## PNV-150-LF-R

## Nucleus Proton Digital Mixing Valve

- 1. Nucleus Proton Digital Mixing Valve
  - A. Mixing Valve shall be Digital and comply with National Low Lead Laws @<.25% Lead
  - B. PNV-150-LF-R shall:
    - 1. Have 1 ¼" inlet/ 1 ½" outlet connections with integral stop/check valves
    - 2. 2-line, 16-character LED display
    - 3. Integral RTD Sensor
    - 4. Deliver mixed water flow of 122 GPM @ 30 PSI Pressure Drop
    - 5. Maintain temperature with .25 GPM flow from the domestic hot water loop
  - C. PNV-150-LF-R shall have all the following operational capabilities:
    - 1. 1X per day shuttle sweep designed to prevent scale buildup on internal mechanical components
    - 2. +/- 2°F water temperature control at times of use and no demand
    - 3. 2°F minimum inlet to outlet water temperature differential
    - 4. Automatic shutoff of hot water upon cold water inlet supply failure
    - 5. Automatic shutoff of cold water upon hot water inlet supply failure
    - 6. Maintain last control position in the event of power failure or be equipped with UPS standby power for approximately 2 hour run time
    - 7. Programmable set point range of 65-180°F (18-82°C)
  - D. PNV-150-LF-R shall be certified to ASSE standard 1017 and CSA B125.3-18 and so certified and identified
  - E. PNV-150-LF-R shall be cULus listed and identified
  - F. Maximum Operating Pressure shall be no greater than 125 PSI
  - G. Disinfection Option with Proton Box 2.0
  - H. BMS connectivity available with Proton 2.5 box utilizing BACnet MS/TP connection in addition to including Disinfection
  - Wi-Fi Connectivity available with Proton 3.0 box in addition to BACnet MS/TP connection, Disinfection, relay, and 3 additional temperature probes for hot and cold inlet in addition to return
  - J. PNV-150-LF-R shall include (2) 1" check valves and tee for recirculation loop tie-in, and a 1" check valve on the cold-water Inlet.