

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: $10^9 \Omega$ 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.

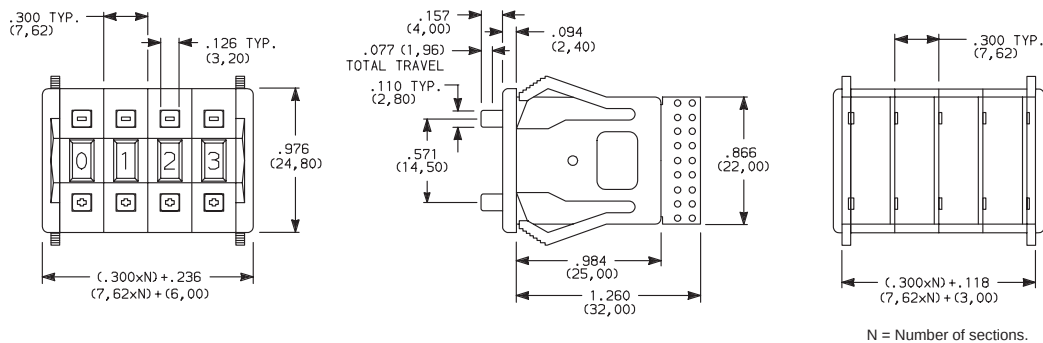
Consult factory for illumination availability.

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
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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.

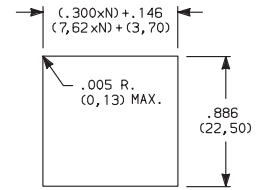
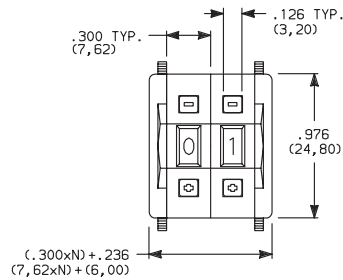
WHEEL	SIGNALS CONN. TO COMM. SIG. C				
	1	2	4	8	C
0		●	●	●	●
1	●		●	●	●
2		●		●	●
3	●		●		●
4		●		●	●
5	●			●	●
6		●		●	●
7	●		●		●
8		●		●	●
9	●			●	●
	1	7	9	3	5
	TERM. LOCATION				

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

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MOUNTING STYLE

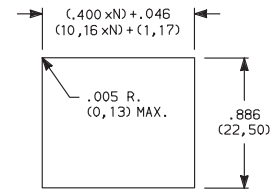
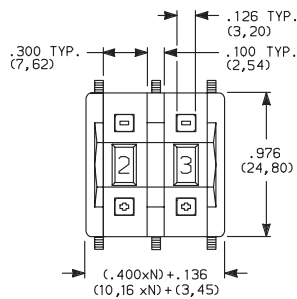
- 0** SNAP-IN FRONT MOUNT,
SECTION PITCH: .300 (7,62) EACH SECTION



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)

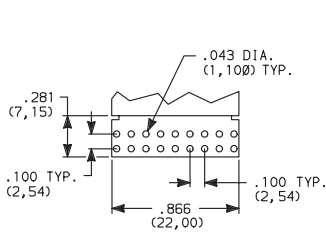


N = Number of sections.

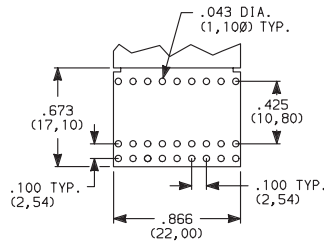
Recommended panel thickness:
.039-.156
(0,99-3,95)

TERMINATIONS

- 0** (STD.) SHORT PCB

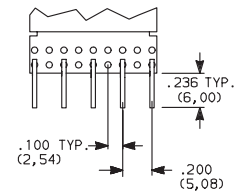


- 1** EXTENDED PCB WITH PROVISION
FOR COMPONENTS



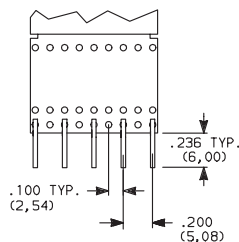
Signal traces cut, except for common(s).

- 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.

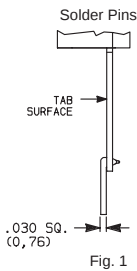
PC Board 1/32" (0,79) thick.

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

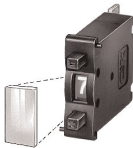


COLOR/MARKING/STOPS

- 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

AVAILABLE HARDWARE

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

Thumbwheel & Pushwheel



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:

Thumbwheel & Pushwheel



M

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

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 ____