





GAS PRESSURE REGULATOR AND FILTER CATALOG

11th Edition





WARNING

Service and installation must be performed by a trained/experienced service technician. All products used with combustible gas **must** be installed and used **strictly** in accordance with the instructions of the Original Equipment Manufacturer (OEM) and with all applicable government codes and regulations, e.g. plumbing, mechanical, and electrical codes and practices. All Maxitrol products should be installed and operated in accordance with Maxitrol Safety Warning Instructions.

Maxitrol is NOT responsible for any errors or omissions in reliance by anyone of any information set forth in this catalog without additional reference to local requirements and applicable ordinances or codes.

The products in this catalogue comply with EU legislation. The technical specifications refer to the CE certification. Additional international approvals and certifications, e.g., CSA and UL, are available upon request. CE

ACCESSORIES

The following items are not sold separately. They are delivered with the gas pressure regulators.

Vent Limiting Device: vLimiter ®

Maxitrol vent limiting devices eliminate the need to run vent piping to the outside. Vent limiting devices are designed for use indoors and in spaces where limiting the amount of gas escapement due to diaphragm failure is critical. Vent limiting devices should not be used outdoors if they are exposed to the environment.

Optional automatic vent limiting device – ball check permits unobstructed inhalation for fast regulator diaphragm response on opening cycle, but limits gas escapement to be within EN 88 requirements should a diaphragm rupture:

- 12A04: Use on RV52, RV53, RV61, R400S, R500S, and R600S regulators
- 12A09: Use on 325-3 regulators
- 12A39: Use on RV81, RV91, RV111, 325-5, 325-7 and 210 series regulators

Pressure Tap

Pressure tap installed as an optional part of the control. The hose fitting is provided with a captive screw plug. This eliminates the need for an additional fitting with a measuring connection.

PF10: For RVLM (Poppets) and filters (others upon request).

Dust Cap

Use on vent opening to prevent blockage of breather hole from dust or other foreign particles. Standard on all "L" models with $\frac{1}{2}$ threaded vent.

13A09: For Rp ¼ vent. Press-in plastic cap

Tamper Proof Seals

Permanent pressure sensitive backed paper. Attempted removal of these seals will destroy the face stock, leaving adhesive residue on surface beneath. Therefore, tampering can be easily detected. Available for all threaded models. Outlet pressure printed on seal.

- 101310: For RV12, RV20L, RV47, RV48, RV52, RV53, RV61, R400S(Z), RV500S(Z), R600S(Z), 325-3, and 325-5
- **101311:** For RV81, RV91, RV111, 210D, 210E, 210G, 325-7



NOTE: When using the vent limiting device, the regulator must be mounted in a horizontal upright position.

NOTE: If no vent limiting device is used, regulator vent must be piped in accordance with government and local codes and regulations.







DEFINITIONS

Capacity

Total load m³/h of all appliances combined.

Lockup Type

Under no flow conditions, outlet pressure will rise above adjusted pressure but will not rise to line pressure.

Maximum Capacity (Main Burner and Pilot)

Maximum capacity of a pressure regulator at which the pressure regulator will control main burner and pilot line pressure within acceptable limits.

Maximum Capacity (Main Burner Only)

Maximum capacity of a pressure regulator at which the pressure regulator will control main burner pressure within acceptable limits.

Maximum Individual Load

Largest single appliance or burner served by the pressure regulator.

Maximum Inlet Pressure

The highest inlet pressure for which the control is intended to be used.

Minimum Capacity (Main Burner Only)

Minimum capacity of a pressure regulator designed to control the flow to the main burner only.

Non-Lockup Type

Under static conditions when no gas is flowing, outlet pressure will rise to line pressure.

Pressure Differential

The difference between inlet pressure to the pressure regulator and outlet pressure from the pressure regulator. To obtain differential pressure, subtract the desired outlet pressure from available inlet pressure.

Pressure Drop

The natural loss of pressure that occurs in the pressure regulator (or in any valve or pipe) due to friction. This friction impedes fluid motion, without regard to artificial losses deliberately created by diaphragm action. The equivalent flow rate for a loss in given pressure with the pressure regulator valve in a normally wide open position.

Pressure Tap

A hose fitting incorporating a captured sealing means for testing inlet and outlet pressures. This eliminates the need for a special barb fitting.

Vent Limiter

A means that limits the flow of gas from the atmospheric chamber to the atmosphere in the event of a diaphragm rupture. This may be either a limiting orifice or a ball check vent limiting device.

 Limiting Orifice Type: A vent limiter where the flow through the limiter is the same in both directions

Gas/Air Ratio Regulators / Zero Pressure Regulators

They require an external impulse signal, such as top loading with pressure or generating vacuum in the downstream piping.



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