FIELDVUE™ Digital Valve Controllers for Nuclear Applications

Fisher™ FIELDVUE technology has been available for over 20 years with more than two million units installed worldwide. The unmatched capabilities make it the number one technology in use and help ensure reliable operation year after year.

Avoid Unnecessary Maintenance

- **Eliminate maintenance guesswork**
  Receive advanced notice of developing performance issues occurring within the control valve assembly or the process.
- **Receive an accurate picture of valve performance around the clock**
  FIELDVUE digital valve controllers and ValveLink™ software combine to provide on-line, in-service Performance Diagnostics, so you can analyze valve and actuator health while the valve remains in service.

Mitigate Personnel Exposure

- **Streamline maintenance requirements**
  A modular instrument design allows fast replacement of the I/P converter, relay, gauges, and encapsulated electronics without disturbing the mounting, pneumatic tubing, or field wiring.
- **Keep technicians out of harm's way**
  For harsh environments, like inside containment, FIELDVUE instruments have remote-mount options that allow you to locate electronics up to hundreds of feet away from the valve assembly.

Reduce Process Downtime

- **Stay running longer with linkage-less feedback**
  With no linkage to prematurely wear, loosen, corrode, or vibrate, these instruments are perfect for notoriously harsh nuclear environments.
- **Lessen the negative effects of temperature, radiation, and vibration**
  With an extreme temperature elastomer package and radiation resistance–tested to more than 11,000 rads total integrated dose–FIELDVUE instruments are rugged enough to handle the harsh conditions of your nuclear facility.

Improve Plant Performance and Security

- **Achieve tighter process control**
  With highly-accurate positioning, as well as high-speed and stable valve response, FIELDVUE instruments can help increase your production efficiency and output.
- **Keep devices protected from cyber attacks**
  Emerson has worked with EPRI to develop a data sheet per Electric Power Research Institute (EPRI) cyber-security procurement methodology, rev 1.

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Specification	DVC6005/6015 instruments	DVC6200, DVC6205/6215 instruments
Radiation	■ Remote mount tested to 2.624E6 rads	■ Remote mount tested to 1.82E4 rads ■ Valve mount tested to 2.27E4 rads
Input	■ Analog input signal: 4–20 mA DC, nominal; split ranging available ■ Minimum voltage available at instrument terminals must be 10.5 VDC for analog control, 11 VDC for HART communication	
EMC	EMC testing meets the intent of the Regulatory Guide 1.180, Revision 1 and EPRI TR-102323, Revision 3 ■ Low frequency conducted emissions: Not Applicable ■ High frequency conducted emissions: IEC 61000-6-4 ■ Radiated magnetic field emissions: None ■ Radiated electric field emissions: EN 55011 and IEC 61326 ■ Low frequency conducted susceptibility: Not Applicable ■ High frequency conducted susceptibility: IEC 61326 and IEC 61000-4-6 ■ Radiated magnetic field susceptibility: IEC 61326 and IEC 1000-4-8 ■ Radiated electromagnetic field susceptibility: IEC 61326 and IEC 61000-4-3 ■ Surge withstand: IEC 61326-1 and IEC 61000-4-5 ■ Electrical fast transient: IEC 61326-1 and IEC 61000-4-4 ■ Electrostatic discharge: IEC 61326-1 and IEC 61000-4-2	
Seismic	Tested to the requirements of: ■ NRC Regulatory Guide 1.100 ■ IEEE 344-1987 ■ 7g maximum seismic acceleration	
Supply Pressure	Maximum: 10.0 bar (145 psig) or maximum pressure rating of the actuator, whichever is lower	
Temperature Limits	-52 to 85°C (-62 to 185°F) with fluorosilicone elastomers -52 to 125°C (-62 to 257°F) with remote mount option	
Electrical Housing	NEMA 4X, IP66	
Available Mounting	■ Sliding-stem linear applications ■ Rotary shaft applications ■ Integral mounting to Fisher rotary actuators ■ IEC 60534-6-1, IEC 60534-6-2, VDI/VDE 3845, and NAMUR standards	

Note: The digital component evaluation process is defined in EPRI TR-106439, Guideline on Evaluation and Acceptance of Commercial Grade Digital Equipment for Nuclear Safety Applications, and is endorsed in the NRC's Standard Review Plan NUREG-0800.

Visit **Fisher.com** or contact your local Emerson office to find out what makes Fisher instruments better in nuclear applications.

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