Main Features

- **Double-layer cone / up-roll edge using a new material**
  A double-layer cone paper consists of two layers. One is a basic layer and the other is a surface layer. In the FF-WK series, a long-fibered (low freeeness) wooden pulp is used for the basic layer, which has high rigidity realized by the large volume structure and appropriate internal loss. For the surface layer, the bincho charcoal powder is blended with a short-fibered (high freeeness) kenaf, which allows to accelerate the propagation speed on the cone paper surface.

- **Up-roll edge shape realizes a long stroke.** A polycarbonate series material which has opposite physicalities of high loss and high frequency with this cap helps to ease an unnecessary sound coloration at high frequency range. Also direct coupling with the voice coil accelerates the propagation speed on the cone paper surface.

- **Ridge-dome shape aluminum alloy center cap / Mechanical 2-way construction**
  A ridge-dome shape center cap made of aluminum alloy is employed. Dispersing and deadening a resonance occurred at a specific frequency with this cap helps to ease an unnecessary sound coloration at high frequency range. Also direct coupling with the voice coil bobbin expands the high frequency response.

- **3-point gluing / Pocket neck damper**
  3-point gluing which glues the cone paper, damper and the voice coil at one point is employed on the FF-WK series. Increasing the strength of the cone neck section realizes an improved high frequency response. Employing the pocket shape at the damper neck section has realized the 3-point gluing even with the usage of junction cable.

- **Faston 205 gold coating connection terminal**
  In order to minimize the sound variation, the Faston 205 gold coating connection terminal is employed as a speaker terminal.

### Frequency Response

#### FF85WK

#### FF105WK

#### FF125WK

#### FF165WK

#### FF225WK

### Outer Shape / Baffle Hole Dimensions List

<table>
<thead>
<tr>
<th>MODEL</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>I</th>
<th>J</th>
<th>Note</th>
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</thead>
<tbody>
<tr>
<td>FF85WK</td>
<td>ø70</td>
<td>ø62</td>
<td>47.5</td>
<td>4.4 x 6&quot;</td>
<td>ø86</td>
<td>ø65</td>
<td>43.3</td>
<td>3.4</td>
<td>15</td>
<td>ø70</td>
<td>ø1-38, ø2/33</td>
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<tr>
<td>FF105WK</td>
<td>ø92</td>
<td>ø107</td>
<td>54.6</td>
<td>4.5 x 6&quot;</td>
<td>ø115</td>
<td>ø85</td>
<td>48.8</td>
<td>4.4</td>
<td>15</td>
<td>ø92</td>
<td>ø105</td>
</tr>
<tr>
<td>FF125WK</td>
<td>ø102.2</td>
<td>ø117</td>
<td>62.4</td>
<td>4.65&quot;</td>
<td>ø126</td>
<td>ø90</td>
<td>57.5</td>
<td>3.8</td>
<td>15</td>
<td>ø102.2</td>
<td>ø125</td>
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<tr>
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<td>ø174</td>
<td>ø120</td>
<td>72</td>
<td>4.6</td>
<td>20</td>
<td>ø143.8</td>
<td>ø165</td>
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<td>ø204</td>
<td>93.7</td>
<td>4.95&quot;</td>
<td>ø200</td>
<td>ø145</td>
<td>86.5</td>
<td>5.2</td>
<td>18</td>
<td>ø182</td>
<td>ø225</td>
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</tbody>
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* Circular hole, ** Slot hole