

WR-34 Waveguide Rotary Joint, UG Cover Flanges, L-Style in Brass

Description

Waveguide rotary joints are used to connect waveguide components which need to rotate or change orientation during operation within a waveguide system. Designed to perform in harsh operating environment, FMW34RJ001 from Fairview is a WR-34 waveguide rotary joint that operates in the frequency range of 29.4 GHz to 31 GHz. This WR-34 waveguide rotary joint has a Max VSWR of 1.25:1. This waveguide rotary joint is made of painted brass and incorporates UG Cover/UG Cover flange interface with maximum rotary speed of 30 RPM and minimum life time of 500×10^4 Revolutions. Waveguide rotary joints are part of Fairview's comprehensive waveguide product offerings which are available in stock and ready for same-day shipment.

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	29.4		31	GHz
VSWR			1.25:1	
VSWR 1, Rotational Variance			0.05	
Insertion Loss			0.35	dB
Input Power (CW)			100	Watts
Peak Power			500	Watts
Insertion Loss Rotational Variance			0.05	dB
Phase Rotational Variance			3	Degrees

Mechanical Specifications

Temperature

Operating Temperature	-40 to 70 °C
Storage Temperature	-55 to 85 °C
Humidity	85% (Max)

Interface

Waveguide Size	WR-34
Flange Type 1	UG Cover
Flange Type 2	UG Cover
Body Material and Plating	Brass, Paint
Rotating Speed	30 RPM
Lifetime	500×10^4 Revolutions
Starting Torque	1.77 in-lbs [0.2 Nm]
Torque During Rotation	0.88 in-lbs [0.1 Nm]
IP Protection Level	IP54



Features:

- WR-34 Waveguide
- Operating Frequency Range from 29.4 GHz to 31 GHz
- UG Cover/UG Cover Flanges
- L-Style Configuration
- 1.25:1 Max VSWR
- 100 Watts (CW) Max Power Handling
- Insertion loss(Max): 0.35 dB
- Rotating Speed (Max): 30 RPM
- Lifetime (Min): 500×10^4 Revolutions

Applications:

- Radar Systems
- Military and Space
- Wireless Radio Systems
- Communication Systems
- R&D Labs
- Maritime Waveguide Systems

Fairview Microwave
 301 Leora Ln., Suite 100
 Lewisville, TX 75056
 Tel: 1-800-715-4396 / (972) 649-6678
 Fax: (972) 649-6689
www.fairviewmicrowave.com
sales@fairviewmicrowave.com

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

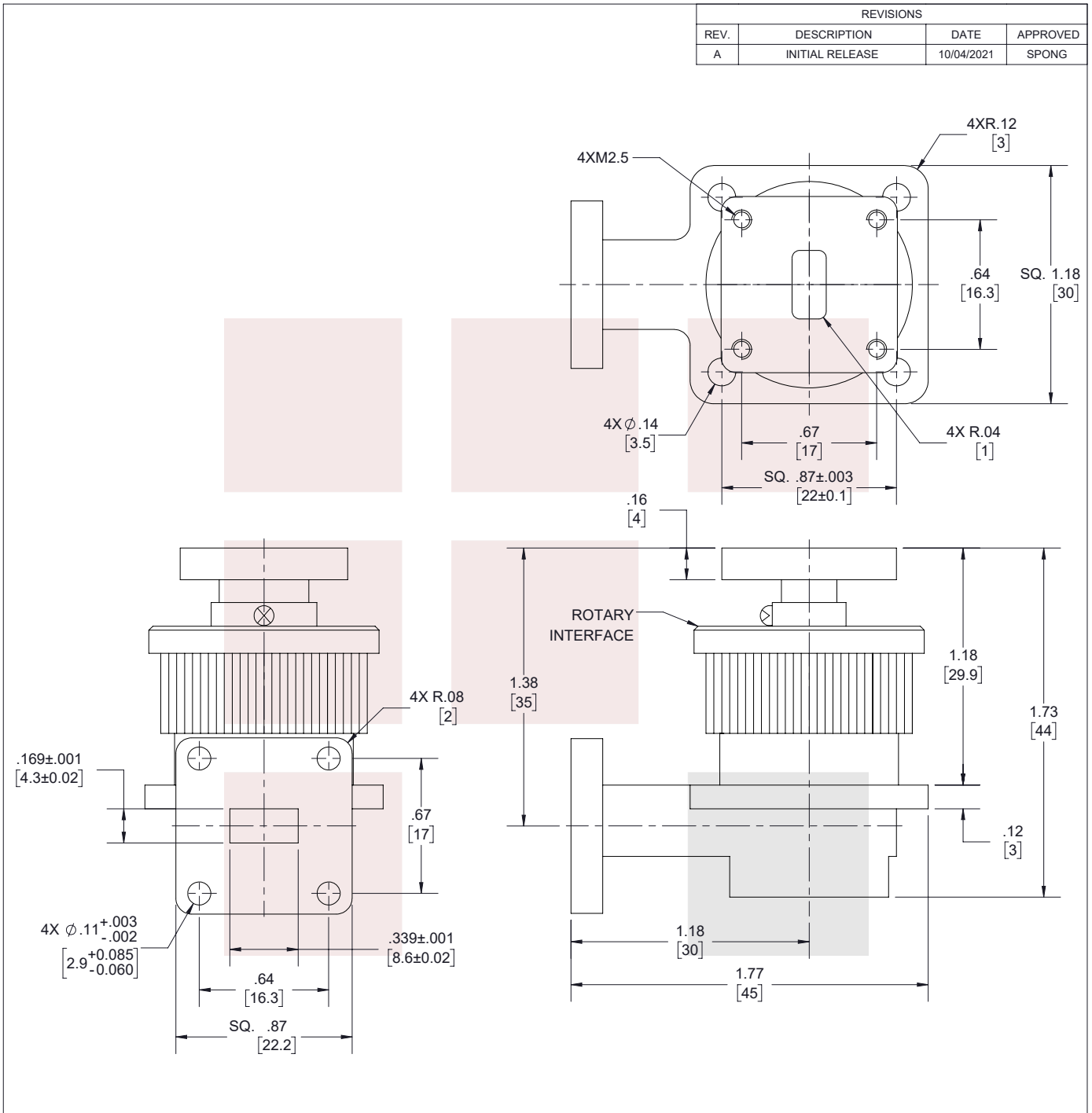
Plotted and Other Data

WR-34 Waveguide Rotary Joint, UG Cover Flanges, L-Style in Brass 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-34 Waveguide Rotary Joint, UG Cover Flanges, L-Style in Brass FMW34RJ0001](#)

URL: <https://www.fairviewmicrowave.com/undefined-url-for-pn-fmw34rj0001-fmw34rj0001-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. 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.



REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	10/04/2021	SPONG

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.

<p>Fairview Microwave an INFINIT[®] brand</p>	<p>UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS</p> <p>TOLERANCES:</p> <table border="0"> <tr> <td>X = ± 2 [5.08]</td> <td>FRACTIONS ± 1/32</td> <td rowspan="4"> <p>CABLE LENGTH (L) TOLERANCES:</p> <p>L ≤ 12 [305] = +1 [25] / -0</p> <p>12 [305] < L ≤ 60 [1524] = +2 [51] / -0</p> <p>60 [1524] < L ≤ 120 [3048] = +4 [102] / -0</p> <p>120 [3048] < L ≤ 300 [7620] = +6 [152] / -0</p> <p>300 [7620] < L = +5%L / -0</p> </td> </tr> <tr> <td>.XX = ± 02 [.51]</td> <td>ANGLES ± 1°</td> </tr> <tr> <td>.XXX = ± .005 [.13]</td> <td></td> </tr> <tr> <td></td> <td></td> </tr> </table>		X = ± 2 [5.08]	FRACTIONS ± 1/32	<p>CABLE LENGTH (L) TOLERANCES:</p> <p>L ≤ 12 [305] = +1 [25] / -0</p> <p>12 [305] < L ≤ 60 [1524] = +2 [51] / -0</p> <p>60 [1524] < L ≤ 120 [3048] = +4 [102] / -0</p> <p>120 [3048] < L ≤ 300 [7620] = +6 [152] / -0</p> <p>300 [7620] < L = +5%L / -0</p>	.XX = ± 02 [.51]	ANGLES ± 1°	.XXX = ± .005 [.13]				<p>THIRD-ANGLE PROJECTION</p> <p>THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF FAIRVIEW MICROWAVE CORPORATION. ALL RIGHTS RESERVED.</p>	
	X = ± 2 [5.08]	FRACTIONS ± 1/32	<p>CABLE LENGTH (L) TOLERANCES:</p> <p>L ≤ 12 [305] = +1 [25] / -0</p> <p>12 [305] < L ≤ 60 [1524] = +2 [51] / -0</p> <p>60 [1524] < L ≤ 120 [3048] = +4 [102] / -0</p> <p>120 [3048] < L ≤ 300 [7620] = +6 [152] / -0</p> <p>300 [7620] < L = +5%L / -0</p>										
.XX = ± 02 [.51]	ANGLES ± 1°												
.XXX = ± .005 [.13]													
<p>TITLE</p> <p>WR-34 Waveguide Rotary Joint, UG Cover Flanges, L-Style in Brass</p>	<p>ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.</p> <table border="1"> <tr> <td>SIZE</td> <td>CAGE CODE</td> <td>DRAWN BY</td> <td>ITEM NO.</td> <td>REV</td> </tr> <tr> <td>A</td> <td>3FKR5</td> <td>MVEERAPPAN</td> <td>FMW34RJ0001</td> <td>A</td> </tr> </table>		SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV	A	3FKR5	MVEERAPPAN	FMW34RJ0001	A	<p>SHEET 1 OF 1</p> <p>SCALE N/A</p>
SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV									
A	3FKR5	MVEERAPPAN	FMW34RJ0001	A									

T-Rev.D