



IRRIGATION

PART 1 - PRODUCTS

1.1 VALVE

- A. REMOTE CONTROL VALVE(s) shall be No. N-100 Nitro series Valves as manufactured by Weathermatic Sprinkler Division of Telsco Industries, or approved equal, with hand operated manual internal bleed. Valve shall be a solenoid operated, diaphragm, reverse flow type, with 150 psi CWP rating, having 1-inch connection for slip (no. N-100S); male thread by barb (N-100MB); or FIP threads (N-100) (optional ISO) and suitable for underground burial without protection.
1. Valve body and cover shall be of temperature resistant PVC with a stainless steel spring. Cover shall be secured to body with stainless screws having a nut driver head for ease of removal.
 2. Diaphragm shall be chlorine resistant Santoprene®, pressure activated, and shall utilize a conical base to reduce water hammer. Design shall be reverse flow causing automatic closure in event of diaphragm wall failure. Valve shall be packless, without sliding seals, and completely serviceable without removing body from pipeline.
 3. Diaphragm design shall incorporate self-cleaning ports to inhibit sand and silt blockage.
 4. Design shall be “normally closed” requiring solenoid to be energized to open valve, thereby causing automatic closure in event of power failure. Solenoid shall comply with Class II National Electric Code and when operating require a maximum of 6.2 VA at 24 volts ac.
 5. Solenoid shall be integrally mounted in valve cover and encapsulated in molded-resin to form a corrosion and moisture-proof unit with exposed metal components of non-corrosive material.
- B. Solenoid shall be energized to open the valve hydraulically and de-energized to close. Pressure to the hydraulic chamber shall be supplied internally through non-metallic, corrosion-free orifices in the diaphragm causing a cleansing action of the orifices. Contamination resistance shall be provided without the use of screens, filters or strainers. In event of tear in diaphragm wall valve shall remain in the closed position. Minimum flow range shall be no greater than 1 GPH.
- C. The valve shall have a manufacturer's over the counter exchange warranty of not less than two