

# ZL series

## Tiny toggle switches - metal bushing

Distinctive features - Specifications - Overview

UG1410A



□ Ø 4,83 mm threaded bushing

□ Solder lug and straight PC terminals

### ELECTRICAL SPECIFICATIONS

- Max. current/voltage rating with resistive load :
  - gold plated contacts : 0,4VA 20V max. AC or DC
  - silver plated contacts : 0,5A 48V max. AC or DC
- Minimum load : 10mA 50mV - 10µA 5VDC
- Contact resistance : 20 mΩ max.
- Insulation resistance : 1.000 MΩ min. at 500VDC
- Dielectric strength: 1.000 Vrms 50 Hz min. between terminals and frame  
500 Vrms 50 Hz min. between terminals
- Electrical life at full load :

Contacts	Number of cycles	
	2 positions	3 positions
Gold plated	60.000	30.000
Silver plated	20.000	10.000

### GENERAL SPECIFICATIONS

- Strength of terminals : pull-out force 10N max.
- Torque : 1 Nm max. applied between the 2 nuts
- Max. panel thickness : 1,5 mm (.059) with 2 nuts
- Operating temperature : -30°C to +85°C
- Moisture : 21 days 95 % (NFC 20-603 - IEC 8-2-3)

### MATERIALS

- Case : thermoplastic UL94-V0
- Actuator : brass, nickel plated
- Bushing : zamac, tin plated
- Contacts and terminals :
  - 0 : brass, gold plated (standard)
  - 1 : brass, silver plated
  - 3 : brass, gold plated (1,27 micron gold)
- Terminal seal : epoxy

### SOLDERING

- Hand soldering : 280°C max. for 5 seconds max.
- Wave soldering : 260°C max. for 5 seconds max.

ZL																																														
SERIES	Number of poles	Electrical functions	Terminals	Contact and terminal materials	Bushings	Models																																								
	3 Single pole	<table><tr><td>1</td><td>ON</td><td>-</td><td>OFF</td></tr><tr><td>6</td><td>ON</td><td>-</td><td>ON</td></tr><tr><td>9</td><td>ON</td><td>OFF</td><td>ON</td></tr><tr><td>7</td><td>MOM</td><td>OFF</td><td>MOM</td></tr><tr><td>8</td><td>ON</td><td>OFF</td><td>MOM</td></tr><tr><td>2</td><td>ON</td><td>-</td><td>MOM</td></tr></table>	1	ON	-	OFF	6	ON	-	ON	9	ON	OFF	ON	7	MOM	OFF	MOM	8	ON	OFF	MOM	2	ON	-	MOM	<table><tr><td>SO</td><td>Solder lug</td></tr><tr><td>PO</td><td>Straight PC</td></tr></table>	SO	Solder lug	PO	Straight PC	<table><tr><td>0</td><td>Brass, gold plated</td></tr><tr><td>1</td><td>Brass, silver plated</td></tr><tr><td>3</td><td>Brass, gold plated (1,27 micron gold)</td></tr></table>	0	Brass, gold plated	1	Brass, silver plated	3	Brass, gold plated (1,27 micron gold)	<table><tr><td>01</td><td>Threaded, with flat</td></tr><tr><td>02</td><td>Threaded, with keyway</td></tr></table>	01	Threaded, with flat	02	Threaded, with keyway	<table><tr><td>00</td><td>Standard model</td></tr></table>	00	Standard model
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**Dimensions** : First dimensions are in mm while inches are shown as bracketed numbers.



**Packaging unit** : 100 pieces

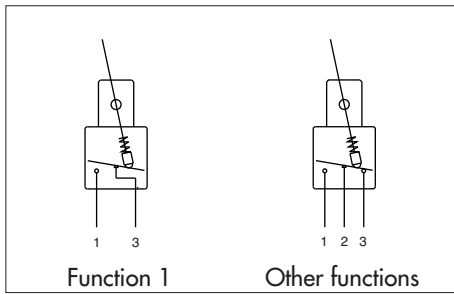


**Mounting accessories** : Standard hardware supplied with all models : 2 hex nuts 7 mm (.275) across flats P/N U5731, 1 locking ring P/N U5821 (with keyway) or U5831 (with flat) and 1 lockwasher P/N U5841.

The company reserves the right to change specifications without notice.

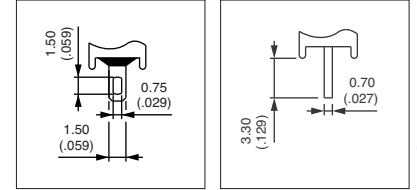
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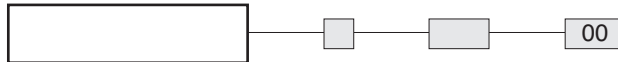


- Single pole
- Gold plated or silver plated contacts
- Epoxy sealed terminals

Other actuator lengths available on request.



MODEL  
STRUCTURE



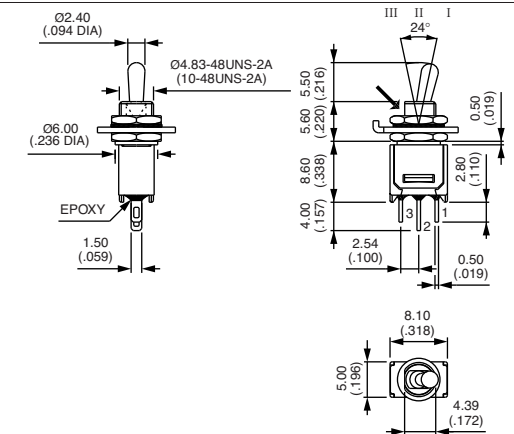
Shown with threaded bushing code 01

### Solder lug terminals : ZL..S0



ZL31S0  
ZL36S0  
ZL39S0  
ZL37S0  
ZL38S0  
ZL32S0

III	II	I
ON	-	OFF
ON	-	ON
ON	OFF	ON
MOM	OFF	MOM
MOM	OFF	ON
MOM	-	ON



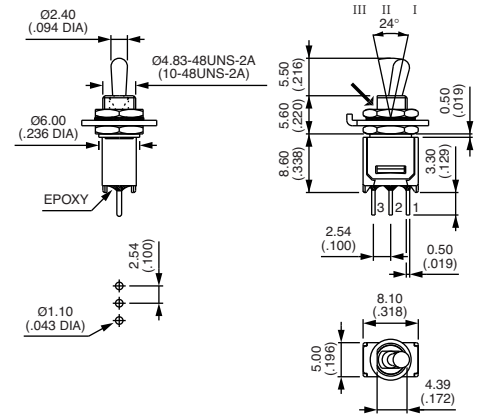
→ Flat

### Straight PC terminals : ZL..P0



ZL31P0  
ZL36P0  
ZL39P0  
ZL37P0  
ZL38P0  
ZL32P0

III	II	I
ON	-	OFF
ON	-	ON
ON	OFF	ON
MOM	OFF	MOM
MOM	OFF	ON
MOM	-	ON



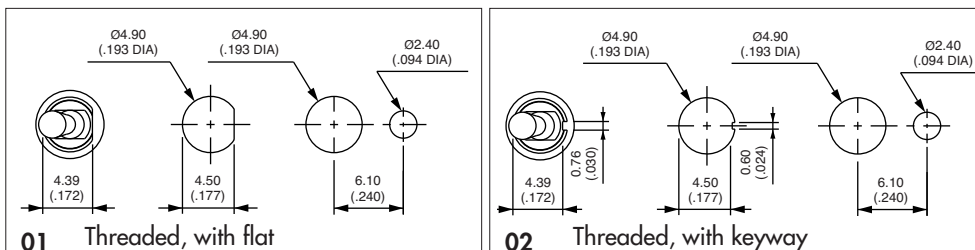
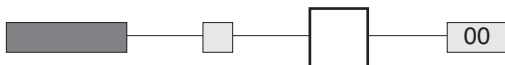
→ Flat

### CONTACT & TERMINAL MATERIALS



0 : Brass, gold plated (standard) - 1 : Brass, silver plated  
3 : Brass, gold plated (1,27µ gold)

### BUSHINGS



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