

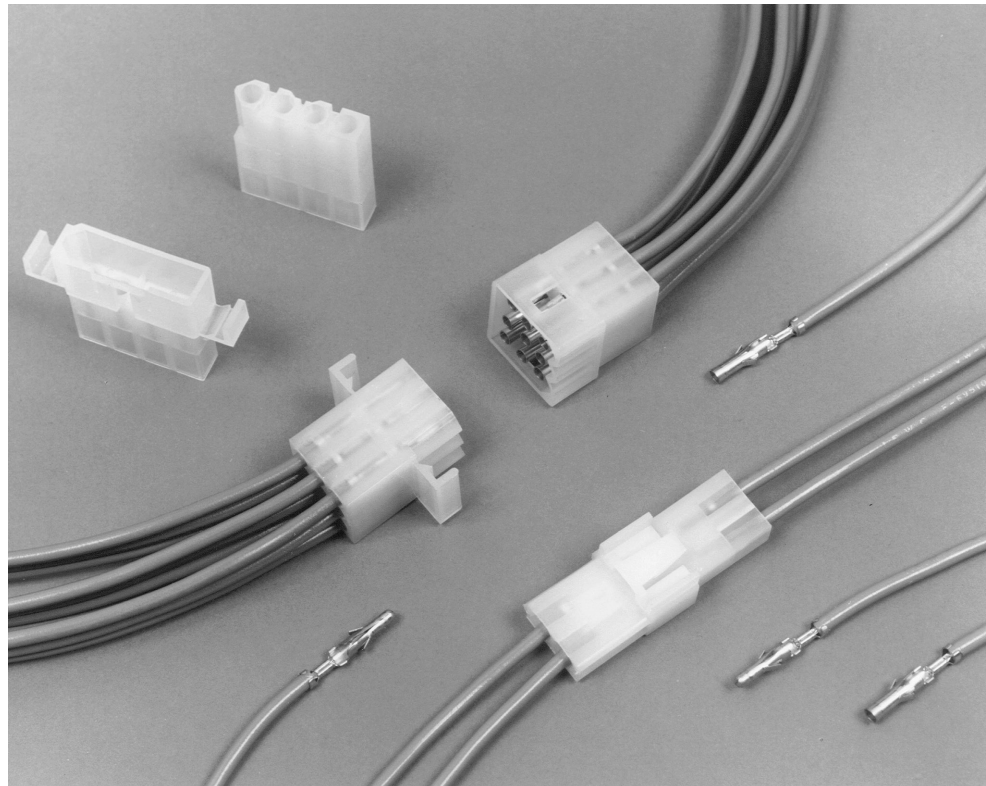


Product Facts

- Polarised
- Cavity identification
- Low contact-mating force
- Dual locking lances
- Detent and positive locking
- Contacts available in brass and phosphor bronze with tin and gold plating
- Panel-mounting and free-hanging styles
- “F” crimp contacts
- Applicator and hand tool available
- Economical commercial-grade connectors
- Compatible with high-speed application machinery and competitive soft shells
- Wire range from 24 to 14 AWG [0.2 to 2 mm²]
- Accepts wires with insulation diameters as large as .180 [4.57]
- Housings available in 1 to 15 positions
- .093 plug and receptacle housings accept pin or socket contacts. The preferred convention is to use socket contacts with receptacle housings
- Not for interrupting current
- Recognised under the Component Program of Underwriters Laboratories Inc.,  File No. E28476
- Certified by Canadian Standards Association,  File No. LR 7189



Performance Characteristics:

The .093 Commercial Pin and Socket Connectors performance characteristics found below are based on free hanging and panel mount connectors, loaded with contacts crimped on stranded wire.

Thermal Shock — -55°C to +105°C

Temperature-Humidity Cycling — +25°C to +65°C at 90–95% RH

Corrosion — 48 hr. at 5% salt concentration

Vibration — 10-55-10 cycles per minute at .06 [1.52] total excursion

Physical Shock — 18 shocks, 50 Gs sawtooth in 11 milliseconds

Durability — 50 mating cycles

Dielectric Withstanding Voltage — 1.0 kVAC

Insulation Resistance — 1000 megohms min. initial

Voltage Rating — 250 V AC or DC

Connector Mating — 2.5 lb. [11.1 N] max. per contact

Connector Unmating — 1.5 lb. [6.7 N] min. per contact

Contact Retention — 10 lb. [44.5 N] min.

Technical Documents:

Product Specification
108-1038

Application Specification
114-49000

Contacts

Product Specification:

Pin Diameter—.093 [2.36]

Material:

.010 [0.25] Stock Thickness
Pin and socket contacts can be used in either plug or receptacle housings.

Related Product Data:

Performance Characteristics— page 9051

Housings—
.198 [5.03] Centerline— pages 9053-9054
.250 [6.35] Centerline— pages 9055-9056

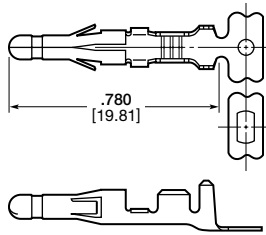
Panel Cutouts—
.250 [6.35] Centerline Housings— page 9055

Application Tooling— pages 9120, 9121 and 9123

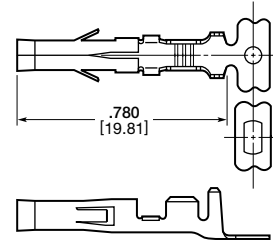
Technical Documents: pages 9051 and 9119

Product Specification
108-1038

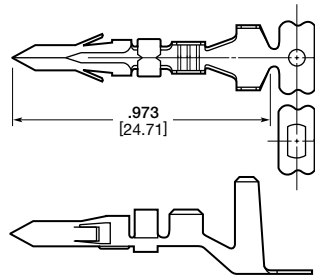
Application Specification
114-49000



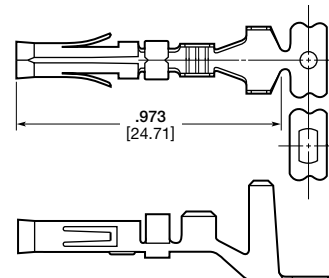
Pin



Socket



Pin
Part Number 770385-1³



Socket
Part Number 770383-1³



**Contact Insertion Tool
(For Pins and Sockets)**
Part Number 91002-1
IS 408-7347



Contact Extraction Tool
Part Number 318837-1
IS 408-4375

Wire Size AWG	mm ²	Ins. Dia.	Material & Finish	Contact Part Numbers				Hand Tool Part Numbers
				Pin		Socket		
				Strip Form	Loose Form	Strip Form	Loose Form	
24-18	0.2-0.9	.110 2.79	Brass, Pre-tin	350418-1	770147-1	350417-1	770146-1	90872-1
			Brass, Gold ²	—	—	350417-3 ²	770146-3 ²	
			Brass Select Gold ¹	350418-5 ¹	770147-5 ¹	350417-5 ¹	770146-5 ¹	
20-14	0.6-2	.140 3.56	Brass, Pre-tin	350416-1	770145-1	350415-1	770144-1	90871-1
			Brass, Select Gold ¹	350416-5 ¹	770145-5 ¹	350415-5 ¹	770144-5 ¹	
			Phos. Brz., Pre-tin	—	—	350415-6	770144-6	
18-14 or 2 (18)	0.8-2 or 2 (0.8-0.9)	.180 4.57	Brass, Pre-tin	770385-1 ³	—	—	—	—
			Phos. Brz., Pre-tin	—	—	770383-1 ³	—	

¹ Select Gold—.000030 [.000762] min gold in mating area over .000050 [.00127] min nickel.

² Gold—.000050 [.00127] min gold in mating area, overall gold flash over .000050 [.00127] min nickel.

³ These contacts have a .0125 [.318] stock thickness and accept two wires, each with maximum .180 [4.57] insulation diameters. They can be used **only** with the following housing part numbers: 770364-1, 770365-1, 770450-1, 770451-1, 770452-1, and 770453-1.

⁴ Contact length is .875 [22.23]

Note: Phosphor bronze contacts should be used in high-temperature/humidity cycling applications.

Housings, Free Hanging or Panel Mount

Product Specification:

Centerline spacing—.198 [5.03]

Material:

Housing—Nylon, natural colour

Flammability Rating—UL94V-2

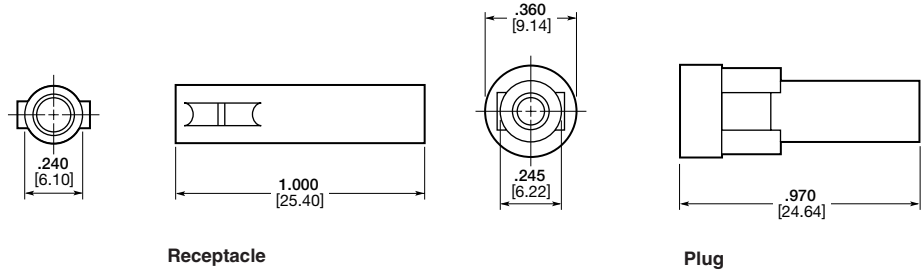
Related Product Data:

Contacts—page 9052

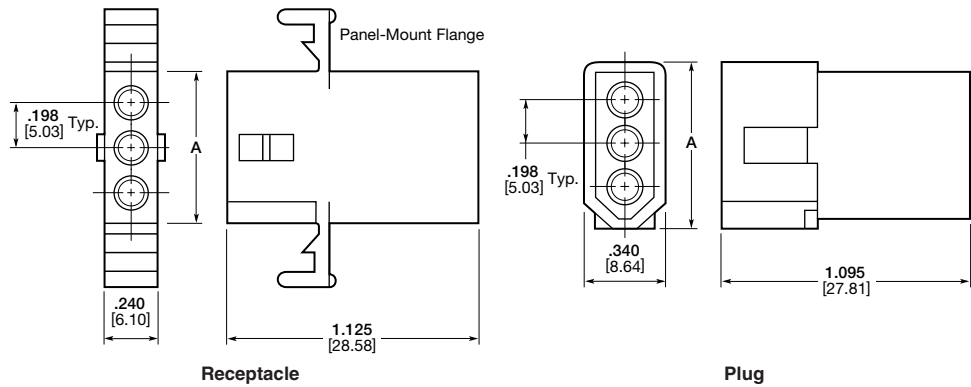
Technical Document:

Product Specification
108-1038

1 Circuit



2, 3, 4 and 6 Circuit, In-Line



No. of Circuits	A Dim.		Receptacle Part Numbers				Plug Part Numbers	
	Receptacle	Plug	Panel-Mount		Free-Hanging		Panel-Mount	Free-Hanging
			Without Detents	With Detents	Without Detents	With Detents		
1	—	—	—	—	—	770063-1	—	770064-1
2	.540 13.72	.640 16.26	—	770066-1 ^{1,5}	—	770065-1 ^{1,5} 770266 ^{1,3,5}	770068-1 ¹	770069-1 ¹
3	.670 17.02	.770 19.56	—	770071-1	—	770070-1 770264-1 ³	770073-1	770074-1
4 (In-Line)	.870 22.10	.970 24.64	—	770076-1	—	770075-1	770077-1	770078-1
4 (Matrix)	.443 11.25	.540 13.71	—	—	—	770843-1	—	770842-1
5	1.070 27.18	1.170 29.72	—	—	—	770083-1 794015-1 ³	—	770084-1
6 (In-Line)	1.268 32.21	1.378 35.00	—	—	—	770782-1 ⁴	—	770892-1 ⁴
6 (Matrix)	.435 11.05	.535 13.59	770085-1	770087-1	770088-1	770086-1	770089-1	770090-1
9	.670 17.02	.770 19.56	770091-1	770093-1	770094-1	770092-1	770095-1 ² 770108-1	770096-1
12	.870 22.10	.970 24.64	770097-1	770099-1	770100-1	770098-1	770101-1	770102-1
15	1.070 27.18	1.170 29.72	770103-1	—	770105-1	—	770106-1	770107-1

¹ .248 [6.30] centerline.

² Mounting ears at wire end.

³ Tool removable.

⁴ Positive lock.

⁵ 600V AC or DC

Housings, Free Hanging or Panel Mount

Product Specification:

Centerline spacing—.198 [5.03]

Material:

Housing—Nylon, natural colour

Flammability Rating—UL94V-2

Related Product Data:

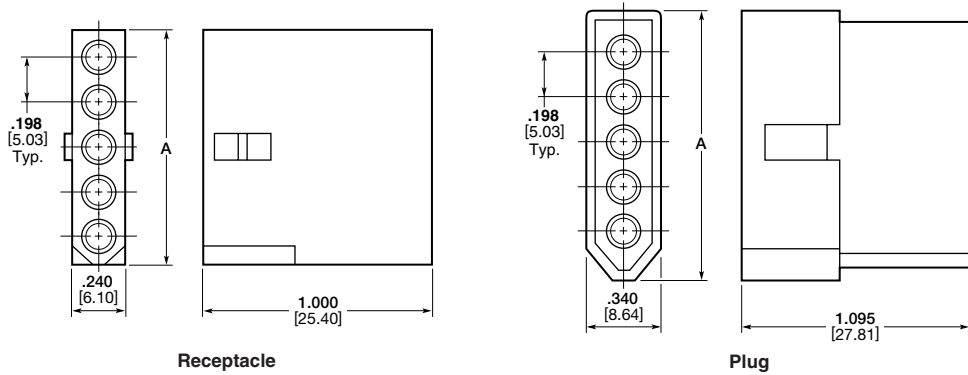
Contacts—page 9052

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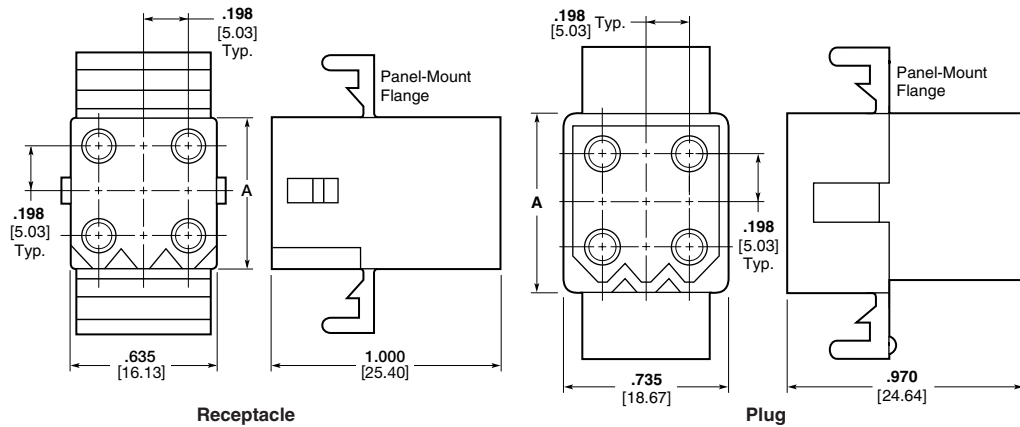
Product Specification

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5 Circuit, In-Line



4, 6, 9, 12, and 15 Circuit, Matrix



Housings, Free Hanging or Panel Mount

Product Specification:

Centerline spacing—.250 [6.35]

Material:

Housing—Nylon, natural colour
 Flammability Rating—UL94V-2
 Voltage Rating—600V AC or DC

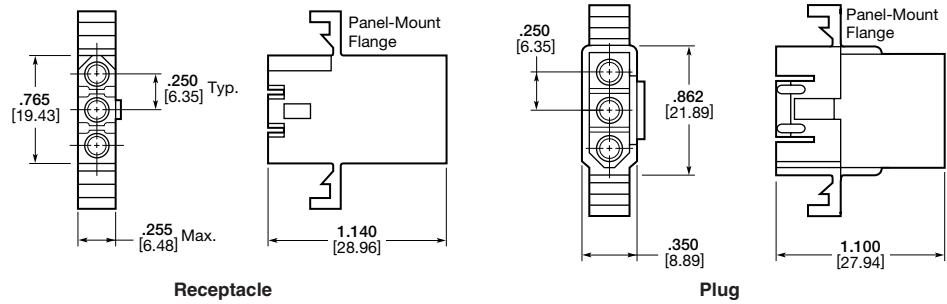
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Contacts—page 9052

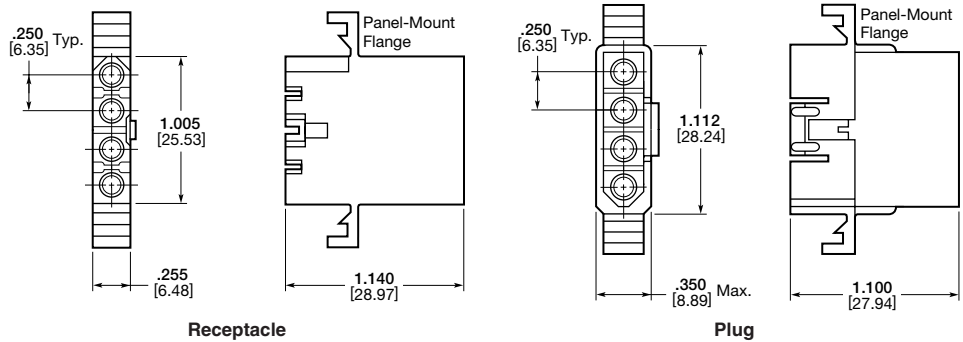
Technical Document:

Product Specification
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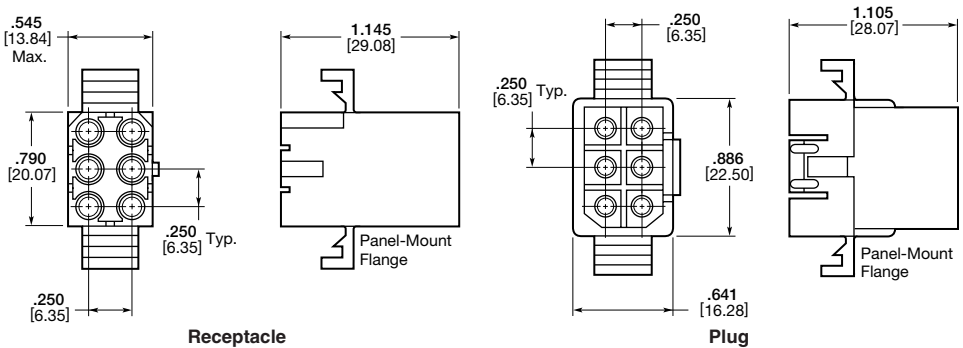
3 Circuit, In-Line



4 Circuit, In-Line



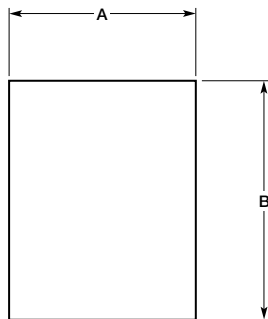
6 Circuit, Matrix



Recommended Panel Cutouts

Maximum panel thickness is .062 [1.57].

Note: The panel should be punched so that the housing enters in the same direction as the punch.



No. of Circuits	Receptacle Part Numbers		Plug Part Numbers	
	Panel-Mount	Free-Hanging	Panel-Mount	Free-Hanging
3	770269-1 770771-1 ¹	770339-1	770338-1	770276-1
4	770329-1	770337-1	770330-1	770336-1
6	770372-1	770360-1	770373-1	770361-1

¹ Pre-bent mounting ears.

No. of Circuits	Panel Cutout Dimensions			
	Receptacle		Plug	
	A	B	A	B
3	.310 7.87	.920 23.37	.365 9.27	1.022 25.96
4	.310 7.87	1.168 29.67	.365 9.27	1.270 32.26
6	.608 15.44	.946 24.03	.658 16.71	1.048 26.62

Housings, Free Hanging or Panel Mount

Product Specification:

Centerline spacing—.250 [6.35]

Material:

Housing—Nylon, natural colour
 Flammability Rating—UL94V-2
 Voltage Rating—600V AC or DC

Related Product Data:

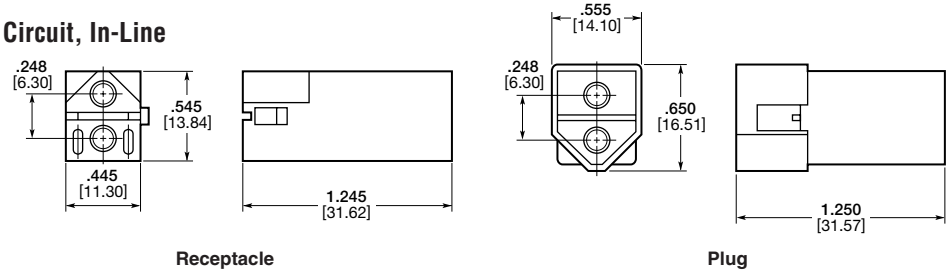
Contacts—page 9052

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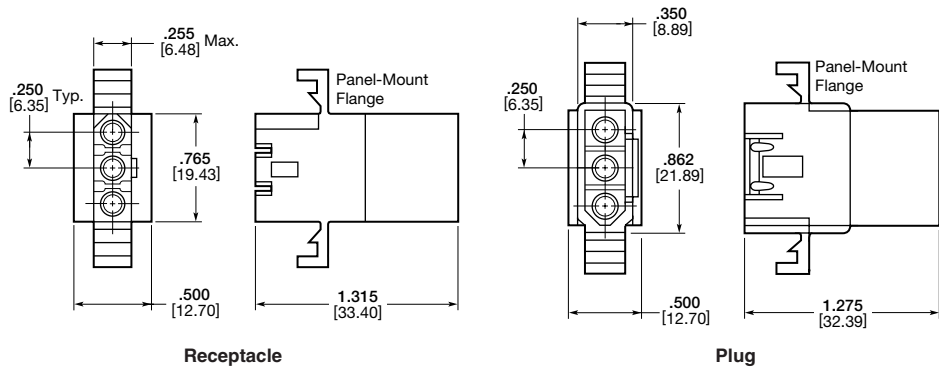
Product Specification
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Dual Wire

2 Circuit, In-Line



3 Circuit, In-Line

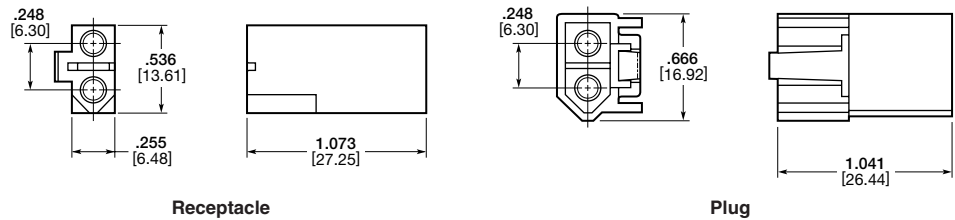


No. of Circuits	Receptacle Part Numbers		Plug Part Numbers	
	Panel-Mount	Free-Hanging	Panel-Mount	Free-Hanging
2	—	770364-1 ¹	—	770365-1 ¹
3	770453-1	770451-1	770452-1	770450-1

¹.248 centerline.

Positive Lock

2, 3 and 4 Circuit, In-Line



No. of Circuits	Receptacle Part Numbers		Plug Part Numbers	
	Free-Hanging		Free-Hanging	
2	770424-1 ¹		770425-1 ¹	
3	770785-1		770783-1	
4	770784-1		770810-1	

¹.248 centerline.