

Installation Guide

Mounting

1. Clean the lines upstream from the valve. Remove any debris (welding slag, pipe scale, or other contaminants) larger than 1/16 inch (1.6 mm).

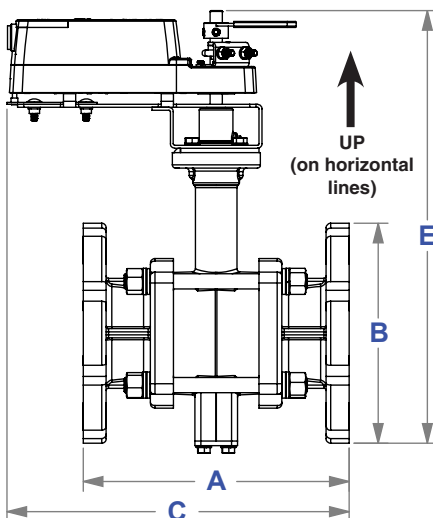
NOTE: If the system experiences large amounts of debris, steps should be taken to keep the system clean, such as 20 mesh strainer installed upstream of the valve.

2. Align the valve assembly according to the system flow requirements (see the illustration below).
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 (not supplied by KMC Controls) and bolt the valve to the pipes.
5. Eliminate air from the system to keep the valves full of fluid during operation.



Wiring

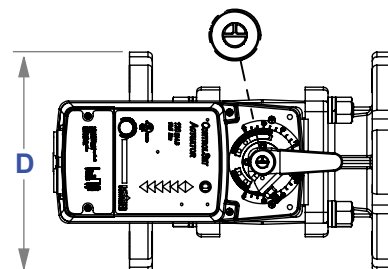
Wiring is dependent on the type of actuator and the desired options that are available. Consult the actuator model label and then the relevant sections in the [MEP-7200/7500/7800 Series Actuators Installation Guide](#) for detailed instructions on the applicable wiring, feedback selector, and actuator/signal range reset (auto-mapping) of the valve's actuator.



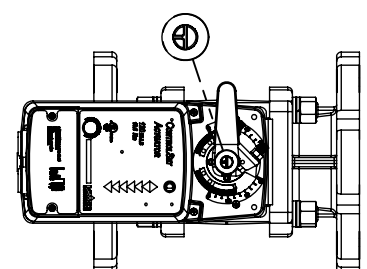
⚠ CAUTION

Using mineral oil lubricants or other incompatible substances in system fluids may damage EPDM rubber seals in valves. 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).

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 |

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

| | |
|----------|--|
| CME-7001 | Rotary aux. cam switch, single |
| CME-7002 | Rotary aux. cam switch, double |
| HMO-4536 | Adjustable stop kit |
| MEP-7xxx | Replacement actuator (see label on actuator or data sheet) |

NOTE: For more information, see the data sheets for the **VEB-53 series valves**, **MEP-7200/7500/7800 series actuators**, and the **CME-7001/7002 switches**.

Models and Specifications

VEB-53 XXX S YY

Actuator Model

(On 4 and 5 inch valves)

FF: Tri-state (MEP-7201, 120 in-lb.)
FK: 0–10 VDC (MEP-7202, 120 in-lb.)
FH: Fail-safe, tri-state (MEP-7251, 120 in-lb.)
FL: Fail-safe, 0–10 VDC (MEP-7252, 120 in-lb.)

(On 6 inch valves only)

GF: Tri-state (MEP-7501, 180 in-lb.)
GK: 0–10 VDC (MEP-7502, 180 in-lb.)
GH: Fail-safe, tri-state (MEP-7551, 180 in-lb.)
GL: Fail-safe, 0–10 VDC (MEP-7552, 180 in-lb.)

Pipe Size/Cv

| | |
|-------------|-------------|
| 16A: 4"/91 | 20D: 5"/309 |
| 16B: 4"/118 | 20E: 5"/400 |
| 16C: 4"/152 | 24A: 6"/208 |
| 16D: 4"/197 | 24B: 6"/268 |
| 16E: 4"/254 | 24C: 6"/346 |
| 20A: 5"/144 | 24D: 6"/441 |
| 20B: 5"/185 | 24E: 6"/577 |
| 20C: 5"/240 | 24F: 6"/650 |

For specifications, see the **VEB-53 Series Data Sheet**.



KMC Controls, Inc.

19476 Industrial Drive

New Paris, IN 46553

574.831.5250

www.kmccontrols.com

info@kmccontrols.com