

3U Series Tiny Pushwheel Switches

Features/Benefits

- **Tiny size saves space**
- **10 and 16 position models available**
- **ESD clip available on select models**
- **Snap-in front mount saves assembly time**

Typical Applications

- **Computer peripherals**
- **Test equipment**
- **Instrumentation**



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: 1,000,000 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: Polyester (UL 94V-0).
PUSHWHEEL: Polycarbonate.
PUSHBUTTON: Polyester (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-4 thru N-6. 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	Dust Lens
3U Tiny pushwheel	0 Switch section 1 1 Switch section 2 2 Switch sections 3 3 Switch sections 4 4 Switch sections 5 5 Switch sections 6 6 Switch sections 7 7 Switch sections 8 8 Switch sections 9 More than 8 switch sections	21 BCD 1-2-4-8 71 BCH, 16 position	0 Snap-in, front mount	0 Short PC board N Short PC board with pins* 9 Any combination	0 No lens 2 Dust lens
Color/Marking/Stops	0 Matte black housing, gloss black wheel, extended actuator, white vertical characters, black pushbutton, no stops 9 Combination of body colors, wheel colors, marking and/or stops A Matte black housing, gloss black wheel, extended actuator, white horizontal characters, black pushbutton, no stops C Matte black housing, gloss black wheel, recessed actuator, white vertical characters, black pushbutton, no stops E Matte black housing, gloss black wheel, recessed actuator, white horizontal characters, black pushbutton, no stops				

* Note: Termination option N (RoHS compliant) replaces termination option 3 (non-RoHS compliant).

Thumbwheel & Pushwheel

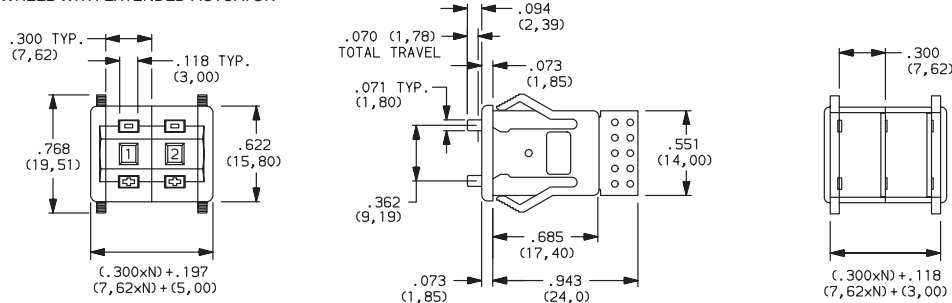


N

3U Series Tiny Pushwheel Switches

SERIES

3U 1/2" TINY PUSHWHEEL WITH EXTENDED ACTUATOR



N = Number of sections.

NUMBER OF SECTIONS

- 0 Switch section only, no endplates.
- 1-8 Number of switch sections in assembly, includes endplates.
- 9 More than 8 switch sections, specify on CONFIGURATION FORM, page N-7 and consult Customer Service Center.

NOTE: Endplates and blank sections available separately, see page N-6.

FUNCTION CODE

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

71 BINARY CODED HEXADECIMAL, 16 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	2	3	4	5
	TERM. LOCATION				

Available Terminations: 0, N
See figs. 2 & 3, page N-5.

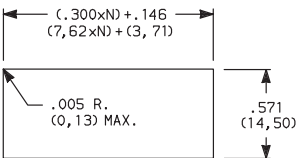
W H E E L	SIGNALS CONN. TO COMM. SIG. C				
	1	2	4	8	C
0					●
1	●				●
2		●			●
3	●	●			●
4			●		●
5	●		●		●
6		●	●		●
7	●	●	●		●
8				●	●
9	●			●	●
A		●	●	●	●
B	●	●	●	●	●
C			●	●	●
D	●		●	●	●
E		●	●	●	●
F	●	●	●	●	●
	2	3	4	5	1
	TERM. LOCATION				

Available Terminations: 0, N
See fig. 2, page N-5.

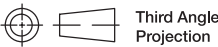
NOTE: ESD pin available, consult Customer Service Center.
For terminal location diagrams, see page N-5.

MOUNTING STYLE

0 SNAP-IN FRONT MOUNTING



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



Third Angle
Projection

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

www.ck-components.com

Thumbwheel & Pushwheel



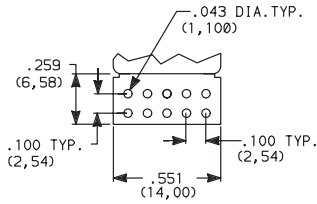
N

C&K

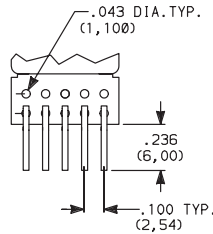
3U Series Tiny Pushwheel Switches

TERMINATIONS

0 SHORT PC BOARD



N SHORT PC BOARD, TYPE 0
WITH SOLDER PINS



9 ANY COMBINATION OF TERMINATION
CONFIGURATION OR SPECIAL TERMINATIONS.

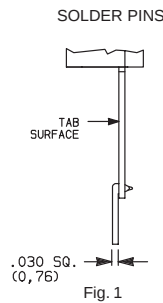
Specify on configuration form, page N-7
and consult Customer Service Center.

Note: Termination option N (RoHS compliant) replaces termination option 3 (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.

Terminal Location Numbers



NOTE: See function codes, page N-4 for signal locations.

COLOR/MARKING/STOPS

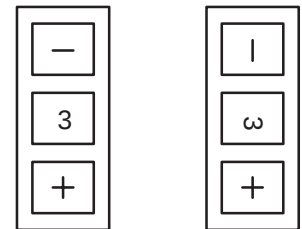
0 MATTE BLACK HOUSING (Gloss black wheel with extended actuator, white vertical characters, black pushbuttons, no stops.)

9 SPECIAL COLORS, MARKINGS FOR HOUSING OR WHEEL, STOPS (Specify on CONFIGURATION FORM, page N-7 and consult Customer Service Center.)

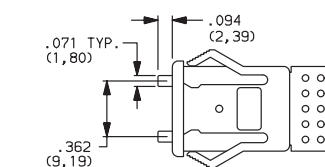
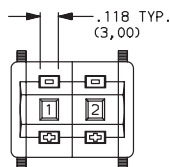
A MATTE BLACK HOUSING (Gloss black wheel with white horizontal characters, extended actuator, black pushbuttons, no stops.)

C MATTE BLACK HOUSING (Gloss black wheel with white vertical characters, recessed actuator, black pushbuttons, no stops.)

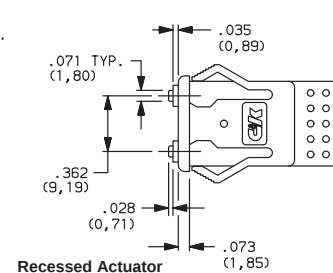
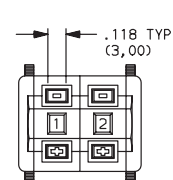
E MATTE BLACK HOUSING (Gloss black wheel with white horizontal characters, recessed actuator, black pushbuttons, no stops.)



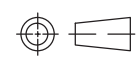
Vertical Characters Horizontal Characters



Extended Actuator



Recessed Actuator



Third Angle
Projection

C&K

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



3U Series Tiny Pushwheel Switches

DUST LENS

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

AVAILABLE HARDWARE

Blank section, .302 THK.
(Replaces active section.)



PART NO.
123B02000 BLACK

End plates



LEFT-with hole



RIGHT-with pin

PART NO.
113B02000 LEFT-BLACK
114B02000 RIGHT-BLACK

One left and one right
piece required for
complete assembly.

3U Series Tiny Pushwheel Switches

Configuration Form

GRAY SHADED AREAS TO BE FILLED IN BY CUSTOMER SERVICE.

CATALOG PART NO.

3 U

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-4).	DESCRIBE IN APPROPRIATE ROW
	1	3 U - -	
	2	3 U - -	
	3	3 U - -	
	4	3 U - -	
	5	3 U - -	
	6	3 U - -	
	7	3 U - -	
	8	3 U - -	
	9	3 U - -	
	10	3 U - -	
	11	3 U - -	

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

