

Job:	Representative:
Unit tag: _____	Order number: _____ Date: _____
Engineer: _____	Submitted by: _____ Date: _____
Contractor: _____	Approved by: _____ Date: _____



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.

- **Maximum working pressure:** 125 PSIG (862 kPa)
- **Temperature adjustment range:** -20°F (-29°C) to +350°F (177°C)

Materials of construction

- **Designed and constructed per ASME Section VIII, Division 1**
- **Shell:** Carbon steel
- **System strainer:** 304 stainless steel with 3/16" (4.8mm) diameter perforations and 51% open area

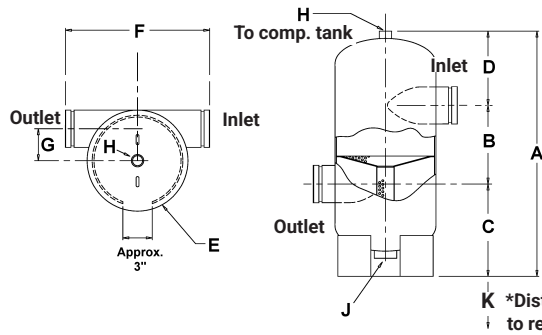
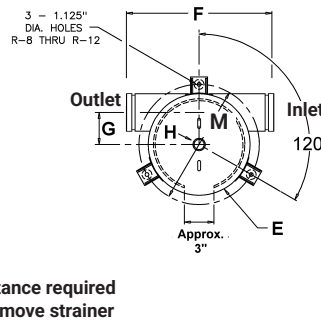
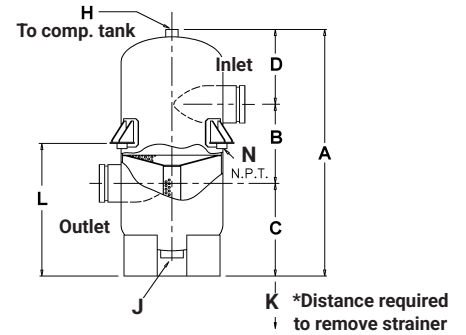
Consult factory for higher working pressures and temperatures

Schedule

Part number	Model number	Recommended capacity	Grooved tangential opening	Tagging information	Quantity
		GPM (m³/hr)	in. (mm.)		
5360-03G-12-003	R-3G	3 (76)	190 (43)		
5360-04G-12-003	R-4G	4 (101)	300 (68)		
5360-05G-12-003	R-5G	5 (127)	500 (113)		
5360-06G-12-003	R-6G	6 (152)	700 (159)		
5360-08G-12-003	R-8G	8 (203)	1,300 (295)		
5360-10G-12-003	R-10G	10 (254)	2,000 (454)		
5360-12G-12-003	R-12G	12 (305)	2,750 (624)		
5360-03G-12-004	R-3GB	3 (76)	190 (43)		
5360-04G-12-004	R-4GB	4 (101)	300 (68)		
5360-05G-12-004	R-5GB	5 (127)	500 (113)		
5360-06G-12-004	R-6GB	6 (150)	700 (159)		
5360-08G-12-004	R-8GB	8 (203)	1,300 (295)		
5360-10G-12-004	R-10GB	10 (254)	2,000 (454)		
5360-12G-12-004	R-12GB	12 (305)	2,750 (624)		

Dimensions and weights

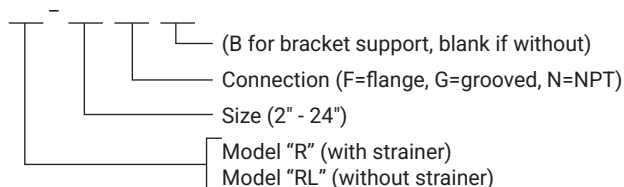
Model number	A	B	C	D	E	F	G	H	J	K	Cv	Strainer free area	Approx. volume	Approx. shpg. wt.	Flood wt. less bracket
	in. (mm.)											in ² (mm ²)	gallons (ltrs.)	lbs. (kgs.)	
R-3G (B)	26-7/8 (683)	8 (203)	10-13/16 (275)	8-1/16 (205)	10-3/4 (273)	16-3/4 (425)	3-5/8 (92)	1-1/4 (32)	3 (76)	12 (305)	119	90 (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)



Model number	L	M	N	Weights of brackets
	in. (mm.)			lbs. (kgs.)
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 note: Dimensions are not to be used for construction.

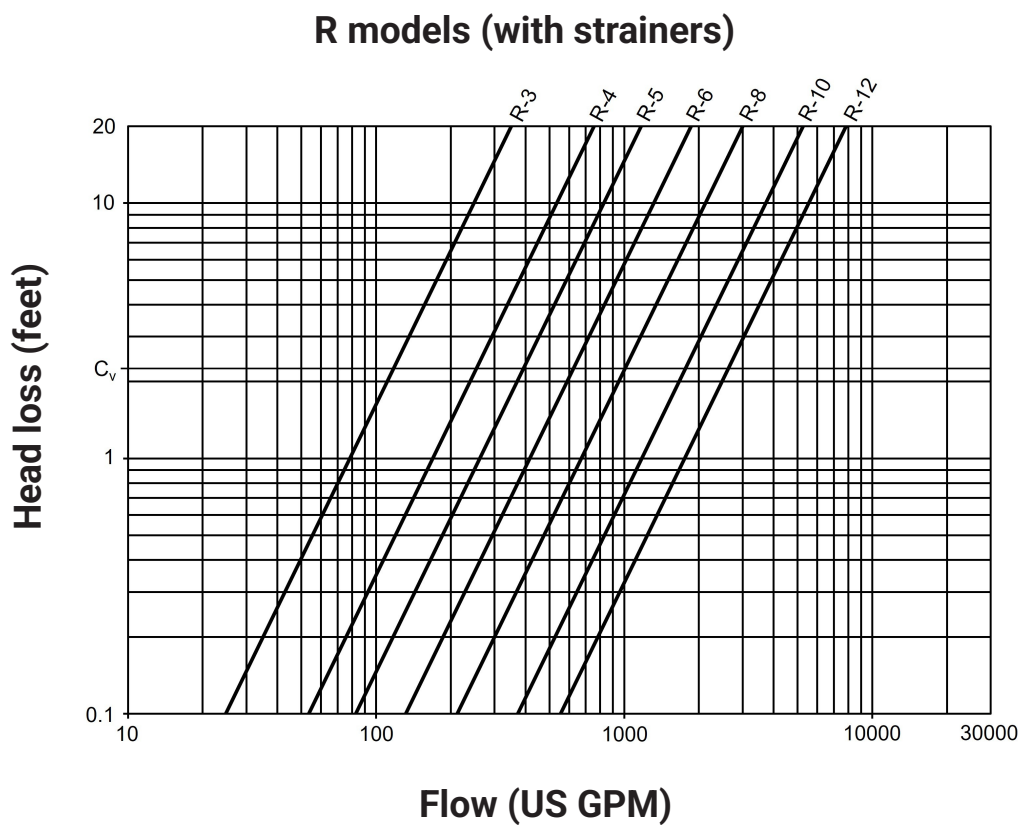
Model numbering



Support 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.

Performance chart



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

Typical Rolairtrol specifications

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 the capability to direct accumulated air to an air vent (air elimination system) via an NPT vent connection at top of unit. The unit shall have an internal type 304 stainless steel strainer with 3/16" (4.8mm) perforations and 51 percent open area.

A blowdown connection shall be provided to facilitate routine cleaning. Specify Bell & Gossett 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).

