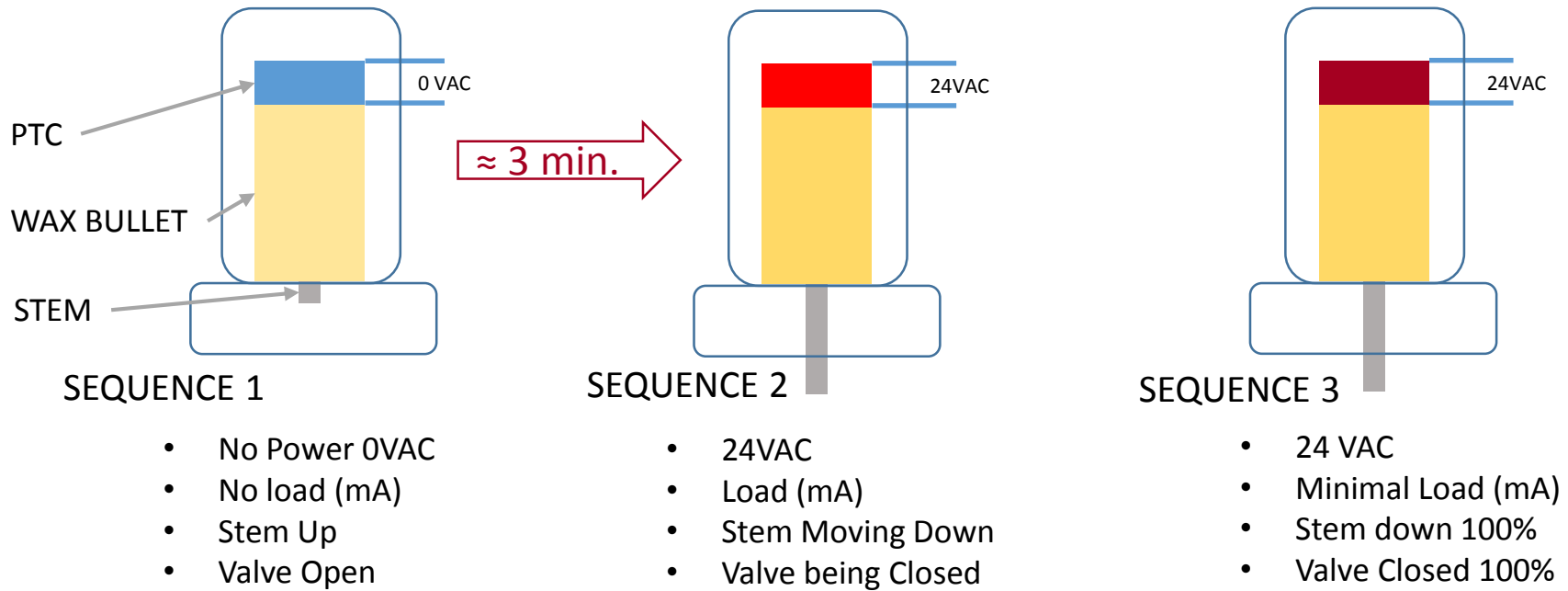


Thermo-Electric, how does it work

Spring Up Actuator shown. Spring Down actuator available



The thermoelectric actuator works with the principle of expansion of wax when heated. The assembly of the actuator allows for Normally Open or Normally Closed actions. The wax is heated with a PTC element, when power is applied to the actuator the PTC element warms up and heats the wax element. The wax being heated expands and pushes the stem out. When cooling down it retracts (usually with the help of a spring, not shown).

The PTC is designed to generate a constant heat at a certain voltage. The heat generated is self-regulated by the PTC.

- In sequence 1 , off, no power. 0VAC
- In sequence 2 ,driven on and draws current to generate heat. Maximum load during 3 minutes 7.2VA
- In sequence 3 after 3 minutes the current load is minimal 2 VA. The PTC has reached it designed temperature and draws minimal power.

PTC (Positive Thermal Coefficient) i.e: Resistance Increase upon heating

Advantages:

- Silent (0 dB)
- Maintenance Free
- Longest warranty
- Low power consumption