

Series CPS Cable Pull Switch

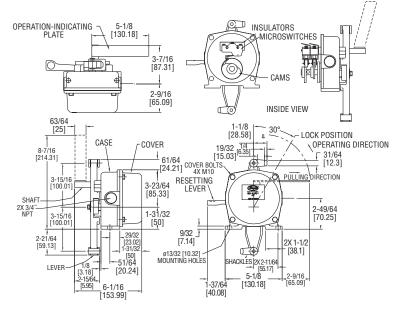
Specifications - Installation and Operating Instructions



The Series CPS Cable Pull Switch is designed to provide a switching system to isolate the power to the conveyor system or other similar process equipment in event of a shut-down condition. A steel wire is placed along the side of the conveyor and attached to the cable pull switch. When the cable is pulled at any point along the conveyor it will trip the cable pull switch causing the conveyor to shut down. To restart the conveyor the CPS must be manually reset. The series CPS has a universal design for bi-directional activation and utilizes a highly visible red flag to indicate the switch status. The compact design makes it ideal for easy installation.

APPLICATIONS

- · Conventional Belt Conveyors
- · Ship Loading/Unloading Systems
- · Stacker/Reclaim Conveyors
- Apron Feeder Conveyors
- Tripper or Shuttle Conveyors
- · Bucket Elevators
- · Horizontal Feed Systems



SPECIFICATIONS

Temperature Limits: -4 to 140°F (-20 to 60°C).

Enclosure: Die cast aluminum. Enclosure Rating: NEMA 6 (IP 67).

Switch Type: 2 SPDT.

Electrical Rating: 10 amp @ 125/250 VAC; 1/2 amp @ 125

VDC.

Electrical Connection: 3 screw type, common, normally open,

normally closed.

Electrical Conduit: Two 3/4" female NPT.

Activation Angles: 30 degrees. Activation Force: 11 +/- 2.25 pounds.

Control Type: Manual reset.

Weight: 6.4 pounds.

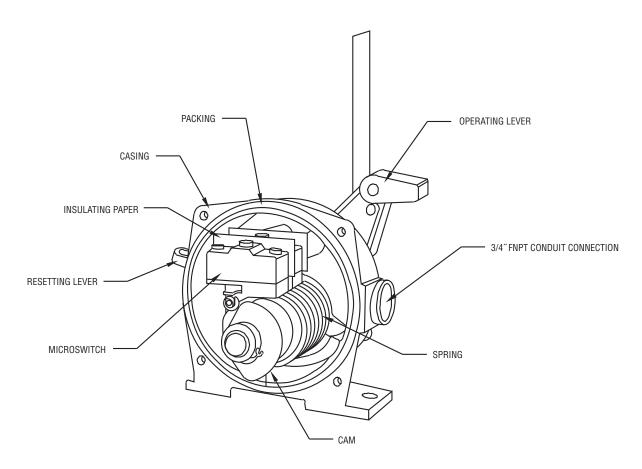
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Operation Principle

The CPS is designed to provide a switching system to isolate the power to conveyor system and other equivalent process equipment in a shutdown condition. The cable pull switch is actuated by a steel wire, which is placed along-side the conveyor. By pulling on the cable at any point, the CPS will activate when the operating lever rotates 30 degrees clockwise, automatically locking the switches. The CPS can be reset by pressing down on the reset lever.



Installation

Eye bolts should be prepared before installation, and should be spaced according to the cable length (Figure 2). A single pull cord up to 50 feet should have an eye bolt mounted every 10 feet. When using a single pull cord up to 75 feet there should be an eyebolt every 3 feet. The maximum length of cable between CPS is 75 feet (Note: Variations in temperature will cause cable to expand and contract). The ideal cord is a steel cable 0.25 inches in diameter. Figure 3 is a typical installation of a CPS.

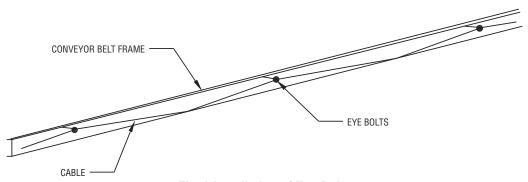


Fig. 2 Installation of Eye Bolts

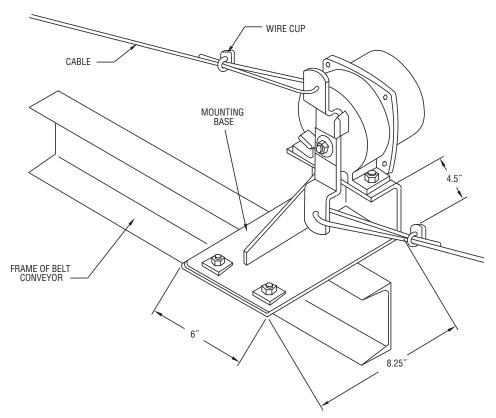
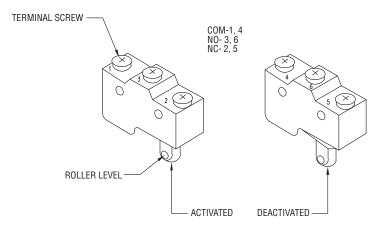


Fig. 3 Typical Installation of CPS

Wiring

The Cable Pull Switch has 2 SPDT relays that can be accessed by removing the cover. The independent relays can be used to control two separate circuits such as a motor starter and a signal light.



Adjustment

The cams are set at the factory to trip the microswitches when the operating arm is rotated 30 degrees clockwise. Cams can be adjusted by loosening the set screw.

MAINTENANCE

Clean excessive amount of dust when it accumulates on the operating lever. Occasionally check to see if the CPS is working normally by pulling the cable. After the CPS is installed check the housing cover to ensure it is tight, water and dust can enter between the cover and casing if it not tightened correctly causing the switch to malfunction. The CPS is not field serviceable and should be returned if any repair is needed (field repair should not be attempted and may void warranty). Be sure to include a brief description of the problem plus any relevant application notes. Contact customer service to receive a returns good authorization number before shipping.

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