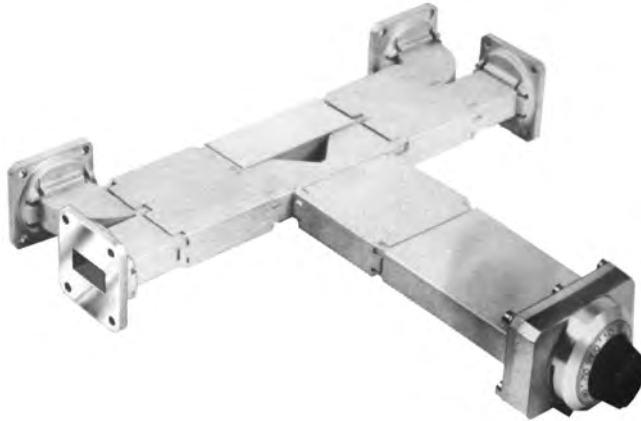


Section 6

Power Dividers



Introduction

MDL variable power dividers are widely used in resonant rings, and can serve as attenuators, particularly where high power is involved. Their peak power handling capacity (without additional pressure) ranges from 18KW in WR28 to 2.5MW in WR284. For applications requiring high average power, provisions can be made for water cooling. The power division is not inherently linear with frequency: however, calibrations can be supplied for specified frequencies. All models may be modified mechanically or electrically to meet customers' special requirements.

Power Dividers

W/G SIZE	FREQ. RANGE	MDL MODEL NUMBER	DIMENSIONS				*TERMINATIONS (EQUIVALENT TO)
			A	B	C	D (REF.)	
WR28	34.0-36.0	28CV26	4.05	4.79	1.10	4.90	UG-599/U
WR42	19.0-21.0	42CV16	4.43	5.46	1.29	5.24	UG-597/U
WR62	15.5-17.0	62CV16	5.59	6.91	1.63	5.15	UG-1655/U
	12.4-14.0	62CV26	5.54	6.86	1.58	5.42	UG-1665/U
	14.2-15.2	62CV36	5.54	6.86	1.58	5.54	UG-1665/U
WR90	8.5-9.6	90CV66	7.95	9.57	2.26	7.42	UG-135/U
WR112	8.5-9.6	112CV26	9.77	11.65	2.62	8.25	UG138/U
	7.5-8.5	112CV36	10.22	12.10	2.71	8.44	UG138/U
WR137	5.4-5.9	137CV26	12.66	15.79	3.44	10.62	UG441/U
	5.8-6.5	137CV36	12.41	15.79	3.44	10.51	UG441/U
	6.1-6.9	137CV46	12.41	15.79	3.44	10.51	UG441/U
WR187	5.4-5.9	187CV26	16.12	19.73	4.96	11.50	UG407/U
	4.4-5.0	187CV36	15.48	19.74	4.34	14.00	UG407/U
WR284	2.85-3.15	284CV46	27.00	32.31	6.62	20.06	UG584/U
	2.66-2.99	284CV56	27.00	32.31	6.62	21.15	UG584/U

- Notes:**
- Tolerances:**
 $\pm .020$ WR28, WR42, WR62, WR90, WR112
 $\pm .030$ WR137
 $\pm .040$ WR187, WR284
 - Attenuation:** (port 1 to port 3, and port 1 to port 4): 28 db minimum
 - Insertion loss:** (port 1 to port 3, and port 1 to port 4): 0.25 db maximum (except MDL model 42CV16=0.30 db maximum, and 28CV26=.035 db maximum)
 - VSWR:** (port 1): 1.25 maximum
 - Isolation:** (port 1 to port 2): 18.0 db minimum.
 - Material:** Aluminum alloy standard, copper alloy available on special request.
 - Finish:** Aluminum models are chromated and painted MDL blue.
 - Cover flanges are standard, however, modifications are available upon request.**
 - Drive:** WR28 & WR42 have micrometer drives. WR62 thru WR284 have dial pot drives as shown.

POWER DIVIDERS

