Mounting a SIPART PS2 Non-Contacting Position Sensor
On a Keiselmann Valve Actuator

This publication provides installation instructions for installing a Siemens SIPART PS2 Non-Contacting Position Sensor (NCS) on a Keiselmann control valve actuator. The NCS provides the feedback signal to the positioner, which is mounted remotely. A typical installation is shown below.
PARTS, KIT TGX: 16152-885

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
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<tbody>
<tr>
<td>Sensor Mounting Bracket</td>
<td>1</td>
</tr>
<tr>
<td>Coupler</td>
<td>1</td>
</tr>
<tr>
<td>Shoulder Washer</td>
<td>1</td>
</tr>
<tr>
<td>M6 X 12 Hex Head Screw</td>
<td>2</td>
</tr>
<tr>
<td>M6 Split Lockwasher</td>
<td>2</td>
</tr>
<tr>
<td>M5 X 20 Low Socket Head Cap Screw</td>
<td>1</td>
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</tbody>
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INSTALLATION

Refer to the following procedure and to the NCS installation information on the CD supplied with the NCS kit. Also refer to the positioner and actuator installation instructions while performing the installation. The current revisions of the NCS installation instruction and the positioner instruction¹ are available for download at the Siemens Internet site. See Customer/Product Support later in this Instruction for the URL.

Before beginning the installation, note the following cautions.

**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.

**CAUTION**

Do not exceed the maximum actuator and valve positioner air pressures stated in the manufacturer’s literature. Exceeding these ratings could cause personal injury or equipment damage.

1. If not already installed, remotely mount the positioner using the appropriate Siemens pipe-mount kit or other positioner mounting kit. Refer to the kit instruction supplied with the mounting kit.
2. Open the TGX:16152-885 kit and non-contact sensor kit and check the supplied parts against the above parts list and the drawings on page 1.
3. Place the coupler on the valve actuator shaft. Place the magnet holder on the coupler.
4. Insert the M5 screw into the (shoulder) washer and insert the screw into the magnet holder and coupler. Tighten the screw into the actuator shaft. Do not over tighten.
5. Insert the plastic washer into the rotary magnet.
6. Snap the rotary magnet over the magnet holder. The magnet now rotates easily on the magnet holder.
7. Align the spring elements on the clamping ring with the hooks on the rotary magnet, as shown on page 1. Press the ring down over the magnet until it snaps into place. The clamping ring and magnet are now hard to turn.

¹ PS2: SIPART PS2 Electropneumatic Positioners for Linear and Rotary Actuators, P/N A5E00074631
8. Attach the sensor mounting bracket to the valve actuator with two M6 screws and lockwashers.

9. Fasten the non-contact sensor to the sensor mounting bracket with hardware supplied in the NCS kit.

10. Tighten all hardware.

11. Connect the sensor to the PS2; refer to the figure below.

![NCS Wiring to PS2](image)

12. Read the “Cautions” on page 2 and then apply the appropriate air pressures to fully stroke the valve. Exercise the positioner and actuator to ensure that:
   - Any feedback levers and linkage do not prevent the valve from fully stroking. Adjust as needed.
   - All hardware is tightened securely.

13. Once the valve moves freely for the entire stroke, make any additional electrical and pneumatic connections and then proceed to the calibration instructions in the positioner manual (see page 2 footnote).
CUSTOMER/PRODUCT SUPPORT

For support and the location of your local Siemens representative, refer to the table below for the URL of the Process Instrumentation portion of the Siemens public Internet site. Once at the site, click **Support** in the right column and then **Product Support**. Next select the type of support desired: sales, technical (see the table below), documentation, or software.

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<tr>
<td>Technical Support</td>
<td>1-800-333-7421; 8 a.m. to 4:45 p.m. eastern time, Monday through Friday (except holidays)</td>
</tr>
<tr>
<td>Customer Service &amp; Returns</td>
<td>1-800-365-8766 (warranty and non-warranty)</td>
</tr>
<tr>
<td>Public Internet Site</td>
<td><a href="http://www.usa.siemens.com/pi">http://www.usa.siemens.com/pi</a></td>
</tr>
<tr>
<td>Technical Publications in PDF</td>
<td>Click the above link to go to the PI home page. Click <strong>Support</strong> and then <strong>Manuals</strong> and then, under “Additional Manuals,” select the product line (e.g. Control Solutions)</td>
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