## MR(36 ${ }^{\circ}$ Step)

## Miniature Rotary Switches

RoHS Compliant


## Features

1. Diallyl phthalate resin (UL94V-O) which has excellent resistance to arc and heat, and superb insulation quality is employed.
2. The terminals are molded in to ensure the permanent seal structure that completely prevents flux entry through the terminals.
3. Adoption of the wiping mechanism for the contacting area to ensure contacting stability and reliability.
4. The variable stopper is provided to allow free selection of the desired number of positions (excluding MR4-2 type).
$\square$ Specifications

| Contact plating |  | Silver plated |  |
| :--- | :--- | :--- | :--- |
| Gold plated |  |  |  |
| Rating | Max. | 500 mA |  |
|  | 125VAC |  |  |
|  | Min. | $10 \mathrm{~mA} 5 \mathrm{VAC} / \mathrm{DC}$ | 5 mA 6 VDC |
| Initial contact resistance | $10 \mathrm{~m} \Omega \mathrm{max} .(1 \mathrm{~A} 2 \sim 4 \mathrm{VDC})$ | $20 \mathrm{~m} \Omega \mathrm{max} .(1.5 \mathrm{~mA} 200 \mu \mathrm{VAC})$ |  |
| Dielectric strength | $1,000 \mathrm{VAC} 1$ minute |  |  |
| Insulation resistance | $100 \mathrm{M} \Omega$ min. |  |  |
| Electrical life | 10,000 cycles |  |  |
| Operating force | $9.8 \mathrm{~N} \cdot \mathrm{~cm}$ max. |  |  |
| Stopper strength | $19.6 \mathrm{~N} \cdot \mathrm{~cm}$ |  |  |
| Operating <br> temperature range | $-20 \sim+85^{\circ} \mathrm{C}$ |  |  |
| Storage <br> temperature range | $-40 \sim+85^{\circ} \mathrm{C}$ |  |  |



Terminal Styles


Standard Accessories

| Part name | Hex Nut | Lockwasher | Locking Ring | stopper |
| :---: | :--- | :---: | :---: | :---: |
| Part No. | $\mathbf{1 4 0 0 0 8 0 1 0 2 4 1}$ | $\mathbf{1 4 0 0 0 8 0 3 0 0 5 1}$ | 140008020066 | 140000600357 |
| Dimensions | Nickel plated | Zinc plated | Zinc plated |  |
| Plating |  |  |  |  |

Panel Cut-Out Dimensions
Panel thickness : 2 mm max.

-A wide variety of optional accessories are available. Specify the part number from Optional Accessories Table on page 542.
OFor Soldering Specifications and Flux Cleaning, see page 547.

1-pole 10-position
Terminal numbers are shown on the switch.
$\left.\begin{array}{|c|c|c|}\hline \text { Part No. } & \text { Number of steps } & \text { Step angle } \\ \hline \text { MMR1-10-Z } & \begin{array}{c}9 \\ \text { Repetition of } \\ \text { from 1 to 10 }\end{array}\end{array}\right)$
From 2 to 9-position can be selected by variable stopper.

※Two Common terminals (1C) are internally short-circuited. Select either one depending on wiring arrangements.

MR2-5-Z


2-pole 5-position
Terminal numbers are shown on the switch.


| Part No. | Number of steps | Step angle |
| :---: | :---: | :---: |
| へMR2-5-Z | $\left(\begin{array}{c} 4 \\ \text { Repetition of } \\ \text { from } 1 \text { to } 5 \end{array}\right)$ | $36^{\circ}$ |
| *MR2-5G-Z |  |  |

From 2 to 4-position can be selected by variable stopper.


Circuit diagram

MR3-3-Z
3-pole 3-position


| Part No. | Number of steps | Step angle |
| :---: | :---: | :---: |
| MR3-3-Z | $\left.\begin{array}{c}\text { Repetition of } \\ \text { from 1 to 3 }\end{array}\right)$ | $36^{\circ}$ |
| 2-position can be selected by variable stopper. |  |  |


MR4－2－Z 4－pole 2－position

$\left.\begin{array}{|c|c|c|}\hline \text { Part No．} & \text { Number of steps } & \text { Step angle } \\ \hline \star \text { MR4－2－Z } & \begin{array}{c}\text { Repetition of } \\ \text { from 1 to 2 }\end{array}\end{array}\right)$
No variable stopper is used．

## How to Use Variable Stopper



1．The required number of positions can be obtained by fully turning the shaft in the counter－clockwise direction and inserting the stopper hook into the select hole of the desired contact number．

2．Do not use the variable stopper when all contacts are used．


## ［Example］

Select Hole No． 5 to set 5 positions with MR1－10－Z．
Select Hole No． 3 to set 3 positions with MR2－5－Z．
Select Hole No． 2 to set 2 positions with MR3－3－Z．
－Optional Accessories（MR，MRE series）

| Part Name |  | ツマミ／Knob |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | FB形 |  | FN形 |  |
| Dimensions |  |  |  |  |  |
|  | Part No． | 140000050598 | 140000051012 | 140000050956 | 140000050601 |
| Color | Body | Silver | Black | Silver | Black |
|  | Indicator Line | Black | White | Black | White |
| Body Material |  | Aluminium |  | Aluminium |  |

[^0]
[^0]:    OFor the hexagon wrench for FB／FN types，choose the M4 wrench（2mm）available on the market．

