# • ThermOmegaTech<sup>®</sup>

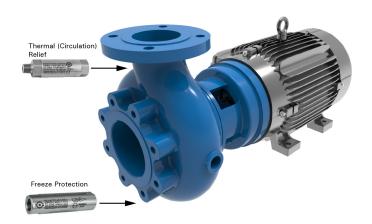
## THERMOSTATIC CONTROL VALVES

#### FOR PUMPS AND MECHANICAL SEALS

### **APPLICATIONS FOR PUMP TEMPERATURE CONTROL**

**Thermal (Circulation) Relief:** During extended periods of deadheading or idling, input horsepower is converted to heat in the pumped fluid by friction. Extreme temperatures can cause damage to mechanical seals and may crack casings or volutes. ThermOmegaTech's **ECONO/HAT-RA** is a reliable thermal relief valve that protects pumps against over-temperature damage.

**Freeze Protection:** Pumps exposed to low ambient temperatures are subject to freezing which can result in cracked casings or volutes. Pumps where the lines have been drained may still be half-filled with fluid. Installed at the bottom of the volute, **HAT/FP** utilizes our thermostatic wax actuator technology to monitor ambient or water temperatures automatically and bleeds off the cold water before freezing occurs.



#### **APPLICATIONS FOR MECHANICAL SEAL SUPPORT**

**Quench Support:** Quench fluid is typically circulated in the mechanical seal to dissipate heat, as overheating can lead to seal failure and pump downtime. In many applications, quench water runs constantly to drain regardless of the need for cooling. Integrating an **EcoFlow**<sup>®</sup> thermostatic valve on the discharge of a cartridge seal or gland will automatically control the cooling water supply.

**Flush Support:** Flush fluid is introduced to the internal seal chamber to keep the seal faces lubricated and cool, and to remove particulates from the pumped fluid. The flush fluid is at a pressure above the pumped fluid (typically 10 to 20 psi above the seal chamber pressure) to wash it back into the pumpage. An **EcoFlow**<sup>®</sup> thermostatic valve ensures the flush water flows while the pump is operating and shuts down again when the pump cools.



#### FEATURES AND BENEFITS OF THERMOSTATIC VALVES

- Operates with Wax Motor technology
- All Stainless Steel wetted parts
- Fails Open (EcoFlow<sup>®</sup>)
- Operates at user selected temperature
- Self-operating No external power source required
- Reduces corrosion
- Protects expensive seals
- Reduces drain fluid

A temperature solution for a temperature problem