

Test Tube Adapter for Universal Waveguide Applicator (UWA)

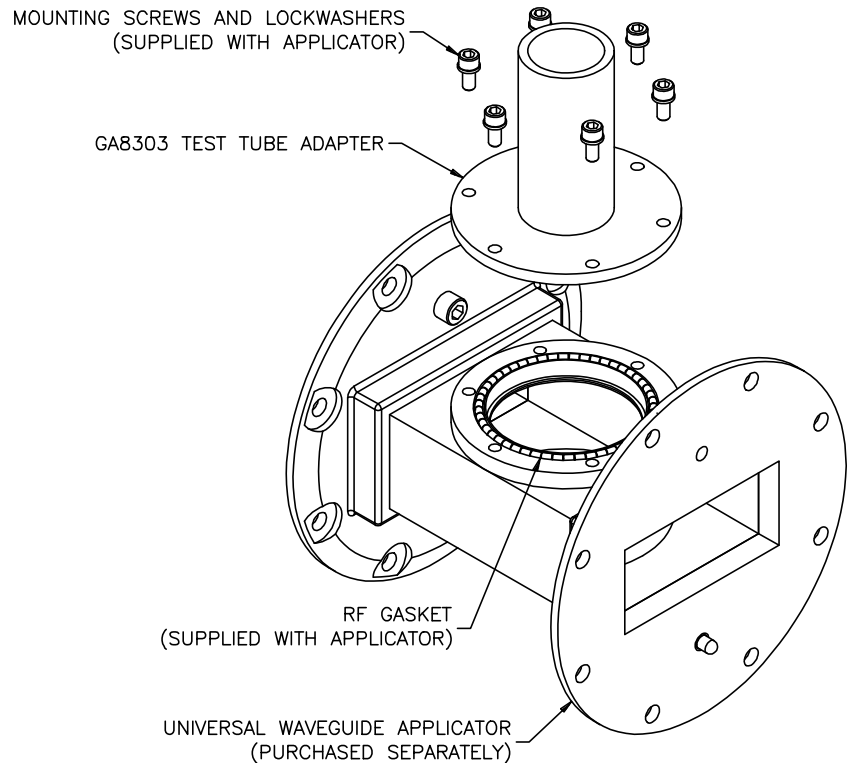
GERLING

Model GA8303

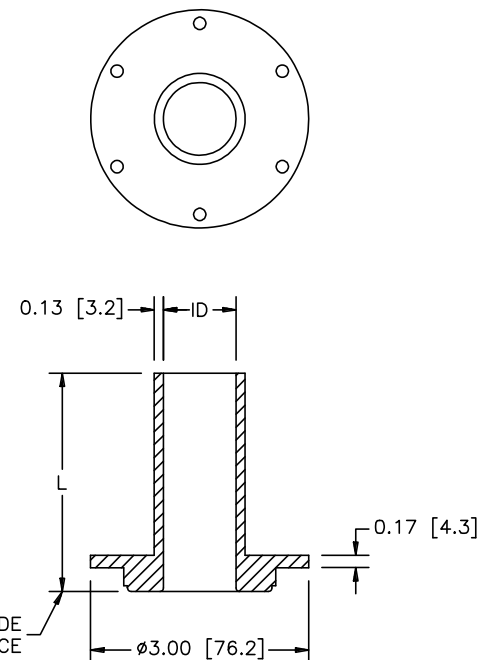
The model GA8303 Test Tube Adapter is designed for use with the Universal Waveguide Applicator (UWA) manufactured by GAE. It provides a convenience means to support a standard size test tube for purposes of heating a contained substance inside the applicator.

The basic concept of the GA8303 design is that of a "cut-off" tube. As microwave energy propagates from the waveguide into the empty cylindrical body of the adapter, the energy is attenuated at a sufficient rate such that energy exiting the end is below the maximum level allowed for safe human exposure. Inserting a standard (thin wall) test tube has minimal effect on the attenuation rate. However, the user is cautioned that test tubes filled with a dielectric material can increase or decrease the attenuation rate depending on the dielectric properties. **UNDER NO CIRCUMSTANCES SHOULD A METALLIC SUBSTANCE BE PLACED INSIDE THE ADAPTER BODY.**

The GA8303 can also be used for other purposes. For example, continuously flowing fluids can be heated by passing a tube through two GA8303 adapters installed opposite each other on a dual sided UWA. Similarly, plasmas can be formed within a quartz or sapphire tube inserted through opposing GA8303 adapters. Contact GAE for more information about special uses of the GA8303 and other adapters available for use with the UWA.



CONFIGURATION TABLE		
SIZE	ID	L
6 MM	.250 [6.4]	1.25 [32]
8 MM	.328 [8.3]	1.30 [33]
10 MM	.406 [10.3]	1.38 [35]
12 MM	.484 [12.3]	1.50 [38]
13 MM	.531 [13.5]	1.75 [44]
15 MM	.609 [15.5]	2.00 [51]
16 MM	.641 [16.3]	2.25 [57]
18 MM	.719 [18.3]	2.75 [70]
20 MM	.797 [20.3]	3.25 [83]
22 MM	.875 [22.3]	3.75 [95]
25 MM	1.00 [25.4]	4.25 [108]
36 MM	1.44 [36.5]	6.00 [152]



Specifications:

Frequency	2.45 GHz +/- 50 MHz
Waveguide Power	10 kW maximum
Construction Material	6061-T6 Aluminum
Finish	Clear chemical conversion coating (Alodine)
Compatible UWA Models	GA6001 thru GA6004



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