

**3-WAY AND 4-WAY VALVES
SUGGESTED SPECIFICATION**

APPLICATION DATA 20.01-2

July 2012

Supersedes January, 2008



Valves shall be of the non-lubricated tapered plug type. Manual valves shall be available with metal-to-metal seating or with resilient faced plugs for drip tight shutoff. End connections shall be flanged and shall be drilled to ANSI 125/150 pound standard. Valves shall be available in cast iron, aluminum, carbon steel, soft rubber and hard rubber lined, stainless steel and other alloys on special order. All cast iron, aluminum, carbon steel and stainless steel valves shall have stainless steel bearings in the upper and lower journal areas. All three-way valves shall be furnished as standard with a plug to shut off one port at a time. All four-way valves shall be furnished with transfer style plugs as standard to divert flow between adjacent ports. Three- and 4-way valves shall be available in sizes 3 - 16" (80 - 410mm).

Manual valves for drip tight shut off shall be furnished with a resilient facing bonded to the plug sealing surface and shall be available with lever or double handwheel actuators. Tight shut off valves with lever actuators shall provide lift, turn and reseal action to operate the valve with a single lever. The lever shall be equipped with a locking device to hold the plug in the desired position. Resilient seated valves for tight shut off shall be available with double handwheel actuators. These actuators shall be of the worm and gear type and shall have one handwheel to lift and reseal the plug and one handwheel to rotate the plug. Handwheel actuators shall be totally enclosed and shall have seals and gaskets to prevent entry of dirt, water or corrosive atmospheres. Actuators shall have corrosion resistant bearings on the gear sector. Manual actuators shall provide plug rotation up to 360 degrees.

Manual valves for flow diverting where drip tight shut off is not required shall be metal-to-metal seated or hard rubber lined and shall be available with lever or single handwheel actuators. Levers shall be of the lift, turn and reseal type to provide single lever valve operation and shall be furnished with a locking device to hold the plug in the desired position. Handwheel actuators for metal-to-metal seated or hard rubber lined valves for flow diverting shall be totally enclosed and shall be of the worm and gear type.

Actuators shall be sealed to prevent entry of dirt, water and corrosive atmospheres, and shall have corrosion resistant bearings on the gear sector. Actuators for metal-to-metal seated or hard rubber lined valves shall have a single handwheel to rotate the plug and shall be available in models to provide plug rotation up to 360°. Double handwheel actuators shall also be available.

Metal-to-metal seated or hard rubber lined valves for flow diverting applications where drip tight shutoff is not required shall be available with powered actuators for remote on-off or throttling applications. Actuators shall be the rack and gear type and shall be furnished with pneumatic or hydraulic cylinders as specified. All actuators shall be totally enclosed with seals and gaskets to prevent the entry of dirt, water and corrosive atmospheres and shall have corrosion resistant bearing on the gear sector. Power actuated valves for throttling applications shall be available with pneumatic or hydraulic positioners mounted directly on the actuator. Metal seated and hard rubber lined valves shall also be available with on-off and modulating electric motor actuators.

All manual and power actuated valves shall be available with all required operating accessories as specified.

All valves, actuators, and accessories shall be as manufactured by DeZURIK, Inc. or approved equal.