Precision Sliding Short Circuit, WR284



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 adjust its relative phase angle continuously throughout a range more than 1/2-guide wavelength. 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.

Model GA1205B features the popular WR284 Q-D (quick-disconnect) round flange that uses a single screw clamp for waveguide connections.

General Specifications:

Frequency 2450 MHz nominal

Power (continuous) 3 kW

Waveguide WR284 (RG75/U)

Input Flange GA1205B: Q-D Round (UG584/U)

GA1215A: CPR (UG1725/U)

Plunger Travel 5.0 inches (12.7 cm)

Position Indicator Multi-turn dial, locking, with digital

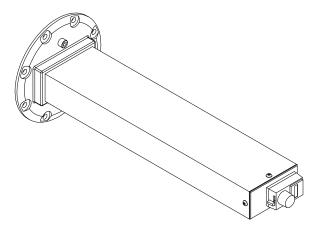
readout

Readout Calibration 0.005 inches (0.013 cm) movement per

unit on the digital readout

Backlash 0.010 inches (0.025 cm) max. Return Loss 0.05 dB max @ 2450 MHz

Model GA1205B Model GA1215A



Model GA1205B

Construction Waveguide: Aluminum

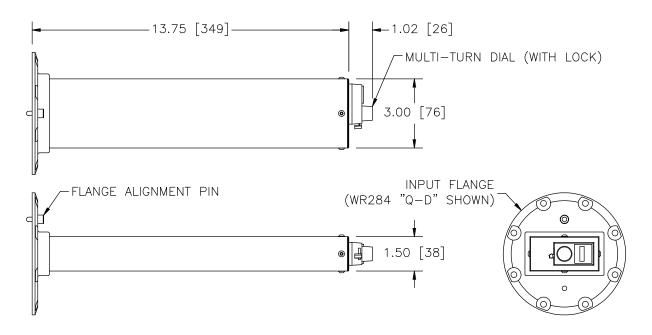
Actuator Screw: Stainless steel Plunger: Brass and aluminum

Options:

Flange interlock switches

Accessories:

- Flange Hardware Kit, Model GA8409 (please see GA8409 specification for selection)
- Flange Clamp, Quick-Release, Model GA8410 (used with model GA1205B only)





© 2007-2008 Gerling Applied Engineering, Inc. PO Box 580816 • Modesto, CA 95358 • USA Phone: +1-209-527-8960 • Fax: +1-209-527-5385 E-mail: sales@2450MHz.com • Web: www.2450MHz.com