

JOB:
REPRESENTATIVE:

 UNIT TAG:
 ENGINEER:
 CONTRACTOR:

 ORDER NUMBER:
 SUBMITTED BY:
 APPROVED BY:

 DATE:
 DATE:
 DATE:


Rolairtrol® Air Separator

 Flanged Less Strainer
 Air Control and Elimination

MAXIMUM WORKING PRESSURE
 125 PSIG (862 kPa)

MAXIMUM OPERATING TEMPERATURE
 350°F (177°C)

CONSTRUCTION MATERIALS

- Designed and constructed per ASME Section VIII, Division 1
 - **Shell:** Carbon Steel
- Consult factory for higher working pressures and temperatures

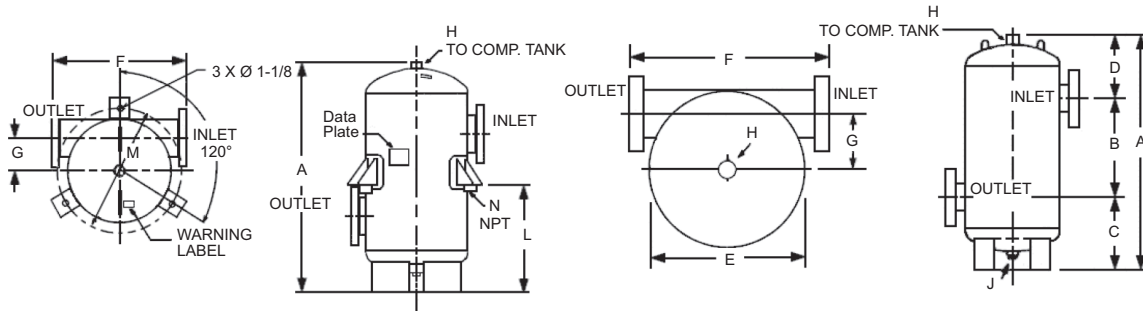
DESCRIPTION

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.

SCHEDULE

Part Number	Model Number	Capacity GPM (m ³ /hr)	Flanged Tangential Opening in. (mm)	Tagging Information	Quantity
5363-14F-12-001	RL-14F	6,100 (1,385)	14 (356)		
5363-16F-12-001	RL-16F	8,000 (1,819)	16 (406)		
5363-14F-12-002	RL-14FB	6,100 (1,385)	14 (356)		
5363-16F-12-002	RL-16FB	8,000 (1,819)	16 (406)		
5363-18F-12-002	RL-18FB	9,700 (2,203)	18 (457)		
5363-20F-12-002	RL-20FB	12,000 (2,725)	20 (508)		
5363-22F-12-002	RL-22FB	15,000 (3,406)	22 (589)		
5363-24F-12-002	RL-24FB	17,000 (3,860)	24 (635)		
5363-30F-12-002	RL-30FB	24,235 (5,505)	30 (762)		
5363-36F-12-002	RL-36FB	34,900 (7,926)	36 (914)		

Model numbers with a B suffix include bracket supports.



14" thru 36" Models less Strainer with support brackets

14" & 16" Models less strainer

DIMENSIONS

Model Number	A	B	C	D	E	F	G	H	J	Cv	Approx. Volume in Gallons (Ltr)	Approx. Shipping Weight in lbs (kg)	Flood Weight Less Bracket in lbs (kg)
RL-14F (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)	3,900	472 (1,787)	1,300 (590)	5,300 (2,404)
RL-16F (B)	104 (2,642)	36 (914)	37-3/4 (959)	30-1/4 (768)	48 (1,219)	62-1/2 (1,588)	16 (406)	2 (51)	3 (76)	5,100	723 (2,737)	2,200 (1,000)	8,150 (3,697)
RL-18FB	125-7/8 (3,197)	40-1/2 (1,029)	47-5/8 (1,210)	37-3/4 (959)	54 (1,372)	70-1/4 (1,784)	18 (457)	2 (51)	3 (76)	6,410	1,149 (4,349)	3,200 (1,450)	12,000 (5,445)
RL-20FB	135-1/2 (3,442)	45 (1,143)	48-5/8 (1,235)	41-7/8 (1,064)	60 (1,524)	78 (1,981)	20 (508)	2 (51)	3 (76)	8,000	1,577 (5,969)	5,300 (2,405)	18,450 (8,370)
RL-22FB	148-1/8 (3,762)	49-5/8 (1,260)	52-3/4 (1,340)	45-3/4 (1,162)	66 (1,676)	85-7/8 (2,181)	22 (559)	2 (51)	3 (76)	10,000	1,958 (7,411)	5,900 (2,675)	21,750 (9,865)
RL-24FB	159-3/8 (4,048)	54 (1,372)	56-1/8 (1,426)	49-1/4 (1,251)	72 (1,829)	93-1/2 (2,375)	24 (610)	2 (51)	3 (76)	11,700	2,463 (9,322)	6,850 (3,105)	27,250 (12,360)
RL-30FB	200-3/4 (5,100)	66 (1,676)	75-1/8 (1,908)	59-5/8 (1,514)	90 (2,286)	112 (2,845)	30 (762)	2 (51)	3 (76)	18,750	6,250 (23,658)	11,000 (4,990)	50,500 (22,905)
RL-36FB	239-3/4 (6,090)	81 (2,057)	85-3/4 (2,178)	73 (1,854)	108 (2,743)	140 (3,556)	36 (914)	2 (51)	3 (76)	25,800	9,125 (34,542)	21,500 (9,750)	90,250 (40,935)

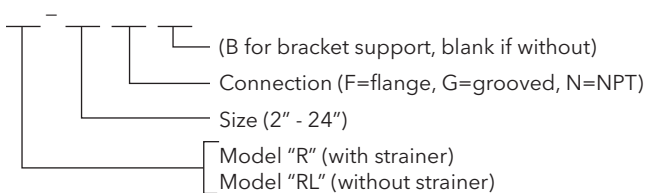
NOTE: DIMENSIONS NOT TO BE USED FOR CONSTRUCTION.

Model Number	L	M	N	Weights of Brackets
RL-14FB	48 (1,219)	49 (1,245)	3 (76)	56 (25)
RL-16FB	50 (1,270)	54-1/2 (1,384)	3 (76)	120 (54)
RL-18FB	61-5/8 (1,565)	60-5/8 (1,340)	3 (76)	N/A
RL-20FB	68-5/8 (1,743)	67-3/4 (1,720)	4 (102)	N/A
RL-22FB	74-1/8 (1,883)	73-3/4 (1,875)	4 (102)	N/A
RL-24FB	80-3/8 (2,042)	79-3/4 (2,025)	4 (102)	N/A
RL-30FB	103 (2,616)	98-3/4 (2,508)	4 (102)	N/A
RL-36FB	122 (3,100)	116-3/4 (2,965)	4 (102)	N/A

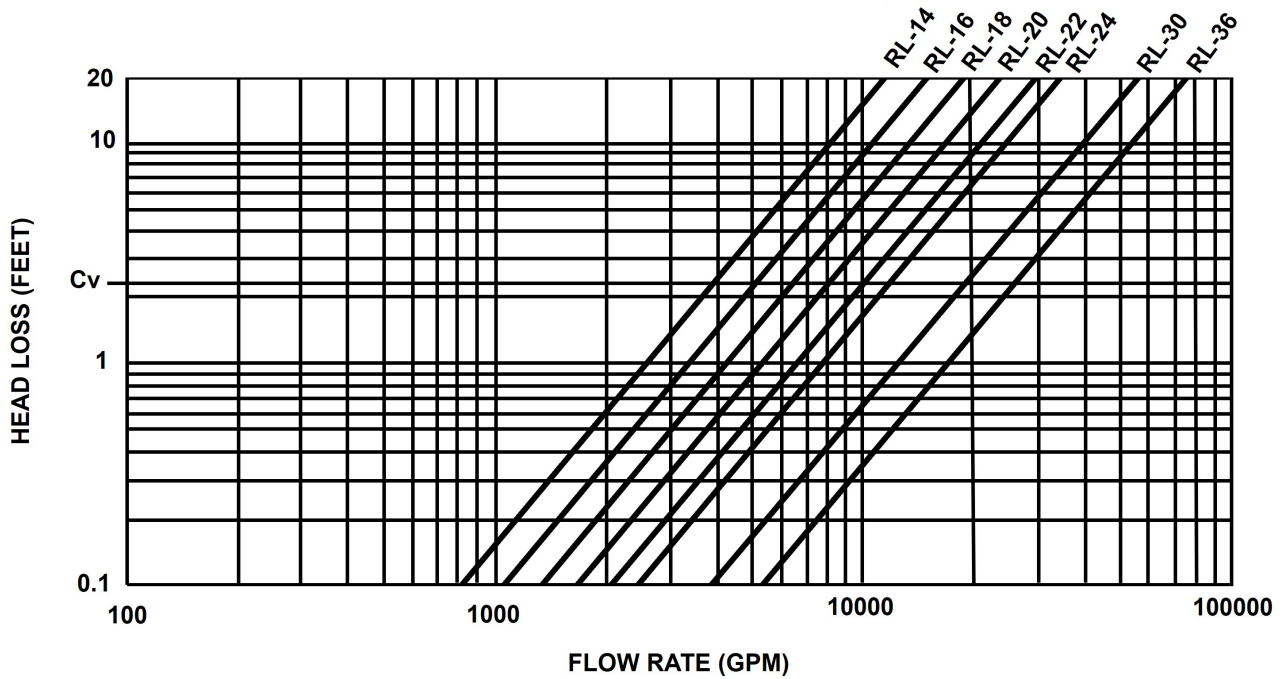
IMPORTANT NOTES:

1. Consult IOM A85524 for safety and service instructions.
2. 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.
3. Welding to the pressure vessel boundary will void the ASME stamp.
4. Factory welded support brackets are included on sizes 18" and above. Optional factory welded support brackets are strongly recommended for sizes 14" and above.
5. Flanged connections for field piping drilled and faced per 150# ANSI standards

MODEL NUMBERING



R MODELS (WITHOUT STRAINER)
Rolairtrol Air Separator Performance Chart



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.

TYPICAL ROLAIRTROL SPECIFICATIONS

Furnish and install, as shown on plans, a centrifugal type air separator. The unit shall have _____" inlet and outlet flanged connections tangential to the vessel shell. The unit shall have an internal 304 stainless steel strainer and air separator with 3/16" (4.8 mm) 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).



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