

PRODUCT CATALOGUE





Company Overview



Vector Telecom provides microwave waveguide components, coaxial components, antennas and other telecommunication components to global market.

Vector Telecom consists of microwave and millimeterwave laboratories, antenna laboratories, microwave and electronic components factories. The laboratories are equipped with advanced microwave measurement facilities and latest R&D platforms. Our professional engineers have excellent background from electronics, telecommunications, space and aviation industries. Continuing investment in the resource indicates Vector Telecom's ongoing commitment to provide customers with innovative and leading edge products.

Vector Telecom offers well-designed, high quality products at global competitive prices. Our products frequency ranges is up to 110 GHz. We implement TQM (Total Quality System) and SOP (Standard Operation Procedure) with ISO 9001:2015 certification and RoHS and REACH Compliance, which assures Vector Telecom's strong commitment to quality standards and customer satisfaction.

Vector Telecom Mission

Satisfy customers by providing cost effective solutions with reliable quality, good performance and timely delivery.

Company Overview



Vector Telecom Pty Ltd

Website: www.vectortele.com

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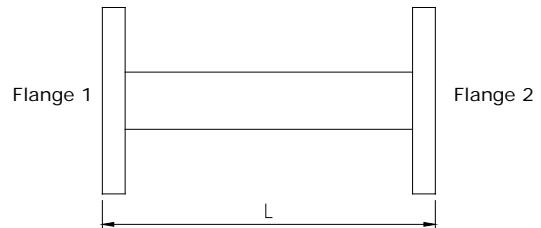
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1 Straight Waveguide

Vector Telecom offers a standard product line of straight waveguides covering waveguide sizes WR3 thru WR2300, double ridged straight waveguide and inflatable straight waveguide. We also supply other special configurations to meet customer's specific requirements. For more information please contact us and discuss your needs with our sales engineer.



1.1 Straight Waveguide



【Specifications】

Model No*	Freq Range (GHz)	VSWR (Max)	WG Type		Flange	Material
			IEC	EIA		
VT3WAL...	0.32-0.49	1.05	R3	WR2300	FDP/FDM	Al
VT4WAL...	0.35-0.53	1.05	R4	WR2100	FDP/FDM	Al
VT5WAL...	0.41-0.62	1.05	R5	WR1800	FDP/FDM	Al
VT6WAL...	0.49-0.75	1.05	R6	WR1500	FDP/FDM	Al
VT8WAL...	0.64-0.98	1.05	R8	WR1150	FDP/FDM	Al
VT9WAL...	0.75-1.15	1.05	R9	WR975	FDP/FDM	Al
VT12WAL...	0.96-1.46	1.05	R12	WR770	FDP/FDM	Al
VT14WAL...	1.13-1.73	1.05	R14	WR650	FDP/FDM	Al
VT18WAL...	1.45-2.20	1.05	R18	WR510	FDP/FDM	Al
VT22WAL...	1.72-2.61	1.05	R22	WR430	FDP/FDM	Al
VT26WAL...	2.17-3.30	1.05	R26	WR340	FDP/FDM	Al
VT32WAL...	2.60-3.95	1.05	R32	WR284	FDP/FDM	Al
VT40WAL...	3.22-4.90	1.05	R40	WR229	FDP/FDM	Al
VT48WAL...	3.94-5.99	1.05	R48	WR187	FDP/FDM	Al

01

Straight
Waveguide



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Section 1

Waveguide Components

01

Straight Waveguide



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Model No*	Freq Range (GHz)	VSWR(Max)	WG Type		Flange	Material
			IEC	EIA		
VT58WAL...	4.64-7.05	1.05	R58	WR159	FDP/FDM	Al
VT70WAL...	5.38-8.17	1.10	R70	WR137	FDP/FDM	Cu
VT84WAL...	6.57-9.99	1.10	R84	WR112	FBP/FBM	Cu
VT100WAL...	8.20-12.40	1.10	R100	WR90	FBP/FBM	Cu
VT120WAL...	9.84-15.0	1.10	R120	WR75	FBP/FBM	Cu
VT140WAL...	11.9-18.0	1.10	R140	WR62	FBP/FBM	Cu
VT180WAL...	14.5-22.0	1.10	R180	WR51	FBP/FBM	Cu
VT220WAL...	17.6-26.7	1.10	R220	WR42	FBP/FBM	Cu
VT260WAL...	21.7-33.0	1.10	R260	WR34	FBP/FBM	Cu
VT320WAL...	26.5-40.0	1.10	R320	WR28	FBP/FBM	Cu
VT400WAL...	32.9-50.1	1.15	R400	WR22	FUGP	Cu
VT500WAL...	39.2-59.6	1.15	R500	WR19	FUGP	Cu
VT620WAL...	49.8-75.8	1.15	R620	WR15	FUGP	Cu
VT740WAL...	60.5-91.9	1.15	R740	WR12	FUGP	Cu
VT900WAL...	73.8-110	1.15	R900	WR10	FUGP	Cu
VT1200WAL...	92.2-140	-	R1200	WR8	FUGP	Cu
VT1400WAL...	113-173	-	R1400	WR7	FUGP	Cu
VT1800WAL...	145-220	-	R1800	WR5	FUGP	Cu
VT2200WAL...	172-261	-	R2200	WR4	FUGP	Cu
VT2600WAL...	217-330	-	R2600	WR3	FUGP	Cu

*Indicates Model Number. See Ordering Information for complete part number.

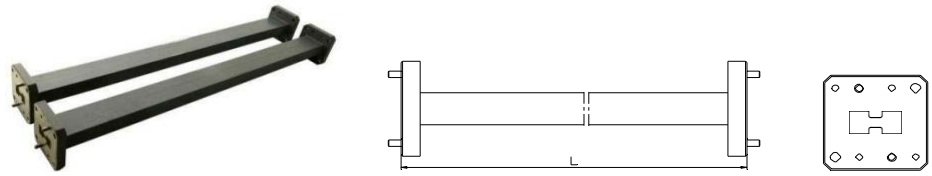
【Ordering Information】

Example Part No: VT 100 WAL 200 P M C
 Vector Telecom _____
 WG Type: R100 _____
 Product Type: Straight WG _____
 Material: A=Aluminum C=Copper
 Flange 2 Type: M=FBM100
 Flange 1 Type: P=FBP100
 Straight WG Length: L=200mm

- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat



1.2 Double Ridged Straight Waveguide



【Specifications】

Model No*	Freq Range (GHz)	VSWR (Max)	WG Type	Flange	Material
			IEC		
VT84DRWAL...	0.84-2	1.15	WRD84	FP/FM	Al
VT150DRWAL...	1.5-3.6	1.15	WRD150	FP/FM	Al
VT200DRWAL...	2-4.8	1.15	WRD200	FP/FM	Al
VT250DRWAL...	2.6-7.8	1.15	WRD250	FP/FM	Al
VT350DRWAL...	3.5-8.2	1.15	WRD350	FP/FM	Al
VT475DRWAL...	4.75-11	1.15	WRD475	FP/FM	Cu
VT500DRWAL...	5-18	1.15	WRD500	FP/FM	Cu
VT580DRWAL...	5.8-16	1.15	WRD580	FP/FM	Cu
VT650DRWAL...	6.5-18	1.15	WRD650	FP/FM	Cu
VT750DRWAL...	7.5-18	1.15	WRD750	FP/FM	Cu
VT700DRWAL...	7-18.5	1.15	WRD700	FP/FM	Cu
VT1100DRWAL...	11-26.5	1.2	WRD1100	FP/FM	Cu
VT1800DRWAL...	18-40	1.2	WRD1800	FP/FM	Cu

*Indicates Model Number. See Ordering Information for complete part number.

【Ordering Information】

Example Part No: VT 650 DRWAL 100 P M C

Vector Telecom | Material: Brass

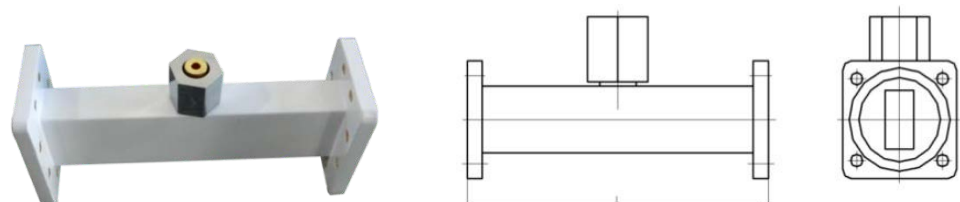
WG Type: WRD650 | Flange 2 Type: FM

Product Type: Double Ridged WG | Flange 1 Type: FP

Length: L=100mm

- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat

1.3 Inflatable Straight Waveguide





Section 1

**Waveguide
Components**

01

**Straight
Waveguide**



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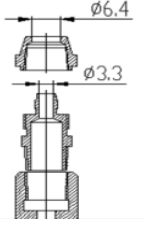
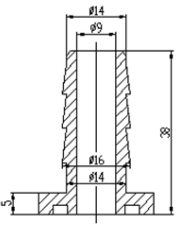
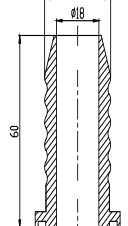
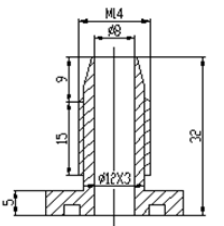
Email: sales@vectortele.com

【Specifications】

Model No*	Freq Range (GHz)	VSWR (Max)	Pressure (Mpa) (Max)	WG Type		Flange	Material
				IEC	EIA		
VT3QWAL...	0.32-0.49	1.05	0.1	R3	WR2300	FDP/FDM	Al
VT4QWAL...	0.35-0.53	1.05	0.1	R4	WR2100	FDP/FDM	Al
VT5QWAL...	0.41-0.62	1.05	0.1	R5	WR1800	FDP/FDM	Al
VT6QWAL...	0.49-0.75	1.05	0.1	R6	WR1500	FDP/FDM	Al
VT8QWAL...	0.64-0.98	1.05	0.1	R8	WR1150	FDP/FDM	Al
VT9QWAL...	0.75-1.15	1.05	0.1	R9	WR975	FDP/FDM	Al
VT12QWAL...	0.96-1.46	1.05	0.1	R12	WR770	FDP/FDM	Al
VT14QWAL...	1.13-1.73	1.05	0.1	R14	WR650	FDP/FDM	Al
VT18QWAL...	1.45-2.20	1.05	0.1	R18	WR510	FDP/FDM	Al
VT22QWAL...	1.72-2.61	1.05	0.1	R22	WR430	FDP/FDM	Al
VT26QWAL...	2.17-3.30	1.05	0.1	R26	WR340	FDP/FDM	Al
VT32QWAL...	2.60-3.95	1.05	0.1	R32	WR284	FDP/FDM	Al
VT40QWAL...	3.22-4.90	1.05	0.1	R40	WR229	FDP/FDM	Al
VT48QWAL...	3.94-5.99	1.05	0.1	R48	WR187	FDP/FDM	Al
VT58QWAL...	4.64-7.05	1.05	0.1	R58	WR159	FDP/FDM	Al
VT70QWAL...	5.38-8.17	1.10	0.1	R70	WR137	FDP/FDM	Cu
VT84QWAL...	6.57-9.99	1.10	0.1	R84	WR112	FBP/FBM	Cu
VT100QWAL...	8.20-12.40	1.10	0.1	R100	WR90	FBP/FBM	Cu
VT120QWAL...	9.84-15.0	1.10	0.1	R120	WR75	FBP/FBM	Cu
VT140QWAL...	11.9-18.0	1.10	0.2	R140	WR62	FBP/FBM	Cu
VT180QWAL...	14.5-22.0	1.10	0.2	R180	WR51	FBP/FBM	Cu
VT220QWAL...	17.6-26.7	1.10	0.2	R220	WR42	FBP/FBM	Cu
VT260QWAL...	21.7-33.0	1.10	0.2	R260	WR34	FBP/FBM	Cu
VT320QWAL...	26.5-40.0	1.10	0.2	R320	WR28	FBP/FBM	Cu

**Indicates Model Number. See Ordering Information for complete part number.*

【Inflatable Mouth Specifications】

Name	Self-Locking Type	Agnail Clamp Type	Pagoda Clamp Type	Thread Type
Outline Drawings				
Inner Diameter (mm)	φ3.3	φ9	φ18	φ8
Outer Diameter (mm)	φ6.4	φ16	φ28	M14
Inner Diameter of Inflatable Tube (mm)	φ4	φ12	φ26	φ10
Outer Diameter of Inflatable Tube (mm)	φ6	φ16	φ30	φ14

【Ordering Information】

Example Part No: VT 120 QWAL 100 P M C

Vector Telecom | Material: Brass

WG Type: R120 | Flange 2 Type: FBM100

Product Type: Inflatable Straight WG | Flange 1 Type: FBP100

| Length: L=100mm

- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat

01

Straight
Waveguide



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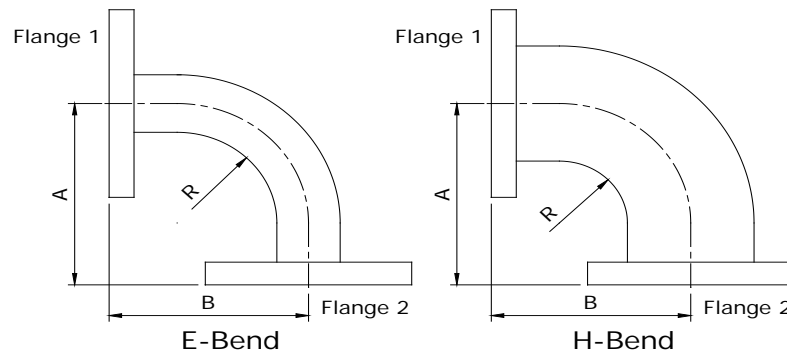
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2 Waveguide Bend

Vector Telecom offers a standard product line of E-bends and H-bends covering waveguide sizes WR10 thru WR430. Multi-degrees, additional sizes, configurations and combinations are available on request.



2.1 Waveguide Bend



【Specifications】

Model No*	Freq Range (GHz)	VSWR (Max)	Std Dimensions AxB (mm)**	WG Type		Flange	Material
				IEC	EIA		
VT22WEB...	1.72-2.61	1.10	150X150	R22	WR430	FDP/FDM	Al
VT22WHB...	1.72-2.61	1.10	150X150	R22	WR430	FDP/FDM	Al
VT26WEB...	2.17-3.30	1.10	100X100	R26	WR340	FDP/FDM	Al
VT26WHB...	2.17-3.30	1.10	180X180	R26	WR340	FDP/FDM	Al
VT32WEB...	2.60-3.95	1.10	100X100	R32	WR284	FDP/FDM	Al
VT32WHB...	2.60-3.95	1.10	150X150	R32	WR284	FDP/FDM	Al
VT40WEB...	3.22-4.90	1.10	80X80	R40	WR229	FDP/FDM	Al
VT40WHB...	3.22-4.90	1.10	100X100	R40	WR229	FDP/FDM	Al
VT48WEB...	3.94-5.99	1.10	80X80	R48	WR187	FDP/FDM	Al
VT48WHB...	3.94-5.99	1.10	80X80	R48	WR187	FDP/FDM	Al
VT58WEB...	4.64-7.05	1.10	80X80	R58	WR159	FDP/FDM	Al
VT58WHB...	4.64-7.05	1.10	80X80	R58	WR159	FDP/FDM	Al
VT70WEB...	5.38-8.17	1.10	50X50	R70	WR137	FDP/FDM	Cu
VT70WHB...	5.38-8.17	1.10	70X70	R70	WR137	FDP/FDM	Cu
VT84WEB...	6.57-9.99	1.10	50X50	R84	WR112	FDP/FDM	Cu
VT84WHB...	6.57-9.99	1.10	70X70	R84	WR112	FDP/FDM	Cu
VT100WEB...	8.20-12.40	1.10	40X40	R100	WR90	FDP/FDM	Cu
VT100WHB...	8.20-12.40	1.10	50X50	R100	WR90	FDP/FDM	Cu
VT120WEB...	9.84-15.0	1.10	40X40	R120	WR75	FDP/FDM	Cu
VT120WHB...	9.84-15.0	1.10	40X40	R120	WR75	FDP/FDM	Cu
VT140WEB...	11.9-18.0	1.10	40X40	R140	WR62	FDP/FDM	Cu

02

Waveguide Bend



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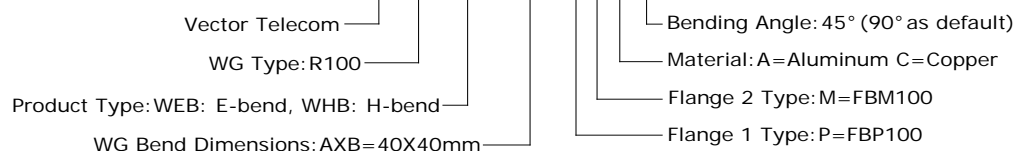
Model No*	Freq Range (GHz)	VSWR (Max)	Std Dimensions AxB (mm)**	WG Type		Flange	Material
				IEC	EIA		
VT140WHB...	11.9-18.0	1.10	40X40	R140	WR62	FBP/FBM	Cu
VT180WEB...	14.5-22.0	1.10	30X30	R180	WR51	FBP/FBM	Cu
VT180WHB...	14.5-22.0	1.10	30X30	R180	WR51	FBP/FBM	Cu
VT220WEB...	17.6-26.7	1.10	30X30	R220	WR42	FBP/FBM	Cu
VT220WHB...	17.6-26.7	1.10	30X30	R220	WR42	FBP/FBM	Cu
VT260WEB...	21.7-33.0	1.15	30X30	R260	WR34	FBP/FBM	Cu
VT260WHB...	21.7-33.0	1.15	30X30	R260	WR34	FBP/FBM	Cu
VT320WEB...	26.5-40.0	1.15	30X30	R320	WR28	FBP/FBM	Cu
VT320WHB...	26.5-40.0	1.15	30X30	R320	WR28	FBP/FBM	Cu
VT400WEB...	32.9-50.1	1.15	30X30	R400	WR22	FUGP	Cu
VT400WHB...	32.9-50.1	1.15	30X30	R400	WR22	FUGP	Cu
VT500WEB...	39.2-59.6	1.15	30X30	R500	WR19	FUGP	Cu
VT500WHB...	39.2-59.6	1.15	30X30	R500	WR19	FUGP	Cu
VT620WEB...	49.8-75.8	1.15	30X30	R620	WR15	FUGP	Cu
VT620WHB...	49.8-75.8	1.15	30X30	R620	WR15	FUGP	Cu
VT740WEB...	60.5-91.9	1.15	30X30	R740	WR12	FUGP	Cu
VT740WHB...	60.5-91.9	1.15	30X30	R740	WR12	FUGP	Cu
VT900WEB...	73.8-110	1.15	30X30	R900	WR10	FUGP	Cu
VT900WHB...	73.8-110	1.15	30X30	R900	WR10	FUGP	Cu
VT1200WEB...	92.2-140	-	20X20	R1200	WR8	FUGP	Cu
VT1200WHB...	92.2-140	-	20X20	R1200	WR8	FUGP	Cu
VT1400WEB...	113-173	-	20X20	R1400	WR7	FUGP	Cu
VT1400WHB...	113-173	-	20X20	R1400	WR7	FUGP	Cu
VT1800WEB...	145-220	-	20X20	R1800	WR5	FUGP	Cu
VT1800WHB...	145-220	-	20X20	R1800	WR5	FUGP	Cu
VT2200WEB...	172-261	-	20X20	R2200	WR4	FUGP	Cu
VT2200WHB...	172-261	-	20X20	R2200	WR4	FUGP	Cu
VT2600WEB...	217-330	-	20X20	R2600	WR3	FUGP	Cu
VT2600WHB...	217-330	-	20X20	R2600	WR3	FUGP	Cu

*Indicates Model Number. See Ordering Information for complete part number.

**Legs (A,B) available in other sizes. Consult sales engineer for more information.

【Ordering Information】

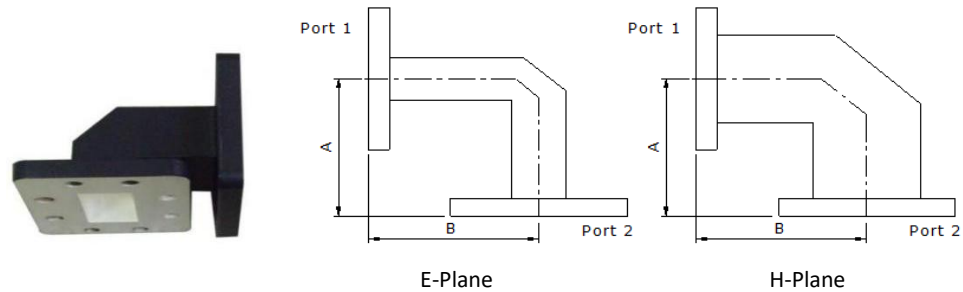
Example Part No: VT 100 WEB 40X40 P M A 45





- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat
- Bends other than 90 available on request

2.2 Waveguide Miter Bend



【Specifications】

Model No*	Freq Range (GHz)	Operating Bandwidth	VSWR (Max)	Std Dimensions AxB(mm)**	WG Type		Flange	Material
					IEC	EIA		
VT3WTEBAxB...	0.32-0.49	Full band	1.15	220x220	R3	WR2300	FDP/FDM	Al
VT3WTHBAxB...	0.32-0.49	≤15%	1.15	350x650	R4	WR2300	FDP/FDM	Al
VT4WTEBAxB...	0.35-0.53	Full band	1.15	200x200	R5	WR2100	FDP/FDM	Al
VT4WTHBAxB...	0.35-0.53	≤15%	1.15	330x330	R6	WR2100	FDP/FDM	Al
VT5WTEBAxB...	0.41-0.62	Full band	1.15	180x180	R8	WR1800	FDP/FDM	Al
VT5WTHBAxB...	0.41-0.62	≤15%	1.15	300x300	R9	WR1800	FDP/FDM	Al
VT6WTEBAxB...	0.49-0.75	Full band	1.15	150x150	R12	WR1500	FDP/FDM	Al
VT6WTHBAxB...	0.49-0.75	≤15%	1.15	240x240	R14	WR1500	FDP/FDM	Al
VT8WTEBAxB...	0.64-0.98	Full band	1.15	130x130	R18	WR1150	FDP/FDM	Al
VT8WTHBAxB...	0.64-0.98	≤15%	1.15	220x220	R22	WR1150	FDP/FDM	Al
VT9WTEBAxB...	0.75-1.15	Full band	1.15	120x120	R26	WR975	FDP/FDM	Al
VT9WTHBAxB...	0.75-1.15	≤15%	1.15	200x200	R40	WR975	FDP/FDM	Al
VT12WTEBAxB...	0.96-1.46	Full band	1.15	110x110	R48	WR770	FDP/FDM	Al
VT12WTHBAxB...	0.96-1.46	≤15%	1.15	160x160	R3	WR770	FDP/FDM	Al
VT14WTEBAxB...	1.13-1.73	Full band	1.15	100x100	R4	WR650	FDP/FDM	Al
VT14WTHBAxB...	1.13-1.73	≤15%	1.15	140x140	R5	WR650	FDP/FDM	Al
VT18WTEBAxB...	1.45-2.20	Full band	1.15	90x90	R6	WR510	FDP/FDM	Al
VT18WTHBAxB...	1.45-2.20	≤15%	1.15	120x120	R8	WR510	FDP/FDM	Al
VT22WTEBAxB...	1.72-2.61	Full band	1.15	70x70	R22	WR430	FDP/FDM	Al
VT22WTHBAxB...	1.72-2.61	≤15%	1.15	100x100	R22	WR430	FDP/FDM	Al
VT26WTEBAxB...	2.17-3.30	Full band	1.15	70x70	R26	WR340	FDP/FDM	Al
VT26WTHBAxB...	2.17-3.30	≤15%	1.15	100x100	R26	WR340	FDP/FDM	Al
VT32WTEBAxB...	2.60-3.95	Full band	1.15	60x60	R32	WR284	FDP/FDM	Al
VT32WTHBAxB...	2.60-3.95	≤15%	1.15	65x65	R32	WR284	FDP/FDM	Al
VT40WTEBAxB...	3.22-4.90	Full band	1.15	45x45	R40	WR229	FDP/FDM	Al

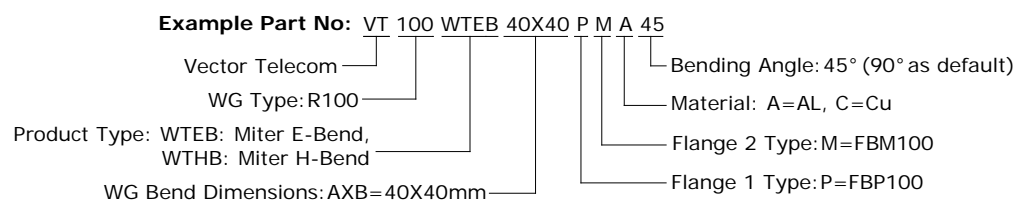


Model No*	Freq Range (GHz)	Operating Bandwidth	VSWR (Max)	Std Dimensions AxB(mm)**	WG Type		Flange	Material
					IEC	EIA		
VT40WTHBAxB...	3.22-4.90	≤15%	1.15	60x60	R40	WR229	FDP/FDM	Al
VT48WTEBAxB...	3.94-5.99	Full band	1.15	45x45	R48	WR187	FDP/FDM	Al
VT48WTHBAxB...	3.94-5.99	≤15%	1.15	60x60	R48	WR187	FDP/FDM	Al
VT58WTEBAxB...	4.64-7.05	Full band	1.15	40x40	R58	WR159	FDP/FDM	Al
VT58WTHBAxB...	4.64-7.05	≤15%	1.15	50x50	R58	WR159	FDP/FDM	Al
VT40WTHBAxB...	3.22-4.90	≤15%	1.15	60x60	R40	WR229	FDP/FDM	Al
VT48WTEBAxB...	3.94-5.99	Full band	1.15	45x45	R48	WR187	FDP/FDM	Al
VT48WTHBAxB...	3.94-5.99	≤15%	1.15	60x60	R48	WR187	FDP/FDM	Al
VT58WTEBAxB...	4.64-7.05	Full band	1.15	40x40	R58	WR159	FDP/FDM	Al
VT58WTHBAxB...	4.64-7.05	≤15%	1.15	50x50	R58	WR159	FDP/FDM	Al
VT70WTEBAxB...	5.38-8.17	Full band	1.15	35x35	R70	WR137	FDP/FDM	Cu
VT84WTEBAxB...	6.57-9.99	Full band	1.15	30x30	R84	WR112	FBP/FBM	Cu
VT84WTHBAxB...	6.57-9.99	≤15%	1.15	40x40	R84	WR112	FBP/FBM	Cu
VT100WTEBAxB...	8.20-12.40	Full band	1.15	25x25	R100	WR90	FBP/FBM	Cu
VT100WTHBAxB...	8.20-12.4	≤15%	1.15	30x30	R100	WR90	FBP/FBM	Cu
VT120WTEBAxB...	9.84-15.0	Full band	1.15	25x25	R120	WR75	FBP/FBM	Cu
VT120WTHBAxB...	9.84-15.0	≤15%	1.15	30x30	R120	WR75	FBP/FBM	Cu
VT140WTEBAxB...	11.9-18.0	Full band	1.15	20x20	R140	WR62	FBP/FBM	Cu
VT140WTHBAxB...	11.9-18.0	≤15%	1.15	25x25	R140	WR62	FBP/FBM	Cu
VT180WTEBAxB...	14.5-22.0	Full band	1.15	20 X20	R180	WR51	FBP/FBM	Cu
VT180WTHBAxB...	14.5-22.0	≤15%	1.15	25 X25	R180	WR51	FBP/FBM	Cu
VT220WTEBAxB...	17.6-26.7	Full band	1.15	15 X15	R220	WR42	FBP/FBM	Cu
VT220WTHBAxB...	17.6-26.7	≤10%	1.15	20 X20	R220	WR42	FBP/FBM	Cu
VT260WTEBAxB...	21.7-33.0	Full band	1.15	15 X15	R260	WR34	FBP/FBM	Cu
VT260WTHBAxB...	21.7-33.0	≤10%	1.15	20 X20	R260	WR34	FBP/FBM	Cu
VT320WTEBAxB...	26.5-40.0	Full band	1.15	12 X12	R320	WR28	FBP/FBM	Cu
VT320WTHBAxB...	26.5-40.0	≤10%	1.15	18 X18	R320	WR28	FBP/FBM	Cu

*Indicates Model Number. See Ordering Information for complete part number.

**Legs (A,B) available in other sizes. Consult sales engineer for more information.

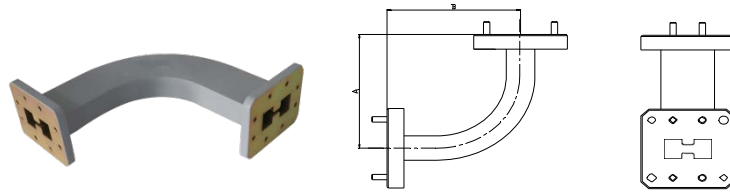
【Ordering Information】



- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat
- Bends other than 90 available on request



2.3 Double Ridged Waveguide Bend



【Specifications】

Model No*	Freq Range (GHz)	VSWR (Max)	Std Dimensions AxB (mm)**	WG Type	Flange	Material
				IEC		
VT84DRWEBAxB...	0.84-2	1.25	150X150	WRD84	FP/FM	Al
VT84DRWHBAxB...	0.84-2	1.25	200X200	WRD84	FP/FM	Al
VT150DRWEBAxB...	1.5-3.6	1.25	100X100	WRD150	FP/FM	Al
VT150DRWHBAxB...	1.5-3.6	1.25	150X150	WRD150	FP/FM	Al
VT200DRWEBAxB...	2-4.8	1.25	100X100	WRD200	FP/FM	Al
VT200DRWHBAxB...	2-4.8	1.25	150X150	WRD200	FP/FM	Al
VT250DRWEBAxB...	2.6-7.8	1.25	100X100	WRD250	FP/FM	Al
VT250DRWHBAxB...	2.6-7.8	1.25	150X150	WRD250	FP/FM	Al
VT350DRWEBAxB...	3.5-8.2	1.25	100X100	WRD350	FP/FM	Al
VT350DRWHBAxB...	3.5-8.2	1.25	100X100	WRD350	FP/FM	Al
VT475DRWEBAxB...	4.75-11	1.25	100X100	WRD475	FP/FM	Cu
VT475DRWHBAxB...	4.75-11	1.25	100X100	WRD475	FP/FM	Cu
VT500DRWEBAxB...	5-18	1.25	80X80	WRD500	FP/FM	Cu
VT500DRWHBAxB...	5-18	1.25	80X80	WRD500	FP/FM	Cu
VT580DRWEBAxB...	5.8-16	1.25	80X80	WRD580	FP/FM	Cu
VT580DRWHBAxB...	5.8-16	1.25	80X80	WRD580	FP/FM	Cu
VT650DRWEBAxB...	6.5-18	1.25	50X50	WRD650	FP/FM	Cu
VT650DRWHBAxB...	6.5-18	1.25	50X50	WRD650	FP/FM	Cu
VT750DRWEBAxB...	7.5-18	1.25	50X50	WRD750	FP/FM	Cu
VT750DRWHBAxB...	7.5-18	1.25	50X50	WRD750	FP/FM	Cu
VT700DRWEBAxB...	7-18.5	1.25	50X50	WRD700	FP/FM	Cu
VT700DRWHBAxB...	7-18.5	1.25	50X50	WRD700	FP/FM	Cu
VT1100DRWEBAxB...	11-26.5	1.25	30X30	WRD1100	FP/FM	Cu
VT1100DRWHBAxB...	11-26.5	1.25	30X30	WRD1100	FP/FM	Cu
VT1800DRWEBAxB...	18-40	1.3	30X30	WRD1800	FP/FM	Cu
VT1800DRWHBAxB...	18-40	1.3	30X30	WRD1800	FP/FM	Cu

*Indicates Model Number. See Ordering Information for complete part number.

**Legs (A,B) available in other sizes. Consult sales engineer for more information.



Section 1

Waveguide Components

【Ordering Information】

Example Part No: VT 100 DRWEB 40X40 P M A 45
Vector Telecom | WT Type: R100 | Bending Angle: 45° (90° as default)
Product Type: (DRWEB: Doble Ridged E-Bend, DRWHB: Doble Ridged H-Bend) | Material: A=Aluminum, C=Copper
WG Bend Dimensions: AXB=40X40mm | Flange 2 Type: FP | Flange 1 Type: FM

- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat
- Bends other than 90 available on request

02

Waveguide Bend



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Website: www.vectortele.com

Email: sales@vectortele.com

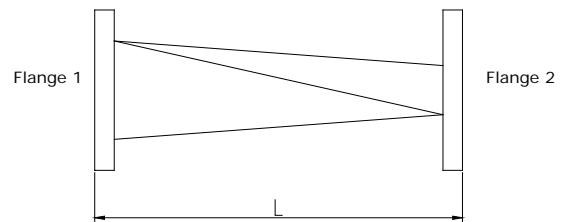


3 Waveguide Twist

Vector Telecom offers a standard product line of waveguide twist covering waveguide sizes WR10 thru WR430 and Double Ridged. Twist angle, twist direction and flange types can be custom made as per customer's specific requirements.



3.1 Waveguide Twist



【Specifications】

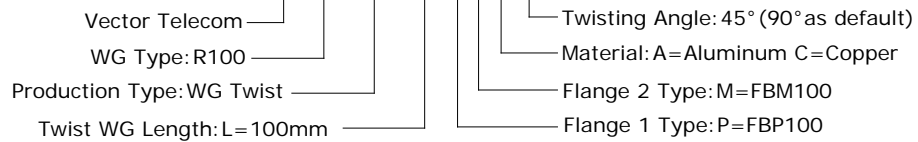
Model No*	Freq Range (GHz)	VSWR (Max)	Std Length (mm)	Min Length (mm)	WG Type		Flange	Material
					IEC	EIA		
VT22WTA...	1.72-2.61	1.10	400	150	R22	WR430	FDP/FDM	Al
VT26WTA...	2.17-3.30	1.10	400	140	R26	WR340	FDP/FDM	Al
VT32WTA...	2.60-3.95	1.10	300	120	R32	WR284	FDP/FDM	Al
VT40WTA...	3.22-4.90	1.10	200	90	R40	WR229	FDP/FDM	Al
VT48WTA...	3.94-5.99	1.10	200	70	R48	WR187	FDP/FDM	Al
VT58WTA...	4.64-7.05	1.10	200	70	R58	WR159	FDP/FDM	Al
VT70WTA...	5.38-8.17	1.10	100	60	R70	WR137	FDP/FDM	Cu
VT84WTA...	6.57-9.99	1.10	100	50	R84	WR112	FBP/FBM	Cu
VT100WTA...	8.20-12.40	1.10	100	45	R100	WR90	FBP/FBM	Cu
VT120WTA...	9.84-15.0	1.10	100	40	R120	WR75	FBP/FBM	Cu
VT140WTA...	11.9-18.0	1.10	100	40	R140	WR62	FBP/FBM	Cu
VT180WTA...	14.5-22.0	1.10	60	35	R180	WR51	FBP/FBM	Cu
VT220WTA...	17.6-26.7	1.10	60	35	R220	WR42	FBP/FBM	Cu
VT260WTA...	21.7-33.0	1.10	60	35	R260	WR34	FBP/FBM	Cu
VT320WTA...	26.5-40.0	1.10	50	30	R320	WR28	FBP/FBM	Cu
VT400WTA...	32.9-50.1	1.15	50	30	R400	WR22	FUGP	Cu
VT500WTA...	39.2-59.6	1.15	50	30	R500	WR19	FUGP	Cu
VT620WTA...	49.8-75.8	1.15	50	25	R620	WR15	FUGP	Cu
VT740WTA...	60.5-91.9	1.15	50	25	R740	WR12	FUGP	Cu
VT900WTA...	73.8-110	1.15	50	25	R900	WR10	FUGP	Cu

*Indicates Model Number. See Ordering Information for complete part number.



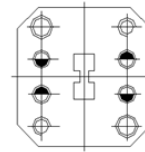
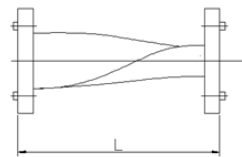
【Ordering Information】

Example Part No: VT 100 WTA 100 P M A 45



- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat
- Twist angle other than 90 available on request
- Twist direction option of VT unless otherwise specified

3.2 Double Ridged Waveguide Twist



【Specifications】

Model No*	Freq Range (GHz)	VSWR (Max)	Std Length (mm)	WG Type		Flange	Material
				IEC	EIA		
VT84DRWTA...	0.84-2	1.25	500	R84	WRD84	FP/FM	Al
VT150DRWTA...	1.5-3.6	1.25	400	R150	WRD150	FP/FM	Al
VT200DRWTA...	2-4.8	1.25	400	R200	WRD200	FP/FM	Al
VT250DRWTA...	2.6-7.8	1.25	300	R250	WRD250	FP/FM	Al
VT350DRWTA...	3.5-8.2	1.25	300	R350	WRD350	FP/FM	Al
VT475DRWTA...	4.75-11	1.25	300	R475	WRD475	FP/FM	Cu
VT500DRWTA...	5-18	1.25	200	R500	WRD500	FP/FM	Cu
VT580DRWTA...	5.8-16	1.25	200	R580	WRD580	FP/FM	Cu
VT650DRWTA...	6.5-18	1.25	200	R650	WRD650	FP/FM	Cu
VT750DRWTA...	7.5-18	1.25	200	R750	WRD750	FP/FM	Cu
VT700DRWTA...	7-18.5	1.25	200	R700	WRD700	FP/FM	Cu
VT1100DRWTA...	11-26.5	1.25	150	R1100	WRD1100	FP/FM	Cu
VT1800DRWTA...	18-40	1.3	80	R1800	WRD1800	FP/FM	Cu

*Indicates Model Number. See Ordering Information for complete part number.



Section 1

**Waveguide
Components**

【Ordering Information】

Example Part No: VT 650 DRWTA 200 P M C
Vector Telecom | Material: Brass
WG Type: WRD650 | Flange 2 Type: FP
Product Type: Double Ridged WG Twist | Flange 1 Type: FM
Length: L=200mm

- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat
- Twist angle other than 90 available on request
- Twist direction option of VT unless otherwise specified

03

**Waveguide
Twist**



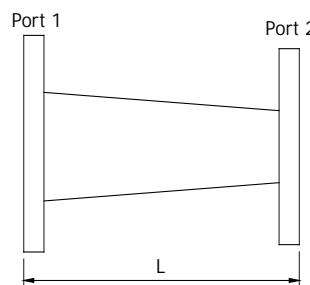
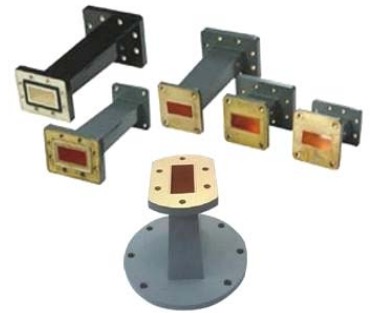
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Website: www.vectortele.com

Email: sales@vectortele.com

4 Waveguide Transition

Vector Telecom manufactures a wide variety of waveguide transitions ranging from standard rectangular waveguide transitions in overlapping bands to custom transitions spanning multiple bands. Additional sizes, extended range, and custom design configurations are available on request.



4.1 Waveguide Transitions in Overlapping Bands

【Specifications】

Model No*	Freq Range (GHz)	VSWR (Max)	Length (mm)	Port 1 WG Type		Port 2 WG Type		Flange	Material
				IEC	EIA	IEC	EIA		
VT34WA...	0.35-0.49	1.10	1000	R3	WR230	R4	WR210	FDP/FDM	Al
VT45WA...	0.41-0.53	1.10	1000	R4	WR210	R5	WR180	FDP/FDM	Al
VT56WA...	0.49-0.62	1.10	900	R5	WR180	R6	WR150	FDP/FDM	Al
VT68WA...	0.64-0.75	1.10	800	R6	WR150	R8	WR110	FDP/FDM	Al
VT89WA...	0.75-0.98	1.10	600	R8	WR110	R9	WR975	FDP/FDM	Al
VT912WA...	0.96-1.15	1.15	200	R9	WR975	R12	WR770	FDP	Al
VT1214WA...	1.13-1.46	1.15	200	R12	WR770	R14	WR650	FDP	Al
VT1418WA...	1.45-1.73	1.15	200	R14	WR650	R18	WR510	FDP	Al
VT1822WA...	1.72-2.20	1.10	200	R18	WR510	R22	WR430	FDP	Al
VT2226WA...	2.17-2.61	1.10	200	R22	WR430	R26	WR340	FDP	Al
VT2632WA...	2.60-3.30	1.10	200	R26	WR340	R32	WR284	FDP	Al
VT3240WA...	3.22-3.95	1.10	200	R32	WR284	R40	WR229	FDP	Al
VT4048WA...	3.94-4.90	1.10	200	R40	WR229	R48	WR187	FDP	Al
VT4858WA...	4.64-5.99	1.10	200	R48	WR187	R58	WR159	FDP	Al
VT5870WA...	5.38-7.05	1.10	150	R58	WR159	R70	WR137	FDP	Al
VT7084WA...	6.57-8.17	1.10	100	R70	WR137	R84	WR112	FDP/FBP	Cu
VT84100WA...	8.20-9.99	1.10	60	R84	WR112	R100	WR90	FBP	Cu
VT100120WA...	9.84-12.4	1.10	60	R10	WR90	R120	WR75	FBP	Cu

04

Waveguide Transition



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Model No*	Freq Range (GHz)	VSWR (Max)	Length (mm)	Port 1 WG Type		Port 2 WG Type		Flange	Material
				IEC	EIA	IEC	EIA		
VT120140WA...	11.9-15.0	1.10	50	R10	WR75	R140	WR62	FBP	Cu
VT140180WA...	14.5-18.0	1.10	50	R10	WR62	R180	WR51	FBP	Cu
VT180220WA...	17.6-22.0	1.10	50	R10	WR51	R220	WR42	FBP	Cu
VT220260WA...	21.7-26.7	1.10	50	R220	WR42	R260	WR34	FBP	Cu
VT260320WA...	26.5-33.0	1.10	50	R260	WR34	R320	WR28	FBP	Cu
VT320400WA...	32.9-40.0	1.15	50	R320	WR28	R400	WR22	FBP/FUGP	Cu
VT400500WA...	39.2-50.1	1.15	50	R400	WR22	R500	WR19	FUGP	Cu
VT500620WA...	49.8-59.6	1.15	50	R500	WR19	R620	WR15	FUGP	Cu
VT620740WA...	60.5-75.8	1.15	50	R620	WR15	R740	WR12	FUGP	Cu
VT740900WA...	73.8-91.9	1.15	50	R740	WR12	R900	WR10	FUGP	Cu
VT9001200WA..	92.2-110	-	30	R900	WR10	R120	WR8	FUGP	Cu
VT1200140W...	113-140	-	30	R1200	WR8	R140	WR7	FUGP	Cu
VT14001800W...	145-173	-	30	R1400	WR7	R180	WR5	FUGP	Cu
VT18002200W...	172-220	-	30	R1800	WR5	R220	WR4	FUGP	Cu
VT22002600W...	217-261	-	30	R2200	WR4	R260	WR3	FUGP	Cu

*Indicates Model Number. See Ordering Information for complete part number.

4.2 Waveguide Transitions in Non Overlapping Bands

【Specifications】

Model No*	Freq Range (GHz)	Port 1 WG Type		Port 2 WG Type		Flange	Material
		IEC	EIA	IEC	EIA		
VT2240WA...	3.22-4.90	R22	WR430	R40	WR229	FDP	Al
VT2658WA...	4.64-7.05	R26	WR340	R58	WR159	FDP	Al
VT3270WA...	5.38-8.17	R32	WR284	R70	WR137	FDP	Al
VT4084WA...	6.57-9.99	R40	WR229	R84	WR112	FDP/FBP	Al
VT48100WA...	8.20-12.4	R48	WR187	R100	WR90	FDP/FBP	Al
VT58120WA...	9.84-15.0	R58	WR159	R120	WR75	FDP/FBP	Al
VT70140WA...	11.9-18.0	R70	WR137	R140	WR62	FDP/FBP	Al
VT84180WA...	14.5-22.0	R84	WR112	R180	WR51	FBP	Cu
VT100220WA...	17.6-26.7	R100	WR90	R220	WR42	FBP	Cu
VT120260WA...	21.7-33.0	R120	WR75	R260	WR34	FBP	Cu
VT140320WA...	26.5-40.0	R140	WR62	R320	WR28	FBP	Cu

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Waveguide Transition



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Model No*	Freq Range (GHz)	Port 1 WG Type		Port 2 WG Type		Flange	Material
		IEC	EIA	IEC	EIA		
VT180400WA...	32.9-50.1	R180	WR51	R400	WR22	FBP/ FUGP	Cu
VT220500WA...	39.2-59.6	R220	WR42	R500	WR19	FBP/ FUGP	Cu
VT260620WA...	49.8-75.8	R260	WR34	R620	WR15	FBP/ FUGP	Cu
VT320740WA...	60.5-91.9	R320	WR28	R740	WR12	FBP/ FUGP	Cu
VT400900WA...	73.8-110	R400	WR22	R900	WR10	FUGP	Cu

*Indicates Model Number. See Ordering Information for complete part number.

【Ordering Information】

Example Part No: VT 84100 WA 100 P M A

Vector Telecom ————

WG Type: R84 to R100 ————

Product Type: WG Transition ————

————— A=Aluminum C=Copper

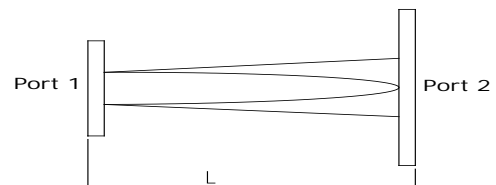
————— Flange 2 Type: M=FBM100

————— Flange 1 Type: P=FBP84

————— WG Length: L=100mm

- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat

4.3 Rectangular To Circular Waveguide Transition (TE10-TE11)



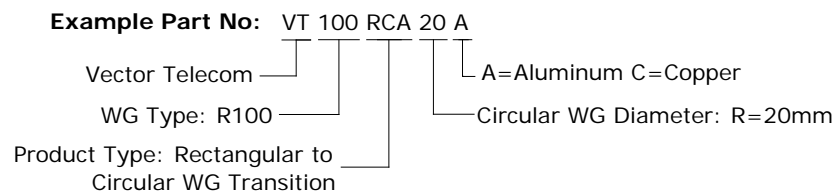
【Specifications】

Model No*	Freq Range (GHz)	VSWR (Max)	Length (mm)	WG Type		Inner Diameter of Circular Waveguide (mm)	Material
				IEC	EIA		
VT14RCA...	1.30-1.70	1.10	920	R14	WR650	157	Al
VT18RCA...	1.76-2.20	1.10	820	R18	WR510	114.58	Al
VT22RCA...	2.07-2.61	1.10	580	R22	WR430	97.87	Al
VT26RCA...	2.42-3.30	1.10	500	R26	WR340	83.62	Al
VT32RCA...	2.83-3.88	1.10	420	R32	WR284	71.42	Al
VT40RCA...	3.22-4.90	1.10	350	R40	WR229	51.99	Al
VT48RCA...	3.94-5.33	1.10	300	R48	WR187	44.45	Al
VT58RCA...	5.3-7.05	1.10	230	R58	WR159	38.10	Al

Model No*	Freq Range (GHz)	VSWR (Max)	Length (mm)	WG Type		Inner Diameter of Circular Waveguide (mm)	Material
				IEC	EIA		
VT70RCA...	6.21-8.17	1.10	200	R70	WR137	32.54	Al
VT84RCA...	7.30-9.97	1.10	200	R84	WR112	27.79	Al
VT100RCA...	8.50-11.6	1.10	160	R100	WR90	23.83	Cu
VT120RCA...	11.6-15.0	1.10	130	R120	WR75	17.42	Cu
VT140RCA...	13.4-18.0	1.10	100	R140	WR62	15.09	Cu
VT180RCA...	15.9-21.8	1.15	100	R180	WR51	12.70	Cu
VT220RCA...	21.2-26.7	1.15	60	R220	WR42	9.53	Cu
VT260RCA...	24.3-33.0	1.15	60	R260	WR34	8.33	Cu
VT320RCA...	31.8-40	1.15	50	R320	WR28	7.14	Cu
VT400RCA...	36.4-49.8	1.15	50	R400	WR22	5.56	Cu
VT500RCA...	46.3-59.6	1.15	40	R500	WR19	4.37	Cu
VT620RCA...	56.6-75.8	1.15	30	R620	WR15	3.58	Cu
VT740RCA...	63.5-87.2	1.15	30	R740	WR12	3.18	Cu
VT900RCA...	84.8-112	1.15	20	R900	WR10	2.39	Cu

*Indicates Model Number. See Ordering Information for complete part number.

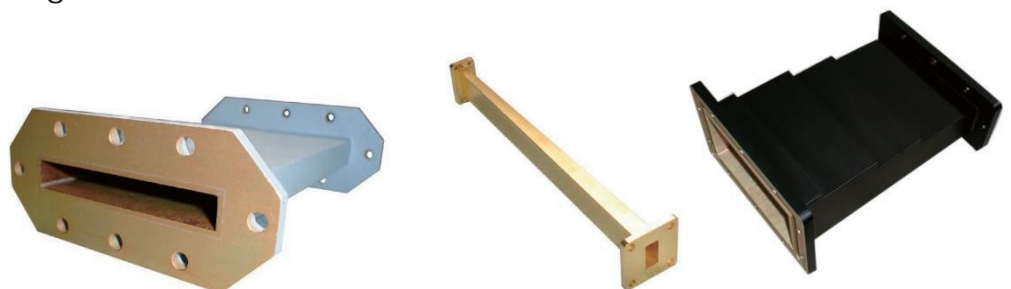
【Ordering Information】



- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat

4.4 Special Transitions

Transitions spanning multiple bands, rectangular to circular waveguide transitions are available. Please consult sales engineer for more information.



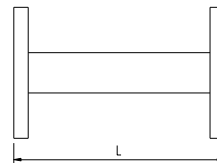


5 Flexible Waveguide

Vector Telecom offers a standard product line of rectangular twistable- flexible waveguides. They are used in requirements where both bending and twisting of the waveguide is needed. For more information feel free to call us and discuss your needs with one of our sales engineers.



5.1 Twistable-Flexible Waveguide



【Specifications】

Model No*	Freq Range (GHz)	VSWR (Max)	IL (dB/m)(Max)	Min Radius		Max Twist (deg/m)	WG Type		Flange
				E-Plane (mm)	H-Plane (mm)		IEC	EIA	
VT40WEL...	3.22-4.90	1.10	0.15	165	330	132	R40	WR229	FDP/FDM
VT48WEL...	3.94-5.99	1.10	0.16	136	272	155	R48	WR187	FDP/FDM
VT58WEL...	4.64-7.05	1.10	0.22	129	258	170	R58	WR159	FDP/FDM
VT70WEL...	5.38-8.17	1.15	0.25	102	204	108	R70	WR137	FDP/FDM
VT84WEL...	6.57-9.99	1.15	0.30	76	152	210	R84	WR112	FBP/FBM
VT100WEL...	8.20-12.40	1.15	0.40	66	127	240	R100	WR90	FBP/FBM
VT120WEL...	9.84-15.0	1.15	0.50	64	120	340	R120	WR75	FBP/FBM
VT140WEL...	11.9-18.0	1.15	0.65	54	105	350	R140	WR62	FBP/FBM
VT180WEL...	14.5-22.0	1.15	1.10	50	100	445	R180	WR51	FBP/FBM
VT220WEL...	17.6-26.5	1.25	1.30	41	82	465	R220	WR42	FBP/FBM
VT260WEL...	21.7-33.0	1.20	1.50	35	70	510	R260	WR34	FBP/FBM
VT320WEL...	26.5-40.0	1.25	2.00	38	76	465	R320	WR28	FBP/FBM
VT400WEL...	32.9-50.1	1.45	3.00	38	76	530	R400	WR22	FUGP

*Indicates Model Number. See Ordering Information for complete part number.

5.2 Flexible Seamless Waveguide



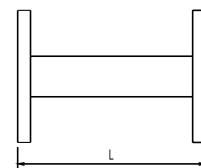


【Specification】

Model No*	Freq Range (GHz)	VSWR (Max)	IL (dB/m) (Max)	Pressure (Mpa) (Max)	WG Type		Flange
					IEC	EIA	
VT14WWEL...	1.13-1.73	1.10	0.12	0.20	R14	WR650	FDP/FDM
VT22WWEL...	1.72-2.61	1.10	0.15	0.20	R22	WR430	FDP/FDM
VT26WWEL...	2.17-3.30	1.10	0.15	0.20	R26	WR340	FDP/FDM
VT32WWEL...	2.60-3.95	1.10	0.08	0.20	R32	WR284	FDP/FDM
VT40WWEL...	3.22-4.90	1.10	0.08	0.20	R40	WR229	FDP/FDM
VT48WWEL...	3.94-5.99	1.10	0.12	0.20	R48	WR187	FDP/FDM
VT58WWEL...	4.64-7.05	1.12	0.17	0.20	R58	WR159	FDP/FDM
VT70WWEL...	5.38-8.17	1.12	0.21	0.20	R70	WR137	FDP/FDM
VT84WWEL...	6.57-9.99	1.12	0.25	0.20	R84	WR112	FBP/FBM
VT100WWEL...	8.20-12.40	1.12	0.37	0.20	R100	WR90	FBP/FBM
VT120WWEL...	9.84-15.0	1.12	0.49	0.20	R120	WR75	FBP/FBM
VT140WWEL...	11.9-18.0	1.15	0.65	0.20	R140	WR62	FBP/FBM
VT180WWEL...	14.5-22.0	1.22	1.23	0.20	R180	WR51	FBP/FBM
VT220WWEL...	17.6-26.5	1.22	1.23	0.20	R220	WR42	FBP/FBM
VT260WWEL...	21.7-33.0	1.33	1.44	0.20	R260	WR34	FBP/FBM
VT320WWEL...	26.5-40.0	1.33	2.05	0.20	R320	WR28	FBP/FBM
VT400WWEL...	32.9-50.1	1.40	4.10	0.20	R400	WR22	FUGP

*Indicates Model Number. See Ordering Information for complete part number.

5.3 Double Ridged Twistable-Flexible Waveguide



Model No*	Freq Range (GHz)	VSWR (Max)	IL(dB/m) (Max)	Min Radius		WG Type	Flange
				E-Plane (mm)	F-Plane (mm)		
VT580DRWEL...	5.8-16	1.25	1.50	105	210	RD580	FP/FM
VT650DRWEL...	6.5-18	1.30	1.65	90	180	RD650	FP/FM
VT750DRWEL...	7.5-18	1.30	1.65	85	170	RD750	FP/FM
VT1800DRWEL...	18-40	1.50	3.42	55	110	RD1800	FP/FM

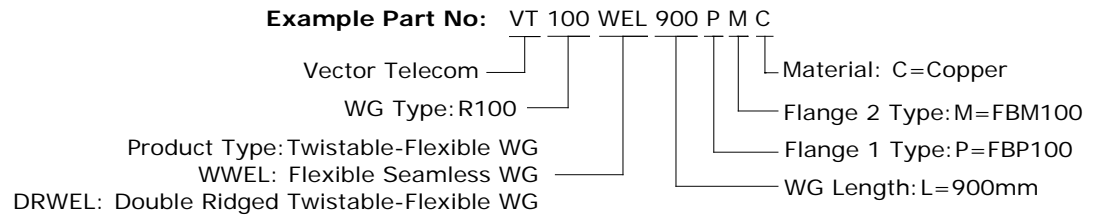
*Indicates Model Number. See Ordering Information for complete part number.



Section 1

Waveguide
Components

【Ordering Information】



- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat
- Std lengths (mm): 100, 200, 300, 500, 600, 900, 1000
- Supplied with Neoprene jacket in order to hold pressure, as a standard model

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Flexible
Waveguide



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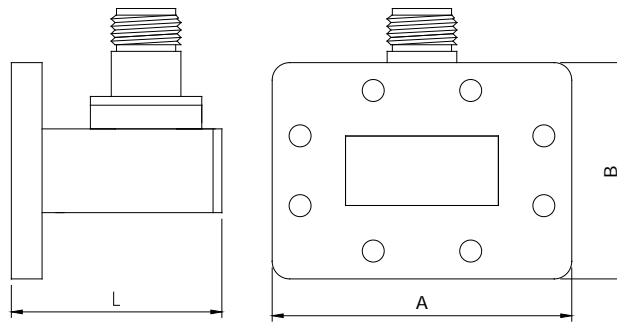
Email: sales@vectortele.com

6 Adapters

6.1 Waveguide to Coaxial Adapter

6.1.1 Waveguide to Coaxial Adapter (Right Angle)

Vector Telecom manufactures Waveguide to Coaxial Adapters covering a full frequency range for Rectangular Waveguides, with multiple flange and coaxial Connector types and configurations available. For more information feel free to call us and discuss your needs with one of our sales engineers.



Type N Waveguide to Coaxial Adapters

【Specifications】

Model No*	Freq Range (GHz)	VSWR (Max)	Dimensions L*B*A (mm)	WG Type		Flange	Material
				IEC	EIA		
VT3WCAN...	0.32-0.49	1.25	400*384*676	R3	WR2300	FDP/FDM	Al
VT4WCAN...	0.35-0.53	1.25	380*359*626	R4	WR2100	FDP/FDM	Al
VT5WCAN...	0.41-0.62	1.25	350*318*546	R5	WR1800	FDP/FDM	Al
VT6WCAN...	0.49-0.75	1.25	300*280*470	R6	WR1500	FDP/FDM	Al
VT8WCAN...	0.64-0.98	1.25	260*235*381	R8	WR1150	FDP/FDM	Al
VT9WCAN...	0.75-1.15	1.25	231*212*336	R9	WR975	FDP/FDM	Al
VT12WCAN...	0.96-1.46	1.25	166*187*285	R12	WR770	FDP/FDM	Al
VT14WCAN...	1.13-1.73	1.25	150*138*220	R14	WR650	FDP/FDM	Al
VT18WCAN...	1.45-2.20	1.25	120*120*185	R18	WR510	FDP/FDM	Al/Cu
VT22WCAN...	1.72-2.61	1.25	100*106*161	R22	WR430	FDP/FDM	Al/Cu
VT26WCAN...	2.17-3.30	1.25	90*95*138	R26	WR340	FDP/FDM	Al/Cu
VT32WCAN...	2.60-3.95	1.25	72*76*114	R32	WR284	FDP/FDM	Al/Cu

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Adapters



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Model No*	Freq Range (GHz)	VSWR (Max)	Dimensions L*B*A (mm)	WG Type		Flange	Material
				IEC	EIA		
VT40WCAN...	3.22-4.90	1.25	65*70*98	R40	WR229	FDP/FDM	Al/Cu
VT48WCAN...	3.94-5.99	1.25	54*63*89	R48	WR187	FDP/FDM	Al/Cu
VT58WCAN...	4.64-7.05	1.25	50*62*81	R58	WR159	FDP/FDM	Al/Cu
VT70WCAN...	5.38-8.17	1.25	48*49*68	R70	WR137	FDP/FDM	Al/Cu
VT84WCAN...	6.57-9.99	1.25	40*48*48	R84	WR112	FBP/FBM/FBE	Al/Cu
VT100WCAN...	8.20-12.4	1.25	38*41*41	R100	WR90	FBP/FBM/FBE	Al/Cu
VT120WCAN...	9.84-15.0	1.25	30*38*38	R120	WR75	FBP/FBM/FBE	Al/Cu
VT140WCAN...	11.9-18.0	1.25	27*33*33	R140	WR62	FBP/FBM/FBE	Al/Cu
VT180WCAN...	14.5-22.0	1.25	27*30*30	R180	WR51	FBP/FBM/FBE	Al/Cu

*Indicates Model Number. See Ordering Information for complete part number.

SMA Waveguide to Coaxial Adapters

【Specifications】

Model No*	Freq Range (GHz)	VSWR (Max)	Dimensions L*B*A (mm)	WG Type		Flange	Material
				IEC	EIA		
VT100WCAS...	8.20-12.4	1.25	38*41*41	R100	WR90	FBP/FBM/FBE	Al/Cu
VT120WCAS...	9.84-15.0	1.25	30*38*38	R120	WR75	FBP/FBM/FBE	Al/Cu
VT140WCAS...	11.9-18.0	1.25	27*33*33	R140	WR62	FBP/FBM/FBE	Al/Cu
VT180WCAS...	14.5-22.0	1.25	27*30*30	R180	WR51	FBP/FBM/FBE	Al/Cu
VT220WCAS...	17.6-26.7	1.35	25*22*22	R220	WR42	FBP/FBM/FBE	Al/Cu
VT320WCAS...	26.5-40.0	1.50	25*19*19	R320	WR28	FBP/FBM/FBE	Al/Cu

*Indicates Model Number. See Ordering Information for complete part number.

2.92mm Waveguide to Coaxial Adapters

【Specifications】

Model No*	Freq Range (GHz)	Dimensions L*B*A (mm)	WG Type		Flange	Material
			IEC	EIA		
VT220WCA2.92...	17.6-26.7	33*22*22	R220	WR42	FBP/FBM/FBE	Al/Cu
VT260WCA2.92...	21.7-33.0	27*21*21	R260	WR34	FBP/FBM/FBE	Al/Cu
VT320WCA2.92...	26.5-40.0	25*19*19	R320	WR28	FBP/FBM/FBE	Al/Cu

*Indicates Model Number. See Ordering Information for complete part number.



2.4mm Waveguide to Coaxial Adapters

【Specifications】

Model No*	Freq Range (GHz)	VSWR (Max)	Dimensions L*B*A (mm)	WG Type		Flange	Material
				IEC	EIA		
VT220WCA2.4...	17.6-26.7	1.50	36*22*22	R220	WR42	FBP/FBM/FBE	Al/Cu
VT260WCA2.4...	21.7-33.0	1.60	27*21*21	R260	WR34	FBP/FBM/FBE	Al/Cu
VT320WCA2.4...	26.5-40.0	1.60	25*19*19	R320	WR28	FBP/FBM/FBE	Al/Cu
VT400WCA2.4...	33.0-50.0	1.60	25*28.6*28.6	R400	WR22	FUGP	Cu

*Indicates Model Number. See Ordering Information for complete part number.

1.85mm Waveguide to Coaxial Adapters

【Specifications】

Model No*	Freq Range (GHz)	VSWR (Max)	Dimensions L*B*A (mm)	WG Type		Flange	Material
				IEC	EIA		
VT500WCA1.85...	40.0-50.0	1.80	25*28.6*28.6	R500	WR19	FUGP	Cu
VT620WCA1.85...	55.0-65.0	1.80	25*19.1*19.1	R620	WR16	FUGP	Cu

*Indicates Model Number. See Ordering Information for complete part number.

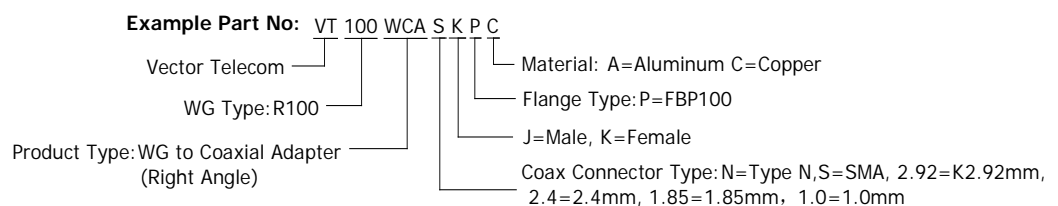
1.0mm Waveguide to Coaxial Adapters

【Specifications】

Model No*	Freq Range (GHz)	VSWR (Max)	Dimensions L*B*A (mm)	WG Type		Flange	Material
				IEC	EIA		
VT740WCA1.0...	66.0-86.0	1.80	20*19.1*19.1	R740	WR12	FUGP	Cu
VT900WCA1.0...	90.0-100.0	1.80	25*19.1*19.1	R900	WR10	FUGP	Cu

*Indicates Model Number. See Ordering Information for complete part number.

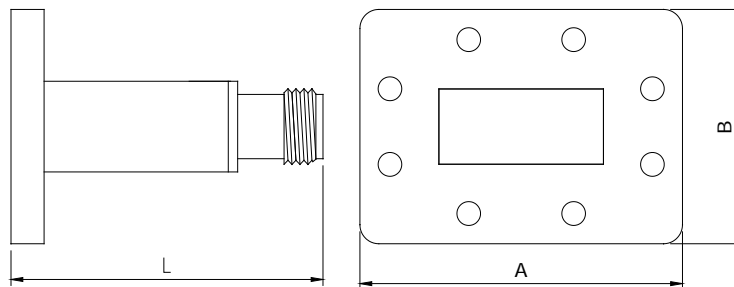
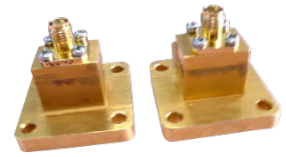
【Ordering Information】



- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat
- Standard unit provided not sealed pressure tight unless otherwise specified

6.1.2 Waveguide to Coaxial Adapter (End-launch)

Vector Telecom manufactures End-launch Waveguide to Coaxial Adapters covering a full frequency range for Rectangular Waveguides, with multiple flange and coaxial connector types and configuration available. For more information feel free to call us and discuss your needs with one of our sales engineers.



【Specifications】

Model No*	Freq Range (GHz)	VSWR (Max)	Connector Type	Dimensions L*B*A (mm)	WG Type		Flange	Material
					IEC	EIA		
VT22WECAN...	1.72-2.61	1.25	N	128.7*106*161	R22	WR430	FDP/FDM	Al/Cu
VT22WECAS...	1.72-2.61	1.25	SMA	113.4*106*161	R22	WR430	FDP/FDM	Al/Cu
VT26WECAN...	2.17-3.30	1.25	N	118.7*95*138	R26	WR340	FDP/FDM	Al/Cu
VT32WECAN...	2.60-3.95	1.25	N	108.7*76*114	R32	WR284	FDP/FDM	Al/Cu
VT40WECAN...	3.22-4.90	1.25	N	94.7*70*98	R40	WR229	FDP/FDM	Al/Cu
VT48WECAN...	3.94-5.99	1.25	N	74.7*63*89	R48	WR187	FDP/FDM	Al/Cu
VT48WECAS...	3.94-5.99	1.25	SMA	78.4*63*89	R48	WR187	FDP/FDM	Al/Cu
VT58WECAN...	4.64-7.05	1.25	N	72.4*62*81	R58	WR159	FDP/FDM	Al/Cu
VT70WECAN...	5.38-8.17	1.25	N	68.8*49*68	R70	WR137	FDP/FDM	Al/Cu
VT84WECAN...	6.57-9.99	1.25	N	58.8*48*48	R84	WR112	FDP/FBM/FBE	Al/Cu
VT84WECAS...	6.57-9.99	1.25	SMA	49.5*48*48	R84	WR112	FDP/FBM/FBE	Al/Cu
VT100WECAN...	8.20-12.40	1.25	N	49.3*41*41	R100	WR90	FDP/FBM/FBE	Al/Cu
VT100WECAS...	8.20-12.40	1.25	SMA	40*41*41	R100	WR90	FDP/FBM/FBE	Al/Cu
VT120WECAN...	9.84-15.0	1.25	N	46.3*38*38	R120	WR75	FDP/FBM/FBE	Al/Cu
VT120WECAS...	9.84-15.0	1.25	SMA	37*38*38	R120	WR75	FDP/FBM/FBE	Al/Cu
VT140WECAN...	11.9-18.0	1.25	N	43.3*33*33	R140	WR62	FDP/FBM/FBE	Al/Cu
VT140WECAS...	11.9-18.0	1.25	SMA	34*33*33	R140	WR62	FDP/FBM/FBE	Al/Cu
VT180WECAS...	14.5-22.0	1.25	SMA	25*33*33	R180	WR51	FDP/FBM/FBE	Al/Cu

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Adapters



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Model No*	Freq Range (GHz)	VSWR (Max)	Connector Type	Dimensions L*B*A (mm)	WG Type		Flange	Material
					IEC	EIA		
VT220WECAS...	17.6-26.7	1.35	SMA	17.5*22*22	R220	WR42	FBP/FBM/FBE	Al/Cu
VT220WECAK...	17.6-26.7	1.50	V2.4mm	18*22*22	R220	WR42	FBP/FBM/FBE	Al/Cu
VT220WECAV...	17.6-26.7	1.50	K2.92mm	18*22*22	R220	WR42	FBP/FBM/FBE	Al/Cu
VT260WECAK...	21.7-33.0	1.50	K2.92mm	21*21*21	R260	WR34	FBP/FBM/FBE	Al/Cu
VT260WECAV...	21.7-33.0	1.50	V2.4mm	21*21*21	R260	WR34	FBP/FBM/FBE	Al/Cu
VT320WECAK...	26.3-40.0	1.50	SMA	16*19*19	R320	WR28	FBP/FBM/FBE	Al/Cu
VT320WECAV...	26.3-40.0	1.50	V2.4mm	16.5*19*19	R320	WR28	FBP/FBM/FBE	Al/Cu
VT400WECAV	33.0-50.0	1.50	V2.4mm	8.8*28.6*28.6	R400	WR22	FUGP	Cu
VT500WECAV	40.0-50.0	1.6	V2.4mm	7*28.6*28.6	R500	WR19	FUGP	Cu
VT500WECA1.85	40.0-50.0	1.6	1.85mm	7*28.6*28.6	R500	WR19	FUGP	Cu
VT620WECA1.85	55.0-65.0	1.6	1.85mm	7*19.1*19.1	R620	WR15	FUGP	Cu
VT740WECA1.0	66.0-86.0	1.8	1.0mm	6*19.1*19.1	R740	WR12	FUGP	Cu
VT900WECA1.0	90.0-100.0	1.8	1.0mm	6*19.1*19.1	R900	WR10	FUGP	Cu

*Indicates Model Number. See Ordering Information for complete part number.

【Ordering Information】

Example Part No: VT 100 WECA S K P C

Vector Telecom ———
 WG Type: R100 ———
 Product Type: WG To Coaxial Adapter (End-launch) ———

Material: A=Aluminum, C=Copper
 Flange Type: P=FBP100
 J=Male, K=Female
 Coax Connector Type: N=Type N, S=SMA,
 2.92 =K 2.92mm, 2.4=2.4mm, 1.85=1.85mm, 1.0=1.0mm

- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat
- Standard unit provided not sealed pressure tight unless otherwise specified

6.1.3 High Power Waveguide to Coaxial Adapter

Vector Telecom manufactures High Power Waveguide to Coaxial Adapters up to 5kW for Rectangular Waveguides, with multiple flange and coaxial connector types and configurations available. For more information feel free to call us and discuss your needs with one of our sales engineers.





Vector Telecom

Section 1

Waveguide
Components

06

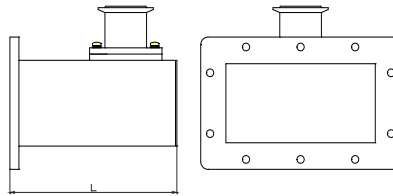
Adapters



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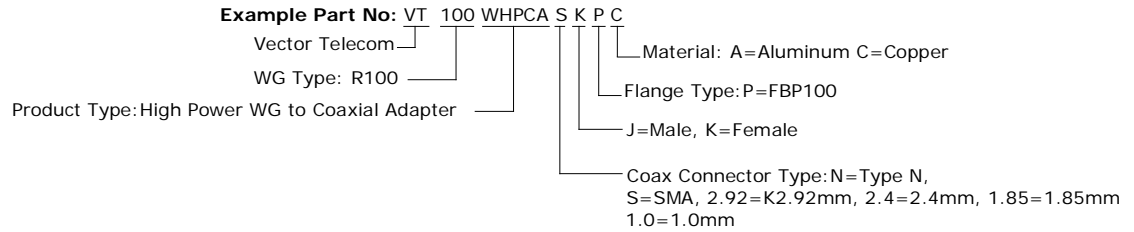


【Specifications】

Model No*	Freq Range (GHz)	VSWR (Max)	Working Bandwidth	WG Type		IL (dB)	Connector	Avg Power (W)	Flange	Material
				IEC	EIA					
VT14WHPCA...	1.13-1.73	1.15	≤15%	R14	WR650	≤0.2	1'5/8 Female	≤5000	FDP	Al
VT14WHPCA...	1.13-1.73	1.15	≤15%	R14	WR650	≤0.2	5339 Female	≤5000	FDP	Al
VT14WHPCAL...	1.13-1.73	1.15	≤15%	R14	WR650	≤0.2	L29 Female	≤2000	FDP	Al
VT14WHPCAL...	1.13-1.73	1.15	≤15%	R14	WR650	≤0.2	L27 Female	≤2000	FDP	Al
VT18WHPCA...	1.45-2.2	1.15	≤15%	R18	WR510	≤0.2	1'5/8 Female	≤4000	FDP	Al
VT18WHPCA...	1.45-2.2	1.15	≤15%	R18	WR510	≤0.2	5339 Female	≤4000	FDP	Al
VT18WHPCAL...	1.45-2.2	1.15	≤15%	R18	WR510	≤0.2	L27 Female	≤2000	FDP	Al
VT22WHPCA...	1.72-2.61	1.15	≤15%	R22	WR430	≤0.2	1'5/8 Female	≤3000	FDP	Al
VT22WHPCA...	1.76-2.61	1.15	≤15%	R22	WR430	≤0.2	5339 Female	≤3000	FDP	Al
VT22WHPCAL...	1.72-2.61	1.15	≤15%	R22	WR430	≤0.2	L29 Female	≤2000	FDP	Al
VT22WHPCAL...	1.72-2.61	1.15	≤15%	R22	WR430	≤0.2	L27 Female	≤2000	FDP	Al
VT26WHPCA...	2.17-3.30	1.15	≤15%	R26	WR340	≤0.2	L29 Female	≤2000	FDP	Al
VT26WHPCAL...	2.17-3.3	1.15	≤15%	R26	WR340	≤0.2	L27 Female	≤2000	FDP	Al
VT32WHPCAL...	2.60-3.95	1.15	≤15%	R32	WR284	≤0.2	L29 Female	≤1000	FDP	Al
VT32WHPCAL...	2.60-3.95	1.15	≤15%	R32	WR284	≤0.2	L27 Female	≤1000	FDP	Al
VT40WHPCAL...	3.22-4.90	1.15	≤15%	R40	WR229	≤0.2	L29 Female	≤1000	FDP	Al
VT40WHPCAL...	3.22-4.90	1.15	≤15%	R40	WR229	≤0.2	L27 Female	≤1000	FDP	Al
VT40WHPCAN...	3.22-4.90	1.25	≤15%	R40	WR229	≤0.2	N Female	≤200	FDP	Al
VT48WHPCAL...	3.94-5.99	1.15	≤15%	R48	WR187	≤0.2	L29 Female	≤1000	FDP	Al
VT48WHPCAL...	3.94-5.99	1.15	≤15%	R48	WR187	≤0.2	L27 Female	≤1000	FDP	Al
VT48WHPCAN...	3.94-5.99	1.25	≤15%	R48	WR187	≤0.2	N Female	≤200	FDP	Al
VT58WHPCAN...	4.64-7.05	1.25	≤15%	R58	WR159	≤0.2	N Female	≤200	FDP	Al
VT70WHPCAN...	5.38-8.17	1.25	≤15%	R70	WR137	≤0.3	N Female	≤200	FDP	Al
VT84WHPCAN...	6.57-9.99	1.25	≤15%	R84	WR112	≤0.3	N Female	≤200	FDP	Cu
VT100WHPCAN...	8.20-12.4	1.25	≤15%	R100	WR90	≤0.3	N Female	≤200	FDP	Cu
VT120WHPCAN...	9.84-15.0	1.25	≤15%	R120	WR75	≤0.3	N Female	≤200	FDP	Cu
VT140WHPCAN...	11.9-18.0	1.15	≤15%	R140	WR62	≤0.3	N Female	≤200	FDP	Cu

*Indicates Model Number. See Ordering Information for complete part number.

【Ordering Information】

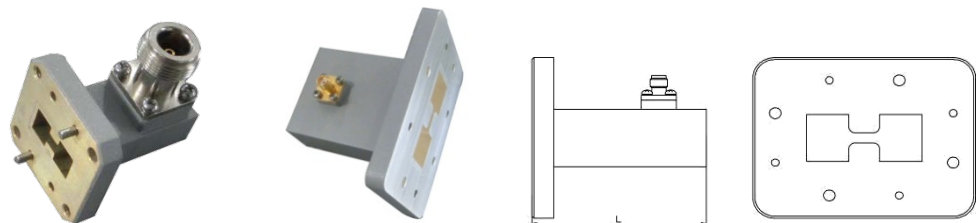


- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat
- Standard unit provided not sealed pressure tight unless otherwise specified

6.2 Double Ridged Waveguide to Coaxial Adapter

Vector Telecom manufactures Waveguide to Coaxial Adapters covering a full frequency range for Double-Ridged Waveguides, with multiple flange and coaxial connector types and configurations available. For more information feel free to call us and discuss your needs with one of our sales engineers.

6.2.1 Double Ridged Waveguide To Coaxial Adapter (Right Angle)



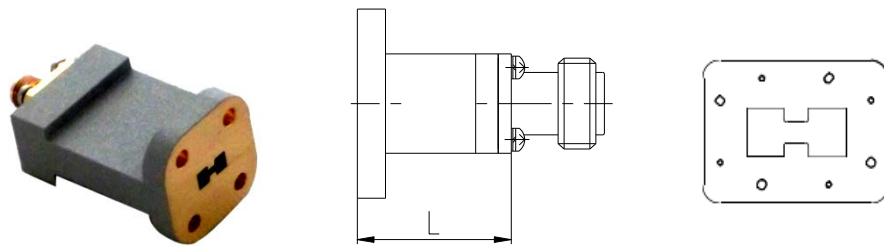
【Specifications】

Model No*	Freq Range (GHz)	VSWR (Max)	Length L(mm)	WG Type EIA	IL (dB)	Connector	Avg Power (W)	Flange	Material
VT84DRWCAN...	0.84-2	1.50	175	WRD84	≤0.5	N Female	800	FP	Al
VT150DRWCAN...	1.5-3.6	1.50	150	WRD150	≤0.5	N Female	800	FP	Al
VT200DRWCAN...	2-4.8	1.50	101	WRD200	≤0.5	N Female	500	FP	Al
VT250DRWCAN...	2.6-7.8	1.50	70	WRD250	≤0.5	N Female	500	FP	Al
VT350DRWCAN...	3.5-8.2	1.50	60	WRD350	≤0.5	N Female	500	FP	Al
VT475DRWCAN...	4.75-11	1.50	50	WRD475	≤0.5	N Female	300	FP	Al
VT500DRWCAS...	5-18	1.50	45	WRD500	≤0.5	SMA Female	300	FP	Al
VT580DRWCAS...	5.8-16	1.50	45	WRD580	≤0.5	SMA Female	300	FP	Al
VT650DRWCAS...	6.5-18	1.50	45	WRD650	≤0.5	SMA Female	100	FP	Cu

Model No*	Freq Range (GHz)	VSWR (Max)	Length L(mm)	WG Type EIA	IL (dB)	Connector	Avg Power (W)	Flange	Material
VT750DRWCAS...	7.5-18	1.50	40	WRD750	≤0.5	SMA Female	100	FP	Cu
VT700DRWCAS...	7-18.5	1.50	40	WRD700	≤0.5	SMAFemale	100	FP	Cu
VT1100DRWCAK..	11-26.5	1.50	35	WRD1100	≤0.5	2.92 Female	50	FP	Cu
VT1800DRWCAK..	18-40	2.00	27	WRD1800	≤0.5	2.92 Female	50	FP	Cu

*Indicates Model Number. See Ordering Information for complete part number.

6.2.2 Double Ridged Waveguide to Coaxial Adapter (End Launch)



【Specifications】

Model No*	Freq Range (GHz)	VSWR (Max)	Length L(mm)	WG Type EIA	IL (dB)	Connector	Avg Power (W)	Flange	Material
VT84DRWECAN...	0.84-2	1.50	300	WRD84	≤0.5	N Female	800	FP	Al
VT150DRWECAN	1.5-3.6	1.50	160	WRD150	≤0.5	N Female	800	FP	Al
VT200DRWECAN	2-4.8	1.50	120	WRD200	≤0.5	N Female	500	FP	Al
VT250DRWECAN	2.6-7.8	1.50	85	WRD250	≤0.5	N Female	500	FP	Al
VT350DRWECAN	3.5-8.2	1.50	80	WRD350	≤0.5	N Female	500	FP	Al
VT475DRWECAN	4.75-11	1.50	50	WRD475	≤0.5	N Female	300	FP	Al
VT500DRWECAS	5-18	1.50	45	WRD500	≤0.5	SMA Female	300	FP	Al
VT580DRWECAS	5.8-16	1.50	40	WRD580	≤0.5	SMA Female	300	FP	Al
VT650DRWECAS	6.5-18	1.50	33.7	WRD650	≤0.5	SMA Female	100	FP	Cu
VT750DRWECAS	7.5-18	1.50	33.7	WRD750	≤0.5	SMA Female	100	FP	Cu
VT700DRWECAS	7-18.5	1.50	33	WRD700	≤0.5	SMA Female	50	FP	Cu
VT1100DRWECK	11-26.5	1.50	30	WRD110	≤0.5	2.92Female	30	FP	Cu
VT1800DRWECK	18-40	2.00	36.8	WRD180	≤0.8	2.92Female	30	FP	Cu

*Indicates Model Number. See Ordering Information for complete part number.

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Adapters



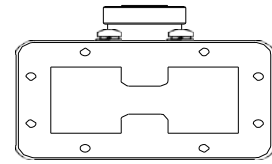
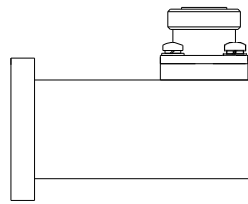
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6.2.3 Double Ridged High Power Waveguide to Coaxial Adapter



【Specifications】

Model No*	Freq Range (GHz)	VSWR (Max)	WG Type EIA	IL (dB)	Connector	Avg Power (W)	Flange	Material
VT84DRWHPCA...	0.84-2	1.50	WRD84	≤0.5	5339Female	1000	FP	Al
VT84DRWHPCAL...	0.84-2	1.50	WRD84	≤0.5	L29Female	500	FP	Al
VT84DRWHPCAL...	0.84-2	1.50	WRD84	≤0.5	L27Female	500	FP	Al
VT84DRWHPCAN...	0.84-2	1.50	WRD84	≤0.5	N Female	300	FP	Al
VT150DRWHPCAN...	1.5-3.6	1.50	WRD150	≤0.5	N Female	300	FP	Al
VT200DRWHPCAN...	2-4.8	1.50	WRD200	≤0.5	N Female	300	FP	Al
VT250DRWHPCAN...	2.6-7.8	1.50	WRD250	≤0.5	N Female	300	FP	Al
VT350DRWHPCAN...	3.5-8.2	1.50	WRD350	≤0.5	N Female	200	FP	Al
VT475DRWHPCAN...	4.75-11	1.50	WRD475	≤0.5	N Female	200	FP	Al
VT500DRWHPCAN...	5-18	1.50	WRD500	≤0.5	N Female	200	FP	Al
VT580DRWHPCAN...	5.8-16	1.50	WRD580	≤0.5	N Female	200	FP	Al
VT650DRWHPCAN...	6.5-18	1.50	WRD650	≤0.5	N Female	200	FP	Cu
VT750DRWHPCAN...	7.5-18	1.50	WRD750	≤0.8	N Female	200	FP	Cu

*Indicates Model Number. See Ordering Information for complete part number.

【Ordering Information】

Example Part No: VT 650 DRWCA S K P C

Vector Telecom — VT
 WG Type: WRD650 — 650
 Product Type: Double WG to Coaxial Adapter (Right Angle) — DRWCA
 Coax Connector Type: N=Type N, S=SMA 2.92=K2.92mm, 2.4=2.4mm, L29=7/16 — S
 Flange Type: P=FBP100 — P
 Material: A=Aluminum C=Copper — C
 J=Male, K=Female — K

Code	Description
DRWCA	Double Ridged Waveguide to Coaxial Adapter (Right Angle)
DRWECA	Double Ridged Waveguide to Coaxial Adapter (End-launch)
DRWHPCA	Double Ridged High Power Waveguide to Coaxial Adapter

- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat



6.3 Circular Waveguide to Coaxial Adapter

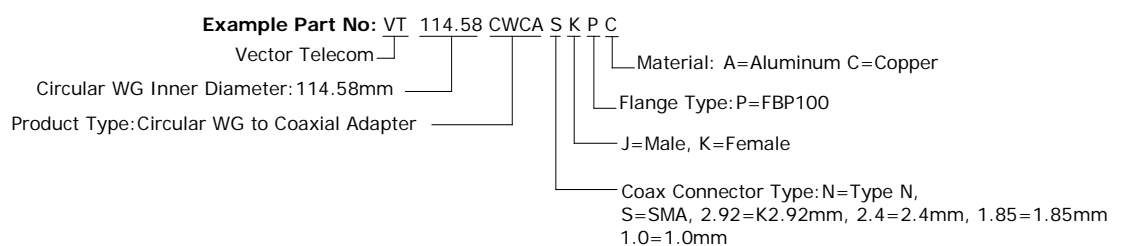


【Ordering Information】

Model No*	Freq Range (GHz)	VSWR (Max)	Working Bandwidth	Inner Diameter Φ (mm)	Connector
VT114.58CWCAN...	1.76-2.42	1.25	$\leq 20\%$	≤ 0.5	N Female
VT97.87CWCAN...	2.1-2.8	1.25	$\leq 20\%$	≤ 0.5	N Female
VT83.62CWCAN...	2.45-3.3	1.25	$\leq 20\%$	≤ 0.5	N Female
VT71.42CWCAN...	2.83-3.88	1.25	$\leq 20\%$	≤ 0.5	N Female
VT51.99CWCAN...	3.9-5.3	1.25	$\leq 20\%$	≤ 0.5	N Female
VT44.45CWCAN...	4.55-6.23	1.25	$\leq 20\%$	≤ 0.8	N Female
VT38.1CWCAN...	5.3-7.3	1.25	$\leq 20\%$	38.1	N Female
VT32.537CWCAN...	6.3-8.5	1.25	$\leq 20\%$	32.537	N Female
VT27.788CWCAN...	7.3-9.5	1.25	$\leq 20\%$	27.788	N Female
VT23.825CWCAN...	8.5-11.5	1.25	$\leq 20\%$	23.825	N Female
VT17.415CWCAS...	11.6-15.9	1.25	$\leq 20\%$	17.415	SMA Female
VT15.088CWCAS...	13.4-18.4	1.25	$\leq 20\%$	15.088	SMA Female
VT12.7CWCAS...	15.9-21.8	1.25	$\leq 20\%$	12.7	SMA Female
VT9.525CWCAK...	21.2-29.1	1.25	$\leq 20\%$	9.525	2.92 Female
VT8.331CWCAK...	24.3-33.2	1.30	$\leq 15\%$	8.331	2.92 Female
VT7.137CWCAK...	28.3-38.8	1.30	$\leq 15\%$	7.137	2.92 Female

*Indicates Model Number. See Ordering Information for complete part number.

【Ordering Information】

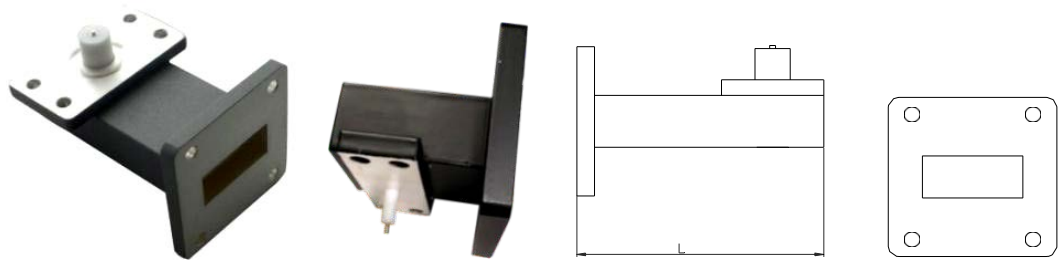


- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat
- Standard unit provided not sealed pressure tight unless otherwise specified.



6.4 Waveguide to Microstrip Adapter

6.4.1 Waveguide to Microstrip Adapter (Right Angle)

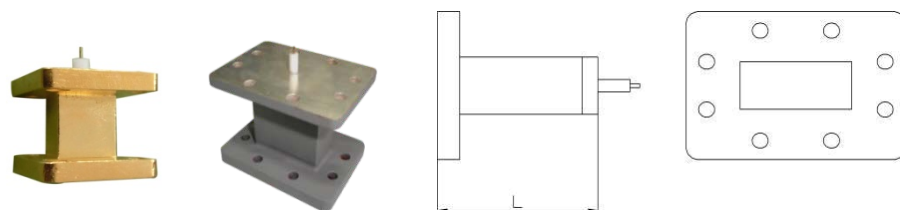


【Specifications】

Model No*	WG Type EIA	Freq Range (GHz)	Working Bandwidth	VSWR (Max)	IL (dB)	Avg Power (W)	Length L (mm)	Flange	Material
VT32WMI	WR284	2.60-3.95	≤15%	1.25	≤0.2	100	80	FDP	Al
VT40WMI	WR229	3.22-4.90	≤15%	1.25	≤0.2	100	70	FDP	Al
VT48WMI	WR187	3.94-5.99	≤15%	1.25	≤0.2	100	70	FDP	Al
VT58WMI	WR159	4.64-7.05	≤15%	1.25	≤0.2	100	60	FDP	Al
VT70WMI	WR137	5.38-8.17	≤15%	1.25	≤0.2	100	50	FDP	Cu
VT84WMI	WR112	6.57-9.99	≤15%	1.25	≤0.2	50	45	FBP	Cu
VT100WMI	WR90	8.20-12.40	≤15%	1.25	≤0.2	50	50	FBP	Cu
VT120WMI	WR75	9.84-15.0	≤15%	1.25	≤0.2	50	40	FBP	Cu
VT140WMI	WR62	11.9-18.0	≤15%	1.25	≤0.2	50	40	FBP	Cu
VT180WMI	WR51	14.5-22.0	≤15%	1.25	≤0.2	50	35	FBP	Cu
VT220WMI	WR42	17.6-26.7	≤15%	1.50	≤0.3	30	30	FBP	Cu
VT260WMI	WR34	21.7-33.0	≤15%	1.50	≤0.5	30	26	FBP	Cu
VT320WMI	WR28	26.5-40.0	≤15%	1.50	≤0.5	30	26	FBP	Cu

*Indicates Model Number. See Ordering Information for complete part number.

6.4.2 Waveguide to Microstrip Adapter (End Launch)



【Specifications】

Model No*	WG Type EIA	Freq Range (GHz)	VSWR (Max)	IL(dB)	Avg Power (W)	Length L(mm)	Flange	Material
VT32WEMI	WR284	2.60-3.95	1.25	≤0.2	100	82	FDP	Al
VT40WEMI	WR229	3.22-4.90	1.25	≤0.2	100	68	FDP	Al

Model No*	WG Type EIA	Freq Range (GHz)	VSWR (Max)	IL(dB)	Avg Power (W)	Length L(mm)	Flange	Material
VT48WEMI	WR187	3.94-5.99	1.25	≤0.2	100	58	FDP	Al
VT58WEMI	WR159	4.64-7.05	1.25	≤0.2	100	56	FDP	Al
VT70WEMI	WR137	5.38-8.17	1.25	≤0.2	100	50	FDP	Cu
VT84WEMI	WR112	6.57-9.99	1.25	≤0.2	50	40	FBP	Cu
VT100WEMI	WR90	8.20-12.40	1.25	≤0.2	50	30.5	FBP	Cu
VT120WEMI	WR75	9.84-15.0	1.25	≤0.2	50	21	FBP	Cu
VT140WEMI	WR62	11.9-18.0	1.25	≤0.2	50	24	FBP	Cu
VT180WEMI	WR51	14.5-22.0	1.25	≤0.2	50	25	FBP	Cu
VT220WEMI	WR42	17.6-26.7	1.50	≤0.3	30	18	FBP	Cu
VT260WEMI	WR34	21.7-33.0	1.50	≤0.5	30	21	FBP	Cu
VT320WEMI	WR28	26.5-40.0	1.50	≤0.5	30	16	FBP	Cu

*Indicates Model Number. See Ordering Information for complete part number.

【Ordering Information】

Example Part No: VT 32 WMI

Vector Telecom
WG Type:R32

Product Type: WMI: WG to Microstrip Adapter (Right Angle)
WEMI: WG to Microstrip Adapter (End Launch)

- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat

06

Adapters



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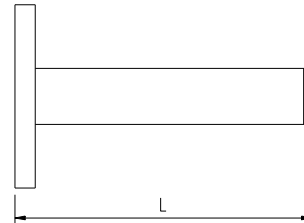
Email: sales@vectortele.com



7 Waveguide Termination (Dummy Load)

7.1 Waveguide Termination

Vector Telecom's standard product line of low power terminations utilizes precision conical load elements for optimum electrical performance. This series of terminations is designed for low power input. Normally VSWR is less than 1.03 over the full waveguide bandwidth.



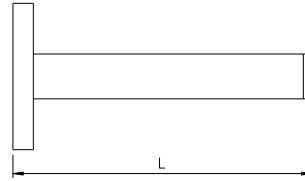
【Specifications】

Model No*	WG Type EIA	Freq Range (GHz)	VSWR (Max)	Sliding Distance (mm)	Flange	Material
VT14WSL...	WR650	1.13-1.73	1.05	≥70	FDP	Cu
VT18WSL...	WR510	1.45-2.20	1.05	≥55	FDP	Cu
VT22WSL...	WR430	1.72-2.61	1.05	≥45	FDP	Cu
VT26WSL...	WR340	2.17-3.30	1.05	≥36	FDP	Cu
VT32WSL...	WR284	2.60-3.95	1.05	≥30	FDP	Cu
VT40WSL...	WR229	3.22-4.90	1.05	≥25	FDP	Cu
VT48WSL...	WR187	3.94-5.99	1.05	≥20	FDP	Cu
VT58WSL...	WR159	4.64-7.05	1.05	≥17	FDP	Cu
VT70WSL...	WR137	5.38-8.17	1.05	≥15	FDP	Cu
VT84WSL...	WR112	6.57-9.99	1.05	≥24	FBP	Cu
VT100WSL...	WR90	8.20-12.40	1.05	≥20	FBP	Cu
VT120WSL...	WR75	9.84-15.0	1.05	≥16	FBP	Cu
VT140WSL...	WR62	11.9-18.0	1.05	≥13	FBP	Cu
VT180WSL...	WR51	14.5-22.0	1.05	≥11	FBP	Cu
VT220WSL...	WR42	17.6-26.7	1.05	≥9	FBP	Cu
VT260WSL...	WR34	21.7-33.0	1.05	≥7.2	FBP	Cu
VT320WSL...	WR28	26.5-40.0	1.05	≥9	FBP	Cu
VT400WSL...	WR22	32.9-50.1	1.15	≥2	FUGP	Cu
VT500WSL...	WR19	39.2-59.6	1.15	≥4	FUGP	Cu
VT620WSL...	WR15	49.8-75.8	1.15	≥3.3	FUGP	Cu
VT740WSL...	WR12	60.5-91.9	1.15	≥2.6	FUGP	Cu
VT900WSL...	WR10	73.8-110	1.15	≥2.1	FUGP	Cu

*Indicates Model Number. See Ordering Information for complete part number.



7.2 Small Size Waveguide Termination



【Specifications】

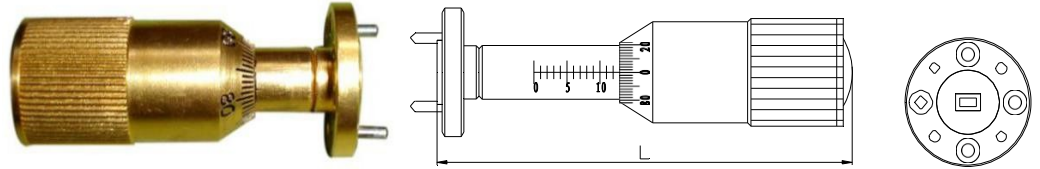
Model No*	WG Type EIA	Freq Range (GHz)	Working Bandwidth	VSWR (Max)	Length L (mm)	Flange	Material
VT3WLS...	WR2300	0.32-0.49	10%	1.07	300-600	FDP	Al
VT4WLS...	WR2100	0.35-0.53	10%	1.07	250-550	FDP	Al
VT5WLS...	WR1800	0.41-0.62	10%	1.07	250-500	FDP	Al
VT6WLS...	WR1500	0.49-0.75	10%	1.07	200-400	FDP	Al
VT8WLS...	WR1150	0.64-0.98	10%	1.07	170-350	FDP	Al
VT9WLS...	WR975	0.75-1.15	10%	1.07	150-300	FDP	Al
VT12WLS...	WR770	0.96-1.46	10%	1.05	120-250	FDP	Al
VT14WLS...	WR650	1.13-1.73	10%	1.05	100-200	FDP	Al
VT18WLS...	WR510	1.45-2.20	10%	1.05	70-150	FDP	Al
VT22WLS...	WR430	1.72-2.61	10%	1.05	60-130	FDP	Al
VT26WLS...	WR340	2.17-3.30	10%	1.05	50-100	FDP	Al
VT32WLS...	WR284	2.60-3.95	10%	1.05	40-90	FDP	Al
VT40WLS...	WR229	3.22-4.90	10%	1.05	40-80	FDP	Al
VT48WLS...	WR187	3.94-5.99	10%	1.05	40-70	FDP	Al
VT58WLS...	WR159	4.64-7.05	10%	1.05	30-60	FDP	Al
VT70WLS...	WR137	5.38-8.17	10%	1.05	25-50	FDP	Cu
VT84WLS...	WR112	6.57-9.99	10%	1.05	20-40	FBP	Cu
VT100WLS...	WR90	8.20-12.40	10%	1.05	15-30	FBP	Cu
VT120WLS...	WR75	9.84-15.0	10%	1.05	15-30	FBP	Cu
VT140WLS...	WR62	11.9-18.0	10%	1.05	10-20	FBP	Cu
VT180WLS...	WR51	14.5-22.0	10%	1.05	10-20	FBP	Cu
VT220WLS...	WR42	17.6-26.7	10%	1.05	10-18	FBP	Cu
VT260WLS...	WR34	21.7-33.0	10%	1.07	10-18	FBP	Cu
VT320WLS...	WR28	26.5-40.0	10%	1.07	8-15	FBP	Cu
VT400WLS...	WR22	32.9-50.1	10%	1.10	7-15	FUGP	Cu
VT500WLS...	WR19	39.2-59.6	10%	1.10	6-12	FUGP	Cu
VT620WLS...	WR15	49.8-75.8	10%	1.10	6-12	FUGP	Cu
VT740WLS...	WR12	60.5-91.9	10%	1.15	5-10	FUGP	Cu
VT900WLS...	WR10	73.8-110	10%	1.15	5-10	FUGP	Cu

*Indicates Model Number. See Ordering Information for complete part number.



7.3 Waveguide Sliding Termination

Vector Telecom's standard product line of waveguide sliding termination used in microwave precision measurement or system. The sliding distance of sliding load can be divided into 180° and 360°.



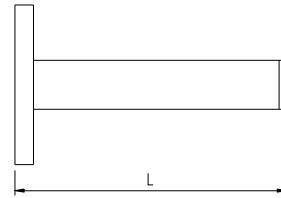
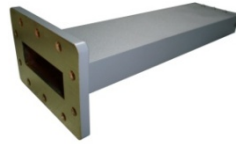
【Specifications】

Model No*	WG Type EIA	Freq Range (GHz)	VSWR (Max)	Sliding Distance (mm)	Flange	Material
VT14WSL...	WR650	1.13-1.73	1.05	≥70	FDP	Cu
VT18WSL...	WR510	1.45-2.20	1.05	≥55	FDP	Cu
VT22WSL...	WR430	1.72-2.61	1.05	≥45	FDP	Cu
VT26WSL...	WR340	2.17-3.30	1.05	≥36	FDP	Cu
VT32WSL...	WR284	2.60-3.95	1.05	≥30	FDP	Cu
VT40WSL...	WR229	3.22-4.90	1.05	≥25	FDP	Cu
VT48WSL...	WR187	3.94-5.99	1.05	≥20	FDP	Cu
VT58WSL...	WR159	4.64-7.05	1.05	≥17	FDP	Cu
VT70WSL...	WR137	5.38-8.17	1.05	≥15	FDP	Cu
VT84WSL...	WR112	6.57-9.99	1.05	≥24	FBP	Cu
VT100WSL...	WR90	8.20-12.40	1.05	≥20	FBP	Cu
VT120WSL...	WR75	9.84-15.0	1.05	≥16	FBP	Cu
VT140WSL...	WR62	11.9-18.0	1.05	≥13	FBP	Cu
VT180WSL...	WR51	14.5-22.0	1.05	≥11	FBP	Cu
VT220WSL...	WR42	17.6-26.7	1.05	≥9	FBP	Cu
VT260WSL...	WR34	21.7-33.0	1.05	≥7.2	FBP	Cu
VT320WSL...	WR28	26.5-40.0	1.05	≥9	FBP	Cu
VT400WSL...	WR22	32.9-50.1	1.15	≥2	FUGP	Cu
VT500WSL...	WR19	39.2-59.6	1.15	≥4	FUGP	Cu
VT620WSL...	WR15	49.8-75.8	1.15	≥3.3	FUGP	Cu
VT740WSL...	WR12	60.5-91.9	1.15	≥2.6	FUGP	Cu
VT900WSL...	WR10	73.8-110	1.15	≥2.1	FUGP	Cu

*Indicates Model Number. See Ordering Information for complete part number.

7.4 Waveguide Unmatched Termination

Vector Telecom offers a full waveguide series of waveguide unmatched load. Normally VSWR value selection is 1.2-2.0, and accuracy is $VSWR \pm 0.02$ over the full waveguide bandwidth.

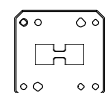


【Specifications】

Model No*	WG Type EIA	Freq Range (GHz)	VSWR (Max)	Length L (mm)	Flange	Material
VT5WUL...	WR1800	0.41-0.62	1.2/1.5/2.0	1600	FDP	Al
VT6WUL...	WR1500	0.49-0.75	1.2/1.5/2.0	1300	FDP	Al
VT8WUL...	WR1150	0.64-0.98	1.2/1.5/2.0	1100	FDP	Al
VT9WUL...	WR975	0.75-1.15	1.2/1.5/2.0	660	FDP	Al
VT12WUL...	WR770	0.96-1.46	1.2/1.5/2.0	680	FDP	Al
VT14WUL...	WR650	1.13-1.73	1.2/1.5/2.0	570	FDP	Al
VT18WUL...	WR510	1.45-2.20	1.2/1.5/2.0	550	FDP	Al
VT22WUL...	WR430	1.72-2.61	1.2/1.5/2.0	470	FDP	Al
VT26WUL...	WR340	2.17-3.30	1.2/1.5/2.0	350	FDP	Al
VT32WUL...	WR284	2.60-3.95	1.2/1.5/2.0	278	FDP	Al
VT40WUL...	WR229	3.22-4.90	1.2/1.5/2.0	275	FDP	Al
VT48WUL...	WR187	3.94-5.99	1.2/1.5/2.0	170	FDP	Al
VT58WUL...	WR159	4.64-7.05	1.2/1.5/2.0	135	FDP	Al
VT70WUL...	WR137	5.38-8.17	1.2/1.5/2.0	180	FDP	Cu
VT84WUL...	WR112	6.57-9.99	1.2/1.5/2.0	100	FBP	Cu
VT100WUL...	WR90	8.20-12.40	1.2/1.5/2.0	100	FBP	Cu
VT120WUL...	WR75	9.84-15.0	1.2/1.5/2.0	90	FBP	Cu
VT140WUL...	WR62	11.9-18.0	1.2/1.5/2.0	90	FBP	Cu
VT180WUL...	WR51	14.5-22.0	1.2/1.5/2.0	75	FBP	Cu
VT220WUL...	WR42	17.6-26.7	1.2/1.5/2.0	60	FBP	Cu
VT260WUL...	WR34	21.7-33.0	1.2/1.5/2.0	55	FBP	Cu
VT320WUL...	WR28	26.5-40.0	1.2/1.5/2.0	40	FBP	Cu
VT400WUL...	WR22	32.9-50.1	1.2/1.5/2.0	40	FUGP	Cu
VT500WUL...	WR19	39.2-59.6	1.2/1.5/2.0	40	FUGP	Cu
VT620WUL...	WR15	49.8-75.8	1.2/1.5/2.0	40	FUGP	Cu
VT740WUL...	WR12	60.5-91.9	1.2/1.5/2.0	38	FUGP	Cu
VT900WUL...	WR10	73.8-110	1.2/1.5/2.0	35	FUGP	Cu

*Indicates Model Number. See Ordering Information for complete part number.

7.5 Double-Ridged Waveguide Termination





【Specifications】

Model No*	WG Type EIA	Freq Range (GHz)	Avg Power (W)	VSWR (Max)	Length L(mm)	Flange	Material
VT84DRWL...	WRD84	0.84-2	5	1.15	720	FP	Al
VT150DRWL...	WRD150	1.5-3.6	5	1.15	650	FP	Al
VT200DRWL...	WRD200	2-4.8	5	1.15	340	FP	Al
VT250DRWL...	WRD250	2.6-7.8	5	1.15	300	FP	Al
VT350DRWL...	WRD350	3.5-8.2	5	1.15	260	FP	Al
VT475DRWL...	WRD475	4.75-11	2	1.15	200	FP	Al
VT500DRWL...	WRD500	5-18	2	1.15	210	FP	Al
VT580DRWL...	WRD580	5.8-16	2	1.15	210	FP	Al
VT650DRWL...	WRD650	6.5-18	1	1.15	102	FP	Cu
VT750DRWL...	WRD750	7.5-18	1	1.15	140	FP	Cu
VT700DRWL...	WRD700	7-18.5	1	1.15	200	FP	Cu
VT1100DRWL...	WRD110	11-26.5	1	1.15	150	FP	Cu
VT1800DRWL...	WRD180	18-40	1	1.15	109	FP	Cu

* Indicates Model Number. See Ordering Information for complete part number.

【Ordering Information】

Example Part No: VT 320 DRWWL 1.03 P C

Vector Telecom ——— |
 WG Type: R320 ——— |
 Product Type: Double Ridged WG Termination ——— |

————— | A=Aluminum C=Copper
 ——— | Flange Type: P=FBP320
 ——— | VSWR: 1.03

Code	Description
WL	Waveguide Termination
DRWL	Double Ridged Waveguide Termination
WSL	Waveguide Sliding Termination
WUL	Waveguide Unmatched Termination
DRWL	Double Ridged Waveguide Termination

- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat

7.6 Circular Waveguide Termination



【Specifications】

Model No*	Freq Range (GHz)	Inner Diameter Φ (mm)	VSWR (Max)	Length L (mm)
VT114.58CWL...	1.76~2.42	114.58	1.15	580
VT97.87CWL...	2.1~2.8	97.87	1.15	470



Model No*	Freq Range (GHz)	Inner Diameter Φ (mm)	VSWR (Max)	Length L (mm)
VT83.62CWL...	2.45~3.3	83.62	1.15	400
VT71.42CWL...	2.83~3.88	71.42	1.15	360
VT51.99CWL...	3.9~5.3	51.99	1.15	300
VT44.45CWL...	4.55~6.23	44.45	1.15	250
VT38.1CWL...	5.3~7.3	38.1	1.15	190
VT32.537CWL...	6.3~8.5	32.537	1.15	170
VT27.788CWL...	7.3~9.5	27.788	1.15	160
VT23.825CWL...	8.5~11.5	23.825	1.15	150
VT17.415CWL...	11.6~15.9	17.415	1.15	140
VT15.088CWL...	13.4~18.4	15.088	1.15	130
VT12.7CWL...	15.9~21.8	12.7	1.15	120
VT9.525CWL...	21.2~29.1	9.525	1.15	100
VT8.331CWL...	24.3~33.2	8.331	1.15	80
VT7.137CWL...	28.3~38.8	7.137	1.15	70
VT5.563CWL...	36.4~49.8	5.563	1.15	65
VT4.369CWL...	46.3~63.5	4.369	1.15	50
VT3.581CWL...	56.6~77.5	3.581	1.15	45
VT3.175CWL...	63.5~87.2	3.175	1.15	45
VT2.388CWL...	84.8~116.0	2.388	1.15	45

*Indicates Model Number. See Ordering Information for complete part number.

【Ordering Information】

Example Part No: VT 12.7 CWL 1.15 C

Vector Telecom ——— |
 Circular WG Inner Diameter: 12.7mm ——— |
 Product Type: Circular WG Termination ——— |
 A=Aluminum C=Copper ——— |
 VSWR: 1.15 ——— |

- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat

7.7 High Power Waveguide Termination



【Specifications】

Model No*	WG Type EIA	Freq Range (GHz)	Avg Power (W)	VSWR (Max)	Flange	Material
VT3WHPL...	WR2300	0.32-0.49	10-4000	1.25	FDP	Al
VT4WHPL...	WR2100	0.35-0.53	10-4000	1.25	FDP	Al



Model No*	WG Type EIA	Freq Range (GHz)	Avg Power (W)	VSWR (Max)	Flange	Material
VT5WHPL...	WR1800	0.41-0.62	10-4000	1.25	FDP	Al
VT6WHPL...	WR1500	0.49-0.75	10-4000	1.25	FDP	Al
VT8WHPL...	WR1150	0.64-0.98	10-4000	1.25	FDP	Al
VT9WHPL...	WR975	0.75-1.15	10-4000	1.25	FDP	Al
VT12WHPL...	WR770	0.96-1.46	10-4000	1.25	FDP	Al
VT14WHPL...	WR650	1.13-1.73	10-4000	1.25	FDP	Al
VT18WHPL...	WR510	1.45-2.20	10-4000	1.25	FDP	Al
VT22WHPL...	WR430	1.72-2.61	10-4000	1.25	FDP	Al
VT26WHPL...	WR340	2.17-3.30	10-4000	1.25	FDP	Al
VT32WHPL...	WR284	2.60-3.95	10-4000	1.25	FDP	Al
VT40WHPL...	WR229	3.22-4.90	10-4000	1.25	FDP	Al
VT48WHPL...	WR187	3.94-5.99	10-4000	1.25	FDP	Al
VT58WHPL...	WR159	4.64-7.05	10-4000	1.25	FDP	Al
VT70WHPL...	WR137	5.38-8.17	10-3000	1.25	FDP	Cu
VT84WHPL...	WR112	6.57-9.99	10-3000	1.25	FBP	Cu
VT100WHPL...	WR90	8.20-12.40	10-3000	1.25	FBP	Cu
VT120WHPL...	WR75	9.84-15.0	10-3000	1.25	FBP	Cu
VT140WHPL...	WR62	11.9-18.0	10-1000	1.25	FBP	Cu
VT180WHPL...	WR51	14.5-22.0	10-1000	1.25	FBP	Cu
VT220WHPL...	WR42	17.6-26.7	10-600	1.25	FBP	Cu
VT260WHPL...	WR34	21.7-33.0	10-600	1.25	FBP	Cu
VT320WHPL...	WR28	26.5-40.0	10-600	1.25	FBP	Cu
VT400WHPL...	WR22	32.9-50.1	10-600	1.25	FUGP	Cu
VT500WHPL...	WR19	39.2-59.6	10-300	1.25	FUGP	Cu

*Indicates Model Number. See Ordering Information for complete part number.

7.8 Double-Ridged High Power Waveguide Termination



【Specifications】

Model No*	WG Type EIA	Freq Range (GHz)	Avg Power (W)	VSWR (Max)	Flange	Material
VT84DRWHPL...	WRD84	0.84-2	10-2000	1.25	FP	Al
VT150DRWHPL...	WRD150	1.5-3.6	10-2000	1.25	FP	Al
VT200DRWHPL...	WRD200	2-4.8	10-2000	1.25	FP	Al
VT250DRWHPL...	WRD250	2.6-7.8	10-2000	1.25	FP	Al
VT350DRWHPL...	WRD350	3.5-8.2	10-2000	1.25	FP	Al



Model No*	WG Type EIA	Freq Range (GHz)	Avg Power (W)	VSWR (Max)	Flange	Material
VT475DRWHPL...	WRD475	4.75-11	10-1000	1.25	FP	Al
VT500DRWHPL...	WRD500	5-18	10-1000	1.25	FP	Al
VT580DRWHPL...	WRD580	5.8-16	10-1000	1.25	FP	Al
VT650DRWHPL...	WRD650	6.5-18	10-1000	1.25	FP	Cu
VT750DRWHPL...	WRD750	7.5-18	10-1000	1.25	FP	Cu
VT700DRWHPL...	WRD700	7-18.5	10-1000	1.25	FP	Cu
VT1100DRWHPL...	WRD110	11-26.5	10-600	1.25	FP	Cu
VT1800DRWHPL...	WRD180	18-40	10-600	1.25	FP	Cu

*Indicates Model Number. See Ordering Information for complete part number.

【Ordering Information】

Example Part No: VT 100 WHPL 500 C
 Vector Telecom ———
 WG Type: WR90 ———
 Waveguide High Power Termination ———
 Material: A=Aluminum, C=Copper
 Power: 500W

Code	Description
WHPL	Waveguide High Power Termination
DRWHPL	Double Ridged Waveguide High Power Termination

- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat

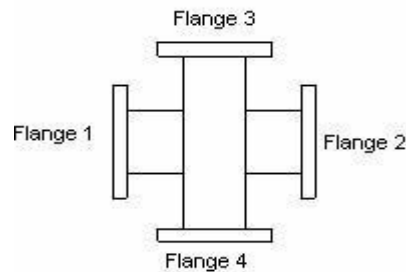
8 Waveguide Coupler

8.1 Crossguide Directional Coupler



Vector Telecom manufactures Crossguide Directional Couplers covering a wide frequency range. Couplers are available in 3 or 4 port configuration. Standard coupling values are 20, 30, 40, 50 and 60 dB, with minimum Directivity of 18 dB. The compactness of crossguide coupler suits many applications where space is at a premium and directivity is not the prime consideration. Models are available with combinations of waveguide and coaxial ports. Special multi-port crossguide couplers can be manufactured to suit customer's special requirements.

Style 1 — 4 Waveguide Ports



【Specifications】

Model No*	Freq Range (GHz)	Operating Bandwidth (%)**	VSWR (Max)		Coupling *** (dB)	Directivity (Min) (dB)	WG Type		Flange	Material
			Main Line	Sec. Line			IEC	EIA		
VT22W+C...	1.72-2.61	10-20	1.10	1.15	18~60	18	R22	WR430	FDP/FDM	Al/Cu
VT26W+C...	2.17-3.30	10-20	1.10	1.15	18~60	18	R26	WR340	FDP/FDM	Al/Cu
VT32W+C...	2.60-3.95	10-20	1.10	1.15	18~60	18	R32	WR284	FDP/FDM	Al/Cu
VT40W+C...	3.22-4.90	10-20	1.10	1.15	18~60	18	R40	WR229	FDP/FDM	Al/Cu
VT48W+C...	3.94-5.99	10-20	1.10	1.15	18~60	18	R48	WR187	FDP/FDM	Al/Cu
VT58W+C...	4.64-7.05	10-20	1.10	1.15	18~60	18	R58	WR159	FDP/FDM	Al/Cu
VT70W+C...	5.38-8.17	10-20	1.10	1.15	18~60	18	R70	WR137	FDP/FDM	Al/Cu
VT84W+C...	6.57-9.99	10-20	1.10	1.15	18~60	18	R84	WR112	FBP/FBM /FBE	Al/Cu

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Waveguide Coupler



Vector Telecom Pty Ltd

Website: www.vectortele.com

Email: sales@vectortele.com

Model No*	Freq Range (GHz)	Operating Bandwidth (%)**	VSWR (Max)		Coupling *** (dB)	Directivity (Min) (dB)	WG Type		Flange	Material
			Main Line	Sec. Line			IEC	EIA		
VT100W+C...	8.20-12.40	10-20	1.10	1.15	18-60	18	R100	WR90	FBP/FBM /FBE	Al/Cu
VT120W+C...	9.84-15.0	10-20	1.10	1.15	18-60	18	R120	WR75	FBP/FBM /FBE	Al/Cu
VT140W+C...	11.9-18.0	10-20	1.10	1.15	18-60	18	R140	WR62	FBP/FBM /FBE	Al/Cu
VT180W+C...	14.5-22.0	10-20	1.10	1.15	18-60	18	R180	WR51	FBP/FBM /FBE	Al/Cu
VT220W+C...	17.6-26.7	10-20	1.10	1.15	18-60	18	R220	WR42	FBP/FBM /FBE	Al/Cu
VT260W+C...	21.7-33.0	10-20	1.10	1.15	18-60	18	R260	WR34	FBP/FBM /FBE	Al/Cu
VT320W+C...	26.3-40.0	10-20	1.15	1.15	18-60	18	R320	WR28	FBP/FBM /FBE	Al/Cu

*Indicates Model Number. See Ordering Information for complete part number.

**Typical operating bandwidth of the crossguide coupler is up to 20% of waveguide bandwidth.

***Nominal Accuracy: $\pm 0.7\text{dB}$ Frequency Sensitivity: $\pm 1\text{dB}$

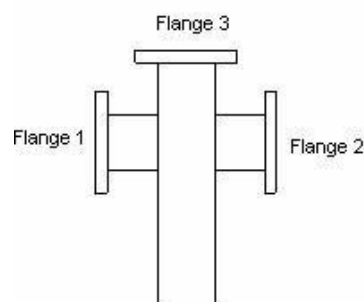
【Ordering Information】

Example Part No: VT 100 W+C 30 P M E M A

Vector Telecom — VT
 WG Type: R100 — W
 Product Type: Broadwall Directional Coupler (3 WG Ports) — C
 Coupling: C=30dB — 30
 Flange 4 Type: FBM100 — P
 Flange 3 Type: FBE100 — M
 Flange 2 Type: FBM100 — E
 Flange 1 Type: FBP100 — M
 Material: A=Aluminum C=Copper — A

- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat

Style 2 — 3 Waveguide Ports





Section 1

Waveguide Components

08

Waveguide Coupler



Vector Telecom Pty Ltd

Website: www.vectortele.com

Email: sales@vectortele.com

【Specifications】

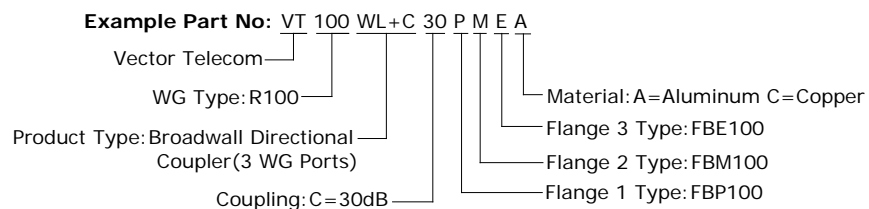
Model No*	Freq Range (GHz)	Operating Bandwidth (%)**	VSWR (Max)		Coupling *** (dB)	Directivity (Min) (dB)	WG Type		Flange	Material
			Main Line	Sec. Line			IEC	EIA		
VT22WL+C...	1.72-2.61	10-20	1.10	1.15	18-60	18	R22	WR430	FDP/FDM	Al/Cu
VT26WL+C...	2.17-3.30	10-20	1.10	1.15	18-60	18	R26	WR340	FDP/FDM	Al/Cu
VT32WL+C...	2.60-3.95	10-20	1.10	1.15	18-60	18	R32	WR284	FDP/FDM	Al/Cu
VT40WL+C...	3.22-4.90	10-20	1.10	1.15	18-60	18	R40	WR229	FDP/FDM	Al/Cu
VT48WL+C...	3.94-5.99	10-20	1.10	1.15	18-60	18	R48	WR187	FDP/FDM	Al/Cu
VT58WL+C...	4.64-7.05	10-20	1.10	1.15	18-60	18	R58	WR159	FDP/FDM	Al/Cu
VT70WL+C...	5.38-8.17	10-20	1.10	1.15	18-60	18	R70	WR137	FDP/FDM	Al/Cu
VT84WL+C...	6.57-9.99	10-20	1.10	1.15	18-60	18	R84	WR112	FDP/FDM	Al/Cu
VT100WL+C...	8.20-12.40	10-20	1.10	1.15	18-60	18	R100	WR90	FDP/FDM	Al/Cu
VT120WL+C...	9.84-15.0	10-20	1.10	1.15	18-60	18	R120	WR75	FDP/FDM	Al/Cu
VT140WL+C...	11.9-18.0	10-20	1.10	1.15	18-60	18	R140	WR62	FDP/FDM	Al/Cu
VT180WL+C...	14.5-22.0	10-20	1.10	1.15	18-60	18	R180	WR51	FDP/FDM	Al/Cu
VT220WL+C...	17.6-26.7	10-20	1.10	1.15	18-60	18	R220	WR42	FDP/FDM	Al/Cu
VT260WL+C...	21.7-33.0	10-20	1.10	1.15	18-60	18	R260	WR34	FDP/FDM	Al/Cu
VT320WL+C...	26.3-40.0	10-20	1.15	1.15	18-60	18	R320	WR28	FDP/FDM	Al/Cu
VT400WL+C...	33.0-50.0	10-20	1.15	1.15	18-60	15	R320	WR28	FUGP	Al/Cu
VT500WL+C...	40.0-60.0	10-20	1.15	1.15	18-60	15	R320	WR28	FUGP	Al/Cu
VT620WL+C...	50.0-75.0	10-20	1.15	1.15	18-60	15	R320	WR28	FUGP	Al/Cu
VT740WL+C...	60.0-90.0	10-20	1.15	1.15	18-60	15	R320	WR28	FUGP	Al/Cu
VT900WL+C...	75.0-110.0	10-20	1.15	1.15	18-60	15	R320	WR28	FUGP	Al/Cu

*Indicates Model Number. See Ordering Information for complete part number.

**Typical operating bandwidth of the crossguide coupler is up to 20% of waveguide bandwidth.

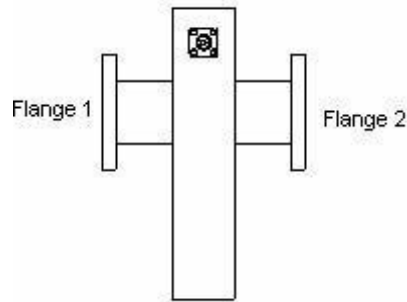
***Nominal Accuracy: ± 0.7dB Frequency Sensitivity: ± 1dB

【Ordering Information】



- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat

Style 3 — 2 Waveguide Ports, 1 Coax Port



【Specifications】

Model No*	Freq Range (GHz)	Operating Bandwidth (%)**	VSWR (Max)		Coupling *** (dB)	Directivity (Min) (dB)	WG Type		Flange	Coax Type	Material
			Main Line	Sec. Line			IEC	EIA			
VT22WL+C...	1.72-2.61	10-20	1.10	1.25	18~60	18	R22	WR430	FDP/FDM	N	Al/Cu
VT26WL+C...	2.17-3.30	10-20	1.10	1.25	18~60	18	R26	WR340	FDP/FDM	N	Al/Cu
VT32WL+C...	2.60-3.95	10-20	1.10	1.25	18~60	18	R32	WR284	FDP/FDM	N	Al/Cu
VT40WL+C...	3.22-4.90	10-20	1.10	1.25	18~60	18	R40	WR229	FDP/FDM	N	Al/Cu
VT48WL+C...	3.94-5.99	10-20	1.10	1.25	18~60	18	R48	WR187	FDP/FDM	N	Al/Cu
VT58WL+C...	4.64-7.05	10-20	1.10	1.25	18~60	18	R58	WR159	FDP/FDM	N	Al/Cu
VT70WL+C...	5.38-8.17	10-20	1.10	1.25	18~60	18	R70	WR137	FDP/FDM	N	Al/Cu
VT84WL+C...	6.57-9.99	10-20	1.10	1.25	18~60	18	R84	WR112	FBP/FBM/FBE	N	Al/Cu
VT100WL+C...	8.20-12.4	10-20	1.10	1.25	18~60	18	R100	WR90	FBP/FBM/FBE	N	Al/Cu
VT120WL+C...	9.84-15.0	10-20	1.10	1.25	18~60	18	R120	WR75	FBP/FBM/FBE	SMA	Al/Cu
VT140WL+C...	11.9-18.0	10-20	1.10	1.25	18~60	18	R140	WR62	FBP/FBM/FBE	SMA	Al/Cu
VT180WL+C...	14.5-22.0	10-20	1.10	1.30	18~60	18	R180	WR51	FBP/FBM/FBE	SMA	Al/Cu
VT220WL+C...	17.6-26.7	10-20	1.10	1.50	18~60	18	R220	WR42	FBP/FBM/FBE	SMA, K	Al/Cu
VT320WL+C...	26.3-40.0	10-20	1.15	1.50	18~60	18	R320	WR28	FBP/FBM/FBE	SMA, K	Al/Cu

Section 1

Waveguide Components

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Waveguide Coupler



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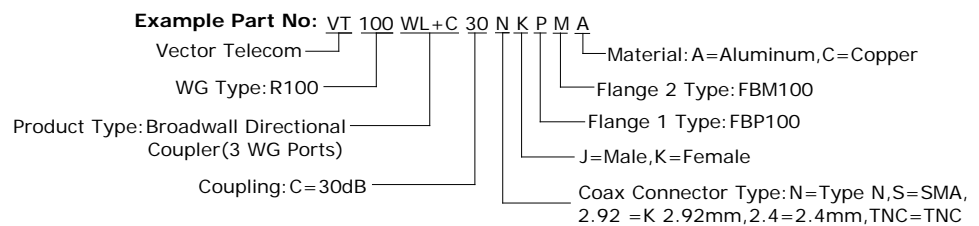
Email: sales@vectortele.com

*Indicates Model Number. See Ordering Information for complete part number.

**Typical operating bandwidth of the crossguide coupler is up to 20% of waveguide bandwidth.

***Nominal Accuracy: $\pm 0.7\text{dB}$ Frequency Sensitivity: $\pm 1\text{dB}$

【Ordering Information】



- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat




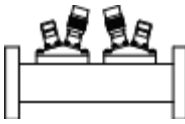
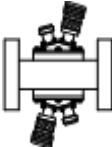
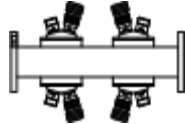
8.2 Waveguide Loop Coupler

Vector Telecom offers waveguide loop coupler within 20% waveguide bandwidth, the typical VSWR of main line is 1.10, and 20/25/30/35/40/45/50/60 dB, with compact structure and good sealing, it is widely applied to the microwave system under secondary line is 1.25, coupling selection is 12GHz.

8.2.1 Waveguide Loop Coupler



【Product Type】

Description	Loop Coupler	Dual Directional Loop Coupler		Four Directional Loop Coupler
Model	WHC...c	WHHC...c	WDHC...c	WDHHC...c
Outline Drawings				
WG Type	WR975-WR90	WR975- WR90	WR975- WR90	WR975- WR90
Working bandwidth	F0±10%	F0±10%	F0±10%	F0±10%
Optional Coupling...(dB)	20-60	20-60	20-60	20-60
Directivity (dB)	15	15	15	15
VSWR (Main Line)	1.10	1.10	1.10	1.10
VSWR (Secondary Line)	1.25	1.25	1.25	1.25
Connector	N or SMA	N or SMA	N or SMA	N or SMA

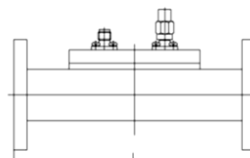
【WHC...c Specifications】

Model No*	WG Type	Freq Range (GHz)	Working Bandwidth (%)**	Optional Coupling... (dB)	Directivity (dB)	VSWR (Main Line)	VSWR (Sec. Line)	Flange	Connector	Length (mm)	Material
VT9WHCN	WR975	0.75-1.15	≤20	20-60	≥15	1.10	1.25	FDP	N Female	300	Al
VT12WHCN	WR770	0.96-1.46	≤20	20-60	≥15	1.10	1.25	FDP	N Female	200	Al
VT14WHCN	WR650	1.13-1.73	≤20	20-60	≥15	1.10	1.25	FDP	N Female	220	Al
VT18WHCN	WR510	1.45-2.20	≤20	20-60	≥15	1.10	1.25	FDP	N Female	210	Al

Model No*	WG Type	Freq Range (GHz)	Working Bandwidth (%)**	Optional Coupling.. (dB)	Directivity (dB)	VSWR (Main Line)	VSWR (Sec. Line)	Flange	Connector	Length (mm)	Material
VT22WHCN	WR430	1.72-2.61	≤20	20-60	≥15	1.10	1.25	FDP	N Female	160	Al
VT26WHCN	WR340	2.17-3.30	≤20	20-60	≥15	1.10	1.25	FDP	N Female	160	Al
VT32WHCN	WR284	2.60-3.95	≤20	20-60	≥15	1.10	1.25	FDP	N Female	150	Al
VT40WHCN	WR229	3.22-4.90	≤20	20-60	≥15	1.10	1.25	FDP	N Female	130	Al
VT48WHCN	WR187	3.94-5.99	≤20	20-60	≥15	1.10	1.25	FDP	N Female	130	Al
VT58WHCN	WR159	4.64-7.05	≤20	20-60	≥15	1.10	1.25	FDP	N Female	130	Al
VT70WHCN	WR137	5.38-8.17	≤20	20-60	≥15	1.10	1.25	FDP	N Female	130	Al
VT84WHCN	WR112	6.57-9.99	≤20	20-60	≥15	1.10	1.25	FBP	N Female	130	Cu
VT100WHC ...N	WR90	8.2-12.4	≤20	20-60	≥15	1.10	1.25	FBP	N Female	100	Cu

*Indicates Model Number. See Ordering Information for complete part number.

8.2.2 Double Ridged Waveguide Loop Couple



【DRWHC Series Specifications】

Model No*	WG Type	Freq Range (GHz)	Optional Coupling.. (dB)	Directivity (dB)	VSWR (Main Line)	VSWR (Sec. Line)	Flange	Connector	Length (mm)	Material
VT84DRWHCN	WRD84	0.84-2	20-60	≥15	≤1.15	≤1.60	FP	N Female	300	Al
VT150DRWHCN	WRD150	1.5-3.6	20-60	≥15	≤1.15	≤1.60	FP	N Female	200	Al
VT200DRWHCN	WRD200	2-4.8	20-60	≥15	≤1.15	≤1.60	FP	N Female	180	Al
VT250DRWHN	WRD250	2.6-7.8	20-60	≥15	≤1.15	≤1.60	FP	N Female	150	Al
VT350DRWHCN	WRD350	3.5-8.2	20-60	≥15	≤1.15	≤1.60	FP	N Female	120	Al
VT475DRWHCN	WRD475	4.75-11	20-60	≥10	≤1.15	≤1.80	FP	N Female	100	Al
VT500DRWHCN	WRD500	5-18	20-60	≥10	≤1.15	≤1.80	FP	N Female	100	Al
VT580DRWHCN	WRD580	5.8-16	20-60	≥10	≤1.15	≤1.80	FP	N Female	100	Al
VT650DRWHCN	WRD650	6.5-18	20-60	≥10	≤1.15	≤1.80	FP	N Female	100	Al
VT750DRWHCN	WRD750	7.5-18	20-60	≥10	≤1.15	≤1.80	FP	N Female	100	Al
VT700DRWHCN	WRD700	7-18.5	20-60	≥10	≤1.15	≤1.80	FP	N Female	100	Al
VT1100DRWHCN	WRD110	11-26.5	20-60	≥10	≤1.20	≤2.0	FP	SMA Female	80	Cu
VT1800DRWHCN	WRD180	18-40	20-60	≥10	≤1.20	≤2.0	FP	SMA Female	80	Cu

*indicates Model Number. See Ordering Information for complete part number.

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Waveguide
Coupler



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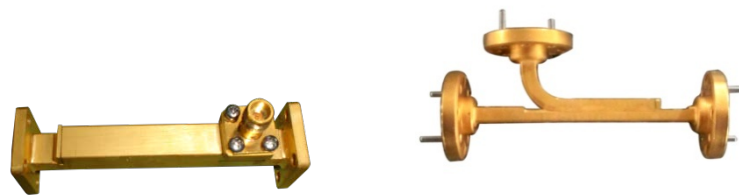
【Ordering Information】

Example Part No: VT 100 WHC 30 S C

Vector Telecom | Material: A=Aluminum C=Copper
 WG Type: R100 | Coax Connector Type: N=Type N, S=SMA,
 Product Type: WG Loop Coupler | 2.92 =K 2.92mm, 2.4=2.4mm, TNC=TNC
 DRWHC: Double Ridge WG Loop Coupler | Coupling: C=30dB

- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat

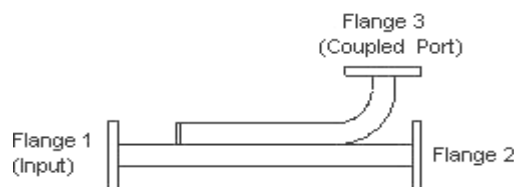
8.3 Broadwall Directional Coupler



Vector Telecom manufactures a standard product line of multi-hole broadwall directional couplers covering a wide frequency range. The optimum electrical characteristics of high directivity and coupling flatness are achieved utilizing a precision machined Tchebyscheff coupling hole distribution and a precision ground tapered load element in the secondary arm. Directional couplers are typically used for power sampling, frequency monitoring, especially in the test setups where power reflection measurements are required. Additional sizes and special configurations are available on request.

8.3.1 Broadwall Directional Coupler

Style 1 — 3 Waveguide Ports



【Specifications】

Model No*	Freq Range (GHz)	VSWR (Max)		Coupling ** (dB)	Directivity (Min) (dB)	WG Type		Flange	Material
		Main Line	Secondary Line			IEC	EIA		
VT14WC...	1.13-1.73	1.10	1.15	3-60	20-38	R14	WR650	FDP/FDM	Al/Cu
VT18WC...	1.45-2.20	1.10	1.15	3-60	20-38	R18	WR510	FDP/FDM	Al/Cu



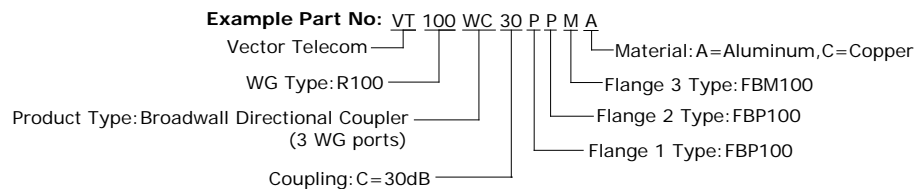
Model No*	Freq Range (GHz)	VSWR (Max)		Coupling ** (dB)	Directivity (Min) (dB)	WG Type		Flange	Material
		Main Line	Secondary Line			IEC	EIA		
VT22WC...	1.72-2.61	1.10	1.15	3-60	20-38	R22	WR430	FDP/FDM	Al/Cu
VT26WC...	2.17-3.30	1.10	1.15	3-60	20-38	R26	WR340	FDP/FDM	Al/Cu
VT32WC...	2.60-3.95	1.10	1.15	3-60	20-38	R32	WR284	FDP/FDM	Al/Cu
VT40WC...	3.22-4.90	1.08	1.12	3-60	20-38	R40	WR229	FDP/FDM	Al/Cu
VT48WC...	3.94-5.99	1.08	1.12	3-60	20-38	R48	WR187	FDP/FDM	Al/Cu
VT58WC...	4.64-7.05	1.08	1.12	3-60	20-38	R58	WR159	FDP/FDM	Al/Cu
VT70WC...	5.38-8.17	1.08	1.12	3-60	20-38	R70	WR137	FDP/FDM	Al/Cu
VT84WC...	6.57-9.99	1.08	1.12	3-60	20-38	R84	WR112	FBP/FBM/FBE	Al/Cu
VT100WC...	8.20-12.40	1.08	1.12	3-60	20-38	R100	WR90	FBP/FBM/FBE	Al/Cu
VT120WC...	9.84-15.0	1.08	1.12	3-60	20-38	R120	WR75	FBP/FBM/FBE	Al/Cu
VT140WC...	11.9-18.0	1.10	1.15	3-60	20-38	R140	WR62	FBP/FBM/FBE	Al/Cu
VT180WC...	14.5-22.0	1.10	1.15	3-60	20-38	R180	WR51	FBP/FBM/FBE	Al/Cu
VT220WC...	17.6-26.7	1.10	1.15	3-60	20-38	R220	WR42	FBP/FBM/FBE	Al/Cu
VT260WC...	21.7-33.0	1.10	1.15	3-60	20-38	R260	WR34	FBP/FBM/FBE	Al/Cu
VT320WC...	26.3-40.0	1.10	1.15	3-60	20-38	R320	WR28	FBP/FBM/FBE	Al/Cu
VT400WC...	33.0-50.0	1.10	1.25	3-60	20-38	R400	WR22	FUGP	Cu
VT500WC...	40.0-60.0	1.10	1.25	3-60	20-38	R500	WR19	FUGP	Cu
VT620WC...	50.0-75.0	1.10	1.25	3-60	20-38	R620	WR15	FUGP	Cu
VT740WC...	60.0-90.0	1.10	1.25	3-60	20-38	R740	WR12	FUGP	Cu
VT900WC...	75.0-110.0	1.10	1.25	3-60	20-38	R900	WR10	FUGP	Cu

*Indicates Model Number. See Ordering Information for complete part number.

**Nominal Accuracy: $\pm 0.7\text{dB}$ Frequency Sensitivity: $\pm 1\text{ dB}$

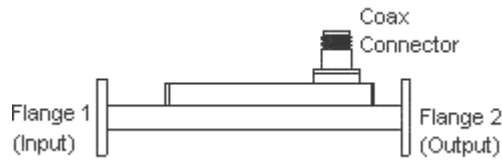
*** These units are supplied with 2.92mm (K-type) connectors

【Ordering Information】



- Finish: Corrosion protection plus black top coat
- Flange type: Multiple types available - see VT Flanges page

Style 2 — 2 Waveguide Ports, 1 Coax Port



Section 1

Waveguide
Components

【Specifications】

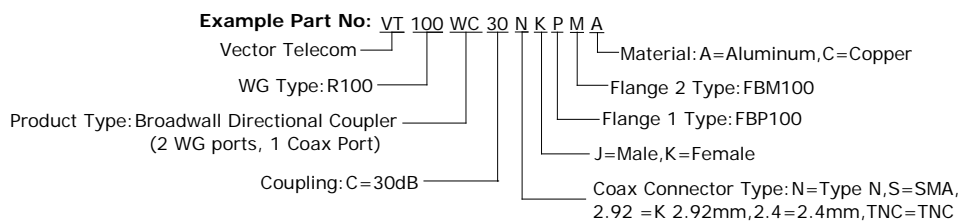
Model No*	Freq Range (GHz)	VSWR (Max)		Coupling ** (dB)	Directivity (Min) (dB)	Coax Type	WG Type		Flange	Material
		Main Line	Sec. Line				IEC	EIA		
VT14WC...N	1.13-1.73	1.10	1.25	3-40	20-38	N	R14	WR650	FDP/FDM	Al/Cu
VT18WC...N	1.45-2.20	1.10	1.25	3-40	20-38	N	R18	WR510	FDP/FDM	Al/Cu
VT22WC...N	1.72-2.61	1.10	1.25	3-40	20-38	N	R22	WR430	FDP/FDM	Al/Cu
VT26WC...N	2.17-3.30	1.10	1.25	3-40	20-38	N	R26	WR340	FDP/FDM	Al/Cu
VT32WC...N	2.60-3.95	1.10	1.25	3-40	20-38	N	R32	WR284	FDP/FDM	Al/Cu
VT40WC...N	3.22-4.90	1.08	1.25	3-40	20-38	N	R40	WR229	FDP/FDM	Al/Cu
VT48WC...N	3.94-5.99	1.08	1.25	3-40	20-38	N	R48	WR187	FDP/FDM	Al/Cu
VT58WC...N	4.64-7.05	1.08	1.25	3-40	20-38	N	R58	WR159	FDP/FDM	Al/Cu
VT70WC...N	5.38-8.17	1.08	1.25	3-40	20-38	N	R70	WR137	FDP/FDM	Al/Cu
VT84WC...N	6.57-9.99	1.08	1.25	3-40	20-38	N	R84	WR112	FBP/FBM/FBE	Al/Cu
VT100WC...N	8.20-12.40	1.08	1.25	3-40	20-38	N	R100	WR90	FBP/FBM/FBE	Al/Cu
VT120WC...S	9.84-15.0	1.08	1.25	3-40	20-38	SMA	R120	WR75	FBP/FBM/FBE	Al/Cu
VT140WC...S	11.9-18.0	1.10	1.25	3-40	20-38	SMA	R140	WR62	FBP/FBM/FBE	Al/Cu
VT180WC...S	14.5-22.0	1.10	1.25	3-40	20-38	SMA	R180	WR51	FBP/FBM/FBE	Al/Cu
VT220WC...K	17.6-26.7	1.10	1.50	3-40	20-38	K***	R220	WR42	FBP/FBM/FBE	Al/Cu
VT260WC...K	21.7-33.0	1.10	1.50	3-40	20-38	K***	R260	WR34	FBP/FBM/FBE	Al/Cu
VT320WC...K	26.3-40.0	1.10	1.50	3-40	20-38	K***	R320	WR28	FBP/FBM/FBE	Al/Cu

*Indicates Model Number. See Ordering Information for complete part number.

**Nominal Accuracy: $\pm 0.7\text{dB}$ Frequency Sensitivity: $\pm 1\text{ dB}$

*** These units are supplied with 2.92mm (K-type) connectors

【Ordering Information】



- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat

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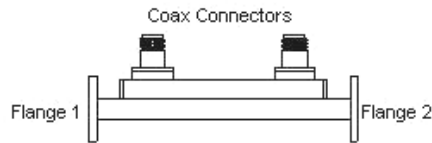
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Website: www.vectortele.com

Email: sales@vectortele.com



Style 3 – 2 Waveguide Ports, 2 Coax Ports



【Specifications】

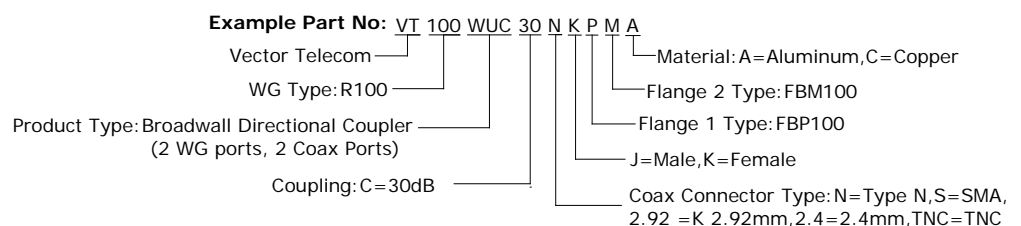
Model No*	Freq Range (GHz)	VSWR (Max)		Coupling ** (dB)	Directivity (Min) (dB)	Coax Type	WG Type		Flange	Material
		Main Line	Sec. Line				IEC	EIA		
VT14WUC...N	1.13-1.73	1.10	1.25	3-40	20-25	N	R14	WR650	FDP/FDM	Al/Cu
VT18WUC...N	1.45-2.20	1.10	1.25	3-40	20-25	N	R18	WR510	FDP/FDM	Al/Cu
VT22WUC...N	1.72-2.61	1.10	1.25	3-40	20-25	N	R22	WR430	FDP/FDM	Al/Cu
VT26WUC...N	2.17-3.30	1.10	1.25	3-40	20-25	N	R26	WR340	FDP/FDM	Al/Cu
VT32WUC...N	2.60-3.95	1.10	1.25	3-40	20-25	N	R32	WR284	FDP/FDM	Al/Cu
VT40WUC...N	3.22-4.90	1.08	1.25	3-40	20-25	N	R40	WR229	FDP/FDM	Al/Cu
VT48WUC...N	3.94-5.99	1.08	1.25	3-40	20-25	N	R48	WR187	FDP/FDM	Al/Cu
VT58WUC...N	4.64-7.05	1.08	1.25	3-40	20-25	N	R58	WR159	FDP/FDM	Al/Cu
VT70WUC...N	5.38-8.17	1.08	1.25	3-40	20-25	N	R70	WR137	FDP/FDM	Al/Cu
VT84WUC...N	6.57-9.99	1.08	1.25	3-40	20-25	N	R84	WR112	FBP/FBM/FBE	Al/Cu
VT100WUC...N	8.20-12.40	1.08	1.25	3-40	20-25	N	R100	WR90	FBP/FBM/FBE	Al/Cu
VT120WUC...S	9.84-15.0	1.08	1.25	3-40	20-25	SMA	R120	WR75	FBP/FBM/FBE	Al/Cu
VT140WUC...S	11.9-18.0	1.10	1.25	3-40	20-25	SMA	R140	WR62	FBP/FBM/FBE	Al/Cu
VT180WUC...S	14.5-22.0	1.10	1.25	3-40	20-25	SMA	R180	WR51	FBP/FBM/FBE	Al/Cu
VT220WUC...K	17.6-26.7	1.10	1.50	3-40	20-25	K***	R220	WR42	FBP/FBM/FBE	Al/Cu
VT260WUC...K	21.7-33.0	1.10	1.50	3-40	20-25	K***	R260	WR34	FBP/FBM/FBE	Al/Cu
VT320WUC...K	26.3-40.0	1.10	1.50	3-40	20-25	K***	R320	WR28	FBP/FBM/FBE	Al/Cu

*Indicates Model Number. See Ordering Information for complete part number.

**Nominal Accuracy: ± 0.7 dB Frequency Sensitivity: ± 1 dB

*** These units are supplied with 2.92mm (K-type) connectors.

【Ordering Information】



- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat

Style 4 — Dual-arm Broadwall Directional Coupler 4 Waveguide Ports



Section 1

Waveguide
Components

08

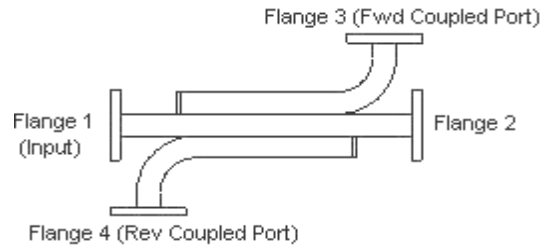
Waveguide
Coupler



Vector Telecom Pty Ltd

Website: www.vectortele.com

Email: sales@vectortele.com



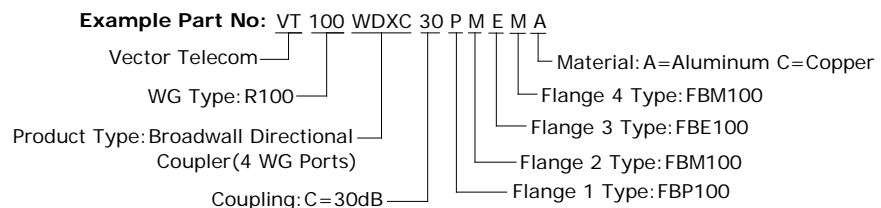
【Specifications】

Model No*	Freq Range (GHz)	VSWR (Max)		Coupling** (dB)	Directivity (Min) (dB)	WG Type		Flange	Material
		Main Line	Secondary Line			IEC	EIA		
VT26WDXC...	2.17-3.30	1.08	1.12	3-40	20-38	R26	WR340	FDP/FDM	Al/Cu
VT32WDXC...	2.60-3.95	1.08	1.12	3-40	20-38	R32	WR284	FDP/FDM	Al/Cu
VT40WDXC...	3.22-4.90	1.08	1.12	3-40	20-38	R40	WR229	FDP/FDM	Al/Cu
VT48WDXC...	3.94-5.99	1.08	1.12	3-40	20-38	R48	WR187	FDP/FDM	Al/Cu
VT58WDXC...	4.64-7.05	1.08	1.12	3-40	20-38	R58	WR159	FDP/FDM	Al/Cu
VT70WDXC...	5.38-8.17	1.08	1.12	3-40	20-38	R70	WR137	FDP/FDM	Al/Cu
VT84WDXC...	6.57-9.99	1.08	1.12	3-40	20-38	R84	WR112	FBP/FBM/FBE	Al/Cu
VT100WDXC...	8.20-12.40	1.08	1.12	3-40	20-38	R100	WR90	FBP/FBM/FBE	Al/Cu
VT120WDXC...	9.84-15.0	1.08	1.12	3-40	20-38	R120	WR75	FBP/FBM/FBE	Al/Cu
VT140WDXC...	11.9-18.0	1.10	1.15	3-40	20-38	R140	WR62	FBP/FBM/FBE	Al/Cu
VT180WDXC...	14.5-22.0	1.10	1.15	3-40	20-38	R180	WR51	FBP/FBM/FBE	Al/Cu
VT220WDXC...	17.6-26.7	1.10	1.15	3-40	20-38	R220	WR42	FBP/FBM/FBE	Al/Cu
VT260WDXC...	21.7-33.0	1.10	1.15	3-40	20-38	R260	WR34	FBP/FBM/FBE	Al/Cu
VT320WDXC...	26.3-40.0	1.10	1.15	3-40	20-38	R320	WR28	FBP/FBM/FBE	Al/Cu

*Indicates Model Number. See Ordering Information for complete part number.

**Nominal Accuracy: ± 0.7 dB Frequency Sensitivity: ± 1 dB

【Ordering Information】

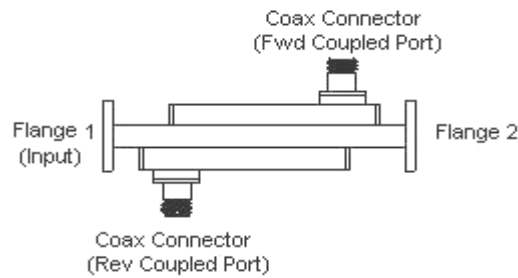


- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat



Style 5 — Dual-arm Broadwall Directional Coupler

2 Waveguide Ports, 2 Coax Ports



【Specifications】

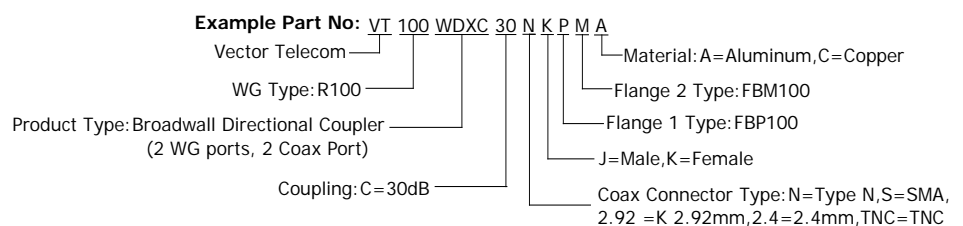
Model No*	Freq Range (GHz)	VSWR (Max)		Coupling ** (dB)	Directivity (Min) (dB)	Coax Type	WG Type		Flange	Material
		Main Line	Secondary Line				IEC	EIA		
VT26WDXC...N	2.17-3.30	1.10	1.25	3-40	20-38	N	R26	WR340	FDP/FDM	Al/Cu
VT32WDXC...N	2.60-3.95	1.10	1.25	3-40	20-38	N	R32	WR284	FDP/FDM	Al/Cu
VT40WDXC...N	3.22-4.90	1.08	1.25	3-40	20-38	N	R40	WR229	FDP/FDM	Al/Cu
VT48WDXC...N	3.94-5.99	1.08	1.25	3-40	20-38	N	R48	WR187	FDP/FDM	Al/Cu
VT58WDXC...N	4.64-7.05	1.08	1.25	3-40	20-38	N	R58	WR159	FDP/FDM	Al/Cu
VT70WDXC...N	5.38-8.17	1.08	1.25	3-40	20-38	N	R70	WR137	FDP/FDM	Al/Cu
VT84WDXC...N	6.57-9.99	1.08	1.25	3-40	20-38	N	R84	WR112	FBP/FBM/FBE	Al/Cu
VT100WDXC...N	8.20-12.40	1.08	1.25	3-40	20-38	N	R100	WR90	FBP/FBM/FBE	Al/Cu
VT120WDXC...S	9.84-15.0	1.08	1.25	3-40	20-38	SMA	R120	WR75	FBP/FBM/FBE	Al/Cu
VT140WDXC...S	11.9-18.0	1.10	1.25	3-40	20-38	SMA	R140	WR62	FBP/FBM/FBE	Al/Cu
VT180WDXC...S	14.5-22.0	1.10	1.25	3-40	20-38	SMA	R180	WR51	FBP/FBM/FBE	Al/Cu
VT220WDXC...K	17.6-26.7	1.10	1.50	3-40	20-38	K***	R220	WR42	FBP/FBM/FBE	Al/Cu
VT260WDXC...K	21.7-33.0	1.10	1.50	3-40	20-38	K***	R260	WR34	FBP/FBM/FBE	Al/Cu
VT320WDXC...K	26.3-40.0	1.10	1.50	3-40	20-38	K***	R320	WR28	FBP/FBM/FBE	Al/Cu

*Indicates Model Number. See Ordering Information for complete part number

**Nominal Accuracy: ± 0.7 dB Frequency Sensitivity: ± 1 dB

*** These units are supplied with 2.92mm (K-type) connectors

【Ordering Information】



- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat



8.3.2 Double Ridged Broadwall Directional Coupler

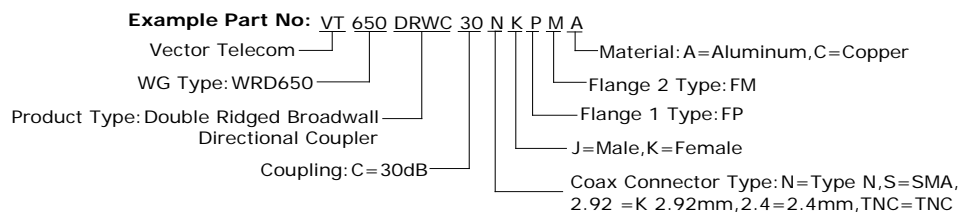


【DRWC Specifications】

Model No*	WG Type EIA	Freq Range (GHz)	Optional Coupling.. (dB)	Coupling Flatness (dB)	Directivity (dB)	Main line VSWR	Secondary line VSWR	Flange	Connector	Material
VT84DRWC...N	WRD84	0.84-2	20-60	±1.5	≥25	1.10	1.50	FP	N Female	Al
VT150DRWC...N	WRD150	1.5-3.6	20-60	±1.5	≥25	1.10	1.50	FP	N Female	Al
VT200DRWC...N	WRD200	2-4.8	20-60	±1.5	≥25	1.10	1.50	FP	N Female	Al
VT250DRWC...N	WRD250	2.6-7.8	20-60	±1.5	≥25	1.10	1.50	FP	N Female	Al
VT350DRWC...N	WRD350	3.5-8.2	20-60	±1.5	≥25	1.10	1.50	FP	N Female	Al
VT475DRWC...N	WRD475	4.75-11	20-60	±1.5	≥25	1.10	1.50	FP	N Female	Al
VT500DRWC...N	WRD500	5-18	20-60	±1.5	≥25	1.10	1.50	FP	N Female	Al
VT580DRWC...N	WRD580	5.8-16	20-60	±1.5	≥25	1.10	1.50	FP	N Female	Al
VT650DRWC...N	WRD650	6.5-18	20-60	±1.5	≥25	1.10	1..5	FP	N Female	Al
VT750DRWC...N	WRD750	7.5-18	20-60	±1.5	≥25	1.10	1.25	FP	N Female	Al
VT700DRWC...N	WRD700	7-18.5	20-60	±1.5	≥25	1.10	1.25	FP	N Female	Al
VT1100DRWC...N	WRD110	11-26.5	20-60	±1.5	≥25	1.10	1.25	FP	SMA Female	Cu
VT1800DRWC...N	WRD180	18-40	20-60	±1.5	≥25	1.10	1.25	FP	SMA Female	Cu

*Indicates Model Number. See Ordering Information for complete part number.

【Ordering Information】



- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat

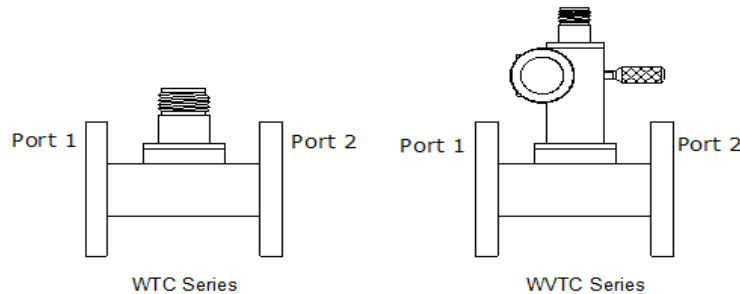
8.4 Waveguide Probe Coupler





Vector Telecom offers waveguide probe couplers with two types of fixed probe couplers and adjustable probe couplers. It is no directionless and is often used for simple detection in waveguide systems.

8.4.1 Waveguide Probe Coupler



【Specifications】

Model No*	WG Type EIA	Freq Range (GHz)	Optional Coupling... (dB)	Connector	Main line VSWR	Flange	Material
VT40WTC...N	WR229	3.22-4.90	30-60	N Female	1.05	FDP	Al
VT48WTC...N	WR187	3.94-5.99	30-60	N Female	1.05	FDP	Al
VT58WTC...N	WR159	4.64-7.05	30-60	N Female	1.05	FDP	Al
VT70WTC...N	WR137	5.38-8.17	30-60	N Female	1.05	FDP	Al
VT84WTC...N	WR112	6.57-9.99	30-60	N Female	1.05	FBP	Cu
VT100WTC...N	WR90	8.20-12.40	30-60	N Female	1.05	FBP	Cu
VT120WTC...N	WR75	9.84-15.0	30-60	N Female	1.05	FBP	Cu
VT140WTC...N	WR62	11.9-18.0	30-60	SMA Female	1.05	FBP	Cu
VT180WTC...N	WR51	14.5-22.0	30-60	SMA Female	1.05	FBP	Cu
VT220WTC...N	WR42	17.6-26.7	30-60	2.92 Female	1.10	FBP	Cu
VT260WTC...N	WR34	21.7-33.0	30-60	2.92 Female	1.10	FBP	Cu
VT320WTC...N	WR28	26.5-40.0	30-60	2.92 Female	1.10	FBP	Cu

*Indicates Model Number. See Ordering Information for complete part number.

【Ordering Information】

Example Part No: VT 100 WTC 30 N K P M A

Vector Telecom — VT
 WG Type: R100 — 100
 Product Type: WG Probe Coupler — WTC
 Coupling: C=30dB — 30
 Coax Connector Type: N=Type N, S=SMA, 2.92 =K 2.92mm, 2.4=2.4mm, TNC=TNC — N
 J=Male, K=Female — K
 Flange 1 Type: FP — P
 Flange 2 Type: FM — M
 Material: A=Aluminum, C=Copper — A

- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat



8.4.2 Circular Waveguide Probe Coupler



【Specifications】

Model No*	Freq Range (GHz)	VSWR	Coupling (dB)	Inner Diameter (mm)	Connector	Material	Finish
VT100CWTC...	2.0~4.0	1.1	30	100	N Female	Al	Chromate conversion
VT61.04CWTC...	3.3~3.8	1.1	30	61.04	N Female	Al	Chromate conversion
VT51.99CWTC...	3.89~5.33	1.1	30	51.99	N Female	Al	Chromate conversion
VT37CWTC...	4.5~6.5	1.1	30	37	N Female	Al	Chromate conversion
VT27.78CWTC...	7.4~9.0	1.1	30	27.78	SMA Female	Al	Chromate conversion
VT23.825CWTC...	9.1~10.0	1.1	30	23.825	SMA Female	Al	Chromate conversion
VT20.244CWTC...	8.5~10.5	1.1	30	20.244	SMA Female	Al	Chromate conversion
VT14CWTC...	15.0~17.0	1.1	30	14	SMA Female	Cu	Silver Plating
VT11.25CWTC...	18.2~24.9	1.1	30	11.25	SMA Female	Cu	Silver Plating
VT11CWTC...	17.7~21.2	1.1	30	11.00	SMA Female	Cu	Silver Plating
VT7.137CWTC...	27.5~31	1.1	30	7.14	SMA Female	Cu	Silver Plating

*Indicates Model Number. See Ordering Information for complete part number.

【Ordering Information】

Example Part No: VT 100 CWTC 30 N K P M A

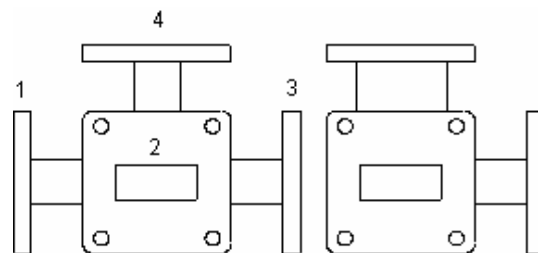
Vector Telecom — VT
 WG Type: R100 — 100
 Product Type: Circular Waveguide Probe Coupler — CWTC
 Coupling: C=30dB — 30
 Coax Connector Type: N=Type N, S=SMA, 2.92=K 2.92mm, 2.4=2.4mm, TNC=TNC — N
 J=Male, K=Female — K
 Flange 1 Type: FBP100 — P
 Flange 2 Type: FBM100 — M
 Material: A=Aluminum, C=Copper — A

- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat

9 Waveguide Power Divider/Combiner

9.1 Magic Hybrid Tee

Vector Telecom's Magic Hybrid Tee is four-port coupler for matching, balance and isolation. E- plane to H-plane Isolation is a function of the symmetry which is carefully balanced on each unit. If the E-plane port 4 or the H-plane port 2 are used as inputs the split is on the output collinear ports 1 and 3. When the input is E plane port 4 the outputs are out of phase 180 deg. When the input is H plane port 2 the outputs are in phase. The in-phase and equal amplitude signals inputting into two collinear ports can result combined signals at H-plane port and cancelled signal at E-plane port. This feature is widely used in monopulse antenna feed structure and phasing testing setup.



【Specifications】

Model No*	Freq Range (GHz)	Operating Bandwidth (%)**	VSWR (Max)		Isolation (H&E Arms)dB	Unbalance (Max) (dB)	WG Type		Flange	Material
			H-Arm	E-Arm			IEC	EIA		
VT3WMT...	0.32-0.49	≤20%	1.20	1.50	35	≤0.25	R3	WR2300	FDP	Al
VT4WMT...	0.35-0.53	≤20%	1.20	1.50	35	≤0.25	R4	WR2100	FDP	Al
VT5WMT...	0.41-0.62	≤20%	1.20	1.50	35	≤0.25	R5	WR1800	FDP	Al
VT6WMT...	0.49-0.75	≤20%	1.20	1.50	35	≤0.25	R6	WR1500	FDP	Al
VT8WMT...	0.64-0.98	≤20%	1.20	1.50	35	≤0.25	R8	WR1150	FDP	Al
VT9WMT...	0.75-1.15	≤20%	1.20	1.50	35	≤0.25	R9	WR975	FDP	Al
VT12WMT...	0.96-1.46	≤20%	1.20	1.50	35	≤0.25	R12	WR770	FDP	Al
VT14WMT...	1.13-1.73	≤20%	1.20	1.50	35	≤0.25	R14	WR650	FDP	Al
VT18WMT...	1.45-2.20	≤20%	1.20	1.50	35	≤0.25	R18	WR510	FDP	Al
VT22WMT...	1.72-2.61	≤20%	1.20	1.50	35	≤0.4	R22	WR430	FDP	Al
VT26WMT...	2.17-3.30	≤20%	1.20	1.50	35	≤0.4	R26	WR340	FDP	Al
VT32WMT...	2.60-3.95	≤20%	1.20	1.50	35	≤0.4	R32	WR284	FDP	Al



Model No*	Freq Range (GHz)	Operating Bandwidth (%)**	VSWR (Max)		Isolation (H&E Arms)dB	Unbalance (Max) (dB)	WG Type		Flange	Material
			H-Arm	E-Arm			IEC	EIA		
VT40WMT...	3.22-4.90	≤20%	1.20	1.50	35	≤0.4	R40	WR229	FDP	Al
VT48WMT...	3.94-5.99	≤20%	1.20	1.50	35	≤0.4	R48	WR187	FDP	Al
VT58WMT...	4.64-7.05	≤20%	1.20	1.50	35	≤0.4	R58	WR159	FDP	Al
VT70WMT...	5.38-8.17	≤20%	1.20	1.50	35	≤0.4	R70	WR137	FDP	Cu
VT84WMT...	6.57-9.99	≤20%	1.20	1.50	35	≤0.4	R84	WR112	FBP	Cu
VT100WMT...	8.20-12.4	≤20%	1.20	1.50	35	≤0.4	R100	WR90	FBP	Cu
VT120WMT...	9.84-15.0	≤20%	1.20	1.50	35	≤0.4	R120	WR75	FBP	Cu
VT140WMT...	11.9-18.0	≤20%	1.20	1.50	35	≤0.4	R140	WR62	FBP	Cu
VT180WMT...	14.5-22.0	≤20%	1.20	1.50	35	≤0.4	R180	WR51	FBP	Cu
VT220WMT...	17.6-26.7	≤20%	1.20	1.50	30	≤0.4	R220	WR42	FBP	Cu
VT260WMT...	21.7-33.0	≤20%	1.20	1.50	30	≤0.4	R260	WR34	FBP	Cu
VT320WMT...	26.5-40.0	≤20%	1.20	1.50	30	≤0.4	R320	WR28	FBP	Cu
VT400WMT...	32.9-50.1	≤20%	1.20	1.50	30	≤0.5	R400	WR22	FUGP	Cu
VT500WMT...	39.2-59.6	≤20%	1.20	1.50	30	≤0.5	R500	WR19	FUGP	Cu
VT620WMT...	49.8-75.8	≤20%	1.20	1.50	30	≤0.5	R620	WR15	FUGP	Cu
VT740WMT...	60.5-91.9	≤20%	1.20	1.50	30	≤0.5	R740	WR12	FUGP	Cu
VT900WMT...	73.8-110	≤20%	1.20	1.50	30	≤0.5	R900	WR10	FUGP	Cu

*Indicates Model Number. See Ordering Information for complete part number.

**Typical operating bandwidth of the hybrid tee is up to 15% of waveguide bandwidth.

*** Performance degradation may occur while it covers wider waveguide bandwidth.

【Ordering Information】

Example Part No: VT 100 WMT A

Vector Telecom ————
WG Type: R100 ————
Material: A=Aluminum C=Copper
Product Type: WG Magic Tee

- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat

9.2 E-Plane Tee

Vector Telecom manufactures a wide variety of E-Plane Tees. The junction of the auxiliary arm is made on the broad wall of the main waveguide.





Vector Telecom

Section 1

Waveguide
Components

09

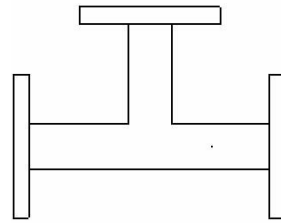
Waveguide
Power
Divider/
Combiner



Vector Telecom Pty Ltd

Website: www.vectortele.com

Email: sales@vectortele.com



【Specifications】

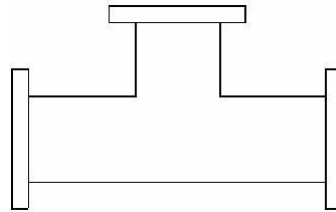
Model No	Freq Range (GHz)	WG Type		Flange	Material
		IEC	EIA		
VT3WET	0.32-0.49	R3	WR2300	FDP/FDM	Al
VT4WET	0.35-0.53	R4	WR2100	FDP/FDM	Al
VT5WET	0.41-0.62	R5	WR1800	FDP/FDM	Al
VT6WET	0.49-0.75	R6	WR1500	FDP/FDM	Al
VT8WET	0.64-0.98	R8	WR1150	FDP/FDM	Al
VT9WET	0.75-1.15	R9	WR975	FDP/FDM	Al
VT12WET	0.96-1.46	R12	WR770	FDP/FDM	Al
VT14WET	1.13-1.73	R14	WR650	FDP/FDM	Al
VT18WET	1.45-2.20	R18	WR510	FDP/FDM	Al
VT22WET	1.72-2.61	R22	WR430	FDP/FDM	Al/Cu
VT26WET	2.17-3.30	R26	WR340	FDP/FDM	Al/Cu
VT32WET	2.60-3.95	R32	WR284	FDP/FDM	Al/Cu
VT40WET	3.22-4.90	R40	WR229	FDP/FDM	Al/Cu
VT48WET	3.94-5.99	R48	WR187	FDP/FDM	Al/Cu
VT58WET	4.64-7.05	R58	WR159	FDP/FDM	Al/Cu
VT70WET	5.38-8.17	R70	WR137	FDP/FDM	Al/Cu
VT84WET	6.57-9.99	R84	WR112	FBP/FBM/FBE	Al/Cu
VT100WET	8.20-12.4	R100	WR90	FBP/FBM/FBE	Al/Cu
VT120WET	9.84-15.0	R120	WR75	FBP/FBM/FBE	Al/Cu
VT140WET	11.9-18.0	R140	WR62	FBP/FBM/FBE	Al/Cu
VT180WET	14.5-22.0	R180	WR51	FBP/FBM/FBE	Al/Cu
VT220WET	17.6-26.7	R220	WR42	FBP/FBM/FBE	Al/Cu
VT260WET	21.7-33.0	R260	WR34	FBP/FBM/FBE	Al/Cu
VT320WET	26.3-40.0	R320	WR28	FBP/FBM/FBE	Al/Cu
VT400WET	32.9-60.1	R400	WR22	FUGP	Cu
VT500WET	39.2-59.6	R500	WR19	FUGP	Cu
VT620WET	49.8-75.8	R620	WR15	FUGP	Cu
VT740WET	60.5-91.9	R740	WR12	FUGP	Cu
VT900WET	73.8-110	R900	WR10	FUGP	Cu

*Indicates Model Number. See Ordering Information for complete part number.



9.3 H-Plane Tee

Vector Telecom manufactures a wide variety of H-Plane Tees. The junction of the auxiliary arm is made on the narrow wall of the main waveguide



【Specifications】

Model No	Freq Range (GHz)	WG Type		Flange	Material
		IEC	EIA		
VT3WHT	0.32-0.49	R3	WR2300	FDP/FDM	Al
VT4WHT	0.35-0.53	R4	WR2100	FDP/FDM	Al
VT5WHT	0.41-0.62	R5	WR1800	FDP/FDM	Al
VT6WHT	0.49-0.75	R6	WR1500	FDP/FDM	Al
VT8WHT	0.64-0.98	R8	WR1150	FDP/FDM	Al
VT9WHT	0.75-1.15	R9	WR975	FDP/FDM	Al
VT12WHT	0.96-1.46	R12	WR770	FDP/FDM	Al
VT14WHT	1.13-1.73	R14	WR650	FDP/FDM	Al
VT18WHT	1.45-2.20	R18	WR510	FDP/FDM	Al
VT22WHT	1.72-2.61	R22	WR430	FDP/FDM	Al/Cu
VT26WHT	2.17-3.30	R26	WR340	FDP/FDM	Al/Cu
VT32WHT	2.60-3.95	R32	WR284	FDP/FDM	Al/Cu
VT40WHT	3.22-4.90	R40	WR229	FDP/FDM	Al/Cu
VT48WHT	3.94-5.99	R48	WR187	FDP/FDM	Al/Cu
VT58WHT	4.64-7.05	R58	WR159	FDP/FDM	Al/Cu
VT70WHT	5.38-8.17	R70	WR137	FDP/FDM	Al/Cu
VT84WHT	6.57-9.99	R84	WR112	FBP/FBM/FBE	Al/Cu
VT100WHT	8.20-12.4	R100	WR90	FBP/FBM/FBE	Al/Cu
VT120WHT	9.84-15.0	R120	WR75	FBP/FBM/FBE	Al/Cu
VT140WHT	11.9-18.0	R140	WR62	FBP/FBM/FBE	Al/Cu
VT180WHT	14.5-22.0	R180	WR51	FBP/FBM/FBE	Al/Cu
VT220WHT	17.6-26.7	R220	WR42	FBP/FBM/FBE	Al/Cu
VT260WHT	21.7-33.0	R260	WR34	FBP/FBM/FBE	Al/Cu
VT320WHT	26.3-40.0	R320	WR28	FBP/FBM/FBE	Al/Cu
VT400WHT	32.9-60.1	R400	WR22	FUGP	Cu
VT500WHT	39.2-59.6	R500	WR19	FUGP	Cu



Model No	Freq Range (GHz)	WG Type		Flange	Material
		IEC	EIA		
VT620WHT	49.8-75.8	R620	WR15	FUGP	Cu
VT740WHT	60.5-91.9	R740	WR12	FUGP	Cu
VT900WHT	73.8-110	R900	WR10	FUGP	Cu

*Indicates Model Number. See Ordering Information for complete part number.

【Ordering Information】

Example Part No: VT 100 WHT A

Vector Telecom
WG Type: R100
Material: A=Aluminum C=Copper
Product Type: WHT: H-Plane Tee
WET: E-Plane Tee

- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat

9.4 In-Phase Waveguide Power Divider / Combiner



【Specifications】

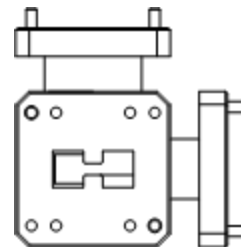
Model No*	WG Type EIA	Freq Range (GHz)	Working Bandwidth	VSWR (Max)		Isolation (2 Balance Arms)(dB)	Distributi on Ratio(dB)	Flange	Material
				H-Arm	Balance Arm				
VT3WMTPC/D	WR2300	0.32-0.49	≤20%	≤1.20	≤1.50	≥17	3±0.25	FDP	Al
VT4WMTPC/D	WR2100	0.35-0.53	≤20%	≤1.20	≤1.50	≥17	3±0.25	FDP	Al
VT5WMTPC/D	WR1800	0.41-0.62	≤20%	≤1.20	≤1.50	≥17	3±0.25	FDP	Al
VT6WMTPC/D	WR1500	0.49-0.75	≤20%	≤1.20	≤1.50	≥17	3±0.25	FDP	Al
VT8WMTPC/D	WR1150	0.64-0.98	≤20%	≤1.20	≤1.50	≥17	3±0.25	FDP	Al
VT9WMTPC/D	WR975	0.75-1.15	≤20%	≤1.20	≤1.50	≥17	3±0.25	FDP	Al
VT12WMTPC/D	WR770	0.96-1.46	≤20%	≤1.20	≤1.50	≥17	3±0.25	FDP	Al
VT14WMTPC/D	WR650	1.13-1.73	≤20%	≤1.20	≤1.50	≥17	3±0.25	FDP	Al
VT18WMTPC/D	WR510	1.45-2.20	≤20%	≤1.20	≤1.50	≥17	3±0.25	FDP	Al
VT22WMTPC/D	WR430	1.72-2.61	≤20%	≤1.20	≤1.50	≥17	3±0.4	FDP	Al
VT26WMTPC/D	WR340	2.17-3.30	≤20%	≤1.20	≤1.50	≥17	3±0.4	FDP	Al
VT32WMTPC/D	WR284	2.60-3.95	≤20%	≤1.20	≤1.50	≥17	3±0.4	FDP	Al
VT40WMTPC/D	WR229	3.22-4.90	≤20%	≤1.20	≤1.50	≥17	3±0.4	FDP	Al
VT48WMTPC/D	WR187	3.94-5.99	≤20%	≤1.20	≤1.50	≥17	3±0.4	FDP	Al
VT58WMTPC/D	WR159	4.64-7.05	≤20%	≤1.20	≤1.50	≥17	3±0.4	FDP	Al
VT70WMTPC/D	WR137	5.38-8.17	≤20%	≤1.20	≤1.50	≥17	3±0.4	FDP	Cu



Model No*	WG Type EIA	Freq Range (GHz)	Working Bandwidth	VSWR (Max)		Isolation (2 Balance Arms)(dB)	Distributi on Ratio(dB)	Flange	Material
				H-Arm	Balance Arm				
VT84WMTPC/D	WR112	6.57-9.99	≤20%	≤1.20	≤1.50	≥17	3±0.4	FBP	Cu
VT100WMTPC/D	WR90	8.20-12.4	≤20%	≤1.20	≤1.50	≥17	3±0.4	FBP	Cu
VT120WMTPC/D	WR75	9.84-15.0	≤20%	≤1.20	≤1.50	≥17	3±0.4	FBP	Cu
VT140WMTPC/D	WR62	11.9-18.0	≤20%	≤1.20	≤1.50	≥17	3±0.4	FBP	Cu
VT180WMTPC/D	WR51	14.5-22.0	≤20%	≤1.20	≤1.50	≥17	3±0.4	FBP	Cu
VT220WMTPC/D	WR42	17.6-26.7	≤20%	≤1.20	≤1.50	≥15	3±0.4	FBP	Cu
VT260WMTPC/D	WR34	21.7-33.0	≤20%	≤1.20	≤1.50	≥15	3±0.4	FBP	Cu
VT320WMTPC/D	WR28	26.5-40.0	≤20%	≤1.20	≤1.50	≥15	3±0.4	FBP	Cu
VT400WMTPC/D	WR22	32.9-50.1	≤20%	≤1.20	≤1.50	≥15	3±0.5	FUGP	Cu
VT500WMTPC/D	WR19	39.2-59.6	≤20%	≤1.20	≤1.50	≥15	3±0.5	FUGP	Cu
VT620WMTPC/D	WR15	49.8-75.8	≤20%	≤1.20	≤1.50	≥15	3±0.5	FUGP	Cu
VT740WMTPC/D	WR12	60.5-91.9	≤20%	≤1.20	≤1.50	≥15	3±0.5	FUGP	Cu
VT900WMTPC/D	WR10	73.8-112	≤20%	≤1.20	≤1.50	≥15	3±0.5	FUGP	Cu

*Indicates Model Number. See Ordering Information for complete part number.

9.5 Double-Ridged Waveguide Magic Tee and Power Divider / Combiner



【Specifications】

Model No*	WG Type EIA	Freq Range (GHz)	VSWR (Max)		Isolation (2 Balance Arm) (dB)	Distribution Ratio (dB)	Flange	Material
			H-Arm	E-Arm				
VT200DRWMTPC/D	WRD200	2.0-4.8	≤1.50	≤1.50	≥12	3±0.6	FP	Al
VT250DRWMTPC/D	WRD250	2.6-7.8	≤1.50	≤1.50	≥12	3±0.6	FP	Al
VT350DRWMTPC/D	WRD350	3.5-8.2	≤1.50	≤1.50	≥12	3±0.6	FP	Al
VT475DRWMTPC/D	WRD475	4.75-11	≤1.50	≤1.50	≥12	3±0.6	FP	Al
VT500DRWMTPC/D	WRD500	5.0-18.0	≤1.50	≤1.50	≥12	3±0.6	FP	Cu
VT650DRWMTPC/D	WRD650	6.5-18.0	≤1.50	≤1.50	≥12	3±0.6	FP	Cu
VT750DRWMTPC/D	WRD750	7.5-18.0	≤1.50	≤1.50	≥12	3±0.6	FP	Cu
VT700DRWMTPC/D	WRD700	7.0-18.0	≤1.50	≤1.50	≥12	3±0.6	FP	Cu

*Indicates Model Number. See Ordering Information for complete part number.



【Ordering Information】

Example Part No: VT 100 WMTPC/D P M A

Vector Telecom ————
 WG Type: R100 ————
 Product Type: WG Magic Tee Combiner/ Divider ————

Material: A=Aluminum C=Copper
 Flange 2 Type: M=FBM100
 Flange 1 Type: P=FBP100

Code	Description
WMTPC/D	Waveguide Magic Tee Power Combiner/Divider
DRWMTPC/D	Double Ridged WG Magic Tee Power Combiner/Divider

- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat

9.6 Waveguide 90° Power Divider/Combiner

Vector Telecom offers a range of high-performance waveguide 90° power dividers/combiners with a frequency range of 1.8-40 GHz and standard rectangular waveguides from BJ22 to BJ320. The typical mainline VSWR in the operating bandwidth is 1.15, the coupling is 3-7dB, and the isolation is greater than 15-25dB.


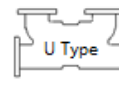
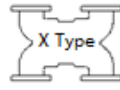
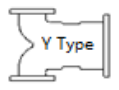
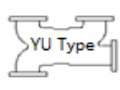


【Product Type】



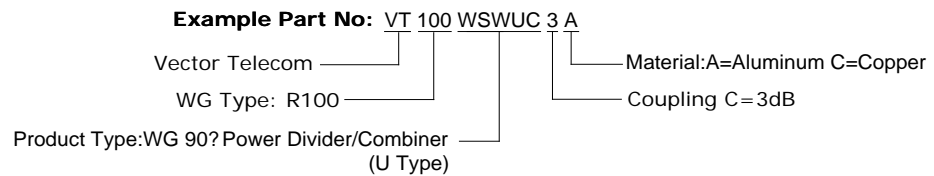
E Plane Coupling (WSWC Series)

H Plane Coupling (WTWC Series)

Model	I Type		U Type		X Type		Y Type		YU Type	
	WSWC	WTWC	WSWUC	WTWUC	WSWXC	WTWXC	WSWYC	WTWYC	WSWYUC	WTWYUC
Description	Narrow wall coupling	Wide wall coupling	Narrow wall coupling	Wide wall coupling	Narrow wall coupling	Wide wall coupling	Narrow wall coupling	Wide wall coupling	Narrow wall coupling	Wide wall coupling
Product Image										



【Ordering Information】



- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat

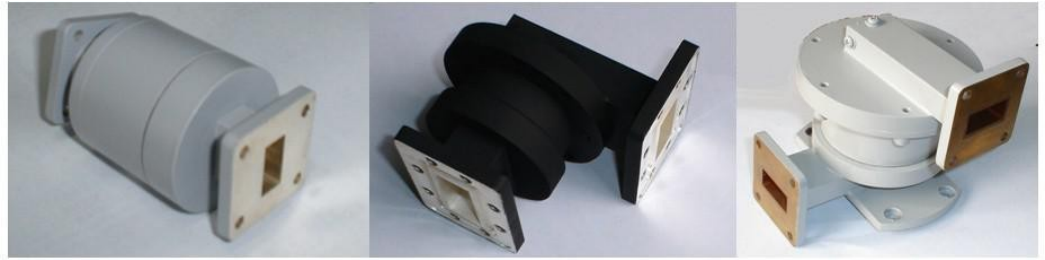
【I Type Specifications】

Model No*	WG Type EIA	Freq Range (GHz)	Working Bandwidth	VSWR (Max)	Coupling.. (dB)	Material
VT40WSWC...	WR229	3.22-4.90	≤10%	≤1.25	3 ~7	Al
VT40WTWC...	WR229	3.22-4.90	≤10%	≤1.25	3 ~7	Al
VT48WSWC...	WR187	3.94-5.99	≤10%	≤1.25	3 ~7	Al
VT48WTWC...	WR187	3.94-5.99	≤10%	≤1.25	3 ~7	Al
VT58WSWC...	WR159	4.64-7.05	≤10%	≤1.25	3 ~7	Al
VT58WTWC...	WR159	4.64-7.05	≤10%	≤1.25	3 ~7	Al
VT70WSWC...	WR137	5.38-8.17	≤10%	≤1.25	3 ~7	Cu
VT70WTWC...	WR137	5.38-8.17	≤10%	≤1.25	3 ~7	Cu
VT84WSWC...	WR112	6.57-9.99	≤10%	≤1.25	3 ~7	Cu
VT84WTWC...	WR112	6.57-9.99	≤10%	≤1.25	3 ~7	Cu
VT100WSWC...	WR90	8.20-12.40	≤10%	≤1.25	3 ~7	Cu
VT100WTWC...	WR90	8.20-12.40	≤10%	≤1.25	3 ~7	Cu
VT120WSWC...	WR75	9.84-15.0	≤10%	≤1.25	3 ~7	Cu
VT120WTWC...	WR75	9.84-15.0	≤10%	≤1.25	3 ~7	Cu
VT140WSWC...	WR62	11.9-18.0	≤10%	≤1.25	3 ~7	Cu
VT140WTWC...	WR62	11.9-18.0	≤10%	≤1.25	3 ~7	Cu
VT180WSWC...	WR51	14.5-22.0	≤10%	≤1.25	3 ~7	Cu
VT180WTWC...	WR51	14.5-22.0	≤10%	≤1.25	3 ~7	Cu
VT220WSWC...	WR42	17.6-26.7	≤10%	≤1.30	3 ~7	Cu
VT220WTWC...	WR42	17.6-26.7	≤10%	≤1.30	3 ~7	Cu
VT260WSWC...	WR34	21.7-33.0	≤10%	≤1.30	3 ~7	Cu
VT260WTWC...	WR34	21.7-33.0	≤10%	≤1.30	3 ~7	Cu
VT320WSWC...	WR28	26.5-40.0	≤10%	≤1.30	3 ~7	Cu
VT320WTWC...	WR28	26.5-40.0	≤10%	≤1.30	3 ~7	Cu

*Indicates Model Number. See Ordering Information for complete part number.

10 Waveguide Rotary Joint

10.1 Waveguide Single Channel Rotary Joint

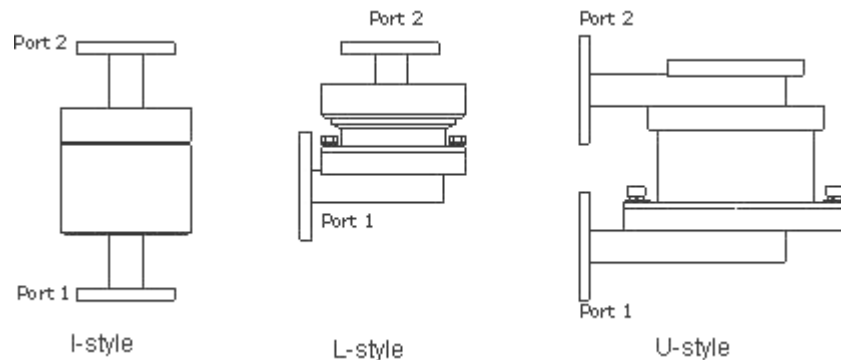


Rotary Joints (rotary couplers) are used to transmit microwave energy from stationary lines to rotating lines. The rotary joint is an electro-mechanical device with RF performance dependent upon rigorous electrical and mechanical design. Available styles are defined by physical geometry as follows:

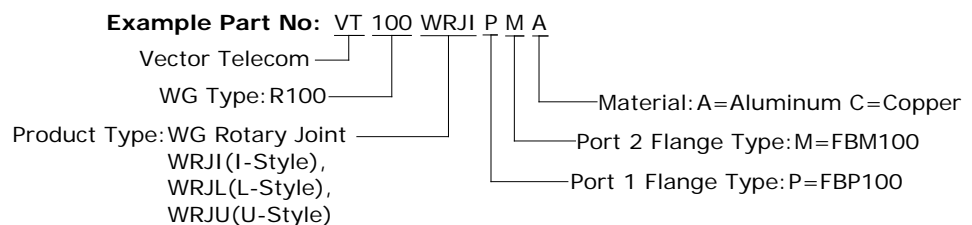
I-style - Two in-line arms both collinear with the axis of rotation.

L-style - One arm is perpendicular to the axis of rotation.

U-style - Both arms are perpendicular to the axis of rotation.



【Ordering Information】



- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat

10

Waveguide Rotary Joint





10.1.1 I Type Waveguide Rotary Joint

【Specifications】

Model No	Freq Range (GHz)	Operating Bandwidth (MHz)	VSWR (Max)	VSWR WOW	IL(dB) (Max)	IL WOW (dB)	WG Type		Material
							IEC	EIA	
VT32WRJI	2.60-3.95	200	1.2	0.05	0.3	0.1	R32	WR284	Al/Cu
VT40WRJI	3.22-4.90	200	1.2	0.05	0.3	0.1	R40	WR229	Al/Cu
VT48WRJI	3.94-5.99	200	1.2	0.05	0.3	0.1	R48	WR187	Al/Cu
VT58WRJI	4.64-7.05	300	1.25	0.05	0.25	0.1	R58	WR159	Al/Cu
VT70WRJI	5.38-8.17	700	1.25	0.05	0.25	0.1	R70	WR137	Al/Cu
VT84WRJI	6.57-9.99	300	1.2	0.05	0.3	0.1	R84	WR112	Al/Cu
VT100WRJI	8.20-12.4	300	1.2	0.05	0.3	0.1	R100	WR90	Al/Cu
VT120WRJI	9.84-15.0	500	1.25	0.05	0.3	0.1	R120	WR75	Al/Cu
VT140WRJI	11.9-18.0	1000	1.3	0.05	0.4	0.1	R140	WR62	Al/Cu
VT180WRJI	14.5-22.0	1000	1.3	0.05	0.4	0.1	R180	WR51	Al/Cu
VT220WRJI	17.6-26.7	2000	1.4	0.05	1	0.1	R220	WR42	Al/Cu
VT260WRJI	21.7-33.0	2000	1.4	0.05	1	0.1	R260	WR34	Al/Cu
VT320WRJI	26.3-40.0	2000	1.4	0.05	1	0.1	R320	WR28	Al/Cu

*Indicates Model Number. See Ordering Information for complete part number.

10.1.2 L Type Waveguide Rotary Joint

【Specifications】

Model No	Freq Range (GHz)	Operating Bandwidth (MHz)	VSWR (Max)	VSWR WOW	IL(dB) (Max)	IL WOW (dB)	WG Type		Material
							IEC	EIA	
VT32WRJL	2.60-3.95	200	1.2	0.05	0.3	0.1	R32	WR284	Al/Cu
VT40WRJL	3.22-4.90	200	1.2	0.05	0.3	0.1	R40	WR229	Al/Cu
VT48WRJL	3.94-5.99	200	1.2	0.05	0.3	0.1	R48	WR187	Al/Cu
VT58WRJL	4.64-7.05	300	1.25	0.05	0.25	0.1	R58	WR159	Al/Cu
VT70WRJL	5.38-8.17	700	1.25	0.05	0.25	0.1	R70	WR137	Al/Cu
VT84WRJL	6.57-9.99	300	1.2	0.05	0.3	0.1	R84	WR112	Al/Cu
VT100WRJL	8.20-12.4	300	1.2	0.05	0.3	0.1	R100	WR90	Al/Cu
VT120WRJL	9.84-15.0	500	1.25	0.05	0.3	0.1	R120	WR75	Al/Cu
VT140WRJL	11.9-18.0	1000	1.3	0.05	0.4	0.1	R140	WR62	Al/Cu
VT180WRJL	14.5-22.0	1000	1.3	0.05	0.4	0.1	R180	WR51	Al/Cu
VT220WRJL	17.6-26.7	2000	1.4	0.05	1	0.1	R220	WR42	Al/Cu
VT260WRJL	21.7-33.0	2000	1.4	0.05	1	0.1	R260	WR34	Al/Cu
VT320WRJL	26.3-40.0	2000	1.4	0.05	1	0.1	R320	WR28	Al/Cu

*Indicates Model Number. See Ordering Information for complete part number.

10.1.3 U Type Waveguide Rotary Joint

【Specifications】

Model No	Freq Range (GHz)	Operating Bandwidth (MHz)	VSWR (Max)	VSWR WOW	IL(dB) (Max)	IL WOW (dB)	WG Type		Material
							IEC	EIA	
VT32WRJU	2.60-3.95	200	1.2	0.05	0.3	0.1	R32	WR284	Al/Cu
VT40WRJU	3.22-4.90	200	1.2	0.05	0.3	0.1	R40	WR229	Al/Cu
VT48WRJU	3.94-5.99	200	1.2	0.05	0.3	0.1	R48	WR187	Al/Cu
VT58WRJU	4.64-7.05	300	1.25	0.05	0.25	0.1	R58	WR159	Al/Cu
VT70WRJU	5.38-8.17	700	1.25	0.05	0.25	0.1	R70	WR137	Al/Cu
VT84WRJU	6.57-9.99	300	1.2	0.05	0.3	0.1	R84	WR112	Al/Cu
VT100WRJU	8.20-12.4	300	1.2	0.05	0.3	0.1	R100	WR90	Al/Cu
VT120WRJU	9.84-15.0	500	1.25	0.05	0.3	0.1	R120	WR75	Al/Cu
VT140WRJU	11.9-18.0	1000	1.3	0.05	0.4	0.1	R140	WR62	Al/Cu
VT180WRJU	14.5-22.0	1000	1.3	0.05	0.4	0.1	R180	WR51	Al/Cu
VT220WRJU	17.6-26.7	2000	1.4	0.05	1	0.1	R220	WR42	Al/Cu
VT260WRJU	21.7-33.0	2000	1.4	0.05	1	0.1	R260	WR28	Al/Cu
VT320WRJU	26.3-40.0	2000	1.4	0.05	1	0.1	R320	WR28	Al/Cu

*Indicates Model Number. See Ordering Information for complete part number.

10.2 High Power Waveguide Rotary Joint



【Specifications】

Model No*	WG Type EIA	Freq Range (GHz)	Working bandwidth	VSWR	IL (dB)	Avg Power(W)	Flange	Material
VT32WHPRJUTM01	WR284	2.60-3.95	≤5%	≤1.15	≤0.20	3000	FDP	Al
VT40WHPRJUTM01	WR229	3.22-4.90	≤5%	≤1.15	≤0.20	3000	FDP	Al
VT48WHPRJUTM01	WR187	3.94-5.99	≤5%	≤1.15	≤0.20	3000	FDP	Al
VT58WHPRJUTM01	WR159	4.64-7.05	≤5%	≤1.15	≤0.20	3000	FDP	Al
VT70WHPRJUTM01	WR137	5.38-8.17	≤5%	≤1.15	≤0.20	2000	FDP	Al
VT84WHPRJUTM01	WR112	6.57-9.99	≤5%	≤1.20	≤0.20	2000	FBP	Cu
VT100WHPRJUTM01	WR90	8.20-12.5	≤5%	≤1.20	≤0.20	2000	FBP	Cu
VT120WHPRJUTM01	WR75	9.84-15.0	≤5%	≤1.20	≤0.20	1000	FBP	Cu
VT140WHPRJUTM01	WR62	11.9-18.0	≤5%	≤1.25	≤0.20	2000	FBP	Cu
VT180WHPRJUTM01	WR51	14.5-22.0	≤5%	≤1.25	≤0.25	500	FBP	Cu
VT220WHPRJUTM01	WR42	17.6-26.7	≤5%	≤1.25	≤0.25	500	FBP	Cu
VT260WHPRJUTM01	WR34	21.7-33.0	≤5%	≤1.25	≤0.25	300	FBP	Cu
VT320WHPRJUTM01	WR28	26.5-40.0	≤5%	≤1.25	≤0.25	300	FBP	Cu

*Indicates Model Number. See Ordering Information for complete part number.

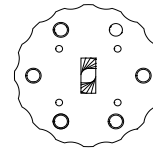
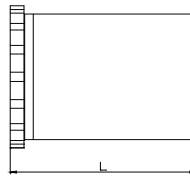
10

Waveguide Rotary Joint





10.3 90° Polarized Rotary Joint

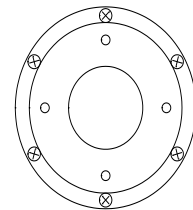
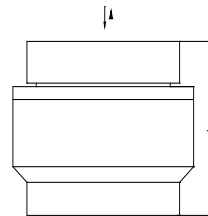


【Specifications】

Model No*	WG Type EIA	Freq Range (GHz)	VSWR (Max)	IL(dB)	Avg Power(W)	Flange	Material
VT70WRJIT	WR137	5.38-8.17	≤1.25	≤0.3	200W	FDP	Cu
VT84WRJIT	WR112	6.57-9.99	≤1.25	≤0.3	100W	FBP	Cu
VT100WRJIT	WR90	8.20-12.5	≤1.25	≤0.3	100W	FBP	Cu
VT120WRJIT	WR75	9.84-15.0	≤1.25	≤0.3	100W	FBP	Cu
VT140WRJIT	WR62	11.9-18.0	≤1.25	≤0.3	100W	FBP	Cu
VT180WRJIT	WR51	14.5-22.0	≤1.25	≤0.3	50W	FBP	Cu
VT220WRJIT	WR42	17.6-26.7	≤1.4	≤0.3	50W	FBP	Cu
VT260WRJIT	WR34	21.7-33.0	≤1.5	≤0.3	50W	FBP	Cu
VT320WRJIT	WR28	26.5-40.0	≤1.5	≤0.3	50W	FBP	Cu

*Indicates Model Number. See Ordering Information for complete part number.

10.4 Circular Waveguide Rotary Joint



【Specifications】

Model No*	Freq Range (GHz)	VSWR (Max)	IL(dB)	Avg Power	Circular Waveguide Diameter (mm)	Flange	Material	Finish
VT100CWRJI	2.0-4.0	≤1.20	≤0.2	200W	100	FAP	Al	Chromate conversion
VT61.04CWRJI	3.3-3.8	≤1.20	≤0.2	200W	61.04	FAP	Al	Chromate conversion
VT51.99CWRJI	3.89-5.33	≤1.20	≤0.2	200W	51.99	FAP	Al	Chromate conversion
VT37CWRJI	4.5-6.5	≤1.20	≤0.2	200W	37	FAP	Al	Chromate conversion
VT27.78CWRJI	7.4-9.0	≤1.20	≤0.2	200W	27.78	FAP	Al	Chromate conversion
VT23.825CWRJI	9.1-10.0	≤1.20	≤0.2	100W	23.825	FAP	Al	Chromate conversion
VT20.244CWRJI	8.5-10.5	≤1.20	≤0.2	100W	20.244	FAP	Al	Chromate conversion
VT14CWRJI	15.0-17.0	≤1.20	≤0.2	100W	14	FAP	Cu	Silver Plating

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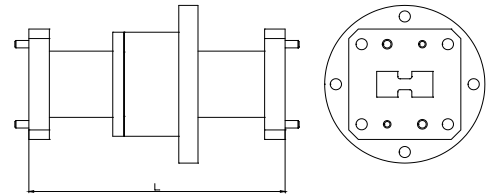
Waveguide Rotary Joint



Model No*	Freq Range (GHz)	VSWR (Max)	IL(dB)	Avg Power	Circular Waveguide Diameter (mm)	Flange	Material	Finish
VT11.25CWRJI	18.2-24.9	≤1.20	≤0.2	100W	11.25	FAP	Cu	Silver Plating
VT11CWRJI	17.7-21.2	≤1.20	≤0.2	100W	11	FAP	Cu	Silver Plating
VT7.137CWRJI	27.5-31	≤1.20	≤0.2	100W	7.137	FAP	Cu	Silver Plating

*Indicates Model Number. See Ordering Information for complete part number.

10.5 Double-Ridged Waveguide Rotary Joint



【Specifications】

Model No*	WG Type EIA	Freq Range (GHz)	VSWR (Max)	IL(dB)	Avg Power	Flange	Material
VT84DRWRJI	WRD84	0.84-2	≤1.5	≤0.5	200W	FP	Cu
VT150DRWRJI	WRD150	1.5-3.6	≤1.5	≤0.5	200W	FP	Cu
VT200DRWRJI	WRD200	2-4.8	≤1.5	≤0.5	200W	FP	Cu
VT250DRWRJI	WRD250	2.6-7.8	≤1.5	≤0.5	200W	FP	Cu
VT350DRWRJI	WRD350	3.5-8.2	≤1.5	≤0.5	200W	FP	Cu
VT475DRWRJI	WRD475	4.75-11	≤1.5	≤0.5	100W	FP	Cu
VT500DRWRJI	WRD500	5-18	≤1.5	≤0.5	100W	FP	Cu
VT580DRWRJI	WRD580	5.8-16	≤1.5	≤0.5	100W	FP	Cu
VT650DRWRJI	WRD650	6.5-18	≤1.5	≤0.5	100W	FP	Cu
VT700DRWRJI	WRD750	7-18.5	≤1.5	≤0.5	100W	FP	Cu
VT750DRWRJI	WRD700	7.5-18	≤1.5	≤0.5	100W	FP	Cu
VT1100DRWRJI	WRD110	11-26.5	≤1.8	≤0.8	50W	FP	Cu
VT1800DRWRJI	WRD180	18-40	≤2.0	≤0.8	30W	FP	Cu

*Indicates Model Number. See Ordering Information for complete part number.

【Ordering Information】

Example Part No: VT 100 DRWRJ I P M A

Vector Telecom — VT
 WG Type: R100 — 100
 Product Type: Double Ridged WG Rotary Joint — DRWRJ
 Port 2 Flange Type: FBM — I
 Port 1 Flange Type: FBP — P
 Material: A=Aluminum C=Copper — M A
 WRJI (I-style), WRJL (L-style), WRJU (U-style)



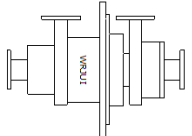
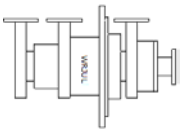
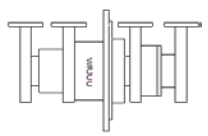
Code	Description
WHPRJUTM01	High Power Waveguide Rotary Joint
WRJIT	90° Polarized Rotary Joint
CWRJI	Circular Waveguide Rotary Joint
DRWRJI	Double-Ridged Waveguide Rotary Joint

- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat

10.6 Waveguide Dual-Channel Rotary Joint



【Structure Type】

Model	UI	UL	UU
Description	Dual-Channel U+I Type	Dual-Channel U+L Type	Dual-Channel U+U Type
Drawing			
Channel Isolation	≥50dB	≥50dB	≥50dB

【WRJUI Specifications】

Model No*	WG Type EIA	Freq Range (GHz)	Working bandwidth	VSWR (Max)	IL(d B)	Avg Power (W)	Peak power (KW)	Flange	Material
VT32WRJUI	WR284	2.60-3.95	≤10%	≤1.25	≤0.3	600	600	FDP	Al
VT40WRJUI	WR229	3.22-4.90	≤10%	≤1.25	≤0.3	600	600	FDP	Al
VT48WRJUI	WR187	3.94-5.99	≤10%	≤1.25	≤0.3	600	600	FDP	Al
VT58WRJUI	WR159	4.64-7.05	≤10%	≤1.25	≤0.3	500	150	FDP	Al
VT70WRJUI	WR137	5.38-8.17	≤10%	≤1.25	≤0.3	500	150	FDP	Cu
VT84WRJUI	WR112	6.57-9.99	≤10%	≤1.25	≤0.3	400	150	FBP	Cu
VT100WRJUI	WR90	8.20-12.5	≤10%	≤1.25	≤0.3	400	150	FBP	Cu
VT120WRJUI	WR75	9.84-15.0	≤10%	≤1.25	≤0.3	100	10	FBP	Cu



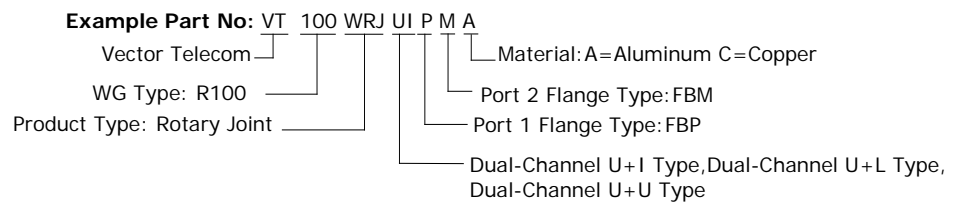
Section 1

Waveguide Components

Model No*	WG Type EIA	Freq Range (GHz)	Working bandwidth	VSWR (Max)	IL(d B)	Avg Power (W)	Peak power (KW)	Flange	Material
VT140WRJUI	WR62	11.9-18.0	≤10%	≤1.25	≤0.3	100	4	FBP	Cu
VT180WRJUI	WR51	14.5-22.0	≤10%	≤1.30	≤0.4	100	3	FBP	Cu
VT220WRJUI	WR42	17.6-26.7	≤10%	≤1.30	≤0.5	50	0.5	FBP	Cu
VT260WRJUI	WR34	21.7-33.0	≤10%	≤1.30	≤0.5	30	0.3	FBP	Cu
VT320WRJUI	WR28	26.5-40.0	≤10%	≤1.50	≤0.7	30	0.3	FBP	Cu

*Indicates Model Number. See Ordering Information for complete part number.

【Ordering Information】



- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat

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Waveguide Rotary Joint



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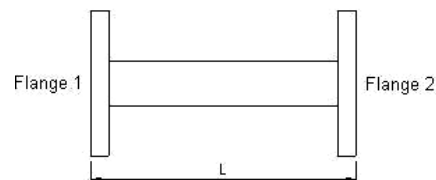
Website: www.vectortele.com

Email: sales@vectortele.com

11 Waveguide Attenuator

Vector Telecom offers a series of rectangular waveguide attenuators. Typical Attenuation values are 3dB, 6dB, 10dB, 20dB and 30dB (other attenuation values available, consult sales engineers for details). The assembly construction includes a precision element for optimum electrical performance, but note that Attenuation vs. Frequency can vary greatly depending on the attenuation at a given frequency. Waveguide Fixed Attenuators with normal and high power units are also available. For more information feel free to call us and discuss your needs with one of our sales engineers.

11.1 Waveguide Fixed Attenuator



【Specifications】

Model No*	Freq Range (GHz)	VSWR (Max)	Power (W)	Attenuation** (dB)	WG Type		Flange	Material
					IEC	EIA		
VT3WFA...	0.32-0.49	1.25	2	3/6/10/20/30	R3	WR2300	FDP	Al
VT4WFA...	0.35-0.53	1.25	2	3/6/10/20/30	R4	WR2100	FDP	Al
VT5WFA...	0.41-0.62	1.25	2	3/6/10/20/30	R5	WR1800	FDP	Al
VT6WFA...	0.49-0.75	1.25	2	3/6/10/20/30	R6	WR1500	FDP	Al
VT8WFA...	0.64-0.98	1.25	2	3/6/10/20/30	R8	WR1150	FDP	Al
VT9WFA...	0.75-1.15	1.25	2	3/6/10/20/30	R9	WR975	FDP	Al
VT12WFA...	0.96-1.46	1.25	2	3/6/10/20/30	R12	WR770	FDP	Al
VT14WFA...	1.13-1.73	1.25	2	3/6/10/20/30	R14	WR650	FDP	Al
VT18WFA...	1.45-2.20	1.25	2	3/6/10/20/30	R18	WR510	FDP	Al
VT22WFA...	1.72-2.61	1.25	2	3/6/10/20/30	R22	WR430	FDP	Al
VT26WFA...	2.17-3.30	1.25	2	3/6/10/20/30	R26	WR340	FDP	Al
VT32WFA...	2.60-3.95	1.25	2	3/6/10/20/30	R32	WR284	FDP	Al
VT40WFA...	3.22-4.90	1.25	2	3/6/10/20/30	R40	WR229	FDP	Al
VT48WFA...	3.94-5.99	1.25	2	3/6/10/20/30	R48	WR187	FDP	Al
VT58WFA...	4.64-7.05	1.25	2	3/6/10/20/30	R58	WR159	FDP	Al

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Waveguide Attenuator



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Website: www.vectortele.com

Email: sales@vectortele.com

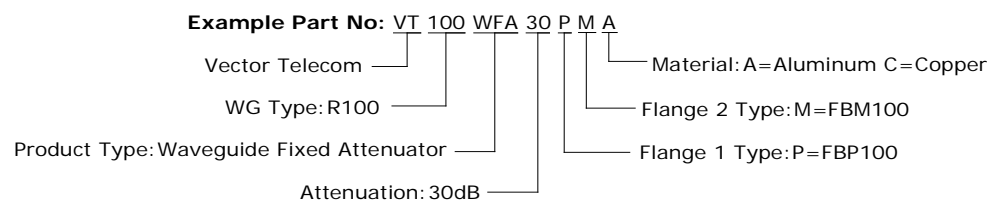


Model No*	Freq Range (GHz)	VSWR (Max)	Power (W)	Attenuation** (dB)	WG Type		Flange	Material
					IEC	EIA		
VT70WFA...	5.38-8.17	1.25	2	3/6/10/20/30	R70	WR137	FDP	Cu
VT84WFA...	6.57-9.99	1.25	2	3/6/10/20/30	R84	WR112	FBP	Cu
VT100WFA...	8.20-12.40	1.25	2	3/6/10/20/30	R100	WR90	FBP	Cu
VT120WFA...	9.84-15.0	1.25	2	3/6/10/20/30	R120	WR75	FBP	Cu
VT140WFA...	11.9-18.0	1.25	2	3/6/10/20/30	R140	WR62	FBP	Cu
VT180WFA...	14.5-22.0	1.25	2	3/6/10/20/30	R180	WR51	FBP	Cu
VT220WFA...	17.6-26.7	1.25	2	3/6/10/20/30	R220	WR42	FBP	Cu
VT260WFA...	21.7-33.0	1.25	2	3/6/10/20/30	R260	WR34	FBP	Cu
VT320WFA...	26.5-40.0	1.25	2	3/6/10/20/30	R320	WR28	FBP	Cu
VT400WFA...	32.9-50.1	1.30	2	3/6/10/20/30	R400	WR22	FUGP	Cu
VT500WFA...	39.2-59.6	1.30	2	3/6/10/20/30	R500	WR19	FUGP	Cu
VT620WFA...	49.8-75.8	1.30	2	3/6/10/20/30	R620	WR15	FUGP	Cu
VT740WFA...	60.5-91.9	1.35	2	3/6/10/20/30	R740	WR12	FUGP	Cu
VT900WFA...	73.8-110	1.35	2	3/6/10/20/30	R900	WR10	FUGP	Cu

*Indicates Model Number. See Ordering Information for complete part number

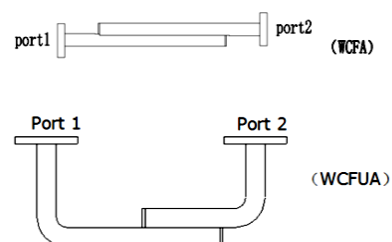
** Nominal Attenuation Accuracy: $\pm 0.5\text{dB}$ Frequency Sensitivity: $\pm 0.7\text{dB}$

【Ordering Information】



- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat

11.2 Waveguide Coupling Fixed Attenuators





【Specifications】

Model No*	WG Type EIA	Freq Range (GHz)	VSWR (Max)	Optional Attenuation (dB)	Frequency Response (dB)	Flange	Material
VT12WCFAX	WR770	0.96-1.46	≤1.20	3-60	±0.5~1.8	FDP	Al
VT12WCFUAX	WR770	0.96-1.46	≤1.20	3-60	±0.5~1.8	FDP	Al
VT14WCFAX	WR650	1.13-1.73	≤1.20	3-60	±0.5~1.8	FDP	Al
VT14WCFUAX	WR650	1.13-1.73	≤1.20	3-60	±0.5~1.8	FDP	Al
VT18WCFAX	WR510	1.45-2.20	≤1.20	3-60	±0.5~1.8	FDP	Al
VT18WCFUAX	WR510	1.45-2.20	≤1.20	3-60	±0.5~1.8	FDP	Al
VT22WCFAX	WR430	1.72-2.61	≤1.20	3-60	±0.5~1.8	FDP	Al
VT22WCFUAX	WR430	1.72-2.61	≤1.20	3-60	±0.5~1.8	FDP	Al
VT26WCFAX	WR340	2.17-3.30	≤1.20	3-60	±0.5~1.8	FDP	Al
VT26WCFUAX	WR340	2.17-3.30	≤1.20	3-60	±0.5~1.8	FDP	Al
VT32WCFAX	WR284	2.60-3.95	≤1.20	3-60	±0.5~1.8	FDP	Al
VT32WCFUAX	WR284	2.60-3.95	≤1.20	3-60	±0.5~1.8	FDP	Al
VT40WCFAX	WR229	3.22-4.90	≤1.20	3-60	±0.5~1.8	FDP	Al
VT40WCFUAX	WR229	3.22-4.90	≤1.20	3-60	±0.5~1.8	FDP	Al
VT48WCFAX	WR187	3.94-5.99	≤1.20	3-60	±0.5~1.8	FDP	Al
VT48WCFUAX	WR187	3.94-5.99	≤1.20	3-60	±0.5~1.8	FDP	Al
VT58WCFAX	WR159	4.64-7.05	≤1.20	3-60	±0.5~1.8	FDP	Al
VT58WCFUAX	WR159	4.64-7.05	≤1.20	3-60	±0.5~1.8	FDP	Al
VT70WCFAX	WR137	5.38-8.17	≤1.20	3-60	±0.5~1.8	FDP	Cu
VT70WCFUAX	WR137	5.38-8.17	≤1.20	3-60	±0.5~1.8	FDP	Cu
VT84WCFAX	WR112	6.57-9.99	≤1.20	3-60	±0.5~1.8	FBP	Cu
VT84WCFUAX	WR112	6.57-9.99	≤1.20	3-60	±0.5~1.8	FBP	Cu
VT100WCFAX	WR90	8.20-12.40	≤1.20	3-60	±0.5~1.8	FBP	Cu
VT100WCFUAX	WR90	8.20-12.40	≤1.20	3-60	±0.5~1.8	FBP	Cu
VT120WCFAX	WR75	9.84-15.0	≤1.20	3-60	±0.5~1.8	FBP	Cu
VT120WCFUAX	WR75	9.84-15.0	≤1.20	3-60	±0.5~1.8	FBP	Cu
VT140WCFAX	WR62	11.9-18.0	≤1.20	3-60	±0.5~1.8	FBP	Cu
VT140WCFUAX	WR62	11.9-18.0	≤1.20	3-60	±0.5~1.8	FBP	Cu
VT180WCFAX	WR51	14.5-22.0	≤1.20	3-60	±0.5~1.8	FBP	Cu
VT180WCFUAX	WR51	14.5-22.0	≤1.20	3-60	±0.5~1.8	FBP	Cu
VT220WCFAX	WR42	17.6-26.7	≤1.20	3-60	±0.5~1.8	FBP	Cu
VT220WCFUAX	WR42	17.6-26.7	≤1.20	3-60	±0.5~1.8	FBP	Cu
VT260WCFAX	WR34	21.7-33.0	≤1.20	3-60	±0.5~1.8	FBP	Cu
VT260WCFUAX	WR34	21.7-33.0	≤1.20	3-60	±0.5~1.8	FBP	Cu
VT320WCFAX	WR28	26.5-40.0	≤1.20	3-60	±0.5~1.8	FBP	Cu
VT320WCFUAX	WR28	26.5-40.0	≤1.20	3-60	±0.5~1.8	FBP	Cu



Model No*	WG Type EIA	Freq Range (GHz)	VSWR (Max)	Optional Attenuation (dB)	Frequency Response (dB)	Flange	Material
VT400WCFAX	WR22	32.9-50.1	≤1.20	3-60	±0.5~1.8	FUGP	Cu
VT400WCFUAX	WR22	32.9-50.1	≤1.20	3-60	±0.5~1.8	FUGP	Cu
VT500WCFAX	WR19	39.2-59.6	≤1.25	3-60	±0.5~1.8	FUGP	Cu
VT500WCFUAX	WR19	39.2-59.6	≤1.25	3-60	±0.5~1.8	FUGP	Cu
VT620WCFAX	WR15	49.8-75.8	≤1.25	3-60	±0.5~1.8	FUGP	Cu
VT620WCFUAX	WR15	49.8-75.8	≤1.25	3-60	±0.5~1.8	FUGP	Cu
VT740WCFAX	WR12	60.5-91.9	≤1.25	3-60	±0.5~1.8	FUGP	Cu
VT740WCFUAX	WR12	60.5-91.9	≤1.25	3-60	±0.5~1.8	FUGP	Cu
VT900WCFAX	WR10	73.8-110	≤1.25	3-60	±0.5~1.8	FUGP	Cu
VT900WCFUAX	WR10	73.8-110	≤1.25	3-60	±0.5~1.8	FUGP	Cu

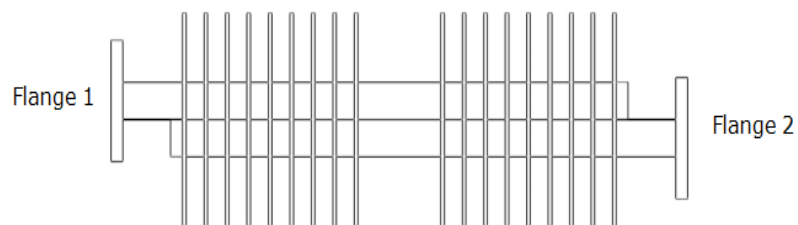
*Indicates Model Number. See Ordering Information for complete part number.

【Ordering Information】

Example Part No: VT 100 WCFA 30 P M A
 Vector Telecom ———
 WG Type: R100 ———
 Product Type: WG Coupling Fixed Attenuators ———
 Attenuation: 30dB ———
 Material: A=Aluminum C=Copper ———
 Flange 2 Type: M=FBM100 ———
 Flange 1 Type: P=FBP100 ———

- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat

11.3 High Power Waveguide Coupling Fixed Attenuators



【Specifications】

Model No*	Freq Range (GHz)	VSWR (Max)	Avg Power Range (W)	Optional Attenuation (dB)	WG Type		Flange	Material
					IEC	EIA		
VT40WHPCA...	3.22-4.90	1.20	10-4000	3-60	R40	WR229	FDP	Al
VT48WHPFA...	5.4-5.9	1.25	10-4000	3-60	R48	WR187	FDP	Al
VT70WHPFA...	5.85-7.025	1.20	10-4000	3-60	R70	WR137	FDP	Al

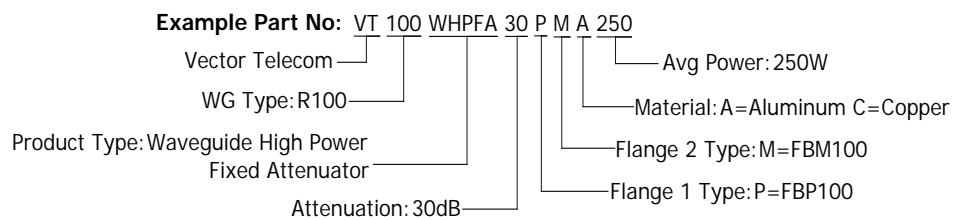


Model No*	Freq Range (GHz)	VSWR (Max)	Avg Power Range (W)	Optional Attenuation (dB)	WG Type		Flange	Material
					IEC	EIA		
VT100WHPFA...	8.5-9.6	1.10	10-3000	3-60	R100	WR90	FDP	Cu
VT120WHPFA...	9.84-15.0	1.15	10-3000	3-60	R120	WR75	FBP	Cu
VT100WHPFA...	8.5-9.6	1.10	10-3000	3-60	R100	WR90	FDP	Cu
VT120WHPFA...	9.84-15.0	1.15	10-3000	3-60	R120	WR75	FBP	Cu
VT140WHPFA...	14.5-15.5	1.25	10-3000	3-60	R140	WR62	FBP	Cu
VT320WHPFA...	26.3-40.0	1.25	10-3000	3-60	R320	WR28	FBP	Cu
VT400WHPCFA...	32.9-50.1	1.20	10-1000	3-60	R400	WR22	FBP	Cu
VT500WHPCFA...	39.2-59.6	1.25	10-1000	3-60	R500	WR19	FBP	Cu
VT620WHPCFA...	49.8-75.8	1.25	10-600	3-60	R620	WR15	FBP	Cu
VT740WHPCFA...	60.5-91.9	1.25	10-600	3-60	R740	WR12	FBP	Cu
VT900WHPCFA...	73.8-110	1.25	10-600	3-60	R900	WR10	FBP	Cu

*Indicates Model Number. See Ordering Information for complete part number.

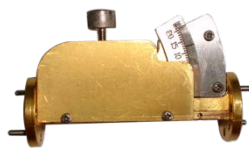
** Nominal Attenuation Accuracy: $\pm 0.5\text{dB}$ Frequency Sensitivity: $\pm 0.7\text{dB}$

【Ordering Information】



- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat

11.4 Waveguide Variable Attenuator



【Specifications】

Model No*	WG Type EIA	Freq Range (GHz)	VSWR (Max)	Optional Attenuation (dB)	Flange	Material
VT12WVA30	WR770	0.96-1.46	≤ 1.25	0~30	FDP	Al
VT14WVA30	WR650	1.13-1.73	≤ 1.25	0~30	FDP	Al
VT18WVA30	WR510	1.45-2.20	≤ 1.25	0~30	FDP	Al
VT22WVA30	WR430	1.72-2.61	≤ 1.25	0~30	FDP	Al
VT26WVA30	WR340	2.17-3.30	≤ 1.25	0~30	FDP	Al



Model No*	WG Type EIA	Freq Range (GHz)	VSWR (Max)	Optional Attenuation (dB)	Flange	Material
VT32WVA30	WR284	2.60-3.95	≤1.25	0~30	FDP	Al
VT40WVA30	WR229	3.22-4.90	≤1.25	0~30	FDP	Al
VT48WVA30	WR187	3.94-5.99	≤1.25	0~30	FDP	Al
VT58WVA30	WR159	4.64-7.05	≤1.25	0~30	FDP	Al
VT70WVA30	WR137	5.38-8.17	≤1.25	0~30	FDP	Cu
VT84WVA30	WR112	6.57-9.99	≤1.25	0~30	FBP	Cu
VT100WVA30	WR90	8.20-12.40	≤1.25	0~30	FBP	Cu
VT120WVA30	WR75	9.84-15.0	≤1.25	0~30	FBP	Cu
VT140WVA30	WR62	11.9-18.0	≤1.25	0~30	FBP	Cu
VT180WVA30	WR51	14.5-22.0	≤1.25	0~30	FBP	Cu
VT220WVA30	WR42	17.6-26.7	≤1.30	0~30	FBP	Cu
VT260WVA30	WR34	21.7-33.0	≤1.30	0~30	FBP	Cu
VT320WVA0	WR28	26.5-40.0	≤1.30	0~30	FBP	Cu
VT400WVA0	WR22	32.9-50.1	≤1.30	0~30	FUGP	Cu
VT500WVA0	WR19	39.2-59.6	≤1.30	0~30	FUGP	Cu
VT620WVA0	WR15	49.8-75.8	≤1.30	0~30	FUGP	Cu
VT740WVA0	WR12	60.5-91.9	≤1.30	0~30	FUGP	Cu
VT900WVA0	WR10	73.8-110	≤1.30	0~30	FUGP	Cu

*Indicates Model Number. See Ordering Information for complete part number.

【Ordering Information】

Example Part No: VT 100 WVA 30 P M A
 Vector Telecom | Material: A=Aluminum C=Copper
 WG Type: R100 | Flange 2 Type: M=FBM100
 Product Type: WG Variable Attenuator | Flange 1 Type: P=FBP100
 Attenuation: 30dB

- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat

12 Waveguide Isolator

12.1 Waveguide Isolator



【Specifications】

Model No*	WG Type EIA	Freq Range (GHz)	Working Bandwidth	VSWR	IL (dB)	Isolation (dB)	Flange	Material
VT14WISO...	WR650	1.13-1.73	≤5%	≤1.2	≤0.3	≥20	FDP	Al
VT18WISO...	WR510	1.45-2.20	≤5%	≤1.2	≤0.3	≥20	FDP	Al
VT22WISO...	WR430	1.72-2.61	≤5%	≤1.2	≤0.3	≥20	FDP	Al
VT26WISO...	WR340	2.17-3.30	≤5%	≤1.2	≤0.3	≥20	FDP	Al
VT32WISO...	WR284	2.60-3.95	≤5%	≤1.2	≤0.3	≥20	FDP	Al
VT40WISO...	WR229	3.22-4.90	≤10%	≤1.2	≤0.3	≥20	FDP	Al
VT48WISO...	WR187	3.94-5.99	≤10%	≤1.2	≤0.3	≥20	FDP	Al
VT58WISO...	WR159	4.64-7.05	≤10%	≤1.2	≤0.3	≥20	FDP	Al
VT70WISO...	WR137	5.38-8.17	≤10%	≤1.2	≤0.3	≥20	FDP	Al
VT84WISO...	WR112	6.57-9.99	≤15%	≤1.2	≤0.3	≥20	FBP	Al
VT100WISO...	WR90	8.2-12.5	≤15%	≤1.2	≤0.3	≥20	FBP	Al
VT120WISO...	WR75	9.84-15.0	≤15%	≤1.2	≤0.3	≥20	FBP	Al
VT140WISO...	WR62	11.9-18.0	≤15%	≤1.2	≤0.3	≥20	FBP	Al
VT180WISO...	WR51	14.5-22.0	≤15%	≤1.2	≤0.3	≥20	FBP	Al
VT220WISO...	WR42	17.6-26.7	≤15%	≤1.25	≤0.4	≥20	FBP	Cu
VT260WISO...	WR34	21.7-33.0	≤15%	≤1.25	≤0.4	≥20	FBP	Cu
VT320WISO...	WR28	26.5-40.0	≤15%	≤1.25	≤0.4	≥20	FBP	Cu
VT400WISO...	WR22	32.9-50.1	≤5%	≤1.5	≤0.6	≥17	FUGP	Cu
VT500WISO...	WR19	39.2-59.6	≤5%	≤1.5	≤0.6	≥15	FUGP	Cu
VT620WISO...	WR15	49.8-75.8	≤5%	≤1.5	≤0.6	≥15	FUGP	Cu
VT740WISO...	WR12	60.5-91.9	≤5%	≤1.5	≤0.8	≥15	FUGP	Cu
VT900WISO...	WR10	73.8-110	≤5%	≤1.5	≤1.0	≥15	FUGP	Cu

*Indicates Model Number. See Ordering Information for complete part number.

Section 1

Waveguide
Components

12

Waveguide
Isolator



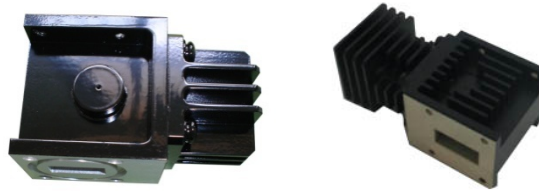
Vector Telecom Pty Ltd

Website: www.vectortele.com

Email: sales@vectortele.com



12.2 High Power Waveguide Isolator



【Specifications】

Model No*	WG Type EIA	Freq Range (GHz)	Working Bandwidth	VSWR	IL (dB)	Isolation (dB)	Avg Power (W)	Flange	Material
VT14WHPISO...	WR650	1.13-1.73	≤5%	≤1.20	≤0.3	≥20	≤2500	FDP	Al
VT18WHPISO...	WR510	1.45-2.20	≤5%	≤1.20	≤0.3	≥20	≤2500	FDP	Al
VT22WHPISO...	WR430	1.72-2.61	≤5%	≤1.20	≤0.3	≥20	≤2000	FDP	Al
VT32WHPISO...	WR284	2.60-3.95	≤5%	≤1.20	≤0.3	≥20	≤2000	FDP	Al
VT40WHPISO...	WR229	3.22-4.90	≤10%	≤1.20	≤0.3	≥20	≤1500	FDP	Al
VT48WHPISO...	WR187	3.94-5.99	≤10%	≤1.20	≤0.3	≥20	≤1500	FDP	Al
VT58WHPISO...	WR159	4.64-7.05	≤10%	≤1.20	≤0.3	≥20	≤1500	FDP	Al
VT70WHPISO...	WR137	5.38-8.17	≤10%	≤1.20	≤0.3	≥20	≤500	FDP	Al
VT84WHPISO...	WR112	6.57-9.99	≤10%	≤1.25	≤0.3	≥20	≤500	FBP	Al
VT100WHPIS...	WR90	8.2-12.5	≤10%	≤1.25	≤0.3	≥20	≤300	FBP	Al
VT120WHPIS...	WR75	9.84-15	≤10%	≤1.25	≤0.3	≥20	≤200	FBP	Al
VT140WHPIS...	WR62	11.9-18	≤10%	≤1.25	≤0.3	≥20	≤200	FBP	Al
VT180WHPIS...	WR51	14.5-22.0	≤10%	≤1.25	≤0.3	≥20	≤100	FBP	Al
VT220WHPIS...	WR42	17.6-26.7	≤10%	≤1.25	≤0.4	≥20	≤80	FBP	Cu
VT260WHPIS...	WR34	21.7-33.0	≤10%	≤1.25	≤0.4	≥20	≤80	FBP	Cu
VT320WHPIS...	WR28	26.5-40.0	≤10%	≤1.25	≤0.4	≥20	≤50	FBP	Cu
VT400WHPIS...	WR22	32.9-50.1	≤5%	≤1.35	≤0.6	≥17	≤3	FUGP	Cu
VT500WHPIS...	WR19	39.2-59.6	≤5%	≤1.50	≤0.6	≥15	≤2	FUGP	Cu
VT620WHPIS...	WR15	49.8-75.8	≤5%	≤1.50	≤0.6	≥15	≤1	FUGP	Cu
VT740WHPIS...	WR12	60.5-91.9	≤5%	≤1.50	≤0.8	≥15	≤1	FUGP	Cu
VT900WHPIS...	WR10	73.8-110	≤5%	≤1.50	≤1.0	≥15	≤1	FUGP	Cu

*Indicates Model Number. See Ordering Information for complete part number.

12.3 High Power Waveguide Differential Phase Shift Isolator





Section 1

Waveguide Components

12
Waveguide Isolator



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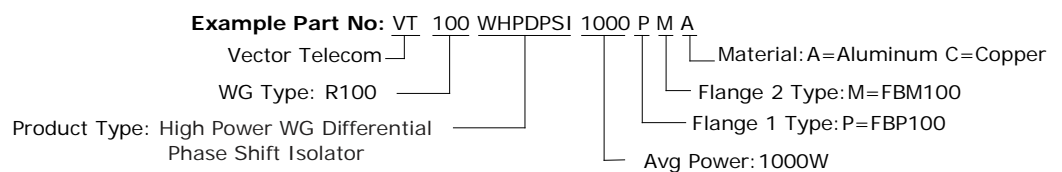
Email: sales@vectortele.com

【Specifications】

Model No*	WG Type EIA	Freq Range (GHz)	Working Bandwidth	VSWR	IL (dB)	Isolation (dB)	Avg Power (W)	Flange Type	Material
VT14WHPDPSI40KW	WR650	1.13-1.73	≤5%	≤1.2	≤0.3	≥20	40k	FDP	Al
VT18WHPDPSI30KW	WR510	1.45-2.20	≤5%	≤1.2	≤0.3	≥20	30k	FDP	Al
VT22WHPDPSI20KW	WR430	1.72-2.61	≤5%	≤1.2	≤0.3	≥20	20k	FDP	Al
VT26WHPDPSI20KW	WR340	2.17-3.30	≤5%	≤1.2	≤0.3	≥20	20k	FDP	Al
VT32WHPDPSI10KW	WR284	2.60-3.95	≤5%	≤1.2	≤0.4	≥20	10k	FDP	Al
VT40WHPDPSI5KW	WR229	3.22-4.90	≤5%	≤1.2	≤0.4	≥20	5k	FDP	Al
VT48WHPDPSI8KW	WR187	3.94-5.99	≤5%	≤1.2	≤0.4	≥20	8k	FDP	Al
VT84WHPDPSI1200W	WR112	6.57-9.99	7%	≤1.25	≤0.4	≥20	1.2k	FBP	Cu
VT100WHPDPSI1000W	WR90	8.2-12.5	7%	≤1.25	≤0.5	≥20	1k	FBP	Cu
VT120WHPDPSI1000W	WR75	9.84-15.0	7%	≤1.25	≤0.5	≥20	1k	FBP	Cu
VT140WHPDPSI800W	WR62	11.9-18.0	7%	≤1.25	≤0.5	≥20	800	FBP	Cu
VT180WHPDPSI800W	WR51	14.5-22.0	7%	≤1.25	≤0.5	≥20	800	FBP	Cu

*Indicates Model Number. See Ordering Information for complete part number.

【Ordering Information】



Code	Description
WISO	Waveguide Isolator
WHPISO	Waveguide High Power Termination
WHPDPSI	High Power Waveguide Differential Phase Shift Isolator

- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat



13 Waveguide Circulator

Vector Telecom offers a standard product line of waveguide circulators ranging from WR10 to WR137. For more information feel free to call us and discuss your needs with one of our sales engineers.



13.1 Waveguide Circulator

【Specifications】

Model No	Freq Range (GHz)	Working Bandwidth	VSWR (Max)	IL (dB) (Max)	Isolation (dB) (Min)	WG Type		Flange	Material
						IEC	EIA		
VT14WCIC	1.13-1.73	≤5%	1.20	0.3	20	R14	WR650	FDP	Al
VT18WCIC	1.45-2.20	≤5%	1.20	0.3	20	R18	WR510	FDP	Al
VT22WCIC	1.72-2.61	≤5%	1.20	0.3	20	R22	WR430	FDP	Al
VT26WCIC	2.17-3.30	≤5%	1.20	0.3	20	R26	WR340	FDP	Al
VT32WCIC	2.60-3.95	≤5%	1.20	0.3	20	R32	WR284	FDP	Al
VT40WCIC	3.22-4.90	≤10%	1.20	0.3	20	R40	WR229	FDP	Al
VT48WCIC	3.94-5.99	≤10%	1.20	0.3	20	R48	WR187	FDP	Al
VT58WCIC	4.64-7.05	≤10%	1.20	0.3	20	R58	WR159	FDP	Al
VT70WCIC	5.38-8.17	≤10%	1.20	0.3	20	R70	WR137	FDP	Al
VT84WCIC	6.57-9.99	≤15%	1.20	0.3	20	R84	WR112	FBP	Al
VT100WCIC	8.20-12.40	≤15%	1.20	0.3	20	R100	WR90	FBP	Al
VT120WCIC	9.84-15.0	≤15%	1.20	0.3	20	R120	WR75	FBP	Al
VT140WCIC	11.9-18.0	≤15%	1.20	0.3	20	R140	WR62	FBP	Al
VT180WCIC	14.5-22.0	≤15%	1.25	0.3	20	R180	WR51	FBP	Al
VT220WCIC	17.6-26.7	≤15%	1.25	0.3	20	R220	WR42	FBP	Cu
VT260WCIC	21.7-33.0	≤15%	1.25	0.3	20	R260	WR34	FBP	Cu
VT320WCIC	26.3-40.0	≤15%	1.25	0.4	20	R320	WR28	FBP	Cu
VT400WCIC	32.9-50.1	≤5%	1.35	0.6	17	R400	WR22	FUGP	Cu
VT500WCIC	39.2-59.6	≤5%	1.50	0.6	15	R500	WR19	FUGP	Cu
VT620WCIC	49.8-75.8	≤5%	1.50	0.6	15	R620	WR15	FUGP	Cu
VT740WCIC	60.5-91.9	≤5%	1.50	0.8	15	R740	WR12	FUGP	Cu
VT900WCIC	73.8-110	≤5%	1.50	1.0	15	R900	WR10	FUGP	Cu

*Indicates Model Number. See Ordering Information for complete part number.

【Ordering Information】

Example Part No: VT 100 WCIC P M A
 Vector Telecom ———
 WG Type: R100 ———
 Product Type: WG Circulator ———
 Material: A=Aluminum C=Copper
 Flange 2 Type: M=FBM100
 Flange 1 Type: P=FBP100

- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat

13.2 High Power Waveguide Circulator



【Specifications】

Model No*	WG Type EIA	Freq Range (GHz)	Working Bandwidth	VSWR	IL (dB)	Isolation (dB)	Avg Power (W)	Flange	Material
VT14WHPCIC20K	WR650	1.13-1.73	≤5%	≤1.2	≤0.3	≥20	20K	FDP	Al
VT18WHPCIC1000	WR510	1.45-2.20	≤5%	≤1.2	≤0.3	≥20	1000	FDP	Al
VT22WHPCIC1000	WR430	2.2-2.55	≤5%	≤1.2	≤0.3	≥20	1000	FDP	Al
VT26WHPCIC1000	WR340	2.17-3.3	≤5%	≤1.2	≤0.3	≥20	1000	FDP	Al
VT32WHPCIC1000	WR284	2.60-3.95	≤5%	≤1.2	≤0.3	≥20	1000	FDP	Al
VT48WHPCIC1000	WR187	3.94-5.99	≤10%	≤1.2	≤0.3	≥20	1000	FDP	Al
VT58WHPCIC1000	WR159	4.64-7.05	≤10%	≤1.2	≤0.3	≥20	1000	FDP	Al
VT70WHPCIC400	WR137	5.38-8.17	≤10%	≤1.2	≤0.3	≥20	400	FDP	Al
VT84WHPCIC400	WR112	6.57-9.99	≤10%	≤1.2	≤0.3	≥20	400	FBP	Al
VT100WHPCIC300	WR90	8.2-12.4	≤15%	≤1.2	≤0.3	≥20	300	FBP	Al
VT120WHPCIC100	WR75	9.84-15.0	≤15%	≤1.2	≤0.3	≥20	100	FBP	Al
VT140WHPCIC150	WR62	11.9-18.0	≤15%	≤1.2	≤0.3	≥20	150	FBP	Al
VT180WHPCIC100	WR51	14.5-22.0	≤15%	≤1.25	≤0.3	≥20	100	FBP	Al
VT220WHPCIC80	WR42	17.6-26.7	≤15%	≤1.25	≤0.3	≥20	80	FBP	Cu
VT260WHPCIC40	WR34	21.7-33.0	≤15%	≤1.25	≤0.3	≥20	80	FBP	Cu
VT320WHPCIC40	WR28	26.5-40	≤15%	≤1.25	≤0.3	≥20	50	FBP	Cu
VT400WHPCIC3	WR22	32.9-50.1	≤5%	≤1.25	≤0.5	≥20	3	FUGP	Cu

*Indicates Model Number. See Ordering Information for complete part number.

13

Waveguide Circulator



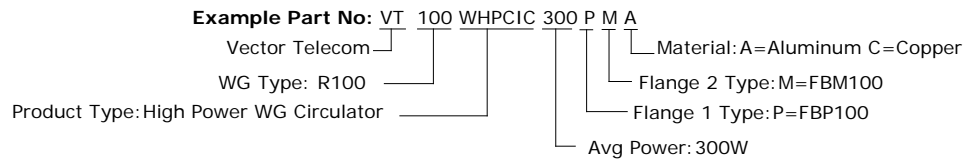
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Email: sales@vectortele.com

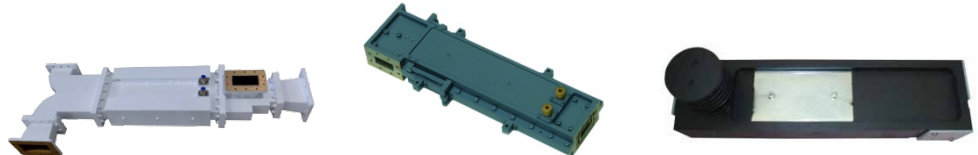


【Ordering Information】



- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat

13.3 High Power Waveguide Differential Phase Shift Circulator

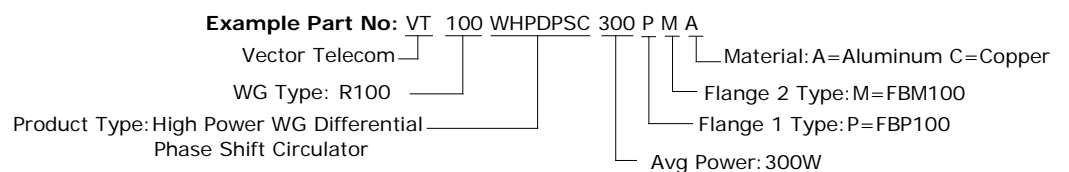


【Specifications】

Model No*	WG Type EIA	Freq Range (GHz)	Working Bandwidth	VSWR	IL (dB)	Isolation (dB)	Avg Power (W)	Flange	Material
VT14WHPDPSI40KW	WR650	1.13-1.73	≤5%	≤1.2	≤0.3	≥20	40k	FDP	Al
VT18WHPDPSI30KW	WR510	1.45-2.20	≤5%	≤1.2	≤0.3	≥20	30k	FDP	Al
VT22WHPDPSI20KW	WR430	1.72-2.61	≤5%	≤1.2	≤0.3	≥20	20k	FDP	Al
VT26WHPDPSI20KW	WR340	2.17-3.30	≤5%	≤1.2	≤0.3	≥20	20k	FDP	Al
VT32WHPDPSI10KW	WR284	2.60-3.95	≤5%	≤1.2	≤0.4	≥20	10k	FDP	Al
VT40WHPDPSI5KW	WR229	3.22-4.90	≤5%	≤1.2	≤0.4	≥20	5k	FDP	Al
VT48WHPDPSI8KW	WR187	3.94-5.99	≤5%	≤1.2	≤0.4	≥20	8k	FDP	Al
VT84WHPDPSI1200W	WR112	6.57-9.99	≤7%	≤1.25	≤0.4	≥20	1.2k	FBP	Cu
VT100WHPDPSI1000W	WR90	8.2-12.5	≤7%	≤1.25	≤0.5	≥20	1k	FBP	Cu
VT120WHPDPSI1000W	WR75	9.84-15.0	≤7%	≤1.25	≤0.5	≥20	1k	FBP	Cu
VT140WHPDPSI800W	WR62	11.9-18.0	≤7%	≤1.25	≤0.5	≥20	800	FBP	Cu
VT180WHPDPSI800W	WR51	14.5-22.0	≤7%	≤1.25	≤0.5	≥20	800	FBP	Cu

*Indicates Model Number. See Ordering Information for complete part number.

【Ordering Information】



- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat



14 Waveguide Filter

14.1 Waveguide Band-pass Filter



【Specifications】

Model No*	WG Type EIA	Band	Pass Band (GHz)	Rejection Band (GHz)	VSWR	IL (dB)	Isolation (dB)	Material
VT70WBPF	WR137	C	5.85-6.425	3.4-4.2	≤1.20	≤0.4	≥70	Cu
VT84WBPF	WR112	X	7.9-8.4	7.25-7.75	≤1.20	≤0.6	≥60	Cu
VT100WBPF	WR90	X	8-9	7.125-7.235	≤1.20	≤0.5	≥30	Cu
VT120WBPF	WR75	Ku	11.7-12.75	14-14.5	≤1.20	≤0.3	≥55	Cu
VT140WBPF	WR62	Ku	13.3-13.7	15.3-15.5	≤1.20	≤0.3	≥50	Cu
VT220WBPF	WR42	Ka	20-22	30-31	≤1.25	≤0.5	≥50	Cu
VT260WBPF	WR34	Ka	24.5~27	≤22GHz ≤20GHz	≤1.20	≤0.3	≥40 ≥60	Cu
VT320WBPF	WR28	Ka	30.5-31.3	26-28.35GHz	≤1.20	≤0.6	≥70	Cu

*Indicates Model Number. See Ordering Information for complete part number.

14.2 Waveguide High-pass Filter



【Specifications】

Model No*	WG Type EIA	Band	Pass Band (GHz)	Rejection Band (GHz)	VSWR	IL (dB)	Isolation (dB)	Material
VT260WHPF	WR34	Ka	25-26	16	≤1.2	≤0.2	≥80	Cu
VT320WHPF	WR28	Ka	29-31.2	19-21	≤1.2	≤0.2	≥70	Cu

*Indicates Model Number. See Ordering Information for complete part number.



14.3 Waveguide Low-pass Filter



【Specifications】

Model No*	WG Type EIA	Band	Pass Band (GHz)	Rejection Band (GHz)	VSWR	IL(dB)	Isolation (dB)	Material
VT40WLPF	WR229	C	4.5-4.8	6.725-7.025	≤1.2	≤0.3	≥55	Al
VT120WLPF	WR75	Ku	11.6-12.8	13.5-15	≤1.2	≤0.25	≥60	Cu
VT220WLPF	WR42	Ka	20.4-20.9	30-31	≤1.2	≤0.3	≥55	Cu

*Indicates Model Number. See Ordering Information for complete part number.

【Ordering Information】

Example Part No: VT 100 WLPF C
 Vector Telecom ——— |
 WG Type: R100 ——— |
 Material: A=Aluminum C=Copper
 Product Type: WG Low Pass Filter

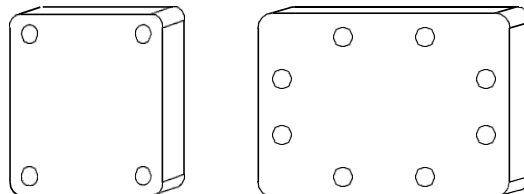
Code	Description
WBPF	Waveguide Band-pass Filter
WHPF	Waveguide High-pass Filter
WLPF	Waveguide Low-pass Filter

- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat

15 Waveguide Short

Vector Telecom offers a standard product line of waveguide short plates which provide high reflection short circuits for terminating all standard waveguides. Vector Telecom offers a cover, all-clear configuration as a standard product. Alternate materials and configurations are available upon request.

15.1 Waveguide Short Plate



【Specifications】

Model No*	Freq Range (GHz)	VSWR (Min)	Thickness (mm)	WG Type		Flange	Material
				IEC	EIA		
VT3WS...	0.32-0.49	60	23	R3	WR2300	FDP	Al
VT4WS...	0.35-0.53	60	23	R4	WR2100	FDP	Al
VT5WS...	0.41-0.62	60	18	R5	WR1800	FDP	Al
VT6WS...	0.49-0.75	60	18	R6	WR1500	FDP	Al
VT8WS...	0.64-0.98	60	14	R8	WR1150	FDP	Al
VT9WS...	0.75-1.15	60	14	R9	WR975	FDP	Al
VT12WS...	0.96-1.46	60	12	R12	WR770	FDP	Al
VT14WS...	1.13-1.73	60	12	R14	WR650	FDP	Al
VT18WS...	1.45-2.20	60	12	R18	WR510	FDP	Al/Cu
VT22WS...	1.72-2.61	60	10	R22	WR430	FDP	Al/Cu
VT26WS...	2.17-3.30	60	10	R26	WR340	FDP	Al/Cu
VT32WS...	2.60-3.95	60	8	R32	WR284	FDP	Al/Cu
VT40WS...	3.22-4.90	60	8	R40	WR229	FDP	Al/Cu
VT48WS...	3.94-5.99	60	7	R48	WR187	FDP	Al/Cu
VT58WS...	4.64-7.05	60	7	R58	WR159	FDP	Al/Cu

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Waveguide
Short



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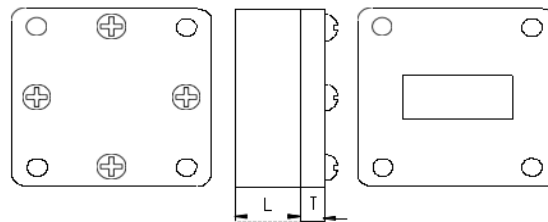
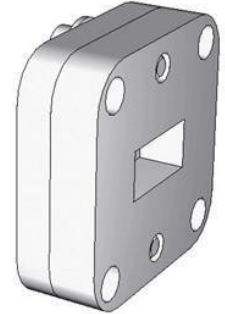
Email: sales@vectortele.com

Model No*	Freq Range (GHz)	VSWR (Min)	Thickness (mm)	WG Type		Flange	Material
				IEC	EIA		
VT70WS...	5.38-8.17	60	7	R70	WR137	FDP	Al/Cu
VT84WS...	6.57-9.99	60	5	R84	WR112	FBP	Al/Cu
VT100WS...	8.20-12.40	60	5	R100	WR90	FBP	Al/Cu
VT120WS...	9.84-15.0	60	5	R120	WR75	FBP	Al/Cu
VT140WS...	11.9-18.0	60	5	R140	WR62	FBP	Al/Cu
VT180WS...	14.5-22.0	60	5	R180	WR51	FBP	Al/Cu
VT220WS...	17.6-26.7	60	4	R220	WR42	FBP	Al/Cu
VT260WS...	21.7-33.0	60	4	R260	WR34	FBP	Al/Cu
VT320WS...	26.3-40.0	60	4	R320	WR28	FBP	Al/Cu
VT400WS...	32.9-50.1	60	4	R400	WR22	FUGP	Cu
VT500WS...	39.2-59.6	60	4	R500	WR19	FUGP	Cu
VT620WS...	49.8-75.8	60	4	R620	WR15	FUGP	Cu
VT740WS...	60.5-91.9	60	4	R740	WR12	FUGP	Cu
VT900WS...	73.8-110	60	4	R900	WR10	FUGP	Cu

*Indicates Model Number. See Ordering Information for complete part number.

15.2 Waveguide Offset Short

Waveguide offset shorts are available on special order. These are designed to have a specific shorting distance as required.



【Specifications】

Model No*	WG Type EIA	Freq Range (GHz)	VSWR	Dimension (mm)		Flange	Material
				T	L		
VT3WOFS	WR2300	0.32-0.49	≥50	23	239.5	FDP	Al
VT4WOFS	WR2100	0.35-0.53	≥50	23	221.6	FDP	Al
VT5WOFS	WR1800	0.41-0.62	≥50	18	188.9	FDP	Al
VT6WOFS	WR1500	0.49-0.75	≥50	18	156.6	FDP	Al
VT8WOFS	WR1150	0.64-0.98	≥50	14	122.3	FDP	Al

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Waveguide Short





Model No*	WG Type EIA	Freq Range (GHz)	VSWR	Dimension (mm)		Flange	Material
				T	L		
VT9WOFS	WR975	0.75-1.15	≥50	14	101.6	FDP	Al
VT12WOFS	WR770	0.96-1.46	≥50	12	81.1	FDP	Al
VT14WOFS	WR650	1.13-1.73	≥50	12	67.9	FDP	Al
VT18WOFS	WR510	1.45-2.20	≥50	12	53.2	FDP	Al
VT22WOFS	WR430	1.72-2.61	≥50	10	44.8	FDP	Al
VT26WOFS	WR340	2.17-3.30	≥50	10	35.5	FDP	Al
VT32WOFS	WR284	2.60-3.95	≥50	8	29.6	FDP	Al
VT40WOFS	WR229	3.22-4.90	≥50	8	23.9	FDP	Al
VT48WOFS	WR187	3.94-5.99	≥50	7	19.6	FDP	Al
VT58WOFS	WR159	4.64-7.05	≥50	7	16.6	FDP	Al
VT70WOFS	WR137	5.38-8.17	≥50	7	14.3	FDP	Cu
VT84WOFS	WR112	6.57-9.99	≥50	5	11.7	FBP	Cu
VT100WOFS	WR90	8.20-12.40	≥50	5	9.5	FBP	Cu
VT120WOFS	WR75	9.84-15.0	≥50	5	7.8	FBP	Cu
VT140WOFS	WR62	11.9-18.0	≥50	5	6.5	FBP	Cu
VT180WOFS	WR51	14.5-22.0	≥50	5	5.3	FBP	Cu
VT220WOFS	WR42	17.6-26.7	≥50	4	4.4	FBP	Cu
VT260WOFS	WR34	21.7-33.0	≥50	4	3.55	FBP	Cu
VT320WOFS	WR28	26.5-40.0	≥50	4	2.9	FBP	Cu
VT400WOFS	WR22	32.9-50.1	≥50	4	2.3	FUGP	Cu
VT500WOFS	WR19	39.2-59.6	≥50	4	1.97	FUGP	Cu
VT620WOFS	WR15	49.8-75.8	≥50	4	1.55	FUGP	Cu
VT740WOFS	WR12	60.5-91.9	≥50	4	1.3	FUGP	Cu
VT900WOFS	WR10	73.8-110	≥50	4	1.05	FUGP	Cu

*Indicates Model Number. See Ordering Information for complete part number.

15.3 Waveguide Sliding Short

Waveguide sliding shorts are available. Please consult sales engineer for more information.





【Specifications】

Model No*	WG Type EIA	Freq Range (GHz)	VSWR	Sliding Distance (mm)	Flange	Material
VT3WSS	WR2300	0.32-0.49	≥50	300	FDP	Al
VT4WSS	WR2100	0.35-0.53	≥50	240	FDP	Al
VT5WSS	WR1800	0.41-0.62	≥50	220	FDP	Al
VT6WSS	WR1500	0.49-0.75	≥50	180	FDP	Al
VT8WSS	WR1150	0.64-0.98	≥50	150	FDP	Al
VT9WSS	WR975	0.75-1.15	≥50	130	FDP	Al
VT12WSS	WR770	0.96-1.46	≥50	100	FDP	Al
VT14WSS	WR650	1.13-1.73	≥50	90	FDP	Al
VT18WSS	WR510	1.45-2.20	≥50	80	FDP	Al
VT22WSS	WR430	1.72-2.61	≥50	70	FDP	Al
VT26WSS	WR340	2.17-3.30	≥50	60	FDP	Al
VT32WSS	WR284	2.60-3.95	≥50	60	FDP	Al
VT40WSS	WR229	3.22-4.90	≥50	50	FDP	Al
VT48WSS	WR187	3.94-5.99	≥50	50	FDP	Al
VT58WSS	WR159	4.64-7.05	≥50	50	FDP	Al
VT70WSS	WR137	5.38-8.17	≥50	40	FDP	Cu
VT84WSS	WR112	6.57-9.99	≥50	40	FBP	Cu
VT100WSS	WR90	8.20-12.40	≥50	30	FBP	Cu
VT120WSS	WR75	9.84-15.0	≥50	30	FBP	Cu
VT140WSS	WR62	11.9-18.0	≥50	25	FBP	Cu
VT180WSS	WR51	14.5-22.0	≥50	20	FBP	Cu
VT220WSS	WR42	17.6-26.7	≥50	20	FBP	Cu
VT260WSS	WR34	21.7-33.0	≥50	10	FBP	Cu
VT320WSS	WR28	26.5-40.0	≥50	10	FBP	Cu
VT400WSS	WR22	32.9-50.1	≥50	10	FUGP	Cu
VT500WSS	WR19	39.2-59.6	≥50	10	FUGP	Cu
VT620WSS	WR15	49.8-75.8	≥50	10	FUGP	Cu
VT740WSS	WR12	60.5-91.9	≥50	10	FUGP	Cu
VT900WSS	WR10	73.8-110	≥50	10	FUGP	Cu

*Indicates Model Number. See Ordering Information for complete part number.

【Ordering Information】



Section 1

Waveguide Components

Example Part No: VT 100 WS A

Vector Telecom

WG Type: R100

100

WS

A

Material: A=Aluminum C=Copper

Product Type: Waveguide Short Plate

Code	Description
WS	Waveguide Short Plate
WOFS	Waveguide Offset Short
WSS	Waveguide Sliding Short

- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat

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Waveguide Short



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Website: www.vectortele.com

Email: sales@vectortele.com



16 Waveguide Pressure Window



【Specifications】

Model No*	WG Type EIA	Freq Range (GHz)	VSWR	Flange	Material
VT3WPW...PM	WR2300	0.32-0.49	≤1.25	FDP/FDM	Al
VT4WPW... PM	WR2100	0.35-0.53	≤1.25	FDP/FDM	Al
VT5WPW... PM	WR1800	0.41-0.62	≤1.25	FDP/FDM	Al
VT6WPW... PM	WR1500	0.49-0.75	≤1.25	FDP/FDM	Al
VT8WPW... PM	WR1150	0.64-0.98	≤1.25	FDP/FDM	Al
VT9WPW... PM	WR975	0.75-1.15	≤1.25	FDP/FDM	Al
VT12WPW... PM	WR770	0.96-1.46	≤1.25	FDP/FDM	Al
VT14WPW... PM	WR650	1.13-1.73	≤1.25	FDP/FDM	Al
VT18WPW... PM	WR510	1.45-2.20	≤1.25	FDP/FDM	Al
VT22WPW... PM	WR430	1.72-2.61	≤1.25	FDP/FDM	Al
VT26WPW... PM	WR340	2.17-3.30	≤1.25	FDP/FDM	Al
VT32WPW... PM	WR284	2.60-3.95	≤1.25	FDP/FDM	Al
VT40WPW... PM	WR229	3.22-4.90	≤1.25	FDP/FDM	Al
VT48WPW... PM	WR187	3.94-5.99	≤1.25	FDP/FDM	Al
VT58WPW... PM	WR159	4.64-7.05	≤1.25	FDP/FDM	Al
VT70WPW... PM	WR137	5.38-8.17	≤1.25	FDP/FDM	Cu
VT84WPW... PM	WR112	6.57-9.99	≤1.25	FBP/FBM	Cu
VT100WPW... PM	WR90	8.20-12.40	≤1.25	FBP/FBM	Cu
VT120WPW... PM	WR75	9.84-15.0	≤1.25	FBP/FBM	Cu
VT140WPW... PM	WR62	11.9-18.0	≤1.25	FBP/FBM	Cu
VT180WPW... PM	WR51	14.5-22.0	≤1.25	FBP/FBM	Cu
VT220WPW... PM	WR42	17.6-26.7	≤1.25	FBP/FBM	Cu
VT260WPW... PM	WR34	21.7-33.0	≤1.25	FBP/FBM	Cu
VT320WPW... PM	WR28	26.5-40.0	≤1.25	FBP/FBM	Cu
VT400WPW...	WR22	32.9-50.1	≤1.3	FUGP	Cu
VT500WPW...	WR19	39.2-59.6	≤1.3	FUGP	Cu
VT620WPW...	WR15	49.8-75.8	≤1.4	FUGP	Cu
VT740WPW...	WR12	60.5-91.9	≤1.4	FUGP	Cu
VT900WPW...	WR10	73.8-110	≤1.4	FUGP	Cu

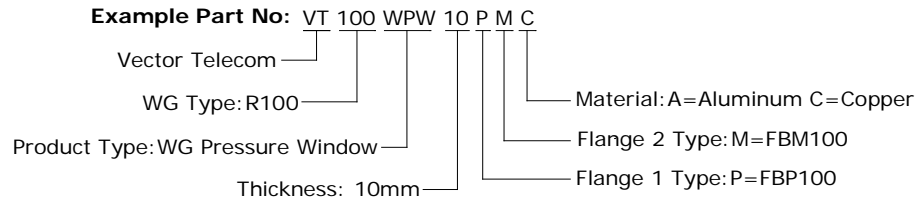
*Indicates Model Number. See Ordering Information for complete part number.



Section 1

Waveguide
Components

【Ordering Information】



- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat

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Waveguide
Pressure
Window



Vector Telecom Pty Ltd

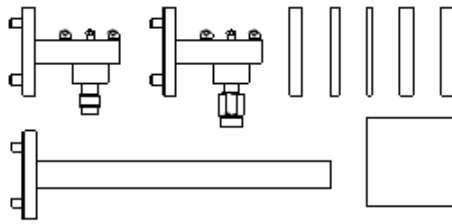
Website: www.vectortele.com

Email: sales@vectortele.com



17 Waveguide Calibration Kits

17.1 Waveguide Calibration Kits



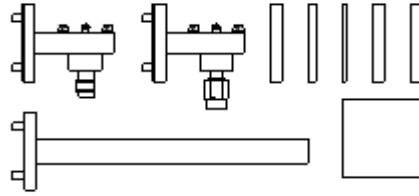
【Specifications】

Model No*	WG Type EIA	Freq Range (GHz)	Connector	Flange	Material
VT9VNAWKN	WR975	0.75-1.15	N Male/Female	FDP	Al
VT12VNAWKN	WR770	0.96-1.46	N Male/Female	FDP	Al
VT14VNAWKN	WR650	1.13-1.73	N Male/Female	FDP	Al
VT18VNAWKN	WR510	1.45-2.20	N Male/Female	FDP	Al
VT22VNAWKN	WR430	1.72-2.61	N Male/Female	FDP	Al
VT26VNAWKN	WR340	2.17-3.30	N Male/Female	FDP	Al
VT32VNAWKN	WR284	2.60-3.95	N Male/Female	FDP	Al
VT40VNAWKN	WR229	3.22-4.90	N Male/Female	FDP	Al
VT48VNAWKN	WR187	3.94-5.99	N Male/Female	FDP	Al
VT58VNAWKN	WR159	4.64-7.05	N Male/Female	FDP	Al
VT70VNAWKN	WR137	5.38-8.17	N Male/Female	FDP	Cu
VT84VNAWKN	WR112	6.57-9.99	N Male/Female	FBP	Cu
VT100VNAWKN	WR90	8.20-12.4	N Male/Female	FBP	Cu
VT120VNAWKN	WR75	9.84-15.0	N Male/Female	FBP	Cu
VT140VNAWKS	WR62	11.9-18.0	SMA Male/Female	FBP	Cu
VT180VNAWKS	WR51	14.5-22.0	SMA Male/Female	FBP	Cu
VT220VNAWKK	WR42	17.6-26.7	2.92 Male/Female	FBP	Cu
VT260VNAWKK	WR34	21.7-33.0	2.92 Male/Female	FBP	Cu
VT320VNAWKK	WR28	26.5-40.0	2.92 Male/Female	FBP	Cu
VT400VNAWKV	WR22	32.9-50.1	2.4 Male/Female	FUGP	Cu
VT500VNAWK1.85	WR19	39.2-59.6	2.4 Male/Female	FUGP	Cu
VT620VNAWK1.85	WR15	49.8-75.8	1.85 Male/Female	FUGP	Cu
VT740VNAWK1.0	WR12	60.5-91.9	1.0 Male/Female	FUGP	Cu
VT900VNAWK1.0	WR10	73.8-110	1.0 Male/Female	FUGP	Cu

*Indicates Model Number. See Ordering Information for complete part number.



17.2 Double-Ridged Waveguide Calibration Kits



【Specifications】

Model No*	Freq Range (GHz)	WG TYPE EIA	Connector	Flange	Material	Finish
VT84DRVNAWKN	0.84-2	WRD84	N Female	FP	Al	Chromate conversion
VT150DRVNAWN	1.5-3.6	WRD150	N Female	FP	Al	Chromate conversion
VT200DRVNAWN	2-4.8	WRD200	N Female	FP	Al	Chromate conversion
VT250DRVNAWN	2.6-7.8	WRD250	N Female	FP	Al	Chromate conversion
VT350DRVNAWN	3.5-8.2	WRD350	N Female	FP	Al	Chromate conversion
VT475DRVNAWN	4.75-11	WRD475	N Female	FP	Cu	Silver Plating
VT500DRVNAWS	5-18	WRD500	SMA Female	FP	Cu	Silver Plating
VT580DRVNAWS	5.8-16	WRD580	SMA Female	FP	Cu	Silver Plating
VT650DRVNAWS	6.5-18	WRD650	SMA Female	FP	Cu	Silver Plating
VT750DRVNAWS	7.5-18	WRD750	SMA Female	FP	Cu	Silver Plating
VT700DRVNAWS	7-18.5	WRD700	SMA Female	FP	Cu	Silver Plating
VT1100DRVNAKK	11-26.5	WRD1100	2.92 Female	FP	Cu	Silver Plating
VT1800DRVNAKK	18-40	WRD1800	2.92 Female	FP	Cu	Silver Plating

*Indicates Model Number. See Ordering Information for complete part number.

【Ordering Information】

Example Part No: VT 100 VNAWK N

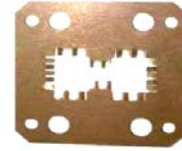
Vector Telecom ——— |
 WG Type: R100 ——— |
 Product Type: WG Calibration Kits ——— |

Coax Connector Type: N=Type N
 S=SMA, K=2.92mm, V=2.4mm
 1.85=1.85mm, 1.0=1.0mm

Code	Description
VNAW	Waveguide Calibration Kits
DRVNAW	Double-Ridged Waveguide Calibration Kits

- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat

18 Waveguide Anti-leak Gasket



【Specifications】

Model No*	WG Type EIA	Freq Range(GHz)	Flange	Thickness(mm)	Material
VT3WG0.2F	WR2300	0.32-0.49	FDP	0.2	Cu
VT4WG0.2F	WR2100	0.35-0.53	FDP	0.2	Cu
VT5WG0.2F	WR1800	0.41-0.62	FDP	0.2	Cu
VT6WG0.2F	WR1500	0.49-0.75	FDP	0.2	Cu
VT8WG0.2F	WR1150	0.64-0.98	FDP	0.2	Cu
VT9WG0.2F	WR975	0.75-1.15	FDP	0.2	Cu
VT12WG0.2F	WR770	0.96-1.46	FDP	0.2	Cu
VT14WG0.2F	WR650	1.13-1.73	FDP	0.2	Cu
VT18WG0.2F	WR510	1.45-2.20	FDP	0.2	Cu
VT22WG0.2F	WR430	1.72-2.61	FDP	0.2	Cu
VT26WG0.2F	WR340	2.17-3.30	FDP	0.2	Cu
VT32WG0.2F	WR284	2.60-3.95	FDP	0.2	Cu
VT40WG0.2F	WR229	3.22-4.90	FDP	0.2	Cu
VT48WG0.2F	WR187	3.94-5.99	FDP	0.2	Cu
VT58WG0.2F	WR159	4.64-7.05	FDP	0.2	Cu
VT70WG0.2F	WR137	5.38-8.17	FDP	0.2	Cu
VT84WG0.1F	WR112	6.57-9.99	FBP	0.1	Cu
VT100WG0.1F	WR90	8.20-12.40	FBP	0.1	Cu
VT120WG0.1F	WR75	9.84-15.0	FBP	0.1	Cu
VT140WG0.1F	WR62	11.9-18.0	FBP	0.1	Cu
VT180WG0.1F	WR51	14.5-22.0	FBP	0.1	Cu
VT220WG0.1F	WR42	17.6-26.7	FBP	0.1	Cu
VT260WG0.1F	WR34	21.7-33.0	FBP	0.1	Cu
VT320WG0.1F	WR28	26.5-40.0	FBP	0.1	Cu
VT400WG0.1F	WR22	32.9-50.1	FUGP	0.1	Cu
VT500WG0.1F	WR19	39.2-59.6	FUGP	0.1	Cu
VT620WG0.1F	WR15	49.8-75.8	FUGP	0.1	Cu
VT740WG0.1F	WR12	60.5-91.9	FUGP	0.1	Cu
VT900WG0.1F	WR10	73.8-112	FUGP	0.1	Cu

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Waveguide
Anti-leak
Gasket



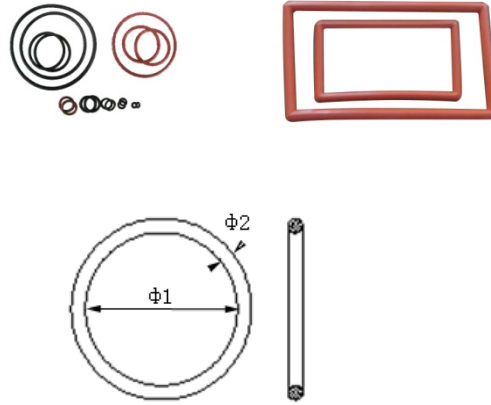
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Website: www.vectortele.com

Email: sales@vectortele.com



19 Waveguide Sealing Gasket



19.1 O-Ring

Standard O-Ring 【Specifications】

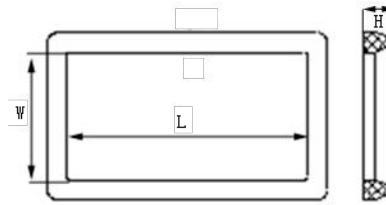
Model No*	WG Type EIA	Dimensions ($\phi 1 \times \phi 2$)	Model No*	Dimensions ($\phi 1 \times \phi 2$)
VT32MFOA	WR284	101X5.4	VT120MFO	28X2.6
VT40MFOA	WR229	82X5.4	VT140MFO	23.5X2.6
VT48MFOA	WR187	68.5X3.5	VT180MFO	20X2.4
VT70MFOA	WR137	53X3.5	VT220MFO	15.5X1.8
VT84MFO	WR112	40X2.6	VT260MFO	14X1.8
VT100MFO	WR90	33X2.6	VT320MFO	10.5X1.8

Special O-Ring 【Specifications】

Model No*	Dimensions ($\phi 1 \times \phi 2$)	Model No*	Dimensions ($\phi 1 \times \phi 2$)
VTMFO56.82	56.82X2.62	VTMFO199.98	199.98X2.62
VTMFO78.38	78.38X2.62	VTMFO284.84	284.84X3
VTMF101.3	101.3X3.53	VTMFO321.06	321.06X3
VTMFO114.4	114.4X3.1	VTMFO321.4	321.4X3
VTMFO120.94	120.94X2.62	VTMFO331	331X3
VTMFO124.5	124.5X3	VTMFO422.1	422.1X3
VTMFO143.8	143.8X3	VTMFO463.4	463.4X3
VTMFO146.68	146.68X2.62	VTMFO486.2	486.2X3
VTMFO162.7	162.7X3	VTMFO493.6	493.6X3
VTMFO164.28	164.28X3	VTMFO499.5	499.5X3.53
VTMFO194.38	194.38X3	VTMFO539.1	539.1X3.53



19.2 D-Ring



Standard D-Ring 【Specifications】

Model No*	WG Type EIA	Dimensions (L*W*H)	Model No*	Dimensions (L*W*H)
VT14MFD	WR650	174.8X92.2X8.5	VT58MFDL	45.5X25.5X3.5
VT18MFD	WR510	136X72X5	VT70MFD	41.2X22.2X4.9
VT22MFDT	WR430	117X63X5	VT70MFDL	39X20.5X3.5
VT26MFDL	WR340	94X51.5X5	VT84MFD	34.9X19X4.9
VT32MFDL	WR284	77X75.5X3.5	VT84MFDL	34.9X19X3.3
VT32MFD	WR284	79.4X41.3X3.5	VT100MFD	28.6X15.9X4.9
VT40MFDL	WR229	63X34.5X3.5	VT100MFDL	28X15.5X3.5
VT48MFDL	WR187	53.9X28.5X3.5	VT140MFD	20.6X12.7X4.9
VT58MFD	WR159	46.7X26.5X4.9		

*Indicates Model Number. See Ordering Information for complete part number.

【Ordering Information】

Example Part No: VT 70 MFD

Vector Telecom

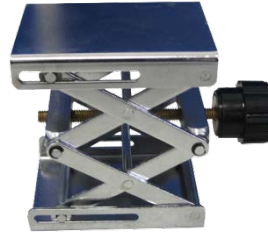
WG Type: R70

Product Type: WG Sealing Gasket

Code	Description
MFO	O-Ring
WFD	D-Ring

- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat

20 Waveguide Adjustable Support



【Specifications】

Model No*	Dimensions (mm)	Static Bearing
VTSJPTX	50x40x(37~93)	40(kg)
VTSJPTZ	70x55x(37~138)	40(kg)
VTSJPTD	100x75x(43~182)	50(kg)
VTSJPTT1	140x100x(55~255)	60(kg)
VTSJPTT2	160x120x(60~285)	80(kg)

【Ordering Information】

Example Part No: VT SJPT X

Vector Telecom — VT
Product Type: Waveguide — SJPT
Adjustable Support — X

X: Small size
Z: Medium
D: Large
T1: Outsize-1
T2: Outsize-2

20

Waveguide
Adjustable
Support



Vector Telecom Pty Ltd

Website: www.vectortele.com

Email:

sales@vectortele.com Vector

Telecom Pty Ltd



Section 1

Waveguide
Components

21

Custom
Waveguide
Assemblies



Vector Telecom Pty Ltd

Website: www.vectortele.com

Email: sales@vectortele.com

21 Custom Waveguide Assemblies

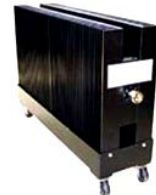
Vector Telecom provides a wide variety of waveguide assemblies that are custom designed, manufactured and tested to meet customer's special requirements. Please call us and discuss your needs with one of our sales engineers





22 Coaxial Fixed Attenuator

Vector Telecom supplies a wide selection of high quality Fixed Attenuators ranging from 2 W to 10 kW in standard Attenuation values of 3, 6, 10, 20, 30, 40 and 50 dB. Please call us with your requirements and discuss your needs with one of our sales engineers.



(Coaxial Fixed Attenuator (50Ω))

22.1 Series of $P \leq 100W$

【Specifications】

Model No*	Avg Power (W)	Peak Power (KW)	Freq Range (GHz)	VSWR	Nominal Attenuation (dB)	Connector
VT400CFA2VJK...	2	0.2	DC-40	≤1.35	1-40	2.4mm
VT420CFA2VJK...	2	0.2	DC-42	≤1.35	3,6,10,20,30	2.4mm
VT500CFA2VJK...	2	0.2	DC-50	≤1.55	1-10,20	2.4mm
VT400CFA5VJK...	5	0.2	DC-40	≤1.35	1-40	2.4mm
VT400CFA10VJK...	10	0.2	DC-40	≤1.40	10-40	2.4mm
VT400CFA20VJK...	20	0.2	DC-40	≤1.40	10-40	2.4mm
VT265CFA2K2.92JK...	2	0.2	DC-26.5	≤1.25	1-40	2.92mm
VT400CFA2K2.92JK...	0.5-2	0.2	DC-40	≤1.35	1-40	2.92mm
VT265CFA5K2.92JK...	5	0.2	DC-26.5	≤1.25	1-40	2.92mm
VT0400CFA5K2.92JK...	5	0.2	DC-40	≤1.35	1-40	2.92mm
VT400CFA10K2.92JK...	10	0.2	DC-40	≤1.40	10-40	2.92mm
VT400CFA20K2.92JK3	20	0.2	DC-40	≤1.40	3	2.92mm
VT400CFA20K2.92JK...	20	0.2	DC-40	≤1.40	10-40	2.92mm
VT400CFA30K2.92JK...	30	0.2	DC-40	≤1.40	30	2.92mm
VT400CFA50K2.92JK...	50	0.5	DC-40	≤1.60	30,40	2.92mm
VT180CFA2TNCJK...	2	0.5	DC-18	≤1.35	1-30	TNC
VT180CFA2TNCJK...	2	0.5	DC-18	≤1.35	40-90	TNC
VT180CFA5TNCJK...	5	0.5	DC-18	≤1.35	1-30	TNC
VT180CFA5TNCJK...	5	0.5	DC-18	≤1.35	40-90	TNC
VT180CFA10TNCJK...	10	1	DC-18	≤1.35	1-30	TNC
VT180CFA10TNCJK...	10	1	DC-18	≤1.35	40-90	TNC
VT180CFA25TNCJK...	25	1	DC-18	≤1.35	10-40	TNC
VT180CFA50TNCJK...	50	1	DC-18	≤1.40	3-40	TNC
VT180CFA50TNCJK...	50	1	DC-18	≤1.3	10-40	TNC
VT180CFA100TNCJK...	100	1	DC-18	≤1.4	10-40	TNC
VT180CFA150TNCJK...	150	1	DC-18	≤ 1.45	10-40	TNC
VT180CFA200TNCJK...	200	1	DC-18	≤ 1.5	10-40	TNC



Section 2

Coaxial Components

22

Coaxial Fixed Attenuator



Vector Telecom Pty Ltd

Website: www.vectortele.com

Email:

sales@vectortele.com **Vector**

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Model No*	Avg Power (W)	Peak Power (kW)	Freq Range (GHz)	VSWR	Nominal Attenuation (dB)	Connector
VT060CFA104.3/10JK...	10	1	DC-6	≤1.25	1-40	4.3/10
VT060CFA254.3/10JK...	25	1	DC-6	≤1.25	1-40	4.3/10
VT080CFA504.3/10JK...	50	5	DC-8	≤1.30	10-40	4.3/10
VT040CFA1004.3/10JK..	100	5	DC-4	≤1.25	20,30,40	4.3/10
VT060CFA1004.3/10JK..	100	5	DC-6	≤1.30	10-40	4.3/10
VT060CFA1504.3/10JK..	150	5	DC-6	≤1.30	10-40	4.3/10
VT060CFA2004.3/10JK..	200	5	DC-6	≤1.30	10-40	4.3/10
VT265CFA23.5JK...	2	0.5	DC-26.5	≤1.25	1-70	3.5mm
VT265CFA53.5JK...	5	0.5	DC-26.5	≤1.25	1-70	3.5mm
VT265CFA103.5JK...	10	0.5	DC-26.5	≤1.25	1-70	3.5mm
VT265CFA253.5JK...	25	0.5	DC-26.5	≤1.3	3-70	3.5mm
VT265CFA503.5JK...	50	0.5	DC-26.5	≤1.3	3-60	3.5mm
VT180CFA100NJK...	100	0.5	DC-18	≤1.25	3,6,10,20,30,40,50	3.5mm,SMA(M,
VT265CFA100SJK...	100	0.5	DC-26.5	≤1.40	3,6,10,20,30,40,50	3.5mm,SMA(M,
VT0320CFA100SJK...	100	0.5	DC-32	≤1.40	10,20,30,40	SMK(2.92)
VT124CFA2SJK...	2	0.2	DC-12.4	≤1.35	1-30	SSMA(M,F)
VT060CFA2SJK...	2	0.5	DC-6	≤1.20	1-30	SMA(M,F)
VT124CFA2BMAJK...	10	1	DC-12.4	≤1.40	1-20	BMA
VT060CFA2QMASMA...	2	0.5	DC-6	≤1.2	1-30	Input: QMA
VT265CFA2SJK...	2	0.5	DC-26.5	≤1.3	1-12	SMA(M,F)
VT180CFA2SJK...	2	0.5	DC-18	≤1.35	1-30	SMA
VT180CFA2SJK...	2	0.5	DC-18	≤1.30	1-50	SMA
VT0300CFA2SJK...	2	0.5	DC-30	≤1.30	3-30	SMA(M,F)
VT265CFA2SJK...	2	0.5	DC-26.5	≤ 1.35	1-40	SMA
VT265CFA2SKK...	2	0.5	DC-26.5	≤ 1.35	1-30	SMA(F,F)
VT265CFA2SJK...	2	0.5	DC-26.5	≤ 1.40	30-90	SMA(M,F)
VT265CFA5SJK...	5	0.5	DC-26.5	≤ 1.35	3-50	SMA(M,F)
VT265CFA10SJK...	10	0.5	DC-26.5	≤ 1.35	3-40	SMA(M,F)
VT265CFA25SJK...	25	1	DC-26.5	≤ 1.35	10-40	SMA(M,F)
VT180CFA50NJK...	50	1	DC-18	≤1.25	10-60	SMA(M,F),3.5(
VT265CFA50SJK...	50	1	DC-26.5	≤1.30	10-60	SMA(M,F),3.5(
VT320CFA50SJK...	50	1	DC-32	≤1.35	10,20,30,40	SMK(2.92)
VT060CFA2NJK...	2	0.5	DC-6	≤1.25	1-40	N, SMA, TNC,
VT180CFA2NJK...	2	0.5	DC-18	≤1.40	1-50	N, TNC
VT060CFA5NJK...	5	0.5	DC-6	≤1.25	1-40	N,SMA,TNC,BN
VT180CFA5NJK...	5	0.5	DC-18	≤1.40	1-50	N,TNC
VT040CFA10NJK...	10	1	DC-4	≤1.25	1-40	N, SMA, TNC,
VT180CFA10NJK...	10	1	DC-18	≤1.40	10-40	N, SMA,TNC
VT180CFA10NJK...	10	1	DC-18	≤1.30	1-40	N,TNC
VT124CFA10NJK...	10	1	DC-12.4	≤1.30	10-60	N, TNC
VT040CFA25NJK...	25	1	DC-4	≤1.25	1-50	N, SMA, TNC,
VT100CFA30NJK...	30	5	DC-10	≤1.20	3-40	N
VT100CFA30NJK...	30	5	DC-10	≤1.20	3-40	N
VT040CFA50SJK...	50	10	DC-4	≤1.35	1-40	N, SMA, 7/16,
VT040CFA50NJK...	50	10	DC-4	≤1.35	1-40	N, 7/16
VT100CFA50NJK...	50	5	DC-10	≤1.35	3-40	N, 7/16



Model No*	Avg Power (W)	Peak Power (kW)	Freq Range (GHz)	VSWR	Nominal Attenuation (dB)	Connector
VT180CFA50NJK...	50	1	DC-18	≤1.35	3-40	N,SMA
VT180CFA50NJK...	50	1	DC-18	≤1.25	10-60	N
VT180CFA50NJK...	50	1	DC-18	≤1.35	10-40	N,TNC,SMA
VT100CFA50NJK...	50	5	DC-10	≤1.35	3-40	7/16(DC-4), N
VT040CFA60NJK...	60	10	DC-4	≤1.35	1-40	N, SMA, 7/16,
VT100CFA60NJK...	60	5	DC-10	≤1.35	3-40	N, 7/16
VT100CFA80NJK...	80	10	DC-10	≤1.35	10-40	N, 7/16, TNC,
VT180CFA80NJK...	80	1	DC-18	≤1.40	10-40	N, SMA
VT100CFA80NJK...	80	5	DC-10	≤1.40	3-40	N,7/16(DC-2.5)
VT040CFA100NJK...	100	10	DC-4	≤1.35	10-50	N, 7/16
VT040CFA100NJK...	100	5	DC-4	≤1.25	30	N,7/16
VT0730CFA100NJK...	100	5	0.7-3	≤1.20	30,40	N
VT180CFA100NJK...	100	1	DC-18	≤1.45	3-50	N
VT180CFA100NJK...	100	1	DC-18	≤1.40	3-50	N
VT180CFA100NJK...	100	1	DC-18	≤1.40	3-40	N
VT100CFA100NJK...	100	5	DC-10	≤1.50	3-40	7/16(DC-4), N
VT100CFA100NJK...	100	5	DC-10	≤1.50	3-40	7/16(DC-4), N
VT0160CFA2NJK...	2/5	0.5	0.1-6	≤1.30	1-9,10,20,30,40	N
VT0160CFA10NJK...	10	1	0.1-6	≤1.30	1-9,10,20,30,40	N
VT0160CFA25NJK...	25	1	0.1-6	≤1.30	1-9,10,20,30,40	N
VT0160CFA50NJK...	50	5	0.1-6	≤1.30	3/6,10,20,30,40	N
VT0140CFA100NJK...	100	5	0.1-4	≤1.25	20,30,40	N
VT060CFA10QSM AJK...	10	0.5	DC-6	≤1.20	30	QSMA
VT100CFA30NJK...	30	5	DC-10	≤1.20	3-40	N
VT040CFA50SJK...	50	10	DC-4	≤1.35	1-40	N, SMA, 7/16,
VT040CFA50NJK...	50	10	DC-4	≤1.35	1-40	N, 7/16
VT100CFA50NJK...	50	5	DC-10	≤1.35	3-40	N, 7/16
VT180CFA50NJK...	50	1	DC-18	≤1.35	3-40	N,SMA
VT180CFA50NJK...	50	1	DC-18	≤1.25	10-60	N
VT180CFA50NJK...	50	1	DC-18	≤1.35	10-40	N,TNC,SMA
VT100CFA50NJK...	50	5	DC-10	≤1.35	3-40	7/16(DC-4), N
VT040CFA60NJK...	60	10	DC-4	≤1.35	1-40	N, SMA, 7/16,
VT100CFA60NJK...	60	5	DC-10	≤1.35	3-40	N, 7/16
VT100CFA80NJK...	80	10	DC-10	≤1.35	10-40	N, 7/16, TNC,
VT180CFA80NJK...	80	1	DC-18	≤1.40	10-40	N, SMA
VT100CFA80NJK...	80	5	DC-10	≤1.40	3-40	N,7/16(DC-2.5)
VT040CFA100NJK...	100	10	DC-4	≤1.35	10-50	N, 7/16
VT040CFA100NJK...	100	5	DC-4	≤1.25	30	N,7/16
VT0730CFA100NJK...	100	5	0.7-3	≤1.20	30,40	N
VT180CFA100NJK...	100	1	DC-18	≤1.45	3-50	N
VT180CFA100NJK...	100	1	DC-18	≤1.40	3-50	N
VT180CFA100NJK...	100	1	DC-18	≤1.40	3-40	N
VT100CFA100NJK...	100	5	DC-10	≤1.50	3-40	7/16(DC-4), N
VT100CFA100NJK...	100	5	DC-10	≤1.50	3-40	7/16(DC-4), N
VT0160CFA2NJK...	2/5	0.5	0.1-6	≤1.30	1-9,10,20,30,40	N
VT0160CFA10NJK...	10	1	0.1-6	≤1.30	1-9,10,20,30,40	N



Vector Telecom

Section 2

Coaxial
Components

22

Coaxial
Fixed
Attenuator



Vector Telecom Pty Ltd

Website: www.vectortele.com

Email: sales@vectortele.com

Model No*	Avg Power (W)	Peak Power (kW)	Freq Range (GHz)	VSWR	Nominal Attenuation (dB)	Connector
VT0160CFA25NJK...	25	1	0.1-6	≤1.30	1-9,10,20,30,40	N
VT0160CFA50NJK...	50	5	0.1-6	≤1.30	3/6,10,20,30,40	N
VT0140CFA100NJK...	100	5	0.1-4	≤1.25	20,30,40	N
VT060CFA10Q SMAJK...	10	0.5	DC-6	≤1.20	30	QSMA

*Indicates Model Number. See Ordering Information for complete part number.

22.2 Series of P≤500W

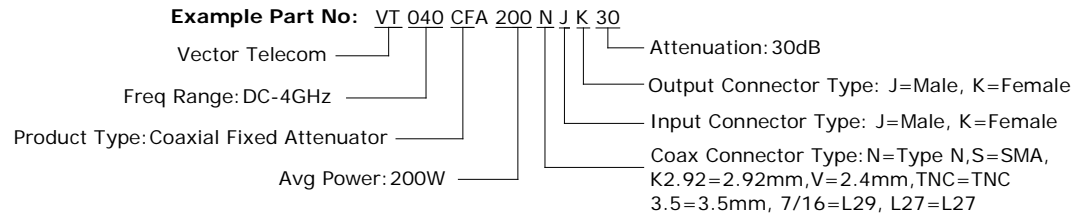
【Specifications】

Model No*	Avg Power (W)	Peak Power (kW)	Freq Range (GHz)	VSWR	Nominal Attenuation (dB)	Connector
VT040CFA150NJK...	150	10	DC-4	1.15-1.40	10,20,30,40,50	N,7/16
VT180CFA150NJK...	150	1	DC-18	1.30-1.45	3,6,10,20,30,40,50	N,SMA
VT180CFA150NJK...	150	1	DC-18	1.25-1.35	3,6,10,20,30,40,50	N
VT100CFA150NJK...	150	5	DC-10	1.15-1.50	3,6,10,20,30,40	N,7/16
VT040CFA200NJK...	200	10	DC-4	1.20-1.40	10,20,30,40,50	N,7/16
VT100CFA200NJK...	200	5	DC-10	1.15-1.45	10,20,30,40	N,7/16
VT180CFA200NJK...	200	1	DC-18	1.25-1.50	10,20,30,40,50	N
VT040CFA250NJK...	250	10	DC-4	1.20-1.40	10,20,30,40,50	N,7/16
VT050CFA250NJK...	250	10	DC-5	1.15	40	N,7/16
VT100CFA250NJK...	250	5	DC-10	1.20-1.45	10,20,30,40	N,7/16
VT100CFA250NJK...	250	5	DC-10	1.20-1.45	10,,20,30,40	N,7/16
VT180CFA250NJK...	250	1	DC-18	1.25-1.55	10,20,30,40,50	N
VT040CFA300NJK...	300	10	DC-4	1.20-1.50	10,20,30,40,50	N,7/16
VT180CFA300NJK...	300	1	DC-18	1.20-1.55	10,20,30,40,50	N
VT100CFA300NJK...	300	5	DC-10	1.25-1.45	30,40,50	N,7/16
VT130CFA350NJK...	350	1	DC-13	1.30-1.50	6,10,20,30,40	N(J,K)
VT040CFA350NJK...	350	1	DC-4	1.3	30	N
VT040CFA400NJK...	400	10	DC-4	1.20-1.50	10,20,30,40,50	N,7/16
VT100CFA400NJK...	400	5	DC-10	1.25-1.45	40,50	N,7/16
VT040CFA500NJK...	500	10	DC-4	1.20-1.50	10,20,30,40,50	N,7/16
VT100CFA500NJK...	500	5	DC-10	1.25-1.45	30,40,50	N,7/16
VT180CFA250NJK...	250	1	DC-18	1.25-1.55	10,20,30,40,50	N
VT040CFA300NJK...	300	10	DC-4	1.20-1.50	10,20,30,40,50	N,7/16
VT180CFA300NJK...	300	1	DC-18	1.20-1.55	10,20,30,40,50	N
VT100CFA300NJK...	300	5	DC-10	1.25-1.45	30,40,50	N,7/16
VT130CFA350NJK...	350	1	DC-13	1.30-1.50	6,10,20,30,40	N(J,K)
VT040CFA350NJK...	350	1	DC-4	1.3	30	N
VT040CFA500NJK...	500	10	DC-4	1.20-1.50	10,20,30,40,50	N,7/16
VT100CFA500NJK...	500	5	DC-10	1.25-1.45	30,40,50	N,7/16



**Indicates Model Number. See Ordering Information for complete part number.*

【Ordering Information】



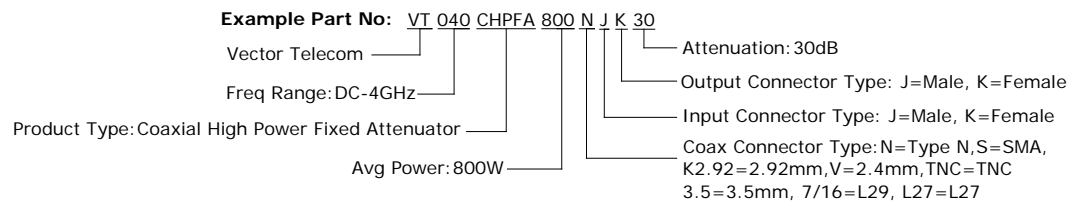
22.3 Series of P>500W

【Specifications】

Model No*	Avg Power (W)	Peak Power (kW)	Freq Range (GHz)	VSWR	Nominal Attenuation (dB)	Connector
VT040CHPFA800NJK...	800	10	DC-4	1.20-1.50	40,50,60	N,7/16
VT060CHPFA1000NJK..	1000	10	DC-6	1.35	50	N, 7/16
VT030CHPFA1000NJK..	1000	10	DC-3	1.40	40,50	N,7/16
VT030CHPFA1500NJK..	1500	10	DC-3	1.40	40,50	N,7/16
VT030CHPFA2000NJK..	2000	10	DC-3	1.40	40,50	N,7/16
VT020CHPFA1000NJK..	1000	50	DC-2	1.20-1.30	30,40,50	N,7/16
VT020CHPFA1000NJK..	1000	50	DC-2	1.20-1.30	30,40,50	N,7/16
VT020CHPFA1000NJK..	1000	50	DC-2	1.20-1.30	30,40,50	N,7/16
VT020CHPFA2000NJK..	2000	50	DC-2	1.20-1.30	30,40,50	N,7/16
VT020CHPFA2000NJK..	2000	50	DC-2	1.20-1.30	30,40,50	N,7/16
VT020CHPFA3000NJK..	3000	50	DC-2	1.30	30,40,50	N,7/16
VT010CHPFA4000NJK..	4000	100	DC-1	1.40	30,40,50	N,7/16
VT010CHPFA5000NJK..	5000	100	DC-1	1.40	30,40,50	7/16,L36,L
VT010CHPFA10000NJK	10000	100	DC-1	1.40	30,40,50	7/16,L36,L

Indicates Model Number. See Ordering Information for complete part number.

【Ordering Information】





23 Coaxial Termination

Vector Telecom supplies high quality Coaxial Terminations up to 18 GHz. Our Free Standing Convection Cooled Terminations offer great flexibility for all your engineering applications. Please call us with your requirements and discuss your needs with one of our sales engineers.



23.1 Series of $P \leq 100W$

【Specifications】

Model No*	Avg Power (W)	Peak Power (kW)	Freq Range (GHz)	VSWR	Connector
VT060CL104.3/10	10	1	DC-6	1.20-1.25	4.3/10
VT060CL254.3/10	25	1	DC-6	1.20-1.25	4.3/10
VT080CL504.3/10	50	5	DC-8	1.15-1.30	4.3/10
VT040CL1004.3/10	100	5	DC-4	1.20-1.25	4.3/10
VT060CL1004.3/10	100	5	DC-6	1.20-1.30	4.3/10
VT060CL1504.3/10	150	5	DC-6	1.20-1.30	4.3/10
VT060CL2004.3/10	200	5	DC-6	1.20-1.30	4.3/10
VT0500CL2V	2	0.2	DC-50	1.30-1.40	2.4mm
VT0500CL2V	5	0.2	DC-50	1.30-1.40	2.4mm
VT0400CL2K2.92	2	0.2	DC-40	1.20-1.25	2.92
VT0400CL5K2.92	5	0.2	DC-40	1.20-1.35	2.92
VT0400CL10K2.92	10	0.2	DC-40	1.25-1.35	2.92
VT0400CL20K2.92	20	0.2	DC-40	1.25-1.35	2.92
VT0400CL50K2.92	50	0.2	DC-40	1.20-1.35	2.92mm
VT0265CL23.5K	2	0.5	DC-26.5	1.15-1.20	3.5mm
VT0265CL53.5K	5	0.5	DC-26.5	1.15-1.20	3.5mm
VT0265CL103.5K	10	0.5	DC-26.5	1.15-1.25	3.5mm
VT0265CL253.5K	25	0.5	DC-26.5	1.15-1.25	3.5mm
VT0265CL503.5K	50	0.5	DC-26.5	1.15-1.25	3.5mm
VT0265CL100S	100	0.5	DC-26.5	1.30-1.40	3.5mm,SMA,SMK
VT0180CL2S	2	0.25	DC-18	1.15-1.30	SMA
VT0180CL2SMA(M)	2	0.25	DC-18	1.10-1.35	SMA(M)
VT0180CL2S	2	0.25	DC-18	1.03-1.20	SMA



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Section 2

Coaxial
Components

23

Coaxial
Termination



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Model No*	Avg Power	Peak Power	Freq Range	VSWR	Connector
VT060CL1Q	1	0.25	DC-6	1.15-1.20	QMA
VT0124CL2S	2	0.1	DC-12.4	1.15-1.25	SMA(M) Reverse polarity
VT0180CL1S	1	0.1	DC-18	1.05-1.30	SMA(M)
VT0265CL2S	2	0.25	DC-26.5	1.20-1.25	SMA
VT0265CL5S	5	0.5	DC-26.5	1.10-1.30	SMA,3.5mm,2.92mm
VT0265CL10S	10	0.5	DC-26.5	1.10-1.30	SMA,3.5mm,2.92mm
VT0265CL25S	25	1	DC-26.5	1.30	SMA
VT0265CL50S	50	1	DC-26.5	1.30	SMA
VT060CL2N	2	0.5	DC-6	1.15-1.25	N,SMA,BNC,TNC
VT0180CL2N	2	0.5	DC-18	1.10-1.30	N
VT030CL27/16(M)	2	1	DC-3	1.10	7/16(M)
VT080CL2N(M)	2	0.5	DC-8	1.10-1.25	N(M)
VT0180CL5N	5	0.5	DC-18	1.10-1.30	N
VT060CL5N	5	0.5	DC-6	1.15-1.25	N,BNC,SMA,TNC,7/16
VT060CL5N(M)	5	1	DC-6	1.15-1.25	N(M)
VT0180CL5N	5	0.5	DC-18	1.10-1.30	N
VT030CL57/16(M)	5	0.5	DC-3	1.10	7/16(M)
VT060CL10N	10	1	DC-6	1.15-1.20	N,BNC,SMA,TNC
VT0180CL10N	10	1	DC-18	1.30-1.40	N,SMA
VT040CL10N	10	1	DC-4	1.15-1.30	N
VT060CL25S	25	1	DC-6	1.15-1.25	SMA,N,7/16,TNC,BNC
VT0180CL25S	25	1	DC-18	1.20-1.40	N,SMA
VT040CL25N	25	1	DC-4	1.15-1.30	N
VT060CL30N	30	10	DC-6	1.10-1.30	N,SMA,7/16,TNC,BNC
VT040CL30N	30	1	DC-4	1.15-1.30	N
VT040CL50N	50	10	DC-4	1.05-1.20	N,SMA,7/16,TNC
VT060CL50N	50	1	DC-6	1.10-1.25	N,SMA,TNC,BNC
VT0100CL50N	50	1	DC-10	1.10-1.25	N
VT0100CL507/16	50	5	DC-10	1.15-1.35	N,7/16
VT0180CL50N	50	1	DC-18	1.25-1.40	N,SMA,TNC
VT0180CL50S	50	5	DC-18	1.15-1.35	N,SMA,TNC
VT040CL60S	60	1	DC-4	1.05-1.20	N,SMA,7/16
VT0100CL60N	60	1	DC-10	1.15-1.40	N
VT040CL80N	80	10	DC-4	1.10-1.25	N,7/16,TNC
VT0180CL80N	80	1	DC-18	1.20-1.40	N,SMA,TNC
VT0180CL80S	80	5	DC-18	1.15-1.55	N,SMA
VT040CL100N	100	10	DC-4	1.10-1.25	N,7/16



Model No*	Avg Power (W)	Peak Power (kW)	Freq Range (GHz)	VSWR	Connector
VT0180CL100N	100	5	DC-18	1.25-1.40	N,SMA,TNC
VT0180CL100TNC	100	5	DC-18	1.25-1.30	N,SMA,TNC
VT0180CL100S	100	5	DC-18	1.15-1.55	N,SMA
VT060CL10QS	10	0.5	DC-6	1.20	QSMA

Indicates Model Number. See Ordering Information for complete part number.

23.2 Series of P≤500W

【Specifications】

Model No*	Avg Power (W)	Peak Power (kW)	Freq Range (GHz)	VSWR	Connector
VT040CHPL150N	150	10	DC-4	1.15-1.30	N,7/16
VT0180CHPL150TNC	150	1	DC-18	1.35-1.40	N,TNC
VT0180CHPL150N	150	10	DC-18	1.25-1.35	N
VT0100CHPL150N	150	5	DC-10	1.15-1.35	N
VT0180CHPL150N	150	5	DC-18	1.15-1.55	N
VT040CHPL200N	200	10	DC-4	1.15-1.30	N,7/16
VT0180CHPL200N	200	5	DC-18	1.25-1.40	N
VT0100CHPL200N	200	5	DC-10	1.15-1.35	N,7/16
VT040CHPL250N	250	10	DC-4	1.15-1.35	N,7/16
VT0180CHPL250N	250	5	DC-18	1.25-1.40	N
VT0180CHPL250N	250	5	DC-10	1.15-1.35	N,7/16
VT0100CHPL250N	250	5	DC-10	1.15-1.35	N,7/16
VT040CHPL300N	300	10	DC-4	1.15-1.40	N,7/16
VT0180CHPL300TNC	300	10	DC-18	1.30-1.50	N,TNC
VT0180CHPL300N	300	5	DC-18	1.15-1.70	N,7/16
VT040CHPL400N	400	10	DC-4	1.15-1.45	N,7/16
VT0100CHPL400N	400	10	DC-10	1.15-1.50	N,7/16
VT040CHPL500N	500	10	DC-4	1.15-1.40	N,7/16
VT0100CHPL500N	500	5	DC-10	1.15-1.55	N,7/16
VT20200CHPL500NJ	500	5000	2-20	1.35-1.4	N(J)

**Indicates Model Number. See Ordering Information for complete part number.*

23.3 Series of P>500W

【Specifications】

Model No*	Avg Power (W)	Peak Power (kW)	Freq Range (GHz)	VSWR	Connector
VT040CHPL800N	800	10	DC-4	1.20-1.45	N,7/16
VT080CHPL1000N	1000	10	DC-8	1.10-1.55	N



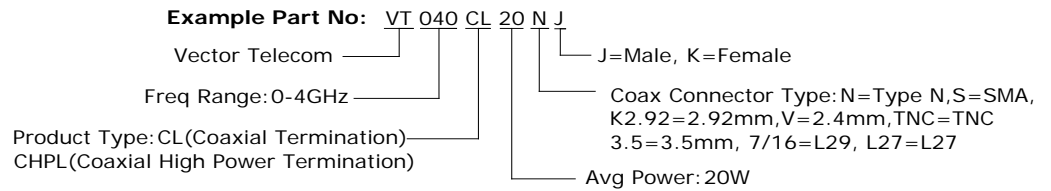
Section 2

Coaxial Components

Model No*	Avg Power (W)	Peak Power (kW)	Freq Range (GHz)	VSWR	Connector
VT040CHPL1000N	1000	10	DC-4	1.40	N,7/16,L27
VT040CHPL1500N	1500	10	DC-4	1.40	N,7/16,L27
VT040CHPL2000N	2000	10	DC-4	1.40	N,7/16,L27
VT020CHPL1000N	1000	50	DC-2	1.30	N,7/16,L27
VT020CHPL1000L27	1000	50	DC-2	1.30	N,7/16,L27
VT020CHPL2000L27	2000	50	DC-2	1.30	N,7/16,L27
VT020CHPL2000N	2000	50	DC-2	1.30	N,7/16,L27
VT020CHPL3000L27	3000	50	DC-2	1.50	N,7/16,L27
VT010CHPL5000L27	5000	100	DC-1	1.40	L27,7/16,L52
VT010CHPL10000L27	10000	100	DC-1	1.40	L27,7/16,L52

*Indicates Model Number. See Ordering Information for complete part number.

【Ordering Information】



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Coaxial Termination



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24 Coaxial Cable Assembly



【Specifications】

Model No*	Inner Conductor Diameter (mm)	Outer Diameter (mm)	Bending Radius (mm)	Freq (GHz) DC-3	Freq (GHz) DC-6	Freq (GHz) DC-18	Freq (GHz) DC-30	Freq (GHz) DC-40	Connector
03SYV-50-3-1	0.9	5	30	IL≤3.0dB; VSWR≤1.4					BNC Male J, Q9 Male J
06SFF-50-3-1	0.93	4.5	40	IL≤2dB; VSWR≤1.3	IL≤3dB; VSWR≤1.4				N,SMA
18SUJ-50-5	1.83	7	45	IL≤0.8dB; VSWR≤1.15	IL≤1dB; VSWR≤1.2	IL≤1.8B; VSWR≤1.4			N Male
18RG402	1.3	4.2	30	IL≤1.0dB; VSWR≤1.15	IL≤1.5dB; VSWR≤1.2	IL≤2.6dB; VSWR≤1.35			N, SMA
40RG402	1.3	4.2	30	IL≤1.0dB; VSWR≤1.15	IL≤1.5dB; VSWR≤1.2	IL≤2.6dB; VSWR≤1.35			2.92 Male J
SFT316	0.9	3	20	IL≤1.8dB	IL≤2.2dB; VSWR≤1.2	IL≤3.6dB; VSWR≤1.25	IL≤4.5dB; VSWR≤1.4	IL≤6.5dB; VSWR≤1.5	2.92 Male J
18DLF35	0.94	3.5	14	VSWR≤1.15	VSWR≤1.2	VSWR≤1.35			N, SMA
18DLF50	1.45	5.2	20.5	IL≤0.7dB; VSWR≤1.15	IL≤0.9dB; VSWR≤1.2	IL≤1.8dB; VSWR≤1.35			N, SMA
30DLA36	0.72	3.6	18	IL≤1.0dB; VSWR≤1.15	IL≤1.5dB; VSWR≤1.2	IL≤2.5dB; VSWR≤1.3	IL≤3.2dB; VSWR≤1.3	5	2.92, SMA, N, SMP, TNC Female
18DLA46	1.02	4.6	23	IL≤0.9dB; VSWR≤1.15	IL≤1.2dB; VSWR≤1.2	IL≤1.9dB; VSWR≤1.3			SMA, N, TNC Female
18DLA52	1.29	3.91	26	IL≤0.7dB; VSWR≤1.15	IL≤1.0dB; VSWR≤1.2	IL≤1.6dB; VSWR≤1.3			SMA, N Male, TNC Male
18DLA63	1.57	6.35	32	IL≤0.6dB; VSWR≤1.15	IL≤0.8dB; VSWR≤1.2	IL≤1.4dB; VSWR≤1.3			SMA Female, N Male, TNC Male
40DLB36	0.91	3.6	18	IL≤0.8dB; VSWR≤1.15	IL≤1.3dB; VSWR≤1.2	IL≤2.0dB; VSWR≤1.25	IL≤2.5dB; VSWR≤1.3	IL≤3.2dB; VSWR≤1.35	2.92, 2.4, SMA, SMP
18DLB52	1.45	5.2	25.5	IL≤0.6dB; VSWR≤1.15	IL≤1.0dB; VSWR≤1.2	IL≤1.3dB; VSWR≤1.3			2.92, 2.4, SMA, N, TNC
18DLB80	2.3	7.8	39	IL≤0.4dB; VSWR≤1.15	IL≤0.7dB; VSWR≤1.2	IL≤1.0dB; VSWR≤1.3			SMA, N, TNC

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Coaxial Cable Assembly



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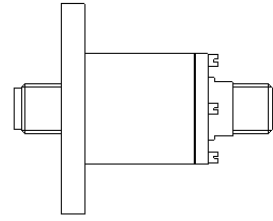
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Model No*	Inner Conductor Diameter (mm)	Outer Diameter (mm)	Bending Radius (mm)	Freq (GHz) DC-3	Freq (GHz) DC-6	Freq (GHz) DC-18	Freq (GHz) DC-30	Freq (GHz) DC-40	Connector
SFT-50-3	0.99	3.58	40	IL≤0.8dB; VSWR≤1.15	IL≤1.0dB; VSWR≤1.5	IL≤1.8dB; VSWR≤1.4			2.92 Male, SMA, N Male
SFT-50-2	0.56	2.18	7	IL≤1.2dB; VSWR≤1.15	IL≤1.6dB; VSWR≤1.2	IL≤2.8dB; VSWR≤1.25	IL≤3.5dB; VSWR≤1.3	IL≤4.0dB; VSWR≤1.35	2.92, 2.4 Male, SMA

Note: The above specs in the table are for 1m length assembly, for different Length, the insertion loss can be calculated according to proportion, VSWR will be adjusted according to the length appropriately.



25 Coaxial Rotary Joint



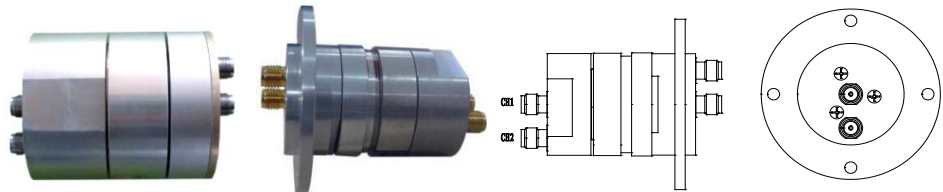
25.1 Single Channel Coaxial Rotary Joint

【Specification】

Model No*	Freq Range (GHz)	VSWR	VSWR WOW (dB)	IL (dB)	IL WOW (dB)	Avg Power (W)	Peak Power (W)	Connector Type	
								Port 1	Port 2
VT30CRJINJK	DC-3	≤1.2	≤0.1	≤0.5	≤0.05	30	300	N Male	N Female
VT80CRJINJK	DC-8	≤1.35	≤0.1	≤0.5	≤0.05	30	300	N Male	N Female
VT124CRJINJK	DC-12.4	≤1.5	≤0.1	≤0.5	≤0.05	30	300	N Male	N Female
VT124CRJISJK	DC-12.4	≤1.5	≤0.1	≤0.5	≤0.05	30	300	SMA Male	SMA Female
VT100150CRJISJK	10-15	≤1.5	≤0.1	≤0.5	≤0.1	30	300	SMA Male	SMA Female
VT180CRJINJK	DC-18	≤1.8	≤0.1	≤0.8	≤0.1	30	300	N Male	N Female
VT180CRJISJK	DC-18	≤1.8	≤0.1	≤0.8	≤0.1	30	300	SMA Male	SMA Female
VT400CRJIV	DC-40	≤1.8	≤0.1	≤0.8	≤0.1	30	300	2.4 Female	2.4 Female

*Indicates Model Number. See Ordering Information for complete part number.

25.2 Dual Channels Coaxial Rotary Joint (II Type)



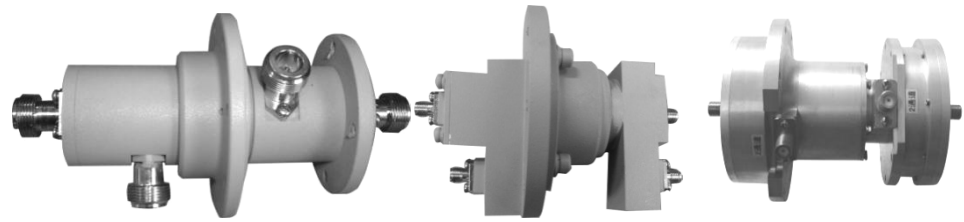
【Specification】

Model No*	Freq Range (GHz)	VSWR	VSWR WOW (dB)	IL(dB)	IL WOW (dB)	Avg Power (W)	Channel Isolation (dB)	Connect Type
VT0030CRJIISA	CH1: 0-3	≤1.25	≤0.10	≤0.3	≤0.05	10	≥60	SMA Female
	CH2: 0-3	≤1.35	≤0.10	≤0.3	≤0.1	10		
VT0050CRJIIS	CH1: 0-5	≤1.20	≤0.05	≤0.3	≤0.05	50W	≥50	SMA Female

*Indicates Model Number. See Ordering Information for complete part number.



25.3 Dual Channels Coaxial Rotary Joint (UI Type)



【Specification】

Model No*	Freq Range (GHz)	VSWR	IL	Connector Type	Material
VT0045CRJIISAT	CH1: 0-4.5	1.2	0.25	SMA Female	Al
	CH2: 0-4.5	1.45	0.3		
VT12CRJUIS1	CH1: 0.95-1.45	1.25	0.5	SMA Female	Cu
	CH2: 0.95-1.45	1.50	0.5		
VT4070CRJUIS	CH1: 3.6-4.2	1.30	0.3	SMA Female	Cu
	CH2: 5.85-6.45	1.30	0.3		
VT160110CRJIISA	CH1: DC-16	1.5	0.5	SMA Female	Al
	CH2: DC-11	2.5	2		
VT94CRJUIS	CH1: 9.4±0.25GHz	1.3	0.4	SMA Female	Cu
	CH1: 9.4±0.25GHz	1.3	0.4		

25.4 Multiple Channels Coaxial Rotary Joint

Model No*: VT11CHPRJUII3



【Specification】

Channel	Freq Range (GHz)	VSWR	VSWR WOW (dB)	IL	IL WOW (dB)	Avg Power (KW)	Peak Power (KW)	Connector
CH1	0.13-0.19	≤1.3	≤0.1	≤0.1dB	≤0.1dB	3.6	30	1'5/8 Female
CH2	1-1.1			≤0.2dB		0.05	5	L27 Female
CH3	1-1.1			≤0.2dB		0.05	5	L27 Female

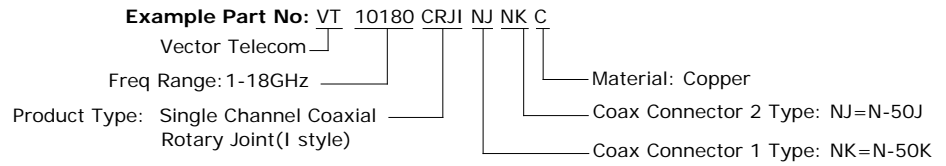
*Indicates Model Number. See Ordering Information for complete part number.



Section 2

**Coaxial
Components**

【Ordering Information】



Code	Description	Code	Description
CRJI	Single Channel Coaxial Rotary Joint	CHPRJUJ	Multiple Channels Coaxial Rotary Joint
CRJII	Dual Channel Coaxial Rotary Joint (II Type)	CRJUI	Dual Channel Coaxial Rotary Joint (UI Type)

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**Coaxial
Rotary Joint**



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26 Coaxial Calibration Kits

VTVNACK Coaxial Calibration Kits



【Component List】

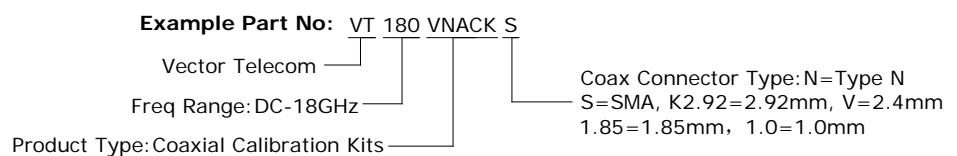
No.	Description	Parameter	Qty
1	Coaxial Termination	Male	1
2	Coaxial Termination	Female	1
3	Coaxial Short Plate	VSWR \geq 60; Male	1
4	Coaxial Short Plate	VSWR \geq 60; Female	1
5	Coaxial Open	VSWR \geq 60; Male	1
6	Coaxial Open	VSWR \geq 60; Female	1
7	Precision Transmission Line (Coaxial Air Line)	L= JJ; KK; JK	3
8	Adaptor	NSJJ;NSKK;NSJK;NSKJ	4
9	Spanner		1
10	Packing Case of Aluminum Alloy		1

【Specification】

Model No*	Freq Range (GHz)	Connector
VT30VNACK75N	0-3	N-75
VT40VNACKN	0-4	N-50
VT80VNACKN	0-8	N-50
VT124VNACKN	0 -12.4	N-50
VT180VNACKS	0 -18	SMA-50

*Indicates Model Number. See Ordering Information for complete part number.

【Ordering Information】

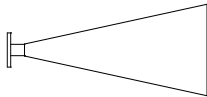
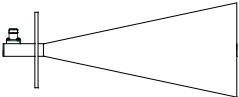
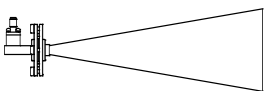


27 Standard Gain Antenna

Vector Telecom manufactures a high quality line of standard gain horn antennas that are linearly polarized, lightweight and corrosion resistant. The most common Gain values available are 10, 15, 20, 25dB. Other Gain values and Horn Sizes can be designed to your requirement. Please call us with your specification and discuss your needs with one of our sales engineers.

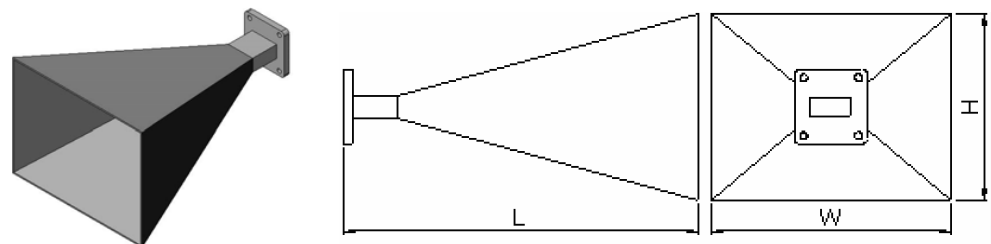


27.1 Standard Gain Horn Antenna (SGAH)

Type	Waveguide Input Style	With Built-in Coaxial Input Style	With Coaxial Connector Style
Outline Drawing			
WG Type	WR770-WR3	R2300-R28	R975-WR22
VSWR	≤1.25	≤1.5	≤1.5

27.1.1 Standard Gain Horn Antenna, 10 dB

Style 1 - Waveguide Input



【Specifications】

Model No	Freq Range (GHz)	Gain* (dB)	3dB Beamwidth* (Nom)	Dimensions (mm)			WG Type		Flange
				L	W	H	IEC	EIA	
VT3SGAH10	0.32-0.49	10	55	1600	1198	955	R3	WR2300	FDP
VT4SGAH10	0.35-0.53	10	55	1400	1006	726	R4	WR2100	FDP
VT5SGAH10	0.41-0.62	10	55	1300	906	656	R5	WR1800	FDP
VT6SGAH10	0.49-0.75	10	55	1100	760	556	R6	WR1500	FDP
VT8SGAH10	0.64-0.98	10	55	1200	606	436	R8	WR1150	FDP
VT9SGAH10	0.75-1.15	10	55	1000	400	280	R9	WR975	FDP
VT12SGAH10	0.96-1.46	10	55	300	400	280	R12	WR770	FDP

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Standard
Gain
Antenna



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Model No	Freq Range (GHz)	Gain* (dB)	3dB Beamwidth* (Nom)	Dimensions (mm)			WG Type		Flange
				L	W	H	IEC	EIA	
VT14SGAH10	1.13-1.73	10	55	280	315	235	R14	WR650	FDP
VT18SGAH10	1.45-2.20	10	55	245	249	184	R18	WR510	FDP
VT22SGAH10	1.72-2.61	10	55	210	209	154	R22	WR430	FDP
VT26SGAH10	2.17-3.30	10	55	160	165	125	R26	WR340	FDP
VT32SGAG10	2.60-3.95	10	55	150	144	114	R32	WR284	FDP
VT40SGAG10	3.22-4.90	10	55	120	113	88	R40	WR229	FDP
VT48SGAG10	3.94-5.99	10	55	110	98	73	R48	WR187	FDP
VT58SGAG10	4.64-7.05	10	55	100	83	63	R58	WR159	FDP
VT70SGAG10	5.38-8.17	10	55	75	67	52	R70	WR137	FDP
VT84SGAG10	6.57-9.99	10	55	70	57	42	R84	WR112	FBP
VT100SGAG10	8.20-12.40	10	55	50	47	37	R100	WR90	FBP
VT120SGAG10	9.84-15.0	10	55	55	40	29	R120	WR75	FBP
VT140SGAG10	11.9-18.0	10	55	55	37	27	R140	WR62	FBP
VT180SGAG10	14.5-22.0	10	55	50	30	20	R180	WR51	FBP
VT220SGAG10	17.6-26.7	10	55	45	24	17	R220	WR42	FBP
VT260SGAG10	21.7-33.0	10	55	35	20	14	R260	WR34	FBP
VT320SGAG10	26.5-40.0	10	55	30	17	12	R320	WR28	FBP
VT400SGAG10	32.9-50.1	10	55	36	10.8	7.9	R400	WR22	FUGP
VT500SGAG10	39.2-59.6	10	55	30	9	6.4	R500	WR19	FUGP
VT620SGAG10	49.8-75.8	10	55	25	7.5	5.3	R620	WR15	FUGP
VT740SGAG10	60.5-91.9	10	55	18	5.9	4.5	R740	WR12	FUGP

*Gain and 3dB Beamwidth values have been calculated by computer simulation.

【Ordering Information】

Example Part No: VT 100 SGAH 10

Vector Telecom

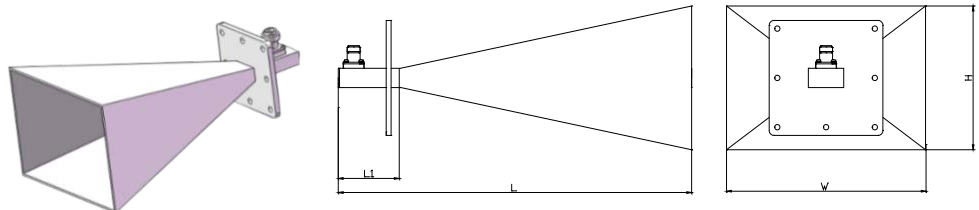
WG Type: R100

Antenna Gain: 10dB

Product Type: Standard Gain Horn Antenna

- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus grey top coat

Style 2 - Built-in Coaxial Input



【Specifications】

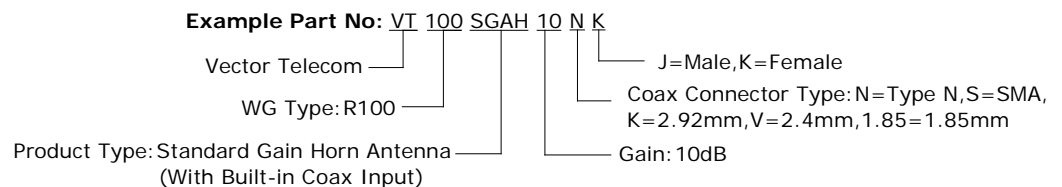


Model No*	Freq Range (GHz)	Gain** (dB)	3dB Beamwidth** (Nom)	Dimensions (mm)			WG Type		Connector
				L	W	H	IEC	EIA	
VT3SGAG10N...	0.32-0.49	10	55	850	1150	800	R3	WR2300	N Type
VT4SGAG10N...	0.35-0.53	10	55	800	1050	720	R4	WR2100	N Type
VT5SGAG10N...	0.41-0.62	10	55	800	900	660	R5	WR1800	N Type
VT6SGAG10N...	0.49-0.75	10	55	700	700	500	R6	WR1500	N Type
VT8SGAG10N...	0.64-0.98	10	55	590	620	440	R8	WR1150	N Type
VT9SGAG10N...	0.75-1.15	10	55	480	480	336	R9	WR975	N Type
VT12SGAG10N...	0.96-1.46	10	55	400	400	280	R12	WR770	N Type
VT14SGAG10N...	1.13-1.73	10	55	370	315	235	R14	WR650	N Type
VT18SGAG10N...	1.45-2.20	10	55	310	400	280	R18	WR510	N Type
VT22SGAG10N...	1.72-2.61	10	55	260	315	235	R22	WR430	N Type
VT26SGAG10N...	2.17-3.30	10	55	200	249	184	R26	WR340	N Type
VT32SGAG10N...	2.60-3.95	10	55	175	209	154	R32	WR284	N Type
VT40SGAG10N...	3.22-4.90	10	55	150	165	125	R40	WR229	N Type
VT48SGAG10N...	3.94-5.99	10	55	145	144	114	R48	WR187	N Type
VT58SGAG10N...	4.64-7.05	10	55	135	113	88	R58	WR159	N Type
VT70SGAG10N...	5.38-8.17	10	55	110	98	73	R70	WR137	N Type
VT84SGAG10N...	6.57-9.99	10	55	95	83	63	R84	WR112	N Type
VT100SGAG10N...	8.20-12.40	10	55	75	67	52	R100	WR90	N Type
VT120SGAG10S...	9.84-15.0	10	55	75	57	42	R120	WR75	SMA
VT140SGAG10S...	11.9-18.0	10	55	75	47	37	R140	WR62	SMA
VT180SGAG10S...	14.5-22.0	10	55	75	40	29	R180	WR51	SMA
VT220SGAG10K...	17.6-26.7	10	55	75	37	27	R220	WR42	K2.92mm
VT260SGAG10K...	21.7-33.0	10	55	53	30	20	R260	WR34	K2.92mm
VT320SGAG10K...	26.5-40.0	10	55	54	24	17	R320	WR28	K2.92mm

*Indicates Model Number. See Ordering Information for complete part number.

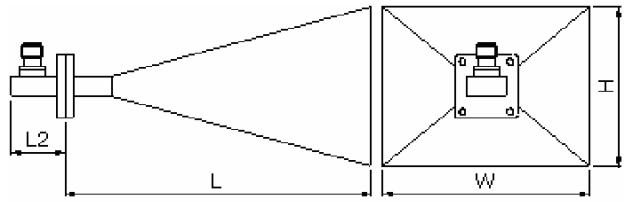
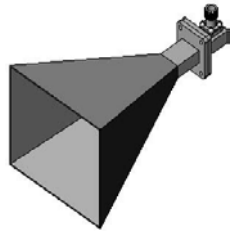
**Gain and 3dB Beamwidth values have been calculated by computer simulation.

【Ordering Information】



- Finish: Corrosion protection plus grey top coat

Style 3 - with Coaxial Connector



【Specifications】

Model No*	Freq Range (GHz)	Gain** (dB)	3dB Beamwidth** (Nom)	Dimensions (mm)				WG Type		Connector
				L	L2	W	H	IEC	EIA	
VT3SGAG10+N...	0.32-0.49	10	55°	1600	400	1198	955	R3	WR2300	N Type
VT4SGAG10+N...	0.35-0.53	10	55°	1400	380	1006	726	R4	WR2100	N Type
VT5SGAG10+N...	0.41-0.62	10	55°	1300	350	906	656	R5	WR1800	N Type
VT6SGAG10+N...	0.49-0.75	10	55°	1100	300	760	556	R6	WR1500	N Type
VT8SGAG10+N...	0.64-0.98	10	55°	1200	260	606	436	R8	WR1150	N Type
VT9SGAG10+N...	0.75-1.15	10	55°	1000	231	506	366	R9	WR975	N Type
VT12SGAG10+N...	0.96-1.46	10	55°	466	166	400	280	R12	WR770	N Type
VT14SGAG10+N...	1.13-1.73	10	55°	430	150	315	235	R14	WR650	N Type
VT18SGAG10+N...	1.45-2.20	10	55°	360	120	249	184	R18	WR510	N Type
VT22SGAG10+N...	1.72-2.61	10	55°	310	100	209	154	R22	WR430	N Type
VT26SGAG10+N...	2.17-3.30	10	55°	245	85	165	125	R26	WR340	N Type
VT32SGAG10+N...	2.60-3.95	10	55°	222	72	144	114	R32	WR284	N Type
VT40SGAG10+N...	3.22-4.90	10	55°	185	65	113	88	R40	WR229	N Type
VT48SGAG10+N...	3.94-5.99	10	55°	164	54	98	73	R48	WR187	N Type
VT58SGAG10+N...	4.64-7.05	10	55°	150	50	83	63	R58	WR159	N Type
VT70SGAG10+N...	5.38-8.17	10	55°	123	48	67	52	R70	WR137	N Type
VT84SGAG10+N...	6.57-9.99	10	55°	110	40	57	42	R84	WR112	N Type
VT100SGAG10+N...	8.20-12.40	10	55°	83	33	47	37	R100	WR90	N Type
VT120SGAG10+S...	9.84-15.0	10	55°	83	30	40	29	R120	WR75	SMA
VT140SGAG10+S...	11.9-18.0	10	55°	82	27	37	27	R140	WR62	SMA
VT180SGAG10+S...	14.5-22.0	10	55°	77	27	30	20	R180	WR51	SMA
VT220SGAG10+K...	17.6-26.7	10	55°	70	25	24	17	R220	WR42	K2.92mm
VT260SGAG10+K...	21.7-33.0	10	55°	62	27	20	14	R260	WR34	K2.92mm
VT320SGAG10+K...	26.5-40.0	10	55°	56	26	17	12	R320	WR28	K2.92mm

**Indicates Model Number. See Ordering Information for complete part number.

**Gain and 3dB Beamwidth values have been calculated by computer simulation

【Ordering Information】



Example Part No: VT 100 SGAG 10 +N K

Vector Telecom

WG Type: R100

Product Type: Standard Gain Horn Antenna
(With Coax Connector)

J=Male, K=Female

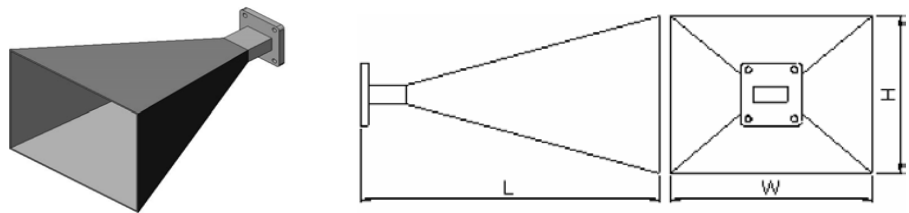
Coax Connector Type: N=Type N, S=SMA,
K=2.92mm, V=2.4mm, 1.85=1.85mm

Gain: 10dB

- Finish: Corrosion protection plus black grey coat

27.1.2 Standard Gain Horn Antenna, 15 dB

Style 1 – Waveguide Input



【Specifications】

Model No	Freq Range (GHz)	Gain* (dB)	3dB Beam width* (Nom)	Dimensions (mm)			WG Type		Flange
				L	W	H	IEC	EIA	
VT9SGAG15	0.75-1.15	15	30°	619	834	619	R9	WR975	FDP
VT12SGAG15	0.96-1.46	15	30°	650	681	506	R12	WR770	FDP
VT14SGAG15	1.13-1.73	15	30°	410	563	423	R14	WR650	FDP
VT18SGAG15	1.45-2.20	15	30°	400	441	327	R18	WR510	FDP
VT22SGAG15	1.72-2.61	15	30°	300	374	278	R22	WR430	FDP
VT26SGAG15	2.17-3.30	15	30°	250	297	216	R26	WR340	FDP
VT32SGAG15	2.60-3.95	15	30°	230	275	190	R32	WR284	FDP
VT40SGAG15	3.22-4.90	15	30°	180	205	145	R40	WR229	FDP
VT48SGAG15	3.94-5.99	15	30°	160	169	119	R48	WR187	FDP
VT58SGAG15	4.64-7.05	15	30°	130	141	97	R58	WR159	FDP
VT70SGAG15	5.38-8.17	15	30°	110	122	84	R70	WR137	FDP
VT84SGAG15	6.57-9.99	15	30°	100	105	71	R84	WR112	FBP
VT100SGAG15	8.20-12.40	15	30°	80	81	56	R100	WR90	FBP
VT120SGAG15	9.84-15.0	15	30°	75	68	47	R120	WR75	FBP
VT140SGAG15	11.9-18.0	15	30°	80	57	40	R140	WR62	FBP
VT180SGAG15	14.5-22.0	15	30°	55	47	33	R180	WR51	FBP
VT220SGAG15	17.6-26.7	15	30°	45	39	27	R220	WR42	FBP
VT260SGAG15	21.7-33.0	15	30°	40	32	22	R260	WR34	FBP
VT320SGAG15	26.5-40.0	15	30°	35	26	19	R320	WR28	FBP
VT400SGAG15	32.9-50.1	15	30°	30	22	15.5	R400	WR22	FUGP
VT500SGAG15	39.2-59.6	15	30°	25	19	13	R500	WR19	FUGP
VT620SGAG15	49.8-75.8	15	30°	21	15	11	R620	WR15	FUGP
VT740SGAG15	60.5-91.9	15	30°	20	13.5	9.5	R740	WR12	FUGP
VT900SGAG15	73.8-112	15	30°	18	11	8	R900	WR10	FUGP

*Gain and 3dB Beamwidth values have been calculated by computer simulation.



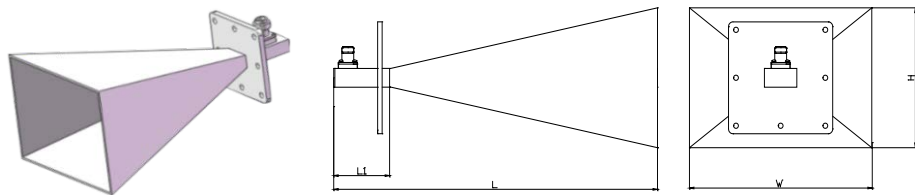
【Ordering Information】

Example Part No: VT 100 SGAG 15

Vector Telecom — Gain: 15dB
 WG Type: R100 — Product Type: Standard Gain Horn Antenna
 (With Waveguide Input)

- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus grey top coat

Style 2 – Built-in Coaxial Input



【Specifications】

Model No*	Freq Range (GHz)	Gain** (dB)	3dB Beam width** (Nom)	Dimensions (mm)			WG Type		Connector
				L	W	H	IEC	EIA	
VT9SGAG15N...	0.75-1.15	15	30°	820	850	580	R9	WR975	N Type
VT12SGAG15N...	0.96-1.46	15	30°	700	700	480	R12	WR770	N Type
VT14SGAG15N...	1.13-1.73	15	30°	520	550	380	R14	WR650	N Type
VT18SGAG15N...	1.45-2.20	15	30°	430	456	316	R18	WR510	N Type
VT22SGAG15N...	1.72-2.61	15	30°	360	380	265	R22	WR430	N Type
VT26SGAG15N...	2.17-3.30	15	30°	290	297	216	R26	WR340	N Type
VT32SGAG15N...	2.60-3.95	15	30°	255	275	190	R32	WR284	N Type
VT40SGAG15N...	3.22-4.90	15	30°	210	205	145	R40	WR229	N Type
VT48SGAG15N...	3.94-5.99	15	30°	195	169	119	R48	WR187	N Type
VT58SGAG15N...	4.64-7.05	15	30°	200	141	97	R58	WR159	N Type
VT70SGAG15N...	5.38-8.17	15	30°	190	122	84	R70	WR137	N Type
VT84SGAG15N...	6.57-9.99	15	30°	150	105	71	R84	WR112	N Type
VT100SGAG15...	8.20-12.40	15	30°	123	81	56	R100	WR90	N Type
VT120SGAG15...	9.84-15.0	15	30°	100	68	47	R120	WR75	SMA
VT140SGAG15...	11.9-18.0	15	30°	80	57	40	R140	WR62	SMA
VT180SGAG15...	14.5-22.0	15	30°	77	47	33	R180	WR51	SMA
VT220SGAG15...	17.6-26.7	15	30°	67	39	27	R220	WR42	K2.92mm
VT260SGAG15...	21.7-33.0	15	30°	60	32	22	R260	WR34	K2.92mm
VT320SGAG15...	26.5-40.0	15	30°	55	26	19	R320	WR28	K2.92mm

*Indicates Model Number. See Ordering Information for complete part number.

**Gain and 3dB Beamwidth values have been calculated by computer simulation.

【Ordering Information】



Example Part No: VT 100 SGAG 15 N K

Vector Telecom

WG Type: R100

Product Type: Standard Gain Horn Antenna
(With Built-in Coax Input)

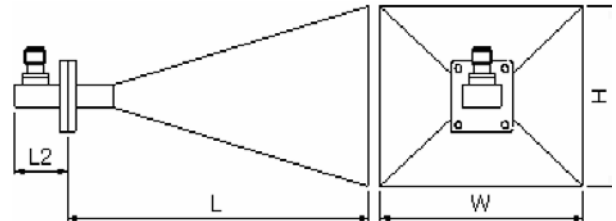
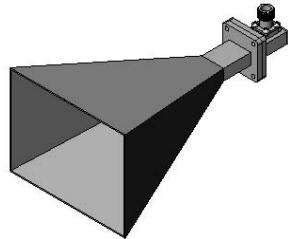
J=Male, K=Female

Coax Connector Type: N=Type N, S=SMA,
K=2.92mm, V=2.4mm, 1.85=1.85mm

Gain: 15dB

- Finish: Corrosion protection plus grey top coat

Style3 –with Coaxial Connector



【Specifications】

Model No*	Freq Range (GHz)	Gain** (dB)	3dB Beamwidth** (Nom)	Dimensions (mm)				WG Type		Connector
				L	L2	W	H	IEC	EIA	
VT9SGAG15+N...	0.75-1.15	15	30°	619	231	576	456	R9	WR975	N Type
VT12SGAG15+N...	0.96-1.46	15	30°	766	166	700	480	R12	WR770	N Type
VT14SGAG15+N...	1.13-1.73	15	30°	580	150	550	380	R14	WR650	N Type
VT18SGAG15+N...	1.45-2.20	15	30°	485	120	456	316	R18	WR510	N Type
VT22SGAG15+N...	1.72-2.61	15	30°	410	100	380	265	R22	WR430	N Type
VT26SGAG15+N...	2.17-3.30	15	30°	335	85	297	216	R26	WR340	N Type
VT32SGAG15+N...	2.60-3.95	15	30°	302	72	275	190	R32	WR284	N Type
VT40SGAG15+N...	3.22-4.90	15	30°	245	65	205	145	R40	WR229	N Type
VT48SGAG15+N...	3.94-5.99	15	30°	214	54	169	119	R48	WR187	N Type
VT58SGAG15+N...	4.64-7.05	15	30°	180	50	141	97	R58	WR159	N Type
VT70SGAG15+N...	5.38-8.17	15	30°	158	48	122	84	R70	WR137	N Type
VT84SGAG15+N...	6.57-9.99	15	30°	140	40	105	71	R84	WR112	N Type
VT100SGAG15+N...	8.20-12.40	15	30°	115	35	81	56	R100	WR90	N Type
VT120SGAG15+S...	9.84-15.0	15	30°	105	30	68	47	R120	WR75	SMA
VT140SGAG15+S...	11.9-18.0	15	30°	107	27	57	40	R140	WR62	SMA
VT180SGAG15+S...	14.5-22.0	15	30°	82	27	47	33	R180	WR51	SMA
VT220SGAG15+K...	17.6-26.7	15	30°	70	25	39	27	R220	WR42	K2.92mm
VT260SGAG15+K...	21.7-33.0	15	30°	67	27	32	22	R260	WR34	K2.92mm
VT320SGAG15+K...	26.5-40.0	15	30°	61	26	26	19	R320	WR28	K2.92mm

*Indicates Model Number. See Ordering Information for complete part number.

**Gain and 3dB Beamwidth values have been calculated by computer simulation.

【Ordering Information】



Example Part No: VT 100 SGAH 15 +N K

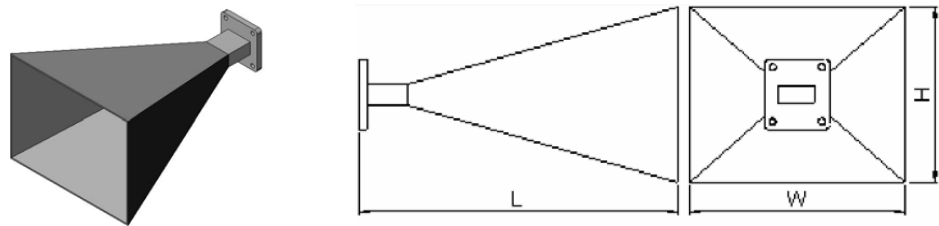
Vector Telecom ———
 WG Type: R100 ———
 Product Type: Standard Gain Horn Antenna (With Coax Connector) ———

J=Male, K=Female
 Coax Connector Type: N=Type N, S=SMA,
 K=2.92mm, V=2.4mm, 1.85=1.85mm
 Gain: 15dB

- Finish: Corrosion protection plus grey top coat

27.1.3 Standard Gain Horn Antenna, 20 dB

Style 1 – Waveguide Input



【Specifications】

Model No	Freq Range (GHz)	Gain* (dB)	3dB Beamwidth* (Nom)	Dimensions (mm)			WG Type		Flange
				L	W	H	IEC	EIA	
VT32SGAG20	2.60-3.95	20	18°	700	476	346	R32	WR284	D Type
VT40SGAG20	3.22-4.90	20	18°	520	345	264	R40	WR229	D Type
VT48SGAG20	3.94-5.99	20	18°	440	280	212	R48	WR187	D Type
VT58SGAG20	4.64-7.05	20	18°	400	245	175	R58	WR159	D Type
VT70SGAG20	5.38-8.17	20	18°	290	197	153	R70	WR137	D Type
VT84SGAG20	6.57-9.99	20	18°	290	180	128	R84	WR112	B Type
VT100SGAG20	8.20-12.40	20	18°	220	138	107	R100	WR90	B Type
VT120SGAG20	9.84-15.0	20	18°	200	115	83	R120	WR75	B Type
VT140SGAG20	11.9-18.0	20	18°	150	93	72	R140	WR62	B Type
VT180SGAG20	14.5-22.0	20	18°	140	80	56	R180	WR51	B Type
VT220SGAG20	17.6-26.7	20	18°	125	70	49	R220	WR42	B Type
VT260SGAG20	21.7-33.0	20	18°	110	54	42	R260	WR34	B Type
VT320SGAG20	26.5-40.0	20	18°	90	47	33	R320	WR28	B Type
VT400SGAG20	32.9-50.1	20	18°	70	36	27	R400	WR22	FUGP
VT500SGAG20	39.2-59.6	20	18°	60	31.4	23	R500	WR19	FUGP
VT620SGAG20	49.8-75.8	20	18°	55	25	18	R620	WR15	FUGP
VT740SGAG20	60.5-91.9	20	18°	50	22	16	R740	WR12	FUGP
VT900SGAG20	73.8-112	20	18°	45	18	13	R900	WR10	FUGP
VT1200SGAH20	92.2-112	20	18°	40	15	11	R1200	WR8	FUGP
VT1400SGAH20	113-173	20	18°	32	12	8.5	R1400	WR7	FUGP
VT1800SGAH20	145-220	20	18°	35	9.7	7	R1800	WR5	FUGP
VT2200SGAH20	172-261	20	18°	30	8.5	5.8	R2200	WR4	FUGP
VT2600SGAH20	217-330	20	18°	27	7	4.8	R2600	WR3	FUGP

*Gain and 3dB Beamwidth values have been calculated by computer simulation.

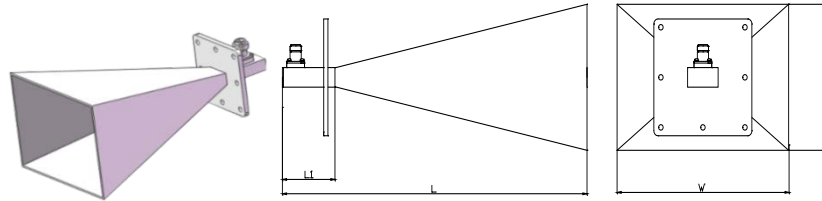


【Ordering Information】

Example Part No: VT 100 SGAH 20
 Vector Telecom ——— Gain: 20dB
 WG Type: R100 ——— Product Type: Standard Gain Horn Antenna
 (With Waveguide Input)

- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat

Style 2 – Built-in Coaxial Input



【Specifications】

Model No*	Freq Range (GHz)	Gain** (dB)	3dB Beam width** (Nom)	Dimensions (mm)			WG Type		Connector
				L	W	H	IEC	EIA	
VT32SGAG20N...	2.60-3.95	20	18°	725	476	346	R32	WR284	N Type
VT40SGAG20N...	3.22-4.90	20	18°	550	345	264	R40	WR229	N Type
VT48SGAG20N...	3.94-5.99	20	18°	475	280	212	R48	WR187	N Type
VT58SGAG20N...	4.64-7.05	20	18°	435	245	175	R58	WR159	N Type
VT70SGAG20N...	5.38-8.17	20	18°	325	197	153	R70	WR137	N Type
VT84SGAG20N...	6.57-9.99	20	18°	315	180	128	R84	WR112	N Type
VT100SGAG20N...	8.20-12.40	20	18°	245	138	107	R100	WR90	N Type
VT120SGAG20S...	9.84-15.0	20	18°	220	115	83	R120	WR75	SMA
VT140SGAG20S...	11.9-18.0	20	18°	170	93	72	R140	WR62	SMA
VT180SGAG20S...	14.5-22.0	20	18°	165	80	56	R180	WR51	SMA
VT220SGAG20K...	17.6-26.7	20	18°	155	70	49	R220	WR42	K2.92mm
VT260SGAG20K...	21.7-33.0	20	18°	128	54	42	R260	WR34	K2.92mm
VT320SGAG20K...	26.5-40.0	20	18°	114	47	33	R320	WR28	K2.92mm

*Indicates Model Number. See Ordering Information for complete part number.

**Gain and 3dB Beamwidth values have been calculated by computer simulation.

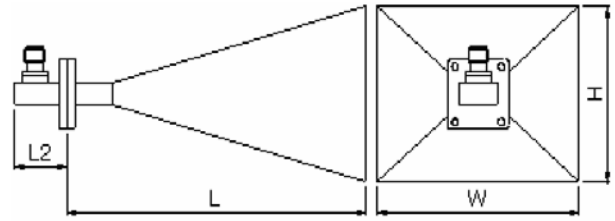
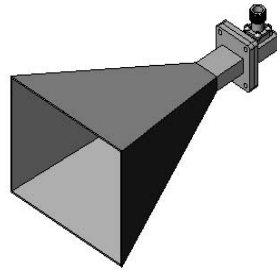
【Ordering Information】

Example Part No: VT 100 SGAH 20 N K
 Vector Telecom ——— J=Male, K=Female
 WG Type: R100 ——— Coax Connector Type: N=Type N, S=SMA,
 K=2.92mm, V=2.4mm, 1.85=1.85mm
 Product Type: Standard Gain Horn Antenna ——— Gain: 20dB
 (With Built-in Coax Input)

- Finish: Corrosion protection plus grey top coat



Style 3 — with Coaxial Connector



【Specifications】

Model No*	Freq Range (GHz)	Gain** (dB)	3dB Beamwidth* * (Nom)	Dimensions (mm)				WG Type		Connector
				L	L2	W	H	IEC	EIA	
VT32SGAG20+N...	2.60-3.95	20	18°	772	72	476	346	R32	WR284	N Type
VT40SGAG20+N...	3.22-4.90	20	18°	585	65	345	264	R40	WR229	N Type
VT48SGAG20+N...	3.94-5.99	20	18°	494	54	280	212	R48	WR187	N Type
VT58SGAG20+N...	4.64-7.05	20	18°	450	50	245	175	R58	WR159	N Type
VT70SGAG20+N...	5.38-8.17	20	18°	338	48	197	153	R70	WR137	N Type
VT84SGAG20+N...	6.57-9.99	20	18°	330	40	180	128	R84	WR112	N Type
VT100SGAG20+N...	8.20-12.40	20	18°	255	35	138	107	R100	WR90	N Type
VT120SGAG20+S...	9.84-15.0	20	18°	230	30	115	83	R120	WR75	SMA
VT140SGAG20+S...	11.9-18.0	20	18°	177	27	93	72	R140	WR62	SMA
VT180SGAG20+S...	14.5-22.0	20	18°	167	27	80	56	R180	WR51	SMA
VT220SGAG20+K...	17.6-26.7	20	18°	150	25	70	49	R220	WR42	K2.92mm
VT260SGAG20+K...	21.7-33.0	20	18°	137	27	54	42	R260	WR34	K2.92mm
VT320SGAG20+K...	26.5-40.0	20	18°	116	26	47	33	R320	WR28	K2.92mm
VT400SGAG20+K...	33.0-50.0	20	18°	96	31	35	26	R400	WR22	K2.92mm

*Indicates Model Number. See Ordering Information for complete part number.

**Gain and 3dB Beamwidth values have been calculated by computer simulation.

【Ordering Information】

Example Part No: VT 100 SGAGH 20 +N K

Vector Telecom

WG Type: R100

Product Type: Standard Gain Horn Antenna
(With Coax Connector)

J=Male, K=Female

Coax Connector Type: N=Type N, S=SMA,
K=2.92mm, V=2.4mm, 1.85=1.85mm

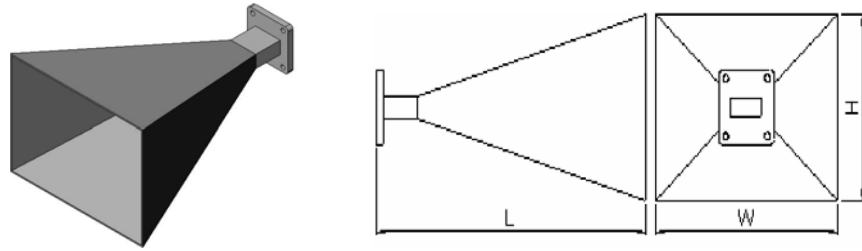
Gain: 20dB

- Finish: Corrosion protection plus grey top coat



27.1.4 Standard Gain Horn Antenna, 25 dB

Style 1 – Waveguide Input



【Specifications】

Model No	Freq Range (GHz)	Gain* (dB)	3dB Beam width* (Nom)	Dimensions (mm)			WG Type		Flange
				L	W	H	IEC	EIA	
VT100SGAG25	8.20-12.40	25	10°	740	250	180	R100	WR90	FBP
VT120SGAG25	9.84-15.0	25	10°	550	200	155	R120	WR75	FBP
VT140SGAG25	11.9-18.0	25	10°	520	175	120	R140	WR62	FBP
VT180SGAG25	14.5-22.0	25	10°	400	134	104	R180	WR51	FBP
VT220SGAG25	17.6-26.7	25	10°	350	120	85	R220	WR42	FBP
VT260SGAG25	21.7-33.0	25	10°	300	92	70	R260	WR34	FBP
VT320SGAG25	26.5-40.0	25	10°	240	80	56	R320	WR28	FBP
VT400SGAG25	32.9-50.1	25	10°	205	66	46	R400	WR22	FUGP
VT500SGAG25	39.2-59.6	25	10°	160	53	37	R500	WR19	FUGP
VT620SGAG25	49.8-75.8	25	10°	130	43	31	R620	WR15	FUGP
VT740SGAG25	60.5-91.9	25	10°	120	37	26	R740	WR12	FUGP
VT900SGAG25	73.8-112	25	10°	100	30	23	R900	WR10	FUGP
VT1200SGAG25	92.2-112	25	10°	86	25	17.7	R1200	WR8	FUGP
VT1400SGAG25	113-173	25	10°	70	20	14	R1400	WR7	FUGP
VT1800SGAG25	145-220	25	10°	57	16	11.2	R1800	WR5	FUGP
VT2200SGAG25	172-261	25	10°	50	13	9.5	R2200	WR4	FUGP
VT2600SGAG25	217-330	25	10°	40	11	7.7	R2600	WR3	FUGP

*Gain and 3dB Beamwidth values have been calculated by computer simulation.

【Ordering Information】

Example Part No: VT 100 SGAGH 25

Vector Telecom

Gain: 25dB

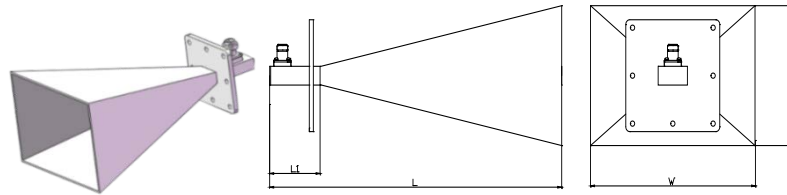
WG Type: R100

Product Type: Standard Gain Horn Antenna
(With Waveguide Input)

- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus grey top coat



Style 2 – Built-in Coaxial Input



【Specifications】

Model No*	Freq Range (GHz)	Gain** (dB)	3dB Beam width** (Nom)	Dimensions (mm)			WG Type		Connector
				L	W	H	IEC	EIA	
VT100SGAG25N...	8.20-12.40	25	10°	760	250	180	R100	WR90	N Type
VT120SGAG25S...	9.84-15.0	25	10°	570	200	155	R120	WR75	SMA
VT140SGAG25S...	11.9-18.0	25	10°	540	175	120	R140	WR62	SMA
VT180SGAG25S...	14.5-22.0	25	10°	424	134	104	R180	WR51	SMA
VT220SGAG25K...	17.6-26.7	25	10°	375	120	85	R220	WR42	K2.92mm
VT260SGAG25K...	21.7-33.0	25	10°	313	92	70	R260	WR34	K2.92mm
VT320SGAG25K...	26.5-40.0	25	10°	259	80	56	R320	WR28	K2.92mm

*Indicates Model Number. See Ordering Information for complete part number.

**Gain and 3dB Beamwidth values have been calculated by computer simulation.

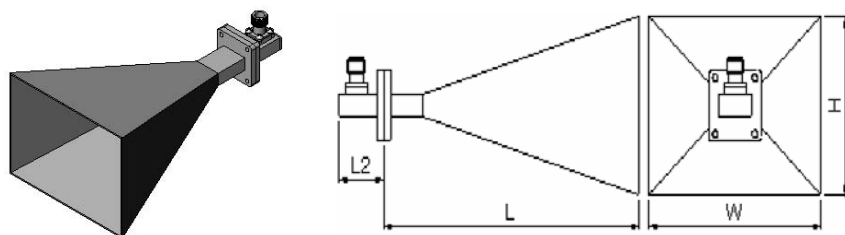
【Ordering Information】

Example Part No: VT 100 SGAH 25 N K

Vector Telecom ——— |
 WG Type: R100 ——— |
 Product Type: Standard Gain Horn Antenna (With Built-in Coax Input) ——— |
 Gain: 25dB ——— |
 J=Male, K=Female ——— |
 Coax Connector Type: N=Type N, S=SMA, K=2.92mm, V=2.4mm, 1.85=1.85mm ——— |

- Finish: Corrosion protection plus grey top coat

Style 3 – with Coaxial Connector



【Specifications】

Model No*	Freq Range (GHz)	Gain** (dB)	3dB Beamwidth** (Nom)	Dimensions (mm)				WG Type		Connector
				L	L2	W	H	IEC	EIA	
VT100SGAG25+N...	8.20-12.40	25	10°	775	35	250	180	R100	WR90	N Type
VT120SGAG25+S...	9.84-15.0	25	10°	550	30	200	155	R120	WR75	SMA
VT140SGAG25+S...	11.9-18.0	25	10°	547	27	175	120	R140	WR62	SMA
VT180SGAG25+S...	14.5-22.0	25	10°	427	27	134	104	R180	WR51	SMA
VT220SGAG25+K...	17.6-26.7	25	10°	375	25	120	85	R220	WR42	K2.92mm
VT260SGAG25+K...	21.7-33.0	25	10°	327	27	92	70	R260	WR34	K2.92mm
VT320SGAG25+K...	26.5-40.0	25	10°	266	26	80	56	R320	WR28	K2.92mm
VT400SGAG25+K...	26.5-40.0	25	10°	236	31	66	46	R400	WR22	K2.92mm

*Indicates Model Number. See Ordering Information for complete part number.

**Gain and 3dB Beamwidth values have been calculated by computer simulation

【Ordering Information】

Example Part No: VT 100 SGAGH 25 +N K

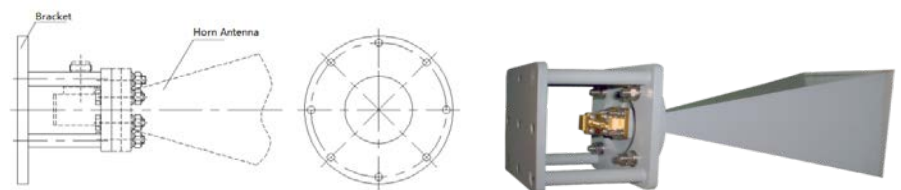
Vector Telecom ——— |
 WG Type: R100 ——— |
 Product Type: Standard Gain Horn Antenna (With Coax Connector) ——— |

————— | J=Male, K=Female
 ——— | Coax Connector Type: N=Type N, S=SMA,
 ——— | K=2.92mm, V=2.4mm, 1.85=1.85mm
 ——— | Gain: 25dB

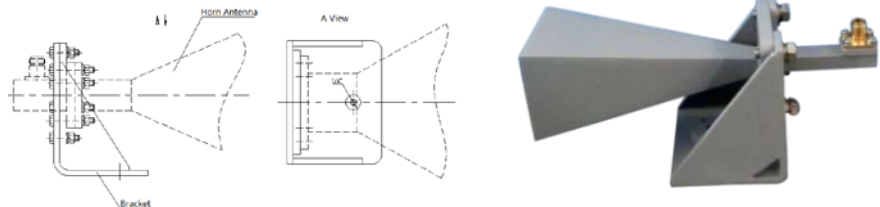
- Finish: Corrosion protection plus grey top coat

27.1.5 Antenna Bracket for Standard Gain Horn Antenna

Type 1



Type 2



【Ordering Information】

Example Part No: VT ZJ G 100

Vector Telecom ——— |
 Product Type: Antenna Bracket ——— |
 ——— | WG Type: R100
 ——— | Bracket type: L:L Style
 ——— | G:I-shaped

- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat





27.2 Circular Polarization Standard Gain Antenna



【Specifications】

Model No*	Freq Range (GHz)	Working bandwidth	Gain Range X (dB)	Axis Ratio (dB)	VSWR	Connector
VT1040SGACPH10N	1-4	10%	10	≤1.5	≤1.6	N Female
VT4080SGACPH10N	4-8	10%	10	≤1.5	≤1.6	N Female
VT84SGACPHXN	7-10	≤5%	10/15	≤0.5	≤1.5	N Female
VT84SGACPHX	7-10	≤5%	10/15	≤0.5	≤1.3	WG Port
VT100SGACPHXN	8-12.4	≤5%	10/15	≤0.5	≤1.5	N Female
VT100SGACPHX	8-12.4	≤5%	10/15	≤0.5	≤1.3	WG Port
VT120SGACPHXN	10-15	≤5%	10/15	≤0.5	≤1.6	N Female
VT120SGACPHX	10-15	≤5%	10/15	≤0.5	≤1.3	WG Port
VT1040SGACPH10N	1-4	10%	10	≤1.5	≤1.6	N Female
VT4080SGACPH10N	4-8	10%	10	≤1.5	≤1.6	N Female
VT84SGACPHXN	7-10	≤5%	10/15	≤0.5	≤1.5	N Female
VT84SGACPHX	7-10	≤5%	10/15	≤0.5	≤1.3	WG Port
VT100SGACPHXN	8-12.4	≤5%	10/15	≤0.5	≤1.5	N Female
VT100SGACPHX	8-12.4	≤5%	10/15	≤0.5	≤1.3	WG Port
VT120SGACPHXN	10-15	≤5%	10/15	≤0.5	≤1.6	N Female
VT120SGACPHX	10-15	≤5%	10/15	≤0.5	≤1.3	WG Port
VT140SGACPHXS	12.4-18	≤5%	10/15	≤0.5	≤1.6	SMA Female
VT140SGACPHX	12.4-18	≤5%	10/15	≤0.5	≤1.3	WG Port
VT180SGACPHXS	15-22	≤5%	10/15/20	≤0.5	≤1.6	SMA Female
VT180SGACPHX	15-22	≤5%	10/15/20	≤0.5	≤1.35	WG Port
VT220SGACPHXK	15-22	≤5%	10/15/20	≤0.5	≤1.6	2.92 Female
*VT220SGACPHX	15-22	≤5%	10/15/20	≤0.5	≤1.35	WG Port
VT260SGACPHXK	22-33	≤5%	10/15/20	≤0.5	≤1.6	2.92 Female
VT260SGACPHX	22-33	≤5%	10/15/20	≤0.5	≤1.35	WG Port
VT320SGACPHXK	26.5-40	≤5%	10/15/20	≤0.5	≤1.6	2.92 Female
VT320SGACPHX	26.5-40	≤5%	10/15/20	≤0.5	≤1.35	WG Port
VT400SGACPHX	33-50	≤5%	10/15/20	≤1	≤1.5	WG Port
VT500SGACPHX	40-60	≤5%	10/15/20	≤1	≤1.5	WG Port
VT620SGACPHX	50-75	≤5%	10/15/20	≤1	≤1.5	WG Port
VT740SGACPHX	60-90	≤5%	10/15/20	≤1	≤1.5	WG Port
VT900SGACPHX	75-110	≤5%	10/15/20	≤1	≤1.6	WG Port

*Indicates Model Number. See Ordering Information for complete part number.



Section 3

Antennas

【Ordering Information】

Example Part No: VT 100 SGACP N
Vector Telecom ——— Coax Connector Type: N=Type N,
S=SMA, 2.92=K2.92mm
WG Type: R100 ——— Product Type: Circular Polarization
Standard Gain Antenna

- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat

27

Standard
Gain
Antenna

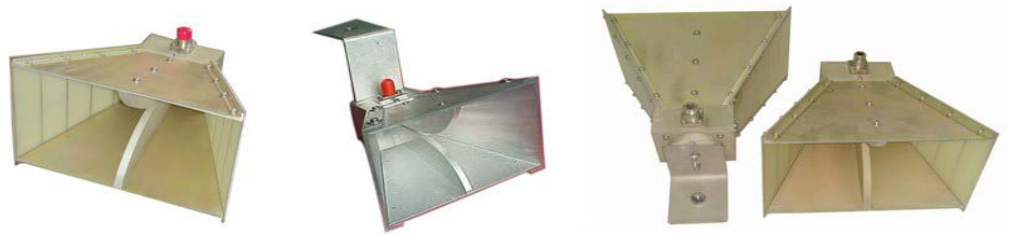


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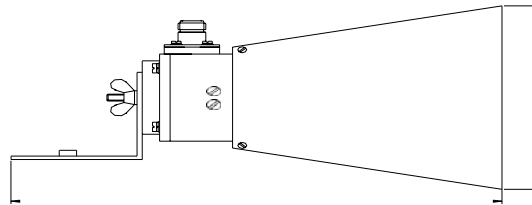
Website: www.vectortele.com

Email: sales@vectortele.com

28 Wideband Double-ridged Horn Antenna



Vector Telecom manufactures a high quality line of dual-ridged horn antennas typically used for EMI testing, surveillance equipment, antenna gain and pattern measurement. Wideband dual-ridged horn antennas are linearly polarized with high Gain, low VSWR, lightweight, covering from 0.2GHz to 40GHz. Please contact us with your specification and discuss your needs with one of our sales engineers.



28.1 Wideband Double-ridged Horn Antenna

【Specifications】

Model No*	Freq Range (GHz)	Gain (dB)	3dB Beamwidth	VSWR (Max)	Dimensions (mm)			Input Coax Connector Type
					L	W	H	
VT0110DRHA8N...	0.1-1	3~10	30°~80°	2.5	2250	2154	1423	SMA
VT0220DRHA8N...	0.2-2	8~13	10°~65°	2.5	960	933	780	N
VT0660DRHA10N...	0.6-6	4~15	10°~80°	2.5	415	306	221	N
VT0840DRHA7N...	0.8-4	6~14	35°~65°	2.5	290	225	155	SMA
VT1060DRHA10N...	1-6	6~13	20°~90°	2.5	158	164	114	K2.4mm
VT10180DRHA10S...	1-18	7~13	30°~80°	2.5	245	160	284	SMA
VT10180DRHA10N...	1.0-18.0	7~15	30°~80°	2.5	245	160	284	N
VT10200DRHA10S...	1-20	8~17	11°~80°	2.5	243	163	241	SMA
VT20180DRHA17S...	2-18	10~14	20°~50°	2.5	200	179	149	SMA
VT60180DRHA10S...	6-18	7~13	30°~55°	2.5	140	63	43	SMA
VT80400DRHA15K	8-40	15~20	10°~30°	2.5	105	28	23	K2.92mm
VT180400DRHA16K...	18.0 - 40.0	3~10	10°~20°	2.5	132	50	38	K2.92mm

*Indicates Model Number. See Ordering Information for complete part number.

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Wideband Double-ridged Horn Antenna



Vector Telecom Pty Ltd

Website: www.vectortele.com

Email: sales@vectortele.com



28.2 Mini Wideband Double-ridged Horn Antenna

Mini, high performance ultra wideband double ridged horn antenna, smaller size, suitable for EMI/RFI test, EMC measurement, wideband monitoring, material analysis, and other areas application. In the design, it does technology processing to restrain the high mode. Have the high gain and low VSWR in the wide band, so it is very ideal for receiving low power signals or transmit medium-power signal. For the requirement of the higher gain, the horn antenna can be assumed to be parabolic reflector antenna feed to get the better directional resolution and gain.



【Specifications】

Model No*	Freq Range (GHz)	Gain (dB)	Beam Width	Dimensions (mm)			VSWR	Connector	Material
				L	W	H			
VT20180DRHA8S	2-18	5~11	40°~80°	119	119	86	≤2.5	SMA Female	Al
VT20245DRHA8S	2-24.5	5~13	40°~80°	119	119	86	≤2.5	SMA Female	Al
VT180400DRHA8K	18-40	5~13	40°~80°	90	60	50	≤2.5	2.92 Female	Al

*Indicates Model Number. See Ordering Information for complete part number.

【Ordering Information】

Example Part No: VT 20180 DRHA 10 N

Vector Telecom

Freq Range: 2-18GHz

Coax Connector Type: N=Type N, S=SMA, 2.92=K2.92mm

Antenna Gain: 10dB

Product Type: Double-ridged Horn Antenna

- Finish: Corrosion protection plus black top coat



29 Linear Polarization Horn Antenna

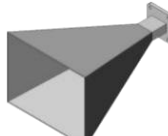
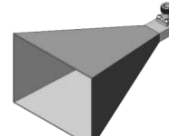
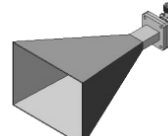
Vector Telecom manufactures a high quality line of linear polarization horn antenna. The common products are pyramidal horn antennas, conical horn antennas and lens antennas. Please call us with your specification and discuss your needs with one of our sales engineers.

29.1 Pyramidal Horn Antenna

Pyramid horn antenna is feeder by TE₁₀ mode waveguide, and stimulated open metal pyramid horn to form radiation. Its advantage is when gain is less than 22 dB, horn antenna has a simple structure, E plane and H plane direction pattern and beam width can respectively control, has stable and reliable performance. The disadvantage is that when require the high gain, beam width is getting narrow, horn antenna length size that relative to the diameter, becomes very long and uncoordinated and inconvenient for use. Pyramid horn antenna can be input waveguide port, also can design with coaxial input directly, or input waveguide type horn + waveguide to coaxial input.

Pyramid horn antenna can be used as a separate transmit and receive antennas, can also be used as a reflector antenna feed source, or array antenna unit.

【Product Type】

Type	With Waveguide Input Style	With Built-in Coaxial Input Style	With Coaxial Connector Style
Model No*	HAA°xB°	HAA°xB°N	HAA°xB°+N
Outline			

【Specifications】

Model No*	WG Type EIA	Freq Range	Optional Beam Width Range(A°XB°)	VSWR	Connector	Material
VT3HAA°XB°N	WR2300	0.32-0.49	30°~ 60°	≤1.5	N Female	Al
VT4HAA°XB°N	WR2100	0.35-0.53	30°~ 60°	≤1.5	N Female	Al



Model No*	WG Type EIA	Freq Range	Optional Beam Width Range(A°XB°)	VSWR	Connector	Material
VT5HAA°XB°N	WR1800	0.41-0.62	30°~ 60°	≤1.5	N Female	Al
VT6HAA°XB°N	WR1500	0.49-0.75	30°~60°	≤1.5	N Female	Al
VT8HAA°XB°N	WR1150	0.64-0.98	20°~60°	≤1.5	N Female	Al
VT9HAA°XB°N	WR975	0.75-1.15	20°~60°	≤1.5	N Female	Al
VT12HAA°XB°N	WR770	0.96-1.46	20°~60°	≤1.5	N Female	Al
VT14HAA°XB°N	WR650	1.13-1.73	20°~60°	≤1.5	N Female	Al
VT18HAA°XB°N	WR510	1.45-2.20	20°~60°	≤1.5	N Female	Al
VT22HAA°XB°N	WR430	1.72-2.61	20°~60°	≤1.5	N Female	Al
VT26HAA°XB°N	WR340	2.17-3.30	20°~60°	≤1.5	N Female	Al
VT32HAA°XB°N	WR284	2.60-3.95	20°~60°	≤1.5	N Female	Al
VT40HAA°XB°N	WR229	3.22-4.90	20°~60°	≤1.5	N Female	Al
VT48HAA°XB°N	WR187	3.94-5.99	20°~60°	≤1.5	N Female	Al
VT58HAA°XB°N	WR159	4.64-7.05	20°~60°	≤1.5	N Female	Al
VT70HAA°XB°N	WR137	5.38-8.17	20°~60°	≤1.5	N Female	Al
VT84HAA°XB°N	WR112	6.57-9.99	20°~60°	≤1.5	N Female	Al
VT100HAA°XB°N	WR90	8.20-12.40	20°~60°	≤1.5	N Female	Al
VT120HAA°XB°N	WR75	9.84-15.0	20°~60°	≤1.5	N Female	Al
VT140HAA°XB°S	WR62	11.9-18.0	20°~60°	≤1.5	SMA Female	Al
VT180HAA°XB°S	WR51	14.5-22.0	20°~60°	≤1.5	SMA Female	Cu
VT220HAA°XB°K	WR42	17.6-26.7	20°~60°	≤1.5	2.92 Female	Cu
VT260HAA°XB°K	WR34	21.7-33.0	20°~60°	≤1.5	2.92 Female	Cu
VT320HAA°XB°K	WR28	26.5-40.0	20°~60°	≤1.5	2.92 Female	Cu
VT400HAA°XB°	WR22	32.9-50.1	20°~60°	≤1.35	FUGP	Cu
VT500HAA°XB°	WR19	39.2-59.6	20°~60°	≤1.35	FUGP	Cu
VT620HAA°XB°	WR15	49.8-75.8	20°~60°	≤1.35	FUGP	Cu
VT740HAA°XB°	WR12	60.5-91.9	20°~60°	≤1.35	FUGP	Cu
VT900HA A°XB°	WR10	73.8-112	20°~60°	≤1.35	FUGP	Cu
VT1200HAA°XB°	WR8	92.2-140	20°~60°	/	FUGP	Cu
VT1400HA AXB°	WR7	113-173	20°~60°	/	FUGP	Cu
VT1800HA AXB°	WR5	145-220	20°~60°	/	FUGP	Cu
VT2200HA AXB°	WR4	172-261	20°~60°	/	FUGP	Cu
VT2600HA AXB°	WR3	217-330	20°~60°	/	FUGP	Cu

*Indicates Model Number. See Ordering Information for complete part number.

【Ordering Information】

Example Part No: VT 100 HA A° X B° N
 Vector Telecom
 Freq Range: 2-18GHz
 Product Type: Horn Antenna

Coax Connector Type: N=Type N, S=SMA, 2.92=K2.92mm
 H-Width: B°
 E-Width: A°

- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat



29.2 Conical Horn Antenna

Conical horn antenna series use electroforming or whole processing and work in linear polarization, can change polarization mode through a combination of circular polarizer, and make it work in circular polarization.



【Specifications】

Model No*	Freq Range (GHz)	Working Bandwidth (%)	Optional Gain Range X(dB)	VSWR	Circular Waveguide Inner Diameter (mm)	Material	Finish
VT114.58CHAX	1.76-2.42	20~40	≤13	≤1.50	Φ114.58	Al	Chromate conversion
VT97.87CHAX	2.1-2.8	20~40	≤13	≤1.50	Φ97.87	Al	Chromate conversion
VT83.62CHAX	2.45-3.3	20~40	≤13	≤1.50	Φ83.62	Al	Chromate conversion
VT71.42CHAX	2.83-3.88	20~40	≤13	≤1.50	Φ71.42	Al	Chromate conversion
VT51.99CHAX	3.9-5.3	20~40	≤15	≤1.50	Φ51.99	Al	Chromate conversion
VT44.45CHAX	4.55-6.23	20~40	≤15	≤1.50	Φ44.45	Al	Chromate conversion
VT38.1CHAX	5.3-7.3	20~40	≤15	≤1.50	Φ38.1	Al	Chromate conversion
VT32.537CHAX	6.3-8.5	20~40	≤15	≤1.50	Φ32.537	Al	Chromate conversion
VT27.788CHAX	7.3-9.5	20~40	≤18	≤1.50	Φ27.788	Al	Chromate conversion
VT23.825CHAX	8.5-11.5	20~40	≤18	≤1.50	Φ23.825	Al	Chromate conversion
VT17.415CHAX	11.6-15.9	20~40	≤18	≤1.50	Φ17.415	Al	Chromate conversion
VT15.088CHAX	13.4-18.4	20~40	≤18	≤1.50	Φ15.088	Al	Chromate conversion
VT12.7CHAX	15.9-21.8	20~40	≤20	≤1.50	Φ12.7	Cu	Silver Plating
VT9.525CHAX	21.2-29.1	20~40	≤20	≤1.50	Φ9.525	Cu	Silver Plating
VT8.331CHAX	24.3-33.2	20~40	≤20	≤1.50	Φ8.331	Cu	Silver Plating
VT7.137CHAX	28.3-38.8	20~40	≤22	≤1.50	Φ7.137	Cu	Silver Plating
VT5.563CHAX	36.4-49.8	20~40	≤22	≤1.50	Φ5.563	Cu	Gold Plating
VT4.369CHAX	46.3-63.5	20~40	≤22	≤1.50	Φ4.369	Cu	Gold Plating
VT3.581CHAX	56.6-77.5	20~40	≤24	≤1.50	Φ3.581	Cu	Gold Plating
VT3.175CHAX	63.5-87.2	20~40	≤24	≤1.50	Φ3.17	Cu	Gold Plating
VT2.388CHAX	84.8-116.	20~40	≤24	≤1.50	Φ2.388	Cu	Gold Plating
VT1.91CHAX	115-140	20~40	≤24	≤1.50	Φ1.91	Cu	Gold Plating
VT1.50CHAX	140-160	20~40	≤24	≤1.50	Φ1.50	Cu	Gold Plating
VT1.00CHAX	200-300	20~40	≤24	≤1.50	Φ1.00	Cu	Gold Plating
VT0.7CHAX	280-400	20~40	≤24	≤1.50	Φ0.7	Cu	Gold Plating

*Indicates Model Number. See Ordering Information for complete part number.

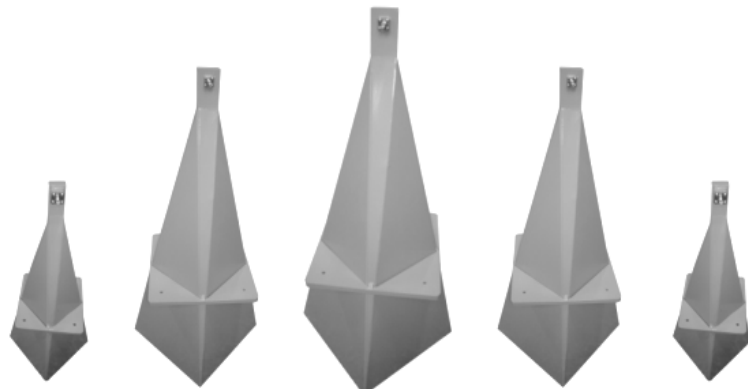
【Ordering Information】

Example Part No: VT 114.58 CHA N
 Vector Telecom
 Circular WG Inner Diameter: 114.58mm
 Product Type: Conical Horn Antennas
 Coax Connector Type: N=Type N, S=SMA, 2.92=K2.92mm

- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat

29.3 Low Side Lobe Diagonal Horn Antenna

The low side lobe diagonal horn antenna series is composed of electroformed rectangular-diagonal square waveguide conversion and square horn antenna. It has low side lobe level and equalized E-plane and H-plane beam width on both E and H plane. The frequency of the low side lobe diagonal horn antenna series covers each waveguide frequency band within 2,000 to 60,000 MHz, and the gain is optional from 10 to 25 dB. It should be emphasized that the low side lobes of the diagonal horn only appear on the E and H planes, when they deviate from these two angles, the phenomenon of low side lobes becomes significantly worse.



【Specifications】

Model No*	Freq Range (GHz)	Gain (dB)	Sidelobe Level (dB)		VSWR	Connector	Diagonal length of antenna aperture (mm)	Length (mm)	Material
			E plane	H plane					
VT22RTHA15N	1.8-2.6	15	<-25	<-30	≤1.5	N Female	420	350	Aluminum
VT26RTHA15N	2.2-3.3	15	<-25	<-30	≤1.5	N Female	350	320	Aluminum
VT32RTHA15N	2.6-4.0	15	<-25	<-30	≤1.5	N Female	290	260	Aluminum
VT40RTHA18N	3.2-4.9	18	<-25	<-30	≤1.5	N Female	325	325	Aluminum
VT48RTHA18N	4.0-5.9	18	<-25	<-30	≤1.5	N Female	225	225	Aluminum
VT58RTHA20N	4.9-7.0	20	<-25	<-30	≤1.5	N Female	270	334	Aluminum
VT70RTHA20N	5.9-8.2	20	<-25	<-30	≤1.5	N Female	225	256	Aluminum
VT84RTHA20N	7.0-10.0	20	<-25	<-30	≤1.5	N Female	188	200	Aluminum
VT100RTHA20N	8.2-12.5	20	<-25	<-30	≤1.5	N Female	135.77	160	Aluminum
VT100RTHA25N	8.2-12.5	25	<-25	<-30	≤1.5	N Female	273	500	Aluminum
VT120RTHA20N	10.0-15.0	20	<-25	<-30	≤1.5	N Female	132	150	Aluminum
VT140RTHA20S	12.5-18.0	20	<-25	<-30	≤1.5	SMA Female	113.14	135.5	Aluminum
VT180RTHA22S	14.5-22.0	22	<-25	<-30	≤1.5	SMA Female	215	260	Copper
VT220RTHA22K	18.0-26.5	22	<-25	<-30	≤1.5	2.92 Female	175	200	Copper
VT260RTHA22K	22.0-33.0	22	<-25	<-30	≤1.5	2.92 Female	150	170	Copper
VT320RTHA22K	26.5-40.0	22	<-25	<-30	≤1.5	2.92 Female	110	120	Copper
VT400RTHA22V	33.0-50.0	22	<-25	<-30	≤1.35	V2.4 Female	95	100	Copper
VT500RTHA22V	40.0-59.0	22	<-25	<-30	≤1.35	V2.4 Female	75	90	Copper

*Indicates Model Number. See Ordering Information for complete part number.

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Linear Polarization Horn Antenna



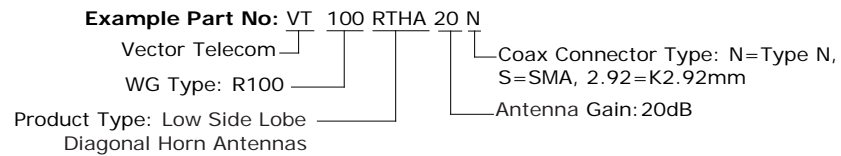
Vector Telecom Pty Ltd

Website: www.vectortele.com

Email: sales@vectortele.com



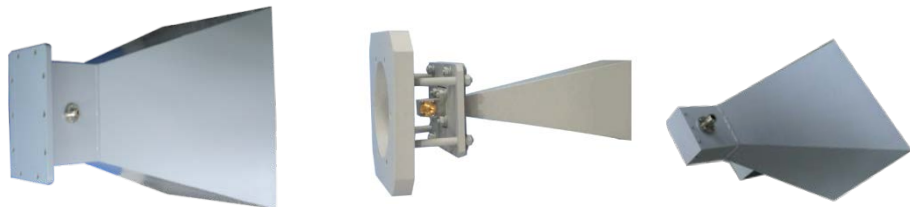
【Ordering Information】



- Finish: Corrosion protection plus black top coat

29.4 Wideband Horn Antenna

Wideband horn antenna's bandwidth is between the full waveguide frequency (40%) and octave bandwidth, usually it refers to the wideband horn antenna within the octave. Therefore, its performance is slightly lower than ordinary horn antenna, and better than ultra-wideband antenna.

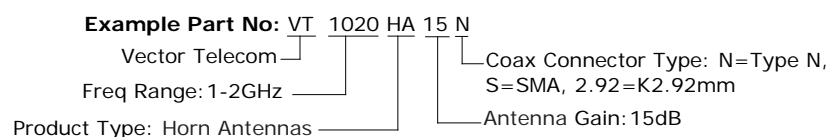


【Specifications】

Model No*	Freq Range (GHz)	Gain (dB)	Beam Width	VSWR	Dimension (mm) W*H*L	Connector	Material
VT1020HA15N	1-2	10~15	35°~55°	≤1.5	456*386*583	N Female	Al
VT2040HA15N	2-4	10~15	15°~55°	≤1.5	367*267*543	N Female	Al
VT4080HA15N	4-8	10~15	15°~55°	≤1.5	144*104*246	N Female	Al
VT80180HA20N	8-18	15~20	15°~55°	≤1.5	133*103*247	N Female	Al
VT180400HA20K	18-40	15~20	15°~55°	≤1.5	68*51*174	2.92 Female	Cu

*Indicates Model Number. See Ordering Information for complete part number.

【Ordering Information】



- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat


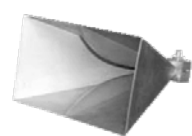



29.5 Octave Double-ridged Horn Antenna

Octave Double-ridged Horn Antennas use the international standard of double ridged waveguide interface, working frequency range covers all band double ridged waveguide. Within 0.5-40 GHz, each corresponding double ridged waveguide frequencies, VT has a corresponding broadband horn antenna and matches the different gain requirements. Each horn antenna will provide gain vs frequency calibration curve, the gain value error is less than 0.7 dB.

This series of antenna has the three gain specifications of 10dB, 13dB and 15dB. It can be customized according to requirements.

【Product Type】

Type	WG Input	Built-in Coaxial Input	With Coaxial Connector
Model	DRHAX	DRHAX...	DRHAX+...
Outline			

【DRHAX... Specification】

Model No*	WG Type	Freq Range (GHz)	Gain (dB)	Beam Width	VSWR	Connector	Material
	EIA						
VT84DRHA10N	WRD84	0.84-2.0	5-12	30°~70°	≤2	N Female	Al
VT150DRHA10N	WRD150	1.5-3.6	8-12	30°~60°	≤2	N Female	Al
VT200DRHA10N	WRD200	2.0-4.8	8-12	30°~60°	≤2	N Female	Al
VT250DRHA10N	WRD250	2.6-7.8	8-12	30°~60°	≤2	N Female	Al
VT350DRHA10N	WRD350	3.5-8.2	8-12	30°~60°	≤2	N Female	Al
VT475DRHA10N	WRD475	4.75-11.0	8-12	30°~60°	≤2	N Female	Al
VT500DRHA10S	WRD500	5.0-18.0	8-12	30°~60°	≤2	SMA Female	Al
VT580DRHA10S	WRD580	5.8-16.0	8-12	30°~60°	≤2	SMA Female	Al
VT650DRHA10S	WRD650	6.5-18.0	8-12	30°~60°	≤2	SMA Female	Al
VT750DRHA10S	WRD750	7.5-18.0	8-12	30°~60°	≤2	SMA Female	Al
VT700DRHA10S	WRD700	7.0-18.5	8-12	30°~60°	≤2	SMA Female	Al
VT1100DRHA10S	WRD110	11.0-26.5	8-12	30°~60°	≤2	SMA Female	Cu
VT1800DRHA10K	WRD180	18.0-40.0	8-12	30°~60°	≤2	2.92 Female	Cu

*Indicates Model Number. See Ordering Information for complete part number.

【Ordering Information】

Example Part No: VT 650 DRHA 10 N

Vector Telecom

WG Type: WRD650

Product Type: Double-ridged Horn Antennas

Coax Connector Type: N=Type N, S=SMA, 2.92=K2.92mm

Antenna Gain: 10dB

- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat

29.6 Dual Linear Polarization Horn Antenna



Double polarization horn antenna can use OMT and conical horn scheme, and the realization of the OMT form is divided into two methods, one is OMT by routine, its design and process is simple, the bandwidth is narrow; another is using symmetry feeder structure form of OMT, its disadvantage is that design and process is complicated, advantage is that can achieve 40% bandwidth, polarization isolation can get more than 30 dB.

【Specification】

Model No*	WG Type EIA	Freq Range (GHz)	Working Bandwidth	Gain X(dB)	Polarization Isolation (dB)	VSWR	Connector	Material
VT84DPHAXN	WR112	7-10	≤5%	10/15	≥20	≤1.5	N Female	Al
			≤40%		≥30			
VT100DPHAXN	WR90	8-12.4	≤5%	10/15	≥20	≤1.5	N Female	Al
			≤40%		≥30			
VT120DPHAXN	WR75	10-15	≤5%	10/15	≥20	≤1.6	N Female	Al
			≤40%		≥30			
VT140DPHAXS	WR62	12-18	≤5%	10/15	≥20	≤1.6	SMA Female	Al
			≤40%		≥30			
VT180DPHAXS	WR51	15-22	≤5%	10/15/20	≥20	≤1.6	SMA Female	Cu
			≤40%		≥30			
VT220DPHAXK	WR42	17.6-26.7	≤5%	10/15/20	≥20	≤1.6	2.92 Female	Cu
			≤40%		≥30			
VT260DPHAXK	WR34	22-33	≤5%	10/15/20	≥20	≤1.6	2.92 Female	Cu
			≤40%		≥30			
VT320DPHAXK	WR28	26.5-40	≤5%	10/15/20	≥20	≤1.6	2.92 Female	Cu
			≤40%		≥30			
VT400DPHAX	WR22	33-50	≤5%	10/15/20	≥20	≤1.5	WR22	Cu
			≤40%		≥30			
VT500DPHAX	WR19	40-60	≤5%	10/15/20	≥20	≤1.5	WR19	Cu
			≤40%		≥30			
VT620DPHAX	WR15	50-75	≤5%	10/15/20	≥20	≤1.5	WR15	Cu
			≤40%		≥30			
VT740DPHAX	WR12	60-90	≤5%	10/15/20	≥20	≤1.5	WR12	Cu
			≤40%		≥30			
VT900DPHAX	WR10	75-110	≤5%	10/15/20	≥20	≤1.6	WR10	Cu
			≤40%		≥30			

*Indicates Model Number. See Ordering Information for complete part number.

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Linear Polarization Horn Antenna



Vector Telecom Pty Ltd

Website: www.vectortele.com

Email: sales@vectortele.com



【Ordering Information】

Example Part No: VT 650 DPHA 10 N
 Vector Telecom
 WG Type: WRD650
 Product Type: Dual Linear Polarization
 Horn Antennas
 Coax Connector Type: N=Type N,
 S=SMA, 2.92=K2.92mm
 Antenna Gain: 10dB

- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat

29.7 Ultra Broadwall Dual Linear Polarization Four Ridged Horn Antenna

In EMC, EMI, and antenna measurements, multi-polarization function requirement is more and more. The double polarization four ridged horn antenna series Vector Telecom researched and developed can work for you. In addition, with broadband bridge can make the antenna series to broadband double circular polarized antenna. This series of antenna cover octave frequency bandwidth, and even as high as dozens of octave bandwidth, the polarization isolation is > 20 dB.



【Specification】

Model No*	Working Bandwidth (GHz)	Gain (dB)	VSWR	Polarization Isolation (dB)	Dimensions (mm)			Connector
					W	H	L	
VT0840DPHA6N	0.8-4	6~10	≤2.5	≥20	250	250	400	N Female
VT1040DPHAXN	1-4	6~10	≤2.5	≥20	280	280	420	N Female
VT20180DPHA6S	2-18	6~16	≤2.5	≥20	120	120	169	SMA Female
VT180400DPHA16K	18-40	14~17	≤2.5	≥20	Φ63x146			2.92 Female
VT260400DPHA18K	26-40	18~20	≤2.5	≥20	Φ46.5x135			2.92 Female

*Indicates Model Number. See Ordering Information for complete part number.

【Ordering Information】



Example Part No: VT 1040 DPHA 10 N
 Vector Telecom
 Freq Range: 1-4GHz
 Product Type: Dual Linear Polarization
 Horn Antennas
 Coax Connector Type: N=Type N,
 S=SMA, 2.92=K2.92mm
 Antenna Gain: 10dB

- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat

29.8 Open Boundary Dual Linear Polarization Four Ridged Horn Antenna

Open Boundary Dual Linear Polarization Four Ridged Horn Antennas is using the latest design of open borders, due to the opening of the border, the antenna's working band can expand to the low end, compared the same size of four ridged horn antenna with boundary between, the antenna performance is improved, and the size of the compression also makes change sensitivity of the antenna phase center decline along with the change of frequency.



【Specification】

Model No*	VT0460DPOBHA10S	VT0880DPOBHA8S	VT30180DPOBHA10S
Freq Range	0.4 - 6 GHz	0.8 - 8 GHz	3 - 18 GHz
Gain	4-13dB	2-10dB	6-14dB
VSWR	≤ 3.0	≤ 3.0	≤ 3.0
Isolation (dB)	≥20 dB	≥20 dB	≥20 dB
Dimensions (W×H×L)	500×500×550mm	350×350×400mm	175×175×200mm
Connector	SMA Female	SMA Female	SMA Female

*Indicates Model Number. See Ordering Information for complete part number.

【Ordering Information】

Example Part No: VT 0880 DPOBHA 10 S
 Vector Telecom
 Freq Range: 0.8-8GHz
 Product Type: Open Boundary Dual Linear
 Polarization Four Ridged Horn Antennas
 Coax Connector Type: N=Type N,
 S=SMA, 2.92=K2.92mm
 Antenna Gain: 10dB

- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat

29.9 Lens Antenna



Lens antenna in working principle is similar to parabolic reflector antenna, are based on the principle of optical design. Its design principle is that the lens antenna's calibre size must be greater than the wavelength. Lens material requires stable dielectric constant, small dielectric loss, easy to forming, and lighter in weight.

Lens antenna has a conical horn lens antenna, pyramid horn lens antenna, feed radiation type lens antenna, spot focusing lens antenna, a metamaterial lens antenna, etc. In order to reduce the weight of the lens, in narrow-band application it adopts zoned lenses or a metamaterial lens design method.

29.9.1 Conical Horn Lens Antenna

Low sidelobe lens horn antenna is composed of conical horn or conical corrugated horn and planoconvex lens. It is characterized by short axial dimensions (versus ordinary horn), low sidelobe level, working in linear polarization, when increase the VTCWPS90° type circular waveguide polarization phase shifter, can make its work in the circular polarization.



【Specification】

Model No*	WG Type EIA	Freq Range (GHz)	Gain (dB)	Sidelobe Level (dB)		Beam Width (°)	VSW R	Interface	Antenna Diameter (Φmm)	Length (mm)
				E plane	H plane					
VT100LHA250	WR90	8.2-12.4	25	≤-15	≤-26	7~10	≤2.5	FBP-100	250	270
VT120LHA250	WR75	10.0-15.0	26	≤-15	≤-26	7~10	≤2.5	FBP-120	250	270
VT140LHA150	WR62	12.5-18.0	23	≤-15	≤-26	7~10	≤2.5	FBP-140	150	170
VT140LHA200	WR62	12.5-18.0	26	≤-15	≤-26	5~8	≤2.5	FBP-140	200	220
VT140LHA250	WR62	12.4-18.0	28	≤-15	≤-26	3~6	≤2.5	FBP-140	250	270
VT180LHA100	WR51	14.5-22.0	22	≤-15	≤-26	9~12	≤2.5	FBP-180	100	120
VT180LHA150	WR51	14.5-22.0	25	≤-15	≤-26	6~9	≤2.5	FBP-180	150	170
VT180LHA200	WR51	14.5-22.0	28	≤-15	≤-26	4~7	≤2.5	FBP-180	200	220
VT220LHA80	WR42	18.0-26.5	21	≤-15	≤-26	9~12	≤2.5	FBP-220	80	100
VT220LHA100	WR42	18.0-26.5	23	≤-15	≤-26	7~10	≤2.5	FBP-220	100	120
VT220LHA150	WR42	18.0-26.5	27	≤-15	≤-26	4~7	≤2.5	FBP-220	150	170
VT220LHA200	WR42	18.0-26.5	29	≤-15	≤-26	3~6	≤2.5	FBP-220	200	220
VT260LHA50	WR34	22.0-33.0	19	≤-15	≤-26	12~16	≤2.5	FBP-260	50	80
VT260LHA80	WR34	22.0-33.0	23	≤-15	≤-26	7~10	≤2.5	FBP-260	80	100
Model No*	WG Type EIA	Freq Range	Gain (dB)	Sidelobe Level (dB)		Beam Width	VSW R	Interface	Antenna Diameter	Length (mm)



		(GHz)		E plane	H plane	(°)			(Φmm)	
VT260LHA100	WR34	22.0-33.0	25	≤-15	≤-26	6~9	≤2.5	FBP-260	100	120
VT260LHA150	WR34	22.0-33.0	29	≤-15	≤-26	3~6	≤2.5	FBP-260	150	170
VT260LHA200	WR34	22.0-33.0	31	≤-15	≤-26	2~4	≤2.5	FBP-260	200	220
VT320LHA50	WR28	26.5-40.0	21	≤-15	≤-26	10~13	≤2.5	FBP-320	50	80
VT320LHA80	WR28	26.5-40.0	25	≤-15	≤-26	6~9	≤2.5	FBP-320	80	100
VT320LHA100	WR28	26.5-40.0	27	≤-15	≤-26	4~7	≤2.5	FBP-320	100	120
VT320LHA150	WR28	26.5-40.0	31	≤-15	≤-26	3~5	≤2.5	FBP-320	150	170
VT320LHA200	WR28	26.5-40.0	33	≤-15	≤-26	2~4	≤2.5	FBP-320	200	220

*Indicates Model Number. See Ordering Information for complete part number.

【Ordering Information】

Example Part No: VT 100 LHA 250

Vector Telecom —
WG Type: R100 —
Antenna Diameter: 250mm —
Product Type: Conical Horn Lens Antennas —

- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat

29.9.2 Pyramidal Horn Lens Antennas

Horn lens antenna can be composed of pyramidal Horn and planoconvex lens. It is characterized by short axial dimensions (versus ordinary horn), low sidelobe level, working in linear polarization, antenna size can be customized according to the requirements. The disadvantage is that increasing the weight of the lens.



【Specification】

Model No*	WG Type EIA	Freq Range (GHz)	Gain (dB)	Sidelobe Level (dB)		VSWR	Interface	Antenna Diameter (mm)	Length (mm)
				E	H				
VT140LHA20A	WR62	11.9-18.0	20	≤-15	≤-26	≤2.5	FBP-140	120x90	205
VT260LHA25A	WR34	21.7-33.0	25	≤-15	≤-26	≤2.5	FBP-260	89x89	175

*Indicates Model Number. See Ordering Information for complete part number.



【Ordering Information】

Example Part No: VT 140 LHA 20 A

Vector Telecom ——— Material: A=Aluminum, C=Copper

WG Type: R140 ——— Antenna Diameter: 250mm

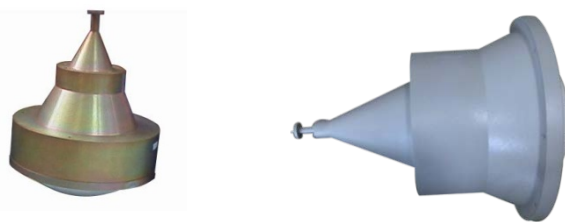
————— Product Type: Conical Horn Lens Antennas

- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat

29.9.3 Point Focusing Horn Lens Antenna

Point focusing lens antenna is composed of conical horn or conical corrugated horn and convex lens. Its characteristic is beam forms a focal spot under the designed focus. The focal length and diameter size can be customized according to the customer requirements. When the focus of the two point focusing lens antenna overlaps, the transmission loss between the two antennas is minimum. Because the area nearby intersection point is lesser, it is one of the best ways to study microwave potter permeability and reflection characteristics of special materials and substances in a local.

Note that the electrical parameters of the point focusing lens antenna cannot define and test in accordance with the general antenna. In the absence of the definition of beam width and antenna gain, so their electrical parameters are mainly: operating frequency range, focal length, and the focal spot size.



【Specification】

Model No*	WG Type EIA	Freq Range (GHz)	Antenna Diameter (Φmm)	Focal Length (mm)	Focal Spot Diameter (mm)	VSWR	Interface
VT32PLHA300F500	WR284	2.6-4	300	500	≤200	≤2.5	FDP-32
VT40PLHA300F500	WR229	3.3-4.9	300	500	≤200	≤2.5	FDP-40
VT48PLHA300F500	WR187	4-6	300	500	≤120	≤2.5	FDP-48
VT58PLHA250F500	WR159	4.9-7.0	250	500	≤80	≤2.5	FDP-58
VT70PLHA250F500	WR137	5.38-8.17	250	500	≤80	≤2.5	FDP-70
VT84PLHA250F500	WR112	6.57-9.99	250	500	≤60	≤2.5	FBP-84
VT100PLHA200F300	WR90	8.2-12.4	200	300	≤60	≤2.5	FBP-100

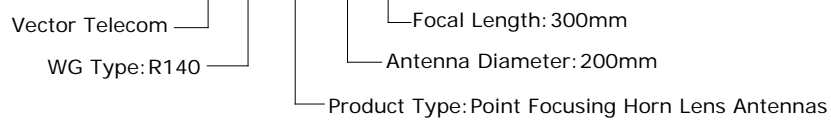


Model No*	WG Type EIA	Freq Range (GHz)	Antenna Diameter (Φmm)	Focal Length (mm)	Focal Spot Diameter (mm)	VSWR	Interface
VT120PLHA200F300	WR75	9.84-15.0	200	300	≤60	≤2.5	FBP-120
VT140PLHA200F300	WR62	11.9-18.0	200	300	≤50	≤2.5	FBP-140
VT180PLHA100F200	WR51	14.5-22.0	100	200	≤40	≤2.5	FBP-180
VT220PLHA100F200	WR42	17.6-26.7	100	200	≤35	≤2.5	FBP-220
VT260PLHA100F100	WR34	21.7-33.0	100	100	≤30	≤2.5	FBP-260
VT320PLHA100F100	WR28	26.5-40.0	100	100	≤25	≤2.5	FBP-320

*Indicates Model Number. See Ordering Information for complete part number.

【Ordering Information】

Example Part No: VT 140 PLHA 200 F300



- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat

29.9.4 Feed Irradiation Lens Antennas

In order to improve the performance of the lens antenna, Vector Telecom adopts the method of irradiating the lens with a feed, by changing the irradiation function to the lens, the amplitude and phase distribution of the aperture field of the lens antenna is changed accordingly, to achieve the required antenna performance.



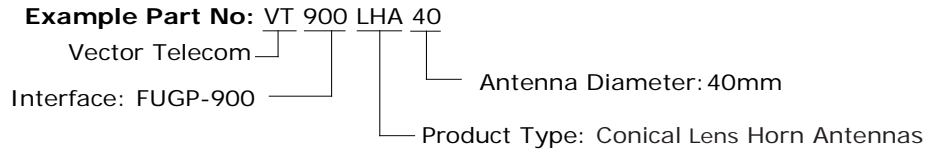
【Specification】

Model No*	Freq Range (GHz)	Gain (dB)	Sidelobe Level (dB)		VSWR	Interface	Antenna Diameter (mm)	Length (mm)
			E Plane	H Plane				
VT900LHA38.4	91.8-95.8	28	≤-25	≤-25	≤2	FUGP-900	Φ38.4	74
VT260LHA200	22-30	30	≤-25	≤-25	≤2	FBP-260	Φ200	275

*Indicates Model Number. See Ordering Information for complete part number



【Ordering Information】



- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat

29.10 Corrugated Horn and Multimode Horn Antennas

The wide-angle corrugated horn antenna adopts broadband technology with variable slot depth and slot width to make it have good VSWR and radiation characteristics in the bandwidth closely to the octave band. It is widely used in high-performance broadband frond feed or offset feed antennas, such as: C-Band, Ku-Band communication antenna, can provide product frequency range up to 300GHz. In the full bandwidth, the low-end frequency, VSWR <1.30, in the narrow-band, VSWR <1.06, and at the -15dB E-H lobe equalization $< \pm 5^\circ$. It can also be customized according to user requirements for frequency range and lobe width.



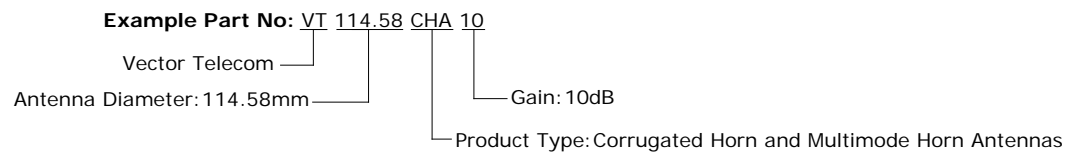
【Specification】

Model No*	Freq Range (GHz)	Horn caliber (mm)	Gain (dB)	VSWR	Input interface (mm)
VT114.58CHA10	1.76-2.42	Φ245	10	≤1.5	Φ114.58
VT97.87CHA10	2.1-2.8	Φ205	10	≤1.5	Φ97.87
VT83.62CHA10	2.45-3.3	Φ176	10	≤1.5	Φ83.62
VT71.42CHA10	2.83-3.88	Φ154	10	≤1.5	Φ71.42
VT51.99CHA10	3.9-5.3	Φ110	10	≤1.5	Φ51.99
VT44.45CHA10	4.55-6.23	Φ96	10	≤1.5	Φ44.45
VT38.1CHA10	5.3-7.3	Φ84	10	≤1.5	Φ38.1
VT32.537CHA10	6.3-8.5	Φ70	10	≤1.5	Φ32.537
VT27.788CHA10	7.3-9.5	Φ62	10	≤1.5	Φ27.788
VT23.825CHA10	8.5-11.5	Φ54	10	≤1.5	Φ23.825
VT17.415CHA10	11.6-15.9	Φ42	10	≤1.5	Φ17.415
VT15.088CHA10	13.4-18.4	Φ35	10	≤1.5	Φ15.088
VT12.7CHA10	15.9-21.8	Φ30	10	≤1.5	Φ12.7

Model No*	Freq Range (GHz)	Horn caliber (mm)	Gain (dB)	VSWR	Input interface (mm)
VT9.525CHA10	21.2-29.1	Φ24	10	≤1.5	Φ9.525
VT8.331CHA10	24.3-33.2	Φ20	10	≤1.5	Φ8.331
VT7.137CHA10	28.3-38.8	Φ18	10	≤1.5	Φ7.137
VT5.563CHA10	36.4-49.8	Φ15	10	≤1.5	Φ5.563
VT4.369CHA10	46.3-63.5	Φ12	10	≤1.5	Φ4.369
VT3.581CHA10	56.6-77.5	Φ10	10	≤1.5	Φ3.581
VT3.175CHA10	63.5-87.2	Φ9	10	≤1.5	Φ3.17
VT2.388CHA10	84.8-116	Φ7.5	10	≤1.5	Φ2.388

*Indicates Model Number. See Ordering Information for complete part number.

【Ordering Information】



- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat

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Linear Polarization Horn Antenna



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Website: www.vectortele.com

Email: sales@vectortele.com

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Circular Polarization Antenna



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Website: www.vectortele.com

Email: sales@vectortele.com

30 Circular Polarization Antenna

Vector Telecom manufactures a high quality line of circular polarization horn antenna, to assist the user in different frequencies, different bandwidth and gain requirements under the implementation of circular polarization antenna, the electromagnetic vibrator can be divided into circular polarization antenna, spiral antenna, circular polarization horn antenna, aperture circular polarization antenna, microstrip circularly polarized antenna reflector circular polarization antenna, variable polarization antenna and other circular polarization antenna, etc. Please call us with your specification and discuss your needs with one of our sales engineers.

30.1 Circular Polarization Horn Antenna

30.1.1 Circular Polarization Horn Antenna (Conical Horn Series)



【Specification】

Model No*	WG Type EIA	Freq Range (GHz)	Working bandwidth	Gain Range X(dB)	Axis Ratio (dB)	VSWR	Connector
VT70CPHAXN	WR137	5-8	≤5%	10~20	≤0.5	≤1.5	N Female
			≤10%		≤1	≤1.6	
			≤20%		≤2.5	≤1.8	
			≤40%		≤3.5	≤2	
			≤67%		≤4	≤2.5	
VT84CPHAXN	WR112	7-10	≤5%	10~20	≤0.5	≤1.5	N Female
			≤15%		≤2	≤1.8	
VT100CPHAXN	WR90	8-12.4	≤5%	10~20	≤0.5	≤1.5	N Female
			≤15%		≤2		
VT120CPHAXN	WR75	10-15	≤5%	10~20	≤0.5	≤1.6	N Female
			≤15%		≤2		
VT140CPHAXS	WR62	12.4-18	≤5%	10~20	≤0.5	≤1.6	SMA Female
			≤15%		≤2		
VT180CPHAXS	WR51	15-22	≤5%	10~25	≤0.5	≤1.6	SMA Female
			≤15%		≤2		
VT220CPHAXK	WR42	15-22	≤5%	10~25	≤0.5	≤1.6	2.92 Female
			≤15%		≤2		
			≤15%		≤2		
VT260CPHAXK	WR34	22-33	≤5%	10~25	≤0.5	≤1.6	2.92 Female



【Specification】

Model No*	WG Type EIA	Freq Range (GHz)	Working bandwidth	Axis Ratio (dB)	VSWR	Dimensions (mm)	Connector
VT70DCPHA15N	WR137	5-8	≤5%	≤0.5	≤1.5	Φ145x420	N Female
			≤15%	≤2			
			≤40%	≤3	≤1.8	Φ145x450	
VT84DCPHA15N	WR112	7-10	≤5%	≤0.5	≤1.5	Φ125x400	N Female
			≤15%	≤2			
			≤40%	≤3	≤1.8	Φ125x420	
VT100DCPHA15N	WR90	8-12.4	≤5%	≤0.5	≤1.5	Φ95x350	N Female
			≤15%	≤2			
			≤40%	≤3	≤1.8	Φ95x370	
VT120DCPHA15N	WR75	10-15	≤5%	≤0.5	≤1.5	Φ80x280	N Female
			≤15%	≤2			
			≤40%	≤3	≤1.8	Φ80x300	
VT140DCPHA15S	WR62	12.4-18	≤5%	≤0.5	≤1.5	Φ68x250	SMA Female
			≤15%	≤2			
			≤40%	≤3	≤1.8	Φ68x260	
VT180DCPHA15S	WR51	15-22	≤5%	≤0.5	≤1.5	Φ58x220	SMA Female
			≤15%	≤2			
			≤40%	≤3	≤1.8	Φ58x240	
VT220DCPHA15K	WR42	18-26	≤5%	≤0.5	≤1.5	Φ50x180	2.92 Female
			≤15%	≤2			
			≤40%	≤3	≤1.8	Φ50x200	
VT260DCPHA15K	WR34	22-33	≤5%	≤0.5	≤1.5	Φ38x150	2.92 Female
			≤15%	≤2			
			≤40%	≤3	≤1.8	Φ38x180	
VT320DCPHA15K	WR28	26.5-40	≤5%	≤0.5	≤1.5	Φ32x130	2.92 Female
			≤15%	≤2			
			≤40%	≤3	≤1.8	Φ32x150	
VT400DCPHA15	WR22	33-50	≤5%	≤1	≤1.5	Φ26x120	FUGP

*Indicates Model Number. See Ordering Information for complete part number.

30.1.3 Dual Circular Polarization Horn Antenna (Ladder Mebrane Type Square Cone Horn Series)

Double circular polarized square cone horn antenna adopts the design of "double port feeder ladder mebrane type square cone horn" to form double circular polarized antenna, it is characterized by small size, narrow bandwidth, good axial ratio, low cost, and suitable for low frequency.



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Circular Polarization Antenna



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【Specification】

Model No*	WG Type EIA	Freq Range (GHz)	Working Bandwidth	Gain Range X(dB)	Axis Ratio (dB)	VSWR	Polar. Iso. (dB)	Dimensions (mm)			Connector
								W	H	L	
VT32DCPSHA10N	WR284	2.6-4	≤10%	10~20	≤1.5	≤1.5	28	170	170	400	N Female
			≤20%		≤2.5		25				
VT40DCPSHA10N	WR229	3.5-5	≤10%	10~20	≤1.5	≤1.5	28	140	140	350	N Female
			≤20%		≤2.5		25				
VT48DCPSHA10N	WR187	4.0-6	≤10%	10~20	≤1.5	≤1.5	28	110	110	300	N Female
			≤20%		≤2.5		25				
VT58DCPSHA10N	WR159	4.5-7	≤10%	10~20	≤1.5	≤1.5	28	100	100	280	N Female
			≤20%		≤2.5		25				
VT70DCPSHA10N	WR137	5-8	≤10%	10~20	≤1.5	≤1.5	28	90	90	260	N Female

*Indicates Model Number. See Ordering Information for complete part number.

30.1.4 Dual Circular Polarization Horn Antenna (Ladder Mebrane Type Conical Horn Series)

Double circular polarized conical horn antenna adopts the design of "double port feeder ladder mebrane type conical horn" to form double circular polarized antenna, it is characterized by small size, narrow bandwidth, good axial ratio, low cost, and suitable for low frequency.



【Specification】

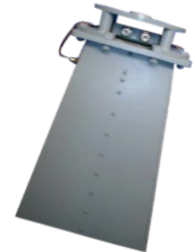
Model No*	WG Type EIA	Freq Range (GHz)	Working Bandwidth	Gain Range X(dB)	Axis Ratio (dB)	VSWR	Polar. Iso. (dB)	Dimensions (mm)	Connector
VT40DCPTCHA10N	WR229	3.5-5	≤10%	10~20	≤1.5	≤1.5	28	Φ130x320	N Female
			≤20%		≤2.5		25		
VT48DCPTCHA10N	WR187	4-6	≤10%	10~20	≤1.5	≤1.5	28	Φ110x280	N Female
			≤20%		≤2.5		25		
VT58DCPTCHA10N	WR159	4.5-7	≤10%	10~20	≤1.5	≤1.5	25	Φ100x260	N Female
			≤20%		≤2.5		25		
VT70DCPTCHA10N	WR137	5-8	≤10%	10~20	≤1.5	≤1.5	28	Φ90x240	N Female
			≤20%		≤2.5		25		

*Indicates Model Number. See Ordering Information for complete part number.



30.1.5 Broadband Circular Polarization Horn Antenna (Dual Linear Polarization Orthogonally Formed)

Broadband circular polarization horn antenna adopts broadband bridge + dual linear polarization antenna synthesis technology, also can get the octave even three octave circular polarized antenna, it is characterized by wide bandwidth, bad axial ratio and small size.



【Specification】

Model No*	Freq Range (GHz)	Gain (dB)	VSWR	Axis Ratio (dB)	Dimensions (mm)	Connector
VT0510CPHA7N	0.5-1	7~10	≤2.5	≤3	510X510X550	N Female
VT1020CPHA10N	1-2	10~15	≤2.5	≤3	250 X250 X460	N Female
VT1040CPHA7N	1-4	7~15	≤2.5	≤5	280 X280 X430	N Female
VT2040CPHA10N	2-4	10~15	≤2.0	≤3	250 X250 X430	N Female
VT4080CPHA10N	4-8	10~15	≤2.0	≤3	Φ140 X470	N Female
VT80180CPHA10S	8-18	10~18	≤2.5	≤5	Φ78 X165	SMA Female
VT180400CPHA10K	18-40	10~18	≤3.0	≤5	Φ40X80	2.92 Female

*Indicates Model Number. See Ordering Information for complete part number.

30.1.6 Broadband Dual Circular Polarization Horn Antenna (Dual Linear Polarization Orthogonally Formed)



【Specification】

Model No*	Freq Range (GHz)	Gain (dB)	VSWR	Axis Ratio (dB)	Polar. Iso. (dB)	Dimensions (mm)	Connector
VT1020DCPHA10N	1-2	10~15	≤2.5	≤3	15	510*510*550	N Female
VT2040DCPHA10N	2-4	10~15	≤2.5	≤3	15	250*250*430	N Female
VT4080DCPHA10N	4-8	10~15	≤2.5	≤3	15	Φ140*620	N Female
VT80180DCPHA10S	8-18	10~18	≤2.5	≤5	15	Φ78*165	SMA Female
VT180400DCPHA10K	18-40	10~18	≤3.0	≤5	15	Φ40*80	2.92 Female

*Indicates Model Number. See Ordering Information for complete part number.



【Ordering Information】

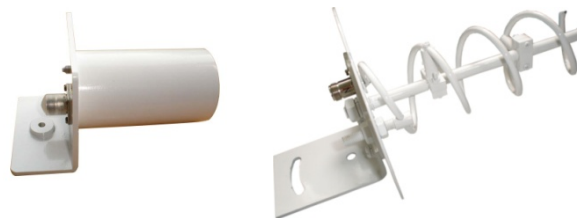
Example Part No: VT 1020 DCPHA 10 N

Vector Telecom ———
 Freq Range: 1-2GHz ———
 Coax Connector Type: N=Type N, S=SMA, K=2.92mm, V=2.4mm, 1.85=1.85mm
 Gain: 10dB
 Product Type: Dual Circular Polarization Horn Antenna

- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat

30.2 Spiral Antenna

The spiral antenna is one of the most commonly used circularly polarized antennas in engineering. It can acquire LHCP or RHCP by changing the direction of the spiral. Its suitable operating frequency is between 200-5000MHz. The gain is within 3-12dB. Especially at the low end of the frequency, the spiral antenna will be smaller than other antennas due to the wavelength. For higher gain requirements, spiral antennas can be used as feeds for parabolic reflector antennas, and the desired gain can be obtained by increasing the reflector size. The bandwidth of the spiral antenna is usually wide, and the VSWR will be around 1.5 in 20% relative bandwidth. The polarization axis ratio can be less than 3dB in the radiation axis, and the typical value is 2dB.



【Specification】

Model No*	Frequency Range (GHZ)	Working bandwidth	Axle ratio (dB)	Gain(dB)	VSWR	Connector
VT0210SA7N...	0.2-1	≤20%	≤2	7	≤1.5	N Female
		≤40%	≤3	7	≤1.5	N Female
VT1030SA10N...	1-3	≤20%	≤2	10	≤1.5	N Female
		≤40%	≤3	10	≤1.5	N Female
VT 3050SA12N...	3-5	≤20%	≤2	12	≤1.5	N Female
		≤40%	≤3	12	≤1.5	N Female

*Indicates Model Number. See Ordering Information for complete part number.



【Ordering Information】

Example Part No: VT 0210 SA 7 N L

Vector Telecom ———

Freq Range: 0.2-1GHz ———

Product Type: Spiral Antenna ———

L: Left-hand Circular Polarization
R: Right-hand Circular Polarization

Coax Connector Type: N=Type N, S=SMA,
K=2.92mm, V=2.4mm, TNC=TNC

Gain: 7dB

- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat

30.3 Planar Spiral Antenna

The planar spiral antenna is an ultra-wideband circularly polarized antenna scheme, and its rotation direction is determined by the spiral direction. It can work in an extremely wide frequency band, radiating most of the power in an effective working area, and no radiation in its structure extension direction. The disadvantage is the antenna efficiency is low and cannot withstand a slightly larger microwave power due to the influence of the absorbing material in the cavity. It is often used as a receiving antenna or a receiving antenna feed in electronic reconnaissance.

【Specification】

Model No*	Freq Range (GHz)	VSWR	Gain (dB)	Dimensions (mm)	Connector
VT0220PSAS	0.2-2	≤2.5	-2~2	φ500x160	SMA Female
VT08100PSAS	0.8-10	≤2.5	-2~2	φ205x90	SMA Female
VT1060PSAS	1-6	≤2.5	1~5	φ90x60	SMA Female
VT2060PSAS	2-6	≤2.5	-2~-2	φ60x60	SMA Female
VT20180PSAS	2-18	≤2.5	-1~3	φ61x55	SMA Female
VT25180PSAS	2.5-18	≤2.5	3~5	φ50x56	SMA Female
VT4080PSAS	4-8	≤2.5	2~4	φ50x45	SMA Female
VT80180PSAS	8-18	≤2.5	1~5	φ30x26	SMA Female

*Indicates Model Number. See Ordering Information for complete part number.

30.4 Quadrifilar Helix Antenna





【Specification】

Model No*	VT400410FSAN	VT1517FSAS
Freq Range (GHz)	400-410MHz	1.55-1.60GHz
Gain(dB)	-2.0 dB	≥4.4dB
Axis ratio (dB)	6.0 dB	2.6dB
VSWR	≤1.8	≤1.8
Dimension	φ300mm x438 mm	φ30mm x220 mm
Connector	N Female	SMA-J

*Indicates Model Number. See Ordering Information for complete part number.

【Ordering Information】

Example Part No: VT 1060 PSA S

Vector Telecom

Freq Range: 1-6GHz

Coax Connector Type: N=Type N, S=SMA,
K=2.92mm, V=2.4mm, TNC=TNC

Product Type: PSA(Planar Spiral Antenna)
FSA(Quadrifilar Helix Antenna)

- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat

30.5 Log-spiral antenna

Circular polarization ultra-wideband logarithmic spiral antenna series is a ultra-wideband circular polarization antenna. The spiral wound around it provides excellent heat dissipation conditions. Its circular polarization makes it quickly find radiation sources of electromagnetic frequencies.



【Specification】

Model No*	Freq Range (GHz)	VSWR	Gain (dB)	Dimensions (mm)	Connector
VT0210LSA3N	0.2-1	≤3	-9~5	φ330x830	N Female
VT0220LSA5N	0.2-2	≤3	5~7	φ331x850	N Female
VT10100LSA3N	1-10	≤3	0~6	φ165x420	N Female
VT20100CLSA	2-10	≤3	2~7	φ130x020	SMA Female

*Indicates Model Number. See Ordering Information for complete part number.



Section 3

Antennas

【Ordering Information】

Example Part No: VT 0210 LSA 3 N
Vector Telecom
Freq Range: 0.2-1GHz
Product Type: Log-spiral antenna
Coax Connector Type: N=Type N,
S=SMA, 2.92=K2.92mm
Antenna Gain: 3dB

- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat

30

**Circular
Polarization
Antenna**



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Website: www.vectortele.com

Email: sales@vectortele.com

31 Cassegrain Antenna

Cassegrain antenna's characteristic is to use back feed form, effectively reduces the wastage of the feeder system. For antenna system with more complex feeder system, adopt cassegrain antenna that can effectively reduce the shade of feeder. Our cassegrain antenna frequency covers until 300 GHz.

Double reflector antenna are widely used in the occasions with high-gain, narrow beam requirements. The frequency range of reflector antenna is very wide. The advantage of double reflector antenna is, big freedom degrees of feed design, low noise temperature, wide feed bandwidth, and convenient for installation and maintenance, can customize various aperture antenna according to customer needs.

31.1 Linear Polarization Cassegrain Antenna



【Specification】

Model No*	Freq Range (GHz)	Antenna Caliber (mm)	Working bandwidth	Gain (dB)	Beam width (°)	Sidelobe Level (dB)		VSWR	Connector
						E plane	H plane		
VT100KRA600N	8.20-12.40	600	≤40%	≥31	≤3.8	-13	-15	≤1.50	N Female
VT120KRA600N	9.84-15.0	600	≤40%	≥32.5	≤3.3	-13	-15	≤1.50	N Female
VT140KRA400S	11.9-18.0	400	≤40%	≥30.5	≤4	-13	-15	≤1.50	SMA Female
VT180KRA300S	14.5-22.0	300	≤40%	≥30	≤4	-13	-15	≤1.50	SMA Female
VT220KRA200K	17.6-26.7	200	≤40%	≥28	≤5.3	-13	-15	≤1.50	2.92 Female
VT260KRA200K	21.7-33.0	200	≤40%	≥29.5	≤4.5	-13	-15	≤1.50	2.92 Female
VT320KRA150K	26.5-40.0	150	≤40%	≥29	≤4.8	-13	-15	≤1.50	2.92 Female
VT400KRA150	32.9-50.1	150	≤40%	≥30.5	≤4	-15	-18	≤1.50	WR22
VT500KRA150	39.2-59.6	150	≤40%	≥32	≤3.1	-15	-18	≤1.50	WR19
VT620KRA150	49.8-75.8	150	≤40%	≥34	≤2.5	-15	-18	≤1.50	WR15
VT740KRA150	60.5-91.9	150	≤40%	≥36	≤2	-15	-18	≤1.50	WR15
VT900KRA150	73.8-112	150	≤40%	≥37.5	≤1.6	-15	-18	≤1.50	WR10

*Indicates Mode Number. See Ordering Information for complete part number.

31

Cassegrain
Antenna




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Website: www.vectortele.com


Email: sales@vectortele.com




【Products Show】

Model No*	VT900KRA135	
Freq Range (GHz)	F0±1GHZ	
Gain (dB)	>37dB	
VSWR	≤1.5	
Polarization mode	Linear polarization	

Model No*	VT320KRA1200	
Freq Range (GHz)	F0±2GHZ	
Gain (dB)	>48dB	
VSWR	≤1.5	
Polarization mode	Linear polarization	

Model No*	VT620KRA250	
Freq Range (GHz)	F0±4GHZ	
Gain (dB)	>38dB	
VSWR	≤1.5	
Polarization mode	Linear polarization	

Model No*	VT740KRA160	
Freq Range (GHz)	F0±2GHZ	
Gain (dB)	>38dB	
VSWR	≤1.5	
Polarization mode	Linear polarization	

【Ordering Information】

Example Part No: VT 100 KRA 600 N
 Vector Telecom | Coax Connector Type: N=Type N, S=SMA, 2.92=K2.92mm
 Freq Range: 10GHz | Antenna caliber: 600mm
 Product Type: Linear Polarization Cassegrain Antenna

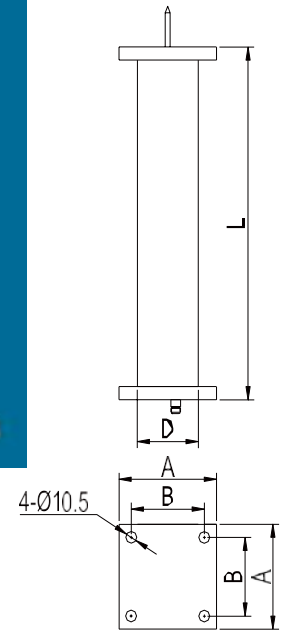
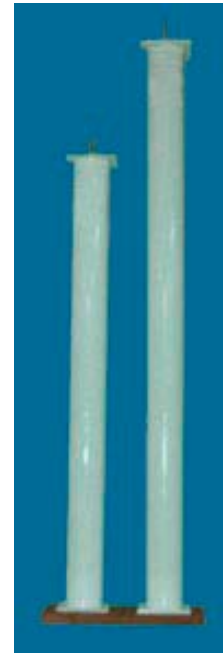
- Flange type: Multiple types available - see VT Flanges page
- Finish: Corrosion protection plus black top coat

32 MMDS Transmitting Antenna

Vector Telecom manufactures a high quality line of MMDS transmitting antennas. Please call us with your specification and discuss your needs with one of our sales engineers.

Features:

- High radiation efficiency
- Wide frequency range
- Low VSWR
- More Gain values available
- Power rating 300W (CW)
- Light weight aluminum material
- Well sealed
- Easy for installation
- Direct lightning protection
- Ground wind velocity 25m/s



【Specification】

Model No	Freq Range (GHz)	VSWR (Max)	Gain (dB)	Polarization	Beamwidth (Azimuth)	Beamwidth (Elevation)	Dimensions (D*H)(mm)	Dimensions (A*B)(mm)	Power Handling (W)	Connector
VT2527HOA10	2.5-2.7	1.5	10	Horizontal	360°	6°	130*1000	180*152	300	N-F
VT2527HOA12	2.5-2.7	1.5	12	Horizontal	360°	5°	130*1300	180*152	300	N-F
VT2527HOA16	2.5-2.7	1.5	13	Horizontal	360°	4°	130*1600	180*152	300	N-F
VT2527VOA10	2.5-2.7	1.5	10	Vertical	360°	6°	170*1000	220*180	300	N-F
VT2527VOA12	2.5-2.7	1.5	12	Vertical	360°	5°	170*1300	220*180	300	N-F
VT2527VOA16	2.5-2.7	1.5	13	Vertical	360°	4°	170*1600	220*180	300	N-F
VT2527HCA10	2.5-2.7	1.5	13	Horizontal	180°	6°	130*1000	180*152	300	N-F
VT2527A12	2.5-2.7	1.5	15	Horizontal	180°	5°	130*1300	180*152	300	N-F
VT2527HCA16	2.5-2.7	1.5	16	Horizontal	180°	4°	130*1600	180*152	300	N-F
VT2527VCA10	2.5-2.7	1.5	13	Vertical	180°	6°	170*1000	220*180	300	N-F
VT2527VCA12	2.5-2.7	1.5	15	Vertical	180°	5°	170*1300	220*180	300	N-F
VT2527VCA16	2.5-2.7	1.5	16	Vertical	180°	4°	170*1600	220*180	300	N-F

*Indicates Model Number. See Ordering Information for complete part number.

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MMDS
Transmitting
Antenna



Vector Telecom Pty Ltd

Website: www.vectortele.com

Email: sales@vectortele.com



【Ordering Information】

Example Part No: VT 2527 HOA 12
 Vector Telecom ——— Gain: 12dB
 Freq Range: 2.5-2.7GHz ——— Antenna Type: HOA

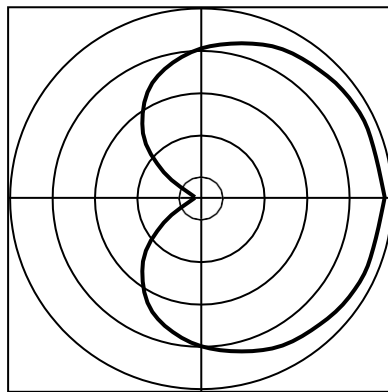
Antenna Type:

HOA - Omni-directional, Horizontal polarized

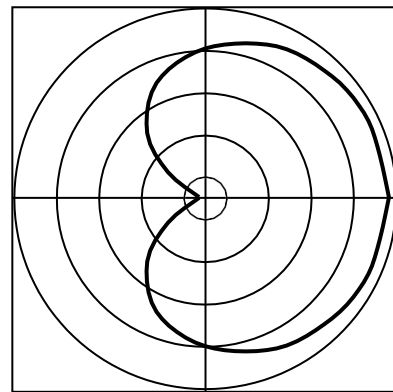
HCA - Half-directional, Horizontal polarized

VOA - Omni-directional, Vertical polarized

VCA - Half -directional, Vertical polarized



180°



360°

Azimuth Beam Pattern



33 Other Antennas

Vector Telecom provides a variety of antennas that are custom designed, manufactured and tested to meet customer's special requirements. Please call us and discuss your needs with one of our sales engineers.



Logarithm Periodic Antenna



Microstrip Logarithm Periodic Antenna



Paraboloid Antenna



Slot Array Antenna



Multi-Polarization Antenna Feed



Microstrip Array Antenna

34 Rectangular Waveguide Tubing Information



Section 4

Technical Reference

34

Rectangular Waveguide Tubing Information



Vector Telecom Pty Ltd

Website: www.vectortele.com

Email: sales@vectortele.com

Model No	EIA WG Designation	IEC WG Designation	Freq Range (GHz)	Material (Stock)	Inside Dimensions (mm)	Std Tol ± Inside Dim (mm)	Nom Wall Thickness (mm)	Outside Dimensions (mm)	Std Tol ± Outside Dim (mm)	Freq of Cut-Off for TE _{1,0} Mode (GHz)	Wave-length of Cut-Off for TE _{1,0} Mode (mm)	Theoretical Attenuation lowest to highest freq (dB/100ft)	
												Al	Cu
VTBJ3	WR2300	R3	0.32-0.49	Aluminum	584.2*292.1		6			0.257	1169.2	0.270-0.400	
VTBJ4	WR2100	R4	0.35-0.53	Aluminum	533.4*266.7		5			0.281	1067.5	0.310-0.460	
VTBJ5	WR1800	R5	0.41-0.62	Aluminum	457.2*228.6	0.51	5			0.328	915.0	0.390-0.580	
VTBJ6	WR1500	R6	0.49-0.75	Aluminum	381*190.5	0.38	3.18			0.393	762.5	0.510-0.760	
VTBJ8	WR1150	R8	0.64-0.98	Aluminum	292.1*146.05	0.38	3.18			0.513	584.6	0.760-0.113	
VTBJ9	WR975	R9	0.76-1.15	Aluminum	247.65*123.82		3.18			0.605	495.6	0.098-0.145	
VTBJ12	WR770	R12	0.96-1.46	Aluminum	195.58*97.79		3.18			0.766	391.4	0.140-0.206	
VTBJ14	WR650	R14	1.13-1.73	Copper Aluminum	165.1*82.55	0.33	2.03	169.16*86.61	0.2	0.908	330.4	0.180-0.266	0.214-0.317
VTBJ18	WR510	R18	1.45-2.2	Copper Aluminum	129.54*64.77	0.26	2.03	133.6*68.83	0.2	1.157	259.1	0.259-0.382	0.309-0.456
VTBJ22	WR430	R22	1.72-2.61	Copper Aluminum	109.22*54.61	0.22	2.03	113.28*58.67	0.2	1.372	218.4	0.334-0.494	0.399-0.588
VTBJ26	WR340	R26	2.17-3.3	Copper Aluminum	86.36*43.18	0.17	2.03	90.42*47.24	0.17	1.736	172.7	0.475-0.702	0.567-0.837
VTBJ32	WR284	R32	2.6-3.95	Copper Aluminum	72.14*34.04	0.14	2.03	76.2*38.1	0.14	2.078	144.3	0.652-0.953	0.777-1.136
VTBJ40	WR229	R40	3.22-4.9	Copper Aluminum	58.17*29.08	0.12	1.625	61.42*32.33	0.12	2.577	116.3	0.860-1.270	1.026-1.514
VTBJ48	WR187	R48	3.94-5.99	Copper Aluminum	47.549*22.149	0.095	1.625	50.8*25.4	0.1	3.153	95.1	1.231-1.795	1.467-2.140
VTBJ58	WR159	R58	4.64-7.05	Copper Aluminum	40.386*20.193	0.081	1.625	43.64*23.44	0.08	3.712	80.77	1.487-2.195	1.773-2.617
VTBJ70	WR137	R70	5.38-8.17	Copper Aluminum	34.849*15.799	0.07	1.625	38.1*19.05	0.08	4.301	69.7	2.004-2.910	2.390-3.470
VTBJ84	WR112	R84	6.57-9.99	Copper	28.499*12.624	0.057	1.625	31.75*15.88	0.05	5.260	57	2.761-3.993	3.292-4.761
VTBJ100	WR90	R100	8.2-12.5	Copper Aluminum	22.86*10.16	0.046	1.27	25.4*12.7	0.05	6.557	45.72	3.833-5.547	4.570-6.614
VTBJ120	WR75	R120	9.84-15	Copper Aluminum	19.05*9.525	0.038	1.27	21.59*12.06	0.05	7.869	38.1	4.590-6.775	5.472-8.078



Section 4

Technical Reference

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Rectangular Waveguide Tubing Information



Vector Telecom Pty Ltd

Website: www.vectortele.com

Email: sales@vectortele.com

Model No	EIA WG Designation	IEC WG Designation	Freq Range (GHz)	Material (Stock)	Inside Dimensions (mm)	Std Tol ± Inside Dim (mm)	Nom Wall Thickness (mm)	Outside Dimensions (mm)	Std Tol ± Outside Dim (mm)	Freq of Cut-Off for TE _{1,0} Mode (GHz)	Wave-length of Cut-Off for TE _{1,0} Mode (mm)	Theoretical Attenuation lowest to highest freq (dB/100ft)	
												Al	Cu
VTBJ140	WR62	R140	11.9-18	Copper Aluminum	15.799*7.899	0.031	1.015	17.83*9.93	0.05	9.488	31.6	6.077-8.971	7.246-10.696
VTBJ180	WR51	R180	14.5-22	Copper Aluminum	12.95*6.477	0.026	1.015	14.99*8.51	0.05	11.575	25.91	8.185-12.082	9.759-14.406
VTBJ220	WR42	R220	17.6-26.7	Copper Aluminum	10.668*4.318	0.021	1.015	12.7*6.35	0.05	14.051	21.34	12.970-18.48 7	15.464-22.042
VTBJ260	WR34	R260	21.7-33	Copper Aluminum	8.636*4.318	0.02	1.015	10.67*6.35	0.05	17.358	17.27	15.036-22.19 7	17.928-26.465
VTBJ320	WR28	R320	26.3-40	Copper Aluminum	7.12*3.556	0.02	1.015	9.14*5.59	0.05	21.053	14.22	20.120-29.70 1	23.989-35.413
VTBJ400	WR22	R400	32.9-50.1	Copper Aluminum	5.69*2.845	0.02	1.015	7.72*4.88	0.05	26.344	11.38	28.119-41.50 8	33.526-49.491
VTBJ500	WR19	R500	39.2-59.6	Copper	4.775*2.388	0.02	1.015	6.81*4.42	0.05	31.393	9.55		43.603-64.367
VTBJ620	WR15	R620	49.8-75.8	Copper	3.795*1.88	0.02	1.015	5.79*3.91	0.05	39.499	7.52		62.425-92.152
VTBJ740	WR12	R740	60.5-91.9	Copper	3.0988*1.5494	0.0127	1.015	5.13*3.58	0.05	48.374	6.2		83.409-123.128
VTBJ900	WR10	R900	73.8-112	Copper	2.54*1.27	0.0127	1.015	4.57*3.3	0.05	59.016	5.08		112.397-165.92 0

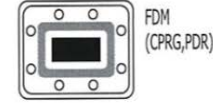
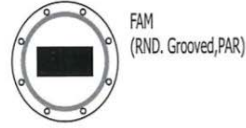
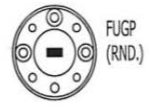
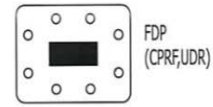
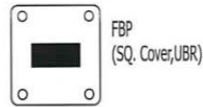
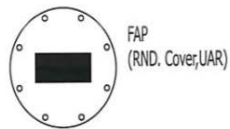
35

Flange Information



35 Flange Information

Click Flange Type No to see the detailed outline drawings.



WG Type		A Type			B Type			D Type		FUGP
EIA Std	IEC Std	FAP (RND COVER)	FAM (RND GROOVED)	FAE(RND CHOKE)	FBP (SQ COVER)	FBM (SQ GROOVED)	FBE (SQ CHOKE)	FDP (CPRF)	FDM (CPRG)	
WR2300	R3							FDP3	FDM3	
WR2100	R4							FDP4	FDM4	
WR1800	R5							FDP5	FDM5	
WR1500	R6							FDP6	FDM6	
WR1150	R8							FDP8	FDM8	
WR975	R9							FDP9	FDM9	
WR770	R12							FDP12	FDM12	
WR650	R14							FDP14	FDM14	
WR510	R18							FDP18	FDM18	
WR430	R22							FDP22	FDM22	
WR340	R26							FDP26	FDM26	
WR284	R32	FAP32	FAM32	FAE32				FDP32	FDM32	
WR229	R40	FAP40	FAM40	FAE40				FDP40	FDM40	
WR187	R48	FAP48	FAM48	FAE48				FDP48	FDM48	
WR159	R58	FAP58	FAM58	FAE58				FDP58	FDM58	
WR137	R70	FAP70	FAM70	FAE70				FDP70	FDM70	
WR112	R84				FBP84	FBM84	FBE84	FDP84	FDM84	
WR90	R100				FBP100	FBM100	FBE100	FDP100	FDM100	
WR75	R120				FBP120	FBM120	FBE120	FDP120	FDM120	
WR62	R140				FBP140	FBM140	FBE140	FDP140	FDM140	
WR51	R180				FBP180	FBM180	FBE180	FDP180	FDM180	
WR42	R220				FBP220	FBM220	FBE220			
WR34	R260				FBP260	FBM260	FBE260			
WR28	R320				FBP320	FBM320	FBE320			
WR22	R400	FAP400	FAM400							FUGP400
WR19	R500	FAP500	FAM500							FUGP500
WR15	R620	FAP620	FAM620							FUGP620
WR12	R740	FAP740	FAM740							FUGP740
WR10	R900	FAP900	FAM900							FUGP900

Revision History

Date	Revision	Changes
25-Nov-2020	1	First release

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Vector Telecom Pty Ltd
Level 40, 140 William Street
Melbourne VIC 3000, Australia
Phone: +61 3 9607 8357
F a x : +61 3 9607 8282
Email: sales@vectortele.com
www.vectortele.com

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