



220 SERIES BRASS VALVES BIDDING SPECIFICATIONS

Note: These specifications were current at the time of publication but are subject to change at any time without notice. Please confirm the accuracy of these specifications with the manufacturer and/or distributor prior to installation.

The 220 Series remote control valve body and bonnet shall be constructed of ingot brass valve and stainless steel and have a maximum pressure rating of 220 PSI. The diaphragm shall be made of double-beaded, fabric-reinforced rubber to retain flexibility and provide maximum sealing throughout its area. The diaphragm assembly shall be fully serviceable, held together with stainless-steel components. All parts shall be serviceable from the top of the valve without removing the valve from the line. The valve may be installed at any angle without affecting valve operation. All other internal parts shall be made of brass and stainless steel to ensure corrosion resistance. The valve shall have an internal manual downstream bleed to prevent flooding of the valve box and be capable of operation by hand with a screwdriver or a socket wrench. The manual bleed also shall be capable of external bleed for system flushing. The valve shall have a removable, self-flushing, 120-mesh, stainless-steel filter screen. The screen will be positioned on the supply side of the stream. The valve shall have a manual flow control with a hand-operated, rising-type flow-control stem with a control wheel/handle. The flow control shall be adjustable down to zero flow. For 1" models, friction loss at 40 GPM shall not exceed 7.0 PSI on electric valves. For 1-1/4" models, friction loss at 100 GPM shall not exceed 16.0 PSI on electric valves. For 1-1/2" models, friction loss at 120 GPM shall not exceed 15.0 PSI on electric valves. For 2" models, friction loss at 180 GPM shall not exceed 14.0 PSI on electric valves. For 2-1/2" models, friction loss at 250 GPM shall not exceed 7.0 PSI on electric valves. For 3" models, friction loss at 350 GPM shall not exceed 7.5 PSI on electric valves. The burst pressure safety rating shall be 750 PSI. The valve must open or close in less than one minute at 220 PSI, and less than 30 seconds at 20 PSI. The valve shall have a plastic solenoid, which is fully encapsulated and have a captured hex plunger and spring. The solenoid will have a removable retainer for servicing of the spring and plunger. The plunger shall be on a stainless-steel solenoid seat for longer life. The 24V a.c. solenoid shall open with a 22.5V a.c. minimum at 220 PSI. At 24V a.c. average inrush, current shall not exceed 0.40 amps. Average holding current shall not exceed 0.20 amps. Line Pressure - Voltage 220 PSI - 22.5 200 PSI - 21.1 175 PSI - 20.2 150 PSI - 19.1 125 PSI - 18.2 100 PSI - 17.1 75 PSI - 16.1 50 PSI - 16.0 The valve shall have a built-in, Schrader-type valve for attaching a pressure gauge to verify downstream pressure. The valve shall be able to field retrofit with an optional pressure-regulating module, EZReg(TM), which can be factory or field installed. The regulator shall be able to be field-installed or serviced under pressure. The valve shall have a forward-flow design to ensure more precise regulation when used with a pressure regulator.

Pressure Regulating Electric Models: The pressure regulator, EZReg(TM), shall be of dial design to permit visual setting of pressure with or without the valve being operated or the use of a pressure gauge. The regulator shall be of a screw-in type and shall regulate precisely over a 5-100 PSI range with maximum inlet pressure of 220 PSI. The regulator shall maintain the set pressure within ± 3 PSI (with a 10 PSI differential between inlet and outlet). The [1" / 1-1/4" / 1-1/2" / 2" / 2-1/2" / 3"] 220 Series valve shall be of [electric, electric pressure regulating] configuration with female-threaded inlet and outlet connections. The 1"-2" valves shall be an in-line configuration and the 2-1/2" / 3" valves shall be an angle configuration. The valve shall be developed, manufactured, qualified and released in the USA. The valve shall come with a 5-year trade warranty.

The valve shall be manufactured, qualified and released in the USA. The valve, model number _____, shall be manufactured by The Toro Company, Irrigation Division, El Paso, Texas, USA.

END OF SECTION