PNV-300-LF-LCV

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-300-LF-LCV shall:
        1. have 3" inlet/3" outlet connections
        2. 2-line, 16-character LED display
        3. Integral RTD Sensor
        4. Deliver mixed water flow of 235 GPM @ 30 PSI Pressure Drop
        5. Maintain temperature with .25 GPM flow from the domestic hot water loop

    C. PNV-300-LF-LCV 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-300-LF-LCV shall be certified to ASSE standard 1017 and CSA B125.3-18 and so certified and identified

    E. PNV-300-LF-LCV 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
        a. Optional 3T (3 additional temperature probes for hot and cold inlet in addition to return)
        b. Optional REL (Connectivity for 5 relay states)

    H. BMS connectivity available with Proton 2.5 box utilizing BACnet MS/TP connection in addition to including Disinfection
        a. Optional 3T (3 additional temperature probes for hot and cold inlet in addition to return)
        b. Optional REL (Connectivity for 5 relay states)

    I. 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