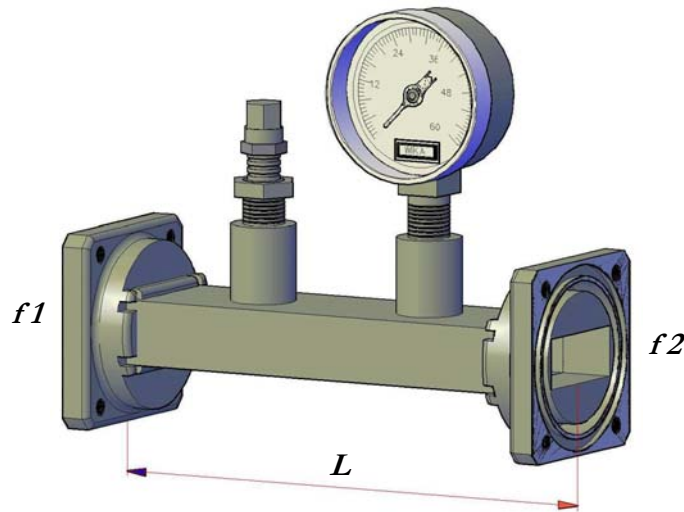


Space Machine & Engineering CORP.

Rectangular Waveguide Pressure Adapter



Space Machine offers a standard product line of pressure adapters covering waveguide sizes WR28 thru WR430.

VSWR is less than 1.10:1 over the full waveguide band. 15 psi capacity gauge is standard. If other than 15 psi capacity is required, please specify when ordering.

Different types of pressure fittings available in standard SME pressure units, such as Schrader Valve, Flared Compression Fitting, Pipe Threads, or Barbed Fitting (see [Pressure Fitting Options](#) table).

Additional sizes and configurations are available upon request.

Ordering Information:

**Waveguide Pressure Adapter, WR75,
4 inches long, Aluminum, Cover / Choke
Flanges with Schrader Valve
Chromate, Paint Space Machine Gray.**

Example part number:

<u>WPA</u>	<u>wr</u>	<u>-l</u>	<u>m</u>	<u>f1 f2</u>	<u>v</u>	<u>-p</u>	<u>f</u>
WPA	75	-4.0	A	01 02	SV	-C	P

Series (WPA):

Waveguide Size (wr): WR28 thru WR430

Length (-l): (inches)

Material (m): A – Aluminum, B – Bronze, C – OFHC Copper, O – Other

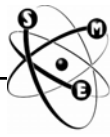
Flanges (f1 f2): See [Appendix G](#)

Pressure Fitting (v): Schrader Valve-SV, Flared Compression Fitting-FF,
Pipe Threads-PT, Barbed Fitting-BF

Plating (-p): C – Chromate, S – Silver, G – Gold, O – Other, N – None

Finish (f): P – Paint Space Machine Gray, N – None, O – Other

2327 16TH AVENUE NORTH, ST. PETERSBURG, FLORIDA 33713 * PHONE (727) 323-2221 * FAX (727) 323-2376



Rectangular Waveguide Pressure Adapter

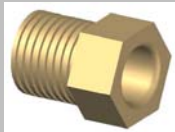
Model	WR#	Frequency (GHz)	Length (l)
WPA28-	28	26.5 - 40.0	4.0
WPA34-	34	22.0 - 33.0	4.0
WPA42-	42	18.0 - 26.5	4.0
WPA51-	51	15.0 - 22.0	4.0
WPA62-	62	12.4 - 18.0	4.0
WPA75-	75	10.0 - 15.0	4.0
WPA90-	90	8.20 - 12.4	4.0
WPA112-	112	7.05 - 10.0	4.0
WPA137-	137	5.85 - 8.20	5.0
WPA159-	159	4.90 - 7.05	5.0
WPA187-	187	3.95 - 5.85	6.0
WPA229-	229	3.30 - 4.90	6.0
WPA284-	284	2.60 - 3.95	6.0
WPA340-	340	2.20 - 3.30	6.0
WPA430-	430	1.70 - 2.60	6.0

Pressure Fitting Options



Schrader Valve

This is one of the most popular pressure units. Schrader valves are durable and secure. They provide a convenient method of serving pressure systems or conducting leak-down pressure tests.



Flared Compression Fitting

Flared Compression Fitting offer a high degree of long-term reliability and can be assembled and disassembled repeatedly. They are manufactured especially for hard-to-hold liquids and gasses, and used for gas and high pressure lines in applications with copper, aluminum and other materials.



Barbed Fitting

A compact and economical barbed fittings offer a quality set up with no leaks, flow restrictions or costly downtime. Barb fittings fit into flexible tubing; the tubing relaxes behind the barb to create a seal that can generally contain pressure up to 30 psi.



Pipe Threads Fitting

Pipe Threads Fittings provide safe and secure fittings and connections. Due to the wedging effect of the tapered thread, extreme care must be used to avoid over-tightening the joint. The over-stressed female fitting may split days, weeks, or even years after initial installation.