

Electro-Sensors Product: M100T Shaft Speed Switch with Integrated Sensor and the 255 Pulser Disc

Application: Monitor tail pulley for slowdown due to belt slippage or breakage.

Purpose: Unwanted slowdown or stoppage of a conveyor can result in costly and even dangerous conditions. Product waste, machine damage, process downtime, and unsafe working conditions can all be attributed to conveyor failure. Bulk raw materials such as grain or rocks may be damp or wet – adding significant weight to the conveyor belt and leading to belt slippage or slowdown. Conveyor belts can break due to overload, wear and tear, or motor burnout. Shaft speed switches detect these conditions and alert the operator before a crisis becomes a catastrophe.

How it works: The M100T shaft speed switch monitors the rotation of the non-driven tail pulley, receiving a digital pulse train from the 255 magnetic pulser disc. The M100T decodes this frequency signal to determine shaft speed and then compares this to the pre-adjusted set point. In the event of a fault condition such as belt slippage or product overload, the relay, pre-calibrated by the operator and usually set at about 90% of operating speed (RPM) can be used to provide an alarm or equipment shutdown, assuring machine protection and process integrity.

Benefits

- Economical two-piece system
- Rugged and field-tested
- Simple to install and calibrate
- Suitable for hazardous locations
- Proactive machinery protection

