



OPTIMUS EPS
BY SEASTAR

ELECTRONIC POWER STEERING FOR
inboardengine

APPLICATIONS
40-100'



OPTIMUS EPS
5000 SERIES





OPTIMUS EPS
BY SEASTAR

Available for both retrofit and new engine installations

As the captain of your vessel you know how important it is to have command of your yacht, Optimus EPS gives you the steering control, performance and comfort you expect. With Optimus EPS, you can take command of your yacht without having to arm-wrestle for control.

Imagine getting the best steering performance and control from your motor yacht

Advantages of Optimus Electronic Power Steering

- Auto adjusting speed sensitive helm effort and turns lock to lock
- Low and high speed dynamic rudder stop position
- Position proportional rudder gain for faster steering response near neutral rudder position
- Can add autopilot without adding an additional pump
- 3 helm capability
- No more long hydraulic hose runs to the helm(s)
- Open loop mode allows system to maintain steering even in the event of a complete loss of RFU signal
- Twin pump configuration provides redundancy in the event of single pump failure
- Twin power inputs with internal battery management system (BMS) prevents steering loss when one power source is low or lost
- Multi levels of redundancy includes fault tolerant CAN network and multiple sensors built into each of the components
- Comprehensive system status and fault indication
- 24VDC compatible
- NMEA 2000 Certified. Meets or exceeds NMMA, ABYC, CE, ISO and SAE electrical and environmental requirements

electronic

Builds upon the proven Optimus core technology and components, with a new hydraulic power unit and new inboard smart cylinder.

Applications for Optimus EPS

- Most single and twin inboard engine boats - electronic and mechanical controlled
- Single, twin and triple helm station yachts
- Performance motor yachts, express convertibles, and sport yachts



Inboard cylinder

- 2-1/8" bore diameter / 1" rod / 9-1/2" stroke
- Maximum steering torque: 37,443in-lb
- Maximum actuator force: 5520 lbs
- Uses existing, proven, power steering cylinder mounting foot and rod end
- Non-contact RFU with redundant sensing circuitry
- Adjustable stainless steel ORB hose fittings (SeaStar hose) with bleed fittings
- Durability: meets or exceeds requirements in ABYC P27
- Meets or exceeds NMMA, ABYC, CE, ISO and SAE electrical and environmental requirements
- Anodized aluminum cylinder for maximum corrosion protection, no brass exposed
- Includes boot and cover for shaft protection



GUI may not be exactly as shown

power you can feel



PCM technology



- Open loop mode allows system to maintain steering in the event of a complete loss of RFU signal
- Sealed harness connections with locking mechanism (USCAR standard)
- Accommodates 3rd party autopilot systems
- Automatic battery sensing and selection
- Water ingress protection: Up to IPX7

OPTIMUS EPS

5000 SERIES

CANtrak display

- Displays rudder position
- Provides quick and easy system setup
- Communicates faults and any special handling instructions to the operator
- Displays system health
- Allows software updating of all system components (USB port on rear)
- Water ingress protection: Up to IPX7
- Meets or exceeds NMMA, ABYC, CE, ISO and SAE electrical and environmental requirements

optimusepsssystem

- Meets or exceeds NMMA, ABYC, CE, ISO and SAE electrical and environmental requirements
- CAN bus communications
- HS-CAN High speed CAN 2.0B 250kbps [SAE J-1939]
- FT-CAN Fault tolerant CAN 125kbps [ISO 11898-3] NMEA 2000
- Status and fault LEDs



Helms

- Only helm designed for marine industry, with solid hard stop and minimal wheel play
- Dual independent sensors and circuits
- Speed sensitive helm turns, effort and steering response
- Tilt (classic and sport style), front, rear mount and 1" rear mount versions available
- Simple multiple station expandability
- Durability: 100,000 steering cycles minimum per ABYC P27
- Water ingress protection: Up to IPX7
- Dual fault-tolerant 125kbps connections [ISO11898-3]
- Meets or exceeds NMMA, ABYC, CE, ISO and SAE electrical and environmental requirements

Reduces turns lock to lock at
slow speeds

Solid feel at the wheel for
unprecedented control in rough seas

Plug and play second
and third station

powersteering

Active sensitivity

Lock-to-lock turns and wheel effort are programmed to change with engine RPM. At slow speeds, Optimus EPS can be set to reduce the number of turns lock-to-lock, for example 4 and make it easier to steer. When you're negotiating through traffic or in a tight spot, those smaller moves of the wheel give you precise control. When you're running at speed in open water, Optimus EPS will automatically adjust steering effort and wheel turns giving the captain more stability and control to comfortably keep on course. And through it all, Optimus EPS does the work, so you can relax and take it easy.



40-100' inboard engines

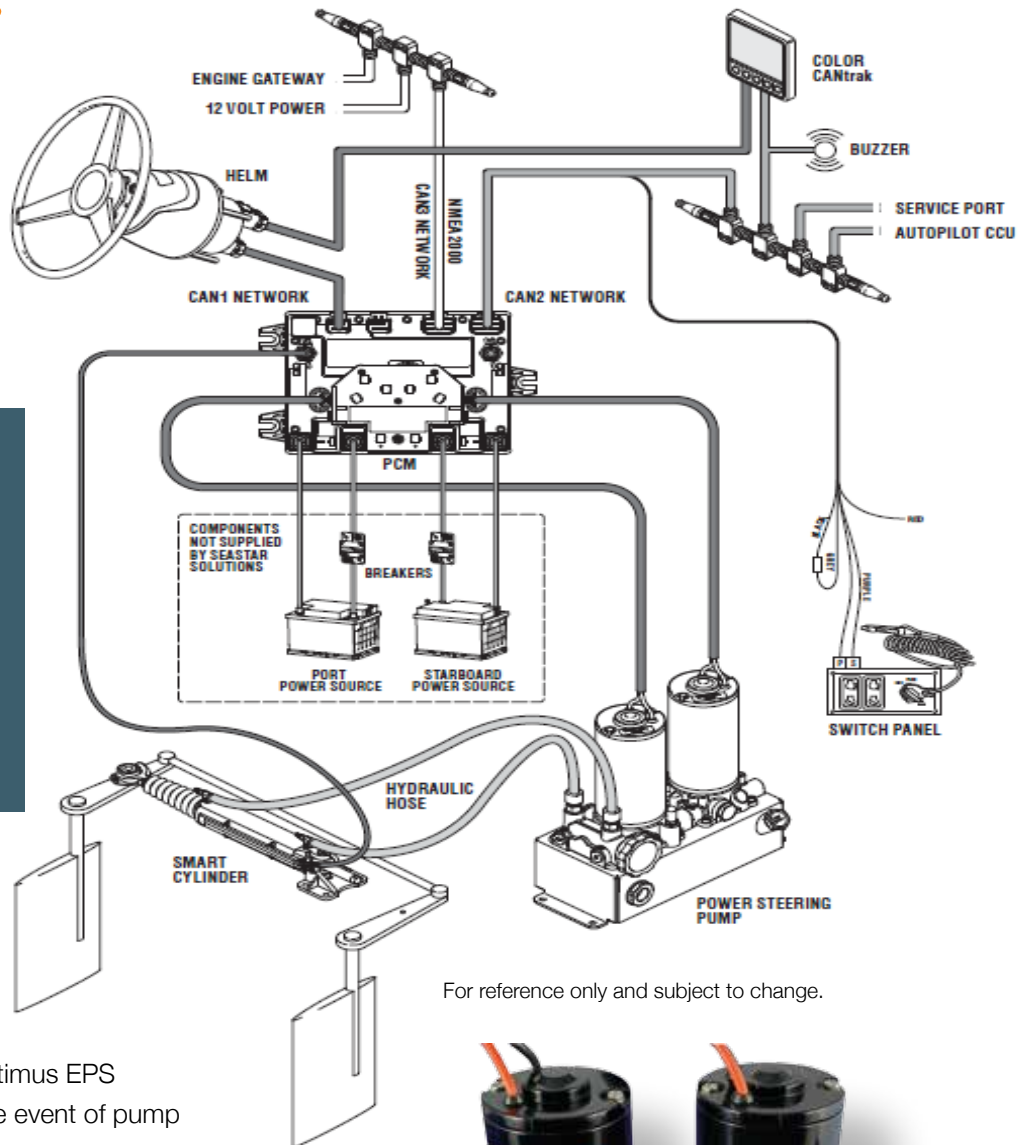
OPTIMUS EPS

5000 SERIES

Optimus EPS Installation



Single cylinder with tiebar shown.
Dual cylinder, dual pump configuration available for large yachts



from the
masters
in electronic
power steering

Pump

- Uses existing Optimus EPS pumps, running in parallel for increased flow
- Similar dual pump configuration as Optimus EPS (outboards) provides redundancy in the event of pump failure
- ~2 GPM output at no load
- 2000 PSI pressure relief
- Integrated service valve to allow manual repositioning of rudder if necessary
- Powder coated aluminum reservoir
- Sight glass for easy fluid level check
- Durability: meets or exceeds requirements in ABYC P27
- Water ingress protection: IPX7
- Meets or exceeds NMMA, ABYC, CE, ISO and SAE electrical and environmental requirements
- Pumps are on demand to minimize power consumption

For reference only and subject to change.



©2017 SeaStar Solutions All Rights Reserved.
Document: Optimus EPS-Inboard. Printed in the USA.

Part No. BROCH-OPTEPSINB

8 08282 36328 4

www.seastarsolutions.com