



WR-42 Flexible Waveguide Twist With a UG-595/U
Flange Operating From 18 GHz to 26.5 GHz

Waveguide Twists Technical Data Sheet

PE-W42TF005-12

Features

- Twelve inch long WR-42 waveguide
- Twistable
- Flexes in both the E and H plane
- Neoprene sleeve allows pressurization
- 18 GHz to 26.5 GHz Frequency Range
- Brass flanges with a silver plated brass body

Applications

- Simplifies positioning parabolic reflectors for line of sight microwave radio links.
- Test Benches
- Eliminates installation problems caused by misalignment.
- Allows expansion/contraction due to thermal issues.
- Pressurized waveguide systems
- Provides vibration isolation
- Microwave Radio

Description

The PE-W42TF005-12 is part of Pasternack's family of flexible, twistable waveguides which operates in the 18 to 26.5 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, provides mechanical support and allows the waveguide to be pressurized.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	18		26.5	GHz
VSWR		1.3:1		
Insertion Loss		0.35		dB

Mechanical Specifications

Waveguide Size	WR-42
Waveguide Design	Twistable
Section Length	12 in [304.8 mm]
E-Plane Minimum Bend Radius, One Time	1.5 in [38.1 mm]
E-Plane Minimum Bend Radius, Repeated	6 in [152.4 mm]
H-Plane Minimum Bend Radius, One Time	3 in [76.2 mm]
H-Plane Minimum Bend Radius, Repeated	12 in [304.8 mm]
Maximum Offset Rotation, One Time	155 degrees/ft
Maximum Offset Rotation, Repeated	45 degrees/ft
Maximum Operating Pressure	45 psig

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-42 Flexible Waveguide Twist With a UG-595/U Flange Operating From 18 GHz to 26.5 GHz PE-W42TF005-12](#)



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Description	Flange 1	Waveguide	Flange 2
Interface	UG-595/U	WR-42	UG-595/U
Material	Brass	Brass	Brass
Plating		Silver	
Color	Gold	Black	Gold

Environmental Specifications

Compliance Certifications (visit www.Pasternack.com for current document)

RoHS Compliant

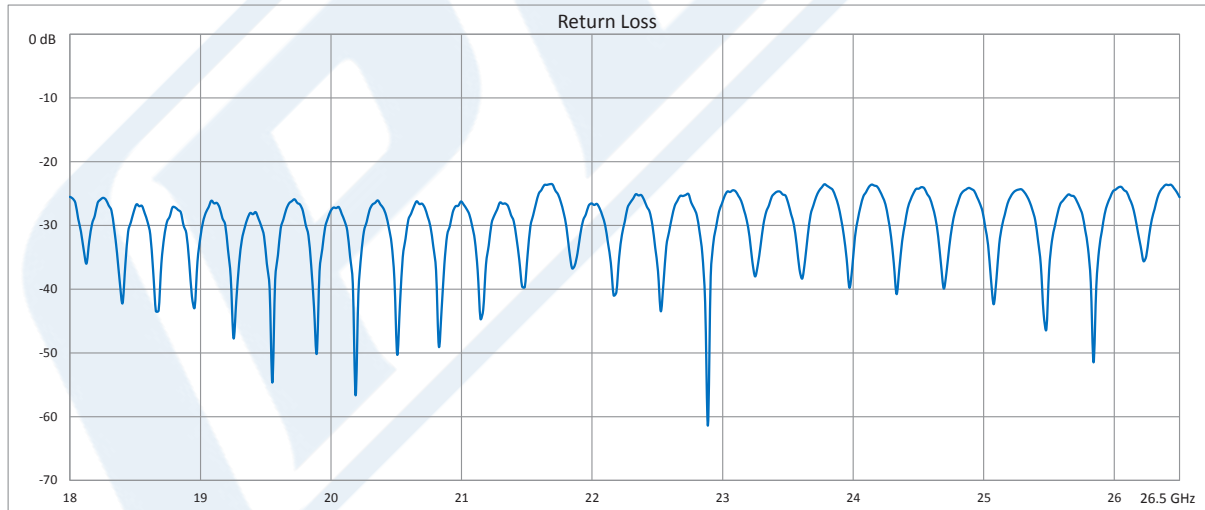
REACH Compliant

12/17/2014

Plotted and Other Data

Notes:

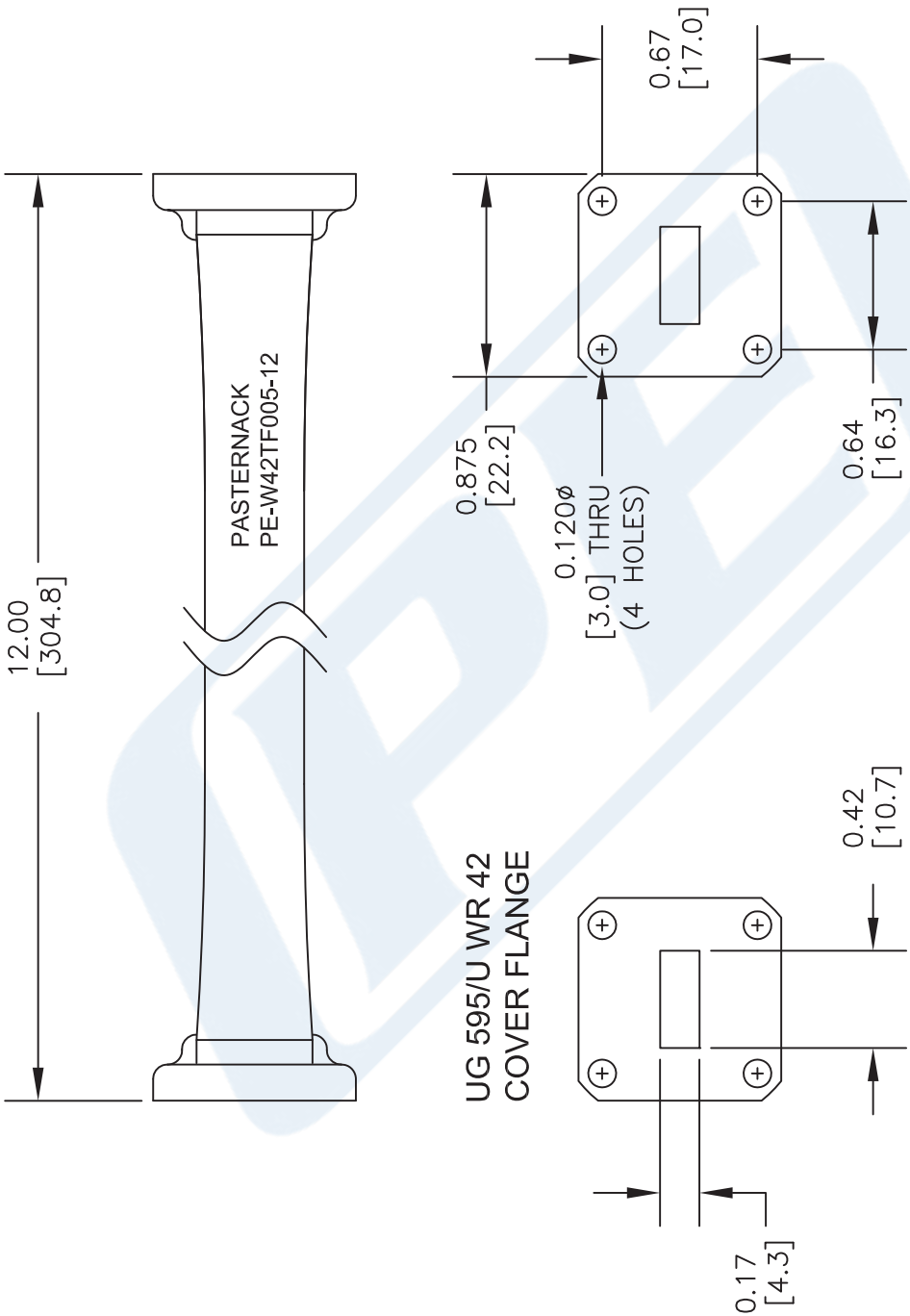
Typical Performance Data



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PE-W42TF005-12 CAD Drawing

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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].

DWG TITLE
PE-W42TF005-12

FSCM NO. 53919

CAD FILE 092815

SCALE N/A

SIZE A

2233

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