

## **Pump Protection Unit (PPU)**

The Pump Protection Unit (PPU) is a non-intrusive alternative to mechanical relief valves, conventional shear pin or mechanical over-load protection devices. It is designed to protect SSP Series S rotary lobe pumps and incorporates micro-controller technology. The PPU is not a power meter or data-logging device but has the ability to monitor true consumption through continuous power monitoring. The PPU is not a pre-set device and requires a simple set-up procedure to be carried out to suit specific duty conditions of the pump to be monitored. After initial setting is completed the monitoring process is automatic and the pump is under the protection of the PPU.

The PPU will detect and react to over-load and rapidly Increasing load. One example of an over-load condition could result from a gradual increase in viscosity of the pumped media. This condition would in turn result in a higher discharge pressure, therefore increased power consumption. Another example could result from a partially closed valve in the discharge pipe also giving rise to excess pressure and therefore power consumption. As well as responding to system related transients, the PPU will also respond to mechanical changes such as bearing or lubrication failure, both of which could result in pump seizure if not detected and corrected.



The PPU will detect and react to a rapidly increasing load such as that caused by a solid object entering the pump and becoming trapped between the rotors. The resulting rapid power increase from this type of occurrence, even within the lines of over-load trip threshold, will cause an automatic shutdown if desired thereby limiting the degree of damage.

The PPU will detect and react to under-load since this highlights a condition preventing optimum pump operating efficiency. One example of under-load could result from a blocked or closed valve in the inlet pipe, a burst inlet or outlet pipe, or even an empty supply vessel.

## Easy Set Up

The PPU is configured using the three keys located on the front panel. The MODE key is used to switch the display from showing kW (%) to display one of the other parameters. LED's show the parameter to be altered. After a parameter is selected using the mode key the value may be altered by pressing the 'UP' or 'DOWN' arrow keys. After a trip condition the pump cannot restart until RESET is pressed.

For further information, please contact our Customer Services.

Represented By:



1200 Speers Rd., #52 Oakville, ON Canada L6L 2X4 The information contained herein is correct at the time of issue, but may be subject to change without prior notice