Transverse Thrusters

Improve docking, slow speed manoeuvring, emergency steering and station keeping
Lightweight aluminium execution

Besides steel executions we offer up to 300kW fully aluminum thrusters (gearbox & tunnel).

Low costs
Durable and economical design

Tailor-made
For small to mid-sized workboats, ferries, and passenger vessels.

FP series – Up to 1060 kW
Our FP thruster, the tunnel thruster with a fixed-pitch propeller, is in theory suitable for all types of vessels. FPs are primarily used in combination with variable shaft/propeller speed and reversible rotational direction.

Reversing the rotational direction of the drive motor determines the thrust direction in the case of a hydraulic or electric drive motor. When using a diesel engine, a reverse gearbox is used to change the rotational direction of the driveshaft and, thus, the thrust direction. The thrust force is determined by the rotational speed of the driveshaft.

CP series – Up to 1000 kW
AAA Propulsion’s CP thruster, the tunnel thruster with a fixed-pitch propeller, is in theory suitable for all types of vessels. CP’s are primarily used in combination with variable shaft/propeller speed and reversible rotational direction.

Reversing the rotational direction of the drive motor determines the thrust direction in the case of a hydraulic or electric drive motor. When using a diesel engine, a reverse gearbox is used to change the rotational direction of the driveshaft and, thus, the thrust direction. The thrust force is determined by the rotational speed of the driveshaft.

Transverse Thrusters characteristics

- Robust and hydrodynamically streamlined gearbox with built-on propeller
- Rigid and solid tunnel section provided with stainless steel liner in the propeller’s blade tip area, protecting the tunnel against electrolytic corrosion
- Gravity oil tank including hand pump are included in the scope of supply
- Flexible shaft coupling between the output shaft of the drive motor and the input shaft of the thruster unit, eliminating possible shaft misalignments and reducing vibration and noise
- Easy to install, maximum reliability and minimum downtime
- Optimum input-output ratio, resulting in maximum thrust efficiency and performance
- Rigid and solid construction reducing vibration and noise
- Optimum design of propeller keeps cavitation volume low which maximizes thrust efficiency and minimizes noise upon request AAA Propulsion can supply five-blade propeller thrusters for ‘silent’ operation.
Scope of application

FP transverse thrusters are used on ships with sufficient draft to guarantee proper functioning. The distance measured from the waterline in the lightest seagoing conditions to the centre of the tunnel should be about one to one and a half times the diameter of the tunnel.

<table>
<thead>
<tr>
<th>Thruster Type</th>
<th>Input Power [kW]</th>
<th>Prop. Diam. [mm]</th>
<th>Input Speed [RPM]</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST190 FP</td>
<td>25 - 35</td>
<td>320 - 370</td>
<td>1500 - 1800</td>
</tr>
<tr>
<td>ST330 FP</td>
<td>60 - 90</td>
<td>530 - 580</td>
<td>1500 - 1800</td>
</tr>
<tr>
<td>ST410 FP</td>
<td>125 - 160</td>
<td>660 - 715</td>
<td>1500 - 1800</td>
</tr>
<tr>
<td>ST440 FP</td>
<td>200 - 225</td>
<td>750 - 805</td>
<td>1500 - 1800</td>
</tr>
<tr>
<td>ST535 FP</td>
<td>250 - 300</td>
<td>950 - 1000</td>
<td>1500 - 1800</td>
</tr>
<tr>
<td>ST624 FP</td>
<td>300 - 400</td>
<td>1100 - 1200</td>
<td>1500 - 1800</td>
</tr>
<tr>
<td>ST800 FP/CP</td>
<td>400 - 500</td>
<td>1300 - 1400</td>
<td>1500 - 1800</td>
</tr>
<tr>
<td>ST851 FP/CP</td>
<td>600 - 700</td>
<td>1450 - 1550</td>
<td>1500 - 1800</td>
</tr>
<tr>
<td>ST953 FP/CP</td>
<td>850 - 1100</td>
<td>1750 - 1800</td>
<td>1500 - 1800</td>
</tr>
</tbody>
</table>

Actual maximum power depends on the application and classification society. All data subject to change without prior notice.

Interested?

Need more information about our products or services? Feel free to contact us by phone, email or just visit our locations. We look forward to hear from you.

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