SiPART PS2 and ValvePAC Series 760 Valve Positioner Mounting Kits for Rotary Actuators

This Instruction describes the use of a Siemens valve positioner mounting kit to mount a Siemens SiPART® PS2 or ValvePAC™ Series 760 valve positioner on a typical rotary valve actuator.¹ Installation instructions for the valve positioner and for the actuator should be available for reference. If assistance is needed, refer to the Customer/Product Support section of this instruction.

Figure 1 shows typical mechanical feedback configurations. The PS2 and Model 760 mount similarly and they use similar feedback components.

KIT CONTENTS AND VARIATIONS

Each mounting kit contains:

- A main bracket for the particular positioner-to-actuator mounting requirements
- Hardware to mount the bracket to the valve positioner
- Hardware to mount the bracket to the valve actuator – When bracket-to-actuator mounting hardware is not supplied, actuator hardware that aligns with the main bracket mounting holes is removed from the actuator and used to secure the main bracket.
- Additional hardware (e.g. spacers) as required – An installation may require use of spacers, supplied in some kits, between the positioner mounting bracket and the actuator.
- Feedback components to transfer the rotary motion of the actuator to the valve positioner input shaft (may be sold separately)
- When using a sheet metal coupler (see the detail at right), ensure that the PS2 feedback arm attaches securely to a C-style metal coupling by positioning the included metal spacer between the coupling and the lockwasher.

KIT INSTALLATION

Before proceeding, read the actuator and valve positioner installation instructions and note all warnings and cautions. Also, read the following cautions as they apply to all procedures in this instruction.

**CAUTION**

Do not apply supply pressure to the actuator or the valve positioner during the installation process. Applying supply pressure before the equipment is properly mounted could cause unexpected movement that could lead to personal injury or equipment damage.

Perform the following steps to mount the positioner on the actuator and complete the feedback connection. Some steps are performed only for certain models or certain actuator configurations as indicated.

¹ This publication provides kit installation information and is intended to complement the product manuals. Refer to the product manuals for applicable warnings and cautions and for detailed product procedures and specifications.
1. Fasten the mounting bracket to the valve positioner using the supplied M6 screws and lockwashers. Mounting bracket shape will vary with the design of the actuator.

2. Note the positioner model and input shaft style and perform either step 2a or 2b.
   
   2a) PS2 or 760 with D-shaped input shaft (Figure 1, detail 1 or 2) – Install the valve positioner coupler. Use the included setscrew and fasten the coupler to the positioner input shaft. Apply a thread locking solution to the setscrew. Tighten the setscrew on the flat of the shaft.
   
   2b) 760 with factory installed NAMUR input shaft (Figure 1, detail 3) – No additional positioner coupler is needed.

3. Mount the positioner/bracket assembly on the actuator and connect the mechanical feedback components as follows.
   
   3a) Place the assembly on the actuator. Note how the mounting bracket will be attached to the actuator – either with hardware included in the kit or with hardware already installed in the actuator. Note how the supplied feedback components will install – either directly or with a “secondary” coupling.
   
   3b) If actuator-to-mounting bracket hardware is not supplied, identify the actuator hardware that aligns with the mounting bracket mounting holes and remove that hardware from the actuator.
   
   3c) Install any provided spacers between the mounting bracket and the actuator. Do not attach the bracket to the actuator yet.
   
   3d) If supplied, install a “secondary” coupler on the actuator. See Figure 1 for examples of secondary couplers. These couplers will usually mount on the actuator’s valve position indicator or on the actuator shaft. The “Secondary” coupler shape and manner of fastening will vary with the design of the actuator.
   
   3e) Hold the positioner on the actuator and insert the positioner coupler into the slot in the actuator shaft, the slot in the 6DR4004-8D feedback arm, or the slot in the secondary coupler.

   **Note**
   
   For a Wheel and Feedback Arm coupler, insert the feedback arm into the slot in the secondary coupler. Insert the pin near the perimeter of the wheel into the hole in the feedback arm.

4. **Important:** Check that all couplers are fully inserted. If the NAMUR coupler includes an antibacklash spring, the spring must be fully inserted for the antibacklash action to function.

   **Note**
   
   Coupler engagement (in Figure 1, details 1 and 2) can be adjusted by loosening the NAMUR coupler setscrew and repositioning the coupler on the positioner input shaft.

5. Use the mounting bracket hardware to attach the bracket to the actuator.
A "secondary" coupler may be required in addition to those shown above. Some examples are shown below (shaded).

**FIGURE 1: The Three Basic Attachment Methods**
CUSTOMER/PRODUCT SUPPORT

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