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## CherryMAX® Rivet CR3212-5-02

CR3212-5-02 is a 5/32" diameter, high-strength blind rivet from the CherryMAX® series with a 100° flush countersunk head. Designed for structural aerospace applications, it features a mechanically locked stem and is ideal for short material stack thicknesses where blind-side installation is required.

### Basic Specifications

- Shank Diameter: 5/32 inch (≈0.156 inch)
- Grip Range: 0.063 – 0.125 inch
- Overall Length: 0.250 – 0.270 inch
- Head Diameter: ≈0.281 inch
- Head Height: ≈0.052 inch
- Head Style: 100° flush countersunk
- Sleeve — Aluminum alloy 5056, anodized or chromate conversion coated
- Mandrel — Alloy steel 8740, cadmium plated
- Standards Compliance: NAS9302B, MS20600, MIL-SPEC (AS), BACR15FR5
- Manufacturer: Cherry Aerospace, USA.

### Material Thickness Selection Guidelines

- Recommended for material stack thickness between 1.6 – 3.2 mm
- Use CR3212-5-01 or shorter variants for very thin structures
- Use CR3212-5-03 or longer variants for increased grip ranges
- Compatible with pneumatic tools: Cherry G27, G747, G704B, or equivalents.

### Part Identification and Marking Structure

- CR — CherryMAX series
- 32 — Rivet type
- 12 — 100° flush head configuration
- 5 — Nominal shank diameter 5/32 inch
- 02 — Length code for 0.063 – 0.125 inch grip range.

## Key Features and Installation Characteristics

- Flush 100° countersunk head allows smooth aerodynamic finish
- Recommended hole diameter: 0.161 – 0.164 inch
- Mechanically locked stem with audible “click” on successful installation
- No exposed mandrel — stem remains captured inside the sleeve.

## Coating and Visual Identification Notes

- Sleeve finish may be gold (chromate) or silver (clear anodized)
- Mandrel is cadmium plated with a silver-gray appearance
- Typical part markings: CR3212-5-02, AF3212-5-02, NAS9302B-5-02
- Always identify parts by marking — not by color alone.

## Additional Technical Characteristics

- Shear Strength: up to 58,000 PSI
- Tensile Strength: up to 85,000 PSI
- Operating Temperature Range: –65°F to +250°F (–54°C to +121°C)
- Minimum Countersink Depth: 0.040 inch
- Head Seat Radius: 0.110 – 0.130 inch
- Installation Air Pressure: 90 psi nominal
- Typical Installation Time: ≤ 1.2 seconds.

## Practical Notes from Technician

- Slight movement before installation is acceptable
- Hole diameter must be precisely controlled (0.161–0.164 inch)
- Do not lubricate — can interfere with proper stem locking
- Use care when setting in composites — reduce force to avoid damage
- Installation tools must be clean and in good working order
- Minimum air pressure: 85 psi
- Listen for the “click” to confirm successful stem lock
- Stem tail should be flush with sleeve within  $\pm 0.005$  inch.

**Note:** This technical information is based on the official documentation provided by Cherry Aerospace and is intended solely for reference in product selection and specification.