# **Precision Sliding Short Circuit**

GERLING

GAE's family of Precision 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 a non-contacting cavity type 1/4 -wave reactive choke design which allows adjustment under high power operation without high losses or arcing. High temperature, low loss polyimide "buttons" provide low friction surfaces for reduced wear. Positional accuracy is provided by a precision screw drive mechanism. Precise positioning is enabled by a multi-turn dial with a digital readout calibrated in tenths of a turns unit.

### **General Specifications:**

Frequency 2450 MHz nominal

Power (continuous) 6 kW

Waveguide GA1206A: WR340 (RG113/U)

GA1207A: WR430 (RG105/U)

Input Flange GA1206A: UG1713/U

GA1207A: UG1711/U

Plunger Travel GA1206A: 4.0 inches (10 cm)

GA1207A: 3.5 inches (8.9 cm)

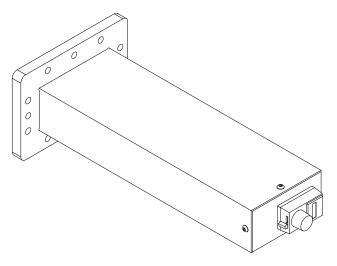
Position Indicator Multi-turn dial with digital readout

Readout Calibration 0.008 inches (0.02 cm) movement

per unit on the digital readout

Backlash 0.015 inches (0.04 cm) max. Return Loss 0.05 dB max @ 2450 MHz

## Model GA1206A Model GA1207A



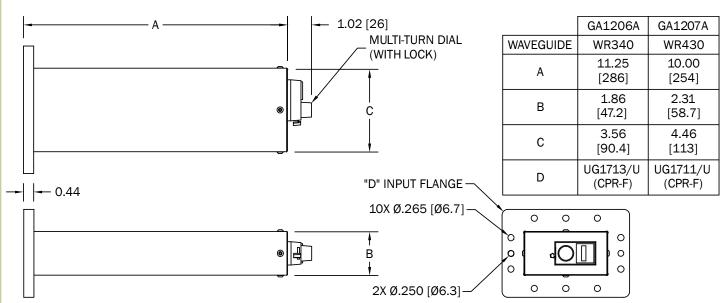
Model GA1206A

### **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)



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