



Valve Technical Information

Lockout/Tagout Recommendations and Practices for Series DX Slurry Knife Gate Valves

PURPOSE: Workers performing service or maintenance on valves and/or piping structures are exposed to injuries from an unexpected release of stored energy. A lockout/tagout implementation isolates and prevents the release of stored energy eliminating potential hazard while maintenance is performed.

Bevel Gear Operated Valves

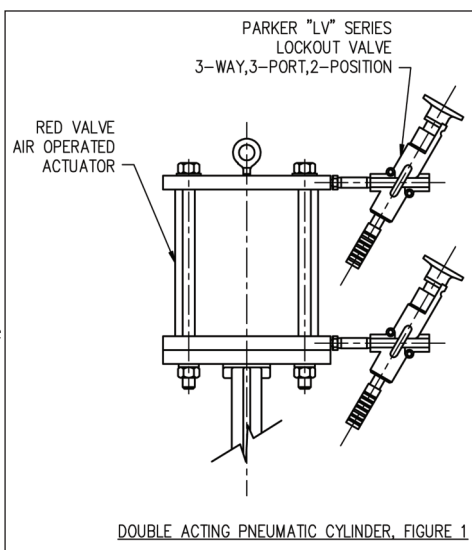
All valves equipped with bevel gear operators must incorporate a handwheel locking device in addition to the standard lockout/tagout pin.

Double Acting Pneumatic Cylinders

Prior to inserting lockout/tagout pin:

1. All line pressure must be relieved and inspected for hazardous and/or toxic chemicals.
2. Valve gate should be moved to desired position (full open or full closed) and lockout pin inserted. After inserting lockout pin, all cylinder pressure must be relieved. A

3-way, 3-port, 2-position lockout valve similar to Parker Hannifin "LV" or "EZ" Series is recommended on pneumatic drop-leg or individual pneumatic control lines as a secondary locking device. Refer to Figure 1.



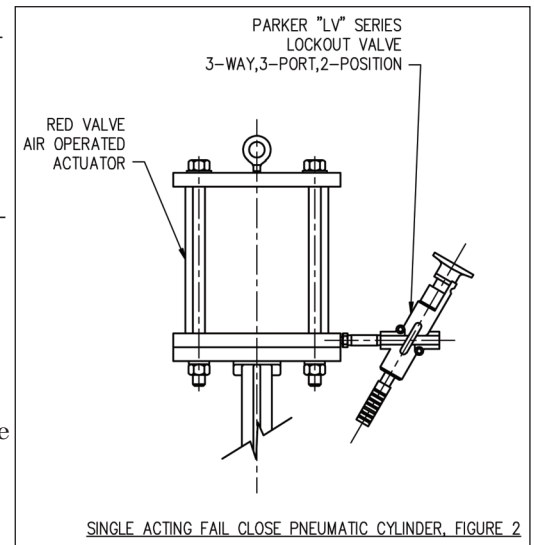
Single Acting Pneumatic Cylinders

Prior to inserting lockout/tagout pin:

1. All line pressure must be relieved and inspected for hazardous and/or toxic chemicals.
2. Valve gate should be moved to desired position (full open or full closed) and lockout pin inserted. After inserting

lockout pin, all cylinder air must be relieved. A 3-way, 3-port, 2-position lockout valve similar to Parker Hannifin "LV" or "EZ"

Series is recommended on pneumatic drop-leg or individual pneumatic control lines as a secondary locking device. Refer to Figure 2. Be advised that the valve must be locked in the fail position only.



Electric Operated Valves

Prior to inserting lockout/tagout pin:

1. All line pressure must be relieved and inspected for hazardous and/or toxic chemicals.
2. Valve gate should be moved to desired position (full open or full closed) and lockout pin inserted. After inserting lockout pin, all electrical sources that feed power to the actuator must be terminated and locked and tagged.

Hydraulic Operated Valves

Prior to inserting lockout/tagout pin:

1. All line pressure must be relieved and inspected for hazardous and/or toxic chemicals.
2. Valve gate should be moved to desired position (full open or full closed) and lockout pin inserted. After inserting lockout pin, all hydraulic pressure must be relieved from cylinder head and hydraulic lines disconnected.

THE ABOVE STATED PROCEDURES ARE RECOMMENDED PROCEDURES ONLY AND SHOULD NOT AT ANY TIME SUPERCEED DOCUMENTED PLANT PROCEDURES AND PRACTICES.