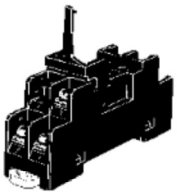
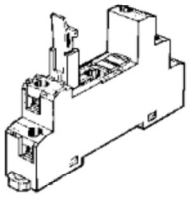
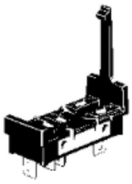
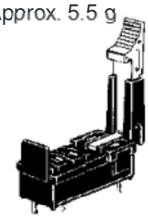
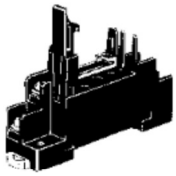
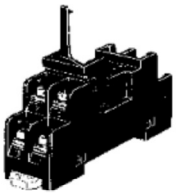
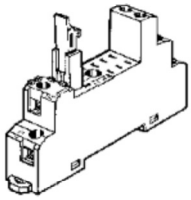
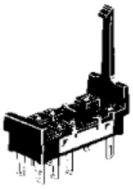
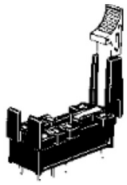
General-purpose Relays and Power Relays

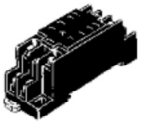
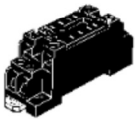
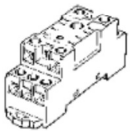
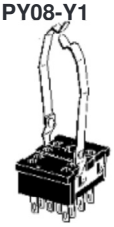
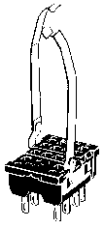
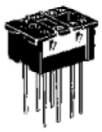
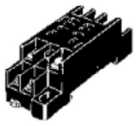
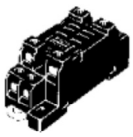
Sockets

Square Sockets

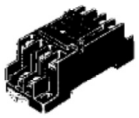
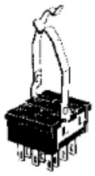
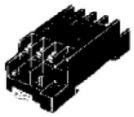
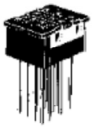
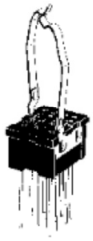
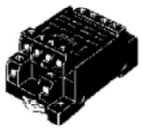
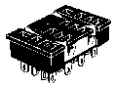
Item	P2RF (Track-mounting) *see page 246		P2R *see page 248			P7TF (Track-mounting) *see page 249
	Screw terminal		Solder terminal	PCB terminal		Screw terminal
5 pins	**P2RF-05** Approx. 27 g 	**P2RF-05-E** Approx. 38 g 	**P2R-05A** Approx. 5 g 	**P2R-05P** Approx. 5 g 	**P2R-057P** Approx. 5.5 g 	**P7TF-05** Approx. 28 g 
8 pins	**P2RF-08** Approx. 33 g 	**P2RF-08-E** Approx. 38 g 	**P2R-08A** Approx. 5 g 	**P2R-08P** Approx. 5 g 	**P2R-087P** Approx. 5.5 g 	---

Note: □-E Models are of finger-protect construction. Round terminals cannot be used. Use Y-shaped terminals.

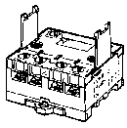
Square Sockets

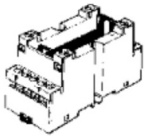
Item	PYF (Track-mounting) *see page 250	PY (back-connecting) *see page 252			PTF (Track-mounting) *see page 253	PT (back-connecting) *see page 255		
	Screw terminal	Solder terminal	Wrapping terminal	PCB terminal	Screw terminal	Solder terminal	Wrapping terminal	PCB terminal
8 pins	**PYF08A** Approx. 32 g  **PYF08A-E**  **PYF08A-N** 	**PY08** Approx. 8 g  **PY08-Y1**  **PY08-Y3** 	**PYQ08QN** Approx. 12 g  **PYQ08QN2**  **PYQ08QN-Y1** **PYQ08QN2-Y1** 	**PY08-02** Approx. 7.2 g 	**PTF08A** Approx. 39 g  **PTF08A-E** 	**PT08** Approx. 11 g 	**PT08QN** Approx. 10.4 g 	**PT08-0** Approx. 8 g 

Note: □-E and □-N Models are of finger-protect construction. Round terminals cannot be used. Use Y-shaped terminals.

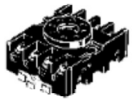
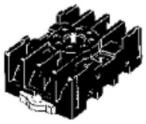
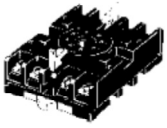
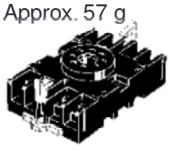
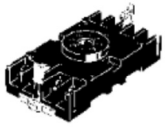
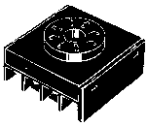
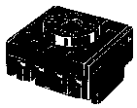
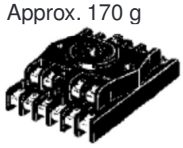
Item	PYF (Track-mounting) *see page 250	PY (back-connecting) *see page 252			PTF (Track-mounting) *see page 253	PT (back-connecting) *see page 255		
	Screw terminal	Solder terminal	Wrapping terminal	PCB terminal	Screw terminal	Solder terminal	Wrapping terminal	PCB terminal
11 pins	**PYF11A** Approx. 46 g 	**PY11** Approx. 9 g  **PY11-Y1** 	**PY11QN** **PY11QN2**  **PY11QN-Y1** **PY11QN2-Y1** 	**PY11-02** 	**PTF11A** Approx. 50 g 	**PT11** Approx. 13 g 	**PT11QN** 	**PT11-0** Approx. 12.2 g 
14 pins	**PYF14A** Approx. 49 g  **PYF14A-E**  **PYF14A-N**  **PYF14T** Approx. 53 g 	**PY14** Approx. 10 g  **PY14-Y1**  **PY14-Y2** 	**PY14QN** **PY14QN2** Approx. 14 g  **PY14QN-Y1** **PY14QN2-Y1** **PY14QN-Y2** **PY14QN2-Y2** 	**PY14-02** 	**PTF14A** Approx. 60 g  **PTF14A-E** 	**PT14** Approx. 17 g 	**PT14QN** Approx. 20 g 	**PT14-0** Approx. 16.2 g 

Note: □-E and □-N Models are of finger-protect construction. Round terminals cannot be used. Use Y-shaped terminals.

Item	P7LF (Track-mounting) *see page 256
	Screw terminal
6 pins	**P7LF-06** Approx. 60 g 

Item	P7S *see page 257		
	Screw terminal (Track-mounting)	Solder terminal	PCB terminal
14 pins	**P7S-14F** Approx. 75 g 	**P7S-14A** Approx. 10 g 	**P7S-14P** Approx. 10 g 

Round Sockets

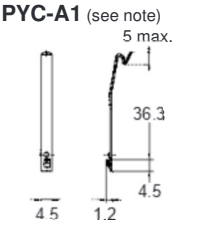
Item	PF (Track-mounting) *see page 258	P2CF (Track-mounting)	PFA (Track-mounting)	P3G (Track-mounting)	PL (back-connecting) *see page 261		
					Solder terminal	Wrapping terminal	PCB terminal
8 pins	**PF083A** Approx. 34 g  **PF083A-E**  **PF085A** Approx. 40 g 	**P2CF-08** Approx. 55 g 	**8PFA** Approx. 57 g  **8PFA1** Approx. 66 g 	**P3G-08** Approx. 40 g 	**PL08** Approx. 14 g 	**PL08-Q** Approx. 15 g 	**PLE08-0** Approx. 10.6 g 
11 pins	**PF113A** Approx. 47 g  **PF113A-E** 	**P2CF-11** Approx. 70 g 	**11PFA** Approx. 74 g 	**P3GA-11** (see note) Approx. 47 g 	**PL11** Approx. 15 g 	**PL11-Q** Approx. 18.5 g 	**PLE11-0** Approx. 10.8 g 
14 pins	---	---	**14PFA** Approx. 104 g 	---	**PL15** Approx. 28 g 	---	---
20 pins	**PF202** Approx. 170 g 	---	---	---	**PL20** Approx. 17 g 	---	---

Note: This model succeeds the P3G-11 for which production was stopped in March 1991.

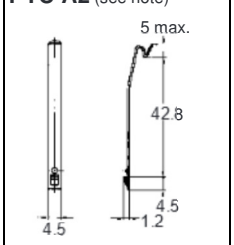
■ Hold-down Clips

For Square Sockets

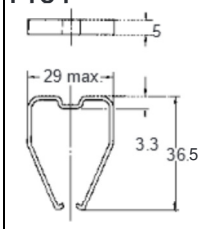
PYC-A1 (see note)



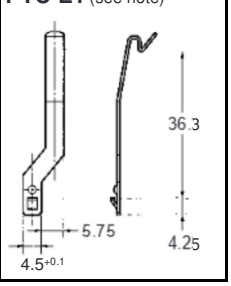
PYC-A2 (see note)



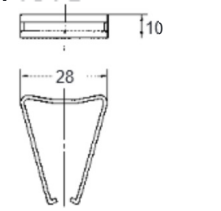
PYC-P



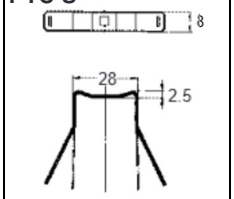
PYC-E1 (see note)



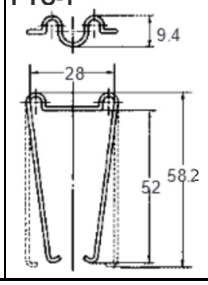
PYC-P2



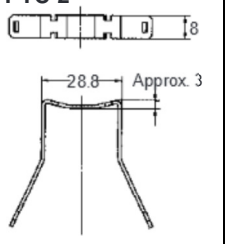
PYC-S



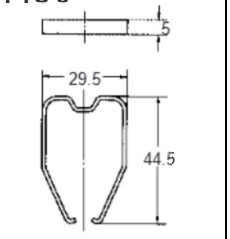
PYC-1



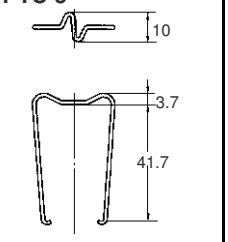
PYC-2



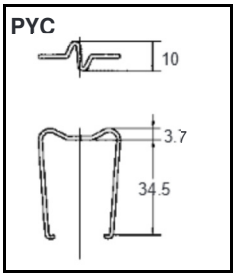
PYC-3



PYC-5

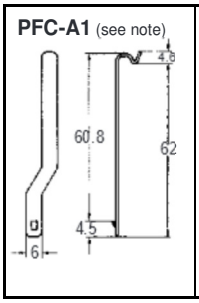


PYC

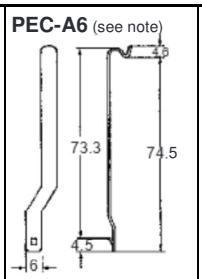


For Round Sockets

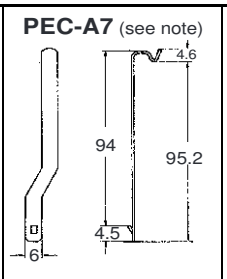
PFC-A1 (see note)



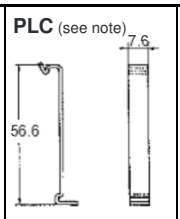
PEC-A6 (see note)



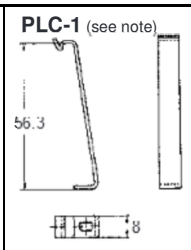
PEC-A7 (see note)



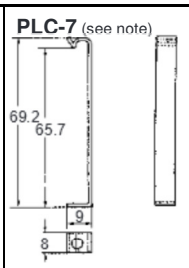
PLC (see note)



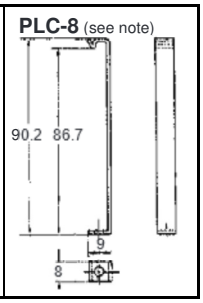
PLC-1 (see note)



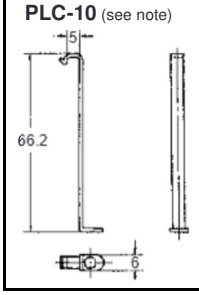
PLC-7 (see note)



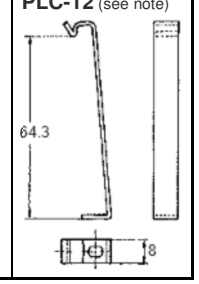
PLC-8 (see note)



PLC-10 (see note)



PLC-12 (see note)



Note: There are 2 pieces per set.

■ Models Used with Sockets

Group	Model	Pin No.	Socket	
			Front-connecting	Back-connecting
MY(K)	MY2	8	PYF	PY
	MY3	11		
	MY4, MY2K	14		
LY	LY1, LY2	8	PTF	PT
	LY3	11		
	LY4	14		
G2A(K)	G2A, G2A-434, G2AK	14	PYF	PY
MK(K)	MK2P	8	PF083A(-E)	PL
	MK3P, MK2KP	11	PF113A(-E)	
MM(K)	MM2(X)P	8	8PFA	
	MM3P, MM2(X)KP	11	PFA	
	MM3XP, MM3(X)KP, MM4(X)P, MM4(X)KP	14		
G4Q	---	8	8PFA1	
G7L	G7L-□A-T(J)	6	P7LF	---

■ Models Used with Hold-down Clips

Square Sockets

Item	PYF□A(-E, -N), PTF□A(-E)	PY□(QN), PT□(QN)	PY□-02, PT□-0
MY( ), MY( )N, MY( )N-D2, MY( )N-CR, MY2K, LY( ), LY( )N, G3H, G3F, G3FD, G3FM	PYC-A1	PYC-P, PYC-S	PYC-P
MY4IN		PYC-P, PYC-P2	PYC-P, PYC-P2
MY2IN	PYC-E1	PYC-P2	PYC-P2
LY( )-CR	Y92H-3	PYC-1	PYC-1
G2A(K) Series	PYC-A2	PYC-2, PYC-3, PYC-5	PYC-3, PYC-5

Note: Pin numbers 08, 11, or 14 apply to □.

Round Sockets

Item	PF083A, PF113A	PL08(-Q), PL11(-Q)	PLE08-0, PLE11-0
MK2P Series, MK2KP, MK3P□ (-US), G3B	PFC-A1	PLC	PLC-10
MK3ZP, MK3LP		PLC-1	
MYA-NA1, -NB1, MYA-LA1, -LB1, MYA-NA2, -NB2 MYA-LA2, -LB2	PFC-A6	PLC-7	---
MYA-LA12, -LB12	PFC-A7	PLC-8	---

Note: 1. 8PFA(I), 11PFA, and 14PFA has hooks that can hold a Relay.

2. PL15, PL20, PF202, and Sockets that are not listed in the above table should be mounted to a panel after opening mounting holes on the panel.

3. A Hold-down Clip for PF085A is sold together with Relays that can be used with PF085A.

■ Socket Performance Characteristics

Item	Carry current	Dielectric strength	Insulation resistance (see note 2)
P2RF-05(-E)	10 A	Between contacts of same polarity: 1,000 VAC for 1 min Between coil and contact: 4,000 VAC for 1 min	1,000 MΩ min.
P2RF-08(-E)	5 A	Between contact of different polarity: 3,000 VAC for 1 min Between contacts of same polarity: 1,000 VAC for 1 min Between coil and contact: 4,000 VAC for 1 min	1,000 MΩ min.
P2R-057P	10 A	Between contacts of same polarity: 1,000 VAC for 1 min Between coil and contact: 5,000 VAC for 1 min	1,000 MΩ min.
P2R-087P	5 A	Between contact of different polarity: 3,000 VAC for 1 min Between contacts of same polarity: 1,000 VAC for 1 min Between coil and contact: 5,000 VAC for 1 min	1,000 MΩ min.
P2R-05A	10 A	Between contacts of same polarity: 1,000 VAC for 1 min Between ground terminal and other terminals: 1,500 VAC for 1 min Between coil and contact: 4,000 VAC for 1 min	1,000 MΩ min.
P2R-08A	5 A	Between contact of different polarity: 3,000 VAC for 1 min Between contacts of same polarity: 1,000 VAC for 1 min Between ground terminal and other terminals: 1,500 VAC for 1 min Between coil and contact: 4,000 VAC for 1 min	1,000 MΩ min.
P7TF-05	5 A	Between terminals: 2,000 VAC for 1 min	100 MΩ min.
PYF08A-E	7 A	Between terminals: 2,000 VAC for 1 min	1,000 MΩ min.
PYF08A-N	7 A (see note 3)	Between terminals: 2,000 VAC for 1 min	1,000 MΩ min.
PYF11A	5 A	Between terminals: 2,000 VAC for 1 min	1,000 MΩ min.
PYF14A-E	5 A	Between terminals: 2,000 VAC for 1 min	1,000 MΩ min.
PYF14A-N	5 A (see note 3)	Between terminals: 2,000 VAC for 1 min	1,000 MΩ min.
PY08(-Y1)	7 A	Between terminals: 1,500 VAC for 1 min	100 MΩ min.
PY08QN(-Y1)	7 A	Between terminals: 1,500 VAC for 1 min	100 MΩ min.
PY08-02	7 A	Between terminals: 1,500 VAC for 1 min	100 MΩ min.
PY11(-Y1)	5 A	Between terminals: 1,500 VAC for 1 min	100 MΩ min.
PY11QN(-Y1)	5 A	Between terminals: 1,500 VAC for 1 min	100 MΩ min.
PY11-02	5 A	Between terminals: 1,500 VAC for 1 min	100 MΩ min.
PY14(-Y1)	3 A	Between terminals: 1,500 VAC for 1 min	100 MΩ min.
PY14QN(-Y1)	3 A	Between terminals: 1,500 VAC for 1 min	100 MΩ min.
PY14-02	3 A	Between terminals: 1,500 VAC for 1 min	100 MΩ min.
PTF□□A	10 A	Between terminals: 2,000 VAC for 1 min	100 MΩ min.
PT□□	10 A	Between terminals: 2,000 VAC for 1 min	100 MΩ min.
PT□□QN	10 A	Between terminals: 2,000 VAC for 1 min	100 MΩ min.
PT□□-0	10 A	Between terminals: 2,000 VAC for 1 min	100 MΩ min.

Item	Carry current	Dielectric strength	Insulation resistance (see note 2)
P7LF-06	30 A	Between contact of different polarity: 2,000 VAC for 1 min Between contacts of same polarity: 2,000 VAC for 1 min Between coil and contact: 4,000 VAC for 1 min	1,000 MΩ min.
PF□□□A	5 A	Between terminals: 2,000 VAC for 1 min	1,000 MΩ min.
P2CF	5 A	Between terminals: 2,000 VAC for 1 min	1,000 MΩ min.
P3G(A)	6 A	Between terminals: 2,000 VAC for 1 min	1,000 MΩ min.
8PFA(1)	10 A	Between terminals: 2,000 VAC for 1 min	1,000 MΩ min.
11PFA(1)	10 A	Between terminals: 2,000 VAC for 1 min	1,000 MΩ min.
PL□□(-Q)	10 A	Between terminals: 2,000 VAC for 1 min	1,000 MΩ min.
PLE□□-0	10 A	Between terminals: 2,000 VAC for 1 min	1,000 MΩ min.
P6D-04P	5 A	Between contacts of same polarity: 1,000 VAC for 1 min Between coil and contact: 3,000 VAC for 1 min	100 MΩ min.
P7S-14□	6 A	Between terminals: 2,500 VAC for 1 min Between ground terminal and other terminals (P7S-14A): 2,000 VAC for 1 min	100 MΩ min.

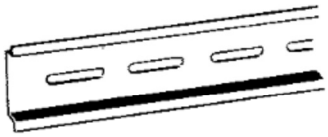
Note: 1. The values given above are initial values.

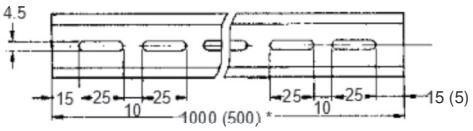
2. The values for insulation resistance were measured at 500 V at the same place as the dielectric strength.

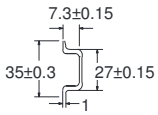
3. The maximum operating ambient temperature for the PYF08A-N and PYF14A-N is 55°C. When using the PYF08A-N or PYF14A-N at an operating ambient temperature exceeding 40°C, reduce the current to 60%.

■ Track and Accessories

Mounting Track
PFP-100N
PFP-50N

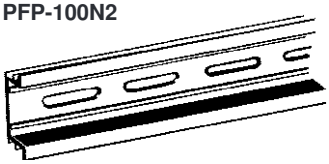


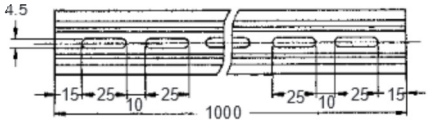


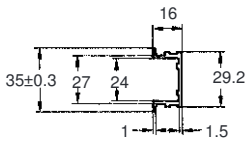


Note: The figure in the parentheses is for PFP-50N.

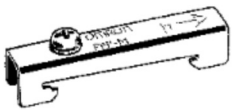
Mounting Track
PFP-100N2

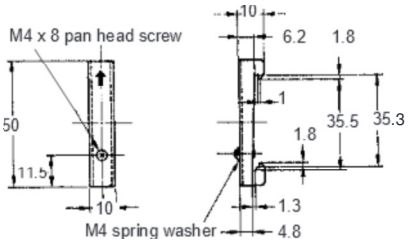




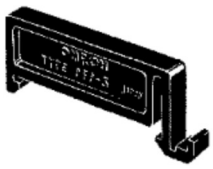


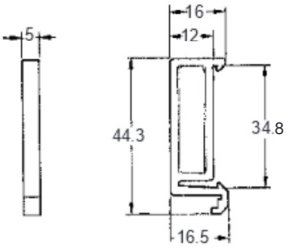
End Plate
PFP-M





Spacer
PFP-S

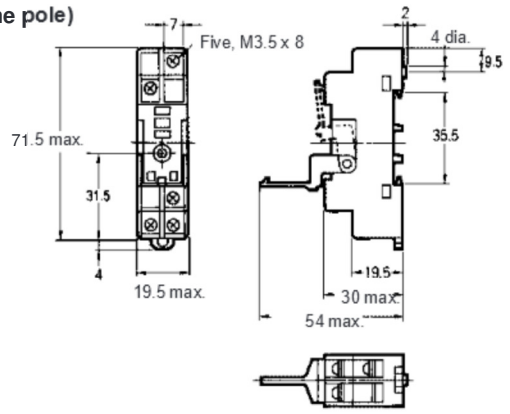
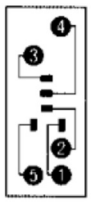
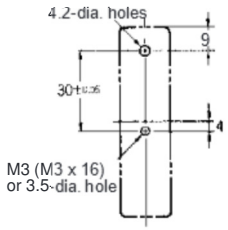
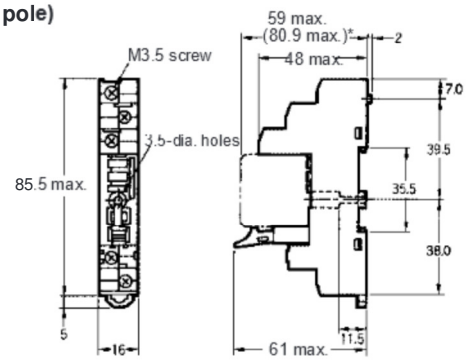
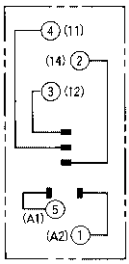
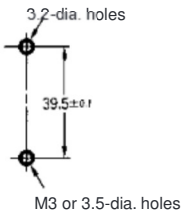
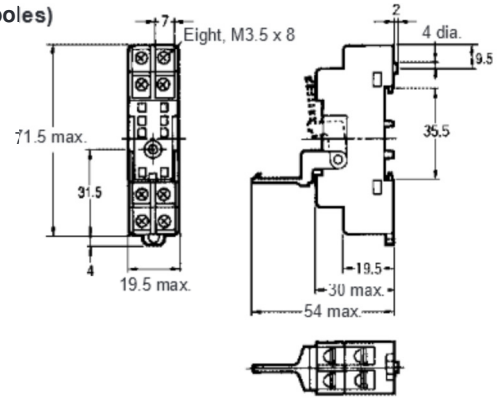
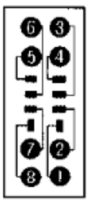
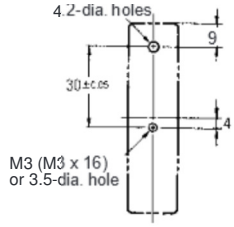


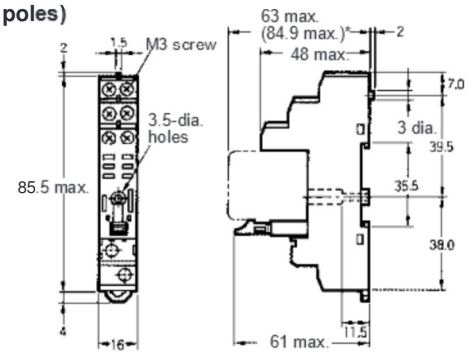
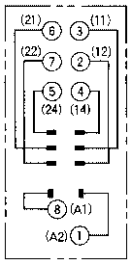
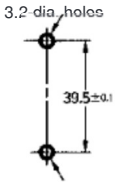


Dimensions

Note: All units are in millimeters unless otherwise indicated.

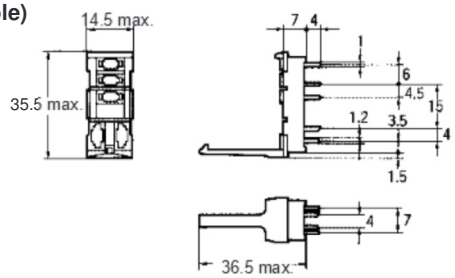
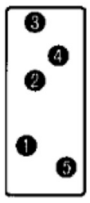
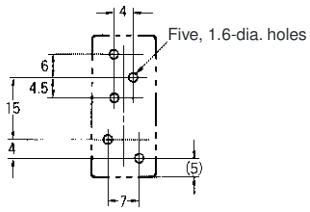
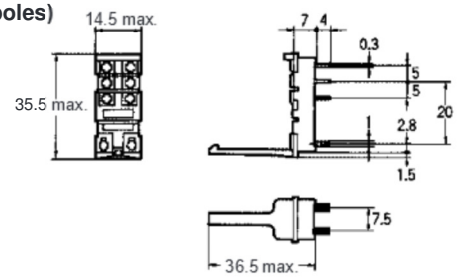
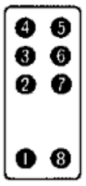
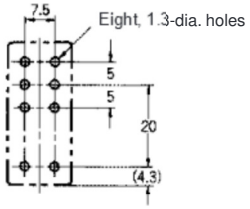
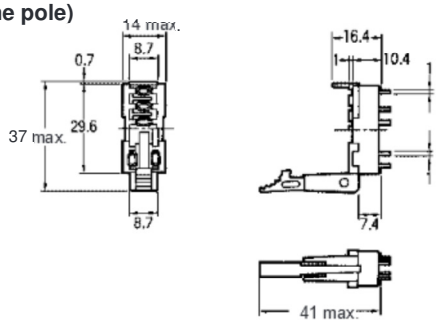
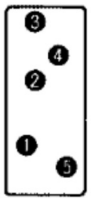
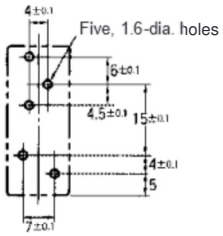
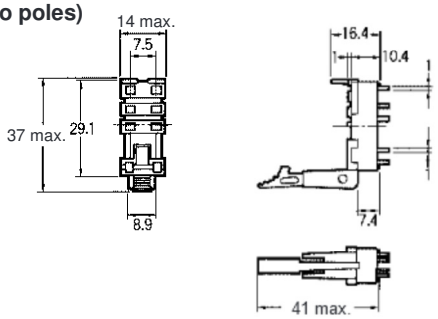
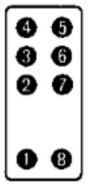
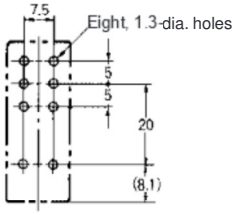
■ P2RF

Dimensions	Terminal arrangement/Internal connections (top view)	Mounting holes (top view)
P2RF-05 (One pole) 		 **Note:** Track-mounting is also possible.
P2RF-05-E (One pole)  * When mounted on H3RN-1□.	 **Note:** Figures in parentheses are DIN standard numbers.	 **Note:** Track-mounting is also possible.
P2RF-08 (Two poles) 		 **Note:** Track-mounting is also possible.

Dimensions	Terminal arrangement/ Internal connections (top view)	Mounting holes (top view)
P2RF-08-E (Two poles)  * When mounted on H3RN-2□.	 **Note:** Figures in parentheses are DIN standard numbers.	 M3 or 3.5-dia. holes **Note:** Track-mounting is also possible.

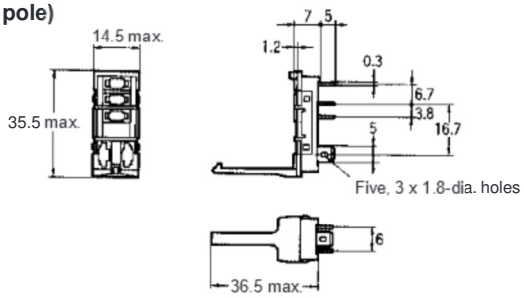
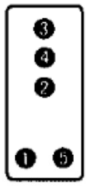
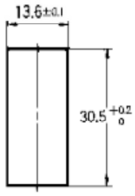
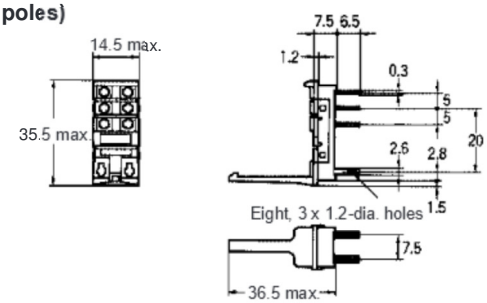
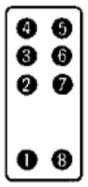
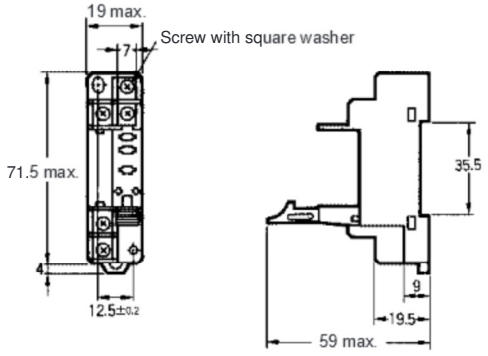
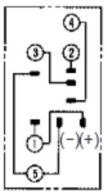
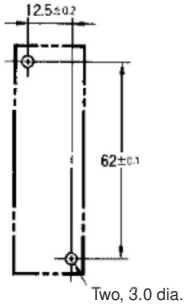
Note: When indicator modules with an I/O SSR are used, the No. 1 pin becomes positive.

■ P2R

Dimensions	Terminal arrangement/ Internal connections (bottom view)	Mounting holes (bottom view)
P2R-05P (One pole) 		
P2R-08P (Two poles) 		
P2R-057P (One pole) 		
P2R-087P (Two poles) 		

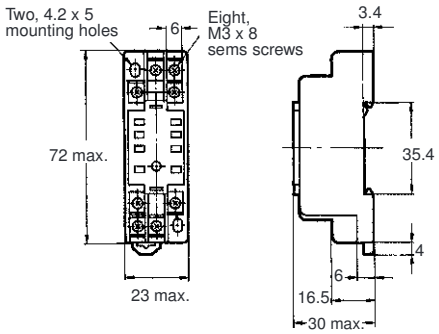
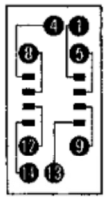
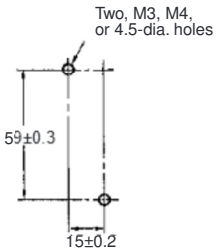
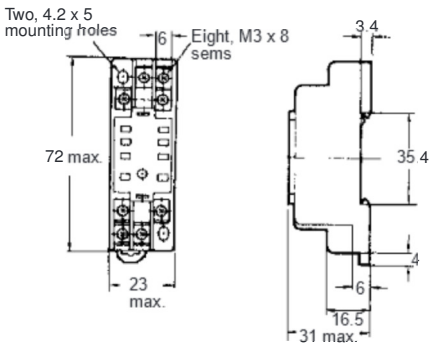
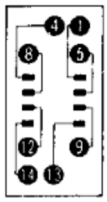
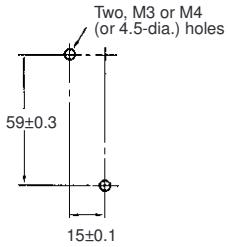
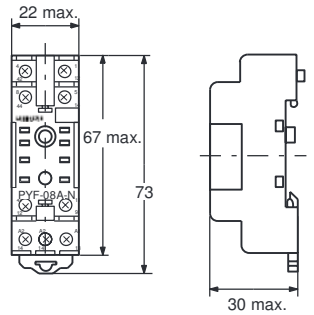
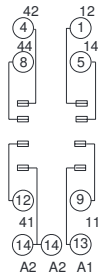
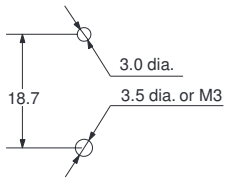
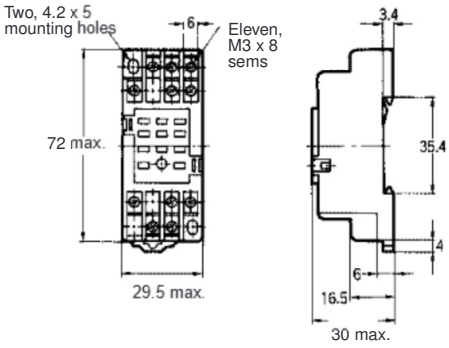
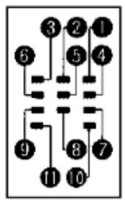
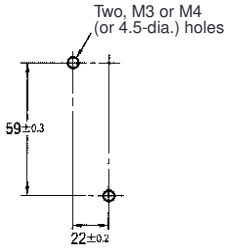
Note: When indicator modules with an I/O SSR are used, the No. 1 pin becomes positive.

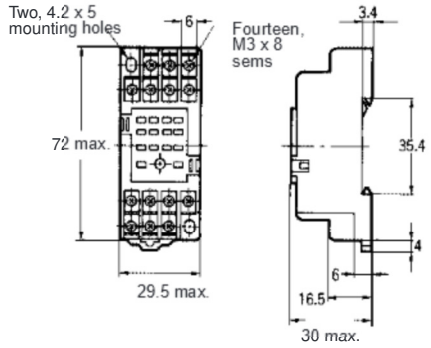
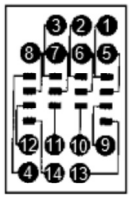
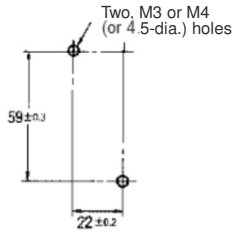
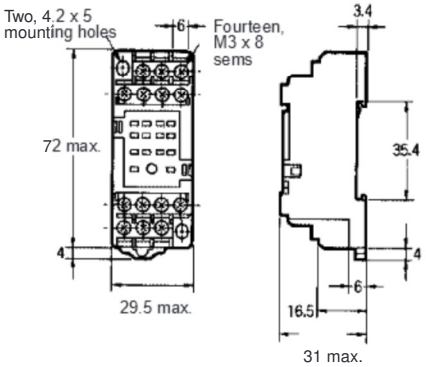
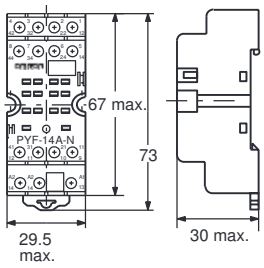
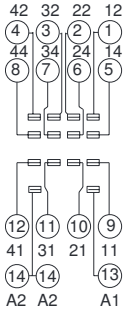
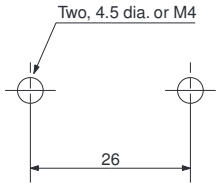
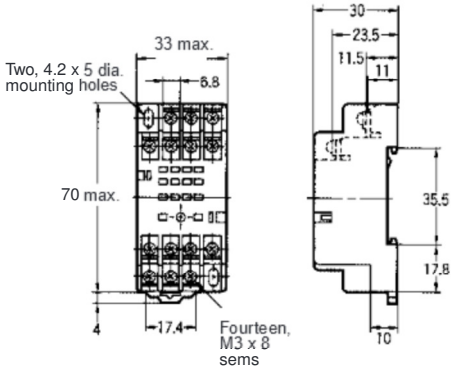
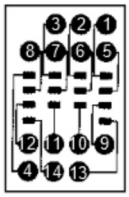
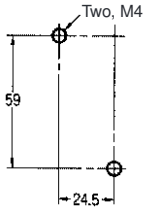
■ P2R/P7TF

Dimensions	Terminal arrangement/ Internal connections	Mounting holes
P2R-05A (One pole) 	 **(Bottom view)**	 Use panel with thickness of 1.6 to 2.0 mm.
P2R-08A (Two poles) 	 **(Bottom view)**	
P7TF-05 	 **(Top view)**	 **(Top view)** **Note:** Track-mounting is also possible.

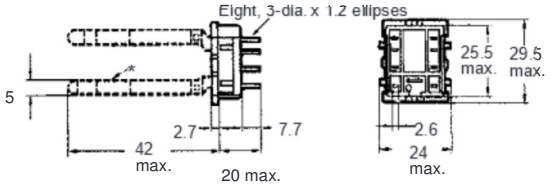
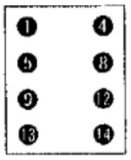
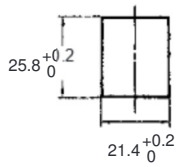
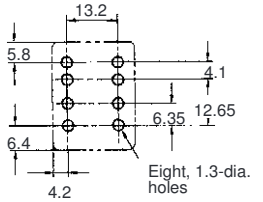
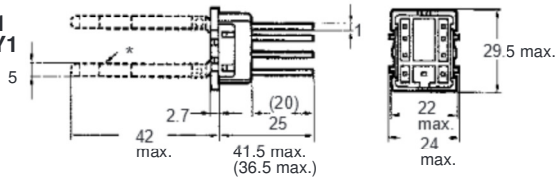
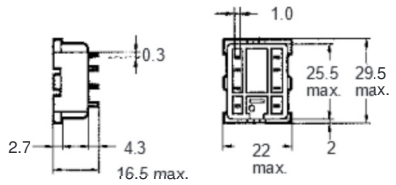
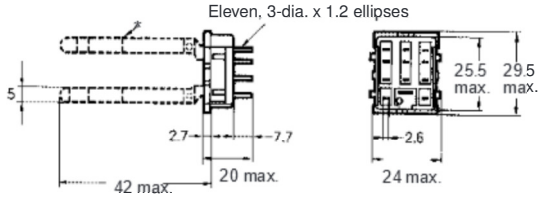
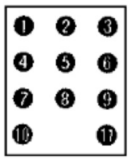
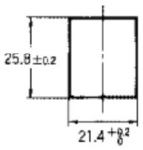
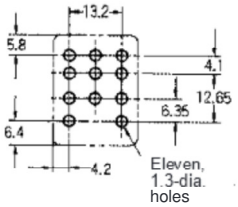
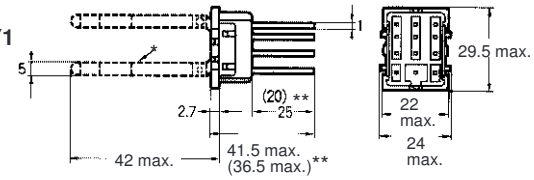
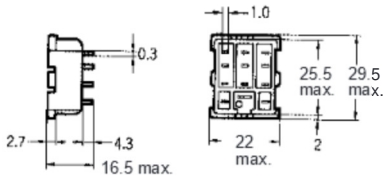
Note: When indicator modules with an I/O SSR are used, the No. 1 pin becomes positive.

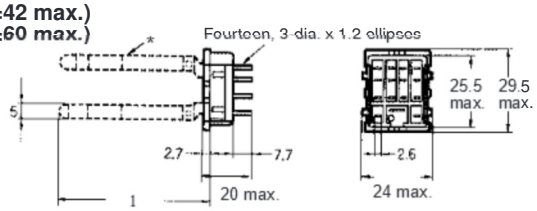
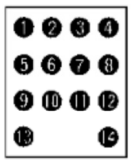
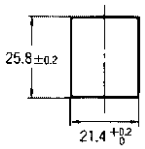
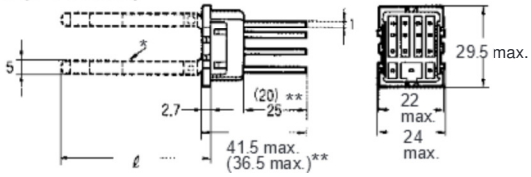
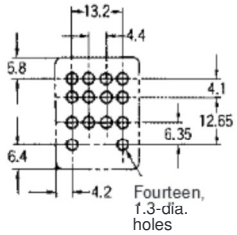
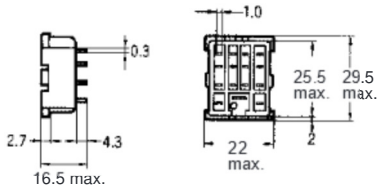
■ PYF Dimensions

Dimensions	Terminal arrangement/ Internal connections (top view)	Mounting holes (top view)
PYF08A 		 **Note:** Track-mounting is also possible.
PYF08A-E 		 **Note:** Track-mounting is also possible.
PYF08A-N 		 **Note:** Track-mounting is also possible. Refer to page 245 for Mounting Tracks.
PYF11A 		 **Note:** Track-mounting is also possible.

Dimensions	Terminal arrangement/ Internal connections (top view)	Mounting holes (top view)
PYF14A 		 **Note:** Track-mounting is also possible.
PYF14A-E 		
PYF14A-N 		 **Note:** Track-mounting is also possible. Refer to page 245 for Mounting Tracks.
PYF14T 		 **Note:** Track-mounting is also possible.

■ PY Dimensions

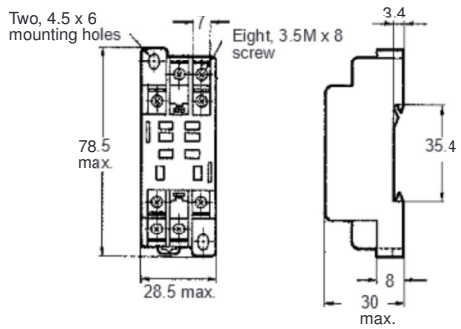
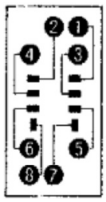
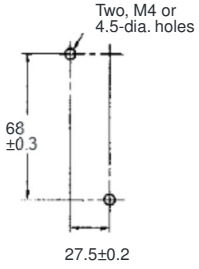
Dimensions	Terminal arrangement/ Internal connections (bottom view)	Mounting holes
PY08 **PY08-Y1** **PY08-Y3**  **Note:** PY08-Y1 includes the part outlined by the dashed lines above.		 
PY08QN **PY08QN2** **PY08QN-Y1** **PY08QN2-Y1**  **Note:** 1. PY08QN(2)-Y1 includes the part outlined by the dashed lines above. 2 The figures in the parentheses are for PY08QN2.		
PY08-02  **Note:** PY08-Y1 includes the part outlined by the dashed lines above.		
PY11 **PY11-Y1**  **Note:** PY11-Y1 includes the part outlined by the dashed lines above.		 
PY11QN **PY11QN2** **PY11QN-Y1** **PY11QN2-Y1**  **Note:** 1. PY11QN(2)-Y1 includes the part outlined by the dashed lines above. 2 The figures in the parentheses are for PY11QN2 (-Y1).		
PY11-02 		

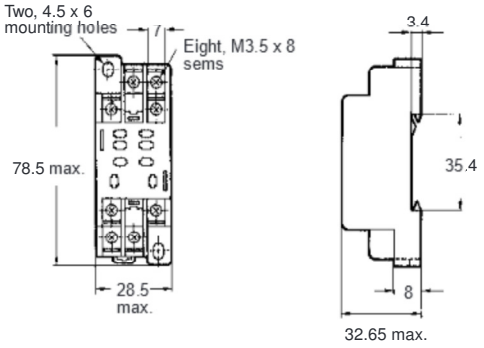
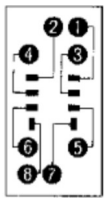
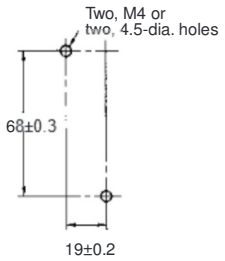
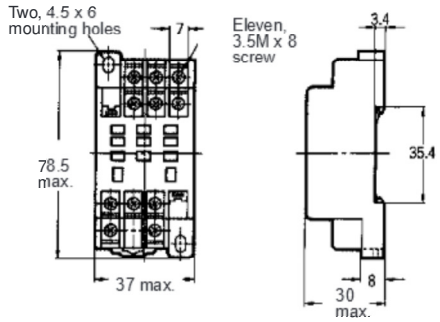
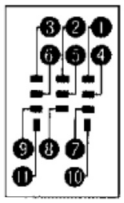
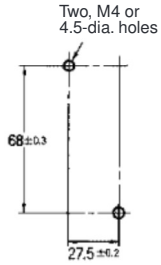
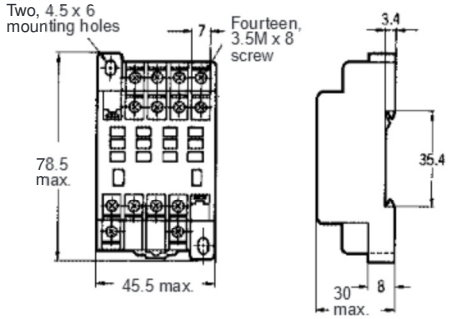
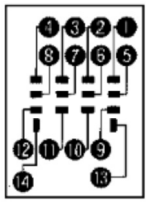
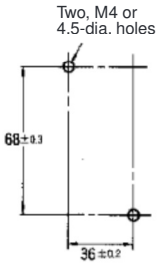
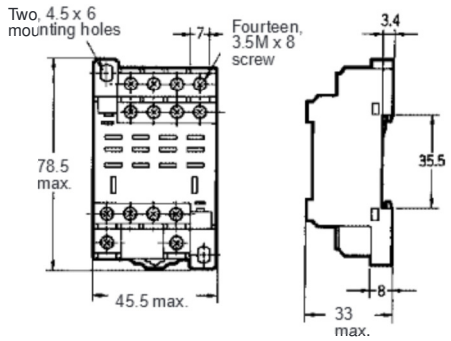
Dimensions	Terminal arrangement/ Internal connections (bottom view)	Mounting holes
PY14 **PY14-Y1 (l=42 max.)** **PY14-Y3 (l=60 max.)**  **Note:** PY14-Y1 includes the part outlined by the dashed lines above.		
PY14QN, PY14QN2 **PY14QN-Y1 (l=42 max.)** **PY14QN2-Y1 (l=42 max.)** **PY14QN-Y2 (l=49 max.)** **PY14QN2-Y2 (l=49 max.)** **PY14QN-Y3 (l=60 max.)** **PY14QN2-Y3 (l=60 max.)**  **Note:** 1. PY11QN(2)-Y1 includes the part outlined by the dashed lines above. 2 The figures in the parentheses are for PY11QN2 (-Y1).		
PY14-02 		

Note: **1.** Use a panel with a thickness of 1 to 2 mm when mounting a Socket on it.

2. The PY14-Y1 and the PY14QN-Y1 can be used with MY4-series models and the MY2K.

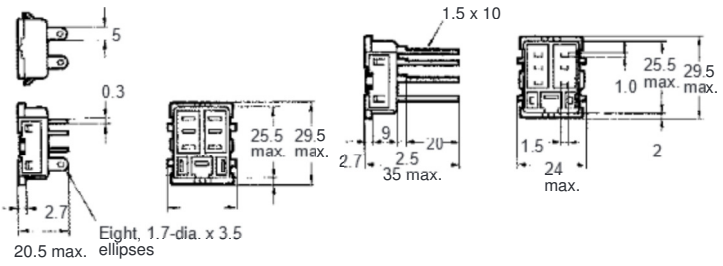
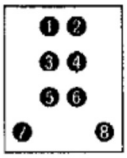
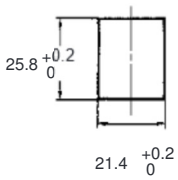
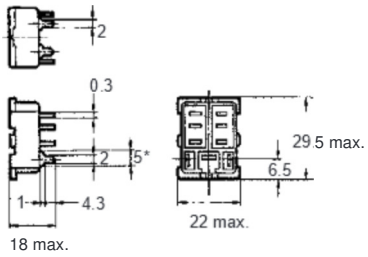
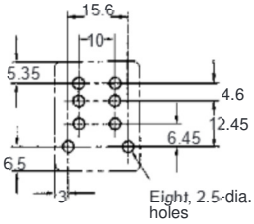
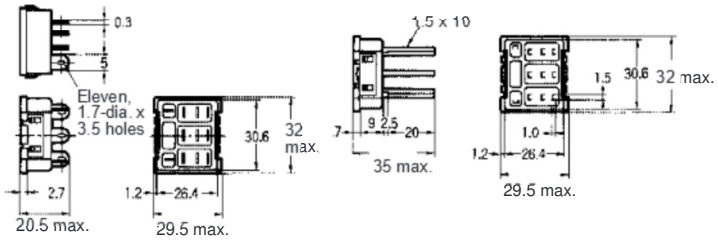
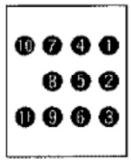
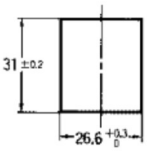
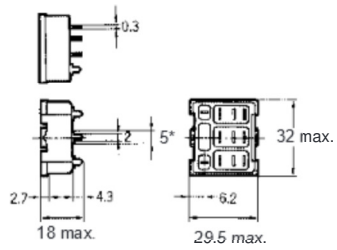
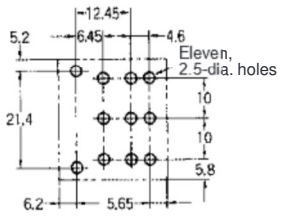
■ PTF Dimensions

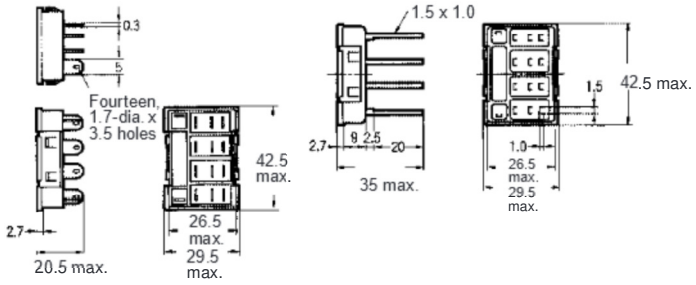
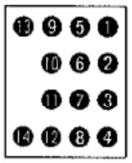
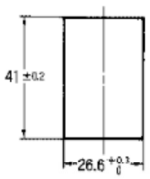
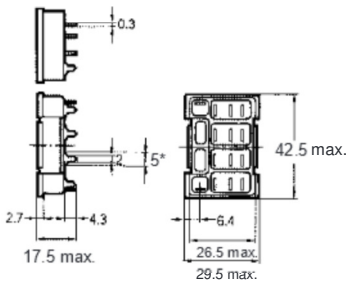
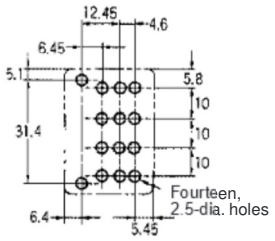
Dimensions	Terminal arrangement/ Internal connections (top view)	Mounting holes (top view)
PTF08A 		 **Note:** Track-mounting is available. See page 245.

Dimensions	Terminal arrangement/ Internal connections (top view)	Mounting holes (top view)
PTF08A-E 		 **Note:** Track-mounting is available. See page 245.
PTF11A 		 **Note:** Track-mounting is available. See page 245.
PTF14A 		 **Note:** Track-mounting is available. See page 245.
PTF14A-E 		

Note: If PTF08A and PT08 are used in combination with LY1 with a total current flow of 10 A minimum, terminals 1 and 2, 3 and 4, 5 and 6 respectively should be short-circuited.

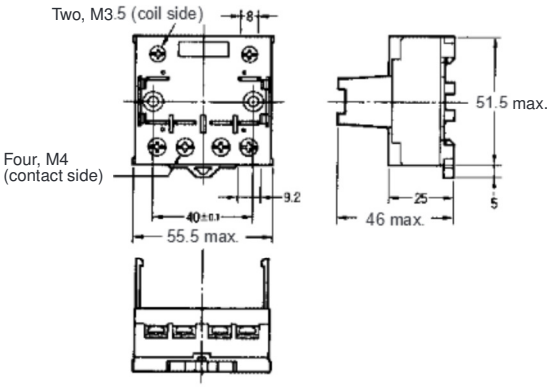
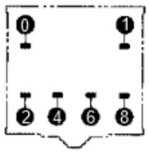
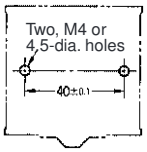
■ PT Dimensions

Dimensions	Terminal arrangement/ Internal connections (bottom view)	Mounting holes
PT08 **PT08QN** 		
PT08-0  *Keep a proper distance between the Socket and PCB patterns.		 The tolerance is ±0.1.
PT11 **PT11QN** 		
PT11-0  *Keep a proper distance between the Socket and PCB patterns.		 The tolerance is ±0.1.

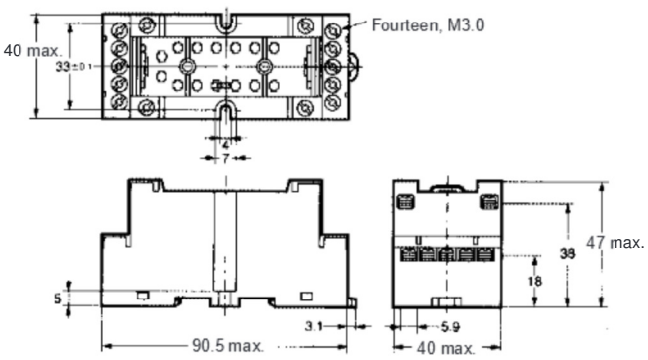
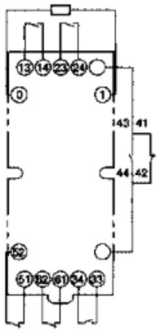
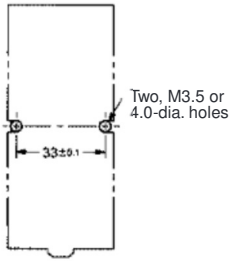
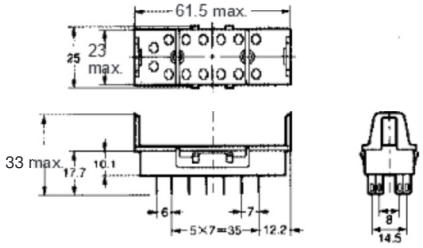
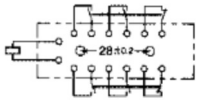
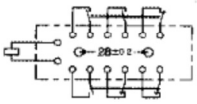
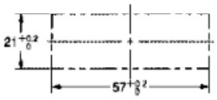
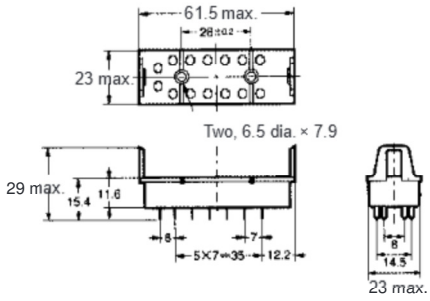
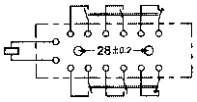
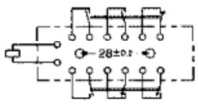
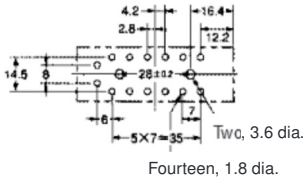
Dimensions	Terminal arrangement/ Internal connections (bottom view)	Mounting holes
PT14 **PT14QN** 		
PT14-0  *Keep a proper distance between the Socket and PCB patterns.		 The tolerance is ±0.1.

Note: Use a panel with a thickness of 1 to 2 mm when mounting a Socket on it.

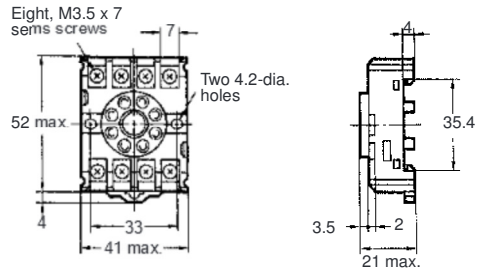
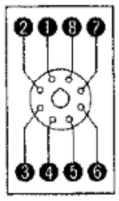
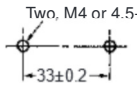
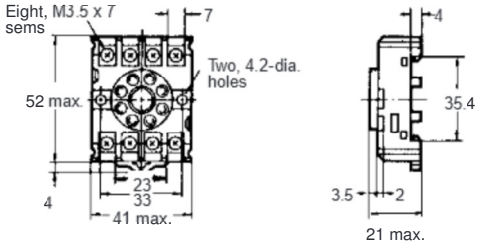
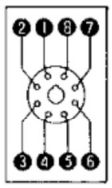
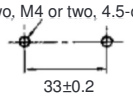
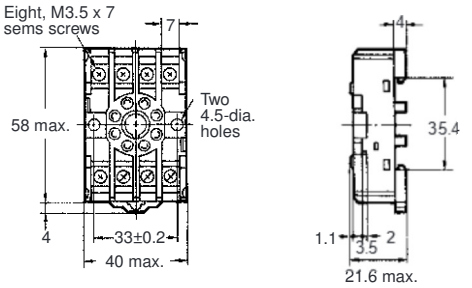
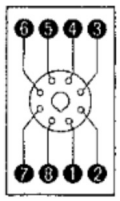
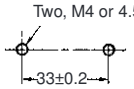
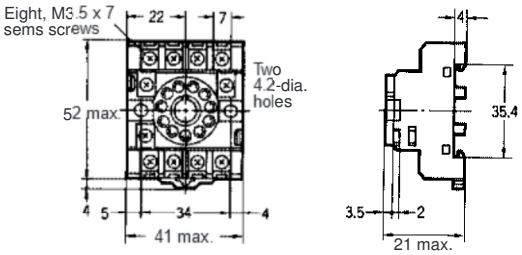
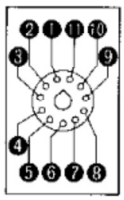
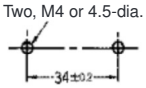
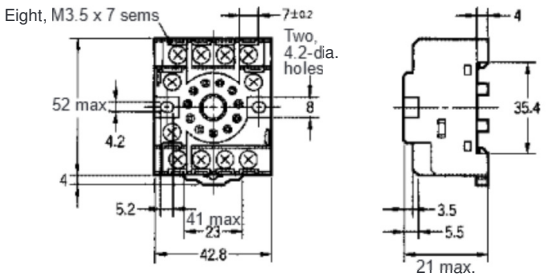
■ P7LF Dimensions

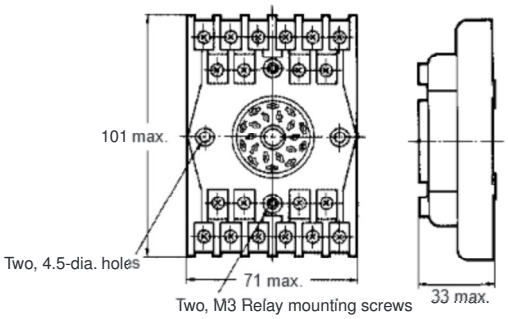
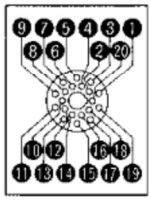
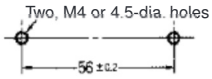
Dimensions	Terminal arrangement/ Internal connections (top view)	Mounting holes
P7LF-06 		

■ P7S Dimensions

Dimensions	Terminal arrangement/ Internal connections	Mounting holes
P7S-14F 	 (top view)	
P7S-14A 	G7S-4A2B  G7S-3A3B  (bottom view)	
P7S-14P 	G7S-4A2B  G7S-3A3B  (bottom view)	

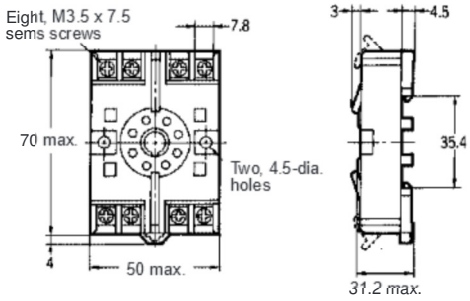
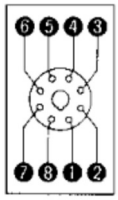
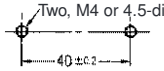
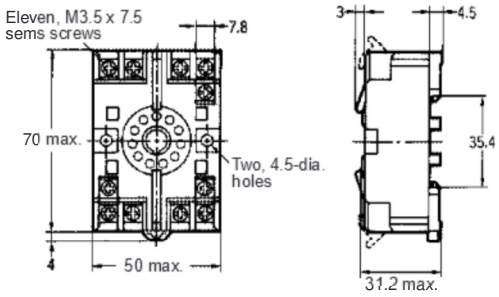
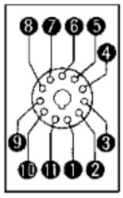
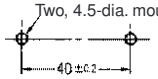
■ PF Dimensions

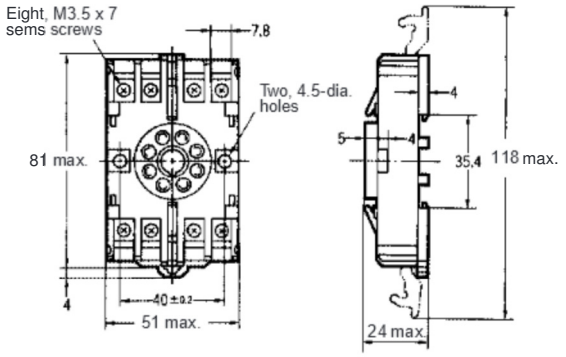
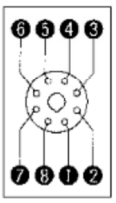
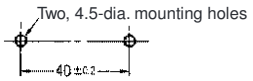
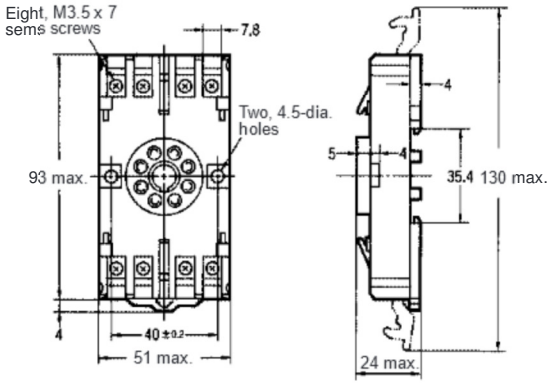
Dimensions	Terminal arrangement/ Internal connections (top view)	Mounting holes
PF083A 		 **Note:** Track-mounting is available. See page 245.
PF083A-E 		
PF085A 		 **Note:** Track-mounting is available. See page 245.
PF113A 		 **Note:** Track-mounting is available. See page 245.
PF113A-E 		

Dimensions	Terminal arrangement/ Internal connections (top view)	Mounting holes
PF202 		

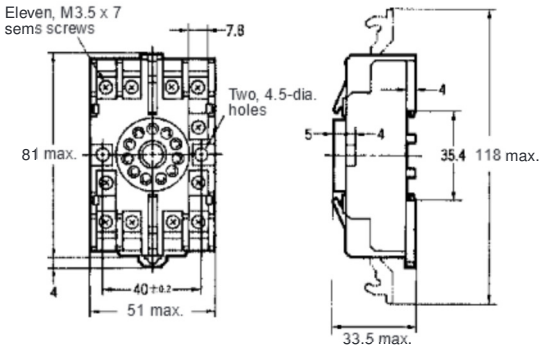
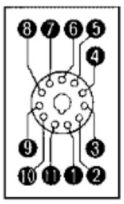
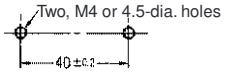
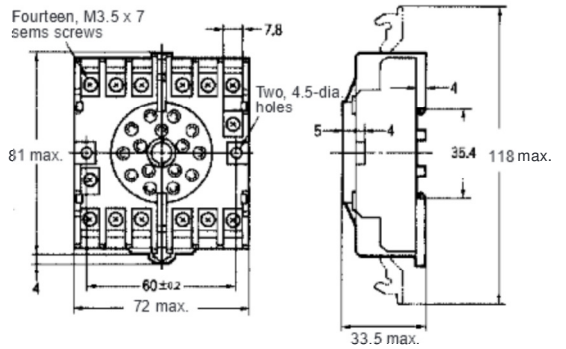
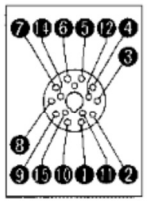
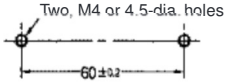
Note: The key groove of PF083A and PF113A (used with MK Relays) are on the upside.

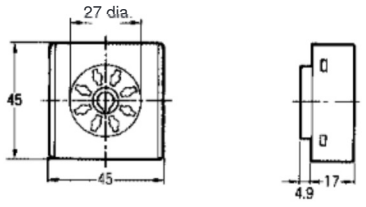
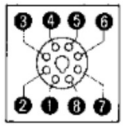
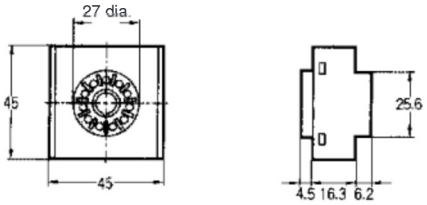
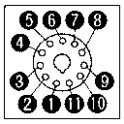
■ P2CF/PFA Dimensions

Dimensions	Terminal arrangement/ Internal connections (top view)	Mounting holes
P2CF-08 		 **Note:** Track-mounting is available. See page 245.
P2CF-11 		 **Note:** Track-mounting is available. See page 245.

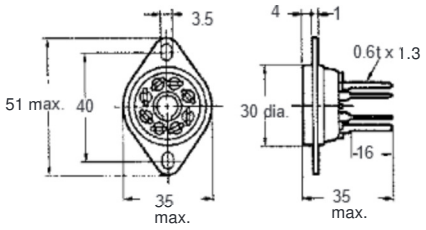
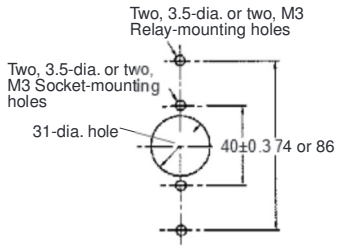
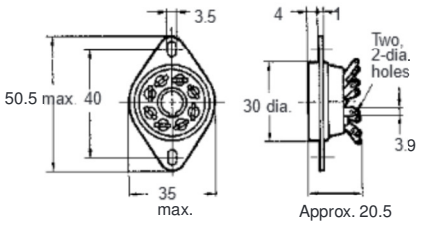
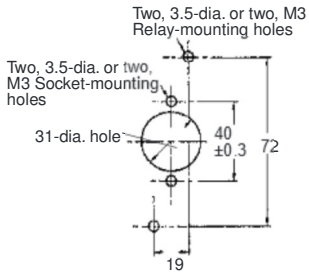
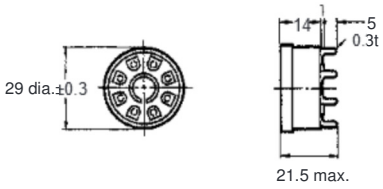
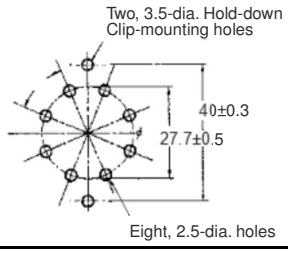
Dimensions	Terminal arrangement/ Internal connections (top view)	Mounting holes
8PFA 		 **Note:** Track-mounting is available. See page 245.
8PFA1 		

■ PFA/P3G/P3GA Dimensions

Dimensions	Terminal arrangement/ Internal connections (top view)	Mounting holes
11PFA 		 **Note:** Track-mounting is available. See page 245.
14PFA 		 **Note:** Track-mounting is available. See page 245.

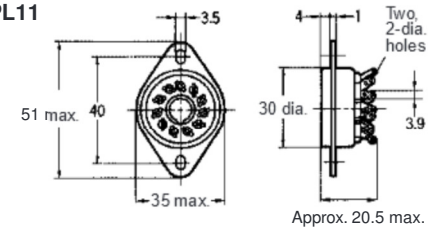
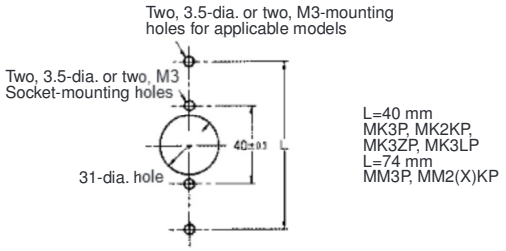
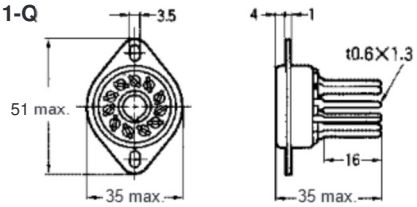
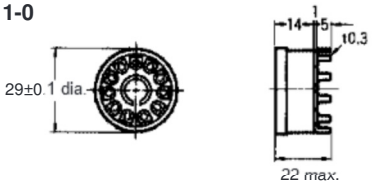
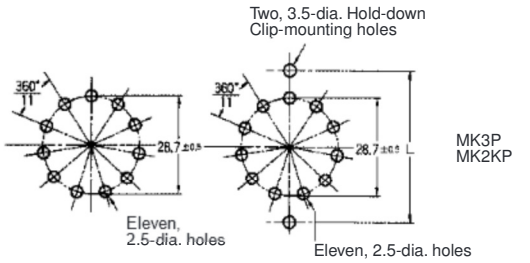
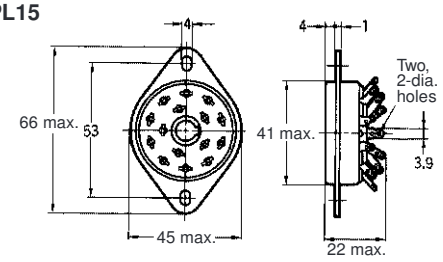
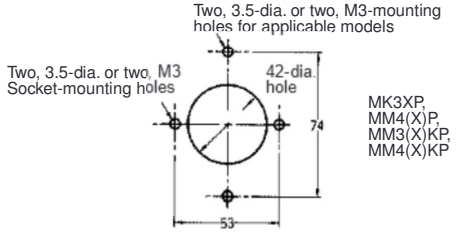
Dimensions	Terminal arrangement/ Internal connections (top view)	Mounting holes
P3G-08 		---
P3GA-11 		---

■ PL Dimensions

Dimensions	Terminal arrangement/ Internal connections (bottom view)	Mounting holes
PL08 		
PL08-Q 		
PLE08-0 		

Note: When mounting, pay due attention to the direction of the key groove of applicable Relays.

■ PL Dimensions

Dimensions	Terminal arrangement/ Internal connections (bottom view)	Mounting holes
PL11 		
PL11-Q 		
PLE11-0 		
PL15 		
PL20