

# CPI

CONVEYOR & PROCESS INSTRUMENTATION  
**Technologies**

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## MODEL TA Belt Alignment Switch



Always used in pairs, the TA conveyor belt alignment switch protects conveyor belts from damage due to belt misalignment or runoff.

### Number of units recommended:

Not less than four alignment switches shall be furnished on each conveyor.

One on each side of the belt near the head and tail pulleys. For conveyor's greater than 1500 feet (457 meters) long an additional four alignment switches shall be provided evenly spaced, one on each side of the carrying and return belt.

### Installation Instructions:

Model TA units are always used in pairs with one placed on each side of the conveyor belt, usually near the head end of the conveyor. They may also be placed at the tail pulley and at selected points along the conveyor.

The micro switch can be wired to give warning signals or it can be connected directly into the motor starter circuit to stop a conveyor. The unit should be mounted on supports so that the roller is positioned in a vertical direction to intercept the conveyor belt at its midpoint. The roller is 9 3/4" high. The point of interception would be at the 4 7/8" point. Units should not be mounted too close to the belt because false signals would result. In most applications, the units could be mounted about 1" from the belt, eliminating false signals but protecting the belt against wide deviations.

### TECHNICAL INFORMATION

#### ALL SWITCHES

- TA-1 One sp/dt micro switch
- TA-2 Two sp/dt micro switches (individually adjustable)
- TA-1X Explosion proof with one sp/dt switch
- TA-2X Explosion proof with two sp/dt switches

Manual Reset: A positive lock out model with manual reset is available

Switches: sp/dt micro switch. Rated 20 amp at 125, 250 or 480V AC  
Switches may be wired for single throw operation, either normally open or normally closed as required.

Standard Construction: Rubber gaskets seal unit against dust and rain for NEMA 4 outdoor applications. Applies to units TA-1 and TA-2, NEMA 7/9 units also available.

Housing: Aluminum or cast iron. Epoxy coating available.

Conduit opening: One 3/4" NPT standard opening

Actuating arm: Red epoxy coated steel roller with stainless steel shaft.

External Hardware: Stainless steel.

The model TA Conveyor Belt Alignment Switch protects conveyor belts from damage due to misalignment or runoff. These controls are used in pairs with one switch placed on each side of the conveyor belt. Each unit can be equipped with two micro switches to produce signals indicating belt misalignment at two deviation points. The first signal point could indicate small belt deviation by sounding an alarm. The second signal point could guard against extreme belt runoff by shutting down the conveyor.

Each control consists of aluminium housing with a red epoxy coated roller. The roller is adjustable up to 90° in both directions and is positioned approximately 1" from the conveyor belt. The switch actuation points are adjustable from 0° to 45° by a simple change of the actuating cam(s). The model TA can be furnished with general purpose or explosion proof construction. Cast iron and epoxy coated housings are also available.

### DIMENSIONS:

