Safety Interlock Switches for Conveyors

Safety is a primary concern for all employers, especially in manufacturing facilities. Bulk material handling equipment with rotating components present a risk of injury to workers. Every person working in a manufacturing environment must be trained in safe practices by their employer. Even with safety training, there is still a chance for an accident to occur. KWS provides solutions to minimize risk of injury with safety interlock switches, which prevent accidental or unauthorized access to the potential hazard.

KWS utilizes safety interlock switches with actuator key design that mount to the leading edge of machine guards and covers. The design provides positively operated switching contacts and a tamper-resistant actuator mechanism.

Safety interlock switches with actuator key design consist of a switch and an actuator key. The switch is rigidly mounted to the frame of the guard or machine. The actuator key is fitted to the removable part of the guard or cover and is aligned to the switch entry aperture. The profile of the actuator key is designed to match a cam mechanism within the switch head to provide a positively operated interlock switch. When the actuator key is inserted into the switch, the safety contacts close and allow the machine start circuit to be enabled. When the actuator key is withdrawn, the safety contacts are positively opened and the machine circuit is broken.

Features

**Special Actuator Key Design** – Special-shaped actuator key ensures switch cannot be activated with a screwdriver or piece of metal.

**Fully Sealed Switch** – Switch housing is manufactured from aluminum or 316 stainless steel. Each switch is tested to ensure that no ingress of dust is possible and immersible in up to 3-feet of water. Some models protect against close-range high pressure, high temperature spray downs.

**Variety of Mounting Options** – Switch has a 90-degree rotating, adjustable head. Actuator keys are available with 14 different mounting shapes.

Benefits

**Extra Layer of Safety** – Switch can only be activated by actuator key and not overridden by machine operators or maintenance personnel.

**Use in Classified Areas** – Switch is certified for use in environments rated up to: IEC IP67, IEC IP69K ratings, cULus, CE approvals. Explosion-proof models are also available.

**Versatile Use** – Switch has 8 different options for mounting, creating flexibility and adaption to the smallest of footprints.
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Typical Screw Conveyor with Interlock Switches on Covers

Close-Up View of Hinged Cover in Closed Position

Close-Up View of Hinged Cover in Opened Position

Machine Circuit is Broken when Special-Shaped Actuator Key is Removed from Switch

Machine Circuit is Enabled when Special-Shaped Actuator Key is Inserted in Switch