



## VP Series Two Bed Deionizers Model VPT

Flow Rates from 10 - 220 gpm

VP Series Two Bed Deionizers are designed and manufactured for industrial applications. They are rugged, pre-engineered, pre-assembled, standardized units that minimize expensive installation and start-up costs. VP Series two bed deionizers consist of an acid regenerated cation vessel piped in series with a caustic regenerated anion vessel. These pre-engineered units provide high-quality water over the length of the service cycle. Operating conditions and an influent water analysis are required for predicting effluent quality and total volume of water treated before regeneration is required.

- Simple design maximizes reliability, efficiency and repeatability
- 100 psig vessel ratings offer added strength and integrity
- Baked PVC lining and paint extend vessel life
- PLC controls ensure extremely reliable operation
- Inlet flow meter assures consistent performance
- Conductivity monitor assures consistent water quality
- Schedule 80 PVC piping ensures long life and does not degrade water quality

To reduce field fit-up problems with interconnecting piping, the VP Series Two Beds must be ordered with the skid-mounted option.

### SYSTEM SPECIFICATIONS

| Diameter                               | 016                               | 020         | 024         | 030         | 036         | 042         | 048         | 054          | 060          | 066          | 072           |
|--|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------|---------------|
| Service Flow Rate (gpm)                | 10                                | 17          | 24          | 38          | 54          | 74          | 97          | 123          | 153          | 182          | 220           |
| Minimum Flow Rate (gpm)                | 3                                 | 4           | 6           | 10          | 14          | 19          | 23          | 31           | 39           | 47           | 55            |
| Media (cubic feet)                     |                                   |             |             |             |             |             |             |              |              |              |               |
| Cation Resin Volume (ft <sup>3</sup> ) |                                   | 4           | 6           | 10          | 15          | 21          | 28          | 36           | 46           | 57           | 69 82         |
| Capacity (Kgr)                         | 80                                | 120         | 200         | 300         | 420         | 560         | 720         | 920          | 1,140        | 1,380        | 1,640         |
| Anion Resin Volume (ft <sup>3</sup> )  | 4.5                               | 7           | 11          | 17          | 24          | 33          | 42          | 54           | 67           | 81           | 96            |
| Capacity (Kgr)                         | 77                                | 120         | 190         | 290         | 410         | 560         | 715         | 920          | 1,140        | 1,380        | 1,640         |
| <b>System Dimensions</b>               |                                   |             |             |             |             |             |             |              |              |              |               |
| H x L x W . . . . . inch               | 96x56x43                          | 97x64x48    | 99x72x50    | 108x84x59   | 114x96x62   | 118x108x65  | 120x120x78  | 125x132x82   | 127x144x84   | 132x156x92   | 136x168x100   |
| . . . . . cm                           | 244x142x117                       | 246x162x122 | 251x183x127 | 274x213x150 | 289x244x157 | 300x274x165 | 305x305x198 | 317x335x208  | 322x366x213  | 335x396x234  | 345x427x254   |
| <b>Shipping Weight</b>                 |                                   |             |             |             |             |             |             |              |              |              |               |
| lb (kg) . . . . .                      | 1800 (817)                        | 2900 (1316) | 3800 (1724) | 4400 (1996) | 6000 (2722) | 7860 (3566) | 9670 (4387) | 11880 (5389) | 14880 (6750) | 20040 (9090) | 25200 (11431) |
| <b>Electrical Requirements</b>         | 115 V/60 Hz/single phase/15 amps. |             |             |             |             |             |             |              |              |              |               |

### ORDERING INFORMATION

|                          |     |            |               |               |            |                         |             |
|--------------------------|-----|------------|---------------|---------------|------------|-------------------------|-------------|
| <b>Catalog Number:</b>   | VPT | S          | XXX           | X             | X          | P                       | D           |
| System . . . . .         | VPT |            | 016 - 16"x72" | 048 - 48"x72" |            |                         |             |
| Configuration . . . . .  |     | S=Simplex* | 020 - 20"x72" | 054 - 54"x72" |            |                         |             |
|                          |     |            | 024 - 24"x72" | 060 - 60"x72" |            |                         |             |
|                          |     |            | 030 - 30"x72" | 066 - 66"x72" | A=100 psig |                         |             |
|                          |     |            | 036 - 36"x72" | 072 - 72"x72" | ASME code  | Y=Skid, seismic zone 2A |             |
| Vessel Size . . . . .    |     |            | 042 - 42"x72" |               | X=100 psig | Z=Skid, seismic zone 4  |             |
| Vessel Rating . . . . .  |     |            |               |               | non-code   |                         |             |
| Vessel Support . . . . . |     |            |               |               |            |                         |             |
| Lining & Paint . . . . . |     |            |               |               |            | P=Solid-State PLC       |             |
| Controls . . . . .       |     |            |               |               |            |                         |             |
| Control Rating . . . . . |     |            |               |               |            |                         | D=NEMA 4/UL |

\*Duplex units should be ordered as two (2) simplex units.

To determine your order number, replace the X with one of the numbered options below it.

#### Feed Water Requirements

|                                  |                                 |
|----------------------------------|---------------------------------|
| Parameter:                       |                                 |
| Suspended Solids . . . . .       | 5 NTU maximum                   |
| Total Dissolved Solids . . . . . | 500 ppm maximum                 |
| Alkalinity . . . . .             | ≥ 30% of total anions           |
| Chlorides . . . . .              | ≤ 30% of total anions           |
| Sodium . . . . .                 | ≤ 50% of total cations          |
| Silica . . . . .                 | ≤ 10% of total anions           |
| Iron and Manganese . . . . .     | ≤ 0.3 ppm combined              |
| Free Chlorine . . . . .          | ≤ 0.2 ppm                       |
| Color . . . . .                  | ≤ 5 APHA units                  |
| Organics . . . . .               | ≤ 2.0 ppm TOC as O <sub>2</sub> |



Technical Support (800) 875-7873 ext. 5000