

# Installation | High Pressure Gas Regulators

## INSTALLATION

The North American 7337A/B/C-4 Regulator may be installed in any orientation as long as flow through it matches the direction arrow cast on the body. Preferred installation is with the spring case vertical above the body.

## OVERPRESSURE PROTECTION

Like most pressure-reducing regulators, the 7337A/B/C-4 Regulators have outlet pressure ratings that are lower than the inlet pressure ratings. Therefore, a pressure relieving or pressure limiting device is needed if the inlet pressure can exceed the outlet pressure rating, see "Specifications". This regulator does not have an internal relief feature.

## CAPACITY INFORMATION

Table C provides the natural gas regulating capacities of the 7337A/B/C-4 regulators at specific inlet pressures and outlet pressure settings. Flows are in SCFH (60°F and 14.7 psia) of 0.6 specific gravity gas. For specific gravity conversion factors to other gases, refer to the "Selection" section.

To determine the wide-open flow capacity of a regulator for relief sizing, use the following formulas.

If  $\left(\frac{P_1}{P_0} \leq 1.894\right)$ :

$$Q = K\sqrt{P_0(P_1 - P_0)}$$

If  $\left(\frac{P_1}{P_0} > 1.894\right)$ :

$$Q = \frac{K P_1}{2}$$

- P<sub>0</sub> = outlet pressure, psia
- P<sub>1</sub> = inlet pressure, psia
- Q = flow rate, SCFH
- K = regulator constant (see below)

Orifice size	½"	¾"	1"
K	520	1100	1800

Table B. 7337A/B/C-4 Regulator Springs and Maximum Inlet Pressures

Regulator Designation	Outlet Pressure Range	Compression Spring		Orifice Size, inches	Max. Operating Inlet Pressure, psig	Max. Emergency Inlet Pressure, psig
		Color	Number			
7337A-4-G4	3.5-6.5"w.c. (8.7-16 mbar)	Red	R690-5600	½	150	175
7337A-4-G8	6-14"w.c. (15-35 mbar)	Green	R690-5608	½	150	175
7337A-4-HG16	12-28"w.c. (30-70 mbar)	Orange	R690-5603	½	150	175
7337A-4-HG80	1-5 psig (0.07-0.34 bar)	White	R690-5604	½	150	175
7337A-4-L3	3-15 psig (.21-1.0 bar)	Gray	R690-5605	½	150	175
7337A-4-L4	10-35 psig (0.68-2.4 bar)	Brown	R690-5606	½	150	175
7337B-4-G4	3.5-6.5"w.c. (8.7-16 mbar)	Red	R690-5600	¾	125	175
7337B-4-G8	6-14"w.c. (15-35 mbar)	Green	R690-5608	¾	125	175
7337B-4-HG16	12-28"w.c. (30-70 mbar)	Orange	R690-5603	¾	125	175
7337B-4-HG80	1-5 psig (0.07-0.34 bar)	White	R690-5604	¾	125	175
7337B-4-L3	3-15 psig (.21-1.0 bar)	Gray	R690-5605	¾	125	175
7337B-4-L4	10-35 psig (0.68-2.4 bar)	Brown	R690-5606	¾	125	175
7337C-4-G4	3.5-6.5"w.c. (8.7-16 mbar)	Red	R690-5600	1	60	110
7337C-4-HG16	12-28"w.c. (30-70 mbar)	Orange	R690-5603	1	60	110
7337C-4-HG80	1-5 psig (0.07-0.34 bar)	White	R690-5604	1	60	110
7337C-4-L3	3-15 psig (.21-1.0 bar)	Gray	R690-5605	1	60	110
7337C-4-L4	10-35 psig (0.68-2.4 bar)	Brown	R690-5606	1	60	110