

A FULL REGULATION PORTFOLIO BASED ON US-STANDARDS

# Industrial Regulators for any Applications

American Meter pressure regulators are used (a) upstream of a gas meter to reduce inlet pressure to the meter and eliminate fluctuations which can affect meter accuracy and (b) downstream from the meter to provide reduced pressure for gas operated equipment.

The three factors which determine the selection of a pressure regulator are:

- ▶ Inlet pressure to the regulator (minimum and maximum)
- ▶ Outlet pressure which the regulator must maintain
- ▶ Required capacity of the regulator in scfh ( $\text{Sm}^3/\text{h}$ ).

Regulators frequently include options for protection against upset conditions. The most common options are:

- ▶ **Internal relief (partial or full)** – the ability to vent excess gas to atmosphere in the event that the outlet pressure rises above a predetermined value
- ▶ **Overpressure Shut-Off (OPSO)** – the ability to shut down the gas supply if outlet pressure exceeds a predetermined value
- ▶ **Underpressure Shut-Off (UPSO)** – the ability to shut down the gas if the outlet pressure falls below a predetermined value
- ▶ **Remote monitoring** – the ability to control / monitor pressure at a specified location downstream from the regulator.



Model 1803 of the 1800 PFM Regulators

Models of the 1800/2000 Series Regulators



The Series 3000 Pressure Control Regulator



AMCO Industrial provides design, manufacturing and support for American Meter products used to measure and control natural gas in high volume and/or high-pressure applications. American Meter offers a wide variety of high-pressure regulators that meet almost any application.

### Series 1800 PFM Regulators

The 1800 PFM industrial regulator is designed for applications requiring medium-to-high capacity, precise outlet pressure control and fast response to changing loads. It is suited for use with meters having base capacities up to 11,000 CFH (312  $\text{m}^3/\text{h}$ ).

An 1800 PFM handles varying inlet pressures up to 125 PSIG (8,6 bar) while controlling a set constant outlet pressure within  $\pm 1\%$  of the absolute set pressure over a wide range of flow rates. It is ideal for fixed factor measurement at metering pressures from 0.5 to 30 PSIG (34 mbar to 2 bar).

### Series 1800/2000 Regulators

The Series 1800/2000 Regulators are offered in various models with numerous options to choose from. The 1800 Series low pressure models have a maximum inlet pressure of 125 psi (8,6 bar) and offer outlet pressures ranging from 3.5" w.c. to 5 psi (9-340 mbar). 1800 Series can be ordered together with a Full Relief, Partial Relief or No Relief Regulator.

The 2000 Series high pressure models allow a maximum inlet pressure of 125 psi (8,6 bar) and outlet pressures ranging from 0.5 psi to 15 psi (34 mbar to 1 bar). The 2000 Series Regulators are non-relieving. Both models are available with Overpressure Shut-off (OPSO), Underpressure Shut-off (UPSO) and monitor capabilities.

### Series 3000 Regulators

The Series 3000 Regulators are engineered throughout for high sensitivity and accuracy. These precision regulators feature a patented balanced valve design, which overcomes the problems inherent in conventional valves. It is ideally suited for batch ovens, furnaces, boilers and other applications. It has unexcelled lock-up and positive and negative shock characteristics and is designed for multipurpose operation.

*Improved technology  
for pressure regulators:  
The American Meter  
Axial Flow Valve*



## **Axial Flow Valves**

The American Meter Axial Flow Valve can be used for pressure regulation, overpressure relief, flow control or as an on/off valve. The control element is an elastomer sleeve, which expands or contracts depending on the pressure differential. Depending on the pilot used, the APV can provide a variety of output pressure ranges.

The Axial Flow Valves install between the flanges of standard pipelines. The Series 300 and the Series 600 both have different maximum working pressures to best fit any need. The AFV is designed to give a streamlined flow path, enabling it to flow a very large amount in a reasonably quiet manner.

## **Radial Flow Valves**

The American Meter Radial Flow Valves are designed for use in the distribution and transmission of natural and other industrial gases. Designed for simple installation and ease of service, these pilot-operated valves are for use in pressure regulation, over pressure relief, flow control, or for on/off applications.

These units provide high capacity in a single-ported valve, with positive lock-up, and easy access to all internal components. With an optional inspirator block, they begin to throttle at just 1.5 psid (100 mbar), making them effective for low-differential applications. The valve's radial outlet flow design achieves a higher capacity range than other top entry valve configurations.

Those products listed above are just a few of the regulators that American Meter offers its customers. These industrial regulators are part of a full portfolio of regulation products to fit a customer's various pressure application needs.

*A continuation of regulation:  
The American Meter Radial  
Flow Valve*

