

JOB:
REPRESENTATIVE:
UNIT TAG:
ORDER NO.
DATE:
ENGINEER:
SUBMITTED BY:
DATE:
CONTRACTOR:
APPROVED BY:
DATE:


ROLAIRTROL[®]

Air Separator

Flanged Less 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

MAXIMUM WORKING PRESSURE

125 PSIG (862 kPa)

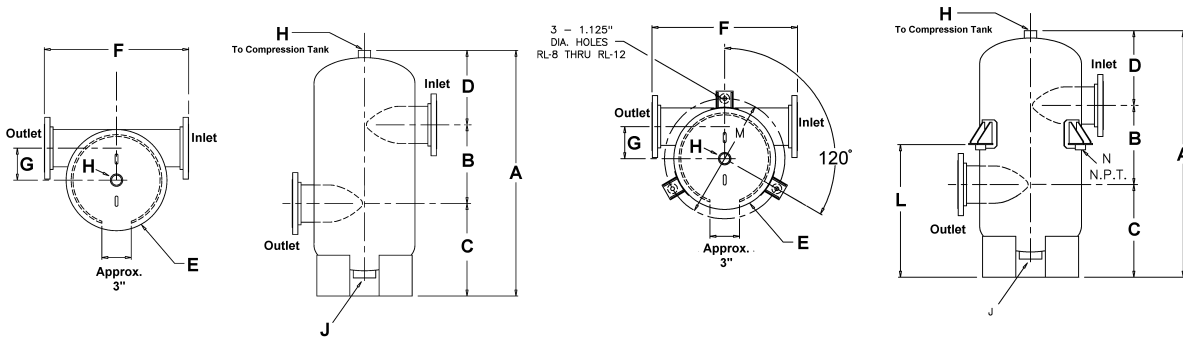
MAXIMUM OPERATING TEMPERATURE

350°F (177°C)

Consult factory for higher working pressures and temperatures.

| PART NUMBER | MODEL NUMBER | Capacity GPM (m ³ /hr) | Flanged Tangential Opening in. (mm) | TAGGING INFORMATION | QUANTITY |
|-----------------|--------------|-----------------------------------|-------------------------------------|---------------------|----------|
| 5363-03F-12-003 | RL-3F | 190 (43.2) | 3 (76.2) | | |
| 5363-04F-12-003 | RL-4F | 300 (68.1) | 4 (101.6) | | |
| 5363-05F-12-003 | RL-5F | 530 (120.4) | 5 (127.0) | | |
| 5363-06F-12-003 | RL-6F | 850 (193.0) | 6 (150.0) | | |
| 5363-08F-12-004 | RL-8F | 1,900 (431.5) | 8 (203.2) | | |
| 5363-10F-12-003 | RL-10F | 3,600 (817.6) | 10 (254.0) | | |
| 5363-12F-12-003 | RL-12F | 4,800 (1090.1) | 12 (300.0) | | |
| 5363-03F-12-004 | RL-3FB | 190 (43.2) | 3 (76.2) | | |
| 5363-04F-12-004 | RL-4FB | 300 (68.1) | 4 (101.6) | | |
| 5363-05F-12-004 | RL-5FB | 530 (120.4) | 5 (127.0) | | |
| 5363-06F-12-004 | RL-6FB | 850 (193.0) | 6 (150.0) | | |
| 5363-08F-12-005 | RL-8FB | 1,900 (431.5) | 8 (203.2) | | |
| 5363-10F-12-004 | RL-10FB | 3,600 (817.6) | 10 (254.0) | | |
| 5363-12F-12-004 | RL-12FB | 4,800 (1090.1) | 12 (300.0) | | |

Model numbers with a B suffix include bracket supports.



DIMENSIONS in Inches (mm) AND WEIGHTS in Lbs (kg.)

| MODEL NUMBER | A | B | C | D | E | F | G | H | J | L* | M* | N* | Cv | Approx. Volume in Gallons (Ltr.) | Approx. Shpg. Wt. in Lbs. (Kg) | Flood Wt. Less Bracket in Lbs. (Kg) | Bracket Wt. in Lbs. (Kg)† |
|--------------|-----------------|----------|----------------|----------------|--------------|---------------|---------------|------------|--------|--------------|---------------|--------|-------|----------------------------------|--------------------------------|-------------------------------------|---------------------------|
| RL-3F (B) | 26-7/8 (683) | 8 (203) | 10-13/16 (275) | 8-1/16 (205) | 10-3/4 (273) | 22-3/4 (578) | 3-5/8 (92) | 1-1/4 (32) | 2 (51) | 13-3/8 (340) | 14 (356) | 2 (51) | 215 | 7 (26) | 115 (52) | 173 (79) | 9 (4) |
| RL-4F (B) | 31-7/16 (799) | 10 (254) | 11-15/16 (303) | 9-1/2 (241) | 12-3/4 (324) | 20-1/2 (521) | 4-1/8 (105) | 1-1/2 (38) | 2 (51) | 15-3/8 (391) | 16 (406) | 2 (51) | 370 | 13 (49) | 155 (70) | 263 (119) | 9 (4) |
| RL-5F (B) | 37 (940) | 12 (305) | 14-1/16 (357) | 10-15/16 (278) | 16 (406) | 23-3/4 (603) | 5-1/4 (133) | 1-1/2 (38) | 2 (51) | 18-1/2 (470) | 19-3/8 (492) | 2 (51) | 580 | 25 (95) | 205 (93) | 414 (188) | 9 (4) |
| RL-6F (B) | 44-1/16 (1119) | 14 (356) | 16-13/16 (427) | 13-1/4 (337) | 18 (457) | 25-3/4 (654) | 5-11/16 (144) | 1-1/2 (38) | 2 (51) | 22-1/8 (562) | 21-1/4 (540) | 2 (51) | 850 | 34 (129) | 280 (127) | 564 (256) | 9 (4) |
| RL-8F (B) | 54 (1372) | 18 (457) | 19-7/16 (494) | 16-9/16 (421) | 24 (610) | 31-3/4 (806) | 7-11/16 (195) | 2 (51) | 2 (51) | 26 (660) | 29-1/2 (749) | 2 (51) | 1,445 | 90 (341) | 420 (190) | 1,171 (531) | 30 (14) |
| RL-10F (B) | 64-11/16 (1643) | 22 (559) | 22-5/8 (575) | 20-1/16 (510) | 30 (762) | 37-3/4 (959) | 9-5/8 (244) | 2 (51) | 2 (51) | 31-5/8 (803) | 35-1/2 (902) | 2 (51) | 2,340 | 150 (568) | 800 (363) | 2,052 (930) | 30 (14) |
| RL-12F (B) | 75-3/8 (1915) | 27 (586) | 25-3/4 (654) | 22-5/8 (575) | 36 (914) | 46-3/4 (1187) | 11-5/8 (295) | 2 (51) | 2 (51) | 37-5/8 (956) | 41-1/2 (1054) | 2 (51) | 3,300 | 291 (1,101) | 1,110 (503) | 3,538 (1,605) | 30 (14) |

*Indicates measurements for models that have optional support brackets

†Bracket weight should be added to flood weight and approximate shipping weight for models that are being supplied with optional support brackets.

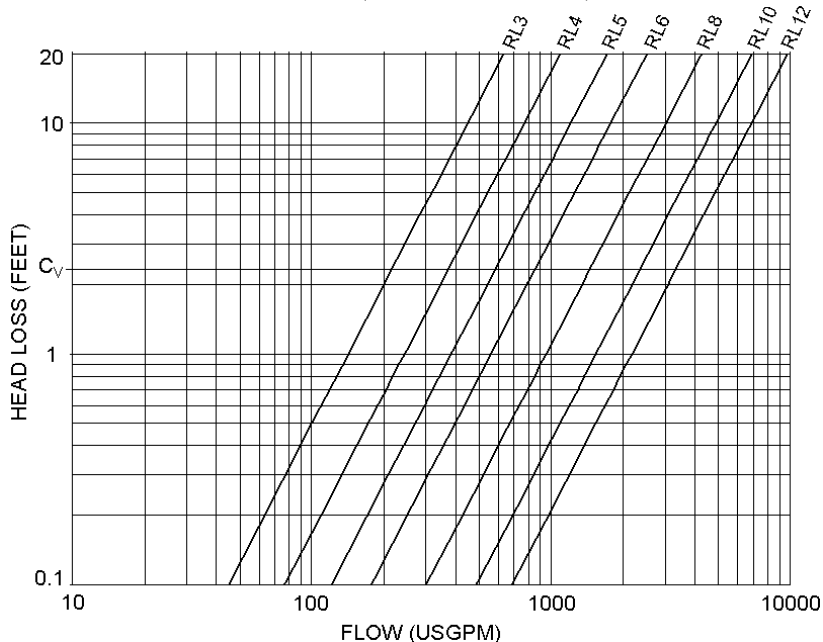
Important Note: Dimensions not to be used for construction.

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. The RL skirt can support flooded vessel weight.
4. Welding to the pressure vessel boundary will void the ASME stamp.
5. 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.

Rolairtrol[®] Air Separator Performance Coverage Chart

RL MODELS (WITHOUT STRAINERS)



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 the capability to direct accumulated air to an air vent (air elimination system) via an NPT vent connection at top of unit.

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

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

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).

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



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