Flygt 4320 mixers

ADJUSTABILITY MADE SIMPLE FOR MAXIMUM EFFICIENCY
Superior Mixing Made Efficient and Effective

Flygt, the industry leader in municipal wastewater mixing, is proud to raise the standard in high efficiency, low-speed, submersible mixers. Flygt 4320’s revolutionary design couples a high efficiency mixer and state-of-the-art motor efficiency, with an integrated variable frequency drive. The result is a submersible mixer that delivers superior mixing with adjustability and simplicity, for unsurpassed energy savings.

Adjustable Simplicity and Efficiency by Design

- Integrated drive dramatically simplifies variable speed mixing. Coupling an integrated drive with a synchronous motor, the Flygt 4320 eliminates the need for an external VFD.
- The Flygt 4320 mixer comes in a variety of ratings and propeller options to meet a broad range of thrust and tank layout requirements. The propeller comes in two or three-bladed options, and in a range of diameters from 1.4 to 2.5 meters (4.6 to 8.2 feet). Flygt engineers can assist you in evaluating your mixing requirements to determine the best possible fit.
- With a motor efficiency equivalent to the Super Premium Efficiency IE4 levels and fully adjustable speed, the Flygt 4320 delivers unparalleled energy efficiency, for lowest life cycle mixing energy costs.
- Flygt 4320’s speed controls can easily be adjusted with a small operator panel, which can be mounted tankside or in the control room for easy accessibility. Control can also be accessed from central control systems, via remote communications. Either way, adjustments are as easy as setting a clock.

Exceptional mixer efficiency + adjustable thrust to match needs = **unparalleled energy efficiency.**

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**Potential savings**

**Soft start**

**Soft stop**

**High power factor**

**Status information and alarms**

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**Process Demand**

**Time**
The Flygt 4320 allows you to adjust for today’s flows and loadings, quickly change to meet seasonal fluctuations, and be prepared for future increases – all without wasting energy.

- Adjusting thrust to meet changing loads or seasonal variations can save up to 50% on energy costs or more.
- Use only the energy you need today, while having the mixing power reserve you need to meet future demands.

**System Optimization.** Flygt 4320’s ease of adjustability empowers you to find the sweet spot, that spot that meets all treatment objectives with the minimal amount of energy consumption.

Process modifications can change thrust requirements by up to 50% or more by:

- Changing inlet screen type
- Changing average bulkflow velocity
- Adjusting the aeration system, or changing to a different aeration system
- Adjusting the mixed liquor suspended solids level
- Adding, removing or turning on or off different zones, for instance anoxic, anaerobic or aerobic zones.

**Adjust for low life cycle costs and quick payback.**

- Energy savings may often provide payback in as little as a couple of years, as high efficiencies and easily adjustable thrust, can minimize energy consumption while still meeting process objectives.
- Installation is simplified, with no external VFD, for quicker construction, quicker start up and lower construction costs.
- Soft starts and stops reduce wear and fatigue on mechanical and electrical components, extending life and reducing maintenance.
- Adjusting for actual thrust requirements reduces wear and stress on the mixer during lower power periods, for longer life and reduced maintenance.
- Easy to handle, install, maintain and control – simplicity by design.
Reliability and service are a given.

Backed by over 50 years of mixing R&D expertise and innovation, the Flygt 4320 delivers the robust performance and reliability you expect from the trusted leader in mixing technology. At Flygt, we design and engineer every component in-house, from propellers and shaft seals, to motors and gearboxes, so you are assured of quality and reliability. With our extensive worldwide service network, professional assistance and genuine spare parts are always nearby.


**Together, let’s mix efficiently. Let’s solve water.**

### Technical data

<table>
<thead>
<tr>
<th></th>
<th>Rated Power 50/60 Hz, kW (hp)</th>
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<tbody>
<tr>
<td></td>
<td>2.0 (2.7)</td>
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<tr>
<td><strong>Propeller diameter, m (in.)</strong></td>
<td>1.4-2.5 (55-98)</td>
</tr>
<tr>
<td><strong>Propeller speed, rpm</strong></td>
<td>variable, up to 70</td>
</tr>
<tr>
<td><strong>Maximum thrust, N</strong></td>
<td></td>
</tr>
<tr>
<td>1.4 m (55 in.)</td>
<td>1,260</td>
</tr>
<tr>
<td>2.0 m (79 in.)</td>
<td>1,910</td>
</tr>
<tr>
<td>2.5 m (98 in.)</td>
<td>2,530</td>
</tr>
<tr>
<td><strong>Maximum efficiency, N/kW</strong></td>
<td></td>
</tr>
<tr>
<td>1.4 m (55 in.)</td>
<td>over 600</td>
</tr>
<tr>
<td>2.0 m (79 in.)</td>
<td>over 1,000</td>
</tr>
<tr>
<td>2.5 m (98 in.)</td>
<td>over 1,500</td>
</tr>
<tr>
<td><strong>Rated current, A</strong></td>
<td>4.0</td>
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<tr>
<td><strong>Starting current, A</strong></td>
<td>4.0</td>
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<tr>
<td><strong>Power factor (cos phi)</strong></td>
<td>up to 0.94 (0.999)</td>
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*According to ISO 21630:2007 and depending on product configuration*