

## Waveguide Pressure Windows

See Also:

[ATM Standard Flange Information](#)

ATM waveguide pressure windows keep contaminants out and provide an efficient seal at pressures as high as 70 psi. They offer substantial price and performance advantages because of their manufacturing method and material content. Unlike conventional pressure windows, they are made from the highest quality, copper-clad, Teflon fiber glass.

The compensated window area is formed by precision photo-etching. The resulting material has excellent pressure sealing capability and withstands temperature and shock extremes of the order encountered in missile and aerospace applications. Standard waveguide window sizes 28 through 284 are readily available. Performance characteristics are listed in the specification chart.

### Rectangular W/G Pressure Windows



WG Size	Freq. (GHz)	VSWR max	Power (kW)-Peak	Pressure (PSIG)	Standard Model No.*	Thickness A** (In)
WR284	<b>2.60 - 3.95</b>	1.06	2000	15	284-230-6-6	0.25
WR229	<b>3.30 - 4.90</b>	1.07	1800	20	229-230-2-2	0.25
WR187	<b>3.95 - 5.85</b>	1.06	1500	25	187-230-6-6	0.25
WR159	<b>4.90 - 7.05</b>	1.05	1000	30	159-230-2-2	0.25
WR137	<b>5.85 - 8.20</b>	1.07	750	35	137-230-2-2	0.25
WR112	<b>7.05 - 10.0</b>	1.10	500	40	112-230-6-6	0.25
WR102	<b>7.0 - 11.0</b>	1.15	400	40	102-230-6-6	0.25
WR90	<b>8.20 - 12.4</b>	1.10	300	40	90-230-6-6	0.16
WR75	<b>10.0 - 15.0</b>	1.09	200	40	75-230-6-6	0.20
WR62	<b>12.4 - 18.0</b>	1.08	150	40	62-230-6-6	0.187
WR42	<b>18.0 - 26.5</b>	1.12	75	40	42-230-6-6	0.15
WR34	<b>22.0 - 33.0</b>	1.15	60	40	34-230-6-6	0.15
WR28	<b>26.5 - 40.0</b>	1.18	45	40	28-230-6-6	0.10

	<u>WR</u>	- <u>Mod</u>	- <u>F1</u>	- <u>F2</u>
W/G Pressure window				
<b>Example part number:</b>	112	-230	-6	-6
Waveguide Size: (WR) WR28 thru WR284 available				
Basic Model No.: (-Mod)				
Flange 1 (-F2): 1=CPRG, 2=CPRF, 6=Cover, 7=Choke				
Flange 2 (-F2): 1=CPRG, 2=CPRF, 6=Cover, 7=Choke				
See <a href="#">ATM Standard Flange</a> page for more info.				

\*The Standard Model Numbers above are the most common parts ordered for size and flange type. However, these models can easily be altered to accommodate your needs by using the Model # code system to the left.

\*\*This dimension is based on the standard model number shown. Thickness may vary depending on flange type. See the [ATM Standard Flange](#) page for more info.

For Window without flange assembly replace the flange type with a "W".

Example: 187-230-2-2 becomes: 187-230-W

Please note: Rectangular waveguide windows are of Brass construction, standard. For aluminum construction please consult factory.

## Double Ridge W/G Pressure Windows

WG Size	Freq. (GHz)	VSWR max	RF Power***		Pressure (PSIG)	Standard Model No.*	Thickness A** (In)
			Avg. CW (Watts)	Peak (kW)			
WRD200	<b>2.00 - 4.80</b>	1.04	600	1	15	200-230-C3-C3	0.25
WRD350	<b>3.50 - 8.20</b>	1.06	600	1	15	350-230-C3-C3	0.25
WRD475	<b>4.75 - 11.0</b>	1.08	600	1	15	475-230-C3-C3	0.25
WRD650	<b>6.50 - 18.2</b>	1.05	600	1	15	650-230-C3-C3	0.25
WRD750	<b>7.50 - 18.0</b>	1.10	600	1	15	750-230-C3-C3	0.25
WRD750	<b>7.50 - 18.0</b>	1.10	600	1	15	750-230-C3-C3	0.25

### Ordering Information

Double Ridge W/G Pressure window

**Example part number:** WRD - Mod - F1 - F2  
750 -230 -C3 -C3

Waveguide Size: (WRD)

WRD750 thru WRD200 available

Basic Model No.: (-Mod)

Flange 1 (-F1) see table below for choices

Flange 2 (-F2) see table below for choices

See [ATM Standard Flange](#) page for more info.

\*The Standard Model Numbers above are the most common parts ordered for size and flange type. However, these models can easily be altered to accommodate your needs by using the Model # code system to the left.

\*\*This dimension is based on the standard model number shown. Thickness may vary depending on flange type. See the [ATM Standard Flange](#) page for more info.

\*\*\*Units tested up to 50,000 ft. altitude.

### FLANGE DESIGNATION & TYPE

DESIGNATION	TYPE	HOLES
- C1	COVER	ALTERNATE TAP/THRU
- C2		ALL TAPPED
- C3		ALL THRU
- G1	GROOVE	ALTERNATE TAP/THRU
- G2		ALL TAPPED
- G3		ALL THRU

For Window without flange assembly replace the flange type with a "W".

Example: 750-230-C1-C1 becomes:  
750-230-W