

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: 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

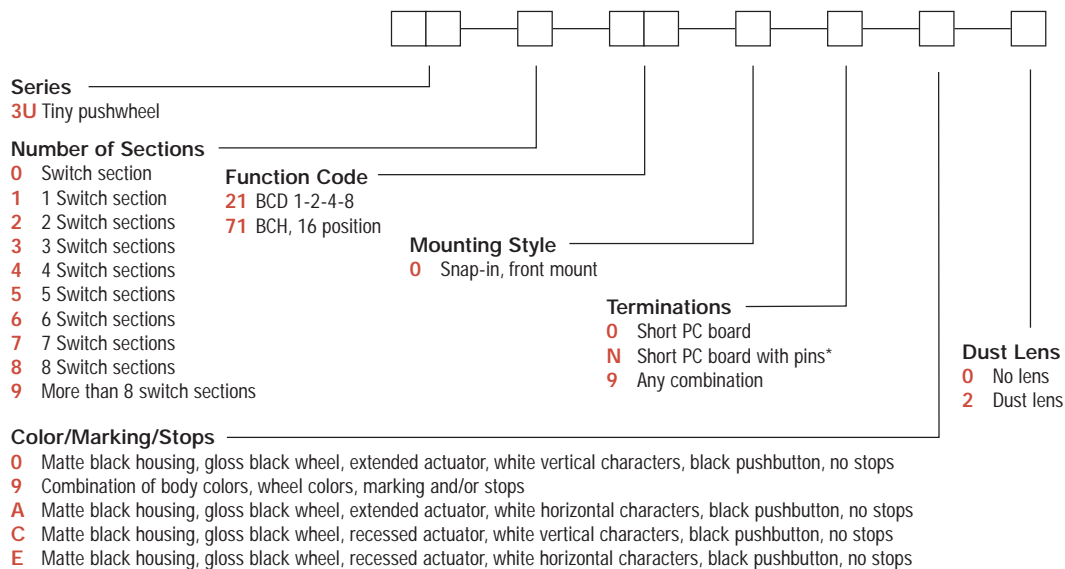
HOUSING: Polyester (UL 94V-0).
 PUSHWHEEL: Polycarbonate.
 PUSHBUTTON: Polyester (UL 94V-0).
 ROTOR CONTACTS: Gold over nickel over copper alloy.
 STATOR CONTACTS: Hard gold over nickel over copper on epoxy fiberglass.

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.



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

Thumbwheel & Pushwheel

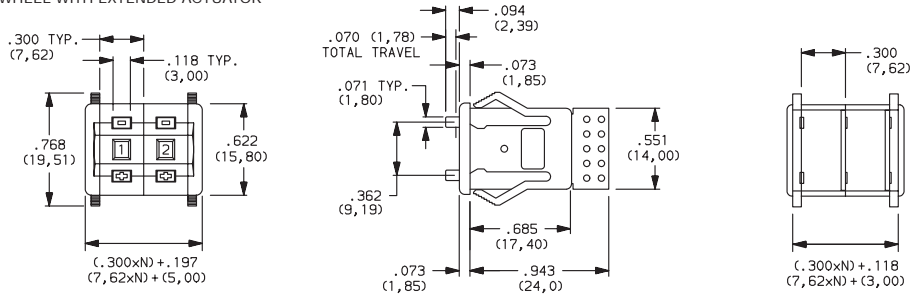


Dimensions are shown: Inch (mm)
 Specifications and dimensions subject to change

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

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.

71 BINARY CODED HEXADECIMAL,
16 POSITION

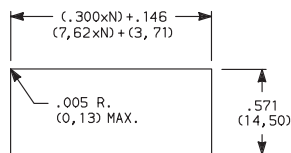
W H E E L	SIGNALS CONN. TO COMM. SIG. C				
	1	2	4	8	C
0					●
1	●				●
2		●			●
3	●	●			●
4			●		●
5	●		●		●
6		●	●		●
7	●	●	●		●
8				●	●
9	●			●	●
A		●	●	●	●
B	●	●	●	●	●
C			●	●	●
D	●	●	●	●	●
E		●	●	●	●
F	●	●	●	●	●
	2	3	4	5	1
	TERM. LOCATION				

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)

Thumbwheel & Pushwheel



N



Third Angle
Projection

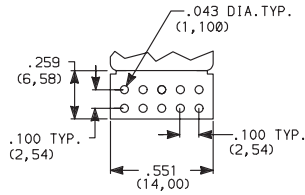
Dimensions are shown: Inch (mm)
Specifications and dimensions subject to change



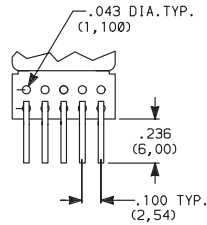
3U Series Tiny Pushwheel Switches

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

SOLDER PINS

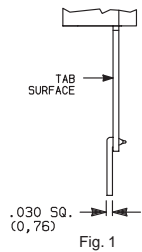
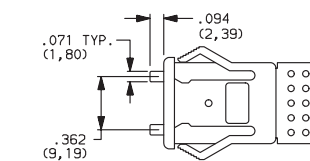
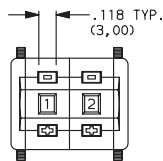
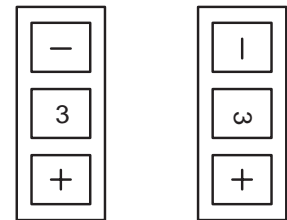


Fig. 2

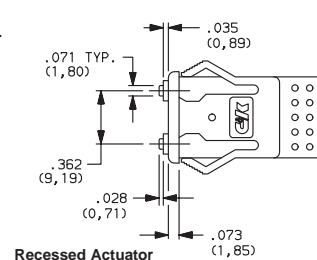
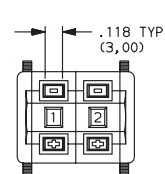
NOTE: See function codes, page N-4 for signal locations.

COLOR/MARKING/STOPS

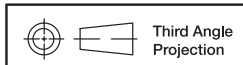
- 0** MATTE BLACK HOUSING (Gloss black wheel with extended actuator, white vertical characters, black pushbuttons, no stops.)
- 9** SPECIAL COLORS, MARKINGS FOR HOUSING OR WHEEL, STOPS (Specify on CONFIGURATION FORM, page N-7 and consult Customer Service Center.)
- A** MATTE BLACK HOUSING (Gloss black 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.)



Extended Actuator



Recessed Actuator



Third Angle
Projection

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



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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.

Thumbwheel & Pushwheel



N

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 _____

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-4).</small>	DESCRIBE IN APPROPRIATE ROW
1	1	3 U - <input type="text"/> <input type="text"/> - <input type="text"/> <input type="text"/> <input type="text"/>	
2	2	3 U - <input type="text"/> <input type="text"/> - <input type="text"/> <input type="text"/> <input type="text"/>	
3	3	3 U - <input type="text"/> <input type="text"/> - <input type="text"/> <input type="text"/> <input type="text"/>	
4	4	3 U - <input type="text"/> <input type="text"/> - <input type="text"/> <input type="text"/> <input type="text"/>	
5	5	3 U - <input type="text"/> <input type="text"/> - <input type="text"/> <input type="text"/> <input type="text"/>	
6	6	3 U - <input type="text"/> <input type="text"/> - <input type="text"/> <input type="text"/> <input type="text"/>	
7	7	3 U - <input type="text"/> <input type="text"/> - <input type="text"/> <input type="text"/> <input type="text"/>	
8	8	3 U - <input type="text"/> <input type="text"/> - <input type="text"/> <input type="text"/> <input type="text"/>	
9	9	3 U - <input type="text"/> <input type="text"/> - <input type="text"/> <input type="text"/> <input type="text"/>	
0	10	3 U - <input type="text"/> <input type="text"/> - <input type="text"/> <input type="text"/> <input type="text"/>	
1	11	3 U - <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: Inch (mm)
Specifications and dimensions subject to change