

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: 10⁹ 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.



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

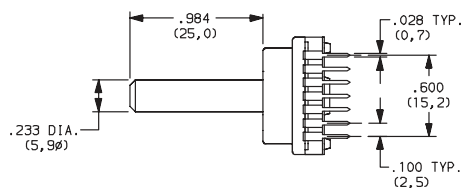
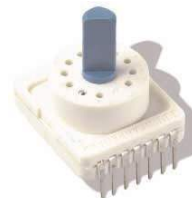
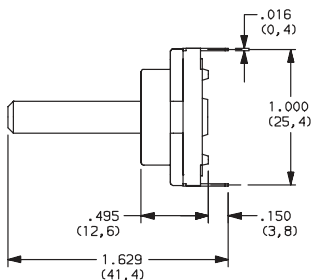
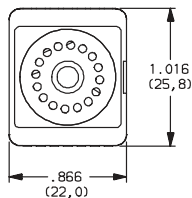
- BCS** (STD.) Direct + complement, 30° /36° Index, no stop
- BS** (STD.) Direct, 22.5° Index, no stop
- GS** Gray, 22.5° Index, no stop
- BCB** Direct + complement, with stop (indicate position)
- GB** Gray, 22.5° Index, with stop (indicate position)
- BB** Direct, 22.5° Index, with stop (indicate position)

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

DESIGNATION

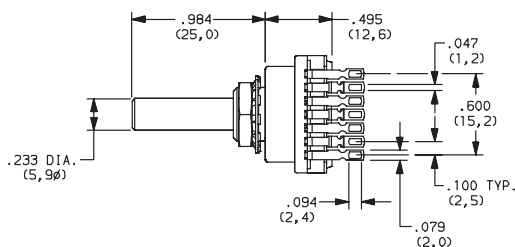
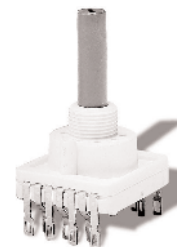
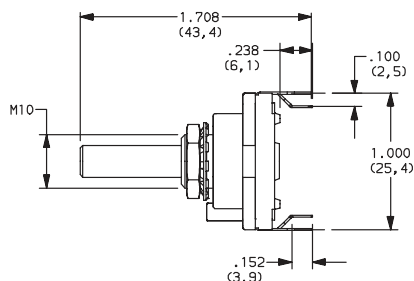
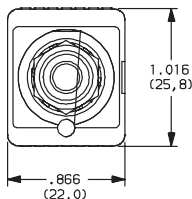


RTAP (STD.) WITH PC PINS



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



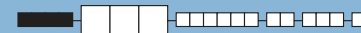
PART NUMBER	FUNCTION	INDEX
RTAC22.5BSAD25S	Binary	22.5
RTAC30112SAD25S	SP 12 positions no stop	30
RTAC36110SAD25S	SP 10 positions no stop	36



K

Rotary

INDEXING



22.5 (STD.) 22.5 index, 16 positions max.

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

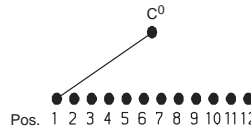
36 (STD.) 36 index, 10 positions max.

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

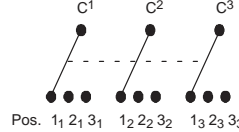
SWITCH FUNCTION

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°	

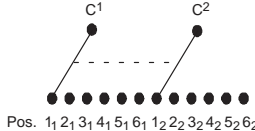
SP MODELS SCHEMATIC



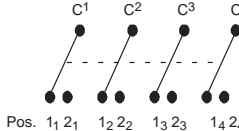
3P MODELS SCHEMATIC



DP MODELS SCHEMATIC



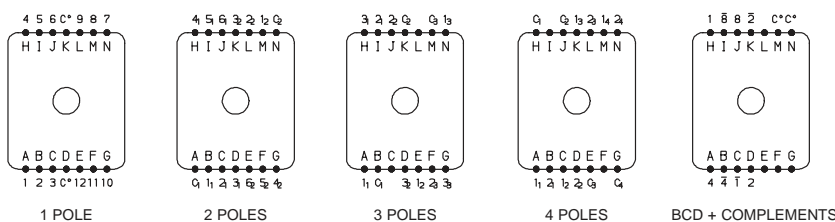
4P MODELS SCHEMATIC



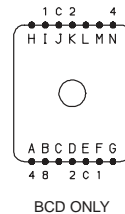
NO. POLES	MODEL NO.	SWITCH FUNCTION	INDEX
DP	206S	6 Positions No Stop	30°
	205S	5 Position No Stop	36°
	202B02	2 Positions	30° / 36°
	203B03	3 Positions	30° / 36°
	204B04	4 Positions	30° / 36°
	205B05	5 Positions	30° / 36°
3P	303S	3 Positions No Stop	30° / 36°
	302B02	2 Positions	30° / 36°
	303B03	3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

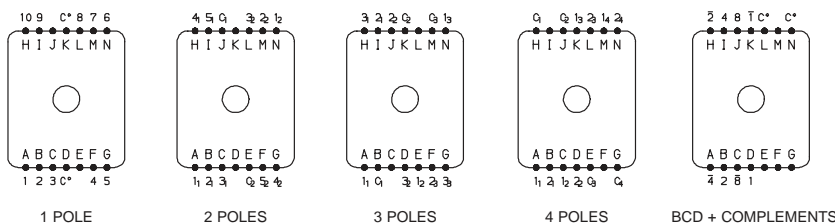
30 INDEXING ANGLE PCB LAYOUT



22.5 INDEXING ANGLE PCB LAYOUT



36 INDEXING ANGLE PCB LAYOUT



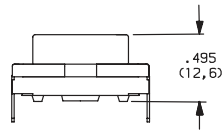
NOTE: Layout view from component side.

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

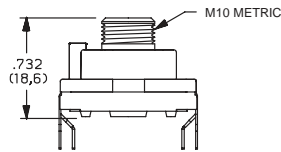
MOUNTING STYLE



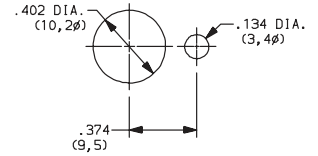
SD (STD.) WITHOUT BUSHING



AD (STD.) WITH BUSHING



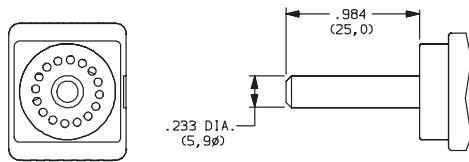
PANEL MOUNTING



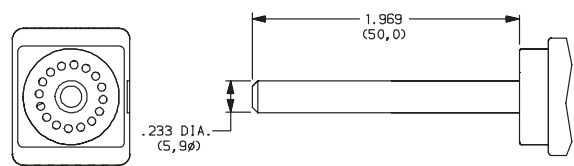
ACTUATOR



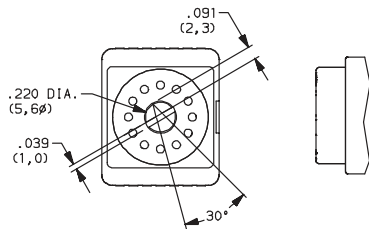
25 (STD.) 0,25 mm (.984)



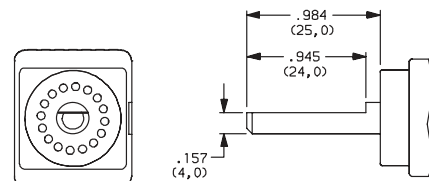
50 0,50 mm (1.97)



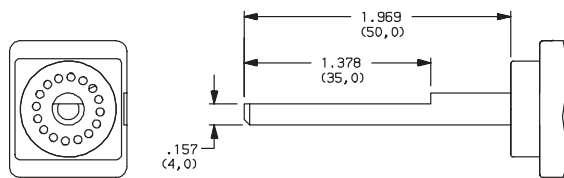
F (STD.) SCREWDRIVER SLOT



M25 FLAT SHAFT



M50 FLAT SHAFT



CONTACT MATERIAL



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



Third Angle
Projection

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