

Configuring the DVC6200 SIS for Throttling Control Using ValveLink™ Software

Supplement to Fisher® FIELDVUE™ DVC6200 SIS Digital Valve Controller Instruction Manual

⚠ WARNING

This instruction manual supplement is not intended to be used as a stand-alone document. It must be used in conjunction with the following documents:

- Safety manual for DVC6200 SIS Digital Valve Controller (D103601X012), sections pertaining to the Position Monitor
- Fisher FIELDVUE DVC6200 SIS Instruction Manual (D103557X012)

Failure to use this instruction manual supplement in conjunction with the above referenced manuals could result in personal injury or property damage. If you have any questions regarding these instructions or need assistance in obtaining either of these documents, contact your Emerson Process Management sales office.

This instruction manual supplement is intended to assist in the use of the DVC6200 SIS as a SIL capable position monitor AND as a non-SIL capable throttling digital valve controller.

⚠ WARNING

The DVC6200 SIS failure rates for the digital valve controller safety function, as listed in the FMEDA and SIL certificate, are not valid in this configuration (with 4-20 mA operation).



Configuration

⚠ WARNING

When using natural gas as the supply medium:

- Remove electrical power before removing the housing cap. Personal injury or property damage from fire or explosion may result if power is not disconnected before removing the cap.
- Ensure that the cover is correctly installed before putting this unit back into service. Failure to do so could result in personal injury or property damage from fire or explosion.

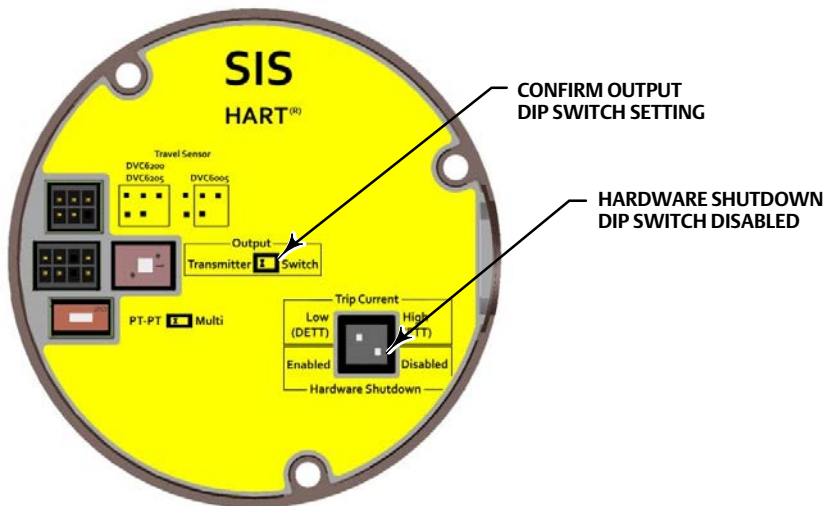
1. Remove the Printed Wiring Board from the DVC6200 SIS.

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2. Ensure that the Hardware Shutdown DIP Switch is configured to disabled, as shown in figure 1.
3. Confirm that the Output DIP Switch is in the desired position for use as either a Position Transmitter or Switch.

Figure 1. Printed Wiring Board



4. Reassemble the DVC6200 SIS.
5. Connect the DVC6200 SIS to ValveLink software.
6. Under Detailed Setup, select Travel/Pressure Control.
 - a. Low Limit/Cutoff Point can be adjusted as low as 5%.
 - b. High Limit/Cutoff Point can be adjusted as high as 95%.

Figure 2. Detailed Setup > Travel/Pressure Control

The screenshot displays the configuration interface for the DVC6200 SIS, specifically the 'Travel/Pressure Control' section. The interface is organized into several tabs at the top: Informational Status, Electronic Alerts, Dynamic Response, Spec Sheet Units, Valve, Trim, Actuator, Accessories, and Notes. The 'Pressure' tab is currently selected. Below the tabs, there are sections for 'Travel/Pressure Control', 'Low Limit/Cutoff Point', 'High Limit/Cutoff Point', 'End Point Press. Control', and 'Pressure Set Point'. Each section contains input fields and buttons for configuration. The 'Low Limit/Cutoff Point' and 'High Limit/Cutoff Point' fields are circled in red in the original image, indicating they are the focus of the instructions. The 'Pressure Set Point' is set to 0.0 bar, and the 'Pressure Saturation Time (sec)' is set to 45.

Parameter	Instrument	Download/Upload	Database Dataset:
Travel/Pressure Control			
Travel / Pressure Select	Travel	← →	Travel
Low Limit/Cutoff Select	Cutoff	← →	Cutoff
Low Limit/Cutoff Point	5	← →	5
High Limit/Cutoff Select	Cutoff	← →	Cutoff
High Limit/Cutoff Point	95	← →	95
End Point Press. Control			
End Point Control Enable	Disabled	← →	Disabled
Control End	Not Configured		
Pressure Set Point	0.0 bar	← →	0.0 psi
Pressure Saturation Time (sec)	45	← →	45

7. Once the Cutoff Points are set, download to the DVC6200 SIS.
8. When the DVC6200 SIS is placed in service, it will be able to throttle between 5 and 95% valve travel.

Note

The DVC6200 SIS will throttle between whatever cutoffs are set in step 6.

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Emerson Process Management
Marshalltown, Iowa 50158 USA
Sorocaba, 18087 Brazil
Chatham, Kent ME4 4QZ UK
Dubai, United Arab Emirates
Singapore 128461 Singapore

www.Fisher.com