



WR-90 Twistable Flexible Waveguide in 24 Inch Using CPRF Flange with a 8.2 to 12.4 GHz Frequency Range

FM-W90TF008-24

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-W90TF008-24 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	24 in [609.6 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

Temperature Operating Range	-50 to 100 deg C
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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 24 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.

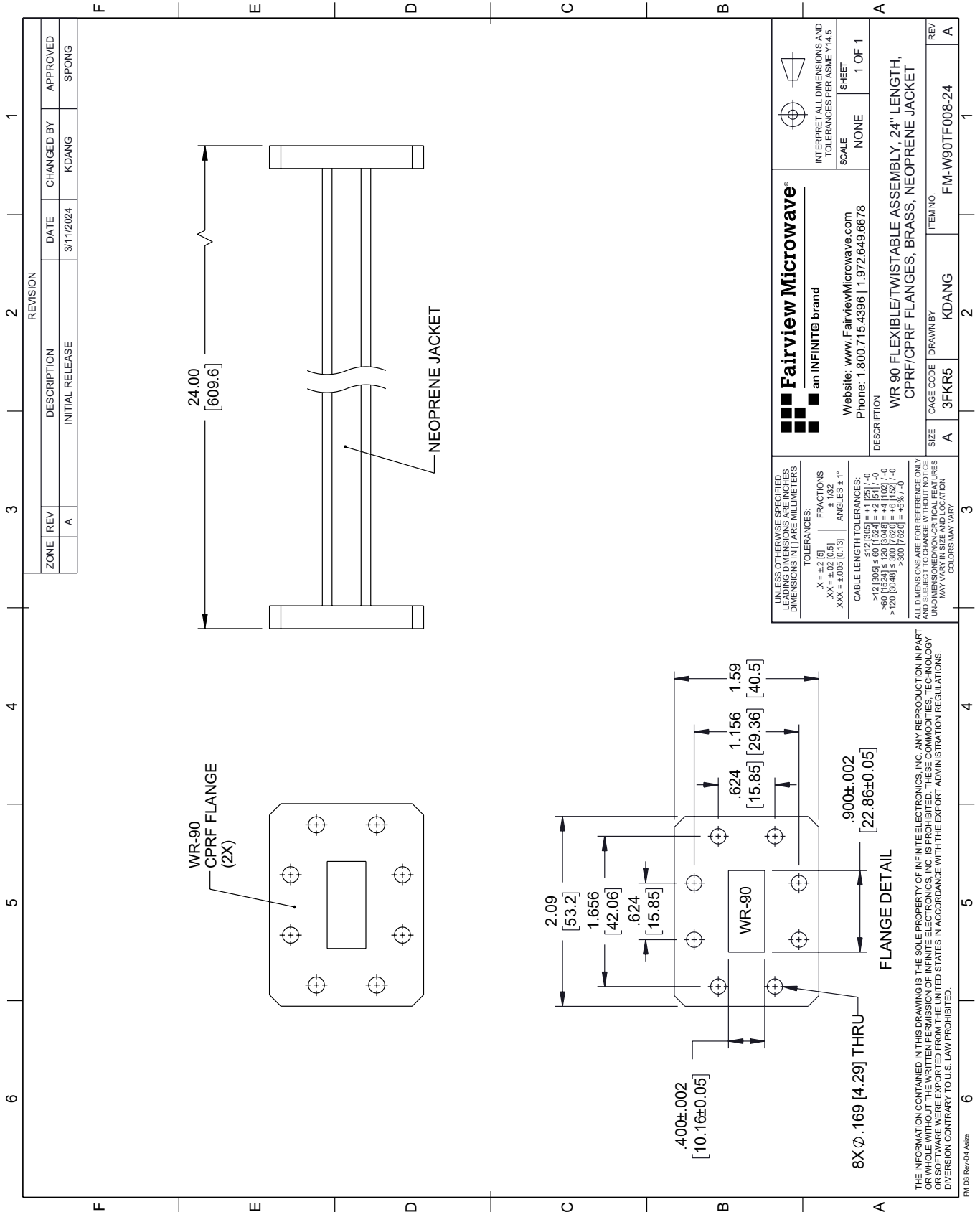
For additional information on this product, please click the following link: [WR-90 Twistable Flexible Waveguide in 24 Inch Using CPRF Flange with a 8.2 to 12.4 GHz Frequency Range FM-W90TF008-24](#)

URL: <https://www.fairviewmicrowave.com/wr-90-twistable-flexible-waveguide-cprf-8.2-12.4-ghz-fm-w90tf008-24-p.aspx>

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FM-W90TF008-24 CAD Drawing

WR-90 Twistable Flexible Waveguide in 24 Inch Using CPRF Flange with a 8.2 to 12.4 GHz Frequency Range



REVISION		DATE	CHANGED BY	APPROVED	
ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	3/11/2024	KDANG	SPONG

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SCALE: NONE
SHEET: 1 OF 1

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

DESCRIPTION: WR 90 FLEXIBLE/TWISTABLE ASSEMBLY, 24" LENGTH, CPRF/CPRF FLANGES, BRASS, NEOPRENE JACKET

SIZE: A
CAGE CODE: 3FKR5
DRAWN BY: KDANG
ITEM NO.: FM-W90TF008-24

REV: A

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES, DIMENSIONS IN [] ARE MILLIMETERS.

TOLERANCES:
X = ±.2 (5) FRACTIONS ± 1/32
.XX = ±.02 (0.5) ANGLES ± 1°
.XXX = ±.005 (0.13)

CABLE LENGTH TOLERANCES:
≤ 12 (305) ± .60 (1524) = +2 (51) / -0
> 12 (305) ≤ 60 (1524) = +4 (102) / -0
> 60 (1524) ≤ 120 (3048) = +4 (102) / -0
> 120 (3048) ≤ 300 (7620) = +5 (127) / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED/NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.

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FM DS Rev-D4 Alt2b