

# Waveguide Broadwall Coupler



RLC Electronics offers a standard range of multi-hole broadwall directional couplers covering the frequencies from 40 GHz to 2.6 GHz in standard waveguide sizes. The electrical characteristics of high directivity and coupling

flatness are achieved by using a precise machined coupling hole pattern and a precision load in the secondary arm. Non standard configurations or selected electrical parameters are available on request.

## WBC-1-2-3-4-5

Waveguide Size	Frequency	Dimensions		
		A	B	C
WR-28	26.50 - 40.00	9.00	1.25	0.90
WR-42	18.00 - 26.5	10.5	1.38	0.90
WR-62	12.40 - 18.00	12.5	2.00	1.00
WR-75	10.00 - 15.00	14.00	2.00	1.00
WR-90	8.20 - 12.40	17.00	2.00	1.25
WR-137	5.85 - 8.20	22.00	3.00	1.50
WR-284	2.60 - 3.95	46.00	6.50	2.50

**VSWR:** Primary: 1.1:1 max  
Secondary: 1.15:1 max

**Coupling values:**  
10, 20, 30, 40, 50 dB +/- 1 dB

**Directivity:** 35 dB min

**Flange Type:**

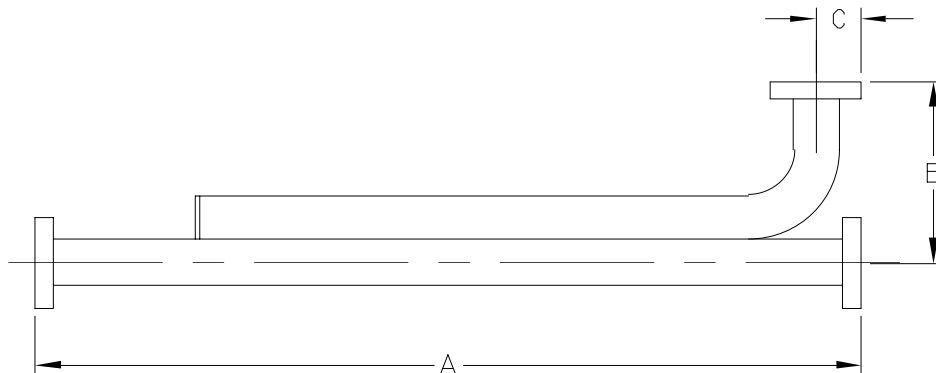
- 1 = Cover
- 2 = Choke
- 3 = CPRF
- 4 = CMR

To designate coupler,

- (1) Waveguide size
- (2) Coupling value
- (3) Flange 1

(4) Input flange 2

- (5) Coupled output flange, or  
R= SMA(f), N= N(f)



Specifications subject to change without notification.

Tolerances unless otherwise specified are .xx +/- .02, xxx +/- .005

Specials requiring closer tolerances, different frequency ranges, special connectors, different materials, finishes, etc. can be furnished upon request.



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