

WR-90 Waveguide 20 dB Crossguide Coupler, UG Cover
Flange, N Female Coupled Port, 9 GHz to 10 GHz, Aluminum

Waveguide Couplers Technical Data Sheet

PEWCP1084-20

The PEWCP1084-20 is a 20 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 PEWCP1084-20 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
- 20±0.7 dB Nominal Coupling Level
- Integrated N Female Connector for the coupled port
- 9 GHz to 10 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	9		10	GHz
Coupler				
Nominal Coupling Level		20		dB
Coupling Accuracy			±0.7	dB
Directivity	20			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			50	kWatts

Mechanical Specifications

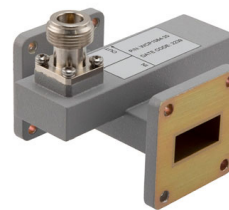
Size

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 20 dB Crossguide Coupler, UG Cover Flange, N Female Coupled Port, 9 GHz to 10 GHz, Aluminum PEWCP1084-20](#)



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Flange Type
RF Connector Type

UG Cover
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 20 dB Crossguide Coupler, UG Cover Flange, N Female Coupled Port, 9 GHz to 10 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 20 dB Crossguide Coupler, UG Cover Flange, N Female Coupled Port, 9 GHz to 10 GHz, Aluminum PEWCP1084-20](#)

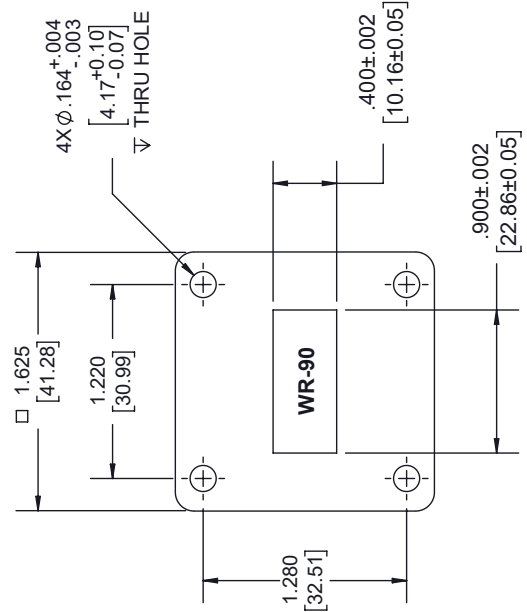
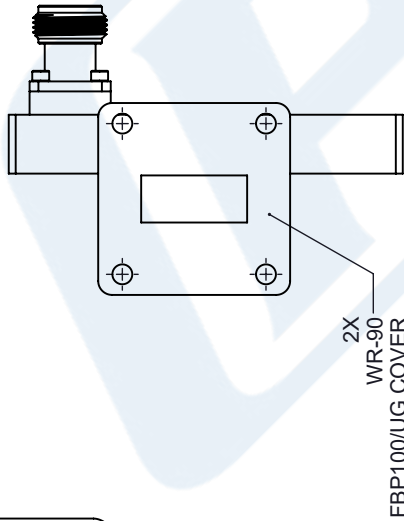
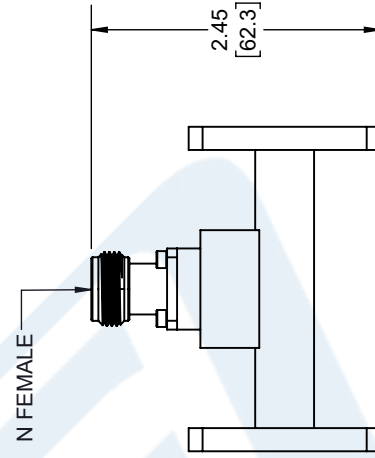
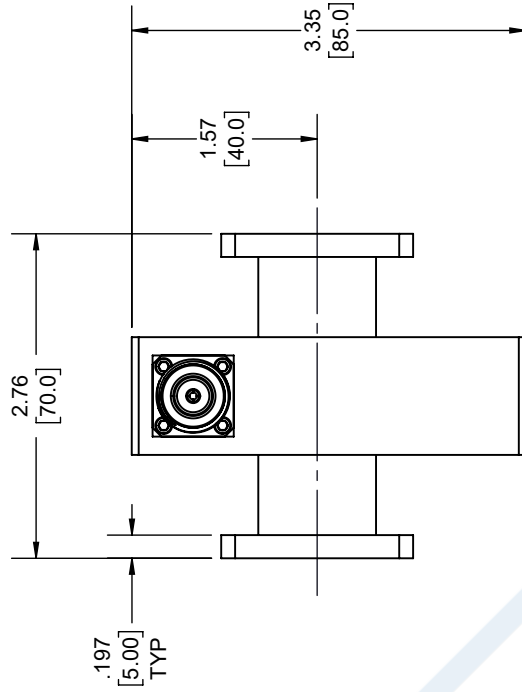
URL: <https://www.pasternack.com/20-db-wr-90-waveguide-crossguide-coupler-pewcp1084-20-p.aspx>

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.

PEWCP1084-20 CAD Drawing

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



FLANGE DETAIL

UNLESS OTHERWISE SPECIFIED
LEADING DIMENSIONS ARE IN 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.

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an INFINITE brand

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SHEET 1 OF 1

SCALE N/A

REV A

ITEM NO. PEWCP1084-20

DRAWN BY K.DANG

CAGE CODE 53919