Contents (continued)

Section 1 Introduction

Installation, Pneumatic and Electrical Connections, and Initial Configuration

Refer to the DVC6200 Series Quick Start Guide (D103556X012) for DVC6200 installation, connection and initial configuration information. If a copy of this quick start guide is needed scan or click the QR code at the right, contact your Emerson sales office or visit our website at Fisher.com.

Scan or click to access field support

Scope of Manual

This instruction manual is a supplement to the DVC6200 Series Quick Start Guide (D103556X012) that ships with every instrument. This instruction manual includes product specifications, reference materials, custom setup information, maintenance procedures, and replacement part details.

This instruction manual describes using an Emerson handheld communicator to set up and calibrate the instrument. You can also use Fisher ValveLink™ software or ValveLink Mobile software to setup, calibrate, and diagnose the valve and instrument. For information on using ValveLink software with the instrument refer to ValveLink software help or documentation.

Do not install, operate, or maintain a DVC6200 digital valve controller without being fully trained and qualified in valve, actuator, and accessory installation, operation, and maintenance. **To avoid personal injury or property damage, it is important to carefully read, understand, and follow all of the contents of this manual, including all safety cautions and warnings.** If you have any questions about these instructions, contact your Emerson sales office before proceeding.

Conventions Used in this Manual

Navigation paths and fast-key sequences are included for procedures and parameters that can be accessed using the handheld communicator.

For example, to access Device Setup:

Handheld Communicator	Configure > Guided Setup > Device Setup (2-1-1)

Refer to Appendix B for handheld communicator menu trees.

Note

Fast-key sequences are only applicable to the 475 Field Communicator. They do not apply to the Trex™ Device Communicator.

Description

DVC6200 digital valve controllers (figures 1-1 and 1-2) are communicating, microprocessor-based current-to-pneumatic instruments. In addition to the traditional function of converting an input current signal to a pneumatic output pressure, the DVC6200 digital valve controller, using the HART® communications protocol, gives easy access to information critical to process operation. You can gain information from the principal component of the process, the control valve itself, using the handheld communicator at the valve, or at a field junction box, or by using a

Figure 1-1. FIELDVUE DVC6200 Digital Valve Controller Mounted on a Fisher Sliding-Stem Valve Actuator

Figure 1-2. FIELDVUE DVC6200 Digital Valve Controller Integrally Mounted to a Fisher GX Control Valve

personal computer or operator's console within the control room. Additionally, an option is available which provides isolated circuitry for a valve position transmitter (for separate valve position feedback) or an integrated switch that can be set as a limit switch or an alert switch.

Using a personal computer and ValveLink software or AMS Suite: Intelligent Device Manager, or a handheld communicator, you can perform several operations with the DVC6200 digital valve controller. You can obtain general information concerning software revision level, messages, tag, descriptor, and date.

Diagnostic information is available to aid you when troubleshooting. Input and output configuration parameters can be set, and the digital valve controller can be calibrated. Refer to table 1-1 for details on the capabilities of each diagnostic tier.

Using the HART protocol, information from the field can be integrated into control systems or be received on a single loop basis.

The DVC6200 digital valve controller is designed to directly replace standard pneumatic and electro-pneumatic valve mounted positioners.

Table 1-1. Instrument Level Capabilities

CAPABILITY	DIAGNOSTIC LEVEL(2)			
	HC	AD	PD	ODV
Auto Calibration	X	X	X	X
Custom Characterization	X	X	X	X
Burst Communication	X	X	X	X
Alerts	X	X	X	X
Step Response, Drive Signal Test & Dynamic Error Band		X	X	X
Advanced Diagnostics (Valve Signature)		X	X	X
Performance Tuner(3)		X	X	X
Travel Control - Pressure Fallback		X	X	X
Supply Pressure Sensor	X(4)	X	X	X
Performance Diagnostics			X	X
Solenoid Valve Testing			X	X
Lead/Lag Set Point Filter(1)				X

1. Refer to brochure part # D351146X012 for information on Fisher optimized digital valves for compressor antisurge applications.
2. HC = HART Communicating ; AD = Advanced Diagnostics ; PD = Performance Diagnostics ; ODV = Optimized Digital Valve.
3. Performance Tuner is only available in ValveLink software.
4. Supply Pressure Sensor available starting with Firmware 7.

Specifications

⚠ WARNING

Refer to table 1-2 for specifications. Incorrect configuration of a positioning instrument could result in the malfunction of the product, property damage or personal injury.

Specifications for DVC6200 digital valve controllers are shown in table 1-2. Specifications for the Device Communicator can be found in the Device Communicator quick start guide.

Related Documents

This section lists other documents containing information related to the DVC6200 digital valve controller. These documents include:

- Bulletin 62.1:DVC6200 - Fisher FIELDVUE DVC6200 Digital Valve Controller (D103415X012)
- Bulletin 62.1:DVC6200(S1) Fisher FIELDUVE DVC6200 Digital Valve Controller Dimensions (D103543X012)
- Bulletin 62.1:Digital Valve Controller - Fisher FIELDVUE Digital Valve Controller Product Selection (D104363X012)
- Fisher FIELDVUE DVC6200 Series Digital Valve Controller Quick Start Guide (D103556X012)
- FIELDVUE Digital Valve Controller Split Ranging (D103262X012)
- Using FIELDVUE Instruments with the Smart HART Loop Interface and Monitor (HIM) (D103263X012)
- Using FIELDVUE Instruments with the Smart Wireless THUM Adapter and a HART Interface Module (HIM) (D103469X012)
- Audio Monitor for HART Communications (D103265X012)
- HART Field Device Specification - Supplement to Fisher FIELDVUE DVC6200 Digital Valve Controller (D103639X012)
- Using the HART Tri-Loop HART-to-Analog Signal Converter with FIELDVUE Digital Valve Controllers (D103267X012)
- Implementation of Lock-in-Last Strategy (D103261X012)
- Fisher HF340 Filter Instruction Manual (D102796X012)
- AMS Trex Device Communicator User Guide
- ValveLink Software Help or Documentation

All documents are available from your Emerson sale office or at Fisher.com.