

# SERIES ZQ700

## Emergency Cable-Pull Switch



### Features & Benefits

- **Compact size** ... ideal for limited space applications.
- **Rugged, corrosion-resistant housing** ... tolerates hostile environments.
- **“Positive-break” NC contacts** ... assures circuit interruption upon pulling of trip-wire.
- **Push/pull operation** ... operates if trip-wire is pulled or goes slack.
- **Watertight design** ... meets up to IP67 environmental requirements.
- **Continuous E-stop protection satisfying EN ISO 13850** ... for supported spans up to 32.5 feet (10m).
- **Visual position indicator** ... for ease of installation.
- **Designed to meet the Performance Level requirements of EN ISO 13849-1 and Safety Control Categories of EN 954-1.**
- **Mounting accessories** ... ease and extend installation.

### Description

The ZQ700 is designed to provide continuous emergency stop control along exposed areas of machinery and conveyors which present hazards to operator/maintenance personnel. Unlike E-Stop pushbuttons, emergency cable-pull systems can be actuated at any point along the “trip wire”.

The unit features a double-break contact block offering two contact variations which change state when the cable is pulled or goes slack. Thus the switch can be actuated if an operator falls into, is pulled into, or leans on the trip wire.

The unit also features a position indicator for easier installation, and a button reset.

The ZQ700 is capable of spanning lengths of up to 10 meters. Its rugged, Thermoplastic housing and watertight design (up to IP67) make it ideal in hostile environments.

### Operation

When the trip-wire is pulled, the positive-opening NC contact(s) are forced to open via a direct mechanical linkage with the actuating shaft ... resulting in machine stoppage.

If the trip-wire goes slack (e.g. breaks or is cut) the NC contact(s) opens ... also resulting in equipment stoppage.

The integral reset mechanism assures that the equipment cannot be restarted until the cable-pull switch reset has been actuated.

### Typical Applications

The ZQ700 is ideal for replacing multiple, discrete E-stop pushbuttons or achieving a continuous, immediately accessible emergency stop ... especially where space is limited. Typical applications include conveyor lines, textile machinery, packaging machinery, and transfer lines.

### AVAILABLE STANDARD MODELS

| Part Number | Contacts |
|-------------|----------|
| ZQ 700-11   | 1NO/1NC  |
| ZQ 700-02   | 2NC      |

### AVAILABLE ACCESSORIES

| Part Number | Description                                    |
|-------------|--|
| STQ441-SC   | 5mm diameter steel cable, PVC coated           |
| STQ441-EB   | M10 eye bolt & hex nut                         |
| STQ441-CC   | Cable clamp                                    |
| STQ441-TB   | Turnbuckle                                     |
| STQ441-TH   | Thimble  |
| STQ441-PU   | Pulley assembly (for “cable cornering”)        |
| S900        | Cable-Pull Switch Wire tensioner, see page 111 |

For recommended installation instructions, please see page 106.

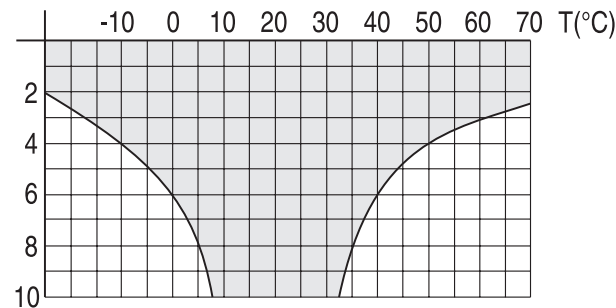
# ZQ700 TECHNICAL DATA

## MECHANICAL SPECIFICATIONS

|                         |                                      |                            |
|-------------------------|--------------------------------------|----------------------------|
| Housing                 | Fiberglass reinforced thermoplastic  |                            |
| Cover                   | Fiberglass reinforced thermoplastic  |                            |
| Degree of Protection    | IP67                                 |                            |
| Maximum Supported Span  | 32.5 feet (10m)                      |                            |
| Operating Temperature   | -13°F to +158°F (-25°C to +70°C)     |                            |
| Mechanical Life         | 1 million operations                 |                            |
| Conformity to Standards | CE<br>EN ISO 13850<br>EN ISO 13849-1 | EN 954-1<br>UL, CSA<br>TUV |

## ELECTRICAL SPECIFICATIONS

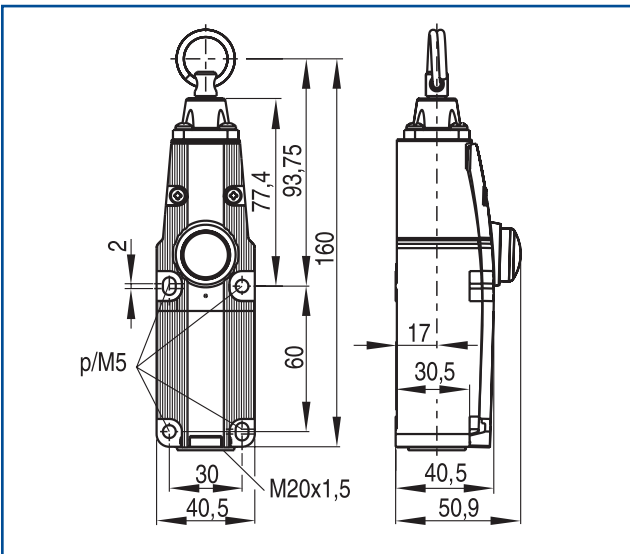
|                          |   |
|--------------------------|---|
| Contacts                 | Fine silver   |
| Contact Configuration    | Double-pole, double-break with electrically-separated contact bridges                     |
| Contact Rating           | 4A/230VAC 4A/24VDC  |
| Switching Action         | Snap-action, positive-break NC contacts with wire pull                                    |
| Short Circuit Protection | 6A (Slow blow)  |
| Rated Insulation Voltage | 500VAC  |
| Type Terminals           | Screw terminals with self-lifting clamps for up to 13 AWG flexible stranded wire (2.5mm²) |



l (m) Cable length vs. temperature range

At 2 to 5 m distance, intermediate wire supports are required, see accessories.

## DIMENSIONS



## SWITCHING DIAGRAMS & CONTACT SCHEMATICS

