

**ABF Elettronica**

**RF devices & Microwave Subsystems**

**AZIENDA CON SISTEMA DI QUALITÀ CERTIFICATO DA DNV  
UNI EN ISO 9001/2000**

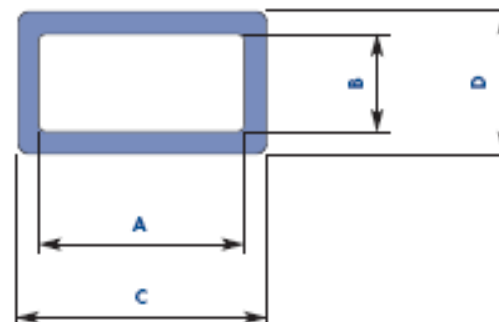
# WAVEGUIDES

## SEAMLESS FLEXIBLE WAVEGUIDE

Interface		Frequency Range	V.S.W.R.	Attenuation	Power rating	Operating Pressure	Bending radius Neutral min		Brass Weight gr/mt	Berillium Copper Weight gr/mt
R70	WR137	5.6÷8.5	1.07	0.2	3.5	30	30	50	352	308
R84	WR112	6.6÷10.0	1.07	0.25	3.0	35	25	45	296	250
R100	WR90	8.2÷12.5	1.07	0.3	2.2	45	22	43	219	183
R120	WR75	10.0÷15.0	1.07	0.4	2.0	45	20	40	152	131
R140	WR62	12.4÷18.0	1.08	0.45	1.5	45	18	30	122	98
R180	WR51	14.5÷22.0	1.08	0.6	1.0	45	15	25	108	99
R220	WR42	17.6÷26.7	1.10	0.9	0.8	45	10	20	56	47
R320	WR28	26.5÷40.1	1.10	1.6	0.6	45	10	15	44	37

## SEAMLESS JACKET FLEXIBLE WAVEGUIDE

Interface		Frequency Range	V.S.W.R.	Attenuation	Power rating	Operating Pressure	Brass Weight gr/mt	Berillium Copper Weight gr/mt
R70	WR137	5.6÷8.5	1.07	0.2	3.5	30	352	308
R84	WR112	6.6÷10.0	1.07	0.25	3.0	35	296	250
R100	WR90	8.2÷12.5	1.07	0.3	2.2	45	219	183
R120	WR75	10.0÷15.0	1.07	0.4	2.0	45	152	131
R140	WR62	12.4÷18.0	1.08	0.45	1.5	45	122	98
R180	WR51	14.5÷22.0	1.08	0.6	1.0	45	108	99
R220	WR42	17.6÷26.7	1.10	0.9	0.8	45	56	47
R320	WR28	26.5÷40.1	1.10	1.6	0.6	45	44	37



## RIGID WAVEGUIDE

Waveguide Type			Frequency range	Nominal Wallthickness	Dimensions (mm)				Nominal Weight Kg/mt			
IEC	EIA	WG			AxB	Toll.+	CxD	Toll.+	Aluminium	Invar	Copper	Bronze
R40	WR229	11A	3.22÷4.90	1.626	58.17x29.083	0.076	61.42x32.33	0.076	0.815	2.314	2.630	2.604
R48	WR187	12	3.95÷5.99	1.626	47.55x22.149	0.064	50.80x25.40	0.076	0.657	1.866	2.120	2.099
R58	WR159	13	4.64÷7.05	1.626	40.39x20.193	0.051	43.65x23.44	0.051	0.575	1.633	1.855	1.836
R70	WR137	14	5.38÷8.18	1.626	34.85x15.799	0.046	38.10x19.05	0.051	0.485	1.378	1.567	1.552
R84	WR112	15	6.58÷10.0	1.626	28.49x12.624	0.038	31.75x15.87	0.051	0.399	1.135	1.290	1.277
R100	WR90	16	8.20÷12.5	1.270	22.86x10.16	0.025	25.40x12.70	0.025	0.250	0.711	0.807	0.799
R120	WR75	17	9.84÷15.0	1.270	19.05x9.525	0.025	21.59x12.06	0.025	0.219	0.622	0.707	0.699
R140	WR623	18	11.9÷18.0	1.015	15.799x7.899	0.020	17.83x9.93	0.025	0.145	0.411	0.467	0.463
R180	WR51	19	14.5÷22.0	1.015	12.954x6.477	0.020	14.99x8.51	0.025	0.121	0.343	0.390	0.386
R220	WR42	20	17.6÷26.7	1.015	10.668x4.318	0.020	12.70x6.35	0.025	0.096	0.272	0.309	0.306
R320	WR28	22	26.4÷40.1	1.015	7.112x3.556	0.020	9.14x5.59	0.025	0.072	0.203	0.231	0.228

## STANDARD FLANGES CHARACTERISTICS

Waveguide Type		Flanges Type	
IEC	EIA	∅ Holes	Type
R40	WR229	4B9-4B15	UER
R40	WR229	n°4∅6.35B9 – n°6∅7	UDR-PDR
R48	WR187	4B9-4B15	UER
R48	WR187	n°4∅6.35B9 – n°4∅7	UDR-PDR
R48	WR187	n°8∅5B9	UAR-PAR
R70	WR137	n°4∅4B9 – n°4∅4.5	UER
R70	WR137	n°4∅5B9 – n°4∅5.5	UDR-PDR
R84	WR112		UER
R84	WR112	n°4∅4C9 – n°4∅4.2	UDR-PDR
R84	WR112	n°4∅4.17B9	UBR-PBR-CBR
R100	WR90	n°4∅4C9 – n°4∅4C15	UDR-PDR
R100	WR90	n°4∅4.17C9	UBR-PBR-CBR
R120	WR75	n°2∅4C9 – n°4∅4C15	UDR-PDR
R120	WR75	n°4∅4C9	UBR-PBR-CBR
R140	WR62	n°2∅4C9 – n°4∅4C15	UDR-PDR
R140	WR62	n°4v4C9	UBR-PBR-CBR
R180	WR51	n°2∅4C9 – n°4∅4C15	UDR-PDR
R180	WR51	n°4∅4C9	UBR-PBR-CBR
R220	WR42	n°4∅3C9	UBR-PBR
R320	WR28	n°4∅3C9	UBR-PBR