

# Effective Use of FIELDVUE™ DVC6200 SIS Instrument Diagnostics

## HART® Communication Protocol

Fisher™ FIELDVUE instruments offer state-of-the-art diagnostic tools providing a window into the health of valve assembly assets. However, crafting a maintenance strategy to take advantage of these tools can be a daunting task. These basic steps will provide immediate value and build momentum toward broader utilization.



### Commissioning/Diagnostic Tools

ValveLink™ Mobile with AMS Trex™ Device Communicator or 475 Field Communicator



AMS ValveLink SNAP-ON™ Software



ValveLink Solo & ValveLink DTM Software



### Commissioning/Diagnostic Tests

1. Review the detailed setup configuration with the safety engineer.
2. Verify that all alerts for diagnostic credit are enabled.
3. Take the valve to the normal end.
4. Perform a status monitor and review the alerts for any concerns.
5. Verify that the instrument enters into End Point Pressure Control when the control signal is at the normal end.
6. Run a partial stroke test (PST) and full stroke test (Valve Signature), verify the test was successful, and save the test.
7. If using 4-20mA input, initiate a demand from the logic solver. If using a 0-24V / 0-20mA input, then run a step test, configuring steps from the normal end to the trip end and from the trip end to the normal end. Upload the diagnostic data, verify the demand stroke time is as expected, and save the data.
8. Enable protection for configuration and calibration.



# Commissioning

## Commissioning Steps

1. Follow the mounting and installation guidelines per the Fisher FIELDVUE DVC6200 Quick Start Guide.
2. Run the setup wizard.
3. Run the Auto Travel, Pressure, and PST calibrations and set up SIS triggers.
4. Configure the instrument, per the table to the right in addition to the diagnostic credit table in the safety manual.

Setup Parameter	Setup Wizard (Default Settings after PST Calibration)	Recommended Initial Settings
HART Tag	As Specified On Order	Fill in Plant Information
Message	Blank	Fill in Plant Information
Descriptor	Blank	Fill in Plant Information
Date	Factory Calibration Date	Set to Current Date
Valve Serial Number	Blank	Fill in Valve Serial Number
Travel Deviation Alert Enabled	Yes	Yes
Travel Deviation Alert Point	5%	5%
Travel Deviation Time	9.99 seconds	9.99 seconds
Supply Pressure Alert Enable	Yes	Yes
Supply Pressure Alert Point	.345 Bar (5 psi)	Single Acting: 0.20 Bar (3 psi) above end point pressure control Double Acting: 0.68 Bar (10 psi) below nominal
Drive Signal Alert Enable	Yes	Yes
Diagnostic Data Avail Enable**	No	Yes
Alert Record Enable	No	Yes
Alert Record Not Empty Enable*	No	Yes
Alert Record Full Enable*	No	Yes
Cycle Counter	0	0
Travel Accumulator	0	0
SIS Trigger	Enabled	Enabled
End Point Pressure Control	Enabled	Enabled
Short Duration PST	Enabled	Follow Plant Guidelines
Return Lead	Disabled	Equal to Valve Hysteresis
PST Pass Alert	Not Configured	Enable and set the tripped by LCP time.
PST Abnormal Alert	Enabled	Enabled
PST Abnormal Notification	Travel Deviation and Low Friction break out disabled	Follow Plant Guidelines
PST Prohibited	Travel Deviation and Low Friction Break out disabled	Follow Plant Guidelines
PST Abort	Travel Deviation and Low Friction Break out disabled, everything else enabled	Follow Plant Guidelines
*Requires a work practice to regularly check/clear the alert		
**Functionality with Performance Diagnostics Tier		

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To learn more, visit  
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