

## Installation Guide

### Mounting

#### ⚠ CAUTION

Best installation practice includes initial system flushing and proper chemical water treatment.

Foreign particles can damage the ball seals. Clean the lines upstream of particles larger than 1/16 inch (1.6 mm) diameter (e.g., welding slag, pipe scale, sand, and other contaminants). If the system experiences large amounts of debris, steps should be taken to keep the system clean, such as a 20 mesh strainer installed upstream of the valve. Remove all strainers/filters before flushing.

Ensure that the fluid chemistry in the pipes is compatible with the valves. Do not use boiler additives, solder flux, or wetted

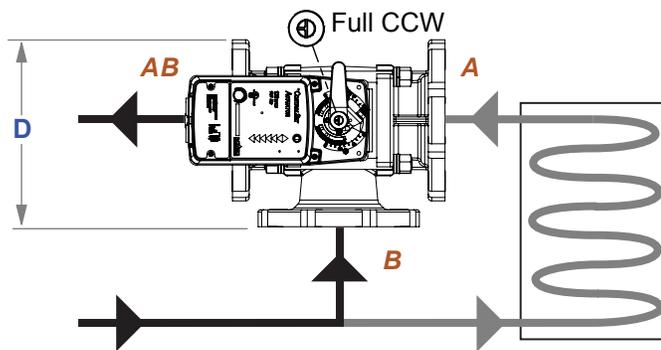
materials that are petroleum based or contain mineral oil, hydrocarbons, or ethylene glycol acetate. Compounds which can be used, with minimum 50% water dilution, are diethylene glycol, ethylene glycol, and propylene glycol (antifreeze solutions).

Before using any lubricant or additive in a water or ethylene glycol base, consult the substance manufacturer for compatibility with EPDM (Ethylene Propylene Diene Monomer) since using mineral oil lubricants or other incompatible substances in system fluids may damage EPDM rubber seats in valves.

Freeze protection is required for fluid temperatures below 32° F (0° C).

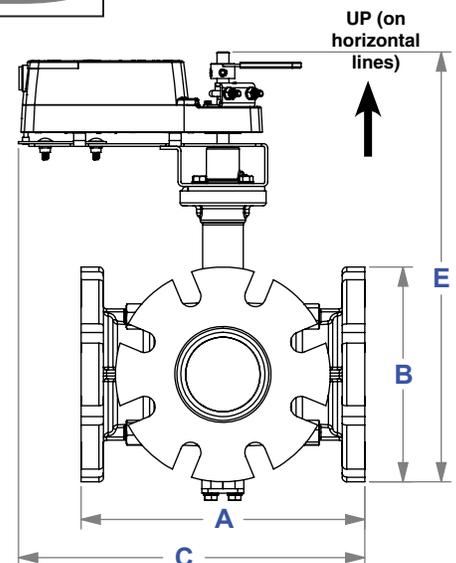
#### Mixing Flow Action:

Port 'A' to Port 'AB'—full CW; Port 'B' to 'AB'—full CCW



#### Dimensions (Inches):

Size	A	B	C	D	E	Weight (lb.)
4"	11.875	9	14.5	10.375	18	80
5"	13.875	10	15.5	12	18.875	95
6"	15.875	11	16.5	13.375	20	110



#### ⚠ CAUTION

Hoist the valve by its BODY only! Do not lift by its actuator, stem, bonnet, flanges, or flange holes.

Mount the valve between aligned pipes. Mounting the valve on pipes that are not aligned causes leakage at the valve-to-pipe connection.

1. Ensure the valve and lines are ready for installation. Clean the lines upstream from the valve. Rotate the valve stem to make sure that the valve stem operates freely.
2. Align the valve assembly according to the system flow requirements (see the illustration on the previous page).
3. The valve may be mounted on either vertical or horizontal pipe lines. On horizontal lines, mount the valve so the actuator is positioned upright and over the valve. (Leave sufficient room on all sides to service the actuator and valve.)

### ▲ CAUTION

**To prevent condensation from dripping onto the actuator housing on horizontal lines, mount the valve with the actuator in the upright position or (at most) at a 45° angle.**

4. Install approved flange gaskets recommended for the medium to be handled (not supplied by KMC Controls).
5. Bolt the valve to the pipes. Use mounting bolts long enough for the nuts to use the full length of the nut threads. Use four 5/8 inch bolts to connect 4-inch valves to mating flanges in pipework; use six 5/8 inch bolts for 5-inch and 6-inch valves.
6. Eliminate air from the system to keep the valves full of fluid during operation.

## Wiring

Wiring is dependent on the type of actuator and the desired options that are available. Consult the actuator model label and then the relevant sections in the [MEP-7500/7800 Series Actuators Installation Guide](#) for detailed instructions on the applicable wiring, feedback selector, and actuator/signal range reset (auto-mapping) of the valve's actuator. (See the More Information section.)

## Operation

After the mechanical and electrical installations have been completed, cycle the actuator to verify the direction of rotation for normal operation and fail-safe if so equipped.

## Maintenance

No routine maintenance is required. The motors are permanently lubricated. Careful installation will also ensure long term reliability and performance.

## Accessories/Repair Parts

<a href="#">CME-7001</a>	Single auxiliary switch, 1 SPDT
<a href="#">CME-7002</a>	Dual auxiliary switch, 2 SPDT
<a href="#">HMO-4536</a>	Adjustable stop kit
<a href="#">MEP-7xxx</a>	Replacement actuator (see label on actuator or data sheet)

## More Information

For **models, specifications**, and additional information, see the [VEB-56 Series Data Sheet](#) on the KMC web site ([www.kmcccontrols.com](http://www.kmcccontrols.com)).

For **wiring, feedback/direction selectors, actuator/signal range reset (auto-mapping)**, and other information, see the [MEP-7500/7800 Series Installation Guide](#).

For **actuator specifications** and other information, see the [MEP-7500/7800 Series Data Sheet](#).

For **accessories, troubleshooting**, and other information, see the [MEP-7500/7800 Series Application Guide](#).

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