Freedom EVO® - Specifications

**General**

**Hardware features**
- Liquid Handling Arm, Robotic Manipulator Arm, Pick and Place Arm, MultiChannel Arm 96 and MultiChannel Arm 384

**Tip configuration**
- 1, 2, 4, 8, 96 and 384 tips, various combinations of application-oriented tip types

**Tip types**
- Standard (FEP-coated stainless steel) and disposable tips with or without filter (10/50/200/1000 µl); low-volume tips for high density format applications

**Syringe sizes**
- 50/250/500/1000/2500/5000 µl

**Liquid handling features**

<table>
<thead>
<tr>
<th>Volume range*</th>
<th>Volume</th>
<th>Standard tips</th>
<th>Disposable tips 200 µl</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10 µl</td>
<td>&lt; 1.75%</td>
<td>&lt; 2.25%</td>
</tr>
<tr>
<td></td>
<td>100 µl</td>
<td>&lt; 0.40%</td>
<td>&lt; 0.40%</td>
</tr>
</tbody>
</table>

*typically achievable results using water in single pipetting mode under optimized conditions.

Manufacturer's guaranteed CV for standard and disposable tips at 10 µl < 3.5%, 100 µl < 0.75%

**Safety features**

**Liquid detection**
- Presence, absence and quantification check of liquid volumes is available for all tip types, various detection modes (single/multi) selectable

**Clot detection**
- Detection of tip obstruction by solid material

**Password protection**
- Three password levels: Administrator, Application Specialist and Operator

**Dimensions**

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Freedom EVO75</th>
<th>Freedom EVO100</th>
<th>Freedom EVO 150</th>
<th>Freedom EVO200</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height</td>
<td>640 mm/25.2&quot;</td>
<td>870 mm/34.3&quot;</td>
<td>870 mm/34.3&quot;</td>
<td>870 mm/34.3&quot;</td>
</tr>
<tr>
<td>Width</td>
<td>880 mm/34.6&quot;</td>
<td>1075 mm/42.3&quot;</td>
<td>1450 mm/57&quot;</td>
<td>2050 mm/80.7&quot;</td>
</tr>
<tr>
<td>Depth</td>
<td>690 mm/27.2&quot;</td>
<td>780 mm/30.7&quot;</td>
<td>780 mm/30.7&quot;</td>
<td>780 mm/30.7&quot;</td>
</tr>
</tbody>
</table>

**Power requirements**
- Power: 600-1200 VA, depending on the instrument size

**Operating conditions**
- Temperature: 15-32°C/59-90°F, relative humidity: 30-80% at 30°C/86°F or below, non condensing