

HP 4590

Now available to the recreational or commercial marine markets is our new heavy duty SEAFIRST 4590 Variable Displacement Steering Pump. This pump was developed to cover a wider range of sizes and be "user tunable" to each vessels unique steering needs.

Features include:

Hydraulic Valve Block with built-in lock valves---Extra Heavy Duty Aluminum casting & machined valve block with standard 3/8" NPT threads allow simple and easy connections to hydraulic lines. No "funny" adapters needed or prone to crack "pot-metal" castings. All pumps have a built-in internal relief valve for total system protection and allows any number of stations with automatic station change-over and eliminates un-wanted rudder feedback.

Pump Shaft & seal---Oversized 30mm diameter stress relieved non-magnetic Stainless Steel with an industry standard taper & straight key design & externally replaceable industry standard double lip oil seal. No more lost woodruff keys and allows easy sleeve adaptation to 1" bored steering wheels.

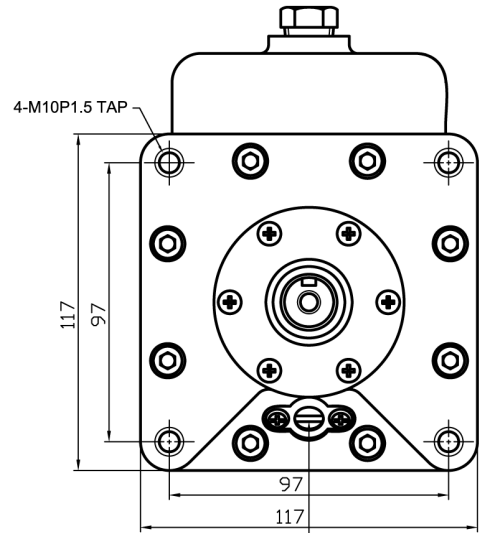
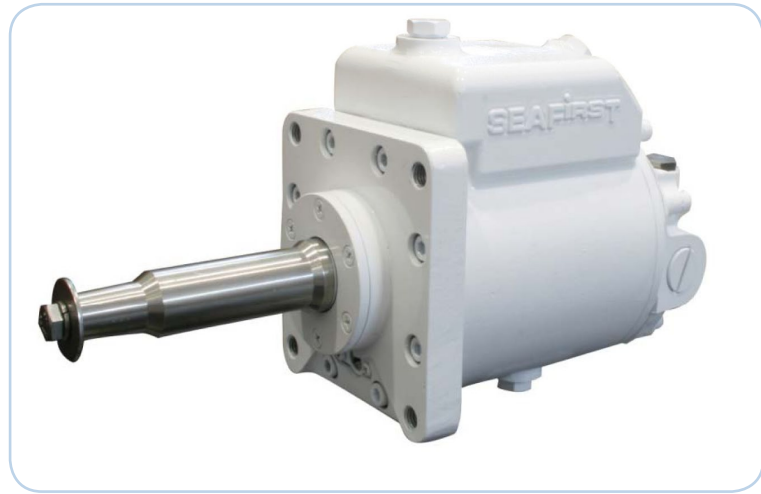
Bearings---100% needle roller & ball bearing support for the steering shaft only seen in much larger pumps or more expensive designs.

Case & Housing design--- Made from specially treated Marine Grade Aluminum, epoxy baked finish that is impervious to the saltwater environment with no more bubbling coatings or corroding pot metal cases. "O-ringed" sealed case w/ large built-in reservoir. Vented and non-vented caps allowing horizontal or vertical mountings, multiple upper & lower stations, and remote reservoirs (if desired), with no gaskets to leak or deteriorate.

Hydraulic Oil--- Multiple fluid compatibility as SEAFIRST pumps operate on both Dextron ATF or other common hydraulic, aviation, or steering oils meeting MIL-H-5056. We recommend ATF for hotter climates where day time temps are typically above 90F.

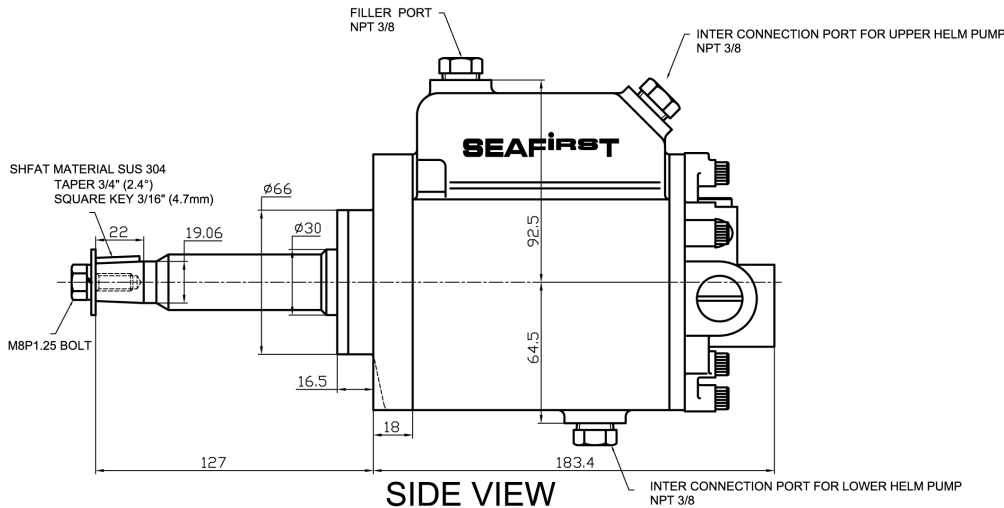
The designs of our pumps are uncompromising with engineering features typically only found in much larger and more expensive units. The simple and efficient two-line system does not require "pressurized air" to operate, and features a precision made ultra smooth non-pulsating axial piston pump design with a roller-bearing squash plate. These pumps easily adapt to most any non-power-steered vessel from 18 to 100 ft in both recreational and commercial applications.

All of our SEAFIRST Marine Hydraulic Steering Components are made with the finest materials and manufacturing technology available today - True 100% "Marine Tuff" components and materials with added robustness where needed for use in the harshest applications!!



Screw for adjustment of displacement

FRONT VIEW



SIDE VIEW

Model	Variable Displacement		Shaft Spec	Key Spec	Features
	cc / rev	cu in cu./ rev			
HP 4590T	48~85	2.9~5.1	3/4" Taper On Shaft	3/16" square	Built in lock valve