

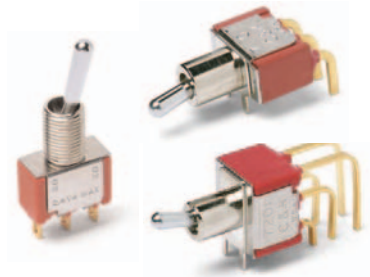
C&K 7000 Series Miniature Toggle Switches

Features/Benefits

- Multi-pole and multi-position
- Wide variety of actuator and termination options
- Epoxy sealed terminals prevent contamination during soldering

Typical Applications

- Telecommunications
- Instrumentation
- Medical equipment



Specifications

CONTACT RATING: B contact material: 0.4 VA max. @ 20 V AC or DC max. Q contact material: 5 AMPS @ 120 V AC or 28 V DC; 2 AMPS @ 250 V AC. See page F-16 for additional ratings.

ELECTRICAL LIFE: 7X01 and UX1 models: 100,000 make-and-break cycles at full load. All other models: 40,000 cycles.

CONTACT RESISTANCE: Below 10 m Ω typ. initial @ 2-4 V DC, 100 mA, for both silver and gold plated contacts.

INSULATION RESISTANCE: 10⁹ Ω min.

DIELECTRIC STRENGTH: 1000 Vrms min. @ sea level.

OPERATING TEMPERATURE: -30°C to 85°C.

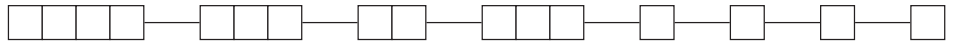
SOLDERABILITY: Per MIL-STD-202F method 208D, or EIA RS-186E method 9 (1 hour steam aging).

For materials see page F-4.

NOTE: Specifications listed above are for 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 F-4 thru F-16. For additional options not shown in catalog, consult our Customer Service Center.



Switch Function

- 7101 (STD.) SP On-None-On
- 7103 (STD.) SP On-Off-On
- 7105 SP Mom.-Off-Mom.
- 7107 SP On-Off-Mom.
- 7108 SP On-None-Mom.
- 7109 SP None-On-Mom.
- 7201 (STD.) DP On-None-On
- 7203 (STD.) DP On-Off-On
- 7205 DP Mom.-Off-Mom.
- 7207 DP On-Off-Mom.
- 7208 DP On-None-Mom.
- 7211 (STD.) DP On-On-On
- 7213 DP On-On-Mom.
- 7215 DP Mom.-On-Mom.
- 7301 (STD.) 3P On-None-On
- 7303 3P On-Off-On
- 7305 3P Mom.-Off-Mom.
- 7307 3P On-Off-Mom.
- 7308 3P On-None-Mom.
- 7401 (STD.) 4P On-None-On
- 7403 4P On-Off-On
- 7405 4P Mom.-Off-Mom.
- 7407 4P On-Off-Mom.
- 7408 4P On-None-Mom.
- 7411 4P On-On-On
- 7413 4P On-On-Mom.
- 7415 4P Mom.-On-Mom.

Actuator

- M (STD.) .200" high
- P3 (STD.) Flatted, anti-rotation, .450" high
- S (STD.) .420" high
- T (STD.) .687" high, 15/32 bushing
- K2 Locking lever, .704" high
- K9 Locking lever, .704" high
- K12 Locking lever, .732" high
- K19 Locking lever, .732" high
- L .840" high
- L1 .640" high
- L1P Anti-rotation, .640" high
- L2 .550" high
- L2P Anti-rotation, .550" high
- L3 Plastic, .840" high
- L3P Plastic, anti-rotation, .840" high
- L40 Lever handle without cap
- L41 .531" high lever handle with cap
- L42 .838" high lever handle with cap
- MP Anti-rotation, .200" high
- P1 Flatted, anti-rotation, .840" high
- P4 Flatted, anti-rotation, .250" high
- SP Anti-rotation, .420" high
- T1 .487" high, 15/32 bushing
- T1P Anti-rotation, .487" high, 15/32 bushing
- T2P Flatted, anti-rotation, .610" high, 15/32 bushing
- TP Anti-rotation, .687" high, 15/32 bushing

Bushing

- D (STD.) .280 high, keyway
- H (STD.) .296 high, flat
- Y (STD.) .350 high, keyway
- NONE No bushing choice required
- CW Splashproof
- D8 .280" high, flat
- D9 .280" high, keyway
- H3 .315" high, keyway
- H4 8mm high, keyway
- Y1 .378" high, keyway
- Y3 8.9mm high, keyway
- Y4 .378" high, flat
- Y9 .350" high, keyway

Terminations

- A (STD.) Right angle, PC thru-hole
- AV2 (STD.) Vert. right angle, PC thru-hole
- C (STD.) PC Thru-hole
- V3 (STD.) .460 high, V-bracket
- Z (STD.) Solder lug
- A2 Right angle, PC thru-hole
- A3 Right angle, PC thru-hole
- A4 Right angle, PC thru-hole
- AV3 Vert. right angle, PC thru-hole
- AW1 Right angle, extended, PC thru-hole
- AW3 Right angle, extended, PC thru-hole
- AW4 Right angle, extended, PC thru-hole
- V2 .555" high, V-bracket
- V4 .630" high, V-bracket
- V6 .460" high, V-bracket
- V7 .630" high, V-bracket
- V8 .953" high, V-bracket
- V9 1.150" high, V-bracket
- V21 .555" high, snap-in V-bracket
- V31 .460" high, snap-in V-bracket
- V41 .630" high, snap-in V-bracket

Contact Material

- B (STD.) Gold
- Q (STD.) Silver
- K Gold, tin-lead
- M Silver, tin-lead
- G Gold over silver
- L Gold over silver, tin-lead

Seal

- E (STD.) Epoxy base
- I Epoxy potted base

Actuator Color/Finish

- NONE (STD.) Bright chrome
- 0 (STD.) Actuator finish with black bushing
- 1 White
- 2 Black
- 3 Red
- S Satin chrome

KXX Actuator Color/Finish

- NONE (STD.) Natural aluminum
- 0 (STD.) Natural aluminum with black bushing
- 2 Black anodized aluminum
- 3 Red anodized aluminum
- 7 Blue anodized aluminum

Bushing Finish

- NONE (STD.) Nickel on all bushings (except D8, satin chrome)
- 2 Black

Note: UL/CSA models available, see pages F-4 & F-5.



F

Toggle

C&K 7000 Series Miniature Toggle Switches

Materials

CASE: Glass filled nylon 6/6, flame retardant, heat stabilized, or diallyl phthalate (DAP) (UL 94V-0).

ACTUATOR: Brass, chrome plated.

BUSHING: Brass or zinc, nickel plated.

HOUSING: Stainless steel.

SWITCH SUPPORT: Brass or steel, tin plated.

END CONTACTS: B contact material: Copper alloy, with gold plate over nickel plate. Q contact material: Coin silver, silver plated. See page F-16 for additional contact materials.

CENTER CONTACTS & ALL TERMINALS: B contact material: Copper alloy, with gold plate over nickel plate. Q contact material: Copper alloy, silver plated. See above for additional contact materials.

TERMINAL SEAL: Epoxy.

HARDWARE: Nut & Locking Ring: Brass, nickel plated.
Lockwasher: Steel, nickel plated.

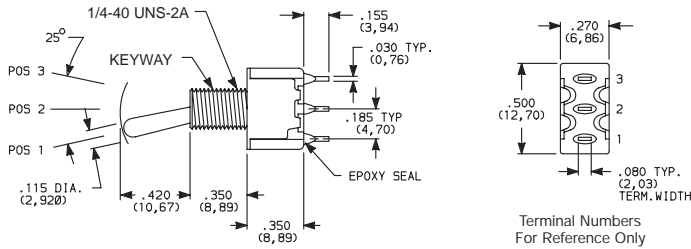
NOTE: Materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

SWITCH FUNCTION



NO. POLES	MODEL NO.	UL/CSA** MODEL NO.	SWITCH FUNCTION			CONNECTED TERMINALS			SCHEMATIC
			POS. 1	POS. 2	POS. 3	POS. 1	POS. 2	POS. 3	
SP	7101 (STD.)	U11	ON	NONE	ON	2-3	N/A	2-1	
	7103 (STD.)	U13	ON	OFF	ON	2-3	OPEN	2-1	
	7105	U15	MOM.	OFF	MOM.				
	7107	U17	ON	OFF	MOM.				
	7108	U18	ON	NONE	MOM.				
	7109	U19	NONE	ON	MOM.	N/A	2-3	2-1	

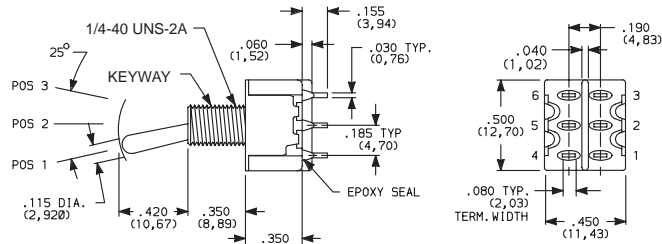
SPDT



Part number shown: 7101SYZBE

DP	7201 (STD.)	U21	ON	NONE	ON	2-3,5-6	N/A	2-1,5-4	
	7203 (STD.)	U23	ON	OFF	ON	2-3,5-6	OPEN	2-1,5-4	
	7205	U25	MOM.	OFF	MOM.				
	7207	U27	ON	OFF	MOM.				
	7208	U28	ON	NONE	MOM.	2-3,5-6	N/A	2-1,5-4	
	7211 (STD.)*	U211*	ON	ON	ON	2-3,5-6	2-3,5-4	2-1,5-4	
	7213*	U213*	ON	ON	MOM.				
	7215*	U215*	MOM.	ON	MOM.				

DPDT



Part number shown: 7201SYZQE

MOM. = Momentary

** U11-U415 model nos. with all options when ordered with G, L, M or Q contact material.

* Wiring for 3-way switch, see Section N.



Dimensions are shown: IN (mm)
Dimensions subject to change