



Optimus EPS 5000 Series Inboard Vessel

Company: _____ **Date:** _____

Contact Name: _____ **Contact Phone No.:** _____

Boat Description: _____

Length: _____ ft.

Beam: _____ ft.

Displacement: _____ Tons

Engine Brand/Model/Year:

Horsepower: _____ HP

Rudders – Center to Center: _____ in.

Vessel – Max. Speed: _____ Knots

Vessel – Cruising Speed: _____ Knots

Number of Rudders: _____

Propeller Diameter: _____ in.

Hull Type: – Planning Yes

Hull Type: – Displacement Yes

Catamaran Yes No

Autopilot: – Raymarine EV2..... Yes

Autopilot: – Simrad SG05 Yes

Autopilot: – Garmin GHP-Reactor..... Yes

Color Display Location:

Harness Layout:

How many steering stations _____

Distance from Helm 1 to 2 _____ ft.

Distance from Helm 1 to 3 _____ ft.

Main Station Helm Type:

Front Mount Yes

Rear Mount..... Yes

1" Shaft Rear Mount Yes

Classic Tilt Yes

Sport Plus Tilt Yes

2nd Station System Alert:

Color Display Yes

Buzzer Only..... Yes

2nd Station Helm Type:

Front Mount Yes

Rear Mount..... Yes

1" Shaft Rear Mount Yes

Classic Tilt Yes

Sport Plus Tilt Yes

3rd Station System Alert:

Color Display Yes

Buzzer Only..... Yes

3rd Station Helm Type:

Front Mount Yes

Rear Mount..... Yes

1" Shaft Rear Mount Yes

Classic Tilt Yes

Sport Plus Tilt Yes

Steering Pump(s) Location:

*(Positioned within 3 feet of PCM, cool, dry, insulated.)
Space for hand on valve required.*

Pump Outlet fittings: – Straight (c/w pump).. Yes

Pump Outlet fittings: – 90 degree..... Yes



Hose Layout:

(For single engine identify hose length from pump to cylinder.)

Distance from pump to cylinder
via rigging tube ft.

Vessels with hydraulic hose runs greater than a total of 80 feet
(2 X 40 ft. run) require appropriately rated hard piping using
3/8 ID tube. Shorter hoses can then be used to connect from
and to cylinder and pumps.

Distance from 1st Helm to Power Control Module (PCM)

(CAN 1 network CM204xx) ft.

Distance from 2nd Helm to Power Control Module (PCM)

(CAN 1 network CM204xx) ft.

Distance from 3rd Helm to Power Control Module (PCM)

(CAN 1 network CM204xx) ft.

Distance from PCM to SmartCylinder

(18 feet standard harness) ft.

SmartCylinder Extensions Required:

- 6 feet Yes
- 12 feet Yes
- 18 feet Yes

SmartCylinder Mounting Position:

- Port side, extending center Yes
- Starboard side, extending center Yes
- Center, extending Port Yes
- Center, extending Starboard Yes

RPM Input to Optimus System:

- NMEA2000 Yes
- J1939 Yes
- Analog Pulse Engine (If YES state PPR.) Yes

Voltage available to Power Optimus System:

(Dual cylinder systems require 24 volts.)

- 12 Volt Yes
- 24 Volt Yes

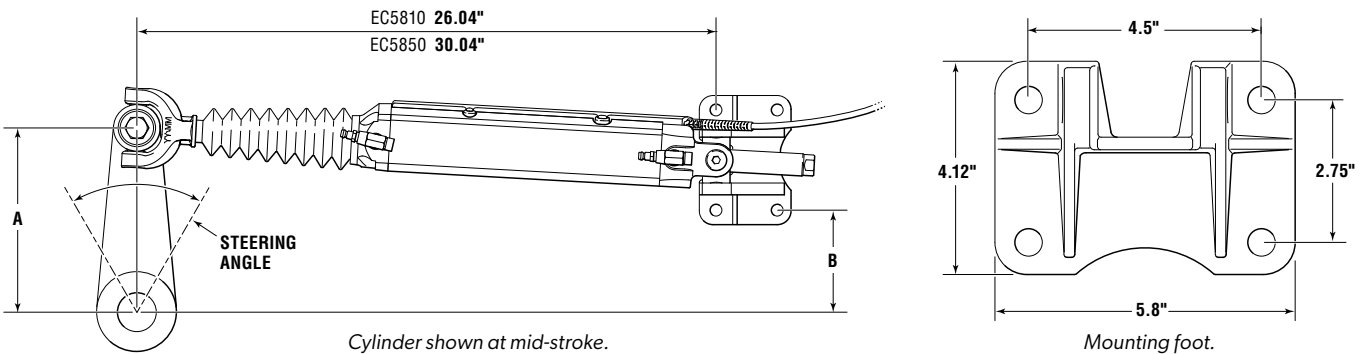


Figure A.

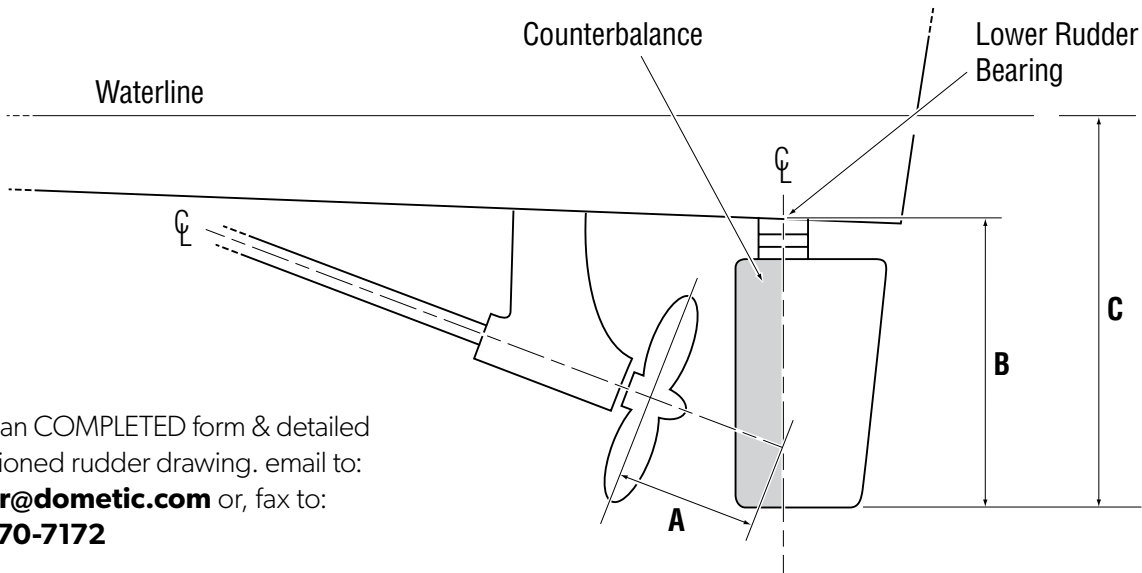
Model	Steering Angle							
	50°		60°		70°		80°	
	A	B	A	B	A	B	A	B
EC5810 9.5" stroke 2.125" Dia.	11.27" (286 mm)	7.96" (202 mm)	9.50" (241 mm)	5.98" (152 mm)	8.25" (210 mm)	4.50" (114 mm)	7.40" (188 mm)	3.41" (87 mm)
	56,300 in-lbs (6,360 Nm)*		45,400 in-lbs (5,130 Nm)*		37,400 in-lbs (4,225 Nm)*		31,200 in-lbs (3,525 Nm)*	
EC5850 12" stroke 2.125" Dia.	A	B	A	B	A	B	A	B
	14.20" (361 mm)	10.62" (270 mm)	12.00" (305 mm)	8.14" (207 mm)	10.46" (266 mm)	6.32" (161 mm)	9.33" (237 mm)	4.90" (125 mm)
	70,800 in-lbs (8,000 Nm)*		57,200 in-lbs (6,460 Nm)*		47,100 in-lbs (5,320 Nm)*		39,300 in-lbs (4,440 Nm)*	

Table 1. *Torque shown is per cylinder.



NOTICE!

Please include a **detailed dimensioned rudder drawing** including the location of the rudder post. This **MUST** be provided to get a steering system recommendation.



Print/scan COMPLETED form & detailed dimensioned rudder drawing. email to: **seastar@dometic.com** or, fax to: **604-270-7172**

Figure B.

Perpendicular distance from the rudder shaft to the propeller: in.
(See figure B, dimension 'A')

Distance parallel to the rudder shaft from rudder base to the center of lower rudder bearing: in.
(See figure B, dimension 'B')

Perpendicular distance from the waterline to the rudder base: in.
(See figure B, dimension 'C')

Rudder Cross Section:

- Foil Flat Plate Other (please specify)

Steering Angle: (Hardover to hardover.).... _____ Degrees

Estimated load per rudder: ft-lbs.
(Please confirm with Naval Architect.)

Comments/Notes:

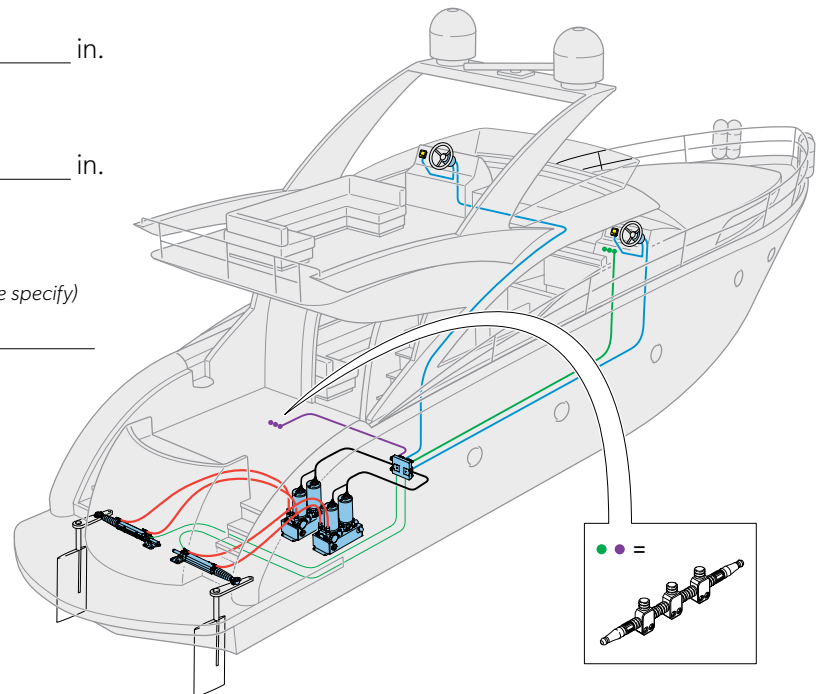


Figure C.

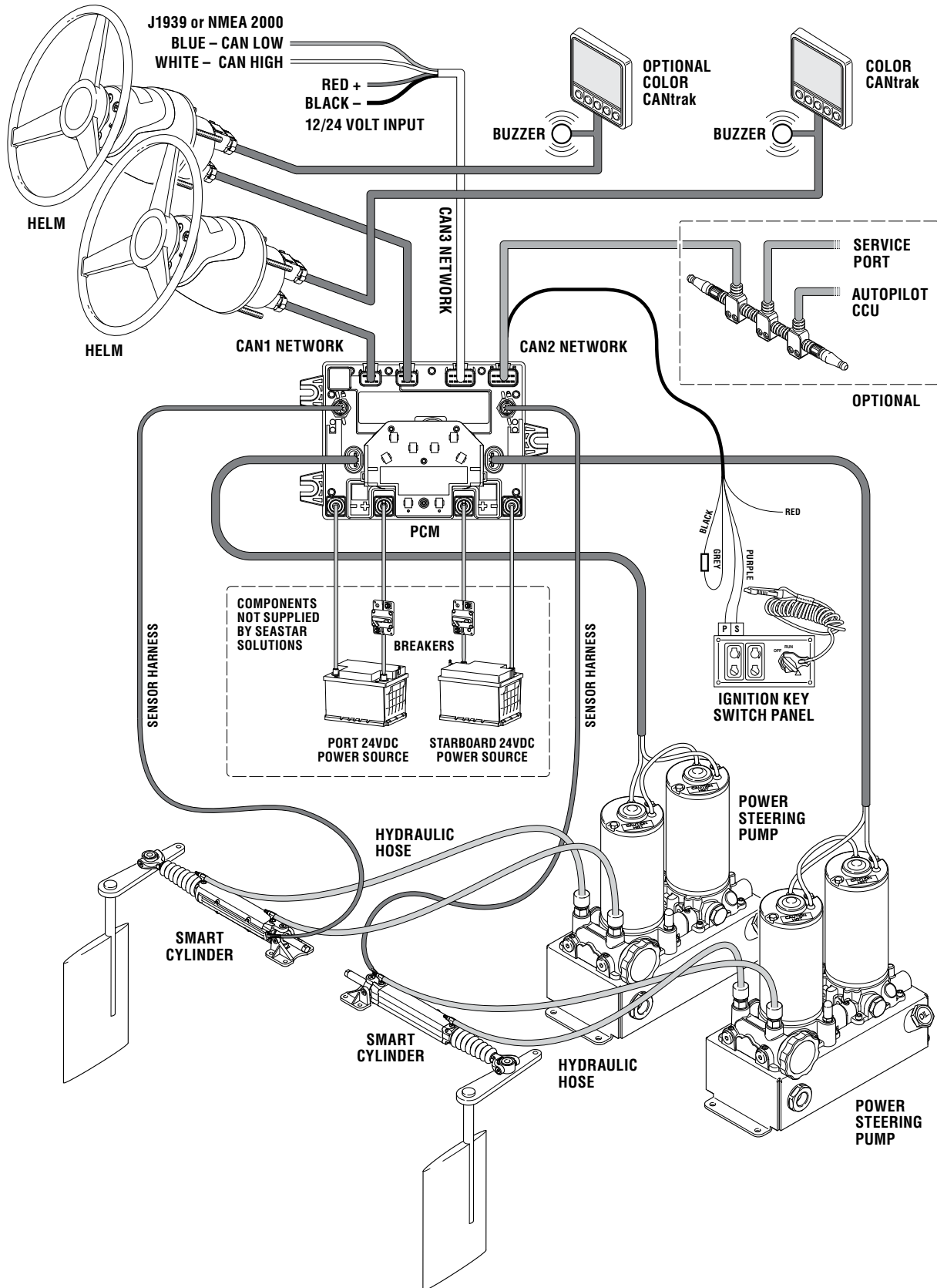


Figure D. Optimus EPS system diagram, dual station, twin cylinder.