

INTRODUCING

Non Return Valves

The Supreme Industries Ltd. is an acknowledged leader of India's plastic industry. The innovative product portfolio offered by Supreme is extensive in range and application and comprises a variety of pipes and a vast spectrum of fittings totaling around 7500 diverse products. To make the agriculture pressure piping systems foolproof, The Supreme is pleased to introduce the uniquely designed and robustly constructed new product "Non Return Valve".

Supreme "Non Return Valves" are used to ensure unidirectional flow of water in pressure piping. With excellent sealing ability, it restricts the sudden reverse flow of water in order to safeguard the equipments such as pumps, compressor etc. and to avoid emptying of pipelines. It also helps to avoid pipe squeezing and water hammer problems and protects the pipeline from failure. This valve is self operated valve and doesn't require any hand wheel or gear for operation.



Unique features

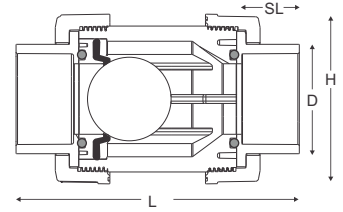
- Strong and Sturdy
- 100 % factory tested
- Can be used horizontally as well as vertically
- Simple and Quick installation
- Minimum space required for installation
- Free from vibrations at high flow velocities
- Excellent flow characteristics
- Resistant to corrosion and most inorganic chemicals
- Union type design for easy cleaning and maintenance
- Durable to last a lifetime
- Minimal Maintenance

Working Mechanism:

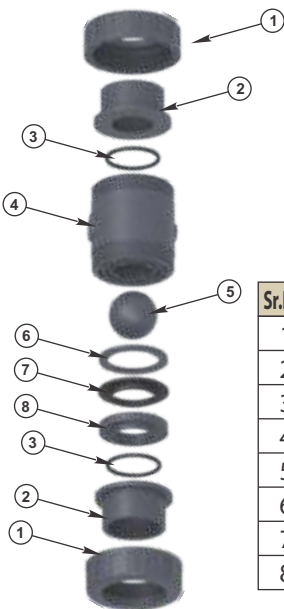
Supreme NRVs has only one movable part i.e. spherical ball. This ball works as closing member to block the reverse flow of water when flow is stopped. NRV remains always in open position when the water is flowing through it. When the flow stops, the ball moves towards its seat and creates positive seal to prevent the reverse flow. These ball type NRVs can be installed horizontally as well as vertically. While using in vertical applications, the valve should be placed in such a way that the flow is always in the upward direction.

Dimension Details

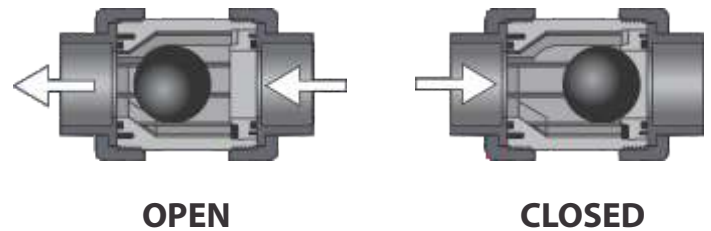
| D | SL | L | H |
|-----|----|-----|-----|
| 63 | 38 | 192 | 115 |
| 75 | 44 | 209 | 139 |
| 90 | 51 | 253 | 164 |
| 110 | 62 | 298 | 205 |



Components of Non Return Valve :



| Sr.No. | Part Name | Material |
|--------|----------------------|----------|
| 1 | Union nut | U-PVC |
| 2 | End connector | U-PVC |
| 3 | End connector O-ring | EPDM |
| 4 | Body | U-PVC |
| 5 | Ball | U-PVC |
| 6 | Closing ring | U-PVC |
| 7 | Body O-ring | EPDM |
| 8 | Seal carrier | U-PVC |



Applications:

- Agriculture
- Drip Irrigation
- Domestic water systems to prevent backflow
- For transport of industrial effluent without suspended particles

Product Range :

| Standard Diameter | Pressure Rating | Type of Joint |
|-------------------|-----------------|---------------|
| 63 mm | PN 10 | Solvent Weld |
| 75, 90, 110 mm | PN 6 | Solvent Weld |

Installation Procedure :

1. Check the diameter and pressure rating of pipeline in which the Non Return Valve is to be installed to verify the suitability.
2. NRV should be installed immediately after the pump and followed by air release valve.
3. Unpack the valve and check that the bores are clean and free from foreign material.
4. The valve must be installed in such way that the direction of the arrow marked on the body is in the direction of flow.
5. Open the union ends to separate them from valve body. Pass the pipe through union nut and join it with bush (end connector) by using solvent cement. This will ensure quick and easy connection without entry of solvent cement inside the valve and subsequent damage of the ball.
6. Apply Teflon tape or thread sealant on male threads of the valve body and screw the union ends from both sides with sufficient torque.
7. After ensuring firm joint allow sufficient time for curing solvent cemented joints prior to commissioning.