

# MODEL BM-2 BELT MISALIGNMENT SWITCH



Model BM-2



**SAVE MONEY BY REDUCING  
DOWNTIME AND MAINTENANCE  
COSTS!**

The **Model (BM-2) Belt Misalignment** switches are conveyor safety accessories designed to alarm and/or shut down conveyor systems in the event of a conveyor belt misalignment. The heavy duty rugged design makes them suitable for most industrial applications, requiring long-term reliable equipment. The action of a belt misalignment switch can save you money by reducing downtime and maintenance costs.

Robust die cast aluminum housing with epoxy based powder coat finish and all stainless steel external hardware.

The **Model BM-2 Belt Misalignment Switch** is designed to prevent damage to belts and equipment due to a misalignment condition of the conveyor belt. They are normally located 1-6 feet from the head and tail pulley on both sides of the belt with the roller arm positioned approximately 1 inch from the normal belt position. If the belt begins to wander, it makes contact with the roller arm causing it to spin. As more force is applied to the roller arm it will rotate away from the normal position and at 10° it will actuate the first alarm SPDT micro switch. The first micro switch will annunciate the alarm condition to the control system so corrective action can be taken. If the belt continues to track off it will cause the roller arm to rotate from its 10° position to the 20° position, which will activate the second alarm SPDT micro switch. This second micro switch is wired into the motor starter of the conveyor belt to shut it down. The BM-2 switches will allow you to reduce downtime and maintenance associated with belt tracking problems.

# SPECIFICATIONS

## MODEL BM-2 BELT MISALIGNMENT SWITCH

- Rugged die cast aluminum enclosure (NEMA-4)
- Micro switch Rating: 15A @ 115-230 VAC, 30 VDC non-inductive
- Outputs: (2) SPDT (one alarm, one shutdown)
- Actuation Angle: 10° and 20° from normal
- Conduit Holes: (2) 3/4" - 14 NPT
- Temperature Rating: -45° to 176° F (-42° to 80°C)
- Rugged design for belt speeds to 1200 FPM
- Bi-Directional action for ease of installation, wiring and component savings
- Cover provides easy access to wiring & internal mechanism
- Two (2) position alarm sequence for preventing costly shutdowns

### OPTIONS:

- Indicating Lights
- Manual Lock Out
- Adjustable Angle
- Mounting Kits

### CE Approvals for Safety:

- Meets Electrical Safety IEC 60204-1: 2005-10  
IEC 60947-1: 2004-03
- Meets Mechanical Safety IEC 60204-1: 2005-10
- Meets Functional Safety IEC 60204-1: 2005-10
- Meets Outdoor/Noise/  
Vibration IEC 60529: 2001-02

All Dimensions in Inches (Millimeters)

