



### BA100 Conveyor Belt Misalignment System

- Highly visible red epoxy coated roller of 1-1/4" diameter with nylon bushings.
- Simple installation — drill (3) 13/32" diameter holes and mount on conveyor.
- 3/4" NPT conduit opening on all weatherproof and explosionproof units.
- The BA100 comes with limit switches rated for 20A @ 120Vac, 240Vac and 480Vac.
- Roller arm can move up to 90 degrees in either direction and is spring loaded for automatic reset.
- Optional manual reset available.
- Cast aluminum housing and optional cast iron housings available.
- Operating temperature range is -40°F to 150°F.
- Available in NEMA 4/5 weatherproof, dust-tight housing and explosionproof NEMA 7/9 housing.

## Product Information

### Description

The model BA100 Conveyor Belt Alignment Switch protects conveyor belts from damage due to belt 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 limit 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 an aluminum 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 BA100 can be furnished with general purpose or explosionproof construction. Cast iron and epoxy-coated housings are also available.

Model BA100 is a belt misalignment control that provides an indication when a conveyor belt has drifted off to a dangerous misalignment condition. The output contacts of the Model BA100 can control up to two separate circuits, one for machinery shutdown and one for an alarm.

The BA100 is a conveyor belt protection system that saves the time, money, process downtime and product loss associated with replacing a damaged conveyor belt.

## BA100 Installation Instructions

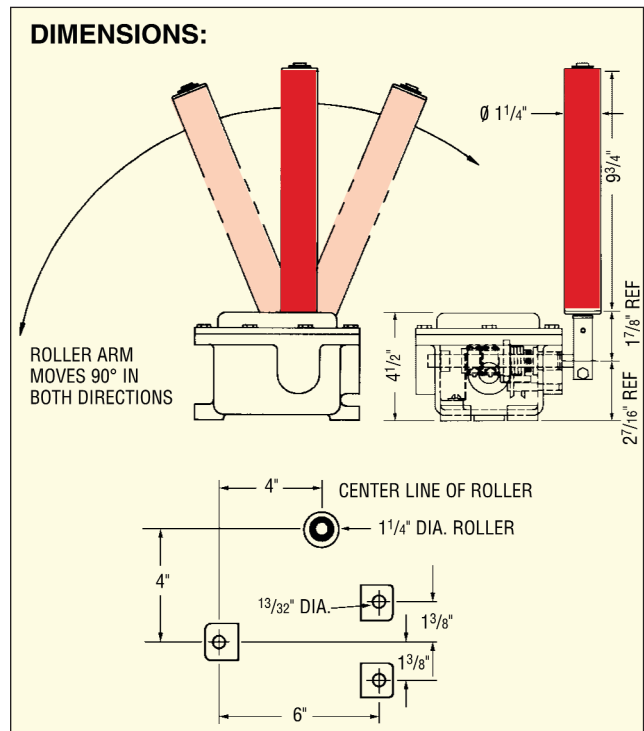
BA100 units are always used in pairs with one placed on each side of the conveyor belt, usually near the head end of the conveyor. They may also be placed at the tail pulley and at selected points along the conveyor. The limit switch can be wired to give warning signals or it can be connected directly 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.



## Specifications • BA100 Conveyor Belt Misalignment System

<b>BA100-1:</b>	One SPDT limit switch
<b>BA100-2:</b>	Two SPDT limit switches (individually adjustable)
<b>BA100-1X:</b>	Explosionproof with one SPDT limit switch
<b>BA100-2X:</b>	Explosionproof with two SPDT limit switches
<b>MANUAL RESET:</b>	A positive lockout model with manual reset is available.
<b>SWITCHES:</b>	SPDT limit switch - Rated 20 amp at 125, 250, or 480VAC. Switches can be wired for single throw operation, either normally open or normally closed as required.
<b>STANDARD CONSTRUCTION:</b>	Rubber gaskets seal units against dust and rain for NEMA 4 outdoor applications. Applies to units BA100-1 and BA100-2. NEMA 7/9 units also available.
<b>HOUSING:</b>	Aluminum or cast iron. Epoxy coating available.
<b>CONDUIT OPENING:</b>	One 3/4" NPT standard opening.
<b>ACTUATING ARM:</b>	Red epoxy coated steel roller with stainless steel shaft.
<b>EXTERNAL HARDWARE:</b>	Stainless steel.
<b>OPERATING TEMPERATURE:</b>	-40°F to +150°F (-40°C to +65°C).



Model	Description	Shipping Weight Lbs.
<b>BA100-1</b>	Unit with One Switch	12
<b>BA100-2</b>	Unit with Two Switches	12
<b>BA100-1X</b>	Explosion Proof - One Switch	13
<b>BA100-2X</b>	Explosion Proof - Two Switches	13

Specifications subject to change without notice.

ES750-RevA