## INSTALLATION INSTRUCTIONS <br> for ROPE OPERATED SWITCHES



Since every installation is unique and separate, the following instructions can be considered flexible. There are some basic switch setup procedures that must be observed and they are indicated by the symbol ( $>$ ). The balance of the suggestions and information is subject to change to accommodate those most familiar and responsible for the installation.

## INSTALLATION:

1. Observe all SAFETY REQUIREMENTS and PROCEDURES during installation, set-up and running.
2. N.E.C. and local wiring codes MUST be followed at all times.
3. The cable switch MUST be mounted on a flat surface! (Recommend $1 / 4 "-20$ Bolts tightened to $\sim 40$ in/lbs. torque)
4. Wire as required, torque each used terminal screw to 18 in.-lbs. ( $20.7 \mathrm{~cm}-\mathrm{kg}$ ).
5. The first cable support SHOULD be located 6 to 12 in. ( 15 to 30 cm ) from the switch.
6. The first cable support SHOULD be located so that the cable is aligned with the switch shaft within 5 degrees.
7. It is recommended that the balance of the cable supports be spaced at intervals NOT exceeding 10 feet ( $\sim 3 \mathrm{~m}$ ). Supports at properly spaced intervals are necessary to ensure that the cable weight will NOT affect switch operation.
8. The maximum recommended cable length is 33 feet $(10 \mathrm{~m})$ and SHOULD be in as straight a line as possible.
9. Wiring SHOULD be through the motor control circuit. (See reference diagram below)
10. To reset the manual switches, Push the ring eye toward the switch body until it is reset (latched in place)
11. Adjust the cable length to obtain the proper function.

NOTE: All cable/rope material will stretch with use and/or temperature changes. Readjustment will be necessary to maintain the original settings.

## MAINTENANCE:

1. Regular Preventive Maintenance inspections are recommended.
2. Some conditions to watch for are:
a. Proper trip/reset tensions and slack within the trip cable.
b. Physical damage to the device.
c. Physical damage to the cable.
d. Frayed wiring.
e. Loose cable connections.
f. Any loose components.
g. Any worn components.
3. If other assistance is desired please contact the factory.

## Warning-Danger

These products should only be used where point-of operation guarding devices have been properly installed and maintained so that all appropriate OSHA and ANSI regulations and standards are met. Misapplication of these products on machinery lacking effective point-of-operation safeguards can cause serious injury to the operator of that machinery.


## OPERATING SPECIFICATIONS


$\mathrm{F}_{\mathrm{T}}=$ The value of force, along the cable, which trips the switch.
$\mathrm{F}_{\mathrm{O}}=$ The value of force, applied by the operator perpendicular to the cable, which trips the switch.
$\mathrm{S}_{\mathrm{D}}=$ The distance between the cable supports.
$\mathrm{S}_{\mathrm{T}}=$ The distance the cable is deflected at the time of tripping. * $\mathrm{S}_{\mathrm{T}}$ is in addition to any slack "droop" req'd for set-up.

| Catalog <br> Number | Contact Arrangement | Reset Style | Conduit Openings (H) | $\mathrm{F}_{\mathrm{T}}$ <br> Trip Force | $\mathrm{S}_{\mathrm{D}}=5 \mathrm{ft} . / 1.5 \mathrm{~m}$ |  | $\mathrm{S}_{\mathrm{D}}=10 \mathrm{ft} . / 3.0 \mathrm{~m}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | $\mathrm{F}_{\mathrm{O}}$ | $\mathrm{S}_{\text {T }}$ | $\mathrm{F}_{\mathrm{O}}$ | $\mathrm{S}_{\text {T }}$ |
| 04958-100 | 1 NO | Auto | $1 / 2 "$ NPT | $\frac{10 \mathrm{lbs} .}{4.5 \mathrm{~kg}}$ | $\frac{1.8 \mathrm{lb} .}{0.8 \mathrm{~kg}}$ | $\frac{3.0 \mathrm{in} .}{7.6 \mathrm{~cm}}$ | $\frac{1.2 \mathrm{lb} .}{0.5 \mathrm{~kg}}$ | $\frac{4.0 \mathrm{in} .}{10.2 \mathrm{~cm}}$ |
| 04958-150 | 1 NC |  |  |  |  |  |  |  |
| 04958-125 | 1 NO |  |  |  |  |  |  |  |
| 04958-175 | 1 NC |  |  | 2.3 kg | 0.4 kg | 6.4 cm | 0.3 kg | 7.1 cm |
| 04958-200 | 1 NO | Manual |  | $\frac{12 \mathrm{lbs} .}{5.4 \mathrm{~kg}}$ | $\frac{2.6 \mathrm{lb} .}{1.2 \mathrm{~kg}}$ | $\frac{3.4 \mathrm{in} .}{8.6 \mathrm{~cm}}$ | $\frac{1.4 \mathrm{lb} .}{0.6 \mathrm{~kg}}$ | $\frac{5.8 \mathrm{in} .}{17.3 \mathrm{~cm}}$ |
| 04958-250 | 1 NC |  |  |  |  |  |  |  |

UL listed (File E 58589);CSA certified (File LR 3648);
NEMA Ratings: AC = A 600; $\quad D C=N 150$
Operating Position: Can be mounted in any position.

These switches comply with UL-508; CSA-C 22.2 No. 14-M1987;
Temperature: $\quad$ Operating $=0^{\circ} \mathrm{C}$ to $+55^{\circ} \mathrm{C}\left(-32^{\circ} \mathrm{F}\right.$ to $\left.+131^{\circ} \mathrm{F}\right)$; Storage $=-40^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right.$ to $\left.+185^{\circ} \mathrm{F}\right)$

Mechanical Life Rating $=150,000$ operations

AVAILABLE ACCESSORIES:


