GF Piping Systems

Valve Tech Tip

Date: **February 24, 2016** **Issue:** **V01/16, rev 1**

EA04 DC Wiring

Description

When using a Type 104 actuated ball valve with a 24-volt DC option for the actuator, the use of an external Double Pole Double Throw (DPDT) relay is recommended. The 24VDC EA04 actuators operate by swapping positive and negative between terminals #1 and #2. When the DIN connector #1 is Positive and #2 is Negative the valve will be CLOSED, when #1 is Negative and #2 is Positive the valve will OPEN.

Operation

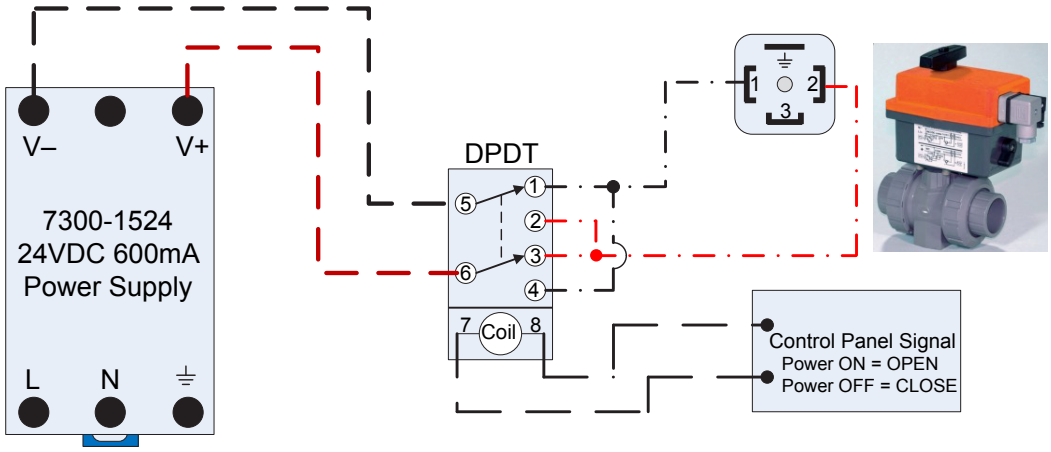
This supplies power to open and close a Type 104 24VDC electric actuator. When the relay is activated Normally Open terminals become active and the valve opens, when the relay is tuned off the power resets to the Normally Closed terminals to power the valve to close. The relays can be sourced through an electronics supply company. Below is an example of the type of relay that can be utilized.

Wiring

The following wiring information will aid in setup of these actuated valves:

- Connect (V–) from the power supply to Relay pin 5
- Connect (V+) from the power supply to Relay pin 6
- Connect Control Panel Signal (+) to Relay pin 7
- Connect Control Panel Signal (–) to Relay pin 8
- Connect DIN Plug terminal 1 to Relay pin 1
- Connect DIN Plug terminal 2 to Relay pin 3
- Jumper Relay pin 1 & 4
- Jumper Relay pin 2 & 3

Note: Relay pinout may differ from manufacturer to manufacturer



G2R-2-DC-24
General Purpose Double Pole Double Throw Relay
Coil: 24VDC
Contacts: Rated up to 250VAC 5A Max.

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