

## WR-90 Twistable Flexible Waveguide in 12 Inch Using CPRF Flange with a 8.2 to 12.4 GHz Frequency Range



### FM-W90TF008-12

#### 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 brass body
- 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
- Provides vibration isolation

#### Description

The FM-W90TF008-12 is part of Fairview Microwave'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 and provides mechanical support

#### Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	8.2		12.4	GHz
VSWR		1.1:1		
Insertion Loss		0.15		dB
Input Power			960	Watts

Electrical Specification Notes:  
VSWR is per 2 foot.  
Insertion Loss is dB per foot.

#### 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]
H-Plane Minimum Bend Radius, One Time	5 in [127 mm]

Description	Flange 1	Waveguide	Flange 2
Type		WR-90	
Designation	CPRF		CPRF
Material	Brass	Brass	Brass

<b>Temperature</b> Operating Range	-50 to 100 deg C
---------------------------------------	------------------

## WR-90 Twistable Flexible Waveguide in 12 Inch Using CPRF Flange with a 8.2 to 12.4 GHz Frequency Range



### FM-W90TF008-12

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

#### Plotted and Other Data

Notes:

- Notes, Plotted Data

#### Typical Performance Data

WR-90 Twistable Flexible Waveguide in 12 Inch Using CPRF Flange with a 8.2 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 Lewisville, Texas. Fairview Microwave is RF on-demand.

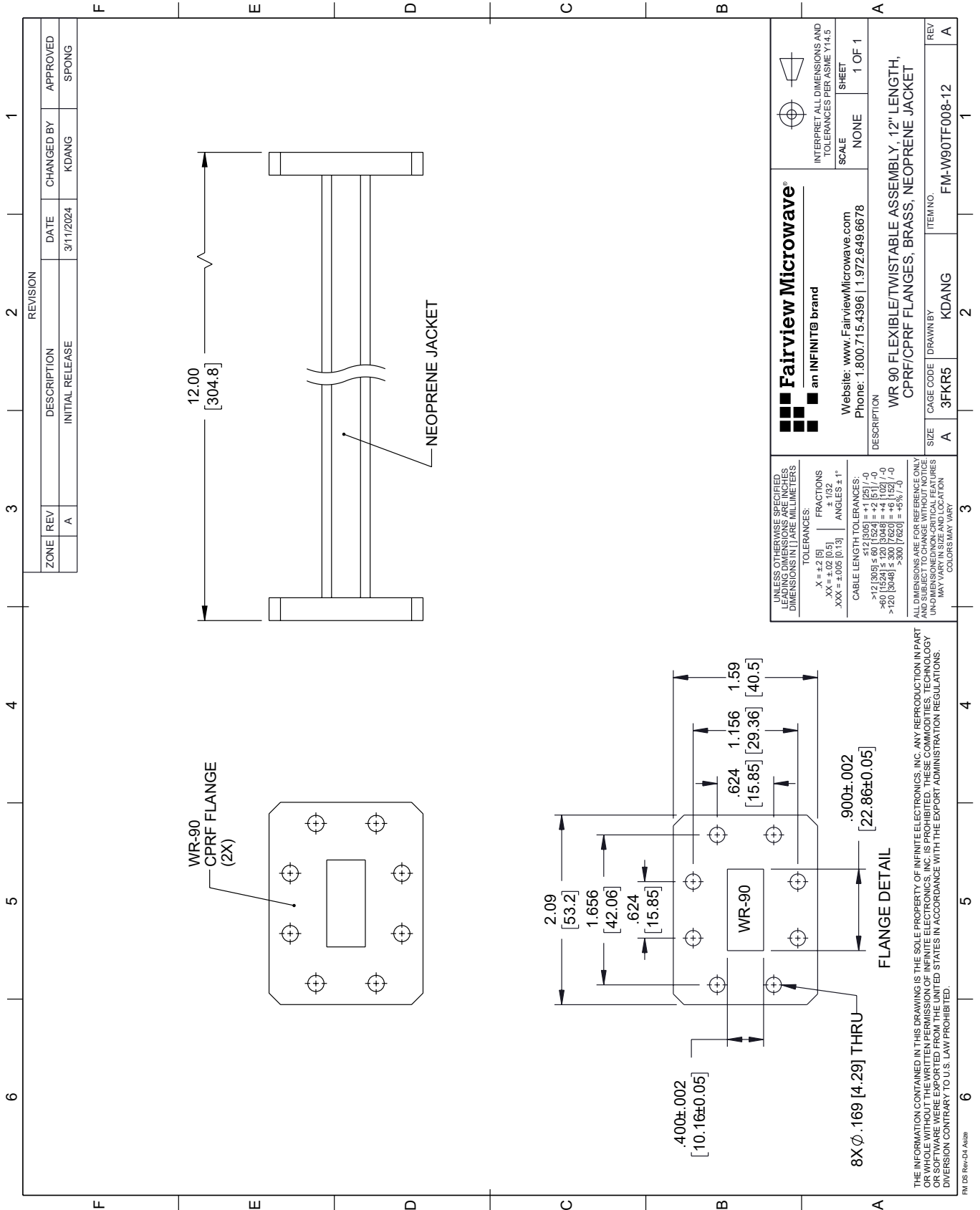
For additional information on this product, please click the following link: [WR-90 Twistable Flexible Waveguide in 12 Inch Using CPRF Flange with a 8.2 to 12.4 GHz Frequency Range FM-W90TF008-12](#)

URL: <https://www.fairviewmicrowave.com/wr-90-twistable-flexible-waveguide-cprf-8.2-12.4-ghz-fm-w90tf008-12-p.aspx>

The information contained within 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 liability arising out of the use of any part or document.

# FM-W90TF008-12 CAD Drawing

WR-90 Twistable Flexible Waveguide in 12 Inch Using CPRF Flange with a 8.2 to 12.4 GHz Frequency Range



THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF INFINITE ELECTRONICS, INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF INFINITE ELECTRONICS, INC. IS PROHIBITED. THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.

FM DS Rev-D4 A424