

## Mounting Instructions

D103451X012  
June 2010

# DVC6200 or DVC2000 Digital Valve Controller on 1052 Size 20 Actuator (End Mount)

Use these instructions to mount a Fisher® FIELDVUE™ DVC6200 or DVC2000 digital valve controller on 1052 size 20 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 appropriate instrument instruction manual listed below 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 1052. Figure 1 shows the instrument mounted upright relative to the actuator spring barrel.

### WARNING

To avoid personal injury due to the sudden, uncontrolled movement of parts, do not remove the actuator hub or hub fasteners when the valve shaft has actuator spring force applied to it.

3. Mounting the instrument on the 1052, size 20 actuator requires removal of the actuator hub to replace the actuator travel indicator scale with a retaining plate (key 14).

4. Remove the travel indicator and its cap screws from the actuator hub, if present. Unscrew the machine screws to remove the actuator hub and travel indicator scale subassembly.

5. Once the actuator hub and travel indicator scale subassembly has been removed from the actuator, remove the retaining ring and the travel indicator scale from the hub. Assemble the retaining plate (key 14) on the hub and reinstall the retaining ring.

6. Reassemble the hub and retaining plate subassembly to the actuator and attach the coupler (key 1) to the actuator shaft using the pan head 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.

7. Attach the mounting bracket (key 3) with the four cap screws (key 13) and tighten. Ensure the hub is positioned on the valve shaft so that the travel indicator screw holes are aligned with the offset portion (where the rod end bearing connects) of the lever. Reassemble the actuator and readjust the actuator spring.

8. 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.



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9. Attach the mounting plate (key 7) to the mounting bracket using pan head screws (key 11) and two washers (key 9) and tighten.
10. Attach the travel indicator scale (key 8) to the mounting plate using the remaining two plain washers (key 9) and pan head machine screws (key 10). Refer to figure 2.
11. Attach the digital valve controller to the mounting bracket using hex head cap screws (key 12) 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.
12. 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.

### Note

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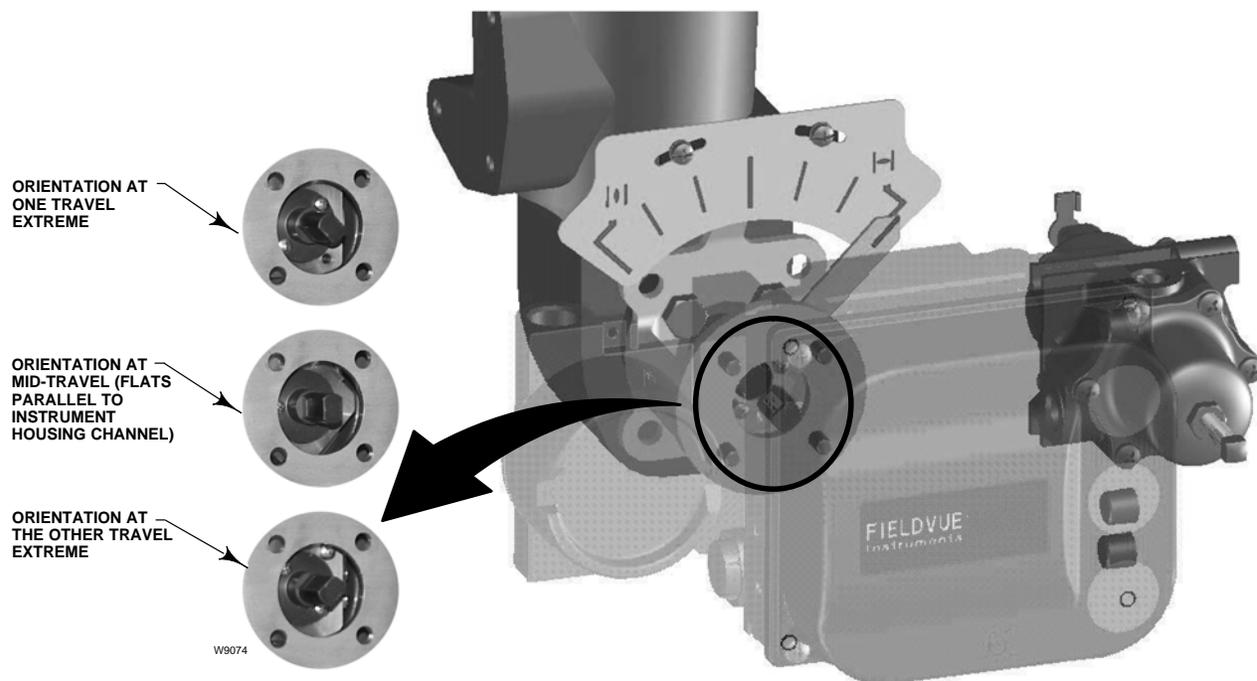


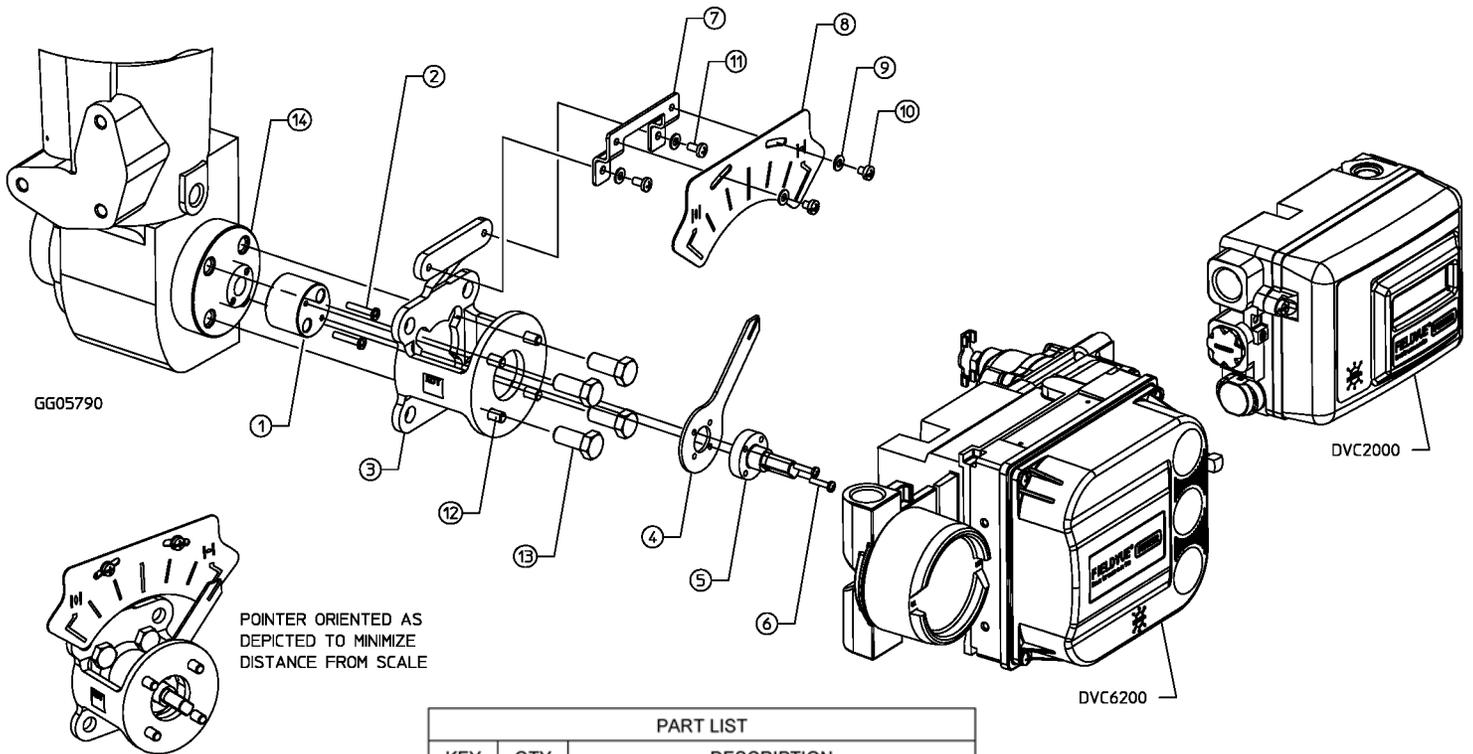
Figure 1. Magnet Assembly Orientation

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PART LIST		
KEY	QTY	DESCRIPTION
1	1	COUPLER
2	2	6-32UNCX0.75" PAN HD SCREW
3	1	MOUNTING BRACKET
4	1	POINTER
5	1	MAGNET ASSEMBLY
6	2	M3X0.5X14 PAN HD SCREW
7	1	MOUNTING PLATE
8	1	TRAVEL INDICATOR SCALE
9	4	PLAIN WASHER
10	2	M4X0.7X5 PAN HD SCREW
11	2	M4X0.7X8 PAN HD SCREW
12	4	M6X1X14 HEX HD CAP SCREW
13	4	3/8"-16UNCX0.88" HEX HD CAP SCREW
14	1	RETAINING PLATE

Figure 2. Mounting Parts Identification

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