

## Automatic Backflush Valve

## For open loop cooling systems

Alfa Laval<sup>®</sup> plate heat exchangers have long been associated with energy conservation using natural resources such as lake water, river water, sea water and water from cooling towers. However, with these natural resources come natural debris such as sand, mussels, leaves and seaweed. To help the plate heat exchanger operate efficiently and remain cost-effective, Alfa Laval has developed a compact, Automatic Backflush Valve.

Backflushing is the reversal of flow for a short period of time. It flushes out matter that has accumulated at the plate heat exchanger inlet. A typical setting is three times a day for thirty seconds. By automatically removing this loose debris on a daily basis, the backflush valve will contribute to many years of trouble-free service.

During normal operation, the butterfly-type valve directs the flow to the plate heat exchanger for normal counterflow operation *(figure 1)*. In the backflush mode, the butterfly valve turns ninety degrees to reverse the flow direction through the plate heat exchanger and flushes any accumulated matter back to the water source. Following the brief backflush cycle, the butterfly valve returns to the original operating position.

Each Alfa Laval Backflush Valve includes a control box *(figure 2),* which can be mounted on the valve or at a remote location. The backflush valve is tailor-made for a compact fit for each Alfa Laval plate heat exchanger model with six inch connections and larger. Because the valve is specially designed to mount directly on the heat exchanger, no extra piping is required.



Figure 1

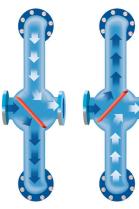


Figure 2



Normal Operation Backflush Mode