



WR-90 Waveguide 40 dB Crossguide Coupler, UG Cover Flange,  
N Female Coupled Port, 8.2 GHz to 12.5 GHz, Aluminum

## Waveguide Couplers Technical Data Sheet

**PEWCP1084N-40**

The PEWCP1084N-40 is a 40 dB WR-90 three port crossguide coupler with integrated N Female connector for the coupled port. This coupler can be mounted directly into the waveguide signal path, connected via coax to allow signal sampling /monitoring. The coupler has a typical VSWR of 1.1:1 and are made of Aluminum with UG Cover flanges. The PEWCP1084N-40 is part of a family of cross guide couplers offered by Pasternack with coupling values ranging from 20 to 50 dB.

### Features

- Three Port Crossguide Waveguide Coupler
- 40±1.5 dB Nominal Coupling Level
- Integrated N Female Connector for the coupled port
- 8.2 GHz to 12.5 GHz Frequency Range
- Low VSWR < 1.25:1

### Applications

- Test Benches
- Radar
- Satellite
- Microwave Radio
- Attenuation Measurements
- Power Measurements
- Source Leveling

### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	8.2		12.5	GHz
<b>Coupler</b>				
Nominal Coupling Level		40		dB
Coupling Accuracy			±1.5	dB
Directivity	18			dB
Insertion Loss		0.1		dB
Main Line VSWR			1.1:1	
Secondary Line VSWR			1.25:1	
Input Power (CW)			600	Watts
Input Power, Peak			200	kWatts

### Mechanical Specifications

#### Size

Length	3.346 in [84.99 mm]
Width	2.756 in [70 mm]
Height	2.45 in [62.23 mm]
Weight	0.441 lbs [200.03 g]

#### Interface

Waveguide Size	WR-90
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Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-90 Waveguide 40 dB Crossguide Coupler, UG Cover Flange, N Female Coupled Port, 8.2 GHz to 12.5 GHz, Aluminum PEWCP1084N-40](#)



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Flange Type	UG Cover
RF Connector Type	N Female
Coupler Body Material and Plating	Aluminum, Chromate

### Environmental Specifications

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

### Plotted and Other Data

Notes:

WR-90 Waveguide 40 dB Crossguide Coupler, UG Cover Flange, N Female Coupled Port, 8.2 GHz to 12.5 GHz, Aluminum 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-90 Waveguide 40 dB Crossguide Coupler, UG Cover Flange, N Female Coupled Port, 8.2 GHz to 12.5 GHz, Aluminum PEWCP1084N-40](#)

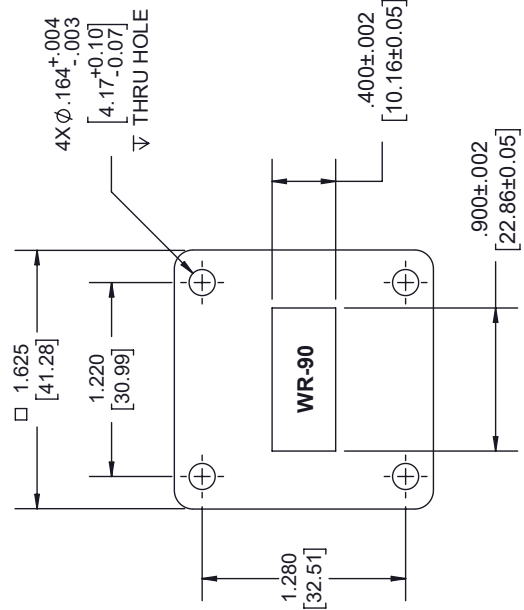
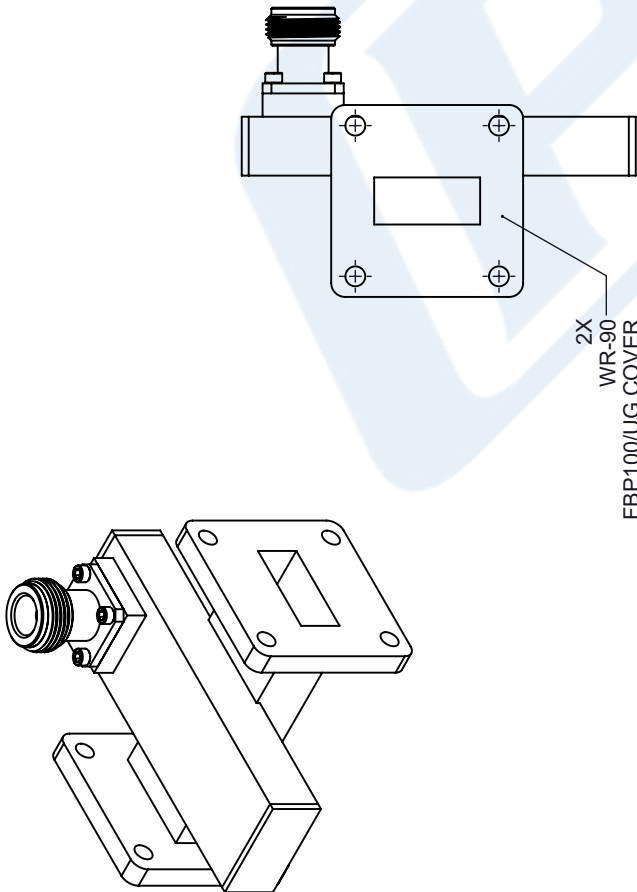
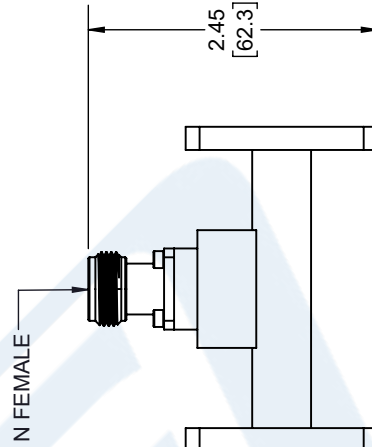
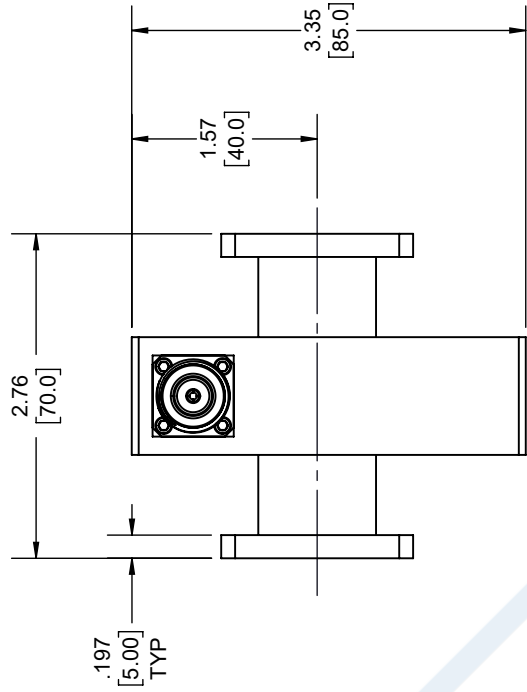
URL: <https://www.pasternack.com/40-db-wr-90-waveguide-crossguide-coupler-pewcp1084N-40-p.aspx>

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# PEWCP1084N-40 CAD Drawing

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	7/7/2022	S. PONG



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

TOLERANCES:  
 .X = ± .2 [5.08] FRACTIONS ± 1/32  
 .XX = ± .02 [ .51] ANGLES ± 1°  
 .XXX = ± .005 [ .13]  
 CABLE LENGTH (L), TOLERANCES:  
 L ≤ 12 [305] = +1 [25] / -0  
 12 [305] < L ≤ 60 [1524] = +2 [51] / -0  
 60 [1524] < L ≤ 120 [3048] = +4 [102] / -0  
 120 [3048] < L ≤ 300 [7620] = +6 [152] / -0  
 300 [7620] < L = +5% / -0

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

REV A

ITEM NO. PEWCP1084N-40

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