

**Note:** This product should be installed, by suitably qualified persons, in a fit for purpose application, to suitable materials, using suitable fixings and comply with any relevant codes. It should be inspected periodically for signs of wear and tear that may affect performance or safety.

Dimensions are subject to manufacturer's tolerance of +/-10mm. Rough-in should be completed with each fixture.

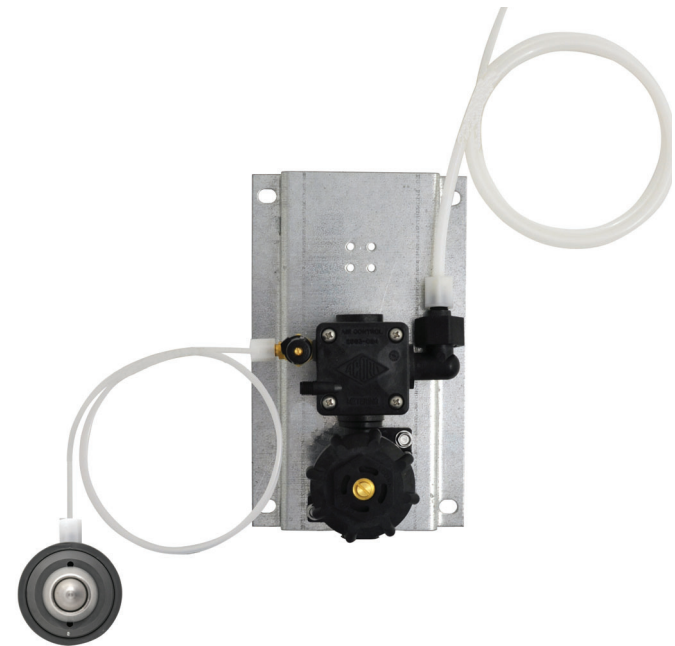
**Important:** Installation Instructions are subject to change without notice.

Please visit [www.rba.com.au](http://www.rba.com.au) for latest revision.



**RBA8000-Series**

**AIR-TROL PNEUMATIC VALVES**



**SERIES:**

- RBA8000-101 [Pictured]
- RBA8000-000-002
- RBA8000-000-003
- RBA8000-000-004

Model	RBA8000-SERIES
Date	09/10/19
Doc#	RBA8000 - Series/0919

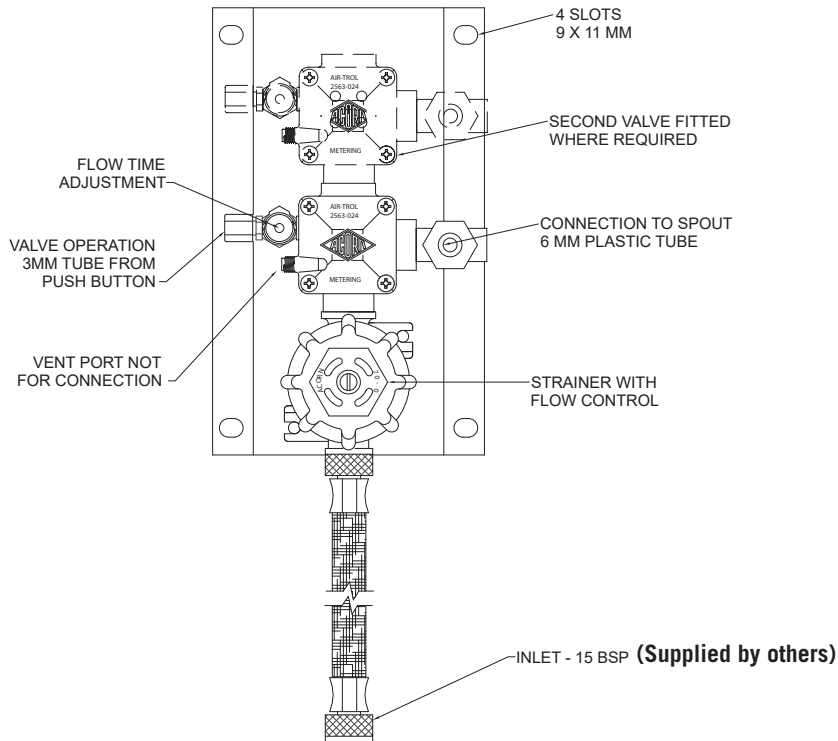
Supersedes all previous



## HYDRAULIC REQUIREMENTS

Nominal Size	15 mm
Minimum Supply Diameter	15 mm
Minimum Supply Pressure	200 kPa
Maximum Supply Pressure	600 kPa
Inlet Connection	15 mm BSP
Flow Time	5 - 60 seconds Adjustable
Maximum Water Temperature	50°C

If maximum supply pressure exceeds 600 kPa, a limiting valve must be fitted, and valve should be protected from freezing.



## AIR-TROL PNEUMATIC VALVE



**AIR-TROL SINGLE TEMP,  
SINGLE VALVE**

Pneumatic operation  
No electricity required  
Adjustable runtime,  
5-60 seconds  
Includes tubing & flexi hose  
**RBA8000-000-002**



**AIR-TROL SINGLE TEMP,  
DOUBLE VALVE**

Pneumatic operation  
No electricity required  
Adjustable runtime,  
5-60 seconds  
Includes tubing & flexi hose  
**RBA8000-000-003**



**AIR-TROL HOT & COLD,  
SINGLE VALVE**

Pneumatic operation  
No electricity required  
Adjustable runtime,  
5-60 seconds  
Includes tubing & flexi hose  
**RBA8000-000-004**

## REPLACEMENT PARTS



**BUTTON ASSEMBLY**

Stainless Steel  
Side Connection  
**RBA2566-160-001**



**BUTTON ASSEMBLY**

Stainless Steel  
Rear Connection  
**RBA2566-150-001**



**METERING ASSEMBLY**

**A2563-020-003**

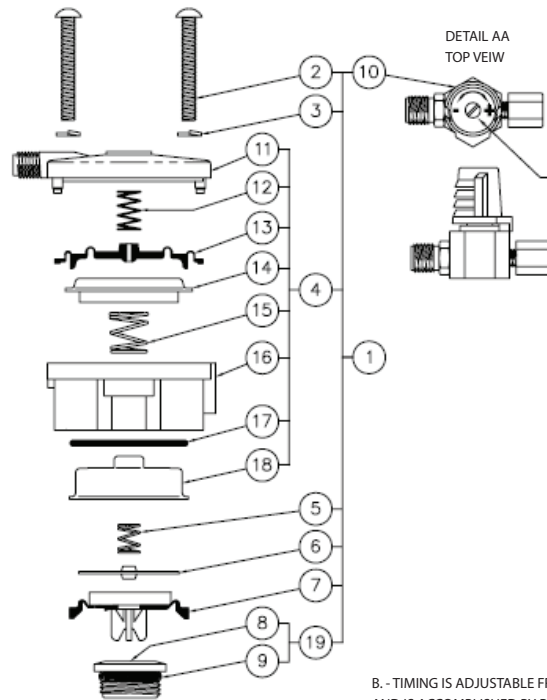
**TROUBLE SHOOTING**

PROBLEM	PROBABLE CAUSE	SOLUTION
Valve does not close fully	Dirt or grit on water diaphragm or valve seat	Remove diaphragm and clean
Valve does not close	Needle valve screwed in too far.	Re-adjust timing
	Water in top section of valve	Remove and dry components. Tighten push button rear housing and valve ass.
	Water Pressure above 700Pa	Fit limiting valve
	Dust in timing needle	Turn screw in and out two or three times
Valve does not open	Water turned off	Turn on
	Kinked braided hose	Correct
	Kinked pneumatic activation line	Correct
Low flow rate	Blocked line strainer	Remove and clean
	Blocked flow restrictor	Remove and clean
	Incorrect flow restrictor	Change
High flow rate	Incorrect flow restrictor	Change
Valve closes too soon	Incorrect time adjustment	Re-adjust
	Leak in pneumatic push button or tube	Tighten all connections
	Damaged water diaphragm	Replace
Shudder on closing	Dirt in valve	Remove flow control elbow and flush valve

**INSTALLATION**

- 1) All lines should be flushed properly before connection is made.
- 2) If valve is not secured within the fixture, it should be screw-fixed, to facilitate later servicing, in a secure location remote from the fixture, and at a distance not greater than 6 meters, using the holes provided.
- 3) Inlet is 15 mm BSP, and connection must be made using a flexible braided hose complying with AS/NZS3499. Under no circumstances should a rigid connection be made.
- 4) Connection from the valve to the spout can be made using the 6 mm plastic tube provided, tightening the compression nuts by hand only.
- 5) Pneumatic connection, from the valve to the activation push button using 3mm plastic tube provided, should also be hand tight only.
- 6) Flow can be shut off completely by turning the brass screw in the centre of the strainer, in a clockwise direction.
- 7) Once flow is established, the flow time can be adjusted by turning the brass screw in the centre of the timer assembly, clockwise to increase time, or anti-clockwise to reduce time.

OPERATION



A.- ITEMS 8 & 9 ARE USED WITH OLD STYLE BRONZE VALVE BODY ONLY

B. - TIMING IS ADJUSTABLE FROM 5 TO 60 SECONDS AND IS ACCOMPLISHED BY ROTATING THE TIMING SCREW ( SEE DETAIL AA). TURNING THE SCREW CLOCKWISE INCREASES TIMING, COUNTERCLOCKWISE DECREASES TIMING.

1	Air-Trol Metering, w/ Seat assembly	11	Metering cover plate
2	8-32 x 1-1/4" Phillips round Head	12	Metering air diaphragm spring
3	48 Lockwasher	13	Metering air diaphragm
4	Metering motor assembly	14	Magnet cup assembly
5	Pilot orifice plate spring	15	Actuator Spring
6	Pilot orifice plate assembly	16	Motor housing
7	Water Diaphragm assembly	17	O-ring
8	seat	18	Separator cup
9	Seat o - ring	19	Seat assembly
10	Timer Assembly		

- 1) At rest, or valve closed, water pressure is balanced on both sides of the diaphragm (7), due to the greater surface area on top of the diaphragm, the valve is held closed using the inlet water pressure.
- 2) When the button is pushed, and released, a negative pressure is created in the connection tube, timer assembly (10), and top section of the valve.
- 3) This negative pressure, via a magnet, lifts the orifice plate (6) off a small orifice in the water diaphragm.
- 4) This allows a small amount of water to drain from the top of the diaphragm into the outlet, thus allowing the now greater inlet pressure under the diaphragm, to push the diaphragm away from the valve seat, and water to flow through the valve.
- 5) As this is happening, air is bleeding back into the top section of the valve via a needle valve in the timer ass. (10), allowing the orifice plate to resume its original position over the orifice in the water diaphragm, restoring pressure on top of the diaphragm, closing the valve.
- 6) Closing time may be adjusted by controlling the speed at which air is allowed to bleed back into the top chamber of the valve.
- 7) This is done by turning the timing screw adjustment (10), clockwise to increase time, or anticlockwise to reduce time.