

DVC6200 or DVC2000 Digital Valve Controller on 1051 and 1052 Size 40–70 Actuators (End Mount)

Mounting Instructions

D103450X012
May 2010

Use these instructions to mount a Fisher® FIELDVUE™ DVC6200 or DVC2000 digital valve controller on Fisher 1051 and 1052, size 40 through 70 actuators.

WARNING

Avoid personal injury or property damage from sudden release of process pressure or bursting of parts. Before performing any maintenance operations:

- Always wear protective clothing and eyewear.
- Do not remove the actuator from the valve while the valve is still pressurized.
- Disconnect any operating lines providing air pressure, electric power, or a control signal to the actuator. Be sure the actuator cannot suddenly open or close the control valve.
- Use bypass valves or completely shut off the process to isolate the control valve from process pressure. Relieve process pressure from both sides of the control valve.
- Vent the pneumatic actuator loading pressure and relieve any actuator spring precompression.
- Use lock-out procedures to be sure that the above measures stay in effect while you work on the equipment.
- Check with your process or safety engineer for any additional measures that must be taken to protect against process media.

Refer to figure 2 and the parts list for mounting parts identification. Refer to the DVC6200 or DVC2000 instruction manual for instrument parts identification. Refer to the appropriate actuator instruction manual for actuator installation, operation, maintenance, and parts identification.

1. Isolate the control valve from the process line pressure and release pressure from both sides of the valve body. Shut off all pressure lines to the actuator, releasing all pressure from the actuator. Use lock-out procedures to be sure that the above measures stay in effect while you work on the equipment.

2. The instrument can be mounted in four different orientations on the 1051 or 1052. Figure 1 shows the instrument mounted upright relative to the actuator spring barrel.

3. Attach the coupler (key 1) to the actuator shaft using the hex head machine screws (key 2) and tighten. For best visibility, the coupler should be oriented on the shaft so that the pointer will rotate in the quadrant above or below the instrument as shown in figure 2.

4. Remove the four actuator cap screws attaching the actuator cover, but leave the cover in place.

5. Attach the mounting bracket (key 3) to the actuator cover, but do not tighten the cap screws.

6. Place the pointer (key 4) before attaching the magnet assembly (key 5) to the coupler using pan head screws (key 6) and tighten.

The magnet assembly must be oriented per figure 1, so that the flats are approximately as shown relative to the channel in the instrument housing when at the mid-travel position.

7. Adjust the mounting bracket so that the magnet assembly is visually centered in the mounting bracket center hole and tighten the four cover cap screws.

8. Attach the mounting posts (key 7) to the mounting bracket and tighten.

9. Attach the travel indicator scale (key 8) to the mounting post using two plain washers (key 9) and pan head machine screws (key 10). Refer to figure 2.

10. Attach the digital valve controller to the mounting bracket using four hex head cap screws (key 11) but do not tighten the screws. Visually adjust the digital valve controller so that the magnet assembly is centered in the housing channel and then tighten the fasteners. Recheck the magnet assembly position again after tightening.

11. Connect and calibrate the instrument as described in the appropriate instruction manual.

For additional information concerning the mounting, setup, calibration, and maintenance of the DVC6200 or the DVC2000 digital valve controller refer to the appropriate instruction manual.



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Note

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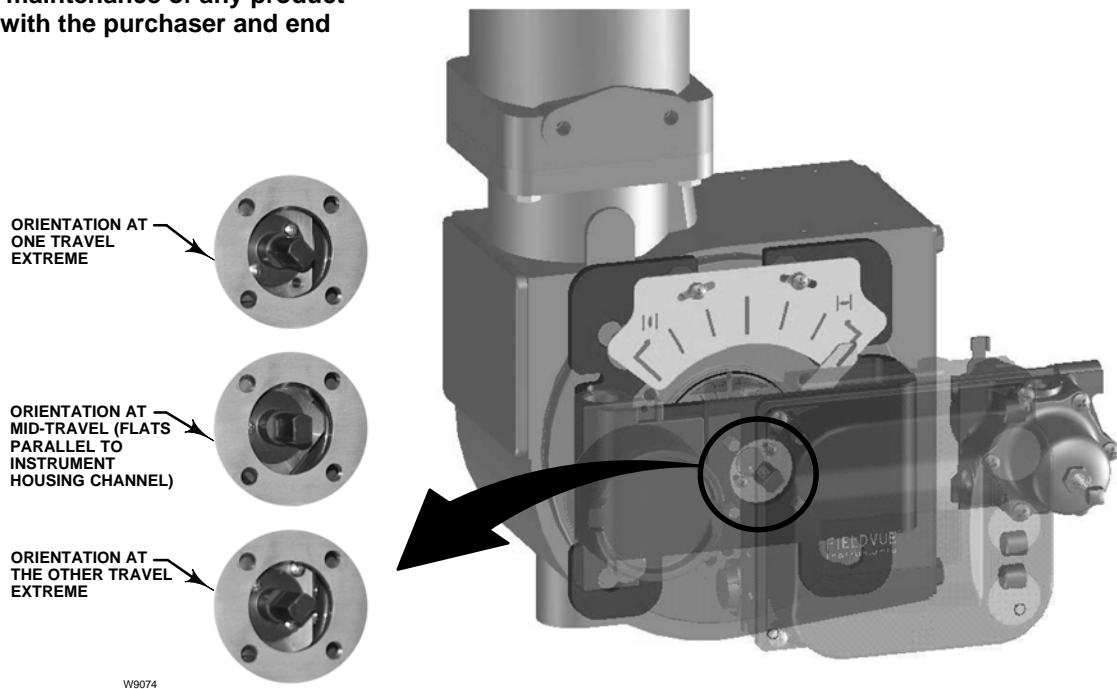


Figure 1. Magnet Assembly Orientation

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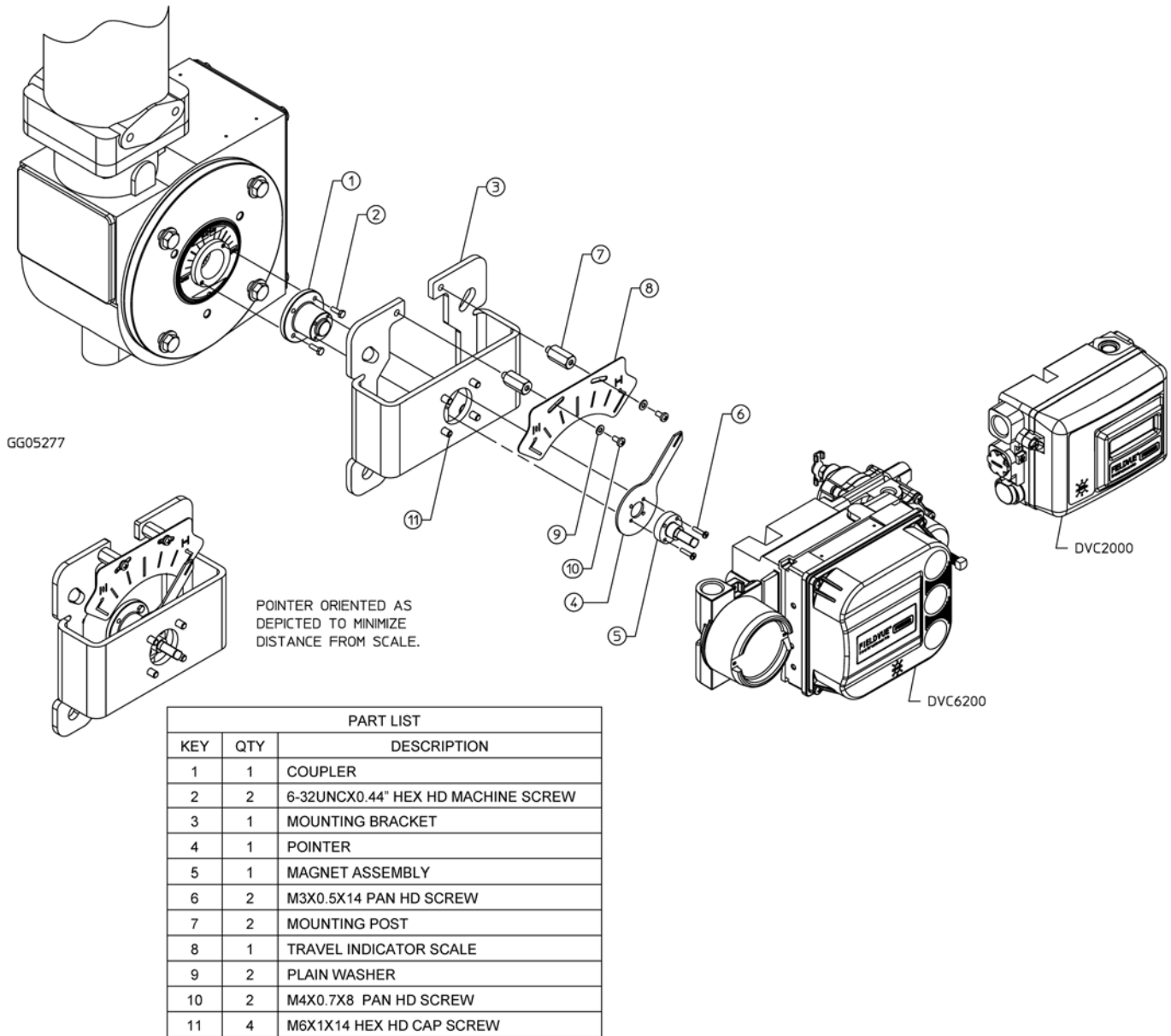


Figure 2. Mounting Parts Identification

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