

## PNEUMATICALLY ACTUATED VALVES

**CAUTION:** Pneumatic actuator operation is sensitive to valve packing nut adjustment. Therefore, precautions must be taken to avoid overtightening the valve packing nut, while maintaining sufficient packing nut torque to prevent leakage. Overtightening the valve packing nut can stall the pneumatic actuator.

**WARNING:** Before servicing any installed valve, you must



- depressurize system
- cycle valve

**WARNING:** Residual material may be left in the valve and system.

**NOTE:** Packing nut adjustment may be required to produce the appropriate packing load. If the packing load is too low, packing leakage will occur. **If the packing load is too high, the actuator may stall.** Packing load that is satisfactory at low pressure may not be sufficient at higher pressures.

On **NORMALLY CLOSED (C)** actuators, adjustments of the actuator stem drive nut affect actuator spring force. This affects

- maximum allowable system pressure that can be shut off by the valve.
- minimum actuator pressure required to open the valve.

On **NORMALLY OPEN (O)** actuators, the amount of stem orifice opening beyond the cracked open position depends on system pressure, flow characteristics, and valve packing nut adjustment.

*For further information, refer to the Swagelok N and HN Series Severe-Service Needle Valve Catalog, MS-01-168.*

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These instructions are also available in  
French, Italian, German and Spanish.

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