AKG/7  N, M, F
Circular Polarization FM Antenna

MOUNTING INSTRUCTIONS

These wide band FM antennas, made of Stainless Steel are particularly recommended for medium Output Power Transmitters.

<table>
<thead>
<tr>
<th>BAYS</th>
<th>DB</th>
<th>ANTEA NA</th>
<th>WEIGHT</th>
<th>WIND VEL.</th>
<th>WIND LOAD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>-1.5</td>
<td>1,8 mt</td>
<td>10.50</td>
<td>160</td>
<td>22</td>
</tr>
<tr>
<td>2</td>
<td>1.5</td>
<td>4,3 mt</td>
<td>21.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>4.5</td>
<td>9,3 mt</td>
<td>42.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>6.0</td>
<td>14,3 mt</td>
<td>63.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>7.5</td>
<td>19,3 mt</td>
<td>82.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SUGGESTED MAST SECTION

Is suggested install this Antenna over poles or guyed mast because the section higher than 110mm can increase the SWR value and modify the radiation pattern.

DISTANCE ESTIMATION BETWEEN FM ANTENNA BAYS

Wave Length \( \lambda = \frac{300}{f(MHz)} \)

Distance between antenna bays (any antenna types) = \( d \)

\[ d \text{ (suggested)} = \lambda \times 0.85 \]

88MHz \( \Rightarrow \) \( \lambda = \frac{300}{88} = 3.41 \text{ mt} \) \( \Rightarrow \) \( d = 3.41 \times 0.85 = 2.9 \text{ mt} \)

98MHz \( \Rightarrow \) \( \lambda = \frac{300}{98} = 3.06 \text{ mt} \) \( \Rightarrow \) \( d = 3.06 \times 0.85 = 2.6 \text{ mt} \)

108MHz \( \Rightarrow \) \( \lambda = \frac{300}{108} = 2.78 \text{ mt} \) \( \Rightarrow \) \( d = 2.78 \times 0.85 = 2.36 \text{ mt} \)

Distance \( d \) suggested 2.6mt even if working frequency is Mid FM Band
MOUNTING INSTRUCTIONS

- The antenna must be assembled with the central insulator down.
- The elements without the hole must be mounted looking to the high while the elements with the hole must be mounting looking down.
- The elements with the hole have different length and for this reason have been marked with different letters, pay attention to follow the A-B-C-D letters.
- After inserting the elements lock nuts lightly.
- Insert the central link and lock it to the inner brass conductor coming out from the central insulator.
- Lock strongly all the nuts.
- Lock the antenna to the mast at the distance indicated from the lines.
- Protect the connector with appropriate tape.