

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				

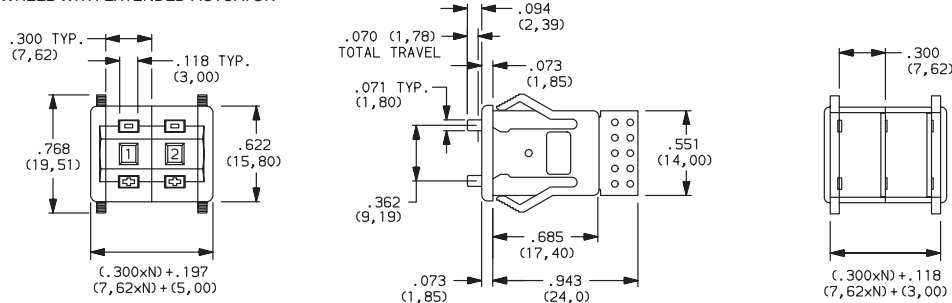
* Note: Termination option N (RoHS compliant) replaces termination option 3 (non-RoHS compliant).



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.

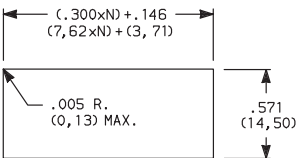
W H E E L	SIGNALS CONN. TO COMM. SIG. C				
	1	2	4	8	C
0					
1					
2					
3					
4					
5					
6					
7					
8					
9					
A					
B					
C					
D					
E					
F					
	2	3	4	5	1
	TERM. LOCATION				

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

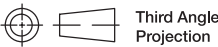
NOTE: ESD pin available, consult Customer Service Center.
For terminal location diagrams, see page N-5.

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

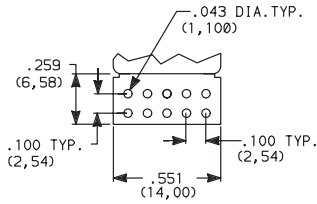
www.ck-components.com



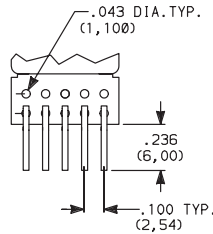
3U Series Tiny Pushwheel Switches

TERMINATIONS

0 SHORT PC BOARD



N SHORT PC BOARD, TYPE 0 WITH SOLDER PINS



9 ANY COMBINATION OF TERMINATION CONFIGURATION OR SPECIAL TERMINATIONS.

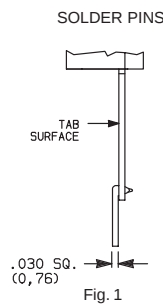
Specify on configuration form, page N-7 and consult Customer Service Center.

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

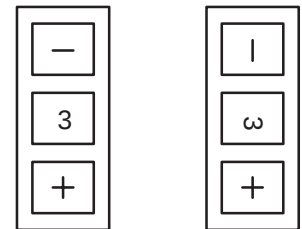
0 MATTE BLACK HOUSING (Gloss black wheel with extended actuator, white vertical characters, black pushbuttons, no stops.)

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

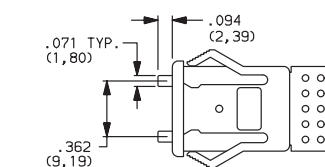
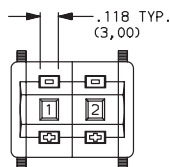
A MATTE BLACK HOUSING (Gloss black wheel with white horizontal characters, extended actuator, black pushbuttons, no stops.)

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

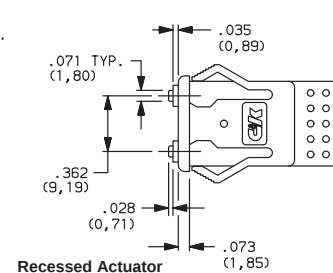
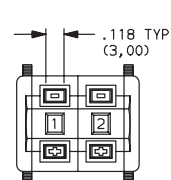
E MATTE BLACK HOUSING (Gloss black wheel with white horizontal characters, recessed actuator, black pushbuttons, no stops.)



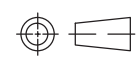
Vertical Characters Horizontal Characters



Extended Actuator



Recessed Actuator



Third Angle Projection

C&K

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

DUST LENS

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



End plates



LEFT-with hole



RIGHT-with pin

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

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	- -	
	2	- -	
	3	- -	
	4	- -	
	5	- -	
	6	- -	
	7	- -	
	8	- -	
	9	- -	
	10	- -	
	11	- -	

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