

## First Stage Regulator

### Spring Loaded - High Pressure



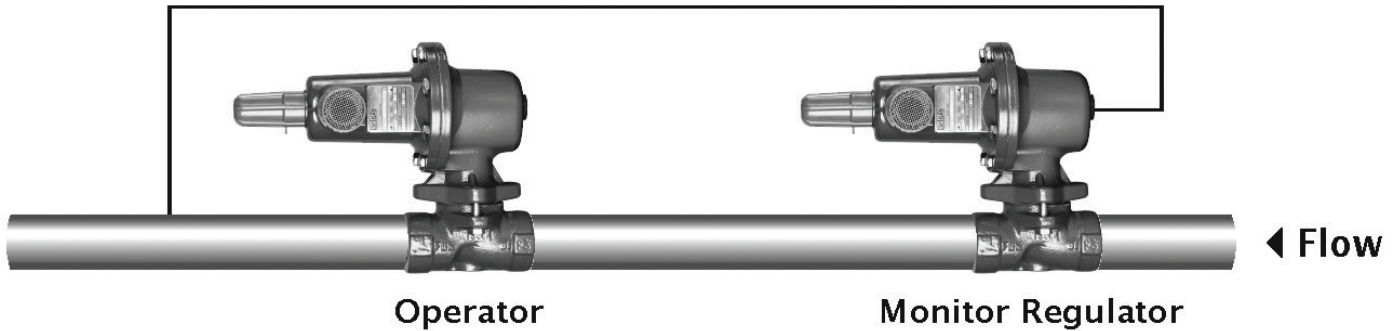
The PG627 is a spring loaded, direct-operated regulator for both low and high pressure applications in the oil and gas industries. These regulators provide durability, from the powder-coated epoxy exterior finish, as well as installation versatility, from the multi-positioned body and spring case configuration.

Part #	Port Size	Orifice Size	Max. Inlet Pressure	Max. Outlet Pressure	Capacity
<b>P627CA-100</b>	1"	1/2"	250 PSI	5 PSI to 20 PSI	Up to 45.5 MBTUH
<b>P627CA-200</b>	2"	1/2"	250 PSI	5 PSI to 20 PSI	Up to 45.5 MBTUH
<b>P627CB-200</b>	2"	1/2"	250 PSI	15 PSI to 40 PSI	Up to 45.5 MBTUH

\*Also available as Monitor Regulator (add 'M' suffix).

## Principle of Operation

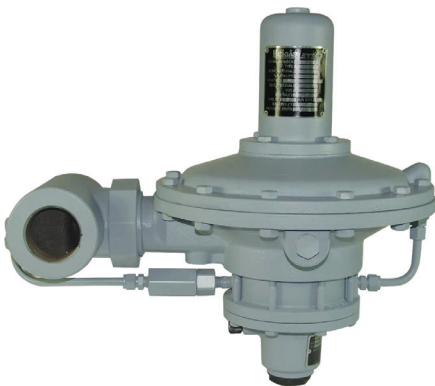
### When used in an Operator/Monitor Installation



The Operator/Monitor installation is designed to protect against over-pressurization of downstream piping and equipment in the event the normally throttling regulator (Operator) cannot function properly. In any Operator/Monitor installation, the Operator will be the regulator with the lower set point and the Monitor will be the regulator with the higher set point. The upstream regulator must always be an "M" version with an o-ring sealed valve stem and a threaded connection on the lower diaphragm case for a downstream sensing line. In the event the Operator cannot function properly, the downstream pressure will rise to the set point of the Monitor at which time the Monitor will begin throttling at its set-point. For example, suppose the Operator has a set-point of 10 PSIG and the Monitor has a set-point of 11 PSIG. Since both regulators are attempting to regulate the pressure at the same location (downstream of the second regulator) the Monitor will remain "wide-open" during normal operation because the Operator is limiting the downstream pressure to 10 PSIG. If the Operator fails to control the pressure at 10 PSIG, the downstream pressure will rise to 11 PSIG and the Monitor will begin regulating.

## First Stage Regulator

### High Pressure Direct Acting



The P99 regulator is designed for commercial and industrial applications such as agriculture, dryers, large boilers, furnaces, asphalt plants, etc.

Downstream sensing line required to obtain maximum accuracy. The seat and orifice can be inspected without removing the body from the pipeline. Pilot Operation keeps outlet pressure constant despite varying inlet pressure.

Over Pressure Protection should be considered for all first stage high pressure regulators. A relief valve or regulators installed as a monitor set are optimal protection for over pressure.

Part #	Port Size	Max. Inlet Pressure	Max. Outlet Pressure	Maximum Capacity
<b>P99</b>	2"	250 PSI	5 PSI - 15 PSI	60 MBTUH
<b>P99-Flange Kit</b>	Includes: 1- N-200 X 3, 2- WFT2 2" Flange 150# 4- BLT-B7 5/8"X3" Studs and Nuts, 1 - 2" #100 Gasket Filter			

## Second Stage Regulators

### Spring Loaded



The Type P143 pressure regulator is ideal for propane. Uses include commercial, residential and light industrial for burners and unit heaters. The P143 has an internal relief device and is available in the low pressure cut off (LPCO) version.

The P200 and P300 Series pressure regulators are manual self-operating, spring loaded, adjustable regulators. They can be used in applications where pressure reduction is required. Both regulators will reduce the risk of "shock" from abrupt changes in downstream conditions. This can help prevent safety equipment from shutting an operation down.

Part #	Inlet/Outlet	Max. Inlet Pressure	Max. Outlet Pressure	Capacity
<b>P143</b>	3/4", 1", 1-1/4"	125 PSI	11" WC - 5 PSI	Up to 5 MBTUH
<b>P202</b>	2"	125 PSI	11" WC - 5 PSI	Up to 31 MBTUH
<b>P302</b>	1-1/4", 1-1/2", 2"	125 PSI	11" WC - 3 PSI	Up to 7 MBTUH

## Second Stage Regulators

### Spring Loaded



The American Meter 1800C Series gas pressure regulators are designed for use in residential, light commercial, and small industrial applications.

The 1813C can be used as a service or line pressure regulator for flows up to 2500 CFH (depending on inlet pressure). The 1813C comes equipped with the safety of full capacity internal relief.

Part #	Inlet/Outlet	Orifice Size	Factory Delivered Pressure	Adj. Range	Bonnet Vent Position	Capacity
<b>1813C-20-3</b>	1-1/4"	5/8"	11" WC at 10 PSIG Inlet	8.5" WC - 14" WC	Over Inlet	3,900,000 BTUH

## Relief Valve

### Back Pressure Regulator Relief Valve



The Type P289 Back Pressure Regulator functions as a high flow relief valve with an adjustable set point. The P289 can be used in place of a standard relief valve to provide protection against over pressurization in the downstream system. The design of a large diaphragm area and a pitot tube booster allow the valve to respond quickly and relieve the excessive pressure smoothly, especially in low-pressure settings.

Use with PG627 regulator.

Part #	Port Size	Max. Inlet Pressure	Max. Outlet Pressure
<b>P289-1</b>	1"	100 PSI	Various spring ranges offered.
<b>P289-2</b>	2"	25 PSI	

**Other Regulator Sizes and Styles Available.**

**Commercial and Industrial Gas Systems are to be installed according to Federal, State, and Local Codes.**

**Please verify system requirements with an authority having jurisdiction.**