

TF2 Series Miniature Snap-acting Switches

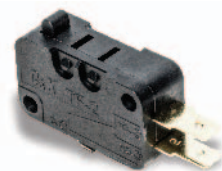
NEW!

Features/Benefits

- Broad range of operating forces
- Ratings up to 16 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 16 AMPS @125/250 V AC.
 ELECTRICAL LIFE: 10,000 cycles at 16 AMPS @ 250 V AC
 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-77
 MOVABLE BLADE: BeCu
 STATIONARY CONTACTS: See electric rating page J-77
 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.

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-77 through J-81. 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 61058-1	ENEC 15
F5	0.1A 125/250 V AC (Temp: 125°C) Min. 10,000 operations	0.1A 125/250 V AC μT125, 1E4
H8	6A 125/250 V AC (Temp: 125°C) Min. 10,000 operations	6A 125/250 V AC μT125, 1E4
K6	10A 125/250 V AC (Temp: 125°C) Min. 10,000 operations	10(4)A 125/250 V AC μT125, 1E4
J6	16A 125/250 V AC (Temp: 125°C) Min. 10,000 operations	16(4)A 125/250 V AC μT125, 1E4

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

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.

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

Snap-acting



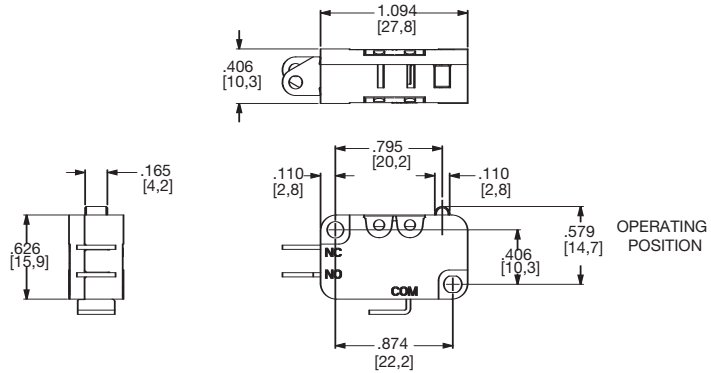
Dimensions are shown: mm
 Specifications and dimensions subject to change

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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

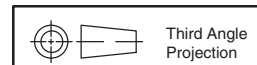
*Minimums may apply, consult Customer Service Center.

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		
J6	Yes	Yes		

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

All models



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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	•	•	•	•	•	•
J6	16	X	X	X	•	•	•	•

• AVAILABLE
x NOT AVAILABLE

All models  

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

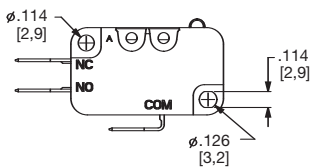
* Low Level=conditions where no arcing occurs during switching, i.e., 0.4 VA max. @ 20 V AC or DC max.

Snap-acting

MOUNTING STYLE

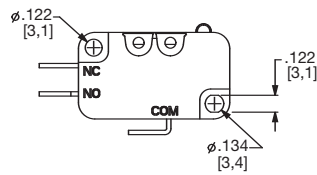
S STANDARD
For 4-40 screw size

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.



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ACTUATOR ■■■■■■

OPTION CODE	FIG	DIM. A	DIM. B	DIM. C	DIM. D	DIM. E
P00	2	.795 (20,2)	-	.578 ±.015 (14,70 ±0,38)	0.068 (1,72)	-
A10	1	.828 (20,03)	.32 (8,1)	.816 ±.050 (20,73 ±1,27)	.068 (1,73)	∅.19 (∅ 4,8)
A15	1	1.342 (34,08)	.32 (8,1)	.816 ±.050 (20,73 ±1,27)	.141 (3,58)	∅.19 (∅ 4,8)
A20	1	1.045 (26,54)	.55 (14)	.816 ±.050 (20,73 ±1,27)	.084 (2,14)	∅.19 (∅ 4,8)
A25	1	1.560 (39,62)	.55 (14)	.816 ±.050 (20,73 ±1,27)	.176 (4,46)	∅.19 (∅ 4,8)
T10	3	.882 (22,39)	.32 (8,1)	.602 ±.020 (15,3 ±0,50)	.077 (1,95)	-
T14	4	1.291 (37,91)	.32 (8,1)	.737 ±.050 (18,72 ±1,30)	.136 (3,44)	∅.275 (∅ 7,0)
T15	3	1.405 (35,69)	.32 (8,1)	.600 ±.040 (15,24 ±1,02)	.152 (3,86)	-
T16	3	2.338 (59,36)	.32 (8,1)	.604 ±.062 (15,35 ±1,57)	.176 (4,46)	-
T17	3	1.708 (43,39)	.32 (8,1)	.603 ±.062 (15,33 ±1,57)	.194 (4,94)	-
T20	3	1.10 (27,93)	.55 (14)	.604 ±.045 (15,34 ±1,14)	.096 (2,43)	-
T24	4	1.513 (38,43)	.55 (14)	.742 ±.090 (18,84 ±2,29)	.169 (4,3)	∅.275 (∅ 7,0)
T25	3	1.631 (41,43)	.55 (14)	.609 ±.080 (15,47 ±2,03)	.190 (4,83)	-
T26	3	2.568 (65,23)	.55 (14)	.616 ±.125 (15,65 ±3,18)	.220 (5,58)	-
T27	3	1.926 (48,93)	.55 (14)	.598 ±.150 (15,2 ±3,8)	.243 (6,16)	-

NOTE: Switch characteristics chart on following page.

Lever Roller

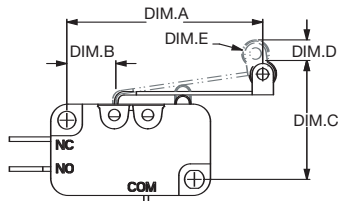


FIG. 1
LEVER ROLLER
TF2XXXXMA1510C

Pin Roller

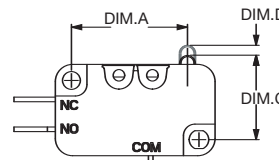


FIG. 2
PIN ROLLER
TF2XXXXMP0010C

Lever

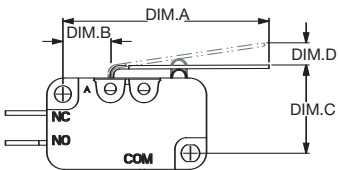


FIG. 3
LEVER
TF2XXXXST1510C SHOWN

Simulated Roller

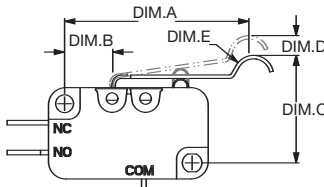


FIG. 4
SIMULATED ROLLER
TF2XXXXST1410C



Third Angle Projection

Dimensions are shown: mm
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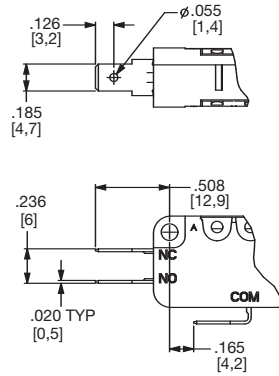
Snap-acting

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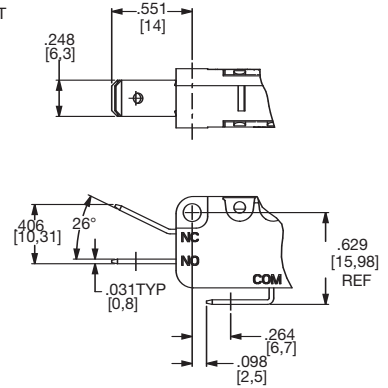
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TERMINATIONS

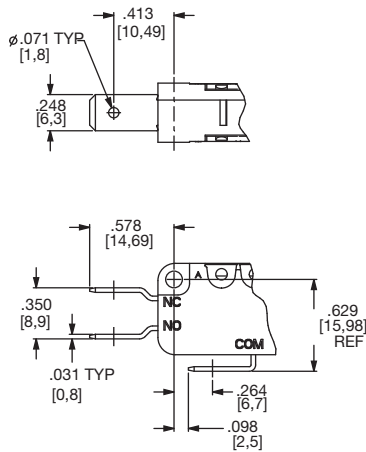
40 .187" QUICK CONNECT



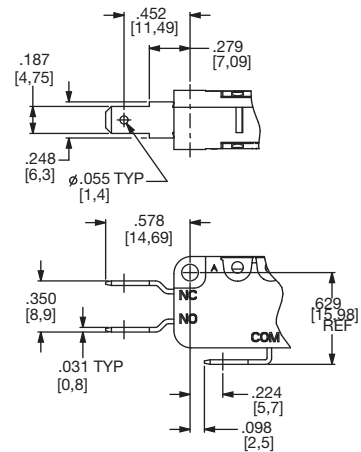
4A .250" QUICK CONNECT



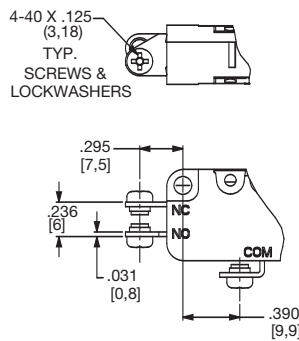
5A .250" OFF SET QUICK CONNECT



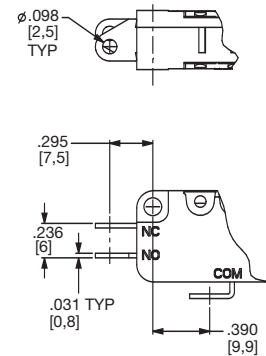
5B .187" OFF SET QUICK CONNECT



60 SCREW STYLE



10 SOLDER



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)



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Snap-acting