

**Eaton®**  
Commercial Controls Division

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# Toggle Switches



The Power of Reliability

2.1

# 2 TOGGLE SWITCHES

## General Purpose Toggle Switches — AC Rated

### DESCRIPTION

These ac rated toggle switches offer the widest selection of features and the design flexibility to meet a variety of applications.

### Combi-Term Option

This is an extension of our ac rated General Purpose Toggle Switch. The "Combi-Term" design allows the user the option of Screw Terminals, .250" Quick Connects or Solder Termination all on the same switch. The special clips and screws are provided in a poly bag with the switch.

### SPECIFICATIONS

#### Rating:

See selection table.

#### Circuits:

1PST, 1PDT, 2PST, 2PDT, 3PST, 3PDT, 4PST & 4PDT.

Maintained and momentary.

#### Contact Mechanism:

Slow-make/Slow-brake butt contact.

### Terminal Types:

Screw Terminals — Brass designed to accept #6-32 x 3/16 binding head (Cat. No. 811-2) screws. Furnished unassembled.

Solder Lug Terminals — Tintillate plated brass.

Spade Terminals — Brass.

Combi-Term — Brass.

STANDARD AC RATED TOGGLES SELECTION TABLE (BOLD FACE TYPE INDICATES ITEMS NORMALLY IN DISTRIBUTOR STOCK)

Rating	Poles and Throw	Circuit with Toggle in			BASE CIRCUIT SEE PAGE 4.28	Bushing Length A mm (inches)	Lever Length B mm (inches)	CATALOG NUMBERS			
		UP Position	CENTER Position	DOWN Position (Keyway)				Solder Lugs	Screw Terminals	.250" Spade Terminals	Combi-Term
<b>ONE POLE</b>											
6A, 125V ac 3A, 250V ac	1 P.S.T.	ON	NONE	OFF	A	8.74 (.344) 11.91 (.469)	14.30 (.563) 14.30 (.563)	<b>7580K7</b> <b>7580K6</b>	7580K5 7580K4	<b>7580K9</b> <b>7580K8</b>	N/A
	1 P.D.T.	ON	OFF	ON	B	11.91 (.469)	14.30 (.563)	7581K6	<b>7581K4</b>	7581K8	
	1 P.D.T.	ON	NONE	ON	B	11.91 (.469)	14.30 (.563)	<b>7582K6</b>	<b>7582K4</b>	7582K8	
	1 P.D.T.	ON ON*	NONE OFF	ON* ON*	B	11.91 (.469)	14.30 (.563)	7585K6 7587K6	7585K4 7587K4	7585K8 7587K8	
10A, 250V ac 1/2 Hp, 250V ac	1 P.S.T.	OFF	NONE	ON*	A	11.91 (.469)	14.30 (.563)	7506K3	<b>7506K4</b>	7506K6	
	1 P.S.T.	OFF	NONE	ON*	A	11.91 (.469)	17.48 (.688)	7506K38	7506K36	7506K40	
	1 P.D.T.	ON* ON	OFF NONE	ON* ON*	B	11.91 (.469)	14.30 (.563)	7509K4 7510K6	<b>7509K5</b> 7510K7	7509K7 7510K9	
	1 P.D.T.	ON ON*	OFF OFF	ON* ON*	B	11.91 (.469)	17.48 (.688)	7508K38 7509K38	7508K36 7509K36	7508K40 7509K40	
15A, 125V ac 10A, 250V ac 3/4 Hp, 250V ac 1/2 Hp, 125V-250V ac	1 P.S.T.	ON	NONE	OFF	A	8.74 (.344) 11.91 (.469)	14.30 (.563) 14.30 (.563)	7501K12 <b>7501K13</b>	7500K13 ② <b>7500K14</b> ②	7501K14 7501K15	
15A, 125V ac 10A, 250V ac 1/2 Hp, 125V ac 3/4 Hp, 250V ac	1 P.D.T.	ON	OFF	ON	B	11.91 (.469)	14.30 (.563)	<b>7503K13</b> ②	<b>7502K13</b>	<b>7503K15</b>	
	1 P.D.T.	ON	NONE	ON	B	11.91 (.469)	14.30 (.563)	<b>7505K4</b>	<b>7504K4</b> ②	<b>7505K6</b>	
20A, 125V ac 10A, 250V ac 1/2 Hp, 125V ac 3/4 Hp, 250V ac	1 P.S.T.	ON	NONE	OFF	A	11.91 (.469)	17.48 (.688)	7546K38	7546K36	7546K40	
20A, 125V AC 10A, 250V AC 1 Hp, 120-240V ac	1 P.S.T.	ON	NONE	OFF	A	11.89 (.468)	17.45 (.687)	<b>7802K11</b>	<b>7802K31</b>	<b>7802K21</b> ③	<b>7802K41</b>
	1 P.D.T.	ON ON ON*	OFF NONE OFF	ON ON ON*	B	11.89 (.468)	17.04 (.671)	7802K12 7802K13 7802K17 ④	7802K32 7802K33 <b>7802K37</b> ④	7802K22 7802K23 ④ 7802K27 ④	7802K42 7802K43 7802K47 ④
30A, 125V ac 25A, 250V ac ①	1 P.S.T.	ON	NONE	OFF	A	8.74 (.344)	14.30 (.563)	—	7576K2	—	N/A

Selection Table continues on page 2.4.

- \* Momentary Contact.
- ① Single pole switch in 2-pole base.
- ② Also 4.2A L @ 125V ac Rating.
- ③ Also 7.5A @ 277V ac, 3/4 Hp @ 120, 240 and 277V ac.
- ④ Not CSA Certified.



**Base Material:**  
Thermoset molding material.

**Mounting Means:**  
Threaded Bushing —  
11.89mm (.468") dia.,  
32 threads/inch.

Keyway —  
1.73 x .89mm deep  
(.068 x .035" deep), provides  
antirotation feature.

**Hardware Supplied —**  
1 hexagon locknut  
(Cat. No. 15-192) and  
1 bright nickel plated knurled  
facenut (Cat. No. 15-124F1),  
except 7700-7705 which have  
bright nickel hexagon facenut  
(Cat. No. 15-966-2).  
Furnished unassembled.

**Finish:**  
Bright nickel plated toggle lever  
and bushing.

**Dielectric Withstand:**  
1,000V RMS minimum.

**Operating Temperature Range:**  
-17.8°C to +65.6°C  
(0°F to +150°F).

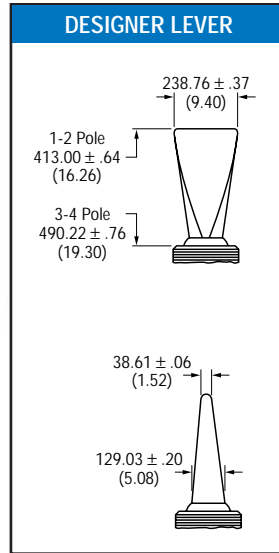
**Approvals:**  
UL Recognized.  
CSA Certified (except as noted).



**Contact Material:**

7500, 7600, 7700 and 7900 Series Switches		
Amperage	Movable	Stationary
3 to 6	Silver Plated Copper	Silver Plated Copper
10 to 20	Silver Plated Copper with Silver Buttons	Silver Plated Copper with Silver Buttons
20 to 30	Silver Plated Copper with Cad Oxide Buttons	Copper with Cad Oxide Buttons
7800 Series Switches		
3 to 6	Silver Plated Copper	Silver Plated Copper
10 to 20	Copper with Silver Buttons	Copper with Silver Buttons

**DIMENSIONS**  
APPROXIMATE IN MM (INCHES)



**OPTIONAL FEATURES** — General Purpose AC Rated Toggles, pages 2.2-2.4. Features shown below may not be available on all toggle models. Contact your local Eaton Sales Representative.

FEATURES FOR 7500, 7600, 7700, 7900 SERIES
3-Independent "ON" Circuit (2PDT or 4PDT only, refer to page 4.28)
Short (11/32") Bushing
Tall (15/32") Bushing
White Nylon Designer Lever (See above dimensions)
Black Nylon Designer Lever (See above dimensions)
Hardware Furnished Assembled
Reversing Jumpers (Not for use with 3-Independent "ON" Circuit)
Short (15/32") Bat Lever
Tall (11/16") Bat Lever (Not available with Short Bushing)
Rotate Keyway 180°
Lever Seal
Omit One Pole (2P, 3P, 4P only. Not for use with 3-Independent "ON" Circuit)
FEATURES FOR 7800 SERIES ONLY
3-Independent "ON" Circuit (2PDT or 4PDT only, refer to page 4.28)
Hardware Furnished Assembled
Reversing Jumpers (Not for use with 3-Independent "ON" Circuit)
Rotate Keyway 180°
Silicone Lever Seal (1P and 2P only)
Omit One Pole (2P, 3P, 4P only. Not for use with 3-Independent "ON" Circuit)



Single Pole



7500, 7600, 7700, 7900 Series  
Double Pole



7800 Series  
Double Pole



Four Pole


2

2.3

# 2 TOGGLE SWITCHES

## General Purpose Toggle Switches — AC Rated (continued)

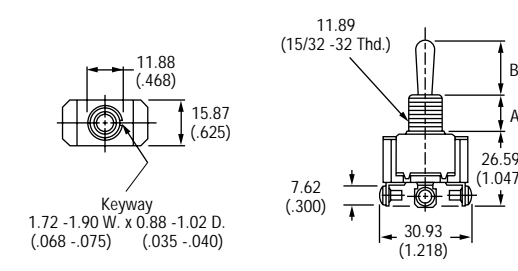
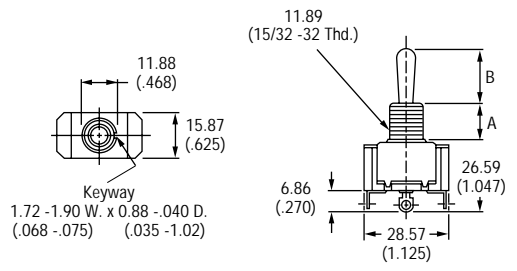
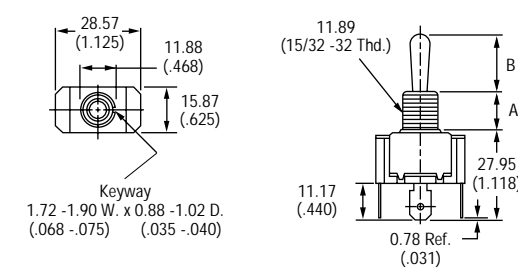
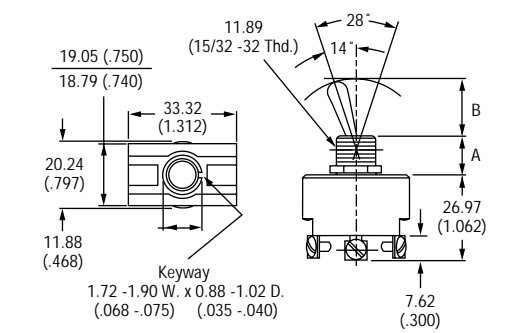
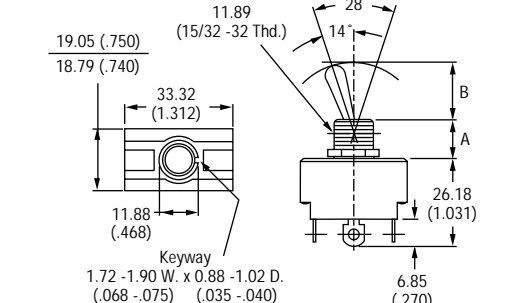
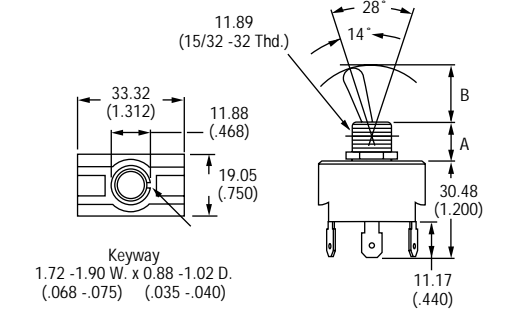
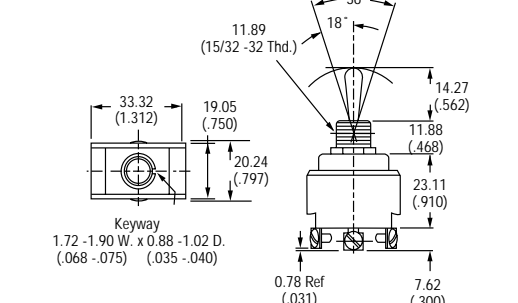
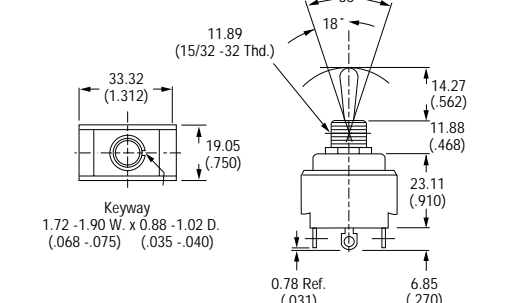
STANDARD AC RATED TOGGLES SELECTION TABLE (BOLD FACE TYPE INDICATES ITEMS NORMALLY IN DISTRIBUTOR STOCK)

Rating	Poles and Throw	Circuit with Toggle in			BASE CIRCUIT SEE PAGE 4.28	Bushing Length A mm (inches)	Lever Length B mm (inches)	CATALOG NUMBERS			
		UP Position 	CENTER Position 	DOWN Position (Keyway) 				Solder Lugs	Screw Terminals	.250" Spade Terminals	Combi-Term
<b>TWO POLE</b>											
6A, 125V ac 3A, 250V ac 2A, 277V ac 2.5A, L @ 125V ac	2 P.S.T.	ON	NONE	OFF	C	11.91 (.469)	14.30 (.563)	7590K6	7590K4	7590K8	N/A
6A, 125V ac 3A, 250V ac 2.5A, L @ 125V ac	2 P.D.T.	ON	OFF	ON	D	11.91 (.469)	14.30 (.563)	7591K6	7591K4	7591K8	
	2 P.D.T.	ON	NONE	ON	D	11.91 (.469)	14.30 (.563)	<b>7592K6</b>	7592K4	<b>7592K8</b>	
6A, 125V ac 3A, 250V ac	2 P.D.T.	ON*	OFF	ON*	D	11.91 (.469)	14.30 (.563)	7597K6	7597K4	7597K8	
15A, 125V ac 10A, 250V ac 3/4 Hp, 250V ac 1/2 Hp, 125V ac	2 P.S.T.	ON	NONE	OFF	C	8.74 (.344) 11.91 (.469)	14.30 (.563) 14.30 (.563)	7561K5 <b>7561K4</b>	7560K6 <b>7560K5</b>	7561K7 <b>7561K6</b>	
	2 P.D.T.	ON	OFF	ON	D	8.74 (.344) 11.91 (.469)	14.30 (.563) 14.30 (.563)	7563K5 <b>7563K4</b>	7562K5 <b>7562K4</b>	7563K7 <b>7563K6</b>	
15A, 125V ac 10A, 250V ac 3/4 Hp, 250V ac	2 P.D.T.	ON	NONE	ON	D	11.91 (.469)	14.30 (.563)	<b>7565K5</b>	<b>7564K6</b>	<b>7565K7</b>	
15A, 125V ac 10A, 250V ac 1/2 Hp, 250V ac	2 P.S.T.	OFF	NONE	ON*	C	11.91 (.469)	14.30 (.563)	7566K4	7566K5	7566K7	
	2 P.D.T.	ON ON*	OFF OFF NONE	ON* ON* ON*	D	11.91 (.469)	14.30 (.563)	7568K3 ① 7569K1 7570K4	7568K2 ① 7569K2 7570K5	7568K4 ① 7569K3 7570K7	
20A, 125V ac 10A, 250V ac 3/4 Hp, 250V ac 1/2 Hp, 125V ac	2 P.S.T.	ON	NONE	OFF	C	11.91 (.469)	17.48 (.688)	7630K38	7630K36	7630K40	
	2 P.D.T.	ON	NONE	ON	D	11.91 (.469)	17.48 (.688)	7632K38	7632K36	7632K40	
20A, 125V ac 10A, 250V ac 1 Hp, 120-240V ac	2 P.S.T.	ON	NONE	OFF	C	—	—	<b>7803K11</b>	<b>7803K31</b>	<b>7803K21 ②</b>	
	2 P.D.T.	ON ON ON*	OFF NONE OFF	ON ON ON*	D	—	—	<b>7803K12</b> <b>7803K13</b> <b>7803K17 ②</b>	<b>7803K32</b> <b>7803K33</b> <b>7803K37 ②</b>	<b>7803K22 ①</b> <b>7803K23 ①</b> <b>7803K27 ②</b>	<b>7803K42</b> <b>7803K43 ②</b> <b>7803K47 ②</b>
<b>THREE POLE</b>											
15A, 125V ac 10A, 250V ac 3/4 Hp, 250V ac 1 Hp, 3 Ph 125-600V ac 1 Hp 1 & 2 Ph 125-480V ac	3 P.S.T.	ON	NONE	OFF	E	11.91 (.469)	17.48 (.688)	7700K1	7700K2	7700K3	N/A
	3 P.D.T.	ON ON	OFF NONE	ON ON	F	11.91 (.469)	17.48 (.688)	7701K1 7702K1	<b>7701K2</b> <b>7702K2</b>	<b>7701K3</b> <b>7702K3</b>	
15A, 125V ac 10A, 250V ac 3/4 Hp, 250V ac	3 P.D.T.	ON* ON*	OFF NONE	ON ON	F	11.91 (.469)	17.48 (.688)	7704K1 7705K1	7704K2 7705K2	7704K3 7705K3	
20A, 125V ac 10A, 250V ac 1 Hp, 120V ac 1, 2, & 3 phase	3 P.D.T.	ON	OFF	ON	F	—	—	<b>7804K12 ②③</b>	<b>7804K32 ②</b>	<b>7804K22 ②</b>	<b>7804K42 ②</b>
<b>FOUR POLE</b>											
15A, 125V ac 10A, 250V ac 3/4 Hp, 250V ac	4 P.S.T.	ON	NONE	OFF	E	11.91 (.469)	17.48 (.688)	7691K14	7690K8	—	N/A
	4 P.D.T.	ON ON	OFF NONE	ON ON	F	11.91 (.469)	17.48 (.688)	7693K2 <b>7695K5</b>	7692K13 <b>7694K4</b>	—	
20A, 125V ac 10A, 250V ac 3/4 Hp, 250V ac 1/2 Hp, 125V ac	4 P.S.T.	ON	NONE	OFF	E	11.91 (.469)	17.48 (.688)	7933K38	7933K36	7933K40	
	4 P.D.T.	ON ON	OFF NONE	ON ON	F	11.91 (.469)	17.48 (.688)	7934K38 7935K38	7934K36 7935K36	7934K40 7935K40	
20A, 125V ac 10A, 250V ac 1 Hp, 125-240V ac 2 & 3 phase	4 P.D.T.	ON	OFF	ON	F	—	—	<b>7805K12 ②</b>	<b>7805K32 ②</b>	<b>7805K22 ②</b>	<b>7805K42 ②</b>

\* Momentary Contact.  
 ① Also 1/2 Hp at 125-250V ac Rating.  
 ② 1 Hp @ 240-480V ac 1 or 2 phase and 240-600V ac, 3 phase.  
 ③ Not CSA Certified.  
 ④ Also 7.5A, 277V ac, 3/4 Hp, 120-240-277V ac.



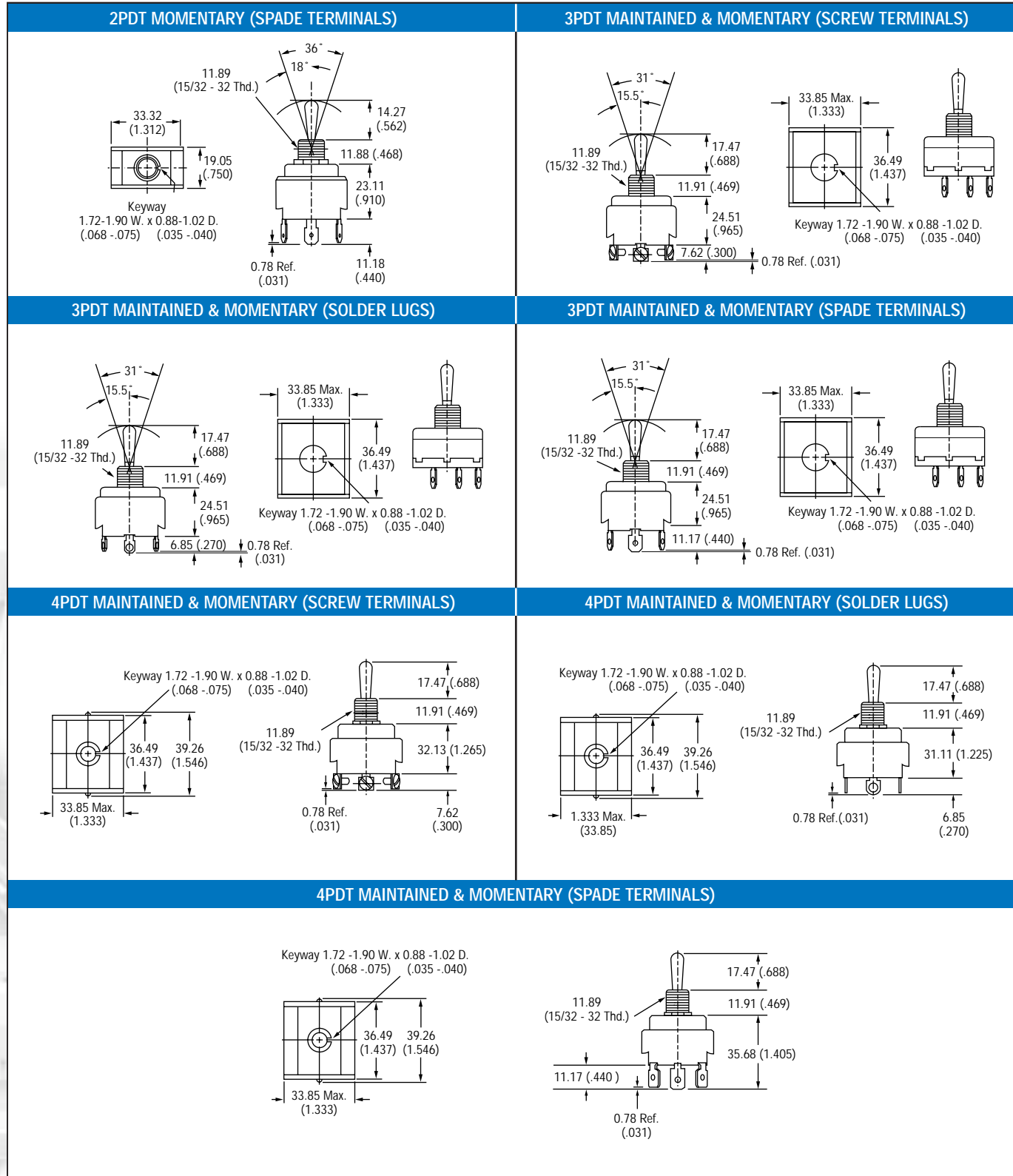
**DIMENSIONS — 7500, 7600, 7700, 7900 SERIES** APPROXIMATE IN MM (INCHES)

1PST MAINTAINED & MOMENTARY (SCREW TERMINALS)	1PDT MAINTAINED & MOMENTARY (SOLDER LUGS)
 <p>11.88 (.468) 15.87 (.625) 11.89 (15/32 -32 Thd.) 7.62 (.300) 30.93 (1.218) 26.59 (1.047) 0.78 Ref. (.031) Keyway 1.72 -1.90 W. x 0.88 -1.02 D. (.068 -.075) (.035 -.040)</p>	 <p>11.88 (.468) 15.87 (.625) 11.89 (15/32 -32 Thd.) 6.86 (.270) 28.57 (1.125) 26.59 (1.047) 0.78 Ref. (.031) Keyway 1.72 -1.90 W. x 0.88 -1.02 D. (.068 -.075) (.035 -.040)</p>
1PDT MAINTAINED & MOMENTARY (SPADE TERMINALS)	2PDT MAINTAINED (SCREW TERMINALS)
 <p>28.57 (1.125) 11.88 (.468) 11.89 (15/32 -32 Thd.) 11.17 (.440) 27.95 (1.118) 0.78 Ref. (.031) Keyway 1.72 -1.90 W. x 0.88 -1.02 D. (.068 -.075) (.035 -.040)</p>	 <p>19.05 (.750) 18.79 (.740) 11.89 (15/32 -32 Thd.) 33.32 (1.312) 20.24 (.797) 11.88 (.468) 26.97 (1.062) 7.62 (.300) 28° 14° Keyway 1.72 -1.90 W. x 0.88 -1.02 D. (.068 -.075) (.035 -.040)</p>
2PDT MAINTAINED (SOLDER LUGS)	2PDT MAINTAINED (SPADE TERMINALS)
 <p>19.05 (.750) 18.79 (.740) 11.89 (15/32 -32 Thd.) 33.32 (1.312) 11.88 (.468) 26.18 (1.031) 6.85 (.270) 28° 14° Keyway 1.72 -1.90 W. x 0.88 -1.02 D. (.068 -.075) (.035 -.040)</p>	 <p>11.89 (15/32 -32 Thd.) 33.32 (1.312) 11.88 (.468) 19.05 (.750) 30.48 (1.200) 11.17 (.440) 28° 14° Keyway 1.72 -1.90 W. x 0.88 -1.02 D. (.068 -.075) (.035 -.040)</p>
2PDT MOMENTARY (SCREW TERMINALS)	2PDT MOMENTARY (SOLDER LUGS)
 <p>33.32 (1.312) 19.05 (.750) 11.89 (15/32 -32 Thd.) 14.27 (.562) 11.88 (.468) 20.24 (.797) 23.11 (.910) 7.62 (.300) 36° 18° Keyway 1.72 -1.90 W. x 0.88 -1.02 D. (.068 -.075) (.035 -.040)</p>	 <p>33.32 (1.312) 19.05 (.750) 11.89 (15/32 -32 Thd.) 14.27 (.562) 11.88 (.468) 19.05 (.750) 23.11 (.910) 6.85 (.270) 36° 18° Keyway 1.72 -1.90 W. x 0.88 -1.02 D. (.068 -.075) (.035 -.040)</p>

# 2 TOGGLE SWITCHES

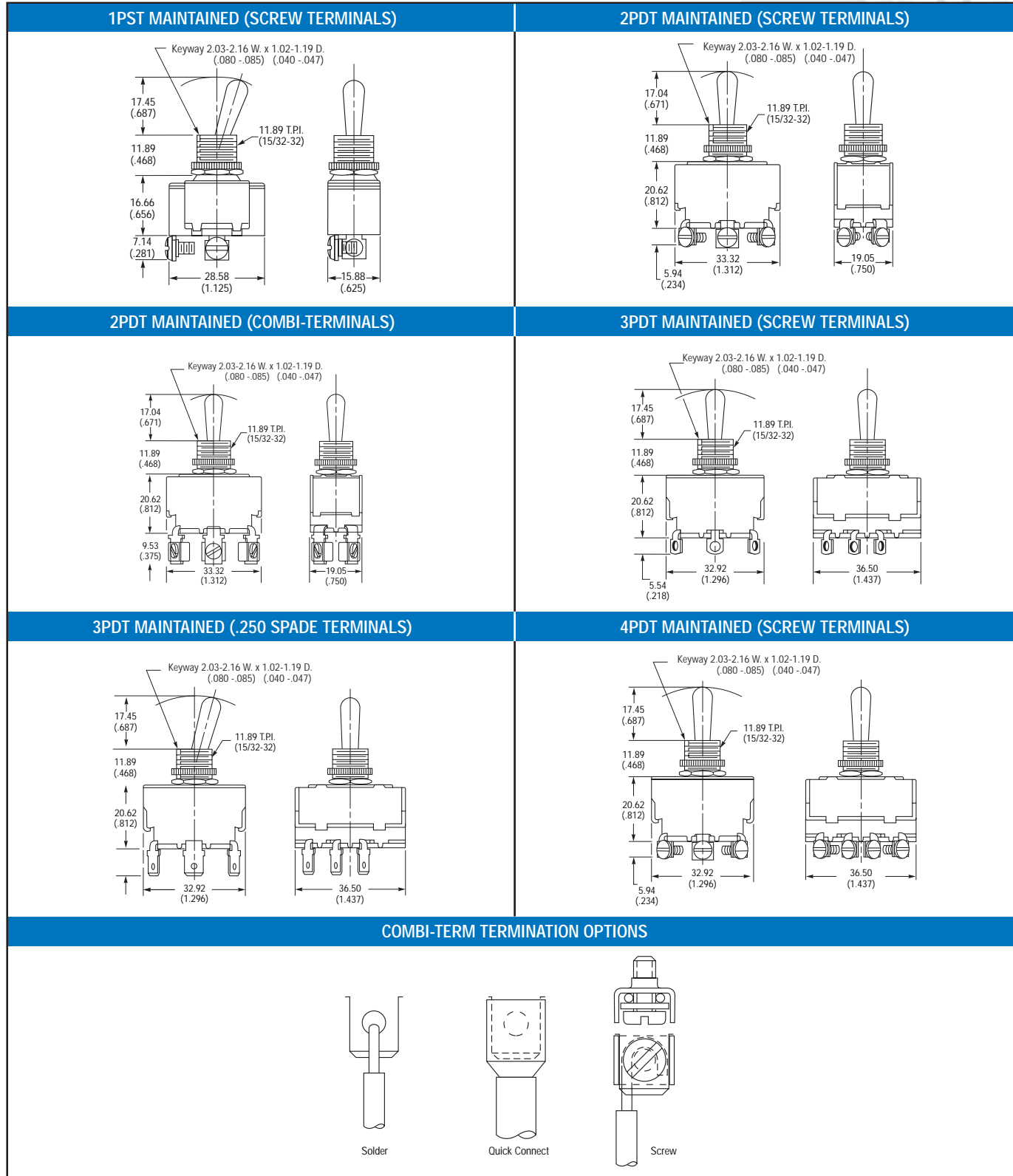
## General Purpose Toggle Switches — AC Rated (continued)

DIMENSIONS — 7500, 7600, 7700, 7900 SERIES APPROXIMATE IN MM (INCHES)





**DIMENSIONS — 7800 SERIES** APPROXIMATE IN MM (INCHES)



2



# 2 TOGGLE SWITCHES

## General Purpose Toggle Switches — AC/DC Rated

**DESCRIPTION**

This line of switches employs a Quick-make/Quick-break contact mechanism. The resultant high speed movement eliminates the "teasing" of the switch and reduces the pitting of the contact surfaces due to arcing. Self-cleaning and wiping contact action assures positive contact on switch operation. These switches are especially suited for use in small motor applications.

**SPECIFICATIONS**

**Ratings:**

See selection table.

**Circuits:**

1PST, 1PDT, 2PST, 2PDT.  
Maintained and momentary toggle action.

**Contact Mechanism:**

Quick-make/Quick-break wiping action.

**Contact Material:**

Bronze silver plated.

**Terminal Types:**

Screw Terminals — Brass designed to accept #5-40 x 5/32" (Cat. No. 11-26) screws. Furnished unassembled.

Solder Lug Terminals — Brass silver plated with 2.16 - 2.29mm (.085 - .090") dia. hole.

Integrated Wire Leads — 18 gauge, 6" long and skinned 3/4". Special wire leads lengths beyond 6" are available at additional charge.

**Base Material:**




Thermoset molding material.

**Mounting Means:**

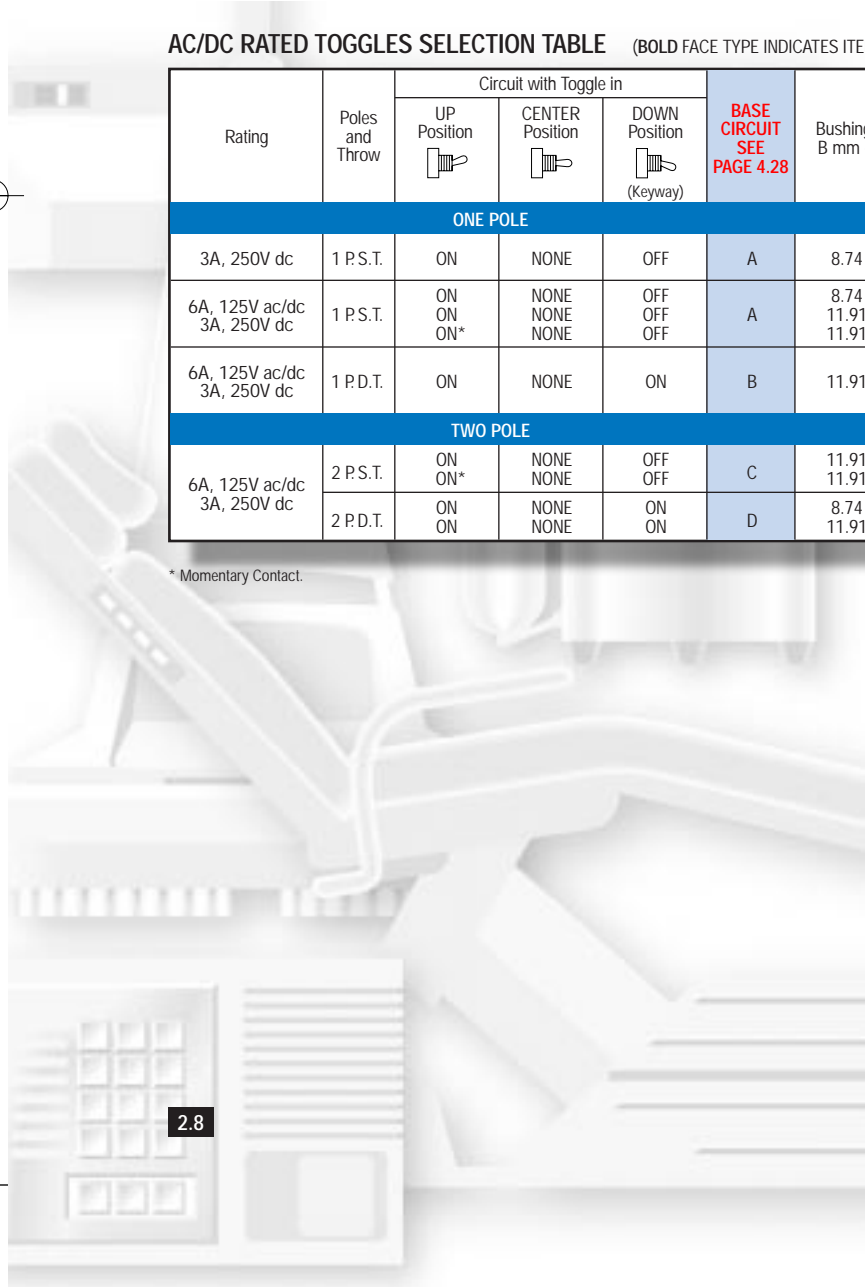
Threaded Bushing — 11.89mm (.468") dia., 32 threads/inch.

Keyway — 1.73 x .89mm deep (.068 x .035" deep), provides antirotation feature.

**AC/DC RATED TOGGLES SELECTION TABLE** (BOLD FACE TYPE INDICATES ITEMS NORMALLY IN DISTRIBUTOR STOCK)

Rating	Poles and Throw	Circuit with Toggle in			BASE CIRCUIT SEE PAGE 4.28	Bushing Length B mm (inches)	Lever Length A mm (inches)	CATALOG NUMBERS		
		UP Position 	CENTER Position 	DOWN Position (Keyway) 				Solder Lugs	Screw Terminals	Wire Leads
<b>ONE POLE</b>										
3A, 250V dc	1 P.S.T.	ON	NONE	OFF	A	8.74 (.344)	12.70 (.500)	<b>8280K115</b>	8295K107	<b>8290K115</b>
6A, 125V ac/dc 3A, 250V dc	1 P.S.T.	ON	NONE	OFF	A	8.74 (.344)	12.70 (.500)	<b>8381K107</b>	8396K107	<b>8391K107</b>
		ON ON*	NONE NONE	OFF OFF		11.91 (.469)	12.70 (.500)	<b>8381K108</b> 8928K478	8396K108 —	<b>8391K108</b> —
6A, 125V ac/dc 3A, 250V dc	1 P.D.T.	ON	NONE	ON	B	11.91 (.469)	12.70 (.500)	8928K479	—	—
<b>TWO POLE</b>										
6A, 125V ac/dc 3A, 250V dc	2 P.S.T.	ON ON*	NONE NONE	OFF OFF	C	11.91 (.469) 11.91 (.469)	12.70 (.500) 12.70 (.500)	<b>8370K107</b> 8928K481	8372K107 8928K482	<b>8371K107</b> —
	2 P.D.T.	ON ON	NONE NONE	ON ON	D	8.74 (.344) 11.91 (.469)	12.70 (.500) 12.70 (.500)	8373K108 <b>8373K107</b>	8375K108 <b>8375K107</b>	8374K108 8374K107

\* Momentary Contact.







Hardware supplied —  
 1 hexagon locknut  
 (Cat. No. 15-192) and  
 1 bright nickel plated knurled  
 facenut (Cat. No. 15-124F1).  
 Furnished unassembled.

**Finish:**

Bright nickel plated toggle  
 lever and bushing.

**Operating**

**Temperature Range:**

-17.8°C to +65.6°C  
 (0°F to +150°F).

**Options:**

- Lever —11/16"
- Lever seal.
- Mounting hardware.  
 Furnished assembled.
- Other lead lengths.

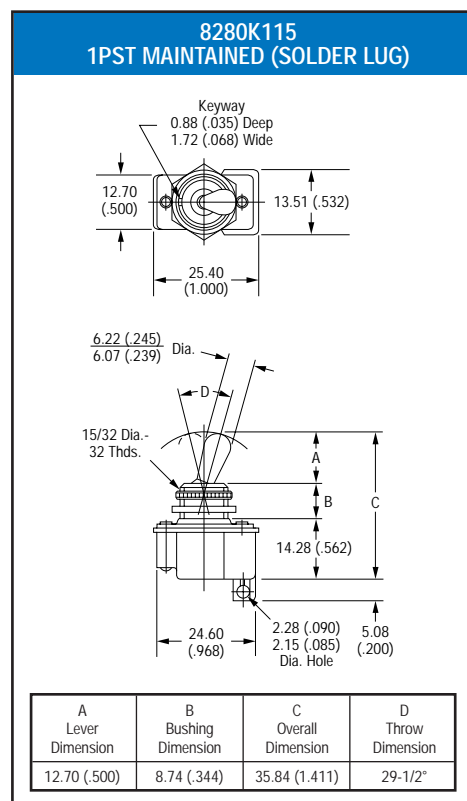
**Approvals:**

UL Recognized.

CSA Certified.



**DIMENSIONS** APPROXIMATE IN MM (INCHES)



Dimensions continue on [page 2.10](#).



8280K115

2



8372K107



8290K115



8374K107

2.9

# 2 TOGGLE SWITCHES

## General Purpose Toggle Switches — AC/DC Rated (continued)

DIMENSIONS APPROXIMATE IN MM (INCHES)

8290K115 1PST MAINTAINED (WIRE LEAD)		8295K107 1PST MAINTAINED (SCREW TERMINALS)		8381K107 & K108 1PST MAINTAINED (SOLDER LUG)							
<p>Keyway 0.88 (.035) Deep 1.72 (.068) Wide</p> <p>12.70 (.500)</p> <p>25.40 (1.000)</p> <p>6.22 (.245) Dia. 6.07 (.239)</p> <p>15/32 Dia.-32 Thds.</p> <p>A</p> <p>B</p> <p>C</p> <p>Standard 152.40 (6.000") Long Wire Leads</p> <p>24.60 (.968)</p> <p>1.19 (.046)</p>		<p>Keyway 0.88 (.035) Deep 1.72 (.068) Wide</p> <p>12.70 (.500)</p> <p>25.40 (1.000)</p> <p>6.22 (.245) Dia. 6.07 (.239)</p> <p>D</p> <p>15/32 Dia.-32 Thds.</p> <p>A</p> <p>B</p> <p>C</p> <p>14.28 (.562)</p> <p>24.60 (.968)</p> <p>31.75 (1.250)</p> <p>1.19 (.046)</p> <p>#5/40 x 5/32 Lg. Binding Head Screw</p>		<p>Keyway 0.88 (.035) Deep 1.72 (.068) Wide</p> <p>17.06 (.671)</p> <p>27.78 (1.093)</p> <p>6.22 (.245) Dia. 6.07 (.239)</p> <p>D</p> <p>15/32 Dia.-32 Thds.</p> <p>A</p> <p>B</p> <p>C</p> <p>17.46 (.687)</p> <p>5.15 (.203)</p> <p>2.28 (.090)</p> <p>2.15 (.085) Dia. Hole</p>							
A Lever Dimension	B Bushing Dimension	C Overall Dimension	D Throw Dimension	A Lever Dimension	B Bushing Dimension	C Overall Dimension	D Throw Dimension	A Lever Dimension	B Bushing Dimension	C Overall Dimension	D Throw Dimension
12.70 (.500)	8.74 (.344)	35.71 (1.406)	29-1/2"	12.70 (.500)	8.74 (.344)	35.71 (1.406)	29-1/2"	12.70 (.500)	8.74 (.344)	38.89 (1.531)	29-1/2"
12.70 (.500)	11.91 (.469)	42.06 (1.656)	25-1/2"	12.70 (.500)	11.91 (.469)	42.06 (1.656)	25-1/2"	12.70 (.500)	11.91 (.469)	42.06 (1.656)	25-1/2"

8391K107 & K108 1PST MAINTAINED (WIRE LEAD)		8396K107 & K108 1PST MAINTAINED (SCREW TERMINALS)		8928K478 1PST MOMENTARY (SOLDER LUG)							
<p>Keyway 0.88 (.035) Deep 1.72 (.068) Wide</p> <p>16.86 (.664)</p> <p>6.09 (.240)</p> <p>D</p> <p>15/32 Dia.-32 Thds.</p> <p>A</p> <p>B</p> <p>C</p> <p>Standard 152.40 (6.000") Long Wire Leads</p> <p>17.39 (.685)</p> <p>27.78 (1.093)</p>		<p>Keyway 0.88 (.035) Deep 1.72 (.068) Wide</p> <p>17.06 (.671)</p> <p>35.32 (1.390)</p> <p>6.22 (.245) Dia. 6.07 (.239)</p> <p>D</p> <p>15/32 Dia.-32 Thds.</p> <p>A</p> <p>B</p> <p>C</p> <p>17.46 (.687)</p> <p>27.78 (1.093)</p> <p>#5/40 x 5/32 Lg. Binding Head Screw</p>		<p>Keyway 0.88 (.035) Deep 1.72 (.068) Wide</p> <p>17.52 (.690)</p> <p>29.36 (1.156)</p> <p>6.14 (.242) Dia.</p> <p>D</p> <p>15/32 Dia.-32 Thds.</p> <p>A</p> <p>B</p> <p>C</p> <p>24.13 (.950)</p> <p>2.15 (.085) Dia. Hole</p>							
A Lever Dimension	B Bushing Dimension	C Overall Dimension	D Throw Dimension	A Lever Dimension	B Bushing Dimension	C Overall Dimension	D Throw Dimension	A Lever Dimension	B Bushing Dimension	C Overall Dimension	D Throw Dimension
12.70 (.500)	8.74 (.344)	38.89 (1.531)	29-1/2"	12.70 (.500)	8.74 (.344)	38.89 (1.531)	29-1/2"	12.70 (.500)	8.74 (.344)	50.29 (1.980)	29-1/2"
12.70 (.500)	11.91 (.469)	42.06 (1.656)	25-1/2"	12.70 (.500)	11.91 (.469)	42.06 (1.656)	25-1/2"	12.70 (.500)	11.91 (.469)	42.06 (1.656)	25-1/2"



**DIMENSIONS** APPROXIMATE IN MM (INCHES)

8370 & 8373K107 & K108 2PST/2PDT MAINTAINED (SOLDER LUG)		8371 & 8374K107 & K108 1PST MAINTAINED (WIRE LEAD)		8373 & 8375107 & K108 2PST/2PDT MAINTAINED (SCREW TERMINALS)							
<p>Keyway 0.88 (.035) Deep 1.72 (.068) Wide</p> <p>17.46 (.687)</p> <p>29.36 (1.156)</p> <p>6.22 (.245) Dia. 6.07 (.239)</p> <p>15/32 Dia.-32 Thds.</p> <p>Two Solder Lugs Omitted For Single Throw</p> <p>2.28 (.090) 2.15 (.085) Dia. Hole</p>		<p>Keyway 0.88 (.035) Deep 1.72 (.068) Wide</p> <p>17.46 (.687)</p> <p>29.36 (1.156)</p> <p>6.22 (.245) Dia. 6.07 (.239)</p> <p>15/32 Dia.-32 Thds.</p> <p>Double Throw</p> <p>27.43 (1.080)</p> <p>25.40 (1.000)</p> <p>Single Throw</p> <p>7.14 (.281)</p>		<p>Keyway 0.88 (.035) Deep 1.72 (.068) Wide</p> <p>17.46 (.687)</p> <p>29.37 (1.163)</p> <p>42.07 (1.656)</p> <p>6.22 (.245) Dia. 6.07 (.239)</p> <p>15/32 Dia.-32 Thds.</p> <p>#5/40 x 5/32 Lg. Binding Head Screw</p> <p>16.27 (.640)</p> <p>8.73 (.343)</p> <p>27.78 (1.093)</p>							
A Lever Dimension	B Bushing Dimension	C Overall Dimension	D Throw Dimension	A Lever Dimension	B Bushing Dimension	C Overall Dimension	D Throw Dimension	A Lever Dimension	B Bushing Dimension	C Overall Dimension	D Throw Dimension
12.70 (.500)	8.74 (.344)	43.03 (1.694)	29-1/2"	12.70 (.500)	8.74 (.344)	37.69 (1.484)	29-1/2"	12.70 (.500)	8.74 (.344)	37.69 (1.484)	29-1/2"
12.70 (.500)	11.91 (.469)	46.23 (1.820)	25-1/2"	12.70 (.500)	11.91 (.469)	38.48 (1.515)	25-1/2"	12.70 (.500)	11.91 (.469)	40.87 (1.609)	25-1/2"

2

# 2 TOGGLE SWITCHES

## Industrial Purpose Toggle Switches — AC/DC Rated

### DESCRIPTION

The Industrial Toggle Switch Line employs a Quick-make/Quick-break wiping action contact mechanism. Large, well separated terminals reduce the possibility of electrical creepage and insure separation of loose wire strands from adjacent leads.

These switches are designed for heavy duty applications, such as industrial power tools and floor cleaning/polishing equipment.

### SPECIFICATIONS

#### Ratings:

See selection table.

#### Circuits:

1PST, 2PST, 2PDT.  
Maintained contact action.

#### Contact Mechanism:

Quick-make/Quick-break wiping action.

#### Contact Material:

Movable — Copper silver plated.  
Stationary — Bronze silver plated.

### Terminal Types:

Screw Terminals —

*7320 & 7321 Series:*  
Brass designed to accept #5-40 x 1/4" (Cat. No. 811-14) binding head screws.  
Furnished unassembled.

*7360 & 7361 Series:*  
Brass designed to accept #6-32 x 1/4" (Cat. No. 811-161) binding head screws.  
Furnished unassembled.

*8690 Series:*  
Brass designed to accept #6-32 x 1/4" (Cat No. 811-7248) binding head screws.  
Furnished unassembled.

INDUSTRIAL PURPOSE SELECTION TABLE

Rating	Poles and Throw	Circuit with Toggle in			BASE CIRCUIT SEE PAGE 4.28	Bushing Length A mm (inches)	Lever Length B mm (inches)	CATALOG NUMBERS
		UP Position	CENTER Position	DOWN Position (Keyway)				Screw Terminals
		ONE POLE — STANDARD			ONE POLE — STANDARD			
16A, 125V ac/dc 8A, 250V ac/dc 1 Hp, 125V ac/dc	1 P.S.T.	ON	NONE	OFF	A	11.91 (.469)	16.66 (.656)	7321K3
20A, 125V ac/dc 10A, 250V ac/dc 1 Hp, 125V ac/dc 1 1/2 Hp, 250V dc	1 P.S.T.	ON	NONE	OFF	A	11.91 (.469)	16.66 (.656)	7361K5
		TWO POLE — STANDARD			TWO POLE — STANDARD			
16A, 125V ac/dc 8A, 250V ac/dc 1 Hp, 125V ac/dc	2 P.S.T.	ON	NONE	OFF	C	8.74 (.344) 11.91 (.469)	16.66 (.656) 16.66 (.656)	7320K2 7320K3
20A, 125V ac/dc 10A, 250V ac/dc 1 1/2 Hp, 125V ac/dc 1 1/2 Hp, 250V ac/dc	2 P.S.T.	ON	NONE	OFF	C	8.74 (.344) 11.91 (.469)	16.66 (.656) 16.66 (.656)	7360K7 7360K8
20A, 250V ac/dc 1 1/2 Hp, 125V ac/dc 2 Hp, 250V ac/dc	2 P.S.T.	ON	NONE	OFF	C	8.74 (.344) 11.91 (.469)	20.65 (.813) 20.65 (.813)	7402K3 7402K4
5A, 125V ac/dc 10A, 250V ac/dc	2 P.D.T.	ON	NONE	ON	D	11.91 (.469)	20.65 (.813)	8690K2





**7402 Series:**  
 Brass designed to accept  
 #8-32 x 3/8" binding  
 (Cat No. 11-1766)  
 head screws.  
 Furnished unassembled.

**Base Material:**  
 Thermoset molding material.

**Lever Material and Finish:**  
 Bright nickel plated brass.

**Mounting Means:**  
 Threaded Bushing —  
 0.468" dia., 32 threads/inch.  
 Keyway — .068 x .035" deep,  
 provides antirotation feature.

**Hardware Supplied —**  
 1 hexagon locknut  
 (Cat. No. 15-192) and  
 1 bright nickel plated  
 hexnut (Cat. No. 15-966-2).  
 Furnished unassembled.

**Operating  
 Temperature Range:**  
 0°C to +55°C  
 (32°F to +131°F).

- Options:**
- Spade terminals.
  - Different bushing sizes.
  - Special markings.
  - Dust resistant lever seals.

**Approvals:**  
 UL Recognized.  
 CSA Certified.



2



7321K3



7360K7



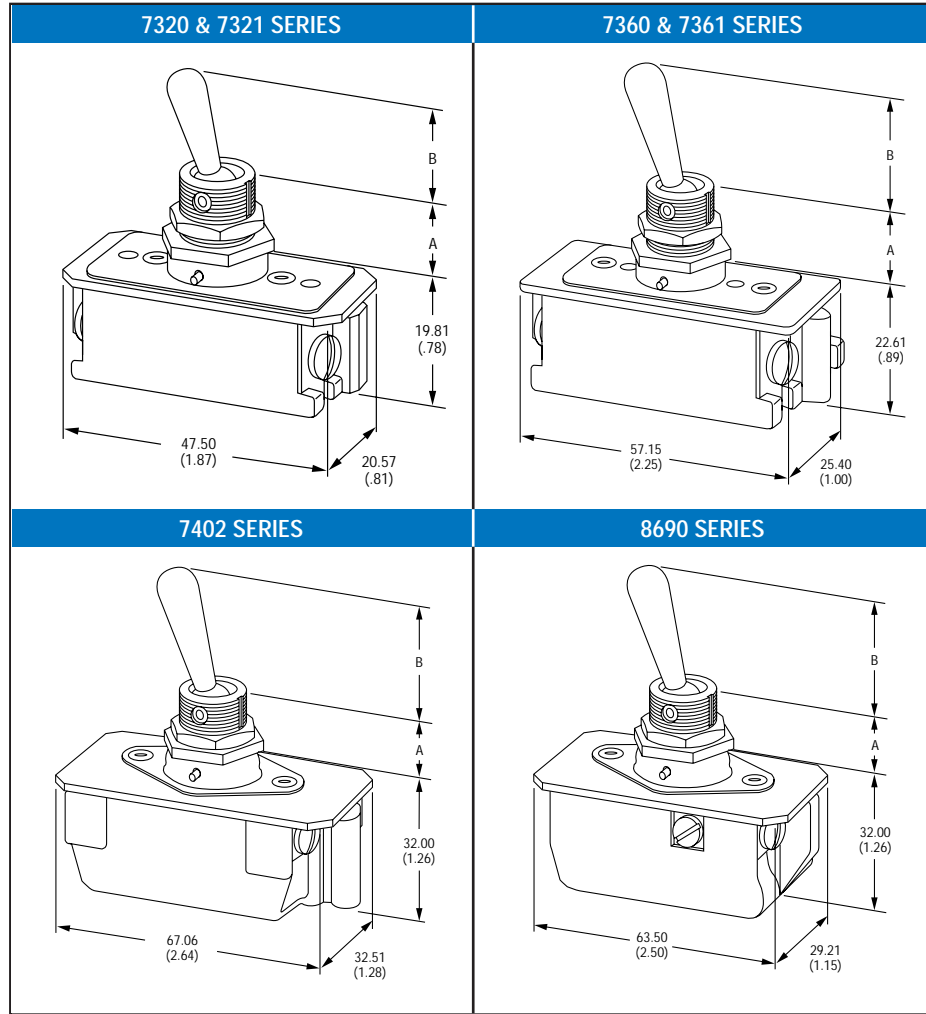
7402K4



8690K2

2.13

**DIMENSIONS** APPROXIMATE IN MM (INCHES)



# 2 TOGGLE SWITCHES

## Special Purpose — Illuminated AC Rated

### DESCRIPTION

These illuminated switches are available only in single pole circuitry. A two pole base is utilized with one pole housing the lamp. On single throw circuits, the lamp is wired to operate in conjunction with the switch. On double throw circuits, the

lamp is independent of the switch. On the sealed versions, a silicone rubber seal is fitted to the paddle lever to provide a moisture and dust resistant seal between the lever and bushing.

### SPECIFICATIONS

**Circuits:**  
1PST and 1PDT.  
Maintained and momentary action.

### Contact Material:

Movable — Silver plated copper.  
Stationary — Silver plated copper.

### Terminal Types:

Spade Terminals — Brass.

### Lever Material:

Colored thermoplastic paddle lever.

*Refer to pages 2.2-2.3 for general specifications.*

### HOW TO ORDER — ILLUMINATED TOGGLES

To determine your Complete Catalog Number you must start with the appropriate Base Circuit Number and add the appropriate Code Letters and/or Numbers as in the example below:

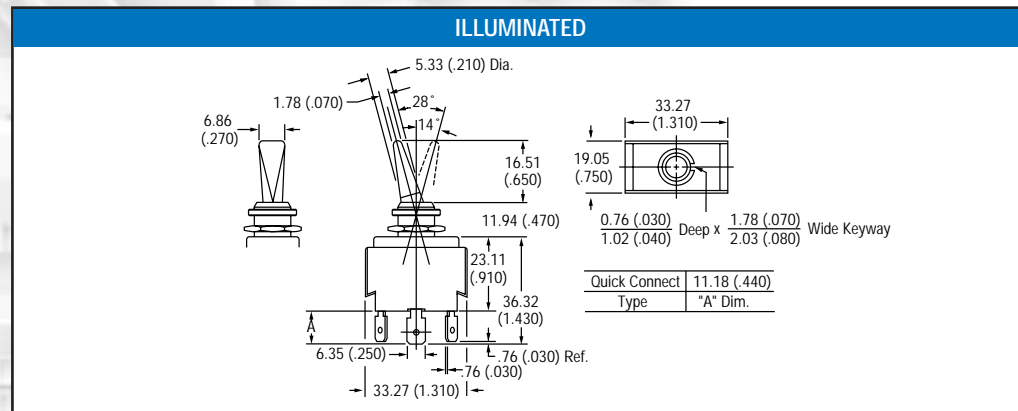
Start with this Base Circuit Number	...add each appropriate Code Number or Letter...			...to get to your Complete Catalog Number
Base Circuit Catalog Number	Lever Color	Bulb Voltage	Termination Type	Complete Catalog Number
7071K21	G	1	52	7071K21G152

### ILLUMINATED AC RATED TOGGLE SELECTION TABLE

Rating	Poles and Throw	Circuit with Toggle in			BASE CATALOG NUMBER	BASE CIRCUIT SEE PAGE 4.28	CODE LETTERS AND NUMBERS — ADD TO BASE CIRCUIT NUMBER					
		UP Position	CENTER Position	DOWN Position (Keyway)			Lever Color		Bulb Voltage		Termination	
							Color	Code	Voltage Type	Code	Termination Type	Code
<b>ILLUMINATED AC TOGGLE SWITCHES — STANDARD</b>												
15A, 125V ac 10A, 250V ac 3/4 Hp, 250V ac	1 P.S.T.	ON	NONE	OFF	7071K21	G	Green	G	14V	1	.250" Spade	52
							Red	T				
							Amber	A				
<b>ILLUMINATED AC TOGGLE SWITCHES — SEALED</b>												
15A, 125V ac 10A, 250V ac 3/4 Hp, 250V ac	1 P.S.T.	ON	NONE	OFF	7073K21	G	Green	G	14V	1	.250" Spade	52
	1 P.D.T.	ON ON*	OFF OFF	ON ON*	7073K20 7073K25	H	Red	T				

\* Momentary Contact.

### DIMENSIONS APPROXIMATE IN MM (INCHES)





## Double Insulated — Industrial and VDE

### DESCRIPTION

This line of Double Insulated toggles comes in two versions: Industrial and VDE Class II. The VDE version has the VDE registration number 80861239 and has been tested in accordance with VDE 0630.

### SPECIFICATIONS

**Lever Material and Finish:**  
Durable high strength nylon.

**Contact Mechanism:**  
Quick-make/Quick-break wiping action.

**Contact Material:**

Movable — Copper silver plated.

Stationary — Bronze silver plated.

**Approvals:**

UL Recognized.

CSA Certified.

VDE Registered (where noted).



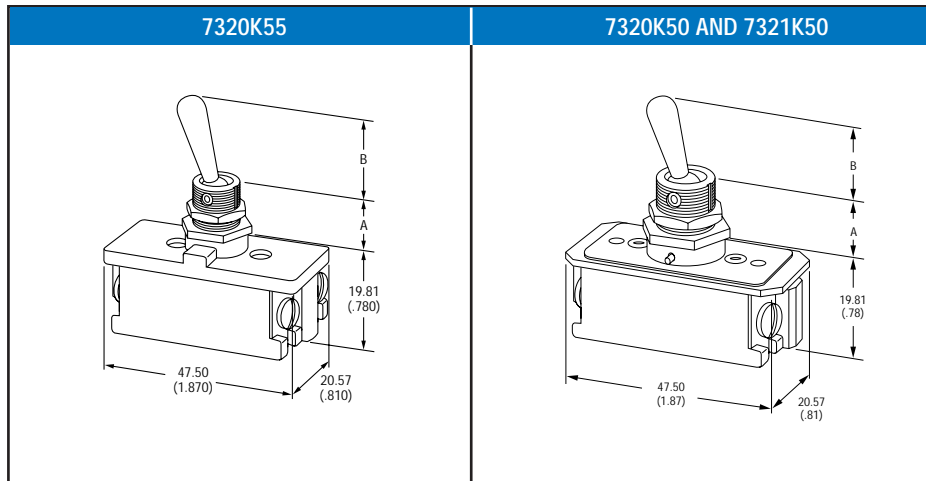
Refer to pages 2.12-2.13 (Industrial Purpose) for general specifications.

### DOUBLE INSULATED SELECTION TABLE

Rating	Poles and Throw	Circuit with Toggle in			BASE CIRCUIT SEE PAGE 4.28	Bushing Length A mm (inches)	Lever Length B mm (inches)	CATALOG NUMBERS
		UP Position	CENTER Position	DOWN Position (Keyway)				
<b>SINGLE POLE — INDUSTRIAL</b>								
16A, 125V ac/dc 8A, 250V ac/dc 1 Hp, 125V ac/dc	1 P.S.T.	ON	NONE	OFF	A	11.89 (.468)	17.12 (.674)	7321K50
<b>TWO POLE — INDUSTRIAL</b>								
16A, 125V ac/dc 8A, 250V ac/dc 1 Hp, 125V ac/dc	2 P.S.T.	ON	NONE	OFF	C	11.89 (.468)	17.12 (.674)	7320K50
<b>VDE APPROVED (MEETS REQUIREMENTS OF CEE PUBL. 25)</b>								
16A, 125V ac/dc 8A, 250V ac/dc 1 Hp, 125V ac/dc	2 P.S.T.	ON	NONE	OFF	C	11.89 (.468)	17.12 (.674)	7320K55

● VDE 8(8) 250V, T85C.

### DIMENSIONS APPROXIMATE IN MM (INCHES)



7073K20G152  
Illuminated



7071K21T152  
Illuminated



7071K21A152  
Illuminated



7320K55  
Double Insulated

2

2.15

# 2 TOGGLE SWITCHES

## Special Purpose Toggle Switches — Panelboard Switches

**DESCRIPTION**

This group of two position power toggle switches is used by manufacturers in a wide variety of applications that require dependability and long service, such as welding equipment, commercial floor polishers, battery chargers, food processors and panelboards.

**SPECIFICATIONS**

**Rating:**

10-60A, 120-600V.

See selection table.

**Circuits:**

1PST, 2PST, 3PST, 2 circuit.

Maintained.

Except for: **8980K13**; Momentary.

**Contact Mechanism:**

Quick-make/Quick-break wiping action.

Except for: **8980K13**:

Quick-make/Quick-break butt contact.

**Contact Material:**

Movable — Bronze.

Stationary — Copper.

**8980K13** — Silver.

**Type of Termination:**

Screw or bus.

**Termination Material:**

Copper.

**Mounting Means:**

Two Hole Mounting — Panel Type Flush.

**Dielectric Withstand:**

1,000 Volts RMS minimum.

**Operating Temperature Range:**

-17.8°C to +65.6°C  
(0°F to +150°F).

**Approvals:**

UL Recognized.

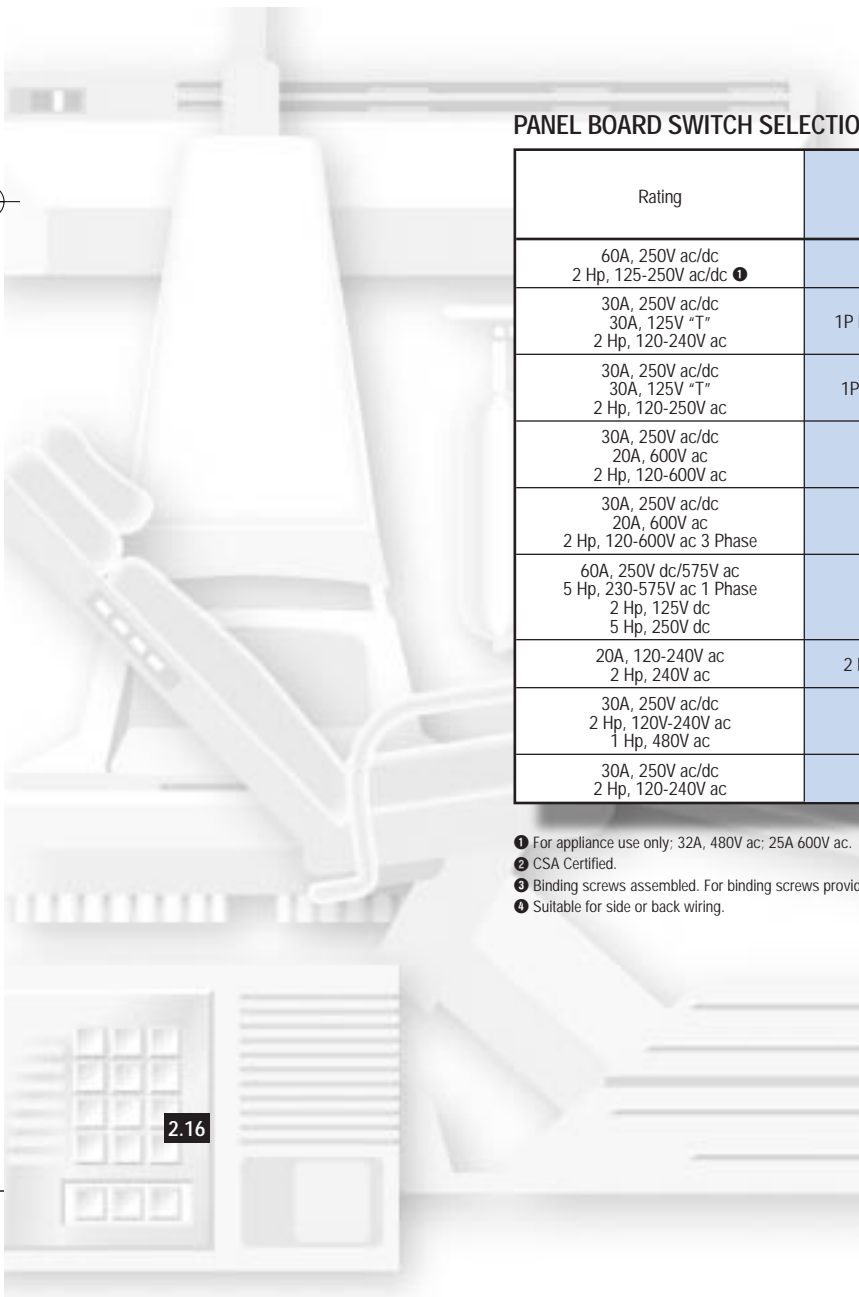
CSA Certified as noted.



**PANEL BOARD SWITCH SELECTION TABLE** (BOLD FACE TYPE INDICATES ITEMS NORMALLY IN DISTRIBUTOR STOCK)

Rating	Poles and Throw	Mounting	Terminals	CATALOG NUMBERS
60A, 250V ac/dc 2 Hp, 125-250V ac/dc ❶	2 P.S.T.			<b>8980K1</b> ❷
30A, 250V ac/dc 30A, 125V "T" 2 Hp, 120-240V ac	1P Double Break	Frame Plate	Center Bus	8980K2
30A, 250V ac/dc 30A, 125V "T" 2 Hp, 120-250V ac	1P Quad Break	Frame Plate	Center Bus	8980K3
30A, 250V ac/dc 20A, 600V ac 2 Hp, 120-600V ac	2 P.S.T.	Panel Type Strap	Screw	8980K5
30A, 250V ac/dc 20A, 600V ac 2 Hp, 120-600V ac 3 Phase	3 P.S.T.	Panel Type	Screw	8980K6
60A, 250V dc/575V ac 5 Hp, 230-575V ac 1 Phase 2 Hp, 125V dc 5 Hp, 250V dc	2 P.S.T.	Panel Type	Bus	8980K7
20A, 120-240V ac 2 Hp, 240V ac	2 P.S.T. (N.O.)	Panel Type Strap	Screw	<b>8980K13</b> ❸❹
30A, 250V ac/dc 2 Hp, 120V-240V ac 1 Hp, 480V ac	2 P.S.T.	Panel Type Strap	Screw	<b>8980K14</b> ❹
30A, 250V ac/dc 2 Hp, 120-240V ac	2 P.S.T.	Panel Type Strap	Screw	<b>8980K16</b>

❶ For appliance use only: 32A, 480V ac; 25A 600V ac.  
 ❷ CSA Certified.  
 ❸ Binding screws assembled. For binding screws provided unassembled, order 8980K30.  
 ❹ Suitable for side or back wiring.







**EATON**

2



8980K1



8980K2



8980K3



8980K5



8980K6



8980K7



8980K13



8980K14



8980K16

2.17

# 2 TOGGLE SWITCHES

## Special Purpose Toggle Switches — Outlet Box — 8337K2

### DESCRIPTION

The switch mechanism on this toggle switch is enclosed in a molded housing. A one piece actuator block is provided with spring loaded detent plungers for "feel" and positioning to insure contact pressure and provide a substantial wear allowance. Large insulating barriers between terminals prevent electrical creepage and insure separation of loose wire strands. Metal parts visible when the switch is mounted are bright nickel plated. These switches have a flat zinc lever with an aluminum ball.

### SPECIFICATIONS

#### Ratings:

- 20A, 250V ac.
- 1-1/2 Hp, 115V ac 1-Ph.
- 2 Hp, 115V ac 3-Ph.
- 2 Hp, 230-460-575V ac 1 through 3 Ph.

#### Circuits:

- 3PST maintained action.
- ON-NONE-OFF.
- Circuit Number E, [see page 4.28.](#)

#### Contact Mechanism:

Slow-make/Slow-break butt contact.

#### Contact Material:

Movable and Stationary — Solid silver.

#### Terminal Type:

Screw Terminals — Brass designed to accept #6-32 x 6.35mm (.250") binding head (Cat. No. 811-161) screws. Furnished unassembled.

#### Mounting Means:

O.B.M. — Switches have countersunk mounting holes spaced for Outlet Box Mounting.

#### Finish:

Flat zinc lever with aluminum ball tip.

#### Options:

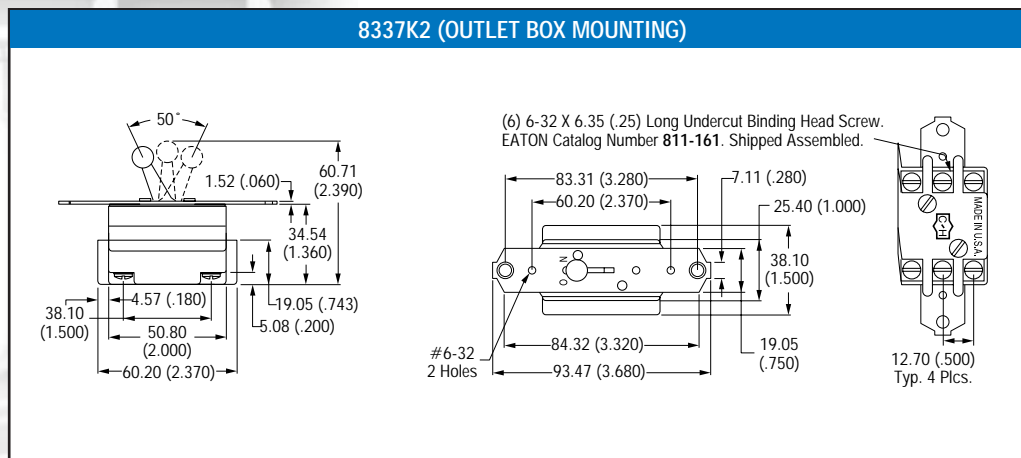
- Terminal screws assembled.
- Wire clamps on terminal screws.

#### Approvals:

UL Recognized.  
CSA Certified.



### DIMENSIONS APPROXIMATE IN MM (INCHES)





## High Capacity Toggle Switch — 7818K1

### DESCRIPTION

The heavy duty, high capacity switch (Cat. No. 7818K1) is ideal for exceptionally high power applications, heavy duty motor loads and for use in welding equipment or similar industrial applications.

### HIGH CAPACITY OVERVIEW

Capacitive loads will result in a current inrush far exceeding normal operating current. In fact, the typical capacitive load inrush current, shown in Figure 2, is potentially more damaging to a switch than a typical inductive load inrush. The major difference is that the capacitive load can reach maximum inrush sooner. Generally, peak inductive load current inrush (figure 1) occurs after any switch contact bounce has subsided. In a capacitive load, however, switch contact bounce could occur at the same time as maximum current inrush, increasing the possibility of

arcing, and of welding the switch contact. EATON has addressed this problem with its high inrush switch.

By combining innovative design and quality materials, this switch is designed to carry the specified maximum inrush current for 10 milliseconds for a minimum of 20,000 On/Off cycles.

### SPECIFICATIONS

#### Ratings:

40A, 600V ac.  
5 Hp, 250V ac.

#### Circuits:

2PST — maintained.

#### Contact Mechanism:

Quick-make/Quick break snap acting butt contact.

*Make:* 200A peak inrush at 125V ac for 10 ms for 20,000 cycles minimum.

*Break:* 20A at 125V ac for 20,000 cycles minimum.

#### Contact Material:

10% silver cadmium oxide composite.

#### Terminal Type:

Screw Terminals — Brass (Cat. No. 11-6074-4) supplied. Furnished unassembled.

#### Mounting Means:

Molded flush mounting bracket, high impact polycarbonate, 84.12mm (3.312"), center-to-center spacing and 60.33mm (2.375") spacing for self-tapping screws.

#### Lever:

Nylon.

#### Base:

Molded thermoset material.

#### Dielectric Withstand:

2200V RMS minimum.

#### Approvals:

UL to Standard 508, File E147754.



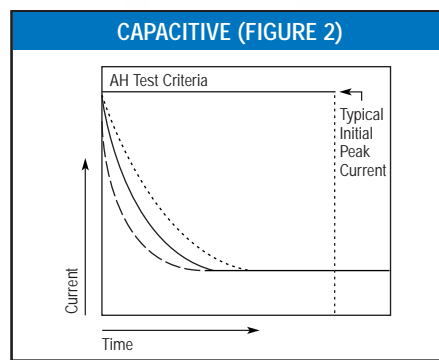
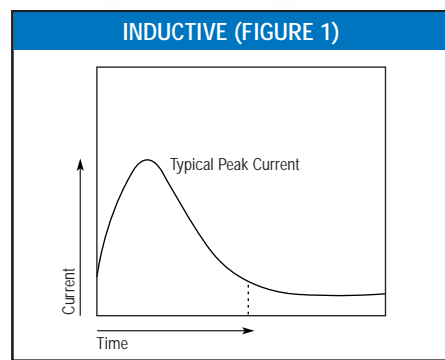
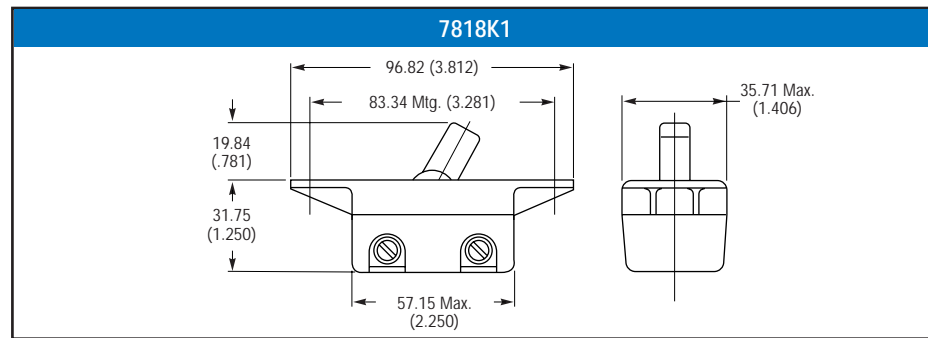
8337K2  
Outlet Box Mounting



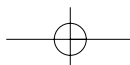
7818K1  
High Capacity

2

### DIMENSIONS APPROXIMATE IN MM (INCHES)



2.19



# 2 TOGGLE SWITCHES

## Special Purpose Heavy Duty and Heavy Duty Hesitation Switches

### DESCRIPTION

#### One Hole Panel Mount

These heavy duty toggle switches are available in either two or three position. The three position switches offer a unique positive center stop feature which assures that the lever cannot be thrown from one side through the center "OFF" position without stopping. This design feature is a major factor in their widespread

acceptance for motor reversing and speed control applications. The most common application for the switch is to help prevent motor damage resulting from the high current generation by counter EMF of the armature at the time of reversing. This type of device is referred to within the industry as an anti-plugging, hesitation, positive stop or positive off switch. Typical applications include bench tools, coach and truck (electric lift) and X-Ray equipment.

#### Flush Mount

These three position switches also offer the positive center stop feature where the lever cannot be thrown from one side through the center "OFF" position without stopping. The high ratings of this series allow it to be used with a broad range of heavy duty applications. Copper contacts and brass screw terminals are standard.

ONE HOLE PANEL MOUNT SWITCH SELECTION TABLE (BOLD FACE TYPE INDICATES ITEMS NORMALLY IN DISTRIBUTOR STOCK)

Rating	Poles and Throw	Circuit with Toggle in			BASE CIRCUIT SEE PAGE 4.28	Bushing Length mm (inches)	Lever Length mm (inches)	Lever Type	CATALOG NUMBERS
		UP Position	CENTER Position	DOWN Position (Keyway)					Screw Terminals
<b>ONE HOLE PANEL MOUNT</b>									
14A, 125V ac/dc 7A, 250V ac/dc 3/4 Hp, 125-250V ac/dc	2 P.D.T.	ON ON	NONE OFF	ON ON	D	10.31 (.406) 10.31 (.406)	13.49 (.531) 13.49 (.531)	Ball Ball	7814K1 7814K2
15A, 125V ac ① 10A, 250V ac 3/4 Hp, 250V ac	2 P.D.T.	ON	OFF	ON	D	11.89 (.468)	17.45 (.687)	Bat	7992K10
10A, 125V ac/dc 5A, 250V ac/dc	3 P.D.T.	ON	OFF	ON	F	10.31 (.406)	13.49 (.531)	Ball	7815K3
15A, 125V ac ① 10A, 250V ac 3/4 Hp, 250V ac	3 P.D.T.	ON	OFF	ON	F	11.89 (.468)	17.45 (.687)	Bat	7991K10
10A, 125V ac/dc 5A, 250V ac/dc	4 P.D.T.	ON	NONE	ON	F	10.31 (.406)	13.49 (.531)	Ball	7815K1②
10A, 125V ac/dc 5A, 250V ac/dc 1/2 Hp, 125-250V ac/dc	4 P.D.T.	ON	OFF	ON	F	10.31 (.406)	13.49 (.531)	Ball	7816K2
15A, 125V ac ① 10A, 250V ac 3/4 Hp, 250V ac	4 P.D.T.	ON	OFF	ON	F	11.89 (.468)	17.45 (.687)	Bat	7990K10

① Listed Rating for 125V ac also applies at 28V dc.  
② Not UL Recognized.

FLUSH MOUNT SWITCH SELECTION TABLE

Rating	Poles and Throw	Circuit with Toggle in			Lever Type	Type of Termination	CATALOG NUMBERS
		UP Position	CENTER Position	DOWN Position (Keyway)			
<b>FLUSH MOUNT SWITCH</b>							
20A, 125V ac/dc 10A, 250V ac/dc	2 P.D.T.	ON ON	NONE OFF	ON ON	Square Square	Screw Screw	7810K1 7810K2 ①②
30A, 125V ac/dc 20A, 250V ac/dc	2 P.D.T.	ON	OFF	ON	Square	Screw	7811K2 ①③
	3 P.D.T.	ON	OFF	ON	Square	Screw	7812K2
	4 P.D.T.	ON	OFF	ON	Square	Screw	7813K2

① CSA Certified.  
② Also rated 5A, 600V ac; 1-1/2 Hp, 250V dc; 2 Hp, 240V ac.  
③ Also rated 2 Hp, 250V ac/dc.



**SPECIFICATIONS**

**Ratings:**

See selection tables.

**Circuits:**

2PDT, 3PDT, 4PDT.  
Maintained action.

**Contact Mechanism:**

**One Pole Panel Mount**

*AC Rated Devices* —  
Slow-make/Slow-break  
butt contact.

*AC/DC Rated Devices* —  
Quick-make/Quick-break  
wiping contacts.

**Flush Mount**

Quick-make/Quick-break  
wiping contacts.

**Contact Material:**

**One Pole Panel Mount**

*AC Rated Devices* —  
Movable — Silver plated  
copper with fine or coin  
silver contact face button.  
Stationary — Copper with  
fine or coin silver contact  
face button.

*AC/DC Rated Devices* —  
Movable — Copper.  
Stationary — Bronze.

**Flush Mount**

Movable — Copper.  
Stationary — Copper.

**Terminal Types:**

Screw Terminals — Brass.

**Mounting Means:**

**One Pole Panel Mount**

*AC Rated Devices* —

Threaded Bushing —  
11.89mm (.468") dia.,  
32 threads/inch.

Keyway — 1.73 x .89mm  
deep (.068 x .035" deep),  
provide anti-rotation feature.

Hardware Supplied —  
1 hexagon locknut  
(**Cat No. 15-192**) and 1 hex  
facenut (**Cat No. 15-966-2**).  
Furnished unassembled.

*AC/DC Rated Devices* —

Threaded Bushing —  
19.05 mm (.750") dia.,  
32 threads/inch.

Keyway — 2.59 x 2.64mm  
(.102 x .104") x  
1.04 x 1.09mm  
(.041 - .043") deep.

Hardware Supplied —  
2 hexnuts  
(**Cat No. 15-1043**).  
Furnished unassembled.

**Flush Mount**

Flush mounting panel tabs.

**Dielectric Withstand:**

1,000V RMS minimum.

**Operating Temperature Range:**

-17.8°C to +65.6°C  
(0°F to +150°F).

**Approvals:**

UL Recognized  
(except where noted).  
CSA Certified  
(where noted).



7814K2  
Panel Mount



7815K1  
Panel Mount



7810K2  
Flush Mount



7811K2  
Flush Mount

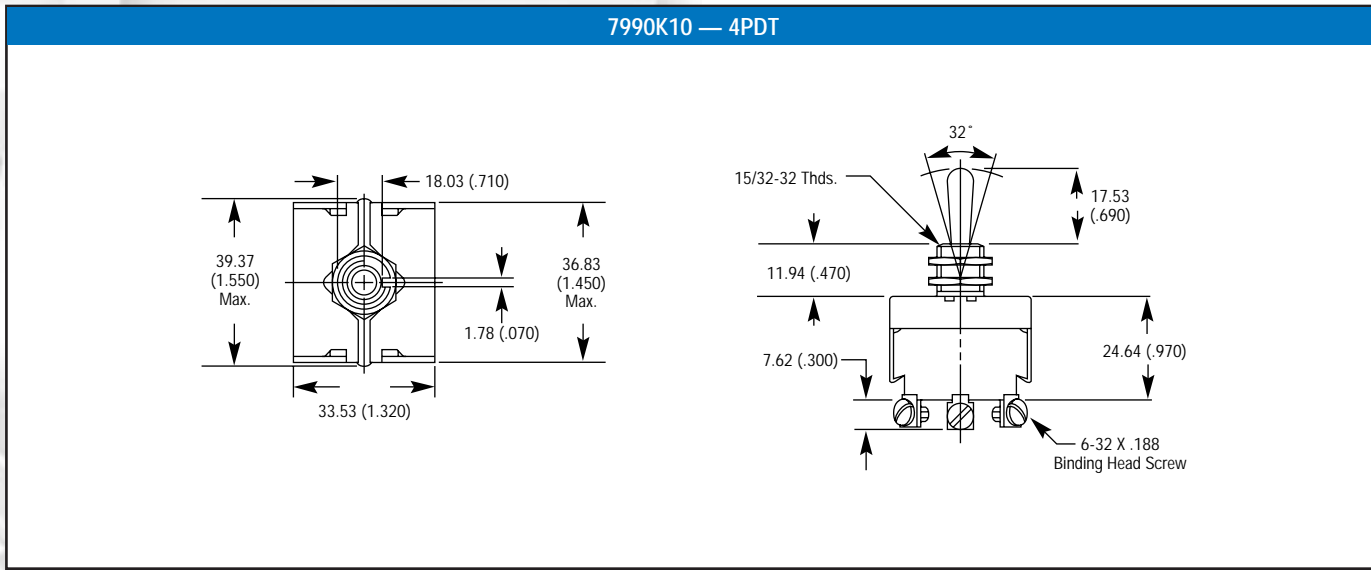
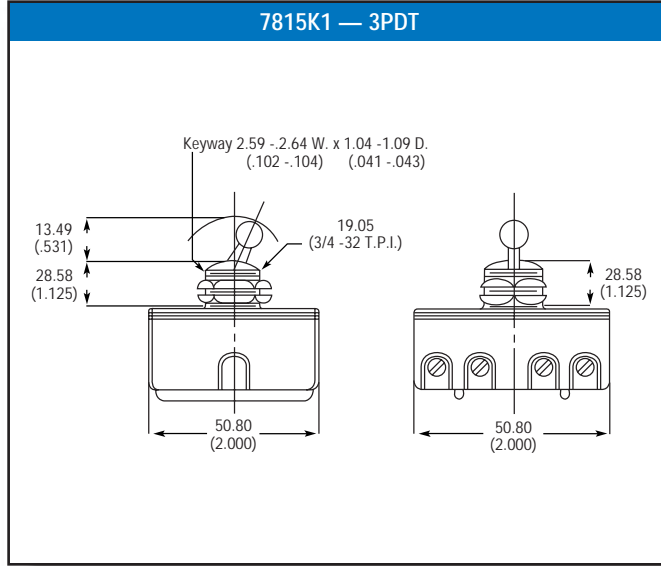
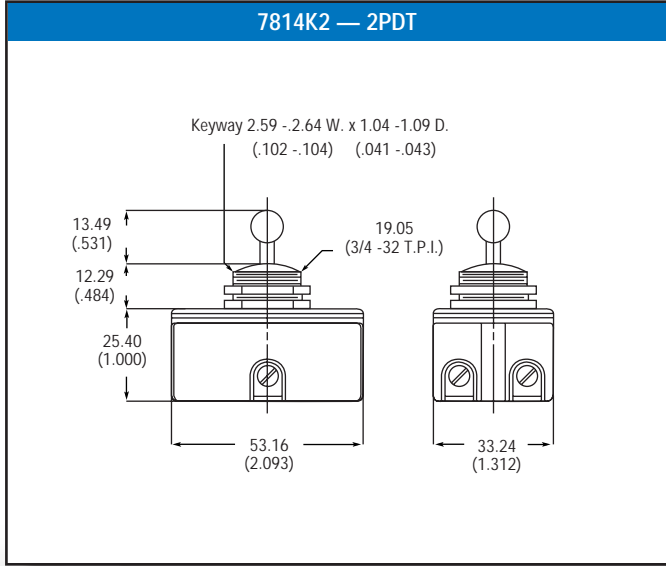
2

2.21

# 2 TOGGLE SWITCHES

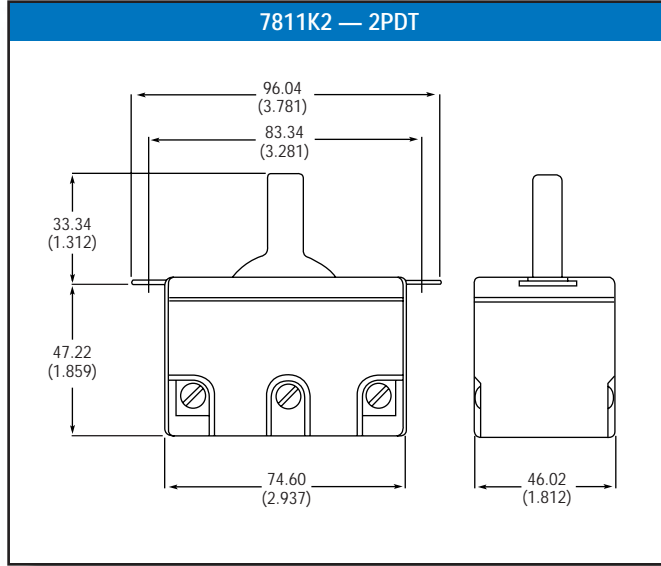
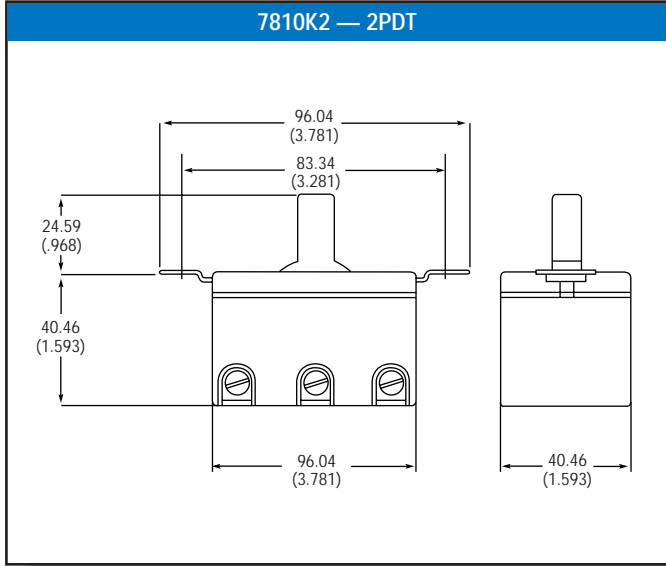
## Special Purpose Heavy Duty and Heavy Duty Hesitation Switches (continued)

ONE HOLE PANEL MOUNT DIMENSIONS APPROXIMATE IN MM (INCHES)

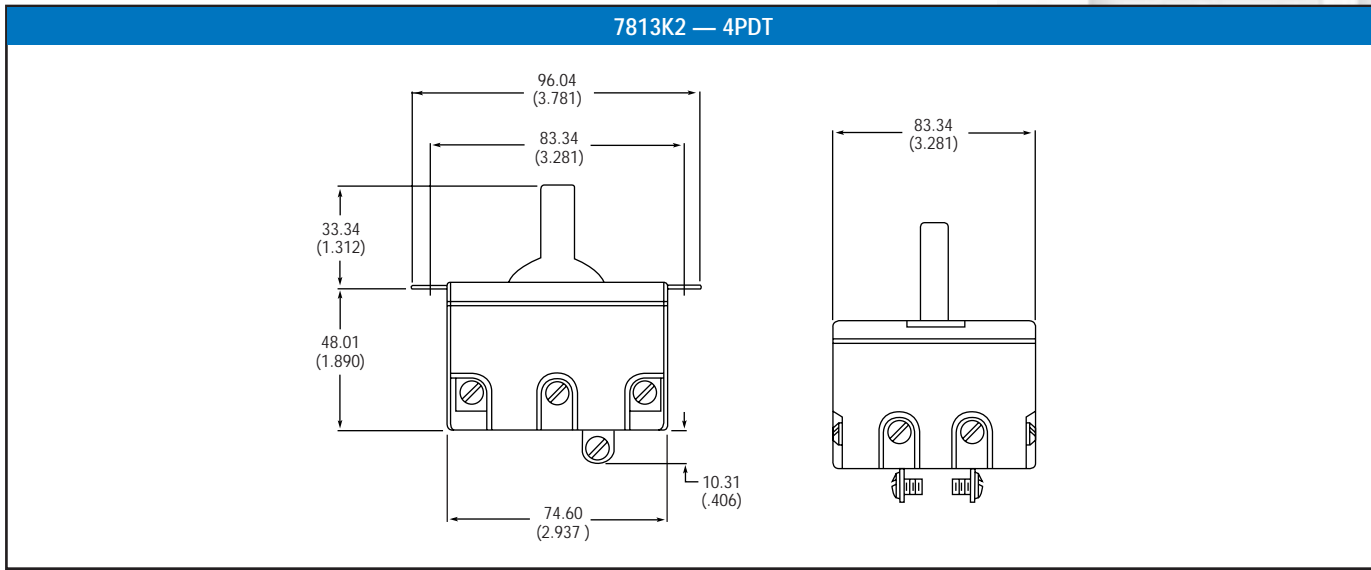




**FLUSH MOUNT DIMENSIONS** APPROXIMATE IN MM (INCHES)



2



# 2 TOGGLE SWITCHES

## Military Purpose Toggle Switches

### DESCRIPTION

Eaton's Military Purpose switches are designed to meet the requirements of MIL-S-83731 or JAN-S-23. Sealed Switches have a silicone rubber lever seal assembled between the lever and the bushing to resist the entrance of contaminants such as dust, sand or water into the contact structure.

The switch mechanisms are completely enclosed to resist the entrance of contaminants into the switch. All metal parts are plated to resist corrosion. The Heavy Duty Switches are offered in both Standard Toggle Lever and Lever

Lock versions. Circuit designations are stamped on the side of each switch.

### SPECIFICATIONS

#### Ratings:

See selection table.

#### Circuits:

1PST, 1PDT, 2PST, 2PDT, 1P3T (ON-ON-ON), 4PST and 4PDT. Maintained and momentary action.

#### Contact Action:

##### Heavy Duty

Slow-make/Slow-break butt contact.

##### Medium Duty

Quick-make/Quick break, wiping action.

#### Contact Material:

##### Heavy Duty

Movable — Silver plated copper with fine or coin silver contact face button.

Stationary — Copper with fine or coin silver contact face button.

##### Medium Duty

Movable — Copper silver plated. Stationary — Bronze silver plated.

AC/DC RATED (MEDIUM DUTY) MIL-S-83731 SWITCHES SELECTION TABLE (BOLD FACE TYPE INDICATES ITEMS NORMALLY IN DISTRIBUTOR STOCK)

Rating	Poles and Throw	Circuit with Toggle in			BASE CIRCUIT SEE PAGE 4.28	Dimension "A" mm (inches)	Dimension "B" mm (inches)	CATALOG NUMBERS	
		UP Position	CENTER Position	DOWN Position (Keyway)				Military or JAN (ST) Solder Lug Terminals	
								MIL-S-83731 With Sealed Lever	Catalog Number
<b>SINGLE POLE</b>									
<b>1</b> <b>1</b> <b>1</b>	1 P.S.T.	ON	NONE	OFF	A	—	23.01 (.906)	MS25098-22	<b>8261K22</b>
		ON	NONE	OFF*			23.01 (.906)	MS25098-29	8261K29
		OFF	NONE	ON*			23.01 (.906)	MS25098-30	8261K30
<b>1</b> <b>1</b>	1 P.D.T.	ON	NONE	ON	B	23.80 (.937)	—	MS25098-23	<b>8261K23</b>
		ON	NONE	ON*			23.80 (.937)	MS25098-26	8261K26
<b>DOUBLE POLE</b>									
<b>2</b> <b>2</b> <b>2</b>	2 P.S.T.	ON	NONE	OFF	C	—	23.01 (.906)	MS25100-22	<b>8262K22</b>
		ON	NONE	OFF*			23.01 (.906)	MS25100-29	8262K29
		OFF	NONE	ON*			23.01 (.906)	MS25100-30	<b>8262K30</b>
<b>2</b> <b>2</b>	2 P.D.T.	ON	NONE	ON	D	23.80 (.937)	—	MS25100-23	<b>8262K23</b>
		ON	NONE	ON*			23.80 (.937)	MS25100-26	8262K26

\* Momentary Contact.

### CURRENT RATINGS

Code From Selection Table	Part Number	CURRENT CAPACITY IN AMPERES PER POLE	
		125V ac, 60 Hz	
		Resistive Load	Inductive Load
<b>1</b>	All MS25098	3.0	1.5
<b>2</b>	MS25100-22, 29, 30	3.0	1.5
<b>3</b>	MS25100-23, 26	1.0	1.0





**Terminal Types:**

**Heavy Duty MIL-S-83731 Types**  
 Screw Terminals — Brass designed to accept #6-32 x 6.35mm (.250") pan head (Cat. No. 11-1893) screws and Si bronze #6 Helical lockwasher (Cat. No. 16-1096). Furnished unassembled. Terminal screws are tin dipped to facilitate soldering if required.

**Heavy Duty Jan-S-23 Types**  
 Screw Terminals — Brass designed to accept #6-32 x 4.78mm (.188") binding head (Cat. No. 811-2) screws. Furnished unassembled.

Solder Lug Terminals — Tintillate plated brass.

**Medium Duty MIL-S-83731 Types**  
 Solder Lugs — Brass silver plated furnished with 2.39mm (.094") dia. hole.

**Base Material:**  
 Thermoset molding material.

**Mounting Means:**  
 Threaded Bushing — 11.89mm (.468") dia., 32 threads/inch.  
 Keyway — 1.73 x .89mm deep (.068 x .035" deep) — provides anti-rotation feature.

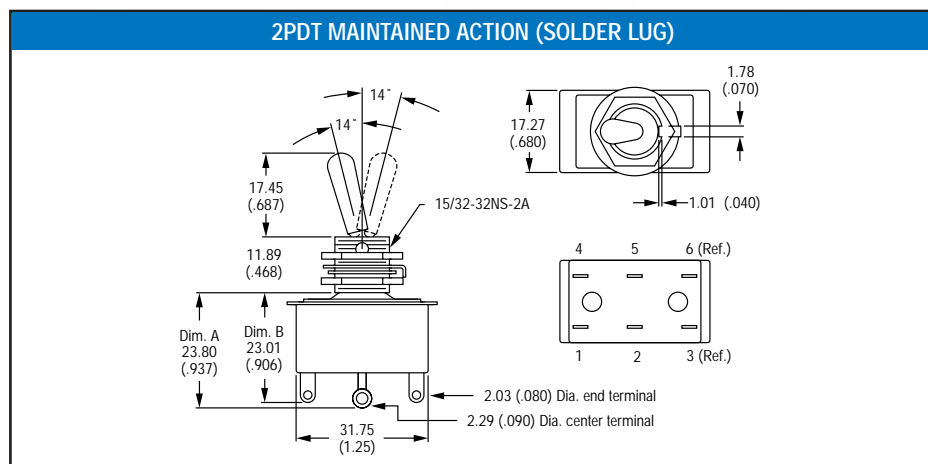
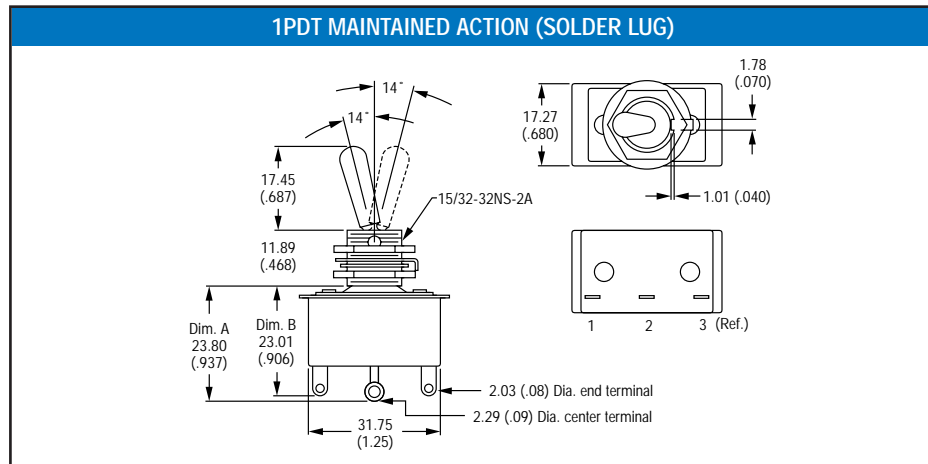
**Hardware Supplied —**  
**MIL-S-83731 Types:**  
 2 hexagon facenuts (Cat. No. 15-966-6), 1 locking ring (Cat. No. 29-761) and 1 internal tooth lockwasher (Cat. No. 16-886). Furnished unassembled.

**Jan-S-23 Types:**  
 2 hexagon facenuts (Cat. No. 15-966-6). Furnished unassembled.

**Dielectric:**  
 1000V RMS minimum.

**Operating Temperature Range:**  
 -17.8°C to +65.6°C (0°F to +150°F).

**DIMENSIONS** APPROXIMATE IN MM (INCHES)



8261K22  
Medium Duty



8262K22  
Medium Duty



8801K22  
Heavy Duty



8820K16  
Heavy Duty

2

2.25

# 2 TOGGLE SWITCHES

## Military Purpose Toggle Switches (continued) AC Rated (Heavy Duty) MIL-S-83731 Switches with Lever Seal

AC RATED (HEAVY DUTY) MIL-S-83731 SWITCHES SELECTION TABLE (BOLD FACE TYPE INDICATES ITEMS NORMALLY IN DISTRIBUTOR STOCK)

Rating	Poles and Throw	Circuit with Toggle in			BASE CIRCUIT SEE PAGE 4.28	Bushing Length "A" mm (inches)	Lever Length "B" mm (inches)	CATALOG NUMBERS	
		UP Position	CENTER Position	DOWN Position (Keyway)				Screw Terminals with Sealed Lever	
		MS Part Number	Catalog Number						
<b>ONE POLE</b>									
1 1 2 2 2	1 P.S.T.	ON ON ON ON NONE OFF	NONE OFF NONE OFF* OFF NONE	OFF NONE OFF* NONE ON* ON*	A	11.89 (.468) 11.89 (.468) 11.89 (.468) 11.89 (.468) 11.89 (.468) 11.89 (.468)	17.45 (.687) 17.45 (.687) 17.45 (.687) 17.45 (.687) 17.45 (.687) 17.45 (.687)	MS35058-22 MS35058-24 MS35058-29 MS35058-25 MS35058-28 MS35058-30	8801K22 8801K23 8813K17 8813K18 8811K18 8811K17
1 1 2 2 2	1 P.D.T.	ON ON ON* ON ON	OFF NONE NONE OFF OFF	ON ON* ON* ON* ON*	B	11.89 (.468) 11.89 (.468) 11.89 (.468) 11.89 (.468) 11.89 (.468)	17.45 (.687) 17.45 (.687) 17.45 (.687) 17.45 (.687) 17.45 (.687)	MS35058-21 MS35058-23 MS35058-26 MS35058-27 MS35058-31	8800K16 8810K15 8804K13 8812K14 8809K16
<b>TWO POLE</b>									
3 3 4 4 4 4	2 P.S.T.	ON ON ON ON NONE OFF	NONE OFF OFF* OFF* OFF NONE	OFF NONE OFF* NONE ON* ON*	C	11.89 (.468) 11.89 (.468) 11.89 (.468) 11.89 (.468) 11.89 (.468) 11.89 (.468)	17.45 (.687) 17.45 (.687) 17.45 (.687) 17.45 (.687) 17.45 (.687) 17.45 (.687)	MS35059-22 MS35059-24 MS35059-29 MS35059-25 MS35059-28 MS35059-30	8822K20 8822K21 8828K13 8828K12 8826K14 8826K15
3 3 4 4 4	2 P.D.T.	ON ON ON ON* ON	OFF NONE NONE OFF OFF	ON ON* ON* ON* ON*	D	11.89 (.468) 11.89 (.468) 11.89 (.468) 11.89 (.468) 11.89 (.468)	17.45 (.687) 17.45 (.687) 17.45 (.687) 17.45 (.687) 17.45 (.687)	MS35059-21 MS35059-23 MS35059-26 MS35059-27 MS35059-31	8820K16 8824K14 8830K13 8834K5 8832K6
5 5 5 5 5 5	1 P.3.T. in a 2P Base	ON ON ON* ON ON ON*	ON ON ON ON ON ON	ON ON* ON* ON ON* ON*	See Diagram On Page 4.28	11.89 (.468) 11.89 (.468) 11.89 (.468) 11.89 (.468) 11.89 (.468) 11.89 (.468)	17.45 (.687) 17.45 (.687) 17.45 (.687) 17.45 (.687) 17.45 (.687) 17.45 (.687)	MS25201-4 MS25201-5 MS25201-6 MS25201-7 MS25201-8 MS25201-9	8860K4 8860K5 8860K6 8860K7 8860K8 8860K9
<b>FOUR POLE</b>									
6 6 7 7 7	4 P.S.T.	ON ON ON NONE OFF	NONE OFF OFF* OFF NONE	OFF NONE NONE ON* ON*	E	11.89 (.468) 11.89 (.468) 11.89 (.468) 11.89 (.468) 11.89 (.468)	17.45 (.687) 17.45 (.687) 17.45 (.687) 17.45 (.687) 17.45 (.687)	— MS25068-24 MS25068-25 MS25068-28 —	7660K12 7660K13 7668K7 7666K9 7666K6
6 6 7 7 7	4 P.D.T.	ON ON ON* ON ON	OFF NONE NONE OFF OFF	ON ON ON* ON* ON*	F	11.89 (.468) 11.89 (.468) 11.89 (.468) 11.89 (.468) 11.89 (.468)	17.45 (.687) 17.45 (.687) 17.45 (.687) 17.45 (.687) 17.45 (.687)	MS25068-21 MS25068-23 MS25068-26 MS25068-27 MS25068-31	7662K7 7664K5 7674K5 7672K5 7670K6

\* Momentary Contact.

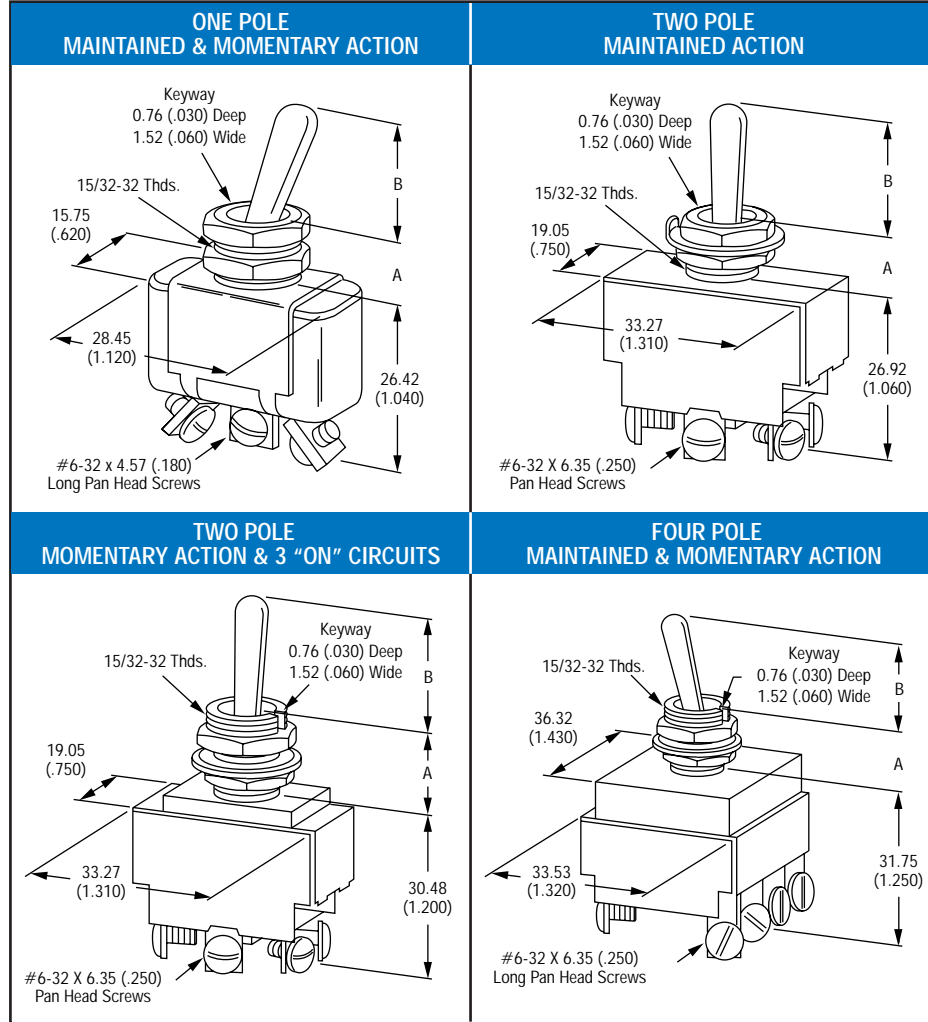
### CURRENT RATINGS

Code From Selection Table	Switch	Type of Operation	CURRENT CAPACITY IN AMPERES PER POLE								
			28V dc			115V ac, 60 Hz			115V ac, 400 Hz		
			Lamp Load	Resistive Load	Inductive Load	Lamp Load	Resistive Load	Inductive Load	Lamp Load	Resistive Load	Inductive Load
1 2	MS35058	Maintained Momentary	7 5	25 20	15 10	— —	10 10	10 7	3 —	10 —	10 —
3 4	MS35059	Maintained Momentary	7 5	20 18	15 10	— —	20 11	— —	4 —	20 —	15 —
5	MS25201	ON-ON-ON	5	18	10	2	11	8	2	11	8
6 7	MS25068	Maintained Momentary	5 4	20 18	12 10	— —	— —	— —	4 2	20 11	15 5

1 Across terminals 2-3 and 5-6.  
 2 Across terminals 1-2 and 5-6.  
 3 Across terminals 1-2 and 4-5.  
 4 Across terminals 2-3 and 4-5.  
 5 For "INDEPENDENT ON-ON-ON" circuit arrangement see page 4.28.



**DIMENSIONS** APPROXIMATE IN MM (INCHES)



2



8858K39  
Heavy Duty



8859K44  
Heavy Duty



7301K36  
Heavy Duty



7310K38  
Heavy Duty

2.27

# 2 TOGGLE SWITCHES

## Military Purpose Toggle Switches (continued) AC Rated (Heavy Duty) MIL-S-83731 Lever Lock Switches with Lever Seal

AC RATED (HEAVY DUTY) MIL-S-83731 LEVER LOCK SWITCHES SELECTION TABLE (BOLD FACE TYPE INDICATES ITEMS NORMALLY IN DISTRIBUTOR STOCK)

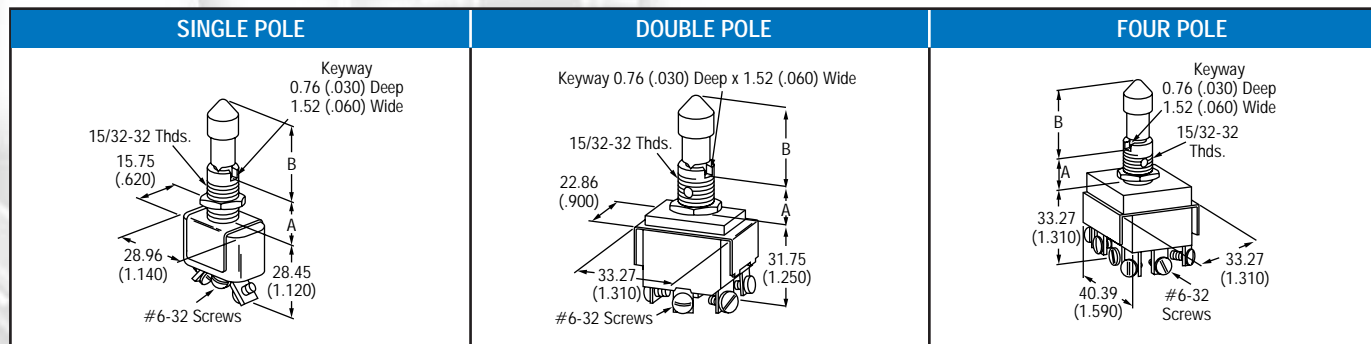
Rating	Poles and Throw	Circuit with Toggle in			BASE CIRCUIT SEE PAGE 4.28	Lever Lock Bushing Style (see below)	Bushing Length "A" mm (inches)	Lever Lock Length "B" mm (inches)	CATALOG NUMBERS		
		UP Position	CENTER Position	DOWN Position (Keyway)					Screw Terminals with Sealed Lever	MS Part Number	Catalog Number
<b>ONE POLE</b>		<b>ONE POLE</b>									
<b>1</b>	1 P.S.T.	ON	NONE	←OFF	A	3	25.40 (1.000)	MS25125-C2	8857K47		
<b>1</b>		ON→	NONE	←OFF		4	25.40 (1.000)			MS25125-E2	8857K48
<b>1</b>		ON→	←OFF	NONE		5	25.40 (1.000)			MS25125-J4	8857K49
<b>1</b>	1 P.D.T.	ON	←OFF→	ON	B	2	25.40 (1.000)	MS25125-B1	8857K40		
<b>1</b>		ON	←OFF→	←ON		3	25.40 (1.000)			MS25125-C3	8857K45
<b>1</b>		ON→	NONE	←ON		4	25.40 (1.000)			MS25125-E3	8857K44
<b>TWO POLE</b>		<b>TWO POLE</b>									
<b>2</b>	2 P.D.T.	ON→	←OFF→	←ON	C	1	25.40 (1.000)	MS25126-A1	8858K39		
<b>2</b>		ON	←OFF→	ON		2	25.40 (1.000)			MS25126-B1	8858K40
<b>2</b>		ON→	NONE	←ON		4	25.40 (1.000)			MS25126-E3	8858K44
<b>FOUR POLE</b>		<b>FOUR POLE</b>									
<b>4</b>	4 P.D.T.	ON→	NONE	←ON	F	4	25.40 (1.000)	MS25127-E3	8859K44		

← Indicates direction against which lever is locked.

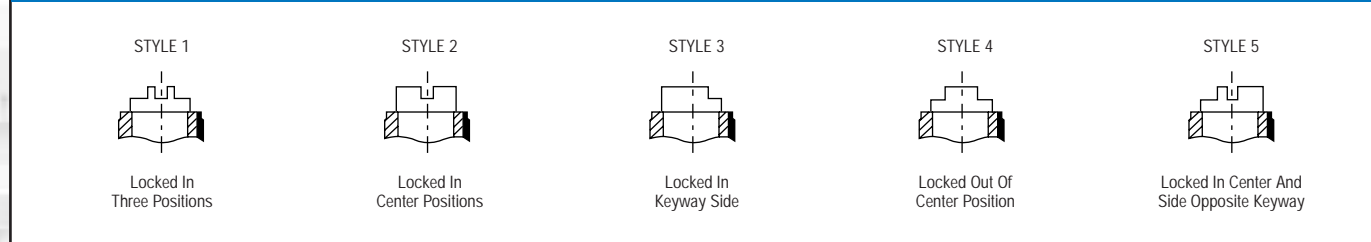
### CURRENT RATINGS

Code From Selection Table	Switch	Type of Operation	CURRENT CAPACITY IN AMPERES PER POLE								
			28V dc			115V ac, 60 Hz			115V ac, 400 Hz		
			Lamp Load	Resistive Load	Inductive Load	Lamp Load	Resistive Load	Inductive Load	Lamp Load	Resistive Load	Inductive Load
<b>1</b>	MS25125	Maintained	5	20	15	—	—	—	3	10	10
<b>2</b>	MS25126	Maintained	7	20	15	—	—	—	4	20	15
<b>3</b>	MS25127	Maintained	5	20	15	—	—	—	4	20	15

### DIMENSIONS APPROXIMATE IN MM (INCHES)



### LEVER LOCK BUSHING STYLES



For pictorial representation only — keyway on right hand side.



# Military Purpose Toggle Switches (continued)

## AC Rated (Heavy Duty) Military (Jan-S-23 Equivalents) with Unsealed Lever

**AC RATED (HEAVY DUTY) MILITARY JAN-S-23 EQUIVALENTS SELECTION TABLE** (BOLD FACE TYPE INDICATES ITEMS NORMALLY IN DISTRIBUTOR STOCK)

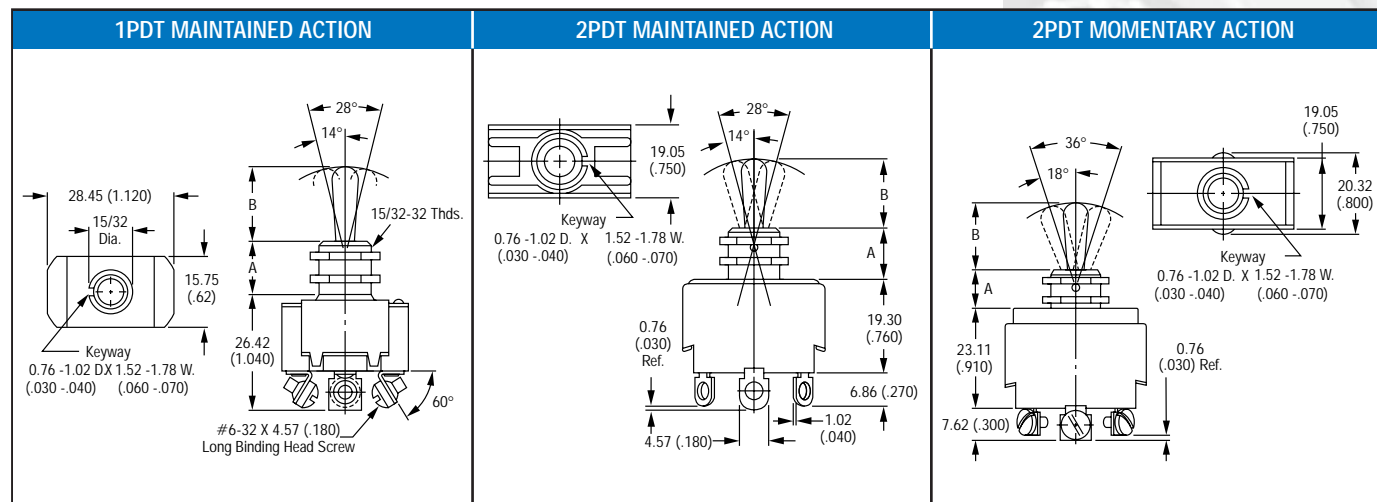
Rating	Poles and Throw	Circuit with Toggle in			BASE CIRCUIT SEE PAGE 4.28	Bushing Length "A" mm (inches)	Bushing Length "B" mm (inches)	CATALOG NUMBERS			
		UP Position	CENTER Position	DOWN Position (Keyway)				Solder Lug Terminals		Screw Terminals	
								Former Jan-S-23 with Unsealed Lever	Catalog Number	Former Jan-S-23 with Unsealed Lever	Catalog Number
<b>ONE POLE</b>											
<b>1</b>	1 P.S.T.	ON	NONE	OFF	A	11.89 (.468)	17.45 (.688)	ST-42A	<b>7300K38</b>	ST-40A	<b>7300K36</b>
<b>2</b>		ON	NONE	OFF*				ST-42B	<b>7304K38</b>	ST-40B	<b>7304K36</b>
<b>2</b>		OFF	NONE	ON*				ST-42C	<b>7303K38</b>	ST-40C	<b>7303K36</b>
<b>1</b>	1 P.D.T.	ON	OFF	ON	B	11.89 (.468)	17.45 (.688)	ST-42E	<b>7301K38</b>	ST-40E	<b>7301K36</b>
<b>1</b>		ON	NONE	ON				ST-42D	<b>7302K38</b>	ST-40D	<b>7302K36</b>
<b>2</b>		ON	NONE	ON*				ST-42F	<b>7307K38</b>	ST-40F	<b>7307K36</b>
<b>2</b>		ON*	OFF	ON*				ST-42G	<b>7306K38</b>	ST-40G	<b>7306K36</b>
<b>2</b>		ON	OFF	ON*				ST-42H	<b>7305K38</b>	ST-40H	<b>7305K36</b>
<b>2</b>		ON	OFF	ON*							
<b>TWO POLE</b>											
<b>3</b>	2 P.S.T.	ON	NONE	OFF	C	11.89 (.468)	17.45 (.688)	ST-52K	<b>7310K38</b>	ST-50K	<b>7310K36</b>
<b>3</b>		ON	NONE	OFF*				ST-52L	<b>7314K38</b>	ST-50L	<b>7314K36</b>
<b>3</b>		OFF	NONE	ON*				ST-52M	<b>7313K38</b>	ST-50M	<b>7313K36</b>
<b>3</b>	2 P.D.T.	ON	OFF	ON	D	11.89 (.468)	17.45 (.688)	ST-52P	<b>7311K38</b>	ST-50P	<b>7311K36</b>
<b>3</b>		ON	NONE	ON				ST-52N	<b>7312K38</b>	ST-50N	<b>7312K36</b>
<b>4</b>		ON	NONE	ON*				ST-52R	<b>7317K38</b>	ST-50R	<b>7317K36</b>
<b>4</b>		ON*	OFF	ON*				ST-52S	<b>7316K38</b>	ST-50S	<b>7316K36</b>
<b>4</b>		ON	OFF	ON*				ST-52T	<b>7315K38</b>	ST-50T	<b>7315K36</b>
<b>4</b>		ON	OFF	ON*							

\* Momentary Contact.

### CURRENT RATINGS

Code From Selection Table	Type of Operation	CURRENT CAPACITY IN AMPERES PER POLE								
		30V dc			125V ac, 60 Hz			250V ac, 60 Hz		
		Lamp Load	Resistive Load	Inductive Load	Resistive Load	Inductive Load	Horse Power	Resistive Load	Inductive Load	Horse Power
<b>ONE POLE</b>										
<b>1</b>	Maintained	5	20	15	15	—	—	6	—	—
<b>2</b>		4	15	10	15	—	—	6	—	—
<b>TWO POLE</b>										
<b>3</b>	Maintained	7	30	15	25	—	—	9	—	—
<b>4</b>		5	20	10	15	—	—	6	—	—

### DIMENSIONS APPROXIMATE IN MM (INCHES)



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