



## COMMON SPECIFICATIONS

### DESIGN PARAMETERS

|                             |                    |
|-----------------------------|--------------------|
| SYSTEM RECOVERY (typical)** | 90% - 95%          |
| INLET PRESSURE              | 45 psig (3.1 bar)  |
| INLET TEMPERATURE           | 60 °F (15.56 °C)   |
| PRODUCT PRESSURE            | 20 psig (1.37 bar) |

### GENERAL SPECIFICATIONS

|                                      |  |
|--------------------------------------|--|
| FRAME MATERIALS                      | Structural carbon steel or stainless steel |
| PLUMBING, VALVES AND INSTRUMENTATION | Market specific                            |

### OPERATING LIMITS

|                                    |                                |
|------------------------------------|--------------------------------|
| MAXIMUM FEED TEMPERATURE           | 113 °F (45 °C)                 |
| MINIMUM FEED TEMPERATURE           | 40 °F (4.4 °C)                 |
| MAXIMUM FEED PRESSURE              | 100 psig (6.9 bar)             |
| MINIMUM FEED PRESSURE              | 45 psig (3.1 bar)              |
| PRESSURE DROP AT MINIMUM FLOW RATE | 10 - 15 psig (0.69 - 1.03 bar) |
| PRESSURE DROP AT NOMINAL FLOW RATE | 25 - 35 psig (1.72 - 2.41 bar) |
| PRESSURE DROP AT MAXIMUM FLOW RATE | 40 - 50 psig (2.76 - 3.45 bar) |

## FEED WATER REQUIREMENTS

|   |             |
|---|-------------|
| FEED WATER SOURCE   | RO PERMEATE |
| FEED WATER CONDUCTIVITY EQUIVALENT INCLUDING CO <sub>2</sub> AND SILICA | < 40 µS/cm  |
| SILICA (SiO <sub>2</sub> )*   | < 1 ppm     |
| IRON, Mn, H <sub>2</sub> S, S   | < 0.01 ppm  |
| TOTAL CHLORINE (as Cl <sub>2</sub> )                                    | < 0.02 ppm  |
| HARDNESS (as CaCO <sub>3</sub> )  | < 1.0 ppm   |
| DISSOLVED ORGANICS (TOC as C)   | < 0.5 ppm   |
| OPERATING pH RANGE  | 4 - 11      |

## AQUALINE CDI - LOW AND CDI-HIGH ELECTRODEIONIZATION SYSTEMS

Aqualine CDI - Low and High systems are pre-engineered and specifically designed to meet the demands of the pharmaceutical, power, microelectronics, and general industry customer. The standard CDI-Low systems come in flow rates from 1.7 to 180 gpm (0.39 to 40.88 m<sup>3</sup>/hr), combining single or multiple (up to 8) IONPURE® CDI-LX modules on a frame with power supplies, controllers, piping, sample valves, cleaning connections, and flow and quality monitoring instrumentation. Select CDI-LX systems can be hot water sanitized at up to 185°F (85° C).

Standard CDI - High systems come in flow rates ranging from 100 gpm to 600 gpm nominal (22.7 to 136.3 m<sup>3</sup>/hr), combining multiple Ionpure® VNX modules on a frame with power supplies, controllers, piping, sample valves, cleaning connections, and pressure, flow and quality monitoring instrumentation.

Continuous electrodeionization is a safe, chemical free way to take RO (reverse osmosis) water to a higher level of purity. CDI Low and High systems use our proven, proprietary process to continuously produce an uninterrupted supply of high purity water, up to 18 megohm-cm, without the need for regeneration chemicals or deionization (DI) tanks.



### FEATURES AND BENEFITS

- Reliable, compact design
- Quick installation
- Low maintenance
- Easy validation
- Hot water sanitizable (HWS) units available up to 185 °F (85 °C)
- High operating temperature (up to 100 psig feed)
- Completely leak-free operation
- Ideal for loop applications
- Low power consumption
- Individual power supplies and controls

### SPECIFICATIONS

- A complete, power supply assembly (NEMA 12 or optional NEMA 4 and 4X)
- Controllers
- Piping
- Sample valves
- Cleaning connections

Flow and quality monitoring instrumentation and remote I/O is available as an option.