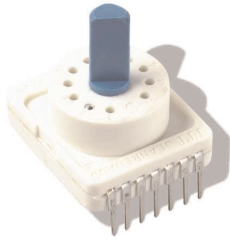


# C&K RTA Series 1-4 Poles Coded Rotary Switches



## Features/Benefits

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

## Typical Applications

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

## Specifications

CONTACT RATING: 5 AMPS  
 ELECTRICAL LIFE: 10,000 operations.  
 OPERATING TORQUE: 5 Ncm±20%.  
 END STOP TORQUE: > 6 Ncm.  
 CONTACT RESISTANCE: < 150 mΩ  
 INSULATION RESISTANCE: 10<sup>9</sup> Ω  
 DIELECTRIC STRENGTH: 500 V rms

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

## 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.

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



Rotary



**Designation**  
**RTAP** (STD.) With Pc pins  
**RTAC** (STD.) With solder lugs

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

**Switch Function**  
**112S** (STD.) SP, 30° Index, 12 pos. no stop  
**110S** (STD.) SP, 36° Index, 10 pos. no stop  
**102B02** SP, 30° /36° Index, 2 pos.  
**103B03** SP, 30° /36° Index, 3 pos.  
**104B04** SP, 30° /36° Index, 4 pos.  
**105B05** SP, 30° Index, 5 pos.  
**106B06** SP, 30° /36° Index, 6 pos.  
**107B07** SP, 30° /36° Index, 7 pos.  
**108B08** SP, 30° /36° Index, 8 pos.  
**109B09** SP, 30° /36° Index, 9 pos.  
**110B10** (STD.) SP, 30° /36° Index, 10 pos.  
**111B11** SP, 30° Index, 11 pos.  
**112B12** (STD.) SP, 30° Index, 12 pos.  
**206S** (STD.) DP, 30° Index, 6 pos. no stop  
**205S** (STD.) DP, 36° Index, 5 pos. no stop  
**202B02** DP, 30° /36° Index, 2 pos.  
**203B03** DP, 30° /36° Index, 3 pos.  
**204B04** DP, 30° /36° Index, 4 pos.  
**205B05** DP, 30° /36° Index, 5 pos.  
**206B06** (STD.) DP, 30° Index, 6 pos.  
**303S** 3P, 30° /36° Index, 3 pos. no stop  
**302B02** 3P, 30° /36° Index, 2 pos.  
**303B03** 3P, 30° /36° Index, 3 pos.  
**402S** 4P, 30° /36° Index, 2 pos. no stop  
**402B02** 4P, 30° /36° Index, 2 pos.

**Mounting Style**  
**SD** (STD.) Without  
**AD** (STD.) With

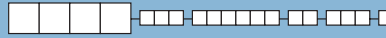
**Actuator (max.)**  
**25** (STD.) .984 (25,0)  
**50** 1.97 (50,0)  
**F** (STD.) Screwdriver slot  
**M25** Flat shaft, .984 (25,0)  
**M50** Flat shaft, 1.97 (50,0)

**Contact Material**  
**S** (STD.) Silver plated  
**G** Gold plated

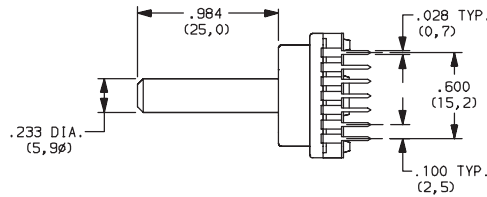
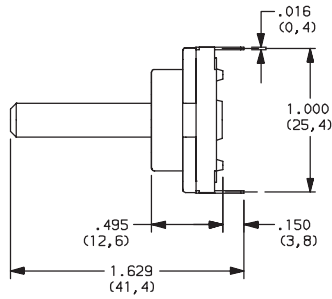
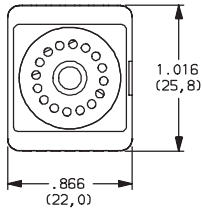
**BCS** (STD.) Direct + complement, 30° /36° Index, no stop  
**BS** (STD.) Direct, 22.5° Index, no stop  
**GS** Gray, 22.5° Index, no stop  
**BCB** Direct + complement, with stop (indicate position)  
**GB** Gray, 22.5° Index, with stop (indicate position)  
**BB** Direct, 22.5° Index, with stop (indicate position)

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

## DESIGNATION

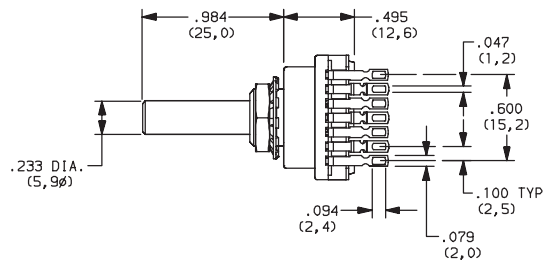
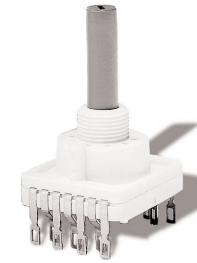
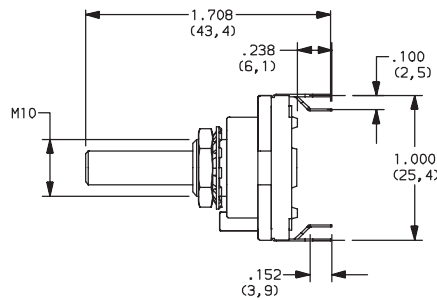
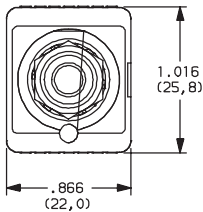


### RTAP (STD.) WITH PC PINS

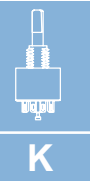


PART NUMBER	FUNCTION	INDEX
RTAP22.5BSSD25S	Binary	22.5
RTAP30112SSD25S	SP 12 positions no stop	30
RTAP36110SSD25S	SP 10 positions no stop	36

### RTAC (STD.) 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** (STD.) 22.5 index, 16 positions max.

**30** (STD.) 30 index, 12 positions max.

**36** (STD.) 36 index, 10 positions max.



Third Angle  
Projection

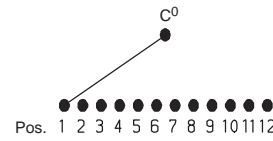
Dimensions are shown: IN (mm)  
Dimensions subject to change

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

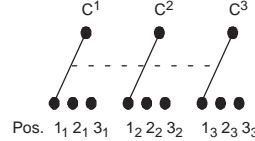
## SWITCH FUNCTION

NO. POLES	MODEL NO.	SWITCH FUNCTION	INDEX
SP	112S	12 Positions No Stop	30°
	110S	10 Positions No Stop	36°
	102B02	2 Positions	30° / 36°
	103B03	3 Positions	30° / 36°
	104B04	4 Positions	30° / 36°
	105B05	5 Positions	30°
	106B06	6 Positions	30° / 36°
	107B07	7 Positions	30° / 36°
	108B08	8 Positions	30° / 36°
	109B09	9 Positions	30° / 36°
	110B10	10 Positions	30° / 36°
	111B11	11 Positions	30°
112B12	12 Positions	30°	

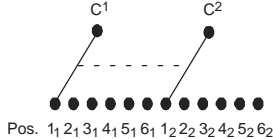
SP MODELS SCHEMATIC



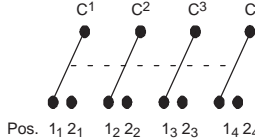
3P MODELS SCHEMATIC



DP MODELS SCHEMATIC



4P MODELS SCHEMATIC



NO. POLES	MODEL NO.	SWITCH FUNCTION	INDEX
DP	206S	6 Positions No Stop	30°
	205S	5 Position No Stop	36°
	202B02	2 Positions	30° / 36°
	203B03	3 Positions	30° / 36°
	204B04	4 Positions	30° / 36°
	205B05	5 Positions	30° / 36°
	206B06	6 Positions	30°
3P	303S	3 Positions No Stop	30° / 36°
	302B02	2 Positions	30° / 36°
	303B03	3 Positions	30° / 36°
4P	402S	3 Positions No Stop	30° / 36°
	402B02	2 Positions	30° / 36°

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



### 30 INDEXING ANGLE PCB LAYOUT



1 POLE



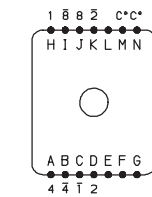
2 POLES



3 POLES

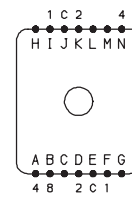


4 POLES



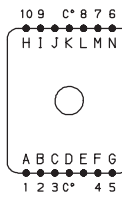
BCD + COMPLEMENTS

### 22.5 INDEXING ANGLE PCB LAYOUT

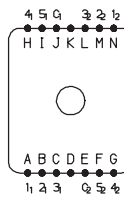


BCD ONLY

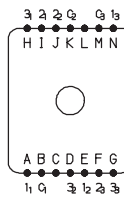
### 36 INDEXING ANGLE PCB LAYOUT



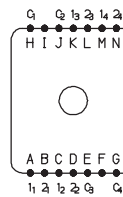
1 POLE



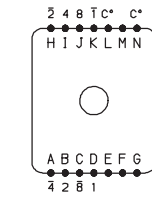
2 POLES



3 POLES



4 POLES



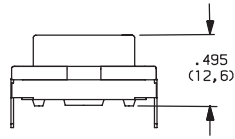
BCD + COMPLEMENTS

NOTE: Layout view from component side.

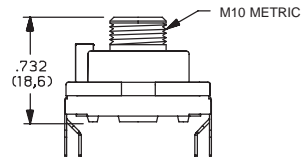
# C&K RTA Series 1-4 Poles Coded Rotary Switches

## MOUNTING STYLE

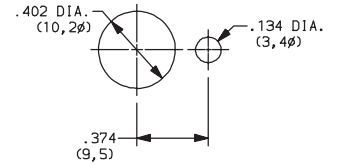
**SD** (STD.) WITHOUT BUSHING



**AD** (STD.) WITH BUSHING

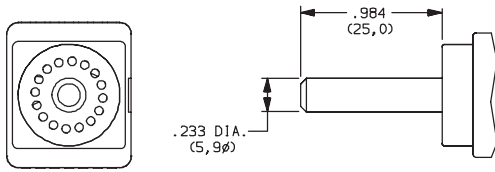


PANEL MOUNTING

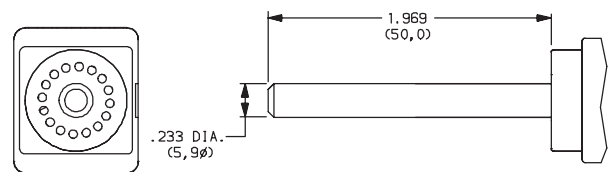


## ACTUATOR

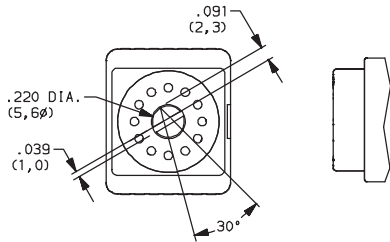
**25** (STD.) 0,25 mm (.984)



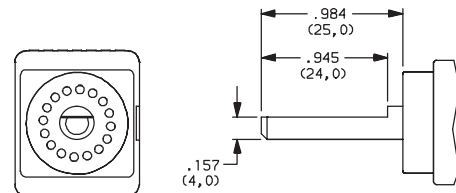
**50** 0,50 mm (1.97)



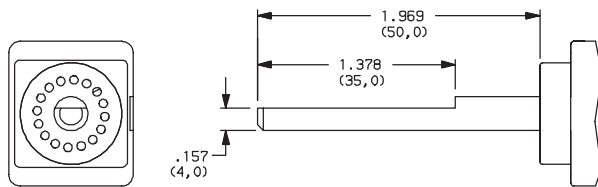
**F** (STD.) SCREWDRIVER SLOT



**M25** FLAT SHAFT



**M50** FLAT SHAFT



## CONTACT MATERIAL

OPTION CODE	CONTACT AND TERMINAL MATERIAL	RATINGS	
<b>S</b> (STD.)	SILVER	LOW LEVEL/DRY CIRCUIT	SWITCH: 150 mA maximum, 60 V nominal. POWER: 5 VA maximum. CARRY: 5 AMPS maximum.
<b>G</b>	GOLD	LOW LEVEL/DRY CIRCUIT OR POWER	SWITCH: 20 mA maximum, 25 V nominal. POWER: 0.5 VA maximum. CARRY: 1 AMP maximum.



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