

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.

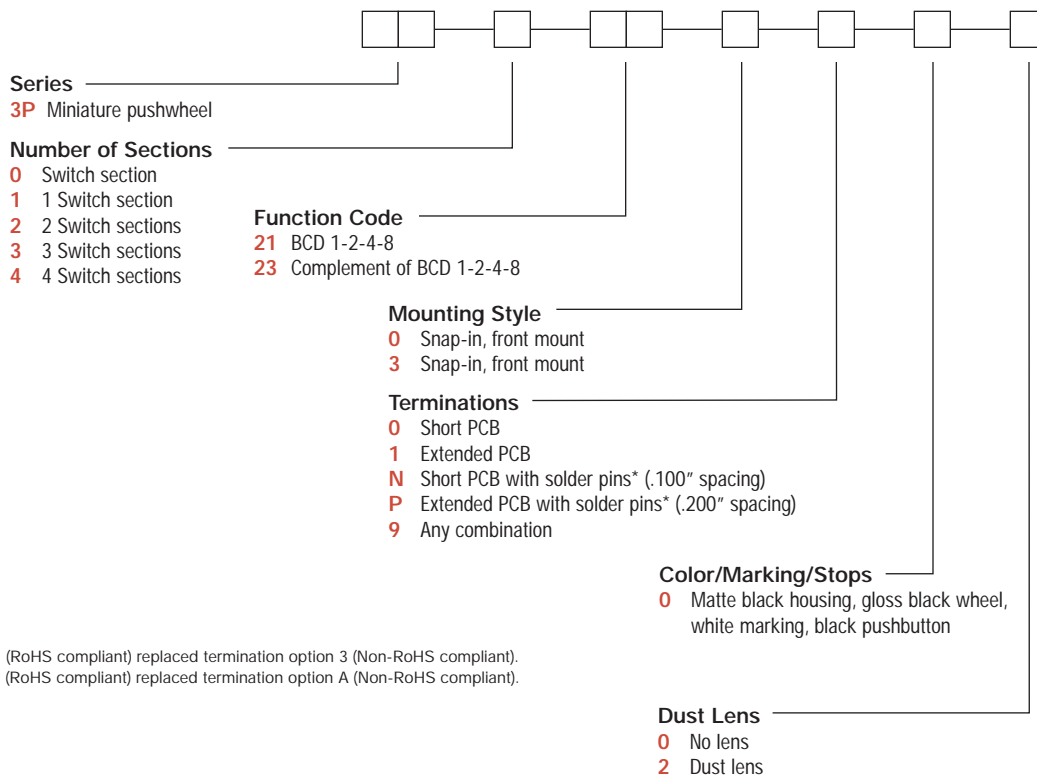
NOTE: Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

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 N-17 thru N-19. For additional options not shown in catalog, consult Customer Service Center. Consult factory for illumination availability.

Thumbwheel & Pushwheel



* 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).

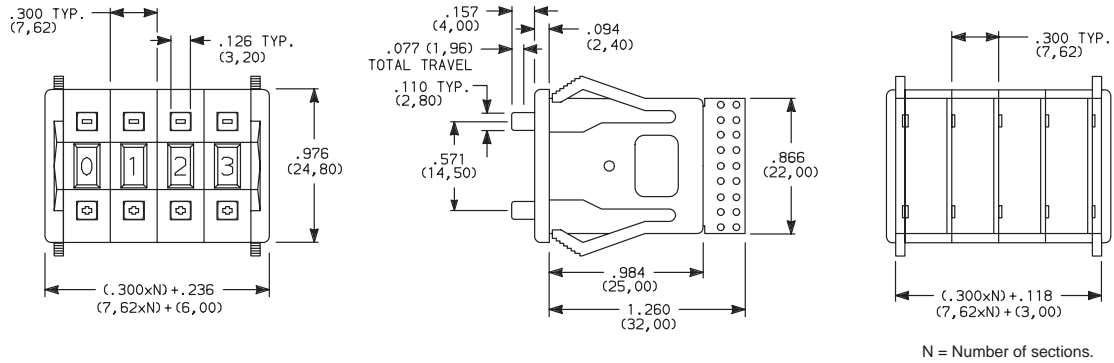


Dimensions are shown: Inch (mm)
 Specifications and dimensions subject to change

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 N-20.

FUNCTION CODE

21 BCD 1-2-4-8, 10 POSITION

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

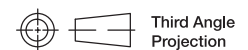
WHEEL	SIGNALS CONN. TO COMM. SIG. C			
	1	2	4	8
0				
1	●			●
2		●		●
3	●			●
4			●	●
5	●			●
6		●		●
7	●	●		●
8				●
9	●			●
	1	3	5	7
	TERM. LOCATION			

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

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

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

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



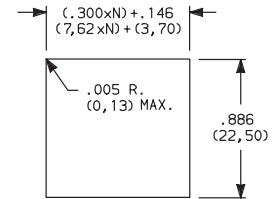
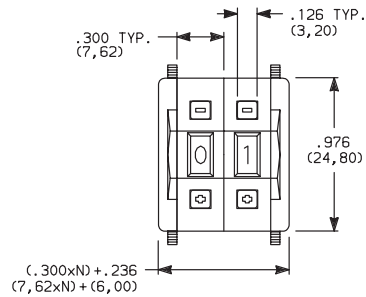
Dimensions are shown: Inch (mm)
Specifications and dimensions subject to change



3P Series Miniature Pushwheel Switches

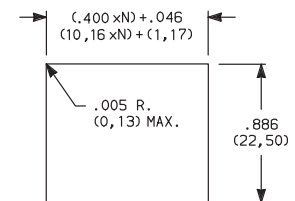
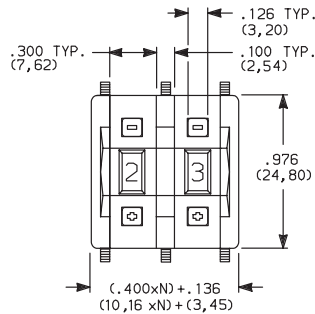
MOUNTING STYLE

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)

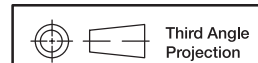


N = Number of sections.
Recommended panel thickness:
.039-.156
(0,99-3,95)

Thumbwheel & Pushwheel



N

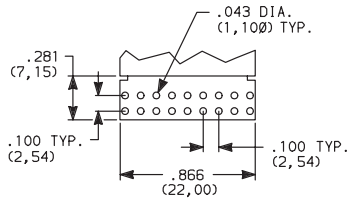


Dimensions are shown: Inch (mm)
Specifications and dimensions subject to change

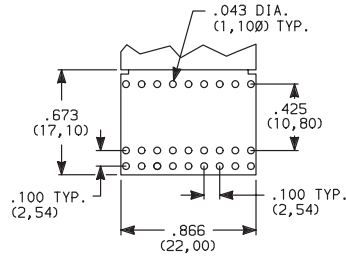
3P Series Miniature Pushwheel Switches

TERMINATIONS

0 SHORT PCB

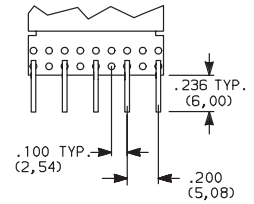


1 EXTENDED PCB WITH PROVISION FOR COMPONENTS



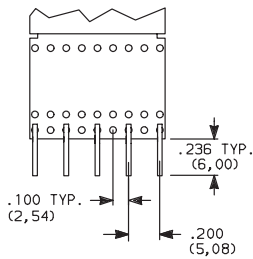
Signal traces cut, except for common(s).

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 N-21 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.

Thumbwheel & Pushwheel

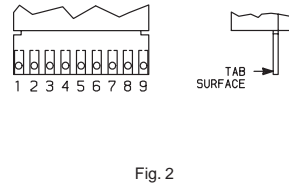
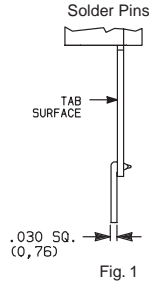


N

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.)



Thumbwheel & Pushwheel



N

3P Series Miniature Pushwheel Switches

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

Terminal connector



PART NO.
630000000

Fits 0, 1
terminations only.

Thumbwheel & Pushwheel



N

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 <small>ENTER OPTION CODES IN APPROPRIATE BOXES. FUNCTION CODES INCLUDE BLANK SECTIONS (SEE PAGE M-17).</small>	DESCRIBE IN APPROPRIATE ROW
<input type="checkbox"/> 1 <input type="checkbox"/>	1	3 P - <input type="text"/> <input type="text"/> - <input type="text"/> <input type="text"/> <input type="text"/>	
<input type="checkbox"/> 2 <input type="checkbox"/>	2	3 P - <input type="text"/> <input type="text"/> - <input type="text"/> <input type="text"/> <input type="text"/>	
<input type="checkbox"/> 3 <input type="checkbox"/>	3	3 P - <input type="text"/> <input type="text"/> - <input type="text"/> <input type="text"/> <input type="text"/>	
<input type="checkbox"/> 4 <input type="checkbox"/>	4	3 P - <input type="text"/> <input type="text"/> - <input type="text"/> <input type="text"/> <input type="text"/>	
<input type="checkbox"/> 5 <input type="checkbox"/>	5	3 P - <input type="text"/> <input type="text"/> - <input type="text"/> <input type="text"/> <input type="text"/>	
<input type="checkbox"/> 6 <input type="checkbox"/>	6	3 P - <input type="text"/> <input type="text"/> - <input type="text"/> <input type="text"/> <input type="text"/>	
<input type="checkbox"/> 7 <input type="checkbox"/>	7	3 P - <input type="text"/> <input type="text"/> - <input type="text"/> <input type="text"/> <input type="text"/>	
<input type="checkbox"/> 8 <input type="checkbox"/>	8	3 P - <input type="text"/> <input type="text"/> - <input type="text"/> <input type="text"/> <input type="text"/>	
<input type="checkbox"/> 9 <input type="checkbox"/>	9	3 P - <input type="text"/> <input type="text"/> - <input type="text"/> <input type="text"/> <input type="text"/>	
<input type="checkbox"/> 0 <input type="checkbox"/>	10	3 P - <input type="text"/> <input type="text"/> - <input type="text"/> <input type="text"/> <input type="text"/>	
<input type="checkbox"/> 1 <input type="checkbox"/>	11	3 P - <input type="text"/> <input type="text"/> - <input type="text"/> <input type="text"/> <input type="text"/>	

Thumbwheel & Pushwheel



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 ____



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