

# 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

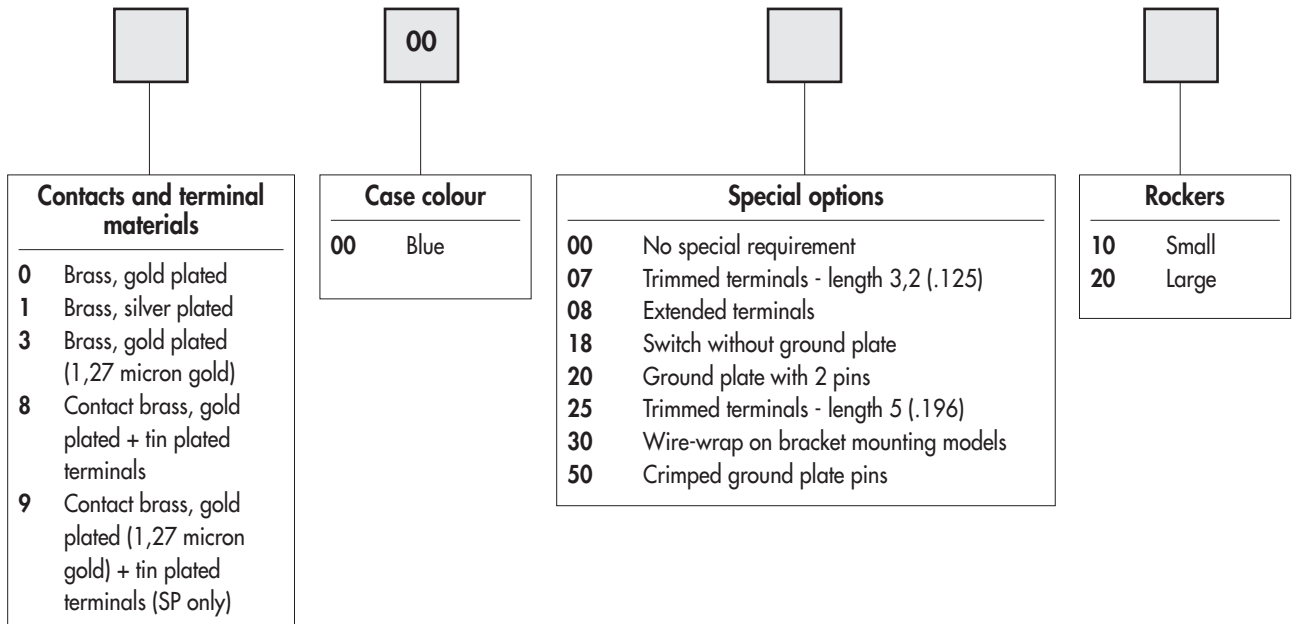
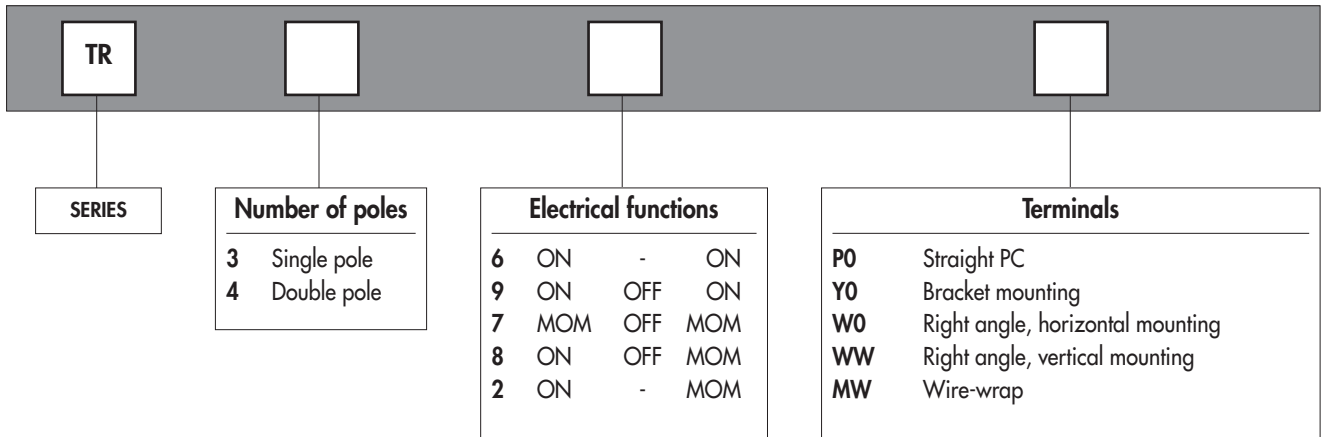
- Strength of terminals : pull-out force - 10N max.
- Operating temperature : -30°C to +85°C
- Moisture : 21 days 95 % (NFC 20-603 - IEC 68-2-3)
- Cleaning : solvents or water + detergent
- Wave soldering : 260°C - 5 sec.

The company reserves the right to change specifications without notice.

# TR series

## Tiny washable rocker switches

Overview



### 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.



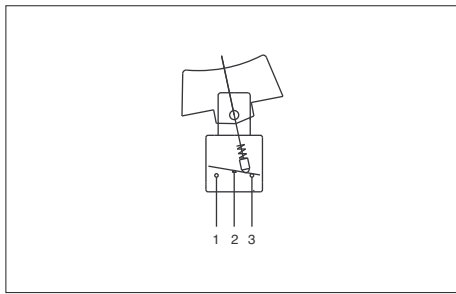
**NOTICE** : please note that not all combinations of above numbers are available. Refer to the following pages for further information.



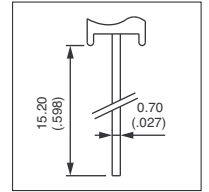
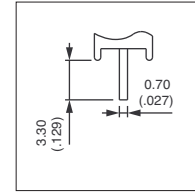
**Packaging unit** : 50 pieces.

# TR series

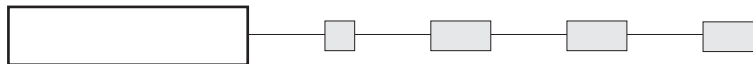
Tiny washable rocker switches



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



MODEL  
STRUCTURE



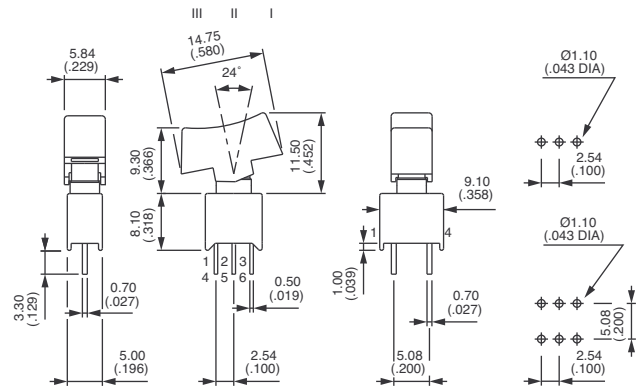
Shown with small rocker (code 10)

## Straight PC terminals : TR..PO



	Single pole	Double pole
TR36PO	ON	ON
TR39PO	ON	OFF
TR37PO	MOM	OFF
TR38PO	ON	OFF
TR32PO	ON	MOM
TR46PO		ON
TR49PO		OFF
TR47PO		OFF
TR48PO		OFF
TR42PO		MOM

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

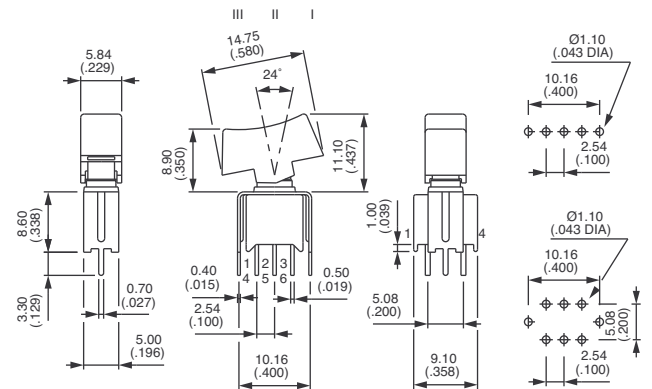


## Straight terminals - bracket mounting : TR..YO



	Single pole	Double pole
TR36YO	ON	ON
TR39YO	ON	OFF
TR37YO	MOM	OFF
TR38YO	ON	OFF
TR32YO	ON	MOM
TR46YO		ON
TR49YO		OFF
TR47YO		OFF
TR48YO		OFF
TR42YO		MOM

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

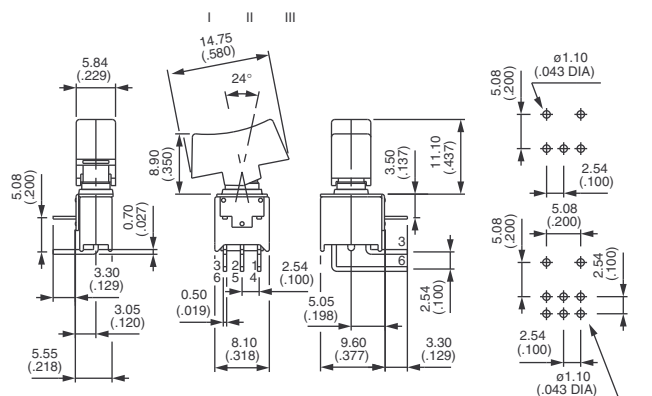


## Right angle terminals - horizontal mounting : TR..WO



	Single pole	Double pole
TR36WO	ON	ON
TR39WO	ON	OFF
TR37WO	MOM	OFF
TR38WO	ON	OFF
TR32WO	ON	MOM
TR46WO		ON
TR49WO		OFF
TR47WO		OFF
TR48WO		OFF
TR42WO		MOM

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





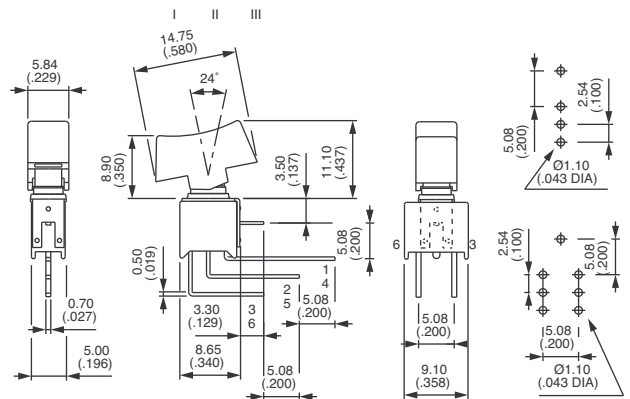
# TR series

## 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*					

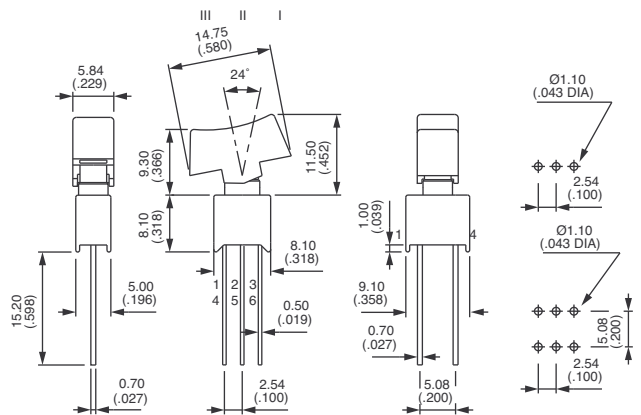


\* Functions 2 and 8 : reversed connection available . Consult factory.

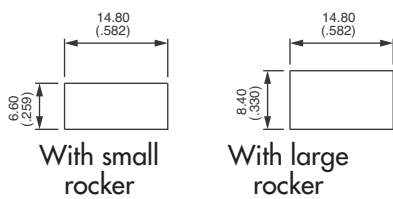
### Wire-wrap terminals : TR..MW



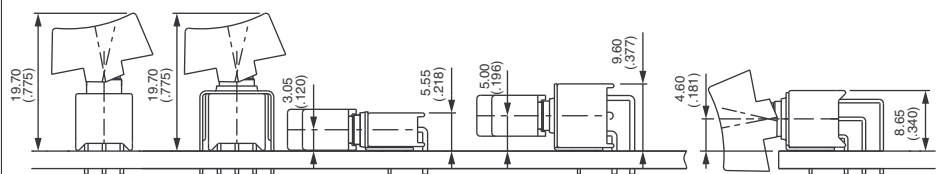
	Single pole	Double pole	III	II	I
TR36MW	ON	-	ON		
TR39MW	ON	OFF	ON		
TR37MW	MOM	OFF	MOM		
TR38MW	ON	OFF	MOM		
TR32MW	ON	-	MOM		
TR46MW					
TR49MW					
TR47MW					
TR48MW					
TR42MW					



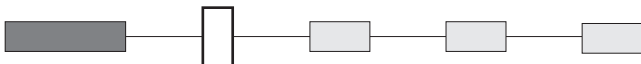
### PANEL CUT-OUT



### PCB MOUNTING

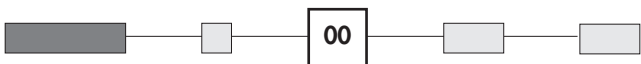


### CONTACT AND TERMINAL MATERIALS



- 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



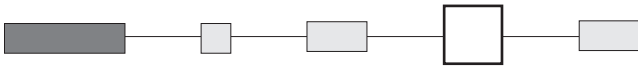
- 00 Blue

# TR series

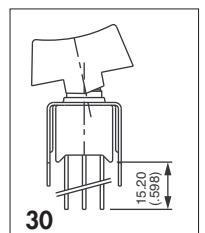
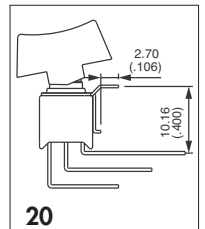
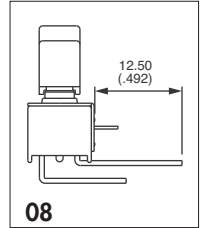
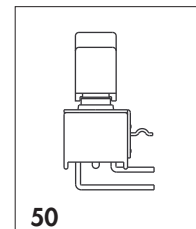
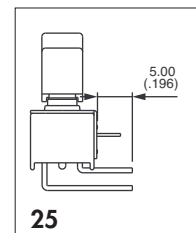
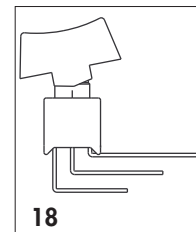
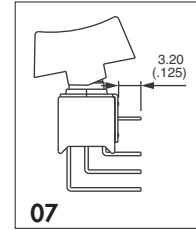
## Tiny washable rocker switches



### SPECIAL OPTIONS

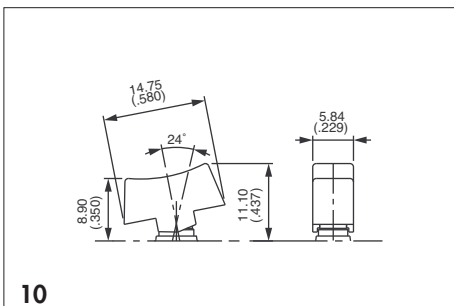
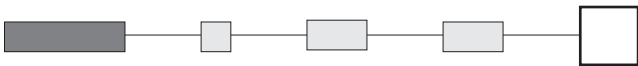


- 00** No special requirement
- 07** **Trimmed terminals** - length 3,2 mm (.125) for TR..WW models only
- 08** **Extended terminals** for TR..WO models only
- 18** Switch **without ground plate** for TR..WW models only
- 20** **Ground plate with 2 pins** for TR..WW models only
- 25** **Trimmed terminals** - 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.

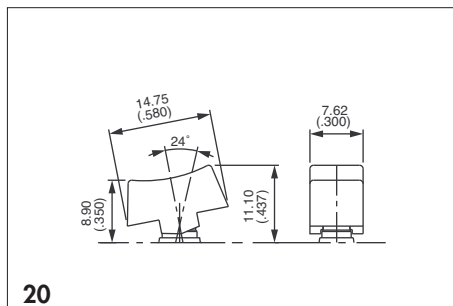


Marking on rocker : consult factory.

### 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 «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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