

# fin stabilisers

ALL SPEED STABILISATION  
SUITABLE FOR YACHTS FROM 45FT (15M) – 164FT (50M)

## The premium choice

Humphree equipment is designed and manufactured to deliver world-class quality and reliability. Customer support and spare parts are available wherever and whenever needed, through our Head Office in Sweden or via our expanding network of local representatives around the world.

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FOR YOUR CLOSEST HUMPHREE REPRESENTATIVE

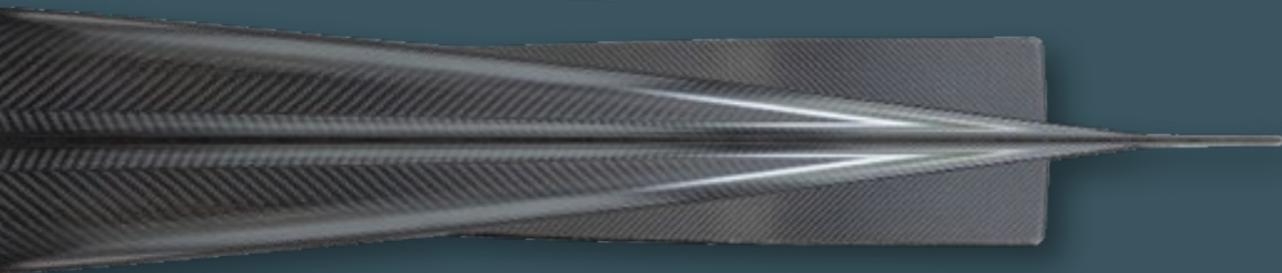
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**HUMPHREE®**

Trim and stabilisation systems

# all speed

24DC electric fin stabilisers



The NEW state-of-the-art 24V DC fin stabilisers deliver a game changing package and offer a number of benefits compared to what has been available on the market previously. With 24V DC, the system is operated without keeping a genset engine running. The full electric system provides soft start- & soft stop-function which minimize noise. The main engine alternators will charge the batteries powering the system while underway, and, while at

anchor, the system can operate for an extended time on battery power alone. Less noise, less fuel, less wear. The system provides full stabilisation from zero all the way up to top speed. On top of all, the system can be fully integrated with our interceptors, meaning that roll, pitch and yaw motions are all controlled by one system. The Coordinated Turn feature provides greater comfort during turns by coordinating fin and rudder movement.

Suitable for yacht-size from 45ft (15m) – 164ft (50m)  
Fins available in four sizes: 0.45m<sup>2</sup>, 0.6m<sup>2</sup>, 0.8m<sup>2</sup> and 1.0m<sup>2</sup>  
Twin or Quad installation

## features and benefits

### Zero emission mode, stabilise without a running engine

The unique ability to rotate the fins 360°, have many benefits. Our “Bow anchor mode” means that the fins rotate 180° when anchored at the bow. Instead of “swimming” against the anchor creating so called anchor walk, our fins will swim away from the anchor keeping the anchor line tensioned. This means a much more stable platform when at anchor resulting in minimal sway, greater comfort and safety.

### A smart, safe and easy installation

A smart solution using 24V DC power means that no large and heavy AC power box has to be installed and no hydraulic hoses or pumps are needed. Once the actuators are in place, simply connect to the DC power. All communication cables are delivered in the package with plug and play watertight connectors. The system also require a minimum of maintenance.

### Underwater replacable fin, designed for safety

In the event of a fin strike, the fin is engineered to break away while maintaining the integrity of the hull structure. Furthermore, the unique flange mount design allows for a new fin to be installed underwater without the need to haul the boat. For a shipyard, the design also means that a fin can be removed or installed in just 10 minutes! Great when fins needs to be removed when boat is on land.

### Instant start and Conductive cooling

Humphree stabilisers do not require any preparation or spool up time to get started. Simply push the button and the stabilisation starts immediately! With the Unique flange mount design we are able to utilize conductive water cooling meaning that there is no need for any external cooling system

### Eliminate anchor walking

The unique ability to rotate the fins 360°, have many benefits. Our “Bow anchor mode” means that the fins rotate 180° when anchored at the bow. Instead of “swimming” against the anchor creating so called anchor walk, our fins will swim away from the anchor keeping the anchor line tensioned. This means a much more stable platform when at anchor resulting in minimal sway, greater comfort and safety.



# customizable

solid, cuttable upper edge

The new Humphree fin design has an optimised hydrodynamic profile for low drag. The upper edge is made solid, another unique Humphree innovation. The common need to cut the fin to avoid touching the hull is now very easy as no lamination is required. Simply cut the thin solid part of the fin to required shape and it is ready to be installed. It is further possible to reach a better tolerance of the modification compared to the traditional cutting/fiberglass work.

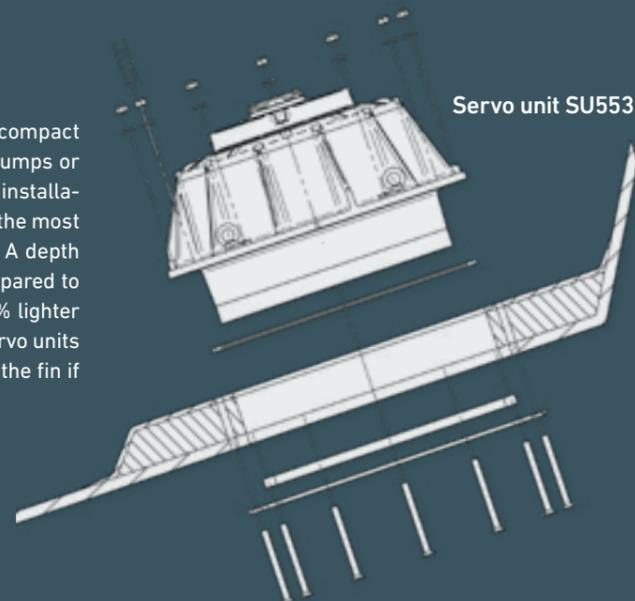
*unique*  
FEATURE



# servo actuators

low built-in height and low weight

The new sturdy patented servo actuators are extremely compact and with the 24V power, no space-consuming hydraulic pumps or AC power modules are required. This also means an easier installation. The space requirement inside the vessel is less than the most compact hydraulic fin stabiliser systems on the market. A depth of only 310 mm from exterior mounting flange. Also, compared to the competition, the Humphree system is typically 25-50% lighter as a result of the 24V power and the unique design. The servo units have an integrated manual tiller so it is possible to rotate the fin if for example the power supply is lost



# TWIN OR QUAD?

For large yachts, our QUAD function makes it just as easy to install FOUR fin stabilisers on one yacht. All Humphree features are retained. Even the low drag.



35M DYNAMIQ GTT 115 HYBRID YACHT WITH HUMPHREE QUAD FINs



# why not choose a complete solution?

## FINS AND INTERCEPTORS INTEGRATED AS A PACKAGE

When choosing a Humphree Fin Stabilising system, all Humphree software functions are included as standard. By adding our ultra fast interceptors on your boat, you can fully enjoy all the full Humphree benefits.

Humphree interceptor trim tabs will add an automatic trim of the boat for lower fuel consumption, better performance, improved visibility and will also provide pitch stabilisation to the boat.

The complete solution from one supplier that made Humphree win the prestigious DAME award in 2015.

### HUMPHREE FUNCTION:

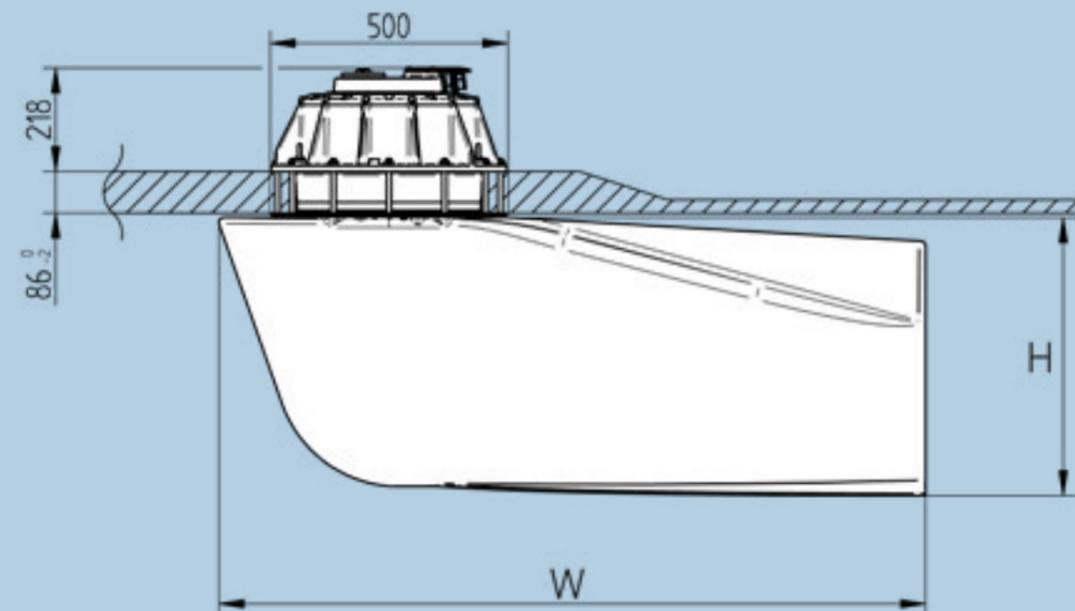
HUMPHREE FUNCTION:	Fins only	Fins + Interceptor
Auto Trim Control - Auto adjustment of boat trim	NO	YES
Auto List Control - Keeps boat even keel	YES	YES
Coordinated Turn Control	YES	YES
Optimised Coordinated Turn Control with interceptor	NO	YES
Active Stabilisation Zero Speed	YES	YES
Active Stabilisation underway - Roll	YES	YES
Active Stabilisation underway - Pitch	NO	YES



## Fin data

Fin Size:	0.45m <sup>2</sup>	W 1141 mm	H 455mm	Weight:	15kg
	0.6m <sup>2</sup>	W 1142 mm	H 597mm	Weight:	16kg
	0.8m <sup>2</sup>	W 1490 mm	H 587mm	Weight:	20kg
	1.0m <sup>2</sup>	W 1491 mm	H 729mm	Weight:	24kg

Material: Carbon and GRP Installation: Twin or Quad



## SU553 Servo Data

Materials inside hull:	Aluminium housing	Fin rotational speed:	Up to 90°/s
Materials outside hull:	Stainless steel (Duplex)	Communication:	HCS5 Integrated
Motor:	Brushless Servo motor	Possible rotation:	360°
Power supply:	24-32V DC	(Illustrations are showing 0,6m <sup>2</sup> fin)	
Weight:	102kg		
Max peak power consumption:	5kW		

### Power consumption - Zero speed, average

	Max. average consumption	Typical average consumption (Moderate waves)
0,45m <sup>2</sup> FIN	(Each): 32 A RMS (24V)	~ 20 A RMS (24V)
0,6m <sup>2</sup> FIN	(Each): 43 A RMS (24V)	~ 25 A RMS (24V)
0,8m <sup>2</sup> FIN	(Each): 58 A RMS (24V)	~ 35 A RMS (24V)
1,0m <sup>2</sup> FIN	(Each): 71 A RMS (24V)	~ 42 A RMS (24V)

Consumption during navigation, typical average consumption All sizes: < 10 A RMS (24V)