

# Hermetically Sealed Relay MY4H

## Hermetically Sealed Relay Ideal for Hazardous Locations

- Class 1 Division 2 approved.
- Fully hermetically sealed for hazardous locations.
- Cadmium-free contacts for environment-friendly use.
- Models with bifurcated contact also available.
- Conforms to UL508 and CSA 22.2.



## Ordering Information

| Type                | Contact form      | Model                           |
|---------------------|-------------------|---------------------------------|
|                     |                   | Plug-in socket/solder terminals |
| Hermetically sealed | 4PDT              | MY4H-US                         |
|                     | 4PDT (bifurcated) | MY4ZH-US                        |

### Model Number Legend:

MY-□□□-□-□  
1 2 3 4 5

**1. Number of Poles**

4: 4 poles

**2. Contact**

Blank: Single

Z: Bifurcated

**3. Enclosure ratings**

H: Hermetically sealed

**4. Approval**

US: Class 1 Division 2 approval

**5. Rated voltage**

12 VDC, 24 VDC, 24 VAC, 110/120 VAC

## Specifications

### Ratings

#### Coil

| Rated voltage (V) | Rated current (mA) |          | Coil resistance (Ω) | Must operate voltage | Must release voltage | Max. voltage | Power consumption  |
|-------------------|--------------------|----------|---------------------|----------------------|----------------------|--------------|--------------------|
|                   | 50 Hz              | 60 Hz    |                     |                      |                      |              |                    |
| DC                | 12                 | 75       | 160                 | 80% max.             | 10% min.             | 110%         | 900 mW             |
|                   | 24                 | 36.9     | 650                 |                      |                      |              |                    |
| AC                | 110/120            | 9.9/10.8 | 4,430               | 30% min.             |                      |              | 0.9-1.1 VA (60 Hz) |
|                   | 24                 | 53.8     | 180                 |                      |                      |              |                    |

## Contact Ratings

|                        |                                   |                                 |
|------------------------|-----------------------------------|---------------------------------|
| Contact material       |                                   | Ag alloy                        |
| Rated load             | Resistive<br>p.f.=1               | 110 VAC, 3 A<br>24 VDC, 3A      |
|                        | Inductive<br>p.f.=0.4<br>L/R-7 ms | 110 VAC, 0.8 A<br>24 VDC, 1.5 A |
| Rated carry current    |                                   | 3 A                             |
| Max. switching voltage |                                   | 125 VAC, 125 VDC                |
| Max. switching current |                                   | 3 A                             |
| Max. switching power   |                                   | 330 VA<br>72 W                  |

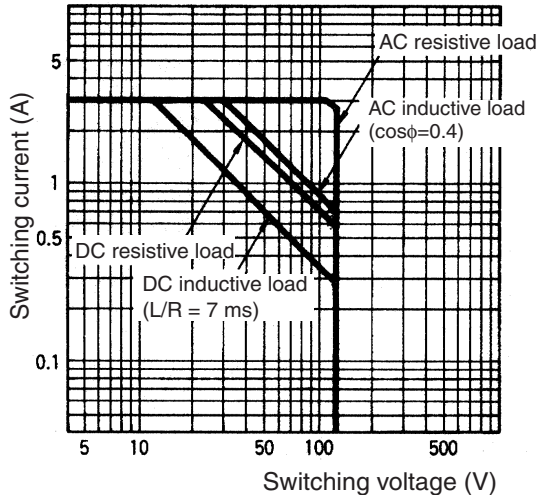
## ■ Characteristics

|                          |             |  |
|--------------------------|-------------|--|
| Contact resistance       |             | 50 mΩ max.   |
| 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      |             | 1,000 VAC, 1 min between coil and contacts<br>1,000 VAC, 1 min between contacts of different polarity<br>700 VAC, 1 min between contacts of same polarity  |
| Vibration resistance     | Destruction | 10 to 55 Hz, 0.5 mm single amplitude   |
|                          | Malfunction | 10 to 55 Hz, 0.5 mm single amplitude   |
| Shock resistance         | Destruction | 1,000 m/s <sup>2</sup>   |
|                          | Malfunction | When energized: 200 m/s <sup>2</sup><br>When not energized: 200 m/s <sup>2</sup>   |
| Endurance                |             | Mechanical:     Single contact: 50,000,000 operations<br>Bifurcated contact: 5,000,000 operations<br>Electrical:       100,000 operations. (Single contact)<br>50,000 operations. (Bifurcated contact) |
| Ambient temperature      | Operating   | -25 to 60° C   |
|                          | Storage     | -25 to 60° C   |
| Ambient humidity         |             | 5% to 85%  |
| Weight                   |             | Approx. 50 g   |

# Characteristic Data

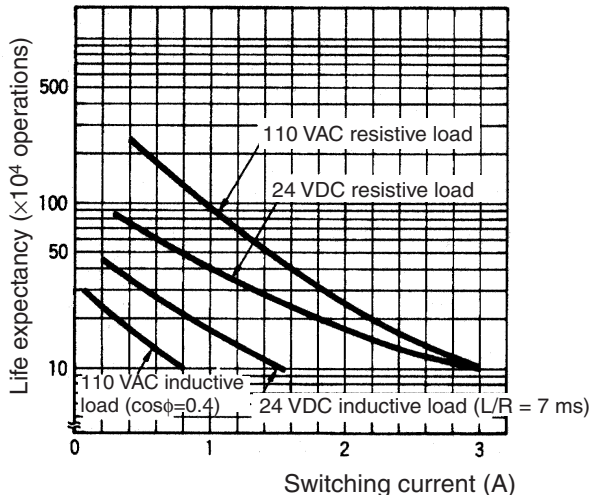
## Maximum Switching Power

MY4(Z)H



## Endurance

MY4H



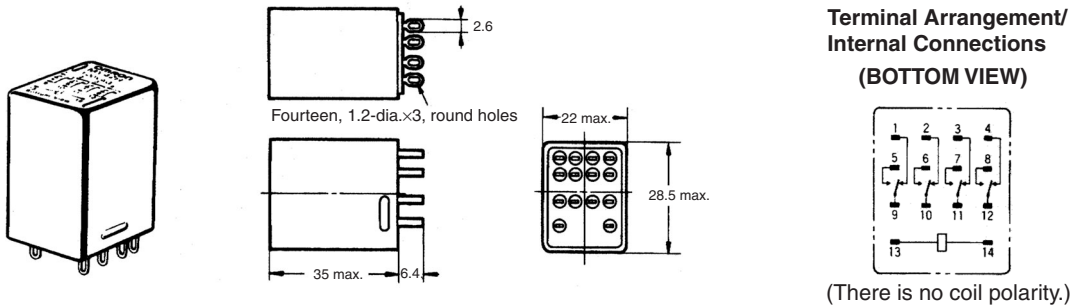
Note The endurance is for bifurcated contact models.

# Dimensions

Unit: mm

## Solder Terminal Models

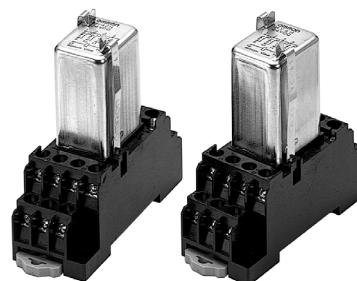
MY4(Z)H



## ■ Socket

### Track-mounted Socket Conforming to Class 1 Division 2

- Special Socket with Class 1 Division 2 approval.
- Holding clips contribute to safety by preventing the Relay falling out of the Socket due to vibration.



### Ordering Information

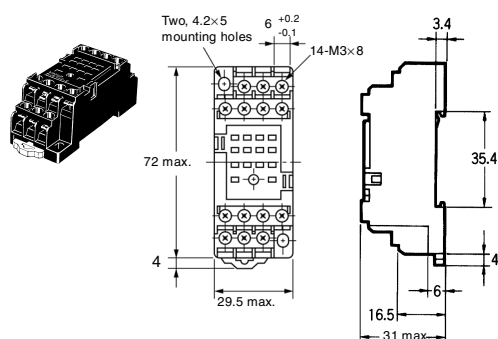
| Item                 | Pole | Model    |
|----------------------|------|----------|
| Track-mounted socket | 4    | PYF14A-E |

- Note:** 1. Class 1 Division 2 approval is obtained for use with the MY4(Z)H Relay.  
 2. Clips are not included.

### Dimensions

Unit: mm

#### PYF14A-E



Terminal Arrangement/  
Internal Connections  
(Top View)

Mounting Holes

Two, M3, M4, or 4.5-dia holes

(TOP VIEW)

**Note:** Track mounting is also possible.

## Approval Tables

UL recognized type (File no. E216067)

| Type | Contact form | Coil ratings              | Contact ratings  |
|------|--------------|---------------------------|--|
| MY4H | 4PDT         | 6 - 24 VAC<br>6 - 125 VDC | 0.8 A - 120 VAC general purpose<br>1.5 A - 24 VDC general purpose<br>3.0 A - 120 VAC resistive<br>3.0 A - 24 VDC resistive |

CSA certified type (File no. LR 31928)

| Type | Contact form | Coil ratings              | Contact ratings  |
|------|--------------|---------------------------|--|
| MY4H | 4PDT         | 6 - 24 VAC<br>6 - 125 VDC | 0.8 A - 120 VAC general purpose<br>1.5 A - 24 VDC general purpose<br>3.0 A - 120 VAC resistive<br>3.0 A - 24 VDC resistive |

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To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

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