

# INSTRUMENTATION GRADE ADAPTERS

## 34 Series DC to 60 GHz



34NN50A



34RKRK50



34RSN50

The 34 Series of precision adapters enable accurate measurements with GPC-7, Type N, or WSMA interfaces. Every adapter is designed and manufactured to ensure low reflections and optimum performance over a broad frequency range.

### Precision adapter features

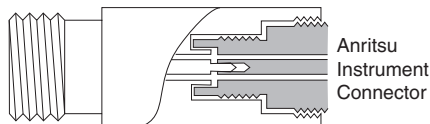
- Low SWR and insertion loss
- GPC-7, Type N, and WSMA connectors
- Convenient transition with minimal effect on signal
- 50 Ω or 75 Ω impedance

The 34R Series precision adapters provide a rugged, rigid connection between Anritsu instruments with WSMA, K Connector, or V Connector outputs and Anritsu SWR Autotesters and SWR Bridges or other instruments.

The adapters have an outside diameter equal to that of a Type N connector, adding mechanical strength to the test setup and making installation convenient and fast.

### Ruggedized adapter features

- Enhance reliability of microwave test setup
- Easy-to-grasp Type N outside diameter
- Rigid test connections for improved test data repeatability

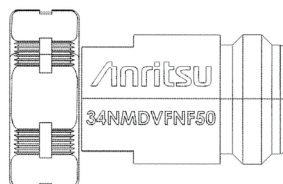


34R Series Adapter

The 34NMD series adapters provide a ruggedized interface to the instrument test port. The NMD interface is designed to fit the appropriate torque wrench dimensions for improved repeatability.

### NMD Adapter features

- Strong mechanical support for mmWave connectors
- Low VSWR and insertion loss



### Specifications

Model	Frequency range (GHz)	Connectors	SWR	Dimensions L(cm) x dia(cm)
34NN75B	DC to 3	N(m) to N(m)	1.1	6.0 x 2.2
34AN50 34ANF50	DC to 18	GPC-7 to N(m) GPC-7 to N(f)	1.02	4.2 x 2.2 4.2 x 2.2
34NN50A 34NFN50	DC to 18	N(m) to N(m) N(f) to N(f)	1.1	6.0 x 2.2 4.7 x 1.6
34NK50 34NKF50 34NFK50 34NFKF50	DC to 18	N(m) to K(m) N(m) to K(f) N(f) to K(m) N(f) to K(f)	1.12	3.8 x 2.2 3.8 x 2.2 3.8 x 1.6 3.8 x 1.6
34RSN50	DC to 18	WSMA(m) to N(m)	1.22	-
34RKNF50	DC to 18	RK(m) to N(f)	1.40	5.1 x 1.7
34RVNF50	DC to 18	RV(m) to N(f)	1.40	5.1 x 1.7
34NMDVFN50	DC to 18	NMD V(f) to N(f)	1.08	3.4 x 2.0
34AKNF50	DC to 20	RAK(m) to N(f)	1.5	-
34RKRK50	DC to 40	RK(m) to RK(m)	2.00	5.8 x 1.7
34RVRK50	DC to 40	RV(m) to RK(m)	2.00	5.8 x 1.7
34RVRV50	DC to 60	RV(m) to RV(m)	2.30	5.8 x 1.7

Impedance: 50 Ω

Temperature range: 0°C to +75°C

### Ordering information

Please specify model/order number, name, and quantity when ordering.

Model/Order No.	Name
	Precision adapter
34NN75B	DC to 3 GHz, 75 Ω, N(m)-N(m)
34AN50	DC to 18 GHz, 50 Ω, GPC-7-N(m)
34ANF50	DC to 18 GHz, 50 Ω, GPC-7-N(f)
34AKNF50	DC to 20 GHz 50 Ω, RAK(m)-N(f)
34NN50A	DC to 18 GHz, 50 Ω, N(m)-N(m)
34NFN50	DC to 18 GHz, 50 Ω, N(f)-N(f)
34NK50	DC to 18 GHz, 50 Ω, N(m)-K(m)
34NKF50	DC to 18 GHz, 50 Ω, N(m)-K(f)
34NFK50	DC to 18 GHz, 50 Ω, N(f)-K(m)
34NFKF50	DC to 18 GHz, 50 Ω, N(f)-K(f)
34RSN50	DC to 18 GHz, 50 Ω, WSMA(m)-N(m)
34RKNF50	DC to 18 GHz, 50 Ω, RK(m) to N(f)
34RVNF50	DC to 18 GHz, 50 Ω, RV(m) to N(f)
34RKRK50	DC to 40 GHz, 50 Ω, RK(m) to RK(m)
34RVRK50	DC to 40 GHz, 50 Ω, RV(m) to RK(m)
34RVRV50	DC to 60 GHz, 50 Ω, RV(m) to RV(m)
34NMDVFN50	DC to 18 GHz, 50 Ω, NMD V(f) to N(f)

# INSTRUMENTATION GRADE ADAPTERS

## 34 Series W to V DC to 65 GHz



These 34 Series of precision adapters enable accurate measurement with W1 Connector and V Connector interfaces.

### Precision adapter features

- Low SWR and insertion loss
- W1 and V Connectors
- 50 Ω Impedance

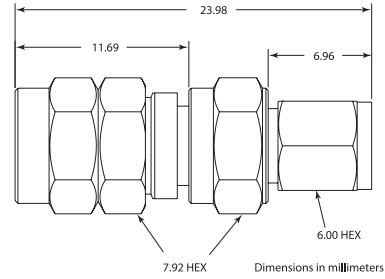
### Specifications

Model	Frequency Range (GHz)	Impedance (Ω)	Connectors	Insertion Loss	SWR
34WV50	DC to 65 GHz	50	W1(m) to V(m)	0.5 dB	1.22
34WV50	DC to 65 GHz	50	W1(f) to V(m)	0.5 dB	1.22
34WVF50	DC to 65 GHz	50	W1(m) to V(f)	0.5 dB	1.22
34WVF50	DC to 65 GHz	50	W1(f) to V(f)	0.5 dB	1.22

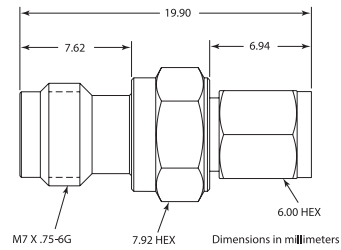
### Ordering information

Please specify model/order number, name, and quantity when ordering.

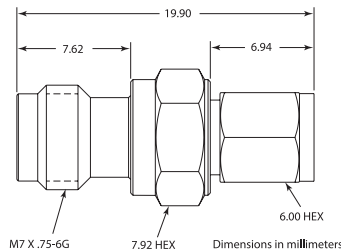
Model/Order No.	Name
	Precision adapter
34WV50	DC to 65 GHz, 50 Ω, W1(m) to V(m)
34WV50	DC to 65 GHz, 50 Ω, W1(f) to V(m)
34WVF50	DC to 65 GHz, 50 Ω, W1(m) to V(f)
34WVF50	DC to 65 GHz, 50 Ω, W1(f) to V(f)



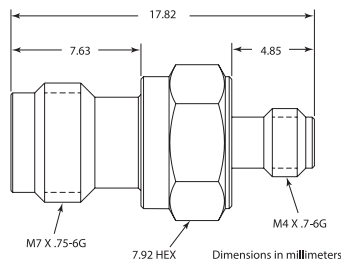
34WV50 outline



34WVF50 outline



34WV50 outline



34WVVF50 outline

# INSTRUMENTATION GRADE WAVEGUIDE ADAPTERS

## 35WR Series 18 to 110 GHz



The 35 Series precision adapters transform standard or double-ridge waveguide to coaxial K Connector, V Connector, and W1 Connector interfaces, thus enabling convenient millimeter wave coaxial measurements.

### Features

- 18 to 110 GHz frequency coverage
- K Connector compatibility with SMA and 3.5 mm
- V Connector compatibility with 2.4 mm
- W1 Connector compatibility with 1.0 mm
- Standard and double-ridge designs

### Specifications

Model	Frequency range (GHz)	Connectors	W/G flange	SWR
35WRD180K 35WRD180KF	18 to 40	WRD180 to K(m) WRD180 to K(f)	N/A	1.25
35WR42K 35WR42KF	18 to 26.5	WR42 to K(m) WR42 to K(f)	595	1.25
35WR28K 35WR28KF	26.5 to 40	WR28 to K(m) WR28 to K(f)	599	1.25
35WR22K 35WR22KF**	33 to 50	WR22 to K(m) WR22 to K(f)	383	1.30
35WR22V** 35WR22VF	33 to 50	WR22 to V(m) WR22 to V(f)	383	1.30
35WR19V 35WR19VF	40 to 60	WR19 to V(m) WR19 to V(f)	383	1.30
35WR15V 35WR15VF	50 to 65	WR15 to V(m) WR15 to V(f)	385	1.30
35WR10W 35WR10WF	75 to 110	WR10 to W1(m) WR10 to W1(f)	387	1.38
35WR12WF-EE*	60-90	WR12 to W1(f)	387	1.38
35WR10WF-EE*	75-110	WR10 to W1(f)	387	1.38

Impedance: 50 Ω

Temperature range: -55°C to +125°C

\* Adapters come with mounting equipment for the VectorStar broadband 110 GHz millimeter system

\*\* Mono Mode available

### Ordering information

Please specify model/order number, name, and quantity when ordering.

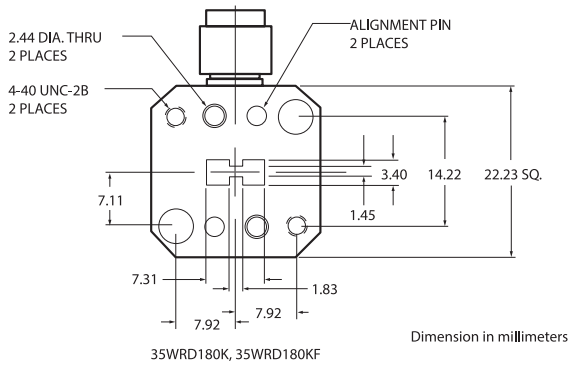
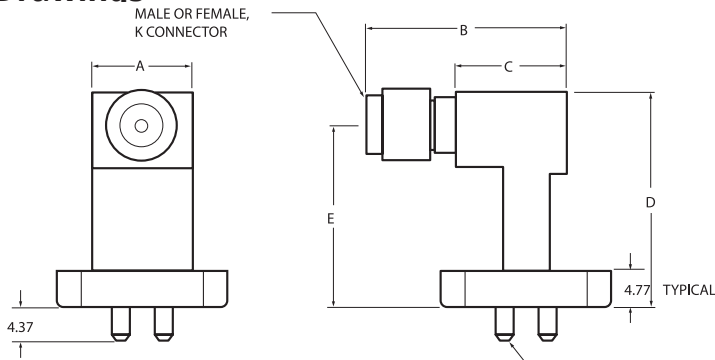
Model/Order No.	Name
	Precision waveguide to coax adapter
35WRD180K	18 to 40 GHz, WRD180 (double ridge waveguide) to K(m)
35WRD180KF	18 to 40 GHz, WRD180 (double ridge waveguide) to K(f)
35WR42K	18 to 26.5 GHz, WR42-K(m)
35WR42KF	18 to 26.5 GHz, WR42-K(f)
35WR28K	26.5 to 40 GHz, WR28-K(m)
35WR28KF	26.5 to 40 GHz, WR28-K(f)
35WR22K	33 to 50 GHz, WR22-K(m)
35WR22KF	33 to 50 GHz, WR22-K(f)
35WR22V	33 to 50 GHz, WR22-V(m)
35WR22VF	33 to 50 GHz, WR22-V(f)
35WR19K	40 to 50 GHz (usable to 54 GHz), WR19-K(m)
35WR19KF	40 to 50 GHz (usable to 54 GHz), WR19-K(f)
35WR19V	40 to 60 GHz, WR19-V(m)
35WR19VF	40 to 60 GHz, WR19-V(f)
35WR15V	50 to 65 GHz (usable to 67 GHz), WR15-V(m)
35WR15VF	50 to 65 GHz (usable to 67 GHz), WR15-V(f)
35WR10W	75 to 110, WR10 to W1(m)
35WR10WF	75 to 110, WR10 to W1(f)
35WR12WF-EE*	60 to 90, WR12 to W1(f)
35WR10WF-EE*	75-110, WR10 to W1(f)

Outline drawings for the 35 Series Waveguide-to-Coaxial Adapters, 18 to 110 GHz, are shown on the following three pages.

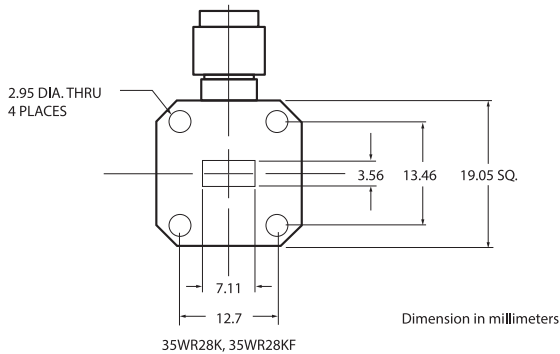
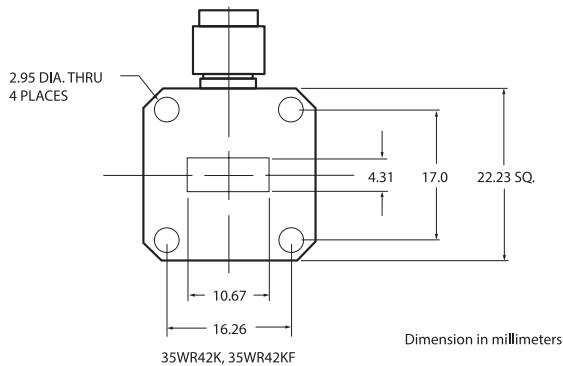
# INSTRUMENTATION GRADE WAVEGUIDE ADAPTERS

## 35WR Series 18 to 110 GHz

### Outline Drawings



Model	Dimensions (mm)				
	A	B	C	D	E
35WRD180K	13.20	27.9	14.43	28.40	23.80
35WRD180KF	13.20	22.9	14.43	28.40	23.80
35WR42K	13.20	27.9	14.43	28.14	23.93
35WR42KF	13.20	22.9	14.43	28.14	23.93
35WR28K	10.67	27.9	14.86	28.78	23.93
35WR28KF	10.67	22.9	14.86	28.78	23.88

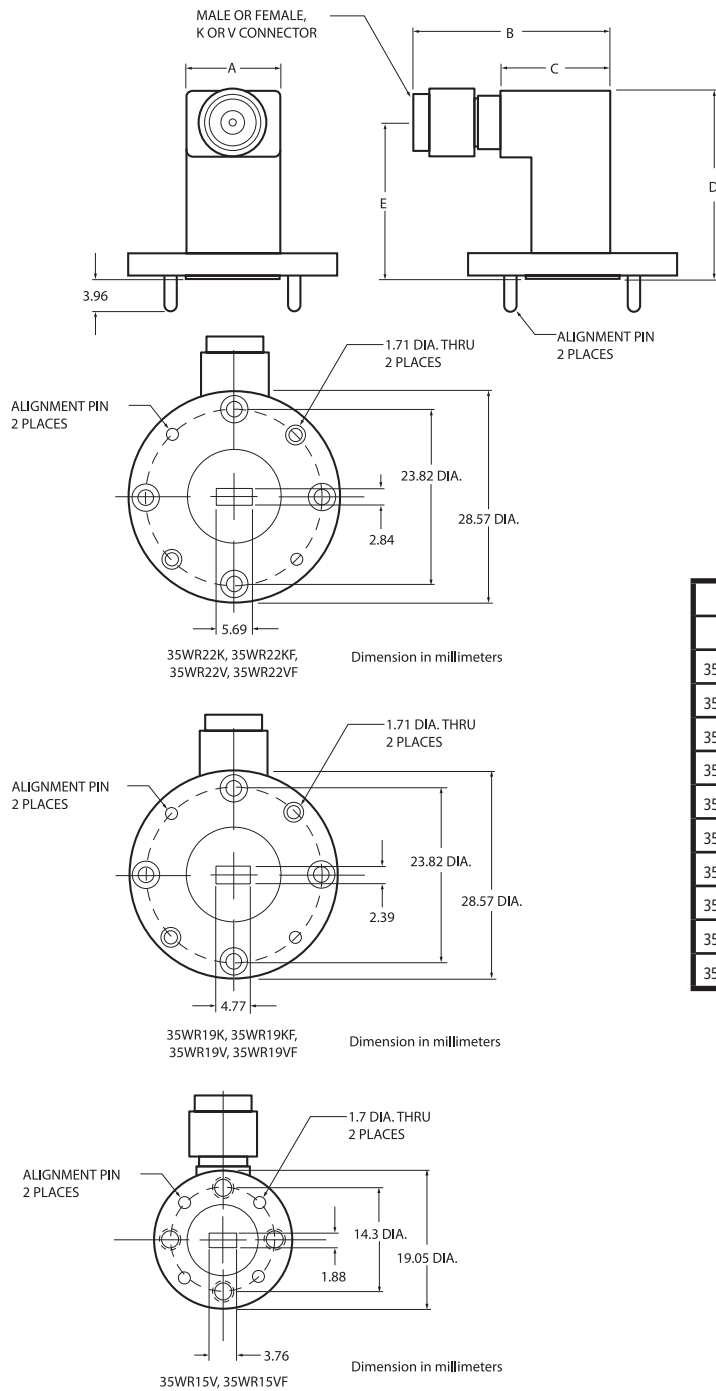


35WRD180K, 35WRD180KF, 35WR42K, 35WR42KF, 35WR28K, 35WR28KF outlines

# INSTRUMENTATION GRADE WAVEGUIDE ADAPTERS

## 35WR Series 18 to 110 GHz

### Outline Drawings



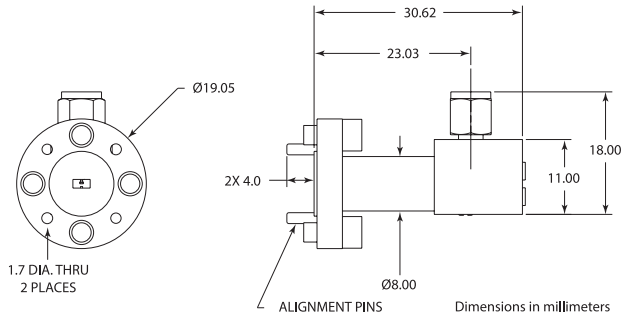
Model	Dimensions (mm)				
	A	B	C	D	E
35WR22K	12.70	26.9	14.73	25.76	21.44
35WR22KF	12.70	21.6	14.73	25.76	21.44
35WR22V	12.70	26.9	14.73	25.76	21.44
35WR22VF	12.70	21.6	14.73	25.76	21.44
35WR19K	12.70	26.9	14.73	25.76	21.44
35WR19KF	12.70	21.6	14.73	25.76	21.44
35WR19V	12.70	27.9	14.73	25.76	21.44
35WR19VF	12.70	22.6	14.73	25.76	21.44
35WR15V	12.70	24.4	12.19	26.97	21.62
35WR15VF	12.70	20.3	12.19	26.97	21.62

35WR22K, 35WR22KF, 35WR22V, 35WR22VF, 35WR19K, 35WR19KF, 35WR19V, 35WR19VF, 35WR15V, and 35WR15VF outlines

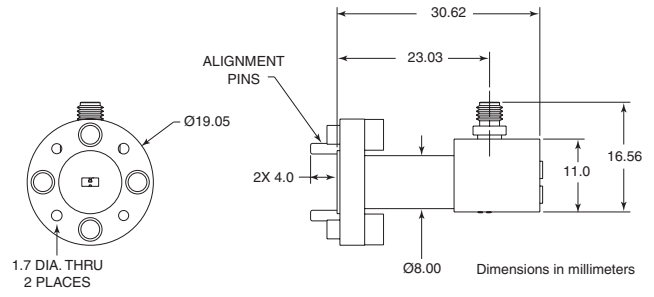
# INSTRUMENTATION GRADE WAVEGUIDE ADAPTERS

35WR Series 18 to 110 GHz

## Outline Drawings



35WR10W outline



35WR10WF outline