

# AIR VENT INSTALLATION GUIDELINES

## BASIC PRINCIPLES OF AIR VENTS

### PROBLEMS RELATED TO AIR IN PIPELINES

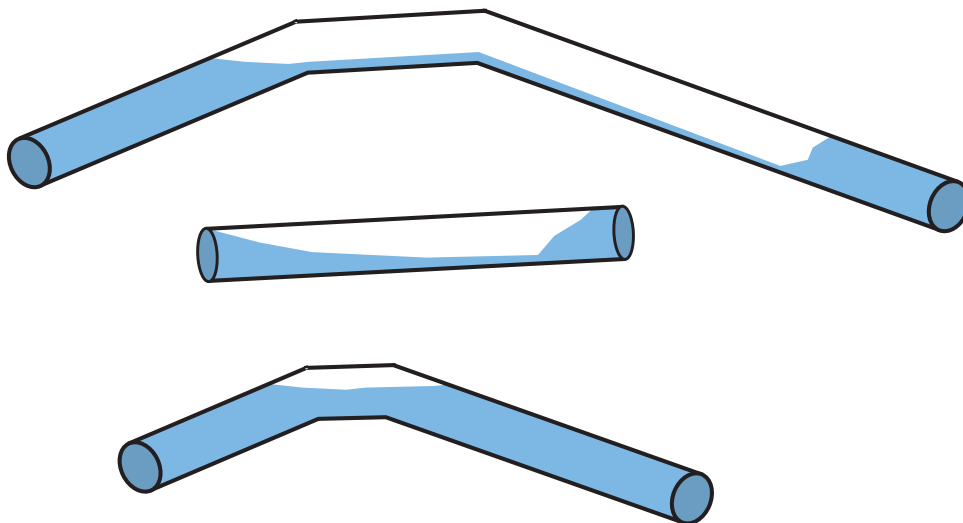
- Damage caused by local water hammer and line surges.
- Increased energy costs caused by obstruction of flow in pipelines and resulting head losses.
- Crop damage caused by inadequate water supply due to obstruction of flow by air pockets.
- Faulty water meter readings resulting in inadequate water supply.
- Corrosion at the crown of metal pipes caused by air pockets.
- Acceleration of cavitation.

### PROBLEMS AND DAMAGES RELATED TO LACK OF AIR IN PIPELINES

- Suction of mud and dirt through the drippers.
- Suction of seals, gaskets and internal accessories into the pipeline.
- Uncontrolled suction of injected chemicals or fertilizers into the system.
- Pipe or accessory collapses due to sub-atmospheric (negative) pressures.
- In some cases, the absence of an air cushion can increase the damages of surge and slam phenomena.

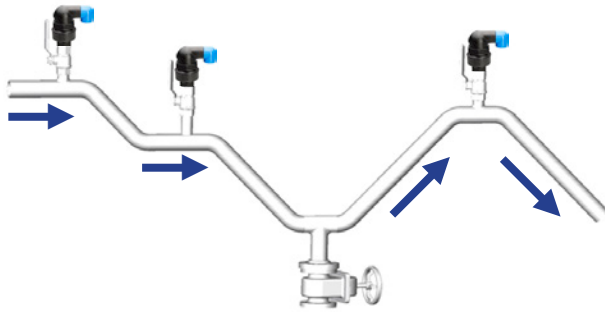
### LOCATION OF ENTRAPPED AIR IN THE PIPELINE

- Air pockets developing at critical points along the pipeline.

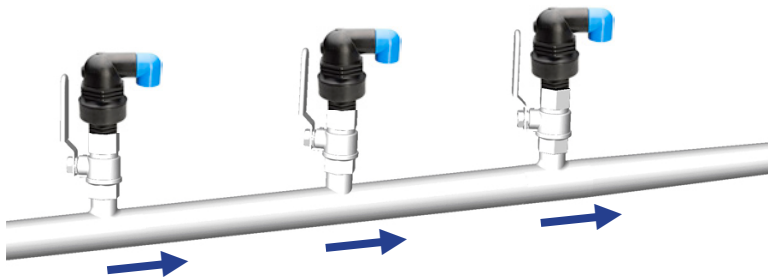


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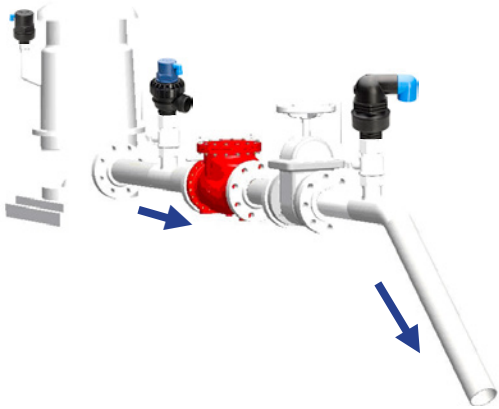
## INSTALLATION AT THE HIGH POINTS IN A LINE



## INSTALLATION ON A LONG FLAT LINE (RECOMMENDED EVERY 500 YARDS)

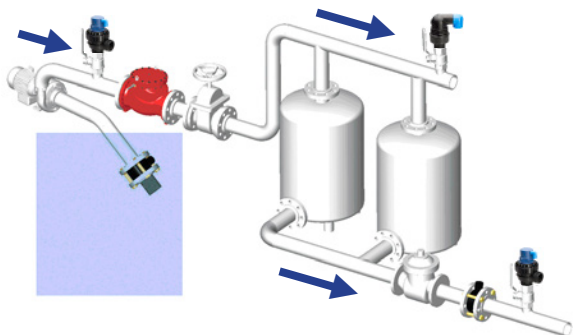


## INSTALLATION AT PUMPS AND PUMP STATIONS

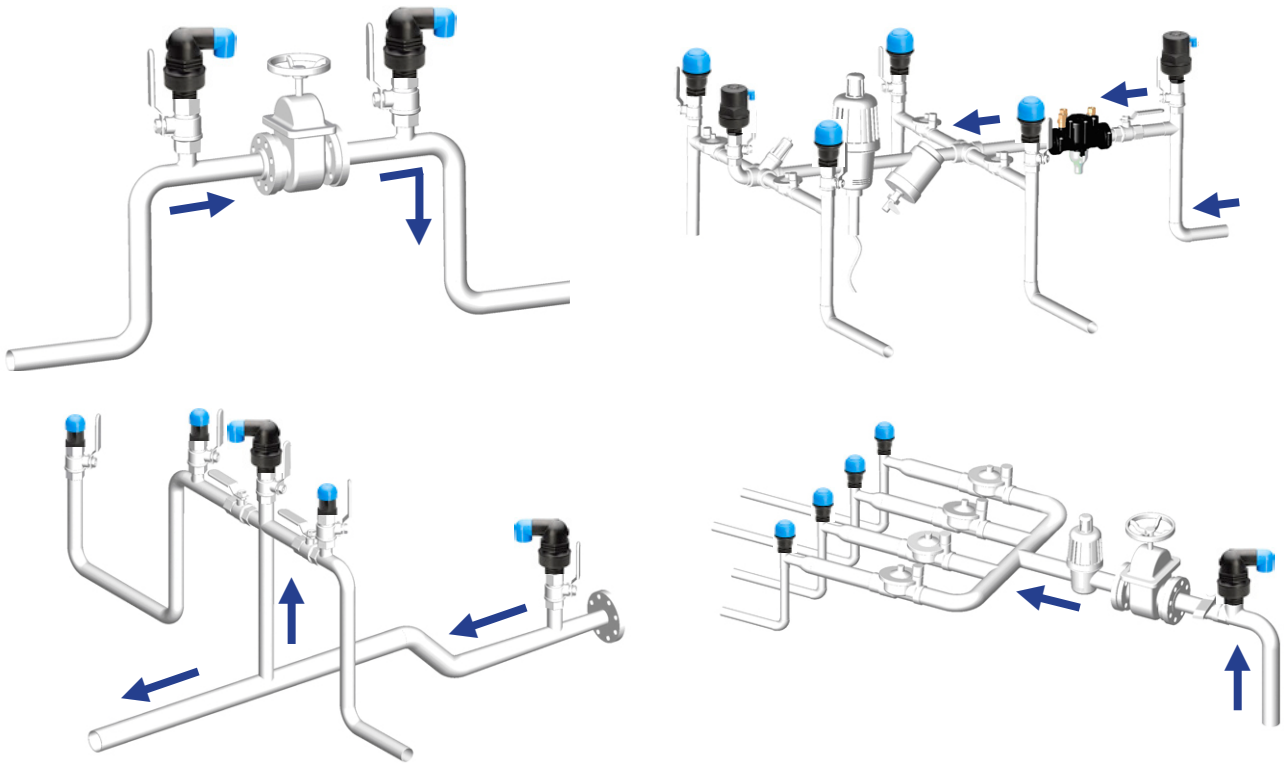


NOTE: It is recommended to install an Automatic Air Vent directly before the pump and a Dynamic Air Vent directly after the pump and before the pump check valve. It is recommended to put another Combination Air Vent after the pump check valve. This Combination Air Vent will intake air when pump is shut down and the check valve closes. It will also discharge air from the line when the water column returns.

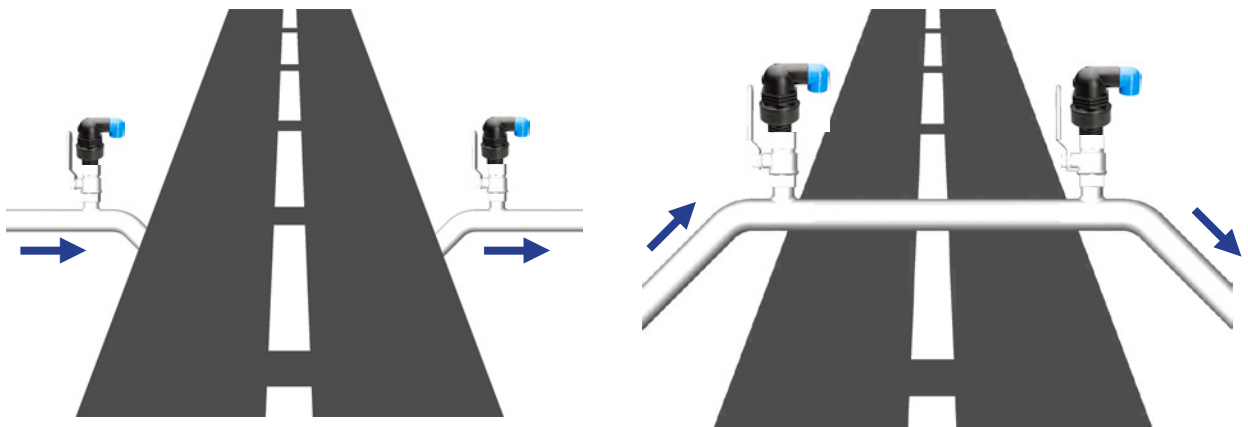
## INSTALLATION AT FILTRATION SYSTEMS



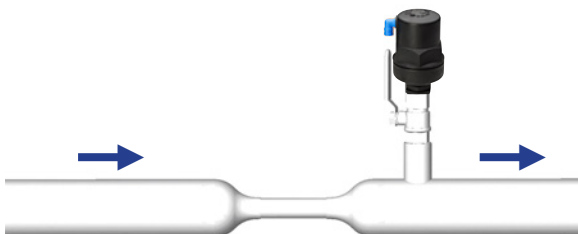
## INSTALLATION ON MAIN AND SUBMAIN IRRIGATION SYSTEMS



## INSTALLATION ON A WATER LINE THAT CROSSES UNDER OR ABOVE A ROAD OR DITCH

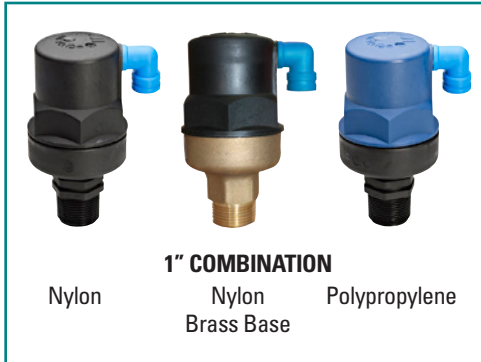


## INSTALLATION AFTER PRESSURE REDUCER



# AIR VENTS

## COMBINATION AIR/VACUUM AND CONTINUOUS ACTING AIR VENTS



\* Can be used anywhere a 2" Combination is used

## AUTOMATIC CONTINUOUS ACTING AIR VENTS



ORDERING INFORMATION		
MODEL NUMBER	SIZE	TYPE
65ARIB1	1"	COMBINATION - NYLON
65ARIB1-B		COMBINATION - NYLON - BRASS BASE
65ARIB1-150		COMBINATION - POLYPROPYLENE
65ARIB2	2"	COMBINATION - NYLON
65ARIB2-B		COMBINATION - NYLON - BRASS BASE
65ARIB2VM		COMBINATION - NYLON - VACUUM GUARD
65ARIB2PP	2"	COMBINATION - POLYPROPYLENE
65ARIB2PRO		PRO - POLYPROPYLENE
65ARIDY2	2"	DYNAMIC - NYLON
65ARIDY3	3"	DYNAMIC - NYLON
65ARIS075	3/4"	AUTOMATIC - NYLON
65ARIS075VM		AUTOMATIC - NYLON - VACUUM GUARD
65ARIS1	1"	AUTOMATIC - NYLON
65ARIS1VM		AUTOMATIC - NYLON - VACUUM GUARD
65ARIA075	3/4"	GUARDIAN - NYLON
65ARIA075S		GUARDIAN - NYLON - SHRADER VALVE
65ARIA100	1"	GUARDIAN - NYLON
65ARIA100S		GUARDIAN - NYLON - SHRADER VALVE
65ARIA2	2"	GUARDIAN - NYLON
65ARIA3	3"	GUARDIAN - NYLON

For additional questions, please contact your Netafim District Sales Manager or Netafim USA Customer Service at 888-638-2346.

## GUARDIAN AIR/VACUUM AIR VENTS



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