MODEL

PNEUMATIC VALVES

RBA8511-series Pneumatic Air-Control Valve | Single Temperature
RBA8521-series Pneumatic Air-Control Valve | Dual Temperature

Lead Free
AS3718
LIC. WM-022005

Quality Management · ISO 9001
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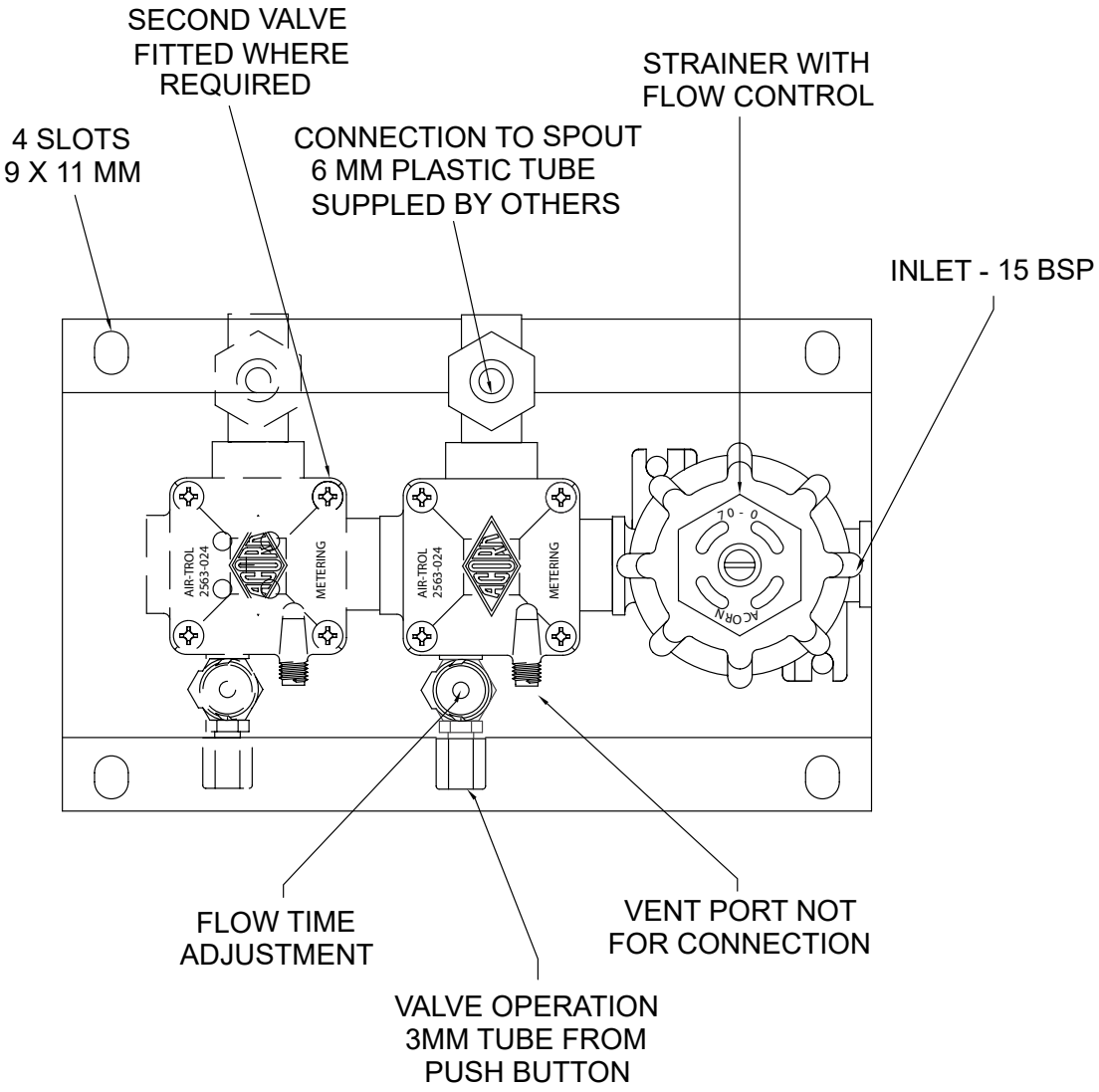
Hydraulic Requirements

Nominal Size	15mm
Minimum Supply Diameter	15mm
Minimum Supply Pressure	200 kPa
Maximum Supply Pressure	500 kPa
Inlet Connection	15mm BSP
Flow Time	5 - 60 seconds adjustable
Maximum Water Temperature	50°C

If maximum supply pressure exceeds 500kPa, a limiting valve must be fitted. Valve shall be protected from freezing at all times.



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Installation

This product is to be installed in accordance with the Plumbing Code of Australia, NCC and AS3500 as well as any other applicable requirements subject to the jurisdiction under which the product may be installed. This includes maximum heated water temperatures to sanitary fixtures, accessible design requirements and where applicable backflow prevention devices may be required. Additionally, where flexible connectors to AS3499 are installed, they shall be in an accessible location.

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 [using holes provided] in a secure location no greater than 3 metres away.

3. Inlet is 15mm BSP, and connection must be made using a flexible hose with a flat seat connection complying with AS3499 [supplied by others]. Under no circumstances shall a rigid connection be made.

4. Connection from the valve to the spout can be made using the 6mm plastic tube, tightening the compression nuts by hand only.

5. Pneumatic connection, from the valve to the activation push button using 3mm plastic tube, tightening by hand 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

1. At rest, water pressure is balanced on both sides of the diaphragm. The greater surface area on the top of the diaphragm holds the valve 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, and top section of the valve.

3. This negative pressure, via a magnet, lifts the orifice plate 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, creating a pressure imbalance under the diaphragm. This pushes the diaphragm away from the valve seat and allows 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 assembly, allowing the orifice plate to resume its original position over the orifice in the water diaphragm, restoring pressure on top of the diaphragm and 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 clockwise to increase time, or anticlockwise to reduce time.

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Troubleshooting

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 bottom rear housing and valve ass.
	Water pressure above 500kPa.	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 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 resistor.	Change.
Valve close 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 clear valve.

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 **our websites** for latest revision

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