



## FRIENDSHIP YACHT COMPANY

<b>FRIENDSHIP 40</b> <b>SPECIFICATION AND STANDARD EQUIPMENT LIST</b>
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<b>LOA</b>	40.27' (12.58 m)	<b>Fresh water</b>	111 g (420 L)
<b>LWL</b>	30.47' (9.28 m)	<b>Waste</b>	22.5 g (86 L)
<b>Beam</b>	12.83' (3.91 m)	<b>Engine</b>	Volvo D2 40HP
<b>Draft</b>	Min 3'11" (1.18 m)	<b>Sleeps</b>	4
	Max 9'2" (2.71m)	<b>Rig</b>	Sloop
<b>Hull mtrl</b>	Composite	<b>I</b>	55.22' (16.83 m)
<b>Deck mtrl</b>	Composite	<b>J</b>	16.34' (4.98 m)
<b>Underbody</b>	Pivoting centerboard	<b>P</b>	51.80' (15.68 m)
<b>Displacement</b>	22,500 lbs (10,206 kg)	<b>E</b>	17.93' (5.23 m)
<b>Ballast</b>	8,100 lbs (3,674 kg)	<b>110% Fore triangle</b>	481 sq. ft (44.68 sq m)
<b>Ballast type</b>	Lead	<b>Mainsail area</b>	509 sq. ft. (47.29 sq m)
<b>Designer</b>	Ted Fontaine	<b>Total sail area</b>	990 sq. ft. (91.98 sq m)
<b>Fuel</b>	33 g (125 L)	<b>Bridge Clearance</b>	66.93' (20.4 m)

### STRUCTURAL

- Hull:** Composite construction using Airex foam in the topsides with solid laminate hull bottom using vinylester resin to minimize print-through. Reinforcements are hand laid, stitched and knitted multiaxial E glass fabrics with carbon fiber in high load areas. Bulkheads are marine-grade plywood laminated into the hull. All cores are fixed using vinylester adhesive.
- Two molded custom consoles for hydraulics, sail controls and engine instruments.  
Molded recessed sheerstrake.  
Finished with owner's choice of standard *Awl Grip* marine paint colors.
- Deck:** Composite construction using Airex foam with extra high density core being used in way of all fittings. Reinforcements are hand laid, stitched and knitted multiaxial E glass fabrics with isothalic polyester resin.

### DECK AND DECK HARDWARE

- Deck:** All exterior decks are gelcoat finished to owner's choice of color. All vertical surfaces finished with glossy gelcoat, cabin house top in *Awlgrip* nonskid.
- Cap Rail:** Varnished teak.
- Sheerstrake:** Recessed sheerstrake painted to match hull color.
- Anchor Locker:** Molded into foredeck with flush, hinged hatch top. Anchor roller, self launching, with 35 lb. Delta anchor, 60m of 6mm chain.  
Salt water anchor wash system in anchor locker.
- Windlass:** *Lewmar* V2 electric stainless steel anchor windlass with two foot buttons and a remote control.
- Chocks:** Custom cast stainless steel: two quarter chocks, two midships chocks, two bow chocks big enough to accommodate bulky mooring lines.
- Cleats:** Eight *Attwood* flush mounted retractable mooring cleats with 4-bolt bases.
- Nosing:** Varnished teak.
- Ports:** Six custom fixed tinted glass elliptical ports in cabin trunk.
- Winches:** Two *Lewmar* self-tailing primary winches with 2.6:1/9:1 gear ratios and 48.6:1 power ratio.  
Two electric *Lewmar* self-tailing halyard/centerboard/mainsheet winches with 2.4:1/7.6:1 gear ratio and 44.8:1 power ratio.  
All winch buttons are recessed stainless steel *Antal* hardware.

Hardware:	Two <i>Lewmar</i> lightweight 250mm lock-in handles with ball grips. <i>Antal</i> winch buttons, radiused genoa T-track, genoa cars and sliders, organizers, screw-in padeyes, stoppers, silver anodized sheaves.
Hatches:	Three custom-made deck hatches: lazarette, foredeck, and anchor locker. One custom stainless steel hatch with glass over salon/forward cabin. Varnished teak companionway sliding hatch with removable varnished teak drop boards with lockable clasp, and custom storage bins. Four hinged stainless steel <i>Manship</i> hatches under cockpit settees, two for storage, two for engine access.
Ensign:	5' varnished teak flag staff and 3' x 5' US yacht ensign commissioning flag. Stainless steel cap rail mounted flag socket.
Accessories:	Four custom 12" x 24" line bins for halyard/sheet tails and four custom drink holders in cockpit all with polished stainless steel trim and lining.
Cockpit sole:	Teak deck on cockpit sole with custom angled helmsman floor.
Sheet stoppers:	Mainsheet, centerboard, topping lift to starboard. Main halyard, main reefing line, MPS halyard to port. Using <i>Antal</i> sheet stoppers and passing through <i>Antal</i> triple deck block organizers.

## EXTERIOR

Trim:	Varnished teak cockpit coaming cap, 6" wide. Varnished teak cabin top nosing. Varnished teak cap rail. Four varnished teak console tops. Varnished teak framed companionway sliding top with stainless rails. Varnished teak cockpit seat fiddles.
Seating:	Molded cockpit seats finished with gelcoat, choice of color. Port and starboard facing settees in cockpit, forward facing settee behind steering wheel, all with double angle back rests for ergonomic comfort. All settees come with custom bottom and backrest cushions, 4" thickness. All cushions upholstered in owner's choice of <i>Perennials</i> or equivalent fabric (\$100/yard allowance).
Cockpit Table:	Custom varnished teak drop leaf table. Table houses GPS plotter, 12V outlet, and insulated, drained cold beverage box with custom varnished teak covers. Stainless steel legs.
Steering Wheel:	48" stainless steel wheel with stainless steel rim and elkhide cover.
Pedestal:	Classic steering pedestal with thru-shaft break and classic stainless steel <i>Ritchie</i> compass.
Stowage:	Storage areas under port and starboard settees. Two Stainless steel sheet rimmed bins one each port and starboard by helm. Two Stainless steel sheet rimmed bins one each port and starboard by companionway for halyard / sheet storage at base of each winch.
Scuppers:	Custom stainless steel design, four in cockpit, four on deck, all with direct overboard drainage.

## INTERIOR

Interior Finish:	Satin varnished teak veneer finish on fore and aft joinery. Hull ceilings painted white v-groove. Athwartship bulkheads in glossy white <i>Nevamar</i> . Solid teak with satin finish for interior trim, locker door and drawer frames and corner posts.
Overhead:	Painted white v-groove overhead.
Soles:	Varnished teak with black resin inlay.
Locker Doors:	Framed edges with solid flat fielded panel teak with satin finish varnish. Port side forward locker cedar lined with lift out bottom for hanging locker.
Drawers:	Solid beaded flat panel teak with lift and pull drawer slides and custom cast bin pulls.
Table:	Solid teak drop leaf table in main salon.
Countertops:	<i>Corian</i> , in owner's choice of colors with radiused edges at fascia and teak fiddles.
Sinks:	Stainless steel underhung sink in galley, <i>Corian</i> sink in head.
Faucets:	<i>Perrin and Rowe</i> wall-mount faucet in galley and <i>Grohe</i> cross-handle mixer tap in head.
Shower:	<i>Grohe</i> hand-held shower unit mounted on head bulkhead.

Drainage:	Head sole varnished teak and black resin with edge drain to sump and direct overboard discharge pump.
Fixtures:	Towel bar, soap dish, toilet paper holder, toilet brush.
Microwave:	<i>Sharp</i> microwave/toaster mounted on teak shelf in galley locker.
Coffee Maker:	<i>Keurig</i> gourmet one-cup brewing system in galley locker.
Cold Box:	Custom stainless steel lined cold box recessed in galley countertop with removable plexiglass shelving.
Berths:	Double berth forward with 5" thick cushion.
Fabric:	Settees used as additional berths. Stowage shelves and lockers above settees. All upholstery to be owner's choice. Standard fabric allowance of \$100/yard.

## MECHANICAL

Engine:	<i>Volvo</i> 40 HP 4-stroke sail drive engine. Fresh water cooling, <i>Racor</i> filter, and heavy duty 135 amp alternator. Oil change pump included on engine.
Gauges:	Custom stainless steel recessed engine instrument panel with <i>Volvo</i> gauges for tachometer, oil pressure, fuel level and tank level.
Gearshift:	<i>Morse</i> type single-control gearshift and throttle near helmsman.
Fuel Tank:	33 gallon welded translucent polyethylene fuel tank with inspection/clean-out port located under cockpit sole and gauge on instrument panel.
Filter:	<i>Racor</i> fuel filter. One spare supplied if optional generator is purchased.
Vents:	Vent line with <i>Racor</i> LG100 vent spillage filters.
Steering:	<i>Whitlock</i> drag and link steering system.
Rudder:	Balanced, elliptical spade rudder constructed with uni-directional glass rovings and 4" diameter carbon fiber shaft with roller type rudder bearings.
Bilge Pumps:	One 12V automatic <i>Jabsco</i> bilge pump and one cockpit operated <i>Whale</i> manual pump.

## ELECTRICAL

House Batteries:	Four Lifeline Group D, 12V DC batteries, 255 Amp Hrs each (1020 Amp Hrs Total).
Starting Battery:	Two Lifeline Marine Start, 12V DC batteries, 950 CCA each (1900 CCA Total).
Distribution:	Custom DC back lit panel with circuit breakers and battery condition meter.
Alternators:	Engine supplied standard alternator to charge starting bank, additional <i>Leece-Neville</i> 12V DC 130 amp alternator supplied to charge house bank.
Shore Power:	125V / 30 amp shore power connection in cockpit with 50' cord.
Battery Switch:	Battery bank switch with DC main breaker.
Inverter:	12V DC / 120V AC, 2000W, <i>Xantrex</i> inverter to be switched on the main AC electrical panel. Inverter shall power microwave and 110V outlets.
Interior Lights:	Four reading lights, five dome lights, courtesy lights at forward and aft end of salon table. Centerline dome light with red/white selection switch. Engine room will have utility lights.
Exterior Lights:	Masthead tri-color and anchor, bow, stern, spreaders, foredeck, and two boom lights.
12V Outlets:	One 12V plug located in cockpit for search light use.
110V Outlets:	Five 110V plugs: galley, head, forward cabin, starboard side salon, and engine room.

## PLUMBING

Water system:	Hot and cold pressure water system to galley, head, shower.
Water Tank:	111 gallons of water capacity in two independently valved tanks.
Water pump:	<i>Jabsco</i> FloJet self-priming water pump.
Water Heater:	<i>Force 10</i> , 6-gallon tank to be powered by AC electrical heating element and from recirculating through the main engine.
Toilet:	<i>Tecma</i> Silence Short electric fresh water toilet with overboard/holding tank discharge. Holding tank with overboard drain/pump out discharge.
Bilge Pump:	One automatic 12V DC bilge pump mounted in the engine room. Pump will discharge overboard at the waterline with vented loops. One manual <i>Whale</i> bilge pump operated from the cockpit.
Sump Pump:	One automatic 12V DC bilge pump with direct overboard discharge.
Thru-hulls:	<i>Forespar</i> flush-mounted sea cocks below the waterline for engine, head, and galley with double-clamped hoses.

## SPARS AND RIGGING

Mast:	Aluminum mast, <i>Awlgrip</i> finish with two sets of airfoil spreaders, steaming light, internal masthead wire conduit, stainless steel gooseneck, vang lugs, and halyard attachment step. Mainsail track for fully-battened mainsail. Two flag halyards to lower spreaders.
Boom:	Aluminum boom with fittings for single reef lines, vang lug, and topping lift/mainsheet bale. One light at mid-boom and one at boom end.
Mast Collar:	Custom stainless steel mast collar with integral turning blocks for all lines.
Standing Rig:	Rod rigging with <i>Navtec</i> turnbuckles.
Running Rig:	12mm braided main halyard, 10mm braided genoa halyard with eye splice to shackle to furler swivel. 12mm braided genoa sheet. Stainless steel genoa halyard adjustment on mast track.
Chain Plates:	Custom stainless steel chainplates, stem head, and backstay tang.
Boom Vang:	Black anodized hydraulic <i>Navtec</i> vang.
Backstay:	Black anodized hydraulic <i>Navtec</i> backstay.
Furler:	<i>Reckmann</i> RS2000-20 line drive manual genoa furler. Furling line led aft under deck to starboard primary winch.
Genoa Tracks:	Two 5' x 1.25" <i>Antal</i> stainless steel T-tracks with two genoa lead blocks.

## NAVIGATION

Compass:	5" <i>Ritchie</i> binnacle mounted compass with red LED.
B&Gs:	Two <i>B&amp;G</i> Hydra 3000 graphic function displays with masthead wind sensor and depth, speed, and temperature transducers.
GPS:	<i>Garmin</i> 5208 touch screen system with plotter located in cockpit table.
Radio:	One <i>Icom</i> IC-M504 VHF radio located in electrical locker.

## PAINT AND FINISH

Hull:	Owner's choice of standard <i>Awlgrip</i> colors.
Deck:	Owner's choice of standard gelcoat colors.
Bottom:	Epoxy primed, painted with owner's choice of anti-fouling color.
Boot Stripe:	Single stripe, painted with owner's choice of <i>Awlgrip</i> color.
Cove Stripe:	Molded, painted with gold.
Exterior Teak:	Minimum of nine coats gloss finish varnish.
Interior Teak:	Satin varnish.
Boat Name:	Name and hail port on transom.

## OUTFITTING

Four 40' double braid dock lines.  
Four 8" x 20" fenders with double braid lines and fleece covers.  
Boat hook mounted in foredeck hatch.  
One engine spares kit and metric tool kit with necessities provided.

## SAILS

North Sails Norlam Soft 7.0 oz mainsail with full, traditional battens.  
North Sails Norlam Soft 7.0 oz. 110% genoa.

## COMMISSIONING

Boat cleaned, tested and delivered in the water in Portsmouth, RI.  
Full owner's orientation in Portsmouth, RI.

## DOCUMENTATION

Friendship 40 Owner's Manual, all equipment manuals, construction drawings and all systems schematics.

**Specifications subject to change without notice.**