

# S and SR series

## Washable rocker and paddle switches

*Distinctive features and specifications*

UG1410A



### ☐ Sealed

- Secure assembly of the two case parts
- Internally sealed bushing
- Epoxy sealed terminals

### ☐ Process compatible (S series)

- Wave solderable
- Washable

### ☐ Optional ESD protection

### ELECTRICAL SPECIFICATIONS

- Max. current/voltage rating with resistive load :
  - silver contacts (A or 1) : 4A 30VDC
  - brass, gold plated contacts (CD or 0) : 0,4VA 20VAC or DC
  - silver, gold plated contacts (AD or 2) : 4A 30VDC (300mA 30VDC 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 with nominal load :

| Contacts | Number of cycles |             |
|----------|------------------|-------------|
|          | 2 positions      | 3 positions |
| A or 1   | 40.000           | 40.000      |
| CD or 0  | 100.000          | 50.000      |
| AD or 2  | 40.000           | 40.000      |

### MATERIALS

- Case and cover : UL94-V0, polyamide, glass filled or PES
- Actuator : polyamide
- Contacts
  - CD or 0 : brass, gold plated
  - A or 1 : silver
  - AD or 2 : silver, gold plated
- Terminal seal : epoxy

### 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 10N max.
- Operating temperature : -20°C to +85°C
- Storage temperature : -40°C to +85°C
- Moisture :  
The insulating materials employed and the complete seal permit the switches to withstand a 56 days moisture test (IEC 68-2-3).
- Soldering - thermal shock (S series only) :  
The switches are especially designed for flow soldering at 260°C during 5 seconds owing to high temperature polymer parts.
- Iron soldering (SR series) : 300°C 5 sec. max.
- Solderability : The switches are tested at 235°C according to IEC 68-2-20 after accelerated aging.

### AGENCY APPROVALS



2A 250VAC  
4A 125VAC

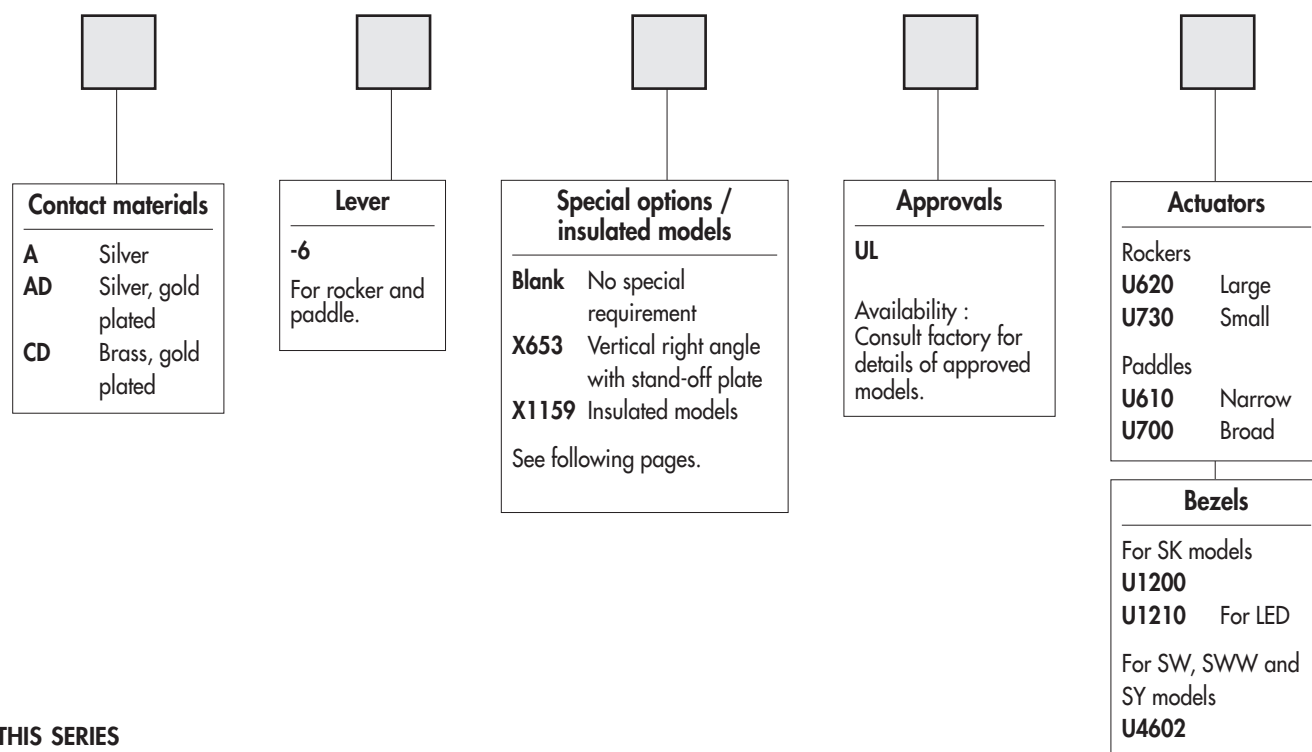
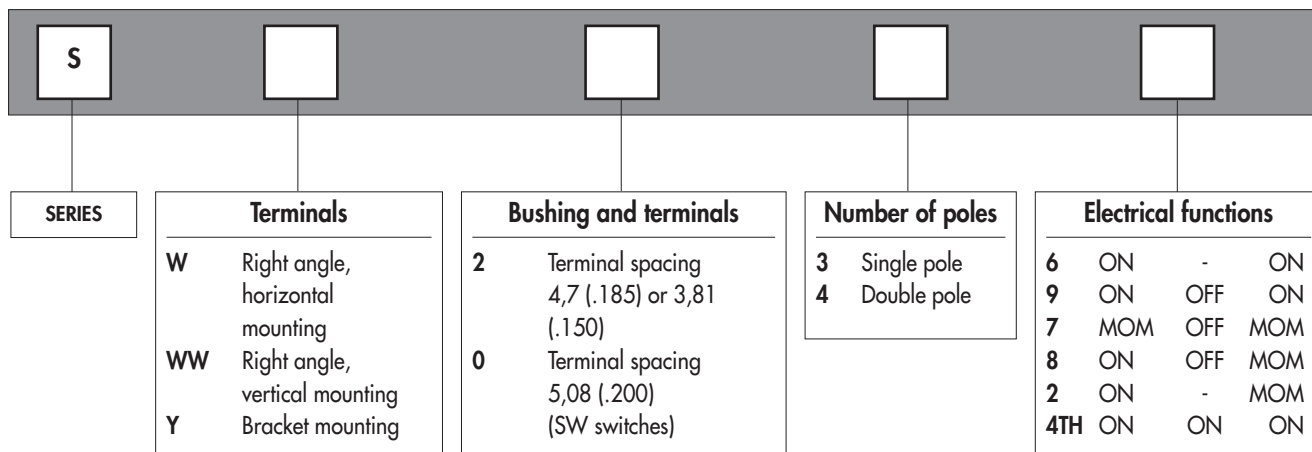
**Availability** : consult factory for details of approved models.

**Marking** : to order switches marked UL, complete appropriate box of ordering format.

# S series

## Washable rocker and paddle switches

### Overview



#### ABOUT THIS SERIES

On the following pages, you will find successively :  
 - model structure of switches  
 - options in the same order as above  
 Specifications are on previous page.

**Dimensions** : first dimensions are in mm while inches are shown as bracketed numbers.



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



**Packaging unit** : 25 pieces to 50 pieces depending on models.

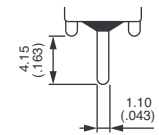
# S series

## Washable rocker and paddle switches

MODEL  
STRUCTURE



- Straight PC or right angle terminals
- Models with snap-in mounting (SK)
- Terminal spacing 4,7 (.185) or 5,08 (.200) on SW switches
- 1 and 2 pole configurations



MODEL  
STRUCTURE



Shown with rocker U620

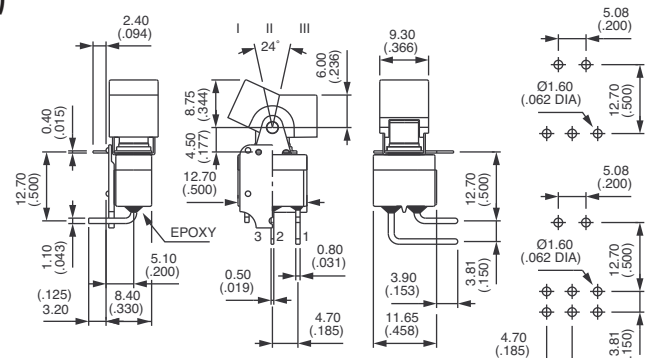
### Right angle terminals - horizontal - spacing 4,7 (.185)



Single pole

Double pole

|            | III | II  | I   |
|------------|-----|-----|-----|
| SW236-6    | ON  | -   | ON  |
| SW239-6    | ON  | OFF | ON  |
| SW237-6    | MOM | OFF | MOM |
| SW238-6    | ON  | OFF | MOM |
| SW232-6    | ON  | -   | MOM |
| SW244TH-6* | ON  | ON  | ON  |



Single pole with stand-off plate, double pole without.

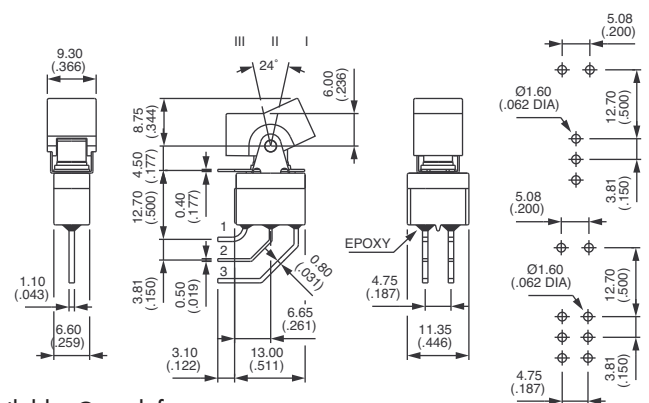
### Right angle terminals - vertical



Single pole

Double pole

|             | III | II  | I   |
|-------------|-----|-----|-----|
| SWW236-6    | ON  | -   | ON  |
| SWW239-6    | ON  | OFF | ON  |
| SWW237-6    | MOM | OFF | MOM |
| SWW238-6    | ON  | OFF | MOM |
| SWW232-6    | ON  | -   | MOM |
| SWW244TH-6* | ON  | ON  | ON  |



\*\* Functions 2 and 8 : reversed connection available. Consult factory.

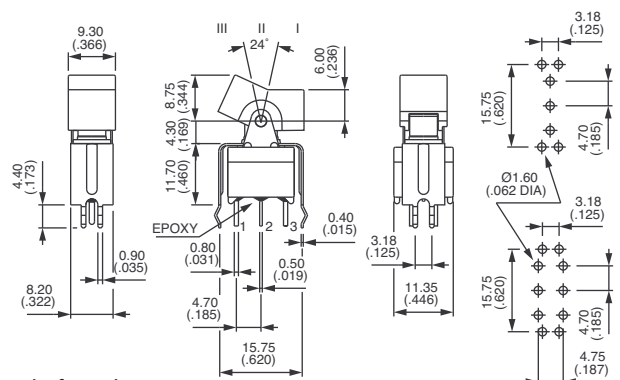
### Bracket mounting



Single pole

Double pole

|            | III | II  | I   |
|------------|-----|-----|-----|
| SY236-6    | ON  | -   | ON  |
| SY239-6    | ON  | OFF | ON  |
| SY237-6    | MOM | OFF | MOM |
| SY238-6    | ON  | OFF | MOM |
| SY232-6    | ON  | -   | MOM |
| SY244TH-6* | ON  | ON  | ON  |



\* Function 4 : SP in DP case - TH connection, see end of catalogue.

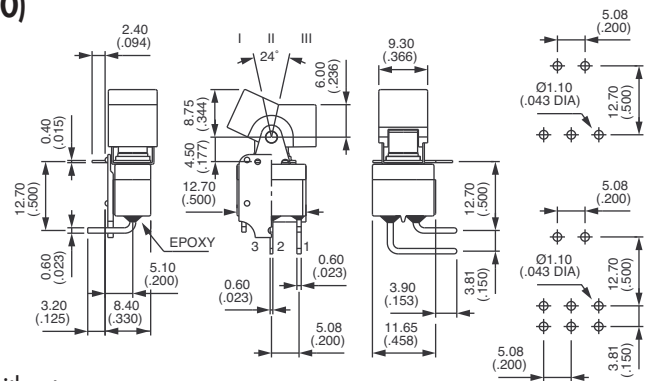
## Washable rocker and paddle switches

MODEL  
STRUCTURE

### Right angle terminals - horizontal - spacing 5,08 (.200)



|                |                   | III | II  | I   |
|----------------|-------------------|-----|-----|-----|
| Single pole    | Double pole       |     |     |     |
| <b>SW036-6</b> | <b>SW046-6</b>    | ON  | -   | ON  |
| <b>SW039-6</b> | <b>SW049-6</b>    | ON  | OFF | ON  |
| <b>SW037-6</b> | <b>SW047-6</b>    | MOM | OFF | MOM |
| <b>SW038-6</b> | <b>SW048-6</b>    | ON  | OFF | MOM |
| <b>SW032-6</b> | <b>SW042-6</b>    | ON  | -   | MOM |
|                | <b>SW044TH-6*</b> | ON  | ON  | ON  |

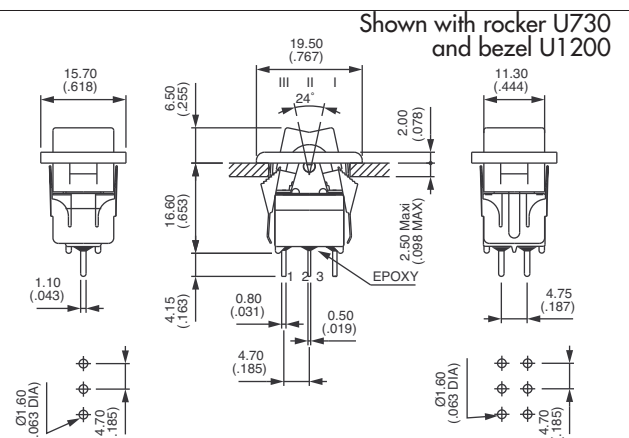


Single pole with stand-off plate, double pole without.

## Straight PC terminals - snap-in mounting

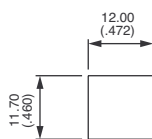


|                |                   | III | II  | I   |
|----------------|-------------------|-----|-----|-----|
| Single pole    | Double pole       |     |     |     |
| <b>SK236-6</b> | <b>SK246-6</b>    | ON  | -   | ON  |
| <b>SK239-6</b> | <b>SK249-6</b>    | ON  | OFF | ON  |
| <b>SK237-6</b> | <b>SK247-6</b>    | MOM | OFF | MOM |
| <b>SK238-6</b> | <b>SK248-6</b>    | ON  | OFF | MOM |
| <b>SK232-6</b> | <b>SK242-6</b>    | ON  | -   | MOM |
|                | <b>SK244TH-6*</b> | ON  | ON  | ON  |

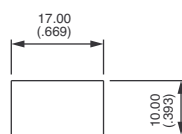


\* Function 4 : SP in DP case - TH connection, see end of catalogue.

## PANEL CUT-OUT

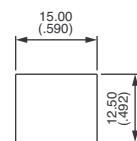


With rocker **U730**  
or paddle **U700**



With rocker **U620**  
or paddle **U610**

**For SK only**

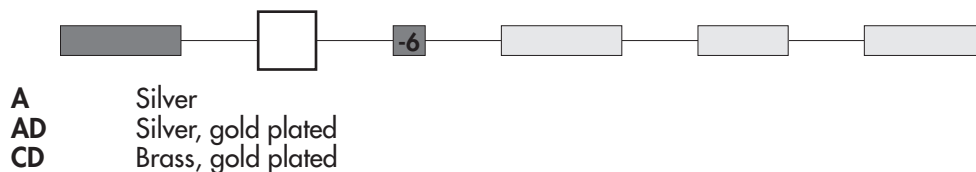




# S series

## Washable rocker and paddle switches

### CONTACT MATERIALS



### SPECIAL OPTIONS / INSULATED MODELS



### X653 Vertical right angle with stand-off plate

Shown with rocker U620



Single pole

SWW236-6 X653  
SWW239-6 X653  
SWW237-6 X653  
SWW238-6 X653  
SWW232-6 X653

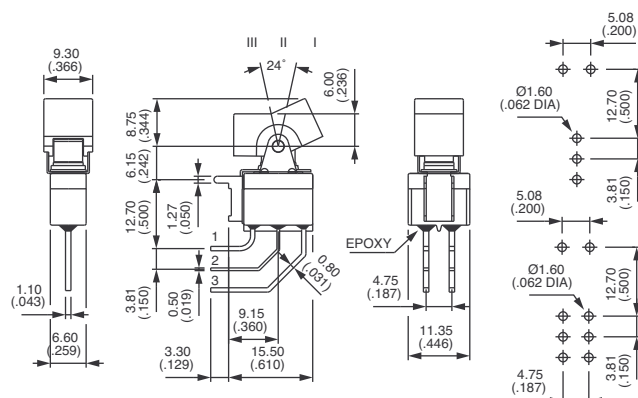
III II I

ON - ON  
ON OFF ON  
MOM OFF MOM  
ON OFF MOM  
ON - MOM

Double pole

SWW246-6 X653  
SWW249-6 X653  
SWW247-6 X653  
SWW248-6 X653\*\*  
SWW242-6 X653\*\*  
SWW244TH-6 X653\*

ON - ON  
ON OFF ON  
MOM OFF MOM  
ON OFF MOM  
ON - MOM  
ON ON ON



\* Function 4 : SP in DP case - TH connection, see end of catalogue.

\*\* Functions 2 and 8 : reversed connection available. Consult factory.

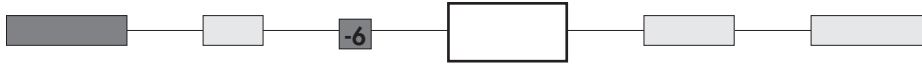
### X601

Silver plated brass contacts

Current/voltage rating for an electrical life of 20.000 cycles : 0,5A 30VDC

Minimum quantity : 5.000 per type and shipment.

### SPECIAL OPTIONS / INSULATED MODELS (continued)



#### X1159 Insulated model protected against E.S.D. up to 12 KV - Horizontal right angle



Single pole

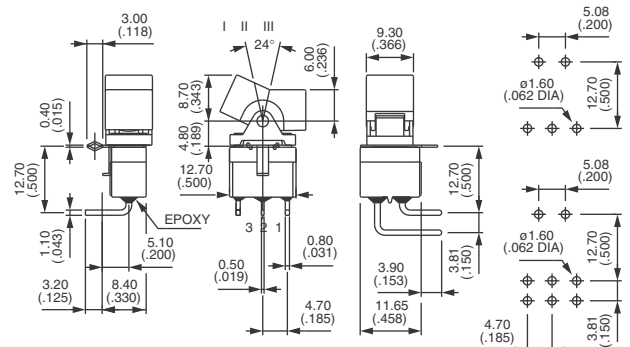
SW236-6 X1159  
SW239-6 X1159  
SW237-6 X1159  
SW238-6 X1159  
SW232-6 X1159

Double pole

SW246-6 X1159  
SW249-6 X1159  
SW247-6 X1159  
SW248-6 X1159  
SW242-6 X1159  
SW244TH-6 X1159\*

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

Shown with rocker U620



#### X1159 Insulated model protected against E.S.D. up to 12 KV - Vertical right angle



Single pole

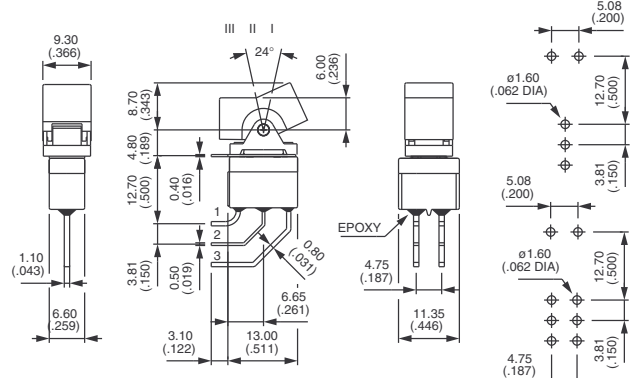
SWW236-6 X1159  
SWW239-6 X1159  
SWW237-6 X1159  
SWW238-6 X1159  
SWW232-6 X1159

Double pole

SWW246-6 X1159  
SWW249-6 X1159  
SWW247-6 X1159  
SWW248-6 X1159\*\*  
SWW242-6 X1159\*\*  
SWW244TH-6 X1159\*

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

Shown with rocker U620



#### X1159 Insulated model protected against E.S.D. up to 12 KV - Straight PC terminals - bracket mounting



Single pole

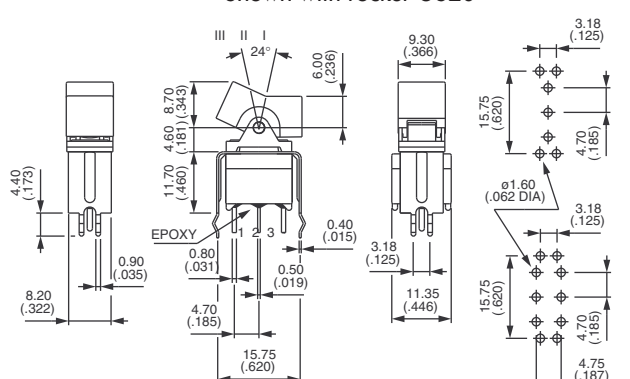
SY236-6 X1159  
SY239-6 X1159  
SY237-6 X1159  
SY238-6 X1159  
SY232-6 X1159

Double pole

SY246-6 X1159  
SY249-6 X1159  
SY247-6 X1159  
SY248-6 X1159\*\*  
SY242-6 X1159\*\*  
SY244TH-6 X1159\*

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

Shown with rocker U620



\* Function 4 : SP in DP case - TH connection, see end of catalogue. \*\* Functions 2 and 8 : reversed connection available. Consult factory.

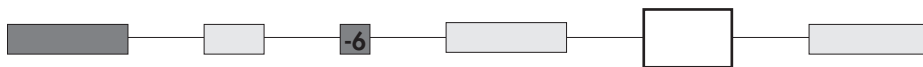
Above models available with all actuators shown on next page.



# S series

## Washable rocker and paddle switches

### AGENCY APPROVAL

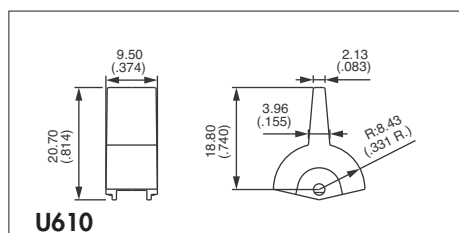
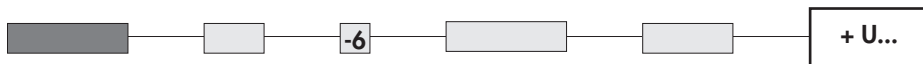


### UL

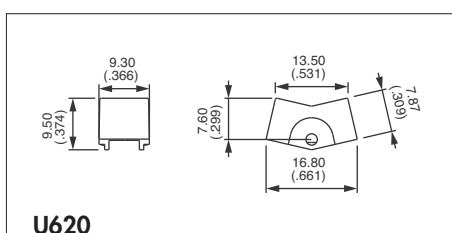
**Availability** : consult factory for details of approved models.

**Marking** : to order switches marked with the UL symbol, complete above box with "UL".  
Blank : no agency approval required.

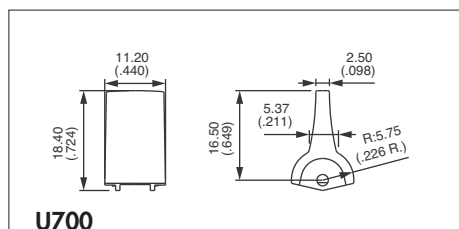
### ACTUATORS



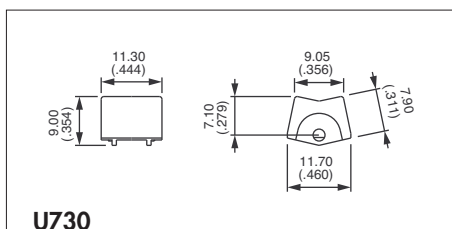
Narrow paddle



Large rocker



Broad paddle



Small rocker

#### Actuator colours

Replace last "0" by number

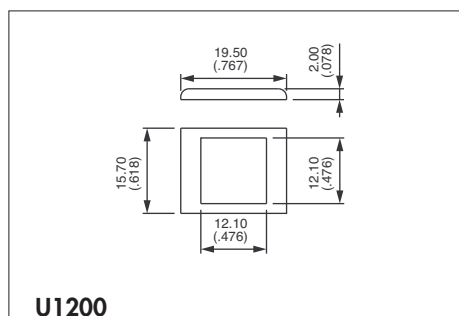
- |     |           |
|-----|-----------|
| 1   | blue      |
| 1/4 | dark blue |
| 2   | black     |
| 3   | green     |
| 4   | grey      |
| 5   | yellow    |
| 6   | red       |
| 7   | ivory     |
| 7/1 | white     |
| 9   | orange    |



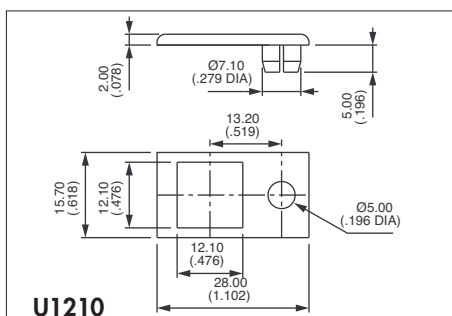
U610 and U620 not available on SK models

### Bezels for SK model (snap-in)

Add bezel part number to actuator part number.

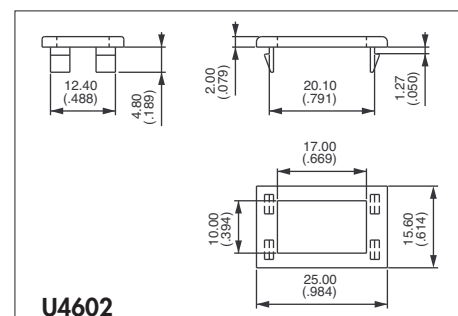


Bezel



Bezel for LED Ø 5 (.196) - not supplied

### Bezel for SW - SWW and SY models

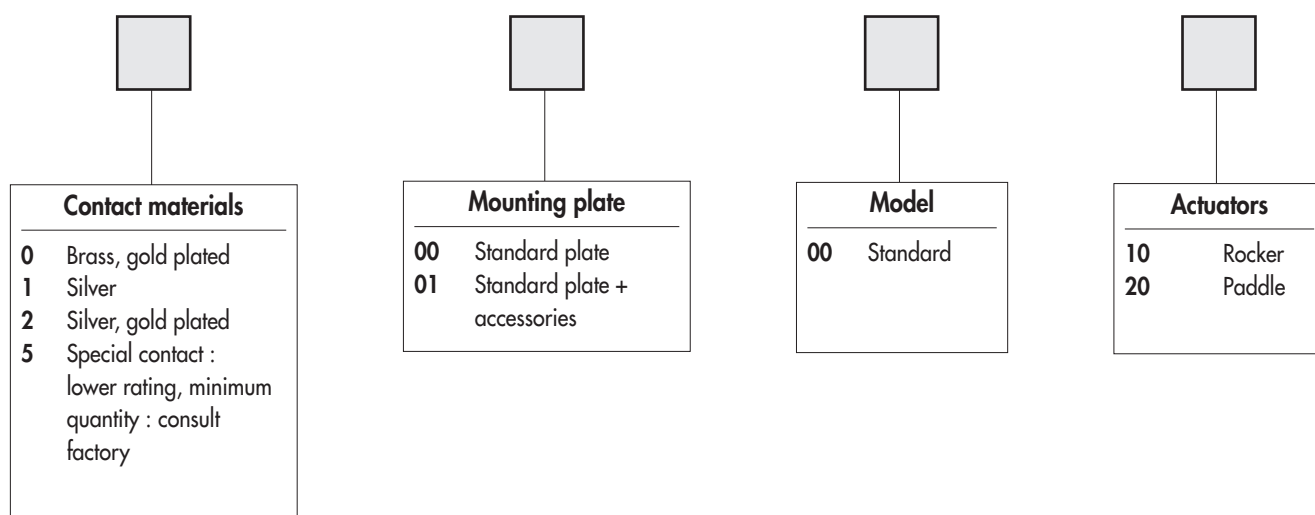
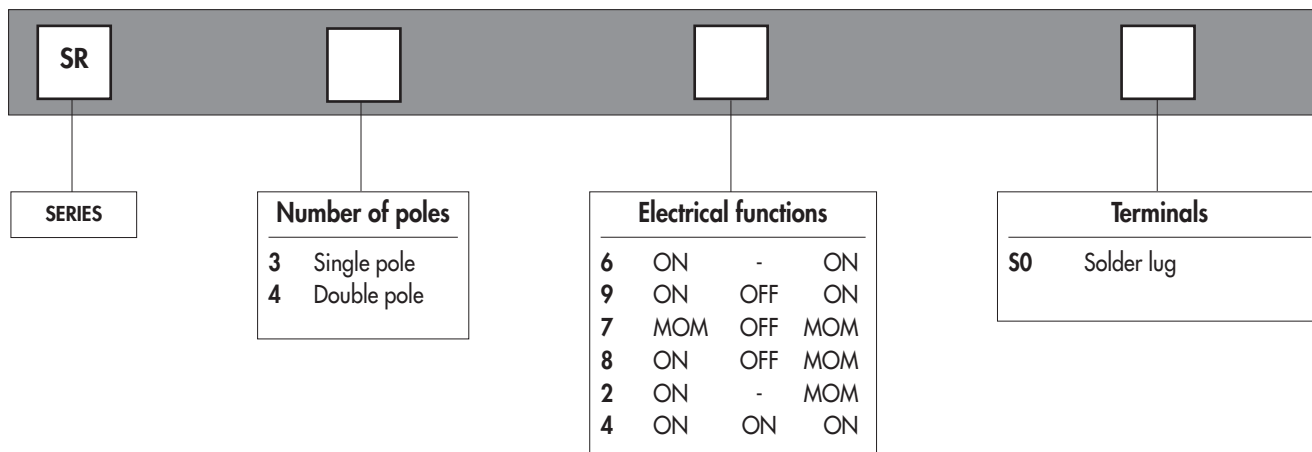


Black bezel - for rocker U620 only

# SR series

## Washable rocker and paddle switches

### Overview



### ABOUT THIS SERIES

On the following pages, you will find successively :

- model structure of switches
- options in the same order as above

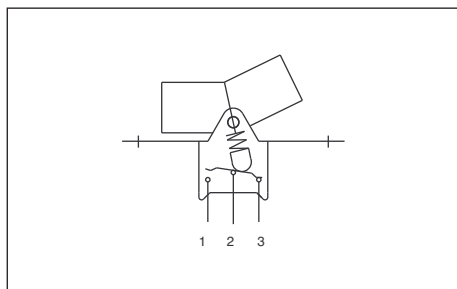
Specifications are at the beginning of this section (S and SR series).

**Dimensions** : first dimensions are in mm while inches are shown as bracketed numbers.

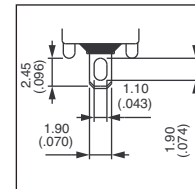


**Packaging unit** : 20 pieces.

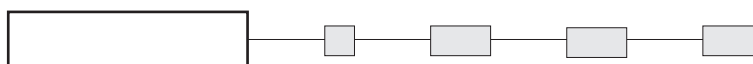




- 1 and 2 pole configurations
- Iron soldering 300°C max. 5 seconds max.



## MODEL STRUCTURE



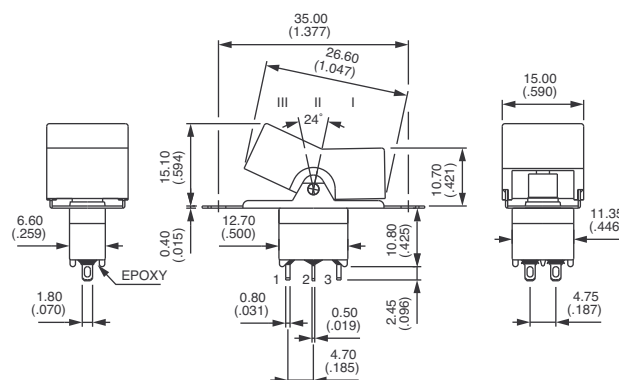
Shown with standard mounting plate (code 00)

## Solder lug terminals



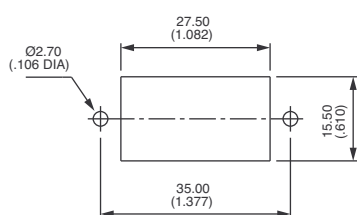
Single pole Double pole

|        |         |     |     |     |
|--------|---------|-----|-----|-----|
| SR3650 | SR4650  | ON  | -   | ON  |
| SR3950 | SR4950  | ON  | OFF | ON  |
| SR3750 | SR4750  | MOM | OFF | MOM |
| SR3850 | SR4850  | ON  | OFF | MOM |
| SR3250 | SR4250  | ON  | -   | MOM |
|        | SR4450* | ON  | ON  | ON  |



\* Function 4 : SP in DP case - TH connection, see end of catalogue.

## PANEL CUT-OUT



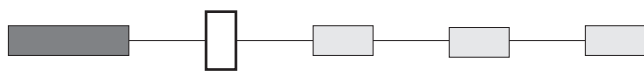
# SR series

## Washable rocker and paddle switches

OPTIONS

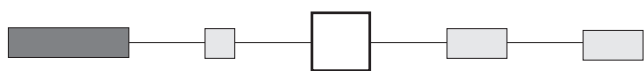


### CONTACT MATERIALS

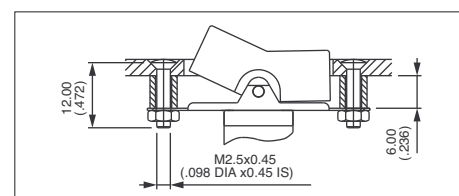


- 0 Brass, gold plated
- 1 Silver
- 2 Silver, gold plated
- 5 Special contact, lower rating, minimum quantity : consult factory.

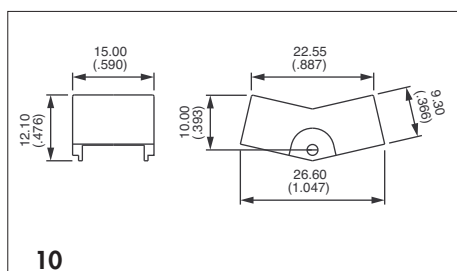
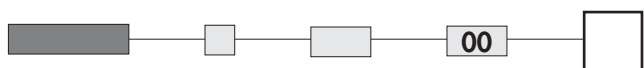
### MOUNTING PLATE



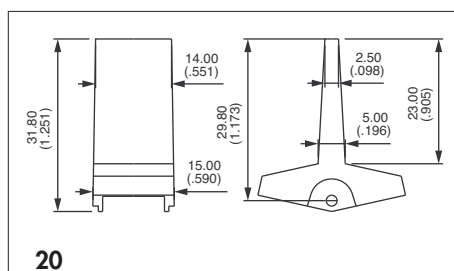
- 00 Standard mounting plate
- 01 Standard mounting plate + mounting accessories (spacers, screws and nuts)



### ACTUATORS



Rocker



Paddle

#### Actuator colours

Replace "0" by number

- 1 blue
- 1/4 dark blue
- 2 black
- 3 green
- 4 grey
- 5 yellow
- 6 red
- 7 ivory
- 7/1 white
- 9 orange

## Данный компонент на территории Российской Федерации

**Вы можете приобрести в компании MosChip.**

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

### Офис по работе с юридическими лицами:

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