

## Flexible Waveguides

### FEATURES:

- ❖ Available from 1.14 GHz to 110 GHz
- ❖ Low VSWR
- ❖ Low Insertion Loss
- ❖ Rugged Construction & Flexibility

### APPLICATION:

- ❖ Communications
- ❖ Radar



**CFT & CFW Series**

### SPECIFICATIONS:

#### **TWISTABLE:**

Waveguide Size	WR 650		WR 510		WR 430		WR 340		WR 284		WR 229		WR 187		WR 159	
Frequency Range (GHz)	1.12	-	1.45	-	1.70	-	2.20	-	2.60	-	3.30	-	3.95	-	4.90	-
	1.70		2.20		2.60		3.30		3.95		4.90		5.85		7.05	
VSWR Typ.	1.10	1.06	1.10	1.10	1.07	1.10	1.07	1.10	1.07	1.10	1.07	1.10	1.09	1.10	1.09	1.09
Insertion Loss (dB/m) Max.	1.10	*	0.20	0.22	0.01	0.25	0.01	0.30	0.02	0.40	0.02	0.45	0.05	0.5	0.06	0.06
		0.01			*		*		*		*		*		*	*

Waveguide Size	WR 137		WR 112		WR 102		WR 90		WR 75		WR 62		WR 51		WR 42	
Frequency Range (GHz)	5.85	-	7.05	-	7.00	-	8.20	-	10.00	-	12.40	-	15.00	-	18.00	-
	8.20		10.00		11.00		12.40		15.00		18.00		22.00		26.50	
VSWR Typ.	1.10	1.09	1.10	1.10	1.10	1.10	1.10	1.10	1.12	1.10	1.12	1.15	1.20	1.23	1.20	1.20
Insertion Loss (dB/m) Max.	0.6	*	0.7	0.08	0.09	0.8	0.10	1.0	0.15	1.7	0.20	2.0	0.35	2.5	0.35	0.35
		0.07		*	*		*		*		*		*		*	*



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### TWISTABLE:

Waveguide Size	WR 34		WR 28		WR 22
Frequency Range (GHz)	22.00 - 33.00		26.50 - 40.00		33.00 - 50.00
VSWR Typ.	1.25	1.30	1.25	1.30	1.35
Insertion Loss (dB/m) Max.	2.7	* 0.50	3.0	* 0.60	1.20

\* Insertion Loss is in dB Per Foot with silver plated waveguide

### FLEXIBLE SEAMLESS:

Waveguide Size	WR 650	WR 510	WR 430	WR 340	WR 284		WR 229		WR 187		WR 159	
Frequency Range (GHz)	1.14 - 1.72	1.45 - 2.20	1.72 - 2.60	2.20 - 3.30	2.60 - 3.95		3.30 - 4.90		3.95 - 5.85		4.90 - 7.05	
VSWR Typ.	1.20	1.20	1.20	1.20	1.20	1.08	1.20	1.08	1.20	1.09	1.20	1.10
Insertion Loss (dB/m) Max.	0.01	0.013	0.017	0.024	0.033	** 0.018	0.043	** 0.020	0.064	** 0.030	0.077	** 0.040

Waveguide Size	WR 137		WR 112		WR 102	WR 90		WR 75		WR 62	
Frequency Range (GHz)	5.85 - 8.20		7.05 - 10.0		7.00 - 11.00	8.20 - 12.40		10.00 - 15.00		12.40 - 18.00	
VSWR Typ.	1.20	1.10	1.20	1.10	1.10	1.20	1.10	1.20	1.10	1.20	1.12
Insertion Loss dB Max.	0.1	** 0.050	0.14	** 0.060	** 0.060	0.15	** 0.100	0.18	** 0.120	0.23	** 0.150



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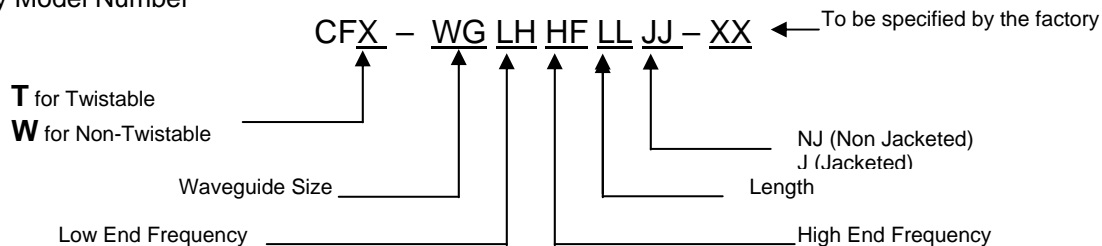
### FLEXIBLE SEAMLESS:

Waveguide Size	WR 51		WR 42		WR 34		WR 28		WR 22		WR 19		WR 15		WR 12		WR 10		
Frequency Range (GHz)	15.00 - 22.00		18.00 - 26.50		22.00 - 33.00		26.50 - 40.00		33.00 - 50.00		40.00 - 60.00		50.00 - 75.00		60.00 - 90.00		75.00 - 110.00		
VSWR Typ.	1.25	1.20	1.30		1.30		1.10	1.30	1.10	1.10	1.10	1.10	1.10	1.12	1.15				
Insertion Loss dB Max.	0.33	**	0.5	**	0.6	*	0.83	*	0.05	0.08	*	*	0.11	*	0.20	*	0.25		

\* Insertion Loss is in dB Per Inch with silver plated waveguide \*\* Insertion Loss is in dB Per Foot

### HOW TO ORDER:

Specify Model Number



**Example:** To order CFT Flexible Waveguide with 2.20 to 3.30 GHz with 0.5 dB maximum insertion loss, specify CFT-340020302-XX.

CERNEX RESERVE THE RIGHT TO CHANGE THE SPECIFICATIONS WITHOUT NOTICE