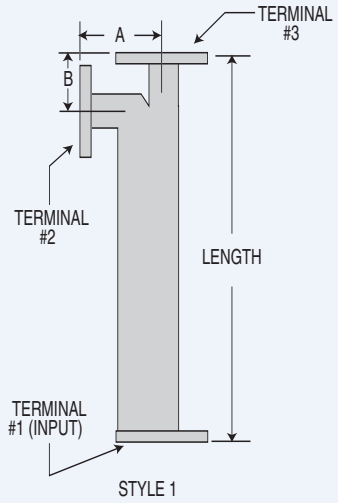
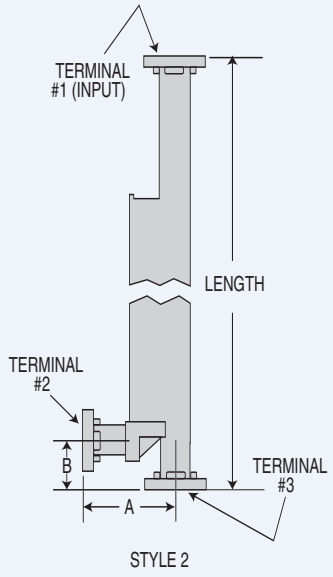
Broadwall couplers

W/G SIZE FREQ. RANGE (GHz)	MDL MODEL NUMBERS	MEAN COUPLING (dB) *	VAR. FROM MEAN COUPLING vs FREQ. (dB)	DIRECT-IVITY (dB min)	STYLE *	MECHANICAL DIMENSIONS (INCHES) LGT.	A	B	INPUT TERMINAL FLANGES EQUIVALENT TO
Multihole									
WR51	51CT16-1	3	±0.5	30	1	6.00	1.14	0.81	51FA52 (1.13 x 1.31 cover flange with four 0.144 dia. holes.)
15.00-22.00	51CT26-1	6	±0.5	30	1	5.62	1.14	0.81	
	51CT36-1	10	±0.5	30	1	5.25	1.14	0.81	
	51CT46-1	20	±0.5	30	1	4.87	1.14	0.81	
	51CT56-1	30	±0.5	30	1	4.87	1.14	0.81	
WR62	62CT16-1	3	±0.5	30	1	7.00	1.20	0.81	UG419/U UG1665/U
12.40-18.00	62CT26-1	6	±0.5	30	1	6.50	1.20	0.81	
	62CT36-1	10	±0.5	30	1	6.00	1.20	0.81	
	62CT46-1	20	±0.5	30	1	5.50	1.20	0.81	
	62CT56-1	30	±0.5	30	1	5.50	1.20	0.81	
WR75	75CT16-1	3	±0.5	25	1	8.25	1.50	0.80	75FA22 (1.50x1.50-cover flanges with four 6-32 threads.)
10.00-15.00	75CT26-1	6	±0.5	25	1	7.50	1.50	0.80	
	75CT36-1	10	±0.5	25	1	7.00	1.50	0.80	
	75CT46-1	20	±0.5	25	1	6.50	1.50	0.80	
	75CT56-1	30	±0.5	25	1	6.50	1.50	0.80	
WR90	90CT86-1	3	±0.5	30	1	9.25	1.53	0.80	UG39/U, UG135/U except 8-32 threads
8.20-12.40	90CT96-1	6	±0.5	30	1	8.50	1.53	0.80	
	90CT106-1	10	±0.5	30	1	7.75	1.53	0.80	
	90CT116-1	20	±0.5	30	1	7.25	1.53	0.80	
	90CT126-1	30	±0.5	30	1	7.25	1.53	0.80	
	90CT136-1	40	±0.5	30	1	7.25	1.53	0.80	
WR102	102CT16-1	3	±0.6	30	1	11.00	1.78	0.90	UG1493/U except 8-32 threads
7.05-11.00	102CT26-1	6	±0.6	30	1	10.25	1.78	0.90	
	102CT36-1	10	±0.6	30	1	9.50	1.78	0.90	
	102CT46-1	20	±0.6	30	1	8.75	1.78	0.90	
	102CT56-1	30	±0.6	30	1	8.75	1.78	0.90	
	102CT86-1	10	±0.7	40	2	15.50	1.78	1.00	
	102CT96-1	20	±0.7	40	2	15.50	1.78	1.00	
WR112	112CT86-1	3	±0.4	30	1	12.00	1.75	1.19	UG51/U, UG138/U except 8-32 threads
7.00-10.00	112CT96-1	6	±0.4	30	1	11.00	1.75	1.19	
	112CT106-1	10	±0.4	30	1	10.00	1.75	1.19	
	112CT116-1	20	±0.4	30	1	9.50	1.75	1.19	
	112CT126-1	30	±0.4	30	1	9.50	1.75	1.19	
	112CT136-1	40	±0.4	30	1	9.50	1.75	1.19	
WR137	137CT16-1	3	±0.5	30	1	15.00	2.38	1.75	UG441/U, UG344/U
5.40-8.20	137CT26-1	6	±0.5	30	1	14.00	2.38	1.75	
	137CT36-1	10	±0.5	30	1	13.00	2.38	1.75	
	137CT46-1	20	±0.5	30	1	12.00	2.38	1.75	
	137CT56-1	30	±0.5	30	1	12.00	2.38	1.75	

**Style 1 not available with choke flange on input terminal*

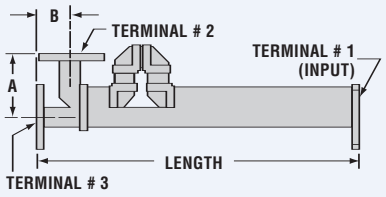




When ordering Style 2, contact factory for length.

Broadwall couplers

MULTIHOLE COMPENSATED



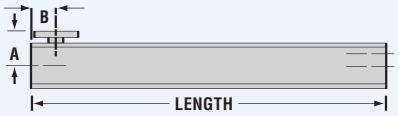
Multihole Compensated

MDL's broadwall compensated directional couplers feature minimum coupling variation with frequency – making them ideal for use in leveling circuits and broadband power monitoring. In contrast to most broadwall couplers, in which variation from mean coupling is ±0.5 dB over a waveguide bandwidth, MDL's new compensated directional couplers reduce variation from mean coupling to only ±0.2 to ±0.3 dB.

W/G SIZE FREQ. RANGE (GHz)	MDL MODEL NUMBERS	MEAN COUPLING (dB)	VAR. FROM MEAN COUPLING vs FREQ. (dB)	DIRECT-IVITY (dB min)	MAIN ARM	SECOND ARM	MECHANICAL DIMENSIONS (INCHES) LGT.	A	B	INPUT TERMINAL FLANGES EQUIV TO†
WR62 12.40-18.00	62FC16-1	20 ± 0.50	±0.20	25	1.08	1.25	8.00	1.20	0.81	UG419/U
WR90	90FC86-1	3 ± 0.40	±0.20	30	1.10	1.25	11.50	1.53	0.80	UG36/U
8.20-12.40	90FC106-1	10 ± 0.40	±0.20	30	1.08	1.20	10.00	1.53	0.80	UG135/U
	90FC176-1	17 ± 0.40	±0.20	30	1.08	1.20	10.00	1.53	0.80	except 8-32 thread
WR102 7.00-11.00	102FC106-1	10 ± 0.40	±0.30	25	1.08	1.20	12.00	1.78	0.90	UG1493/U except 8-32 thread

† Terminal 1 (input) not available with choke flanges.

MULTIHOLE HIGH DIRECTIVITY



Multihole High Directivity

MDL high directivity couplers are made using broached waveguides. Walls on the waveguide are extremely thick to prevent changes in characteristics caused by physical distortion. The electrical design assures a minimum directivity of at least 45 dB and typically 50 dB over the entire band, making possible the design of high performance reflectometers: These couplers available with cover flanges only. Material aluminum only.

W/G SIZE FREQ. RANGE (GHz)	MDL MODEL NUMBERS	MEAN COUPLING (dB)	VAR. FROM MEAN COUPLING vs FREQ. (dB)	DIRECTIVITY (dB min)	MECHANICAL DIMENSIONS (INCHES) LGT.	A	B
WR90 8.20-12.40	90CT336-1	10 ± 0.40	±0.50	50	13.62	1.25	0.80