RALEX® EDI STACK MPure™ 36

APPLICATION:
MPure™ electrodeionization (EDI) stacks are used for the production of high purity water for the power, semiconductor and chemical industry.
EDI produces high purity water continuously without the use of hazardous regeneration chemicals required for a mixed bed process.

DESCRIPTION:
MPure™ stacks are building on MEGA’s ion-exchange membrane manufacturing capability and extensive electroseparation experience. All stacks include RALEX® ion exchange membranes developed by MEGA. The novel MPure™ stack produces 16 to 18 MΩ·cm product water quality at very high recovery. These stacks are designed to replace mixed bed ion exchange at flow rates from 5 to 500 m³/h (20 to 2000 gpm) and beyond.

FEATURES:
- Stack interconnection capability for low cost system construction
- High flow rate blocks, flows up to 45 m³/h (200 gpm) per block
- High deionization with recovery up to 97.5 %
- Robust design: no internal or external leaks
- Small footprint: ideal for operation inside containers
- Voltage stability
- Effective replacement for competing EDI technology
- Complete OEM engineering package

MPure™ 36 stack
### Feed Water Limitation

- TEA and TEC: < 25 ppm as CaCO₃
- Feed water source: RO permeate or better
- Free Cl₂: < 0.01 ppm Cl₂
- Oxidizing agents: N.D.
- Fe, Mn: < 0.01 ppm
- Sulfide: < 0.01 ppm H₂S
- Oil: N.D.
- Turbidity: < 0.1 NTU
- SDI: < 1
- pH: 4–10
- Total hardness: < 1 ppm as CaCO₃
- Total organics: < 0.5 ppm TOC
- Silica: < 1.0 ppm SiO₂

* Actual performance will depend on site conditions. Please use MEGA's software to determine actual performance.

### Typical Performance

- Flow nominal: 10 m³/h (44 gpm)
- Flow maximum: 15 m³/h (66 gpm)
- Flow minimum: 5 m³/h (22 gpm)
- Concentrate flow: > 0.3 m³/h (> 1.3 gpm)
- Electrode flow: > 0.1 m³/h (> 0.4 gpm)
- Recovery: < 97.5%
- Feed pressure: < 7 bar (< 102 psi)
- Pressure drop D at nominal flow: 1.3–2.3 bar (19–33 psi)
- Pressure difference D>C: > 0.3 bar (> 4 psi)
- Temperature: 5–40 °C (41–104 °F)
- Current: < 16 A
- Voltage: < 300 V
- Product water quality: > 16 MΩ·cm*
- Silica removal: > 96%

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**Physical Specifications**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of cell pairs</td>
<td>36</td>
</tr>
<tr>
<td>Dimensions (WxHxD)</td>
<td>582x802x697 mm (22.9x31.6x27.4 inch)</td>
</tr>
<tr>
<td>Shipping weight</td>
<td>330 kg (728 lbs)</td>
</tr>
<tr>
<td>Operating weight</td>
<td>350 kg (772 lbs)</td>
</tr>
<tr>
<td>Hydraulic Connections D</td>
<td>2½&quot; (73 mm) victaulic</td>
</tr>
<tr>
<td>C</td>
<td>1¼&quot; (42.4 mm) victaulic</td>
</tr>
<tr>
<td>E</td>
<td>¾&quot; (29.6 mm) victaulic</td>
</tr>
</tbody>
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**Block of MPure™ 36 stacks**

**Lenntech**

info@lenntech.com  Tel. +31-152-610-900  www.lenntech.com  Fax. +31-152-616-289