



JMC1200T

Flexible and Twistable Waveguide

JMC1200N

Flexible Non Twistable Waveguide

Flexible and Twistable Waveguide

Flexible and twistable rectangular waveguides are used in a wide variety of satcom, VSAT and telecom applications that carry high frequency radio (microwave communications) signals. Flexible waveguides are manufactured from helically wound silver plated copper alloy strip material which allows the waveguides to twist and bend in the E and H planes simultaneously.

The flexible waveguide core is protected from the environment by a molded neoprene rubber jacket providing durability and full axis of motion over the operating temperature range of -20 to +100 degrees Celsius.

Electrical Specifications

Add 0.03 to VSWR for Choke flanges

Electrical performance can be optimized over narrower frequency bands

Waveguide Size		Frequency	Insertion loss	VSWR		Power Rating	
IEC R	EIA WR	Operating GHz	Maximum dB/ft. (m)	Maximum <36 in. (1 m)	Maximum >36 in. (1 m)	JMC1200T Watts	JMC1200N Watts
70	137	5.85-8.20	0.06 (0.20)	1.07	1.11	1700	2000
84	112	7.05-10.00	0.07 (0.23)	1.09	1.12	1200	1500
100	90	8.20-12.40	0.09 (0.30)	1.09	1.12	700	1000
120	75	10.00-15.00	0.13 (0.43)	1.10	1.12	500	750
140	62	12.40-18.00	0.16 (0.52)	1.12	1.15	220	400
220	42	18.00-26.50	0.38 (1.25)	1.20	1.25	100	150

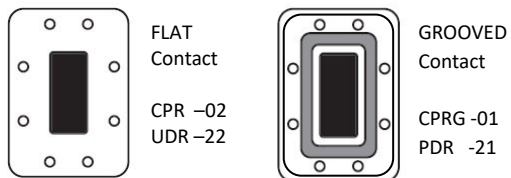
Mechanical Specifications

Waveguide Size		Bending Radius Rating Minimum for JMC1200T or JMC1200N				Twisting Rating Maximum for JMC1200T		Length Tolerance	Internal Pressure Rating Maximum
IEC R	EIA WR	Static		Repeated		Static	Repeated	Static	Static
		E-Plane In. (mm)	H-Plane In. (mm)	E-Plane In. (mm)	H-Plane In. (mm)	+/- Deg. /ft (m)	+/- Deg. /ft (m)	+/- inches/foot (%)	PSIG (kPa)
70	137	4.0 (102)	8.0 (203)	16 (406)	32 (813)	64 (210)	16 (52)	0.13 (1%)	30 (207)
84	112	3.0 (76)	6.0 (152)	12 (305)	24 (610)	79 (259)	20 (66)	0.13 (1%)	35 (242)
100	90	2.5 (64)	5.0 (127)	10 (254)	20 (508)	96 (315)	23 (75)	0.13 (1%)	45 (311)
120	75	2.1 (51)	4.2 (102)	8.5 (216)	17 (432)	112 (364)	28 (92)	0.13 (1%)	45 (311)
140	62	1.8 (46)	3.6 (92)	7.0 (178)	14 (368)	136 (446)	34 (112)	0.13 (1%)	45 (311)
220	42	1.2 (30)	2.3 (60)	4.7 (120)	11 (240)	160 (525)	44 (144)	0.13 (1%)	45 (311)

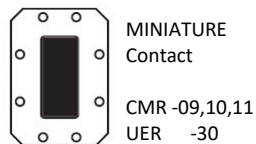
Waveguide Flanges

Brass and aluminum waveguide flanges are manufactured in-house and maintained in inventory reducing product lead time so we can respond quickly to market demands. Both North American (EIA) and European (IEC) standard waveguide flanges are available in corrosion protected base metal or plated finishes.

Rectangular Flanges

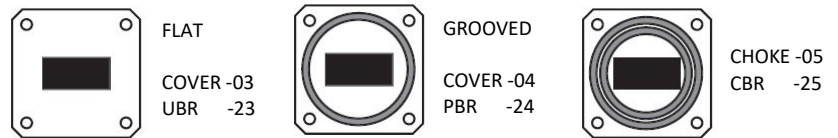


Number of holes for some flange styles depends on waveguide size



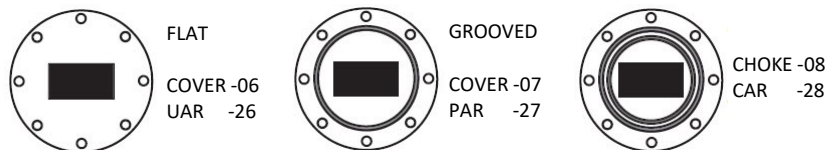
Square Flanges

WR42 to WR112 / R70 to R220



Round Flanges

WR137 / R70



Accessories

Hardware, fixing and clamping kit accessories are available for use with our flexible waveguide products.

Part Number Guide

	JMC1200T	-08	-36	IN	-N	-03	-04	-R
Flex Type								
Flex Twist	JMC1200T							
Flex Non Twist	JMC1200N							
Waveguide Size								
	R70 / WR137	-05						
	R84 / WR112	-06						
	R100 / WR90	-07						
	R120 / WR75	-08						
	R140 / WR62	-09						
	R220 / WR42	-11						
Flex Length								
Unit Length								
inch				IN				
mm				MM				
Jacket Type								
Neoprene					-N			
Silicone					-S			
Flange Type								
CPRG - Grooved Contact						-01	-21	PDR - Rectangular Grooved
CPRF - Contact Flat						-02	-22	UDR - Rectangular Flat
Cover Flat - Square						-03	-23	UBR - Square Flat
Cover Grooved - Square						-04	-24	PBR - Square Grooved
Choke - Square						-05	-25	CBR - Square Choke
Cover F WR137 - Round						-06	-26	UAR70 - Round Plain
Cover G WR137 - Round						-07	-27	PAR70 - Round Grooved
Choke WR137 - Round						-08	-28	CAR70 - Round Choke
CMR - Standard Holes						-09		
CMR - Clear Holes						-10	-30	UER - Clear Holes
CMR - Tapped Holes						-11	-99	Special - Customer Specified
Flange Finish								
-S								Silver Plated
-N								Nickel Plated
-T								Tin Plated
-G								Gold Plated
-R								Iridite

Standard

Neoprene Rubber Jacket
Brass Flanges

Special Request

Silicone Rubber Jacket -S
Aluminium Flanges -A