

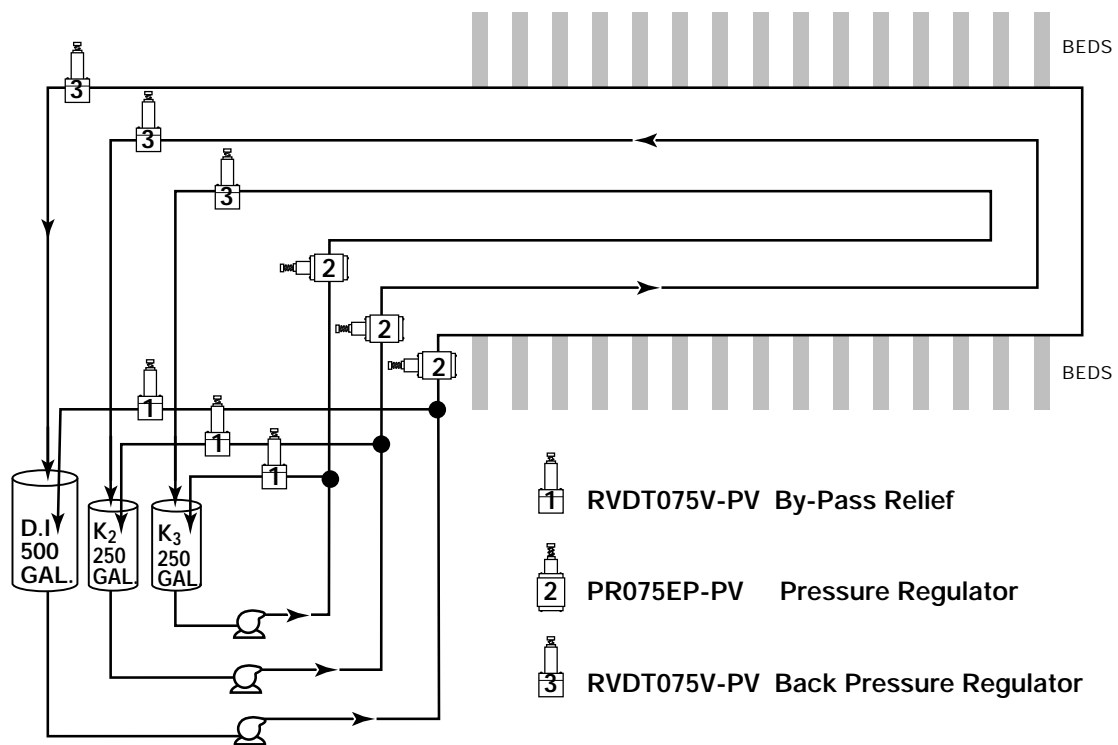
MARKET Renal (Kidney) Dialysis Systems

PRODUCT(S) Pressure Relief (By-Pass) Valves – Series RVDT, Pressure Regulators – Series PR, and Back Pressure Regulators – Series RVDT.

REQUIREMENT Provide proper pressures and flows to dialysis stations.

PROCESS FLUID(S) Acidified (salt) solutions and D.I. (deionized) water 15.7 megohm.

INLET PRESSURE/TEMPERATURE 30 PSI / Ambient



Dialysis center, consisting of 30 stations (beds), was having difficulty in delivering 0.014 GPM at 1 to 8 PSI thru 950 feet of 3/4" pipe to each station with a pump delivering 5 GPM at approximately 32 PSI. They were finding that front-end stations were being subjected to high pressures while those towards the end were not being provided the sufficient pressure nor flows. The installation of a 3/4" Series RVDT valve as a by-pass between the pump and the Series PR

Pressure Regulator took off a lot of the excess flow, while the Series PR (set at 8 PSI) assured that the closed loop pressures would not exceed the 8 PSI maximum. Lastly, the installing of another Series RVDT as a back pressure regulator, set at 5 PSI, further assured a 5 PSI (mid-range) system (loop) pressure.

PVC with EPDM seals was found to be compatible with both solutions, as well as economical.