

**JOB:**
**REPRESENTATIVE:**

 UNIT TAG:  
 ENGINEER:  
 CONTRACTOR:

 ORDER NUMBER:  
 SUBMITTED BY:  
 APPROVED BY:

 DATE:  
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# ROLAIRTROL®

## Air Separator

Grooved with Strainer  
 Air Control and Elimination

**DESCRIPTION**

The Rolairtrol Air Separator is an ASME vessel designed with tangential openings to create a low velocity vortex where air is separated and removed from the circulating water.

**CONSTRUCTION MATERIALS**

Designed and constructed per ASME Section VIII, Division 1

**Shell:** Carbon Steel

**System strainer:** Type 304 Stainless Steel with 3/16" (4.8mm) diameter perforations and 51% open area

**OPERATING DATA\***

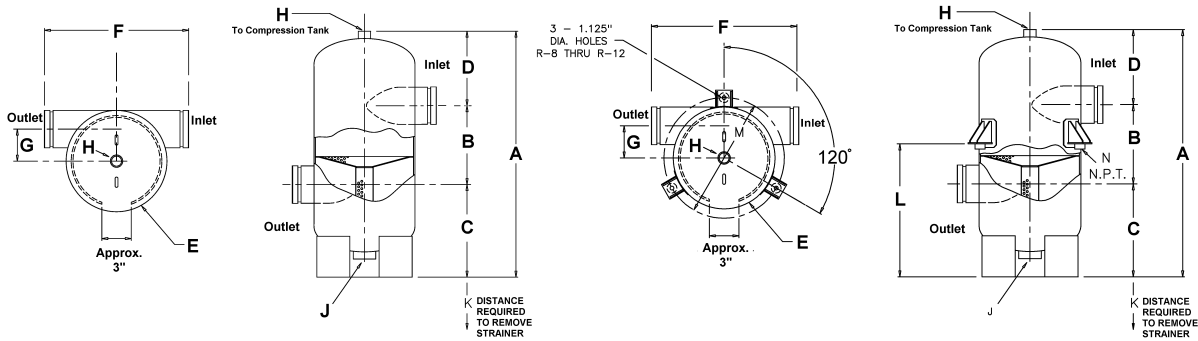
**Max Working Pressure:** 125 PSIG (862 kPa)

**Max Operating Temperature:** 350°F (177°C)

\* Consult factory for higher working pressures or temperatures.

**SCHEDULE**

PART NUMBER	MODEL NUMBER	INLET/OUTLET CONNECTION	RECOMMENDED CAPACITY IN GPM (M <sup>3</sup> /HR)	TAGGING INFORMATION	QUANTITY
5360-03G-12-003	R-3G	190 (43)	3 (76)		
5360-04G-12-003	R-4G	300 (68)	4 (101)		
5360-05G-12-003	R-5G	500 (113)	5 (127)		
5360-06G-12-003	R-6G	700 (159)	6 (152)		
5360-08G-12-003	R-8G	1,300 (295)	8 (203)		
5360-10G-12-003	R-10G	2,000 (454)	10 (254)		
5360-12G-12-003	R-12G	2,750 (624)	12 (305)		
5360-03G-12-004	R-3GB	190 (43)	3 (76)		
5360-04G-12-004	R-4GB	300 (68)	4 (101)		
5360-05G-12-004	R-5GB	500 (113)	5 (127)		
5360-06G-12-004	R-6GB	700 (159)	6 (150)		
5360-08G-12-004	R-8GB	1,300 (295)	8 (203)		
5360-10G-12-004	R-10GB	2,000 (454)	10 (254)		
5360-12G-12-004	R-12GB	2,750 (624)	12 (305)		



**DIMENSIONS AND WEIGHTS**

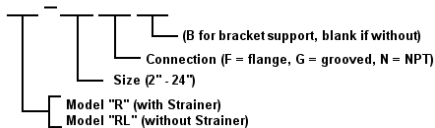
MODEL NUMBER	A	B	C	D	E	F	G	H	J	K	Cv	STRAINER FREE AREA IN IN <sup>2</sup> (MM <sup>2</sup> )	APPROX. VOLUME IN GALLONS (LTR.)	APPROX. SHPG. WT. IN. LBS. (KG)	FLOOD WT. LESS BRACKET IN LBS. (KG)
R-3G (B)	26-7/8 (683)	8 (203)	10-13/16 (275)	8-1/16 (205)	10-3/4 (273)	16-3/4 (425)	3-5/8 (92)	1-1/4 (32)	3 (76)	12 (305)	119	90 (58,064)	7 (26)	112 (51)	170 (77)
R-4G (B)	31-7/16 (799)	10 (254)	11-15/16 (275)	9-1/2 (241)	12-3/4 (324)	19-3/4 (502)	4-1/8 (105)	1-1/2 (38)	3 (76)	14 (356)	257	120 (77,419)	13 (49)	144 (65)	252 (115)
R-5G (B)	37 (940)	12 (305)	14-1/16 (357)	10-15/16 (278)	16 (406)	23 (584)	5-1/4 (133)	1-1/2 (38)	3 (76)	16 (406)	398	165 (106,451)	25 (95)	190 (86)	399 (181)
R-6G (B)	44-1/16 (1,119)	14 (356)	16-13/16 (427)	13-1/4 (337)	18 (457)	25 (635)	5-11/16 (145)	1-1/2 (38)	3 (76)	19 (483)	632	205 (132,258)	34 (129)	261 (118)	545 (247)
R-8G (B)	54 (1,372)	18 (457)	19-7/16 (494)	16-9/16 (421)	24 (610)	31 (787)	7-11/16 (195)	2 (51)	3 (76)	23 (584)	1,020	325 (209,677)	90 (341)	404 (183)	1,155 (524)
R-10G (B)	64-11/16 (1,643)	22 (559)	22-5/8 (575)	20-1/16 (510)	30 (762)	37-3/4 (959)	9-5/8 (244)	2 (51)	3 (76)	28 (711)	1,789	475 (306,451)	150 (568)	765 (347)	2,017 (915)
R-12G (B)	75-3/8 (1,915)	27 (686)	25-3/4 (654)	22-5/8 (575)	36 (914)	46-3/4 (1,187)	11-5/8 (295)	2 (51)	3 (76)	31 (787)	2,665	645 (416,128)	291 (1,101)	1,038 (471)	3,466 (1,572)
R-14G (B)	92-1/8 (2,340)	31-1/2 (800)	34-3/4 (883)	25-7/8 (657)	42 (1,067)	54-1/2 (1,384)	14 (356)	2 (51)	3 (76)	32-1/2 (826)	3,400	715 (461,286)	470 (1,779)	1,775 (805)	5,715 (2,592)
R-16G (B)	104 (3,642)	36 (914)	37-3/4 (959)	30-1/4 (768)	48 (1,219)	62-1/2 (1,588)	16 (406)	2 (51)	3 (76)	40 (1,016)	4,200	919 (592,902)	723 (2,737)	2,417 (1,096)	8,450 (3,833)

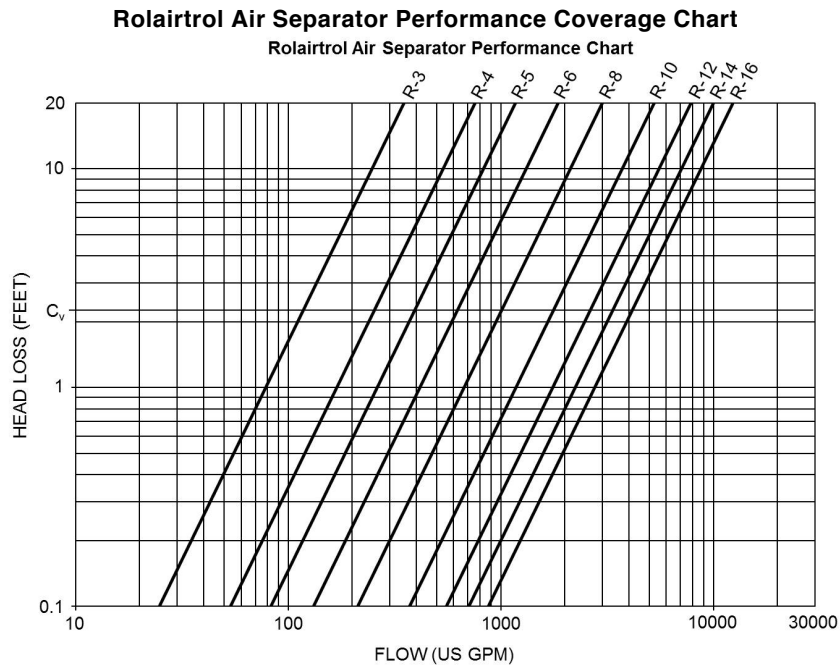
MODEL NUMBER	L	M	N	Weights of Brackets
R-3GB	13-3/8 (340)	14 (356)	2 (51)	9 (4)
R-4GB	15-3/8 (391)	16 (406)	2 (51)	9 (4)
R-5GB	18-1/2 (470)	19-3/8 (492)	2 (51)	9 (4)
R-6GB	22-1/8 (562)	21-1/4 (540)	2 (51)	9 (4)
R-8GB	26 (660)	29-1/2 (749)	2 (51)	30 (14)
R-10GB	31-5/8 (803)	35-1/2 (902)	2 (51)	30 (14)
R-12GB	37-5/8 (956)	41-1/2 (1,054)	2 (51)	30 (14)

**IMPORTANT NOTES:**

1. Consult IOM A85524 for Safety and Service Instructions.
2. Model "R" Rolairtrol Air Separators have strainers which must be removed and cleaned after 24 hours operation, 30 days operation and as required to maintain proper system air separation. Before installing the model "R" Rolairtrol, refer to (K) in the dimensions and weights table, which notes minimum distances to be maintained between the blowdown connection and the floor or other equipment for strainer removal.
3. Lifting lugs are for the transportation and installation of the empty vessel, and are not to be used for complete or partial support of the flood vessel.
4. The R skirt can support flooded vessel weight. Strainer Models require adequate floor clearance of skirt for removal of strainer.
5. Welding to the pressure vessel boundary will void the ASME stamp.
6. Standard Rolairtrol design up to 12" can be hung from the nozzles using hangers. Optional, factory welded, support brackets are available for an additional cost.

**MODEL NUMBERING**





**TYPICAL ROLAIRTROL SPECIFICATIONS**

Note: Pressure drops for a range of flow are indicated on this chart. Users should select Rolairtrol using B&G published capacity guidance, and ASHRAE pipe sizing recommendations for optimal performance.

Furnish and install, as shown on plans, a centrifugal type air separator. The unit shall have \_\_\_\_\_ " inlet and outlet grooved connections tangential to the vessel shell. The unit shall have an internal type 304 stainless steel strainer and air separator with 3/16" (4.8mm) perforations and 51 percent open area designed to direct accumulated air to an air vent (air elimination system) via an NPT vent connection at top of unit.

A blowdown connection shall be provided to facilitate routine cleaning. Specify B&G Model MBV-1 Rolairtrol accessory with appropriate fittings for manual blowdown.

Vessel shell diameter to be three times the nominal inlet/outlet pipe diameter, with a minimum vessel volume for sufficient velocity reduction.

**Refer to submittal A-329 for information on the MBV-1 manual blowdown valve.**

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

Each air separator shall be Bell & Gossett Model No. \_\_\_\_\_ Rolairtrol Air Separator for \_\_\_\_\_ GPM (\_\_\_\_\_ m3), Shell Dia. \_\_\_\_\_ " (\_\_\_\_\_ mm) and Min. Vessel Volume \_\_\_\_\_ Gal (\_\_\_\_\_ liters).

# Xylem |'zīləm|

- 1) The tissue in plants that brings water upward from the roots;
- 2) a leading global water technology company.

We're a global team unified in a common purpose: creating advanced technology solutions to the world's water challenges. Developing new technologies that will improve the way water is used, conserved, and re-used in the future is central to our work. Our products and services move, treat, analyze, monitor and return water to the environment, in public utility, industrial, residential and commercial building services settings. Xylem also provides a leading portfolio of smart metering, network technologies and advanced analytics solutions for water, electric and gas utilities. In more than 150 countries, we have strong, long-standing relationships with customers who know us for our powerful combination of leading product brands and applications expertise with a strong focus on developing comprehensive, sustainable solutions.

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