

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.

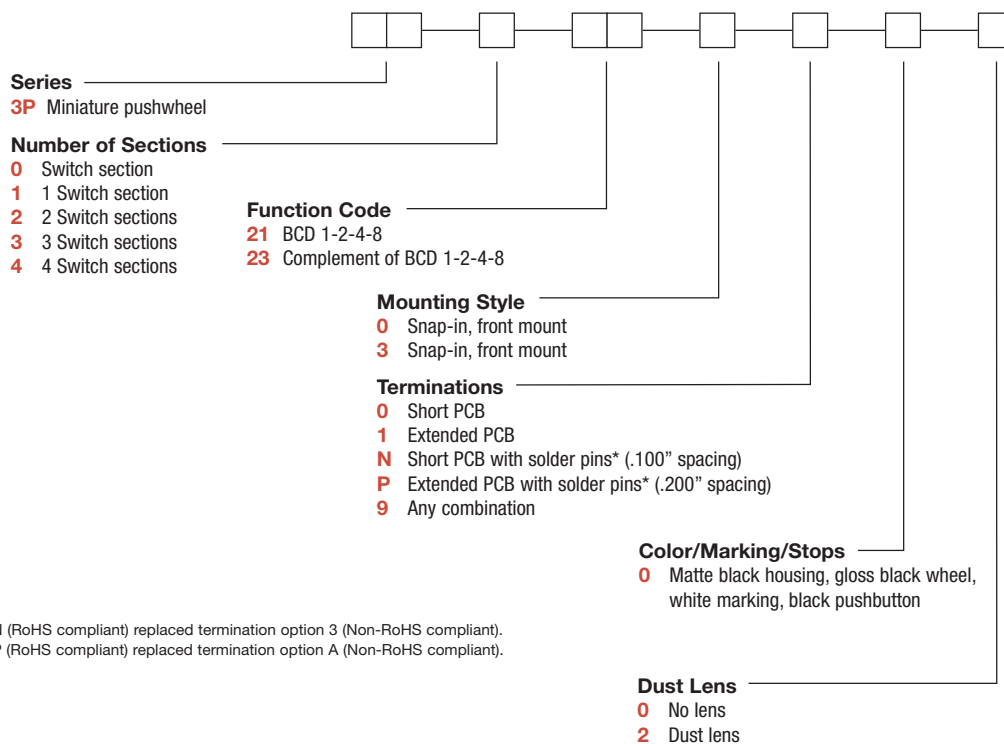
NOTE: Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

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.



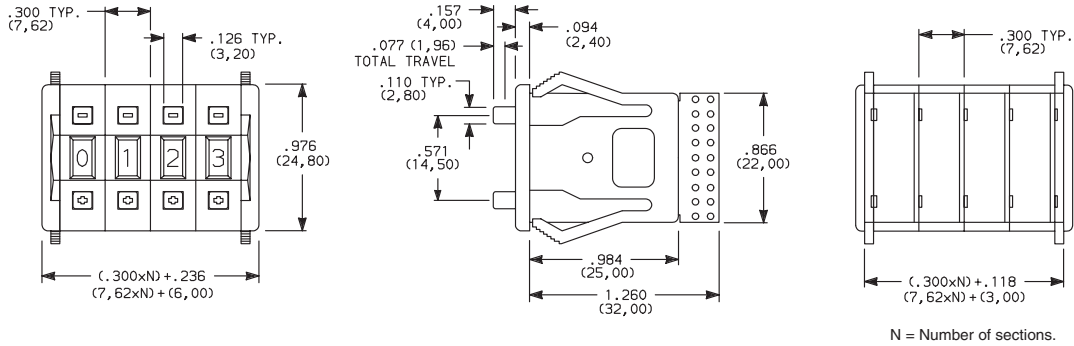
Thumbwheel & Pushwheel



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				

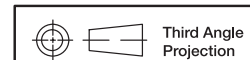
Available Terminations: 0, 1, N
See figs. 2 & 3, page N-19.

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

Thumbwheel & Pushwheel



M



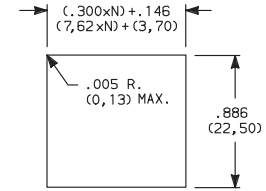
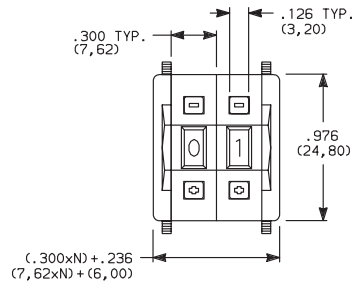
Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change



3P Series Miniature Pushwheel Switches

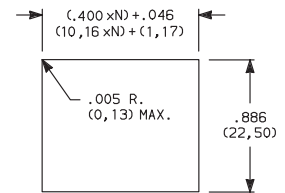
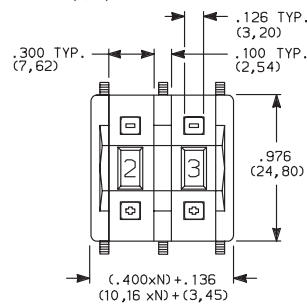
MOUNTING STYLE

- 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)

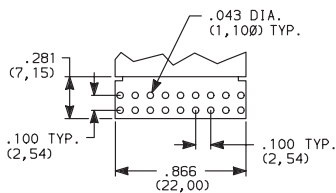
- 3** SNAP-IN FRONT MOUNT WITH SPACER,
SECTION PITCH: .400 (70,16) EACH SECTION, LAST SECTION .300 (7,62)



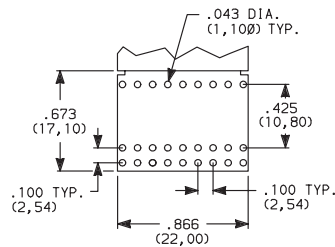
N = Number of sections.
Recommended panel thickness:
.039-.156
(0,99-3,95)

TERMINATIONS

- 0** SHORT PCB

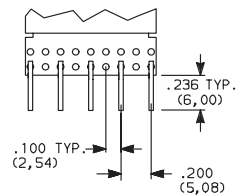


- 1** EXTENDED PCB WITH PROVISION
FOR COMPONENTS



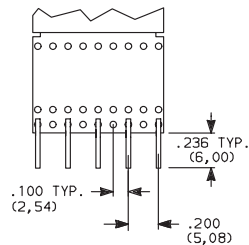
Signal traces cut, except for common(s).

- 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

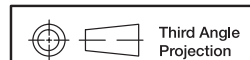
Specify on configuration form, page M-15
and consult Customer Service Center.

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.



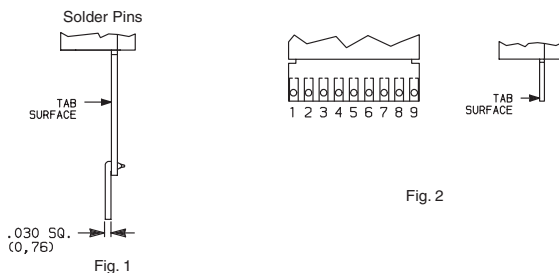
Third Angle
Projection
Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change



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

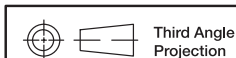


PART NO.
657800000

Thumbwheel & Pushwheel



M



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

Thumbwheel & Pushwheel



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