Submersible mixers
type ABS XRW 210 and 300
Main industries and applications

The submersible mixer type ABS XRW is a compact and versatile mixer with a wide range of applications, including use in aggressive and abrasive liquids.

Its design makes it particularly suitable for mixing and stirring applications in sewage treatment plants and industrial areas such as:
- Equalization of sewage
- Biological processes (aerobic, anoxic and anaerobic)
- Selector (contact zone)

Also applicable for homogenization of highly concentrated sludge and slurries such as:
- Primary, secondary and digested sludge in storage and buffer tanks
- Lime and mineral slurries

Hazardous locations:
- Certification for ATEX (Ex II 2G Ex h db IIB T4 Gb), FM and CSA available as an option

Features and benefits

The following features and benefits apply to the 210 and 300 models of the submersible mixer type ABS XRW, which are used for mixing at high speeds.

Energy-saving, Premium Efficiency IE3 asynchronous motor
- Ensures the lowest possible energy consumption
- Keeps operating temperature low for longer product life

Large, long-lasting bearings
- Offer true reliability with a calculated lifetime of more than 100’000 operating hours
- Need no maintenance – lubricated for life

Pre-loaded upper bearing
- Prevents spinning through the design of the outer ring
- Eliminates backlash
- Ensures longer bearing life

Large rotor shaft
- Keeps shaft deflection to a minimum through heavy-duty construction

When you choose our submersible mixer XRW, you choose the market’s best ongoing energy performance. You also get the best lifecycle cost, from initial purchase to ongoing operation.
Sealed connection chamber with quick-connection block
- Simplifies mixer maintenance
- Safeguards the motor to ensure high reliability

Triple seal system with dual oil chamber
- Improves motor protection

Enhanced mechanical seal protection system
- Keeps the mechanical seal clog-free
- Greatly extends the life of the seal

Hydraulic-optimized investment-cast propeller
- Ensures the highest possible mixing performance
- Reduces maintenance through self-cleaning

Abrasion-resistant, galvanically insulated mast bracket and suspension
- Reduces the risk of electrochemical corrosion

TCS (Thermo Control System)
- Provides a warning or switches off the motor automatically before the permissible temperature limit is exceeded, whether due to high-temperature medium or another problem source
Materials

<table>
<thead>
<tr>
<th></th>
<th>EC (cast iron)</th>
<th>CR (stainless steel)</th>
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</thead>
<tbody>
<tr>
<td>Mixer part</td>
<td></td>
<td></td>
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<tr>
<td>Motor housing</td>
<td>EN-GJL-250 painted</td>
<td>1.4404 (AISI 316L)</td>
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<tr>
<td>Motor shaft</td>
<td>1.4021 (AISI 420)</td>
<td>1.4401 (AISI 316)</td>
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<tr>
<td>Propeller</td>
<td>1.4460 (AISI 329)</td>
<td>1.4460 (AISI 329)</td>
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<tr>
<td>Fasteners</td>
<td>1.4401 (AISI 316)</td>
<td>1.4401 (AISI 316)</td>
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Operating data

<table>
<thead>
<tr>
<th></th>
<th>50 Hz (IE3)</th>
<th>60 Hz (IE2* / IE3)</th>
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<tbody>
<tr>
<td>Propeller diameter</td>
<td>210 / 300 mm</td>
<td>210 / 300 mm</td>
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<tr>
<td></td>
<td>8 / 12 in.</td>
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<tr>
<td>Motor power</td>
<td>0.8 – 2.9 kW</td>
<td>0.9 – 3.5 kW</td>
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<td>1.2 – 4.7 hp</td>
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<tr>
<td>Motor efficiency</td>
<td>up to 85%</td>
<td>up to 85%</td>
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<tr>
<td>Mixing flow</td>
<td>up to 0.23 m³/s</td>
<td>up to 3’650 USgpm</td>
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<td>up to 0.23 m³/s</td>
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* IE2 only valid for XRW 300 60 Hz
A global specialist at your doorstep

Sulzer serves clients worldwide through a network of over 180 production and service sites and has a strong footprint in emerging markets.