



# WR - 90 Seamless Flexible Waveguide, UG - 39 / U Square Cover Flange Operating From 8.2 GHz to 12.4 GHz

## Flexible Waveguides Technical Data Sheet

PE-W90SF005-12

### Features

- WR-90 waveguide
- Flexes in both the E and H plane
- 8.2 GHz to 12.4 GHz Frequency Range
- Brass flanges with a silver plating
- Neoprene sleeve provides added protection and mechanical support

### Applications

- Allows expansion/contraction due to thermal issues.
- Test Benches
- Microwave Radio
- Eliminates installation problems caused by misalignment.
- Pressurized waveguide systems
- Provides vibration isolation

### Description

The PE - W90SF005 - 12 is part of Pasternack's family of flexible waveguides. The waveguide body is made of silver plated brass. It can be bent in both the E and H planes without impairing VSWR or attenuation. The waveguide is covered by a neoprene jacket which protects the waveguide and provides mechanical support.

### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	8.2		12.4	GHz
VSWR		1.07:1		
Insertion Loss		0.09		dB

### Mechanical Specifications

Waveguide Size	WR-90
Waveguide Design	Seamless
Section Length	12 [in [304.8 mm]]
E - Plane Minimum Bend Radius	0087 [in] 22.1 mm]
H - Plane Minimum Bend Radius	1060 [in] 42.93 mm]
Maximum Operating Pressure	45 psig

Description	Flange 1	Waveguide	Flange 2
Type	Square Cover	WR-90	Square Cover
Designation	UG-39/U		UG-39/U
Material	Brass	Brass	Brass
Plating		Silver	
Color	Gold	Black	Gold

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and lead time: [WR-90 Seamless Flexible Waveguide, UG-39 / 8.2 GHz to 12.4 GHz PE-W90SF005-12](#)

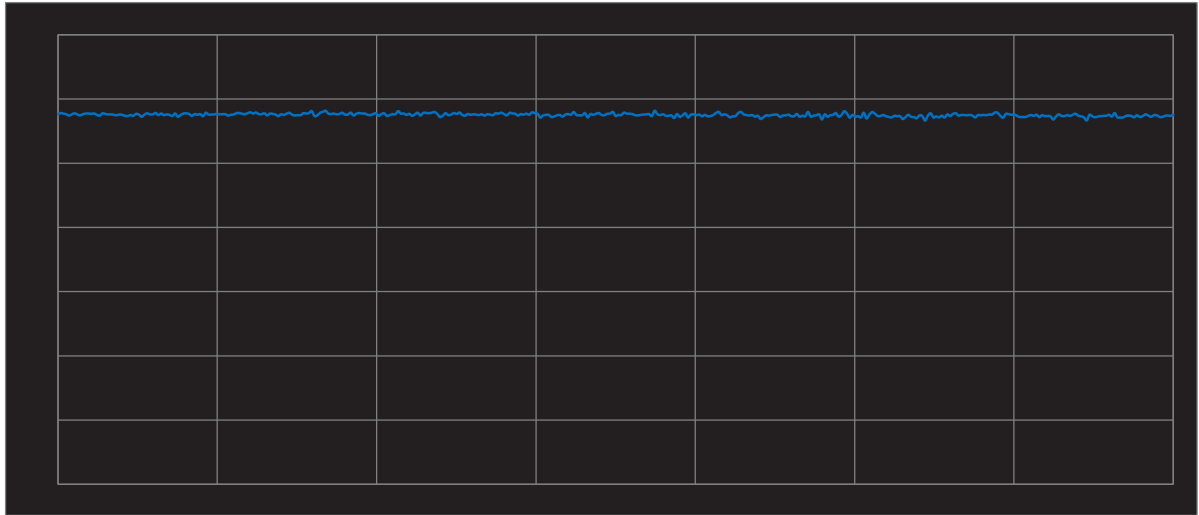




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Pasternack Enterprises has same day shipment for worldwide and wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" inventory and [WR - 90 Seamless Flexible Waveguide, UG - 39 / U Square Cover Flange Operating From 8.2 GHz to 12.4 GHz PE-W90SF005-12](https://www.pasternack.com/wr90-seamless-flexible-waveguide-ug-39-u-square-cover-flange-operating-from-8.2-ghz-to-12.4-ghz-pe-w90sf005-12)

URL: <https://www.pasternack.com/wr90-seamless-flexible-waveguide-ug-39-u-square-cover-flange-operating-from-8.2-ghz-to-12.4-ghz-pe-w90sf005-12>

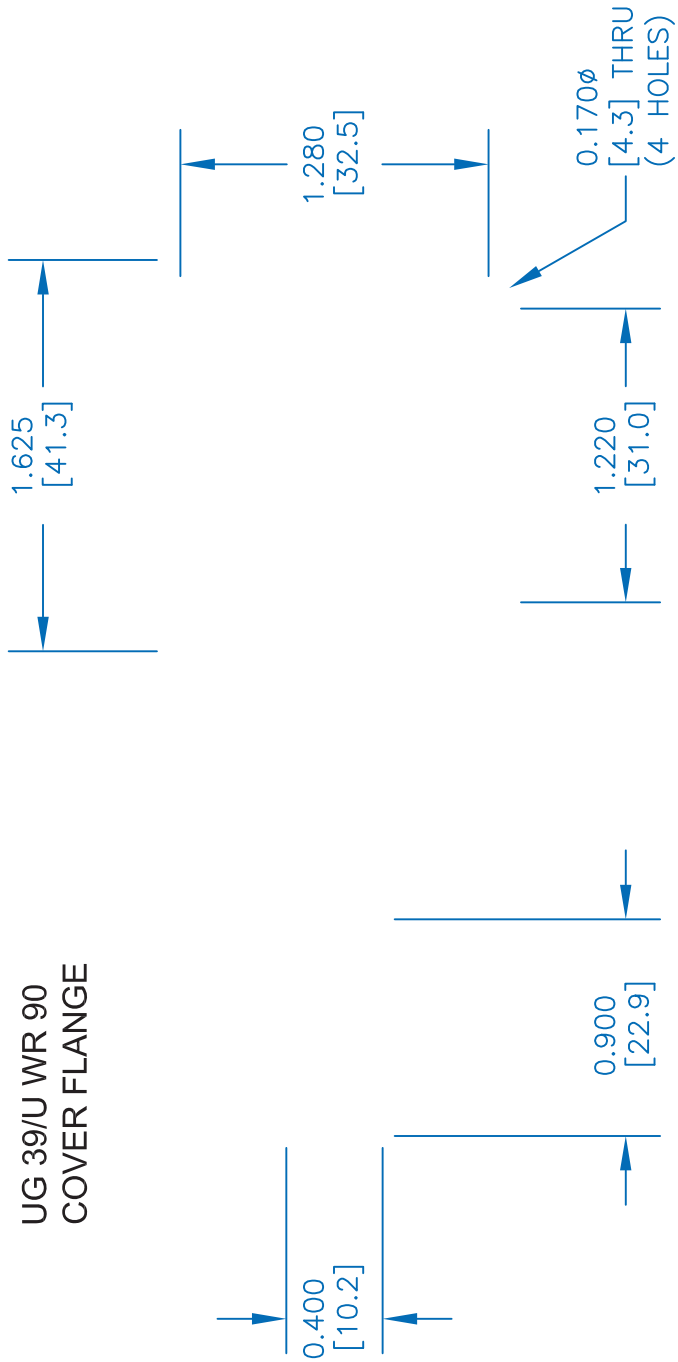
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# PE-W90SF005-12 CAD Drawing

WR - 90 Seamless Flexible Waveguide, UG - 39/U  
 Flange Operating From 8.2 GHz to 12.4



PASTERNAK  
 PE-W90SF005-12



NOTES:  
 1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.  
 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.  
 3. DIMENSIONS ARE IN INCHES [mm].

DWG TITLE  
**PE-W90SF005-12**

FSCM NO. 53919

CAD FILE 101315

SCALE N/A

SIZE A

2233

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