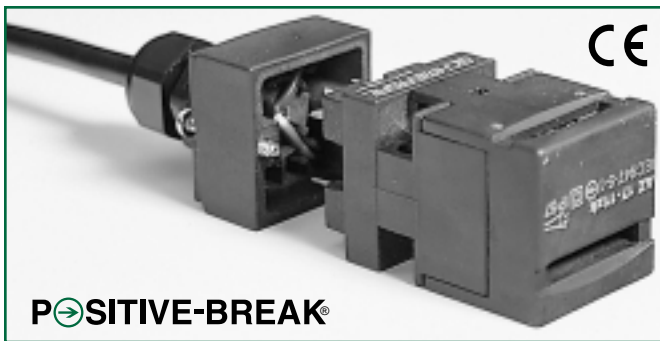


# SERIES AZ17zi

## Individually-Coded Movable Machine Guard Safety Interlock Switch



**POSITIVE-BREAK®**



**INDIVIDUALLY-CODED  
ACTUATOR KEYS  
(15,000 CODES)**

### Description

The compact Series AZ17zi are designed for use with movable machine guards which must be closed for operator safety. Their tamper-resistant design, and positive-opening NC contacts, provide a significantly higher level of safety than conventional spring-driven switches whose contacts can weld/stick shut. Their IP67 rating makes them ideal for interlocking safety guards in hostile environments.

### Operation

The AZ17zi is a two-piece, electromechanical safety interlock switch. It consists of a rugged switch mechanism and an individually-coded, geometrically-unique actuating key. The key must be directly hard-mounted to the movable guard. Upon opening of the guard, the normally-closed (NC) contact(s) are forced to open through a direct (non-resilient) mechanical linkage with the actuating key. The positive-break NC contacts assure circuit interruption (and machine stoppage) upon removal of the actuator key. (The NO contacts close upon key removal.)

When the guard is closed, the actuating key forces the NC contacts to re-close, and any NO contacts to re-open. The tamper-resistant design prevents bypassing with simple tools, bent wires or other readily available means.

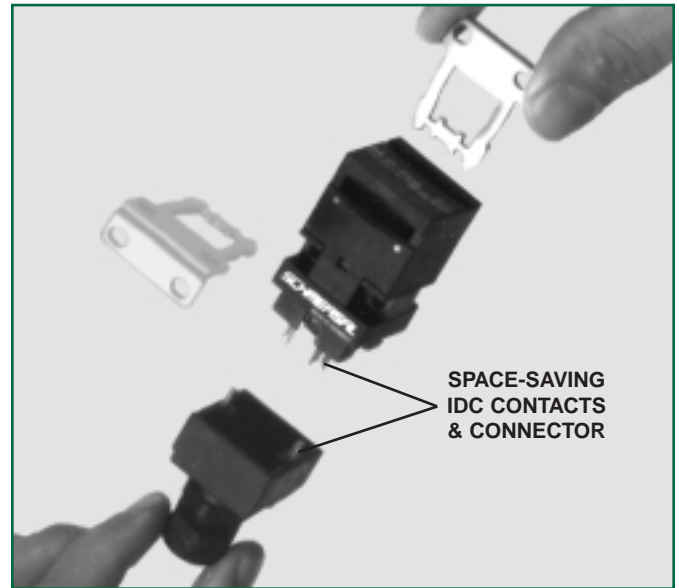
### Typical Applications



The AZ17zi is intended for use as a safety interlock on movable machine guards which, when open, expose the operator/maintenance personnel to machine hazards. Typical applications are the interlocking of protective gratings, hinged covers, access panels and other movable guards.

### Features & Benefits

- **Highly tamper-resistant actuating mechanism** ... difficult to defeat with simple tools, tape, bent wires, etc. Reduces liability exposure.
- **Individually-coded actuator key (15,000 codes)** ... provides extra security in high-risk applications.
- **Compact design** ... only 1 1/4" x 1 1/4" x 3". Ideal where space is limited.
- **Non-removable actuating head** ... heightens tamper-resistance.
- **Four optional key entry locations** ... provide installation flexibility.
- **"Positive-Break" NC contacts** ... assure circuit interruption upon actuator key removal.
- **Watertight design** ... meets IP67 washdown requirements.
- **High-strength, stainless-steel actuator key** ... tolerates mechanical abuse without damage.
- **Rugged, corrosion-resistant housing** ... tolerates the most hostile environments.
- **Wide selection of accessories** ... to meet diverse application requirements.
- **Padlockable key** ... for added security during equipment maintenance.
- **Meets rigid safety agency standards** ... BG, UL and CSA.



# AZ17zi AVAILABLE MODELS AND ACCESSORIES

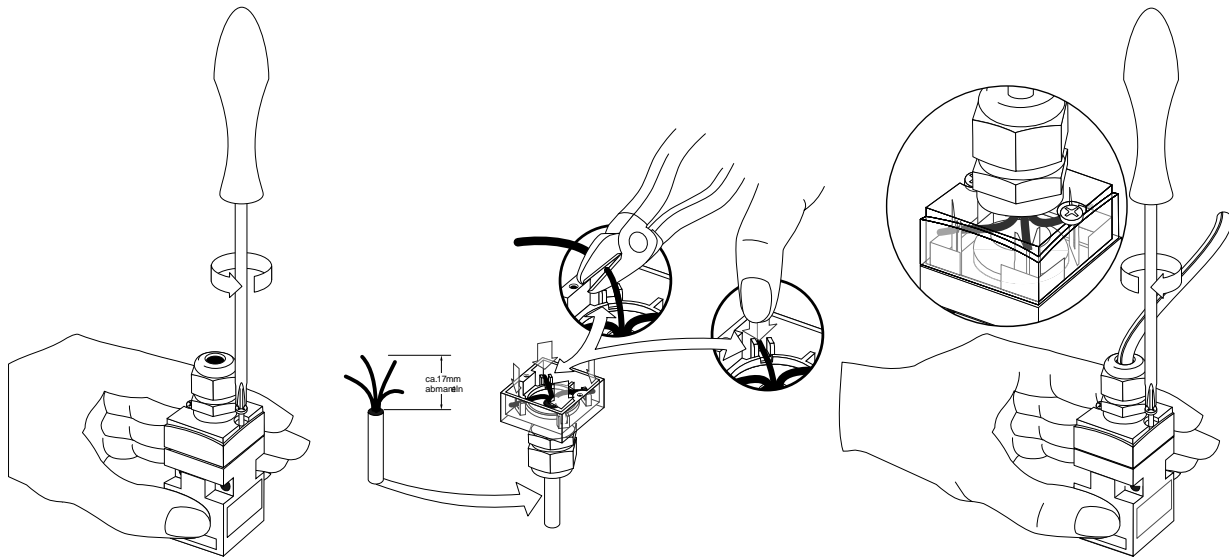
## AVAILABLE MODELS (Includes Individually-Coded Actuator Key and 1/2" NPT Plastic Adapter)

Part Number	Description	Contacts (with actuator key inserted)
AZ17-11zi-B1	Standard unit	1 NO & 1 NC
AZ17-11zi-B5		
AZ17-11zi-B6R		
AZ17-11zi-B6L		
AZ17-02zi-B1	Standard unit	2 NC
AZ17-02zi-B5		
AZ17-02zi-B6R		
AZ17-02zi-B6L		

## OPTIONAL ACCESSORIES

Part Number	Description
MS AZ 17	Adjustable mounting kit (Eases installation and facilitates adjustment due to guard misalignment)

Note: Standard units feature 1.2 pounds of key retention force. For unit with 7 pounds of key retention force, please add suffix "r" to part number. Example: AZ17-11zir-B1



AZi  
**15000**  
CODES

# AZ17zi TECHNICAL DATA

## MECHANICAL SPECIFICATIONS

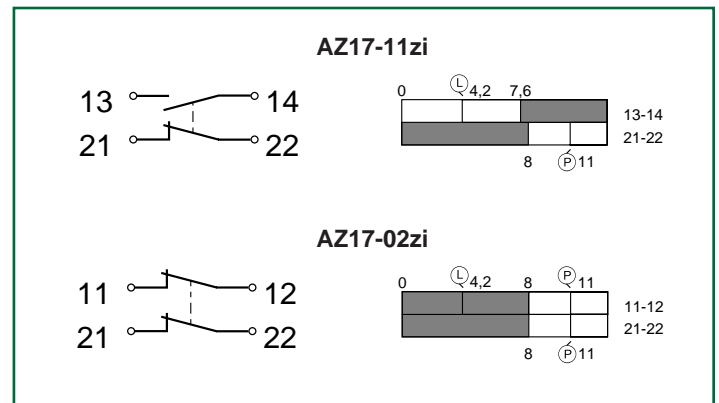
<b>Housing</b>	Glass-fibre reinforced, self-extinguishing thermoplastic
<b>Actuator Key</b>	Stainless steel, 1.4301
<b>Degree of Protection</b>	IP67
<b>Key Retention Force</b>	zi models: 1.2 pounds zir models: 7 pounds
<b>Travel for Positive-Break</b>	8 mm (0.315 inches)
<b>Closing Force</b>	Approx. 12N (2.7 pounds)
<b>Operating Temperature</b>	-22°F to +175°F
<b>Mechanical Life</b>	> 10 <sup>6</sup> operations
<b>Conformity to Standards</b>	IEC 947-5-1 EN 60947-5-1 DIN VDE 0660-200 BG-GS-ET, pr EN 1088 UL & CSA
<b>Minimum Closing Radius</b>	1.97" (with B6L or B6R actuator key) 7.87" (with B1 or B5 actuator key)

## ELECTRICAL SPECIFICATIONS

<b>Contacts</b>	Fine silver
<b>Contact Configuration</b>	Double-pole, double-break with electrically separated contact bridges
<b>Contact Rating</b>	4A/230VAC
<b>Switching Action</b>	Slow-action, positive-break NC contacts
<b>Short Circuit Protection</b>	6A (time-delay)
<b>Rated Isolation Voltage</b>	250V
<b>Type Terminals</b>	Insulation displacement contacts & connector for 18AWG flexible stranded wire (0.75 mm <sup>2</sup> )

**Note:** Pre-wired (5 meter length) cable entry models available. See optional accessories.

## SWITCHING DIAGRAMS & CONTACT SCHEMATICS



## MS AZ 17 ADJUSTABLE MOUNTING KIT

