

2230 MP Series Combination Solenoid and Pressure Reducing Valves**Performance Specifications**

Control valves shall be a combination pressure reducing and solenoid control consisting of a main valve, a pressure reducing pilot, a solenoid control pilot and a manual bypass pilot valve. The main valve shall: (1) be cast iron body with removable seat and have two inlet tappings for either angle or straight installation, (2) be mechanically self-cleaning and automatically self-purging without the use of screens or filters, (3) have a mechanically guided diaphragm assembly, (4) be self-bleeding when installed horizontally, (5) have a manual flow stem to adjust the speed of closure and provide internal flushing. The pressure reducing pilot must: (1) be diaphragm actuated for positive action without the use of pistons or sliding seals, (2) have a single adjusting stem for pressure setting provided with a tamper-proof cover, (3) have a tire-type valve to provide for quick-disconnect pressure measurement. A very low power, 0.07 amp at 18 Volt RMS, lightning protected solenoid must be provided. A pilot bypass shall provide manual operation with automatic pressure regulation. Converting the valve to a non-pressure reducing type shall not be readily possible. All valve components shall be serviceable from the top without removing the main valve body and pilot bodies.

2030 Series Solenoid Control Valves**Performance Specifications**

Remote control valves shall be cast iron body with removable seat and have two inlet tappings for either angle or straight installation.

The internal control system of the valves must be mechanically self-cleaning and automatically self-purging without the use of screens or filters.

The diaphragm assembly unit must be hydraulically balanced and be mechanically guided in all positions. Upon opening, the internal control port shall enlarge in size to purge, and gradually reduce during closure to reduce hammer and chatter. A manual flow stem to adjust the closing speed and internal flushing must be provided.

When installed with the flow system up, energizing the solenoid shall automatically exhaust all trapped air in the cover chamber. A drip-tight, resilient seated petcock must be provided for manual opening without electricity. The solenoid pilot must be corrosion proof, molded in epoxy and encased in brass housing. The electrical requirements shall not exceed 70mA at 24 Volts RMS, 60 Hz, when the line pressure is 150 PSIG. The power factor shall be greater than 0.9.

2000 Series Solenoid Control Valves**Performance Specifications**

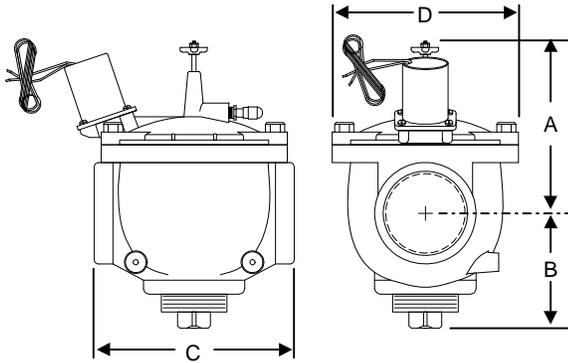
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NORMALLY CLOSED VALVE



SPECIFICATIONS:

Operating Pressure:	2 to 200 PSI
Material:	Cast Iron and Bronze
End Connections:	NPT (BSPT Optional)
Voltage Operating Range:	22-28 VAC
Low Current Requirement:	0.40 A at 24 VAC
Assembly:	Valve comes fully assembled
Optional:	Purple Handle for Reclaimed Water
Optional:	Epoxy Coating

DIMENSIONS & WEIGHTS (NOMINAL)

SIZE	MODEL NO.	A (IN)	B (IN)	C (IN)	D (IN)	APPROX SHIP WT IN LBS
1"	2000H	4.25	2.50	4.50	4.00	7.75
1-1/4"	2000J	4.25	2.75	4.50	4.00	7.50
1-1/2"	2000K	6.00	3.00	5.50	4.80	12.25
2"	2000L	6.00	3.25	7.50	6.00	19
2-1/2"	2000M	6.25	3.25	7.50	6.00	22
3"	2000N	6.50	4.50	8.50	6.00	26

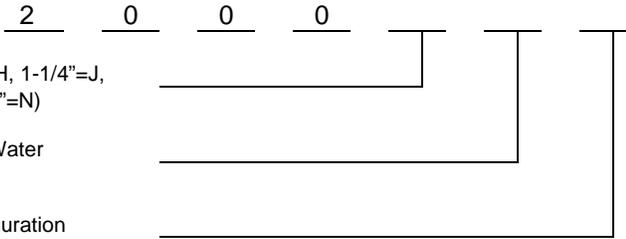
PRESSURE LOSS (PSI) AT VARIOUS FLOWRATES

SIZE	FLOW PATTERN	Cv	FLOWRATE (GPM)																															
			10	15	20	25	30	35	40	44	50	55	60	65	70	80	90	100	120	140	160	180	200	225	250	275	300	325	350	375	400			
1"	STRAIGHT	13.50	1.0	1.24	2.2	3.4	5.0	6.7	8.8	11.1	13.7	16.6	19.7	CONSULT WITH FACTORY IN THIS RANGE																				
	ANGLE	15.30			1.7	2.7	3.9	5.2	6.8	8.6	10.7	12.9	15.4																					
1-1/4"	STRAIGHT	16.60			1.5	2.3	3.3	4.5	5.8	7.4	9.1	11.0	13.1	15.3	17.8	CONSULT WITH FACTORY IN THIS RANGE																		
	ANGLE	17.80			1.3	2.0	2.8	3.9	5.1	6.4	7.9	9.6	11.4	13.3	15.5																			
1-1/2"	STRAIGHT	26.00					1.3	1.8	2.4	3.0	3.7	4.5	5.0	5.4	7.3	9.5	12.0	14.8	USE 1 PSI DROP IN THIS RANGE															
	ANGLE	29.00					1.1	1.5	1.9	2.4	3.0	3.6	4.3	5.9	6.3	7.6	9.7	11.9																
2"	STRAIGHT	52.00												1.6	1.8	2.4	3.0	3.7	5.3	7.3	9.5	12.0	14.8	USE 1 PSI DROP IN THIS RANGE										
	ANGLE	57.00												1.3	1.5	2.0	2.5	3.1	4.4	6.1	7.9	10.0	12.3											
2-1/2"	STRAIGHT	65.00																	1.0	1.2	1.5	1.9	2.4	3.4	4.6	6.1	7.7	9.5	12.0	14.8	17.9	21.3		
	ANGLE	72.00																		1.2	1.6	1.9	2.8	3.8	4.9	6.3	7.7	9.8	12.0	14.6	17.4			
3"	STRAIGHT	83.00																		1.2	1.5	2.1	2.8	3.7	4.7	5.8	7.3	9.1	11.0	13.1	15.3	17.8	20.4	23.2
	ANGLE	92.00																			1.0	1.2	1.7	2.3	3.0	3.8	4.7	6.0	7.4	8.9	10.6	12.5	14.5	16.6

APPLICATIONS

The 2000 Solenoid Control Valve offers maximum performance combined with the reliability you have come to expect from Griswold Controls. Intended for use in a wide variety of irrigation systems, the valve is ideally suited for use as either an On-Off Solenoid Valve or as a General Purpose Master Valve. The 2000_R can be used with Reclaimed Water.

MODEL NUMBER SELECTION



Select a Housing Size (1"=H, 1-1/4"=J, 1-1/2"=K, 2"=L, 2-1/2"=M, 3"=N)

Add an "R" for Reclaimed Water
Add an "E" for Epoxy

Add an "A" for Angle Configuration



DESCRIPTION:

- Normally Closed: Energize Solenoid to Open Valve, De-Energize to Close Valve
- On/Off Solenoid Control Valve
- Watertight Epoxy Molded Solenoid Coil
- Slow Closing
- "No Surge or Hammer" Operation
- Will Throttle Against Flow Without Chatter
- Diaphragm-Disc Assembly Guided by Stainless Steel Stem in all Positions
- Completely Serviceable Without Removing Valve Body from the System

HAMMER-FREE,
CHATTER-FREE
CLOSING:

Instead of an abrupt, sudden closure, Griswold valves close gradually to eliminate water hammer and chatter, regardless of the throttled position of the diaphragm assembly. Notice in the graph how the closing action of the Griswold Valve compares to the abrupt closing action of ordinary valves. Closing speed depends on the size of the valve and flow velocity. A minimum of 5 seconds may be expected from Griswold Valves.

