

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: $10^9 \Omega$ 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.

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.

Series Miniature pushwheel

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

Function Code
 BCD 1-2-4-8
 Complement of BCD 1-2-4-8

Mounting Style
 Snap-in, front mount
 Snap-in, front mount

Terminations
 Short PCB
 Extended PCB
 Short PCB with solder pins* (.100" spacing)
 Extended PCB with solder pins* (.200" spacing)
 Any combination

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

Dust Lens
 No lens
 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

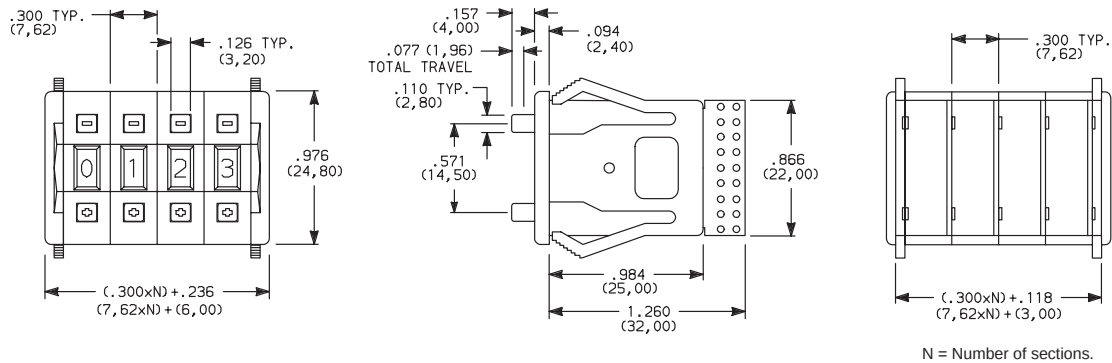


N

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

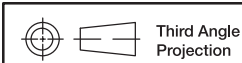
W H E E L	SIGNALS CONN. TO COMM. SIG. C				
	1	2	4	8	C
0					
1	●				●
2		●			●
3	●	●			●
4			●		●
5	●		●		●
6		●	●		●
7	●	●	●		●
8				●	●
9	●			●	●
	1	3	5	7	9
	TERM. LOCATION				

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 N-19.



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

www.ck-components.com

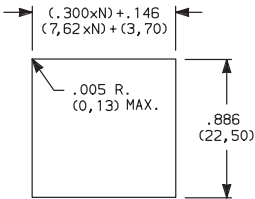
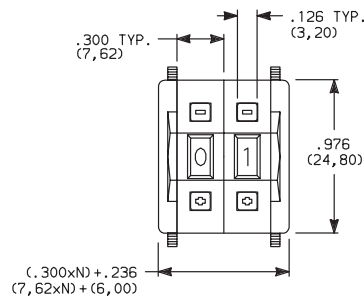


3P Series Miniature Pushwheel Switches

MOUNTING STYLE

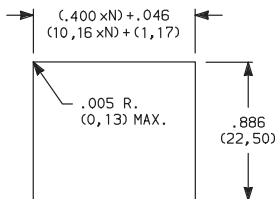
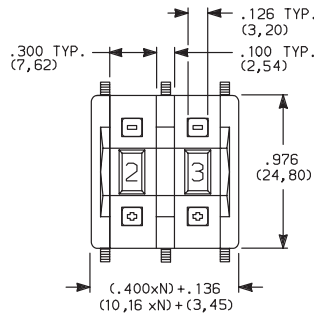


- 0
- SNAP-IN FRONT MOUNT,
SECTION PITCH: .300 (7,62) EACH SECTION



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)

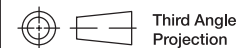


N = Number of sections.
Recommended panel thickness:
.039-.156
(0,99-3,95)

Thumbwheel & Pushwheel



N

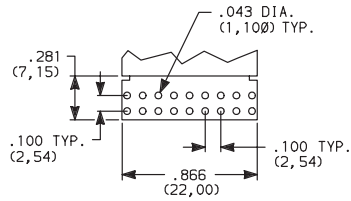


Dimensions are shown: Inch (mm)
Specifications and dimensions subject to change

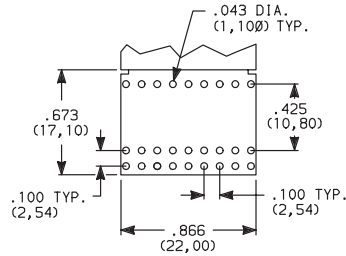
3P Series Miniature Pushwheel Switches

TERMINATIONS

0 SHORT PCB

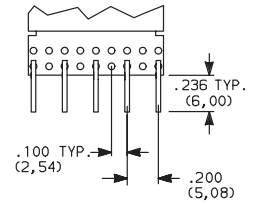


1 EXTENDED PCB WITH PROVISION FOR COMPONENTS



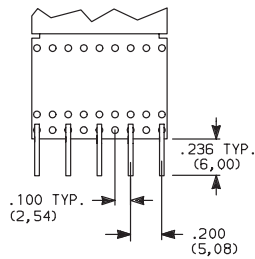
Signal traces cut, except for common(s).

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

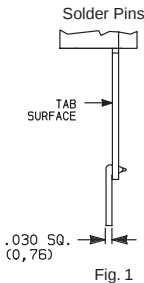


Fig. 2

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. 667800000	Terminal connector  PART NO. 630000000 Fits 0, 1 terminations only.	

Thumbwheel & Pushwheel



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 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 ____



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

Thumbwheel & Pushwheel



N