

# TR series

## Tiny washable rocker switches

*Distinctive features and specifications*

UG1410A



### Sealed

- Single piece case
- O-ring seal between actuator and bushing
- Epoxy sealed terminals

### Wide variety of contact materials

### Same PCB layout as tiny toggle (TL), pushbutton (TP) and slide switches (TG)

#### 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 - 10 $\mu$ A 5VDC
- Contact resistance : 20 m $\Omega$  max.
- Insulation resistance : 1.000 M $\Omega$  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

#### MATERIALS

- Case : PBT
- Actuator : polyamide
- Contacts and terminals :
  - 0 : brass, gold plated
  - 1 : brass, silver plated
  - 3 : brass, gold plated (1,27 micron gold)
  - 8 : contact brass, gold plated + tin plated terminals
  - 9 : contact brass, gold plated (1,27 micron gold) + tin plated terminals
- Terminal seal : epoxy

#### GENERAL SPECIFICATIONS

- Strength of terminals : pull-out force - 10N max.
- Operating temperature : -30°C to +85°C
- Moisture : 21 days 95 % (NFC 20-603 - IEC 68-2-3)
- Cleaning : solvents or water + detergent
- Wave soldering : 260°C - 5 sec.

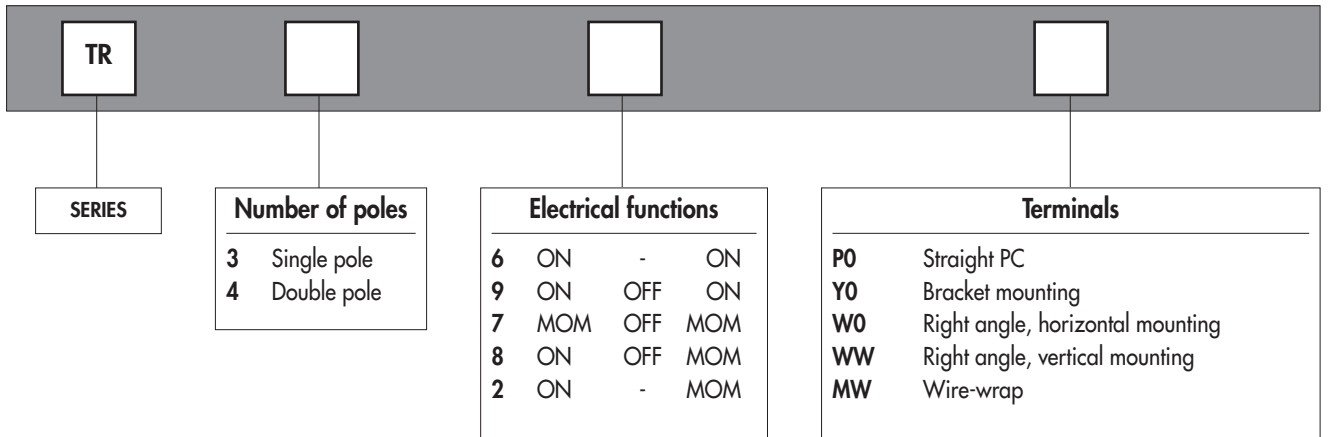
The company reserves the right to change specifications without notice.

# TR series

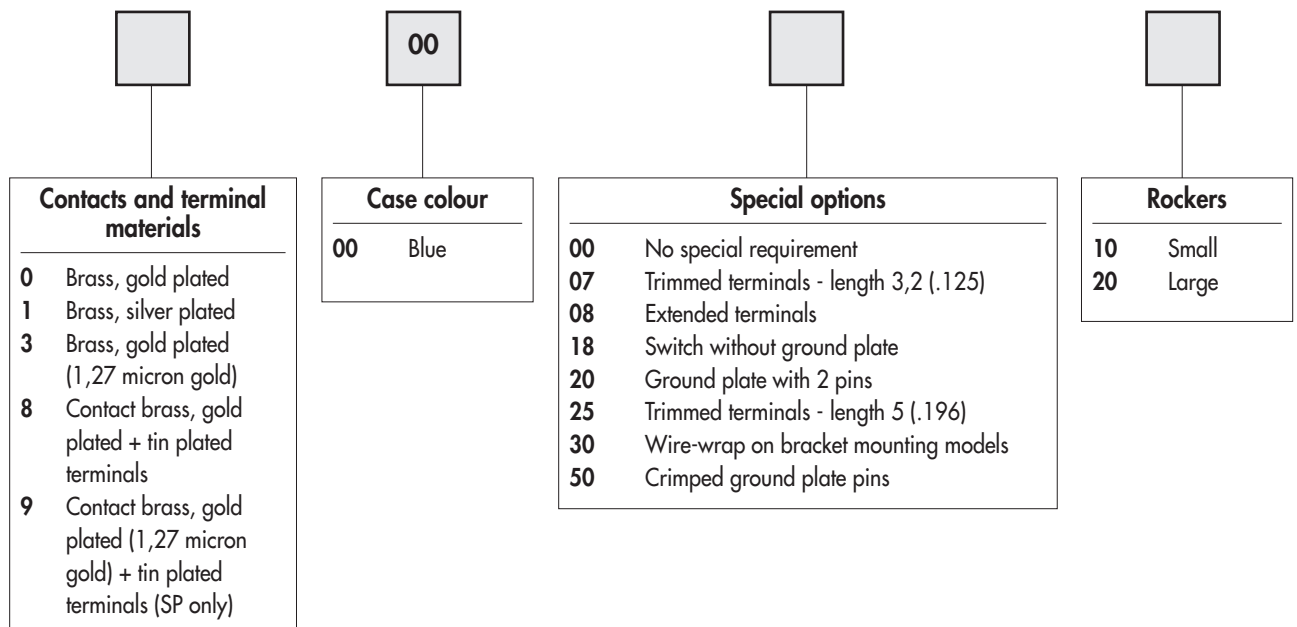
## Tiny washable rocker switches

Overview

MODEL  
STRUCTURE



OPTIONS



### ABOUT THIS SERIES

On the following pages, you will find successively :

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

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



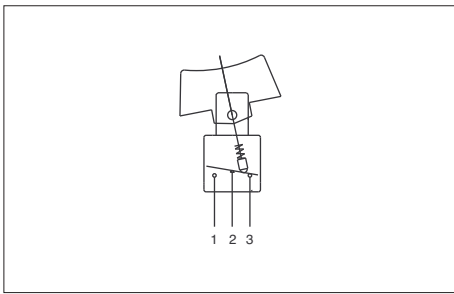
**NOTICE** : please note that not all combinations of above numbers are available. Refer to the following pages for further information.



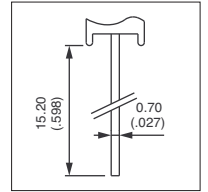
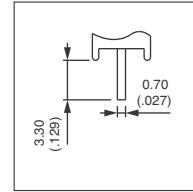
**Packaging unit** : 50 pieces.

# TR series

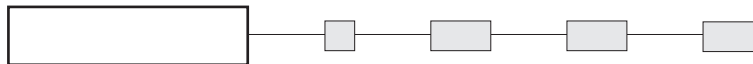
Tiny washable rocker switches



- Straight PC, right angle or wire-wrap terminals
- 1 and 2 pole configurations



MODEL  
STRUCTURE



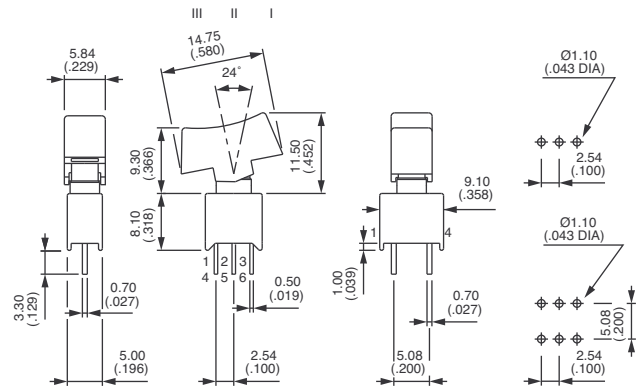
Shown with small rocker (code 10)

## Straight PC terminals : TR..PO



	Single pole	Double pole
TR36PO	ON	- ON
TR39PO	ON	OFF ON
TR37PO	MOM	OFF MOM
TR38PO	ON	OFF MOM
TR32PO	ON	- MOM

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

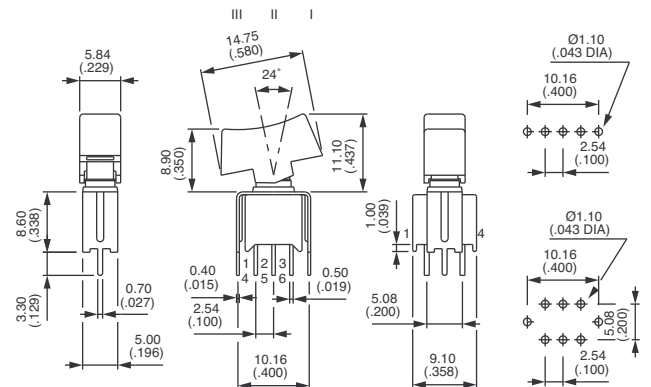


## Straight terminals - bracket mounting : TR..YO



	Single pole	Double pole
TR36YO	ON	- ON
TR39YO	ON	OFF ON
TR37YO	MOM	OFF MOM
TR38YO	ON	OFF MOM
TR32YO	ON	- MOM

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

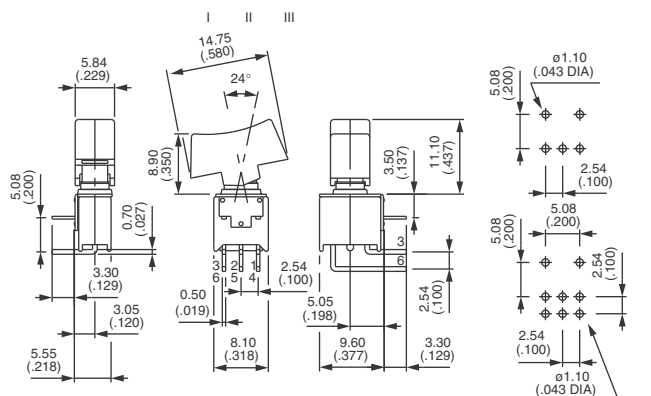


## Right angle terminals - horizontal mounting : TR..WO



	Single pole	Double pole
TR36WO	ON	- ON
TR39WO	ON	OFF ON
TR37WO	MOM	OFF MOM
TR38WO	ON	OFF MOM
TR32WO	ON	- MOM

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





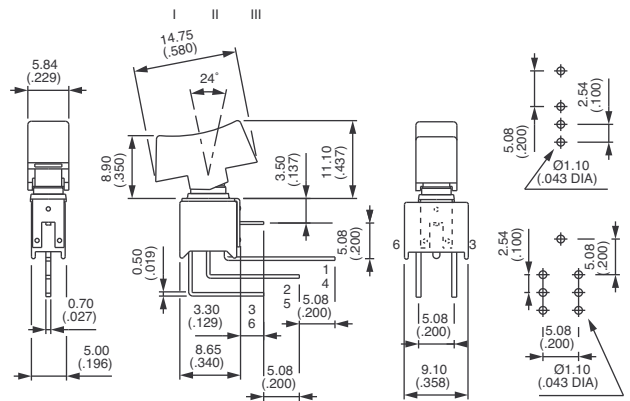
# TR series

## Tiny washable rocker switches

### Right angle terminals - vertical mounting : TR..WW



	Single pole	Double pole	III	II	I
TR36WW	ON	-	ON		
TR39WW	ON	OFF	ON		
TR37WW	MOM	OFF	MOM		
TR38WW*	ON	OFF	MOM		
TR32WW*	ON	-	MOM		
TR46WW					
TR49WW					
TR47WW					
TR48WW*					
TR42WW*					

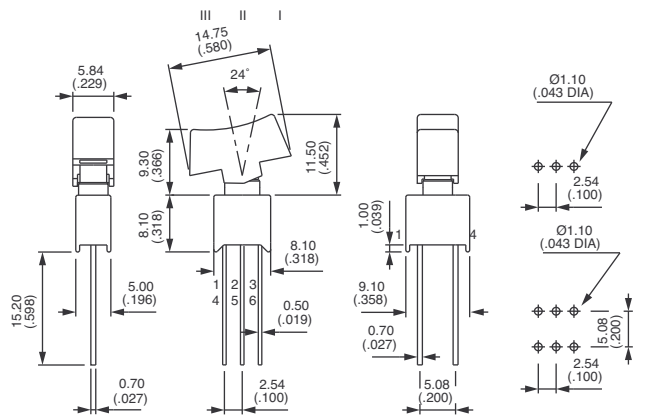


\* Functions 2 and 8 : reversed connection available . Consult factory.

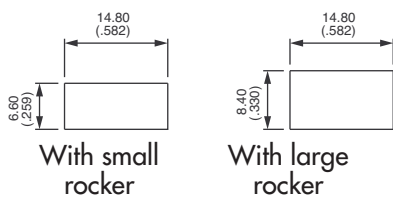
### Wire-wrap terminals : TR..MW



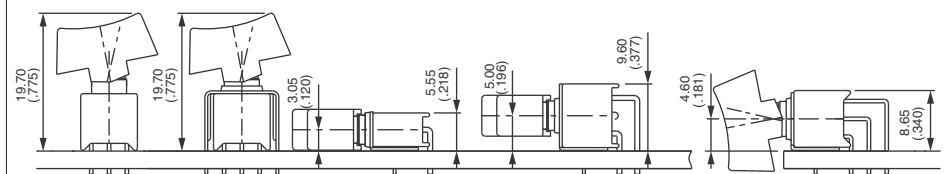
	Single pole	Double pole	III	II	I
TR36MW	ON	-	ON		
TR39MW	ON	OFF	ON		
TR37MW	MOM	OFF	MOM		
TR38MW	ON	OFF	MOM		
TR32MW	ON	-	MOM		
TR46MW					
TR49MW					
TR47MW					
TR48MW					
TR42MW					



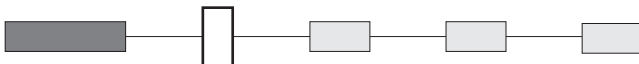
### PANEL CUT-OUT



### PCB MOUNTING

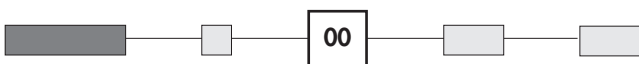


### CONTACT AND TERMINAL MATERIALS



- 0 Brass, gold plated
- 1 Brass, silver plated
- 3 Brass, gold plated (1,27 micron gold)
- 8 Contact brass, gold plated + tin plated terminals
- 9 Contact brass, gold plated (1,27 micron gold) + tin plated terminals (single pole only)

### CASE COLOUR



- 00 Blue

# TR series

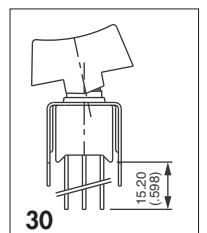
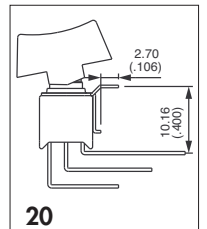
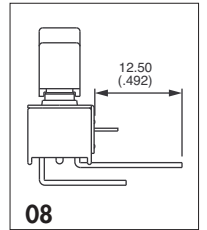
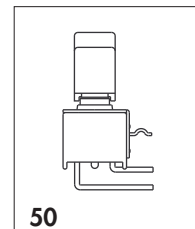
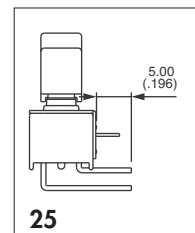
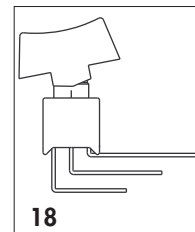
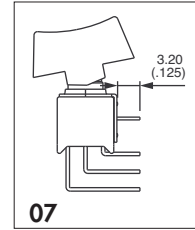
Tiny washable rocker switches



## SPECIAL OPTIONS

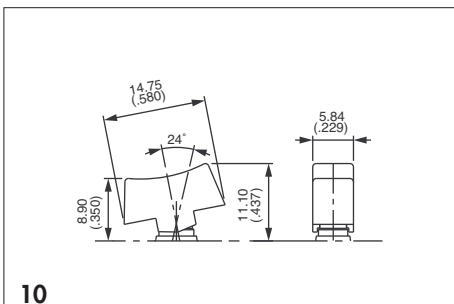
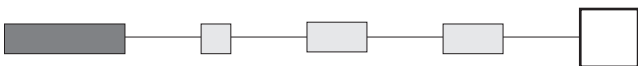


- 00 No special requirement
- 07 **Trimmed terminals** - length 3,2 mm (.125) for TR..WW models only
- 08 **Extended terminals** for TR..WO models only
- 18 Switch **without ground plate** for TR..WW models only
- 20 **Ground plate with 2 pins** for TR..WW models only
- 25 **Trimmed terminals** - length 5 mm (.196) for all models, except TR..WW
- 30 **Wire-wrap terminals** on models with mounting **bracket**
- 50 **Crimping of ground plate pins.**  
Retains switch on PCB during handling and wave soldering.  
For models TR..WO, TR..WW and TR..YO single and double pole.

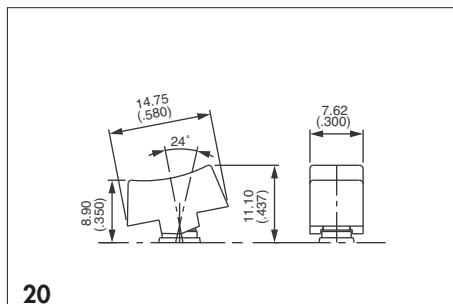


Marking on rocker : consult factory.

## ROCKERS



10  
Small



20  
Large

Rocker 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

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

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- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



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