APPLICATION

This Belt Alignment Control is designed to protect elevator legs from the severe damage that results from misalignment of vertical conveyor belts. When used in pairs, these controls can be wired to give signals such as turning on a warning device and/or can be connected directly into the starter motor circuit to stop the belt.

HOW IT OPERATES

The main components of this Belt Alignment Control are a conveyor roller with sealed bearings, a four bar linkage, and the microswitch. The control has double pole/double throw circuitry. The four bar linkage connects the roller's pivot shaft to the switch actuator. The roller is held into position by roll pins and set screws.

When the roller is displaced 15°, the first pole of the switch is triggered. This pole can be wired to sound a warning alarm, light an indicator light, or stop the conveyor. The second pole is triggered when the belt strays 25° from horizontal and can be wired to stop the conveyor motor. To eliminate false signals the controls should be mounted about one inch away from the belt.
INSTALLATION

The Belt Alignment Controls should be mounted in a location that allows them to be directly across from each other. This will give the most accurate alignment reading. See Drawing “B” for an illustration.

PREPARING THE CHUTE:
1. The Vertical Bucket Elevator Control is mounted directly onto the chute.
2. Locate the centerline of the conveyor belt on the return side of the conveyor system. Project this point onto the chute walls.
3. Use the supplied template to mark off all hole locations.

MOUNTING THE UNIT:
1. Measure distance between chute and conveyor belt edge.
2. Adjust conveyor roller to rest about 1/4" - 1/2" from conveyor belt edge.
3. With the housing gasket in place, line up the control’s holes with the holes on the chute.
4. Place the 1/4" - 20 bolts through the holes and tighten with wrench.
5. Wire according to schematic.

SPECIFICATIONS

EXPLOSION PROOF MICROSWITCH
- Meets NEMA Standards: 1, 3, 4, 6, 7, 9 and 13
- Class I, Div. 1, Groups B, C and D
- Class II, Div. 1, Groups E, F and G
- UL Listed and CSA Listed

GENERAL PURPOSE MICROSWITCH
- Meets NEMA standards: 1, 3, 4, 4X, 6P and 13
- UL Listed and CSA Listed

ELECTRICAL OUTPUT
- Double Pole/Double Throw
- 10 Amp - 120, 240, 480 VAC
- 0.8 Amp - 120 VDC
- 0.4 Amp - 240 VDC
- Conduit Connection: 3/4” NPT

<table>
<thead>
<tr>
<th>MODEL</th>
<th>DESCRIPTION</th>
<th>SHPG. WT.</th>
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<tbody>
<tr>
<td>VA</td>
<td>General Purpose NEMA 4 microswitch</td>
<td>10 lbs.</td>
</tr>
<tr>
<td>VA-X</td>
<td>Explosion Proof NEMA 7-9 microswitch</td>
<td>10 lbs.</td>
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</tbody>
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