



WR-90 Twistable Flexible Waveguide 12 Inch, CPR-90G Flange Operating From 8.2 GHz to 12.4 GHz

## Flexible Waveguides Technical Data Sheet

**PE-W90TF006-12**

### Features

- Twelve inch long WR-90 waveguide
- Twistable
- Flexes in both the E and H plane
- Neoprene sleeve allows pressurization
- 8.2 GHz to 12.4 GHz Frequency Range
- Brass flanges with a silver plated brass body

### Applications

- Simplifies positioning parabolic reflectors for line of sight microwave radio links.
- Test Benches
- Eliminates installation problems caused by misalignment.
- Allows expansion/contraction due to thermal issues.
- Pressurized waveguide systems
- Provides vibration isolation
- Microwave Radio

### Description

The PE-W90TF006-12 is part of Pasternack's family of flexible, twistable waveguides which operates in the 8.2 to 12.4 GHz range. The waveguide body is made of a helically wound silver coated brass strip. It can be twisted and/or 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, provides mechanical support and allows the waveguide to be pressurized.

### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	8.2		12.4	GHz
VSWR		1.07:1		
Insertion Loss		0.15		dB
Input Power			1	KWatts
Peak Power			180	KWatts

### Mechanical Specifications

Waveguide Size	WR-90
Waveguide Design	Twistable
Section Length	12 [in [304.8 mm]]
E-Plane Minimum Bend Radius, One Time	2.5 in [63.5 mm]
E-Plane Minimum Bend Radius, Repeated	10 in [254 mm]
H-Plane Minimum Bend Radius, One Time	5 in [127 mm]
H-Plane Minimum Bend Radius, Repeated	20 in [508 mm]
Maximum Offset Rotation, One Time	96 degrees/ft
Maximum Offset Rotation, Repeated	24 degrees/ft
Maximum Operating Pressure	45 psig

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-90 Twistable Flexible Waveguide 12 Inch, CPR-90G Flange Operating From 8.2 GHz to 12.4 GHz PE-W90TF006-12](#)



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Description	Flange 1	Waveguide	Flange 2
Type	CPR-90G	WR-90	CPR-90G
Designation	None		None
Material	Brass	Brass	Brass
Plating		Silver	
Color	Gold	Black	Gold

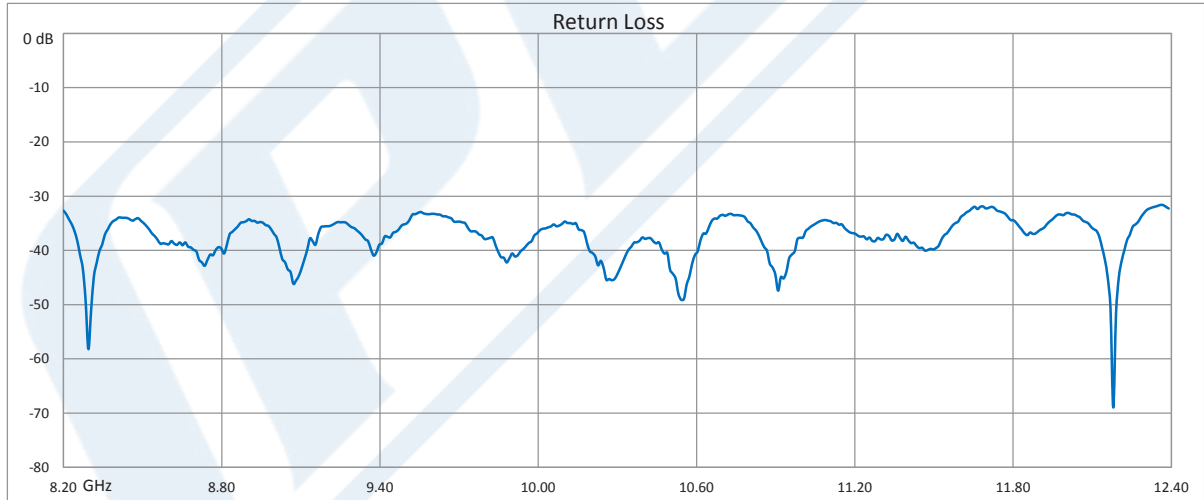
**Environmental Specifications**

**Compliance Certifications** (see [product page](#) for current document)

**Plotted and Other Data**

Notes:

**Typical Performance Data**



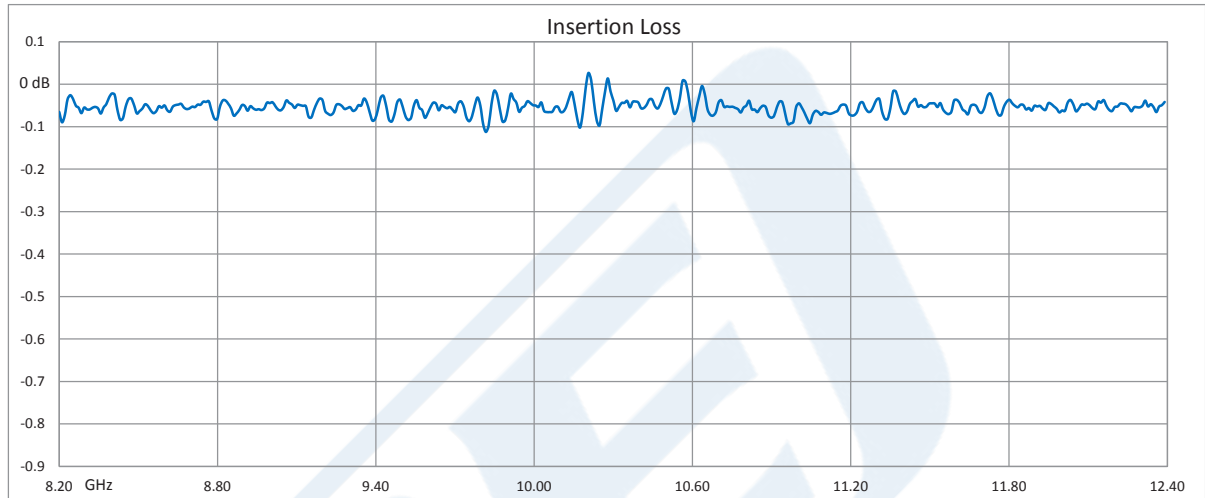
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WR-90 Twistable Flexible Waveguide 12 Inch, CPR-90G Flange Operating From 8.2 GHz to 12.4 GHz from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-90 Twistable Flexible Waveguide 12 Inch, CPR-90G Flange Operating From 8.2 GHz to 12.4 GHz PE-W90TF006-12](https://www.pasternack.com/wr90-twistable-flexible-waveguide-cpr-90g-8.2-12.4-ghz-pe-w90tf006-12-p.aspx)

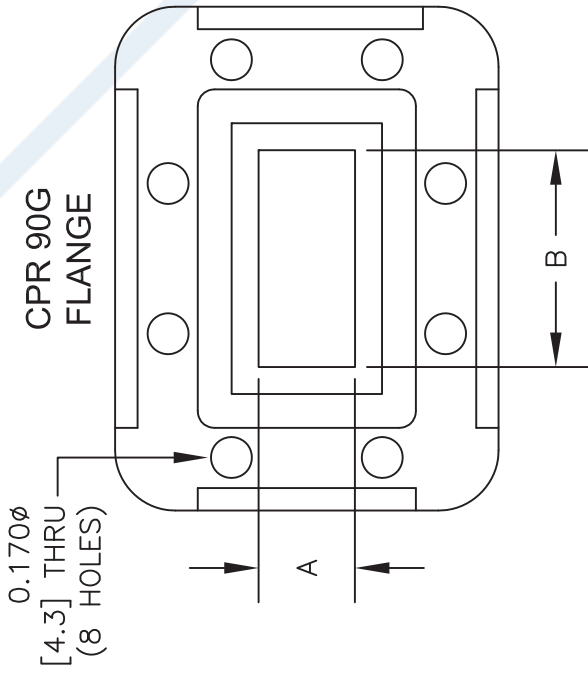
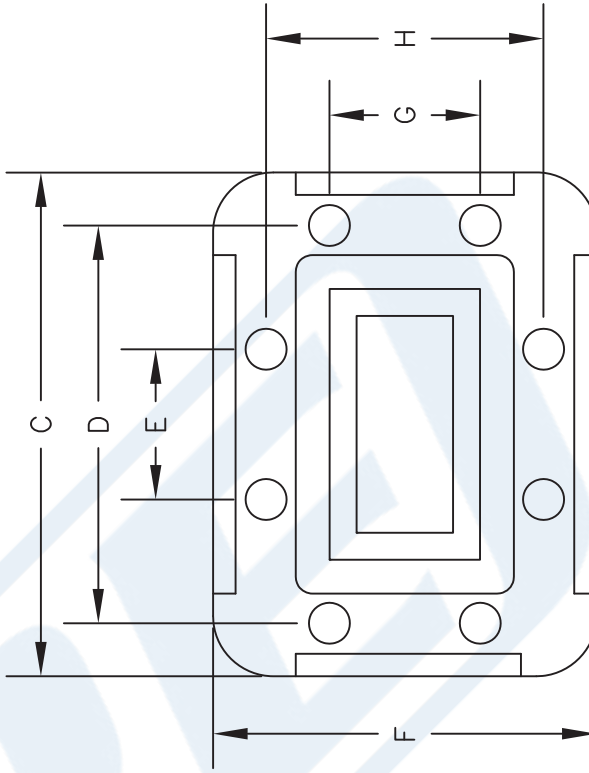
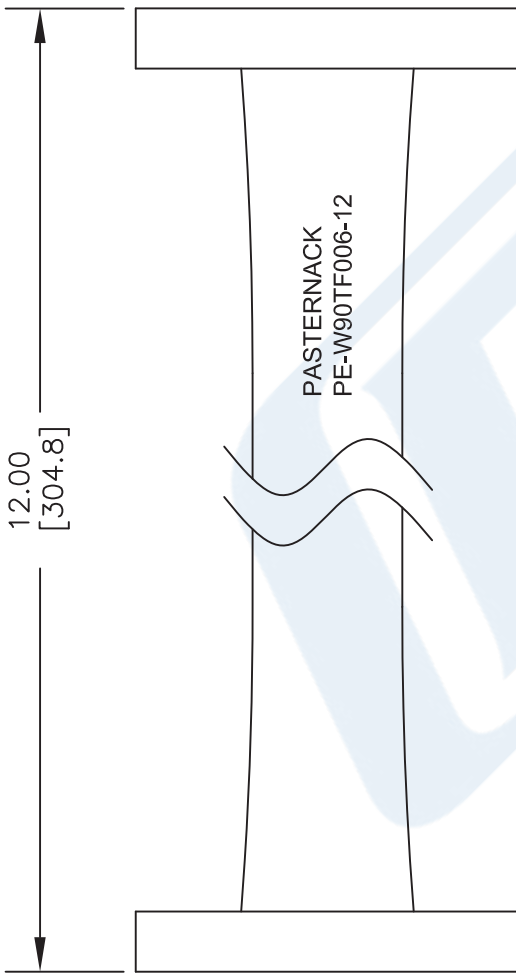
URL: <https://www.pasternack.com/wr90-twistable-flexible-waveguide-cpr-90g-8.2-12.4-ghz-pe-w90tf006-12-p.aspx>

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

# PE-W90TF006-12 CAD Drawing

WR-90 Twistable Flexible Waveguide 12 Inch, CPR-90G  
Flange Operating From 8.2 GHz to 12.4 GHz

CPR 90G	Dimension	Inches	mm
	A	0.400	10.16
	B	0.900	22.86
	C	2.092	53.14
	D	1.652	41.96
	E	0.624	15.85
	F	1.592	40.44
	G	0.626	15.90
	H	1.152	29.26



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-W90TF006-12**

FSCM NO. 53919  
CAD FILE 100115  
SCALE N/A  
SIZE A  
2233

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