Rotary Joints

FEATURES:
- Negligible Variation During Rotation
- Minimum Effects on Transferred Signals
- Frequencies 11.6-150GHz

APPLICATIONS:
- Test setups
- Radar

DESCRIPTION:
Cernex’s CRJ series rotary joints are available in standard circular waveguide sizes from 11.6 to 150 GHz. Each rotary joint consists of two circular waveguide sections mounted on ball bearings. Connections to the guides are made at standard male and female circular flanges. Precise alignment of the waveguide sections prevents spurious mode generation, and the very small gap between abutting surfaces contributes a negligible loss in the TE_01 circular mode. In all models, amplitude variation with rotation is less than 0.2 dB and phase variation is less than 2 degrees.

SPECIFICATIONS:

<table>
<thead>
<tr>
<th>Frequency Band (GHz)</th>
<th>11.6 – 48.0</th>
<th>48.0 – 96.0</th>
<th>96.0 – 150.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency Range (GHz)</td>
<td>11.6-16; 13.2-18.9; 15.9-21.9</td>
<td>39.8-54.8; 46.4-63.90</td>
<td>93.0-128.0</td>
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<tr>
<td>18.6-25.6; 21.9-30.1; 25.3-34.9</td>
<td>50.0-68.0; 53.1-73.1</td>
<td>101.0-139.0</td>
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<tr>
<td>27.3-38.0; 29.3-40.4; 32.0-44.0</td>
<td>61.9-85.2; 69.7-95.9</td>
<td>124.0-150.0</td>
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<td>34.8-48.0</td>
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<tr>
<td>Insertion Loss TE_01 (dB) Max.</td>
<td>0.3</td>
<td>0.4</td>
<td>0.5</td>
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<tr>
<td>VSWR Min.</td>
<td>1.10</td>
<td>1.10</td>
<td>1.15</td>
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</tbody>
</table>

Lower Frequency Rotary Joints are also available.

HOW TO ORDER:
Specify Model Number  
CRJ – W G - L F - H F - I L -- XX  
Waveguide Size  
Low End Frequency Band  
Insertion Loss  
High End Frequency Band  

Example: To order a rotary joint for WR15 of Frequency range of 55-65Ghz, with 0.3dB Insertion Loss specify CRJ-15556503-XX

CERNEX RESERVE THE RIGHT TO CHANGE THE SPECIFICATIONS WITHOUT NOTICE