

# SeaStar inboard steering

# SeaStar®

**The most popular inboard hydraulic steering system offers unmatched comfort and control for today's inboards up to 50 feet. A wide range of helm and cylinder displacements covers most applications.**

## Applications:

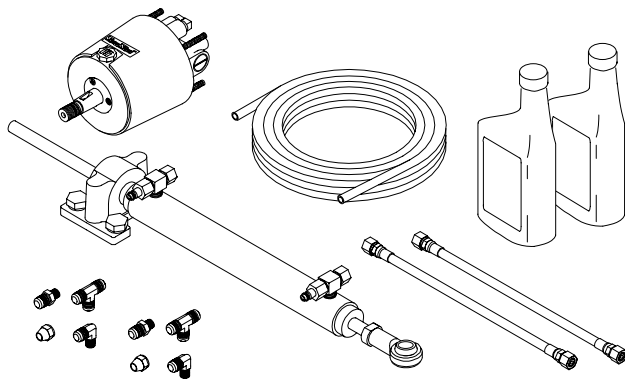
Most inboard powered boats with single or dual engines: single engine planing/displacement hull craft from 26-44 feet; dual engine planing hull craft from 26-50 feet; dual engine displacement hull & sail craft from 26-44 feet. Suitable for dual station use with purchase of extra hardware.

SEASTAR®  
2-LINE  
INBOARD SYSTEM



SeaStar P/A™  
available!

Tilt™  
STEERING  
available!



## Features:

- Low friction hydraulic steering system.
- Configurations for most inboards.
- Compact helm has only a 4-7/16" footprint — needs only 3" dash hole (Tilt requires larger hole).
- Standard 3/4" tapered steering shaft.
- Easy installation on single or dual rudders.
- Cylinders supplied with bleeder fittings.
- Regular duty aluminum or heavy duty brass cylinders. Two-axis articulation.
- Meets A.B.Y.C. standards.
- Meets N.M.M.A. certification requirements.
- Accepts steering wheels to 28" (20" for Tilt)

*(turns vary by system)*

## How to Spec a System:

1. From the application guide select the System Number appropriate for the vessel based on:
  - a) hull type — displacement or planing;
  - b) length of vessel;
  - c) number of rudders; and
  - d) usage of vessel.
2. From the ordering guide select the appropriate helm and accessory hardware for each steering station.
3. Select fitting/hose kits required from the ordering guide.
4. Confirm that there is sufficient space available in the dash and engine compartment(s) for the steering components. Review helm and cylinder dimensions at the end of this section.

DIMENSIONS: pages 160-166  
HOW TO SPEC: page 126  
SERVICE PARTS: pages 148-151  
SUPPORT: [www.teleflexmarine.com](http://www.teleflexmarine.com)  
or call 604-270-6899

**NOTE:** When properly installed, this steering system will connect to inboard engines using appropriate engine/rudder connection hardware.

**NOTE:** If you have any questions, please contact Teleflex (Canada) Tech Service at [www.teleflexmarine.com](http://www.teleflexmarine.com) or FAX us at (604) 270-7172.

hydraulic 2-line inboard steering, boats to 50 feet

## Complete Systems:

System components sold separately. See application and ordering guides to select appropriate components.

## Components:

- SeaStar 1.7 Helm .....HH5271 or
- SeaStar 2.4 Helm .....HH5272
- (See ordering guide.)
- Inboard Cylinder ..... HC53\_\_ or K-?
- (See ordering guide.)
- 3/8" Tubing..... HT5\_\_ or copper
- (See ordering guide.)
- Fitting Kit (for Copper Tubing/1.7 helm). HF5507
- Hose Kit for Copper Tubing (2 hoses) ... HF5508
- SeaStar Oil (1 Quart Mil Spec H5606) .. HA5430

## Options:

- SeaStar 1.7 Sport Tilt Helm/Mech. .... HH5291
- SeaStar 1.7 Traditional Tilt Helm/Mech. HH5741
- SeaStar 2.4 Sport Tilt Helm/Mech. .... HH5292
- SeaStar 2.4 Traditional Tilt Helm/Mech. HH5742
- SeaStar 1.7 Rear Mount Helm ..... HH5261

- SeaStar 1.7 Commercial Duty Helm..... HH5217
- SeaStar 2.4 Commercial Duty Helm..... HH5224
- (Designed for small Lobster and Crabbing vessels, these helms have a stainless steel shaft with heavy duty seal and wiper, which help protect the helm from the abrasive effects of sediment brought on board with traps or pots.)

- SeaStar Round Bezel Kit ..... HA5417
- (Reduces helm protrusion by 3.75")

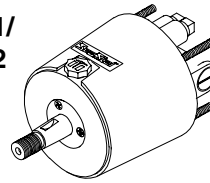
- SeaStar Backplate Kit..... HA5418
- (Reduces helm protrusion by dash thickness and allows clean retrofit of SeaStar helm where following helms were installed: pre-1991 SeaStar, SyTen, and mechanical rotary steering.)

- SeaStar 20° Dash Wedge Kit ..... HA5419
- Ball Joint Mount Cylinder (7 cu. in.)..... K-18
- Ball Joint Mount Cylinder (9 cu. in.)..... K-19
- Fixed Mount Cylinder (13.3 cu. in.)
- (one ball joint end) ..... K-22
- Fixed Mount Cylinder (13.3 cu. in.)
- (two ball joint ends)..... K-27
- Add-A-Station/Autopilot Fittings Kit ..... HF5502
- SeaStar Hose Kit (2 hoses) .....HO51\_\_

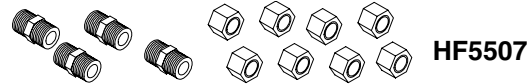
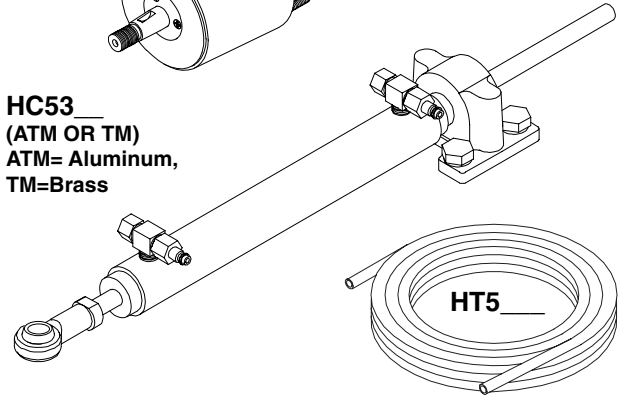
## Service Items:

- SeaStar Oil (1 Gallon) ..... HA5440
- Steering Wheel Locknut ..... 747521

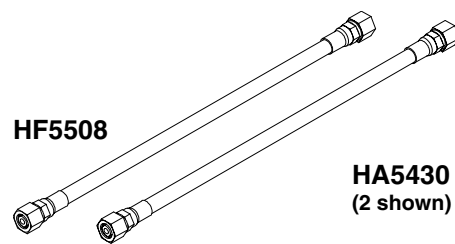
HH5271/  
HH5272



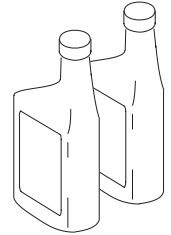
HC53\_\_  
(ATM OR TM)  
ATM= Aluminum,  
TM=Brass



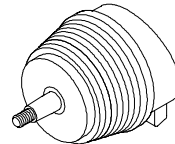
HF5508



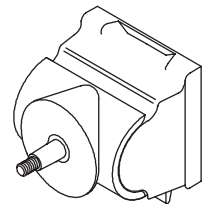
HA5430  
(2 shown)



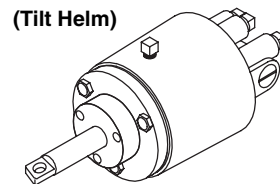
HH5291/HH5292  
(includes Tilt Helm)



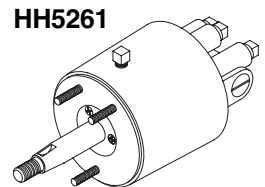
HH5741/HH5742  
(includes Tilt Helm)



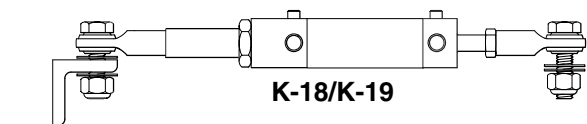
(Tilt Helm)



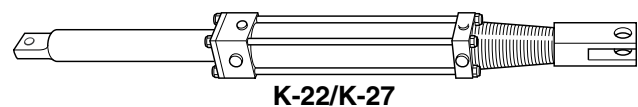
HH5261



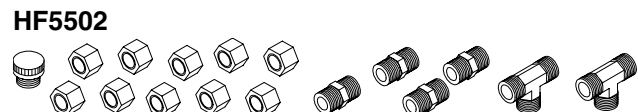
K-18/K-19



K-22/K-27



HF5502



747521






# SeaStar inboard steering

## Application Guide: 2-Line Inboard Steering

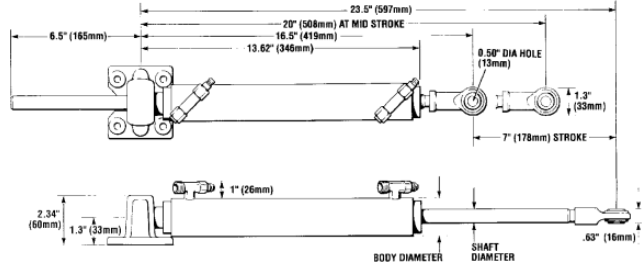
### Application Guide (inboard steering)

### Inboard Cylinder Dimensions

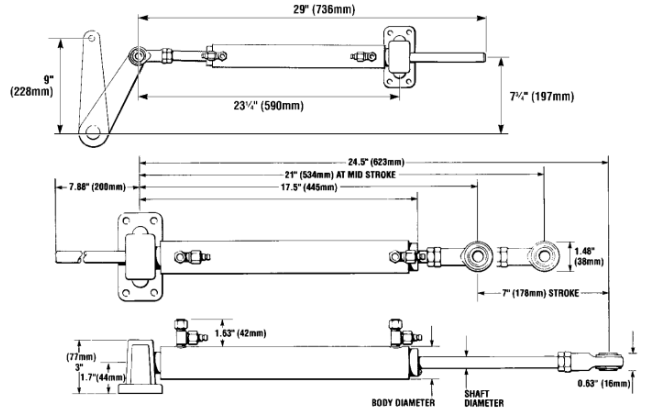
Use "System Numbers" in chart below to select the components from ordering guide on next page.

BOAT TYPE/ LENGTH	System Numbers 1 ENGINE		System Numbers 2 ENGINES	
	Pleasure	Work	Pleasure	Work
<b>PLANING HULLS</b> 				
To 26 Ft. (8m)	1	4	1	4
To 32 Ft. (10m)	2	4	1	4
To 38 Ft. (11.5m)	3	5	2	5
To 44 Ft. (13.5m)	5	—	3	5
To 50 Ft. (15m)	—	—	5	—
<b>DISPLACEMENT HULLS</b> 				
To 26 Ft. (8m)	2	4	2	4
To 32 Ft. (10m)	3	4	3	4
To 38 Ft. (11.5m)	5	5	3	5
To 44 Ft. (13.5m)	—	—	5	—
To 50 Ft. (15m)	—	—	—	—
<b>SAIL</b> 				
To 26 Ft. (8m)	4	4	—	—
To 32 Ft. (10m)	4	4	—	—
To 38 Ft. (11.5m)	4	5	—	—
To 44 Ft. (13.5m)	5	—	—	—
To 50 Ft. (15m)	—	—	—	—

#### ATM (ALUMINUM BODY) INBOARD CYLINDERS P/N HC5312/HC5313/HC5314 (MODEL BA1\_-7ATM):



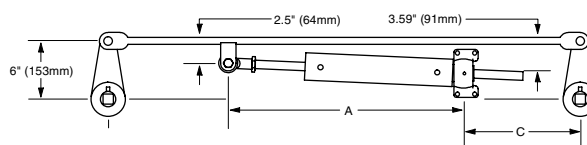
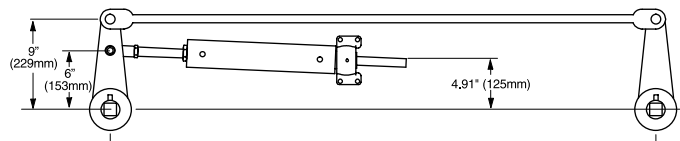
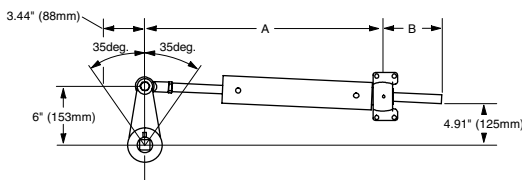
#### TM (BRASS BODY) INBOARD CYLINDERS P/N HC5318/HC5319 (MODEL BA1\_-7TM):



**Planing Hull:** maximum hull speed normally exceeds 18 knots.  
**Displacement Hull:** maximum hull speed does not normally exceed 18 knots.

#### CYLINDER DIMENSIONS & MOUNTING CONFIGURATIONS SPECIFIC TO MODEL

CYLINDER MODEL	PART NO.	BODY DIAMETER (SEE DIAGRAMS ABOVE)	SHAFT DIAMETER	DIM.		
				A	B	C
BA125-7ATM	HC5312	1.375" (34.9mm)	.50" (12.7mm)	20" (508mm)	6.5" (165mm)	8.5" (216mm)
BA135-7ATM	HC5313	1.50" (38.1mm)	.625" (15.9mm)	20" (508mm)	6.5" (165mm)	8.5" (216mm)
BA150-7ATM	HC5314	1.75" (44.4mm)	.625" (15.9mm)	20" (508mm)	6.5" (165mm)	8.5" (216mm)
BA150-7TM	HC5318	1.75" (44.4mm)	.625" (15.9mm)	21" (534mm)	8.0" (204mm)	10.0" (254mm)
BA150-9TM	HC5369	1.75" (44.4mm)	.625" (15.9mm)	21" (534mm)	8.0" (204mm)	10.0" (254mm)
BA175-7TM	HC5319	2.00" (50.8mm)	.75" (19.0mm)	21" (534mm)	8.0" (204mm)	10.0" (254mm)



hydraulic 2-line inboard steering, boats to 50 feet

# Ordering Guide: 2-Line Inboard Steering

ENGINE/CYLINDER CONFIGURATION	COMPONENT DESCRIPTION	QTY. REQ'D	MODEL	PART NO.	
<b>SYSTEM #1</b> <u>NUMBER OF TURNS: 4.0</u>	CYLINDER	1	BA125-7ATM	HC5312	
	HELM	1	SEASTAR 1.7	HH5271	
	TUBING (SEE NOTES 1 & 3)		3/8" DIA. NYLON	HT5____	
	OIL	3	SEASTAR OIL (QT.)	HA5430	
	<b>FOR EXTRA STEERING STATION, ADD:</b>	HELM	1	SEASTAR 1.7	HH5271
	FITTING KIT	1	ADD A STATION	HF5502	
	EXTRA TUBING (SEE NOTES 1 & 3)		3/8" DIA. NYLON	HT5____	
<b>SYSTEM #2</b> <u>NUMBER OF TURNS: 5.0</u>	CYLINDER	1	BA135-7ATM	HC5313	
	HELM	1	SEASTAR 1.7	HH5271	
	TUBING (SEE NOTES 1 & 3)		3/8" DIA. NYLON	HT5____	
	OIL	3	SEASTAR OIL (QT.)	HA5430	
	<b>FOR EXTRA STEERING STATION, ADD:</b>	HELM	1	SEASTAR 1.7	HH5271
	FITTING KIT	1	ADD A STATION	HF5502	
	EXTRA TUBING (SEE NOTES 1 & 3)		3/8" DIA. NYLON	HT5____	
<b>SYSTEM #3</b> <u>NUMBER OF TURNS: 6.0</u>	CYLINDER	1	BA150-7ATM	HC5314	
	HELM	1	SEASTAR 1.7	HH5271	
	TUBING (SEE NOTES 1 & 3)		3/8" DIA. NYLON	HT5____	
	OIL	3	SEASTAR OIL (QT.)	HA5430	
	<b>FOR EXTRA STEERING STATION, ADD:</b>	HELM	1	SEASTAR 1.7	HH5271
	FITTING KIT	1	ADD A STATION	HF5502	
	EXTRA TUBING (SEE NOTES 1 & 3)		3/8" DIA. NYLON	HT5____	
<b>SYSTEM #4</b> <u>NUMBER OF TURNS: 4.25</u>	CYLINDER	1	BA150-7TM	HC5318	
	HELM	1	SEASTAR 2.4	HH5272	
	TUBING (SEE NOTES 1 & 3)		3/8" DIA. COPPER		
	HOSE KIT	1	SEASTAR HOSE KIT	HF5508	
	OIL	3	SEASTAR OIL (QT.)	HA5430	
	<b>FOR EXTRA STEERING STATION, ADD:</b>	HELM	1	SEASTAR 2.4	HH5272
	FITTING KIT	1	ADD A STATION	HF5502	
<b>SYSTEM #5</b> <u>NUMBER OF TURNS: 5.5</u>	CYLINDER	1	BA175-7TM	HC5319	
	HELM	1	SEASTAR 2.4	HH5272	
	TUBING (SEE NOTES 1 & 3)		3/8" DIA. COPPER		
	HOSE KIT	1	SEASTAR HOSE KIT	HF5508	
	OIL	3	SEASTAR OIL (QT.)	HA5430	
	<b>FOR EXTRA STEERING STATION, ADD:</b>	HELM	1	SEASTAR 2.4	HH5272
	FITTING KIT	1	ADD A STATION	HF5502	
<b>OPTIONAL EQUIPMENT</b>	BACK PLATE KIT		(FOR STANDARD HELMS)	HA5418	
	20 DEGREE WEDGE		(FOR STANDARD HELMS)	HA5419	
	AUTOPILOT FITTING KIT		(FOR ALL HELMS)	HF5502	
	* TILT HELM - SEASTAR 1.7			HH5741	
	REAR MOUNT HELM - SEASTAR 1.7			HH5261	
	** TILT HELM - SEASTAR 1.7			HH5742	
	REAR MOUNT HELM - SEASTAR 1.7			HH5262	
POWER ASSIST STEERING			PA1200		

**For systems 1, 2, & 3,** nylon tubing (3/8" diameter) is the standard requirement for plumbing the system. Copper tubing (3/8" diameter) can be substituted by Fitting Kit HF5507 is required. **For systems 4 & 5,** copper tubing (3/8" diameter) is the standard requirement for plumbing the system. Fitting Kit HF5508 is required. **For systems 1, 2, 3, 4, & 5,** SeaStar outboard hose can be substituted for nylon or copper tube. These hoses must be ordered in standard lengths. They cannot be cut to length.

**OTHER CYLINDER OPTIONS:** The following cylinders are also offered for use with SeaStar inboard systems: ball joint mount cylinders K-18 (7 cu. in. displacement) and K-19 (9 cu. in.) as well as fixed mount cylinders K-22/K-27 (13.3 cu. in.). HC5369 (similar to HC5318, except has a 9" stroke) is also available. See cylinder specifications and dimensions, later in this catalog, for more information. Number of steering wheel turns for a given system is based on total cylinder displacement divided by helm displacement.

HYDRAULIC STEERING SeaStar Inboard