

# RB21

## Hinged Belt-Misalignment Sensor Installation Guide

**CAUTION:** All wiring must be in accordance with wiring methods of the National Electrical Code and with the authority having jurisdiction. Prior to installation, inspection, calibration, or repair, disconnect power at source following lockout-tagout procedures per ANSI Z244.1.

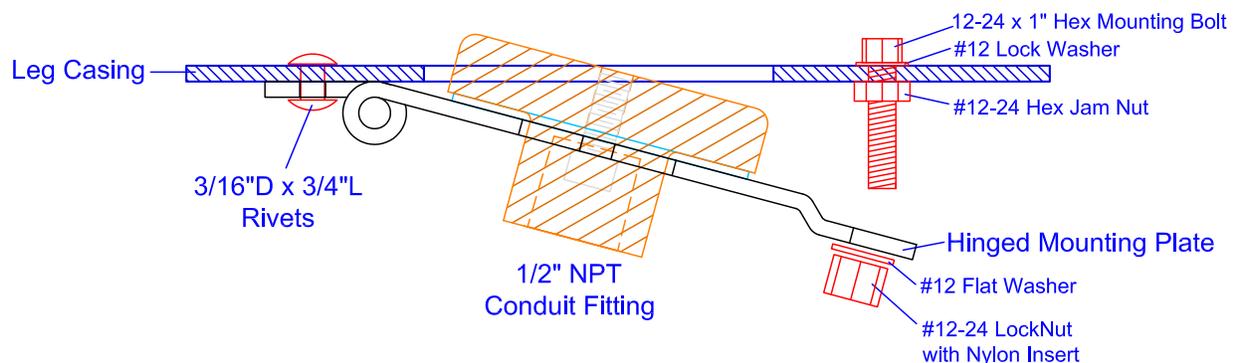
Maxi-Tronic RB21 belt misalignment sensors combine fast sensing, compatible sensor types and an industry leading design.

### Prepare Leg Casing:

1. Position the RB21 DRILLING TEMPLATE at the determined location on the casing . See the RB21 SENSOR PLACEMENT notes on the back of this document for placement tips.
  - If leg casing has existing holes that are incompatible with the RB21, cover it with the RB21 **Retrofit Plate** (P/N 942.000200). Securely mount the pre-drilled Retrofit Plate to cover the existing holes.
  - Open legs and conveyors that do not have casings will require fabrication of a rigid bracket to hold the RB21.
2. Mark hole centers for the rivets, mounting bolts, and the brass Disc.  
*Note: If using a optional Spacer with the RB21 then select center for the Disc center marked "Spacer", which is offset to allow the unit to pivot open when a Spacer is used.*
3. Drill mounting holes in the leg casing: (2) 3/16" holes for rivets, (2) 1/4" holes for the mounting bolts.
4. Drill leg casing for the brass Disc using a 2-3/4" hole saw, debur the hole.

### Mount the RB21:

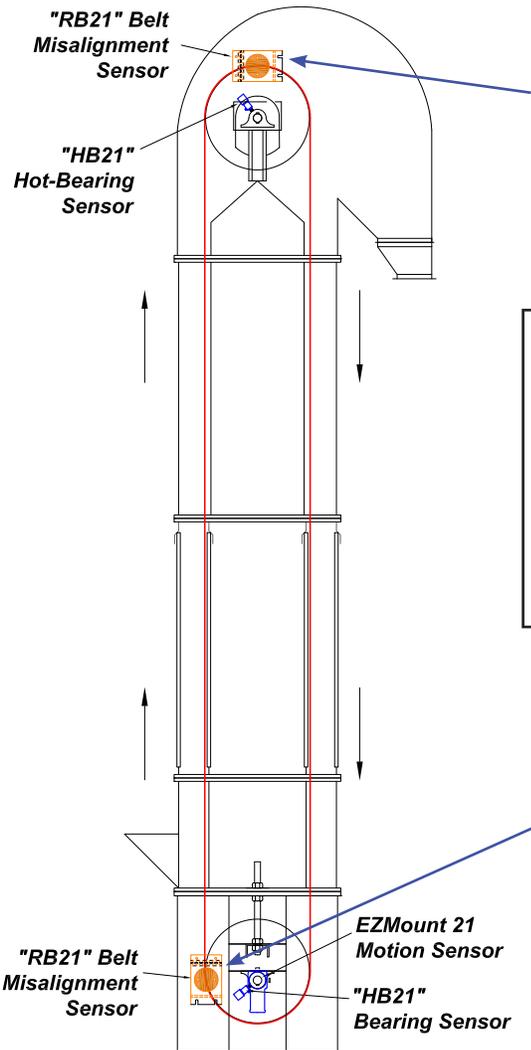
1. Attach the (2) #12-24 x 1" hex bolts to the leg casing using using the supplied (2) lock washers and (2) hex jam nuts.
2. Position the RB21 on the leg and verify it pivots open and closed without obstruction.
3. Attach the RB21 to the leg casing using the (2) 3/16" Aluminum pop rivets.
4. Pivot the RB21 closed and secure it using the (2) flat washers and (2) #12-24 lock-nuts.



### RB21 Operation

Attach 1/2" liquid-tight flexible conduit to allow device to swing open for inspection.

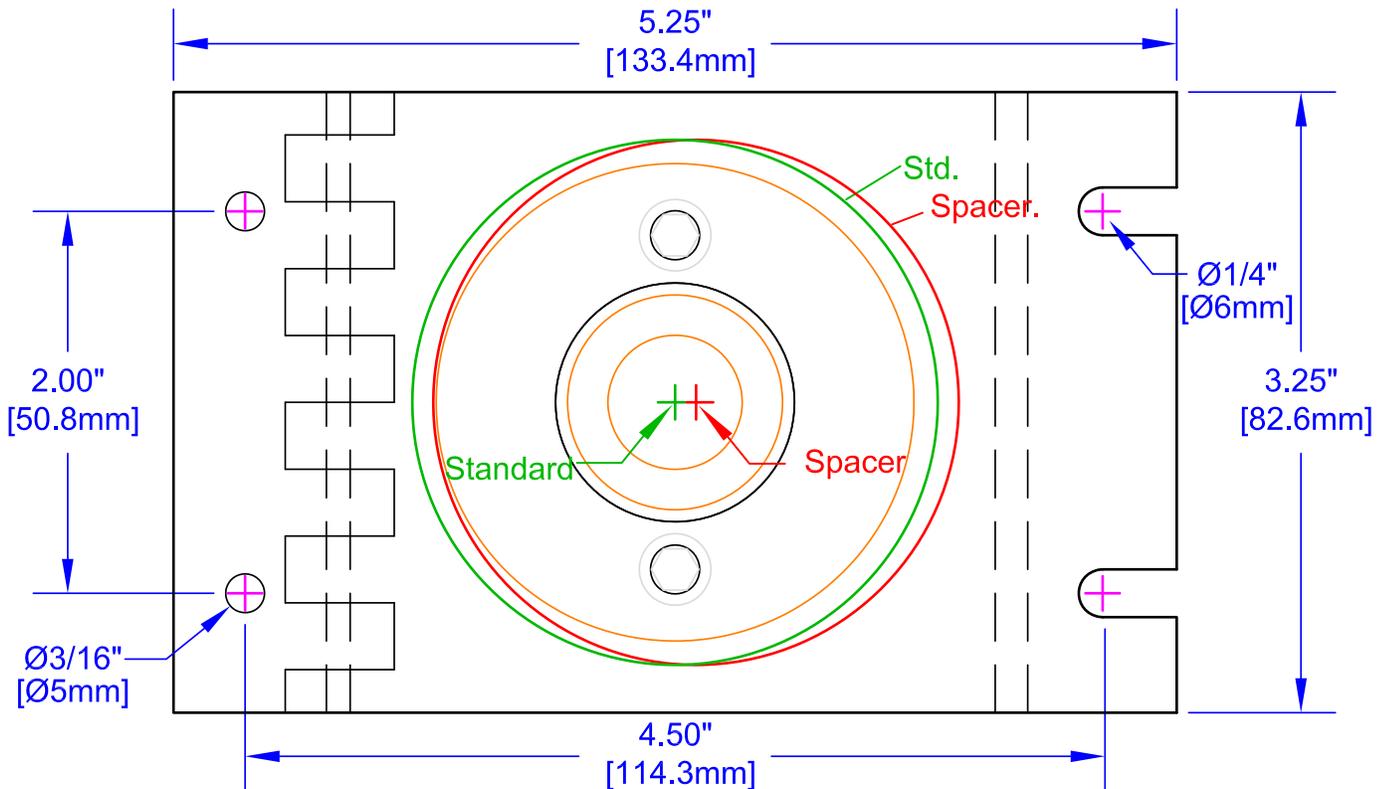
--- See other side for RB21 Sensor Placement and Drilling Template. ---



Mount the HEAD section RB21 sensor as close to the 12-o'clock position as possible, it must be mounted between the 9-o'clock and 3-o'clock positions. Mount another RB21 on the other side of the leg, opposite this one.

- RB21 Sensor Placement:**
- ▶ Mount RB21 sensors so that the belt strikes them in the center of the brass disc.
  - ▶ Mount RB21 sensors in pairs, opposite each other on each side of the leg or conveyor.
  - ▶ Mount RB21 sensors so they are aligned with both the belt and the pulley. If a sensor cannot be aligned with the pulley then mount it over the belt as close to the pulley as possible.

Mount the BOOT section RB21 sensor on the upside of the leg, at the highest position that the pulley can be adjusted to.



**RB21 Drilling Template**