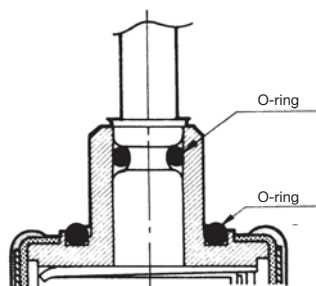


# Panel Seal

# MRE<sub>(36° Step)</sub>

## Miniature Rotary Switches

## RoHS Compliant



The panel sealing capability of the switch ensures no problem when it is left in water 1 meter deep for 30 minutes. However, do not operate the switch in water.

## ■ Features

1. The switch is designed for panel seal. The built-in O-ring prevents entry of water drops and dust through the panel.
2. Diallyl phthalate resin (**UL94V-O**), which has excellent resistance to arc and heat, and superb insulation quality is employed.
3. The terminals are molded in to ensure the permanent seal structure which completely prevents flux entry through the terminals.
4. Adoption of the wiping mechanism for the contacting area to ensure contact stability and reliability.

## ■ Specifications

Contact plating.		Silver plated	Gold plated
Rating	Max.	500mA 125VAC	
	Min.	10mA 5VAC/DC	5mA 6VDC
Initial contact resistance		10mΩ max. (1A2~4VDC)	20mΩ max. (1.5mA 200μVAC)
Dielectric strength		1,000VAC 1 minute	
Insulation resistance		100MΩ min. (500VDC)	
Electrical life		10,000 cycles	
Operating force		9.8N·cm max.	
Stopper strength		19.6N·cm	
Operating temperature range		-20~+85°C	
Storage temperature range		-40~+85°C	

## ■Part Numbering

The diagram illustrates the components of the model number **MR E 1 - 10 G - Z**:

- MR**: Series code
- E**: Actuator shape
- 1**: Number of poles
- 10**: Number of position
- G**: Contact plating
- Z**: Waterproof type

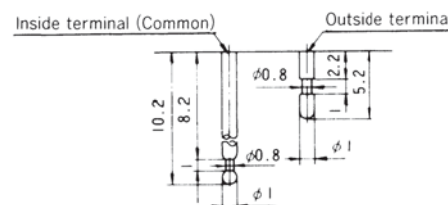
Below the diagram, the options for the last three components are listed:

Number of poles	
1	1pole
2	2poles
3	3poles
4	4poles

Number of position	
10	10position
5	5position
3	3position
2	2position

Contact plating	
None	Silver plated
G	Gold plated

## ■ Terminal Style

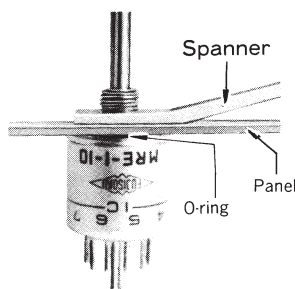


## ■ Standard Accessories

《Supplied with switch》

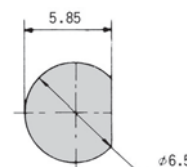
[illegible]

## ■ Panel mounting



### ■ Panel Cut-Out Dimensions

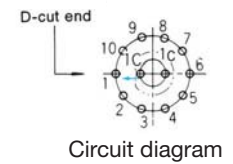
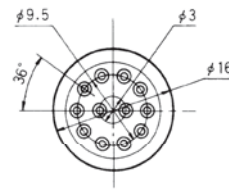
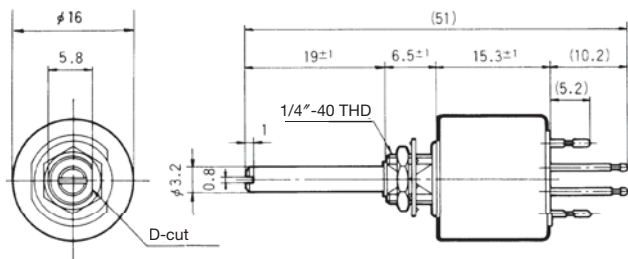
Panel thickness : 3.5 mm max.



**MRE1-10-Z**      1-pole 10-position



Terminal numbers are shown on the switch.



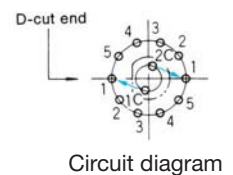
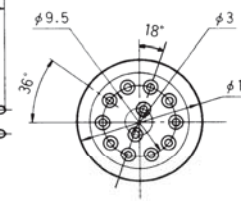
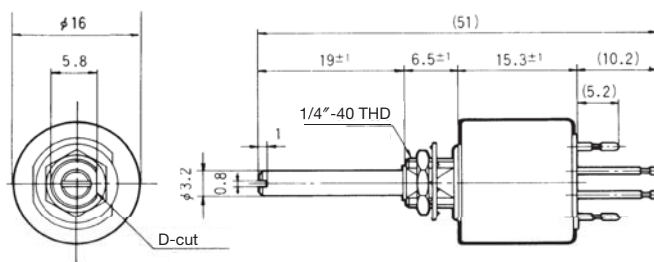
※Two Common terminals (1C) are internally short-circuited. Select either one depending on wiring arrangements.

Part No.	Number of steps	Step angle
★MRE1-10-Z	9	36°
★MRE1-10G-Z	( Reprtiton of from 1 to 10 )	

**MRE2-5-Z**      2-pole 5-position



Terminal numbers are shown on the switch.



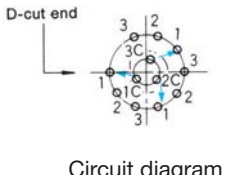
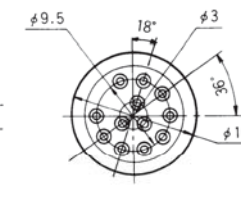
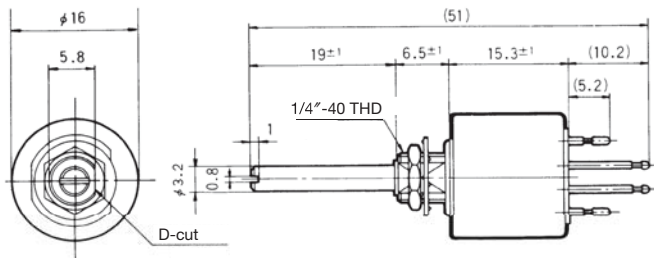
### Circuit diagram

Part No.	Number of steps	Step angle
★MRE2-5-Z	4	36°
★MRE2-5G-Z	( Repetition of from 1 to 5 )	

**MRE3-3-Z**      3-pole 3-position



Terminal numbers are shown on the switch.



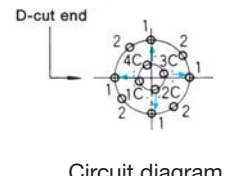
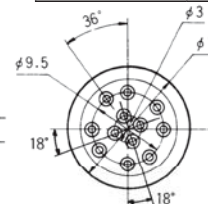
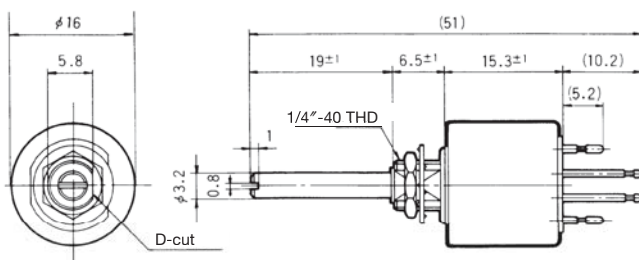
### Circuit diagram

Part No.	Number of steps	Step angle
★MRE3-3-Z	2	36°
★MRE3-3G-Z	( Repetition of from 1 to 3 )	

**MRE4-2-Z**      4-pole 2-position



Terminal numbers are shown on the switch.



Circuit diagram

Part No.	Number of steps	Step angle
★MRE4-2-Z	1	36°
★MRE4-2G-Z	( Repetition of from 1 to 2 )	

- The circuit diagrams show the switches as viewed from the terminal side with the shaft fully turned in the counter-clockwise direction.

- A wide variety of **optional accessories** are available. Specify the part number from Optional Accessories Table on page 567.

- For **Soldering Specifications** and **Flux Cleaning**, see page 572.

- ★ : Made to order products.