

# Gas Regulators Used In Dispensing Draft Beer

## Overview

**Introduction** A gas regulator is used for maintaining carbonation and pressure for the dispensing of draft beer from keg to faucet. The intent of Breweries is to keep the quality of their beer perfect from brewing until dispensed and consumed by the end user. To pour that perfect glass of beer, one must have a reliable gas regulator. Gas regulators come in many different shapes & sizes.

**Purpose** The purpose of this document is to explain the function of a gas regulator as a component of a draft beer dispensing system, and to list and describe the three most common types of gas regulators used to dispense draft beer.

## Gas Regulators for Beer Dispensing

**Three Types of Regulators** The following are the more commonly known gas regulators used in dispensing of draft beer today.

**Primary C02 Regulator** – Connects directly to the C02 tank/cylinder. The primary regulator is designed to decrease the C02 cylinder's high pressure to a lower, more usable pressure. A properly adjusted and functioning regulator is one of the keys to dispensing quality draft beer.

**Primary Nitrogen (N) Regulator** – Connects directly to the Nitrogen cylinder and is the same in functionality as the aforementioned C02 regulator. The primary nitrogen regulator is designed to decrease the nitrogen cylinders high pressure to a lower, more usable pressure.

**The Secondary Regulator** is a regulator or combination of regulators used in a multi branded draft beer system. If dispensing two or more products, various pressures may be required for each individual product or keg being dispensed, requiring a secondary regulator for each product.

## Gas Pressure, Regulators and the Beer

### **Beer and Gas Pressure**

Understanding the relationship between the beer and the gas pressure is the key to dispensing a high quality great tasting product.

The gas selected should only be viewed as the pressure of the system, and should never change the carbonation level of the product as prescribed by the brewery.

Quality begins with selecting the proper gas source. 100% CO<sub>2</sub> is the preferred gas for direct draw units and home Kegerators. These systems require a Primary CO<sub>2</sub> regulator and may require one or more secondary CO<sub>2</sub> regulator(s) if different beer(s) with different carbonation levels are on tap.

Often, bars and restaurants that have draft beer on tap are not dispensing the product directly from the cooler. In the case of dispensing beer from a remote location this would generally require the need for blended gas. Blended gas typically would require the use of a blender with a separate supply of CO<sub>2</sub> and nitrogen. If using a separate tank for CO<sub>2</sub> and nitrogen an additional primary regulator will be required for each tank connected.

**!** See the paper on “Blended Gasses” or “Glycol Cooled Beer Dispensing Systems” to gain a better understanding of using blended or mixed gasses to dispense draft beer.