

## Using the Offset Feature

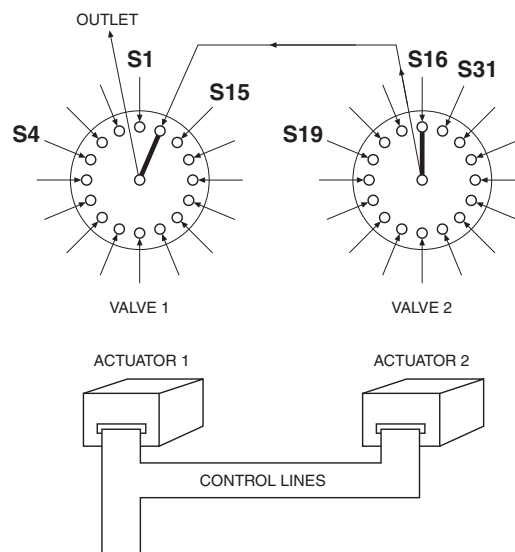
This feature makes it possible to control more than one actuator without increasing the number of BCD or serial input lines. The actuator's SO value can be set from "1" to "96", minus the current NP value (the number of positions the actuator is set to index). Once an SO value is set, that value is the first (or lowest) position an actuator will recognize. The factory SO setting is "1", so an actuator with an NP value of 10 responds to move commands for positions "1" to "10". If the SO value is changed to "10", the actuator will respond only to move commands for positions "10" through "19". For any setting of SO and NP, the lowest valid position will be the SO value and the highest valid position will be the SO value plus the NP value minus 1; i.e., the actuator will respond to commands for position SO through position {SO + NP - 1}.

The examples below describe a system that will step sequentially from 1 through 31 with a single instruction. However, note that when positions are selected in a random sequence, position 16 must always be requested before any positions higher than 16 are selected. **Figure 12** helps illustrate this: since both actuators respond to a command to go to position 16, stream 16 will flow through valve 1/port 1, out the common port of valve 2, into valve 1/port 16, and out of the common port of valve 1. Thereafter, any stream select command that is above 16 will move only valve 2; when a move command for a position less than 16 is given, valve 1 will move and cut off all flow from valve 2.

### With BCD Control

Here is how this can be feature can be used to set up a 31-stream stream selection system using six dedicated BCD lines and two 16-position valves and actuators. Refer to "Using the Manual Remote to Configure the Actuator" on page 3 as required.

1. Use the manual remote to enable the auto-latching feature on both actuators. This eliminates the need for a data latch signal.
2. Use the manual remote to assign the second actuator an offset value of "16", giving it a valid position range of 16 to 31.
3. Use a piece of tubing to connect port 16 of the first valve (on the actuator still carrying the factory-default offset value of "1") to the common port of the valve on the second actuator (which now has an offset value of "16").
4. Connect streams 1 through 15 to ports 1 through 15 on the first valve, and streams 16 through 31 to ports 1 through 15 on the second valve.



**Figure 12:** Using the Offset feature