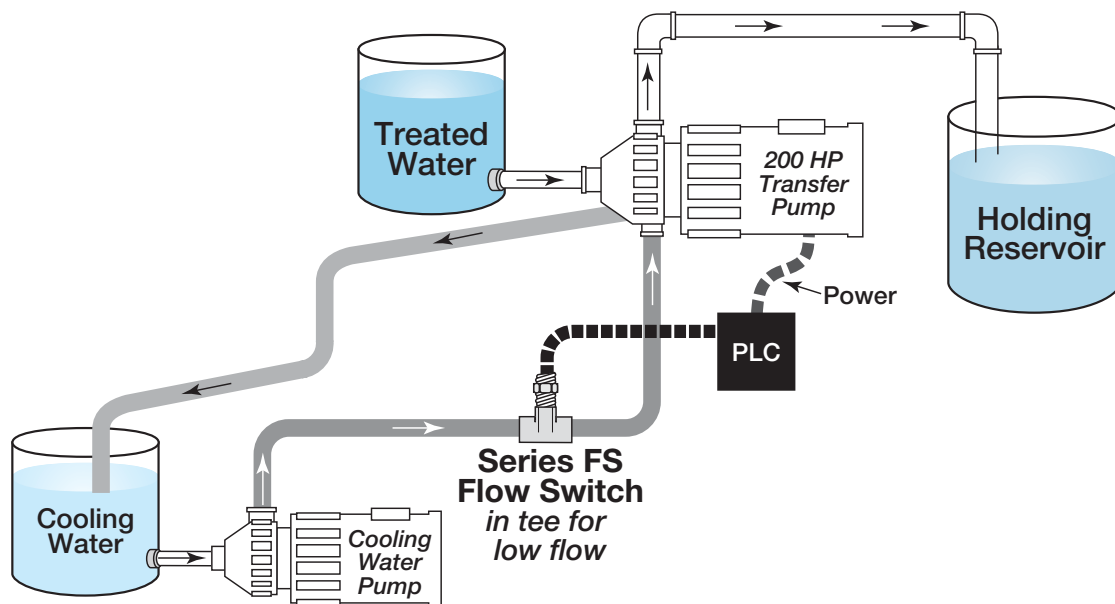**MARKET** Water/Wastewater Treatment; potentially any application using liquid cooled pumps.

PRODUCT(S) Flow Switch

REQUIREMENT Switch to turn off large pumps when cooling water flow stops.

PROCESS FLUID(S) City Water

INLET PRESSURE/TEMPERATURE 75 - 90 PSIG

Large pumps used in municipalities for water and waste water transfer are quite expensive, usually in the tens of thousands of dollars. To prevent premature bearing failure, cooling water is used in the pump head where the bearings are located. The cooling water typically flows at 0.5 gpm.

The traditional way of making sure the pump has bearing cooling water is by measuring the pressure in the pump cooling water line. However pressure doesn't guarantee flow. Scale build up sometimes clogs the cooling lines, blocking flow. Without flow the pumps are damaged relatively quickly and rebuilding these large pumps can cost thousands of dollars.

To eliminate the issue of sensing pressure without any flow it is a better practice to use a flow switch. To meet the flow performance requirements Plast-O-Matic uses an FS switch assembled into a tee with an integral 1/4" orifice.

This allows for switching off and on between 0.3 - 0.4 GPM giving a reliable, all-plastic wetted switch and true indication of flow.