

Stagers

What is a stager? Stagers are motor-driven rotary multiport pilot valves, which are used to control a set of individual diaphragm valves in a predefined sequence.

Durability. Stagers are constructed of durable, non-corroding, self-lubricating material for long and trouble-free operation.

Automatic Operation. Stagers are driven by an electric motor and are controlled by programmable controllers or adjustable timers.

Manual Operation. In the event of a power failure, these stagers can be manually advanced through all positions.

Function. Stagers function by pressurizing and venting the control ports, allowing valves to open and close in a predefined sequence.

Pressure Requirements. The control pressure to the stager, either hydraulic or pneumatic, must be constant and equal to or greater than the line pressure in the system.

Fluid. Stagers can operate on air or filtered water.



WATER KING MODEL No	MPV1	MPV2	MPV3	MPV4	MPV5
APPLICATION	SIMPLEX	MULTIPLE FILTERS	TWIN ALTERNATING	HIGH PRESSURE	CENTURION WITH POSITION INDICATION
Aquamatic Series No.	48	51	58	96	48 S
Max. Pressure PSI (bar)	125 (8.6)	125 (8.6)	125 (8.6)	250 (17)	125 (8.6)
Max Temp °F (°C)	150 (65)	150 (65)	150 (65)	150 (65)	150 (65)
Body Material	Brass	Brass	PVC	Brass	Brass
Internal Gasket	Neoprene	Neoprene	Neoprene	Neoprene	Neoprene
Stem Plate	PTFE	PTFE	PTFE	PTFE	PTFE
Number Of Control Ports	6	8	16	8	6
Inlet and Drain Port Size N.P.T	1/8-inch	1/8-inch	1/4-inch	1/8-inch	1/8-inch
Control Port Size N.P.T	1/8-inch	1/8-inch	1/8-inch	1/8-inch	1/8-inch
Max Power Usage in Watts	4.0	4.0	3.5	3.5	4.0

MPV Specifications:

Stager Operation. Diaphragm valves shall be operated by a rotary multiport pilot valve (stager) with multiple ports through which control fluid is directed, thereby operating the diaphragm valves installed in a process system. Standard units shall use staggers constructed of durable, non-corroding, self-lubricating material for long, maintenance free life. The stager shall function by opening and closing its ports, singly or in combination, in a sequence that accomplishes the five cycles of softening. The stager shall use either water or air for the operating fluid. Process fluid, if pressurized, and not damaging to the internal parts of the stager or diaphragm valve, may be drawn from the main line to the inlet of the stager. Otherwise, an independent source of control fluid is required. The pressure of the control fluid must be equal to or greater than the line pressure of the system.

Model MPV1. Stager shall be constructed of precision machined brass. Maximum pressure shall be 125 psi with a maximum temperature rating of 150°F. All ports, inlet, and drain are 1/8" FNPT. Power shall be either 120 VAC/60 Hz or 230 VAC/50 Hz. Flexible tubing (¼" O.D.) shall connect stager ports to diaphragm valves. The stager shall have six(6) ports.

Model MPV2. Stager shall be constructed of precision machined brass. Maximum pressure shall be 125 psi with a maximum temperature rating of 150°F. All ports, inlet, and drain are 1/8" FNPT. Power shall be either 120 VAC/60 Hz or 230 VAC/50 Hz. Flexible tubing (¼" O.D.) shall connect stager ports to diaphragm valves. The stager shall have eight (8) ports.

Model MPV3. Stager shall be constructed of precision machined PVC. Maximum pressure shall be 125 psi with a maximum temperature rating of 150°F. Inlet and drain connections shall be ¼" FNPT. All ports shall be 1/8" FNPT. Power shall be either 120 VAC/60 Hz or 230 VAC/50 Hz. Flexible tubing (¼" O.D.) shall connect stager ports to diaphragm valves. The stager shall have sixteen (16) ports.

Model MPV4. Stager shall be constructed of precision machined brass. Maximum pressure shall be **150** psi with a maximum temperature rating of 150°F. All ports, inlet, and drain are 1/8" FNPT. Power shall be either 120 VAC/60 Hz or 230 VAC/50 Hz. Flexible tubing (¼" O.D.) shall connect stager ports to diaphragm valves. The stager shall have eight (8) ports.

Model MPV1. Stager shall be constructed of precision machined brass. Maximum pressure shall be 125 psi with a maximum temperature rating of 150°F. All ports, inlet, and drain are 1/8" FNPT. Power shall be either 120 VAC/60 Hz or 230 VAC/50 Hz. Flexible tubing (¼" O.D.) shall connect stager ports to diaphragm valves. The stager shall have six(6) ports. A specially machined cam and additional microswitches shall be provided to allow position indication when used with the Centurion™ controller.