

CO₂ (R744) FITTINGS

ENGINEERING SPECIFICATIONS



Product Description

Copper-iron (CuFe2P) fittings designed for use in high-pressure CO₂ refrigeration systems, including both subcritical and transcritical applications. Engineered for safe use in extreme conditions.

Size Range

- Imperial: 3/8" up to 2-1/8"
- DN: DN10 to DN54

Material & Construction

- Copper-Iron alloy CuFe2P (2.1–2.6% Fe)
- Manufactured to AS/NZS 4041 and AS/NZS 1571

Operating Parameters

- Operating Temperature: -196 °C to 150 °C
- Maximum Operating Pressure: 130 bar (13 MPa / 1885 psi at 150 °C)

Compliance & Standards

- AS/NZS 1200 – Pressure Equipment
- AS/NZS 4041 – Pressure Piping
- AS/NZS 5149 – Refrigerating Systems and Heat Pumps

Testing & Certification

- Designed and pressure tested to UL 207 and AS/NZS 5149
- Nitrogen purge required during brazing
- Manufactured under ISO 9001 QA systems

Compatibility

- Refrigerants: R-744 (CO₂), suitable for transcritical and subcritical systems
- Tubing: Copper-iron alloy pipe to AS/NZS 1571

Applications

- Supermarket CO₂ booster systems
- Cold chain and logistics facilities
- Industrial refrigeration (meat, dairy, breweries)
- Heat pump and hot water systems