

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.

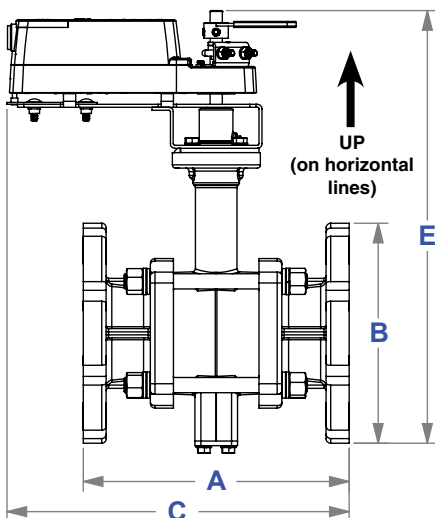
Freeze protection is required for fluid temperatures below 32° F (0° C).

▲ CAUTION

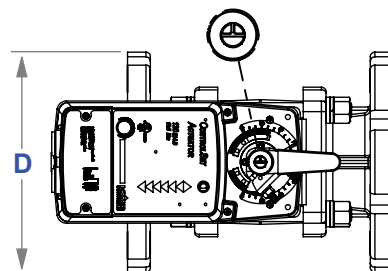
Hoist the valve by its **BODY** only! Do not lift by its actuator, stem, bonnet, flanges, or flange holes.

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

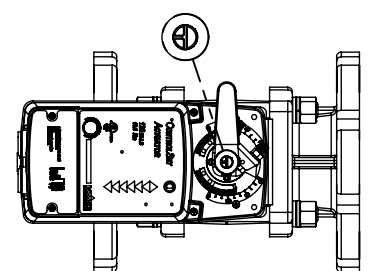
1. Ensure the valve and lines are ready for installation. Clean the lines upstream from the valve. Rotate the valve stem to make sure that the valve stem operates freely.
2. The valve may be mounted on either vertical or horizontal pipe lines. On horizontal lines, mount the valve so the actuator is positioned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



Full CW = Valve Open



Full CCW = Valve Closed



Size	A	B	C	D	E	Weight (lb.)
4"	11	9	13.75	9	17.75	70
5"	12.375	10	14.75	10	18	80
6"	13.875	11	15.625	11	18.875	95

▲ 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.

NOTE: Flow inside the valve can be in either direction.

3. Install approved flange gaskets recommended for the medium to be handled (not supplied by KMC Controls).
4. 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.
5. Eliminate air from the system to keep the valves full of fluid during operation.

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.

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.)

Maintenance

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

Accessories/Repair Parts

CME-7001	Single auxiliary switch, 1 SPDT
CME-7002	Dual auxiliary switch, 2 SPDT
HMO-4536	Adjustable stop kit
MEP-7xxx	Replacement actuator (see label on actuator or data sheet)

More Information

For **models, specifications**, and additional information, see the [VEB-53 Series Data Sheet](#) on the KMC web site (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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