

Series - 8855, 8856

MINIATURE POSITIVE ACTION SWITCHES MIL-DTL-8834 Miniature Positive Action Switches Lever Lock/Solder Lug Terminals

FEATURES			SPECIFICATIONS			CURRENT RATINGS																																						
<ul style="list-style-type: none"> Sealed bushing Dry circuit (logic level loads) to power switching levels 1 and 2 pole circuitry Non-teasible mechanism for all but center "ON" circuits High electrical/ mechanical reliability Two styles of lever lock Actuator Locking actuator for safety Wiping action contacts Positive make and break action Solder lug termination 	<ul style="list-style-type: none"> Bushing seal or bonded seal per MIL-DTL-8834 MS approved and QPL'd to MIL-DTL-8834 Temperature Range: -67°F to +160°F (-55°C to +71°C) Life: 20,000 operations at rated load 40,000 operations mechanical life Solder lug terminal .050 [1,27] dia.hole 	<table border="1"> <thead> <tr> <th rowspan="2">No. of Poles</th> <th rowspan="2">Catalog Number</th> <th rowspan="2">Type of Operation</th> <th colspan="2">28 and 50VDC (Amperes per pole)</th> <th colspan="4">115VAC 60Hz and 400Hz (Amperes per pole)</th> </tr> <tr> <th>Resistive Load</th> <th>Inductive Load</th> <th colspan="2">Resistive Load</th> <th colspan="2">Inductive Load</th> </tr> <tr> <td></td> <td></td> <td></td> <th>28VDC</th> <th>28VDC</th> <th>60Hz</th> <th>400Hz</th> <th>60Hz</th> <th>400Hz</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>8855</td> <td>Maintained and Momentary</td> <td>5</td> <td>1</td> <td>2</td> <td>3</td> <td>1</td> <td>2</td> </tr> <tr> <td>2</td> <td>8866</td> <td>Maintained and Momentary</td> <td>5</td> <td>1</td> <td>2</td> <td>3</td> <td>1</td> <td>2</td> </tr> </tbody> </table>	No. of Poles	Catalog Number	Type of Operation	28 and 50VDC (Amperes per pole)		115VAC 60Hz and 400Hz (Amperes per pole)				Resistive Load	Inductive Load	Resistive Load		Inductive Load					28VDC	28VDC	60Hz	400Hz	60Hz	400Hz	1	8855	Maintained and Momentary	5	1	2	3	1	2	2	8866	Maintained and Momentary	5	1	2	3	1	2
						No. of Poles	Catalog Number	Type of Operation	28 and 50VDC (Amperes per pole)		115VAC 60Hz and 400Hz (Amperes per pole)																																	
Resistive Load	Inductive Load	Resistive Load		Inductive Load																																								
			28VDC	28VDC	60Hz	400Hz	60Hz	400Hz																																				
1	8855	Maintained and Momentary	5	1	2	3	1	2																																				
2	8866	Maintained and Momentary	5	1	2	3	1	2																																				
Minimum Rating: 25 microamperes at 5 millivolts.																																												



SELECTION TABLE

CIRCUIT WITH LEVER IN . . .

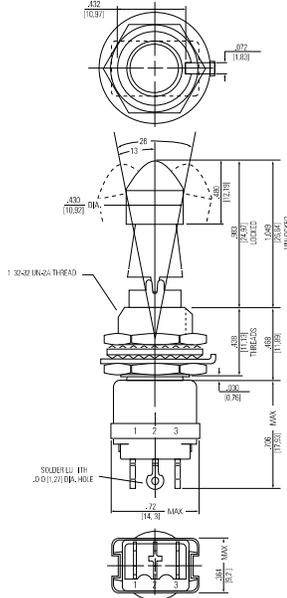
Up Position	Center Position	Down Position (Keyway)	Lever Lock [®] Bushing Style	MS Part Number	Catalog Number	MS [®] Part Number	Catalog [®] Number	MS Part Number	Catalog Number	MS Part [®] Number	Catalog [®] Number
ONE POLE											
ON →	← OFF →	← ON	A	MS21026-A211	8855K4	Feature Not Available in Single Pole Switches		MS21436-A211	8855K74	Feature Not Available in Single Pole Switches	
ON	← OFF →	ON	B	-B211	K5			-B211	K75		
ON	← OFF →	NONE	B	-B241	K19			-B241	K719		
ON	NONE	← OFF	C	-C221	K13			-C221	K713		
ON	NONE	← ON	C	-C231	K7			-C231	K77		
ON	← OFF →	ON	D	MS21026-D211	8855K10			MS21436-D211	8855K710		
ON →	NONE	← OFF	E	-E221	K14			-E221	K714		
ON →	NONE	← ON	E	-E231	K8			-E231	K78		
* ON	← OFF →	ON*	F	-F271	K15			-F271	K715		
ON	OFF →	ON*	G	-G311	K16			-G311	K716		
* ON	← OFF →	ON*	H	MS21026-H271	8855K17			MS21436-H271	8855K717		
ON →	← OFF →	NONE	J	-J241	K9			-J241	K79		
NONE	OFF →	ON*	K	-K281	K18			-K281	K718		
ON	← OFF →	ON*	K	-K311	K20			-K311	K720		
ON	← OFF →	ON*	L	-L311	K12			-L311	K712		
TWO POLE											
ON →	← OFF →	← ON	A	MS21027-A211	8856K4	MS21027-A711	8856K4X	MS21437-A211	8856K74	MS21437-A711	8856K74X
ON	← OFF →	ON	B	-B211	K5	-B711	K5X	-B211	K75	-B711	K75X
ON	← OFF →	NONE	B	-B241	K19	-B741	K19X	-B241	K719	-B741	K719X
ON	NONE	← OFF	C	-C221	K13	-C721	K13X	-C221	K713	-C721	K713X
ON	NONE	← ON	C	-C231	K7	-C731	K7X	-C231	K77	-C731	K77X
ON	← OFF →	ON	D	MS21027-D211	8856K10	MS21027-D711	8856K10X	MS21437-D211	8856K710	MS21437-D711	8856K710X
ON →	NONE	← OFF	E	-E221	K14	-E721	K14X	-E221	K714	-E721	K714X
ON →	NONE	← ON	E	-E231	K8	-E731	K8X	-E231	K78	-E731	K78X
* ON	← OFF →	ON*	F	-F371	K27	-F871	K27X	-F371	K727	-F871	K727X
ON	OFF →	ON*	G	-G311	K16	-G811	K16X	-G311	K716	-G811	K716X
* ON	← OFF →	ON*	H	MS21027-H371	8856K29	MS21027-H871	8856K29X	MS21437-H371	8856K729	MS21437-H871	8856K729X
ON →	← OFF →	NONE	J	-J241	K9	-J741	K9X	-J241	K79	-J741	K79X
NONE	OFF →	ON*	K	-K381	K28	-K881	K28X	-K381	K728	-K881	K728X
ON	← OFF →	ON*	K	-K311	K20	-K811	K20X	-K311	K720	-K811	K720X
ON	← OFF →	ON*	L	-L311	K12	-L811	K12X	-L311	K712	-L811	K712X
ON →	← ON →	← ON	A	MS21027-A331	8856K21⊕	MS21027-A831	8856K21X⊕	MS21437-A331	8856K721⊕	MS21437-A831	8856K721X⊕
ON	← ON →	ON	B	-B331	K30⊕	-B831	K30X⊕	-B331	K730⊕	-B831	K730X⊕
ON	ON	← ON	C	-C331	K31⊕	-C831	K31X⊕	-C331	K731⊕	-C831	K731X⊕
ON	← ON →	ON	D	-D331	K32⊕	-D831	K32X⊕	-D331	K732⊕	-D831	K732X⊕
* ON	← ON →	ON*	F	-F341	K22⊕	-F841	K22X⊕	-F341	K722⊕	-F841	K722X⊕
* ON	← ON →	ON*	H	MS21027-H341	8856K34⊕	MS21027-H841	8856K34X⊕	MS21437-H341	8856K734⊕	MS21437-H841	8856K734X⊕
NONE	ON →	ON*	K	-K321	K24⊕	-K821	K24X⊕	-K321	K724⊕	-K821	K724X⊕
ON	ON →	ON*	G	-G351	K35⊕	-G851	K35X⊕	-G351	K735⊕	-G851	K735X⊕
ON	← ON →	ON*	K	-K351	K23⊕	-K851	K23X⊕	-K351	K723⊕	-K851	K723X⊕
ON	← ON →	ON	L	-L351	K36⊕	-L851	K36X⊕	-L351	K736⊕	-L851	K736X⊕

MINIATURE POSITIVE ACTION SWITCHES

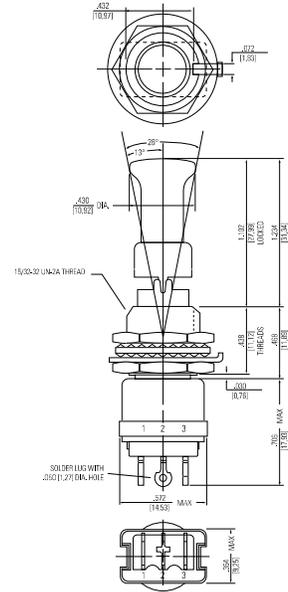
Series - 8855, 8856

MIL-DTL-8834 Miniature Positive Action Switches Lever Lock/Solder Lug Terminals

MOUNTING DIMENSIONS - ONE POLE / 8855



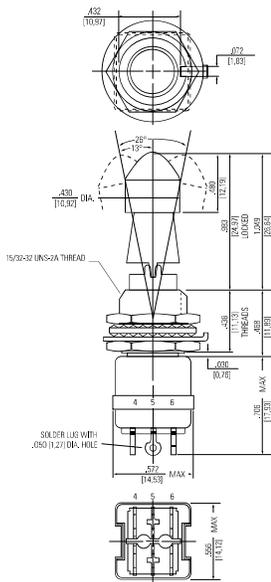
Standard Cap Style



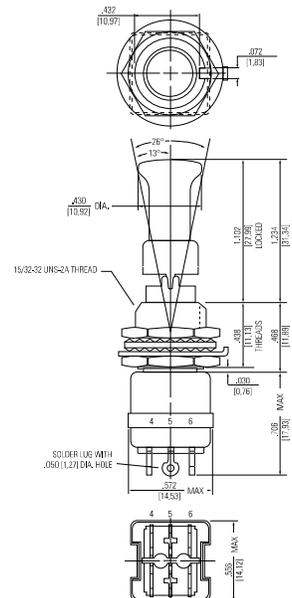
Mushroom Cap Style

Terminal Identification

MOUNTING DIMENSIONS - TWO POLE / 8856



Standard Cap Style



Mushroom Cap Style

Terminal Identification

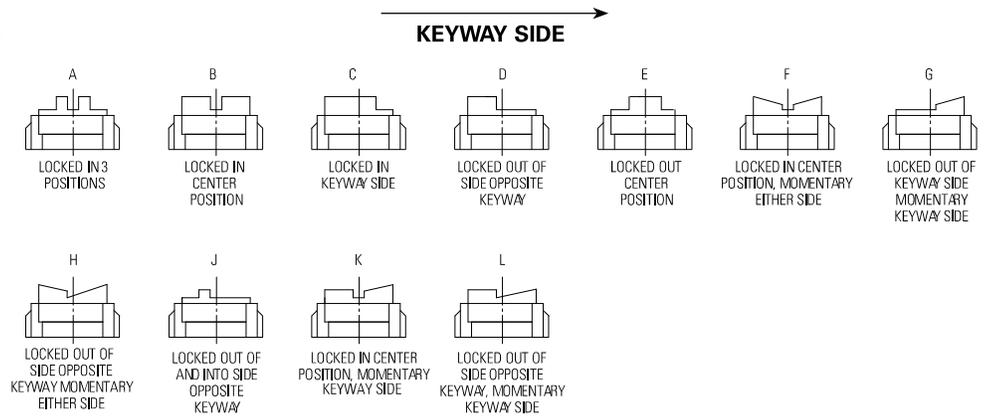
STANDARD
0.00 = inches
[0,0] = mm

Mounting dimensions for reference only.

Non-functional terminals not supplied.

OPTIONS/ACCESSORIES **LEVER LOCK - BUSHING STYLES**

- Special mounting hardware
- Special marking
- Mounting hardware furnished assembled
- Special locking configurations
- Panel seal, Part Number 32-341
- Special circuits
- Special locking cap style
- Custom wire harnesses
- EMI/RFI capability on two pole

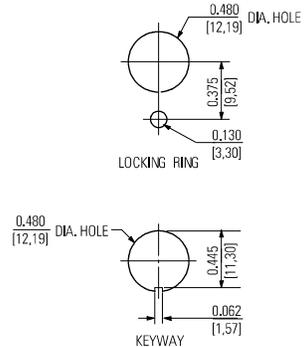


Figures A thru L do not represent details of construction. They schematically illustrate locking function.

OPTIONS/ACCESSORIES **PANEL CUTOUT DIMENSIONS**

- Special mounting hardware
- Special marking
- Mounting hardware furnished assembled
- Special locking configurations
- Panel seal, Part Number 32-341
- Special circuits
- Special locking cap style
- Custom wire harnesses
- EMI/RFI capability on two pole
- Gold plated contacts

15/32 DIA. BUSHING



MINIATURE POSITIVE ACTION SWITCHES

Series - 8855, 8856, 8866-69

MIL-DTL-8834 Miniature Positive Action Switches
Toggle and Lever Lock/IWTS Terminals

FEATURES			SPECIFICATIONS			CURRENT RATINGS						
<ul style="list-style-type: none"> Sealed bushing Dry circuit (logic level loads) to power switching levels 1 and 2 pole circuitry Non-teasible mechanism for all but center "ON" circuit Small and large size bushings and Actuator Toggle and lever lock Actuator Wiping action contacts Positive make and break action Integrated Wire Termination System (IWTS) 	<ul style="list-style-type: none"> Bushing seal or bonded seal per MIL-DTL-8834 MS approved and QPL listed to MIL-DTL-8834 Temperature Range: -67°F to +160°F (-55°C to +71°C) Life: 20,000 operations at rated load 40,000 operations mechanical life Bushing thread sizes: Small Toggle: 1/4" - 40 thread Large Toggle and Lever Lock: 15/32" - 32 thread Accepts SAE-AS39029/1-101 Pins (pins not included) 	No. of Poles	Catalog Number	Type of Operation	28VDC (Amperes per pole)		115VAC 60Hz and 400Hz (Amperes per pole)					
					Resistive Load	Inductive Load	Resistive Load	Inductive Load				
							28VDC	28VDC	60Hz	400Hz	60Hz	400Hz
		1	8855 8866 8868	Maintained and Momentary	5	1	2	3	1	2		
2	8856 8867 8869	Maintained and Momentary	5	1	2	3	1	2				

Minimum Rating: 25 microamperes at 5 millivolts.

SELECTION TABLE



CIRCUIT WITH LEVER IN . . .						ONE POLE		TWO POLE						
Up Position	Center Position	Down Position (Keyway)	MS Part Number	Catalog Number Large Lever	MS Part Number	Catalog Number Small Lever	MS Part Number	Catalog Number Large Lever	MS Part Number	Catalog Number Small Lever	MS Part Number	Catalog Number	MS Part Number	Catalog Number
ON	OFF	ON	MS21346-211	8868K51	MS24655-211W	8866K51	MS21347-211	8869K51	MS24656-211W	8867K51	MS21347-711	8869K51X		
ON	NONE	OFF	-221	K57	-221W	K57	-221	K57	-221W	K57	-721	K57X		
ON	NONE	ON	-231	K54	-231W	K54	-231	K54	-231W	K54	-731	K54X		
ON	OFF	NONE	-241	K55	-241W	K55	-241	K55	-241W	K55	-741	K55X		
* ON	OFF	ON*	MS21346-271	8868K52	-271W	8866K52	MS21347-271	8869K52	-271W	8867K52	MS21347-771	8869K52X		
NONE	OFF	ON*	-281	K56	-281W	K56	-281	K56	-281W	K56	-781	K56X		
ON	OFF	ON*	-311	K53	-311W	K53	-311	K53	-311W	K53	-811	K53X		
NONE	ON	ON*	MS21346-321	K58 [Ⓞ]	-321W	K58 [Ⓞ]	MS21347-321	8869K58 [Ⓞ]	-321W	8867K58 [Ⓞ]	MS21347-821	8869K58X [Ⓞ]		
ON	ON	ON	-	-	-331W	-	-331	K59 [Ⓞ]	-331W	K59 [Ⓞ]	-831	K59X [Ⓞ]		
ON	ON	ON*	-	-	-351W	-	-351	K510 [Ⓞ]	-351W	K510 [Ⓞ]	-851	K510X [Ⓞ]		
* ON	ON	ON*	-	-	-341W	-	-341	K511 [Ⓞ]	-341W	K511 [Ⓞ]	-841	K511X [Ⓞ]		

* Momentary contact.

Ⓞ Dielectric per MIL-DTL-8834 except limited to 1250 volts. Delayed action of the switch toggle lever may cause circuit to close or open before snap action mechanism trips.

Ⓞ Furnished with Bonded Seal feature. (Meets 15' head of water level requirement.)

SELECTION TABLE



8855



8856

CIRCUIT WITH LEVER IN . . .			ONE POLE		TWO POLE		
Up Position	Center Position	Down Position (Keyway)	Lever Lock Bushing Style	MS Part Number	Catalog Number	MS Part Number	Catalog Number
ON →	← OFF →	← ON	A	MS21346-A211	8855K54	MS21347-A211	8856K54
ON	← OFF →	ON	B	-B211	K55	-B211	K55
ON	← OFF →	NONE	B	-B241	K519	-B241	K519
ON	NONE	← OFF	C	-C221	K513	-C221	K513
ON	NONE	← ON	C	-C231	K57	-C231	K57
ON	← OFF →	ON	D	MS21346-D211	8855K510	MS21347-D211	8856K510
ON →	NONE	← OFF	E	-E221	K514	-E221	K514
ON →	NONE	← ON	E	-E231	K58	-E231	K58
* ON	← OFF →	ON*	F	-F271	K515	-F271	K515
ON	OFF →	ON*	G	-G311	K516	-G311	K516
* ON	← OFF →	ON*	H	MS21346-H271	8855K517	MS21347-H271	8856K517
ON →	← OFF →	NONE	J	-J241	K59	-J241	K59
NONE	OFF →	ON*	K	-K281	K518	-K281	K518
ON	← OFF →	ON*	K	-K311	K520	-K311	K520
ON	← OFF →	ON*	L	-L311	K512	-L311	L512

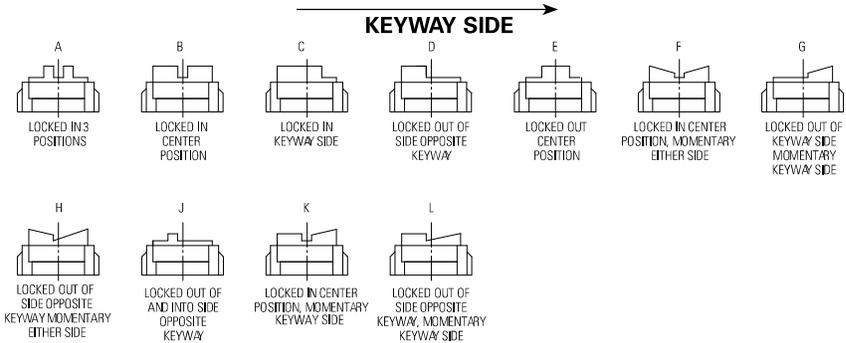
* Momentary contact.

→ Indicates direction against which lever is locked.
See page A75 for special circuit diagrams.

OPTIONS/ACCESSORIES

- Special mounting hardware
- Special marking
- Mounting hardware furnished assembled
- Panel seal, Part Number 32-341 (15/32" - 32 bushing only)
- Special circuits
- Special bushing and lever finish
- Special locking cap style on lever lock switches
- EMI/RFI capability on two pole (15/32" - 32 bushing only)

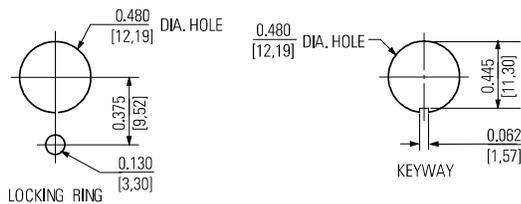
LEVER LOCK - BUSHING STYLES



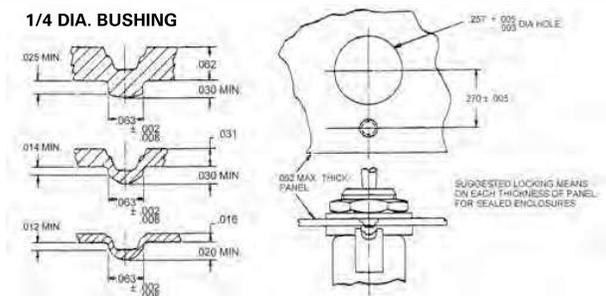
Figures A thru L do not represent details of construction. They schematically illustrate locking function.

PANEL CUTOUT DIMENSIONS

15/32 DIA. BUSHING



1/4 DIA. BUSHING

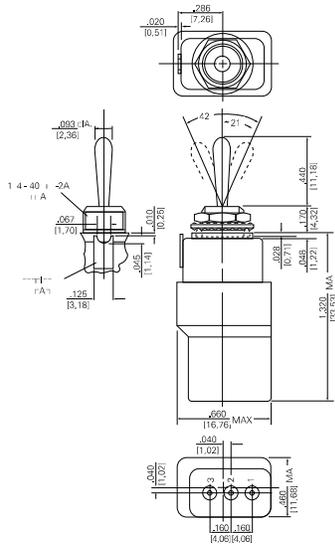


MINIATURE POSITIVE ACTION SWITCHES

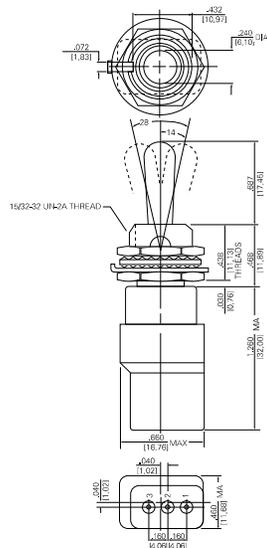
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MIL-DTL-8834 Miniature Positive Action Switches
Toggle and Lever Lock/IWTS Terminals

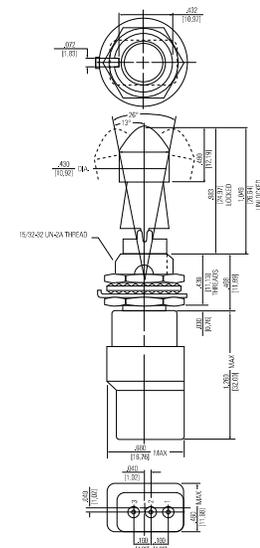
MOUNTING DIMENSIONS - ONE POLE / 8855, 8866, 8868



Small Toggle

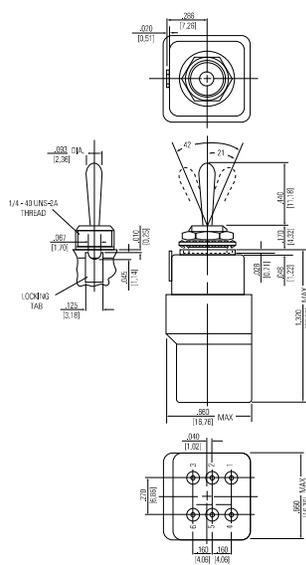


Large Toggle/ Terminal Identification

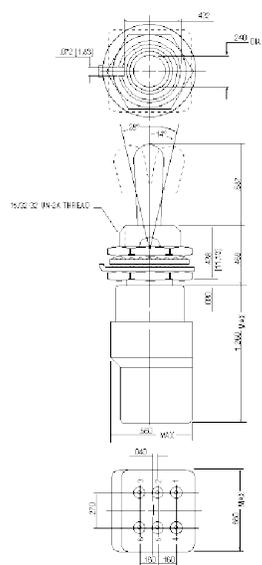


Lever Lock

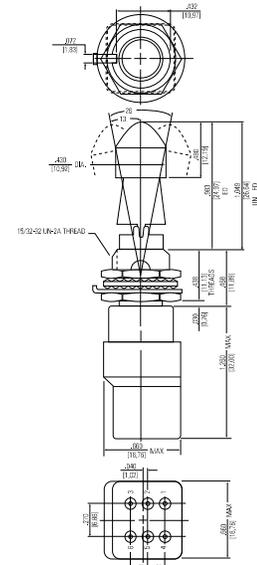
MOUNTING DIMENSIONS - TWO POLE / 8856, 8867, 8869



Small Toggle



Large Toggle/ Terminal Identification



Lever Lock

STANDARD
0.00 = inches
[0.0] = mm

Mounting dimensions for reference only.