

3P Series

Miniature Pushwheel Switches



Features/Benefits

- Snap-in front mount design for easy assembly
- 10 position models 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.

Note: All models listed are RoHS compliant. See Technical Data section of this catalog for RoHS compliant and compatible definitions and specifications.

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-12 thru M-15. For additional options not shown in catalog, consult Customer Service Center. Consult factory for illumination availability.

Series	
Number of Sections	
Function Code	
Mounting Style	
Terminations	
Color/Marking/Stops	
Dust Lens	

Series
3P 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 Short PCB
1 Extended PCB
N Short PCB with solder pins* (.100" spacing)
P Extended PCB with solder pins* (.200" spacing)
9 Any combination

Color/Marking/Stops
0 Matte black housing, gloss black wheel, white marking, black pushbutton

Dust Lens
0 No lens
2 Dust lens

* Note: Termination option N (RoHS compliant) replaced termination option 3 (Non-RoHS compliant).
Termination option P (RoHS compliant) replaced termination option A (Non-RoHS compliant).

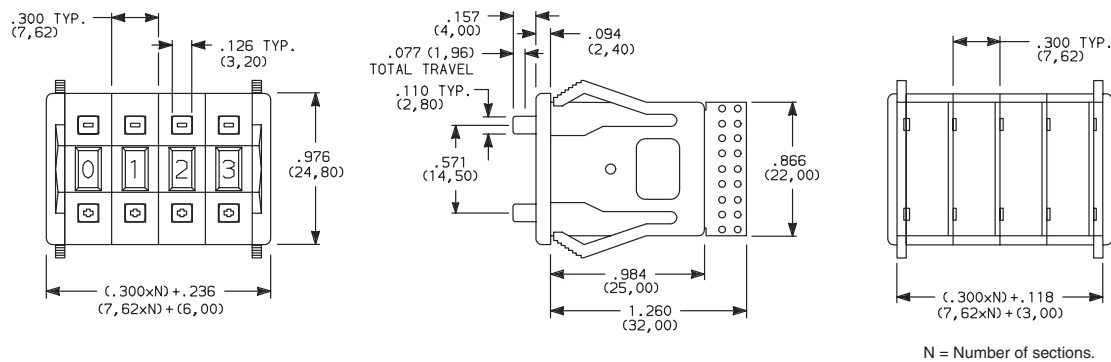
Thumbwheel & Pushwheel



3P Series
Miniature Pushwheel Switches

SERIES

3P 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-14.

FUNCTION CODE

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

W H E E L	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: P, 0, 1, N
See figs. 2 & 3, page N-19.

W H E E L	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, N
See figs. 2 & 3, page N-19.

NOTE: For terminal location diagrams, see page M-14.



Third Angle
Projection

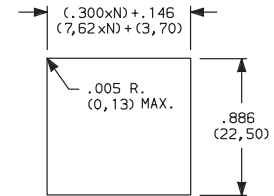
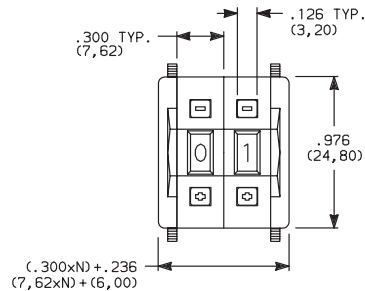
Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

www.ck-components.com

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MOUNTING STYLE

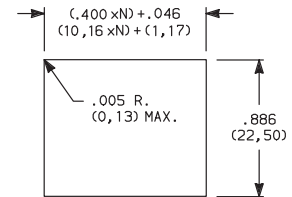
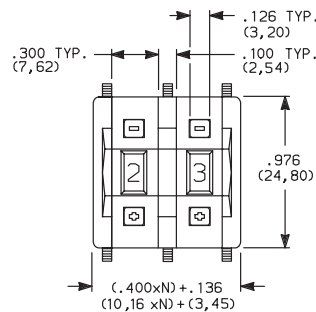
- 0** SNAP-IN FRONT MOUNT,
SECTION PITCH: .300 (7,62) EACH SECTION



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)

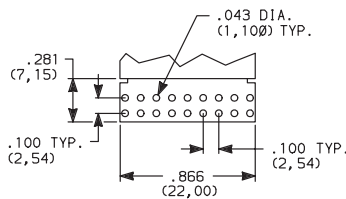


N = Number of sections.

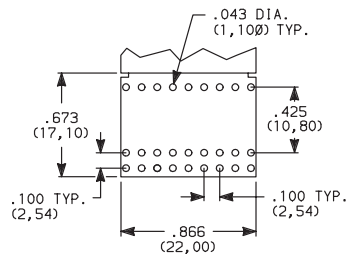
Recommended panel thickness:
.039-.156
(0,99-3,95)

TERMINATIONS

- 0** SHORT PCB

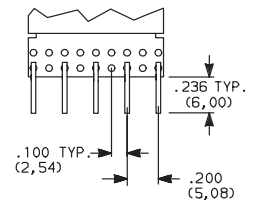


- 1** EXTENDED PCB WITH PROVISION
FOR COMPONENTS



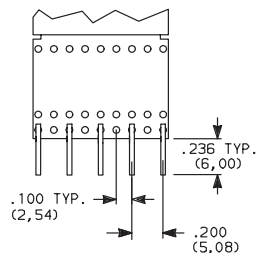
Signal traces cut, except for common(s).

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



For terminal location numbers, see next page.

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



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

Specify on configuration form, page M-15
and consult Customer Service Center.

For terminal location numbers, see next page.
Signal traces cut, except for common(s).

** Note: Termination option N (RoHS compliant) replaced termination option 3 (Non-RoHS compliant).
Termination option P (RoHS compliant) replaced termination option A (Non-RoHS compliant).

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

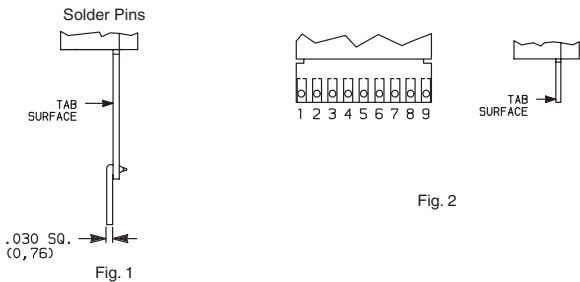
NOTE: All terminal holes shown may not be present for all function codes,
consult Customer Service Center.



3P Series Miniature Pushwheel Switches

TERMINATIONS

Terminal Location Numbers



COLOR/MARKING/STOPS

- 0 MATTE BLACK HOUSING (Gloss black wheel with white characters, black pushbuttons, no stops.)

DUST LENS

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



AVAILABLE HARDWARE

Blank sections, .300 THK.



PART NO.
663702000 BLACK

End plates



LEFT-with hole



RIGHT-with pin

PART NO.
623502000 LEFT-BLACK
623602000 RIGHT-BLACK

One left and one right
piece required for
complete assembly.

Spacers, .100 THK.
(Makes section pitch .400)



PART NO.
663602000 BLACK

Stop pins



PART NO.
657800000



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



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

CUSTOMER
PRINT
REVISION:

ADDRESS TEL.#

CUSTOMER CONTACT DATE

DETAILS:

ORIGINATED BY SALES REP.

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 ____



Thumbwheel & Pushwheel

