

C&K RTA Series

1-4 Poles Coded Rotary Switches



Features/Benefits

- PCB or hand soldering versions
- Bushing mounting
- Multiple poles
- Decimal and hexadecimal codes
- Screwdriver slot or extended actuator
- RoHS Compliant Lead Free

Typical Applications

- Appliances
- Electronic alarm systems
- Medical
- Building automation
- HVAC air conditioning

Electrical Data

	Silver	Gold
SWITCHING MODE:	BBM	BBM
MAX. SWITCHING POWER:	5 VA	0.5 VA
MAX. SWITCHING CURRENT:	150 mA	20 mA
MAX. CARRYING CURRENT:	5 A	1 A
NOMINAL VOLTAGE AT 50 Hz:	60 V	25 V
CONTACT RESISTANCE:	< 150 mΩ	< 150 mΩ
DIELECTRIC STRENGTH AT 50 Hz BETWEEN CONTACTS AND GROUND TERMINALS:	500 V r	500 V r
INSULATION RESISTANCE BETWEEN CONTACTS OR CONTACTS AND FRAME (500 V ⇒):	10 ⁹ Ω	10 ⁹ Ω
NO. OF OPERATIONS:	10,000	10,000
BOUNCE:	< 5 ms	< 5 ms

Mechanical Data

MAX. NO. OF BANKS: 1.
 OPERATING TORQUE: 5 Ncm±20%.
 END STOP TORQUE: < 60 Ncm.
 STOP: With/without or adjustable
 MOUNTING: By fixed index 9.5 mm (0.374) of center, for bushing mount only

Materials

HOUSING: PETP Thermoplastic
 STATIONARY CONTACTS & TERMINALS: Nickel alloy, gold or silver plated.
 ROTOR: Printed circuit, gold or silver plated.
 CODING PLATE: PA thermoplastic
 ACTUATOR: Polysulfon thermoplastic
 BUSHING: Washer: PA. Nut: Brass.
 HARDWARE: Stop pin: Aluminum. Ball & Spring: Stainless steel.

Environmental Data

OPERATING TEMPERATURE: -20°C to + 70°C -20°C to + 70°C
 STORAGE TEMPERATURE: -40°C to + 85°C -40°C to + 85°C

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

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

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 L-9 thru L-11. For additional options not shown in catalog, consult Customer Service Center.



Designation

RTAP With PC Thru-Hole
RTAC With solder lugs

Indexing

22.5 22.5 index (coded only)
30 30° index (12 positions max.)
36 36° index (10 positions max.)

Switch Function

112S SP, 30° Index, 12 pos. no stop
110S SP, 36° Index, 10 pos. no stop
103B03 SP, 30° /36° Index, 3 pos.
106B06 SP, 30° /36° Index, 6 pos.
109B09 SP, 30° /36° Index, 9 pos.
110B10 SP, 30° /36° Index, 10 pos.
111B11 SP, 30° Index, 11 pos.
112B12 SP, 30° Index, 12 pos.
205S DP, 36° Index, 5 pos. no stop
206S DP, 30° Index, 6 pos. no stop
202B02 DP, 30° /36° Index, 2 pos.
204B04 DP, 30° /36° Index, 4 pos.
205B05 DP, 30° /36° Index, 5 pos.
206B06 DP, 30° Index, 6 pos.
303B03 3P, 30° /36° Index, 3 pos.
402B02 4P, 30° /36° Index, 2 pos.
BCS Direct + complement, 30° /36° Index, no stop
BS Direct, 22.5° Index, no stop
BCB Direct + complement, with stop (indicate position)
BB Direct, 22.5° Index, with stop (indicate position)

Mounting Style

SD Without bushing
AD With bushing

Actuator (max.)

25 .984 (25,0)
50 1.97 (50,0)
F Screwdriver slot
M25 Flat shaft, .984 (25,0)

Contact Material

S Silver plated
G Gold plated

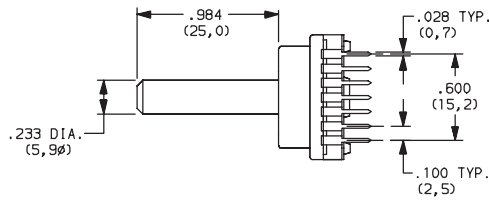
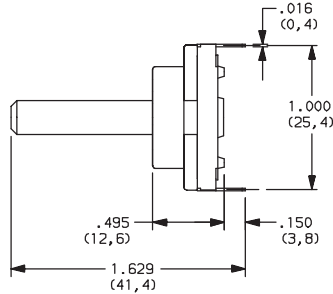
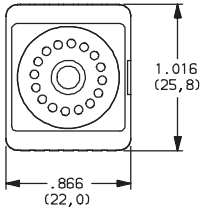


Dimensions are shown: Inch (mm)
 Specifications and dimensions subject to change

C&K RTA Series 1-4 Poles Coded Rotary Switches

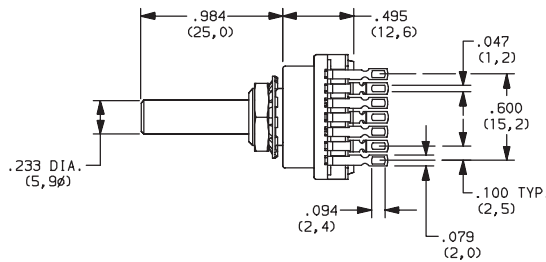
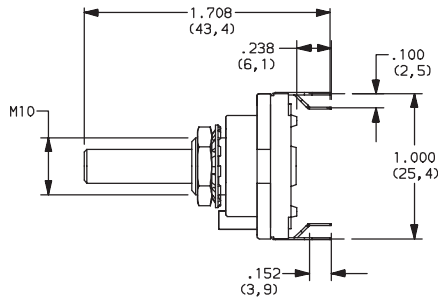
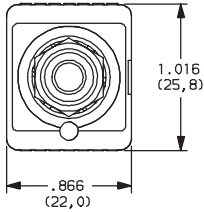
DESIGNATION

RTAP WITH PC PINS

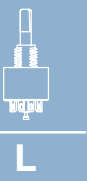


PART NUMBER	FUNCTION	INDEX
RTAP22.5BSSD25S	Binary	22.5
RTAP30112SSD25S	SP 12 positions no stop	30
RTAP36110SSD25S	SP 10 positions no stop	36

RTAC WITH SOLDER LUGS



PART NUMBER	FUNCTION	INDEX
RTAC22.5BSAD25S	Binary	22.5
RTAC30112SAD25S	SP 12 positions no stop	30
RTAC36110SAD25S	SP 10 positions no stop	36



Rotary

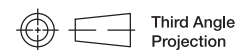
INDEXING

22.5 22.5 index, 16 positions max.

30 30 index, 12 positions max.

36 36 index, 10 positions max.

Both commons must be connected by user to ground.



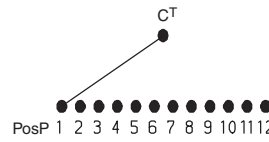
Dimensions are shown: Inch (mm)
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C&K RTA Series 1-4 Poles Coded Rotary Switches

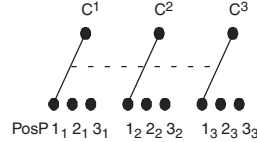
SWITCH FUNCTION

NO. POLES	MODEL NO.	SWITCH FUNCTION	INDEX
SP	112S	12 Positions No Stop	30°
	110S	10 Positions No Stop	36°
	103B03	3 Positions	30°/36°
	106B06	6 Positions	30°/36°
	109B09	9 Positions	30°/36°
	110B10	10 Positions	30°/36°
	111B11	11 Positions	30°
	112B12	12 Positions	30°

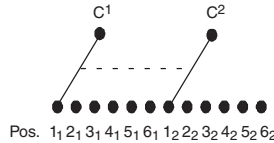
SP MODELS SCHEMATIC



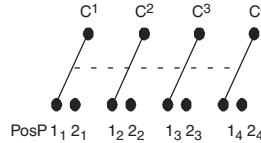
3P MODELS SCHEMATIC



DP MODELS SCHEMATIC



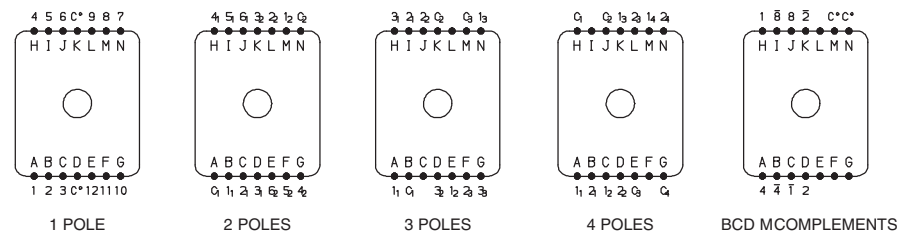
4P MODELS SCHEMATIC



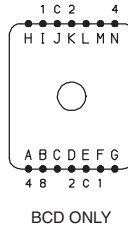
NO. POLES	MODEL NO.	SWITCH FUNCTION	INDEX
DP	205S	5 Positions No Stop	30°/36°
	206S	6 Positions No Stop	30°
	202B02	2 Positions	30°/36°
	204B04	4 Positions	30°/36°
	205B05	5 Positions	30°/36°
	206B06	6 Positions	30°
3P	303B03	3 Positions	30°/36°
4P	402B02	2 Positions	30°/36°

22.5°	30°	36°	Pos.	Pos.															
Term.	Term.	Term.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
E,J	M,N	L,N	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
F,I	H	D	1		•		•				•		•						•
D,K	D	B	2			•	•				•	•		•	•				•
A,N	A	I	4				•	•		•	•				•	•		•	•
B	J	J	8									•	•	•	•	•	•	•	•
-	C	K	1	•		•		•		•		•		•		•		•	
-	K	H	2	•	•							•	•		•	•			
-	B	A	4	•	•	•	•					•	•	•	•				
-	I	C	8	•	•	•	•	•	•	•	•								

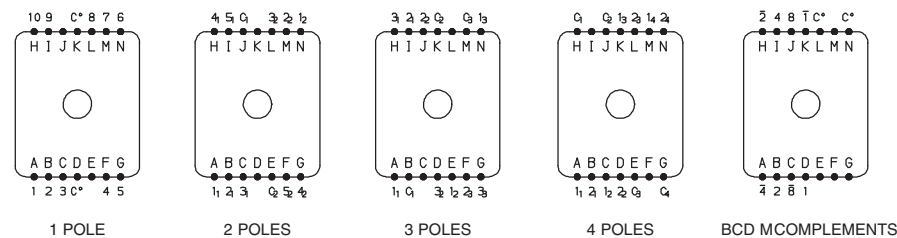
30 INDEXING ANGLE PCB LAYOUT



22.5 INDEXING ANGLE PCB LAYOUT



36 INDEXING ANGLE PCB LAYOUT



NOTE: Layout view from component side.

Common terminals that are in locations A-G are not connected to common terminals that are in locations H-N. For 7-12 position output customer must tie these commons together.



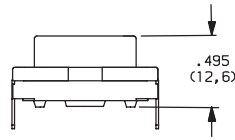
Dimensions are shown: Inch (mm)
Specifications and dimensions subject to change



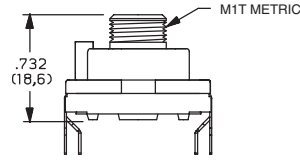
C&K RTA Series 1-4 Poles Coded Rotary Switches

MOUNTING STYLE

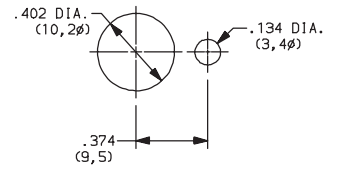
SD WITHOUT BUSHING



AD WITH BUSHING

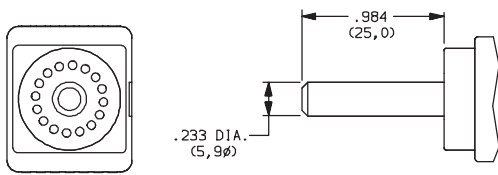


PANEL MOUNTING

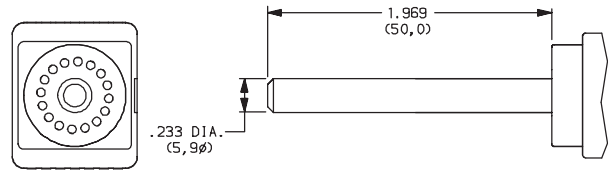


ACTUATOR

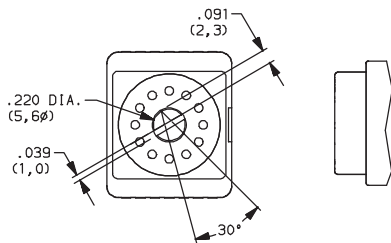
25 0,25 mm (.984)



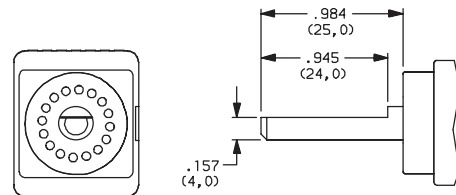
50 0,50 mm (1.97)



F SCREWDRIVER SLOT



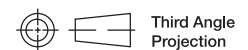
M25 FLAT SHAFT



CONTACT MATERIAL

OPTION CODE	RoHS COMPLIANT*	RoHS COMPATIBLE*	CONTACT AND TERMINAL MATERIAL	RATING	
				LOW LEVEL/DRY CIRCUIT	SWITCH: 150 mA MAXIMUM, 60 V NOMINAL. POWER: 5 VA MAXIMUM. CARRY-5 AMPS MAXIMUM.
S	YES	YES	SILVER	LOW LEVEL/DRY CIRCUIT	SWITCH: 150 mA MAXIMUM, 60 V NOMINAL. POWER: 5 VA MAXIMUM. CARRY-5 AMPS MAXIMUM.
G	YES	YES	GOLD	LOW LEVEL/DRY CIRCUIT OR POWER	SWITCH: 20 mA MAXIMUM, 25 V NOMINAL. POWER: 0.5 VA MAXIMUM. CARRY: 1 AMP MAXIMUM.

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



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