

# TF3 Series Mid Size Snap-acting Switches (Full Disconnection - Gap >3 mm)



## Features/Benefits

- Broad range of operating forces
- Ratings up to 25 AMPS
- Wide variety of actuator styles
- Quick connect terminations
- Extreme operating temperature up to 125°C

## Typical Applications

- Heavy duty power tools
- Motor controls
- HVAC

UL61058-1



## Specifications

CONTACT RATING: From 10A to 25A @ 125/250 V AC  
 ELECTRICAL LIFE: 10,000 cycles  
 MECHANICAL LIFE: 500,000 cycles  
 INSULATION RESISTANCE: 100 M ohm min.  
 DIELECTRIC STRENGTH: 1,500 Vrms min. @ sea level  
 OPERATING TEMPERATURE: -40°C to 125°C  
 OPERATING FORCE: Refer to chart for lever style forces  
 MOUNTING: Torque screws 2-5 in/lbs.

## Materials

SWITCH HOUSING: PBT  
 COVER: PBT  
 ACTUATOR BUTTON: Nylon  
 SPRING: SWP  
 PIVOT: Copper  
 MOVABLE CONTACTS: Silver Alloy  
 MOVABLE BLADE: Copper Alloy  
 STATIONARY CONTACTS: Silver Alloy  
 TERMINALS: Copper

## Build-A-Switch

To order, simply select desired option from each category and place in the appropriate box. For additional options not shown in catalog, consult Customer Service Center.



### Series

**TF3** SP, Mom.

### Electrical Rating

**10** 10.1A 125/250 VAC  
**16** 16A 125/250 VAC  
**20** 20.1A 125/250 VAC  
**25** 25A 125/250 VAC

### Operating Force

OPTION CODE	OPERATING FORCE
<b>CF</b>	Refer to operating force table
<b>CG</b>	
<b>CJ</b>	
<b>EC</b>	
<b>EE</b>	
<b>EK</b>	

### Actuator

**P00** Pin plunger  
**T10** Lever 14 mm  
**T15** Lever 27.5 mm  
**T30** Lever 51.3 mm  
**T24** Simulated roller 24.5 mm  
**A10** Lever roller 12.5 mm  
**A15** Lever roller 25.9 mm

### Circuitry

**Y** SPST N.O.

### Terminations

**40** .187" quick connect  
**4A** .250" quick connect

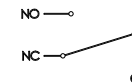
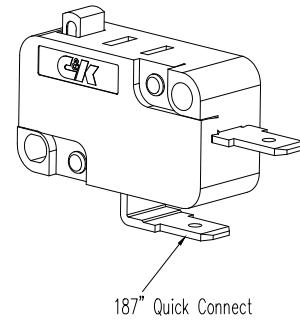
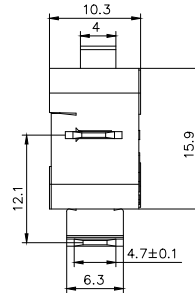
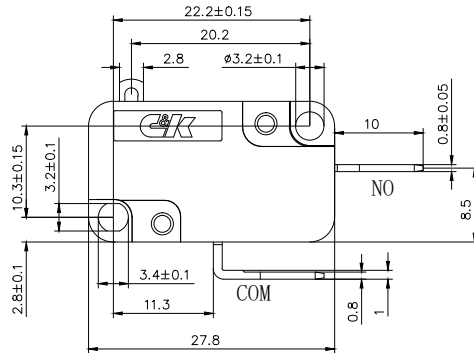
Snap-acting



# TF3 Series Mid Size Snap-acting Switches (Full Disconnection - Gap >3 mm)

## SERIES

**TF3** MID SIZE SNAP-ACTING SWITCHES (FULL DISCONNECTION)



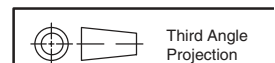
Circuit Diagram

## ELECTRICAL RATING

OPTION CODE	RoHS COMPLIANT	RoHS COMPATIBLE	ELECTRICAL RATING
<b>10</b>	Yes	Yes	10.1A @ 125/250 V AC
<b>16</b>	Yes	Yes	16A @ 125/250 V AC
<b>20</b>	Yes	Yes	20A @ 125/250 V AC
<b>25</b>	Yes	Yes	25A @ 125/250 V AC

## OPERATING FORCE WITH ASSOCIATED ACTUATOR

OPTION CODE	OPERATING FORCE MAX. (grams)		
	CF	CG	CJ
<b>P00</b>	190	510	842
<b>T10</b>	190	510	753
<b>T15</b>	100	260	374
<b>A10</b>	190	510	842
<b>A15</b>	102	275	395
	<b>EC</b>	<b>EE</b>	<b>EK</b>
<b>T30</b>	46	80	115
<b>T24</b>	88	170	235



Third Angle  
Projection

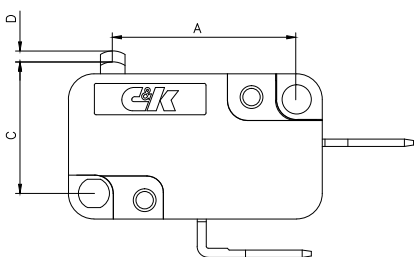
Dimensions are shown: mm (inches)  
Specifications and dimensions subject to change

# TF3 Series Mid Size Snap-acting Switches (Full Disconnection - Gap >3 mm)

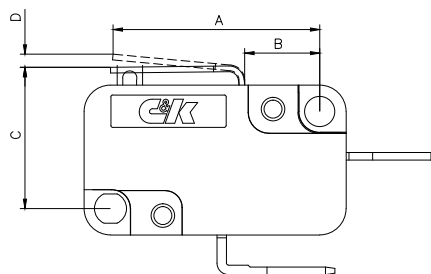
## ACTUATOR

OPTION CODE	'A'	'B'	'C'	'D'	'E'
<b>P00</b>	20.2	8	14.4 ± 0.5	1.9	-
<b>T10</b>	21.94	8	15.0 ± 0.8	2.4	-
<b>T15</b>	35.38	8	15.0 ± 1.5	4.8	-
<b>A10</b>	20.61	8	20.4 ± 0.7	2.2	Ø 4.8
<b>A15</b>	33.57	8	20.4 ± 1.4	4.5	Ø 4.8
<b>T30</b>	65.11	14	15.0 ± 4.7	15	-
<b>T24</b>	38.43	14	18.4 ± 2.0	7.2	Ø 7

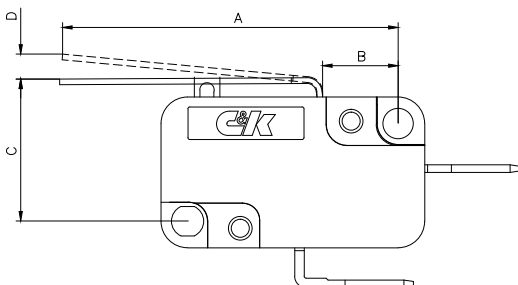
**P00 Pin Plunger**



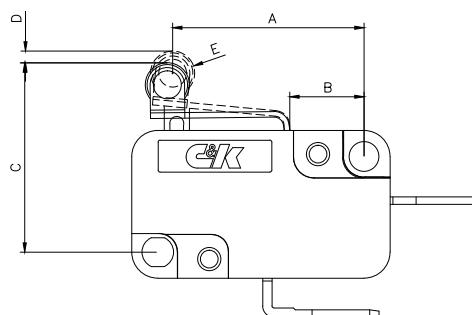
**T10 Lever 14 mm**



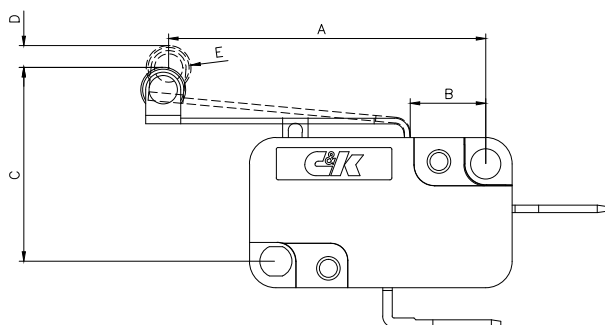
**T15 Lever 27.5 mm**



**A10 Lever Roller 12.5 mm**



**A15 Lever Roller 25.9 mm**



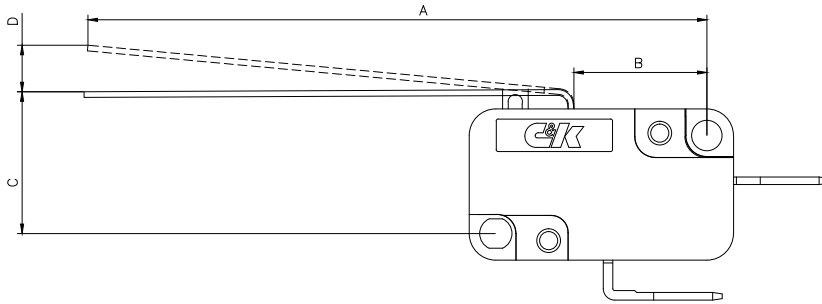
Snap-acting

# TF3 Series

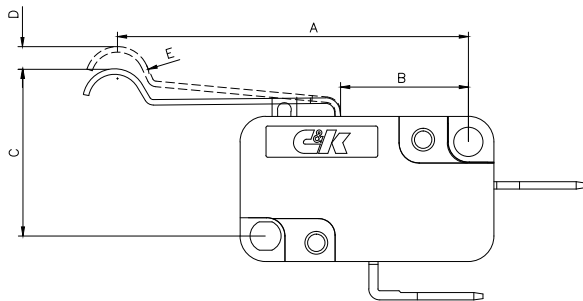
## Mid Size Snap-acting Switches (Full Disconnection - Gap >3 mm)

### ACTUATOR

#### T30 Lever 51.3 mm



#### T24 Simulated Roller 24.5 mm

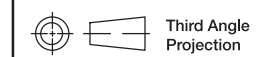
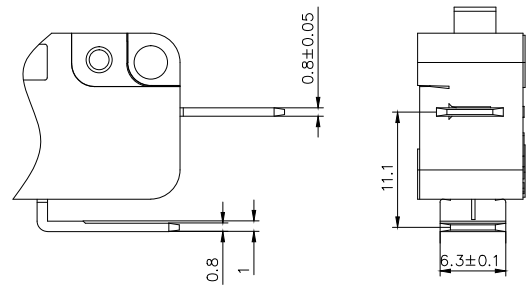
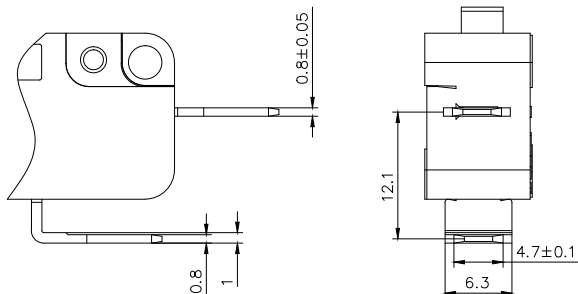


OPTION CODE	OPERATING FORCE MAX. (grams)			OPERATING POSITION (mm)	PRE-TRAVEL MAX. (mm)	OVER-TRAVEL MIN. (mm)	MAX. DIFFERENTIAL MAX. (mm)
	CF	CG	CJ				
<b>P00</b>	190	510	842	14.4 ± 0.5	1.9	0.7	1.2
<b>T10</b>	190	510	753	15.0 ± 0.8	2.4	0.5	1.4
<b>T15</b>	100	260	374	15.0 ± 1.5	4.8	1.0	2.7
<b>A10</b>	190	510	842	20.4 ± 0.7	2.2	0.4	1.2
<b>A15</b>	102	275	395	20.4 ± 1.4	4.5	0.9	2.6
	<b>EC</b>	<b>EE</b>	<b>EK</b>				
<b>T30</b>	46	80	115	15.0 ± 4.7	15	3.1	7
<b>T24</b>	88	170	235	18.4 ± 2.0	7.2	1.5	2.9

### TERMINATIONS

#### 40 .187" Quick Connect

#### 4A .250" Quick Connect



Dimensions are shown: mm (inches)  
Specifications and dimensions subject to change