

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 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.

FEATURES

- ▶ The face of the sensor is made from hardened and annealed stainless steel, not soft brass or aluminium, increasing wear resistance when the belt contacts it.
- ▶ Not affected by dust or material built up; will work when completely covered by material.
- ▶ An external test knob allows for quick and simple sensor/system testing.
- ▶ The sensors can be connecting direct to a PLC or for increased security to an independant monitoring system such as the **B400 ELITE**, **WATCHDOG ELITE** or **T500 Hotbus**, all ATEX Approved zone 21 and 22.

PART NUMBERS/ACCESSORIES

- ▶ TS1V4A – Cable Entry Touchswitch ATEX Zone 20
- ▶ TS2V4CA – Conduit Entry Touchswitch ATEX Zone 20 & CSA Class 2 Div 1, Groups E, F & G
- ▶ TS Spacers – additional spacers available to adjust position relative to belt

COMPATIBLE 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.



U.S. Patent # 6,731,219
Other Patents Pending



ATEX Approved
Ex II 1D T120°C-IP65- ZONE 20



CLASS 2 Div. 1 Groups
E, F & G

T500 ELITE



B400 ELITE



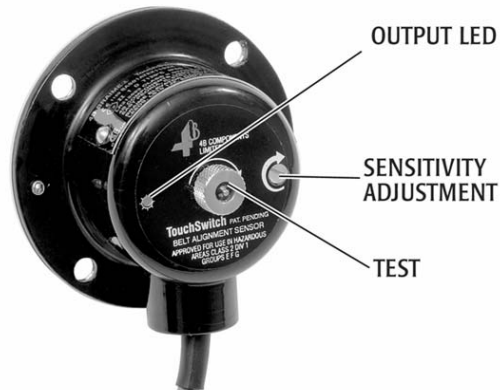
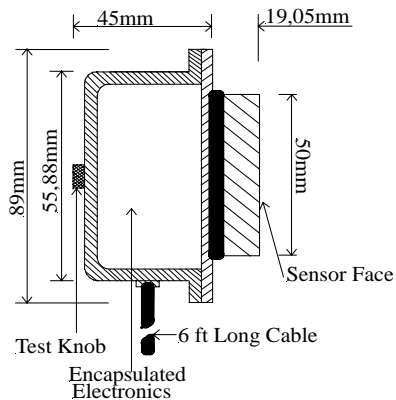
WATCHDOG ELITE



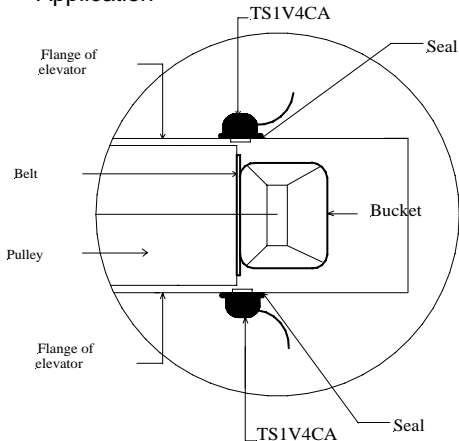
TECHNICAL SPECIFICATIONS

Supply	24 V dc
Supply Max	27 V dc
Power consumption	60 mA
Indication	Red LED indicates when powered up and relay is energized
Adjustment	Turn Sensivity Adjustment Screw (1 to 12 lbs approx)
Test Knob	Turn the test knob clockwise until the LED goes out
Cable	6 wires, 2 meter long
Body Construction	Pressed seamless steel with epoxy paint
Face Construction	Hardened and annealed stainless steel
Protection	IP 65
Output	Contact relay 5A 250V ac not inductive
Approval	ATEX EX II 1D T120°C (Zone 20) & CSA
Weight	0,769 Kg
Fixing centres M6	51 mm x 51 mm
Dimensions	Dia. 89 mm x 44,5 mm

DIMENSIONS



Bucket Elevator Application



Enclosed Belt Conveyor Application



Open Belt Conveyor Application

