

**WR-90 Twistable Flexible Waveguide Using CPR-90G Flange With a 8.2 GHz to 12.4 GHz Frequency Range**

The SMW90TF006-36 is one of Fairview Microwave's flexible, twistable sections which operates in the 8.2 to 12.4 GHz range. It can be twisted and/or bent in both the E and H planes without impairing VSWR or attenuation because of its silver coated helically wound brass body construction. The twistable section is covered in a neoprene jacket which allows the section to be pressurized as well as protecting the waveguide's integrity.

**Electrical Specifications**

Description	Min	Typ	Max	Units
Frequency Range	8.2		12.4	GHz
VSWR		1.07:1		
Insertion Loss		0.45		dB

**Mechanical Specifications**

Waveguide Size	WR-90
Waveguide Design	Twistable
Section Length	36 in [914.4 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

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

**Compliance Certifications** (visit [www.FairviewMicrowave.com](http://www.FairviewMicrowave.com) for current document)

RoHS Compliant	Yes
REACH Compliant	12/17/2015

**Plotted and Other Data**

- Notes:
- Notes, Plotted Data



**Features:**

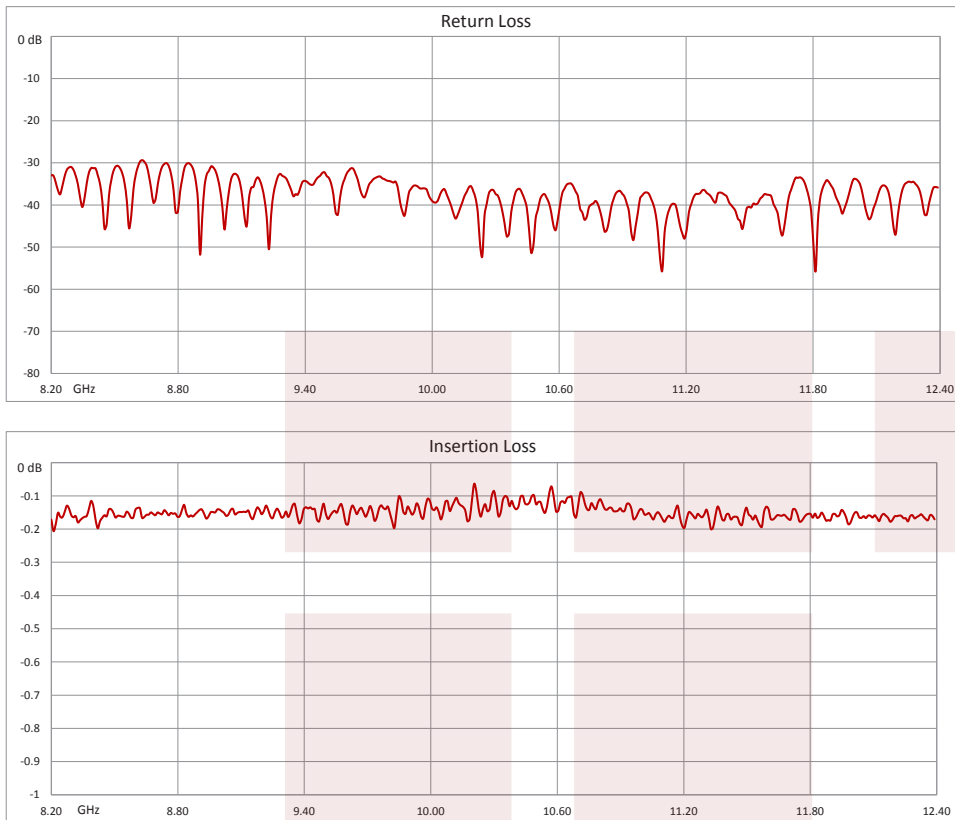
- Twistable/Flexible in both the E and H plane
- Neoprene Jacket allows pressurization
- 8.2 GHz to 12.4 GHz Range
- Brass flanges with a silver plated brass body

**Applications:**

- Test Benches
- Microwave Radio
- Pressurized waveguide systems
- Provides vibration isolation
- Easily connects misaligned sections.
- Relieves mechanical stresses caused by thermal expansion/contraction.

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**Typical Performance Data**

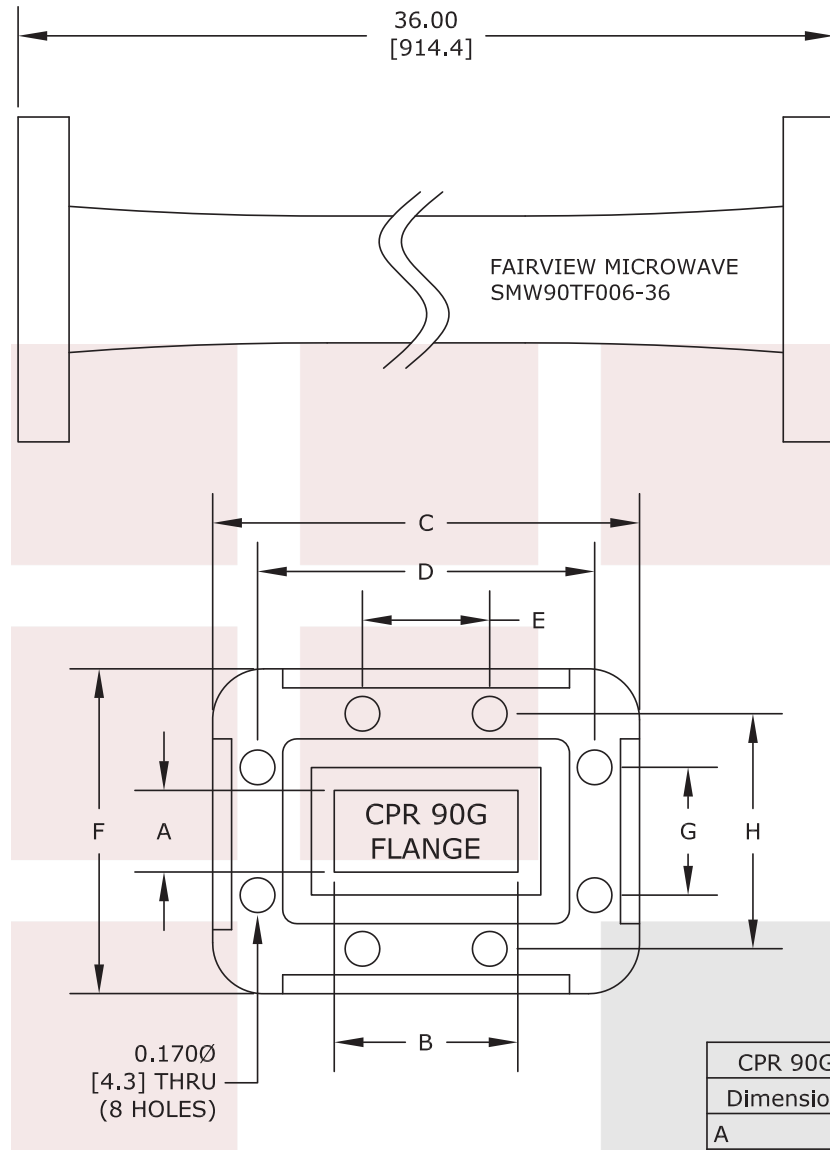


WR-90 Twistable Flexible Waveguide Using CPR-90G Flange With a 8.2 GHz to 12.4 GHz Frequency Range from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [WR-90 Twistable Flexible Waveguide Using CPR-90G Flange With a 8.2 GHz to 12.4 GHz Frequency Range SMW90TF006-36](https://www.fairviewmicrowave.com/wr-90-twistable-flexible-waveguide-cpr-90g-8.2-12.4-ghz-smw90tf006-36-p.aspx)

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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. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.



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

<b>FAIRVIEW MICROWAVE INC.</b> ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM		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].			
TITLE WR-90 Twistable Flexible Waveguide Using CPR-90G Flange With a 8.2 GHz to 12.4 GHz Frequency Range		DWG NO SMW90TF006-36		CAGE CODE 3FKR5	
CAD FILE	100515	SHEET	SCALE	N/A	SIZE A 2233