

C&K LC Series Subminiature Precision Snap-acting Switches



Features/Benefits

- Compact design
- Long life and high electrical capacity
- Quick connect, wire lead or PC mounting
- Wide variety of actuator styles

Typical Applications

- Motorized equipment
- Sump pump
- Thermostatic controls



Specifications

CONTACT RATING: From low level* to 10.1 AMPS @ 250 V AC.
 ELECTRICAL LIFE: 100,000 cycles at 5 AMPS @ 250 V AC.
 INSULATION RESISTANCE: 1,000 M Ω min.
 DIELECTRIC STRENGTH: 1,000 Vrms min. @ sea level.
 OPERATING TEMPERATURE: -17°F to 185°F (-25°C to 85°C).
 OPERATING FORCE: From 142 to 170 grams at actuator button.
 Forces are less at free end of lever actuators; (see OPERATING FORCE and ACTUATOR option sections).
 MOUNTING: 2-56 screws, torque 2.3 in/lbs max.

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

NOTE: For the latest information regarding RoHS compliance, please go to: www.ittcannon.com/rohs.

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

Materials

SWITCH HOUSING: Thermoplastic polyester or high temperature thermoplastic (PTS) (UL 94V-0).
 ACTUATOR BUTTON: Thermoplastic polyester (UL 94V-0).
 SPRING: Copper alloy.
 PIVOT: Copper alloy.
 MOVABLE CONTACTS: Fine silver for ratings greater than 1 AMP @ 125 V AC. Fine silver with 24K gold plate for 1 AMP @ 125 V AC or less.
 STATIONARY CONTACTS: Fine silver welded on copper alloy for ratings greater than 1 AMP @ 125 V AC. Gold alloy welded on copper alloy for ratings less than 1 AMP @ 125 V AC.
 TERMINALS: Copper alloy.
 TERMINAL SEAL: Epoxy.

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 K-18 through K-20. For additional options not shown in catalog, consult Customer Service Center.

	<div style="border: 1px solid black; display: inline-block; padding: 2px;">L</div> <div style="border: 1px solid black; display: inline-block; padding: 2px;">C</div>											
Series												
LC	SP, Mom.											
Operating Force												
GG	5 oz./142 grams											
GD	3.3 oz./94 grams											
GH	6 oz./170 grams											
Electrical Rating												
F5	1 A, 125, V AC, 30 V DC											
L9	5 A, 1/3 HP, 125, 250 V AC											
M1	10.1 A, 1/3 HP, 125, 250 V AC											
V6	5 A, 1/3 HP, 125, 250 V AC											
X1	1 A, 125 V AC, 30 V DC											
Actuator												
P00	Pin plunger											
A10	.28" lever roller, high force											
A25	.61" lever roller, low force											
T10	.29" lever, high force											
T13	.22" simulated roller, high force											
T20	.38" lever, low force											
T23	.32" simulated roller, low force											
T25	.67" lever, low force											
Terminations												
E	Solder											
H	.110" quick connect											
J	Wire lead											
L	Left formed PC thru-hole											
R	Right formed PC thru-hole											
S	PC Thru-hole											
Circuitry												
C	SPDT											
W	SPST N.C.											
Y	SPST N.O.											
Electrical Life												
NONE	6,000 operations											
U	Extended 100,000 operations											
Seal												
NONE (STD.)	No seal											
E	Epoxy seal											



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

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ACTUATOR 

OPTION CODE	FIG.	DIM. A	DIM. B	DIM. C
P00	1	.30 (7,6)	.330 ± .015 (8,38 ± 0,38)	—
A10	7	.28 (7,1)	.560 ± .070 (14,22 ± 1,78)	.19 dia. (4,80)
A25	2	.61 (15,5)	.560 ± .175 (14,22 ± 4,45)	.19 dia. (4,80)
T10	3	.29 (7,4)	.340 ± .070 (8,64 ± 1,78)	—
T13	5	.22 (5,6)	.455 ± .065 (11,56 ± 1,65)	—
T20	4	.39 (9,9)	.340 ± .140 (8,64 ± 3,56)	—
T23	6	.32 (8,1)	.455 ± .125 (11,56 ± 3,18)	—
T25	4	.67 (17,0)	.340 ± .185 (8,64 ± 4,70)	—

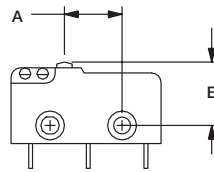


FIG. 1
Pin Plunger

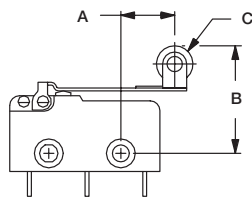


FIG. 2
Lever Roller

HIGH FORCE

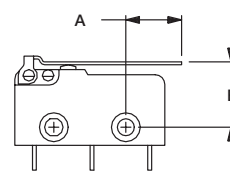


FIG. 3
Lever

LOW FORCE

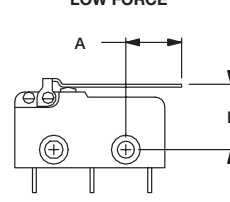


FIG. 4
Lever

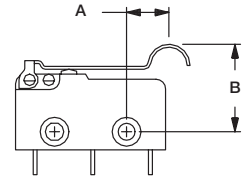


FIG. 5
Simulated Roller

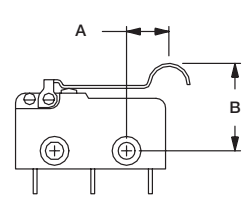


FIG. 6
Simulated Roller

BASIC FORCE

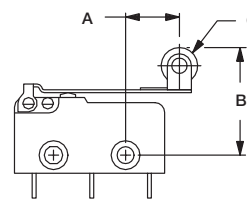


FIG. 7
Lever Roller

SWITCH CHARACTERISTICS

OPTION CODE	MAXIMUM OPERATING FORCE (OZ./GRAMS)			MINIMUM RELEASE FORCE (OZ./GRAMS)			MAXIMUM DIFFERENTIAL TRAVEL	MAXIMUM PRETRAVEL	MINIMUM OVERTRAVEL
	GG	GD	GH	GG	GD	GH	ALL FORCES	ALL FORCES	ALL FORCES
A10	1.69 48	1 28	2.0 57	.21 6	.11 3	.42 12	.034 (0,86)	.140 (3,56)	.029 (0,74)
A15	1.3 37	.68 19	1.6 44	.16 4.5	.07 2	.32 9	.044 (1,12)	.180 (4,57)	.037 (0,94)
A20	0.9 26	.52 15	1.1 31	.11 3	.05 15	.21 6	.067 (1,70)	.272 (6,91)	.053 (1,53)
A25	.70 20	.42 12	.85 24	.07 2	.04 1	.16 4.5	.086 (2,18)	.351 (8,92)	.068 (1,73)
P00	5 142	3.3 95	6 170	1 28	.05 14	2.0 57	.004 (0,10)	.030 (0,76)	.010 (0,25)
T10	1.7 48	1 28	2.1 60	.21 6	.10 3	.39 11	.035 (0,90)	.140 (3,56)	.029 (0,74)
T13	1.8 52	1.2 34	2.2 62	.21 6	.03 1	.42 12	.032 (0,81)	.130 (3,30)	.026 (0,66)
T20	0.9 26	.52 15	1.1 30	.10 3	.03 1	.21 6	.067 (1,70)	.276 (7,01)	.053 (1,35)
T23	1.0 28	.52 15	1.2 34	.10 3	.03 1	.21 6	.062 (1,57)	.252 (6,40)	.049 (1,24)
T25	0.7 19	.05 14	0.8 24	.07 2	.03 1	.14 4	.090 (2,29)	.372 (9,45)	.072 (1,83)

NOTE: For basic switch operating forces, see page K-18.

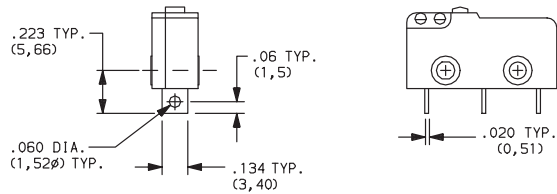


Third Angle
Projection
Dimensions are shown: Inch (mm)
Specifications and dimensions subject to change

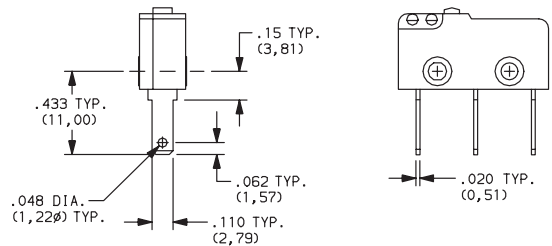
C&K LC Series Subminiature Precision Snap-acting Switches

TERMINATIONS

E SOLDER

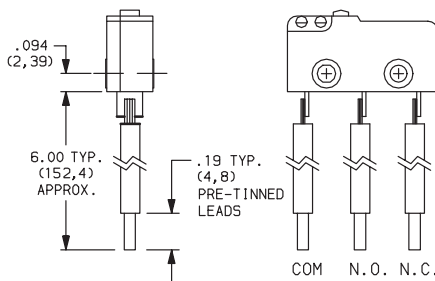


H .110" QUICK CONNECT



NOTE: Use Amp Quick Connect Part No. 640932-1.

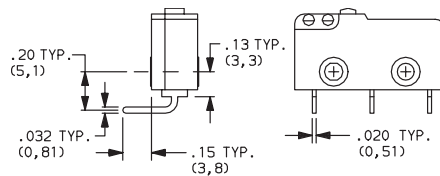
J WIRE LEAD



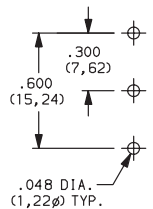
RATING	WIRE SIZE
1 AMP	22 AWG
5 AMPS	20 AWG
10.1 AMPS	18 AWG

TERMINAL	WIRE COLOR
COMMON	BLACK
NORMALLY OPEN	WHITE
NORMALLY CLOSED	RED

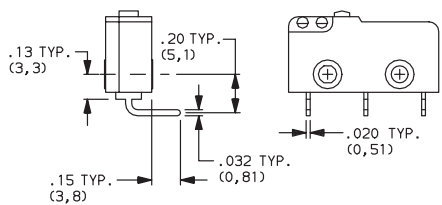
L LEFT FORMED PC THRU-HOLE



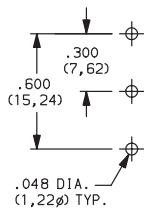
PC MOUNTING



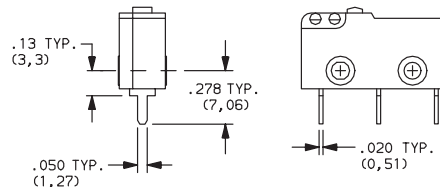
R RIGHT FORMED PC THRU-HOLE



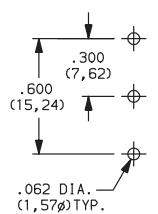
PC MOUNTING



S PC THRU-HOLE



PC MOUNTING



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)

ELECTRICAL LIFE

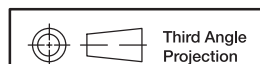
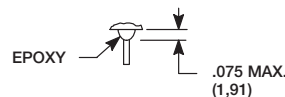
NONE 6,000 OPERATIONS

U EXTENDED 100,000 OPERATIONS

SEAL

NONE NO SEAL

E EPOXY SEAL



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