# PASTERNACK
## an INFINITe brand

## WR-75 Waveguide Rotary Joint, UG Cover Flanges, U-Style in Brass



| TECHNICAL DATA SHEET | PEW75RJ0001 |

## Features

- WR-75 Waveguide
- Operating Frequency Range from 13.75 GHz to 14.5 GHz
- UG Cover/UG Cover Flanges
- U-Style Configuration
- 1.2:1 Max VSWR
- 100 Watts (CW) Max Power Handling
- Insertion loss(Max): 0.3 dB
- Rotating Speed (Max): 30 RPM
- Lifetime (Min): 500 x 10^4 Revolutions

## Applications

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

## 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, PEW75RJ001 from Pasternack is a WR-75 waveguide rotary joint that operates in the frequency range of 13.75 GHz to 14.5 GHz. This WR-75 waveguide rotary joint has a Max VSWR of 1.2:1. 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 x 10^4 Revolutions. Waveguide rotary joints are part of Pasternack's comprehensive waveguide product offerings which are available in stock and ready for same-day shipment.

## Electrical Specifications (Values at 25°C, sea level)

| Description | Minimum | Typical | Maximum | Units |
|---|---|---|---|---|
| Frequency Range | 13.75 | | 14.5 | GHz |
| VSWR | | | 1.2:1 | |
| VSWR 1, Rotational Variance | | | 0.05 | |
| Insertion Loss | | | 0.3 | dB |
| Input Power (CW) | | | 100 | Watts |
| Peak Power | | | 1 | kWatts |
| Insertion Loss Rotational Variance | | | 0.05 | dB |
| Phase Rotational Variance | | | 2 | Degrees |

## Mechanical Specifications

| Description | Minimum | Typical | Maximum | Units |
|---|---|---|---|---|
| **Temperature** | | | | |
| Operating Temperature | | -40 to 70 ºC | | |
| Storage Temperature | | -55 to 85 ºC | | |
| Humidity | | 85% (Max) | | |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: WR-75 Waveguide Rotary Joint, UG Cover Flanges, U-Style in Brass PEW75RJ0001

## WR-75 Waveguide Rotary Joint, UG Cover Flanges, U-Style in Brass

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|---|---|

**Size**

| Weight | 0.0622 lbs [28.21 g] |
|---|---|

**Interface**

| Waveguide Size | WR-75 |
|---|---|
| Flange Type 1 | UG Cover |
| Flange Type 2 | UG Cover |
| Body Material and Plating | Brass, Paint |
| Rotating Speed | 30 RPM |
| Lifetime | 500 x 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 |

**Compliance Certifications** (see product page for current document)

**Plotted and Other Data**

WR-75 Waveguide Rotary Joint, UG Cover Flanges, U-Style in Brass 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-75 Waveguide Rotary Joint, UG Cover Flanges, U-Style in Brass PEW75RJ0001

URL: https://www.pasternack.com/pew75rj0001-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.

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# PEW75RJ0001 CAD Drawing
## WR-75 Waveguide Rotary Joint, UG Cover Flanges, U-Style in Brass



**REVISIONS**

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

SQ. 1.18 [30.0]
SQ. .89±.004 [22.5±0.1]
4X M4x0.7
1.85 [47.0]
2.20 [56.0]

Rotary Interface
3.05 [77.5]
2.81 [71.5]
1.77±.004 [45±0.1]
1.73±.01 [44±0.2]
.20 [5.0]

4X ∅.16 +.004/+.003 [4 +0.10/+0.07]
4X R.12 [3.0]
SQ. 1.50 [38.0]
1.04 [26.42]
.38±.001 [9.525±0.038]
.75±.001 [19.05±0.038]
1.12 [28.5]

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| CAGE CODE | DRAWN BY | ITEM NO. |
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SHEET 1 OF 1
SCALE N/A
REV A
SIZE A

T-Rev.D