

APPLICATION NOTE
USE OF SEQUENCE VALVE 1018 FOR CASCADE BANK FILLING

The 1018 valve can be used instead of priority valves to automatically fill cascaded storage banks. The advantages are first that the compressor operates at the bank pressure it is filling wherein a priority valve requires the compressor to operate at maximum pressure most of the time. Second the cascade valve permits use of a reference pressure cylinder. This eliminates spring adjustments, permits reading the set pressure on a gauge and automatically corrects fill pressure for temperature. Referring to the schematic below, the reference pressure line is connected to the close ports of the 1018 valves. The compressor will fill the high bank until it reaches the reference pressure at which time the high bank pressure will open the #1 valve. The compressor will then pump through valve #1 to the medium bank until it reaches reference pressure. At this point #2 valve will open permitting the low bank to fill. Any number of banks can be used. The number of 1018 valves required is one less than the number of banks.

