



Valve Technical Information

Manual Override

The Manual Override actuator option is available on all Red Valve Pneumatic actuated valves including; Series 5200 and 5400 Control Pinch Valves and Series G and D pneumatic actuated Knife Gate Valves. The unit consists of a mounting yoke and operator assembly. In normal operation, the Manual Override is disengaged. It is engaged when the valve cannot be operated automatically by the actuator; for instance, if the plant air supply is shut down, or the instrument air signal to a positioner is cut off.

The Manual Override assembly consists of a handwheel or bevel gear actuator, a modified pneumatic actuator with a stem extension, an override mounting yoke, a position indicator and a removable override engagement pin.

Operation

The Manual Override is engaged by aligning the holes through the override stem extension and override jack screw, then inserting the removable engagement pin. Once the engagement pin is inserted, the override handwheel may be turned to open or close the valve.

CAUTION: The actuator must be depressurized before engaging the manual override. Failure to do so could damage the valve and Manual Override unit, and cause injury.

The Manual Override is disengaged by removing the engagement pin. Once the engagement pin is removed, the valve may be returned to automatic operation.

CAUTION: The engagement pin MUST be removed prior to activating automatic control of the valve. Failure to do so could damage the valve and Manual Override unit, and cause injury.

Red Valve recommends that block and bleed valves be installed in the plant air lines and instrument signal air lines, where applicable to allow pressure to bleed from the actuator prior to engaging the Manual Override, and to prevent accidental pressurization of the actuator while the Manual Override is engaged.

In larger sizes and high pressure applications, bevel gear actuators are available in ranges of 4:1, 8:1, 22:1 to meet customer rim pull specifications.

The Manual Override is available only as a factory-installed option; it cannot be retrofitted in the field.

