3 Jan 2024 Version #74 (WEF 65-069)

# Fleming 65 - Pilothouse Motor Yacht

# **SPECIFICATIONS**

#### **General Description**

LOA (hull): LOA (including swim step and anchor platform): LWL: Beam: Draft: Air draft (to top of radar arch):	67' 4" (20.5m) 70' 10" (21.6m) 61' 11" (18.9m) 18' 8" (5.7m) 5' (1.52m) 17' 11" (5.46m)
Displacements Minimum Operating Condition: Loaded Condition:	102,698 Lbs. (46,583kg) 124,663 Lbs. (56,546kg)
Main Engines: Transmissions: Reduction Ratio: PTO's Engine Controls:	Twin MAN i6-800 (800 HP @ 2300 RPM) Twin Disc MGX-5126A 2.50:1 Clutched C-Pad on both transmissions Twin Disc EC600
Shafts: Driveline:	Aqualloy 22 Hi-strength Aquadrive CV48
Generator:	Onan eQD 21.5Kw, 220v, 60 Hz
	(European model 17.5Kw, 230v, 50Hz)
Stabilizers:	
Stabilizers: Bow Thruster: Stern Thruster:	(European model 17.5Kw, 230v, 50Hz) Humphree DC Electric with 10.7 Sq. Ft (1.0 Sq
Bow Thruster:	(European model 17.5Kw, 230v, 50Hz) Humphree DC Electric with 10.7 Sq. Ft (1.0 Sq m) fins, including at-rest function Twin Disc 65 HP Hydraulic

#### SPECIFICATIONS BY AREA OR GROUP

#### HULL

Solid laminate, commensurate for hull size, made in female mold Black Gel coated boot stripe Vinylester resin used for outer laminations Full-length stringers and athwartships frames laminated over foam Simulated planking grooves Gel coated finish Five coats of epoxy barrier coat below waterline Two coats of Black Pettit 1088 GA antifouling paint Pettit Metal Etch Primer 6455/044 and Pettit Epoxy Primer 4700 and Pettit 1088GL Trinidad Antifoul used on underwater metals Integrally molded guard with stainless-steel rub strip Keel extends below running gear Keel space filled and sealed across top FRP rudders with Aqualoy 22 Hi-strength stocks **CE-approved Stainless-steel port lights** Stainless-steel keel shoe – 8 ft (2.4m) long Shallow Shaft Tunnels – draft 5ft (1.52m) Razor shaft cutters Molded Bustle under swim step (provides longer LWL) with access hatch on top of swim platform and interior storage compartment

#### DECK AND SUPERSTRUCTURE CONSTRUCTION

All parts made from molds Corecell Cored construction Polynt gel coat "Fleming White" Vinylester resin used for outer laminations

# **EXTERIOR**

Stainless-steel trim around roofs, on forward teak cap rail, and guard Italian made exterior locks

Hella LED navigation and anchor lights in accordance relevant regulations Stainless-steel Fleming & "F" Logo on port & stbd forward roof supports Rope cutters

Exterior seating with EZ-Dri foam, Sunbrella upholstery, and mesh backs for drainage

Groco serviceable exterior sea strainers

# AFT DECK AREA

Cockpit with teak decking.

Flush lazarette hatches with hinges, gaskets, locks & gutters with drains FRP Swim step, molded white non-skid surface. Stainless-steel rub rail Hatch access into bustle Stainless-steel telescopic swim ladder, can be deployed by swimmer Wide teak coaming around cockpit FRP skirt inboard of teak cap. Engine-room air intakes behind skirt and inside bulwarks Stainless-steel ladder to flybridge with teak treads Sliding doors to salon. Aluminum with FRP skin, glass windows & Stainless-steel weather strips Seadog style latches for doors Hot & cold shower fittings on inside of transom adjacent to door, with quick release shower head and flexi hose Salt water 316 Stainless-steel faucet Fresh Water 316 Stainless-steel faucet Two Smartplug shorepower inlets for 240v, 50A (European model 230v, 32A) Overhead LED lighting with dimmer control LED rope lighting under coaming skirt Chocks at hull sides and transom (4) Six 14" heavy duty Stainless-steel cleats secured to plates inside bulwarks Deck scuppers piped out through transom at boot stripe Hatch with steps down into lazarette, also provides access to engine room Integrally molded seats Integrally molded cockpit cabinet lockers Stainless-steel 1 1/8" handrails across transom Courtesy LED "F" logo lights at step up to salon Stainless-steel folding handrail down to engine room which stows on inside of hatch lid

CCTV pan/tilt/zoom camera

## SIDE-DECKS

Teak decks

Stainless-steel 1 1/8" diameter handrails along house-side

Teak rail cap on bulwarks

Bulwark doors opening inboard with Seadog style latches and bolts

Non-skid on top side of guard at boarding gates

LED overhead lights, two per side.

Courtesy LED "F" logo lights at steps up to Portuguese deck

Stainless-steel handrails at side deck steps

Stainless-steel grab rails over side deck bulwark gates port & stbd

Steps to Portuguese Bridge deck with teak treads

House side windows fixed with tinted, tempered glass and FRP frames Galley & Pantry windows sliding with tinted, tempered glass and FRP frames Two sets of spring-line chocks per side

Five 14" heavy duty stainless-steel cleats per side, recessed into bulwarks with heavy duty steel backing plates

Non-spill fuel fills in steps port and stbd, with custom stainless-steel "F" logo lids. Can fill all fuel tanks from port or starboard fuel fills via crossover manifold

# PILOT-HOUSE DECK LEVEL

Portuguese Bridge

Teak rail cap

Locker doors in aft face of Portuguese bridge, access to large, vented storage area with Dri-Deck flooring

Stainless-steel 1 1/8" diameter handrail around forward & sides of pilothouse Sliding Aluminum pilothouse doors port & stbd with stainless-steel interlocking weather seals

Teak decks

Hinged doors port & stbd through Portuguese bridge to foredeck with stainlesssteel gas spring assist

Speich heavy duty self-parking wipers with speed control and screen wash Clear, tempered 10mm thick glass, in forward facing windshields

Pilothouse windows are fixed and have FRP frames

Inward opening gates on Portuguese Bridge side decks port & starboard Stainless-steel Fleming "F" logos on forward roof supports port & starboard Black water tank suck-out deck fittings on port and stbd sides

Two stainless steel fender tie fittings on port and stbd sides Galley cooktop and microwave vent

# FOREPEAK

Chain and rope lockers with removable stainless-steel access plates Stainless-steel chain pipes Watertight collision bulkhead Forepeak drains directly overboard. Bitter end fittings Hatch scuppers High gloss poly paint finish Overhead LED light Dri-Deck flooring

# FWD DECK

Fleming white color non-skid deck

Cabin trunk with white non-skid finish and one large CE approved stainless-steel skylight

Vented deck lockers in cabin trunk

Stainless-steel handrail on cabin trunk

Teak rail cap on bulwarks increasing in width going forward

Stainless-steel stanchions & mid-rail

Oval stainless-steel hand rail

Deck lockers either side of anchor platform with white non-skid finish

FRP anchor platform with molded white non-skid finish and two sets of rollers Two Hydraulic Maxwell RC12 windlasses with pendant control, and control panels at pilothouse & flybridge helm stations

300ft (91m) length of 7/16" (12mm) Stainless-steel Grade 60 German chain 132 Lbs. (60Kg) Stainless-steel Ultra Anchor with stainless-steel Ultra Swivel Chain hook with strop (for securing anchor when stowed)

Four stainless-steel chocks

Eight 14" heavy duty stainless-steel cleats

Stainless-steel pulpit 1 1/4" diameter tube. Welds ground and polished.

Foredeck LED "F" logo lights at steps through gates thru Portuguese bridge. Hatch to forepeak

Two Smartplug Shorepower inlets 240v, 60Hz, 50A (European model 230v, 50 Hz, 32A)

Saltwater 316 Stainless-steel faucet inside foredeck lockers

Fresh water 316 Stainless-steel faucet inside foredeck lockers Socket for windlass control pendant

Deck drains plumbed to boot-stripe to prevent black streaks

Teak burgee pole

# FLYBRIDGE

Lexan venturi with stainless-steel rail Steering console with engine controls on level surface Electronics console with black Formica panel Raised Stidd Helm seat with "Surf" white Naugahyde upholstery, folding armrests, back recline adjustment, and twin folding footrests Color touchscreen for FFM monitoring system Engine instrumentation Ritchie compass with light & dimmer Hypro Electro-hydraulic steering with destroyer-type stainless steel steering wheel Rudder angle indicator Fire system repeater alarm L-Settee

Isotherm stainless-steel refrigerator Beige color non-skid deck Table starboard side with fixed Silestone top Straight settee on port side Flybridge cushions on settees with EZi-dri foam, Sunbrella upholstery, and mesh backs for drainage Perfix snaps for attaching cushions LED navigation lights in accordance with appropriate regulations Kahlenberg D-330 Air horn with twin trumpets Two Mastervolt 20-amp 24v to 12v DC-DC converters with 12v AGM back-up batterv FRP Radar arch with LED down lights Stainless-steel railings with mid safety rail Stainless-steel safety rail by sliding hatch Stainless-steel safety gate between flybridge and boat deck CCTV pan/tilt/zoom camera Dri-Deck flooring in storage areas and under seating ABT TRAC-LINK color touchscreen control panel for hydraulic system & pumps Humphree control panel for stabilizers Low level courtesy LED lights with "F" logo

## BOAT DECK

Integrally molded beige color non-skid on deck Integrated deck drains with gutter system Stainless-steel handrails. 1 1/4" diameter with 3/4" diameter mid-rail. Removable mid-rail on port side for liferaft deployment 1,500 lbs. (680 kg) capacity Hydraulic davit with powered luffing, hoisting, telescopic boom and rotation Hinged hatch to cockpit ladder GFCI 120v AC outlet (European model 230v RCD protected) Fresh Water 316 Stainless-steel faucet Stainless-steel saddles (4) for tender (supplied loose) Aluminum plate inside deck for tender tie down eye Stainless-steel flagpole holder on aft flybridge rail Teak flagpole with internal stainless-steel reinforcement

# LAZARETTE

Steering gear

Hypro Marine hydraulic power pack with primary, back-up, and autopilot steering pumps, on anti-vibration mounts with FRP drip tray Deck and hatch scuppers Hull finished with gloss white polyurethane paint

#### LED Overhead lights

400 US gals (1,514 Liters) in four polyethylene tanks with sight gages Variable frequency drives for 3-phase salon & pilothouse air-conditioning Air-conditioning compressors Aft shorepower inlet circuit breakers Smoke detector Dual Gianneschi Fresh water pumps, pressure regulator, and flow sensor Fresh water system (debris) filter Fresh water tanks drain valve, with protective cover Fresh water tanks isolation valves Aft DC electrical panel Submersible bilge pump High bilge alarm Starboard platforms and sole boards with stainless-steel lifters Arctic steel raw water strainers for aircon seawater inlets Two isolation-boosting shorepower transformers Automatic AC power Controller Seacock & Arctic steel strainer for watermaker

## ENGINE-ROOM

Aquadrives with thrust plate & CV joints Rubber Design soft engine mounts Bronze dripless shaft seals with Buck Algonquin "Seal Tight" Packing Hinged covers over Aquadrive thrust bearing FRP fuel tanks (4) with fire retardant coating Solenoid operated sight gages on fuel tanks Fuel transfer system with high capacity pump & digital totalizer Arctic Steel raw water strainers for engines, gensets, aircon and all seawater intakes Humphree Stabilizer Servos & DC Circuit Breakers Equipment platforms 21.5Kw, 240v, 60 Hz, (European model 230v, 50Hz, 17.5Kw) Onan eQD genset with sound shield and combined muffler/water separator for exhaust NIM module for genset – allows genset data to be displayed on FFM Monitoring System Tru-Design composite seacocks for seawater inlets Main engine exhaust system Automatic engine room ventilation & air circulation system Heavy duty sound insulation covered with perforated aluminum Engine access hatch locked down on gaskets Fire suppression system with automatic engines/genset/blowers, & air-intakes shutdown Heat detectors (3) Smoke detector

Air intake baffles with auto-close in event of fire and guarded manual switch in cockpit Bilges painted with gloss white polyurethane paint Sole board covered with Lonseal vinyl. Fresh water hose coil Submersible bilge pump Sump pump Hi-bilge level sensor Engine start/stop buttons for each engine Lube oil pumps (2) for engines, transmissions and generator AC LED slim tube lighting DC LED lighting (24v) 120v GFCI electrical outlets (European model 230v RCD protected) Heavy duty Air-horn Compressor Double platform with anti-vibration soft mounts for genset 24v 1,150 A/H Mastervolt Li-Ion house battery bank house battery bank 24v 255 A/H port engine/genset starting battery bank – Two Lifeline GPL-8DL 24v 255 A/H stbd engine/genset starting battery bank – Two Lifeline GPL-8DL FRP drip pans underneath main engines Stainless-steel mirror finished plates on inboard face of aft fuel tanks Stainless-steel mirror finished engine stringer caps Airtight FRP door with dog down latch and viewing port Starboard platforms and sole boards Lead foam sound insulation Two Delstar 200-amp heavy duty brushless aux alternators Two Mastervolt Alpha Pro III alternator regulators with alternator temperature sensors Two 24v Mastervolt 15-amp battery chargers, one for each engine/genset battery bank Three Mastervolt 4,000 watt inverters Three 100-amp Mastervolt 24v Battery Chargers for house bank Two CCTV pan/tilt/zoom cameras Gianneschi 24v DC high capacity sea water pump Engine room Airconditioning 16,000 BTU

#### **INTERIOR**

Accommodation with three staterooms Hanging lockers lined with teak Insect screens for all opening windows, port lights and skylights Mobella interior door locks Cruisair reverse cycle air-conditioning with remote compressors LED mood rope lighting behind valances, stairs and settees LED warm white interior lighting throughout (24v DC) Teak joinery with satin varnish, hand-rubbed finish Teak and holly soles throughout – hand-laid solid timber (not plywood) Light fixtures polished stainless-steel finish Vimar light switches and AC & USB outlets with graphite grey silk faceplates Interior locker door handles with polished stainless-steel finish Interior bulkheads feature sandwich construction with lead foam sound insulation Headroom 6' 6" (1.97m) minimum throughout All drawers constructed with dovetail joints Cabin & Head doors with gaskets Bookshelves with custom stainless steel drop-down fiddles Synthetic leather headliner - "Fleming White"

Silestone countertops and shower stalls are available in the following colors:

Eternal Statuario Eternal Calacatta Gold Poblenou Royal Reef Blanco Maple

Standard three stateroom accommodation includes master cabin forward (ensuite) with two hanging lockers and vanity, port cabin with twin berths, hanging locker & vanity, stbd cabin with up & over berths, hanging locker and vanity, guest head to stbd. See drawing "FLEMING 65' – Standard Accommodation"

Two choices of salon layout:

- L-Settee to port, Fleming Hi-low table, aft wet bar with sink, refer/icemaker combo, stbd side entertainment centre with teak top & TV cabinet in aft corner, with powered TV lift. See drawing FLEMING 65' – Salon Arrangement – Option #1"
- Straight settee to port with cabinets at either end, aft wet bar with sink, refer/icemaker combo, stbd side dinette with dining table and light fixture above & TV cabinet in aft corner, with powered TV lift. See drawing FLEMING 65' – Salon Arrangement – Option #2"

## SALON

Fixed windows in house sides Opening windows in galley and pantry with removable insect screens Sliding doors at aft end Medium grey tinted, tempered, glass. Wood window blinds with teak retainers Teak joinery with satin varnish hand-rubbed finish Silestone countertops Teak valance over windows with LED rope lighting Overhead LED lighting on dimmers Access hatch to allow for engine removal Synthetic leather headliner – "Fleming White" CO detector Cruisair reverse cycle air-conditioning FRP sandwich with honeycomb composite sole Sconce lights with shade

## GALLEY

Silestone countertops Silestone splash back installed behind sink and cooktop Undermount stainless-steel double sink Insinkerator waste disposal unit Stainless steel convection microwave oven with cooktop overboard vent Three burner Miele Induction cooktop Removable stainless-steel potholders for cooktop 20.5 cu ft. side by side refrigerator/freezer **Overhead LED lighting** Swivel faucet with removable spray head Slide out trash bin Drawers with guides and stops Cabinets 120v AC GFCI outlets (European model 230v RCD protected) Instahot – instant hot & cold filtered water dispenser Slide-out pot/appliance storage lockers (2) in forward bulkhead Slide-out pot/appliance storage lockers (2) in aft cabinet Dishlocker at stbd side with opening top & front Slide out storage in pantry on stbd side Synthetic leather headliner - Fleming White Cruisair reverse cycle air-conditioning Preparation for optional dishwasher – including AC power cables, circuit breaker, and freshwater feed with shut-off valve Storage cabinet under sink with automatic LED lighting Overhead cabinets with hinged teak doors

# PILOTHOUSE

One Stidd 500XL low back helm seat with chrome package, footrest, drink holder, and black Ultraleather upholstery Chart table with double-guide drawers and stops Chart light on flexible arm Dismountable control console with ample space for electronics Fleming First Mate (FFM) Monitoring System 16" color display screen Engine instrumentation Dedicated space for Autopilot control Humphree control panel for stabilizers ABT TRAC-LINK color touchscreen panel for hydraulic system & pumps ABT friction type jog levers for hydraulic bow & stern thrusters Horn control Reservoir for air horn Rudder angle indicator Back lit engine start & stop/Ignition buttons Engine power key-switches on advisory panel Twin Disc Electronic engine controls with synchronizer, Express and troll modes Hypro electro-hydraulic steering with Destroyer type steering wheel with teak grips Back-up Steering control panel with back-up rudder angle indicator Ritchie Compass with light & dimmer (specify required hemisphere) Overhead electronics console Wiring routes to facilitate equipment installation Overhead LED lighting with dimmer LED red and white dimmable bridge lights in upper console Stairs down to salon, up to flybridge Back lit electrical & Battery Master Switch panel Advisory panel Doors on electrical and advisory panels L-shaped settee on raised area Wood boat blinds on port window at settee with teak retainer Teak table with single stainless-steel leg and swivel File drawer Self-parking, heavy-duty windscreen wipers with multi-speed/intermittent controls & freshwater wash on forward-facing windows Windshield glass, clear, tempered, 10mm thick Synthetic leather headliner – "Fleming White" Variable speed demister blower on forward facing windows Hinged soffit access to underside of flybridge console Stainless-steel handrail around dayhead Cruisair reverse cycle air-conditioning which can be run on inverters whilst main engines are running Black water tank level indication and pump control on FFM System with auto pump shut-off when tank empty, and auto head shut-off when tank full

Generator digital control panel with start/stop Windlass up/down switches & control circuit breaker Fire system control panel Bilge pump control on advisory panel Custom stainless-steel fold down bookshelf fiddles Dimmer for instrument lighting Main engine sea water flow alarms Sconce lights with shade Charcoal suede fabric on upper surface of consoles Cushion for pilothouse berth and dedicated storage for in-fill pieces Smoke detector inside pilothouse console Smoke detector under flybridge console Two teak access doors to electronics compartment behind seating eFit iPad storage and charging socket in overhead console

#### Pilothouse Day-Head

Porcelain wash basin in Silestone countertop Locker and medicine cabinet with mirror Vented Wet locker with drain pan Tecma toilet Intake and discharge head vent fans Air-conditioning outlet Synthetic leather headliner - Fleming White

#### ACCOMMODATION

#### PASSAGE

Lower part of bulkhead teak. Upper part Synthetic leather "Fleming White" with teak chair-rail trim at join Access doors to staterooms LED rope lighting at stairs to salon and forward cabin Overhead LED lighting Manual bilge pump under steps Bosch washer and Bosch drier in cabinet behind sliding door Synthetic leather headliner – Fleming White Teak handrail above stairs to accommodation

#### FORWARD STATEROOM

Four stainless-steel CE-approved port lights with removable insect screens

CE approved skylight providing light, ventilation, and emergency exit Telescopic escape ladder, with dedicated storage in hanging locker Powered Oceanair sliding insect and black-out screens for skylight Tapered queen-sized bed with electric lift and manual slide Retainer device for sliding bed securing knob Foam mattress Upholstered headboard Teak lockers either side of bed LED rope lighting under bed and steps Two hanging lockers. Teak faced with double louvered doors and automatic interior lights TV space on bulkhead Drawers with center guides and stops Beveled-edge European sourced mirrors Door stops and holders. Doors with flat teak panels, and teak frame with arched top Bulkheads with lower half teak and upper half synthetic leather – "Fleming White" Synthetic leather headliner – "Fleming White" Teak valance over portlights Formica inside portlight openings LED Rope lighting and drape tracks at portlight openings LED overhead lighting on dimmers. Berth LED reading lights. CO detector Smoke detector Sump and condensate pump for air-conditioning Vanity at aft bulkhead Custom Stainless-steel fold down bookshelf fiddles Drapes Cruisair reverse cycle air-conditioning CCTV control panel

## PORT HEAD (en Suite)

CE-approved portlight with removable insect screen FRP/PU coated shower stall with Silestone/marble sole and auto sump pump Shower mixer, pressure and temperature compensated Stainless-steel toiletries rack in shower Silestone countertop with porcelain basin Hans-Grohe Faucets Beveled-edge European sourced mirrors LED lighting 120v AC GFCI outlet (European model 230v RCD protected) Stainless-steel towel rails Tecma toilet Ventilator extraction fan Drapes Trident Premium Sanitation hose Holding tank full indicator Air-Conditioning inlet from cabin Shower sump pump control and override switch

#### STBD GUEST CABIN

Stainless-steel CE-approved port lights with removable insect screens Upper & lower berths in "L" configuration Hanging locker with louvered door & auto-light. Vanity with drawers 120v AC outlets (European model 230v RCD protected) Foam mattresses Upholstered Headboards LED overhead lighting. Berth LED reading lights LED rope lighting and drape tracks at portlight openings. Full height beveled-edge European sourced mirror Pocket entrance door CO detector Smoke detector Custom stainless-steel fold down bookshelf fiddles Drapes Synthetic leather headliner - "Fleming White" Bulkheads with lower half teak and upper half synthetic leather – "Fleming White" Teak valance over portlights Formica inside portlight openings LED Rope lighting and drape tracks at portlight openings Cruisair reverse cycle air-conditioning

#### PORT STATEROOM

Stainless-steel CE-approved port lights with removable insect screens Twin berths LED rope lighting under berths Full height beveled-edge European sourced mirror Hanging locker with auto lighting and louvered door Teak valance over portlights Formica inside portlight openings LED Rope lighting and drape tracks at portlight openings Foam mattresses 120v AC outlets (European model 230v RCD protected) Upholstered Headboards Vanity and cabinets LED overhead lighting Bookshelves Berth LED reading lights LED Rope lighting and drape tracks at portlight openings. CO detector Smoke detector Custom Stainless-steel fold down bookshelf fiddles Synthetic leather headliner – "Fleming White" Bulkheads with lower half teak and upper half synthetic leather – "Fleming White" Cruisair reverse cycle air-conditioning

#### GUEST HEAD

CE-approved Portlight with removable insect screen FRP/PU coated shower stall with Silestone or marble sole, auto sump pump, seat and lockers Stainless-steel and glass custom shower doors Lockers Shower mixer, pressure and temperature compensated Silestone countertop with porcelain basin Hans-Grohe Faucets Beveled-edge European sourced mirrors LED overhead lighting 120v AC GFCI outlet (European model 230v RCD protected) Stainless-steel towel rails. Tecma toilet Ventilator fan Drapes Trident Premium Sanitation hose Holding tank full indicator Shower sump pump control and override switch

#### <u>SYSTEMS</u>

## STEERING

Hypro Marine Electro-Hydraulic Steering with electronic helm units at Pilothouse and Flybridge.

Hydraulic Power-pack with on-demand variable speed primary pump, back-up pump, and pre-plumbed 24v 1.5 LPM Autopilot pump in lazarette Shielded power supply cables

Rudder angle indicators at pilothouse and flybridge station on FFM Monitoring System Back-up steering control panel with dedicated rudder angle indicator in pilothouse. Separate power supply and control for backup steering Destroyer wheel at flybridge and in pilothouse Pilothouse steering wheel has teak grips FRP rudders with Aqualoy 22 stocks Rudder tubes extend above waterline

## ENGINE CONTROLS

Twin Disc EC600 electronic engine controls with Troll, Express, and Synchronizer modes, at pilothouse and flybridge.

#### MACHINERY

Twin MAN i6-800 HP Common Rail Engines

Twin Disc MGX-5126A "Quickshift" Marine transmissions with electric shift and troll valves

Stabilizers – Humphree DC Electric with 10.7 Sq. Ft (1.0 Sq m) fins, including atrest function

ABT 38HP Hydraulic Bow Thruster (12" tunnel) friction type jog lever controls at pilothouse and flybridge control stations

ABT 20HP Hydraulic Stern Thruster (10" tunnel) friction type jog lever controls at pilothouse and flybridge control stations

ABT hydraulic system with clutched C-pad PTO's driving hydraulic pumps on both transmissions, with noise suppressors, hydraulically driven sea water cooling pump, and two color touchscreen control panels (P/H & F/B)

4-blade (NSP) Nickel Aluminum bronze propellers

Recessed I-struts in shaft pockets

Rubber Design adjustable soft engine mounts

Underwater exhaust and internal water-lock muffler system

Fleming First Mate (FFM) central monitoring system with 16" color touch-screens in Pilothouse and Flybridge

## FUEL SYSTEM

Twin Racor 75/1000MAX duplex filters with change-over valve, and Dent vacuum gage for main engines, drip pans under filters

MAN Primary fuel filters with water-in-fuel sensors for main engines Racor 500MA fuel filter for generator Four FRP fuel tanks made with vinylester and fire-retardant resins and with a fire proof outer coating

Total fuel capacity 1,700 USG (6,435 liters)

Fuel tank sumps and drains with shut-off valves on all tanks

Fuel management panel for engine/genset fuel supply/return selection

High capacity 24v DC Fuel Transfer pump with suction & delivery manifolds Digital fuel flow totalizer for transfer system

Stainless-steel fuel tank float switches and Hi-level alarm and transfer pump safety shut-off feature

Sight glasses on all fuel tanks with solenoid operated (push button) safety valves Electric fuel priming pumps for both main engines

Pressure type fuel tank level sensors connected to FFM System

#### PLUMBING

#### SANITARY

Tecma heads

Toilets flush to FRP holding tank with level indicator on FFM Toilet flushing with seawater or freshwater. Anti-odor filters on holding tank vents port & starboard 330 USG (1,249 liters) Black water tank Tank level indicator and pump control on FFM Monitoring System Plastic lined pressure accumulator tank Black water tank suction deck fittings port and stbd side Black water tank seawater flushing system, with self closing safety valve Gianneschi 24v DC heavy duty black water discharge pump Sealand T24 backup black water discharge pump Black water discharge seacocks with position indication – prevents discharge pumps running if valves are closed

## FRESH WATER SYSTEM

400 USG (1,514 Liters) total in four polyethylene tanks, with drain and isolation valves.

Sight glasses on water tanks

Dual Gianneschi 24v DC Fresh water pumps, inlet filter & flow sensor 40 USG (151 Liters) Torrid water heater with two 240v AC heating elements, two heat exchanger coils, drain & pressure/temp relief valves.

Heat exchanger system and circulation pump for heating domestic water from port main engine via heat exchanger, circulation pump runs automatically when engine is running

Hot water re-circulation solenoid valve and timer with switches in both heads Fresh Water 316 Stainless-steel faucet on foredeck, flybridge and cockpit Hans-Grohe interior faucets Whale plumbing system Whale gulper shower sump pumps Fresh water coil hose in engine room Pressure type water tank level sensor connected to FFM System Thermal expansion tank

#### SEA WATER SYSTEM

Gianneschi 24v DC, heavy duty, seawater pump and strainer Saltwater 316 Stainless-steel faucet on foredeck, and cockpit Sea water flush line connected to black water tank, with self closing safety valve Whale brand plumbing Arctic steel intake strainers for main engines, generator and sea water system

Sea water pump auto shut-off safety function

#### **BILGE SYSTEM**

3 pcs 3,700 GPH Rule electric bilge pumps with auto/man control 1 pc 2,000 GPH Rule electric bilge pumps with auto/man control (bustle) Manual bilge pump for forward bilge compartment Forward bilge sump pump – Whale Gulper Engine room bilge sump pump – Whale Gulper USS type bilge pump/high level alarm float switches in bustle, lazarette, engine room, and forward bilge - connected to FFM System Bilge counter on FFM Monitoring System records number of times bilge pump runs

#### **ELECTRICAL**

## ELECTRICAL – AC

240v, 21.5Kw 60 Hz, Onan eQD generator, single phase, in sound shield, double mounted on anti-vibration soft mounts, with NIM module (European model 230v, 50Hz, 17.5Kw)

Load distribution panel with backlit labels.

Dedicated inverter compliant AC panel

Digital meters (volts, amps, watts and frequency) and circuit breakers as required Four 240v, 50-amp shorepower inlets fore and aft connected so that two can be used simultaneously (European model has 230v, 32A shorepower inlets)

Two Isolation & voltage boosting transformers for shorepower

Automatic AC power controller for shorepower/genset

AC & USB outlets throughout. GFCI type in heads, galley, engine room and exterior

Three 4,000-watt pure sine wave Mastervolt inverters

Inverter bypass system

Mastervolt remote control panel in pilothouse.

Approved marine grade tinned copper wire

Vimar AC outlets with Graphite Grey Silk Faceplates

Hinged panels for serviceability

## ELECTRICAL – DC

Main ships system is 24v DC

Three isolated 24v battery banks

24v 1,150 A/H Mastervolt Li-Ion (LiFePO4) house battery bank

24v 255 A/H port engine/genset starting battery bank – Two Lifeline GPL-8DL

24v 255 A/H stbd engine/genset starting battery bank – Two Lifeline GPL-8DL

12v 105 A/H Backup battery – Lifeline GPL-31T

12v DC provided via two 24v-12v DC-DC, 20-amp converters & back-up battery system located on flybridge

DC-DC Converter and auto transfer device for back-up power to Hot DC Bus Remote controlled battery master switches operable from Pilothouse, also permits paralleling of engine/genset battery banks

Two 24v Mastervolt 15-amp battery chargers, one for each engine/genset battery bank.

Three 24v Mastervolt 100-amp Battery Chargers for house bank Engine/genset battery banks also charged by MAN engines original alternators Mastervolt display & FFM shows voltage, state of charge and current flow in & out of house battery bank

Two Delstar 200 amp, 24v, heavy duty, brushless, auxiliary alternators Two Mastervolt Alpha Pro external alternator regulators with alternator temperature sensors

Approved marine grade tinned copper wire

Hinged panel for serviceability

Vimar light switches with graphite grey faceplates

LED lighting and dimmers.

USB Outlets throughout

## ELECTRICAL – BONDING

Copper strap or cable connecting all thru-hulls, underwater fittings, pulpit and flybridge rails – (equipotential bonding system) Zincs on transom (2) Zincs on propeller shafts (2) Copper strapping system in engine room, flybridge and pilothouse for SSB radio counterpoise

#### FLEMING FIRST MATE - MONITORING SYSTEM (FFM)

16" color touchscreen located in Pilothouse16" color touchscreen located on Flybridge5" color touchscreen in Master CabinDigital switching of AC & DC loads, with feedback and status monitoring

Fleming First Mate mobile phone App receives alarm system push notifications and provides remote control of specific digital switching circuits. Vessel position and N2k data can be viewed remotely.

System monitors/displays the following parameters:

Navigation lights control Bilge pumps & counter Sump pumps High bilge level alarms Fire system – Cylinder pressure Heat detectors Smoke detectors Black water tank level and control of discharge pump Status of black water discharge seacocks Fuel Tank levels using pressure type sensors Water tanks level using pressure type sensor Port and Stbd engine room air intake shutters Engine room, sea water & exterior ambient air temperature Fresh water system pressure Fresh water system flow Seawater system pressure Seawater system flow Engine room blowers Engine room door Lazarette hatch Cablemaster (in/out) Passarelle (in/out) Engine room lights Steering pump Back-up steering pump DC voltage (24v and 12v battery banks) Fwd & aft Shorepower voltage, frequency and current draw Inverter voltage, frequency and current draw Genset/s voltage, frequency and current draw

## **MISCELLANEOUS OUTFIT**

**eFIT** – (Electronic Fleming Information Tablet) all technical documentation is supplied on an Apple iPad including, a comprehensive Owner's Manual with system descriptions, schematics, wiring diagrams, product manuals and equipment list. An iPad storage slot and charging device is provided in the pilothouse overhead console.

**Propsmith** – All new Fleming's are equipped with a Propsmith tool which can be used for simple, trouble-free installation and removal of the propellors. The PropSmith is both a prop puller and a prop pusher, with no risk of damage to the prop.

Cruisaire reverse cycle air-conditioning throughout using REU model quiet blowers Sump and condensate pump for air-conditioning in forward cabin Trudesign composite seacocks on all through hulls at or below waterline Sika-Flex deck Caulking 5/8" thick teak deck Lead foam insulation between accommodation bulkheads

Pre wiring with coax, CAT 5 and speaker cables throughout as follows:-

- CAT 5 2 x from salon stereo cabinet to behind FB inboard panel, PH console & each cabin
- Speaker wire 2 x from salon stereo cabinet to FB radar arch port and stbd, PH console, each cabin, laz or aft deck overhead
- COAX 2 x from salon stereo cabinet to behind FB inboard panel, PH console, and each cabin
- COAX 4 x from salon stereo cabinet to FB stbd settee near davit base

#### CONSTRUCTION STANDARDS

All Fleming Yachts are built to comply with the appropriate marine and environmental regulations for the area in which the yacht is delivered

**USA -** NMMA Certified Manufacturer fully complying with: ABYC, USCG and EPA regulations.

**European -** Built to CE–RCD Category "A" Ocean Standard using the relevant ISO standards.

Australia – Australian Standard 1799.1-2009

Canada - Transport Canada TP1332E 04/2010

#### MANAGEMENT & ENVIRONMENT

Fleming Yachts Construction (HK) Ltd management and environmental systems have met and been approved by ISO 9001:2008 Quality Management Systems and ISO 14001:2004 Environmental Management Standards.

#### **AFTERWORD**

The question most manufacturers ask themselves when considering a new feature is whether it is necessary to include it in order to sell the boat. In the case of the Fleming, we ask only whether its inclusion will make the boat safer, better, or more convenient. That is why we have introduced literally thousands of refinements since we started construction in 1985, and why we continue the process today.

For that reason, Fleming Yachts reserves the right to make changes to specifications and equipment without notice.