

TF2 Series Miniature Snap-acting Switches



Features/Benefits

- Broad range of operating forces
- Ratings up to 10 AMPS
- Wide variety of actuator styles
- Quick connect terminations

Typical Applications

- Motor controls
- Thermostatics
- Portable tools
- Air Conditioner

Specifications

CONTACT RATING: From low level* to 10 AMPS @125/250 V AC.
 ELECTRICAL LIFE: 10,000 cycles
 MECHANICAL LIFE: 1,000,000 cycles at 0.1A and 6A
 400,000 cycles at 10A
 INSULATION RESISTANCE: 1,000 M ohm min.
 DIELECTRIC STRENGTH: 1,500 Vrms min. @ sea level.
 OPERATING TEMPERATURE: -40°C to 125°C (-40°C to 85°C).
 OPERATING FORCE: From 18 to 330 grams at actuator button available.
 MOUNTING: Torque screws 2-5 in/lbs.

* Low Level=conditions where no arcing occurs during switching, i.e., 0.4 VA max. @ 20 V AC or DC max. Standard electrical life per UL 1054, rated for 6,000 operations.

Materials

SWITCH HOUSING: Nylon 6/6
 ACTUATOR BUTTON: Nylon 6/6
 SPRING: Stainless Steel
 PIVOT: Brass Alloy
 MOVABLE CONTACTS: See electric rating page J-21
 MOVABLE BLADE: BeCu
 STATIONARY CONTACTS: See electric rating page J-21
 TERMINALS: Brass Alloy

NOTE: Specifications and materials listed above are switches with standard options. For information on specific and custom switches, consult Customer Service Center.



Snap-acting

Build-A-Switch

To order, simply select desired option from each category and place in the appropriate box. Available options are shown and described on pages J-21 through J-25. For additional options not shown in catalog, consult Customer Service Center.

Series **TF2** SP, Mom.

Operating Force
CC 18 grams
CF 45 grams
CG 75 grams
CH 110 grams
CJ 170 grams
EC 230 grams
EE 330 grams

Electrical Rating Chart

OPTION CODE	UL US 61058-1	ENEC 15
F5	0.1A 125/250 V AC (T85) Min. 10,000 operations	0.1A 125/250 V AC μT125, 1E4
H8	6A 125/250 V AC (T85) Min. 10,000 operations	6A 125/250 V AC μT125, 1E4
K6	10A 125/250 V AC (T85) Min. 10,000 operations	10(4)A 125/250 V AC μT125, 1E4

Mounting Style
S Standard
V Metric

Actuator
P00 Pin plunger
A10 Lever roller 12.5 mm
A15 Lever roller 25.9 mm
A20 Lever roller 12.5 mm
A25 Lever roller 25.9 mm
T10 Lever 14 mm
T14 Simulated roller 24.5 mm
T15 Lever 27.5 mm
T16 Lever 31.7 mm
T17 Lever 35 mm
T20 Lever 14 mm
T24 Simulated lever 24.5 mm
T25 Lever 27.5 mm
T26 Lever 31.7 mm
T27 Lever 35 mm

Circuitry
C SPDT
W SPST N.C.
Y SPST N.O.

* Note: No UL & ENEC 15 safety for Termination option "60"

Terminations
40 .187" quick connect
4A .250" quick connect
5A .250" off set quick connect
5B .187" off set quick connect
60 Screw style *
10 Solder

see chart on following pages for detailed information

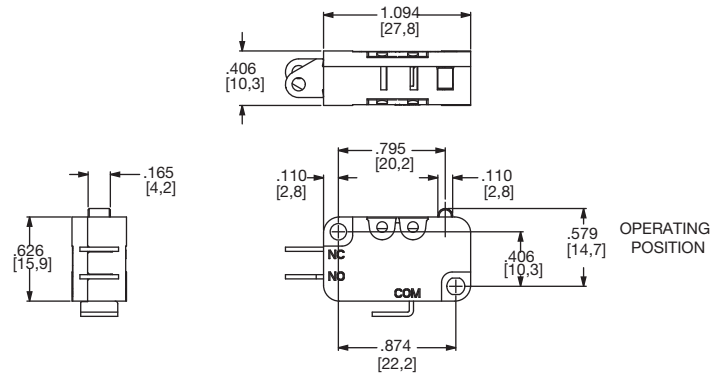


Dimensions are shown: mm
 Specifications and dimensions subject to change

TF2 Series Miniature Snap-acting Switches

SERIES

TF2 MINIATURE SNAP-ACTING SWITCHES



OPERATING FORCE

OPTION CODE	BASIC SWITCH OPERATING FORCE (grams)
CC	18
CF	45
CG	75
CH	110
CJ	170
EC	230
EE*	330

*Minimums may apply, consult Customer Service Center.

ELECTRICAL RATING

OPTION CODE	CONTACT MATERIAL		MOVABLE CONTACT	STATIONARY CONTACT
	RoHS COMPLIANT *	RoHS COMPATIBLE *		
F5	Yes	Yes	Silver alloy	Silver alloy
H8	Yes	Yes		
K6	Yes	Yes		

* Note: See Technical Data section of this catalog for RoHS compliant and compatible definitions and specifications.

All models  



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

www.ck-components.com



TF2 Series Miniature Snap-acting Switches

ELECTRICAL RATING

INTERNATIONAL RATING SYMBOLS	
μ	Microgap construction (less than 3 mm).
~	Alternating current.
T__	Maximum rated use temperature.
50E3	Cycles over 50,000 at rated current.
10E3	Cycles over 10,000 at rated current.
10(3)	Current Rating: First number represents resistive rating; second number represents inductive (motor) rating.

ELECTRICAL RATING	AMPS (REF.)	OPERATING FORCE						
		CC (18)	CF (45)	CG (75)	CH (110)	CJ (170)	EC (230)	EE (330)
F5	0.1	•	•	•	•	•	•	X
H8	6	X	•	•	•	•	•	•
K6	10	X	X	X	•	•	•	•

• AVAILABLE
X NOT AVAILABLE



Snap-acting

All models

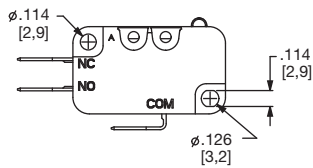
Consult Customer Service center for availability and delivery of nonstandard ratings.

* Low Level=conditions where no arcing occurs during switching, i.e., 0.4 VA max. @ 20 V AC or DC max.

MOUNTING STYLE

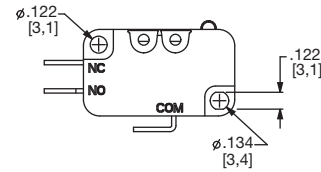
S STANDARD
For 4-40 screw size

V Metric
For 3 mm screw size



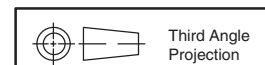
TF2 SWITCH WITH TYPE 40 (.187 QC) TERMINALS AND P00 ACTUATOR SHOWN

NOTE: TORQUE MOUNTING SCREWS 2-5 IN/LBS.



TF2 SWITCH WITH TYPE 10 (SOLDER) TERMINALS AND P00 ACTUATOR SHOWN

NOTE: TORQUE MOUNTING SCREWS 2-5 IN/LBS.



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

TF2 Series Miniature Snap-acting Switches

ACTUATOR

OPTION CODE	FIG	DIM. A	DIM. B	DIM. C	DIM. D	DIM. E
P00	2	.795 (20,2)	-	.578 ± .019 (14,70 ± 0,05)	0.068 (1,72)	-
A10	1	.822 (20,9)	.33 (8,4)	.816 ± .050 (20,73 ± 1,27)	.106 (2,70)	∅.19 (∅ 4,8)
A15	1	1.35 (34,3)	.33 (8,4)	.816 ± .059 (20,73 ± 1,5)	.165 (4,20)	∅.19 (∅ 4,8)
A20	1	1.05 (26,8)	.56 (14,3)	.816 ± .050 (20,73 ± 1,27)	.183 (4,65)	∅.19 (∅ 4,8)
A25	1	1.58 (40,2)	.56 (14,3)	.816 ± .086 (20,73 ± 2,2)	.366 (9,30)	∅.19 (∅ 4,8)
T10	3	.882 (22,39)	.33 (8,4)	.602 ± .020 (15,3 ± 0,50)	.110 (2,80)	-
T14	4	1.295 (32,9)	.33 (8,4)	.737 ± .059 (18,72 ± 1,5)	.216 (5,50)	∅.275 (∅ 7,0)
T15	3	1.405 (35,69)	.33 (8,4)	.600 ± .059 (15,24 ± 1,5)	.232 (5,90)	-
T16	3	1.58 (40,01)	.33 (8,4)	.604 ± .068 (15,35 ± 1,75)	.196 (5,0)	-
T17	3	1.708 (43,39)	.33 (8,4)	.603 ± .062 (15,33 ± 1,57)	.216 (5,50)	-
T20	3	1.11 (28,3)	.56 (14,3)	.604 ± .045 (15,34 ± 1,14)	.204 (5,20)	-
T24	4	1.527 (38,8)	.56 (14,3)	.742 ± .090 (18,84 ± 2,29)	.342 (8,70)	∅.275 (∅ 7,0)
T25	3	1.631 (41,43)	.56 (14,3)	.609 ± .090 (15,47 ± 2,3)	.381 (9,70)	-
T26	3	1.811 (46,00)	.56 (14,3)	.616 ± .125 (15,65 ± 3,18)	.389 (9,90)	-
T27	3	1.94 (49,3)	.56 (14,3)	.598 ± .150 (15,2 ± 3,8)	.433 (11,0)	-

NOTE: Switch characteristics chart on following page.

Lever Roller

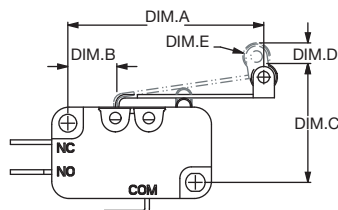


FIG. 1
LEVER ROLLER
TF2XXXXMA1510C

Pin Roller

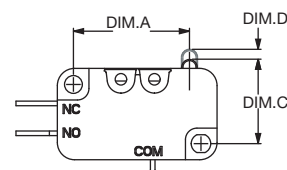


FIG. 2
PIN ROLLER
TF2XXXXMP0010C

Lever

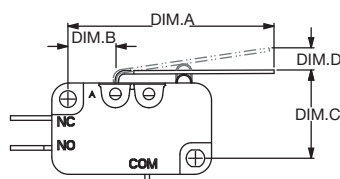


FIG. 3
LEVER
TF2XXXXST1510C SHOWN

Simulated Roller

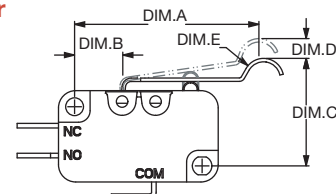


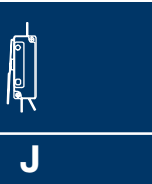
FIG. 4
SIMULATED ROLLER
TF2XXXXST1410C



Third Angle
Projection

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

C&K

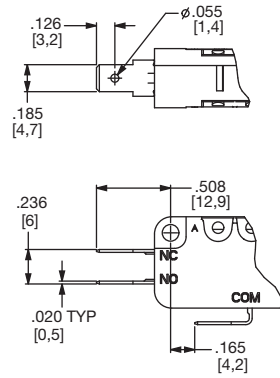


Snap-acting

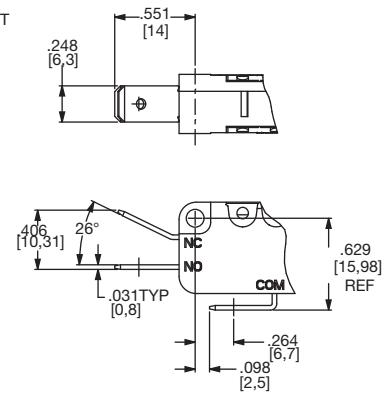
TF2 Series Miniature Snap-acting Switches

TERMINATIONS

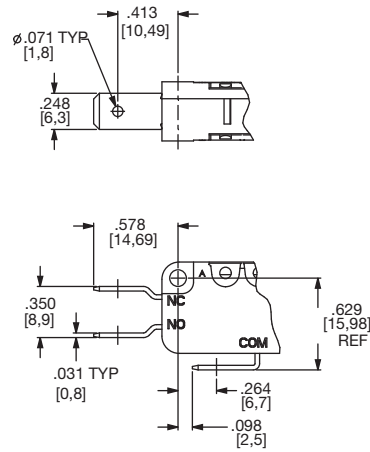
40 .187" QUICK CONNECT



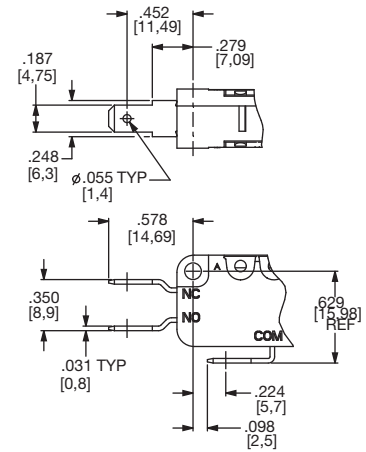
4A .250" QUICK CONNECT



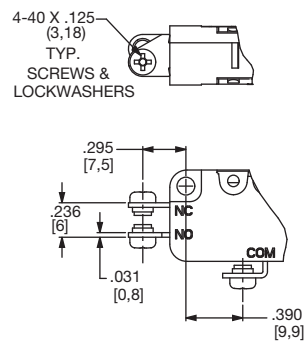
5A .250" OFF SET QUICK CONNECT



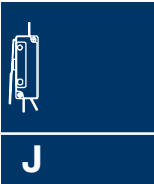
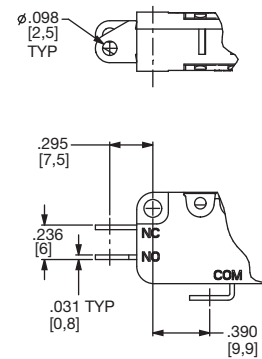
5B .187" OFF SET QUICK CONNECT



60 SCREW STYLE



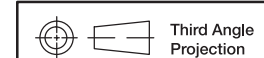
10 SOLDER



Snap-acting

CIRCUITRY

- C** SPDT (Single Pole, Double Throw)
- W** SPST N.C. (Single Pole, Single Throw, Normally Closed)
- Y** SPST N.O. (Single Pole, Single Throw, Normally Open)



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

