

AMMONIA (REFRIGERANT R-717)



Ammonia (Refrigerant R-717) is a very thin liquid that is a gas at ambient temperature and pressure. It is typically kept at elevated pressure to keep it in liquid form. Ammonia is used as the refrigerant in cooling systems.

AMMONIA APPLICATIONS:

- Evaporator Liquid Overfeed
- System Filling and Emptying

VIKING IN THE PROCESS:

In vapor compression ammonia refrigeration systems, liquid ammonia in the evaporator coils absorbs heat, and some flashes to a gas before recompression. Viking pumps “overfeed” the evaporator to ensure that the ammonia in the evaporator coils is liquid, which is more efficient at removing heat than a gas. Viking 4924A Series™ draw liquid ammonia from an accumulator vessel and pump it to the evaporator and back in a closed loop. Liquid and gaseous ammonia are separated in the accumulator and the gas is recompressed and flows to the condenser where it rejects heat, then to a receiver and back to the accumulator in a closed loop. The Viking pumps’ slow speeds enable very low NPSHr to prevent flashing and cavitation. Their high efficiency, with air-cooled motor, add almost no heat to the system, increasing overall cooling efficiency.

SUGGESTED PUMPS:

4924A SERIES™



- Cast Iron
- Double mechanical seal with barrier fluid for superior containment
- Five sizes from 10 to 60 GPM

VIKING PUMP®

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