

30 dB WR-28 Waveguide Crossguide 3 Port Coupler with UG Cover Flange from 26.5 GHz to 40 GHz in Brass

The FMWCP1089-30 is a 30 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 FMWCP1089-30 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 | 26.5 | | 40 | GHz |
| Coupler | | | | |
| Nominal Coupling Level | | 30 | | dB |
| Coupling Accuracy | | | ±1.5 | dB |
| Directivity | 15 | | | dB |
| Insertion Loss | | 0.2 | | dB |
| Main Line VSWR | | | 1.1:1 | |
| Secondary Line VSWR | | | 1.5:1 | |
| 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
- 30±1.5 dB Nominal Coupling Level
- 26.5 GHz to 40 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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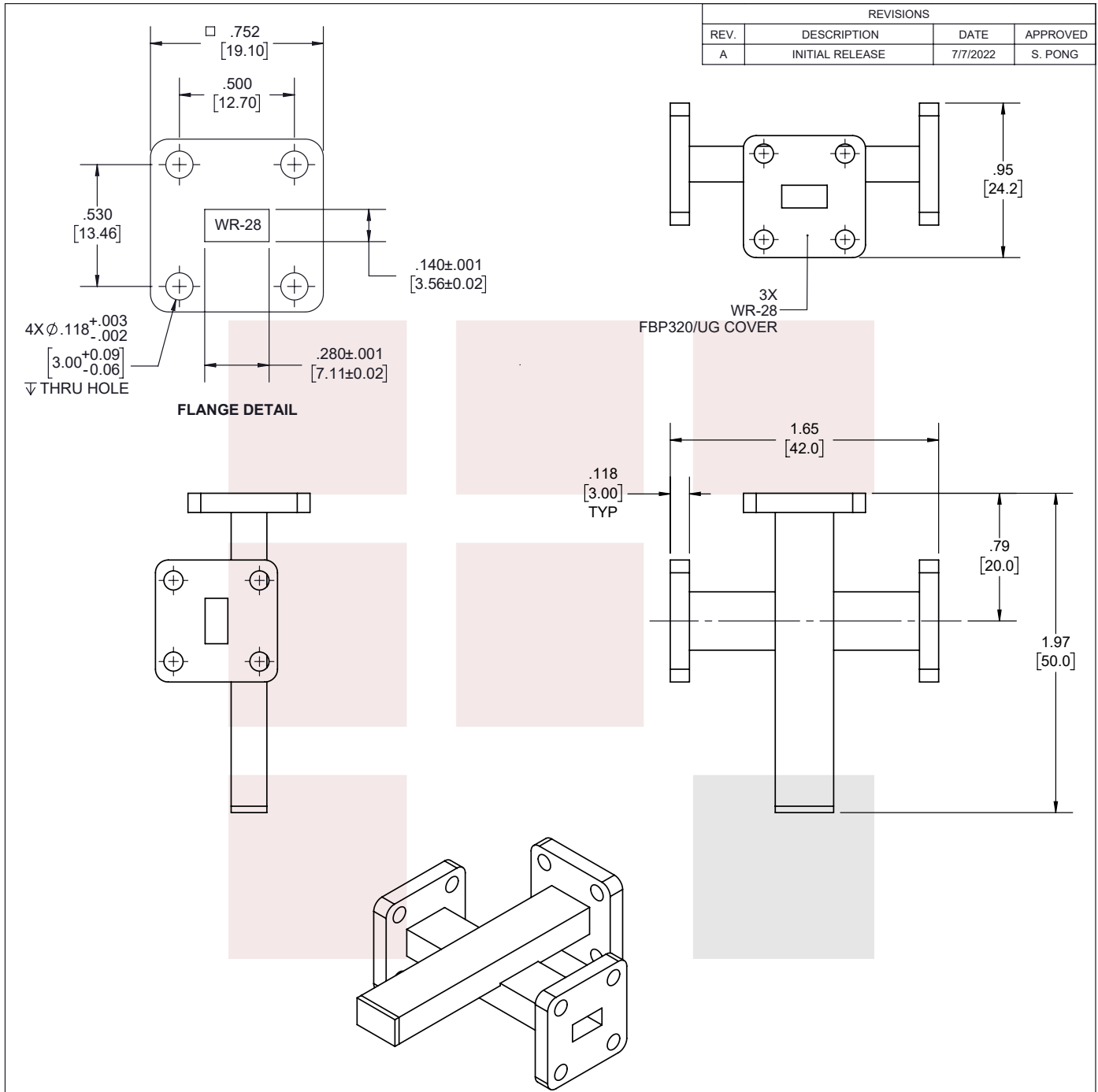
30 dB WR-28 Waveguide Crossguide 3 Port Coupler with UG Cover Flange from 26.5 GHz to 40 GHz in Brass from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [30 dB WR-28 Waveguide Crossguide 3 Port Coupler with UG Cover Flange from 26.5 GHz to 40 GHz in Brass FMWCP1089-30](#)

URL: <https://www.fairviewmicrowave.com/30-db-wr-28-waveguide-crossguide-coupler-fmwcp1089-30-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 [.51] 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. | |
| TITLE 30 dB WR-28 Waveguide Crossguide 3 Port Coupler with UG Cover Flange from 26.5 GHz to 40 GHz in Brass | | ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY. | | SHEET 1 OF 1 SCALE N/A | |
| SIZE A | CAGE CODE 3FKR5 | DRAWN BY K.DANG | ITEM NO. FMWCP1089-30 | REV A | |

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