

Specifications BORÉAL 47.2 - 3 CABINS (07/2019)

CHARACTERISTICS

- Length Overall (LOA):	14.36 m
- Length at the Waterline:	12.73 m
- Beam:	4.39 m
- Beam à Water Line:	3.56 m
- Draught:	1.02/2.48 m
- Ballast in lead:	3 800 kg
- Light displacement:	13 650 kg
- Displacement loaded:	17 000 kg
- Standard Engine:	50 hp
- Sail Area:	100 m²
- Mainsail:	45 m ²
- Genoa:	55 m ²
- Staysail:	26 m²
- Capacity Fuel:	635 1
- Capacity Water:	635 1

Architecture & conception: Jean-François Delvoye

CONSTRUCTION

Hull

Triple chines on frames and floating stringers 5083 and 5086 H111 aluminum Mig and Tig welding in Argon controlled by sweating

Structure

100 X 10 Ribs, 12 X 40 stringers, floor-plate thickness 8 mm
Water-tight collision bulkhead 1.85 m behind the bow
Water-tight bulkhead at the rear, before rudder post and dagger boards
Flat keel 120 X 10, enhanced to 300 X 30 at the forefoot
Chain plates and reinforcements under chain plates integrated into structure
Beams 100 X 10
Tube embedded in the beams to bring the chain to the anchor locker at the foot of the mast
Engine cradle and sternpost

<u>Skin</u> Keel plate 10 mm, bottom plate 8 mm Chines: lower and middle 6 mm, top 5 mm Deck, roof, cockpit: 4 and 5mm Transom: 6 mm

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Appendages

Swinging centreboard NACA profile centerboard, flat structures of 10 mm, 8 mm skin Well 8 mm reinforced by ribs and a T-shaped structure of 50x50x5 Shaft in ERTALON diameter 120 2 lines to lift and lower the centreboard (line to lift brought back to the cockpit)

Daggerboards

2 lifting dagger boards in polyester (fuse) in their casing at the rear

Rudder

Single rudder in aluminum, NACA profile, structure in flats of 8 mm, 6 mm skin Rudder stock diameter 100 mm, self aligning Ertalon bearings Emergency tiller

Ballast

3 800 kg, below the bottom plate, in the keel core, made of massive lead, insulated and embedded in sealing resin and welded in watertight compartments.

Tanks

Deck fillers (1 diesel, 2 black water, 2 water) <u>Diesel:</u> 635 liters in the keel embryo <u>Fresh water</u>: 635 liters in 2 tanks build into hull on both sides of the centreboard casing Tanks painted with food quality paint

Deck

Bow fitting with double anchor roller and aluminum tube under deck bringing the chain to the anchor locker

Chain locker at base of mast, water drains into the sump, support for windlass and rollers

8 welded cleats

Chain plates 80 X 20.

All reinforcements for attaching rails and winches.

9 Emplacements for hatches.

4 bookings for Plexiglas fixed in the upper skin

7 bookings for embedding the Plexiglas windows in the roof. (Double glazing optional)

2 reservations for recessed Plexiglas in the dog house.

1 watertight door in aluminum in the doghouse

A large rear cargo with 2 access panels

Separate storage for 2 gas bottles (13 kg)

Sail locker in the front with access by Goiot hatch

1 location for life raft

Lifting stern platform with integrated bathing ladder

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STANDARD EQUIPMENTS EXTERIOR

Rigging and sails

Rigging 1 anodized aluminum mast with double pushing spreaders Length 17.5 m Rigging in single strand stainless steel 1 anodized aluminum boom 1 mast base (deck stepped mast) 2 Winch 2 speed 40 AST (Lewmar) 1 genoa furler Profurl LC42 1 mainsail halvard, 1 topping lift and 1 mainsail sheet. 1 mainsheet system with webbing on the cabin roof. 1 outhaul of the mainsail and 3 reefing lines brought back to the cockpit 1 genoa halyard and 2 genoa sheets 2 lines to lift and lower the centerboard (line to lift brought back to the cockpit) Vang (rigid vang optional) Staysail hanked-on on removable stay or on furler with halyard, 2 sheets & running check stays optional Navigations lights as internationally approved (LED)

<u>Sails</u>

Mainsail with battens (Elvström, Dacron, horizontal cut) and 3 reefs 45 m² Genoa on furler with UV protection strip (Elvström, Dacron, horizontal cut) 55 m²

Deck Equipment

<u>Goiot hatchest</u> 1 x 490 x490 forward sail locker 2 x 440 x 440 forward cabin 1 x 390 x 240 front heads 1 x 390 x 240 starboard gangway 2 x 490 x 360 saloon 1 x 390 x 240 aft heads

Portholes and windows

2 opening windows in the side of the roof Lewmar Size 3

2 opening windows in the side of the cockpit Lewmar Size 4

4 fixed hull ports (2 in forward cabin, 1 in each aft cabin)

2 smoked Plexis 15mm in the Dog House

4 transparent Plexis at the rear of the doghouse

7 15mm Plexiglass windows in deck saloon (double glazing optional)

Recoveries of deck and bridges

Cockpit seatings & cockpit floor covered with synthetic teak Painting of deck PU white until deck line Anti Slip PU Sicomin Fullgripp on deck and roof (grey)

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Safety

Tubular handrails in aluminum on the roof, vertical part of dog house and steering columns
2 pulpits with support beam and 2 pushpits, 2 granny bars at mast
4 simple and 4 entrance stanchions
4 mm single strand lifelines with fixed clevis & pelican hooks
4 Wichard padeyes in cockpit
Lifeline systems all have the heat till the horn.

Lifeline system all long the boat till the bow

Lewmar Winchs 2 primary winchs for genoa 2 speed self tailing 55 AST 2 secondary winchs for mainsail sheet 2 speed self tailing 50 AST 1 central winch 2 speed self tailing 65 AST 2 x 5 Lewmar jammers around central winch 3 winch handles 2 genoa rails with car Principal lines brought back to central winch

<u>Ground tackle</u> Windlass 12 V 1500 Watt for 12 mm chain gypsy and wrapping end.

2 steering columns, one with single engine control lever and system of steering cables.

Enough space to build in plotters, pilot and other control panels

2 Steering wheels diameter 900mm

Compass build in the cockpit table

STANDARD EQUIPMENT INTERIOR

General

Insulation: Extruded polystyrene with a thickness of 60 mm under the bridge and 80 mm along the hull above the waterline and cork sprayed on frames

Joinery made of solid wood and veneer in natural Ash (or in oak - optional) Main bulkheads in 15 mm plywood Plywood furniture in10 mm plywood Soles in 15 mm plywood Inspection traps - wherever possible - fixed part fitted around the bulkheads and furniture to facilitate the opening and prevent friction Linings in white Comacell and white Sky Quality Marine Hardware Magnet and door stop on each door Upholstery saloon in Stamskin Mattress foam thickness of 100 mm

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<u>2 Aft cabins</u>: each with either a double bed either two bunks (bunk/storage)
Storage lockers under each bed
1 hanging locker
1 closet
1 locker down the side
1 ceiling light, 2 reading lights, 1 socket 12 V

Forward Cabin

1 double berth with storage under bed base and 2 individual mattresses

2 ceiling lights and 2 reading lights, 1 at each headboard, 1 socket 12 V

1 hanging locker, 1 office desk (starboard), several cabinets

Deck saloon Raised deck saloon in U shape with view Upholstery in Stamskin L-bench with important storage volumes 1 bar furniture, 2 cabinets 1 library shelving 2 cabinets 1 fixed central table with toe rail Back rest on central seat of saloon (optional) 2 ceiling spotlights

Galley

2 Stainless steel sink bowls with single lever hot and cold water under pressure

1 sea water foot pump and spout

1-gimballed 3 burner gas oven ENO with pot holders and electronic ignition (GN Cooker optional)

- 1 fitted refrigerator with 2 drawers 144 liters
- 2 cabinets for crockery & 2 lower cabinets

1 Stainless steel handrail

3 ceiling spotlights, 1 red (for the night), 1 socket 220 V

1 manual gas stopcock (gas alarm and remote solenoid optional)

Watch post/chart table in doghouse

Panoramic chart table with grey panel for navigation instruments 1 curved seat with its cushion covered in Stamskin 1 ceiling light 1 white/red fixed light for night passages 1 socket 12 V & 1 socket 220 V

<u>Front heads</u> 1 manual marine toilet 1 cabinet with sink, mixing faucet and storage 1 separate shower with door, shower tray and mixing faucet shower 1 mirror 2 ceiling spotlights

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Aft heads (starboard)

manual marine toilet
 cabinet with sink and mixing faucet/shower
 shower tray
 mirror
 ceiling spotlight

WATER AND DRAINAGE SYSTEM

Pressurized central water unit 151/min, self priming and with electronic control Water Heater 220 V, 40 liter with heat exchanger on engine 2 holding tanks for black water 1 holding tank grey water in front heads Shower (cold and warm water) in the cockpit

Drainage 4 electric bilge pumps 12V 1 manual bilge pump

ENGINE

Engine Volvo Penta D2-50 hp (Engine Volvo D2-60 or 75 hp and Yanmar 4JH57 or 4JH80 optional) Electrical bipolar installation, mounted on flexible "Silent Blocks" Acoustic insulation with absorbent foam and visco-elastic mass Ventilation ducts for fresh air Control panel with alarms in the companionway Access through aft cabins and companionway Single lever engine control at port steering column Fixed three-bladed propeller

ELECTRICITY

1 alternator on engine 12 V/115 A
1 shore plug 220 V
1 battery charger 220 V / 12 V
1 charge distributor
3 batteries (1 dedicated to the engine, 2 service batteries of 130 Amps)
1 panel 220 V
Circuit 12 V - Circuit 220 V
1 electric panel bipolar12 V dedicated to living area 15 functions with bipolar leakage tester, voltmeter and circuit breakers
1 electric panel bipolar 12 V dedicated to navigation in doghouse
Gauges diesel (1), water (2), grey water (1), black water (2)

CATHODIC PROTECTION

sacrificial anode on the hull
 sacrificial anode on the centreboard
 sacrificial anode on the rudder

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