Heavy-Duty Metal-Body Safety Interlock Switch

- Rugged enclosure—the all metal housing and stainless steel actuator of the T4016 makes it suitable for harsh environments
- NEMA 6/IP67 enclosure enables these switches to withstand water washdown cleaning.
- Rotatable head gives eight possible actuator entry points for versatile installation. A blanking plug is supplied for the unused entry
- Long life—these switches, with their stainless steel actuators, are designed for a minimum of two million actuations
- A variety of 4 contact pole versions provides 2 poles for dual channel safety monitoring and 2 additional poles for status monitoring
- A Rapid Delivery Product: Select models are available for shipment today or within 3 to 5 days



Conforms to EN60947-5-1, EN1088, EN ISO 13849-1
UL and C-UL listed
DGUV approved

G

Specifications

Electrical	All Models		
Contact Configurations:	2 N/C + 2 N/O, 3 N/C + 1 N/O, 4 N/C		
Safety Contacts:	2 N/C, 3 N/C or 4 N/C positive break		
Switching Ability	AC: 230 V, 4 A		
	DC: 24 V, 4 A		
Contact Material:	Silver alloy, gold flashed		
Auxiliary Contacts:	1 N/O, 2 N/O		
Minimum Switching Voltage:	12 V at 10 mA		
Minimum Switching Current:	1 mA at 24 V		
Mechanical			
Mounting:	Any position		
Mounting Hardware:	2 x M5 screws (not supplied)		
Min Operating Radius:	Approximately 300 mm (12 in.) with 90-degree actuator		
Break Contact Min Force:	50 N (11.2 lb.)		
Max Actuation Speed:	20 m/min.		
Max Actuation Frequency:	112 cycles/min.		
Case Material:	Die-cast alloy, cathodically dipped		
Actuator Material:	Stainless steel		
Wiring Entry:	3 x 0.5 in. NPT		
Weight:	400 g (14 oz.)		
Color:	Black with red lid		
Mechanical Life:	2 x 10 ⁶ operations		
Environmental			
Protection:	IP67 (NEMA 6)		
Operating Temperature:	-20 to 80°C (-4 to 176°F)		
Cleaning:	Water washdown		
Compliance			
Standards:	EN60947-5-1, EN1088, EN ISO 13849-1		
Approvals/Listings:	CE marked for all applicable directives, UL and C-UL, DGUV		
Reliability Data			
per EN ISO 13849-1:	B10d: 4.50E+06		

Specifications are subject to change without notice.

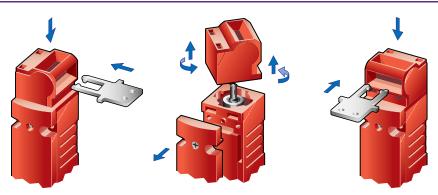
Note: The safety contacts of the STI switches are described as normally closed (N/C)—i.e., with the guard closed, actuator in place, and the machine able to be started.







Operation



Contact Arrangements

Flat Actuator

Flexible rubber mounting bushings allow for some actuator flexibility.

90-Degree Actuator

Flexible rubber mounting bushings allow for some actuator flexibility.



Flexible 1 Actuator

15 degree flexibility may be adjusted with the set screw.



Flexible 2 Actuator

15 degree flexibility may be adjusted with the set screw.



Optional Slide Bolt

- Allows easy installation of switch on machine guards
- Actuator included (order switch separately)
- Integral handle included
- Robust for use with heavy doors
- Slotted hole in bolt permits attaching multiple padlocks
- Yellow color for easy recognition



Optional SLD Series

Optional switch locking devices are available. See accessories section for details.



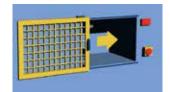




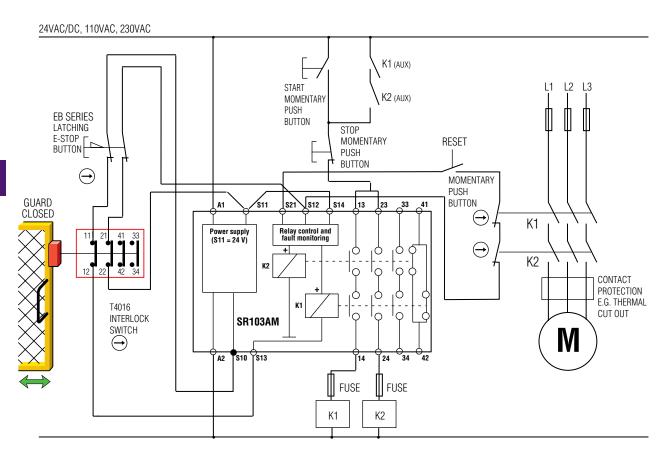


Applications

Typical applications are on sliding guard doors or swinging guard doors.









For a full explanation of the circuit operating principle and fault detection, see "Common Circuit Examples" in the Expert Area Section of this catalog on page G-103



Visit this product on www.sti.com for details.



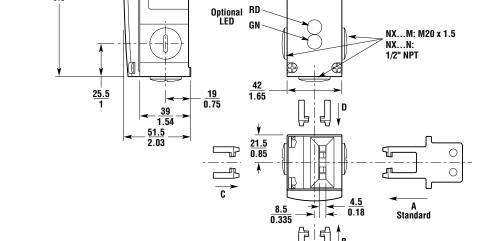
G-178



Dimensions (mm/in.)

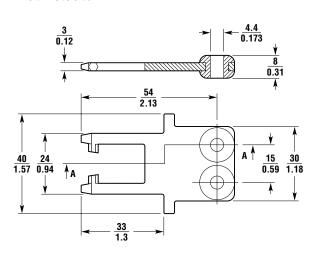
T4016 **Insertion Depth** Actuator Insertion Depth s Approach Radius R Insertion Depth Standard 32 (1.26) + 1 (0.04) > 300 (11.81) 4.5 0.18 Travel 32 (1.26) + 8 (0.31) > 440 (17.32) **Order Actuator Separately** <u>58.5</u> 2.303 1.81

30 1.18



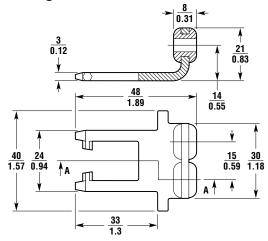
Flat Actuator

160 6.3



90-degree Actuator

For M5 > 45 mm ISO 1207 (DIN 84) ISO 4762 (DIN 912)









Ordering

Model	Contacts	Wiring Entry	Part No.
T4019 90-Degree Actuator			
T4016-031SM	3 N/C + 1 N/O	3 X 0.5 in. NPT conduit	44539-0010
T4016-022SM	2 N/C + 2 N/O	3 X 0.5 in. NPT conduit	44539-0020
T4016-040SM	4 N/C	3 X 0.5 in. NPT conduit	44539-0030
T4016 Flat Actuator			
T4016-031TM	3 N/C + 1 N/O	3 X 0.5 in. NPT conduit	44539-0110
T4016-022TM	2 N/C + 2 N/O	3 X 0.5 in. NPT conduit	44539-0120
T4016-040TM	4 N/C	3 X 0.5 in. NPT conduit	44539-0130
T4016 Flex 1 Actuator			
T4016-031F1M	3 N/C + 1 N/O	3 X 0.5 in. NPT conduit	44539-0210
T4016-022F1M	2 N/C + 2 N/O	3 X 0.5 in. NPT conduit	44539-0220
T4016-040F1M	4 N/C	3 X 0.5 in. NPT conduit	44539-0230
T4016 Flex 2 Actuator			
T4016-031F2M	3 N/C + 1 N/O	3 X 0.5 in. NPT conduit	44539-0310
T4016-022F2M	2 N/C + 2 N/O	3 X 0.5 in. NPT conduit	44539-0320
T4016-040F2M	4 N/C	3 X 0.5 in. NPT conduit	44539-0330
Switch Only Models (no actuator and no adapter included)			
T4016-031	3 N/C + 1 N/O	3 X 0.5 in. NPT conduit	44539-2010
T4016-022	2 N/C + 2 N/O	3 X 0.5 in. NPT conduit	44539-2020
T4016-040	4 N/C	3 X 0.5 in. NPT conduit	44539-2030
Accessories			
Standard Actuators with Rubber Bushing			
Replacement flat actuator RB for T4016			44535-0700
Replacement 90-degree actuator RB for T4016			44535-0710
Overtravel Actuators with Rubber Bushing			
Replacement flat actuator OTRB for T4016			44535-0720
Replacement 90-degree actuator OTRB for T4016			44535-0730
Flexible Actuators			
Replacement flex 1 actuator for T4016			44535-0750
Replacement flex 2 actuator for T4016			44535-0760
Slide Bolts			
Bracket with handle for right-hung door for T4016 (yellow)			44535-8000
Bracket with handle for left-hung door for T4016 (yellow)			44535-8010
Miscellaneous			
LED lid kit for T4016			44539-0790







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