

# S series

Washable miniature toggle switches •  
plain bushing



## DISTINCTIVE FEATURES

- Process sealed
- Front and rear sealing
- Process compatible
- Wave solderable
- Washable



## ENVIRONMENTAL SPECIFICATIONS

- Operating temperature : -20 °C to +85 °C (-4 °F to +185 °F)
- Storage temperature : -40 °C to +85 °C (-40 °F to +185 °F)
- Moisture : The insulating materials employed and the complete seal permit the switches to withstand a 56 days moisture test (IEC 68-2-3).
- Solderability : The switches are tested at 235 °C ( 455 °F) according to IEC 68-2-20 after accelerated aging.



## ELECTRICAL SPECIFICATIONS

- Max. current/voltage rating with resistive load :
  - silver contacts (A) : 4 A 30 VDC
  - gold plated brass contacts (CD) : 0.4 VA 20 VAC or DC
  - gold plated silver contacts (AD) : 4 A 30 VDC (300 mA 30 VDC for gold plating)
- Initial contact resistance : 10 mΩ max.
- Insulation resistance : 1,000 MΩ min.
- Dielectric strength : 1,000 Vrms 50 Hz min.
- Electrical life at full load :

Contacts	Number of cycles	
	2 positions	3 positions
A	40,000	40,000
CD	100,000	50,000
AD	40,000	40,000

The company reserves the right to change specifications without notice.



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## GENERAL SPECIFICATIONS

- Mechanical strength : Terminals are strengthened by a bracket or a ground plate ensuring the rigidity of the switch on the board. Actuator strength is 10 N max.
- Soldering - thermal shock : The switches are especially designed for flow soldering at 260 °C (500 °F) during 5 seconds owing to high temperature polymer parts.



## MATERIALS

- Case and cover : UL94-VO, polyamide, glass filled or PES
- Actuator : brass, nickel plated
- Contacts  
 CD : brass, gold plated  
 A : silver  
 AD : silver, gold plated
- Terminal seal : epoxy

## AGENCY APPROVALS



2 A 250 VAC  
4 A 125 VAC



CECC 96201-006

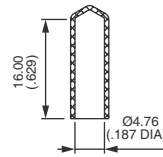


## ELECTRICAL FUNCTIONS



## CAP FOR PCB PROCESSING

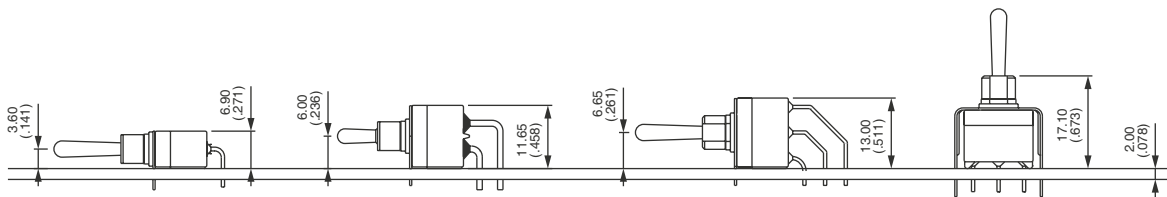
- Provide additional protection during PCB processing.
- Supplied mounted on the switch or separately.
- Material : vinyl



U3012



## PCB MOUNTING

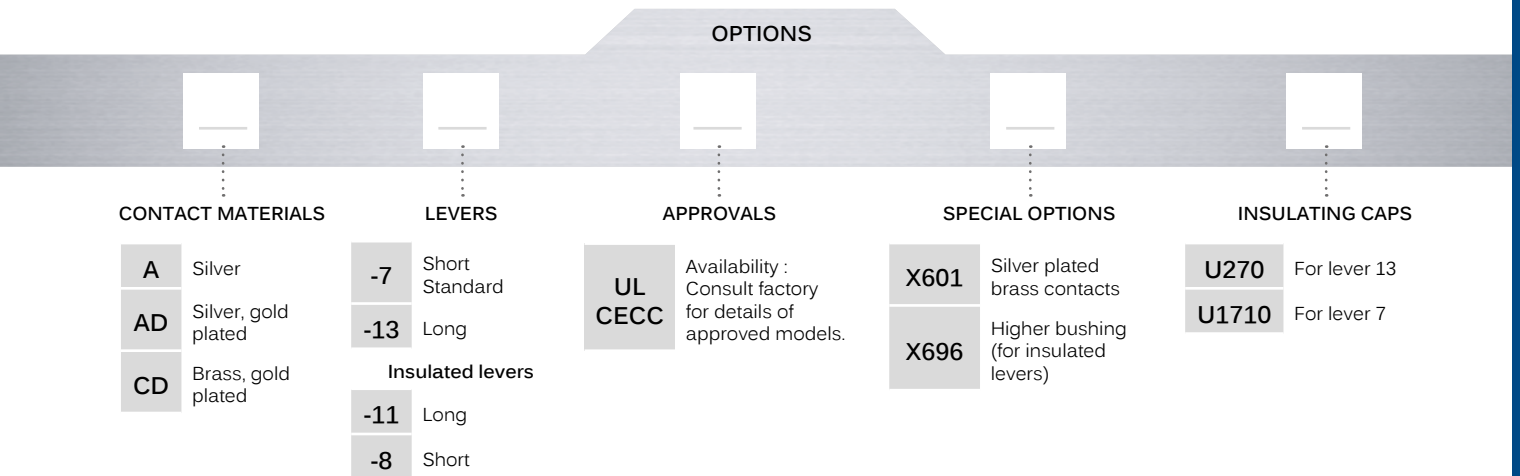
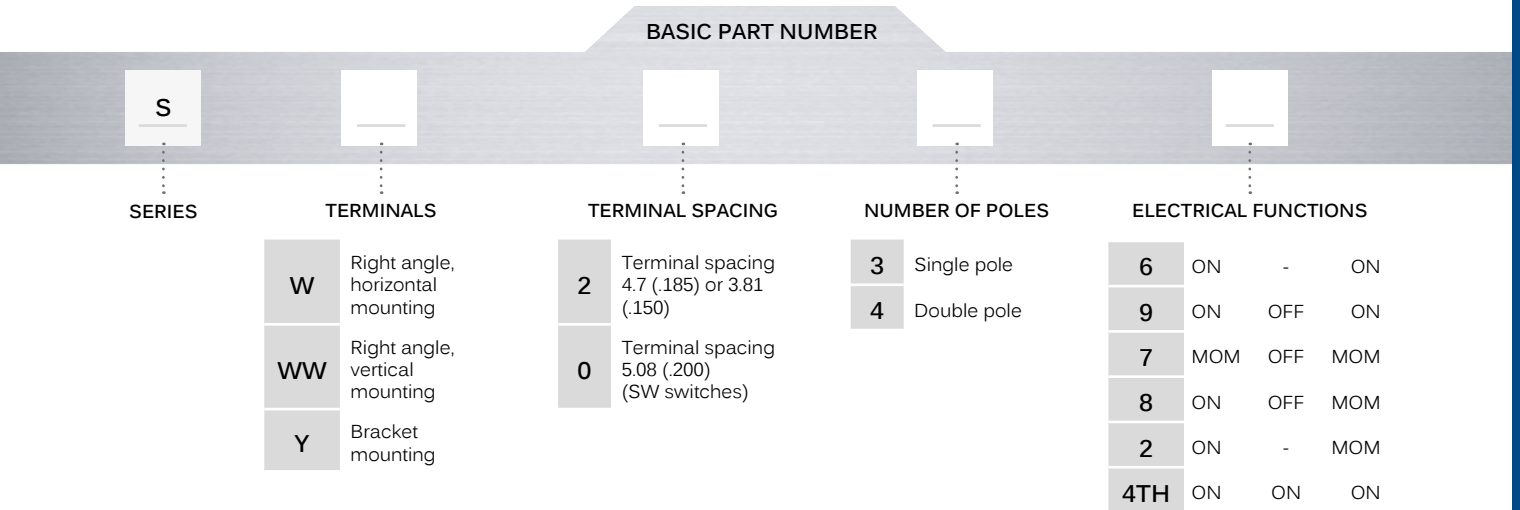


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## BUILD YOUR PART NUMBER



## ABOUT THIS SERIES

On the following pages, you will find successively basic part numbers of switches and options in the same order as in above chart.

⚠ **Notice** : please note that not all combinations of above numbers are available. Refer to the following pages for further information.

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## RIGHT ANGLE TERMINALS - HORIZONTAL SPACING 4.7 (.185)



	Single pole	Double pole	III 2-3 5-6	II	I 2-1 4-5
	SW236	SW246	ON	-	ON
	SW239	SW249	ON	OFF	ON
	SW237	SW247	MOM	OFF	MOM
	SW238	SW248	ON	OFF	MOM
	SW232	SW242	ON	-	MOM
		SW244TH*	ON	ON	ON

## RIGHT ANGLE TERMINALS - VERTICAL



	Single pole	Double pole	I 2-3 5-6	II	III 2-1 4-5
	SWW236	SWW246	ON	-	ON
	SWW239	SWW249	ON	OFF	ON
	SWW237	SWW247	MOM	OFF	MOM
	SWW238	SWW248**	ON	OFF	MOM
	SWW232	SWW242**	ON	-	MOM
		SWW244TH*	ON	ON	ON

## BRACKET MOUNTING



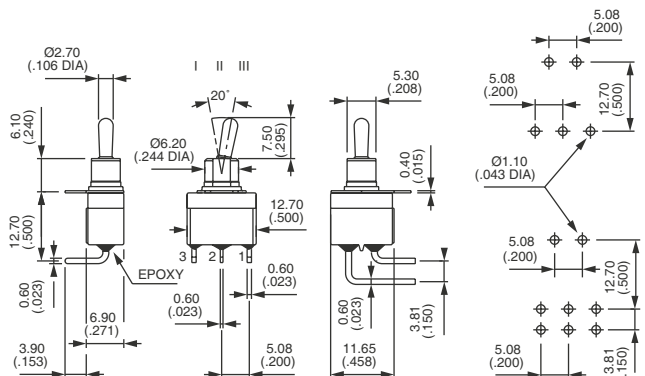
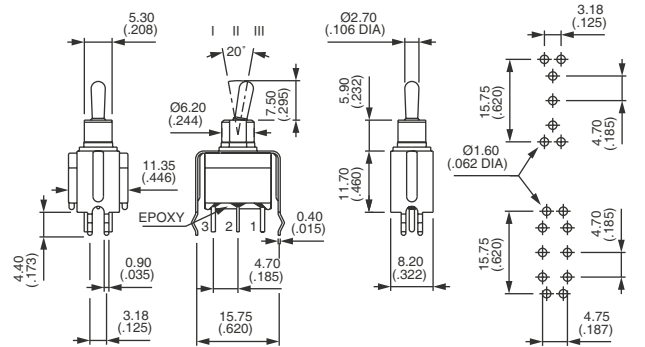
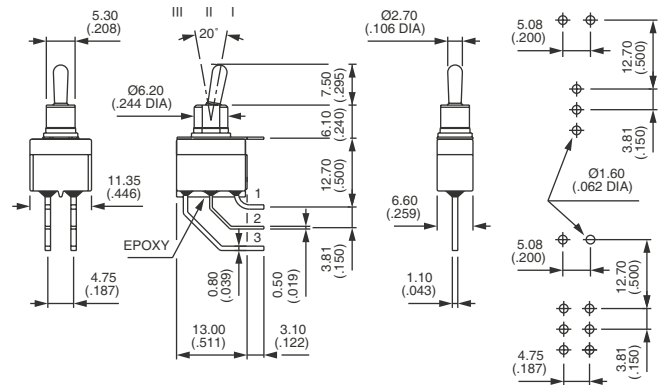
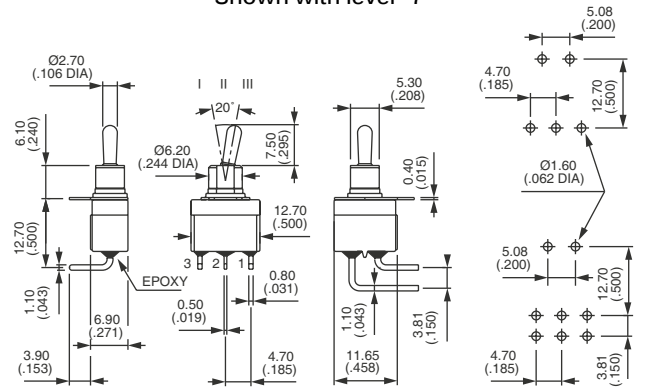
	Single pole	Double pole	I 2-3 5-6	II	III 2-1 4-5
	SY236	SY246	ON	-	ON
	SY239	SY249	ON	OFF	ON
	SY237	SY247	MOM	OFF	MOM
	SY238	SY248	ON	OFF	MOM
	SY232	SY242	ON	-	MOM
		SY244TH*	ON	ON	ON

## RIGHT ANGLE TERMINALS - HORIZONTAL SPACING 5.08 (.200)



	Single pole	Double pole	I 2-3 5-6	II	III 2-1 4-5
	SW036	SW046	ON	-	ON
	SW039	SW049	ON	OFF	ON
	SW037	SW047	MOM	OFF	MOM
	SW038	SW048	ON	OFF	MOM
	SW032	SW042	ON	-	MOM
		SW044TH*	ON	ON	ON

Shown with lever - 7

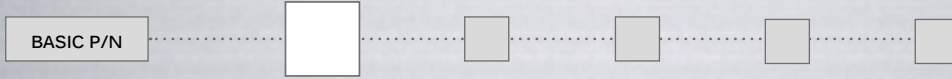


\* Function 4 : SP in DP case - TH connection, see "Technical information" on website.  
 \*\* Functions 2 and 8 : reversed connection available. On request.

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## CONTACT MATERIALS

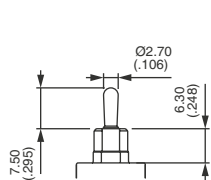


- A Silver
- AD Silver, gold plated
- AC Brass, gold plated

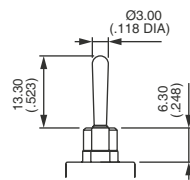
## LEVERS



### METAL LEVERS

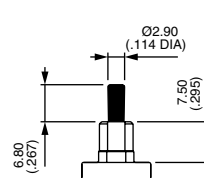


-7  
Standard

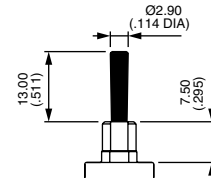


-13  
Long

### INSULATED LEVERS



-8  
Short



-11  
Long

If actuator not specified, we supply former default option -13.

Protected against electrostatic discharges (ESD) up to 12 KV. Black color.

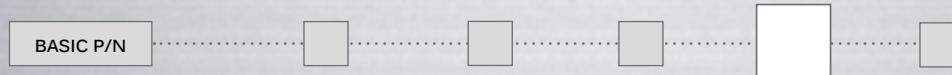
⚠ To combine with option X696.

## SPECIAL OPTIONS



- X601 Silver plated brass contacts  
Lower rating - Minimum quantity : 5,000 pieces per model and shipment.
- X696 Higher bushing 7.50 (.295). Compulsory for insulated levers 11 and 8.

## AGENCY APPROVALS



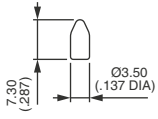
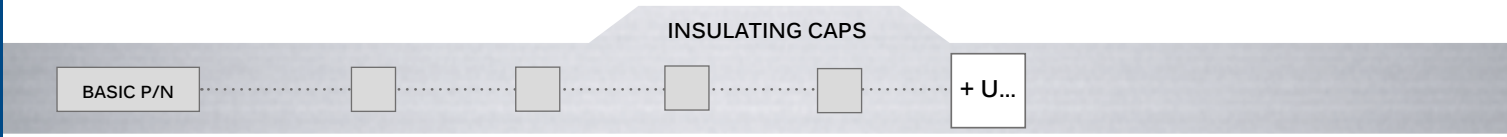
- UL
- CECC
- Blank No agency approval required.

**Availability** : consult factory for details of approved models.

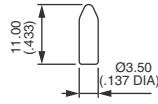
**Marking** : to order switches marked UL or CECC, please complete above box with desired approvals.

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**U1710**  
For lever 7



**U270**  
For lever 13

For cap colors, replace "0" with number :

- 1 Blue
- 1/4 Dark blue
- 2 Black
- 3 Green
- 4 Grey
- 5 Yellow
- 6 Red
- 7/1 White
- 9 Orange