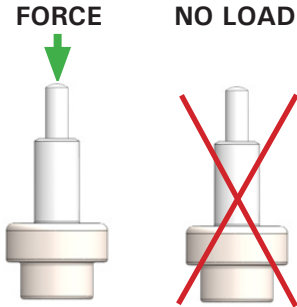
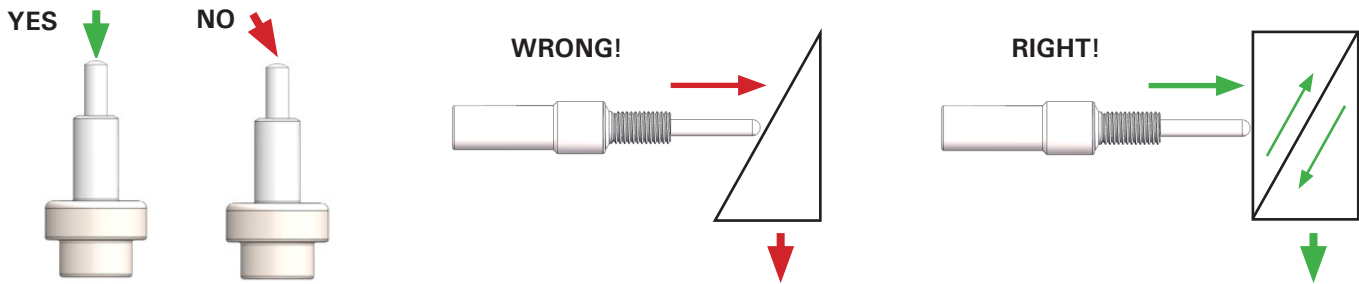


## THERMAL ACTUATORS DO'S AND DON'TS

- 1. Minimum Retraction Force:** Our thermal actuators will extend but not retract without a restorative force against the piston. Applying the minimal load (Refer to the Min./Max. applied force chart on the product sheet) will promote a smooth extension/retraction during operation.



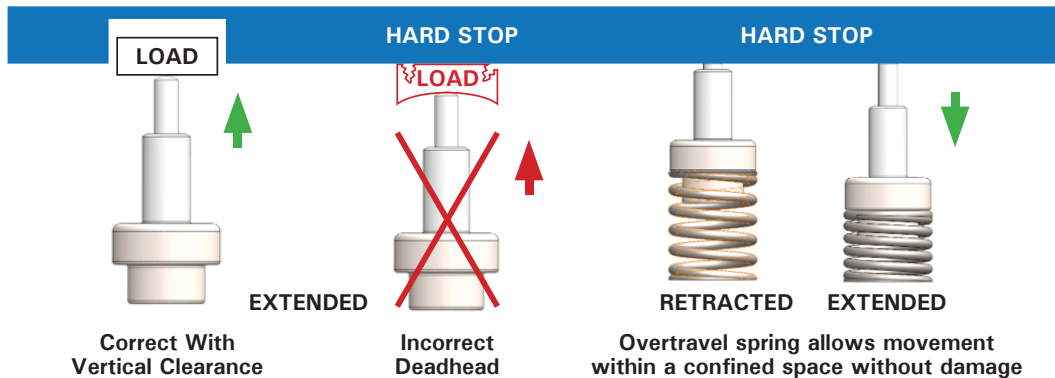
- 2. No Side Loading:** Applied force must be directed upon the actuator's piston. Skewed loading may bend the piston, inhibiting its ability to retract back into the guide.




- 3. Deadheading:** Not accounting for the total stroke length of the actuator's piston throughout this application range. If the full temperature range stroke is inhibited, the piston movement stops, and the internal cup pressure starts to increase. With enough restrictions on piston extension, the actuator's internals can be permanently damaged.

**Solutions:**

1. Provide adequate clearance for total travel of the actuators piston.
2. Provide an over-travel spring for actuators moving against dead stops.



- 4. Exceeding the Maximum Rated Temperature:** Our maximum temperature for all our thermal actuators is 150°F (65.6°C) over the set point or 300°F (149°C), whichever is lower.

 **WARNING:** This product can expose you to chemicals, for example lead, nickel, acrylonitrile, which are known to the State of CA to cause cancer, birth defects, or reproductive harm. For more information, go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)