TOUCHSWITCH
Belt Misalignment Sensor

APPLICATION
The Touchswitch is an electro-mechanical limit-switch with no moving parts, that detects the misalignment of both pulleys and belts in conveyors and bucket elevators. The sensor detects the lateral force of the belt or pulley and activates a voltage free solid state relay contact. This relay contact can be used to send an alarm or shutdown the machine. The sensors are usually installed in pairs on opposite sides of the belt/pulley. The sensors can be connected directly to a PLC input, or for greater safety, to a central independent monitoring system, such as the T500 Hotbus or the Watchdog Super Elite.

FEATURES
► Hardened Stainless Steel Sensor Face
► No Moving Parts
► Not affected by dust or material built up
► External Test Function
► Not a “Rub” Block
► IP66 Rated

WATCHDOG SUPER ELITE
B400 ELITE

COMPATIABLE CONTROL UNITS
Connect the Touchswitch directly to a PLC, or use with the optional T500 Elite Hotbus and Watchdog Elite digital monitoring systems for conveyors or bucket elevators. Belt alignment, belt speed, bearing temperature, pulley alignment, and plug condition monitoring in one complete standardized system.

T500 ELITE
WATCHDOG SUPER ELITE
B400 ELITE

Part Number    Type       Supply Voltage  ATEX/IECEx   CSA
TS2V34AI       Conduit Entry  12-24Vdc  Zone 20     Not Approved

Information subject to change or correction. July 2018
### Technical Specifications

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
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</thead>
<tbody>
<tr>
<td>Supply Voltage</td>
<td>12Vdc or 24Vdc (see part numbers)</td>
</tr>
<tr>
<td>Supply Current</td>
<td>21mA max</td>
</tr>
<tr>
<td>Output</td>
<td>Normally open solid state relay; 50mA @ 240 VAC/VDC (MAX); non-Inductive</td>
</tr>
<tr>
<td>Sensor State Indication</td>
<td>Green LED Indicated Power ON and NO Alarm</td>
</tr>
<tr>
<td>Cable</td>
<td>6 Core; 3 Meter Long</td>
</tr>
<tr>
<td>Sensor Face</td>
<td>Hardened Stainless Steel</td>
</tr>
<tr>
<td>Sensor Body</td>
<td>Pressed Seamless Steel with Epoxy Paint</td>
</tr>
<tr>
<td>Dimensions</td>
<td>Dia. 89mm x H 45mm</td>
</tr>
<tr>
<td>Weight</td>
<td>0.77 kg</td>
</tr>
<tr>
<td>Fixing Centres</td>
<td>4 x M6 on 74mm diameter</td>
</tr>
</tbody>
</table>

### DIMENSIONS

- **Note:** All dimensions in mm.
- Test Wheel
- Power LED
- TouchSwitch
- Enveloped Electronics
- 2 inch Diameter Hardened Stainless Steel (Recess 5/16"")
- 6 x M6 Conduit Entry
- 1m Long Cable
- 6 x 22 AWG Conductors
- 5.5 mm Overall Jacket Diameter
- 4.7mm Clear Fixing Holes Equally Spaced on 74 Diameter

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**Bucket Elevator Application**

- Flange of elevator
- Jack
- Pulley
- Flange of elevator

**Enclosed Belt Conveyor Application**

- TouchSwitch
- Seal

**Open Belt Conveyor Application**

- TouchSwitch
- Seal

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Detailed specification, wiring diagrams and installation/operating instructions available upon request.

Please refer to instruction manual for correct installation. Information subject to change or correction. July 2018