

SeaStar® *BayStar*™

INBOARD STEERING
SYSTEMS FOR ALL
APPLICATIONS



precision steering



THE ART OF STEERING

Teleflex®
MARINE

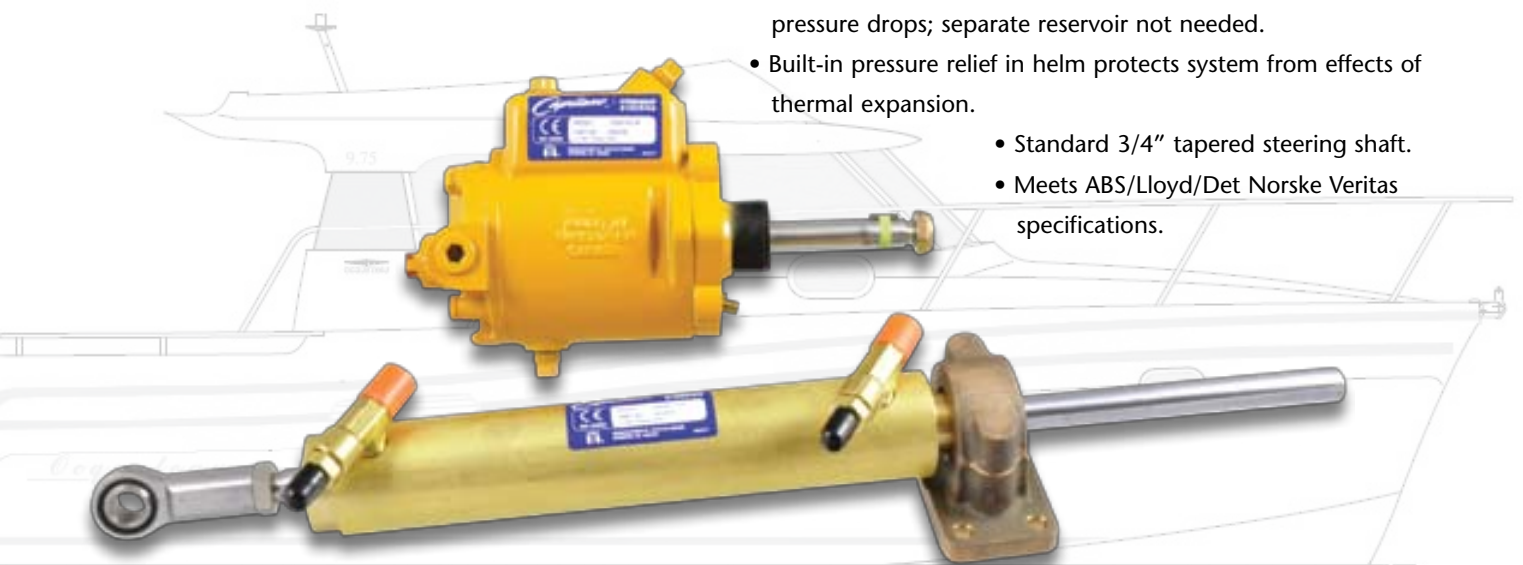


CAPILANO 2-LINE HEAVY DUTY

Uncompromising Design. Capilano steering stands for ruggedness and reliability worldwide. Helms include a variable displacement feature enabling the helmsman to adjust the number of steering wheel turns to suit maneuvering and weather conditions. Capilano systems install easily and give years of dependable service.

FEATURES

- Variable displacement helms for adjustable number of steering wheel turns.
- Heavy duty brass cylinders with bleed fittings; chrome-plated stainless steel rods.
- Stainless steel and bronze mounting hardware.
- Easy installation on single and dual rudder vessels.
- Systems are not air-pressurized; no air leaks or pressure drops; separate reservoir not needed.
- Built-in pressure relief in helm protects system from effects of thermal expansion.
- Standard 3/4" tapered steering shaft.
- Meets ABS/Lloyd/Det Norske Veritas specifications.



DC POWER STEERING SYSTEM

SeaStar Power Steering provides super responsive automotive style steering performance for today's large motor yachts.

The SeaStar DC Power Steering Unit is the heart of the system providing reliable and economical hydraulic flow to the steering cylinder whenever the wheel is turned.

Whether docking or cruising at high speed, the system will deliver 100% power regardless of engine speed.

SeaStar's superior design and selection of materials, precision manufacturing and rigid quality control all add up to an outstanding robust and versatile system for all large boat applications.

FEATURES

- Fewer components (filters, coolers and engine pumps not required)
- Highly responsive, effortless steering performance at all speeds
- Low number of turns lock to lock (based on helm selection)
 - Few components to spec and install
 - Semi-Auto purge feature
 - Suitable for multi-station applications
 - Integrated autopilot pump
 - Suitable for use with most SeaStar helms (including tilt versions)
 - Automatic manual back up system



WHICH STEERING SYSTEM?

CHOOSE A SYSTEM USING THE CHARTS BELOW

BOAT LENGTH	PLANNING HULLS				DISPLACEMENT HULLS			
	1 Rudder		2 Rudders		1 Rudder		2 Rudders	
	Pleasure	Work	Pleasure	Work	Pleasure	Work	Pleasure	Work
Up to 18ft (5.5m)	1	-	1	-	1	-	1	-
Up to 24ft (7m)	2	-	2	-	2	-	2	-
26ft (8m)	1	4	1	4	2	4	2	4
32ft (10m)	2	4	1	4	3	4	3	4
28ft (11.5m)	3	5	2	5	5	5	3	5
44ft (13.5m)	5	-	3	5	-	-	5	-
50ft (15m)	-	-	5	-	-	-	-	-
Greater than 50ft OAL, consult Teleflex Technical Service								

1*	Cylinder	Quantity 1	HC4461-3
	Helm (3.2 turns)	Quantity 1	HH4311
	Nylon Tubing 3/8"	As Req'd	HT5100
	Oil 1 liter	Quantity 2	HA5430
2*	Cylinder	Quantity 1	HC4460-3
	Helm (4.8 turns)	Quantity 1	HH4314
	Nylon Tubing 3/8"	As Req'd	HT5100
	Oil 1 liter	Quantity 2	HA5430

*30kg-m (2600 in-lbs) **52kg-m (4500 in-lbs)

3	Cylinder	Quantity 1	HC5312-3
	Helm (4 Turns)	Quantity 1	HH5271
	Nylon Tubing 3/8"	As Req'd	HT5100
	Oil 1 liter	Quantity 2	HA5430
4	Cylinder	Quantity 1	HC5313-3
	Helm (5 Turns)	Quantity 1	HH5271
	Nylon Tubing 3/8"	As Req'd	HT5100
	Oil 1 liter	Quantity 2	HA5430
5	Cylinder	Quantity 1	HC5314-3
	Helm (6 Turns)	Quantity 1	HH5271
	Nylon Tubing 3/8"	As Req'd	HT5100
	Oil 1 liter	Quantity 2	HA5430
6	Cylinder	Quantity 1	HC5318
	Helm (4.25 Turns)	Quantity 1	HH5272
	Copper Tubing 3/8"	As Req'd	NA
	Oil 1 liter	Quantity 2	HA5430
7	Cylinder	Quantity 1	HCS319
	Helm (5.5 Turns)	Quantity 1	HH5272
	Copper Tubing 3/8"	As Req'd	NA
	Oil 1 liter	Quantity 1	HA5430

For all work and Pleasure boat applications from 20' to 90' requiring precision inboard hydraulic steering, Teleflex Marine have the solutions.

Hard working, tough, durable, responsive and light, Teleflex Marine's Inboard Hydraulic and Power steering range is built for the job.

INBOARD CYLINDERS

These cylinders are for single and dual rudder vessels with two axis articulation and easy autopilot interface. Cylinders are also supplied with bleeder fittings.

FEATURES

- Low friction hydraulic steering system
- Configurations for most inboards
- Easy installation on single or dual rudders
- Adjustable O-ring sealed fittings c/w bleeder fittings
- Anodized aluminum or heavy duty brass cylinders (two axis articulation)
- Meets A.B.Y.C. standards
- Meets N.M.M.A. certification requirements

PART NUMBER	DESCRIPTION
HC4461-3	BayStar Cylinder, BA 100 ATM, Inboard Type
HC4460-3	BayStar Cylinder, BA 125 ATM, Inboard Type
HC5312-3	SeaStar Cylinder, BA 125 ATM, Inboard Type
HC5313-3	SeaStar Cylinder, BA 135 ATM, Inboard Type
HC5314-3	SeaStar Cylinder, BA 150 ATM, Inboard Type
HC5318	SeaStar Cylinder, BA 150-7TM, Inboard Type
HC5319	SeaStar Cylinder, BA 175-7TM, Inboard Type
HC5369	SeaStar Cylinder, BA150-9TM, Inboard Type

SELECTABLE OPTIONS/VARIABLES

- 1 - Use an alternative helm to increase or reduce number of turns lock-to-lock
- 2 - Reduce or increase wheel torque (larger capacity helm will reduce number of turns and increase torque)
- 3 - Gain the advantages of a Tilt function, Select from 3 different styles
- 4 - Mount the helm behind the dash (various back mount helm options also available)
- 5 - Multi Station or Autopilots require HF5502 "add station kit"

Teleflex Marine recommend that all steering applications are validated by a qualified Teleflex dealer/installer.

HELMS

Unmatched comfort and control only with SeaStar Steering.
The worlds most popular hydraulic steering system – offering smooth, efficient No Feedback Steering.



- Compact helm has only a 4-7/16" foot print - needs only 3" dash hole (Tilt requires larger hole)
- Standard 3/4" tapered steering shaft
- Accepts steering wheels to 28" (20" for Tilt)

NEW redesigned cylinder with the following features:

- All anodized aluminum construction
- Adjustable o-ring sealed ports
- Common components (i.e. end glands, pistons, seals)
- New cylinders will be designated by HC53XX-3

PART NUMBER	DESCRIPTION
HH4311	BayStar 1.1 Front Mount
HH4314	BayStar 1.4 Front Mount
HH5269	SeaStar 1.4 Front Mount
HH5260	SeaStar 1.4 Rear Mount
HH5271	SeaStar 1.7 Front Mount
HH5261	SeaStar 1.7 Rear Mount
HH5273	SeaStar 2.0 Front Mount
HH5263	SeaStar 2.0 Rear Mount
HH5272	SeaStar 2.4 Front Mount
HH5262	SeaStar 2.4 Rear Mount
HH5283	SeaStar 3.0 Front Mount
HH5265	SeaStar 3.0 Rear Mount



TILT STEERING

The ultimate in Tilt Steering Technology. Tilt Steering delivers unsurpassed performance and flexibility making it the perfect system for all possible applications and boat types.



FEATURES

- Pre loaded dual taper bearings ensures minimal excess free play
- Smooth operation and feel
- Shaft seals to prevent water ingress
- 48 degrees of tilt articulation
- 5 positive lock positions
- Up to 3 style options
- Compact footprint
- Maintenance free
- Fits most styled and formed dashes

SPORT PLUS



SEASTAR POWER ASSIST

SeaStar Power Assist steering brings automotive-type steering comfort and control to powerboats. The addition of a Power Assist unit will greatly reduce steering effort and enhance the boating experience for everyone. The SeaStar Power Assist steering unit is designed for use with SeaStar manual hydraulic steering systems and is suited for all heavy / high torque steering applications.



PA1200-2

FEATURES

- Dramatically reduces wheel torque
- Easy to install
- Simple 'add on' to an existing SeaStar manual system (optimal performance achieved when used with SeaStar 1.4 – 2.0 pumps)
- OEM or Retro fit
- Compatible with power purge system
- Reverts to manual mode in the case of power loss.
- Suitable for use with autopilots
- 12v or 24v operation
- Wall or floor mounted
- Wiring harness, and mounting bracket included
- Ignition protected (SAE J-1171)
- ABYC, CE, NMMA, ISO 10592 Approved

TECHNICAL SPECIFICATIONS

Voltage	12V or 24V (automatically recognized)
System Pressure	1000 psi MAX (1500 psi MAX Power Assist Pro)
Current Draw	40 A MAX,- @ 12V, 60A Peak @ 12V

PART NUMBER	DESCRIPTION
HH4315	BayStar 1.4 - Sport Tilt
HH4316	BayStar 1.4 - Sport Plus Tilt
HH6575	SeaStar Pro 1.4 - Classic Tilt*
HH5779	SeaStar Pro 1.7 - Front Mount
HH5218	SeaStar Pro 1.7 - Front Mount Commercial
HH5778	SeaStar Pro 1.7 - Rear Mount
HH5289	SeaStar Pro 1.7 - Sport Tilt*
HH6573	SeaStar Pro 1.7 - Classic Tilt*
HH6489	SeaStar Pro 1.7 - Sport Plus Tilt*
HH5770	SeaStar Pro 2.0 - Front Mount
HH5771	SeaStar Pro 2.0 - Rear Mount
HH6190	SeaStar Pro 2.0 - Sport Tilt*
HH6574	SeaStar Pro 2.0 - Classic Tilt*
HH6490	SeaStar Pro 2.0 - Sport Plus Tilt*
HH5772	SeaStar Pro 2.4 - Front Mount

CE

www.teleflexmarine.com

Teleflex[®]
MARINE

©2011 Teleflex Marine INT. All Rights Reserved.
Document: - Inboard Steering - 2011. Printed in the USA.

