



Autoclave probe with quick disconnect cable

APPLICATION



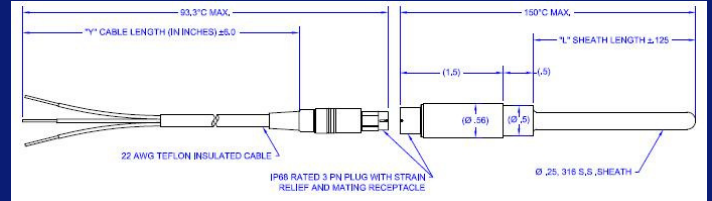
A pharmaceutical manufacturer has temperature sensors mounted on their gel cap dipping machine. These sensors monitor the temperature of the gel solution in order to maintain a precise viscosity for dipping. The solution reservoir and the temperature sensors immersed in the reservoir need to be sterilized between runs. A time consuming dismantling process takes place in order to remove the probes and their cabling. During this procedure, the probes and/or cables are susceptible to damage.

CHALLENGE



The current probe design has a long length of cable that runs from the machine to the control panel. In order to sterilize the probes, they must disconnect the entire length of cable and transfer the probe/cable combination to an autoclave for sterilization. In the process of disconnecting and transporting the probes, damage occurs, which leads to probe replacement and/or recalibration. An obvious solution is to have a connector which would make disconnecting the probe simpler, however many connectors and cables are not liquid tight.

18432



Quick Disconnect Capsule Style Probe

SOLUTION



In all liquid tight sensor designs, the cable transition is the weakest point. The cable creates a leak path both to the probe and the connector. The solution was to design a probe that has an integral connector which is liquid tight.

The 18432 integrates a liquid tight connector into the probe boot, thereby completely sealing the sensing element from moisture. The probes can now stay mounted in the gel reservoir and the complete assembly can be removed and autoclaved together as a single unit. This minimizes the chance for damage in transporting and saves time by making the disconnection of the probe simple.