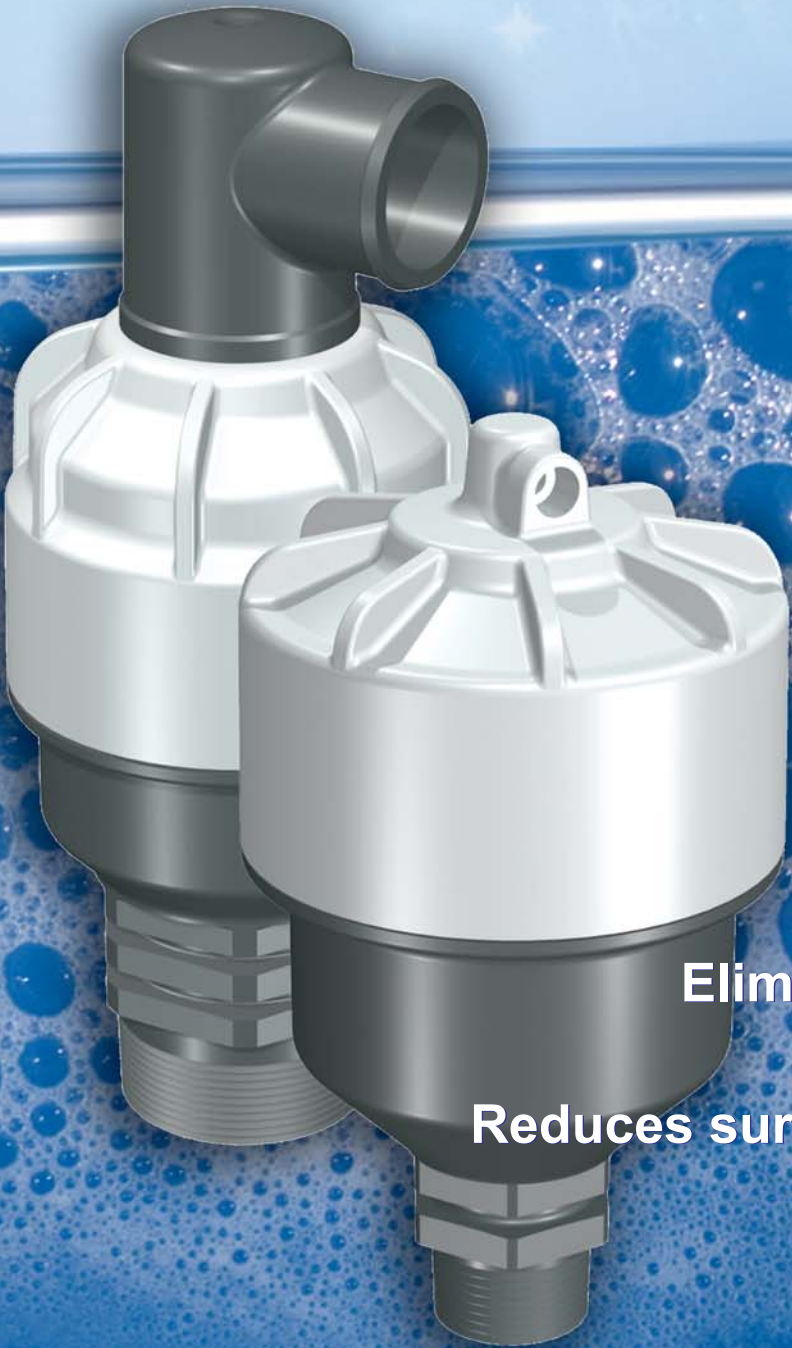


VENT-O-MAT®

SERIES RPS

GENERAL SERVICE, ROBUST LIGHTWEIGHT
PLASTIC AIR RELEASE AND
VACUUM BREAK VALVES



Pipelines



Industrial



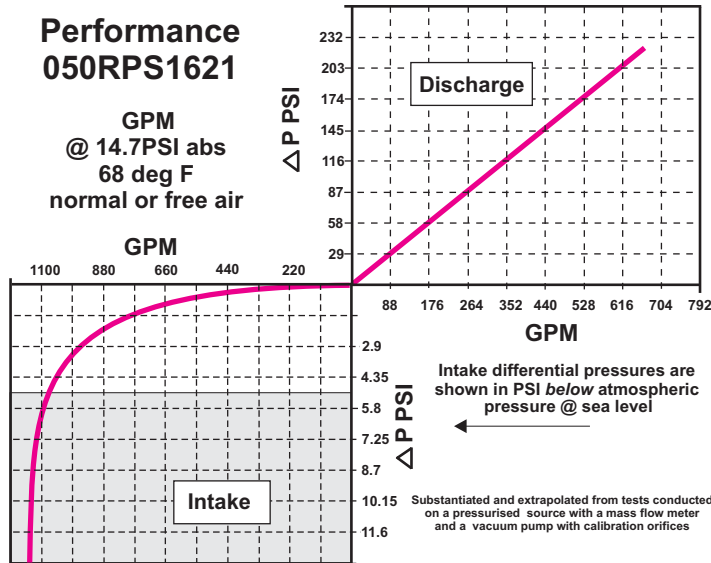
Irrigation



- Eliminates air from pipeline
- Breaks vacuum
- Reduces surge by unique operation
- Corrosion resistant
- Multifunction options

Series RPS

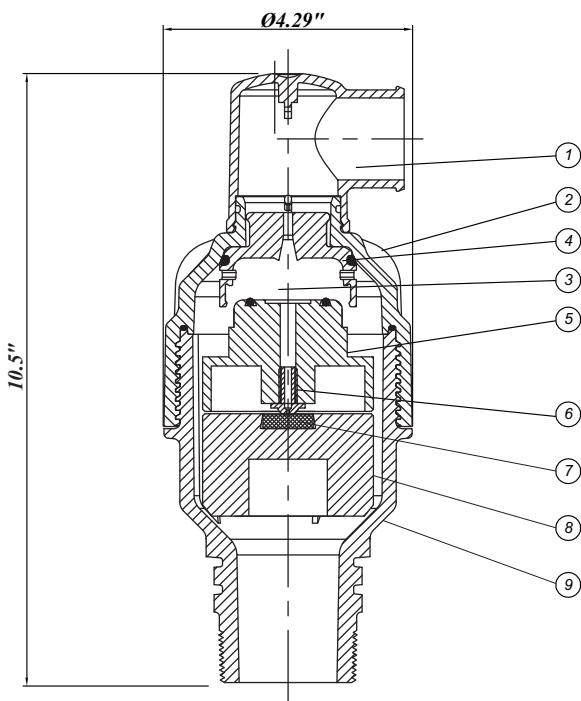
Vent-O-Mat Series RPS 2" NPT Air release and vacuum breaking



Caution

The VENT-O-MAT valve is specifically designed to limit the large discharges associated with the large orifice .

When evaluating the large orifice performance of **other valve manufacturers**, ask specifically if the large orifice discharge data quoted is in the presence of water. In other words if the discharge performance is quoted as say 1761 GPM @ 11.6 PSI the valve must be able to close instantaneously with water and still not exceed its max test pressure rating of 348 PSI (1.5 times working pressure)



Parts

Item	Description	Material
1	Outlet	Polypropylene
2	Upper Body	Polypropylene reinforced
3	"Anti-shock" Device	Polypropylene
4	O - Rings	EPDM
5	Upper Float	Polyethylene
6	Nozzle	Stainless Steel/ Nylon
7	Nozzle Seat	EPDM
8	Lower Float	Polyethylene
9	Lower Body	Polypropylene reinforced

Specifications

Operating pressure	2.9 to 232 PSI
Media	Drinkable water 39 - 185 Deg F
Inlet	2 Inch NPT Male (taper)
Outlet	Rotatable 360 deg for 1.7" ID pipe
Mass	2.07 lb
Areas (inches) ²	Large orifice 1.24 , small orifice 0.0007

Benefits

- Simple efficient action
- Reduces water hammer
- Multifunction versatile product
- Ensures maximum protection

- UV stabilised
- Robust lightweight and compact
- Replaces any existing valves

Ordering information

050RPS1621	Standard - 2 inch NPT 232 PSI
050RPSb1621	Pump start- Large orifice in small orifice out
050RPSv1621	For syphon- both orifices out only

Vent-O-Mat Series RPS 1" and ½" NPT Air Release only

Series
RPS

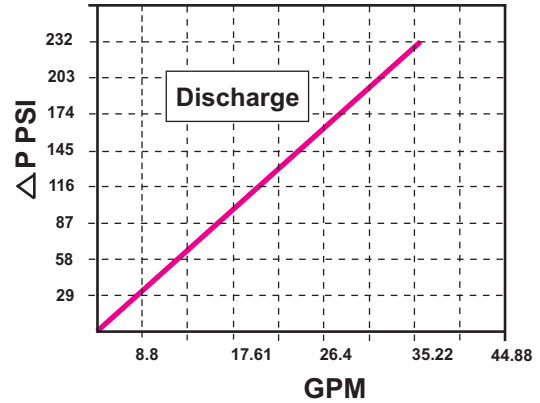
Performance

025RPS1621

015RPS1621

GPM
@ 14.7PSI abs
68 deg F
normal or free air

Substantiated and extrapolated from tests conducted on a pressurised source with a mass flow meter



Parts

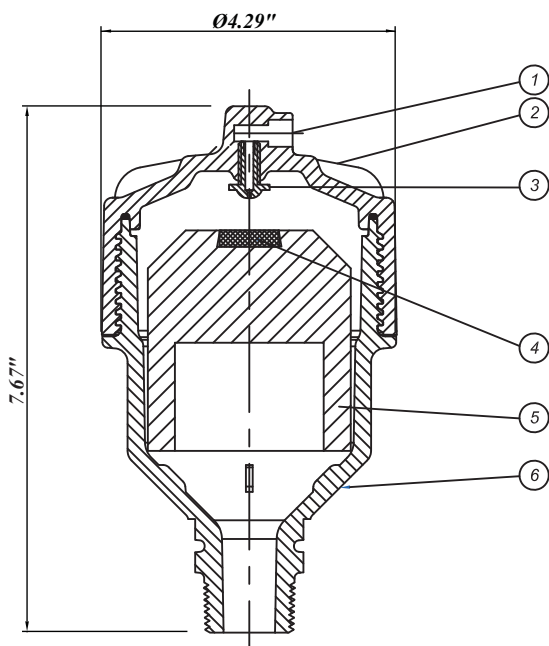
Item	Description	Material
1	Outlet	(Part of upper body)
2	Upper Body	Polypropylene reinforced
3	Nozzle	Stainless steel /Nylon
4	Nozzle Seat	EPDM
5	Control Float	Polyethylene
6	Lower Body	Polypropylene reinforced

Specifications

Operating pressure	2.9 to 232 PSI
Media	Drinkable water 39 - 185 Deg F
Inlet	½ and 1 Inch NPT Male (taper)
Mass	1.7 LB
Area inches ²	Small orifice 0.00068
Outlet	0.05" Dia
Outlet (options)	External pipe min 0.2" dia ID (Press in fitting) hole 0.38" dia ID

Ordering information

015RPS1621	Standard - ½ inch NPT 232 PSI
025RPS1621	Standard - 1 inch NPT 232 PSI
000RPS01	Press in fitting for ext tube - nylon



Benefits

- Simple efficient action
- Reduces water hammer
- Multifunction versatile product
- Ensures maximum protection
- UV stabilised
- Robust lightweight and compact
- Replaces any existing valves

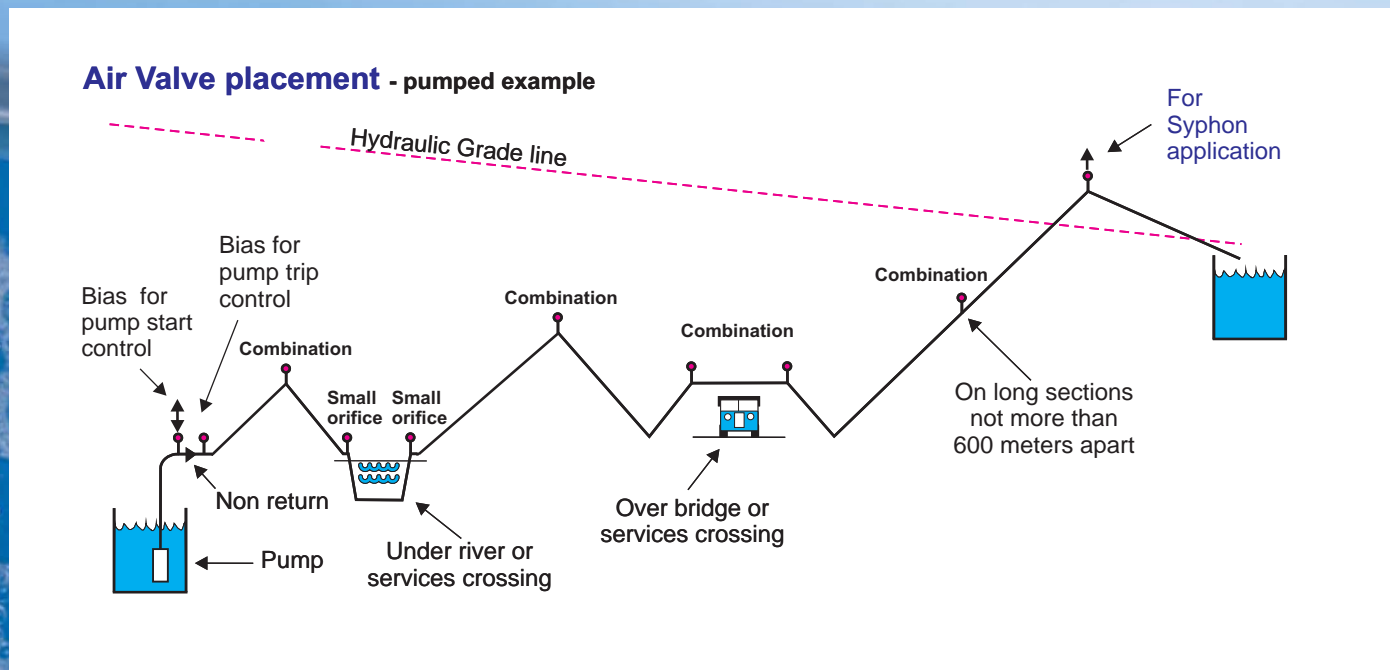
General Sizing Notes

Sizing

Most sizing is based on the need to vent the initial air, to protect the pipeline and seals from a negative pressure and to vent the pressurised air. For small orifice air release see the diagram below for general positioning. A general rule for vacuum protection is to limit the internal pipeline pressure to 5 PSI below atmospheric. The intake curve on page 2 shows the safe limits. Calculate the possible outflow out of the pipeline for scouring or rupture for each section to ensure it does not exceed the safe limit of 1056 GPM for the 2" valve. On pumped applications assume the pump flow rate is equal to the rupture rate.

Placement

The graphic below shows most of the common places where air release valves are fitted. High points are a natural start, also over or under obstacles like bridges and roads. Check for syphon application (type 050RPSv1621) above the hydraulic grade line. Special care should be given to the pump and check valve with the application of biased valves (type 050RPSb1621) before and after the check valve to control pump start and pump trip.



Ventomat series of valves and further information is available from :-

RF Technologies, Inc t/a Vent-O-Mat USA.
1342 Charwood Rd., Suite A
Hanover,
MD 21076
USA

Tel:- +1-410-850-4404
Fax:- +1-410-850-4464
Sales+1-770-725-5440
rfvalves@rfvalve.com
www.ventomat.us