

# 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.

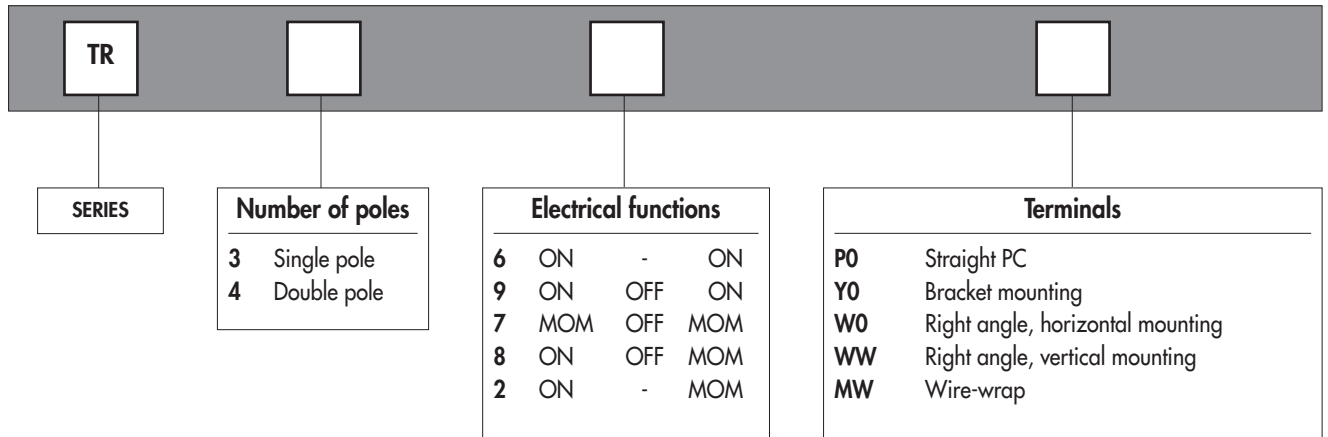
The company reserves the right to change specifications without notice.

# TR series

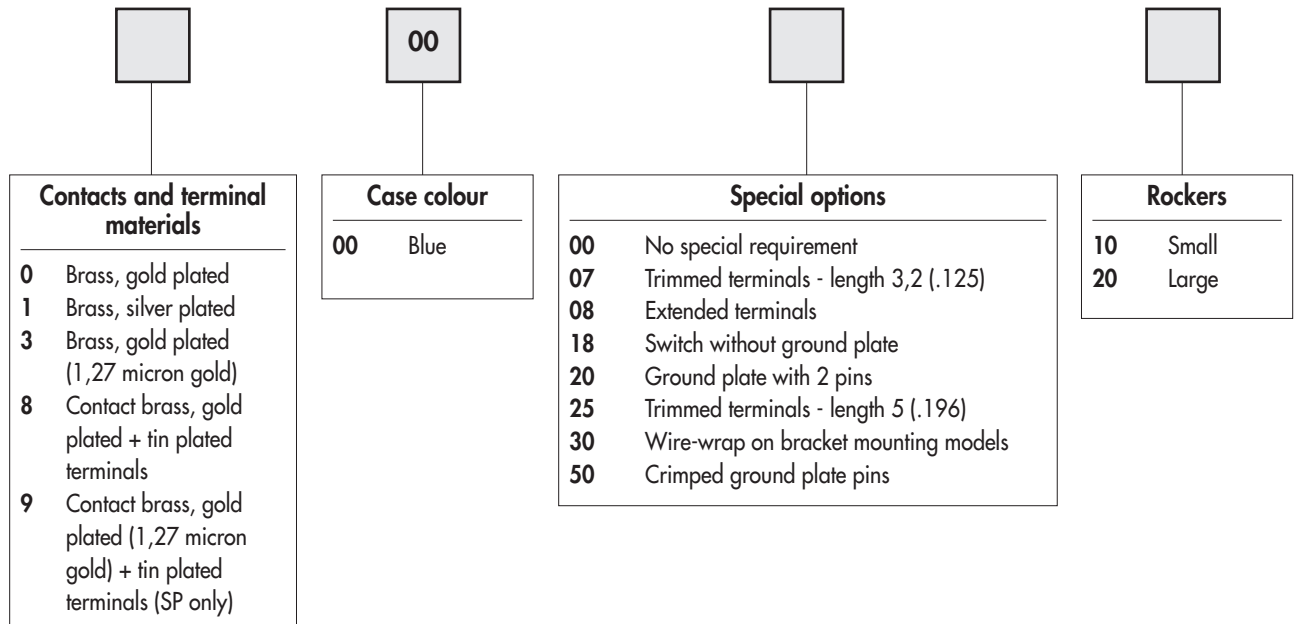
Tiny washable rocker switches

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.

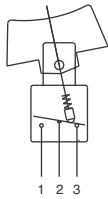


**Packaging unit** : 50 pieces.

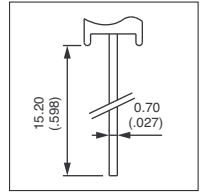
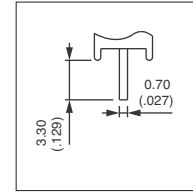
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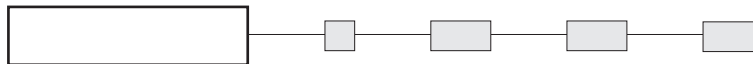
MODEL  
STRUCTURE



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



MODEL  
STRUCTURE



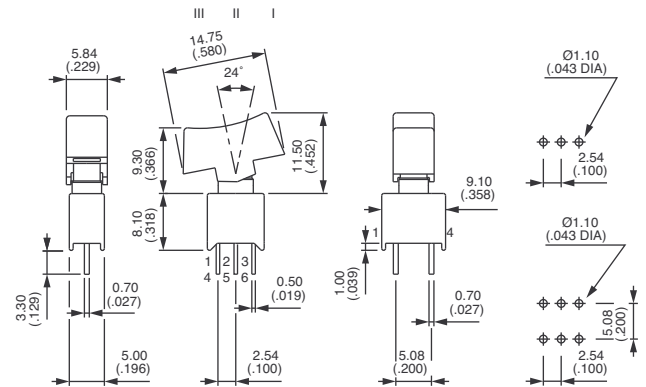
Shown with small rocker (code 10)

## Straight PC terminals : TR..P0



| Single pole | Double pole |
|-------------|-------------|
| TR36P0      | TR46P0      |
| TR39P0      | TR49P0      |
| TR37P0      | TR47P0      |
| TR38P0      | TR48P0      |
| TR32P0      | TR42P0      |

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

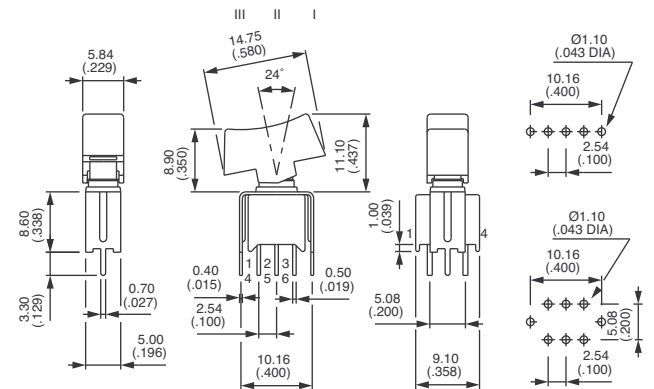


## Straight terminals - bracket mounting : TR..Y0



| Single pole | Double pole |
|-------------|-------------|
| TR36Y0      | TR46Y0      |
| TR39Y0      | TR49Y0      |
| TR37Y0      | TR47Y0      |
| TR38Y0      | TR48Y0      |
| TR32Y0      | TR42Y0      |

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

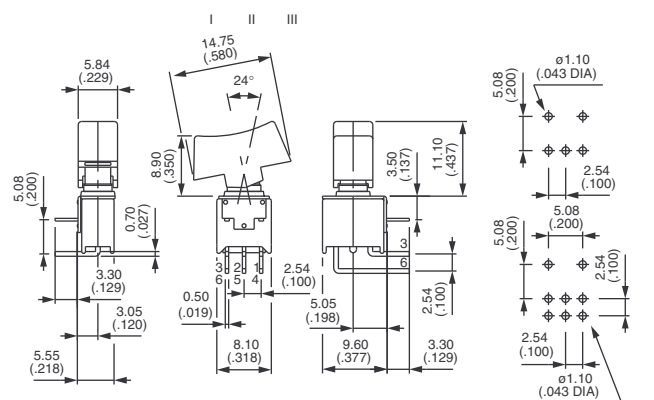


## Right angle terminals - horizontal mounting : TR..W0



| Single pole | Double pole |
|-------------|-------------|
| TR36W0      | TR46W0      |
| TR39W0      | TR49W0      |
| TR37W0      | TR47W0      |
| TR38W0      | TR48W0      |
| TR32W0      | TR42W0      |

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



Technical drawing of a mechanical assembly, showing three views: a front view (left), a top view (middle), and a side view (right). Dimensions are provided in inches (in) and millimeters (mm).

**Front View (Left):**

- Overall width: 5.84 (229)
- Overall height: 5.00 (.196)
- Internal width: 0.70 (.027)
- Internal height: 0.50 (.019)
- Internal width: 3.30 (.129)
- Internal height: 8.65 (.340)
- Internal width: 5.08 (.200)
- Internal height: 5.08 (.200)

**Top View (Middle):**

- Overall width: 14.75 (.580)
- Overall height: 24"
- Internal width: 8.90 (.350)
- Internal height: 3.50 (.137)
- Internal width: 11.10 (.437)
- Internal height: 5.08 (.200)
- Internal width: 5.08 (.200)
- Internal height: 5.08 (.200)

**Side View (Right):**

- Overall width: 5.08 (.200)
- Overall height: 5.08 (.200)
- Internal width: 5.08 (.200)
- Internal height: 5.08 (.200)
- Internal width: 5.08 (.200)
- Internal height: 5.08 (.200)
- Internal width: 5.08 (.200)
- Internal height: 5.08 (.200)

**Detail View (Bottom Right):**

- Overall width: 5.08 (.200)
- Overall height: 5.08 (.200)
- Internal width: 5.08 (.200)
- Internal height: 5.08 (.200)
- Internal width: 5.08 (.200)
- Internal height: 5.08 (.200)
- Internal width: 5.08 (.200)
- Internal height: 5.08 (.200)

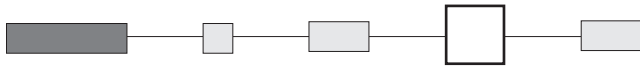
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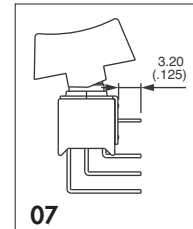
OPTIONS



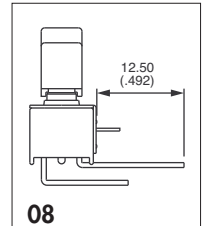
## SPECIAL OPTIONS



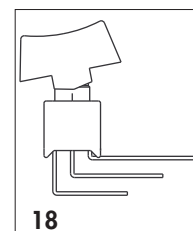
- 00** No special requirement
- 07** **Trimmed terminals** - length 3,2 mm (.125) for TR..WW models only
- 08** **Extended terminals** for TR..W0 models only
- 18** Switch **without ground plate** for TR..WW models only
- 20** **Ground plate with 2 pins** for TR..WW models only
- 25** **Trimmed terminals** - 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..W0, TR..WW and TR..Y0 single and double pole.



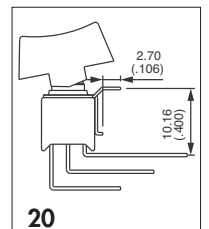
**07**



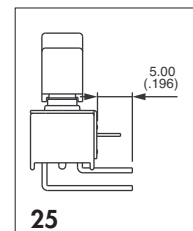
**08**



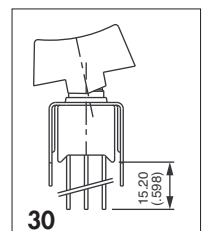
**18**



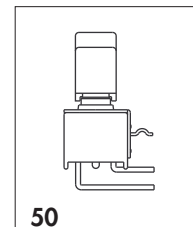
**20**



**25**



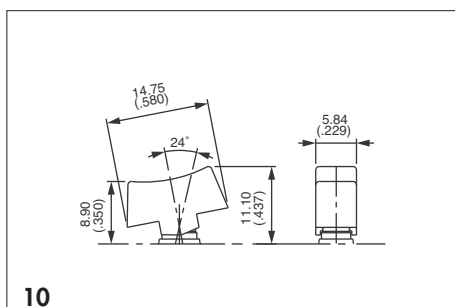
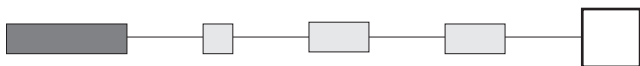
**30**



**50**

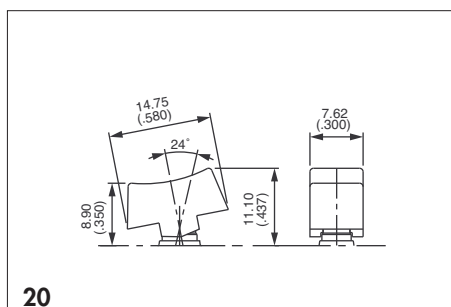
Marking on rocker : consult factory.

## 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