

# Automatic Air and Vacuum Valve for Waste Water



## Model 990 – Made in the USA

Automatic air release and vacuum valve, AIS and BABA Compliant, for operating range: 0 – 250 PSI (17.2 Bar), outdoor application possible



Type	Size ANSI	Maximum Pressure PSI/Bar	Body Material	Overall Width B Inch/mm	Overall Height H Inch/mm	Weight lbs./Kg
Thread	2" FNPT	250 PSI 17.2 Bar	Stainless Steel	10.75" 273 mm	24.4" 620 mm	35 lbs. 16Kg
Thread	3" FNPT	250 PSI 17.2 Bar	Stainless Steel	10.75" 273 mm	24.4" 620 mm	36 lbs. 16 Kg
Flange	3" ANSI	250 PSI 17.2 Bar	Stainless Steel	10.75" 273 mm	24.7" 627 mm	46 lbs. 21 Kg
Flange	4" ANSI	250 PSI 17.2 Bar	Stainless Steel	10.75" 273 mm	24.7" 627 mm	55 lbs. 25 Kg
Flange	6" ANSI	250 PSI 17.2 Bar	Stainless Steel	10.75" 273 mm	24.7" 627 mm	64 lbs. 29 Kg
Flange	8" ANSI	250 PSI 17.2 Bar	Stainless Steel	10.75" 273 mm	24.7" 627 mm	70 lbs. 32 Kg

### Features:

Automatic and infinitely variable air valve for waste water applications. Recommended for outdoor application in frost-free areas. These air release valves are AIS compliant.

Maximum Operating Pressure: 250 PSI (17.2 Bar). Operating Range: 0 – 250 PSI (0 - 17.2 Bar).

Valve body of US made 316 Stainless Steel. Valve seat does not contact the medium (air cushion). Two connections for effective flushing during maintenance work (top inlet flushing connection). All mechanical parts are manufactured of corrosion-resistant materials.

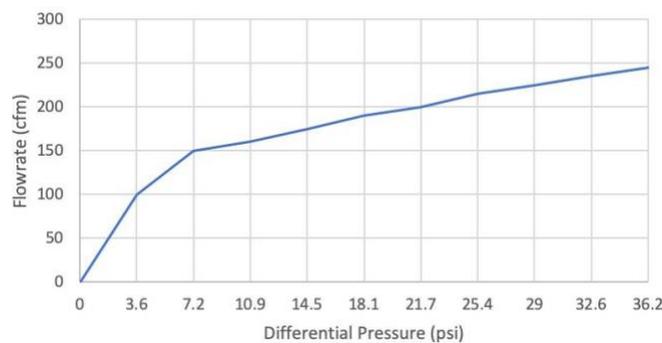
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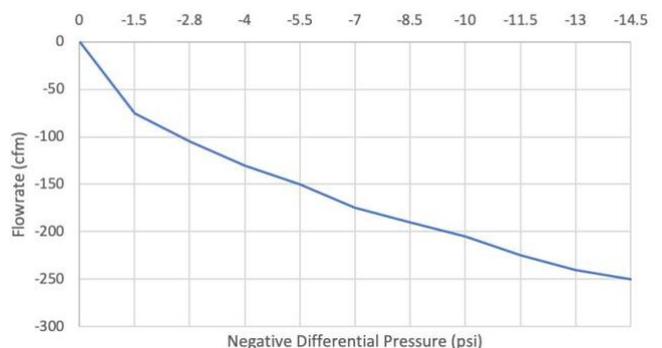
## Materials:

Component	Series - Stainless
Diaphragm	Buna HNBR
Debris shield	Homopolymer (PP)
Body	USA made Stainless Steel 316
Float	Delrin® (POM)
Debris screen	Delrin® (POM)
Diaphragm holder	Delrin® (POM)
Upper air valve part	Delrin® (POM)

Air Release Flowrate



Vacuum Flowrate



## Valve Maintenance:

Air valves must be tested for function and maintained at least once per year. Valve must be shut off and flushed at both lateral connections.

## Infinitely variable surge protection:

In general understanding the surge protection of an ARV is a measure taken to protect the pipeline system. Filling of the pipeline should be within international standards to prevent water hammer (5ft/s) or (0,25m/s) and correct opening and closing of valves is fundamental.

The design of the H-TEC 990 ARV allows for large volumes of air (in/out). The unique function for infinite air release/intake, due to the automatic movements of the diaphragm in operation modus, (e.g. Fluid level rises, diameter of orifice is reducing infinitely variable) soft sealing and slowing the water column preventing water hammer.

Traditional ARV's operate with two functions: open or closed. The rubber diaphragm of the H-TEC model 990 is infinitely variable operating. In case of increased velocity in the valve the float will lift slow and throttle down the air flow. This function slows the water column, water hammer from this ARV will not occur. The H-TEC 990 ARV has an integrated pressure spring on the vertical shaft attached to the float. This mechanical feature protects from vibrations, smooth function, prevents amplified movements. No additional surge prevention unit necessary.