



Charging/Fill & Isolation Valve Suggestions

If you don't already have a fill kit for use with solar thermal, hydronic, or chiller systems, you can easily create one with the following Bill of materials: All Pex fittings are available at www.supplyhouse.com

2 ea. Pex 1" x 3/4" Tee SKU: H051175LF Brand: Rifeng

1 ea. Pex 1" Ball Valve SKU: H081000LF Brand: Rifeng

2 ea. Pex 3/4" Ball Valve SKU: H080750LF Brand: Rifeng

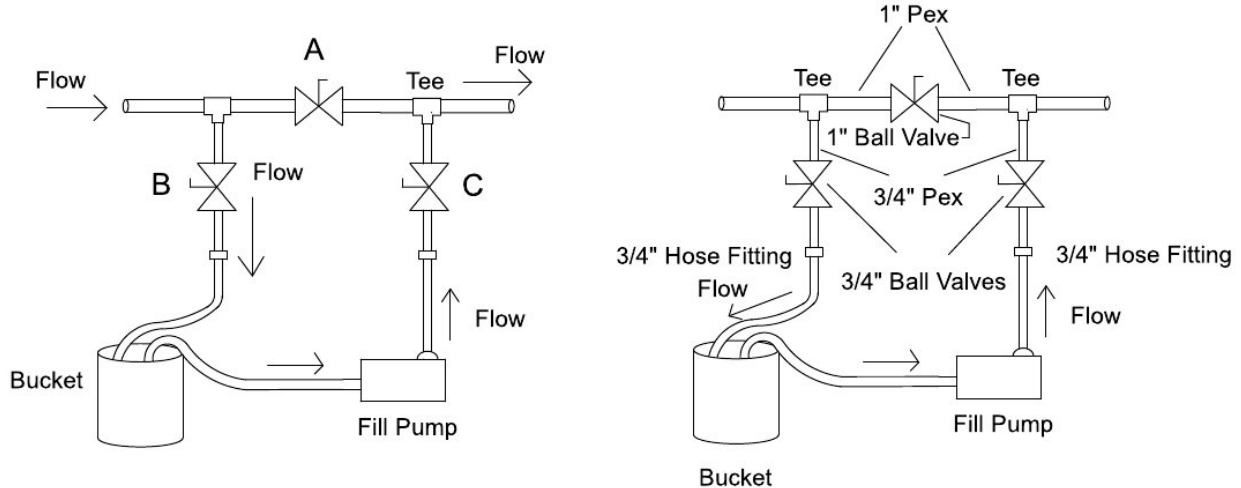
2 ea. 3/4" Hose Fitting SKU: G20103 Brand: Jones Stephens

2 ea. Pex 3/4" x 3/4" NPT Female Adaptor SKU: H040750LF Brand: Rifeng

10' of Garden Hose Home Depot

5 Gallon Bucket Home Depot

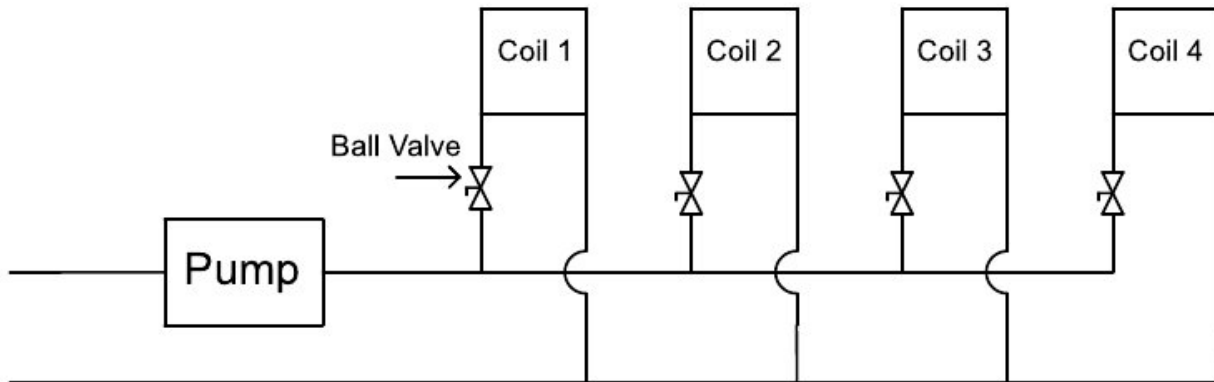
High Head Fill Pump Grainger



Pre-mix the glycol (if needed) in a open container large enough to hold the loop volume. Using a filling pump and 3 hoses, place one hose in the container and connect it to the suction side of the pump, prime the pump, then connect the other hose to the pump discharge and the other end to the valve "C" that is closest to the fan coils. Using a third hose, connect it to valve "B", closest to the chiller. Close the middle valve "A". Minimum loop pressure is 14.5 psi, maximum pressure is 43.5 psi, and ideal pressure is 29 psi.



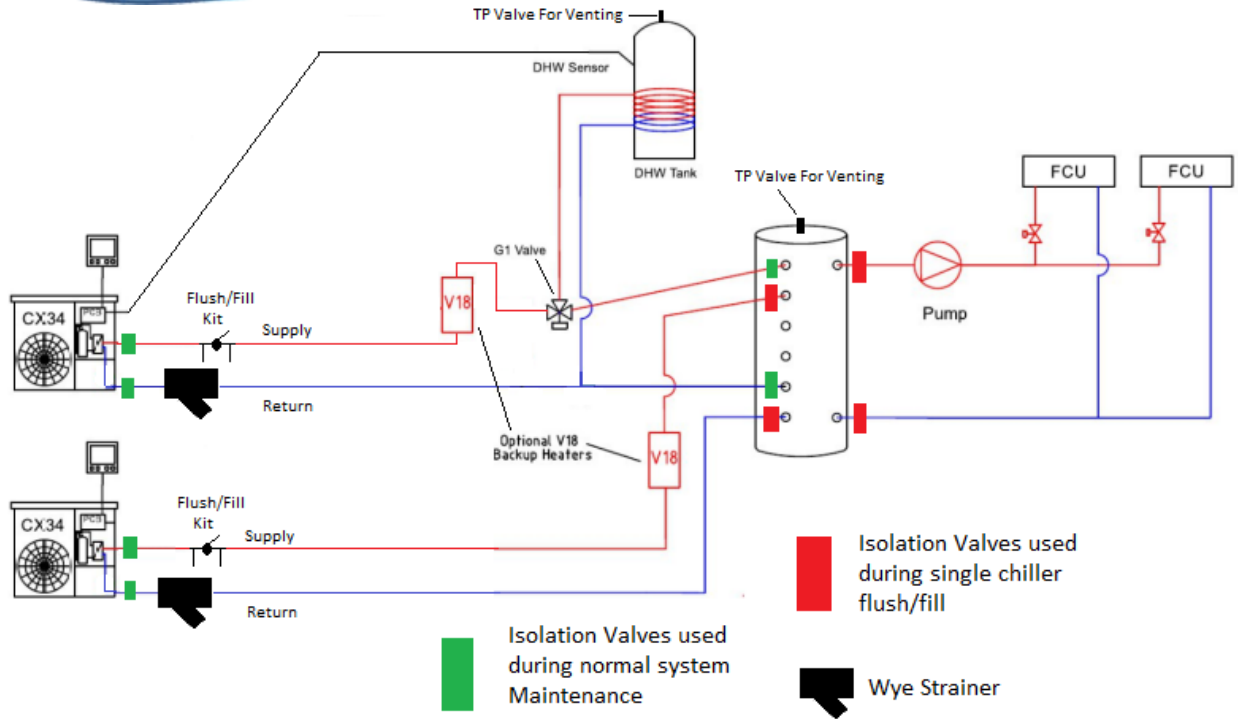
Bleeding Air from system:



Close the input valve to each fan coil except the last coil (4). Turn the pump on and run it, when the bubbles stop coming out of the discharge hose turn on the ball valve on coil (1), wait for the bubbles to stop, then do the same for coil number (2), then (3). All CX Chillers are required to have a flow switch installed in the loop. Air in the system may cause a flow switch alarm; the controller will display a P5 or P6 error code.

Proper and even flow through each fan coil is critical for both heating and cooling. This can be done with flow meters or ball valves installed at each fan coil supply pipe. Set each fan coil to the same temperature and fan speed. Using an accurate digital thermometer adjust each ball valve until the coil return temperatures are even. This can be done in cooling or heating mode.

Please consult the manual for more information.



Isolation valves are used during the flush/fill procedure to isolate the loop between the chiller and the buffer tank. When flushing a single chiller the red valves will be closed to force the water back to the chiller. They are also helpful when performing system maintenance.