**M-Revo® standard product list**

<table>
<thead>
<tr>
<th>Shape of head</th>
<th>Head diameter</th>
<th>φ34</th>
<th>φ48</th>
<th>φ64</th>
<th>φ90</th>
<th>φ120</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hemisphere type</strong></td>
<td>Model number</td>
<td>MB034304A</td>
<td>MB048304A</td>
<td>MB64304A</td>
<td>MB80PVCA</td>
<td>MB120PVCA</td>
</tr>
<tr>
<td></td>
<td>Shaft diameter</td>
<td>8 mm</td>
<td>8 mm</td>
<td>13 mm</td>
<td>18 mm</td>
<td>18 mm</td>
</tr>
<tr>
<td></td>
<td>Shaft length</td>
<td>500 mm</td>
<td>500 mm</td>
<td>500 mm</td>
<td>700 mm</td>
<td>700 mm</td>
</tr>
<tr>
<td><strong>Through-type</strong></td>
<td>Model number</td>
<td>MB034304B</td>
<td>MB048304B</td>
<td>MB64304B</td>
<td>MB80PVCA</td>
<td>MB120PVCA</td>
</tr>
<tr>
<td></td>
<td>Shaft diameter</td>
<td>8 mm</td>
<td>8/13 mm</td>
<td>18 mm</td>
<td>18 mm</td>
<td>22 mm</td>
</tr>
<tr>
<td></td>
<td>Shaft length</td>
<td>500 mm</td>
<td>500/700 mm</td>
<td>700 mm</td>
<td>700 mm</td>
<td>1000 mm</td>
</tr>
</tbody>
</table>

General guideline of stirring capacity at the 0.1m of the standard stirrer (150rpm) is 10l for Hemisphere-type, 20l for Through-type, 40l for Hemisphere-type, 100l for Through-type, and 200l for Through-type of two-head setup.

**Material**
- SUS304 or synthetic resin (PVC, etc.)
- synthetic resin (PVC, etc.)

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**Safety**
Because of bladeless structure, vortex generation and liquid scattering are limited during the stirring.

**Quality improvement**
M-Revo® enables “soft stirring” that has little damage to the object to be stirred because of smaller shearing power. In addition, it reduces generation of contamination, cavitations, and bubbles during the stirring.

**Work efficiency**
There is a capability to suppress vortex generation so that container capacity can be effectively utilized. The absorption power enables to stir the sediments liquid.

**Energy saving**
As M-Revo® can reboot in slumries, intermittent continuation operation is possible.

**Innovativeness**
In the case of airation type, the negative pressure can be controlled by the revolution speed so that pumpless or valveless aeration is possible.

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**Hemisphere-type φ64**
Number of suction ports: Number of discharging ports = 1 : 1
(The head is joined to the shaft with a setscrew).
[Characteristics]
- Minimal shear power generation enables soft stirring. It has stronger stirring power than Through-type.

**Through-type φ64**
Number of suction ports: Number of discharging ports = 1 : N
(The shaft penetrate the head.)
(The head is joined to the shaft with a setscrew).
[Characteristics]
- Because the shaft penetrate the head(s), the stirring position(s) can be changed, e.g., top and bottom inversion, and/or plural setups. Fluidity is higher than Hemisphere-type.
To elucidate stirring mechanism, stirring performance, and the most suitable shape of M-Revo®, revolving speed, streamline, speed ground, and pressure ground, etc., were scientifically analyzed. It has been proved that a jet flow of the liquid is proportional for number of revolutions and the characteristics do not change even if shapes of M-Revo® are different. These results of research were presented in a hydraulic engineering section of the Japan Society of Mechanical Engineers. (November, 2012)

Table for choice of M-Revo® size

<table>
<thead>
<tr>
<th>Volume (L)</th>
<th>15W</th>
<th>30W</th>
<th>60W</th>
<th>※α</th>
</tr>
</thead>
<tbody>
<tr>
<td>250</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>200</td>
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<td>150</td>
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</tr>
<tr>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

 ※α Consumption electricity reference level (DC motor)
 Even though the reference level may be affected by losses from motor characteristics, reduction gear, or inclination, etc., please use them as your reference.

※1 Weak stirring (prevention of sedimentation)
 Assuming water, all the liquid to be stirred circulates once a minute. A state of circular number 1 is assumed.

※2 Standard stirring (uniforming of density)
 Assuming water, all the liquid to be stirred circulates three times a minute. A state of circular number 3 is assumed.

※3 Strong stirring (promotion of mixing and dissolving)
 Assuming water, all the liquid to be stirred circulates five times a minute. A state of circular number 5 is assumed.

For more information
http://mrevo.jp

Please inquire with us for further terms of use / container volume / M-Revo® head diameter, or the special material designation.