

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

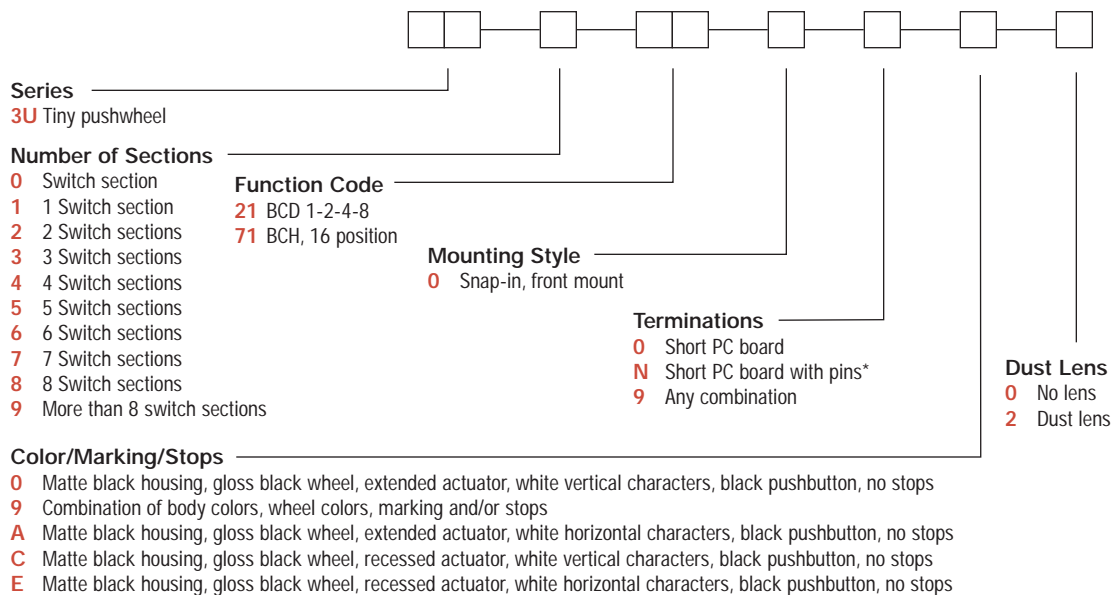
HOUSING: Polyester (UL 94V-0).
 PUSHWHEEL: Polycarbonate.
 PUSHBUTTON: Polyester (UL 94V-0).
 ROTOR CONTACTS: Gold over nickel over copper alloy.
 STATOR CONTACTS: Hard gold over nickel over copper on epoxy fiberglass.

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).

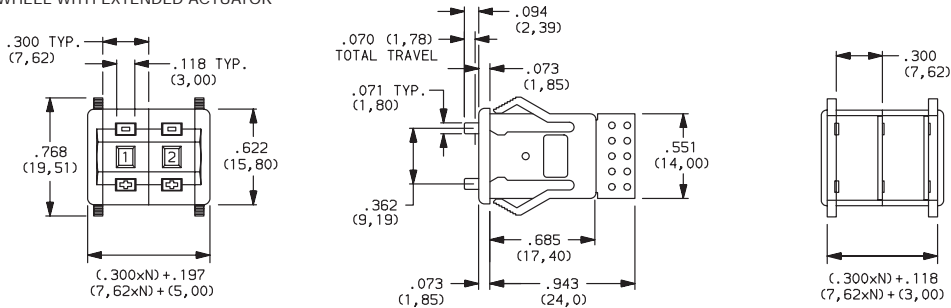
Thumbwheel & Pushwheel



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

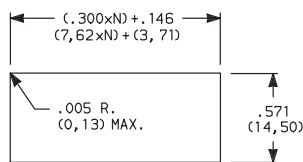
| W H E E L | SIGNALS CONN. TO COMM. SIG. C | | | | |
|-----------------------|----------------------------------|---|---|---|---|
| | 1 | 2 | 4 | 8 | C |
| 0 | | | | | ● |
| 1 | ● | | | | ● |
| 2 | | ● | | | ● |
| 3 | ● | ● | | | ● |
| 4 | | | ● | | ● |
| 5 | ● | | ● | | ● |
| 6 | | ● | ● | | ● |
| 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.

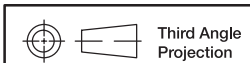
NOTE: ESD pin available, consult Customer Service Center.
For terminal location diagrams, see page N-5.

MOUNTING STYLE

0 SNAP-IN FRONT MOUNTING



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



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

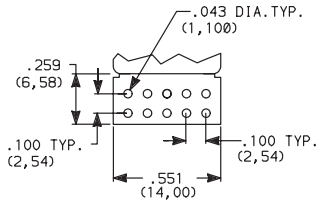
www.ck-components.com



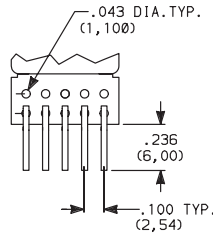
3U Series Tiny Pushwheel Switches

TERMINATIONS

0 SHORT PC BOARD



N SHORT PC BOARD, TYPE 0 WITH SOLDER PINS



9 ANY COMBINATION OF TERMINATION CONFIGURATION OR SPECIAL TERMINATIONS.

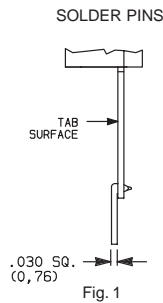
Specify on configuration form, page N-7 and consult Customer Service Center.

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.

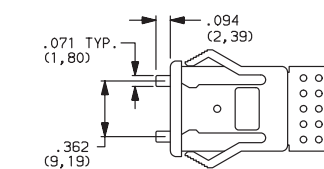
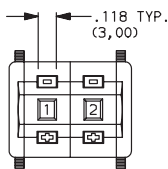
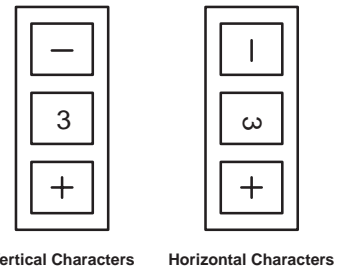
Terminal Location Numbers



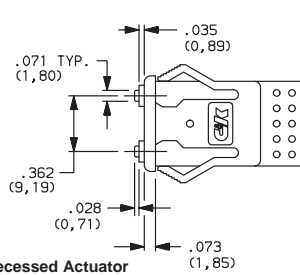
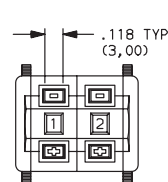
NOTE: See function codes, page N-4 for signal locations.

COLOR/MARKING/STOPS

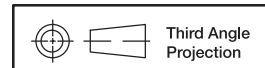
- 0** MATTE BLACK HOUSING (Gloss black wheel with extended actuator, white vertical characters, black pushbuttons, no stops.)
- 9** SPECIAL COLORS, MARKINGS FOR HOUSING OR WHEEL, STOPS (Specify on CONFIGURATION FORM, page N-7 and consult Customer Service Center.)
- A** MATTE BLACK HOUSING (Gloss black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



Extended Actuator



Recessed Actuator



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

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



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

Thumbwheel & Pushwheel

