The cushions and mattress pillows are part of the standard inventory. Clients may select their own type of upholstery.



Rigging

The mast and boom are made of aluminium, and coloured with a cream white coating. The top and lower shrouds are Dyform. Both the forestay and the backstay are 1x19 steel wire. The mast features one pair of swept spreaders, a windex and a tricolour toplight. The mainsail and genoa halyards are made of cupsheet. The topping lift is made of 6 mm standard line. The boom vang is a 4:1 set of Harken blocks.

Sails

The crosscut mainsail with upper long batten is made of Dacron. The 105% high aspect jib is made of a special penflex Dacron laminate. This laminate guarantees a stabile profile, also when there is a lot of wind. The standard wardrobe is a mainsail and a 105% high aspect jib including bags and sheets.

Deck equipment

The design of the deck layout takes into account that it should be possible to sail the boat singlehandedly, too, which is why all halyards and reefs can be controlled from the cockpit. From the mast these lines run towards the cockpit through Harken blocks via port and starboard Harken organisers. The lines are stopped on port and starboard by two Spinlock stoppers. These halyards and reefs (there is room for six lines in total) are handled on two Andersen winches (type 10, single-speed). With multiple purchase through Harken blocks the mainsheet runs from the boom via the traveller back to the boom, from where the sheet is led forward. Near the cockpit the sheet goes through a Frederiksen mainsheet block with a cleat on the boom.

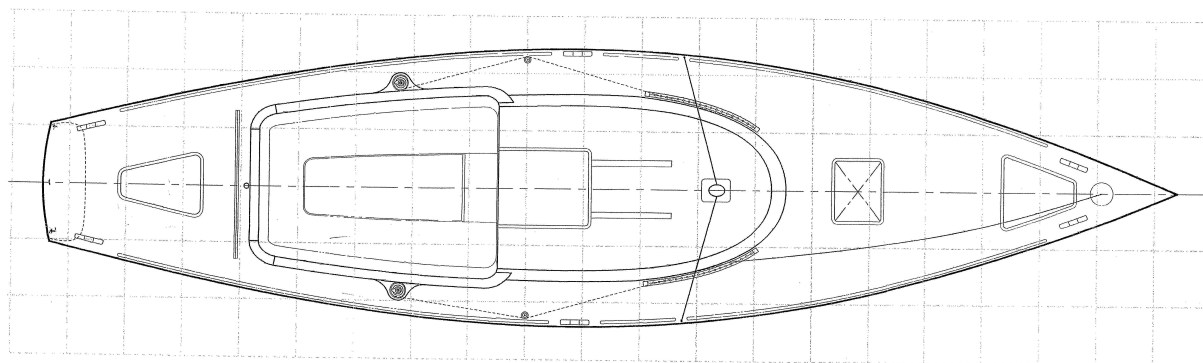
Two self-tailing stainless steel Andersen winches (type 28, double-speed) are fitted on the coaming, one for port and one for starboard. The genoa sheet runs from the sail through a car on a Harken genoa rail to a turning block and then to the genoa winch.

The backstay can also be controlled from the cockpit by means of a 16:1 purchase set of Harken blocks on the aft deck, from where the stay runs through a Spinlock stopper positioned on the port side of the coaming.

In addition, the *Ranger 9.9* is equipped with six stainless steel cleats, four stainless steel port holes and a brass chromium-plated escape hatch and two Andersen winch handles.

Teak exterior

The footrail, coaming, cockpit floor, handrails on the cabin roof and the entrance doors to the cabin are all made of teak.



Engine installation

The *Ranger*'s standard engine is a Lombardini marine diesel engine (model LDW502M). This is an engine with a maximum capacity of 9,05 kW (13 hp) at 3600 rotations per minute. It is fully built-in with a Technodrive mechanical reversing clutch, reduction 2.6:1 (model TMC40). For the transmission to the propeller a water-lubricated propeller shaft with thrust bearing and homokinetic coupling has been installed. The combination of the well insulated engineroom, the Lombardini engine and the homokinetic coupling ensure relatively quiet propulsion. A digital gauge in the cockpit clearly and conveniently provides all information (from engine hours up to temperature).

Electrical installation

The electrical installation on board is a 12 Volt system installed in accordance with the CE norm. Shore power is available by means of a shore power connector in the anchor locker. In order to obtain shore power a 220 Volt socket is located next to the control panel, which can be found on the front of the starboard wardrobe in the forepeak. A main switch for the service system is located next to the socket and the control panel. A separate main switch for the engine installation is located in the equipment locker, while an electrical tank gauge indicates the amount of fuel left in the tank. The electrical system is conveniently positioned. All cables and wires are numbered and listed in the manual that comes with the boat, making it easy to maintain a good overview of your electrical system.

The installation comprises the following parts:

- Control panel 6-group Mastervolt
- Battery charger 15 Amp Mastervolt
- Bilge pump panel Mastervolt
- Bilge pump with float switch
- Starting battery 70 ah maintenance-free lead battery
- Light battery 100 ah maintenance-free lead battery semi-traction
- Both batteries have main fuses
- Both batteries have heavy-duty main switches
- Cyrix battery charge relay
- Shore power connection complete with earth leakage circuit breaker and automaton
- Drinking-water pump with pressure switch with filters
- 4 light fittings

Drinking-water supply

There is room for 60 litres of water on board. This water is stored in a water bag located underneath the bed in the forecabin, and supplies the galley with running water. The water reservoir may be filled up on deck on the port sidedeck.

Grey water

Due to more stringent legislation the *Ranger* has a drytoilet. A toilet with a built-in black-water tank is optional. This tank is located underneath the anchor locker and can be emptied in the marina by means of a black water pump, or at open sea by means of a drainpipe.

Safety equipment

The *Ranger* has a self-bailing cockpit and antiskid surfaces on deck and in the cockpit. Teak handrails are mounted on the superstructure and the foot rail is also made of solid teak. The forepeak has an escape hatch to the foredeck, and all sheets and mainsail reefs can be controlled from the cockpit.

The boat has both a manual bilge pump and an electrical bilge pump with an automatic float switch. There is a foam fire extinguisher on board, and the engine installation is also equipped with a foam fire extinguishing system with temperature sensor.

In order to limit their number, the through-hull fittings have been combined as much as possible. These through-hull fittings are well positioned to ensure easy access, and they are therefore easy to close up.

The energy source for cooking on board is diesel. This stove with ceramic hot plate can also serve as a heater, in combination with the optional heat-distributing hood. Gas is thus no longer needed, neither for cooking nor for the heater.

You can make your *Ranger* even safer with various other options, such as a sea railing, which automatically puts the boat in CE-category B. Venturing onto the foredeck on open sea becomes much safer when you fit lifelines. A furling headsail system enables you to unfurl your jib to any desired size, thus creating a variable amount sail area. The furling headsail can also be controlled from the cockpit.

Accessories

Three mooring ropes of 10 m each are supplied on delivery, as are four fenders and a 5-kg galvanized anchor. For the finishing touch the Ranger comes with a 1 x 1.5 m flag on a lacquered wooden flag pole.