

# Miniature Power Relays: MY2(S)/MY4(S)/MY4Z(S)



Refer to the standards certifications and compliance section of your OMRON website for the latest information on certified models.

## Ratings and Specifications

### Ratings

#### Contact Ratings

Item	2-pole		4-pole		4-pole (bifurcated)	
	Resistive load (cos φ = 1)	Inductive load (cos φ = 0.4, L/R = 7 ms)	Resistive load (cos φ = 1)	Inductive load (cos φ = 0.4, L/R = 7 ms)	Resistive load (cos φ = 1)	Inductive load (cos φ = 0.4, L/R = 7 ms)
Rated load	5A, 250 VAC 5A, 30 VDC	2A, 250 VAC 2 A, 30 VDC	3 A, 250 VAC 3 A, 30 VDC	0.8 A, 250 VAC 1.5 A, 30 VDC	3 A, 250 VAC 3 A, 30 VDC	0.8 A, 250 VAC 1.5 A, 30 VDC
Carry current	10 A (see note)		5 A (see note)			
Max. switching voltage	250 VAC 125 VDC					
Max. switching current	10 A		5 A			
Contact materials	Ag		Au cladding + Ag alloy			
Failure rate (reference value)	5 VDC, 1 mA		1 VDC, 1 mA		1 VDC, 100 μA	

Note: Don't exceed the carry current of a Socket in use. Please see page 26.

### Characteristics

Item	All Relays
Contact resistance	100 mΩ max. (50 mΩ: 4-pole bifurcated)
Operate time	20 ms max.
Release time	20 ms max.
Max. operating frequency	Mechanical:18,000 operations/hr Electrical:1,800 operations/hr (under rated load)
Insulation resistance	100 MΩ min. (at 500 VDC)
Dielectric strength	2,000 VAC, 50/60 Hz for 1.0 min (1,000 VAC between contacts of same polarity)
Vibration resistance	Destruction:10 to 55 to 10 Hz, 0.5 mm single amplitude (1.0 mm double amplitude) Malfunction:10 to 55 to 10 Hz, 0.5 mm single amplitude (1.0 mm double amplitude)
Shock resistance	Destruction:1,000 m/s <sup>2</sup> Malfunction:200 m/s <sup>2</sup>
Endurance	See the following table.
Ambient temperature	Operating: -55°C to 70°C (with no icing)
Ambient humidity	Operating: 5% to 85%
Weight	Approx. 35 g

Note: The values given above are initial values.

### Endurance Characteristics

Pole	Mechanical life (at 18,000 operations/hr)	Electrical life (at 1,800 operations/hr under rated load)
2-pole	AC:50,000,000 operations min. DC:100,000,000 operations min.	500,000 operations min.
4-pole		200,000 operations min.
4-pole (bifurcated)	20,000,000 operations min.	100,000 operations min.

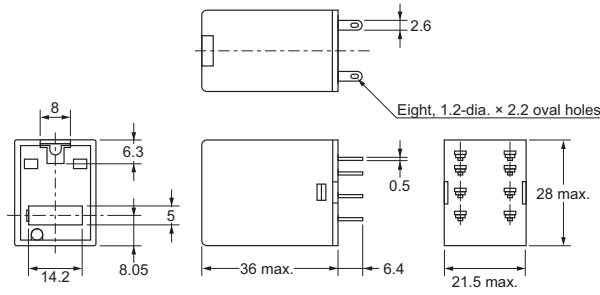
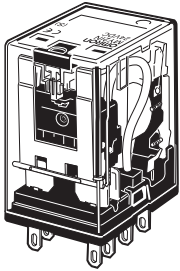
# MY(S)

## Dimensions

(Unit: mm)

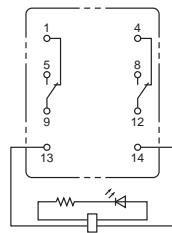
### List of Models

- MY2IN (S)
- MY2IN-D2 (S)

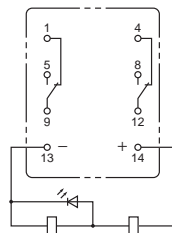


Terminal Arrangement/Internal Connections (Bottom View)

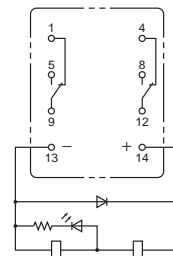
MY2IN(S)  
(AC Model)



MY2IN(S)  
(DC Models)

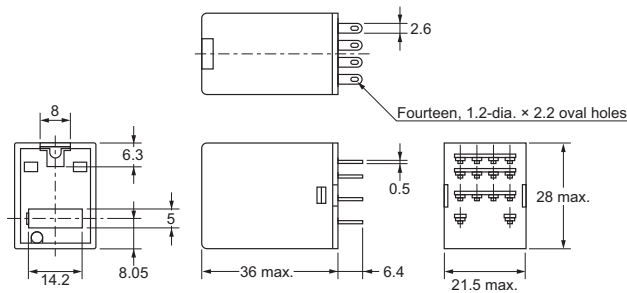
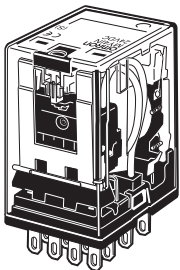


MY2IN-D2(S)  
(DC Models Only)



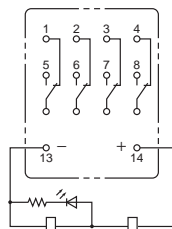
**Note:** For the DC models, check the coil polarity when wiring and wire all connections correctly.

- MY4 (Z) IN (S)
- MY4 (Z) IN-D2 (S)
- MY4 (Z) IN-CR (S)

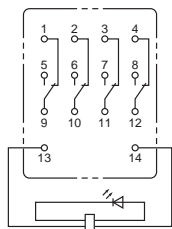


Terminal Arrangement/Internal Connections (Bottom View)

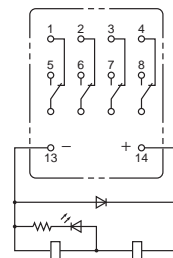
MY4(Z)IN(S)  
(DC Models)



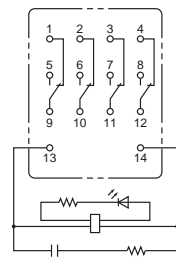
MY4(Z)IN(S)  
(AC Models)



MY4(Z)IN-D2(S)  
(DC Models Only)



MY4(Z)IN-CR(S)  
(AC Models Only)



**Note:** For the DC models, check the coil polarity when wiring and wire all connections correctly.