

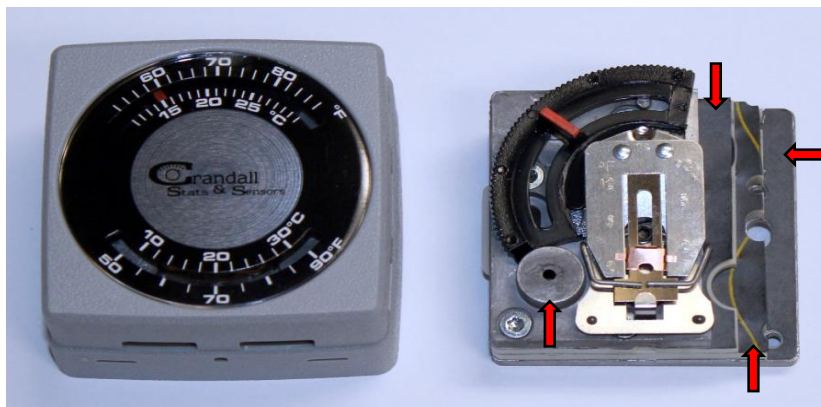


## Market: Environmental Controls

### Excelsior Performs Critical Sealing Functions on Pneumatic Thermostats

Founded in 2014 Crandall Stats and Sensors manufactures various pneumatic controls, electronic controllers, electro-mechanical assemblies and PC board assemblies used in products for the HVAC industry.

Utilized in schools, factories, hospitals and commercial buildings Crandall's 2 x 2 pneumatic thermostat is a device that controls temperature by sending a 3-15 psi output signal to a valve that positions an actuator which adjusts the heat output. Upon sensing temperature air flow is routed through different channels in the thermostat depending on the output signal required. Used primarily as a retrofit in pneumatic systems the 2 x 2 is a quality product which is reliable and safe. There is no danger of sparks igniting into a fire.



It is critical that the air channels in the 2 x 2 are sealed at all times to provide an accurate pneumatic signal. Excelsior supplies multiple product configurations made from different materials for the 2 x 2. Three of these products provide sealing for channels in the thermostat. Another Excelsior product seals a seat on a relay valve.

There are many small holes of different diameters in each of the seals. The dimensional accuracy of the holes in the seals and the quality of the valve seat seal are critical to the function of the thermostat. Even the smallest air leak or piece of contamination in the system will negatively impact the signal resulting in an incorrect temperature adjustment.

Excelsior has developed processes and control plans for each individual part to ensure the dimensional integrity of each part.



Excelsior, Inc.  
4982 27th Avenue  
Rockford, IL 61109  
www.excelsiorinc.com  
Phone (815) 987 2900  
Fax (815) 962 5466