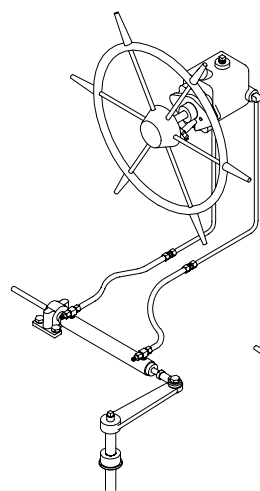


Capilano inboard steering

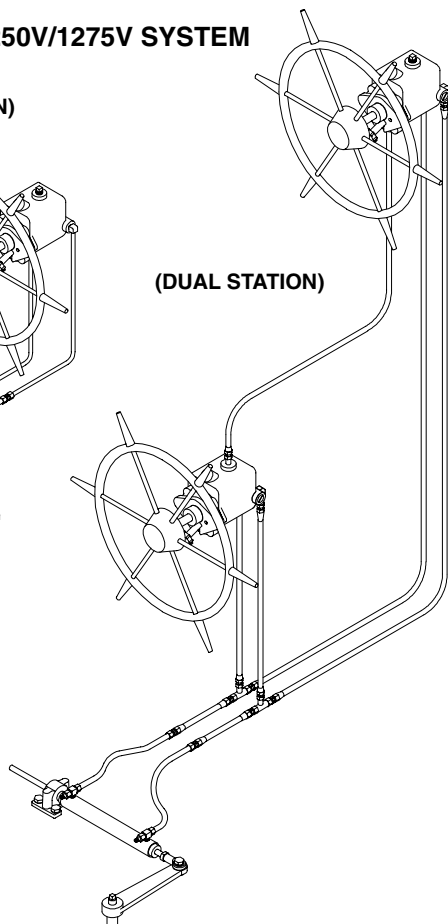
SeaStar®
Capilano™

CAPILANO 1250V/1275V SYSTEM

(SINGLE STATION)



(DUAL STATION)



(turns vary by system)

DIMENSIONS: pages 160-168
HOW TO SPEC: page 130
SERVICE PARTS: pages 148-151
SUPPORT: 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. For more information, order Capilano Brochure #071030 and SeaStar Manual #4.

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.

Applications:

Most inboard powered boats with single or dual engines including planing/displacement hull craft from 30-55 feet in length. Suitable for dual station use with the purchase of extra helm, tubing/hose & fittings. Capilano systems use Dexron II® type ATF fluid.

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.

How to Spec a System:

1. From the application guide select components appropriate for the vessel based on:
 - a) hull type — displacement or planing;
 - b) length of vessel; and
 - d) number of steering wheel turns desired.
2. Select the fitting and hose kits required, based on type of plumbing (1/2" or 5/8" tubing or hose) and based on number of steering stations.
3. Confirm that there is sufficient space available in the dash and engine compartment(s) for the steering components. See helm and cylinder dimensions at the end of this section.

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

hydraulic 2-line heavy duty inboard steering, boats to 50 feet

Complete Systems:

System components sold separately. See application guide to select appropriate items.

Components:

Capilano 1250V Helm.....HH5250 or
 Capilano 1275V Helm.....HH5275
(See Application Guide.)

Inboard CylinderHC53__
(See Application Guide.)

Copper Tubing 1/2" or 5/8" OD
(See application guide.)

Fitting Kit (for 1/2" Copper Tubing) HF5590 or
 Fitting Kit (for 5/8" Copper Tubing) HF5592
(See application guide.)

These fitting kits are for one steering station (purchase add-a-station kit for 2nd station).

Hose Kit for Copper Tubing (2 hoses) ... HA5731
This hose kit contains two 18" (.45m) hoses for single-cylinder installations.

Capilano Steering FluidDexron II® ATF

Options:

Dual Cylinder Hose 2' (.6m) HA5732
 Dual Cylinder Hose 3' (.9m) HA5733
 Dual Cylinder Hose 4' (1.2m) HA5734
 Dual Cylinder Hose 5' (1.5m) HA5735
 Dual Cylinder Hose 6' (1.8m) HA5736

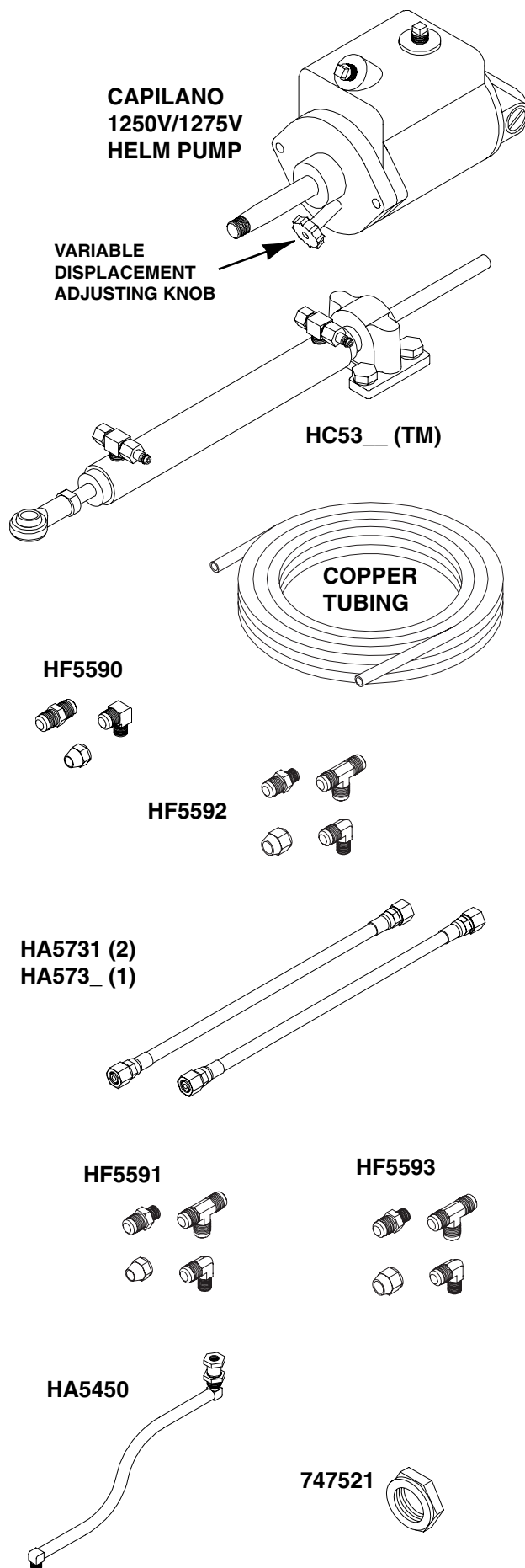
These hoses are sold individually (four are required for dual cylinder installations).

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
 Pivot Mount Cylinder (25.5 cu. in.) K-31
 Universal Mount Cylinder (39.2 cu. in.) K-8
 Universal Mount Cylinder (55 cu. in.) K-9

Add-A-Station Fitting Kit (1/2" tubing).... HF5591
 Add-A-Station Fitting Kit (5/8" tubing).... HF5593
 Helm Remote Fill Kit (through-dash) HA5450

Service Items:

Steering FluidDexron II® ATF
 Steering Wheel Locknut 747521



HYDRAULIC STEERING Capilano Inboard

Capilano inboard steering

Application Guide: Capilano 2-Line Inboard Steering

This application guide should be used with discretion. The chart below is only a guide to selecting a steering system.

A steering system manufacturer cannot anticipate all the variables in boat-rudder design that affect steering loads. It is the final responsibility of the boat designer/builder to specify maximum expected steering loads.



If the required information is not available, contact our customer service department at 604-270-6899 with rudder dimensions, vessel size and anticipated maximum vessel speed.

Definitions of terms used in the charts on these pages:

Planing Hull: maximum hull speed normally exceeds 18 knots.

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

Diameters: Copper tubing diameter shown is O.D. Hose diameter shown is I.D.

FOR VESSEL SIZES UP TO:	HELM PUMP MODEL	STEERING WHEEL TURNS ADJUST. RANGE Min.-Max.	REQUIRES CYLINDER MODEL (2x = 2 cylinders)	TUBING/HOSE DIAMETERS		MAXIMUM OUTPUT TORQUE FROM CYLINDER(S)	
				when distance from Cylinder to farthest Helm is:		In.-Lb.	Kg m
				40 Feet or Less	40 Feet or More		
PLANING HULLS: 							
35' (11m)	1250V	3 - 6	BA150-7TM_	1/2"	N/A	6,548	75
40' (12m)	1250V	4 - 8	BA175-7TM_	1/2"	N/A	8,795	100
50' (15m)	1250V	5.5 - 11	BA200-7TM_	1/2"	5/8"	12,134	140
50' (15m)	1275V	3.5 - 7	BA200-7TM_	1/2"	5/8"	12,134	140
50' (15m)	1275V	4 - 8	2x BA150-7TM_	1/2"	5/8"	14,766	170
55' (17m)	1275V	5.5 - 11	BA200-11 TM_	1/2"	5/8"	19,900	230
55' (17m)	1275V	5.5 - 11	2x BA175-7TM_	1/2"	5/8"	19,902	230
60' (18m)	1275V	7.5 - 15	2x BA200-7TM_	1/2"	5/8"	26,322	300
DISPLACEMENT HULLS: 							
30' (9m)	1250V	3 - 6	BA150-7TM_	1/2"	N/A	6,548	75
38' (11.5m)	1250V	4 - 8	BA175-7TM_	1/2"	N/A	8,795	100
45' (14m)	1250V	5.5 - 11	BA200-7TM_	1/2"	5/8"	12,134	140
45' (14m)	1275V	3.5 - 7	BA200-7TM_	1/2"	5/8"	12,134	140
45' (14m)	1275V	4 - 8	2x BA150-7TM_	1/2"	5/8"	14,766	170
50' (15m)	1275V	5.5 - 11	BA200-11 TM_	1/2"	5/8"	19,900	230
50' (15m)	1275V	5.5 - 11	2x BA175-7TM_	1/2"	5/8"	19,902	230
50' (15m)	1275V	7.5 - 15	2x BA200-7TM_	1/2"	5/8"	26,322	300

NOTE: Theoretical torque about pivot point at 35 degree articulation with 1,000 PSI (70 BAR) system pressure.

Helm Options

A unique variable displacement feature on the helm allows the number of steering wheel turns to be adjusted by the helmsman to his preference within a pre-determined range.

HELM PART #	MODEL	DISPLACEMENT ADJUSTMENT RANGE	RELIEF VALVE SETTING
HH5250	1250V	1.7-3.4 cu.in. (27.8-55.7 cc)	1000 PSI (70 BAR)
HH5275	1275V	2.7-5.4 cu.in. (44.2-88.4 cc)	1000 PSI (70 BAR)

Tubing/Hose Options

We recommend use of soft refrigeration type copper tubing for optimum performance. If hose must be used, select a hydraulic hose rated for 1000 PSI (70 bar) working pressure, and with a very low volumetric expansion rating. A hydraulic hose that expands too much at 500 PSI (35 bar) will make the steering spongy.

HELM TYPE	DISTANCE — CYLINDER TO FURTHEST HELM	
	40 Feet or Less	More Than 40 Feet
1250V	1/2" O.D. Copper Tubing	5/8" O.D. Copper Tubing
	1/2" I.D. Hydraulic Hose	5/8" I.D. Hydraulic Hose
1275V	5/8" O.D. Copper Tubing	5/8" O.D. Copper Tubing
	5/8" I.D. Hydraulic Hose	5/8" I.D. Hydraulic Hose

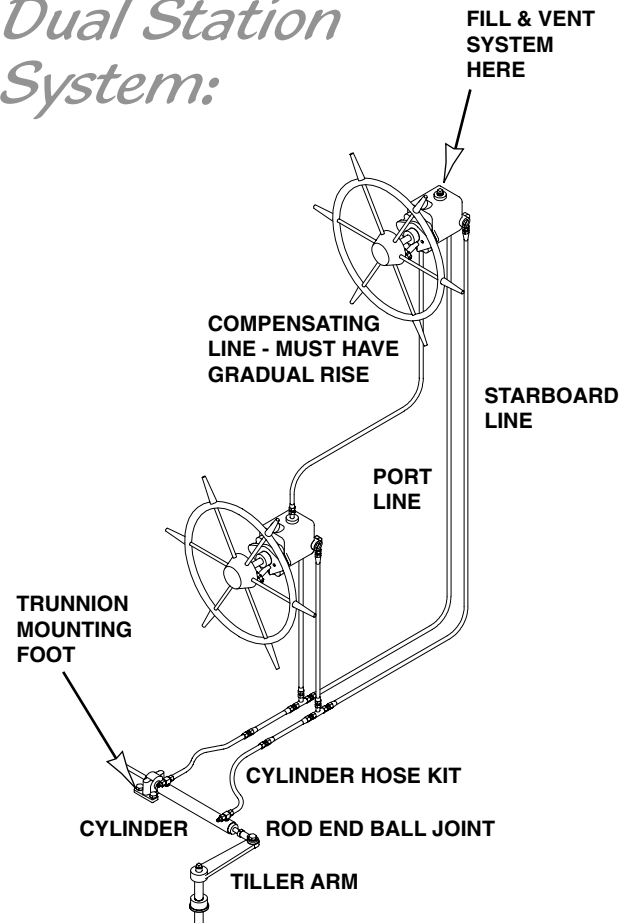
Cylinder Options

Cylinders are made from brass & stainless steel. Available with stainless rod & ball joint (TMB models) or stainless rod & bronze clevis (TMC models.) Cylinders with ball joints have 2-axis articulation.

PART NO.	DESCRIPTION/MODEL/ROD END CONFIG.
7" STROKE MODELS:	
HC5349	Cylinder BA150-7TMB (rod end ball joint)
HC5350	Cylinder BA175-7TMB (rod end ball joint)
HC5351	Cylinder BA200-7TMB (rod end ball joint)
HC5355	Cylinder BA150-7TMC (rod end clevis)
HC5356	Cylinder BA175-7TMC (rod end clevis)
HC5357	Cylinder BA200-7TMC (rod end clevis)
9" STROKE MODEL:	
HC5373	Cylinder BA175-9TMB (rod end ball joint)
11" STROKE MODELS:	
HC5378	Cylinder BA200-11TMB (rod end ball joint)
HC5379	Cylinder BA200-11TMC (rod end clevis)

Also available are fixed mount cylinders K-22/ K-27 (13.3 cu. in. displacement); pivot mount cylinder K-31 (25.5 cu. in.); and universal mount cylinders K-8 (39.2 cu. in.) and K-9 (55 cu.in.). See cylinder specifications and dimensions, later in this catalog, for more information. The number of steering wheel turns is based on total displacement of the cylinder(s) divided by the displacement of one helm.

Typical Capilano Dual Station System:



Capilano™