Packaging Machine

BASIC
AP 00013

PRODUCT
B-type large Basics, 234PC Pressure Sensors

APPLICATION DESCRIPTION
Recently, the packaging industry's first computerized and programmable skin packaging/ vacuum forming machine was introduced. The new machine automatically encloses objects with a protective layer of plastic. Its uses include skin packaging of products for visual diplay and protection in shipping. It can also vacuum form to produce prototypes of new products, mold three-dimensional signs, or manufacture a variety of small parts, assembly fixtures, etc.

Basic switches help control heating and vacuum cycles. At the beginning of each packaging operation, a heating element moves into postion above the plastic sheet that is fed in from a roll. A high temperature BZ switch detects this movement and and triggers a heating time cycle. The switch is subjected to continual temperatures of approximately 380°F. The plastic is held in place by a metal frame. After the plastic has been heated, a frame lowers the plastic down over the objects to be wrapped. On the way down, the frame contacts another BZ basic switch. This activates the vacuum cycle which draws down to encase the objects in a sealed, see-through shroud of protection.

Pressure sensors are used in each machine. These 234PCs provide the rugged packaging required for industrial applications. One sensor measures negative gage pressure during the vacuum cycle. The 234 PC monitors a range from atmospheric pressure to .27 inches of mercury (in.Hg), which is nearly a perfect vacuum. The resulting signal becomes input for a digital display. A second sensor is used to maintain the correct operating air pressure by turning a compressor on and off. Another detects the regulated pressure of the system, and triggers a warning light if it drops too low.