



FLEXIBLE ARMORED WAVEGUIDE

High Power, Non-Twistable, Flexible Armored Waveguide

ATM Type "126" flexible armored, non-twist waveguide assemblies



For use in hi-power applications

Crush resistant

304 stainless steel flexible armor jacket

Kink resistant

Newer applications for Microwave Systems have required higher frequencies. This has led to the use of smaller waveguide sizes from WR28 [26.5-40.0GHz] to WR62 [12.4-18.0GHz]. In general, these smaller size waveguide components are more fragile. In particular, high power flexible waveguide in these sizes are more delicate due to the nature of the design. So when they are subject to mechanical stress, and/or mishandling, it can result in degraded RF performance or even mechanical failure.

To solve this problem, ATM has developed High Power Flexible Armored Waveguide. This provides high power flexible waveguide protected from mechanical crushing and kinking.



FLEXIBLE ARMORED WAVEGUIDE SPECIFICATIONS

Mechanical Specifications					
WG Size	Bending Rating				Available lengths (inch)
	Static		Repeated		
	*E-plane Rad (inch)	*H-plane Rad (inch)	*E-plane Rad (inch)	**H-plane Rad (inch)	
WR90	6.0	6.0	6.0	8.0	5.0 - 47.0
WR75	5.0	5.0	5.0	7.0	5.0 - 47.0
WR62	4.0	4.0	4.0	6.0	5.0 - 47.0
WR51	3.5	3.5	3.5	5.5	4.0 - 47.0
WR42	3.0	3.0	3.0	5.0	4.0 - 35.0
WR34	2.5	2.5	2.5	5.0	4.0 - 35.0
WR28	2.0	2.0	2.0	4.0	4.0 - 35.0

**Note: Bending Radius is limited by the minimum bending radius of the armor.*

***Note: Bending Rating Radius for Repeated H-plane is larger than the minimum bending radius of the armor.*

Standard Models								
WG Size	Frequency (GHz)	I.L. (dB/ft)	VSWR (Typ)		Power Rating		Pressure max (psig)	Model No.
			<36"	>36"	avg (kW)	Peak (kW)		
WR90	8.20-12.4	0.11	1.12	1.20	2.2	150	45	90-126-(L)-6-6
WR75	10.0-15.0	0.15	1.12	1.20	2.1	125	60	75-126-(L)-6-6
WR62	12.4-18.0	0.16	1.20	1.20	1.3	100	60	62-126-(L)-6-6
WR51	15.0-22.0	0.20	1.25	1.30	1.0	75	60	51-126-(L)-6-6
WR42	18.0-26.5	0.25	1.25	1.30	0.6	35	60	42-126-(L)-6-6
WR34	22.0-33.0	0.30	1.30	1.35	0.5	20	60	34-126-(L)-6-6
WR28	26.5-40.0	0.35	1.30	1.35	0.5	20	60	28-126-(L)-6-6

The Standard Model Numbers above are the most common parts ordered for size, material and flange. However, these models can easily be altered to accommodate your custom needs.

When creating a standard model number for your order, please use the desired length (in inches) of your assembly in place of (L) as shown above.

For complete technical information on Flexible Armored Waveguide, please visit our website at ...

http://www.atmmicrowave.com/wave-flexible.html#Flex_Armored0

