

Features

- 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.



See page 225

To Order

Select the part number from the available types chart and add the desired coil voltage rating.

MY4-DC6
Coil Rating

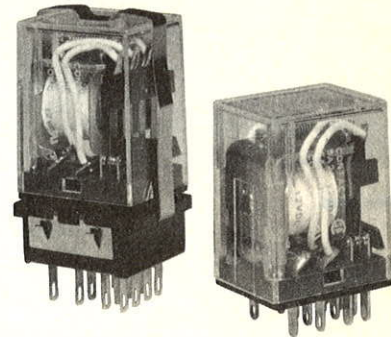
NOTE: AgCdO contacts are also available except the hermetically sealed type (MY2E, MY3E, MY4E). Contact your Omron sales representative for details.

TO ORDER connecting sockets and mounting tracks, see Accessories Section.

For SEV approved type, order the following:

MY4-SV-DC6

(Lloyd's Register approval, see Approved by Standards Chart.)



Available Types

Type	Terminal	Contact form	Single contact			Bifurcated contact				
			Standard bracket mounting	Upper mounting bracket	Lower mounting bracket	Standard bracket mounting	Upper mounting bracket	Lower mounting bracket		
Standard	Unsealed	Plug-in/solder	DPDT	MY2	MY2F	MY2S	MY2Z	MY2ZF	MY2ZS	
			3PDT	MY3	MY3F	MY3S	—	—	—	
			4PDT	MY4	MY4F	MY4S	MY4Z	MY4ZF	MY4ZS	
	PCB	—	DPDT	MY2-02	—	—	MY2Z-02	—	—	
			3PDT	MY3-02	—	—	—	—	—	
			4PDT	MY4-02	—	—	MY4Z-02	—	—	
	Sealed	Plug-in/solder	4PDT	MYQ4	—	—	MYQ4Z	—	—	
			PCB	4PDT	MYQ4-02	—	—	MYQ4Z-02	—	—
				—	—	—	—	—	—	—
	Hermetically sealed	Plug-in/solder	4PDT	MY4H	—	—	MY4ZH	—	—	
			PCB	4PDT	MY4H-0	—	—	MY4ZH-0	—	—
	LED indicator	Plug-in/solder	DPDT	MY2N	—	—	MY2ZN	—	—	
3PDT			MY3N	—	—	—	—	—		
4PDT			MY4N	—	—	MY4ZN	—	—		
High capacity	w/o LED indicator	Plug-in/solder	DPDT	MY2Y	—	—	—	—		
	w/LED indicator		DPDT	MY2N-Y	—	—	—	—		
Diode surge suppression	Plug-in/solder	DPDT	MY2-D	—	—	MY2Z-D	—	—		
		3PDT	MY3-D	—	—	—	—	—		
		4PDT	MY4-D	—	—	MY4Z-D	—	—		
LED indicator and diode surge suppression	Plug-in/solder	DPDT	MY2N-D2	—	—	MY2ZN-D2	—	—		
		3PDT	MY3N-D2	—	—	—	—	—		
		4PDT	MY4N-D2	—	—	MY4ZN-D2	—	—		
RC circuit	w/o LED indicator	Plug-in/solder	DPDT	MY2-CR	—	—	MY2Z-CR	—	—	
			3PDT	MY3-CR	—	—	—	—	—	
	4PDT		MY4-CR	—	—	MY4Z-CR	—	—		
	w/LED indicator		DPDT	MY2N-CR	—	—	—	—	—	
Push-to-test button	Plug-in/solder	DPDT	MY2I2	—	—	MY2ZI2	—	—		
		3PDT	MY3I2	—	—	—	—	—		
		4PDT	MY4I2	—	—	MY4ZI2	—	—		
LED indicator/push-to-test button	Plug-in/solder	DPDT	MY2I2N	—	—	MY2ZI2N	—	—		
		4PDT	MY4I2N	—	—	MY4ZI2N	—	—		

Contact Data

Type	Unsealed				Sealed		Hermetically sealed	
	DPDT, 3PDT		4PDT		4PDT		4PDT	
	Resistive load (p.f. =1)	Inductive load (p.f.=0.4, L/R=7msec)	Resistive load (p.f. =1)	Inductive load (p.f. =0.4, L/R=7msec)	Resistive load (p.f. =1)	Inductive load (p.f. =0.4, L/R=7msec)	Resistive load (p.f. =1)	Inductive load (p.f. =0.4, L/R=7msec)
Rated load	220 VAC 5 A 24 VDC 5 A	220 VAC 2 A 24 VDC 2 A	220 VAC 3 A 24 VDC 3 A	220 VAC 0.8A 24 VDC 1.5 A	220 VAC 1 A 24 VDC 1 A	220 VAC 0.5 A 24 VDC 0.5 A	110 VAC 3 A 24 VDC 3 A	110 VAC 0.8 A 24 VDC 1.5 A
Contact material	Ag		Ag (Au Flash)		Ag (Au Flash)		Ag (Au Flash)	
Carry current	5 A		3 A		1 A		3 A	
Max. operating voltage	250 VAC; 125 VDC				250 VAC; 125 VDC		125 VAC; 125 VDC	
Max. operating current	5 A		3 A		1 A		3 A	
Max. switching capacity	1,100 VA 120 W	440 VA 48 W	660 VA 72 W	176 VA 36 W	220 VA 24 W	110 VA 12 W	330 VA 72 W	88 VA 36 W
Minimum permissible load	Consult factory				Consult factory		Consult factory	

Coil Data

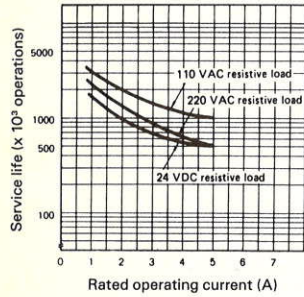
Rated voltage (V)	Rated current (mA)		Coil resistance (Ω)	Coil inductance (ref. value) (H)		Pickup Voltage	Dropout voltage	Maximum voltage	Power consumption (VA, W)
	50Hz	60Hz		Armature OFF	Armature ON				
	% of rated voltage								
6	214.1	183	12.2	0.04	0.08				
12	106.5	91	46	0.17	0.33				Approx.
24	53.8	46	180	0.69	1.30				1.0 to 1.2
50	25.7	22	788	3.22	5.66		30% min.		
100/110	11.7/12.9	10/11	3,750	14.54	24.6				
110/120	9.9/10.8	8.4/9.2	4,430	19.20	32.1				Approx.
200/220	6.2/6.8	5.3/5.8	12,950	54.75	94.07	80% max.		110% max.	0.9 to 1.1
220/240	4.8/5.3	4.2/4.6	18,790	83.50	136.40				
6	150		40	0.17	0.33				
12	75		160	0.73	1.37				
24	36.9		650	3.20	5.72		10% min.		Approx. 0.9
48	18.5		2,600	10.60	21.00				
100/110	9.1/10		11,000	45.60	86.20				

- NOTE: 1. The rated current and coil resistance are measured at a coil temperature of 23°C 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.
 4. Because the coil is designed for low power consumption, connect a bleeder resistor (if necessary after confirming the leakage current), when the coil is driven by an SCR.

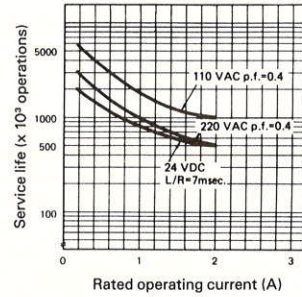
Characteristic Data

Electrical service life

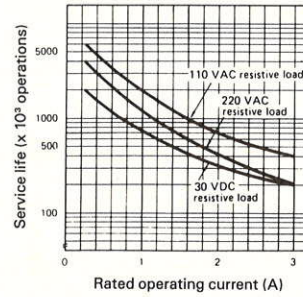
MY2, MY3 (Resistive Load)



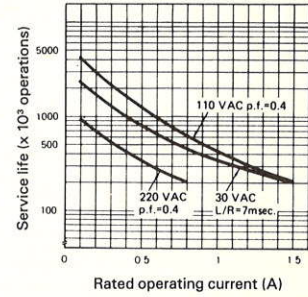
MY2, MY3 (Inductive Load)



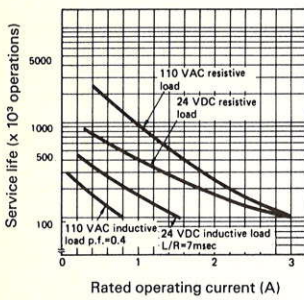
MY4 (Resistive Load)



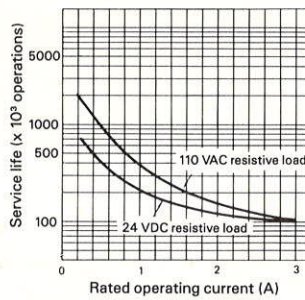
MY4 (Inductive Load)



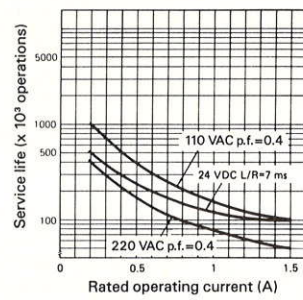
MY4H



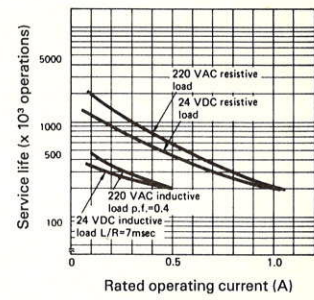
MY4Z (Resistive Load)



MY4Z (Inductive Load)



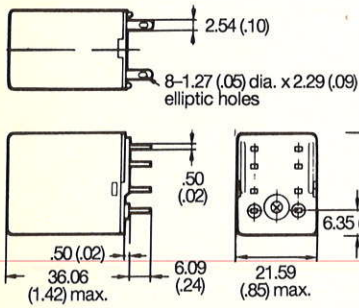
MYQ4



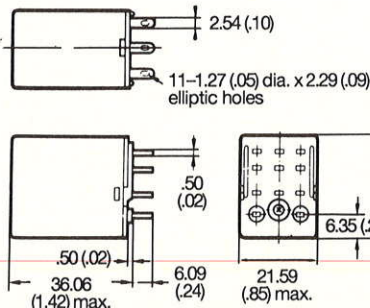
Dimensions

[Unit: mm (inch)]

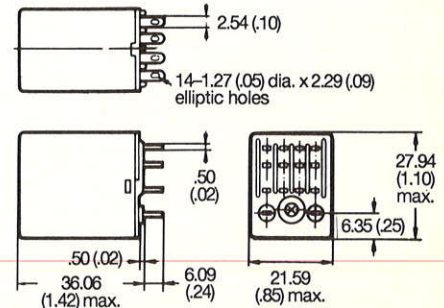
MY2



MY3



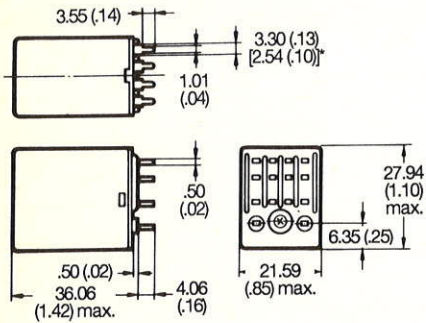
MY4



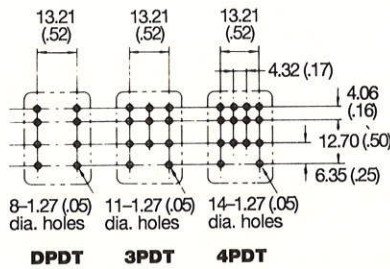
Dimensions

[Unit: mm (inch)]

MY□-02

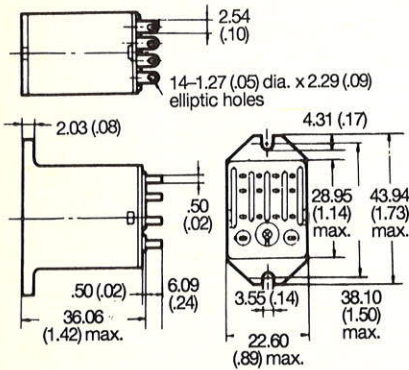


Mounting holes MY□-02

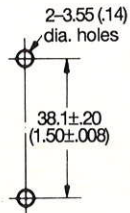


* Dimensions in brackets apply to Type MY4-02.

MY□F

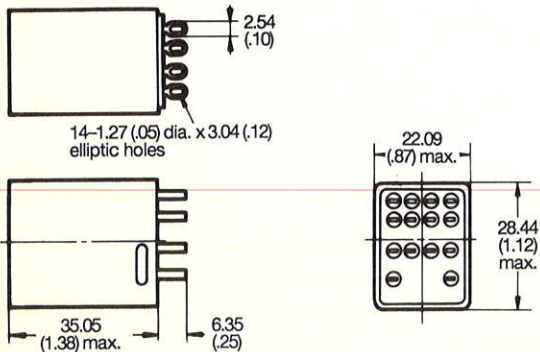


Mounting holes MY□F

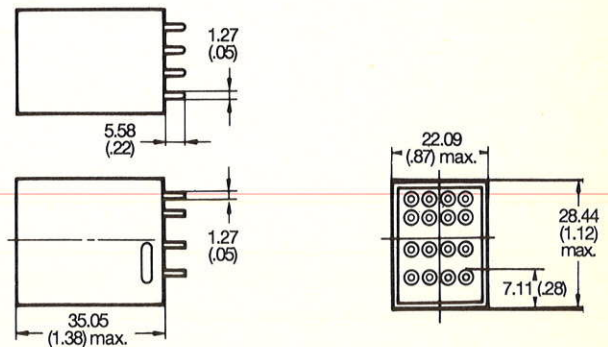


NOTE: The above dimensioned drawing shows the 4-pole type. The dimensions of the 2- and 3-pole types are identical to the 4-pole type.

MY(Z)H



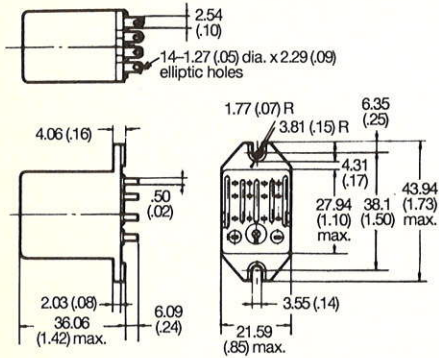
MY4(Z)H-0



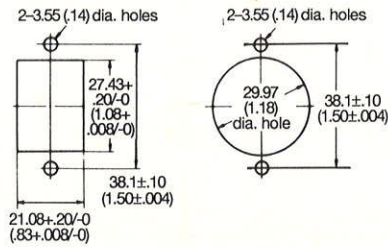
Dimensions

[Unit: mm (inch)]

MY□S

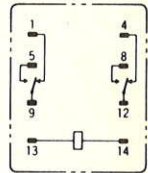


Mounting holes

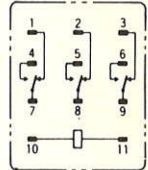


Terminal arrangement (Bottom view)

MY2

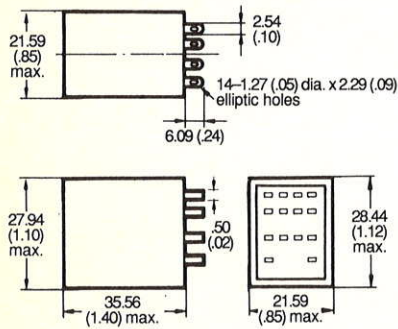


MY3

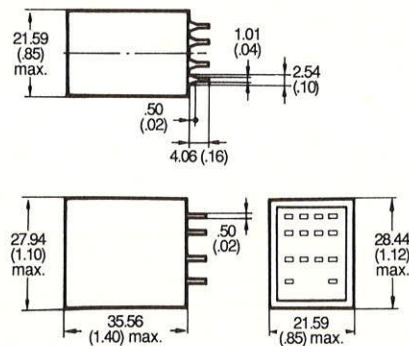


NOTE: The above dimensioned drawing shows the 4-pole type. The dimensions of the 2- and 3-pole types are identical to the 4-pole type.

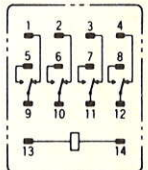
MYQ4(Z)



MYQ4(Z)-02



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



Approved by Standards

Note that the rated values approved by each of the safety standards (e.g., UL and CSA) may be different from the performance characteristics individually defined in this catalog.

UL recognized type (File No. E41515)

Type	Contact form	Coil ratings	Contact ratings
MY□-	DPDT	6 to 240 VAC 6 to 120 VDC	5 A 120 VAC (resistive load)
			5 A 28 VDC (resistive load)
			5 A 240 VAC (inductive load)
	3PDT		5 A 28 VDC (resistive load)
			5 A 240 VAC (inductive load)
			4PDT
3 A 120 VAC (inductive load)			
1.5 A 240 VAC (inductive load)			
		5 A 240 VAC (inductive load, same polarity)	
		5 A 28 VDC (resistive load, same polarity)	

CSA certified type (File No. LR31928)

Type	Contact form	Coil ratings	Contact ratings
MY□-	DPDT	6 to 240 VAC 6 to 120 VDC	5 A 28 VDC (resistive load)
			5 A 240 VAC (inductive load)
			3PDT
	3 A 240 VAC (inductive load)		
	4PDT		
			5 A 28 VDC (resistive load, same polarity)

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

Type	Contact form	Coil ratings	Contact ratings
MY□-SV	DPDT	6 to 240 VAC	5 A 220 VAC (resistive)
	3PDT	6 to 110 VDC	5 A 24 VDC (resistive)
	4PDT		

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

Type	Contact form	Coil ratings	Contact ratings
MY□-	DPDT	6 to 240 VAC 6 to 120 VDC	2 A 30 VDC (inductive load)
			2 A 200 VAC (inductive load)
	4PDT		1.5 A 30 VDC (inductive load)
			0.8 A 200 VAC (inductive load)
		1.5 A 115 VAC (inductive load)	

Relay Options

LED Indicator

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

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.

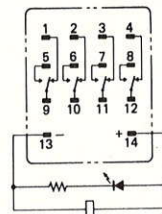
Green LED	AC
Red LED	DC

Terminal arrangement/Internal connections (Bottom view)

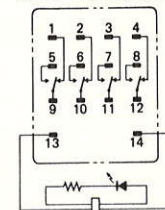
MY4N

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.

DC coil rating type



AC coil rating type



NOTE:

1. Pay special attention to the polarities when using the DC type.
2. The AC coil-type is provided with a self-diagnostic function that detects a breakage in the coil.

Relay Options

High Capacity Type

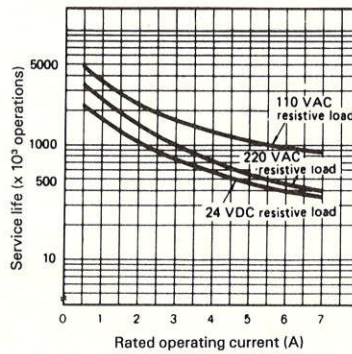
Specifications and dimensions same as the standard type with the following exceptions.

Contact Data

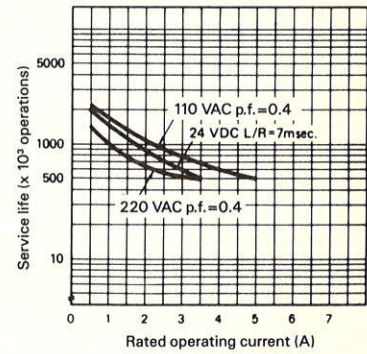
Load	Resistive load (p.f.=1)	Inductive load (p.f.=0.4, L/R=7 ms)
Rated load	220 VAC 7A	220 VAC 3.5 A
	24 VDC 7 A	24 VDC 3.5 A
Contact material	AgCdO	
Carry current	7 A	
Max. operating voltage	250 VAC; 125 VDC	
Max. operating current	7 A	
Max. switching capacity	1,540 VA	770 VA
	168 W	84 W

Characteristic Data

MY2-Y
Electrical service life
(Resistive load)



Electrical service life
(Inductive load)



Dimensions

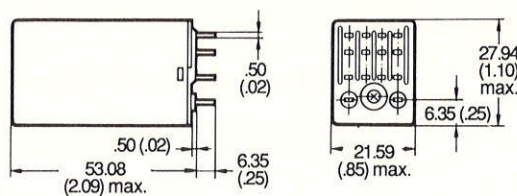
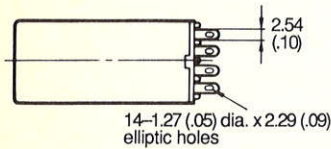
Terminal arrangement/Internal connections

MY2-Y: Same as the Standard Type.
MY2N-Y: Same as the LED Indicator Type.

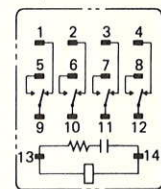
RC Circuit

Specifications and dimensions same as 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 (.67).



Terminal arrangement/ Internal connections (Bottom view)



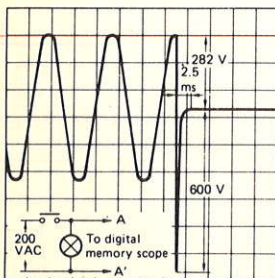
RC circuit
C : 0.033 μ F
R : 120 Ω

NOTE:

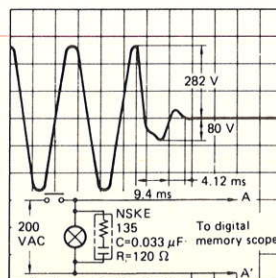
- The above dimensioned drawing shows the 4-pole type. The dimensions of the 2- and 3-pole types are identical to the 4-pole type.
- Available on AC versions only.

Characteristic Data

Without RC circuit



With RC circuit

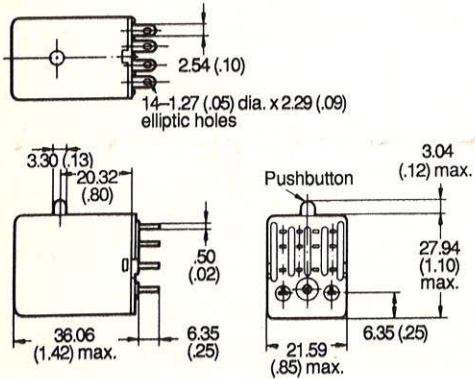


Relay Options

Push-to-Test Button

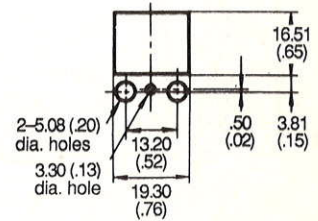
Specifications and Dimensions same as the standard type with the following exceptions.

MY □ I2



Mounting holes

When mounting the relay, use the connecting socket PYC-P2 shown in ACCESSORIES. 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

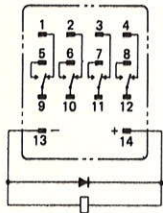
Specifications and dimensions same as standard type with the following exceptions.

Ambient operating temperature: -55° to $+60^{\circ}\text{C}$

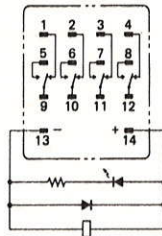
Terminal arrangement/Internal connections (Bottom view)

MY4(N)-D(2): MY2(N)-D(2) is the same as MY4(N)-D(2) with the exception of the contact configuration.

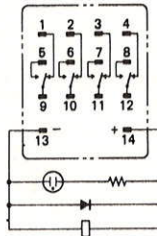
MY4-D 6, 12, 24, 48, 100/110 VDC



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 20 ms.
 3. The reverse-breakdown voltage of the diode is 1,000 VDC.
 4. Available on DC versions 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

Relay	Socket*	Relay Hold-Down Clip		Mounting Track
		Standard	RC Circuit	
DPDT	PYF08A-E			PFP-100N/PFP-50N & PFP-M or
3PDT	PYF11A	PYC-A1	Y92-H3	PFP-100N2
4PDT	PYF14A-E			(Option: PFP-S Spacer)

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

Back Connecting Sockets

Relay	Solder Terminal Socket	Wire Wrap Terminal Socket	Relay Hold Down Clip				Socket Mounting Plates		
			Standard	Push-to-Test	RC Circuit	Mtg. Plate	1 Socket	18 Socket	36 Socket
DPDT	PY08	PY08QN							
3PDT	PY11	PY11QN	PYC-P	PYC-P2	PYC-1	PYC-S	PYP-1	PYP-18	PYP-36
4PDT	PY14	PY14QN							

Note: PYP-18 and PYP-36 may be cut to any desired length.

Relay	PC Terminal Socket	Relay Hold Down Clip		
		Standard	Push-to-Test	RC Circuit
DPDT	PY08-02			
3PDT	PY11-02	PYC-P	PYC-P2	PYC-1
4PDT	PY14-02			

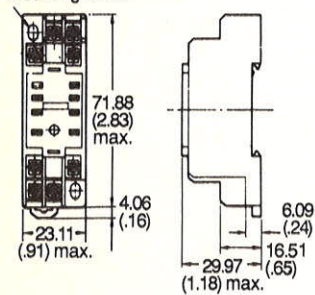
Dimensions

[Unit: mm (inch)]

Track Mounted Sockets (UL File No. E87929) (CSA Report No. LR46088)

PYF08A-E

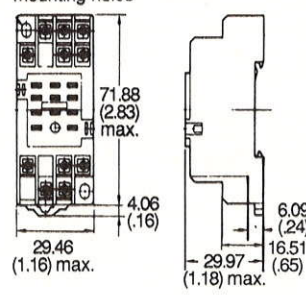
2-4.31 (.17) x 5.08 (.20) mounting holes



Terminal arrangement/ mounting holes (Top View)

PYF11A

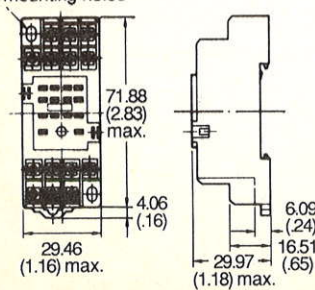
2-4.31 (.17) x 5.08 (.20) mounting holes



Terminal arrangement/ mounting holes (Top View)

PYF14A-E

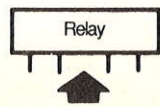
2-4.31 (.17) x 5.08 (.20) mounting holes



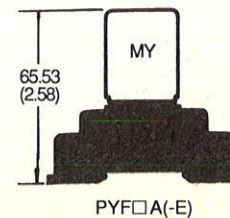
Terminal arrangement/ mounting holes (Top View)

When shown, a "Bottom View" is assumed to be oriented as follows:

Bottom View



Mounting height of relay with socket



Accessories

Dimensions

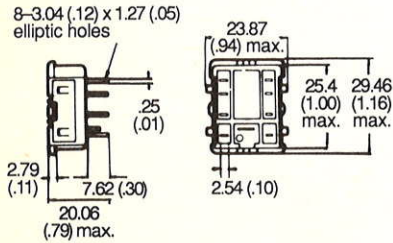
[Unit: mm (inch)]

Back Connecting Sockets (UL File No. E87929) (CSA Report No. LR46088)

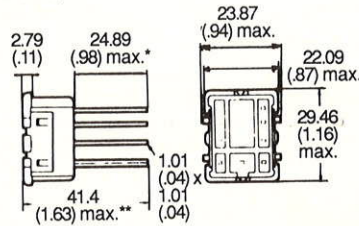
NOTE: UL/CSA does not apply to wire wrap (Q) type sockets.

DPDT

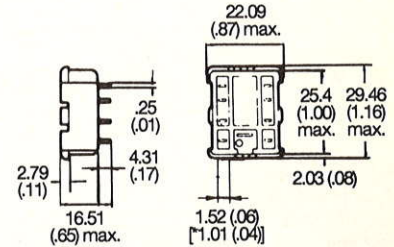
PY08



PY08QN

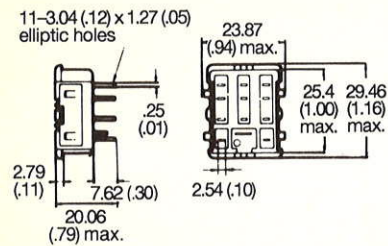


PY08-02

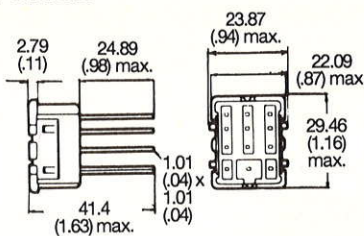


3PDT

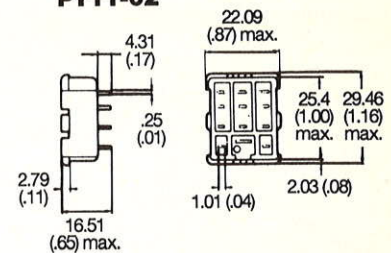
PY11



PY11QN

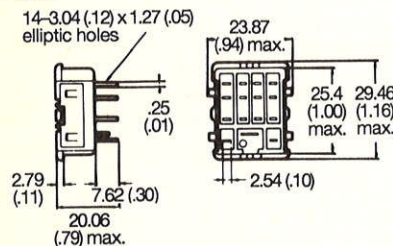


PY11-02

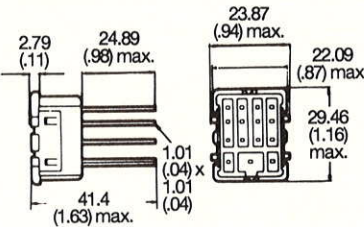


4PDT

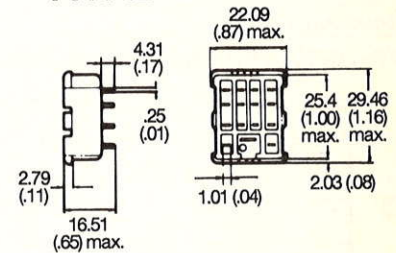
PY14



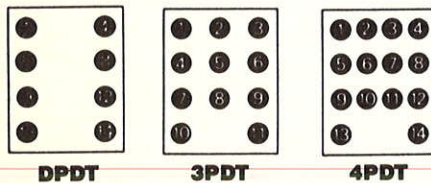
PY14QN



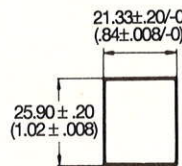
PY14-02



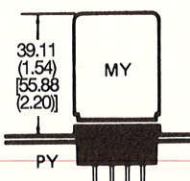
Terminal arrangement (Bottom view)



Panel cutout

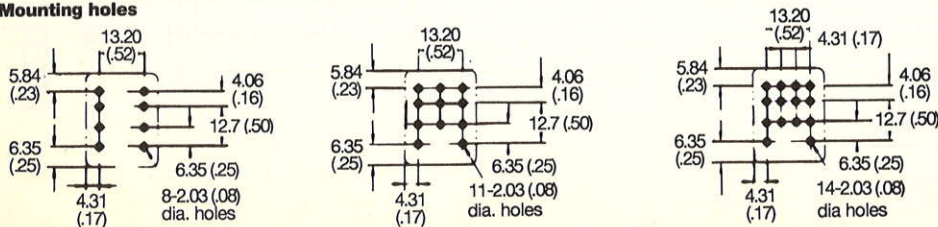


Mounting height of relay with socket



NOTE: Value in brackets is for MY□-CR.

Mounting holes



DPDT

[1.29 (.051)]

3PDT

[1.29 (.051)]

4PDT

[1.29 (.051)]

* For types with suffix -02.

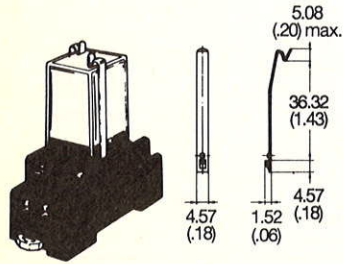
Accessories

Dimensions

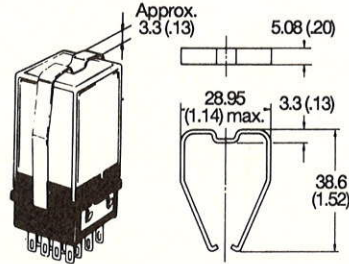
[Unit: mm (inch)]

Relay Hold-Down Clips

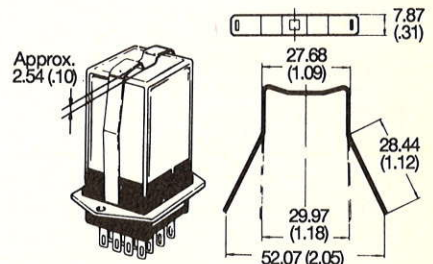
PYC-A1
for PYF□A
socket



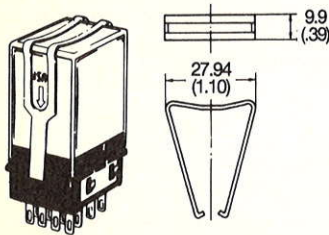
PYC-P
for PY□
socket



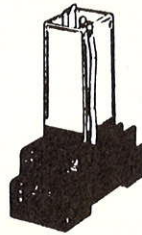
PYC-S
for relay mounting
plates



PYC-P2
for test button self-contained
type with PY□ socket



Y92-H3 for RC circuit

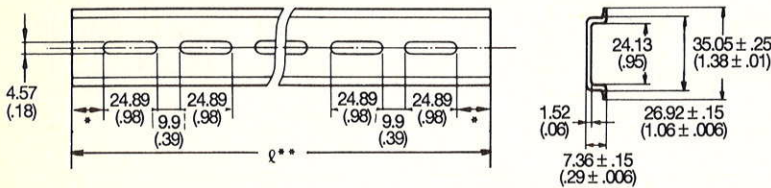


PYC-1 for RC circuit

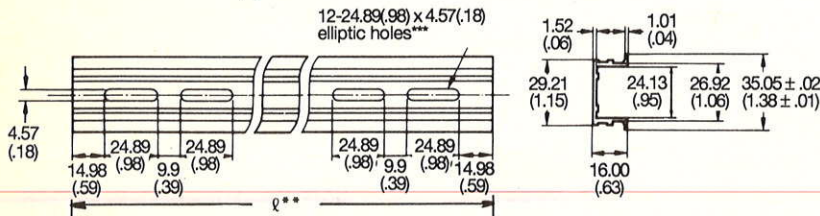


Mounting Tracks

PFP-100N/PFP-50N Mounting Track



PFP-100N2 Mounting Track

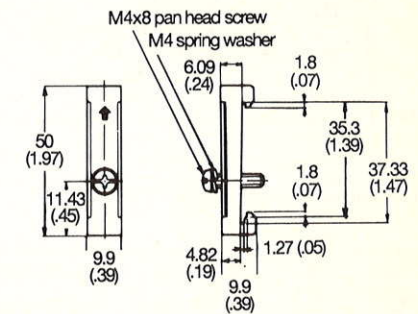


- * This dimension is 14.99 (.59) on both ends in the case of PFP-100N, but on one end in the case of PFP-50N.
- ** The length of each mounting track is shown in this table.

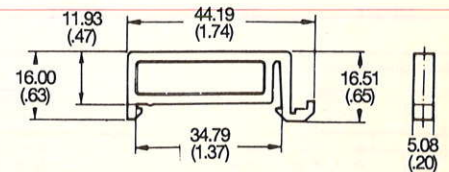
PFP-100N	990.6 (39.0)
PFP-50N	497.8 (19.6)
PFP-100N2	990.6 (39.0)

- *** A total of twelve 24.89 (.98) x 4.57 (.18) elliptical holes are provided, with six holes cut from each end of the track at a pitch of 9.91 (.39) between holes.

PFP-M End Plate



PFP-S Spacer



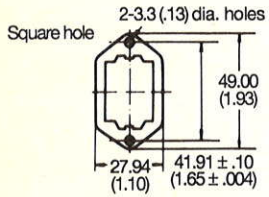
Accessories

Dimensions

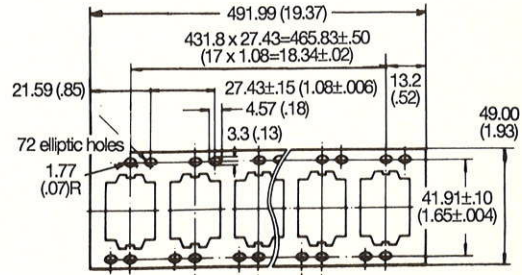
[Unit: mm (inch)]

Socket Mounting Plates [t=1.52 (.06)]

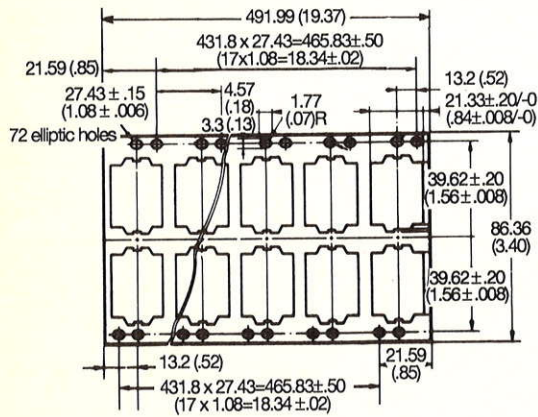
PYP-1



PYP-18



PYP-36



Features

- 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
- High vibration and shock resistance
- LED indicator for easy relay monitoring



See page 235

To Order

Select the part number from the available types chart and add the desired coil voltage rating.

MY2K-US- DC6
Coil rating

Available Types

Contact form	Terminal	
	Plug-in	PC board
DPDT	MY2K-US	MY2K-02-US

Contact Data

Load	Resistive load (p.f. = 1)	Inductive load (p.f. = 0.4, L/R = 7msec)
Rated load	220 VAC 3A 24 VDC 3A	220 VAC 0.8A 24 VDC 1.5A
Contact material	Ag	
Carry current	3A	
Max. operating voltage	250 VAC 125 VDC	
Max. operating current	3A	
Max. switching capacity	660 VA, 72W	180 VA, 36W
Minimum permissible load	Consult factory	

Coil Data

Rated voltage (V)	Set coil			Reset coil			Set Pickup voltage (V)	Reset Pickup voltage (V)	Maximum voltage	Power consumption (VA, W)		
	Rated current (mA)		Coil resistance (Ω)	Rated current (mA)		Coil resistance (Ω)				% of rated voltage	Set coil	Reset coil
	50Hz	60Hz		50Hz	60Hz							
AC	6	146	142	13	68	32	80% max.	80% max.	110% max.	Approx. 0.6 to 0.9	Approx. 0.2 to 0.5	
	12	57	56	72	39	130						
	24	27.4	26.4	320	18.6	550						
	50	14	13.4	1,400	3.5	3,000						
	120	5.8	5.6	8,300	3.5	3,000						
DC	6	230		26	100	60				Approx. 1.3	Approx. 0.6	
	12	110		110	50	235						
	24	52		470	25	940						

- NOTES: 1. For AC type, the rated current values are half-wave rectified current values measured with a DC ammeter.
 2. The rated current and coil resistance are measured at a coil temperature of 23°C with tolerances of +15%, -20% for AC rated current; ±15% for DC rated current; and ±15% for rated coil resistance.
 3. The rated current and performance characteristics are measured at a coil temperature of 5° to 35°C.

Characteristics

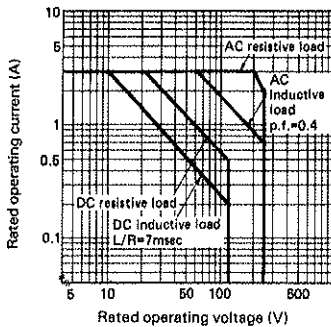
(Data shown are of initial value)

Contact resistance	50mΩ max.
Operate time	AC: 30ms max. DC: 15ms max.
Release time	AC: 30ms max. DC: 15ms max.
Operating frequency	Mechanically: 18,000 operations/hour Under rated load: 1,800 operations/hour
Insulation resistance	100MΩ min. (at 500 VDC)
Dielectric strength	1,500 VAC, 50/60Hz for 1 minute (1,000 VAC between contacts of same pole, and between set and reset coils)
Vibration	Mechanical durability: 10 to 55Hz; .04" double amplitude Malfunction durability: 10 to 55Hz; .04" double amplitude
Shock	Mechanical durability: Approx. 100G's Malfunction durability: Approx. 20G's
Ambient temperature	Operating: -55° to +60°C
Humidity	45 to 85% RH
Service life	Mechanically: 100,000,000 operations min. (at operating frequency of 1,800 operations/hour) Electrically: See "Characteristic Data"
Weight	Approx. 1.06 oz. (30 g)

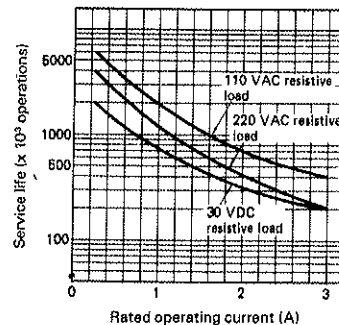
Characteristic Data

MY2K(-02)

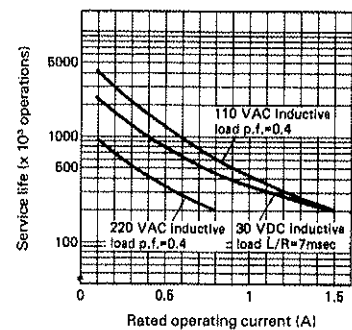
Max. switching capacity



Electrical service life (Resistive load)



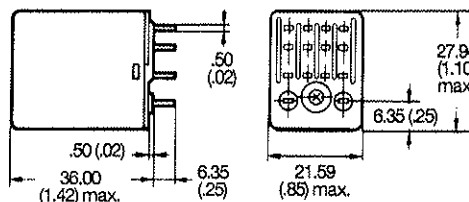
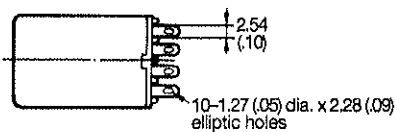
Electrical service life (Inductive load)



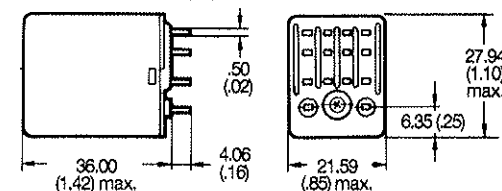
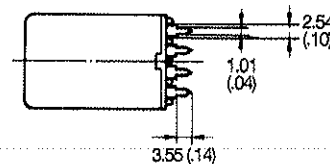
Dimensions

[Unit: mm (inch)]

MY2K

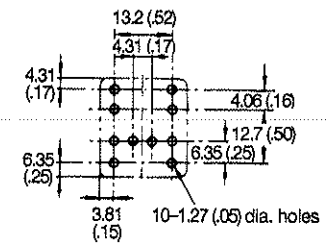


MY2K-02



Mounting holes

(Bottom view)



NOTE: A tolerance of .10 (.004) applies to the above drawing.

Approved by Standards

UL recognized type (File No. E41515)

Type	Contact form	Coil ratings	Contact ratings
MY2K-	DPDT	5 to 120 VAC 5 to 48 VDC	3A 240 VAC (Resistive load) 3A 28 VDC (Resistive load)

CSA certified type (File No. LR31928)

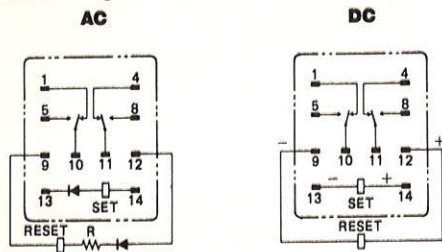
Type	Contact form	Coil ratings	Contact ratings
MY2K	DPDT	5 to 120 VAC 5 to 48 VDC	3A 240 VAC (General use) 3A 30 VDC (Resistive load)

Accessories

Connecting Sockets

Reference standard type with the following exceptions.

Terminal arrangement/Internal connections (Bottom view)



NOTES:

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.

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.

