

A **bullnose nipple** for Carbon Dioxide (CO₂) and liquid petroleum/gas applications is a high-pressure brass or stainless steel gas cylinder connector used to hook up regulators or distribution manifolds safely. The "bullnose" refers to the rounded, bullet-like tip of the stem that forms a tight, metal-to-metal or washer-assisted mechanical seal inside a cylinder valve to prevent leaks under immense pressure.

Specification Details

Common Standards	CGA 320 (Standard US CO ₂), BS 341 No. 8 (UK standard for CO ₂)
Material	High-grade Free-Cutting Brass or 316L Stainless Steel
Working Pressure	Typically rated up to 250 – 300 bar (3600 – 4350 PSI)
End Connection	Bullnose on the cylinder side; usually 1/4" NPT Male/Female or orbital weld on the regulator side

Key Functions

- **Gas Cylinder Inlets:** It serves as the main intake tailpiece for CO₂ dual-gauge gas regulators. [\[1\]](#)
- **Leak Prevention:** The rounded bullnose shape centers perfectly within the valve's seat. A nylon or Teflon washer is compressed between the joint to establish a zero-leak connection. [\[1, 2, 3\]](#)
- **Corrosion Resistance:** For carbon dioxide lines, heavy brass avoids rust and degradation from the moisture traces or temperature drops caused by liquid-to-gas conversion. [\[1, 2\]](#)

Ordering or Replacement Checklist