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.
AIR VENT INSTALLATION GUIDELINES

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

1" COMBINATION
Nylon
Nylon
Polypropylene

2" COMBINATION
Nylon
Nylon Brass Base
Polypropylene
Nylon Vacuum Guard

2" & 3" DYNAMIC
Nylon

2" PRO *
Polypropylene

* Can be used anywhere a 2" Combination is used

AUTOMATIC CONTINUOUS ACTING AIR VENTS

3/4" OR 1" AUTOMATIC
Nylon
Nylon
Vacuum Guard

GUARDIAN AIR/VACUUM AIR VENTS

3/4" OR 1" GUARDIAN
Nylon
Nylon
Shrader Valve

2" OR 3" GUARDIAN
Nylon

ORDERING INFORMATION

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