CERNEX, Inc.

Rotary Joints

FEATURES:

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

APPLICATIONS:

- Test setups
- Radar

DESCRIPTION:

CRJ Series

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:

Frequency Band (GHz)	11.6 – 48.0	48.0 – 96.0	96.0 – 150.0
Frequency Range (GHz)	11.6-16 ; 13.2-18.9 ; 15.9-21.9	39.8-54.8; 46.4-63.90	93.0-128.0
	18.6-25.6; 21.9-30.1; 25.3-34.9	50.0-68.0; 53.1-73.1	101.0-139.0
	27.3-38.0; 29.3-40.4; 32.0-44.0	61.9-85.2; 69.7-95.9	124.0-150.0
	34.8-48.0		
Insertion Loss TE_{01} (dB) Max.	0.3	0.4	0.5
VSWR Min.	1.10	1.10	1.15

Lower Frequency Rotary Joints are also available.

HOW TO ORDER:

Specify Model Number CRJ –WG-LF-HF-IL-- XX ← To be specified by the factory

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