

# DELTA Pump Protection Application



Many of Delta M's customers are using our switches to protect their pumps. The photo on the left shows a dual channel Versa-Switch<sup>®</sup> on the suction side of a progressive cavity pump. By using the dual channel version, the customer is able to monitor the presence of fluid, thus preventing the pump from starting up dry. At the same time, the second channel of the switch is used to alarm a low flow rate, ensuring that the flow is sufficient to prevent damage to the pump. This is an inexpensive way to extend the life of all pumps. In many installations like the one shown here, our customers install a time delay relay in parallel with our switching contacts that allows them to run the pump for a short period of time to allow priming of the pump on start up.

The Delta M pump protection solution incorporates patented thermal differential technology that has no moving parts to wear or stick. This provides for reliable and superior performance over technologies such as pressure switches and sensors that have seals and diaphragms that may leak.

Delta M Corporation also manufactures single channel switches for use in pump protection applications, such as low flow alarm and dry line indication. These single channel switches are more cost effective in applications that only require one alarm. The dual channel switch can also be set so that one channel alarms on temperature while the remaining channel monitors either flow or dry line conditions. These switches come standard in 316 L stainless steel with many other materials available as options. The standard operating pressure is 3000 psig and the standard operating temperature is 390°F or 200°C. Delta M also manufactures switches to operate at temperatures of 850°F or 458°C.