

valve

A device that controls flow with a system.

angle

valve configured with its outlet oriented 90 degrees from its inlet.

air vent (air relief, air release)

Device that releases air from a pipeline automatically without permitting loss of water.

air vacuum, air relief

Device that releases air from a pipeline automatically without permitting loss of water or admits air automatically if the internal pressure becomes less than atmospheric.

back flow prevention

Check valve that allows flow in one direction.

ball

Valve in a pipeline used to start or stop flow by rotating a sealed ball with a transverse hole approximately equal to the diameter of the pipeline. Ball rotation is typically 90 degrees for a single-port control.

butterfly

Valve in a pipeline to start or stop flow by rotating a disk 90 degrees. The disk is about the same diameter as the pipeline.

check

Valve used in a pipeline which allows flow in only one direction.

chemigation

Valve especially designed to be used with the injection of chemicals in an irrigation system.

drain valve flushing

Valve on the end of a line to flush out dirt and debris. May be incorporated into an end plug or cap.

float valve

Valve, actuated by a float that automatically controls the flow of water.

flushing valve

A valve used to expel sediment from irrigation lines, one that automatically opens and drains the line when the pressure drops to near zero.

foot valve

Check valve used on the bottom of the suction pipe to retain the water in the pump when it is not in operation.

flow control

Valve with automatically adjusts to provide a predetermined downstream flow.

gate

Valve in a pipeline used to start or stop water flow. May be operated by hand with or with mechanical assistance or by high or low voltage (solenoid) electric controlled mechanical assistance. Gate valves consist of seated slide or gates operated perpendicular to the flow of water. Head loss through a gate valve is typically less than a globe valve, but more than a ball or butterfly valve.

globe

Valve in a pipeline used to start or stop water flow. Globe valves stop flow by positioning a disk and gasket over a machined seat about the same diameter as the pipe. Globe valves are limited to smaller sizes because of the high velocities and very high head loss through the valve.

hydraulic

Irrigation zone valve which uses small flexible tubes and water under pressure to provide the actuation signal from the controller to the valve.

isolation

Any mechanical valve used to isolate a section of a piping system.

pressure regulating

Valve designed to automatically provide a preset downstream pressure in a hydraulic system.

pressure relief

Spring loaded valve set to open at a pressure slightly above the operating pressure, used to relieve excessive pressure and surges.

pressure sustaining

Valve designed to provide a minimum preset upstream pressure.

remote control

Valve which is actuated by an automatic controller by electric or hydraulic means. synonymous with Automatic Control Valve.

vacuum relief valve

Valve used to prevent a vacuum in pipelines and avoid collapsing of thin-wall pipe.