



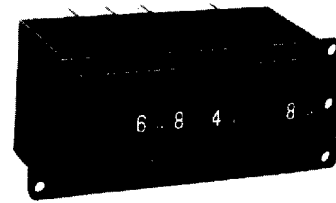
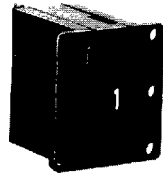
3 Series

NEW

ILLUMINATED MODELS

# Thumbwheel Switches

A-25-09

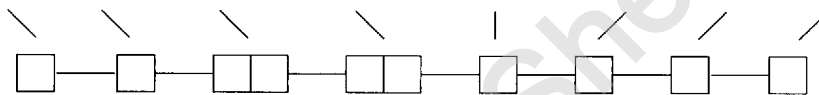


## Easy Build-A-Switch:

Below is a complete listing of available options for 3 SERIES THUMBWHEEL SWITCHES. Build-A-Switch allows you to mix and match options to create the switch you need—simply select desired option from each category. All available options are described on pages F-33 thru F-43. Dashes, hyphens or spaces in the part number are not significant, and are shown for clarity only. Complete HOW TO ORDER information is at the end of this section, page F-43. Use CONFIGURATION FORM, page F-44, for special instructions. Hardware is available separately, see catalog section H.

SERIES	NUMBER OF SECTIONS	FUNCTION CODE	MOUNTING STYLE	TERMINATIONS	COLOR/MARKING/STOPS	SEALS	ILLUMINATION
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3	One	Decimal 1 Pole	Front Mount		Black w/ white Markings	Unsealed	None
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Special switch no. assigned by C&K.



Configuration form required, see page F-44.

3	0	11 42	00	0	0	0	(NONE)
	1	12 45	03	1	1	1	3
	2	13 51	04	3	9	2	5
	3	14 52	09	4		3	6
	4	16 58	10	5		9	
	5	21 59	14	6			
	6	22 61	19	7			
	7	23 70	20	9			
	8	24 71	24	A			
	9	26 72	29	B			
		27 81	30	C			
		28 83	33	D			
		29 91	34	E			
		31 92		F			
		32 99		G			
		33		H			
		34		J			
		35		M			
		41		U			

F

C&K COMPONENTS, INC.

57 Stanley Avenue, Watertown, MA 02172-4802

Tel: (617) 926-6400, Fax: (617) 926-6846

F-32

94E 1760885 0004284 233

SERIES

### 3 Series thumbwheel switches

NUMBER OF SECTIONS

- 0 Switch section only, no assembly (Blank bodies are considered sections. Endplates are not sections). Must be ordered with 09, 19, mounting style options, see pages F-37 and F-38.
- 1-8 Number of switch sections in assembly, includes endplates.
- 9 More than 8 switch sections, specify on CONFIGURATION FORM, page F-44 and consult factory.

NOTE: Endplates and blank sections available separately, see catalog section H.

FUNCTION CODE

For terminal location diagram, see page F-42.

#### 11 DECIMAL — 1 POLE; 10 POSITION

AVAILABLE TERMINATIONS  
0, 1, 3, A

W H E E L	SIGNALS CONNECTED TO COMMON SIGNAL C											
	0	1	2	3	4	5	6	7	8	9	C	
0	●											●
1		●										●
2			●									●
3				●								●
4					●							●
5						●						●
6							●					●
7								●				●
8									●			●
9										●		●
	2	3	4	5	6	7	8	9	10	11	12	
	TERM. LOCATION											

See fig.1, page F-42.

#### 12 DECIMAL—1 POLE; 10 POSITION

AVAILABLE TERMINATIONS  
1, 4, 5, A, D, E

W H E E L	SIGNALS CONNECTED TO COMMON SIGNAL C											
	0	1	2	3	4	5	6	7	8	9	C	
0	●											●
1		●										●
2			●									●
3				●								●
4					●							●
5						●						●
6							●					●
7								●				●
8									●			●
9										●		●
	2	3	4	5	6	7	8	9	10	11	12	6
	TERM. LOCATION											

See fig.1, page F-42.

#### 13 DECIMAL — 2 POLE; 10 POSITION

AVAILABLE TERMINATIONS  
M, U

W H E E L	COMMON A CONN. TO:	COMMON B CONN. TO:
0	0	0
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9

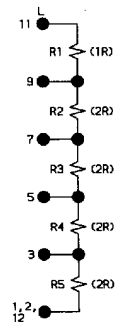
FOR TERM. LOC. CONSULT CRK

Special board, request terminal location, mechanical and electrical specifications from factory.

#### 14 RESISTOR DECADE; 1-2-2-2-2 CODE (RESISTORS NOT SUPPLIED)

AVAILABLE TERMINATIONS  
1, A

W H E E L	SWITCH CIRCUIT											
	0	1	2	3	4	5	6	7	8	9		
0	●											●
1	●	●										●
2	●	●	●									●
3	●	●	●	●								●
4	●	●	●	●	●							●
5	●	●	●	●	●	●						●
6	●	●	●	●	●	●	●					●
7	●	●	●	●	●	●	●	●				●
8	●	●	●	●	●	●	●	●	●			●
9	●	●	●	●	●	●	●	●	●	●		●
	11	9	7	5	3	1	2	12				
	TERM. LOCATION											



See fig.1, page F-42.

### FUNCTION CODE ■■■□□□□□□□

For terminal location diagram, see page F-42.

**16** DECIMAL — 1 POLE; 11 POSITION

**21** BCD 1-2-4-8; 10 POSITION

**22** OCTAL 1-2-4; 8 POSITION (STOPPED BETWEEN 0-7 INCL.)

AVAILABLE TERMINATIONS

4, D

WHEEL	SIGNALS CONNECTED TO COMMON SIGNAL A										
	0	1	2	3	4	5	6	7	8	9	10
0	●										●
1		●									●
2			●								●
3				●							●
4					●						●
5						●					●
6							●				●
7								●			●
8									●		●
9										●	●
1,0											●
	1	2	3	4	5	7	8	9	10	11	12
	TERM. LOCATION										

See fig.1, page F-42.

AVAILABLE TERMINATIONS

0, 1, 3, A

WHEEL	SIGNALS CONN. TO COMM. SIG. C				
	1	2	4	8	C
0					●
1	●				●
2		●			●
3			●		●
4				●	●
5	●				●
6		●			●
7	●				●
8		●			●
9	●				●
	3	5	7	11	9
	TERM. LOCATION				

See fig.1, page F-42.

**23** COMPLEMENT OF BCD 1-2-4-8; 10 POSITION

**26** COMPLEMENT OF BCD 1-2-4-8; 10 POSITION

**27** BCD 1-2-4-8; 10 POSITION

**24** COMPLEMENT OF OCTAL 1-2-4; 8 POSITION (STOPPED BETWEEN 0-7 INCL.)

AVAILABLE TERMINATIONS

0, 1, 3, A

WHEEL	SIGNALS CONN. TO COMM. SIG. C				
	T	Z	A	B	C
0	●	●	●	●	●
1	●	●	●	●	●
2	●	●	●	●	●
3	●	●	●	●	●
4	●	●	●	●	●
5	●	●	●	●	●
6	●	●	●	●	●
7	●	●	●	●	●
8	●	●	●	●	●
9	●	●	●	●	●
	3	9	11	5	7
	TERM. LOCATION				

See fig.1, page F-42.

AVAILABLE TERMINATIONS

6, B

WHEEL	SIGNALS CONN. TO COMM. SIG. C				
	T	Z	A	B	C
0	●	●	●	●	●
1	●	●	●	●	●
2	●	●	●	●	●
3	●	●	●	●	●
4	●	●	●	●	●
5	●	●	●	●	●
6	●	●	●	●	●
7	●	●	●	●	●
8	●	●	●	●	●
9	●	●	●	●	●
	4	5	1	2	3
	TERM. LOCATION				

See fig.2, page F-42.

AVAILABLE TERMINATIONS

6, B

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

See fig.2, page F-42.

**28** COMPLEMENT OF 9'S COMPLEMENT; 10 POSITION

**29** BCD 1-2-4-8; 10 POSITION

**31** BCD 1-2-4-8; 10 POSITION

**32** OCTAL 1-2-4; 8 POSITION (STOPPED BETWEEN 0-7 INCL.)

AVAILABLE TERMINATIONS

7, C

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

See fig.2, page F-42.

AVAILABLE TERMINATIONS

6, B

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

See fig.2, page F-42.

AVAILABLE TERMINATIONS

0, 1, 3, 4, 5, A, D, E

WHEEL	SIGNALS CONN. TO COMM. SIG. C				
	1	2	4	8	C
0					●
1	●				●
2		●			●
3	●				●
4		●			●
5	●				●
6		●			●
7	●				●
8		●			●
9	●				●
	2	3	11	9	8
	TERM. LOCATION				

See fig.1, page F-42.

## FUNCTION CODE ■■□□□□□□

For terminal location diagram, see page F-42.

- 33** COMPLEMENT OF BCD 1-2-4-8; 10 POSITION
- 34** COMPLEMENT OF OCTAL 1-2-4; 8 POSITION (STOPPED BETWEEN 0-7 INCL.)

- 35** BCD 1-2-4-8 W/ SEPARATE COMMON TO NOT TRUE BITS, 10 POSITION

- 41** BCD 1-2-4-8 W/ COMPLEMENT, 10 POSITION
- 42** OCTAL 1-2-4 W/ COMPLEMENT, 8 POSITION (STOPPED BETWEEN 0-7 INCL.)

**AVAILABLE TERMINATIONS**

1, 4, 5, A, D, E

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	●	●	●	●	●
	2	3	11	9	8
	TERM. LOCATION				

See fig.1, page F-42.

**AVAILABLE TERMINATIONS**

0, 1, 3, A

W H E E L	SIGNALS CONN. TO COMMON SIGNALS				
	1	2	4	8	X Y
0	○	○	○	○	○
1	○	○	○	○	○
2	○	○	○	○	○
3	○	○	○	○	○
4	○	○	○	○	○
5	○	○	○	○	○
6	○	○	○	○	○
7	○	○	○	○	○
8	○	○	○	○	○
9	○	○	○	○	○
	8	6	4	2	12 10
	TERM. LOCATION				

See fig.1, page F-42.

**AVAILABLE TERMINATIONS**

0, 1, 3, A

W H E E L	SIGNALS CONN. TO COMM. SIG. C				
	1	2	4	8	T 2 4 8 C
0	●	●	●	●	●
1	●	●	●	●	●
2	●	●	●	●	●
3	●	●	●	●	●
4	●	●	●	●	●
5	●	●	●	●	●
6	●	●	●	●	●
7	●	●	●	●	●
8	●	●	●	●	●
9	●	●	●	●	●
	10	9	8	7	3 4 5 6 11
	TERM. LOCATION				

See fig.1, page F-42.

- 45** BCD 1-2-4-8; 10 POSITION

**AVAILABLE TERMINATIONS**

0,3

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	●	●	●	●	●
	5	6	7	8	9
	TERM. LOCATION				

See fig.1, page F-42.

- 51** BCD 1-2-4-8 W/ COMPLEMENT, ONE COMMON, 10 POSITION

- 52** OCTAL 1-2-4 W/ COMPLEMENT, ONE COMMON, 8 POSITION (STOPPED BETWEEN 0-7 INCL.)

**AVAILABLE TERMINATIONS**

0, 1, 3, 4, 5, A, D, E

W H E E L	SIGNALS CONN. TO COMM. SIG. C				
	1	2	4	8	T 2 4 8 C
0	●	●	●	●	●
1	●	●	●	●	●
2	●	●	●	●	●
3	●	●	●	●	●
4	●	●	●	●	●
5	●	●	●	●	●
6	●	●	●	●	●
7	●	●	●	●	●
8	●	●	●	●	●
9	●	●	●	●	●
	5	4	3	2	10 9 8 7 6
	TERM. LOCATION				

See fig.1, page F-42.

- 58** SEVEN SEGMENT DECODER W/ BLANK AND BCD OUTPUT (TTL) SPECIAL BOARD, I.C. NOT SUPPLIED, CONSULT FACTORY

**AVAILABLE TERMINATIONS**

F, H

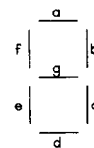
W H E E L	SIGNALS CONNECT TO COMMON GROUND								
	a	b	c	d	e	f	g	Blank/vee	1 2 4 8
0	●	●	●	●	●	●	●	●	●
1	●	●	●	●	●	●	●	●	●
2	●	●	●	●	●	●	●	●	●
3	●	●	●	●	●	●	●	●	●
4	●	●	●	●	●	●	●	●	●
5	●	●	●	●	●	●	●	●	●
6	●	●	●	●	●	●	●	●	●
7	●	●	●	●	●	●	●	●	●
8	●	●	●	●	●	●	●	●	●
9	●	●	●	●	●	●	●	●	●
	FOR TERMINAL LOCATIONS CONSULT C&K								

NOTE: Connections for RBO and RBI supplied.

- 59** SEVEN SEGMENT DECODER (TTL) SPECIAL BOARD, I.C. NOT SUPPLIED, CONSULT FACTORY

**AVAILABLE TERMINATIONS**

G, J



W H E E L	COMMON (C) CONNECTED TO TERMINAL INDICATED							
	a	b	c	d	e	f	g	Blank/vee
0	●	●	●	●	●	●	●	●
1	●	●	●	●	●	●	●	●
2	●	●	●	●	●	●	●	●
3	●	●	●	●	●	●	●	●
4	●	●	●	●	●	●	●	●
5	●	●	●	●	●	●	●	●
6	●	●	●	●	●	●	●	●
7	●	●	●	●	●	●	●	●
8	●	●	●	●	●	●	●	●
9	●	●	●	●	●	●	●	●
	6	5	4	3	2	8	7	1 12
	TERM. LOCATION							

See fig.1, page F-42.

NOTE: IC not supplied, use decoder type 7446/7 or equivalent.

F

## FUNCTION CODE ■■ □ □ □ □ □ □

For terminal location diagram, see page F-42.

**61** SPDT REPEATING; PLUS (+) AND MINUS (-) ALTERNATING, 10 POSITION

**70** COMPLEMENT OF BINARY CODED HEXADECIMAL W/ PARITY BIT, 16 POSITION

**71** BINARY CODED HEXADECIMAL, 16 POSITION

AVAILABLE TERMINATIONS

0, 1, 3, 4, 5, A, D, E

AVAILABLE TERMINATIONS

0, 3

AVAILABLE TERMINATIONS

0, 1, 3, A

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

See fig.1, page F-42.

W H E E L	SIG. CONN. TO COMM. SIG. C				
	1	2	4	8	P C
0	●	●	●	●	●
1	●	●	●	●	●
2	●	●	●	●	●
3	●	●	●	●	●
4	●	●	●	●	●
5	●	●	●	●	●
6	●	●	●	●	●
7	●	●	●	●	●
8	●	●	●	●	●
9	●	●	●	●	●
A	●	●	●	●	●
B	●	●	●	●	●
C	●	●	●	●	●
D	●	●	●	●	●
E	●	●	●	●	●
F	●	●	●	●	●
	3	5	7	11	1 9
	TERM. LOCATION				

See fig.1, page F-42.

W H E E L	SIG. 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	●	●	●	●
	3	5	7	11 9
	TERM. LOCATION			

See fig.1, page F-42.

**72** BINARY CODED HEXADECIMAL, 16 POSITION

**81** BCD 1-2-4-8; 10 POSITION

**83** BINARY CODED HEXADECIMAL, 16 POSITION

AVAILABLE TERMINATIONS

6, B

AVAILABLE TERMINATIONS

6, B

AVAILABLE TERMINATIONS

6, B

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

See fig.2, page F-42.

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

See fig.2, page F-42.

W H E E L	SIG. 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	●	●	●	●
	1	2	3	5 4
	TERM. LOCATION			

See fig.2, page F-42.

**91** BLANK SECTION (INACTIVE)

**92** BLANK SECTION W/ RIBBED CENTER (INACTIVE)

**99** INTERMIXED SECTIONS, SPECIFY ON CONFIGURATION FORM, PAGE F-44 AND CONSULT FACTORY

AVAILABLE TERMINATIONS

9

AVAILABLE TERMINATIONS

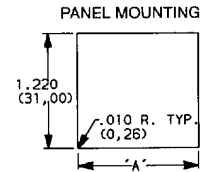
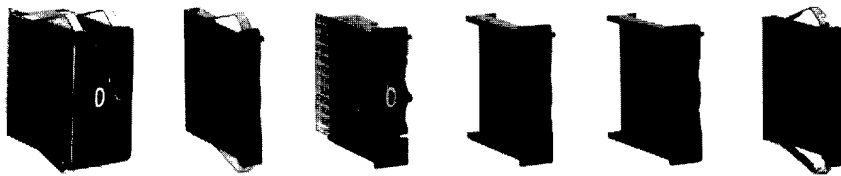
9

AVAILABLE TERMINATIONS

CONSULT FACTORY.

## MOUNTING STYLE

### TYPE 0 SNAP-IN FRONT MOUNTING

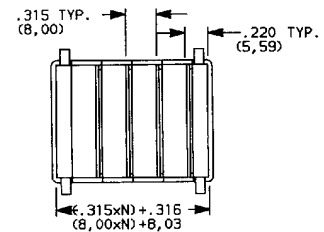
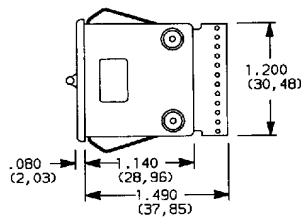
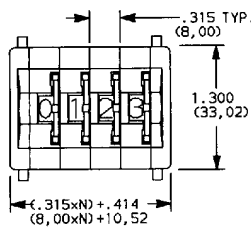


DIM. A	MOUNTING STYLE
$(.315 \times N) + .326$ $(8,0 \times N) + (8,28)$	00
$(.394 \times N) + .326$ $(10,0 \times N) + (8,28)$	03
$(.500 \times N) + .326$ $(12,7 \times N) + (8,28)$	04

N = Number of sections

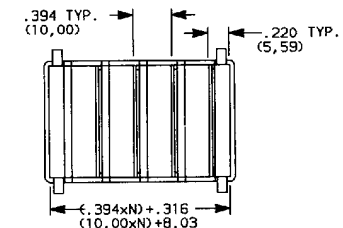
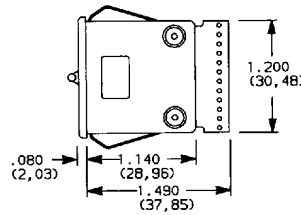
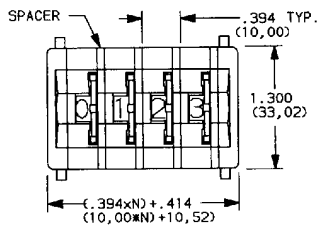
Recommended Panel Thickness:  
 .046 - .125 (1,16 - 3,18)

### 00 SWITCH ASSEMBLY W/ ENDPLATES — .315 (8,00) SECTION PITCH



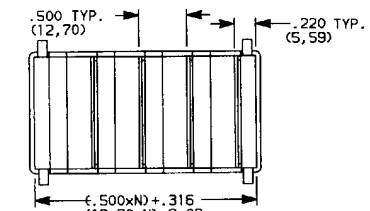
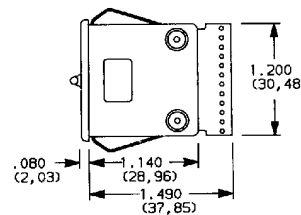
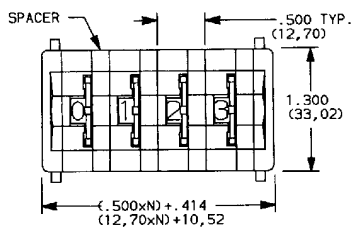
N = Number of sections

### 03 SWITCH ASSEMBLY W/ ENDPLATES AND SPACER(S) — 10mm SECTION PITCH



N = Number of sections

### 04 SWITCH ASSEMBLY W/ ENDPLATES AND SPACER(S) — .500 (12,70) SECTION PITCH



N = Number of sections

### 09

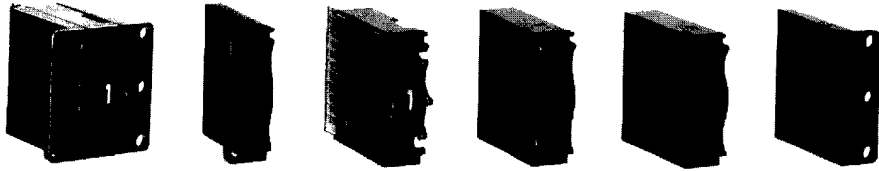
Switch section only—unassembled, without endplates or spacers (must be ordered with 0 number of sections, see page F-33).

NOTE: Endplates, blank sections, spacers and assembly hardware available separately, see catalog section H.

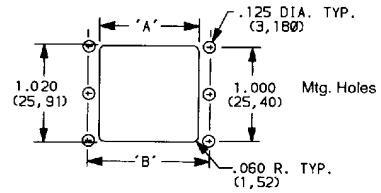
F

## MOUNTING STYLE

### TYPE 1 REAR MOUNTING



PANEL MOUNTING

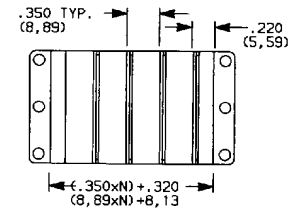
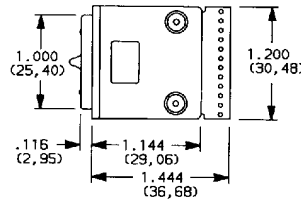
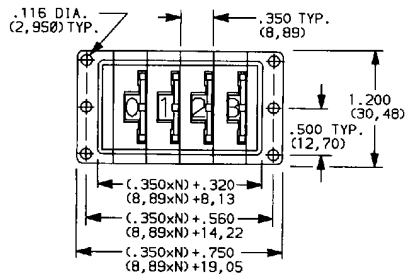


DIM. A	DIM. B	MOUNTING STYLE
$(.350 \times N) + .340$ (8,89 x N) + (8,64)	$(.350 \times N) + .560$ (8,89 x N) + (14,22)	10
$(.500 \times N) + .340$ (12,7 x N) + (8,64)	$(.500 \times N) + .560$ (12,7 x N) + (14,22)	14

N = Number of sections

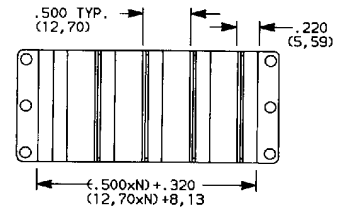
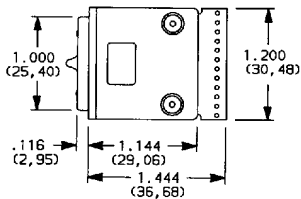
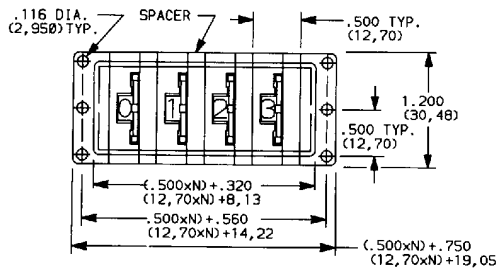
Recommended Panel Thickness:  
.046 - .125 (1,16 - 3,18)

### 10 SWITCH ASSEMBLY W/ ENDPLATES — .350 (8,89) SECTION PITCH



N = Number of sections

### 14 SWITCH ASSEMBLY W/ ENDPLATES AND SPACER(S) — .500 (12,70) SECTION PITCH



N = Number of sections

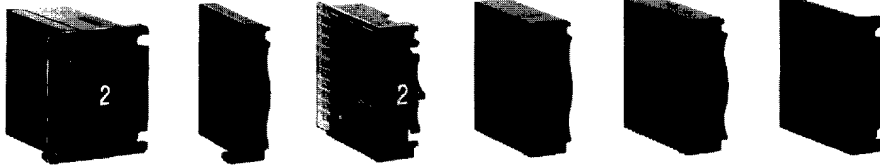
### 19

Switch section only — unassembled, without endplates or spacers (must be ordered with 0 number of sections, see page F-33).

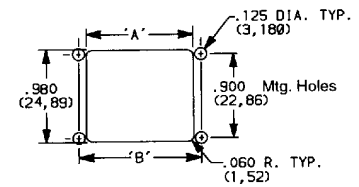
NOTE: Endplates, blank sections, spacers and assembly hardware available separately, see catalog section H.

## MOUNTING STYLE

### TYPE 2 REAR MOUNTING



### PANEL MOUNTING

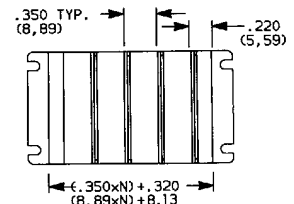
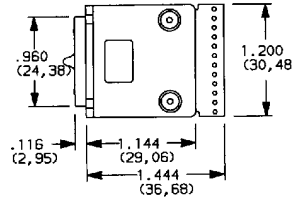
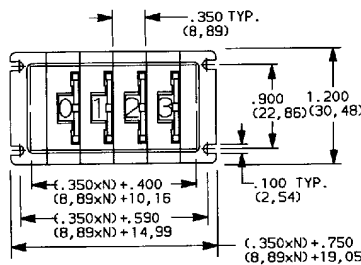


DIM. A	DIM. B	MOUNTING STYLE
$(.350 \times N) + .420$ (8,89 x N) + (10,67)	$(.350 \times N) + .590$ (8,89 x N) + (14,99)	20
$(.500 \times N) + .420$ (12,7 x N) + (10,67)	$(.500 \times N) + .590$ (12,7 x N) + (14,99)	24

N = Number of sections

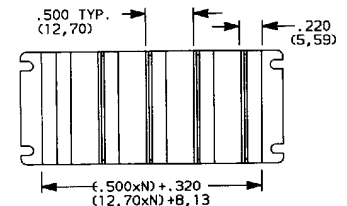
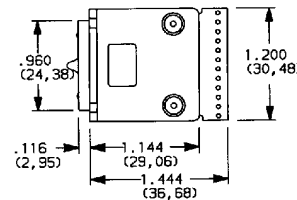
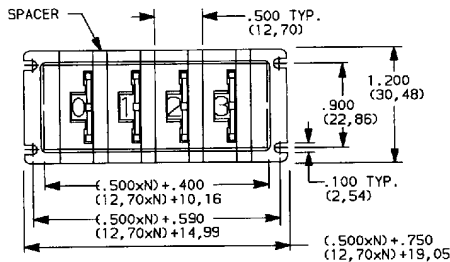
Recommended Panel Thickness:  
.046 - .125 (1,16 - 3,18)

### 20 SWITCH ASSEMBLY W/ ENDPLATES — .350 (8,89) SECTION PITCH



N = Number of sections

### 24 SWITCH ASSEMBLY W/ ENDPLATES AND SPACER(S) — .500 (12,70) SECTION PITCH



N = Number of sections

### 29

Switch section only—unassembled, without endplates or spacers (must be ordered with 0 number of sections, see page F-33).

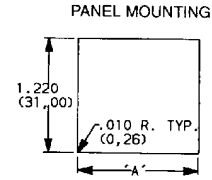
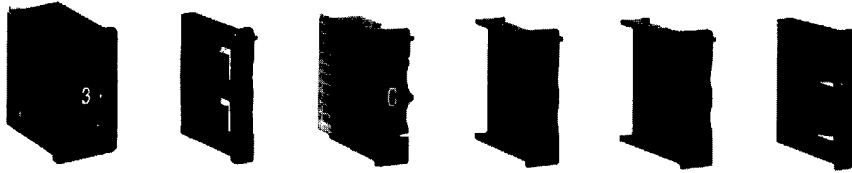
NOTE: Endplates, blank sections, spacers and assembly hardware available separately, see catalog section H.

F



## MOUNTING STYLE

### TYPE 3 SNAP-IN FRONT MOUNTING

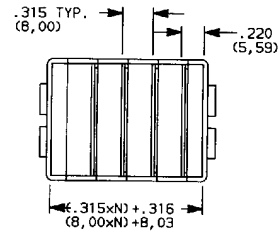
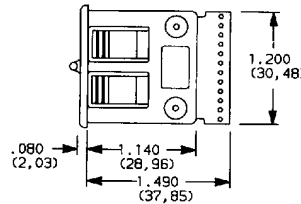
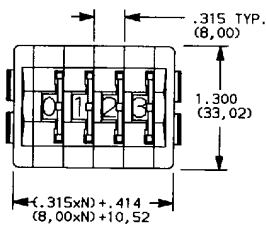


DIM. A	MOUNTING STYLE
$(.315 \times N) + .360$ (8,0 x N) + (9,14)	30
$(.394 \times N) + .360$ (10,0 x N) + (9,14)	33
$(.500 \times N) + .360$ (12,7 x N) + (9,14)	34

N = Number of sections

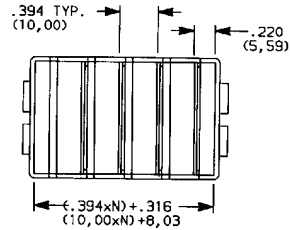
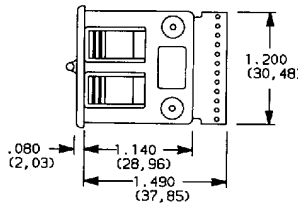
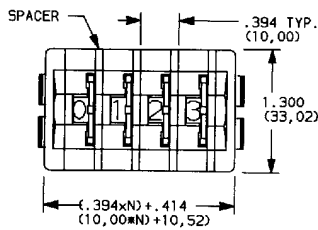
Recommended Panel Thickness:  
.046 - .125 (1,16 - 3,18)

### 30 SWITCH ASSEMBLY W/ ENDPLATES — .315 (8,00) SECTION PITCH



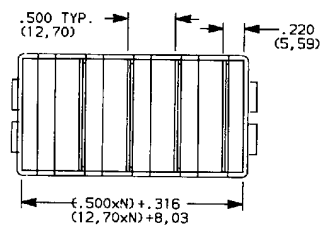
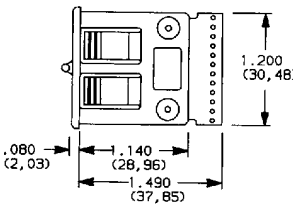
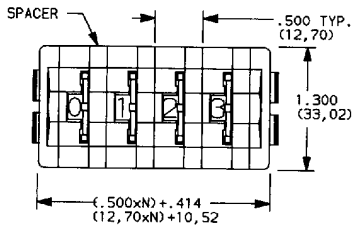
N = Number of sections

### 33 SWITCH ASSEMBLY W/ ENDPLATES AND SPACER(S) — 10mm SECTION PITCH



N = Number of sections

### 34 SWITCH ASSEMBLY W/ ENDPLATES AND SPACER(S) — .500 (12,70) SECTION PITCH



N = Number of sections

### 09

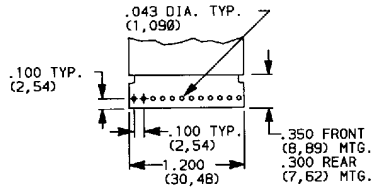
Switch section only—unassembled, without endplates or spacers (must be ordered with 0 number of sections, see page F-33).

NOTE: Endplates, blank sections, spacers and assembly hardware available separately, see catalog section H.

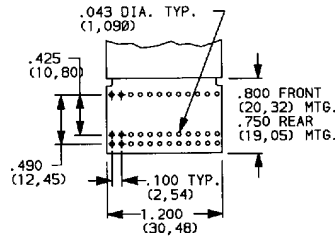
## TERMINATIONS

NOTE: All terminal holes shown may not be present for all function codes, consult factory.

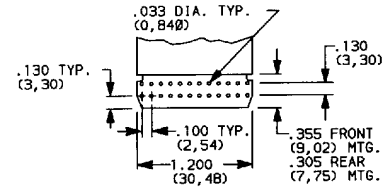
0 (STD.)



1



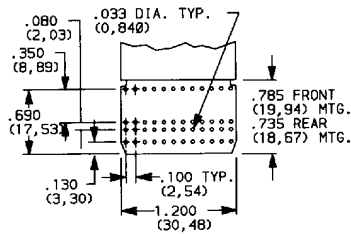
4



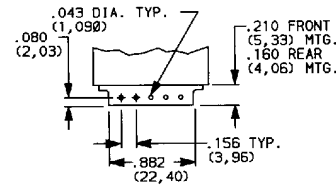
Signal traces cut except for common(s).

P.C. BOARD 1/32" (0,79) THK.

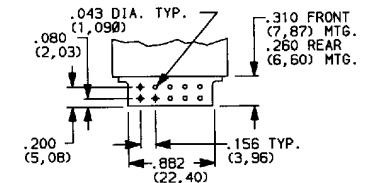
5



6



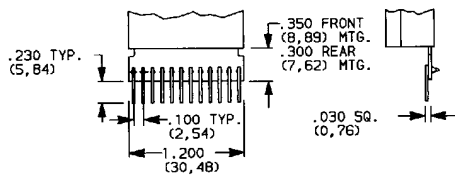
7



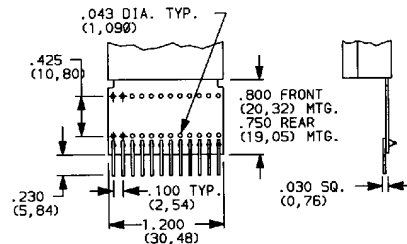
Signal traces cut except for common(s).

P.C. BOARD 1/32" (0,79) THK.

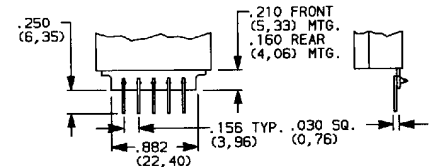
3 TYPE 0 WITH SOLDER PINS



A TYPE 1 WITH SOLDER PINS



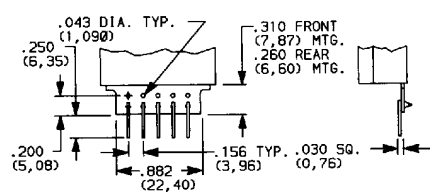
B TYPE 6 WITH SOLDER PINS



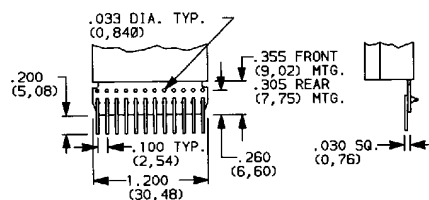
Signal traces cut except for common(s).

P.C. BOARD 1/32" (0,79) THK.

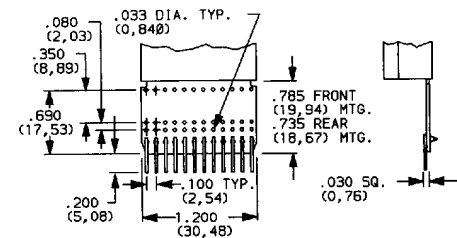
C TYPE 7 WITH SOLDER PINS



D TYPE 4 WITH SOLDER PINS



E TYPE 5 WITH SOLDER PINS



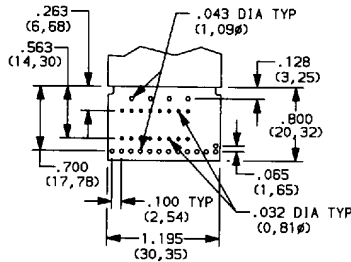
Signal traces cut except for common(s).

P.C. BOARD 1/32" (0,79) THK.

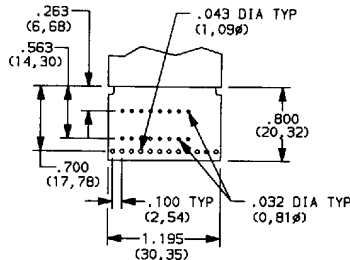
## TERMINATIONS

NOTE: All terminal holes shown may not be present for all function codes, consult factory.

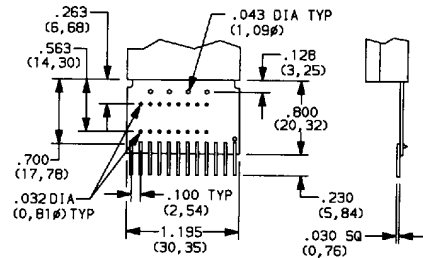
**F** FOR 58 CODE ONLY



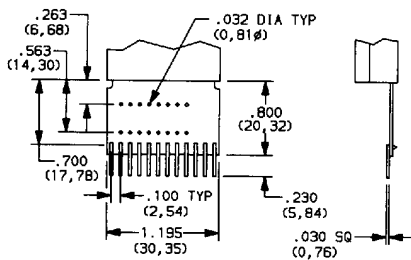
**G** FOR 59 CODE ONLY



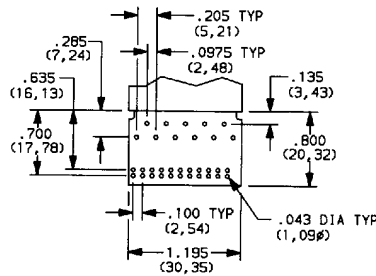
**H** TYPE F WITH SOLDER PINS FOR 58 CODE ONLY



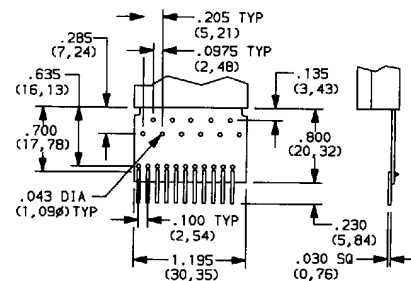
**J** TYPE G WITH SOLDER PINS FOR 59 CODE ONLY



**M** FOR 13 CODE ONLY



**U** TYPE M WITH SOLDER PINS FOR 13 CODE ONLY



**9** ANY COMBINATION OF TERMINATION CONFIGURATIONS OR SPECIAL TERMINATIONS. ALSO USED WITH FUNCTION CODES 91 AND 92.

CONNECTOR

SPECIFY ON CONFIGURATION FORM, PAGE F-44 AND CONSULT FACTORY.

TERMINAL CONNECTOR AVAILABLE FOR TERMINATION OPTIONS 0, 1, 4, 5. SEE CATALOG SECTION H.

## TERMINAL LOCATION NUMBERS

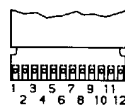


Fig. 1

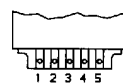


Fig. 2

See function codes, pages F-33 thru F-36, for signal locations.

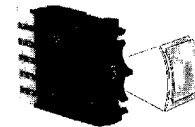
## COLOR/MARKING/STOPS

- 0** (STD.) Matte black housing, Gloss black wheel with white characters; No stops.
- 1** Matte gray housing, Gloss black wheel with white characters; No stops.
- 5** Matte black housing, translucent off-white wheel with black characters; No stops (recommended with ILLUMINATION option)
- 6** Matte gray housing, translucent off-white wheel with black characters; No stops (recommended with ILLUMINATION option)
- 9** Special color or markings for housing or wheel, stops, specify on CONFIGURATION FORM, page F-44 and consult factory. AVAILABLE COLORS: MARKING—White, Black.  
BODY—Black, Gray (matte finish).  
WHEEL—White, Black, Red, Orange, Yellow, Green, Blue, Brown, Gray (gloss finish).

Stop pins are available separately, see catalog section H.

## SEAL ■■■■■■□

- 0 (STD.) Unsealed switching contacts.
- 1 Sealed switching contacts. Sealing is by means of an o-ring rotary seal and a cured-in-place elastomer gasket. Switching contact area is protected from moisture, oil, and airborne contaminants.
- 2 Dust lens. Protects the character face of the wheel from abrasion and dirt (recommended with ILLUMINATION option).
- 3 Sealed switching contacts and dust lens. (Options 1 and 2 recommended with ILLUMINATION option).
- 9 Sealing variations, section to section within assembly. Specify on CONFIGURATION FORM, page F-44 and consult factory. (Also specify with blank sections, where seal is not applicable).



DUST LENS

## ILLUMINATION ■■■■■■□

- NEW** (NONE) (STD.) No illumination
- 3 Red LED
  - 5 Yellow LED
  - 6 Green LED

COLOR/MARKINGS/STOPS option 5, 6 and SEAL option 2, 3 recommended with ILLUMINATION option.

**NOTE:** Illumination option not available with termination options with solder pins. Internal LED illuminates wheel character for low-light visibility.

### HOW TO ORDER

All available 3 SERIES THUMBWHEEL SWITCH options are listed on page F-32, and are described on pages F-33 thru F-43. Dashes, hyphens or spaces in the part number are not significant, and are shown for clarity only. Use CONFIGURATION FORM, page F-44, for special instructions.

Endplates, blank sections, spacers, and assembly hardware are available separately, see catalog section H.

### SPECIFICATIONS

CONTACT RATING:  
 CARRY: 1 AMP continuous.  
 SWITCH: 100 mA max.

OPERATING VOLTAGE: 50 mV to 28 V DC or 120 V AC.

ELECTRICAL LIFE: 10<sup>5</sup> detent operations between any two adjacent positions @ 25°C.

CONTACT RESISTANCE: Below 100 milliohms typ. initial @ 2-4 V DC, 100 mA.

INSULATION RESISTANCE: 10<sup>9</sup> ohms min.

DIELECTRIC STRENGTH: 500 V RMS min. @ sea level between common terminal and any output.

OPERATING TEMPERATURE: -10°C to 65°C.

### MATERIALS

HOUSING: ABS plastic.  
 THUMBWHEEL: ABS plastic.  
 ROTOR CONTACTS: Precious metal on copper alloy.  
 STATOR CONTACTS: Hard gold over nickel over copper on epoxy fiberglass.

**NOTE:** Specifications and materials listed above are general specifications. Specifications available for specific and custom switches, consult factory.