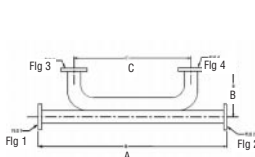




# Waveguide Components

## BROADWALL DIRECTIONAL COUPLERS



- Description:**
- Full waveguide frequency range
  - Units pressure tested to 30 psi
  - Ideal for High Power Combiner/Divider
  - Finish is a unique corrosion-resistant 316 stainless steel epoxy coating

**Electrical Specifications:**  
 VSWR (MAX.) PRIMARY: 1.05 (1.10 for WR42, WR28)  
 SECONDARY: 1.10 (1.15 for WR42, WR28)  
 NOM. COUPLING (dB): ± .50 (± .75 for WR42, WR28)  
 FREQ. SENS. (dB): ± .6 (± .75 for WR42, WR28)

Ordering Information:

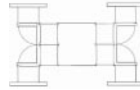
Basic Model #: BCA650 B -10 -1 -1 -1

Material: A=Alum, B=Brass, C=Copper, D=Special  
 Coupling (dB): 3dB, 6dB, 10dB, 20dB, 30dB, 40dB  
 Flange 1: 1=CPRG, 2=CPRF, 6=Cover, 7=Choke, 8=Special  
 Flange 2: See Above  
 Flange 3: See Above  
 Flange 4: See Above

Basic Model No.	WG Size	Freq (GHz)	Dimension A (inches)	Dimension B (inches)	Dimension C (inches)
BCA-650	WR650	1.12 - 1.70	37	8.00	29.0
BCA-430	WR430	1.70 - 2.60	35	6.00	27.0
BCA-284	WR284	2.60 - 3.95	31	6.00	24.0
BCA-229	WR229	3.30 - 4.90	28	5.00	21.0
BCA-187	WR187	3.95 - 5.85	25	4.00	19.0
BCA-159	WR159	4.90 - 7.05	23	3.00	17.5
BCA-137	WR137	5.95 - 8.20	20	3.00	15.5
BCA-112	WR112	7.05 - 10.0	18	2.50	14.0
BCA-90	WR90	8.20 - 12.4	17	2.00	13.5
BCA-75	WR75	10.0 - 15.0	15	1.50	12.0
BCA-62	WR62	12.4 - 18.0	13	1.25	10.5
BCA-51	WR51	10.0 - 15.0	12	1.25	9.50
BCA-42	WR42	18.0 - 26.5	11	1.25	8.50
BCA-34	WR34	22.0 - 33.0	9	1.00	8.50
BCA-28	WR28	26.5 - 40.0	10	1.00	8.00

## WAVEGUIDE COMBINER-DIVIDER

Short slot hybrid configuration  
 Symmetrical 4 port device  
 90 degree phase shift



WG Size WR	Freq (GHz)	VSWR Max	Isolation Min. dB	Model No.
159	5.90-6.40	1.15	26	WCD-159
137	5.90-6.40	1.15	26	WCD-137
112	7.90-8.40	1.15	26	WCD-112
75	14.0-14.5	1.15	26	WCD-75
62	14.0-14.5	1.15	26	WCD-62

Flange Code: 2=CPRG; 6=Cover; 7=Choke

## LOOP COUPLERS

- Description:**
- Full waveguide frequency range
  - Units pressure tested to 30 psi
  - Ideal for High Power Sensing
  - Finish is a unique corrosion-resistant 316 stainless steel epoxy coating

**Electrical Specifications:**  
 VSWR: 1.1 max.  
 NOM. COUPLING: +/- 1.00 dB  
 FREQ. SENS.: +/- 1.00 dB max.  
 DIRECTIVITY: 15 dB min.

Ordering Information:

Basic Model #: LC430 B -30 -6 -6

Material: A=Alum, B=Brass, C=Copper, D=Special  
 Coupling (dB): 3dB, 6dB, 10dB, 20dB, 30dB, 40dB  
 Flange 1: 1=CPRG, 2=CPRF, 6=Cover, 7=Choke, 8=Special  
 Flange 2: See Above

Basic Model No. (SMA F)	Basic Model No. (N Type F)	WG Size	Freq (GHz)	Dim. A (inches)	Dim. B (inches)	Dim. C (inches)
LC430	LCN430	WR430	1.70 - 2.60	4.5	1.0	1.63
LC284	LCN284	WR284	2.60 - 3.95	4.5	1.0	1.63
LC229	LCN229	WR229	3.30 - 4.90	4.0	1.0	1.38
LC187	LCN187	WR187	3.95 - 5.85	3.5	1.0	1.13
LC159	LCN159	WR159	4.90 - 7.05	3.5	1.0	0.88
LC137	LCN137	WR137	5.95 - 8.20	3.0	1.0	0.88
LC112	LCN112	WR112	7.05 - 10.0	3.0	1.0	0.88
LC90	LCN90	WR90	8.20 - 12.4	3.0	1.0	0.88
LC75	LCN75	WR75	10.0 - 15.0	3.0	1.0	0.88
LC62	LCN62	WR62	12.4 - 18.0	3.0	1.0	0.88
LC51	LCN51	WR51	15.0 - 22.0	3.0	1.0	0.88
LC42	LCN42	WR42	18.0 - 26.5	2.5	1.0	0.63
LC34	LCN34	WR34	22.0 - 33.0	2.5	1.0	0.63
LC28	LCN28	WR28	26.5 - 40.0	2.5	1.0	0.63

## BROADWALL DIRECTIONAL COUPLERS

- Description:**
- Full waveguide frequency range
  - Units pressure tested to 30 psi
  - Ideal for High Power Combiner/Divider
  - Finish is a unique corrosion-resistant 316 stainless steel epoxy coating

**Electrical Specifications:**  
 VSWR (MAX.) PRIMARY: 1.05 (1.10 for WR42, WR28)  
 SECONDARY: 1.10 (1.15 for WR42, WR28)  
 NOM. COUPLING (dB): ± .50 (± .75 for WR42, WR28)  
 FREQ. SENS. (dB): ± .6 (± .75 for WR42, WR28)  
 DIRECTIVITY (dB): 40 typical, 30 min.

Ordering Information:

Typical Part #: BCB650 B -10 -1 -1 -1

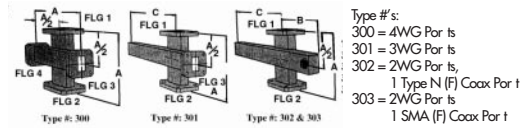
Basic Model #: \_\_\_\_\_  
 Material: A=Alum, B=Brass, C=Copper, D=Special  
 Coupling (dB): 3dB, 6dB, 10dB, 20dB, 30dB, 40dB  
 Flange 1: 1=CPRG, 2=CPRF, 6=Cover, 7=Choke, 8=Special  
 Flange 2: See Above  
 Flange 3: See Above

Basic Model No.	WG Size	Freq (GHz)	Dimension A (inches)	Dimension B (inches)	Dimension C (inches)
BCB650	WR650	1.12 - 1.70			
BCB430	WR430	1.70 - 2.60			
BCB284	WR284	2.60 - 3.95	50.25	9.18	2.66
BCB229	WR229	3.30 - 4.90	42.00	6.81	1.00
BCB187	WR187	3.95 - 5.85	34.62	6.44	1.81
BCB159	WR159	4.90 - 7.05	32.50	5.25	0.88
BCB137	WR137	5.95 - 8.20	26.50	3.06	1.56
BCB112	WR112	7.05 - 10.0	18.62	3.06	0.94
BCB90	WR90	8.20 - 12.4	16.68	1.94	0.81
BCB75	WR75	10.0 - 15.0	15.00	2.50	1.25
BCB62	WR62	12.4 - 18.0	13.75	2.18	0.66
BCB51	WR51	15.0 - 22.0	11.50	1.25	0.66
BCB42	WR42	18.0 - 26.5	9.50	1.25	0.75
BCB34	WR34	22.0 - 33.0	9.00	1.25	0.75
BCB28	WR28	26.5 - 40.0	8.00	1.12	0.75

## CROSSGUIDE DIRECTIONAL COUPLERS

- Description:**
- Full waveguide frequency range
  - Units pressure tested to 30 psi
  - Ideal for High Power Combiner/Divider
  - Finish is a unique corrosion-resistant 316 stainless steel epoxy coating

**Electrical Specifications:**  
 VSWR PRIMARY: 1.05 max.  
 COAX SECONDARY: 1.25 max.  
 NOM. COUPLING: ± 0.50 dB  
 FREQ. SENS.: ± 1.00 dB max.  
 DIRECTIVITY: 20 dB min.



Ordering Information:

Typical Part #: CDC430 B -10 -1 -1 -1

Basic Model #: \_\_\_\_\_  
 Material: A=Alum, B=Brass, C=Copper, D=Special  
 Coupling (dB): 3dB, 6dB, 10dB, 20dB, 30dB, 40dB  
 Flange 1: 1=CPRG, 2=CPRF, 6=Cover, 7=Choke, 8=Special  
 Flange 2: See Above  
 Flange 3: See Above  
 Flange 4: See Above

Basic Model No.	WG Size	Freq (GHz)	Dim A (inches)	Dim. B (inches)	Dim. C (inches)
CDC430	WR430	1.70 - 2.60	7.50	5.00	8.00
CDC284	WR284	2.60 - 3.95	7.50	3.75	5.00
CDC229	WR229	3.30 - 4.90	7.00	3.50	4.75
CDC187	WR187	3.95 - 5.85	6.50	3.25	4.50
CDC159	WR159	4.90 - 7.05	6.00	3.00	4.00
CDC137	WR137	5.95 - 8.20	6.00	3.00	4.00
CDC112	WR112	7.05 - 10.0	4.20	2.10	3.00
CDC90	WR90	8.20 - 12.4	4.00	2.00	2.75
CDC75	WR75	10.0 - 15.0	3.75	1.87	2.50
CDC62	WR62	12.4 - 18.0	3.50	1.75	2.37
CDC51	WR51	15.0 - 22.0	3.10	1.50	2.25
CDC42	WR42	18.0 - 26.5	2.20	1.10	1.50
CDC34	WR34	22.0 - 33.0	2.20	1.10	1.50
CDC28	WR28	26.5 - 40.0	2.00	1.00	1.50

## INSTRUMENTS FOR INDUSTRY INC.

IFI 中国总代理: 北京康泰电子有限公司

Tel: 8610-58731155

Email: sales@quatronix-cn.com

[www.ifi.com](http://www.ifi.com) (英文) [www.quatronix-cn.com](http://www.quatronix-cn.com) (中文)