

For Protection of Belt Conveyors
and Personnel

Thermo Ramsey

PRO-LINE Belt Misalignment Switch



BELT MISALIGNMENT SWITCH

For Protection of Belt Conveyors and Personnel

- Universal mounting design for top or bottom of conveyor stringers.
 - Rugged cast aluminum enclosure with standard NEMA-4 clear iridite finish or optional two-part baked urethane enamel finish for salty, alkaline or acidic atmospheres. Also, electroless nickel finish optional for extremely corrosive environments.
 - Full cover plate permits easy access to terminals, switches and adjustments.
 - Cover plate can be removed without detaching actuator roller.
- Stocked by local distributors for immediate delivery.
 - Roller bearings of actuator roller are rated to 5000 R.P.M. for belt speeds to 1250 F.P.M.
 - Normal angle of actuator roller adjustable by 22.5° increments for angling towards the troughed belt and away from covers and structure.
 - Standard unit includes alarm contacts at 10° from normal and shut down at 20° from normal.

Run-Off Switches are mounted on the top or bottom of the conveyor stringers with the actuating arm adjusted to the outside edges of the belt.

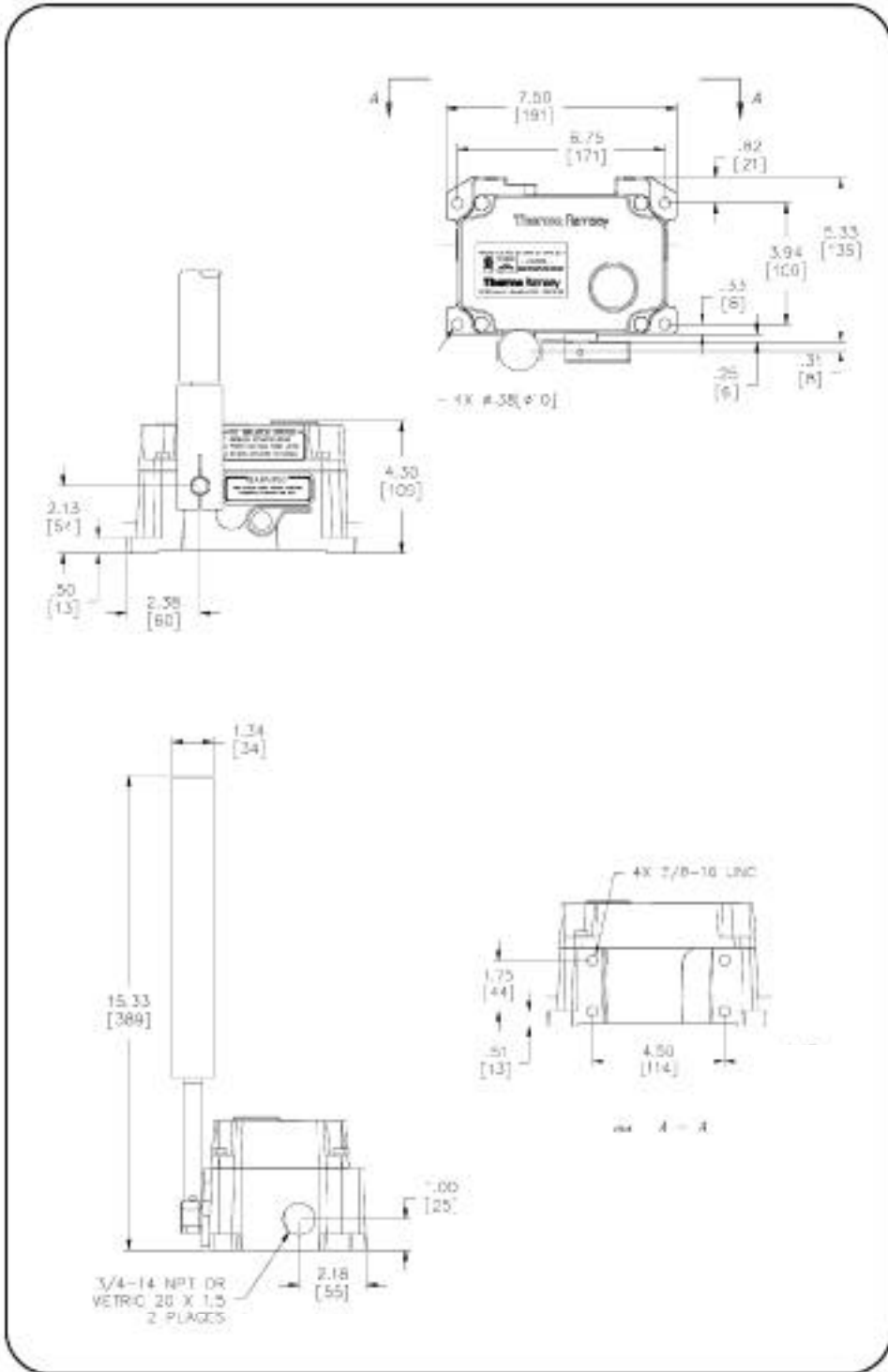
Under normal conditions with the belt trailing properly, the edge of the belt clears the actuating arms by 1" or more (adjustable by switch positioning).

If the belt skews or runs-off contacting actuating arm, displacing it from the arm's normal vertical position, one or more of the microswitches are contacted.

Displacement of the actuating arm causes a cam to operate a microswitch with SPDT contacts. These contacts may be used for interlocking, conveyor shut-down and/or alarm/annunciation.

The standard alarm/shutdown positions are 10 and 20°.

DIMENSIONS



SPECIFICATIONS

- 2 Switch rating SPDT 10A 480V
- NEMA-4 weatherproof enclosure
- Actuating angle adjustment, vertical to 22.5° from vertical
- Actuating force 5 lbs.
- Up to three conduit openings, threaded 3/4" 14 NPT
- CSA approved models for Class II Division 1 & 2, Group E,F, & G

APPLICATIONS

- Conventional belt conveyors
- Underground, cable supported belt conveyors
- Stacker/reclaimer conveyors
- Ship loading/unloading systems
- Tripper and shuttle conveyors
- Crane/shovel boom position limit detector
- Apron feeders & conveyors
- Heavy duty limit switch

OPTIONS

- Lock-out with manual reset
- Special finishes:
 - 2 part baked enamel
 - Nickel plated (NEMA-4X) with stainless roller
- Secondary flag alarm
- Short roller arm for tight fit covers
- NEMA-4 & NEMA-9 alarm light

Models Available

- Standard NEMA-4
 - ROS-2D Dual Switch
- Class II - CSA Approved
 - ROS-2D-3 Dual Switch
 - ROS-2D-3-NP Dual Switch
 - Nickel Plated (NEMA-4X)

Also available as a Tripper Position Switch with 3" diameter x 1 3/4" wide Acetal roller.



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