

Fisher® 3582 and 3582i Positioners and 582i Electro-Pneumatic Converter

Fisher 3582 pneumatic valve positioners and 3582i electro-pneumatic valve positioners, shown in figure 1, are used with diaphragm-actuated, sliding-stem control valve assemblies. The pneumatic valve positioners receive a pneumatic input signal from a control device and modulate the supply pressure to the control valve actuator, providing an accurate valve stem position that is proportional to the pneumatic input signal.

3582NS positioners are designed for nuclear power applications. The 3582NS construction includes materials that provide superior performance at elevated temperature and radiation levels. The O-rings are EPDM (ethylene propylene) and the diaphragms are EPDM/meta-aramid. EPDM demonstrates superior temperature capability and shelf life over nitrile.

Note

Use a clean, dry, oil-free air supply with instruments containing EPDM components. EPDM is subject to degradation when exposed to petroleum-based lubricants.

The meta-aramid diaphragm fabric demonstrates improved strength retention at elevated temperature and radiation conditions.

Under the 10CFR50, Appendix B, quality assurance program, the 3582NS positioner is qualified commercial grade dedicated. These can be supplied as 10CFR, Part 21 items.

The 3582i electro-pneumatic valve positioner consists of a Fisher 582i electro-pneumatic converter installed on a 3582 pneumatic valve positioner. The 3582i provides an accurate valve stem position that is proportional to a DC current input signal.



FISHER 3582 PNEUMATIC VALVE POSITIONER

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The 582i electro-pneumatic converter, shown in figure 3, is a modular unit that can be installed at the factory or in the field.

The converter receives a DC current input signal and provides a proportional pneumatic output signal through a nozzle/flapper arrangement. The pneumatic output signal provides the input signal to the pneumatic positioner, eliminating the need for a remote mounted transducer.

Note

Upgrading an existing 3582 positioner by field installation of a 582i electro-pneumatic converter may require changing the existing positioner mounting and the input signal range. Contact your Emerson Process Management sales office when planning an upgrade.



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