

# T2007

## Miniature Tongue-Operated Safety Interlock Switch

- **Miniature size**—The smallest tongue-actuated safety interlock switch available. Ideal for smaller machines with space restrictions. Fits on 1 in. square tubing.
- **NEMA 6 enclosure**—Enables the T2007 with conduit entry or connector to withstand water washdown cleaning.
- **Rotatable head**—Gives 8 possible actuator entry points for versatile installation. A blanking plug is supplied for the unused entry.
- **Small swing radius**—Allows use on doors with a swing radius as small as 2.5 in. when using the flex actuator with stainless steel guide.
- **Long life**—The T2007 with its stainless steel actuators and optional stainless steel guide is designed for one million actuations.
- **Safety switch conformity**—By including the safety-related functions of force-guided contacts and a tamper-resistant mechanism, the T2007 conforms to the European safety standards indicated here.
- **A Rapid Delivery Product:** Select models are available for shipment today or within 3 to 5 days



Conforms to EN1088, EN292,  
EN60947-5-1, EN60204-1  
UL and C-UL listed

## Specifications

| Electrical                               | All Models                                                                                                               | T2007-02TM<br>T2007-02SM | T2007-11TM<br>T2007-11SM |
|------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|
| Contact Configurations:                  |                                                                                                                          | 2 N/C                    | 1 N/C + 1 N/O            |
| Safety Contacts:                         |                                                                                                                          | 2 N/C positive break     | 1 N/C positive break     |
| Switching Ability                        | AC: 500 V–1 A, 250 V–2 A, 100 V–5 A<br>DC: 250 V–0.5 A, 24 V–2 A                                                         |                          |                          |
| Safety Contact Gap:                      | > 2 mm (0.079 in.)                                                                                                       |                          |                          |
| Auxiliary Contacts:                      | 1 N/O                                                                                                                    |                          |                          |
| Max Switching Current/Volt/Amp:          | 500 V/500 VA                                                                                                             |                          |                          |
| Minimum Current:                         | 5 V 5 mA DC                                                                                                              |                          |                          |
| Electrical Life:                         | 1 x 106 minimum                                                                                                          |                          |                          |
| Mechanical                               |                                                                                                                          |                          |                          |
| Mounting:                                | Any position                                                                                                             |                          |                          |
| Mounting Hardware:                       | 2 x M4 screws                                                                                                            |                          |                          |
| Actuator Travel for Positive Opening:    | 3.6 mm (0.142 in.)                                                                                                       |                          |                          |
| Min Operating Radius with Flex Actuator: | 60 mm (2.36 in.)                                                                                                         |                          |                          |
| Break Contact Min Force:                 | 6 N (1.35 lb.)                                                                                                           |                          |                          |
| Max Actuation Speed:                     | 160 mm/sec (6.30 in./sec)                                                                                                |                          |                          |
| Max Actuation Frequency:                 | 2 cycles/sec                                                                                                             |                          |                          |
| Case Material:                           | UL listed, glass-filled polyester                                                                                        |                          |                          |
| Actuator Material:                       | Stainless steel                                                                                                          |                          |                          |
| Wiring Entry:                            | 1 x M16 conduit with 0.5 in. NPT adapter; or Brad Harrison connector (Micro-Change, 8R Series, 4-pole male, M12 threads) |                          |                          |
| Weight:                                  | 60 g (2.1 oz.)                                                                                                           |                          |                          |
| Color:                                   | Red                                                                                                                      |                          |                          |
| Mechanical Life:                         | 1 x 106 minimum                                                                                                          |                          |                          |
| Environmental                            |                                                                                                                          |                          |                          |
| Protection:                              | IP67 (NEMA 6)                                                                                                            |                          |                          |
| Operating Temperature:                   | -20 to 80°C (-4 to 176°F)                                                                                                |                          |                          |
| Cleaning:                                | Water washdown                                                                                                           |                          |                          |
| Compliance                               |                                                                                                                          |                          |                          |
| Standards:                               | EN1088, EN292, EN60947-5, EN60204-1                                                                                      |                          |                          |
| Approvals/Listings:                      | CE marked for all applicable directives, UL and C-UL                                                                     |                          |                          |
| Reliability Data                         |                                                                                                                          |                          |                          |
| Standards:                               | B10d: 2.00E+06                                                                                                           |                          |                          |

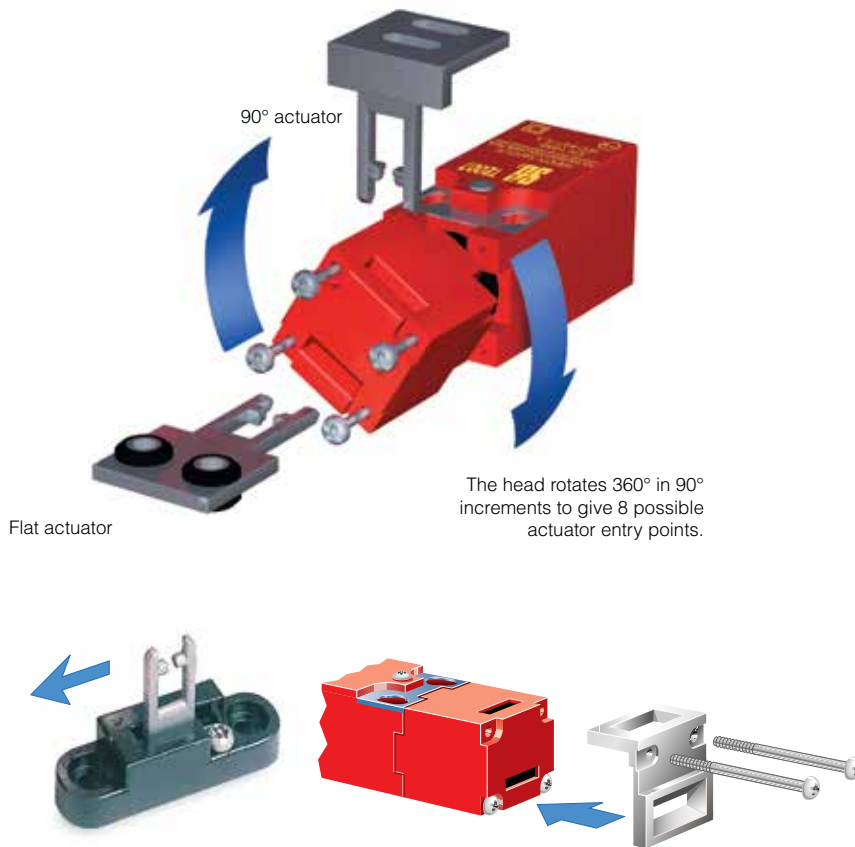
Specifications are subject to change without notice.

Note: The safety contacts of the STI switches are described as normally closed (N/C)—i.e., with the guard closed, actuator in place, and the machine able to be started.

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## Operation



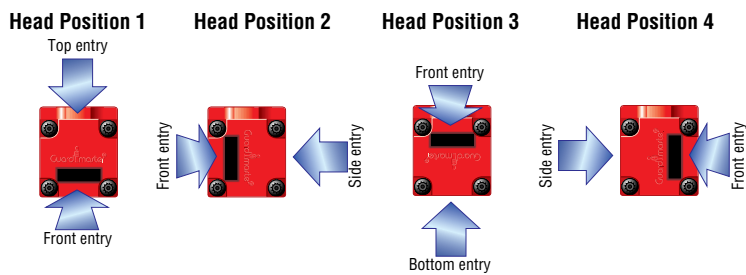
### Flex Actuator

10° flexibility in one direction.

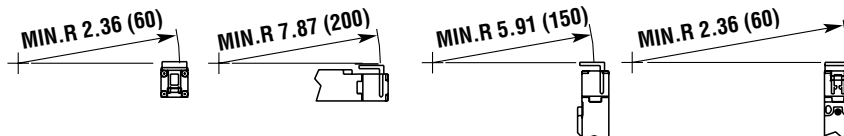
### Optional Kit

Optional kit consists of the flex actuator and the stainless steel guide.

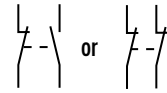
## 8 possible actuator entry points



### Minimum Operating Radius Front-Entry Using Flex Actuator With Stainless Steel Guide



## Contact Arrangements

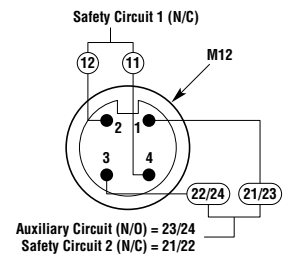


Actuator withdrawal distance from full insertion

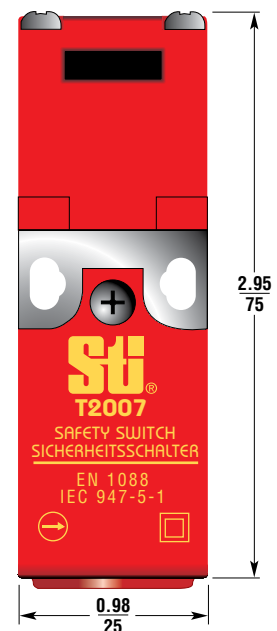


## Connector Configurations

4-pin micro DC (M12) male connector



## Actual Size

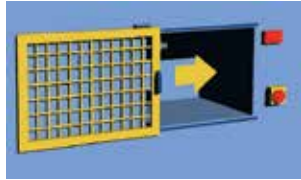


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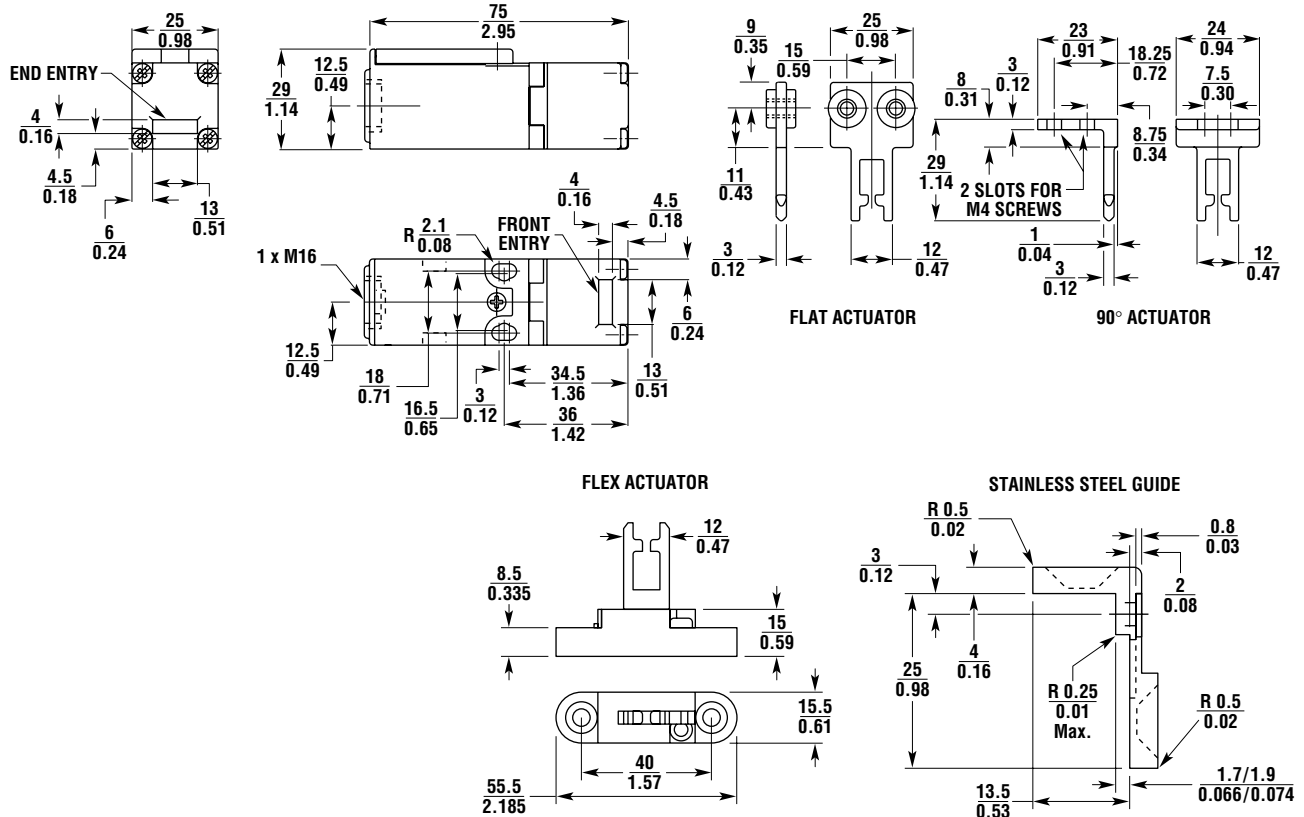
## Applications

Typical applications are on sliding guard doors or swinging guard doors with a 6 in. minimum swing radius.



## Dimensions

(mm/in.)



## Ordering

| Model                                    | Contacts      | Wiring Entry             | Part No.   |
|------------------------------------------|---------------|--------------------------|------------|
| T2007-11TM (Flat actuator)               | 1 N/C + 1 N/O | 1 x M16 with NPT adapter | 44521-1020 |
| T2007-11TC (Flat actuator)               | 1 N/C + 1 N/O | connector + 5 m cable    | 44521-1022 |
| T2007-11F1 (Flex actuator with SS guide) | 1 N/C + 1 N/O | 1 x M16 with NPT adapter | 44521-1027 |
| T2007-11SM (90° actuator)                | 1 N/C + 1 N/O | 1 x M16 with NPT adapter | 44521-1040 |
| T2007-11SC (90° actuator)                | 1 N/C + 1 N/O | connector + 5 m cable    | 44521-1042 |
| T2007-02TM (Flat actuator)               | 2 N/C         | 1 x M16 with NPT adapter | 44521-1050 |
| T2007-02TC (Flat actuator)               | 2 N/C         | connector + 5 m cable    | 44521-1052 |
| T2007-02F1 (Flex actuator with SS guide) | 2 N/C         | 1 x M16 with NPT adapter | 44521-1057 |
| T2007-02SM (90° actuator)                | 2 N/C         | 1 x M16 with NPT adapter | 44521-1060 |
| T2007-02SC (90° actuator)                | 2 N/C         | connector + 5 m cable    | 44521-1062 |
| Spare flat actuator                      |               |                          | 44513-0710 |
| Spare 90° actuator                       |               |                          | 44513-0700 |
| Flex actuator with stainless steel guide |               |                          | 44513-0730 |
| Spare M16 to 0.5 in. NPT adapter         |               |                          | 44512-0300 |
| M16 cord grip                            |               |                          | 44512-0080 |



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For information on Accessories, see page G-209.

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