

20 dB WR-28 Waveguide Crossguide 3 Port Coupler with UG Cover Flange from 29 GHz to 31 GHz in Brass

The FMWCP1089-20 is a 20 dB WR-28 three port crossguide coupler with integrated UG Cover Flange for the coupled port. This coupler can be mounted directly into the waveguide signal path, connected via waveguide to allow signal sampling /monitoring. The coupler has a typical VSWR of 1.1:1 and are made of Brass with UG Cover flanges. The FMWCP1089-20 is part of a family of cross guide couplers offered by Fairview Microwave with coupling values ranging from 20 to 50 dB.



Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	29		31	GHz
Coupler				
Nominal Coupling Level		20		dB
Coupling Accuracy			±0.7	dB
Directivity	18			dB
Insertion Loss		0.2		dB
Main Line VSWR			1.1:1	
Secondary Line VSWR			1.25:1	
Input Power (CW)			200	Watts
Input Power Peak			20	kWatts

Mechanical Specifications

Size	
Length	1.969 in [50.01 mm]
Width	1.654 in [42.01 mm]
Height	0.95 in [24.13 mm]
Weight	0.11 lbs [49.9 g]
Interface	
Waveguide Size	WR-28
Flange Type	UG Cover
Coupler Body Material and Plating	Brass Copper, Gold

Environmental Specifications

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

Plotted and Other Data

Notes:

Features:

- Three Port Crossguide Waveguide Coupler
- 20±0.7 dB Nominal Coupling Level
- 29 GHz to 31 GHz Frequency Range
- Low VSWR < 1.25:1

Applications:

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

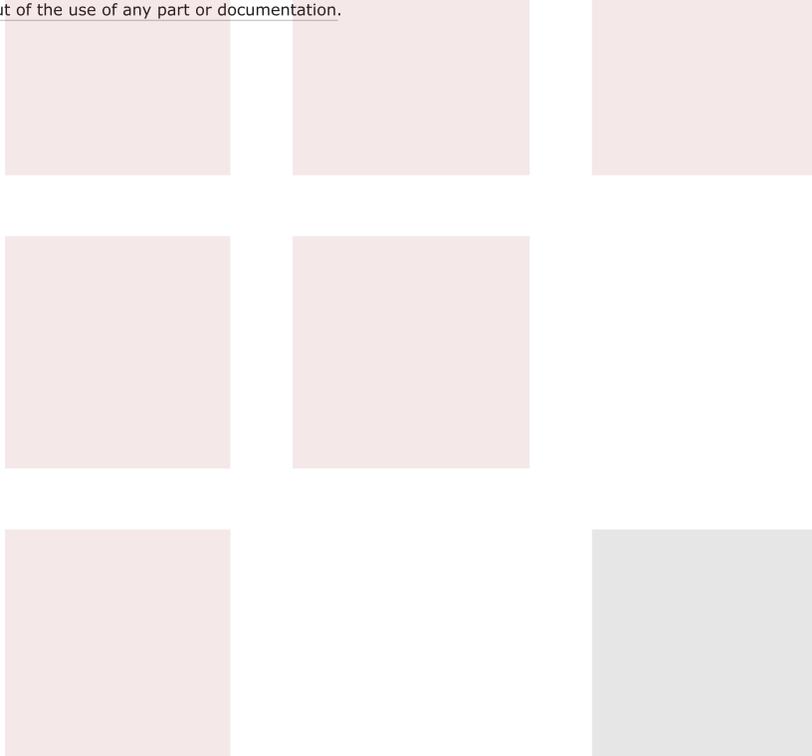
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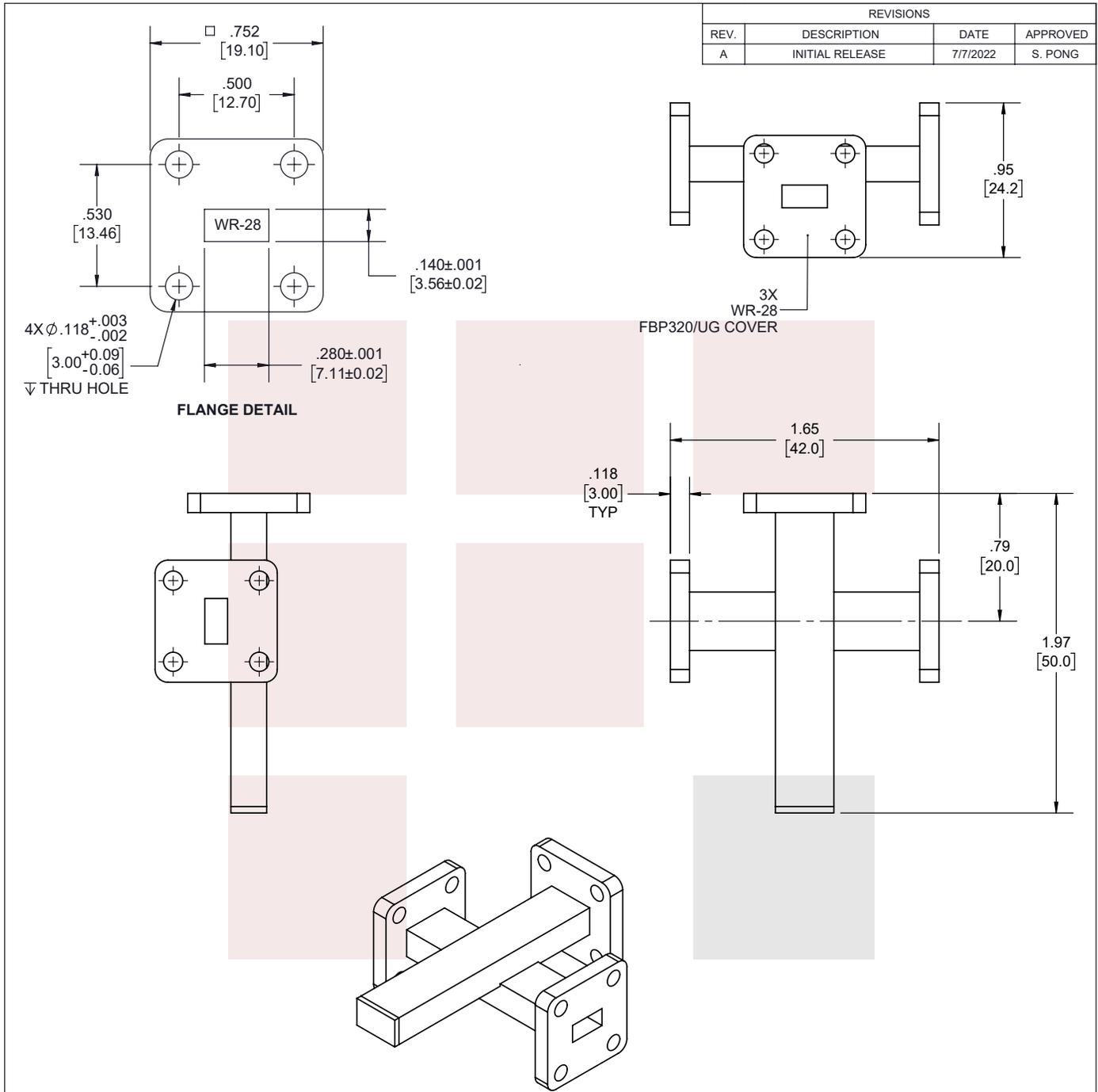
20 dB WR-28 Waveguide Crossguide 3 Port Coupler with UG Cover Flange from 29 GHz to 31 GHz in Brass from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [20 dB WR-28 Waveguide Crossguide 3 Port Coupler with UG Cover Flange from 29 GHz to 31 GHz in Brass FMWCP1089-20](#)

URL: <https://www.fairviewmicrowave.com/20-db-wr-28-waveguide-crossguide-coupler-fmwcp1089-20-p.aspx>

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

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	TOLERANCES:		CABLE LENGTH (L) TOLERANCES:		
.X = ± 2 [.08] FRACTIONS ± 1/32 .XX = ± .02 [.51] ANGLES ± 1° .XXX = ± .005 [.13]		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%L / -0		THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF FAIRVIEW MICROWAVE CORPORATION. ALL RIGHTS RESERVED.	
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