

REMOVES ENTRAINED AIR

- To protect the system against damage
- To eliminate system noise

TANGENTIAL FLOW PATTERN

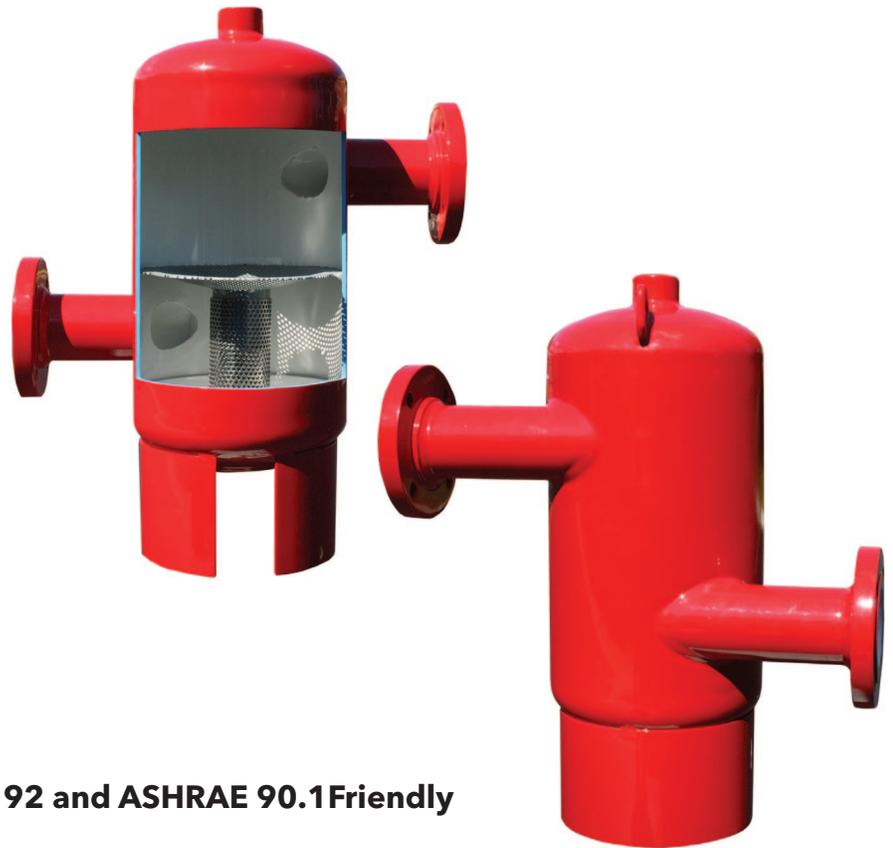
- Increases air separation efficiency
- Allows use of smaller sizes than required with straight flow separators

MODELS UP TO 36" PIPE SIZE

- NPT, flanged or grooved connections are available, with and without strainers
- Stainless steel construction available

CONSTRUCTED IN ACCORDANCE WITH ASME CODE

- Stamped 125 psig, higher design pressures are available



EPACT 92 and ASHRAE 90.1 Friendly

Rolairtrol[®] Air Separator

For Hot and Chilled Water Systems

THE BELL & GOSSETT ROLAIRTROL, SUPREME AIR SEPARATION FOR COMMERCIAL SYSTEMS

DESCRIPTION

The Bell & Gossett Rolairtrol is a patented air separator with significant advantages. The Rolairtrol is capable of removing the air that commonly causes problems in commercial hot and chilled water systems. The Rolairtrol provides air free flow, improving efficiency and performance of the HVAC system.

Every aspect of the Rolairtrol design maximizes air separation and simplifies installation and maintenance. The air separation efficiency of the Rolairtrol is significantly higher than any other commercial air separator on the market.

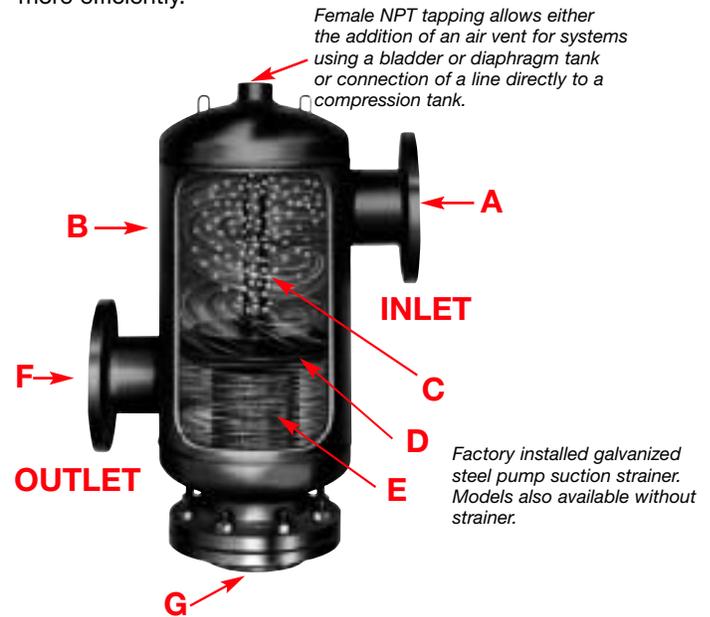
The standard Rolairtrol air separator is constructed to meet ASME code and is stamped for design pressure and temperature ratings of 125 psig (862 kPa) and 350°F (177°C). Higher pressure and temperature models are available.

EPACT 92 IMPACT

As part of the Federal Energy Policy Act of 1992 (known as EPACT 92), effective October 25, 1997, the U.S. Dept. of Energy has established ASHRAE/IESNA Standard 90.1-1989 as the Energy efficiency benchmark for HVAC systems in all new buildings (except low rise residential).

ASHRAE 90.1 has a provision in the form of a clause on building energy transport systems. It states that “energy should be transported by the most efficient means possible and that distribution systems should be selected to complement other system parameters such as control strategies, storage capabilities, conversion, and utilization efficiencies.”

How will a B&G Rolairtrol assist a commercial HVAC system meet EPACT 92 requirements? An air bound system is an inefficient energy transfer system. When the B&G Rolairtrol removes entrained air from a commercial HVAC system, it allows the pumps and valves to operate and transport energy more efficiently.



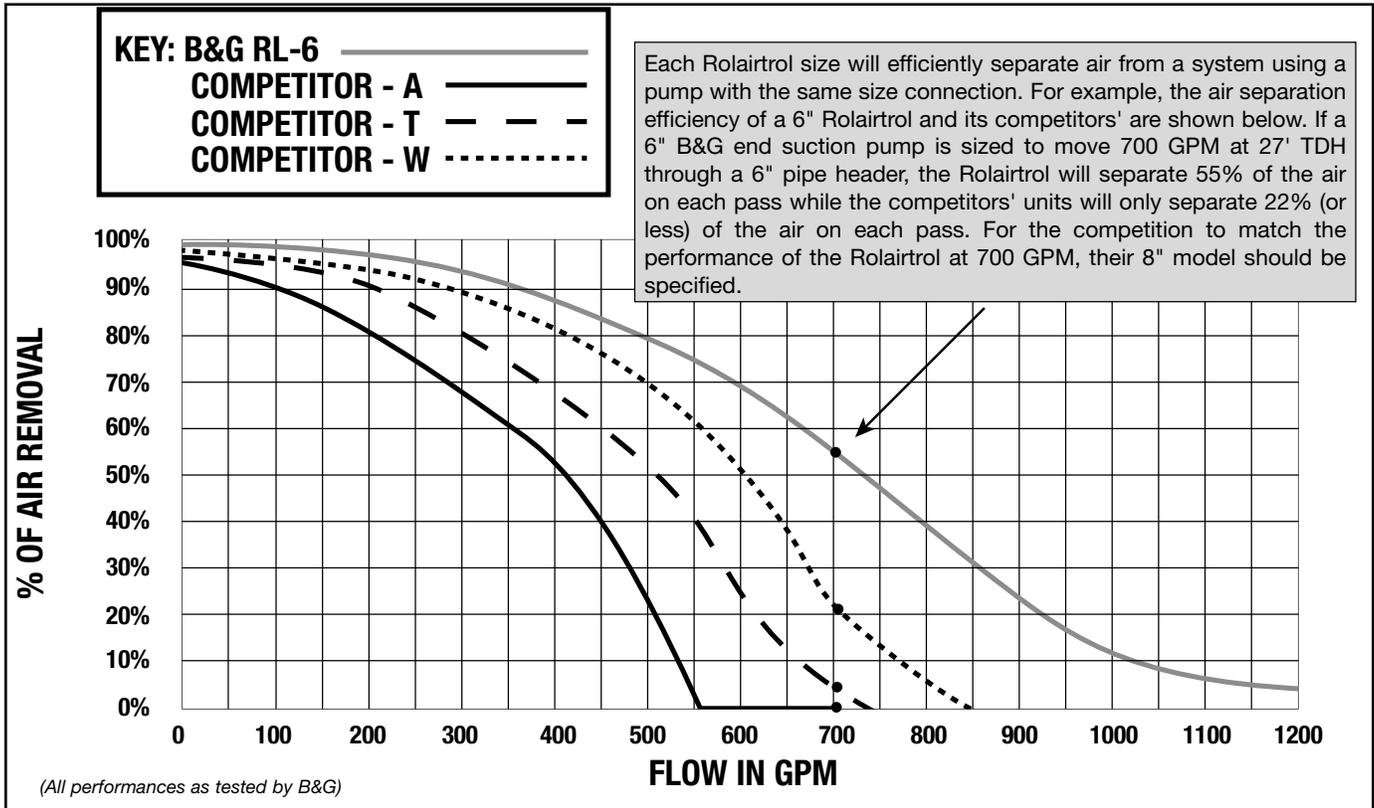
ROLAIRTROL FEATURES

ROLAIRTROL BENEFITS

A Tangential Flow Through Design	Original B&G Design...Perfected by B&G – The Rolairtrol provides maximum air separation efficiency due to a combination of centrifugal force and velocity reduction. The Rolairtrol’s tangential design creates a whirlpool inside the vessel. This vortex action sends heavier, air-free water to the outer portion of the vessel shell while forcing the separated air into the center where it is drawn to the air collector tube. The tangential design has been proven to have greater air separation efficiency when compared to less effective, straight flow air separators.
B Vessel Shell is 3 Times the Nominal Inlet/Outlet Pipe Diameter	Original B&G Design...Perfected by B&G – The vessel shell is at least 3 times the inlet and outlet pipe diameter. This assures maximum velocity reduction in order to develop the highest possible air separation efficiency.
C Stainless Steel Air Collector Tube	Exclusive B&G Design – An air collector tube is provided to efficiently gather and centralize the separated air. The separated air is easily directed upwards through the tube and vented in air elimination systems or returned to the compression tank in air control systems.
D Baffle	Exclusive B&G Design – The baffle is a barrier between the air-free water and the separated air. It assures that only air-free water is transferred to the outlet connection while separated air is directed to the collector tube.
E Vertical Strainer with Bottom Access	Exclusive B&G Design – Unlike the upper, horizontal strainer location in competitive air separators, the Rolairtrol’s lower, vertical strainer does not interfere with the vortex action necessary for proper air removal...maximizing efficiency. In addition, the Rolairtrol’s strainer is accessible from the bottom of the unit, reducing floor space while simplifying maintenance and clean out of accumulated system debris.
F NPT, Grooved and Flanged Connections	Exclusive B&G Product Offering – 3 connection options offer installation flexibility. 2"-3" models are NPT, 3"-12" models are grooved or flanged, and 14"-36" models are flanged.
F Up to 36" Pipe Size Connections	Exclusive B&G Product Offering – Models up to 36" in pipe diameter will meet the air separation requirements in the largest HVAC systems.
G Optional B&G Manual Blowdown Valve	Exclusive B&G Product Offering – A 1" NPTF manual blowdown valve is available to simplify installation, general maintenance, and remove start-up debris.

BELL & GOSSETT ROLAIRTROL FEATURES VERSUS THE COMPETITION

AIR SEPARATION EFFICIENCY COMPARISON (6" MODEL)



Cv COMPARISON (WITHOUT STRAINER)

MANUFACTURER:	B&G RL-6	COMPETITOR-A	COMPETITOR-T	COMPETITOR-W
6" Separators:	850	720	750	410

3 TIMES PIPE DIAMETER

MANUFACTURER:	B&G	COMPETITOR-A	COMPETITOR-T	COMPETITOR-W
	All Models	Only 2" Size	Only 2"-6" Sizes	Only 2"-4", 6", 10" Sizes

COLLECTOR TUBE

MANUFACTURER:	B&G	COMPETITOR-A	COMPETITOR-T	COMPETITOR-W
	All Models	Not Available	Not Available	Not Available

BAFFLE

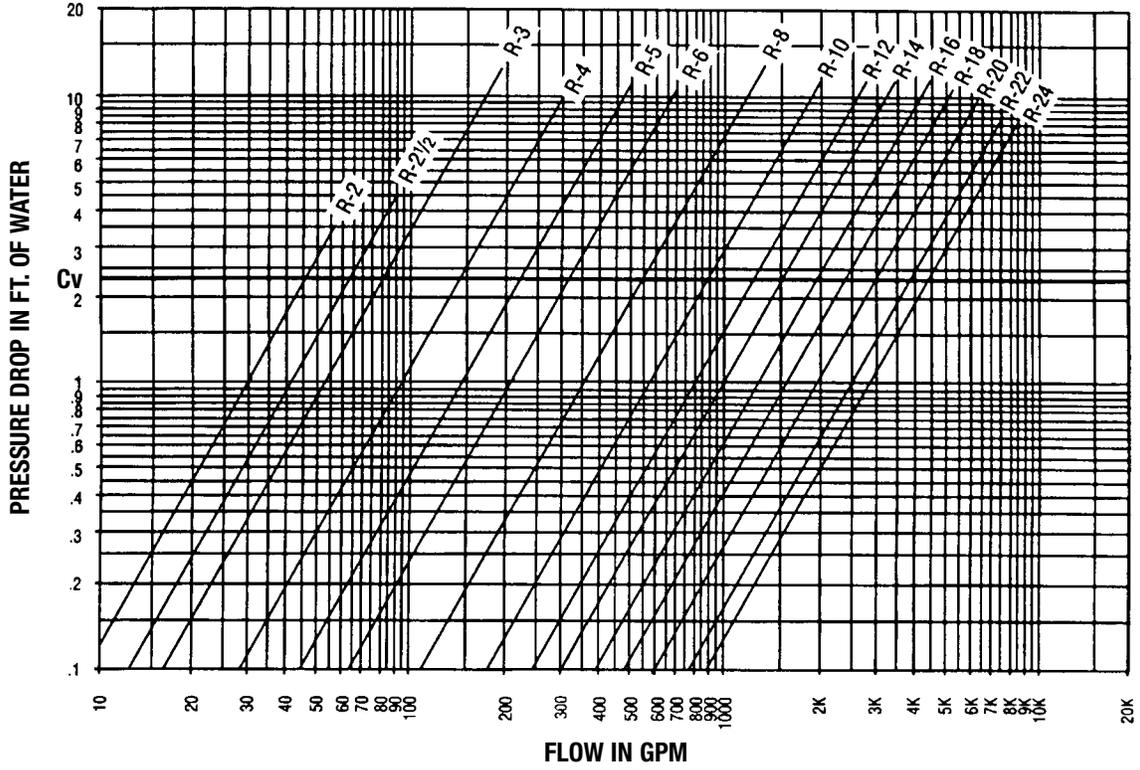
MANUFACTURER:	B&G	COMPETITOR-A	COMPETITOR-T	COMPETITOR-W
	All Models	Not Available	Not Available	Not Available

STRAINER ACCESS

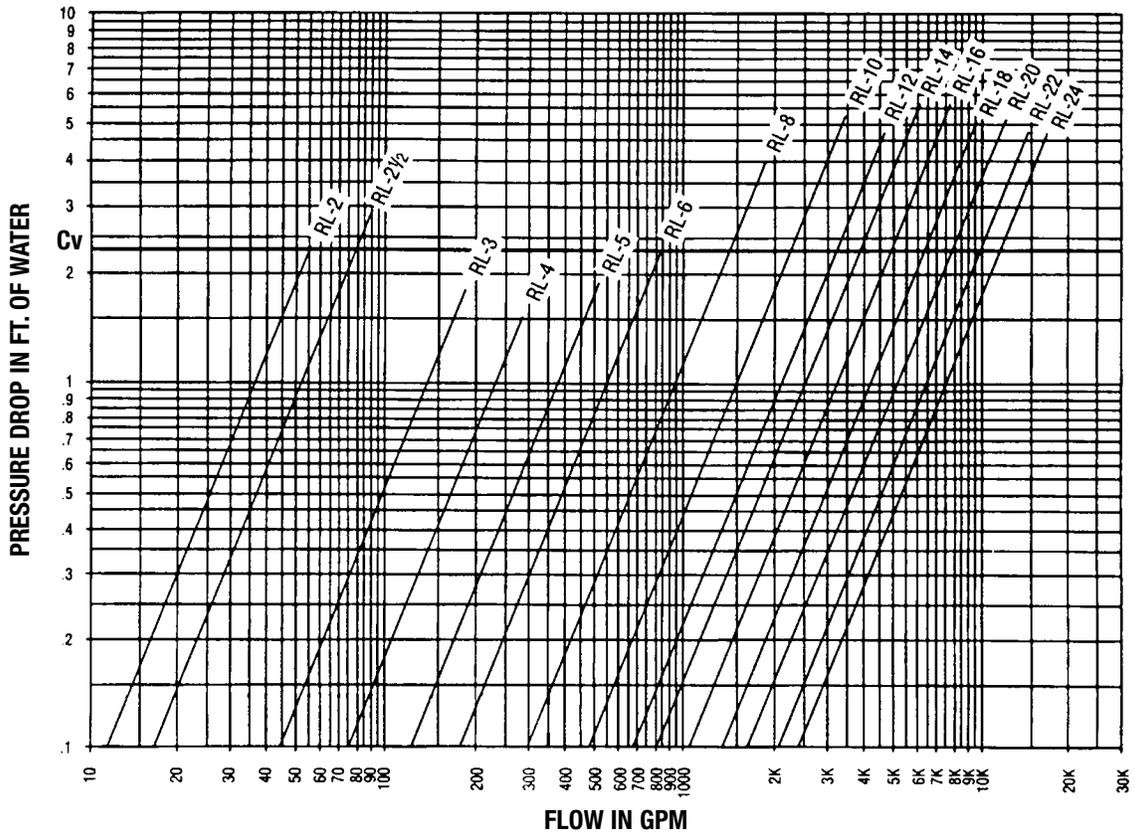
MANUFACTURER:	B&G "R" TYPE	COMPETITOR-A	COMPETITOR-T	COMPETITOR-W
	Vertical/Bottom	Horizontal/Side	Horizontal/Side	Horizontal/Side

ROLAIRTROL® AIR SEPARATOR PERFORMANCE COVERAGE CHART

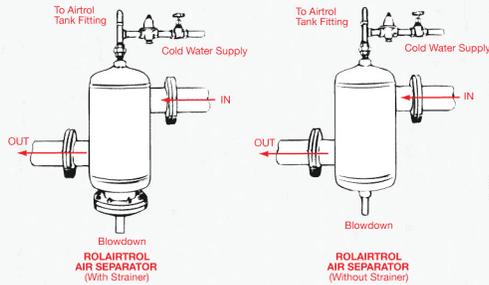
R MODELS (WITH STRAINER)



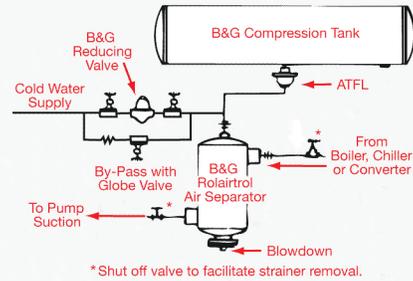
RL MODELS (WITHOUT STRAINER)



TYPICAL PIPING ARRANGEMENTS



TYPICAL INSTALLATION



TYPICAL HYDRONIC HEATING/COOLING APPLICATIONS

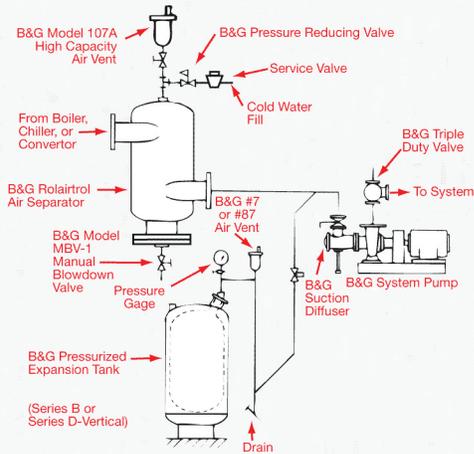


Figure A
B&G Rolairtrol with Series "B" or "D"
Vertical Pressurized Expansion Tank

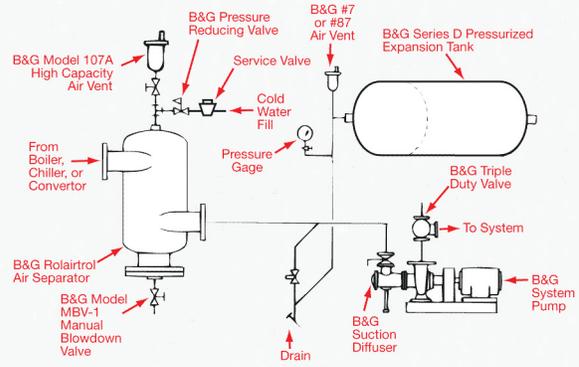


Figure B
B&G Rolairtrol with Series "D" Horizontal
Pressurized Expansion Tank

TYPICAL SPECIFICATIONS

Furnish and install, as shown on plans, a centrifugal type air separator. The unit shall have _____" (NPT/flanged/grooved) inlet and outlet connections tangential to the vessel shell. The unit shall have an internal stainless steel air collector tube with $\frac{5}{32}$ " (4mm) diameter perforations and 63% open area designed to direct accumulated air to the compression tank on an air control system or an air vent on an air elimination system via an NPT vent connection at top of unit.

(NOTE: If a system strainer is not specified, disregard the following underlined statements.) The unit shall have a removable galvanized system strainer with $\frac{3}{16}$ " (4.8mm) diameter perforations and a free area of not less than five times the cross-sectional area of the connecting pipe. The strainer shall be located at the bottom of the vessel to reduce floor space required for strainer removal.

A blowdown connection shall be provided to facilitate routine cleaning of the strainer and the separator. *Specify B&G Model MBV-1 Rolairtrol accessory for manual blowdown.* Manufacturer

to furnish data sheet specifying air collection efficiency and pressure drop at rated flow.

Vessel shell diameter is to be three times the nominal inlet/outlet pipe diameter, with a minimum vessel volume for sufficient velocity reduction. The air separator must be designed, constructed and stamped for 125 psig @ 350°F (862 kPa @ 177°C) in accordance with Section VIII, Division I of the ASME Boiler and Pressure Vessel Code, and registered with the National Board of Boiler and Pressure Vessel Inspectors. The air separator(s) shall be painted with one shop coat of light gray air dry enamel.

A manufacturer's Data Report for Pressure Vessels, Form U-1 as required by the provisions of the ASME Boiler and Pressure Vessel Code, shall be furnished for each air separator upon request.

Each air separator shall be Bell & Gossett Model No. R-_____ (with system strainer) or RL-_____ (less system strainer) Rolairtrol Air Separator for _____ GPM.

xylem
Let's Solve Water

Xylem Inc.
8200 N. Austin Avenue
Morton Grove, Illinois 60053
Phone: (847) 966-3700
Fax: (847) 965-8379
www.xylem.com/brands/bellgossett

Bell & Gossett is a trademark of Xylem Inc. or one of its subsidiaries.
© 2012 Xylem Inc. A-305G March 1999