



CONVEYOR COMPONENTS COMPANY

Division of Material Control, Inc.

130 Seltzer Road, PO Box 167 • Crowell, MI 48422 USA

PHONE: (810) 679-4211 • TOLL FREE (800) 233-3233 • FAX: (810) 679-4510

Email: info@conveyorcomponents.com • <http://www.conveyorcomponents.com>

MODEL RSB: ROPE SAFETY CONTROL W/ CABLE BREAK DETECTION INSTALLATION INSTRUCTIONS



WARNING:

DEATH or SERIOUS INJURY may occur.

Before installing or adjusting, shut down and physically lock-out the conveyor system.

The **Model RSB** is designed to act as an emergency stop pull cord control on moving machinery. This version incorporates built in broken cable detection. The **Model RSB** has two external extension springs which maintain constant tension on the pull cable. The operating handle is held in the center vertical position with the internal micro-switch in a normally open condition. If the cable is pulled, or if the cable breaks, the handle rotates to actuate the micro-switch lever. In this way, the alarm signal is generated for either condition. The operating handle must be manually reset back to the center position after the cause has been corrected.

TECHNICAL INFORMATION

Raintight Units (standard):

Gasket sealed for indoor/outdoor applications

Aluminum housing with three (3) ¾" (19mm) NPT conduit openings in base casting

Explosion Proof Units:

Aluminum housing with three (3) ¾" (19mm) NPT conduit openings in the base casting

All Units:

Red polyester powder coated flag arm made of steel

Stainless steel flag arm shaft

Hardened steel internal cam and wear plate

External hardware is all stainless steel

Cable break spring kit with turnbuckle

Micro-switch Ratings:

SPDT switches:	DPDT switches:
20 Amps, 125/250/480 VAC	15 Amps, 125/250 VAC
10 Amps, 125 VAC Inductive	N/A
1 hp, 125 VAC	3/4 hp, 125 VAC
2 hp, 250 VAC	1 1/2 hp, 250 VAC
½ Amp, 24 VDC	N/A
½ Amp, 125 VDC	N/A
¼ Amp, 250 VDC	N/A

Control may be wired for single throw operation, either normally open or normally closed as required (See figure 1).

Raintight Units:

Meets NEMA Type 4 Dust-tight and Rain-tight construction.

Explosion Proof:

Meets NEMA Type 7 – CLASS I, GROUPS C & D; and NEMA Type 9 – CLASS II, GROUPS E, F, & G for Hazardous Locations.

Installation Instructions

1. The base should be mounted on a flat surface using three (3) mounting holes in base casting (see Figure 2). The base holes are manufactured for 3/8" (9mm) bolts.
2. Each unit can cover 100 feet (30m) maximum in each direction left and right of the control (see Figure 3). Safety considerations dictate not more than 200 feet (60m) total cable can be attached.
3. Eyebolts supporting cable should be placed at 8-10 feet (2.5-3m) intervals.
4. RSB unit must be centered between end eyebolts such that A' one side = A' other side within 5 feet (1.5m) (see Figure 3).
5. Attach one spring and one safety link (see Figure 6) to each end eyebolt (see Figure 3).
6. Attach one cable end and turnbuckle using bolt, two (2) nuts, two (2) washers, and lock nut, to top or bottom flag arm hole (see figure 5). Both cables with turnbuckle must be attached to the same flag arm hole.
7. Attach second cable end to turnbuckle end. Run cable in each direction to attach to springs installed in steps 5 and 6.
8. Attach cables to springs and safety links. Do not tighten cable clamps.
9. Move flag arm to right until it locks. Pull right cable tight at spring until the spring is 5.5 inches (140mm) long (see Figure 4). Tighten cable clamp.
10. Move flag arm to left and apply tension to left spring.
11. Return flag arm to center and adjust turnbuckle to center the arm. Tighten locknuts on turnbuckle. The springs will be 6 inches (152mm) long +/-0.25 inches (+/-6mm) at 70°F (21°C).
12. This unit is designed for pilot duty. Control circuit should be wired through conveyor motor starter circuit or other controlled equipment. See micro-switch and electrical information in previous section. Note: TWIST WIRES TOGETHER BEFORE INSERTING IN TERMINAL (ENROULEZ LES FILS ENSEMBLE AVANT LES INTRODUITE DANS LA BORNE.).
13. Unit should be tested after installation by actuation of cable. Protected equipment should stop and alarms sound as required.

Figure 1: Electrical Contacts

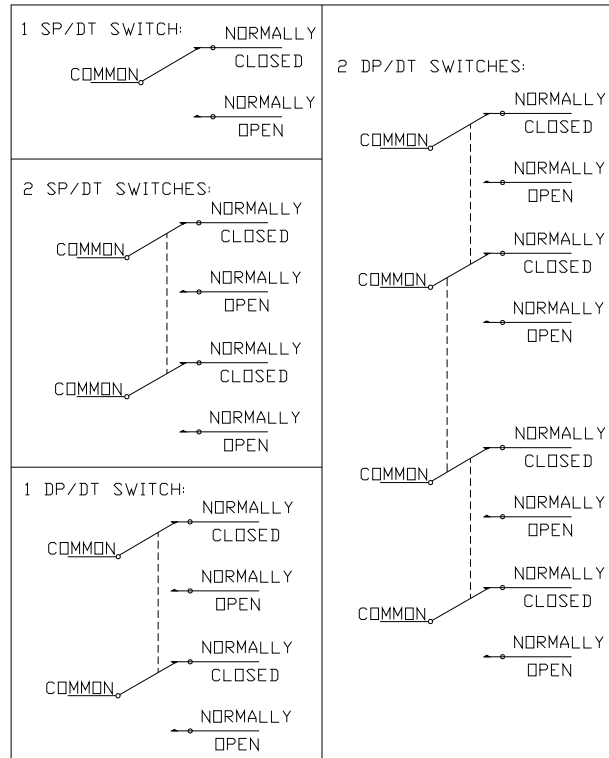


Figure 2: Dimensions

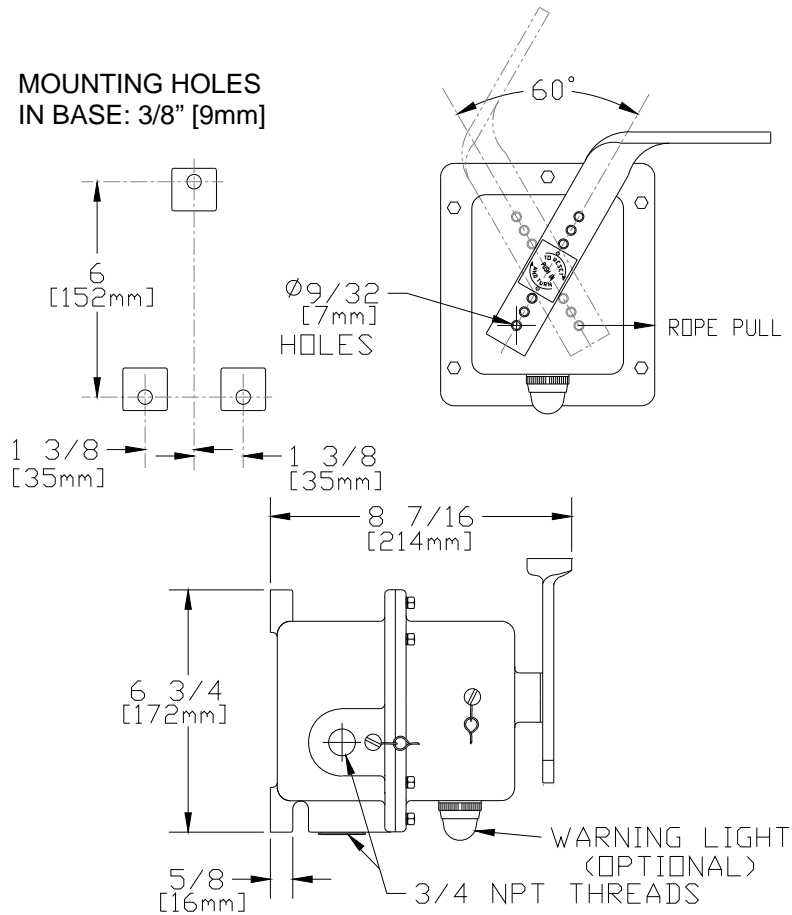


Figure 3: Cable and RSB

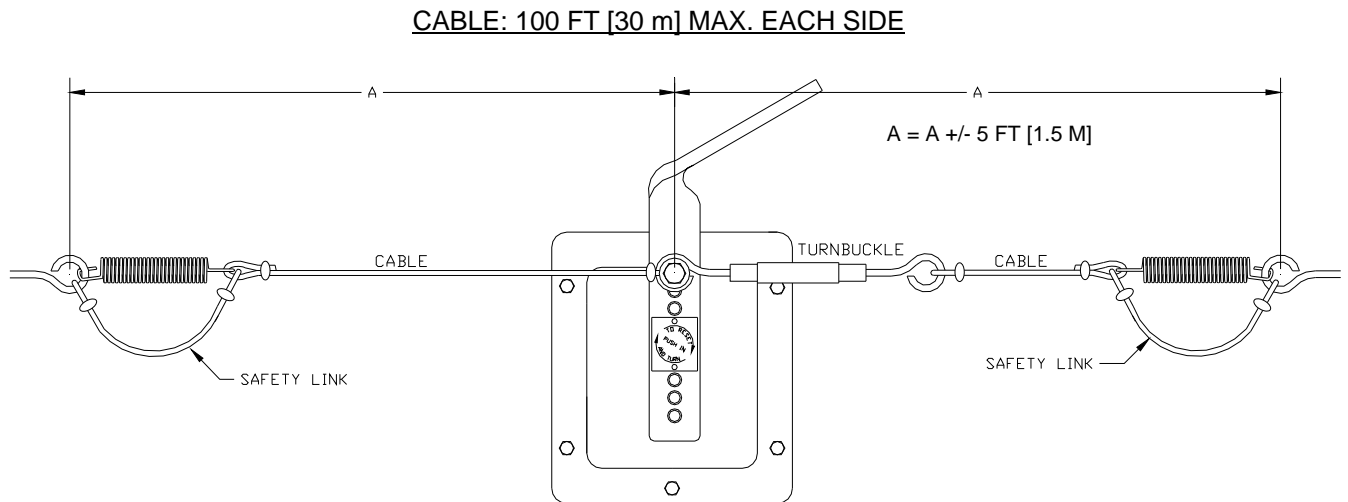


Figure 4: Cable Spring

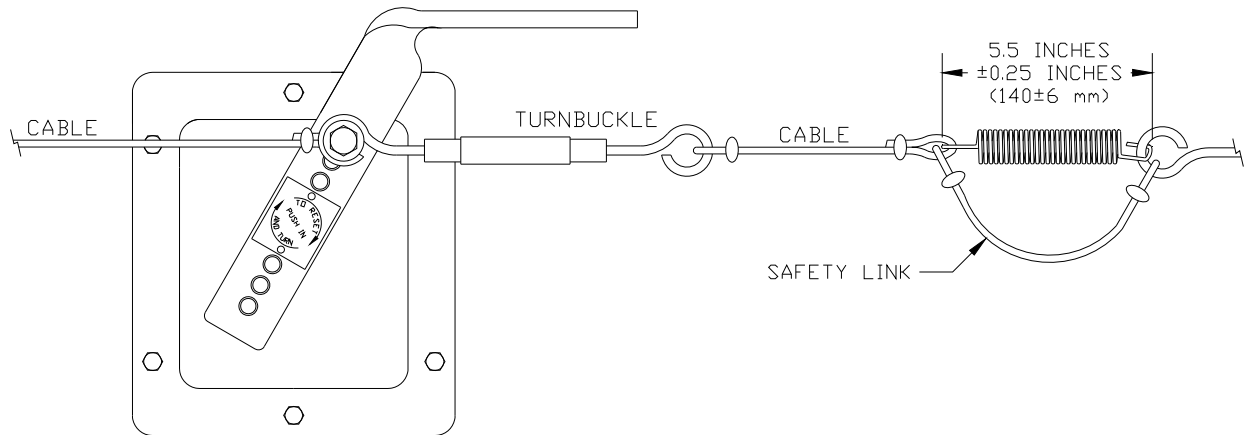


Figure 5: Turnbuckle detail

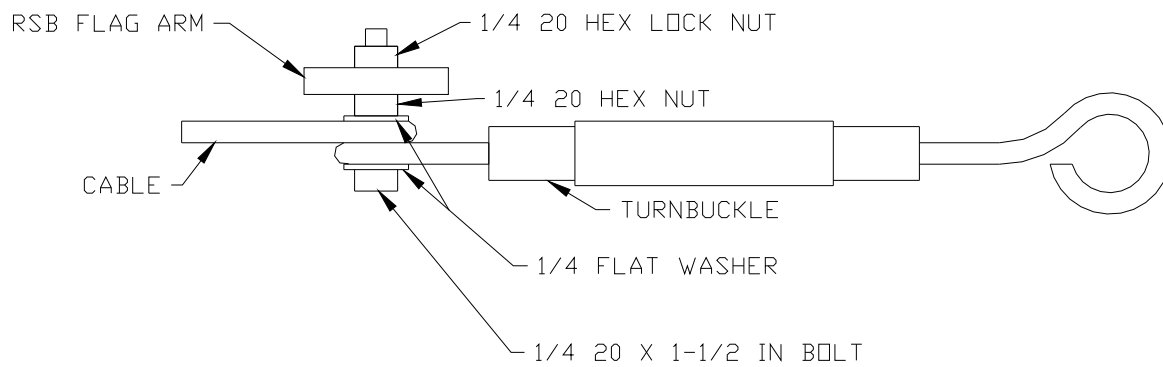


Figure 6: Safety Link

