

You said: CO2 NUT

A **CO2 nut** (or carbon dioxide regulator inlet nut) is a threaded brass fitting used to **secure a gas regulator to a CO2 cylinder valve**. It ensures a leak-proof, high-pressure connection critical for welding, beverage dispensing, and planted aquariums. [[1](#), [2](#)]

## □□ **Key Specifications & Standard**

- **CGA-320 Thread:** Most standard CO2 cylinders in North America and parts of Asia use the **CGA-320 specification** for their valve connections. [[1](#), [2](#), [3](#)]
- **Material:** Almost always manufactured from **heavy-duty brass**. Brass is non-sparking, resists corrosion, and handles high pressure without warping. [[1](#), [2](#), [3](#)]
- **Pressure Rating:** Designed to handle typical carbon dioxide cylinder pressures up to **15 MPa (approx. 2175 PSI)** safely. [[1](#), [2](#), [3](#)]

## **Component Breakdown**

A complete inlet assembly usually consists of three parts: [[1](#)]

1. **The Nut:** The outer hex or hand-tight ring that screws onto the tank valve.
2. **The Nipple (Stem):** The inner pipe that pushes into the valve opening to guide the gas.
3. **The Washer (Gasket):** A nylon, plastic, or fiber washer placed between the nipple and the valve to absorb pressure and prevent gas leaks.