

## 100 Series (Century PLUS) Valves

Bidding Specifications

Valve(s) shall be 100 Series (Century PLUS) 1", 11/2", 2" or 3" electric globe/angle models as manufactured under the brand name of Irritrol Systems or approved equal.

Construction: Valve body shall be of glass-reinforced nylon for superior high temperature and high-pressure strength and shall not be affected by rust or electrolysis. Plug shall be provided for globe or angle configuration sealed with a positive O-ring. Valve shall have slow-closing design to prevent water hammer. Valve shall have electric or manual operation. Manual operation shall have an internal and external bleed. Internal bleed shall have a solenoid bleed lever. External bleed shall be present for flushing. Valve shall have a flow control for downstream flow adjustment and/or manual closing. Valve shall have a nylon-reinforced double-beaded Buna-N diaphragm. Valve shall have a Buna-N valve seat seal. Valve shall have a self-cleaning externally removable metering system. Valve shall be serviceable without needing to be removed from the system. Body shall have molded brass studs anchored for positive bonnet attachment. 2" and 3" models shall have a brass control stem. Valve shall be powered by a 24 V ac captive plunger solenoid, .4 amp inrush and .2 amp holding.

**Operation:** Valve shall have a working pressure range from 10 psi (0,7 Bars) minimum to 200 psi (14 Bars) maximum and a recommended flow range from 5 to 300 GPM (20 to 1150  $\frac{1}{2}$ ) depending on valve size.

Anti-contamination (102 models): Valve shall be electric globe/angle with external control-water filter and three-way solenoids. Valve shall have non-continuous metering system for dirty or effluent water applications. Valve shall have a small exchange of control water to allow for minimum filter capacity. Valve shall have externally-serviceable, 150-mesh control-water filter. Valve shall have selectable normally open or normally closed operation (factory set at normally closed). Working pressure range shall be 10 to 100 psi (0,7 to 6,9 Bars). Not compatible with E2003 DC latching solenoid.

Pressure Regulation (OmniReg<sup>™</sup> Modular Option): Outlet pressure regulating range shall be from 5 to 100 psi (0,3 to 6,9 Bars) or 5 to 30 psi (0,3 to 2,1 Bars) dependent on the regulator option. Valve shall have self-modulating type pressure regulator that maintains constant downstream pressure and be accurate to within ±3 psi (0,2 Bars) of pressure setting. Inlet pressure shall be 10 psi (0,7 Bars) greater than desired outlet pressure. Valve shall have an internal bleed for manual operation in pressure regulation mode. Valve shall be able to be installed in any position. Not compatible with E2003 DC latching solenoid.