

CAVITATION TROUBLESHOOTING

Cavitation can cause serious damage to the pump and the system.

Read the conditions and solutions to help eliminate the possibility of machine downtime and maintenance costs.



Condition	Solution
<i>Unsuitable dimensioning of the supply line</i>	Increase the dimension of the supply circuit It must be at least one size larger than the inlet coupling
<i>Excessive pump pulsation</i>	Move the supply tank closer to the pump. Add a pulsation damper
<i>Rigid pipes on the suction line</i>	Use reinforced (flexible) hose for the inlet and by-pass to absorb pulsations and pressure spikes
<i>Excessive number of elbow joints on the inlet pipe line</i>	There should be as few elbows as possible and they must be below 90°
<i>Excessive liquid temperature</i>	Use thermo valves on the by-pass line Replace a closed loop with a separate double tank The size of the tank must be at least 6-10 times the flow rate of the pump. The temperature of the pumped liquid is too high Ensure cabinets and rooms have sufficient ventilation
<i>Air bubbles in the pipes</i>	Check all connections Use PTFE tape or sealing paste for pipes
<i>The liquid in the supply tank is agitated</i>	The size of the tank must be at least 6-10 times the flow rate of the pump. Fit a separate tank to eliminate the air between the inlet and the outlet
<i>Very viscose liquids</i>	Check the viscosity of the pumped liquids prior to operation (<500 CPS/2500 SSU) Raise the temperature of the liquid to reduce its viscosity Lower the number of rpm of pump operation Add an extra supply pump Increase the line input dimension
<i>Blocked filters</i>	Clean the filters regularly Use clear filters so it is easier to monitor their status Use appropriate mesh size for the specifications of the liquids and pumps, 80 mesh (177 microns) is recommended for freshwater