

ST Series Miniature Toggle Switches

CONTACT RATINGS

Q Power models - 6 Amps at 125 VAC, 3 Amps at 250 VAC or 7 Amps at 30 VDC (resistive loads).

B Dry Circuit models - 0.4 Volt-Amps (VA) max. at 20 V max. (AC or DC).

UL models - 6 Amps at 125 VAC or 3 Amps at 250 VAC (75% power factor). UL file no. E66367.

CSA models - Same ratings as UL models. CSA file no. LR54592-1

See page C14 for other contact ratings.

OTHER RATINGS

Electrical Life: 100,000 cycles min. (ST1-1 and ST2-1 only - other models 40,000 cycles min.) - resistive.

Initial Contact Resistance: 3 milliohms max. at 3 VDC, 0.1 Amp.

Insulation Resistance: Greater than 200,000 megohms between terminals and case ground.

Dielectric Strength: Greater than 2000 VAC for 1 minute between terminals and case ground (sea level).

Operating Temperature Range: -30 to +85 C.

MATERIALS

Toggle Handle - Brass, bright nickel or chrome plated

Bushing - Brass, nickel plated

Strap - Stainless steel

Case - Diallyl phthalate, color red

Contacts - Coin silver for power, UL and CSA models; Gold over nickel over brass for dry circuit models

Support Bracket - Brass or steel, tin plated

Spring Mounting Bracket - Stainless steel

Bezel and Bezel Insert - Nylon. Available in red, white or black - consult factory for other colors.

L.E.D.'s

Intensity: 2.0 mcd at 10 mA. Forward voltage: 2.0 V (3.0 V max.). Max. continuous forward current: 15 mA for red, 30 mA for green and 20 mA for yellow. Red is standard. Yellow and green are optional.

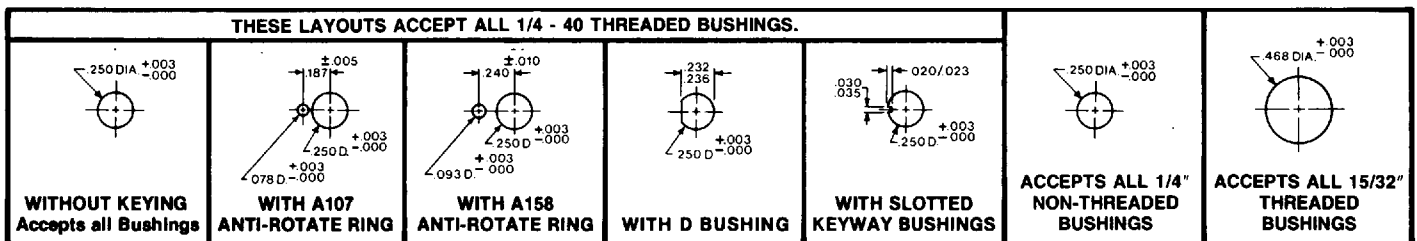
L.E.D. specifications are subject to change without notice - consult factory.

MOUNTING HARDWARE

See page C10.

PANEL MOUNTING INFORMATION FOR BUSHING MOUNTED SWITCHES - See page E 35

PANEL LAYOUTS FOR BUSHING MOUNTED SWITCHES



INDEX

Models with complete models numbers specified Pg. C3 - Pg. C10
 Selection guide for ST series miniature toggle switches Pg. C11 - Pg. C14

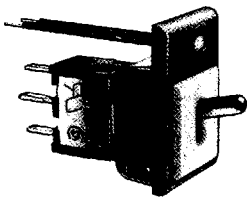
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SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

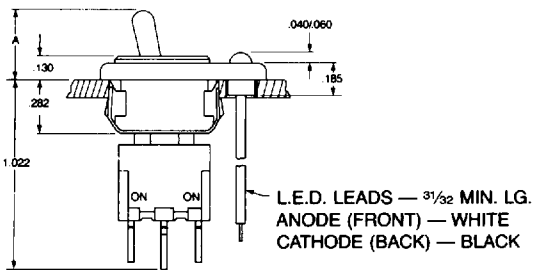
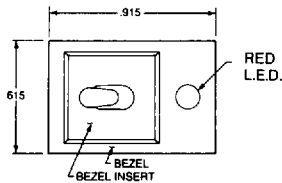
SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

J61 snap in bezel toggle switches with L.E.D. light

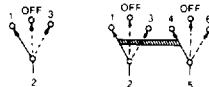
PATENT NO.
Des. 282, 524



UL11KMZQJ61



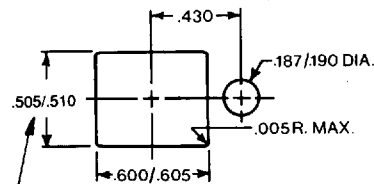
3 2 1 (1st row)
6 5 4 (2nd row-DP only)



| ACTUATOR OPTION | DIM. A |
|-----------------|--------|
| K | .400 |
| L | .830 |
| L1 | .630 |
| L2 | .260 |

TERM. NOS. FOR REFERENCE ONLY

RECOMMENDED PANEL CUTOUT



FOR MULTIPLE SWITCH ASSEMBLIES, THIS DIMENSION = (NO. OF SWITCHES X .615) - .120
PANEL THICKNESS RANGE: .047-.125

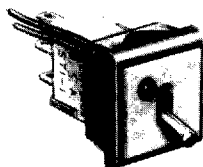
| | MODELS | | | HANDLE POSITION AND CIRCUITRY | | |
|----------------------------|-------------------------|-----------------------|----------------|-------------------------------|----------|----------|
| | Power Circuit Model No. | Dry Circuit Model No. | U.L. Model No. | | | |
| S I N G L E | ST1-1KMZQJ61 | ST1-1KMZBJ61 | UL11KMZQJ61 | ON | NONE | ON |
| | ST1-2KMZQJ61 | ST1-2KMZBJ61 | UL12KMZQJ61 | ON | OFF | ON |
| | ST1-3KMZQJ61 | ST1-3KMZBJ61 | UL13KMZQJ61 | (ON) | OFF | (ON) |
| | ST1-4KMZQJ61 | ST1-4KMZBJ61 | UL14KMZQJ61 | ON | OFF | (ON) |
| | ST1-5KMZQJ61 | ST1-5KMZBJ61 | UL15KMZQJ61 | ON | NONE | (ON) |
| D O U B L E | ST2-1KMZQJ61 | ST2-1KMZBJ61 | UL21KMZQJ61 | ON | NONE | ON |
| | ST2-2KMZQJ61 | ST2-2KMZBJ61 | UL22KMZQJ61 | ON | OFF | ON |
| | ST2-3KMZQJ61 | ST2-3KMZBJ61 | UL23KMZQJ61 | (ON) | OFF | (ON) |
| | ST2-4KMZQJ61 | ST2-4KMZBJ61 | UL24KMZQJ61 | ON | OFF | (ON) |
| | ST2-5KMZQJ61 | ST2-5KMZBJ61 | UL25KMZQJ61 | ON | NONE | (ON) |
| | ST2-6KMZQJ61 | ST2-6KMZBJ61 | UL26KMZQJ61 | ON | ON | ON |
| | ST2-7KMZQJ61 | ST2-7KMZBJ61 | UL27KMZQJ61 | ON | ON | (ON) |
| | ST2-8KMZQJ61 | ST2-8KMZBJ61 | UL28KMZQJ61 | (ON) | ON | (ON) |
| | Term. Conn. | Term. Conn. | Term. Conn. | 1-2, 4-5 | 1-2, 5-6 | 2-3, 5-6 |

CONTACTS MAKE OPPOSITE HANDLE DIRECTION PARENTHESIS INDICATES MOMENTARY ACTION

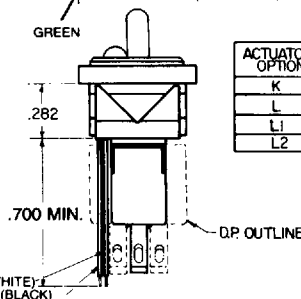
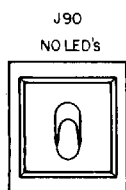
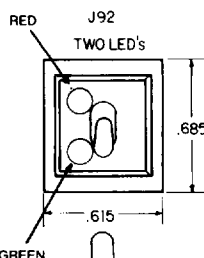
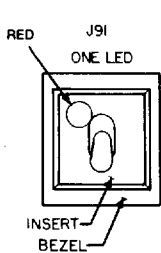
NOTE - ADD BEZEL AND INSERT COLORS TO MODEL NUMBER - BLACK, RED OR WHITE - SEE PAGE C11.

J90, J91 & J92 snap in bezel toggle switches with or without L.E.D. light

PATENT NO.
Des. 282, 524

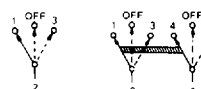


ST1-1KMZQJ91



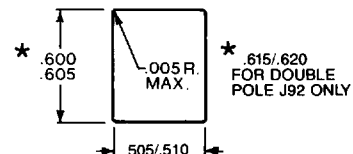
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|-----------------|--------|
| K | .400 |
| L | .830 |
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PANEL THICKNESS RANGE: .047-.125

| | MODELS | | | HANDLE POSITION AND CIRCUITRY | | |
|----------------------------|-------------------------|-----------------------|----------------|-------------------------------|----------|----------|
| | Power Circuit Model No. | Dry Circuit Model No. | U.L. Model No. | | | |
| S I N G L E | ST1-1KMZQJ91 | ST1-1KMZBJ91 | UL11KMZQJ91 | ON | NONE | ON |
| | ST1-2KMZQJ91 | ST1-2KMZBJ91 | UL12KMZQJ91 | ON | OFF | ON |
| | ST1-3KMZQJ91 | ST1-3KMZBJ91 | UL13KMZQJ91 | (ON) | OFF | (ON) |
| | ST1-4KMZQJ91 | ST1-4KMZBJ91 | UL14KMZQJ91 | ON | OFF | (ON) |
| | ST1-5KMZQJ91 | ST1-5KMZBJ91 | UL15KMZQJ91 | ON | NONE | (ON) |
| D O U B L E | ST2-1KMZQJ91 | ST2-1KMZBJ91 | UL21KMZQJ91 | ON | NONE | ON |
| | ST2-2KMZQJ91 | ST2-2KMZBJ91 | UL22KMZQJ91 | ON | OFF | ON |
| | ST2-3KMZQJ91 | ST2-3KMZBJ91 | UL23KMZQJ91 | (ON) | OFF | (ON) |
| | ST2-4KMZQJ91 | ST2-4KMZBJ91 | UL24KMZQJ91 | ON | OFF | (ON) |
| | ST2-5KMZQJ91 | ST2-5KMZBJ91 | UL25KMZQJ91 | ON | NONE | (ON) |
| | ST2-6KMZQJ91 | ST2-6KMZBJ91 | UL26KMZQJ91 | ON | ON | ON |
| | ST2-7KMZQJ91 | ST2-7KMZBJ91 | UL27KMZQJ91 | ON | ON | (ON) |
| | ST2-8KMZQJ91 | ST2-8KMZBJ91 | UL28KMZQJ91 | (ON) | ON | (ON) |
| | Term. Conn. | Term. Conn. | Term. Conn. | 1-2, 4-5 | 1-2, 5-6 | 2-3, 5-6 |

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