Basic Sliding Short Circuit

GAE’s family of Basic Sliding Short Circuits are designed for use in high power microwave networks to establish a standing wave in waveguide and continuously vary the location of the standing wave throughout a range of positions. Typical uses include waveguide applicators in which a standing wave must be accurately positioned to maximize the coupling of microwave power to the load being heating.

The sliding plunger utilizes an open type 1/4-wave reactive choke with Teflon between sliding contact surfaces to reduce power absorption (return loss) and wear during high power operation. Plunger travel of over 1/2-guide wavelength is adjusted using a sliding actuator rod which can be locked in the desired position by a clamping collar.

**General Specifications:**
- Frequency: 2450 MHz nominal
- Power (continuous): 3 kW (GA1216A, GA1218A) 6 kW (GA1219A, GA1220A)
- Return Loss: 0.1 dB max @ 2450 MHz
- Construction: Dip brazed aluminum waveguide, steel adjusting rod
- Finish: Chemical conversion coating on waveguide

**Options:**
- Heli-Coils or studs on flanges (any combination)
- Round flange with taper for quick-disconnect clamp on WR340
- Flange interlock switches

**Accessories:**
- Flange Hardware Kit, Model GA8409 (please see GA8409 specification for selection)
- Flange Clamp, Quick-Release, Model GA8410 (used with model GA1218A only)

**WAVEGUIDE**

<table>
<thead>
<tr>
<th>Waveguide</th>
<th>GA1216A</th>
<th>GA1218A</th>
<th>GA1219A</th>
<th>GA1220A</th>
</tr>
</thead>
<tbody>
<tr>
<td>WR340</td>
<td>1.50 [38.1]</td>
<td>1.50 [38.1]</td>
<td>1.86 [47.2]</td>
<td>2.31 [58.7]</td>
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<tr>
<td>WR430</td>
<td>3.00 [76.2]</td>
<td>3.00 [76.2]</td>
<td>3.56 [90.4]</td>
<td>4.46 [113]</td>
</tr>
</tbody>
</table>

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- Flange Clamp, Quick-Release, Model GA8410