

C&K 3P Series Miniature Pushwheel Switches



Features/Benefits

- Snap-in front mount design for easy assembly
- 10 position models available
- Illuminated backlighting available

Typical Applications

- Test & measurement equipment
- Industrial machinery
- Computer peripherals

Specifications

CONTACT RATING:

CARRY: 1 AMP continuous.

SWITCH: 0.4 VA max., 100 mA max., 28 V DC max.

OPERATING VOLTAGE: 50 mV to 28 V DC.

ELECTRICAL LIFE: 100,000 actuations.

CONTACT RESISTANCE: Below 300 m Ω typ. @
2-4 V DC, 100 mA.

INSULATION RESISTANCE: 10⁹ Ω min. (dry).

DIELECTRIC STRENGTH: 500 Vrms min. @ sea level
between common terminal and any output.

OPERATING TEMPERATURE: -10°C to 65°C.

Materials

HOUSING: Polycarbonate (UL 94V-0).

PUSHWHEEL: Polycarbonate (UL 94V-0).

PUSHBUTTON: Polycarbonate (UL 94V-0).

ROTOR CONTACTS: Gold over nickel over copper alloy.

STATOR CONTACTS: Hard gold over nickel over copper
on epoxy fiberglass.

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 M-17 thru M-19. For additional options not shown in catalog, consult Customer Service Center.

Consult factory for illumination availability.

Thumbwheel & Pushwheel

Series _____
3P (STD.) Miniature pushwheel

Number of Sections _____
0 Switch section
1 1 Switch section
2 2 Switch sections
3 3 Switch sections
4 4 Switch sections

Function Code _____
21 BCD 1-2-4-8
23 Complement of BCD 1-2-4-8

Mounting Style _____
0 Snap-in, front mount
3 Snap-in, front mount

Terminations _____
0 (STD.) Short PCB
1 Extended PCB
3 Short PCB with solder pins
9 Any combination
A Extended PCB with solder pins

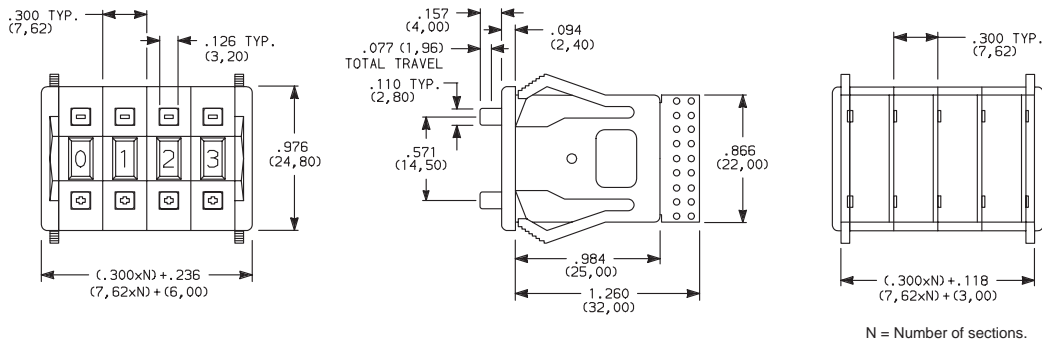
Color/Marking/Stops _____
0 Matte black housing, gloss black wheel, white marking, black pushbutton
9 Combination of body colors, wheel colors, marking and/or stops

Dust Lens _____
0 (STD.) No lens
2 Dust lens

C&K 3P Series Miniature Pushwheel Switches

SERIES

3P (STD.) MINIATURE PUSHWHEEL SWITCH



NUMBER OF SECTIONS

- 0** Switch section only, no endplates.
- 1-4** Number of switch sections in assembly, includes endplates.

NOTE: Endplates and blank sections available separately, see page M-20.

FUNCTION CODE

- 21** BCD 1-2-4-8, 10 POSITION
- 23** COMPLEMENT OF BCD 1-2-4-8, 10 POSITION

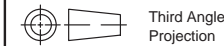
WHEEL	SIGNALS CONN. TO COMM. SIG. C				
	1	2	4	8	C
0					●
1	●				●
2		●			●
3	●				●
4			●		●
5	●			●	●
6		●		●	●
7	●		●		●
8		●		●	●
9	●			●	●
	1	3	5	7	9
	TERM. LOCATION				

Available Terminations: A, 0, 1, 3
See figs. 2 & 3, page M-19.

WHEEL	SIGNALS CONN. TO COMM. SIG. C				
	1	2	4	8	C
0		●	●	●	●
1	●		●	●	●
2		●		●	●
3	●		●		●
4		●		●	●
5	●		●		●
6		●		●	●
7	●		●		●
8		●		●	●
9	●		●		●
	1	7	9	3	5
	TERM. LOCATION				

Available Terminations: 0, 1, 3
See figs. 2 & 3, page M-19.

NOTE: For terminal location diagrams, see page M-19.



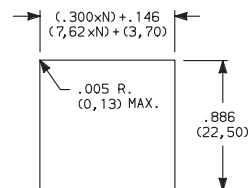
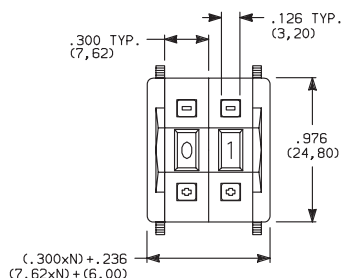
Dimensions are shown: IN (mm)
Dimensions subject to change

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C&K 3P Series Miniature Pushwheel Switches

MOUNTING STYLE

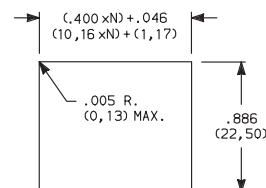
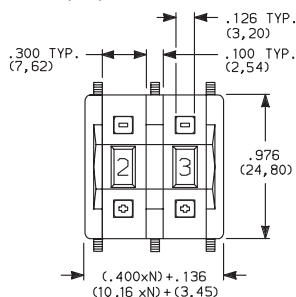
- 0** SNAP-IN FRONT MOUNT,
SECTION PITCH: .300 (7,62) EACH SECTION



N = Number of sections.

Recommended panel thickness:
.039-.156
(0,99-3,95)

- 3** SNAP-IN FRONT MOUNT WITH SPACER,
SECTION PITCH: .400 (70,16) EACH SECTION, LAST SECTION .300 (7,62)

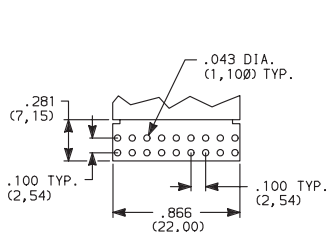


N = Number of sections.

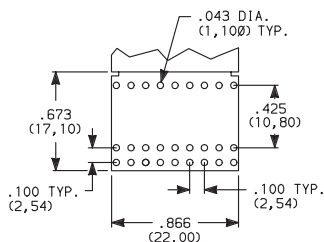
Recommended panel thickness:
.039-.156
(0,99-3,95)

TERMINATIONS

- 0** (STD.) SHORT PCB

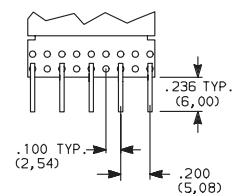


- 1** EXTENDED PCB WITH PROVISION
FOR COMPONENTS



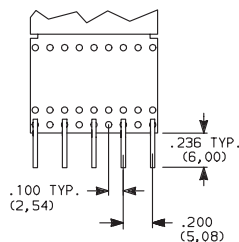
Signal traces cut, except for common(s).

- 3** SHORT PCB, TYPE 0 WITH SOLDER PINS



For terminal location numbers, see next page.

- A** EXTENDED PCB, TYPE 1 WITH
SOLDER PINS



For terminal location numbers, see next page.

Signal traces cut, except for common(s).

- 9** ANY COMBINATION OF TERMINATION
CONFIGURATIONS OR SPECIAL TERMINATIONS

Specify on configuration form, page M-21
and consult Customer Service Center.

PC Board 1/32" (0,79) thick.

NOTE: All terminal holes shown may not be present for all function codes,
consult Customer Service Center.

C&K 3P Series Miniature Pushwheel Switches

TERMINATIONS

Terminal Location Numbers

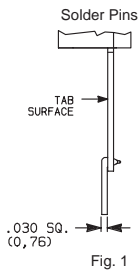


Fig. 1



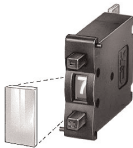
Fig. 2

COLOR/MARKING/STOPS

- 0 (STD.) MATTE BLACK HOUSING (Gloss black wheel with white characters, black pushbuttons, no stops.)
- 9 SPECIAL COLORS, MARKINGS FOR HOUSING OR WHEEL, STOPS (Specify on CONFIGURATION FORM, page M-21 and consult Customer Service Center).

DUST LENS

- 0 (STD.) NO LENS
- 2 DUST LENS (Protects character face of the wheel from abrasion and dust.)



Thumbwheel & Pushwheel



M


C&K 3P Series

Miniature Pushwheel Switches

Thumbwheel & Pushwheel



AVAILABLE HARDWARE

<p>Blank sections, .300 THK.</p>  <p>PART NO. 663702000 BLACK 663709000 GRAY</p>	<p>End plates</p>   <p>LEFT-with hole RIGHT-with pin</p> <p>PART NO. 623502000 LEFT-BLACK 623509000 LEFT-GRAY 623602000 RIGHT-BLACK 623609000 RIGHT-GRAY</p> <p>One left and one right piece required for complete assembly.</p>	<p>Spacers, .100 THK. (Makes section pitch .400)</p>  <p>PART NO. 663602000 BLACK 663609000 GRAY</p>
<p>Stop pins</p>  <p>PART NO. 657800000</p>	<p>Terminal connector</p>  <p>PART NO. 630000000</p> <p>Fits 0, 1 terminations only.</p>	

C&K 3P Series Miniature Pushwheel Switches

Configuration Form

GRAY SHADED AREAS TO BE FILLED IN BY CUSTOMER SERVICE.

CATALOG PART NO.

3 **P**

C&K PART NUMBER

C&K PART NUMBER

COMPANY NAME























ADDRESS TEL.#

CUSTOMER CONTACT DATE

ORIGINATED BY SALES REP.

CUSTOMER
PRINT
REVISION:

DETAILS:

PUSHWHEEL SECTIONS	NO. OF SEC.	FUNCTION CODE – TERMINATIONS – COLOR/MARKING/STOPS/SEAL – ILLUMINATION <small>ENTER OPTION CODES IN APPROPRIATE BOXES. FUNCTION CODES INCLUDE BLANK SECTIONS (SEE PAGE M-17).</small>	DESCRIBE IN APPROPRIATE ROW
 1 	1	3 P – <input type="text"/> <input type="text"/> – <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
 2 	2	3 P – <input type="text"/> <input type="text"/> – <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
 3 	3	3 P – <input type="text"/> <input type="text"/> – <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
 4 	4	3 P – <input type="text"/> <input type="text"/> – <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
 5 	5	3 P – <input type="text"/> <input type="text"/> – <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
 6 	6	3 P – <input type="text"/> <input type="text"/> – <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
 7 	7	3 P – <input type="text"/> <input type="text"/> – <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
 8 	8	3 P – <input type="text"/> <input type="text"/> – <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
 9 	9	3 P – <input type="text"/> <input type="text"/> – <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
 0 	10	3 P – <input type="text"/> <input type="text"/> – <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
 1 	11	3 P – <input type="text"/> <input type="text"/> – <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	

QUALITY CONTROL INSTRUCTIONS

PRODUCTION APPROVAL

DATE

Q.C. APPROVAL

DATE

REV.

INITIALS

DATE

FOR SWITCHES WITH MORE THAN 11 SECTIONS, CONTINUE ON ADDITIONAL SHEETS.

SPECIAL INSTRUCTIONS OR SPECIFICATIONS:

SHEET ____ OF ____

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

C&K Components:

[623502000](#) [623602000](#)