



### Features & Benefits

- **Rugged, corrosion-resistant, die-cast aluminum housing ...** tolerates the most hostile environments.
- **“Positive-break” NC contact ...** assures circuit interruption upon pulling of trip wire.
- **Visual position indicator ...** for ease of installation.
- **Push/pull operation ...** actuates if trip-wire is pulled or goes slack.
- **Watertight design ...** meets IP65 requirements.
- **Continuous E-stop protection ...** for supported trip-wire spans up to 65 feet (20m).
- **Meets rigid safety agency standards ...** UL, CSA.
- **Low actuating force ...** operates with only 13.5 lbs of force. Ideal for short-run applications.
- **Explosion protected ...** optional IEC-rated explosion-proof models available.
- **Mounting accessories ...** ease and extend installation.

### Description

The ZS71 is designed to provide continuous emergency stop along exposed areas of machinery and conveyors which present hazards to operators/maintenance personnel. Unlike E-stop pushbuttons, emergency-stop cable-pull systems can be actuated at any point along the “trip-wire.”

The unit features a positive-opening NC contact which is forced open when the trip-wire is pulled. This design also assures actuation if the operator falls into, leans on, or is pushed against the trip-wire.

In addition, the switch is designed to operate if the trip wire is cut or goes slack.

Their rugged metal housing, small size and watertight design (IP65) make them ideal for use in hostile environments where space is limited.

### Operation

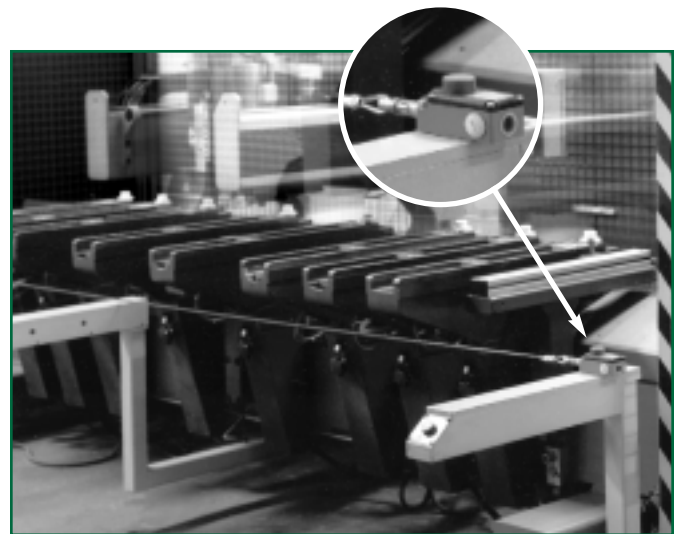
The ZS71 features an axial actuating shaft and a double-pole contact block with either 1 NO & 1 NC or 2 NC contacts (with trip-wire attached). When installed, the trip-wire is pulled out 5 mm, closing the open contact.

When the trip-wire is pulled, the positive-break NC contact is forced open via a direct mechanical linkage with the actuating shaft. If the trip-wire goes slack (e.g. breaks or is cut) the NO contact, closed during pre-tensioning, opens – resulting in equipment stoppage.

Manual (key or pushbutton) reset mechanisms assure the equipment cannot be restarted until the reset is actuated.

### Typical Applications

The ZS71 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, turret lathes, and transfer lines.



# ZS71 AVAILABLE MODELS AND ACCESSORIES

## AVAILABLE STANDARD MODELS

Part Number	Contact Configuration	Type Reset	Pre-Tensioned Force	Typical Actuating Force (F)	Maximum Cable Length
ZS71-10/1S WVDA-55N*	1 NO & 1 NC	Pushbutton	12.5 lbs (55N)	1.4 lbs (6N)	32.5 ft (10m)
ZS71-10/1S WVDA*	1 NO & 1 NC	Pushbutton	45.5 lbs (200N)	6 lbs (25N)	65 ft (20m)
ZS71-10/1S WVSA-55N*	1 NO & 1 NC	Key	12.5 lbs (55N)	1.4 lbs (6N)	32.5 ft (10m)
ZS71-10/1S WVSA*	1 NO & 1 NC	Key	45.5 lbs (200N)	6 lbs (25N)	65 ft (20m)
ZS71-20 WVDA-55N	2 NC	Pushbutton	12.5 lbs (55N)	1.4 lbs (6N)	32.5 ft (10m)
ZS71-20 WVDA	2 NC	Pushbutton	45.5 lbs (200N)	6 lbs (25N)	65 ft (20m)
ZS71-20 WVSA-55N	2 NC	Key	12.5 lbs (55N)	1.4 lbs (6N)	32.5 ft (10m)
ZS71-20 WVSA	2 NC	Key	45.5 lbs (200N)	6 lbs (25N)	65 ft (20m)

\*Available in an IEC-rated explosion-proof design. To order, add suffix "-EX" to part number.

## AVAILABLE ACCESSORIES

Part Number	Description
PL-PG13.5-24V	24V Pilot light kit
PL-PG13.5-120V	120V Pilot light kit
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")

For recommended installation instructions, please see page 109.

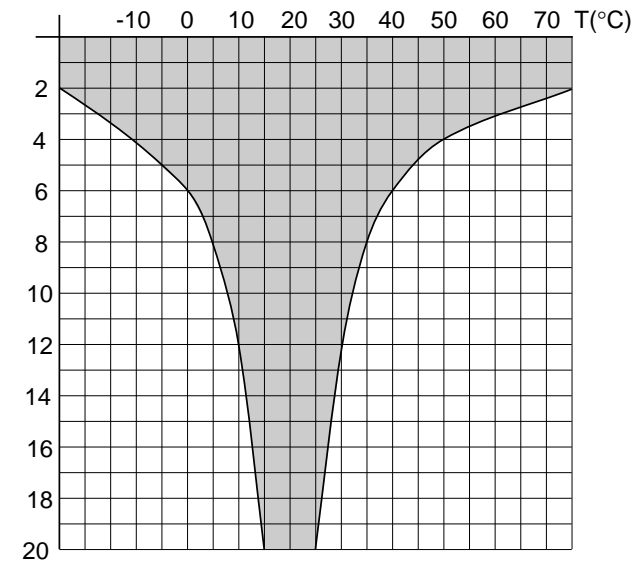
# ZS71 TECHNICAL DATA

## MECHANICAL SPECIFICATIONS

<b>Housing</b>	Die-cast aluminum with fiberglass-reinforced thermoplastic cover
<b>Degree of Protection</b>	IP65
<b>Maximum Supported Span</b>	65 feet (20m)
<b>Operating Temperature</b>	-13°F to +158°F (-25°C to +70°C)
<b>Mechanical Life</b>	1 million operations
<b>Conformity to Standards</b>	EN418, UL, CSA
<b>Minimum Cable Tension</b>	6.7 lbs. (30N)
<b>Typical Deflection (S) Required for Operation</b>	4.4" (11cm)

## ELECTRICAL SPECIFICATIONS

<b>Contacts</b>	Fine silver
<b>Contact Configuration</b>	1 NO & 1 NC or 2 NC double-pole, double-break with electrically-separated contact bridges
<b>Contact Rating</b>	6A/400VAC
<b>Switching Action</b>	Slow-action, positive-break NC contacts (with wire pulling). Snap-action NO contact.
<b>Short Circuit Protection</b>	6A (external)
<b>Type Terminals</b>	Screw terminals with clamping washers



l (m) Cable length vs. temperature range

