



# MODEL TA

## BELT ALIGNMENT CONTROL



### WHAT IT IS, AND WHAT IT DOES

The model TA Conveyor Belt Alignment Control protects conveyor belts from damage due to belt misalignment or run-off. These controls are used in pairs with the control panel on each side of the conveyor belt. Each unit can be adjusted with microswitches to produce signals indicating misalignment at two deviation points. The first signal produces a small belt deviation by sounding an alarm. The second signal point could guard against extreme belt runoff by stopping down the conveyor.

Each control consists of an aluminum housing with a red powder-coated roller. The roller is adjustable up to 90° in both directions and is positioned approximately 1" from the conveyor belt. The control 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. Epoxy coated cast aluminum housing available upon request.

### NUMBER OF UNITS RECOMMENDED

Not less than four alignment controls shall be furnished on each conveyor, one on each side of the belt near the

and tail pulley. For conveyors greater than 1,500 feet long, an additional four alignment switches shall be furnished, one on each side of the carrying and return pulleys, one on each side of the return belt.

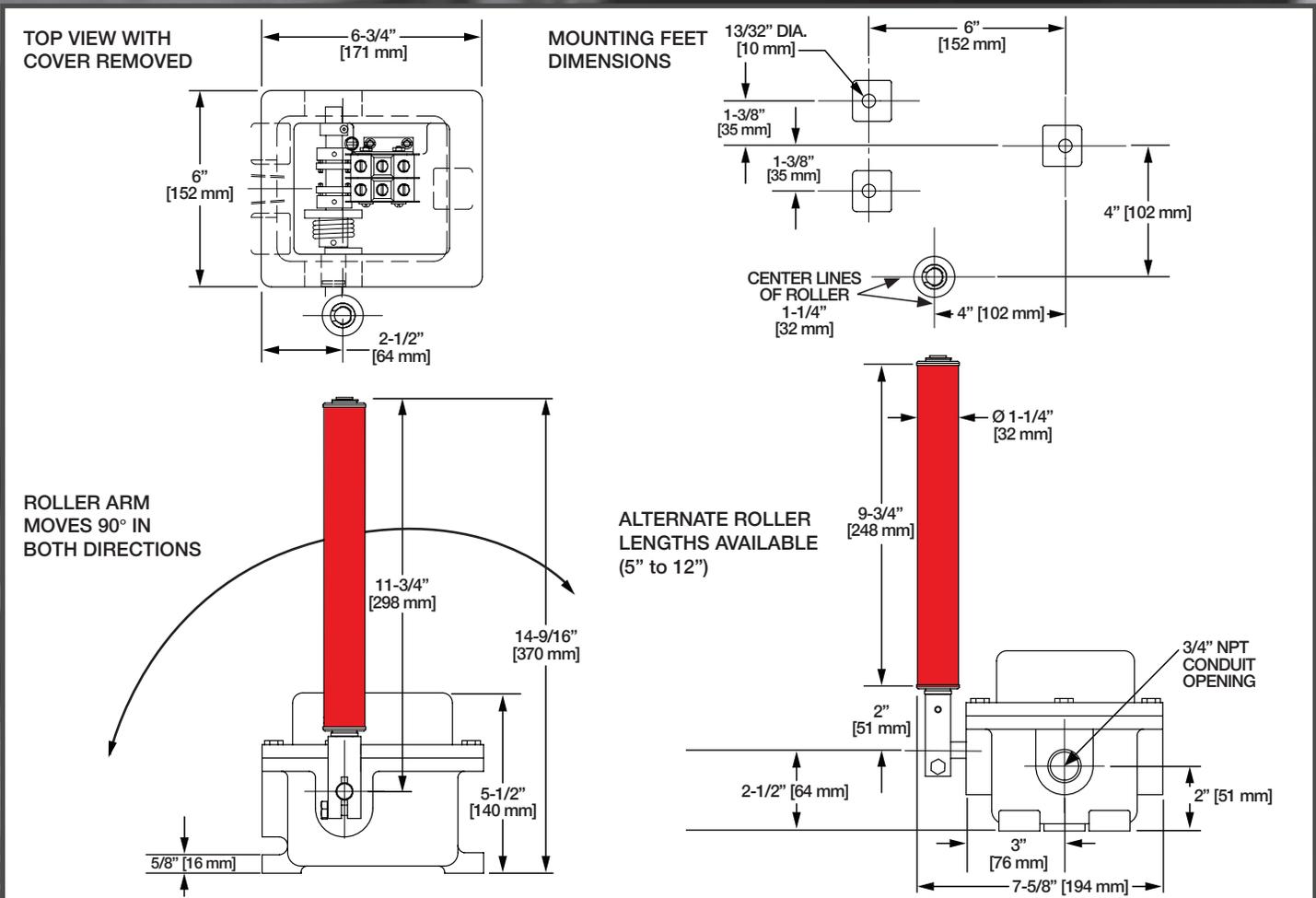
### INSTALLATION INSTRUCTIONS

The 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 microswitch 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.

# MODEL TA DIMENSIONAL INFORMATION



## MODEL TA PRODUCT SELECTION

| MODEL | DESCRIPTION  |
|-------|--|
| TA-1  | General Purpose, 1 SP/DT microswitch                         |
| TA-1X | Explosion proof, 1 SP/DT microswitch                         |
| TA-2  | General Purpose, 2 SP/DT microswitches                       |
| TA-2X | Explosion proof, 2 SP/DT microswitches                       |
| TA-2D | Special NEMA 4, 4X & NEMA 9 enclosure, 2 SP/DT microswitches |
| TA-5  | General Purpose, 2 DP/DT microswitches                       |
| TA-5X | Explosion proof, 2 DP/DT microswitches                       |
| TA-5D | Special NEMA 4, 4X & NEMA 9 enclosure, 2 DP/DT microswitches |

Epoxy coated housing option: Add "E" to end of model number.  
 Manual reset option: Add "M" to end of model number, GP only.  
 Optional shorter roller available; add "-R5" to end of model number for 5" roller (5" thru 12" rollers available, specify accordingly).



Special roller with ball bearing ends available: add "-RBB" to end of model number. Roller ball bearings denoted by orange end-cap.  
 Note: Standard roller has white polymer plain bearings.



## MODEL TA TECHNICAL INFORMATION

**MANUAL RESET:** A positive lock-out model with manual reset is available. Available only on General Purpose units.

**SP/DT MICROSWITCHES:** Individually adjustable. Rated 20 amp at 125, 250, or 480 VAC, 1/2 Amp 125 VDC; 1/4 Amp 250 VDC.

**DP/DT MICROSWITCHES:** Individually adjustable. Rated 15 amp at 125, 250 VAC.

Switches may be wired for single throw operation, either normally open or normally closed as required.

**STANDARD CONSTRUCTION:** Rubber gaskets seal units against dust and rain for NEMA 4, 4X outdoor applications. Applies to weatherproof units only. NEMA 7/9 units also available (without gasket).

**HOUSING:** Aluminum. Polyester or Epoxy coating available.

**CONDUIT OPENING:** One 3/4" NPT conduit opening.

**ACTUATING ARM:** Red powder-coated steel roller with stainless steel shaft.

**EXTERNAL HARDWARE:** Stainless steel.

**TEMPERATURE:**

General Purpose units rated ambient 32° to 104°F [0° to 40°C]; Functional ambient (not rated) -58° to 104°F (-50° to 40°C).

TA-D, TA-X are rated ambient -13° to 104°F [-25° to 40°C]; rated operating max. 212°F (100°C) [T5].

**ENCLOSURE RATINGS:**

TA-1, TA-2, TA-4, TA-5: C-UL-US Types 3S, 4, 4X & 5.

TA-1X, TA-2X, TA-4X, TA-5X: C-UL-US for Class I, Groups C & D; Class II, Groups E, F & G; Class III Hazardous Locations.

TA-1D, TA-2D, TA-4D, TA-5D: C-UL-US Types 3S, 4, 4X & 5; Class II, Groups E, F & G; Class III Hazardous Locations.

**CERTIFICATION:** cULus Listed.