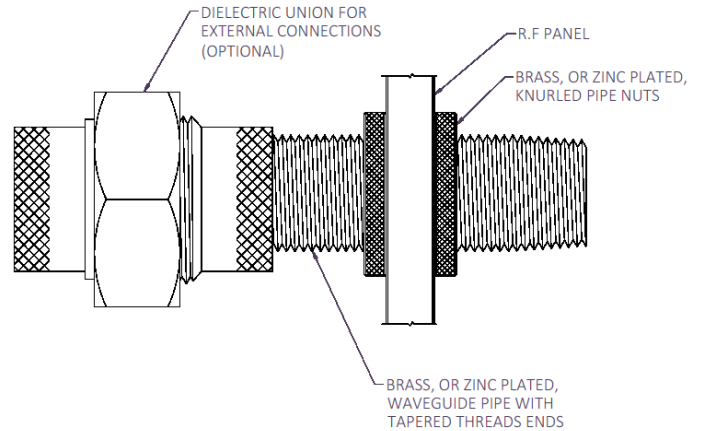


# Waveguide Pipe Penetrations



## Features:

- ◆ Manufactured in brass with NPT thread type.
- ◆ Field locatable and can be installed in a bulkhead panel or modular shielded panel.
- ◆ Applicable for the insertion of dielectric materials such as fibre optic cables or gases.
- ◆ Applicable for the insertion of liquids and oils; however, if a closed system is not used, the attenuation may be substantially reduced.
- ◆ Satisfy fire suppression and hydraulic requirements.



WAVEGUIDE NOMINAL SIZE	WAVEGUIDE LENGTH	100dB ATTENUATION CUT-OFF FREQUENCY
1/2"	4"	12.67 GHz
3/4"	4"	8.44 GHz
1"	4"	6.59 GHz
1-1/4"	4-1/2"	5.01 GHz
1-1/2"	6"	4.30 GHz
2"	8"	3.34 GHz
2-1/2"	10"	2.80 GHz
3"	12"	2.25 GHz
4"	16"	1.72 GHz

## Additional Options:



- ◆ Custom sizes available.
- ◆ Dielectric unions are available to maintain isolation from ground should metal piping be utilized on the outside of the shield.
- ◆ Insulated pipe penetrations for installation where thermal differences are a concern.
- ◆ A honeycomb waveguide insert for high frequency in gaseous applications up to an attenuation cut off at 18 GHz.

**Note:** As an industry rule of thumb, the length of a circular waveguide should be at least four times the diameter.