



### Features & Benefits

- **Tamper-resistant** ... geometrically-matched mating actuator prevents bypassing.
- **“Positive-break” NC contacts** ... ensure circuit interruption upon only 14° of guard displacement.
- **Watertight design** ... meets IP67 washdown and immersion requirements.
- **Rugged, corrosion-resistant housing** ... tolerates the most hostile environments.
- **Meets rigid safety agency standards** ... IEC and BG.
- **Flat design** ... permits opening of hinged guard 180°.

### AVAILABLE STANDARD MODELS

Part Number	Contacts (Guard Closed)	Description*
TV8S-521-11/11Z	2 NO & 2 NC	Two-piece hinged safety interlock switch with two contact blocks, each having 1 NO & 1 NC contact
TV8S-521-02/20Z	2 NO & 2 NC	Two-piece hinged safety interlock switch with one contact block having 2 NO contacts and one contact block having 2 NC contacts

**Note:** The TV8S-521 models consist of a base unit, universal shaft assembly and a fixed hinge block. Please consult factory for assistance in ordering.

\* Please see switch travel diagrams for operating characteristics.

### Description

The TV8S-521 Series are designed for use with hinged movable machine guards which must be closed for operator safety. Their flat design permits opening the door 180°. Their tamper-resistant design and positive-opening NC contacts provide a significantly higher level of safety than conventional, spring-driven limit switches often used to monitor hinged-guard position. Their IP67 rating make them ideal for interlocking safety guards in hostile environments.

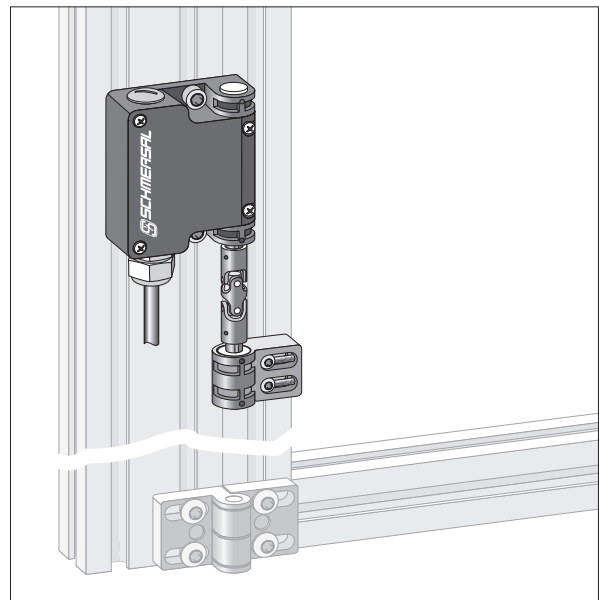
### Operation

The TV8S-521 is a two-piece, electromechanical safety interlock switch which is designed to mount to a hinged machine guard. After opening the guard only 6°, the unit's normally-closed contacts are forced to open by a direct (non-resilient) actuating mechanism ... achieving positive-break at 14°. These positive-break contacts ensure circuit interruption (and machine stoppage).

### Typical Applications



The TV8S-521 Series is intended for use as a safety interlock switch on hinged, movable machine guards which, when open, expose operator/maintenance personnel to machine hazards. Their sealed design (IP67) and oil-tolerant seals make them ideal for use in hostile environments.



# TV8S-521 TECHNICAL DATA

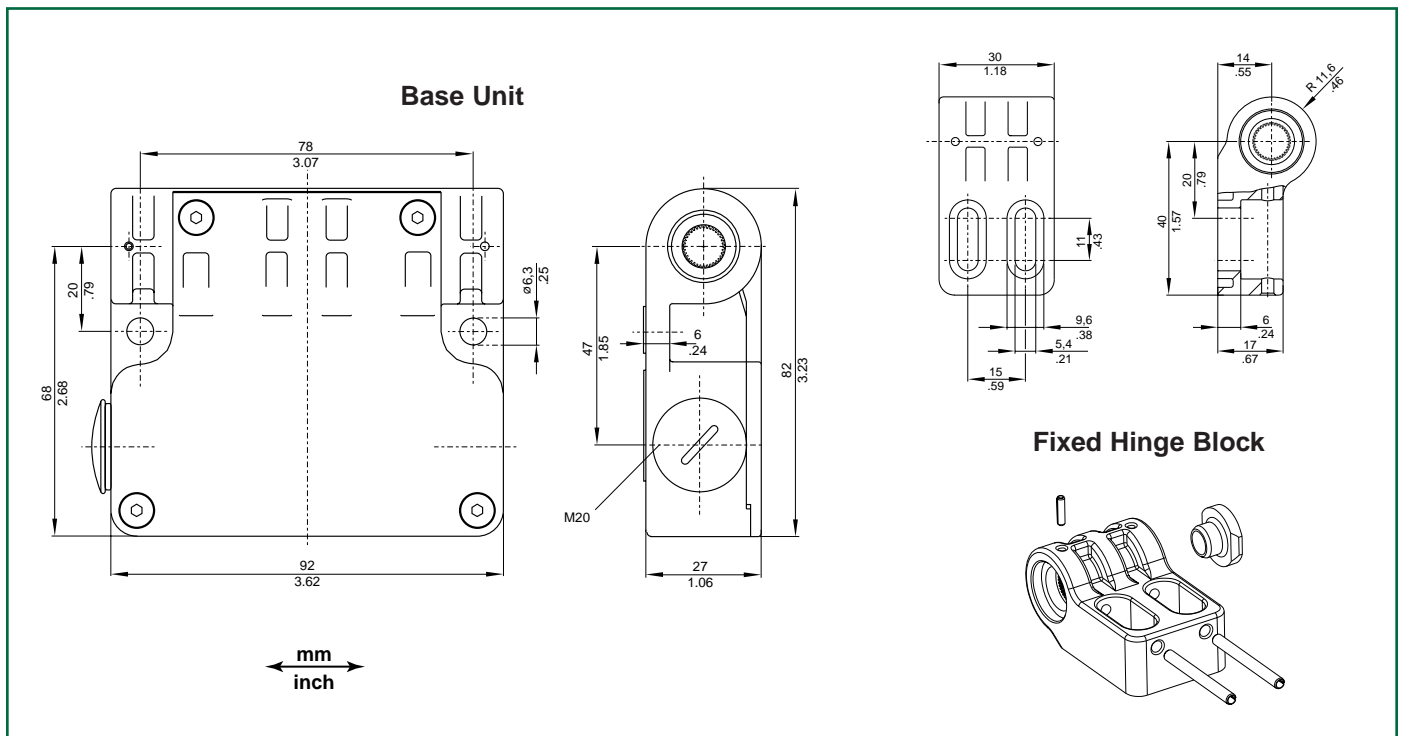
## MECHANICAL SPECIFICATIONS

<b>Housing</b>	Diecast zinc, enamel finish
<b>Displacement Angle for Contact Opening</b>	6°
<b>Degree of Protection</b>	IP67
<b>Operating Temperature</b>	-13°F to +158°F
<b>Mechanical Life</b>	>106 operations
<b>Conformity to Standards</b>	EN 1088 EN 60947-5-1 DIN VDE 0660-200 BG-GS-ET15 UL & CSA
<b>Displacement angle for positive-break</b>	14°

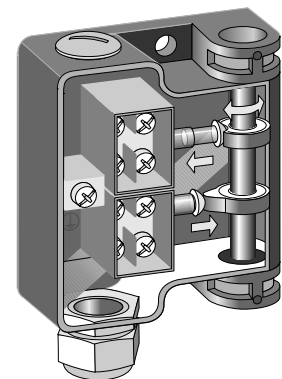
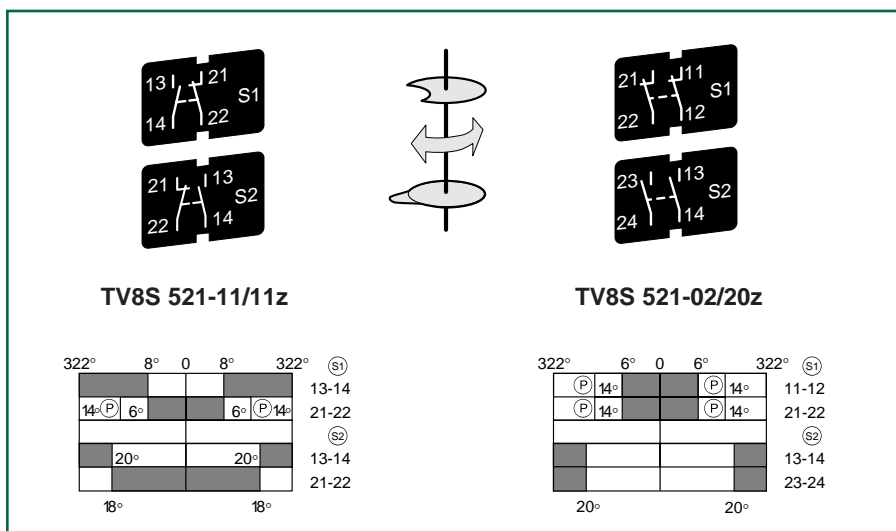
## ELECTRICAL SPECIFICATIONS

<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>	Fuse 6A (Slow-blow)
<b>Rated Insulation Voltage</b>	250VAC
<b>Rated Impulse Withstand Voltage</b>	4kV
<b>Electrical Connections</b>	Screw terminals, maximum (13AWG wiring including conductor ferrules)

## DIMENSIONS



## SWITCHING DIAGRAMS & CONTACT SCHEMATICS



Base Unit