VALVE TYPE	CONTROL FUNCTIONS	APPLICATIONS	REMARKS
Manual " on-off"	3-way manual selector permits selection of open or closed	Use with any small MI systems	
Electric Control " on-off"	3-way solenoid valve, activated by an electric current or pulse to open or close valve		
Pressure Reducing	Valve maintains a pre-set pressure, regardless of pressure or flow variation	Protects MI system from high pressures and surges	
Pressure Sustaining/Relief	Valve maintains upstream (inlet) pressure, regardless of flow rate variations	Valve will close if the inlet pressure drops below the set point. It fully opens when the upstream pressure exceeds the set point	Install downstream of filter to maintain filter pressure when filter banks are backwashed
Quick Relief Safety valve	Opens instantly when pipeline pressure exceeds safe level. Valve closes slowly when pressure returns to normal		
Pump Control Valve	The electrically activated valve opens gradually on pump start-up and closes slowly before the pump is switched off	Eliminates damaging surges caused by pump start up and shut off	Valve operates as a non-slam check valve, preventing reverse flow
3-Way Filter Backflush	Acts as a main valve for filter and as a flushing valve for backwash	Used with most filtration systems requiring backflushing	Valve is usually a part of a modular filter configuration
Check/backflow Preventing	Enable flow in one direction. When flow starts the flap rises. When the flow stops the flap is returned by the spring to its sealing position	Required for systems using municipal water or when pumping from aquifer and chemicals are injected.	
Modulating Float Control	The main valve is controlled by a float valve, located in the tank or reservoir at the max. water level	The valve maintains a constant water level	Used to maintain a constant levels in standpipes and tanks
Air/Vacuum Relief Valves, also known as kinetic air valves, large orifice air valves, vacuum breakers, low-pressure air valves and air relief (not release) valves.	Air valves discharge large volumes of air before the pipeline is pressurized, especially at pipe filling. They admit large quantities of air when the pipe drains and at the appearance of water column separation.	They admit large quantities of air when the pipe drains and at the appearance of water column separation.	
Air Release Valves are also known as automatic air valves, small orifice air valves, continuous acting air vents, and pressure air valves.	Valve continues to discharge air, usually in smaller quantities, after the air vacuum valves close, as the line is pressurized.	Releases air continuously when the lines are pressurized	
Combination Air Valves, also known as double orifice air valves	Fills the functions of the two types of air valves described above.	Admits and releases large quantities of air when needed, and releases air continuously when the lines are pressurized	