

C&K RTBH Series

1-2 Pole Coded Rotary Switches



Features/Benefits

- **Totally sealed**
- **Detent angles, 15 , 22.5 , 30 and 36**
- **Multi pole**
- **Coding functions**
- **Robust construction**

Typical Applications

- **Telecommunications**
- **Military**
- **Instrumentation**
- **Heavy-duty industrial equipment**

Specifications

CONTACT RATING: S Contact material: Switch: 250mA, 5VA resistive load. Carry: 5 AMPS
 ELECTRICAL LIFE: Up to 25,000 operations.
 OPERATING TORQUE: 5Ncm±30% (with 1 module).
 MECHANICAL STOP RESISTANCE: > 70 Ncm.
 BUSHING MOUNTING TORQUE: 100 Ncm.
 CONTACT RESISTANCE: < 100 mΩ.
 INSULATION RESISTANCE: > 10⁹ Ω
 DIELECTRIC STRENGTH: 500 V rms.

Materials

HOUSING: PBT thermoplastic and PC thermoplastic
 STATIONARY CONTACTS & TERMINALS: Nickel alloy, gold or silver plated, insert molded in PBT thermoplastic.
 ROTOR: Printed circuit, gold or silver plated.
 ACTUATOR: Steel
 BUSHING: Brass
 HARDWARE: Stop pin and spring: Stainless steel
 All models are RoHS compliant and compatible.

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.

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-27 thru L-31. For additional options not shown in catalog, consult Customer Service Center.

Rotary

Designation
RTBH

<p>Indexing</p> <p>15 15°</p> <p>22.5 22.5°</p> <p>30 30°</p> <p>36 36°</p>	<p>Number of Switch Functions**</p> <p>1 1 Function</p> <p>2 2 Functions</p>
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Switch Function

Number of Poles (first digit)

Maximum Position (second & third digit)
or code (binary code = B, complement = C, direct + complement = BC)

B Binary code

116 22.5 index, SP, 16 positions

112 30 index, SP, 12 positions

206 DP, 6 positions

C Complement

BC Direct + complement

 Stops **B** Stop with number of positions **S** Without **Mounting Style** **AD** Standard bushing for panel mount **DE** Sealed bushing for panel mount | **Shaft Diameter** **D6** 6 mm (.236) **D63** 6.35 mm (.250) **Option of Shaft** **(NONE)** **M10X5** Shaft with flat | **Actuator Option Angle*** **(NONE)** **K0** 0° angle **K60** 60° angle **K90** 90° angle **K120** 120° angle **K180** 180° angle **K270** 270° angle | **Actuator Length** **25** 25 mm (.984) **Contact Material** **S** Silver plated **G** Gold plated |

* Other angles available by request

** Several functions can be combined. For more information consult us.

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

L-26

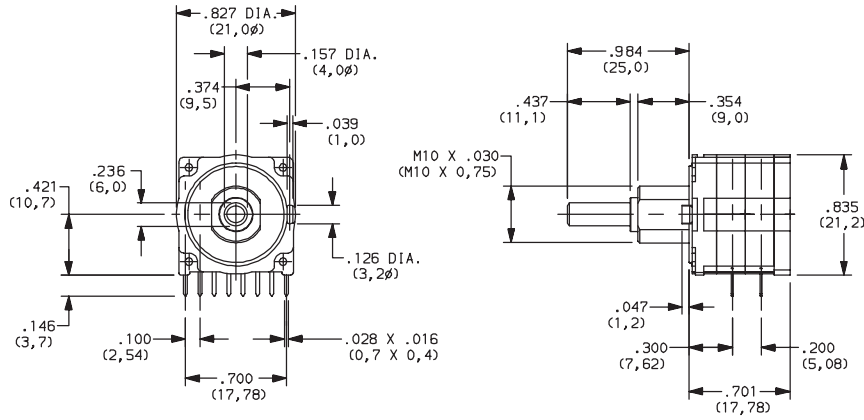
www.ittcannon.com

C&K RTBH Series 1-2 Pole Coded Rotary Switches

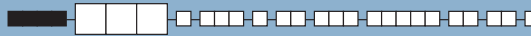
DESIGNATION



RTBH



INDEXING



- 15** 15° index
- 22.5** 22.5° index
- 30** 30° index
- 36** 36° index



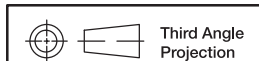
Rotary

NUMBER OF SWITCH FUNCTIONS



- 1** 1 FUNCTION
- 2** 2 FUNCTIONS

NOTE: Several functions can be combined. For more information consult us.



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

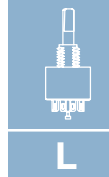
C&K RTBH Series 1-2 Pole Coded Rotary Switches

NUMBER OF POLES / POSITIONS 

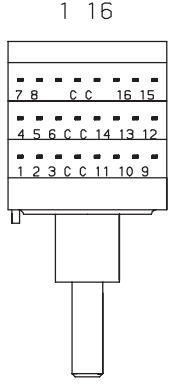
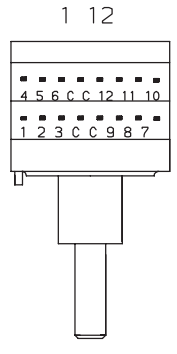
- 116** 22.5 INDEX, SP, 16 POSITIONS
- 112** 30 INDEX, SP, 12 POSITIONS
- 206** 30 INDEX, DP, 6 POSITIONS
- B** BINARY CODE, 15 /22.5 /30 /36
- C** COMPLEMENT, 15 /22.5 /30 /36
- BC** DIRECT + COMPLEMENT, 15 /22.5 /30 /36

SINGLE POLE FUNCTION

	C	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	●	●																							
2	●		●																						
3	●			●																					
4	●				●																				
5	●					●																			
6	●						●																		
7	●							●																	
8	●								●																
9	●									●															
10	●										●														
11	●											●													
12	●												●												
13	●													●											
14	●														●										
15	●															●									
16	●																●								
17	●																	●							
18	●																		●						
19	●																			●					
20	●																				●				
21	●																					●			
22	●																						●		
23	●																							●	
24	●																								●



Rotary



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

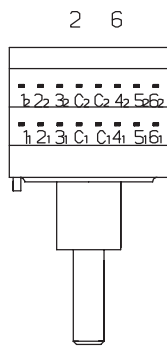
C&K RTBH Series 1-2 Pole Coded Rotary Switches

NUMBER OF POLES / POSITIONS



DOUBLE POLE FUNCTION

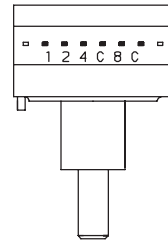
	C ₁	1 ₁	2 ₁	3 ₁	4 ₁	5 ₁	6 ₁	C ₂	1 ₂	2 ₂	3 ₂	4 ₂	5 ₂	6 ₂
1	●	●						●	●					
2	●		●					●		●				
3	●			●				●			●			
4	●				●			●				●		
5	●					●		●					●	
6	●						●	●						●



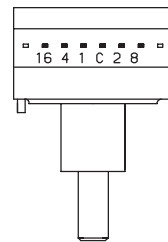
BINARY DIRECT CODE

	C	1	2	4	8	16
0	●					
1	●	●				
2	●		●			
3	●	●	●			
4	●			●		
5	●	●			●	
6	●		●			●
7	●	●	●			●
8	●			●		
9	●	●			●	
10	●		●			●
11	●	●	●			●
12	●			●		
13	●	●			●	
14	●		●			●
15	●	●	●			●
16	●					●
17	●	●				●
18	●		●			●
19	●	●			●	
20	●		●			●
21	●	●	●			●
22	●			●		●
23	●	●	●			●

B10 B12 B16



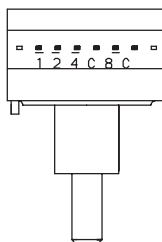
B24



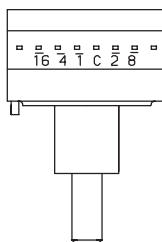
COMPLEMENT BINARY CODE

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4	●	●	●	●	●	●
5	●	●	●	●	●	●
6	●	●	●	●	●	●
7	●	●	●	●	●	●
8	●	●	●	●	●	●
9	●	●	●	●	●	●
10	●	●	●	●	●	●
11	●	●	●	●	●	●
12	●	●	●	●	●	●
13	●	●	●	●	●	●
14	●	●	●	●	●	●
15	●	●	●	●	●	●
16	●	●	●	●	●	●
17	●	●	●	●	●	●
18	●	●	●	●	●	●
19	●	●	●	●	●	●
20	●	●	●	●	●	●
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22	●	●	●	●	●	●
23	●	●	●	●	●	●

C10 C12 C16



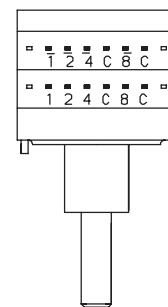
C24



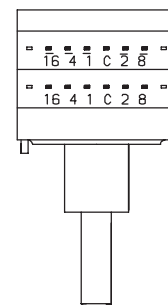
DIRECT AND COMPLEMENT BINARY CODE

	C	1	2	4	8	16	C	1	2	4	8	16
0	●						●	●	●	●	●	●
1	●	●					●	●	●	●	●	●
2	●		●				●	●	●	●	●	●
3	●	●	●				●	●	●	●	●	●
4	●			●			●	●	●	●	●	●
5	●	●			●		●	●	●	●	●	●
6	●		●			●	●	●	●	●	●	●
7	●	●	●			●	●	●	●	●	●	●
8	●			●			●	●	●	●	●	●
9	●	●			●		●	●	●	●	●	●
10	●		●			●	●	●	●	●	●	●
11	●	●	●			●	●	●	●	●	●	●
12	●			●			●	●	●	●	●	●
13	●	●			●		●	●	●	●	●	●
14	●		●			●	●	●	●	●	●	●
15	●	●	●			●	●	●	●	●	●	●
16	●					●	●	●	●	●	●	●
17	●	●				●	●	●	●	●	●	●
18	●		●			●	●	●	●	●	●	●
19	●	●			●		●	●	●	●	●	●
20	●		●			●	●	●	●	●	●	●
21	●	●	●			●	●	●	●	●	●	●
22	●			●		●	●	●	●	●	●	●
23	●	●	●			●	●	●	●	●	●	●

BC10 BC12 BC16

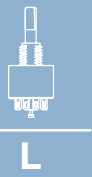


BC24



Third Angle Projection

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



Rotary

C&K RTBH Series 1-2 Pole Coded Rotary Switches

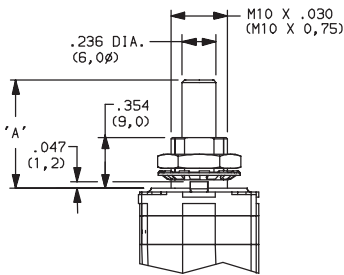
STOPS

B STOP WITH NUMBER OF POSITIONS

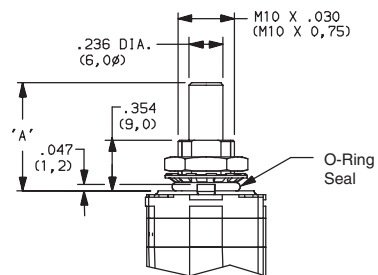
S WITHOUT

MOUNTING STYLE

AD STANDARD BUSHING FOR PANEL MOUNT

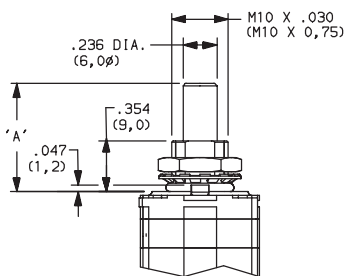


DE SEALED BUSHING FOR PANEL MOUNT

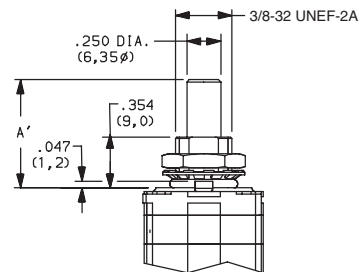


SHAFT DIAMETER

D6 6 mm (.236)

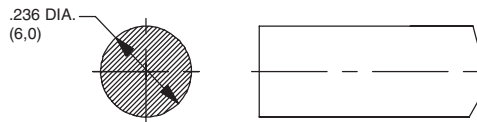


D63 6.35 mm (.250)

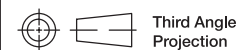
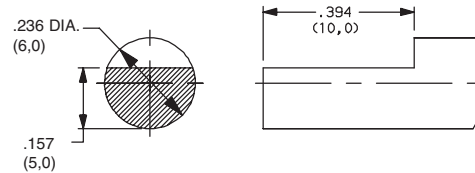


OPTION OF SHAFT

(NONE)

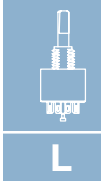


M10X5 FLAT



Third Angle
Projection

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



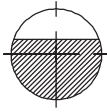
Rotary

C&K RTBH Series 1-2 Pole Coded Rotary Switches

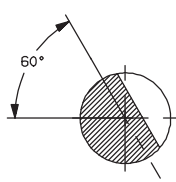
ACTUATOR OPTION ANGLE



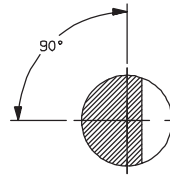
(NONE)



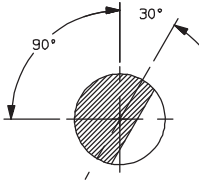
K0 0 ANGLE



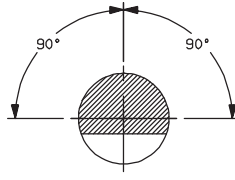
K60 60°



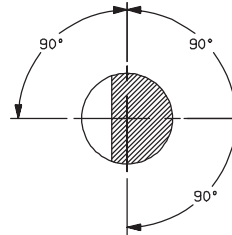
K90 90°



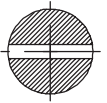
K120 120°



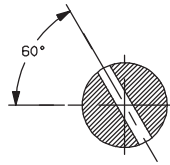
K180 210°



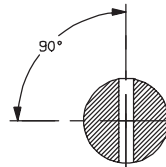
K270 300°



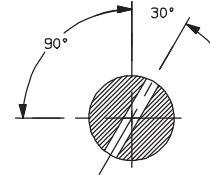
K0 (STD.) 0 ANGLE



K60 60°



K90 90°



K120 120°

ACTUATOR LENGTH



25 0,25 mm (.984) STANDARD SHAFT

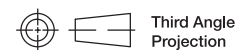
Other lengths available by request.

CONTACT MATERIAL



OPTION CODE	RoHS COMPLIANT*	RoHS COMPATIBLE*	CONTACT AND TERMINAL MATERIAL	RATING	
				LOW LEVEL/DRY CIRCUIT	SWITCH: 250 mA, POWER: 5 VA; CARRY: 5 AMPS
S	YES	YES	SILVER	LOW LEVEL/DRY CIRCUIT	SWITCH: 250 mA, POWER: 5 VA; CARRY: 5 AMPS
G	YES	YES	GOLD	LOW LEVEL/DRY CIRCUIT OR POWER	SWITCH: 20 mA, POWER: 0.2 VA; CARRY: 1 AMP

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



Third Angle Projection
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Rotary