

WRJ-10
W-BAND 360° ROTARY JOINT

FEATURES:

- 360° Continuous Rotation
- Straight and Right-Angle Ports Available
- Low Insertion Loss
- 79 – 105 GHz Wideband Operation

APPLICATIONS:

- Mechanically Scanned Antennas
- Automatic Test Equipment (ATE)
- Axial Ratio Measurement

DESCRIPTION:

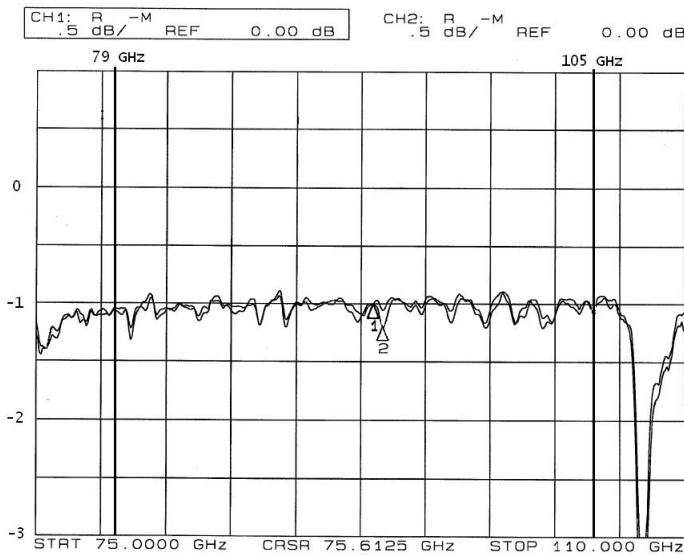
The W-Band Rotary Joint allows the transmission of RF signals from stationary to 360° rotating rectangular waveguide. Common applications include scanning antennas of any kind used in radar and radiometer systems.

Input and Output ports are available in straight to straight, right angle to straight, straight to right angle, and right angle to right angle variations. There is also an extended straight port available on the flange end.

The unit may be installed by four 0.125" through holes. These will be placed around the mounting disc, located in the center of the two ports. The flange end of the unit will be anchored with the mounting disc, while the rotating side will be free to move.

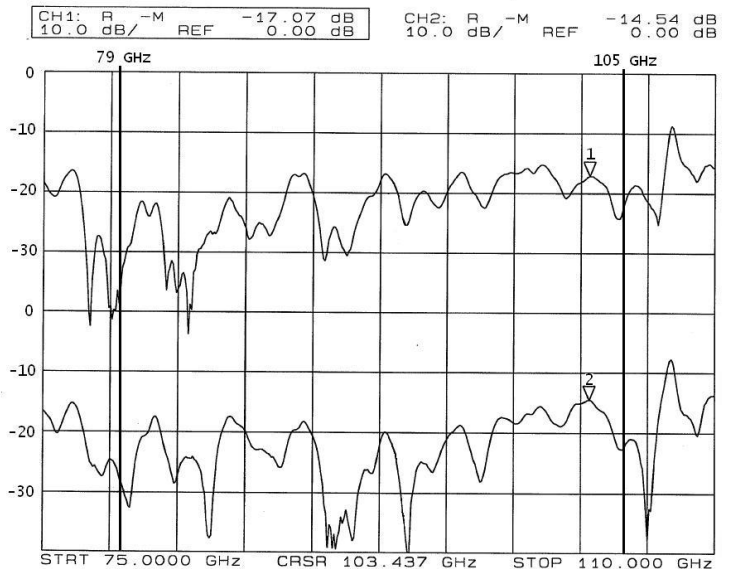
ELECTRICAL SPECIFICATIONS:

	PERFORMANCE	UNITS
Frequency Range	79 – 105	GHz
Insertion Loss	1.1 typ.	dB
Input VSWR	1.5:1 typ.	
Output VSWR	1.5:1 typ.	



Typical Insertion Loss

- 1. IL @ 0°
- 2. IL @ 90°

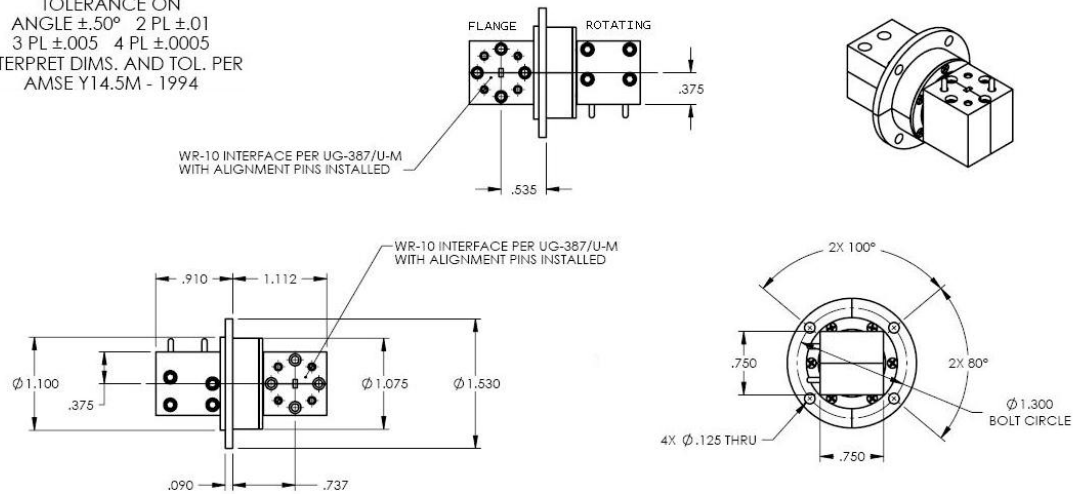


Typical Return Loss

- 1. RL @ 0°
- 2. RL @ 90°

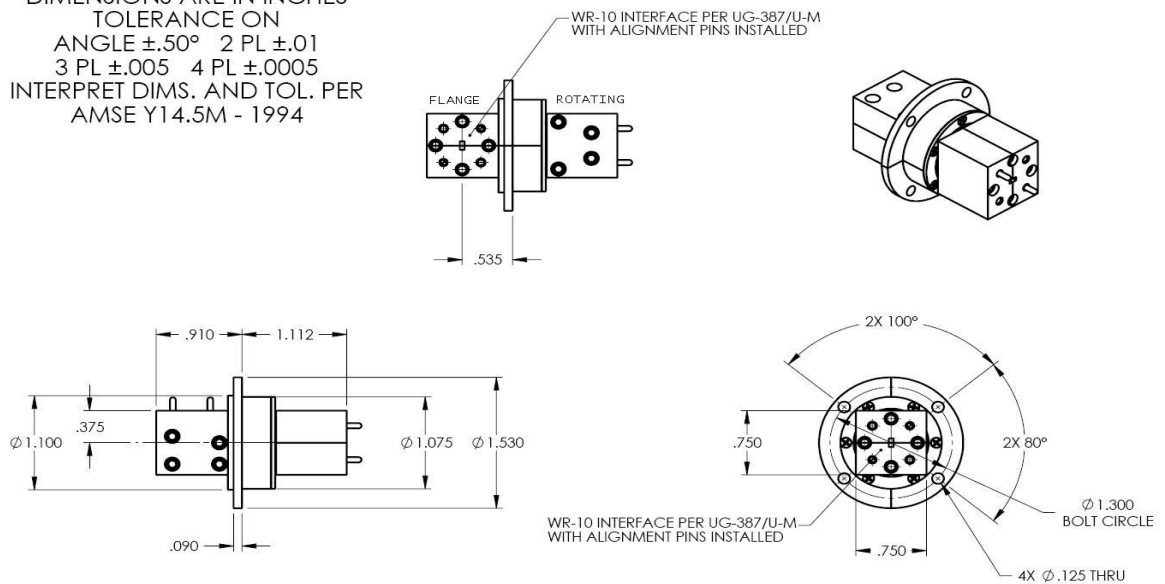
OUTLINE DRAWINGS:

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCE ON
ANGLE $\pm .50^\circ$ 2 PL $\pm .01$
3 PL $\pm .005$ 4 PL $\pm .0005$
INTERPRET DIMS. AND TOL. PER
AMSE Y14.5M - 1994



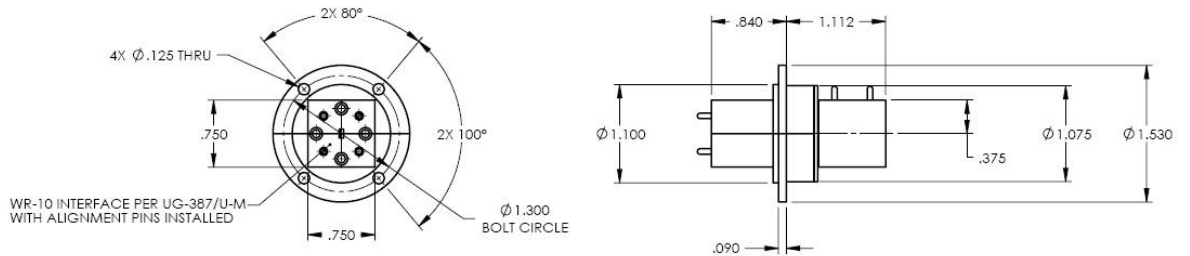
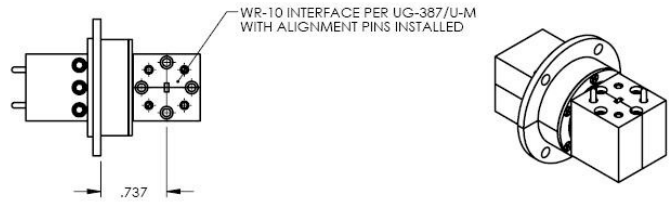
**RIGHT ANGLE/RIGHT ANGLE
(315193)**

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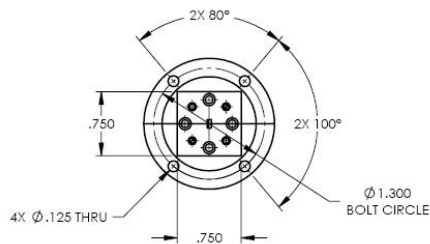
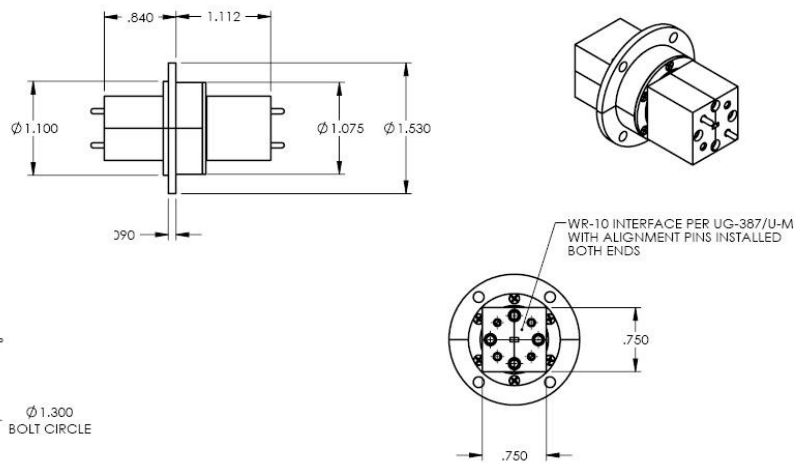
**RIGHT ANGLE/STRAIGHT
(315192)**

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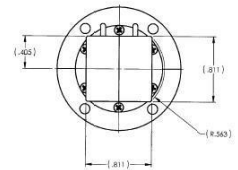
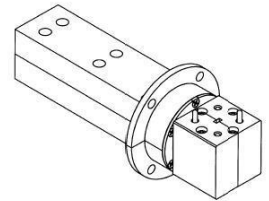
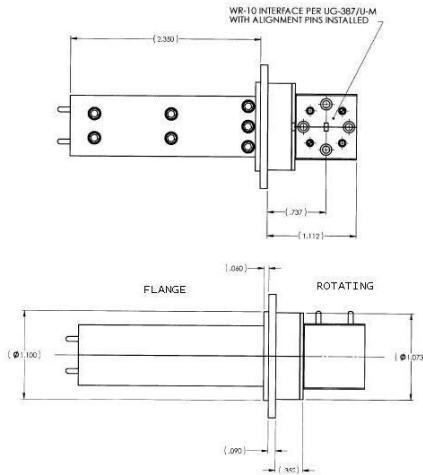
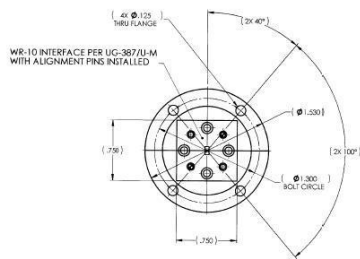
**STRAIGHT/RIGHT ANGLE
 (314991)**

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**STRAIGHT/STRAIGHT
 (314982)**

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 DIMENSIONS ARE IN INCHES
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 ANGLE $\pm .50^\circ$ 2 PL $\pm .01$
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Extended/Right Angle

HOW TO ORDER

Specify Model Number WRJ-10-RARBO

A = Flange Side Transition Type
 E – end (straight)
 S – side (right angle)
 X – extension (straight)

B = Rotating Side Transition Type
 E – end (straight)
 S – side (right angle)