

Travel Control/Pressure Fallback

Fisher™ FIELDVUE™ DVC6200 HW2 Digital Valve Controller

Valve position feedback is very important to control valve performance. The DVC6200 HW2 digital valve controller provides a unique feature to detect position feedback issues and automatically revert from travel control to pressure control (I/P transducer mode) to keep the valve operational. This can help avoid costly unplanned spurious trips that can affect plant operation.

Notes

The DVC6200 HW2, instrument level AD, PD, or ODV, can fallback into pressure control mode only if the unit is direct- or reverse-acting single output. The pressure fallback feature will not work on dual outputs that are required for double-acting piston actuators.

The DVC6200 HW2 can fallback from travel control mode to pressure control mode based on the following parameter settings:

- Fallback on Sensor Failure—When the instrument detects a travel sensor failure it will fall back into pressure control mode. The instrument will disregard the travel feedback and control based on output pressure.
- Fallback on Sensor Failure or Deviation—Pressure fallback will occur when the instrument detects a travel sensor failure or if the configured deviation between travel target and actual travel have exceeded the travel deviation time.
- Fallback Recovery—If the instrument has fallen into pressure control and the feedback problem is resolved, recovery to travel control can occur automatically or with manual intervention. To return to travel control when Manual Recovery is selected, change the Fallback Recovery to Auto Recovery, and then back to Manual Recovery.

In the DVC6200 HW2, the Travel/Pressure configuration parameter allows for choosing the control mode:

Travel

Pressure

Fallback on Sensor Failure (Auto or Manual recovery)

Fallback on Sensor Failure or Deviation (Auto or Manual recovery)

Advantages of Travel Control/Pressure Fallback

Travel Control/Pressure Fallback can help you avoid plant trips due to a failure of the travel sensor, allowing you to maximize plant availability.

Travel Control/Pressure Fallback can be used during hot cutover applications, which can result in considerable operating cost savings.

Miscellaneous

- The Travel Calibration procedure calibrates the instrument for both travel and pressure control mode; it allows the instrument to operate in Travel as the default mode, but revert to pressure control when the Travel/Pressure Select parameter is configured as such.
- In the case of the travel sensor failure, the change from travel to pressure control mode is bumpless.
- When the DVC6200 HW2 is configured for auto recovery, it will revert to Travel Control once the travel sensor issue has been rectified and the deviation limit settings are back to their normal range.
- The Travel Deviation Pressure Fallback and Travel Deviation Pressure Fallback time parameters configure the instrument to detect when the travel sensor is out of the specified range and revert to pressure control mode.
- Refer to the DVC6200 HW2 instruction manual, in Related Documents below, for detailed set up information.
- This option is also available on DVC6200f and DVC6200p digital valve controllers. Refer to the appropriate instruction manual in Related Documents below.

Related Documents

Refer to the DVC6200 Series Quick Start Guide, [D103556X012](#), for installation, connection, and initial configuration information. Refer to the instruction manual, listed below, for all other information pertaining to the digital valve controller, including product specifications, reference materials, custom setup information, maintenance procedures, and replacement part details.

- DVC6200 HW2 Digital Valve Controller Instruction Manual ([D103605X012](#))
- DVC6200f Digital Valve Controller Instruction Manual ([D103412X012](#))
- DVC6200p Digital Valve Controller Instruction Manual ([D103563X012](#))

Documents are available from your [Emerson sales office](#) or at Fisher.com.

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