

Product Overview | High Pressure Gas Regulator

7347 Regulators reduce high gas supply pressures to practical use levels. Since capacities will vary with the pressure drop across the regulator (see Table C), due care must be exercised in properly sizing both the regulator and downstream piping. For 7347 regulators, downstream piping may be enlarged only one pipe size from the regulator pipe size to increase capacity. Outlet pressure of regulators (except where noted) may be varied through use of interchangeable compression springs within the groups indicated in selection Table B. Compression springs are identified by either color or part number.

SPECIFICATIONS

Body Sizes and End Connections: 3/4" to 1 1/4" NPT

Orifice Diameter: 3/8"

Maximum Operating Inlet Pressure: See Table B

Maximum Outlet (Casing) Pressure: 20 psig (1.4 bar)

Maximum Operating Outlet Pressure to Avoid Internal Parts Damage - The Outlet Pressure Rating:
2 psig (0.14 bar) above outlet pressure setting

Temperature Capabilities: -20° to 180°F (-29° to 82°C)

Pressure Registration: Internal pitot tube

SELECTION

When selecting a regulator, specify its complete designation including pipe size code and spring designation or outlet pressure range.

Example: Select a regulator for 800 scfh of 1.5 specific gravity propane gas from 10 psig supply pressure to 26" w.c. outlet pressure.

Solution: Convert the propane gas volume to the equivalent natural gas volume by using the factor from Table A: 800 scfh of propane gas ÷ 0.632 is equivalent to 1266 of natural gas. Entering Table C at the smallest regulator with this capacity yields a 7347-0. The required outlet pressure reveals that a 7347-0-A Regulator having a 15-33" w.c. spring should be used.

Table A. Specific Gravity Correction

Sp Gr	Factor
0.4	1.22
0.6	1.00
1.0	0.774
1.5	0.632
2.0	0.547

If the specific gravity of the gas is other than 0.6, divide desired flow by gravity factor to get equivalent flow of natural gas; then select regulator from Table C.

Multiply a given size regulator's natural gas capacity by gravity factor to get regulator capacity with different gas.

RELIEF VALVES

The North American **7347 Regulator** comes equipped with a non-adjustable internal limited capacity relief valve feature. This internal relief valve is intended to minimize overpressure that could occur due to seat leakage. If the downstream pressure exceeds the regulator setting by 10" w.c. to 2 psig (25 mbar to 0.14 bar) depending on the main spring used (see Table B), the relief valve opens and excess gas is vented through the stabilizer vent in the upper spring case.