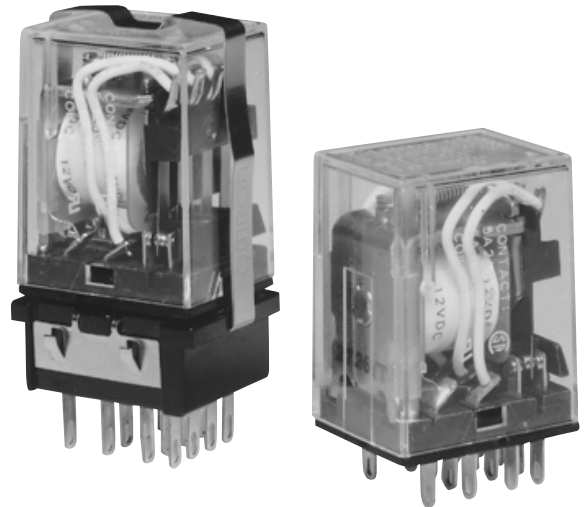


- Designed small, 2- and 3-pole types break 5 A loads and 4-pole type, 3 A load
- High reliability, long life
- Ultra-high sensitivity with quick response
- High vibration/shock resistance
- 3- and 4-pole types have an arc barrier
- UL and CSA approved
- Withstands dielectric strength of 2,000 V
- Relays with high-capacity, LED indicator, diode surge suppression, push-to-test button, or RC circuit are available
- Changes due to aging are negligible because of use of special magnetic materials, thus ensuring long continuous holding time
- Little change in characteristics such as contact follow, contact pressure, etc., throughout long life



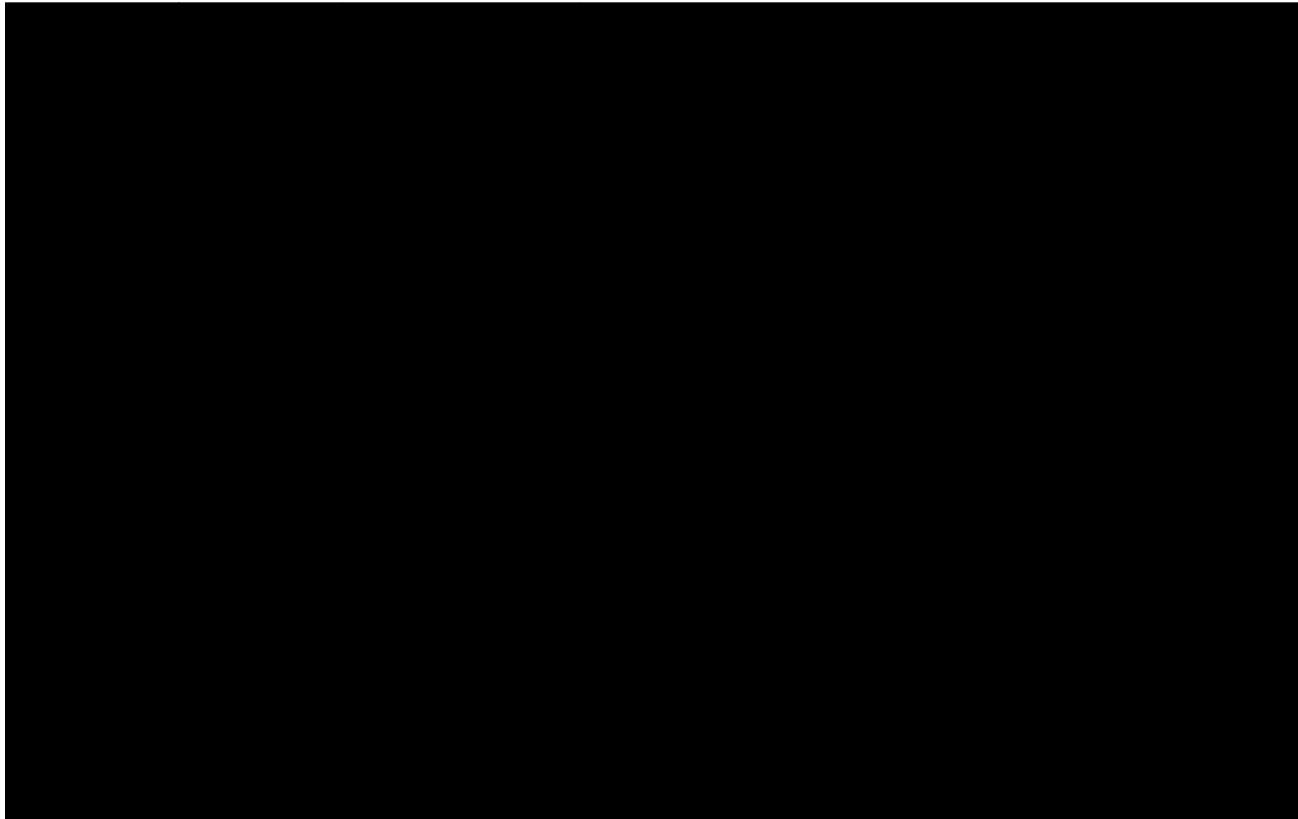
## Ordering Information

To Order: Select the part number and add the desired coil voltage rating (e.g., MY4-DC6).

Type	Terminal	Contact form	Construction	Part number							
				Single contact			Bifurcated contact				
				Standard bracket mounting	Upper mounting bracket	Lower mounting bracket	Standard bracket mounting	Upper mounting bracket	Lower mounting bracket		
Standard	Plug-in/solder	DPDT	Unsealed	MY2	MY2F	MY2S	MY2Z	MY2ZF	MY2ZS		
				MY3	MY3F	MY3S	—	—	—		
				MY4	MY4F	MY4S	MY4Z	MY4ZF	MY4ZS		
		PCB		DPDT	MY2-02	—	—	MY2Z-02	—	—	
					MY3-02	—	—	—	—	—	
					MY4-02	—	—	MY2Z-02	—	—	
	Plug-in/solder	4PDT	Sealed	MYQ4	—	—	MYQ4Z	—	—		
				MYQ4-02	—	—	MYQ4Z-02	—	—		
				—	—	—	—	—	—		
		PCB		4PDT	Hermetically Sealed	MY4H	—	—	MY4ZH	—	—
						MY4H-0	—	—	MY4ZH-0	—	—
						—	—	—	—	—	—

- Note:
1. For SEV approved type, order the following: MY4-SV-DC6. (Lloyd's Register approval. See "Approvals" section.)
  2. To order connecting sockets and mounting tracks, see "Accessories" section.
  3. AgCdO contacts are also available (MY2E, MY3E, MY4E). Contact your OMRON sales representative for details.

Ordering information (continued)



Type	Terminal	Contact form	Part number
Latching	Plug-in	DPDT	<b>MY2K-US</b>
	PC board		<b>MY2K-02-US</b>

- Note:
1. For SEV approved type, order as the following: MY4-SV-DC6. (Lloyd's Register approval. See "Approvals" section.)
  2. To order connecting sockets and mounting tracks, see "Accessories" section.
  3. AgCdO contacts are also available. Contact your OMRON sales representative for details.
  4. \* DC coils only  
 \*\* AC coils only

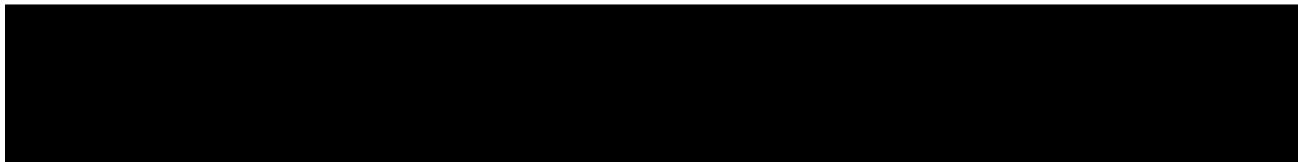
■ **ACCESSORIES**

**Connecting Sockets**

To Order: Select the appropriate part numbers for sockets, clips, and mounting tracks (if required) from the available types chart.

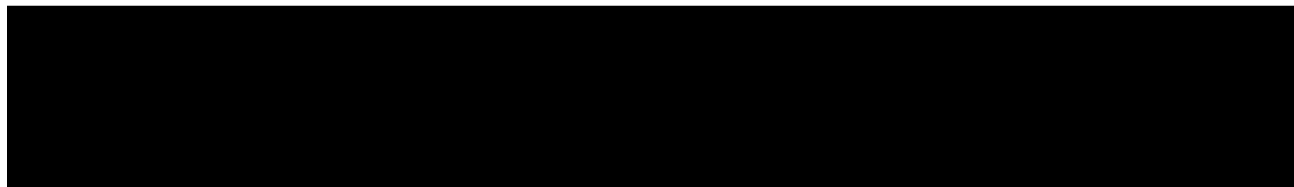
**Available Types**

**Track mounted sockets**

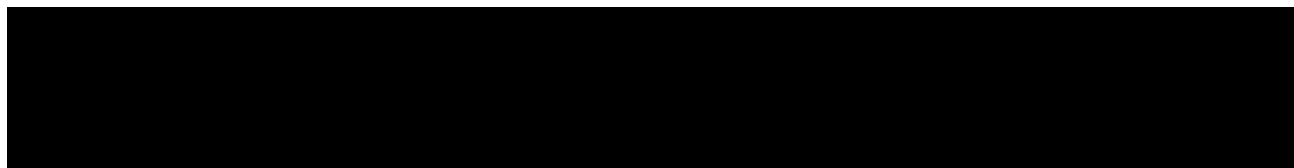


\* Track mounted socket can be used as a front connecting socket.

**Back connecting sockets**



Note: Types PYP-18, PTP-12 and PTP-10 may be cut to any desired length.

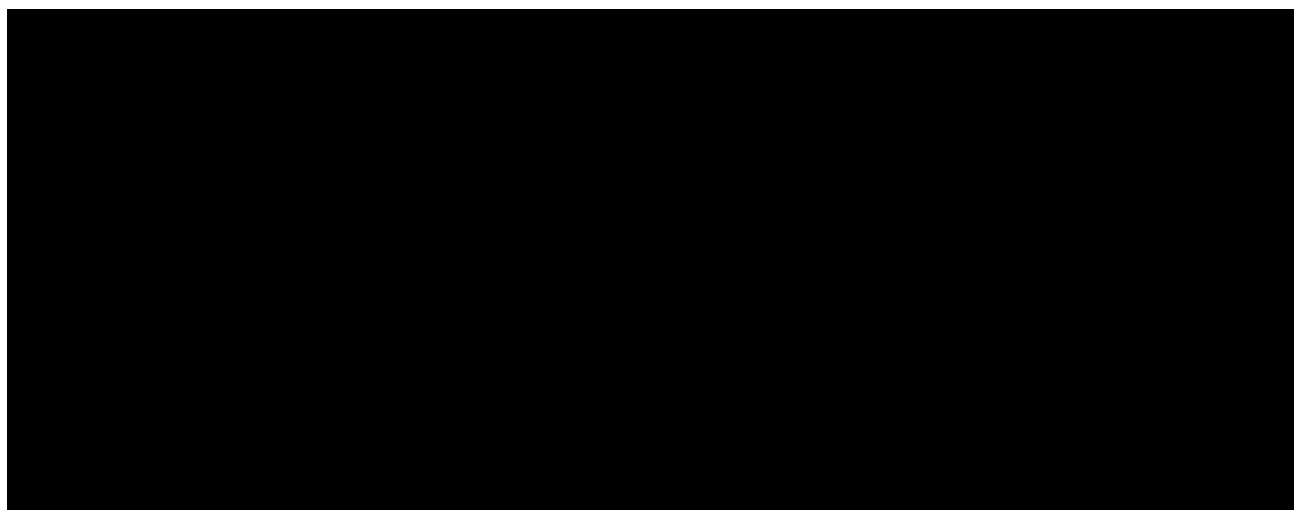


## Specifications

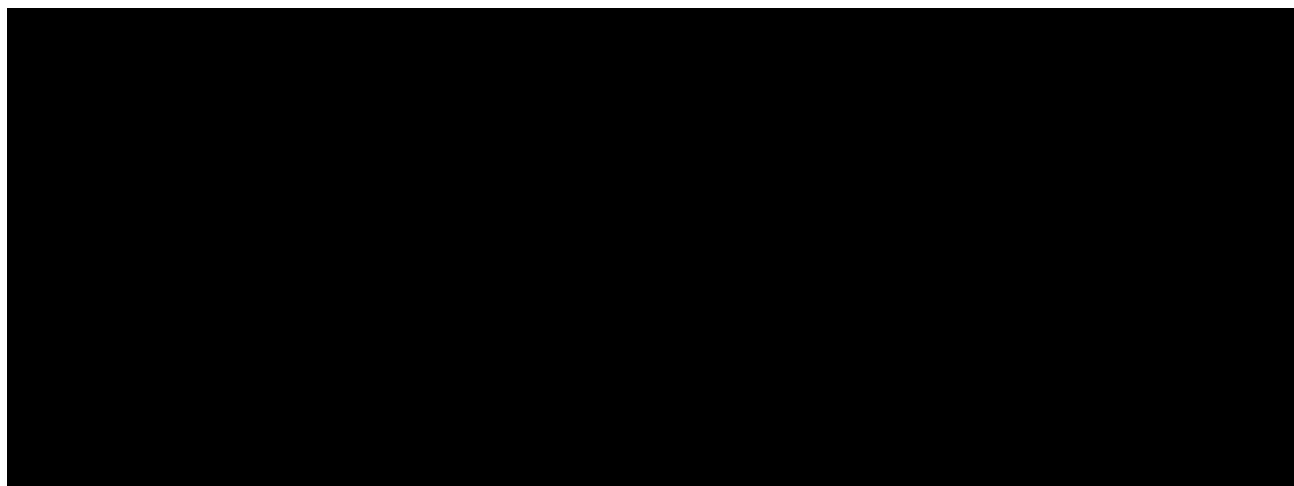
---

■ **CONTACT DATA**

**Non-latching – Unsealed**



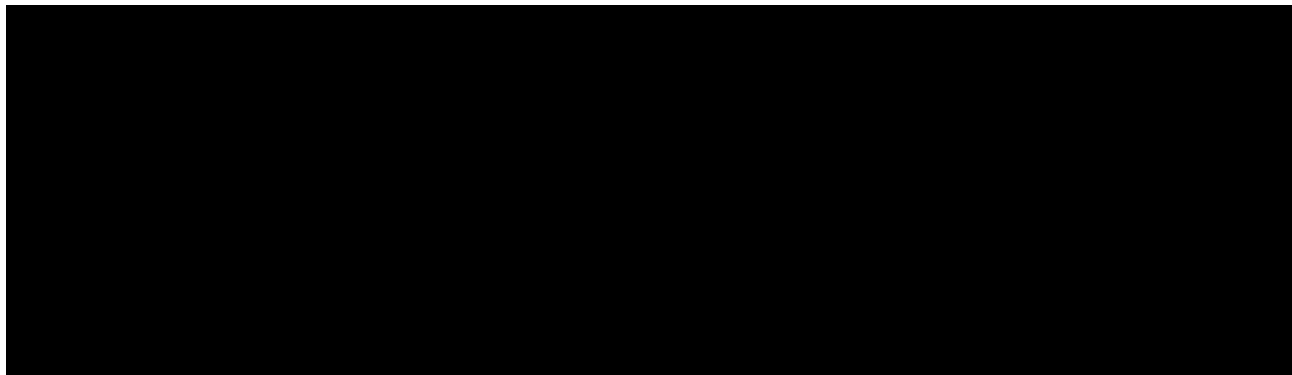
**Non-latching – Sealed/Hermetically sealed**



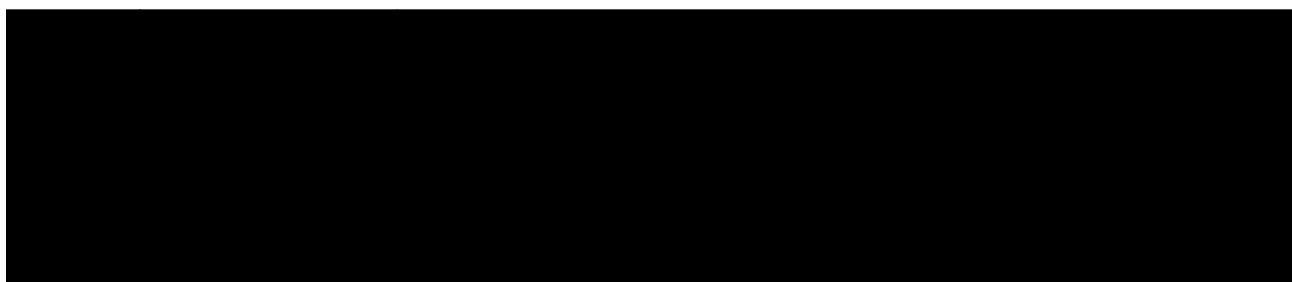
Note: P level:  $\lambda_{60} = 0.1 \times 10^{-6}/\text{operation}$

■ COIL DATA

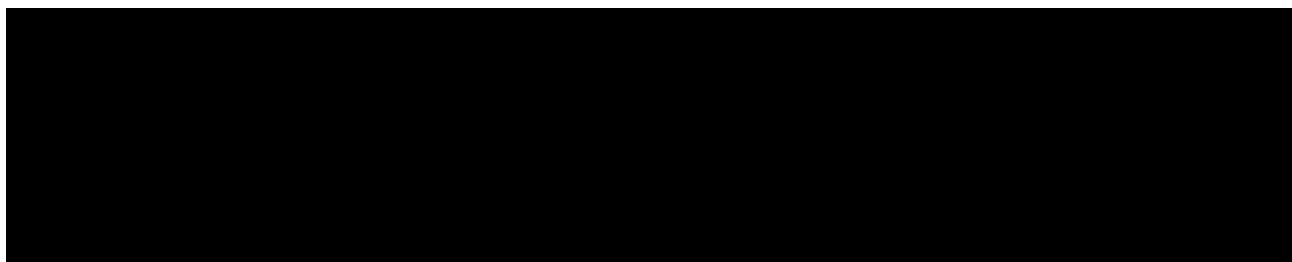
Non-latching – AC



Non-latching – DC



Latching – AC



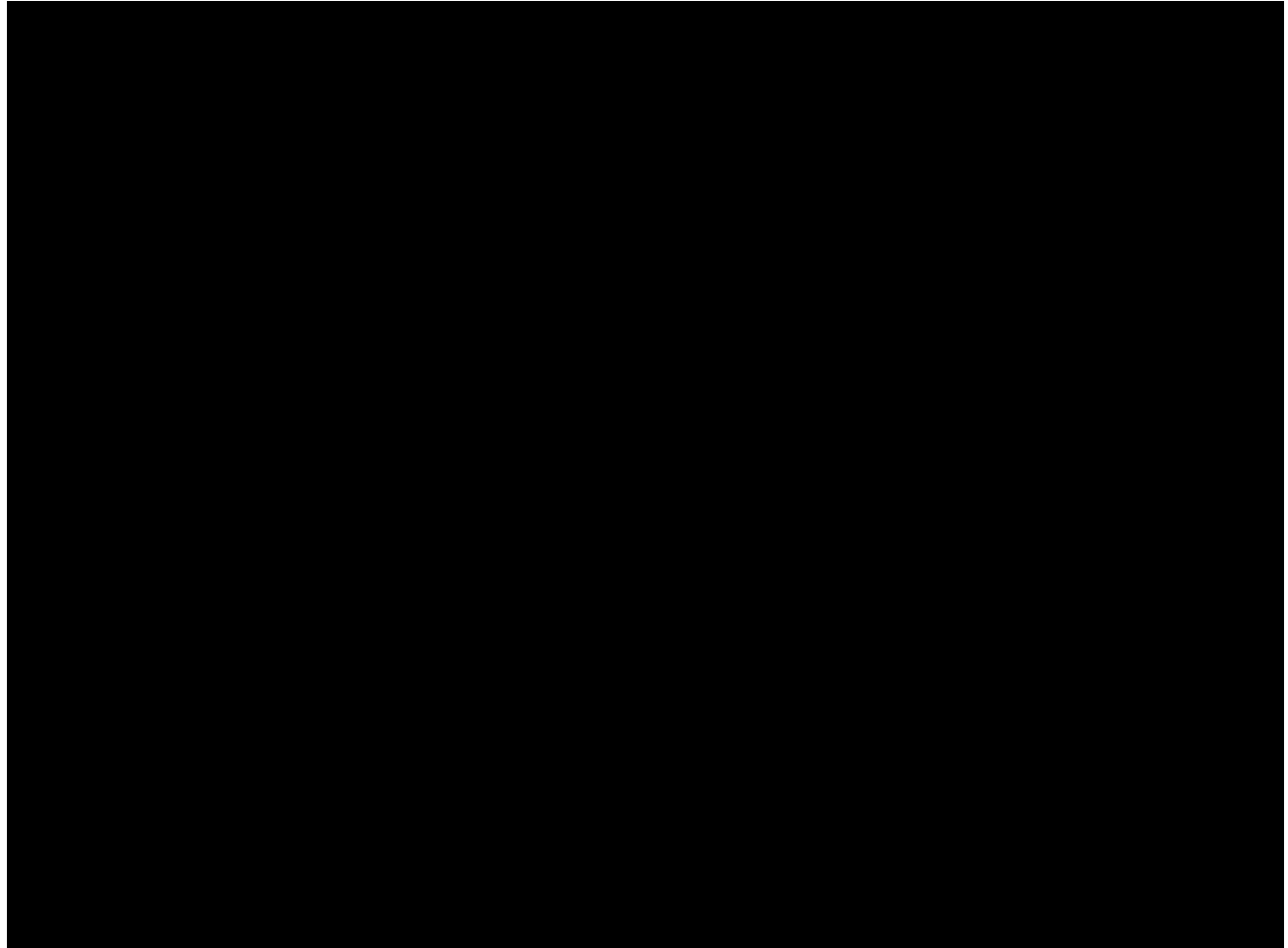
Latching – DC

Rated voltage (V)	Rated current (mA)		Coil resistance (Ω)		Pick-up voltage (% of rated voltage)	Dropout voltage	Maximum voltage	Power consumption (VA, W)	
	Set coil	Reset coil	Set coil	Reset coil				Set coil	Reset coil
6	230	100	26	60	80% max.	80% max.	110% max.	Approx. 1.30	Approx. 0.06
12	110	50	110	235					
24	52	25	470	940					

- Note:
1. The rated current and coil resistance are measured at a coil temperature of 23°C (73°F) with tolerances of +15%, -20% for AC rated current, and ±15% for DC rated coil resistance.
  2. The AC coil resistance and inductance are reference values at 60 Hz.
  3. The performance characteristics are measured at a coil temperature of 23°C (73°F).
  4. Because the coil is designed for low power consumption, connect a bleeder (if necessary after confirming the leakage current), when the coil is driven by an SCR.
  5. For AC type latching coils, the rated current values are half-wave rectified current values measured with a DC ammeter.

■ CHARACTERISTICS

Non-latching



Latching

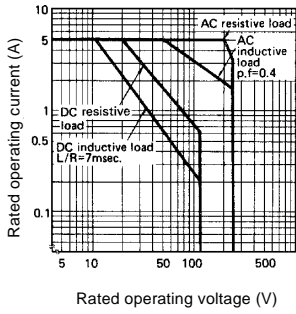
Contact resistance		50 mΩ max.
Operate time		AC: 30 ms max.; DC: 15 ms max.
Release time		AC: 30 ms max.; DC: 15 ms max.
Operating frequency	Mechanically	18,000 operations/hour
	Under rated load	1,800 operations/hour
Insulation resistance		100 MΩ min. (at 500 VDC)
Dielectric strength		1,500 VAC, 50/60 Hz for 1 minute 1,000 VAC, 50/60 Hz for 1 minute between contacts of same polarity, and between set and reset coils
Vibration	Mechanical durability	10 to 55 Hz, 1.00 mm (0.04 in) double amplitude
	Malfunction durability	10 to 55 Hz, 1.00 mm (0.04 in) double amplitude
Shock	Mechanical durability	1,000 m/s <sup>2</sup> (approx. 100 G)
	Malfunction durability	200 m/s <sup>2</sup> (approx. 20 G)
Ambient temperature	Operating	-55° to 70°C (-67° to 158°F)
Humidity		45% to 85% RH
Service Life	Mechanically	100 million operations min. (at operating frequency of 18,000 operations/hour)
	Electrically	See "Characteristic Data"
Weight		Approx. 30 g (1.06 oz)

Note: Data shown are of initial value.

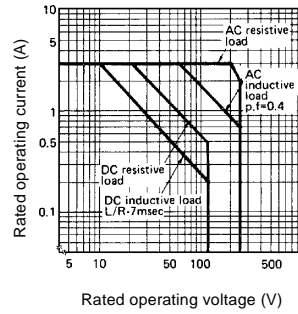
**CHARACTERISTIC DATA**

**Maximum switching capacity – Non-latching**

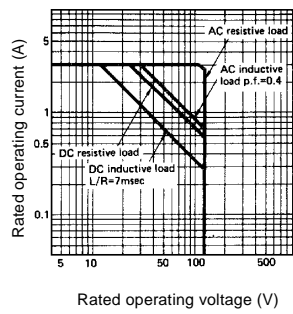
**MY2, MY3**



**MY4**



**MY4(Z)H**

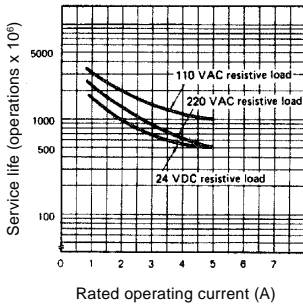


**MYQ4(Z)H**

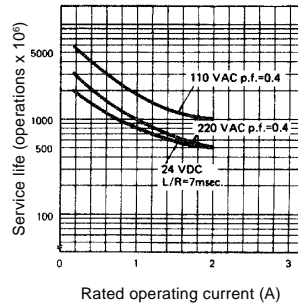


**Electrical service life**

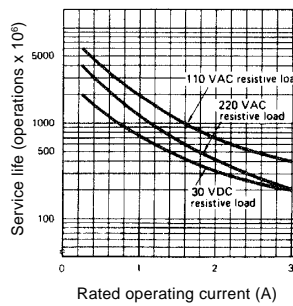
**MY2, MY3 (Resistive load)**



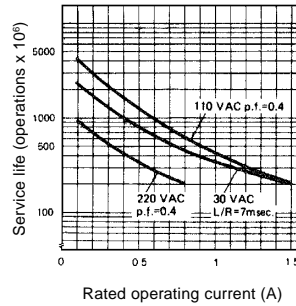
**MY2, MY3 (Inductive load)**



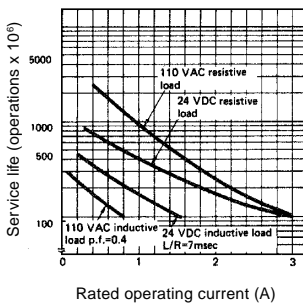
**MY4 (Resistive load)**



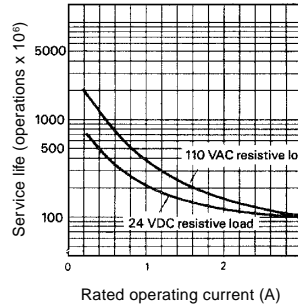
**MY4 (Inductive load)**



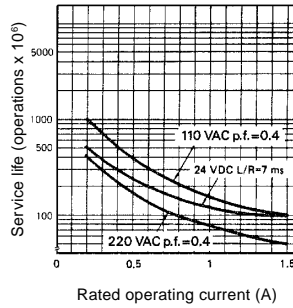
**MY4H**



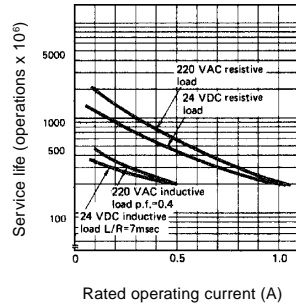
**MY4Z (Resistive load)**



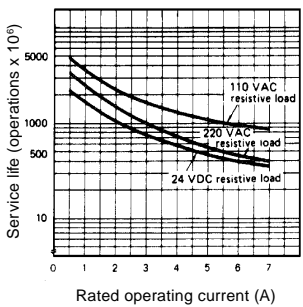
**MY4Z (Inductive load)**



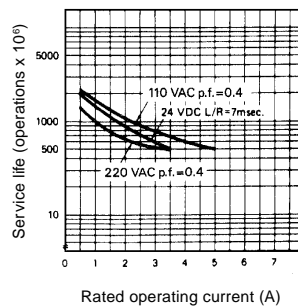
**MYQ4**



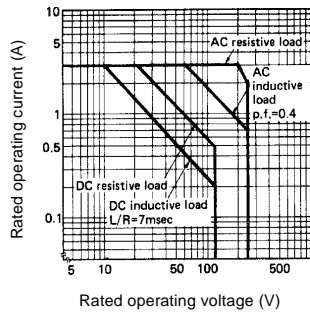
**MY2-Y (Resistive load)**



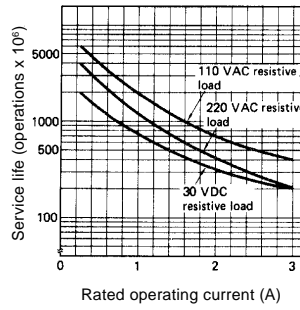
**MY2-Y (Inductive load)**



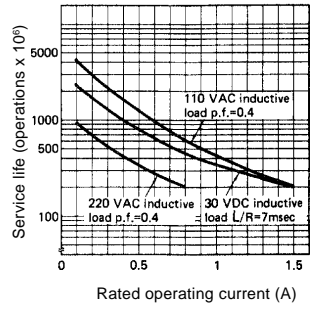
**Maximum switching capacity – Latching**  
**MY2K(-02)-US**



**Electrical service life**  
**MY2K(-02)-US**  
(Resistive load)



(Inductive load)

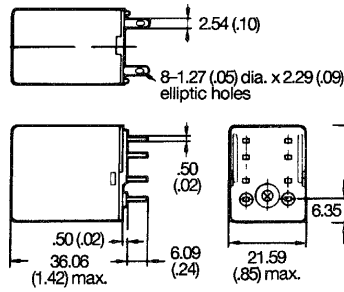


**Dimensions**

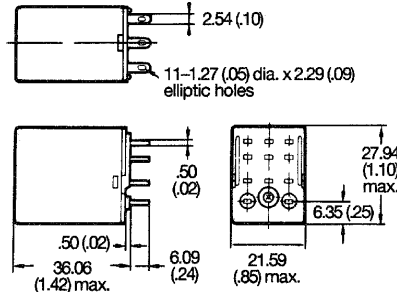
Unit: mm (inch)

■ RELAYS

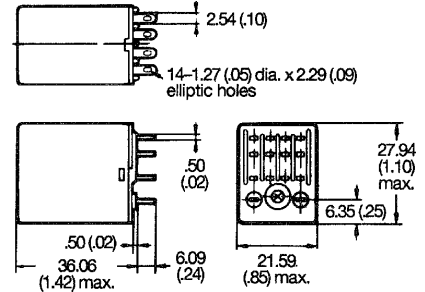
**MY2**



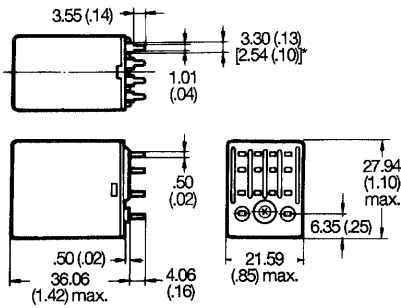
**MY3**



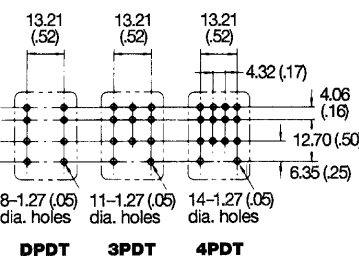
**MY4**



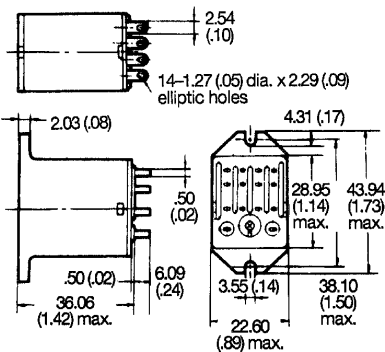
**MY-02**



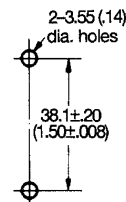
**Mounting holes**



**MYF**



**Mounting holes**

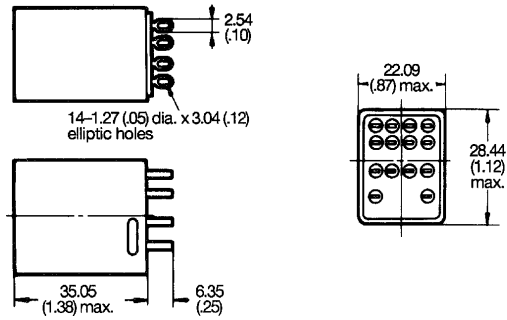


Note: The above dimensioned drawing shows the 4-pole type. The dimensions of the 2- and 3-pole types are identical to the 4-pole type.

Unit: mm (inch)

■ RELAYS (continued)

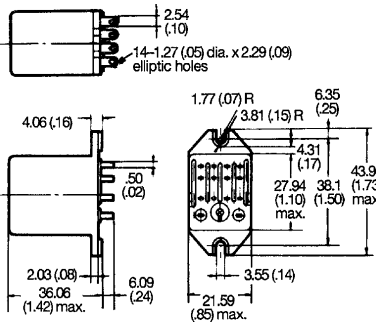
MY(Z)H



MY4(Z)H-0



MY■-5

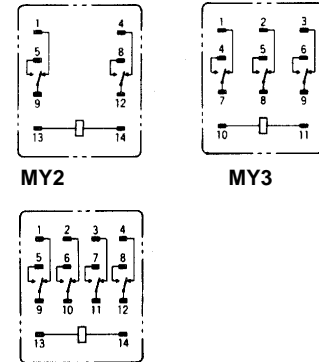


Mounting holes



Terminal arrangement

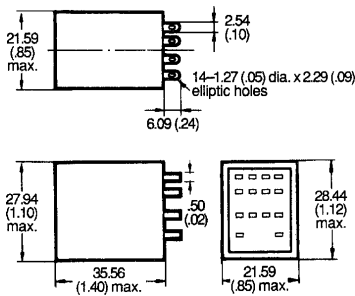
(Bottom view)



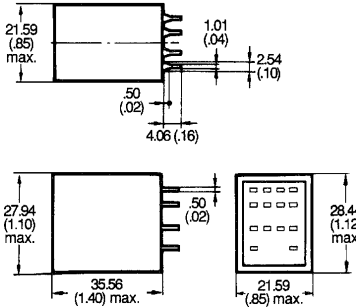
MY4, MYQ4(Z), MY4(Z)H, MY4H-0

Note: The above dimensioned drawing shows the 4-pole type. The dimensions of the 2- and 3-pole types are identical to the 4-pole type.

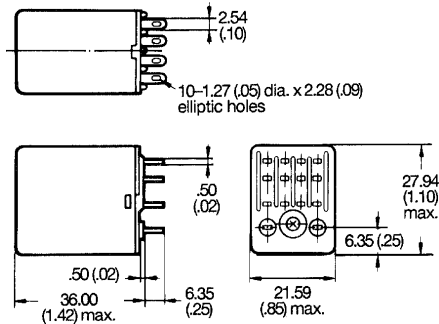
MYQ4(Z)



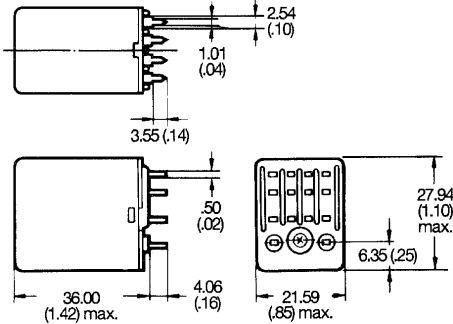
MYQ4(Z)-02



MY2K-US

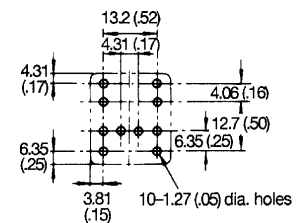


MY2K-02-US



Mounting holes

(Bottom view)



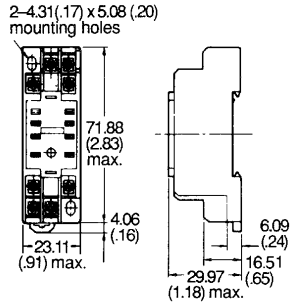


Unit: mm (inch)

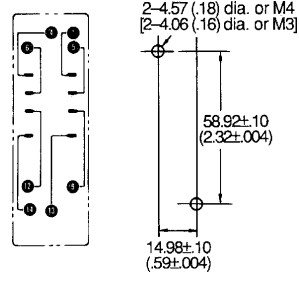
■ ACCESSORIES

Track mounted sockets (UL File No. E87929) (CSA Report No. LR46088)

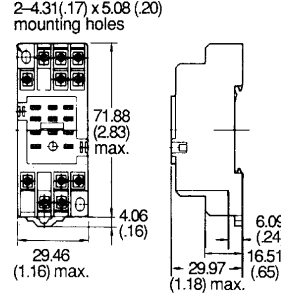
PYF08A-E



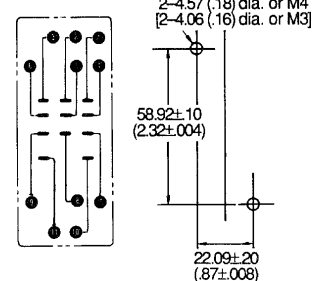
Terminal arrangement/  
mounting holes  
(Top view)



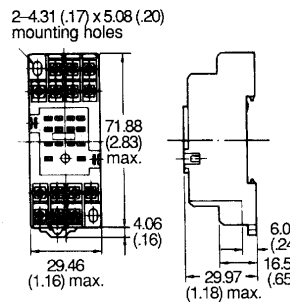
PYF11A



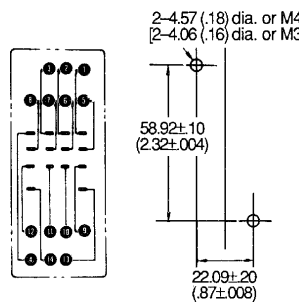
Terminal arrangement/  
mounting holes  
(Top view)



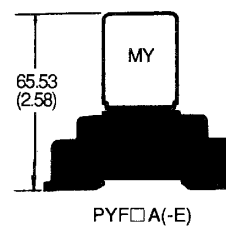
PYF14A-E



Terminal arrangement/  
mounting holes  
(Top view)

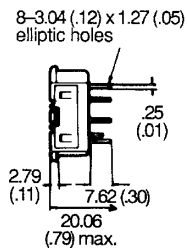


Mounting height of  
relay with socket

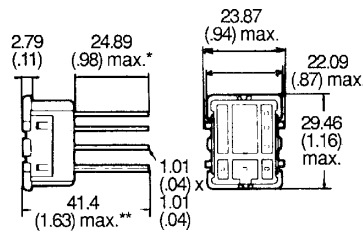


Back connecting socket (UL File No. E87929) (CSA Report No. LR46088) – DPDT

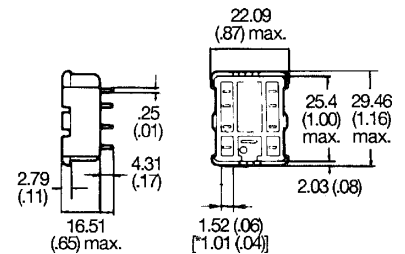
PY08



PY08QN

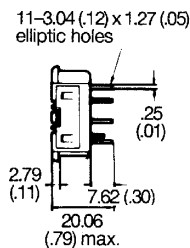


PY08-02

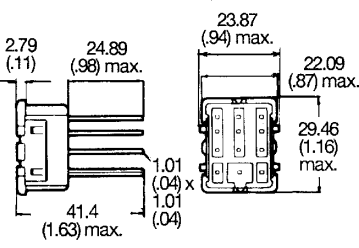


Back connecting socket (UL File No. E87929) (CSA Report No. LR46088) – 3PDT

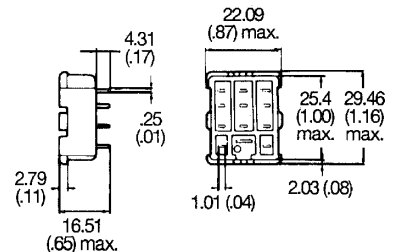
PY11



PY11QN



PY11-02



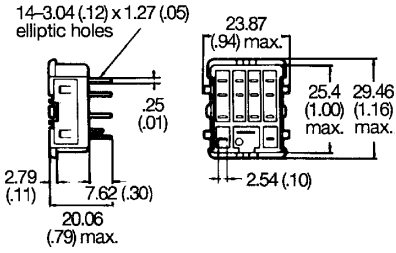
Note: 1. UL/CSA does not apply to wire wrap (Q) type sockets.  
2. Value in brackets is for MY■CR.

Unit: mm (inch)

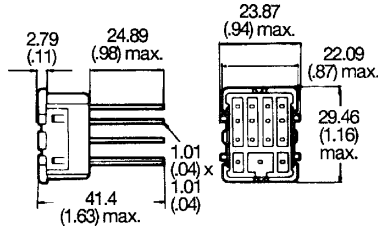
■ ACCESSORIES (continued)

Back connecting socket (UL File No. E87929) (CSA Report No. LR46088) – 4PDT

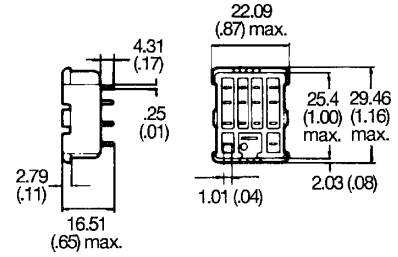
PY14



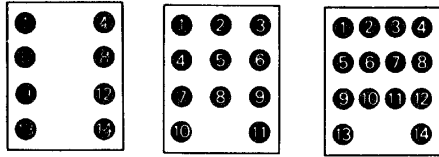
PY14QN



PY14-02



Terminal arrangement (Bottom view)

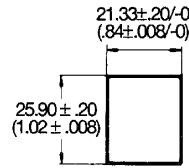


DPDT

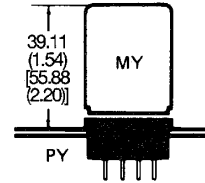
3DPT

4DPT

Panel cutout



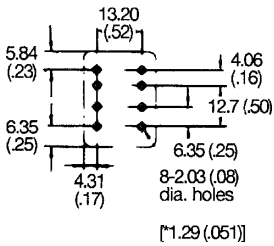
Mounting height of relay with socket



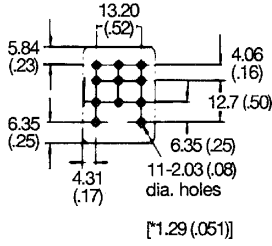
Note: Value in brackets is for MY■-CR.

Mounting holes

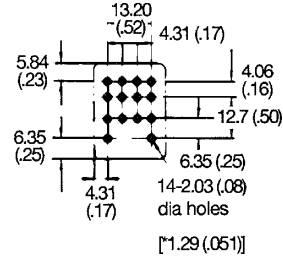
DPDT



3PDT



4PDT

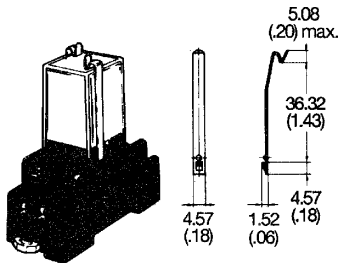


\* For types with suffix - 02.

Relay hold-down clip

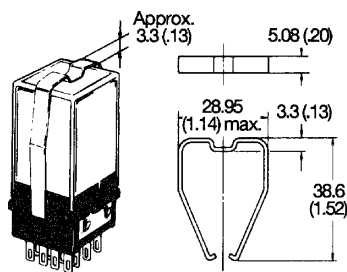
PYC-A1

for PYF■A socket



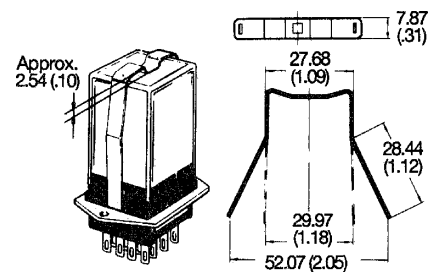
PYC-P

for PY■ socket



PYC-S

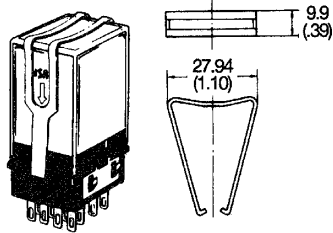
for relay mounting plates



**Relay hold-down clip**

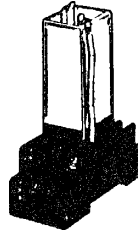
**PYC-P2**

for test button self-contained type with PY■A socket



**Y92-HC**

for RC circuit

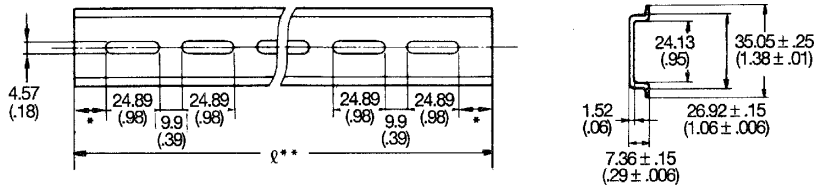


**PYC-1**

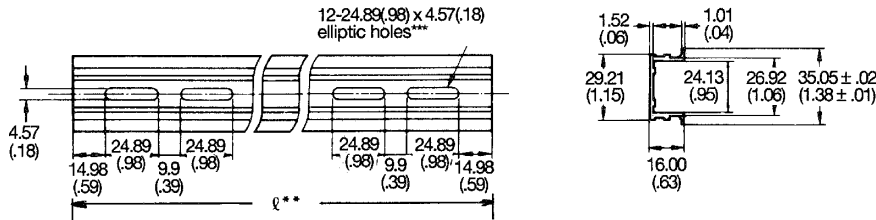
for RC circuit



**PFP-100N/PFP-50N mounting track**



**PFP-100N2 mounting track**

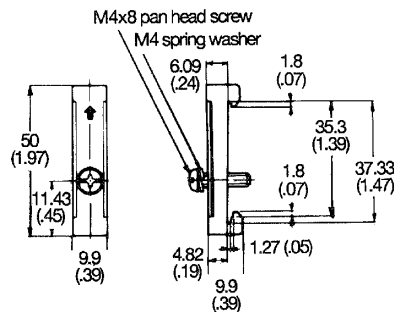


\* This dimension is 14.99 mm (0.59 in) on both ends in the case of PFP-100N, but on one end in the case of PFP-50N.

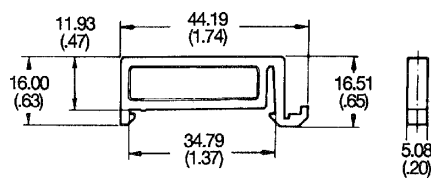
- \*\* L = Length
- PFP-50N ..... L = 497.84 mm (19.60 in)
- PFP-100N ..... L = 990.60 mm (39.00 in)
- PFP-100N2 ..... L = 990.60 mm (39.00 in)

\*\*\* A total of twelve 24.89 x 4.57 mm (0.98 x 0.18 in) elliptical holes are provided, with six holes cut from each end of the track at a pitch of 9.91 (0.39) between holes.

**PFP-M end plate**



**PFP-S spacer**

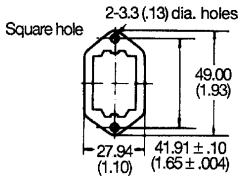


Unit: mm (inch)

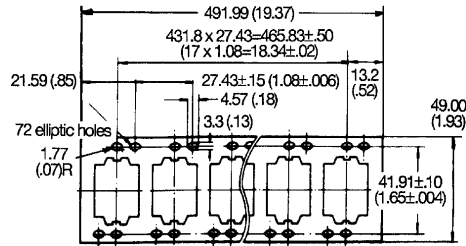
■ **ACCESSORIES (continued)**

Socket mounting plates [t=1.52 (.06)]

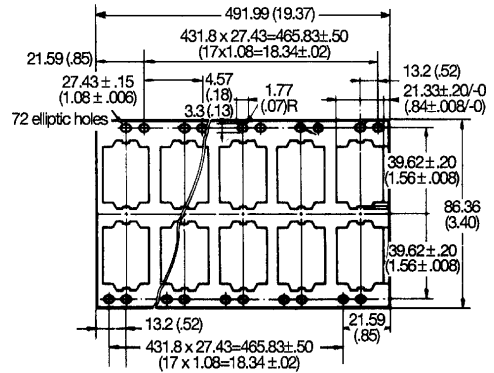
PYP-1



PYP-18



PYP-36



	Number of socket specs.		
Socket needed	1	18	36
PY08, PY11, PY11QN, PY14, PY4QN	PYP-1	PYP-18	PYP-36

■ **RELAY OPTIONS**

**LED Indicator**

Specifications and dimensions same as the standard type with the following exception. Because an LED indicator is employed as the operation indicator, the rated current is approximately 3.8 mA higher in the DC types and 0.5 to 5 mA higher in the AC types than in the standard type.

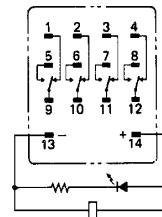
Ambient operating temperature: -55° to 60°C (-67° to 140°F).

Green LED ..... DC  
Red LED ..... AC

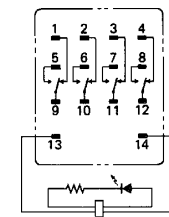
**Terminal arrangement/Internal connections (Bottom view)**

MY4N

DC coil rating type



AC coil rating type

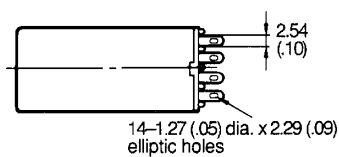


- Note:
1. In MY2N and MY3N, only the contact circuit is different from the illustration below. The coil terminals 10 and 11 of MY3N become (-) and (+), respectively.
  2. Pay special attention to the polarities when using the DC type.
  3. The AC coil-type is provided with a self-diagnostic function that detects a breakage in the coil.

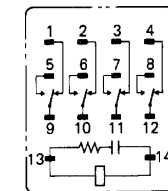
**RC Circuit**

Specifications and dimensions same as the standard type with the following exceptions.

The panel cutout dimensions are the same as those of the standard type. However, the height is higher by 17.02 mm (0.67 in).



**Terminal arrangement/Internal connections (Bottom view)**

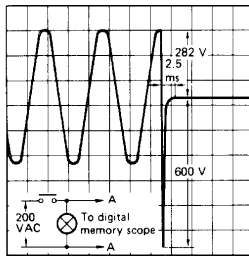


RC circuit  
C : 0.033 μF  
R : 120 Ω

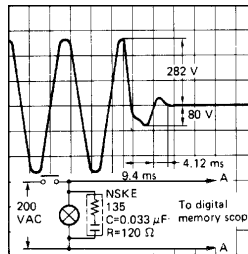
- Note:
1. The above dimensioned drawing shows the 4-pole type. The dimensions of the 2- and 3-pole types are identical to the 4-pole type.
  2. Available on AC versions only.
  3. Terminal arrangement/internal connections: MY2-Y is the same as the standard type; MY2N-Y is the same as the LED indicator type.

**Characteristic Data**

**Without RC circuit**

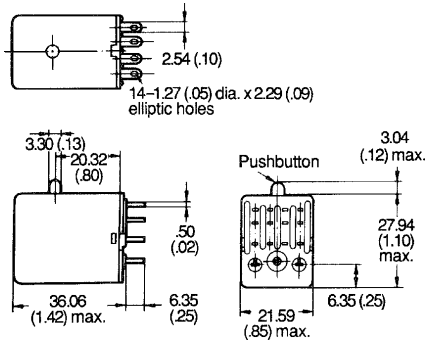


**With RC circuit**



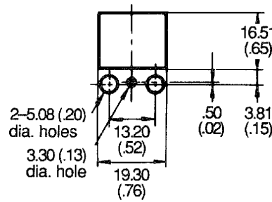
**Push-to-test button**

**MY■12**



**Mounting holes**

When mounting the relay, use the connecting socket PYC-P2 shown in "ACCESSORIES" section. The mounting hole dimensions shown here are applicable to the relay with mounting stud.



Note: The dimension drawings show the 4-pole type. The dimensions of the 2- and 3-pole types are identical to the 4-pole type.

**Diode Surge Suppression**

Specifications and dimensions same as the standard type with the following exceptions.

Terminal arrangement/internal connections: MY2(N)-D(2) is the same as the MY4(N)-D(2) with the exception of the contact configuration.

Ambient operating temperature: -55° to 60°C (-67° to 140°F).

**Terminal arrangement/Internal connections (Bottom view)**

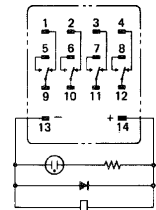
**MY4-D**  
6, 12, 24, 48  
100/110 VDC



**MY4N-D2**  
6, 12, 24, 48 VDC



**MY4N-D2**  
100/110 VDC



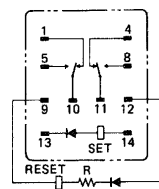
- Note:
1. Pay special attention to the polarities when using the DC type.
  2. The release time is somewhat longer, but satisfies the standard specifications of 25 ms.
  3. The reverse-breakdown voltage of the diode is 1,000 VDC.
  4. Available on DC versions only.

**Connecting sockets**

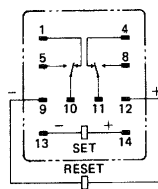
Use the standard MY4 (4PDT) sockets with the terminal arrangements listed below.

**Terminal arrangement/Internal connections (Bottom view)**

**AC**



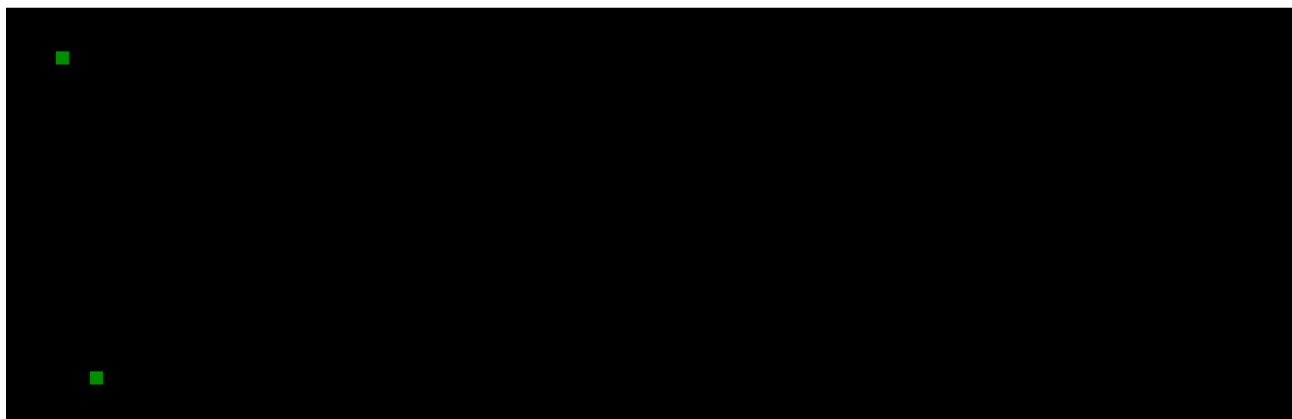
**DC**



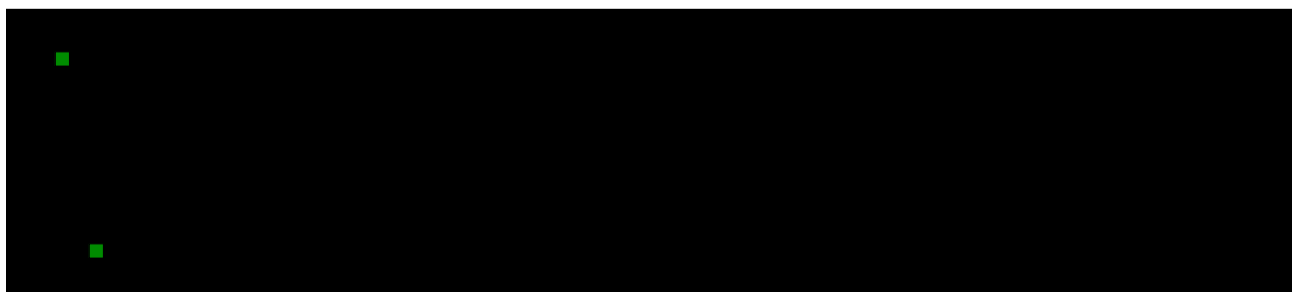
- Note:
1. R is a resistor for ampere-turn compensation, and is incorporated in the relays rated at 50 VAC or above.
  2. Pay attention to the polarity of the set and reset coils, as incorrect connection of positive and negative terminals will result in malfunctioning of the relay.

■ APPROVALS

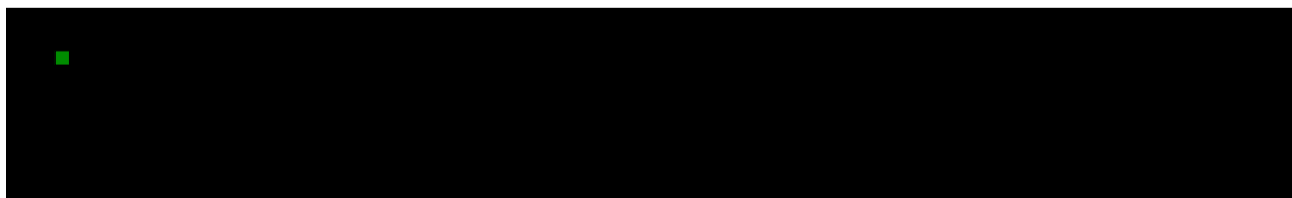
UL recognized type (File No. E41515)



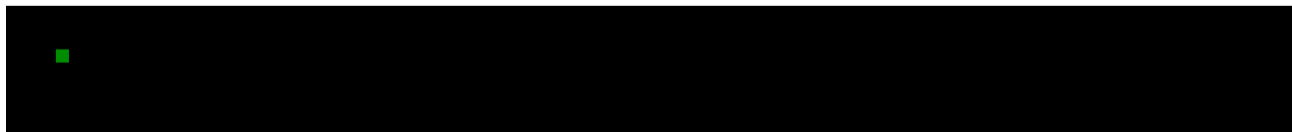
CSA certified type (File No. LR31928)



LR (Lloyd's Register) approved type (File No. 563KOB-204524)



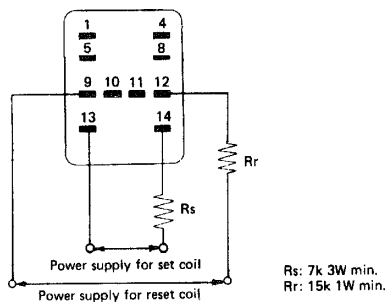
SEV listed type (File No. D791/63 [2- & 4-pole], D791/91 [3-pole])



- Note:
1. The rated values approved by each of the safety standards (e.g., UL, CSA, VDE, and SEV) may be different from the performance characteristics individually defined in this catalog.
  2. In the interest of product improvement, specifications are subject to change.

■ HINTS ON CORRECT USE

When using the relay rated at 120 VAC at a supply voltage of 240 VAC, be sure to connect external resistors  $R_s$  and  $R_r$  to the relay.





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