

Rectangular Waveguide Components

Ordering information

Different Rectangular waveguide components are available to simplify the installation especially in a shelter or to connect a radio placed near to the antenna.

The following components are offered:

- Straight sections
- 90 deg E-Bends
- 90 deg H-Bends

- 90 deg Twist sections
- Twistflex
- Pressure windows
- Shims
- Transitions
- Flange Adaptors

Straight Sections



For flange installation hardware and blanking plates with absorbing material contact RFS.



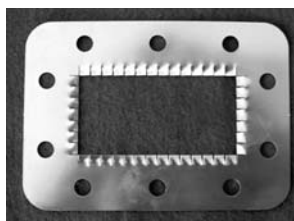
Waveguide Bends and Twist Sections

WAVEGUIDE BENDS AND TWIST SECTIONS

Freq. Range, GHz	E Bend 90°	H Bend 90°	Twist 90°	Straight 100mm (3.9 in)	Flange Type
3.3 - 4.2	EB040-DV	HB040-DV	TS040-DV	SW040-DV	PDR40, UDR40
	EB229-CC	HB229-CC	TS229-CC		CPR229G, CPR229G
4.4 - 5.0	EB048-DV	HB048-DV	TS048-DV	SW048-DV	PDR48, UDR48
	EB187-CC	HB187-CC	TS187-CC		CPR187G, CPR187G
5.725 - 7.75	EB070-DV	HB070-DV	TS070-DV	SW070-DV	PDR70, UDR70
	EB137-ZU	HB137-ZU	TS137-ZU		UG-343/U, UG-343/U
7.125 - 8.5	EB084-DV	HB084-DV	TS084-DV	SW084-DV	PDR84, UDR84
	EB084-BW	HB084-BW	TS084-BW	SW084-BW	PBR84, UBR84
	EB112-ZU	HB112-ZU	TS112-ZU		UG-51/U, UG-52/U
	EB112-CC	HB112-CC	TS112-CC		CPR112G, CPR112G
10.2 - 11.7	EB100-DV	HB100-DV	TS100-DV	SW100-DV	PDR100, UDR100
	EB100-BW	HB100-BW	TS100-BW	SW100-BW	PBR100, UBR100
	EB090-ZU	HB090-ZU	TS090-ZU		UG-39/U, UG-40/U
	EB090-CC	HB090-CC	TS090-CC		CPR090G, CPR090G
12.2 - 13.25	EB120-DV	HB120-DV	TS120-DV	SW120-DV	PDR120, UDR120
	EB120-BW	HB120-BW	TS120-BW	SW120-BW	PBR120, UBR120
	EB075-ZU	HB075-ZU	TS075-ZU		WR75 choke, WR75 cover
14.2 - 15.35	EB140-DV	HB140-DV	TS140-DV	SW140-DV	PDR140, UDR140
	EB140-BW	HB140-BW	TS140-BW	SW140-BW	PBR140, UBR140
17.3 - 26.5	EB220-BW	HB220-BW	TS220-BW	SW220-BW	PBR220, UBR220
27.3 - 40.0	EB320-BW	HB320-BW	TS320-BW	SW320-BW	PBR320, UBR320

SHIMS

Model Number	Flange	Product information
SHIM-B084	UBR84	Silver plated
SHIM-B100	UBR100	Silver plated
SHIM-B120	UBR120	Silver plated
SHIM-B140	UBR140	Silver plated
SHIM-B220	UBR220	Silver plated
SHIM-B260	UBR260	Silver plated
SHIM-B320	UBR320	Silver plated
SHIM-D040	UDR40	Silver plated
SHIM-D048	UDR48	Silver plated
SHIM-D070	UDR70	Silver plated
SHIM-D084	UDR84	Silver plated
SHIM-D100	UDR100	Silver plated
SHIM-D120	UDR120	Silver plated
SHIM-D140	UDR140	Silver plated



Shim



Rectangular Waveguide Components

Ordering information

PRESSURE WINDOWS: IEC FLANGES

Model Number	Flange
PW-W084	UBR84
PW-W100	UBR100
PW-W120	UBR120
PW-W140	UBR140
PW-W180	UBR180
PW-W220	UBR220
PW-W260	UBR260
PW-W320	UBR320
PW-V040	UDR40
PW-V048	UDR48
PW-V058	UDR58
PW-V070	UDR70
PW-V084	UDR84
PW-V100	UDR100
PW-V120	UDR120
PW-V140	UDR140
PW-V180	UDR180
PW-BW120	UBR120, PBR120
PW-BW140	UBR140, PBR140
PW-BW220	UBR220, PBR220
PW-BW260	UBR260, PBR260
PW-BW320	UBR320, PBR320
PW-DV070	UDR70, PDR70



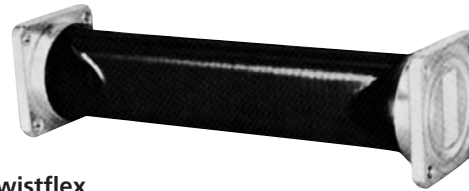
Pressure Windows

PRESSURE WINDOWS: EIA FLANGES

Model Number	Flange
PW-C229	CPR229G
PW-C187	CPR187G
PW-G187	UG-148/149/U
PW-C159	CPR159G
PW-C137	CPR137G
PW-G137	UG-343/344/U
PW-C112	CPR112G
PW-G112	UG-51/52/U
PW-C090	CPR90G
PW-G090	UG-39/40/U
PW-G075	WR75 choke/cover
PW-G062	UG-419/541/U
PW-G042-L	UG-595/596/U
PW-G042-H	UG-595/596/U

Twistflex

Twistflex are fabricated from spiral wound silver plated bronze strip covered by a pressure tight protective neoprene jacket. Twistflex sections are available in standard lengths with EIA- or IEC-flanges.



Twistflex

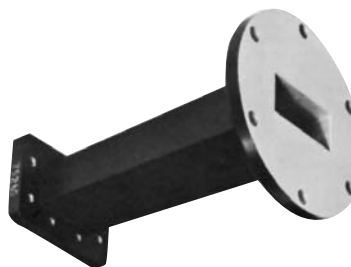
TWISTFLEX

Frequency Range, GHz	Nominal length, mm (inch)				Flange Type
	300 (12)	600 (24)	900 (36)	1200 (24)	
3.3 - 4.2	TF040-DV2-030M	TF040-DV2-060M	TF040-DV2-090M	TF040-DV2-120M	PDR40, UDR40
	TF229-CC1-012I	TF229-CC1-024I	TF229-CC1-036I		CPR229G, CPR229G
4.4 - 5.0	TF048-DV2-030M	TF048-DV2-060M	TF048-DV2-090M	TF048-DV2-120M	PDR48, UDR48
	TF187-CC1-012I	TF187-CC1-024I	TF187-CC1-036I		CPR187G, CPR187G
5.725 - 7.75	TF070-DV2-030M	TF070-DV2-060M	TF070-DV2-090M	TF070-DV2-120M	PDR70, UDR70
	TF137-CC1-012I	TF137-CC1-024I	TF137-CC1-036I		CPR137G, CPR137G
7.125 - 8.5	TF084-DV2-030M	TF084-DV2-060M	TF084-DV2-090M	TF084-DV2-120M	PDR84, UDR84
	TF084-BW2-030M	TF084-BW2-060M	TF084-BW2-090M	TF084-BW2-120M	PBR84, UBR84
	TF112-CC1-012I	TF112-CC1-024I	TF112-CC1-036I		CPR112G, CPR112G
10.2 - 11.7	TF100-DV2-030M	TF100-DV2-060M	TF100-DV2-090M	TF100-DV2-120M	PDR100, UDR100
	TF100-BW2-030M	TF100-BW2-060M	TF100-BW2-090M	TF100-BW2-120M	PBR100, UBR100
	TF090-CC1-012I	TF090-CC1-024I	TF090-CC1-036I		CPR90G, CPR90G
12.2 - 13.25	TF120-DV2-030M	TF120-DV2-060M	TF120-DV2-090M	TF120-DV2-120M	PDR120, UDR120
	TF120-BW2-030M	TF120-BW2-060M	TF120-BW2-090M	TF120-BW2-120M	PBR120, UBR120
	TF075-UZ1-012I	TF075-UZ1-024I	TF075-UZ1-036I		WR75 choke, WR75 cover
14.2 - 15.35	TF140-DV2-030M	TF140-DV2-060M	TF140-DV2-090M	TF140-DV2-120M	PDR140, UDR140
	TF140-BW2-030M	TF140-BW2-060M	TF140-BW2-090M	TF140-BW2-120M	PBR140, UBR140
	TF062-UZ1-012I	TF062-UZ1-024I	TF062-UZ1-036I		WR62 choke, WR62 cover
17.3 - 26.5	TF220-BW2-030M	TF220-BW2-060M	TF220-BW2-090M	TF220-BW2-120M	PBR220, UBR220
	TF042-UZ1-012I	TF042-UZ1-024I	TF042-UZ1-036I		UG-595/U, UG-596/U
27.3 - 40.0	TF320-BW2-030M	TF320-BW2-060M	TF320-BW2-090M	TF320-BW2-120M	PBR320, UBR320

Rectangular Waveguide Components

Waveguide Transition

Taper transition between waveguide sizes. Maximum VSWR, 1.05 across specified band. 1/pkg



Waveguide Transition

ORDERING INFORMATION FOR TRANSITIONS: IEC FLANGES

Frequency GHz	Model Number	Length mm (in)	Flange
7.1 - 8.6	TRAN-D070-D084	50 (1.9)	PDR70, PDR84
14.0 - 15.5	TRAN-B120-B140	40 (1.6)	PBR120, PBR140
17.7 - 20.3	TRAN-B180-B220	20 (0.8)	PBR180, PBR220
24.0 - 26.5	TRAN-B220-B260	20 (0.8)	PBR220, PBR260

ORDERING INFORMATION FOR TRANSITIONS: EIA FLANGES

Frequency GHz	Model Number	Length mm (inch)	Flanges
5.85-7.05	TRAN-C137-C159	152 (6)	CPR137G, CPR-159G
5.85 - 7.05	TRAN-U137-C159	152 (6)	UG-344/U, CPR-159G
7.05-8.40	TRAN-C137-C112	305 (12)	CPR137G, CPR-112G
7.05-8.40	TRAN-U112-U137	305 (12)	UG-51/U, UG-344/U
7.125-7.750	TRAN-C137-C112-W	152 (6)	CPR137G, CPR-112G
7.05-8.4	TRAN-U12-U137	305 (12)	UG-51/U, UG-344/U
8.20-10.0	TRAN-U090-U112	203 (8)	UG-39/U, UG-51/U
10.0-12.4	TRAN-U075-U090	152 (6)	WR75 cover, UG-39/U

Flange Adapter

Straight waveguide sections with different flanges on each end. Pressure gaskets included. 1/pkg

ORDERING INFORMATION FOR FLANGE ADAPTERS: IEC FLANGES

Frequency GHz	Model Number	Length mm (in)	Flange
4.4 - 5.0	FADP048-DP1	100 (3.8)	PDR48/PAR48
5.72 - 7.75	FADP070-DB1	100 (3.8)	PDR70/PBR70
6.57 - 9.99	FADP084-DB1	50 (1.9)	PDR84/PBR84
8.2 - 12.5	FADP100-DB1	50 (1.9)	PDR100/PBR100
9.84 - 15.0	FADP120-DB1	50 (1.9)	PDR120/PBR120
11.9 - 18.0	FADP140-DB1	50 (1.9)	PDR140/PBR140
17.3 - 26.5	FADP220-DB1	50 (1.9)	PDR220/PBR220

ORDERING INFORMATION FOR FLANGE ADAPTERS: EIA FLANGES

Waveguide size	Model Number	Length mm (inch)	Flanges
WR90	FADP-C090-M090	105 (4)	CPR90G, CMR90
WR90	FADP-C090-U090	105 (4)	CPR90G, UG39/U
WR112	FADP-C112-Z112	105 (4)	CPR112G, UG-52/U
WR112	FADP-C112-M112	105 (4)	CPR112G, CMR-112
WR112	FADP-C112-U112	105 (4)	CPR112G, UG-51/U
WR137	FADP-C137-Z137	105 (4)	UG-343A/U, CPR-137G
WR137	FADP-C137-U137	105 (4)	UG-344/U, CPR-137G
WR137	FADP-C137-M137	105 (4)	CMR137, CPR-137G



Rectangular Waveguide Components

Waveguide to Type N Female Adapter

Waveguide installation –

- The rectangular waveguide component provides simple installation in particular difficult cases
- The flange Adapter provides proper matching of rectangular waveguide flanges to N-female connector
- It provides outstanding electrical performance



N Female Adapter

ORDERING INFORMATION FOR WAVEGUIDE TO COAX ADAPTER: IEC FLANGES

Frequency GHz	Model Number	Length mm (in)	Flange
3.22 - 4.9	NADP-D040	46.5 (1.8)	PDR40
3.94 - 5.99	NADP-D048	37.5 (1.5)	PDR48
5.38 - 8.17	NADP-D070	38.5 (1.5)	PDR70
6.57 - 9.99	NADP-D084	35 (1.4)	PDR84
9.84 - 15.0	NADP-D120	37.5 (1.5)	PDR120
9.84 - 15.0	NADP-W120	20 (0.8)	UBR120
11.9 - 18.0	NADP-B140	37.5 (1.5)	PBR140

ORDERING INFORMATION FOR WAVEGUIDE TO COAX ADAPTER: EIA FLANGES

Waveguide Size	Model Number	Flange
WR90	NADP-U090	UG-39/U
WR90	NADP-C090	CPR90G
WR112	NADP-U112	UG-51/U
WR112	NADP-C112	CPR112G
WR137	NADP-U137	UG-344/U
WR137	NADP-C137	CPR137G
WR159	NADP-C159	CPR159G