



## Using Safety Rope Switches

### Use of Safety Rope Switches.

IDEM Guardian line switches are designed to be mounted on machines and sections of conveyors which cannot be protected by guards. In contrast to traditional mushroom head type Emergency Stop buttons, Safety Rope Switches can initiate the emergency command from any point along the installed rope length and provide robust Emergency Stop Rope Pull protection for exposed conveyors or machines.

In combination with a dual channel safety monitoring relay IDEM Safety Rope Systems can be used as emergency stop devices monitored for up to Category 4 To EN 954-1 or Plc ISO13849-1. All IDEM Safety Rope Emergency stop switches conform to ISO13850 and IEC 60947-5-5. They have a positive mechanical linkage between the switch contacts and the wire rope. The switches have a wire-breakage monitoring.

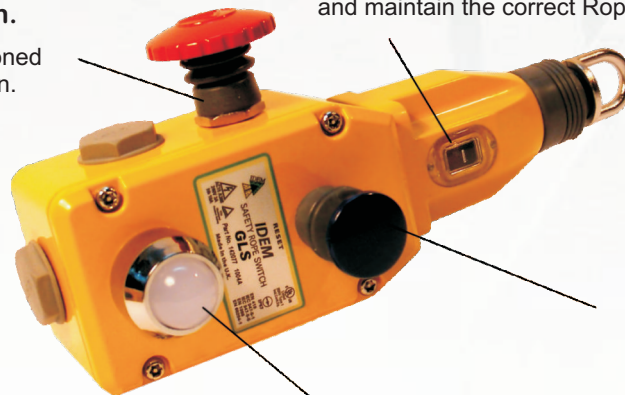
On pulling the rope safety contacts are positively opened and the auxiliary contacts are closed. The switches are mechanically latched and can then only be returned to the operational condition by pressing the blue reset button as required by ISO 13950. An optional 2 colour LED indicator is available to enable switch status to be viewed from a distance.

#### Mushroom Type Emergency Stop Button.

Can be installed or repositioned  
Left or Right after installation.

#### Tension Indicator.

Ensures the system is easy to set up  
and maintain the correct Rope tension.



#### Reset Button.

The Blue Button must be pushed to  
reset the switch following activation by  
pulling or slackening of the Rope.

#### Indicator LED.

Can be wired to flash Red in the event of the Rope  
being pulled - switch activated, illuminate steady  
Green to indicate a reset switch in Machine 'Run'  
state. Visible from long distances.

### System set up:

Rope support eyebolts must be fitted at 2.5m. min to 3m. maximum intervals along the rope lengths between switches. The rope must be supported no more than 500mm from the switch eyebolt or Safety Spring (if used). It is important that this 500mm is not used as part of the active protection coverage. When using one switch the rope must be anchored at the other end using a Safety Spring. When using a Safety Spring a maximum of one corner pulley only may be used to ensure complete lengths of rope are visible to either the switch or the spring anchorage.

