Alfa Laval IM 25 Rotary Jet Mixer

Superior Mixing – Liquid, Gas and Powder

The patented IM 25 Rotary Jet Mixer (RJM) does not only mix fast, efficient and uniform but creates also the necessary process flexibility that makes it easy to switch to new product formulations with diverse viscosities, densities and volumes. Besides classic liquid to liquid mixing the RJM is excellent for gas and powder dispersion plus a superb tank cleaning machine.

Applications
Process and storage vessels between 10-1000 m³ used in a wide range of industries such as: beer & beverage, food & ingredients, home & personal care, health care, biotech and chemical industry etc.

Operation
Secure that the mixer is positioned in the correct level and submerged into the liquid before round pumping or when adding any additional products from any up-stream pipe works.

TECHNICAL DATA

Lubricant: ....................... Self-lubricating with the mixing/cleaning fluid
Connection: ....................... Standard thread 2.5” BSP, female
Min. tank opening: ............. See dimension drawings

Pressure
Working pressure: ............. 2-12 bar
Recommended pressure during mixing: ............. 4-8 bar
Recommended pressure during CIP: ............. 5-10 bar

PHYSICAL DATA

Materials: ....................... AISI 316L, AISI 316, SAF 2205, PEEK, PVDF, Carbon, Tefzel, Ceramics

Weight: ....................... 13.2 kg

Temperature
Max. working temperature: ............. 95°C
Max. ambient temperature: ............. 140°C

Benefits
Using the IM 25 Rotary Jet Mixer makes it possible, at a modest investment, to perform fast and efficient mixing in a hygienic system. In traditional systems, using propeller mixers, a rotating shaft penetrates the tank wall and a mechanical seal and a gear box are installed. With the Rotary Jet Mixing technology the shaft, seal and gearbox are eliminated, and a more hygienic design is obtained. With the Rotary Jet Mixing technology good mixing is achieved without the use of baffles. The Rotary Jet Mixing technology can also be used for gas dispersion and for dispersion and dissolving of powder. The IM 25 can furthermore be used for efficient CIP when the tank is empty, saving liquid, chemicals and energy compared to a fixed spray ball CIP system.
Flow rate
Relationship between inlet pressure and flow rate for liquids with waterlike properties for the IM 25 Rotary Jet Mixer.

Volumetric flow rate [m³/h]

Reach of jet
Reach of jet for the IM 25 during cleaning, and indicative reach of jet for mixing of liquids with water-like properties.

<table>
<thead>
<tr>
<th>Dimensions (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A = 2.5&quot; BSP</td>
</tr>
</tbody>
</table>

Nozzles
A) 2 x ø21 mm
B) 2 x ø19 mm
C) 2 x ø17 mm
D) 2 x ø15 mm

<table>
<thead>
<tr>
<th>Dimensions (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A = 2.5&quot; BSP</td>
</tr>
</tbody>
</table>

The Rotary Jet Mixing technology

<table>
<thead>
<tr>
<th>Traditional Mixing technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Round pumping</td>
</tr>
<tr>
<td>Propeller mixing</td>
</tr>
</tbody>
</table>

A = Rotary Jet Mixer
B = Gas
C = Product
D = Liquid feed

A = Liquid feed
B = Product

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
</tr>
</thead>
<tbody>
<tr>
<td>286</td>
<td>156</td>
<td>80</td>
<td>337</td>
<td>220</td>
<td>Ø343</td>
<td>Ø424</td>
<td>Ø223</td>
</tr>
</tbody>
</table>
Alfa Laval reserves the right to change specifications without prior notification.

How to contact Alfa Laval
Contact details for all countries are continually updated on our website. Please visit www.alfalaval.com to access the information direct.