

EX210

ADVANCED HYDRAULIC ACTUATOR POSITIONER



Atex Certified Enclosure System

Optimised for electro-hydraulic actuators

Simple to use

Large graphics LCD with comprehensive status and data display

KEY FEATURES

- Digital Display
- IR Communication
- AC or DC Supply
- V or I command signal
- Up to 1.5A solenoid load
- 3-way Galvanic Isolation
- User Configurable
- Secure Password Protection

EX210

ADVANCED ELECTRO-HYDRAULIC VALVE ACTUATOR POSITIONER

INTRODUCTION

The EX210 is designed specifically to operate with electro-hydraulic actuators.

The EX210 provides a reliable and accurate positioning system for valve actuators in a complete enclosure system suitable for Zone 1 and 2 hazardous environments.

EX210

ADVANCED HYDRUALIC VALVE ACTUATOR POSTIONER

Basic System

- Zone 1 / 2 Infrared communication interface using an Ex ia keypad
- Large graphics LCD with comprehensive status and data display
- Three way galvanic isolation – command in, actual position out and power supply
- Selectable sinking or sourcing actual position 4-20mA output
- Local / remote configuration enable input and open drain status output
- Selectable solenoid drive sense for failsafe operation
- Selectable default operation on command signal/feedback signal break
- ESD solenoid output - 24VDC open drain
- Fault output - 24VDC open drain
- Hydraulic pump drive controlled by demand or external pressure sensors
- External fault contact monitoring
- Selectable interlock between ESD and fault outputs
- Stepping mode with adjustable ON and OFF times
- Low power - normal operation less than 2W plus solenoids
- Direct mounting within Compact Exd Enclosure System

Enhanced System

- HART communication channel on retransmitted actual position signal (available late 2011)
- Foundation Fieldbus interface (available late 2011)
- 3 analogue inputs for hydraulic system monitoring and condition monitoring
- Performance logging with USB download
- 1.5A proportional solenoid drive with PID control
- Self contained hydraulic motor control – 220V ac 0.55kw



Diagnostics

Travel Time Comparison

The EX210 records the actuator travel against time during a change in command signals. This is then compared to the signature rate set during commissioning. Deviations from a 'signature' set of data will alert the user to potential faults in the actuator or valve.

System Stability Monitoring

The EX210 records the operation of solenoids required to compensate for a leaking hydraulic system when the command signal is stable. eg solenoid leakage.

All test results, successful and failed, are recorded with a date stamp on an internal mounted SD memory card with sufficient capacity for many hundreds of operations. The results are formatted as a simple, universal, comma separated variable file that can be read into an Excel spreadsheet. Local led indicators show that the instrument is healthy.

