Wide Angle Scalar Feed Horns

FEATURES:

- Low VSWR
- Wide Beamwidths
- Polarization Insensitive
- Partial Waveguide Bandwidths

APPLICATIONS:

- Low F/D Antennas
- Surveillance Systems
- Offset Feed Antennas

DESCRIPTION:

Cernexwave's CWA series wide angle scalar feed horn or also called a choke horn, has been designed to be used in applications where wide beamwidth (55 Deg.) is required such as low F/D ratios of .5 or .4 in parabolic reflectors and offset feed applications. Please Note: CWA series Feed Horns are normally supplied with a standard rectangular waveguide, circular is also available.

SPECIFICATIONS:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency Range (GHz)</td>
<td>8.2 to 12.4</td>
<td>10.0 to 15.0</td>
<td>12.4 to 18</td>
<td>18 to 26.5</td>
<td>26.5 to 40</td>
<td>33 to 50</td>
<td>40 to 60</td>
<td>50 to 75</td>
<td>60 to 90</td>
<td>75 to 110</td>
<td>90 to 140</td>
</tr>
<tr>
<td>Bandwidth (GHz) Typ</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>7</td>
<td>7 to 10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A in</td>
<td>-</td>
<td>-</td>
<td>1.8</td>
<td>1.5</td>
<td>1.5</td>
<td>1.2</td>
<td>1.0</td>
<td>0.80</td>
<td>0.80</td>
<td>0.60</td>
<td>0.60</td>
</tr>
<tr>
<td>mm</td>
<td>-</td>
<td>-</td>
<td>45.7</td>
<td>38.1</td>
<td>38.1</td>
<td>30.5</td>
<td>25.4</td>
<td>20.3</td>
<td>15.2</td>
<td>15.2</td>
<td></td>
</tr>
<tr>
<td>B in</td>
<td>-</td>
<td>-</td>
<td>2.72</td>
<td>1.86</td>
<td>1.17</td>
<td>1.00</td>
<td>0.83</td>
<td>0.66</td>
<td>0.55</td>
<td>0.45</td>
<td>0.36</td>
</tr>
<tr>
<td>mm</td>
<td>-</td>
<td>-</td>
<td>69.1</td>
<td>47.2</td>
<td>29.74</td>
<td>25.4</td>
<td>21.1</td>
<td>16.8</td>
<td>14.0</td>
<td>11.4</td>
<td>9.10</td>
</tr>
</tbody>
</table>

Typical Electrical Specifications

- Beamwidth: E-Plane 55 Deg
- 3dB: H-Plane 56 Deg
- Sidelobes: E-Plane -25dB
- Sidelobes: H-Plane -25dB

HOW TO ORDER:

Specify Model Number  CWA – WG LF HF-- XX

Example: To order a Wide Angle Scalar Feed Horn with a waveguide size of 19, specify CWA-194060-XX.

CERNEXWAVE RESERVE THE RIGHT TO CHANGE THE SPECIFICATIONS WITHOUT NOTICE