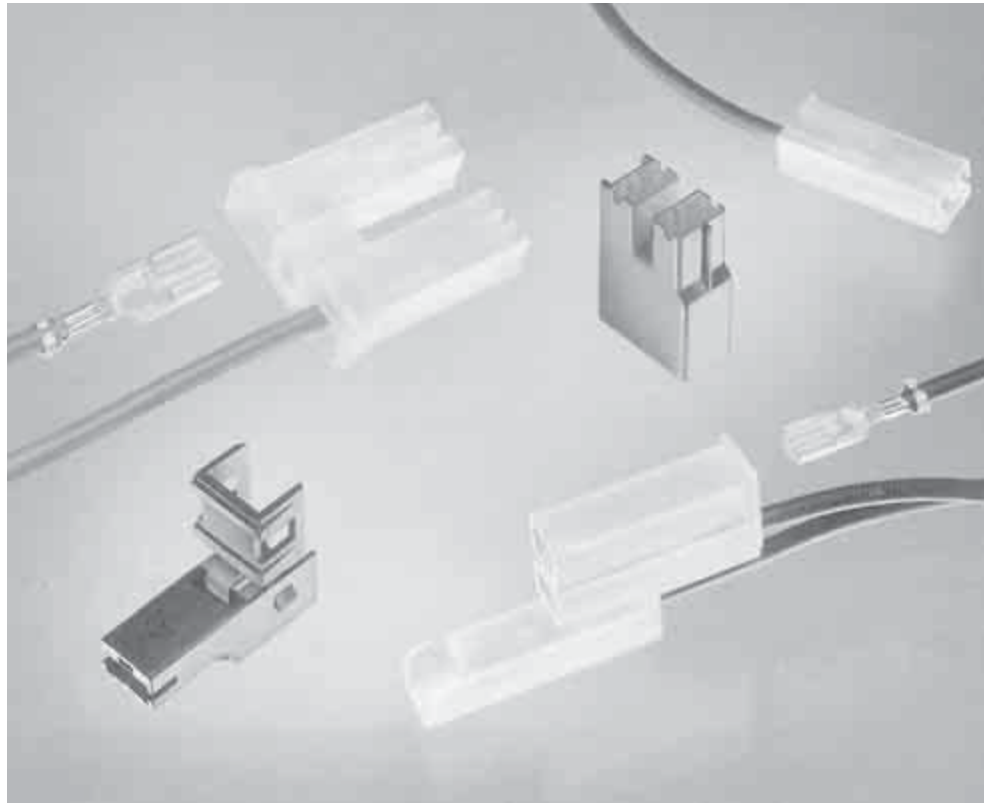


## Positive Lock Receptacles

### Product Facts

- Reduced insertion force
- Locks onto tabs containing holes
- Housing insulates and serves as a removal tool
- “Snap” action tells assembler receptacle is mated properly
- Terminated by automatic or semi-automatic equipment
- Single and multiple circuit housings available
- Recognized under the Component Program of Underwriters Laboratories Inc., File Nos. E66717 and E28476
- Certified by Canadian Standards Association File No. LR7189A



Positive Lock receptacles are specifically designed to provide ease of assembly and secure retention to mating tabs. These unique features are attainable by the reduced insertion force of the product and the locking dimple. The receptacle locks onto mating tabs containing holes and is removable only by deflecting an integrally designed depressor prior to withdrawal. The depressor can be deflected manually by thumb pressure, or automatically by a cam inside a specially designed nylon housing. If the housing is employed,

removal of the terminal from the tab is performed by simply applying withdrawal force to the housing. In addition to providing a means of disconnecting the terminal, the housing performs its traditional insulating function.

Aside from reduced insertion forces, Positive Lock receptacles give the assembler a definite mechanical “snap” when the terminal is correctly seated over the mating tab. This facilitates correct assembly in hard-to-reach areas such as under dashboards, recessed switch tabs, etc.

Safety is enhanced by the locking capability of the product. Unless the depressor is deliberately deflected, either manually or by withdrawal force applied directly to the optional housing, a terminal will not easily come off of the tab. Thus, the potential of exposed live parts or disruption of critical circuitry due to improperly seated or accidentally removed terminals is greatly reduced.

**Positive Lock Receptacles (Continued)**

**Mark I**

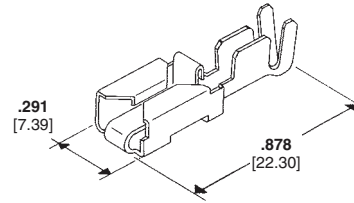
**250 Series Receptacles**



**Stock Thickness** — .016 [0.41]

**Fits Tab** — .032 [0.81]

Recognized under the Component Program of Underwriters Laboratories Inc.,

UL File No. E28476 



Wire Range AWG	Insulation Diameter	Material and Finish	Part Numbers				
			Receptacle			Quick Change Applicator No. <sup>2</sup>	Hand Tool
20-16	.090-.130 2.29-3.30	Brass/Pre-Tin	1-160759-1	X	X	567181-2	654174-1
18-14	.135-.195 3.43-4.95	Brass/Tin	63812-1 <sup>1</sup>	X	X	680140-2	—
	.095-.155 2.41-3.94	Brass/Tin	154718-3	X	—	466542-3	525651
14-11	.140-.170 3.56-4.32	Brass/Tin	154717-3	X	—	466883-2	525651
12-10	.135-.200 3.43-5.08	Brass/Pre-Tin	790319-3	—	—	567417-2	—

<sup>1</sup> "A" Style Housing only.

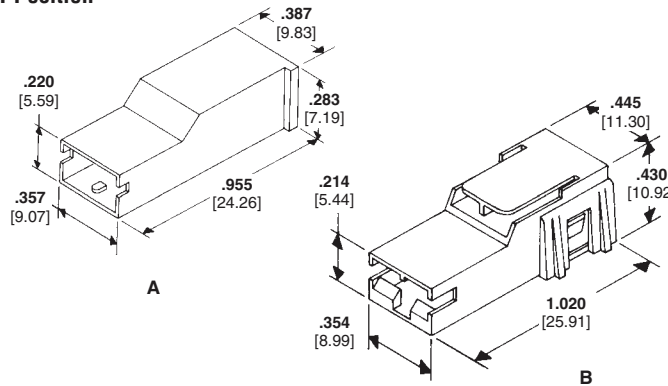
<sup>2</sup> Quick-Change Applicator for AMP-O-LECTRIC Machine 565435-5.

For AMPOMATOR Machine and other machines not listed, contact Tyco Electronics.

**Receptacle Housings**

**Material** — 94 V-2, 6/6 Nylon

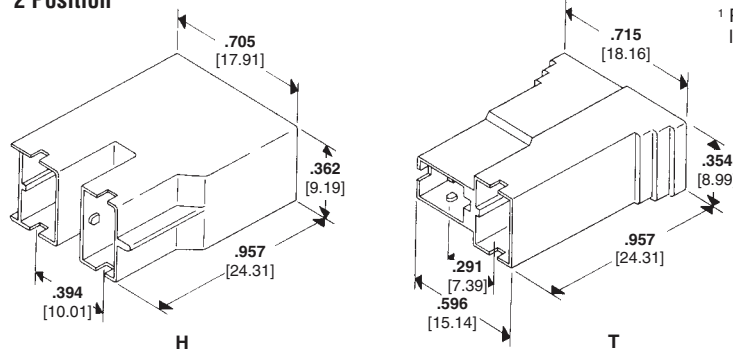
**1 Position**



Style	Color	Part No.
A	Black	154719-0
	Natural	154719-1
B	Black	520961-1 <sup>1</sup>
H	Black	926521-2
T	Black	926522-1
	Natural	926522-2

<sup>1</sup> Press-to-release with secondary lock.

**2 Position**



**Note:** All part numbers are RoHS compliant.

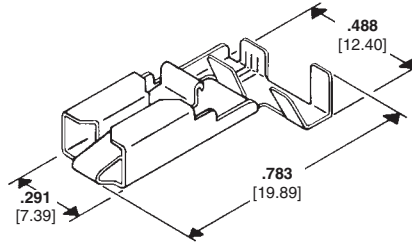
**Positive Lock Receptacles (Continued)**

**Mark I**

**250 Series Flag Receptacle**

Stock Thickness — .016 [0.41]

Fits Tab — .032 [0.81]



Wire Range AWG	Insulation Diameter	Material and Finish	Part Numbers	
			Receptacle	Quick Change Applicator No. <sup>1</sup>
20-16	.087-.130 2.21-3.30	Brass/Pre-Tin	926820-4	680436-2

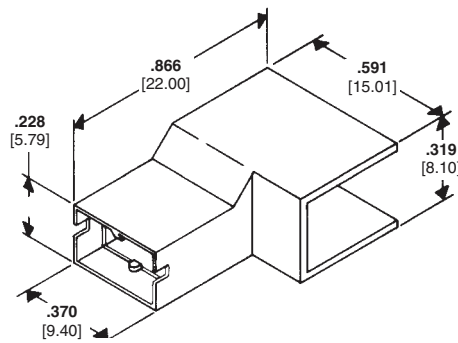
<sup>1</sup> Quick-Change Applicator for AMP-O-LECTRIC Machine 565435-5.  
For AMPOMATOR Machine and other machines not listed, contact Tyco Electronics.

Positive Lock Receptacles

**Mark I**

**250 Series  
Receptacle Housings**

Material — 94 V-2, 6/6 Nylon

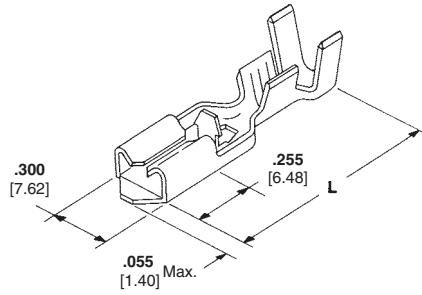


Color	Part Number
Black	926291-1

**Note:** All part numbers are RoHS compliant.

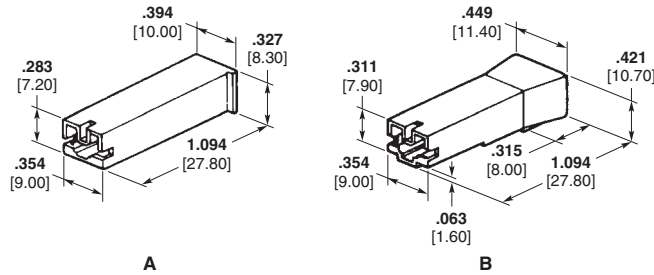
**Positive Lock Receptacles (Continued)**

**Mark II  
250 Series  
Straight Receptacles**



Wire Range AWG	Tab Thickness	Insulation Diameter	Material and Finish	Stock Thickness	L (Overall Length)	UL	SP	Terminal Part No.
22-18	.032 0.81	.060-.100 1.52-2.54	Brass, Tin Plated	.016 0.41	.886 22.50	X	X	63119-1
	.032 0.81	.059-.122 1.50-3.10	Pre-Tin Brass	.016 0.41	.976 24.80	X	X	170327-1
18-14	.032 0.81	.090-.155 2.29-3.94	Brass	.016 0.41	.886 22.50	X	X	63097-2
	.032 0.81	.090-.155 2.29-3.94	Brass, Tin Plated	.016 0.41	.886 22.50	X	X	63097-1
	.025 0.64	.090-.155 2.29-3.94	Brass, Tin Plated	.016 0.41	.886 22.50	X	X	63809-1
	.020 0.51	.090-.155 2.29-3.94	Brass, Tin Plated	.016 0.41	.886 22.50	X	X	63442-1
	.032 0.81	.090-.135 2.29-3.43	Pre-Tin Brass	.016 0.41	1.015 25.80	X	X	170328-1
	.032 0.81	.110-.200 2.79-5.08	Pre-Tin Brass	.016 0.41	1.015 25.80	X	X	170329-1
12-10	.032 0.81	.150-.200 3.81-5.08	Brass, Tin Plated	.018 0.46	.913 23.20	X	X	63239-1

**Mark II  
250 Series  
Receptacle Housings  
1 Circuit**

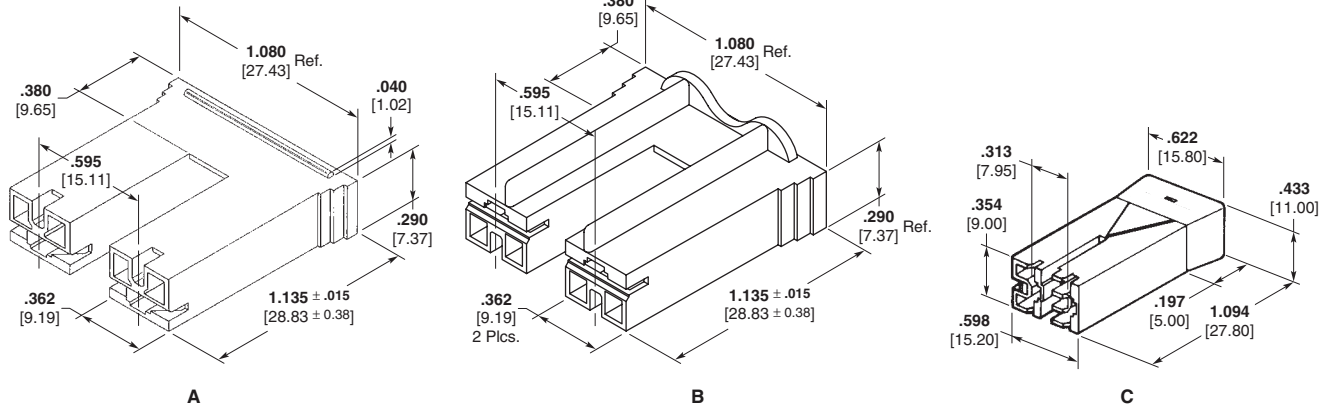


Style	Material	UL 94	Color	UL	SP	Part Number
A	6/6 Nylon	V2	Natural	—	—	172076-1
			Black	—	—	172076-2
			Yellow	—	—	172076-4
			Green	—	—	172076-5
			Blue	—	—	172076-6
		Red	—	—	172076-7	
		V0	Natural	—	—	2-172076-1
			Black	—	—	2-172076-2
			Yellow	—	—	2-172076-4
			Green	—	—	2-172076-5
Blue	—		—	2-172076-6		
B	6/6 Nylon	V0	Red	—	—	2-172076-7
			Natural	X	X	177627-1
			Yellow	X	X	177627-4
			Green	—	—	177627-5
			Blue	—	—	177627-6
			Red	—	—	177627-7
			Black	—	—	177627-9

**Note:** All part numbers are RoHS compliant.

**Positive Lock Receptacles (Continued)**

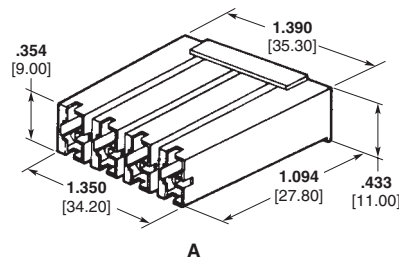
**Mark II**  
**250 Series**  
**Receptacle Housings**  
**2 Circuit**



Style	Material	UL 94	Color			Part Number
A	6/6 Nylon	V2	Natural	X	X	520935-1
			Red	X	X	520935-2
			Black	—	—	520935-3
			Green	—	—	520935-4
			Blue	—	—	520935-5
			Yellow	—	—	520935-6
			Brown	—	—	520935-7
B	6/6 Nylon	V0	Natural	—	—	1-520935-1
			Red	—	—	1-520935-2
			Blue	—	—	1-520935-5
C	6/6 Nylon	V0	Natural	X	X	521229-1
			Red	—	—	521229-2
C	6/6 Nylon	V0	Natural	—	—	521588-1
			Natural	—	—	178833-1
			Yellow	—	—	178833-4
			Blue	—	—	178833-6
			Red	—	—	178833-7

Positive Lock Receptacles

**Mark II**  
**250 Series**  
**Receptacle Housings**  
**4 Circuit**

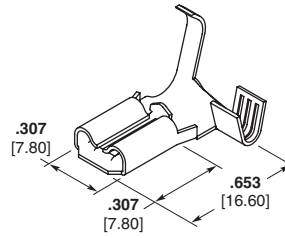


Style	Material	UL 94	Color			Part Number
A	6/6 Nylon	V2	Natural	X	X	174429-1

**Note:** All part numbers are RoHS compliant.

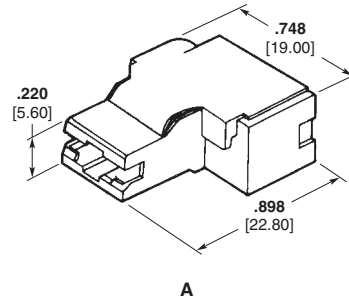
**Positive Lock Receptacles (Continued)**

**Mark II**  
**250 Series**  
**Flag Receptacles**  
**Stock Thickness** — .016 [0.41]  
**Fits Tab** — .032 [0.81]



Wire Range AWG	Insulation Diameter	Material and Finish	UL	RU	SP	Terminal Part No.
22-18	0.59-.110 1.50-2.80	Pre-Tin Brass	X	—	X	172761-1
18-14	.110-.205 2.80-5.20	Pre-Tin Brass	X	—	X	172763-1
12-10	.110-.205 2.80-5.20	Pre-Tin Brass	X	—	X	172765-1

**Mark II**  
**250 Series**  
**Flag Style Receptacle Housing**  
**1 Circuit**

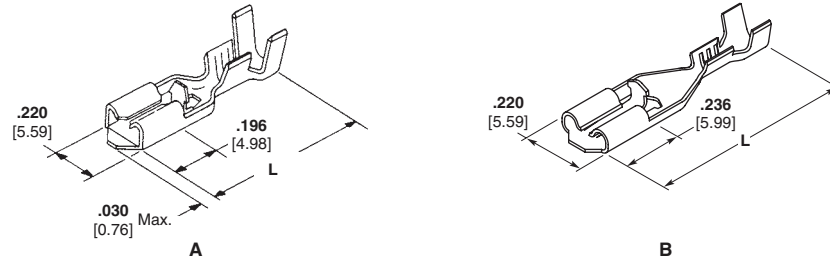


Style	Material	UL 94	Color	RU	SP	Part Number
A	6/6 Nylon	V2	Natural	X	X	172469-1
			Blue	X	X	172469-2
			Green	—	—	172469-4
			Red	—	—	172469-7
		V0	Natural	—	—	1-172469-1
			Blue	—	—	1-172469-2
			Yellow	—	—	1-172469-3

**Note:** All part numbers are RoHS compliant.

**Positive Lock Receptacles (Continued)**

**Mark II  
187 Series  
Straight Receptacles**



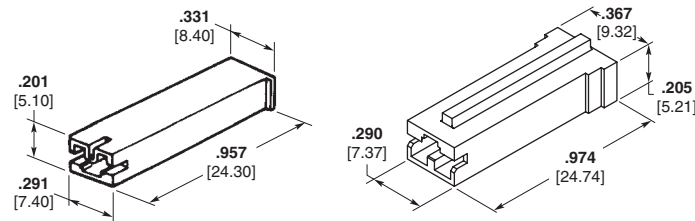
Wire Range AWG	Style	Tab Fit	Insulation Diameter	Material and Finish	Stock Thickness	L (Overall Length)	UL	SP	Terminal Part No.
24-20	A	.020 0.51	.060-.110 1.52-2.79	Brass, Post Tin Plated	.012 0.30	.755 19.17	X	X	63196-1
	B	.020 0.51	.060-.105 1.52-2.67	Pre-Tin Brass	.012 0.30	.850 21.60	X	X	170324-1
	A	.020 0.51	.060-.110 1.52-2.79	Pre-Tin Brass	.012 0.30	.755 19.17	X	X	63407-2 <sup>1</sup>
	B	.020 0.51	.060-.105 1.52-2.67	Phos. Bronze, Nickel Plated	.012 0.30	.850 21.60	X	X	170324-2
	B	.020 0.51	.060-.105 1.52-2.67	Pre-Tin Phos. Bronze	.012 0.30	.850 21.60	—	—	170324-5
	B	.020 0.51	.074-.134 1.87-3.40	Pre-Tin Brass	.012 0.30	.850 21.60	X	X	170325-1
20-16	B	.020 0.51	.074-.134 1.87-3.40	Pre-Tin Phos. Bronze	.012 0.30	.850 21.60	—	—	170325-3
	A	.020 0.51	.090-.130 2.29-3.30	Brass, Tin Plated	.012 0.30	.755 19.17	X	X	63195-1
		.020 0.51	.090-.130 2.29-3.30	Brass, Pre-Tin	.012 0.30	.755 19.17	X	X	63232-1 <sup>1</sup>
		.032 0.81	.060-.110 1.52-2.79	Brass, Tin Plated	.012 0.30	.740 18.80	X	X	63498-1 <sup>2</sup>
		.032 0.81	.090-.130 2.29-3.30	Brass, Tin Plated	.012 0.30	.755 19.17	X	X	63313-1 <sup>1</sup>
	18-14 (2) 18	B	.020 0.51	.083-.142 2.11-3.61 (2) .216 5.49	Brass, Pre-Tin	.012 0.30	.850 21.60	—	—

<sup>1</sup> Low profile — not for use in housing.

<sup>2</sup> For use with housing 521125.

Positive Lock Receptacles

**Mark II  
187 Series  
Receptacle Housings  
1 Circuit**



**A — Use with  
(.187 x .020 [4.74 x 0.51])**

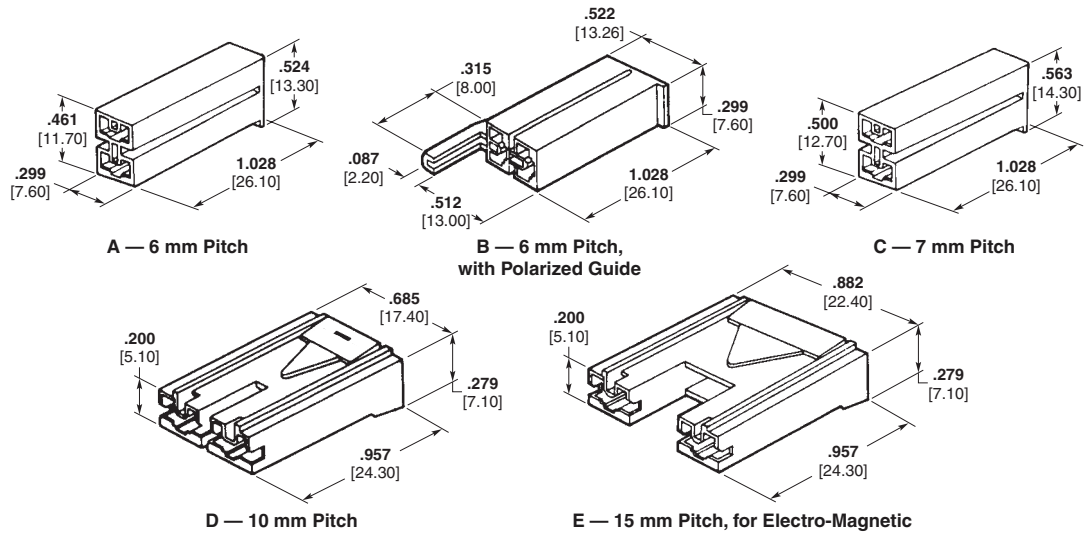
**B — Use with  
(.187 x .032 [4.75 x 0.81])**

Style	Material	UL 94	Color	UL	SP	Part Number		
A	6/6 Nylon	V2	Natural	X	X	172074-1		
			Black	—	—	172074-2		
			Yellow	—	—	172074-4		
			Green	—	—	172074-5		
			Blue	—	—	172074-6		
			Red	—	—	172074-7		
			V0	Natural	X	X	173974-1	
		Black		—	—	173974-2		
		Yellow		—	—	173974-4		
		Green		—	—	173974-5		
		Blue		—	—	173974-6		
		Red		—	—	173974-7		
		B		6/6 Nylon	V2	Natural	—	—

**Note:** All part numbers are RoHS compliant.

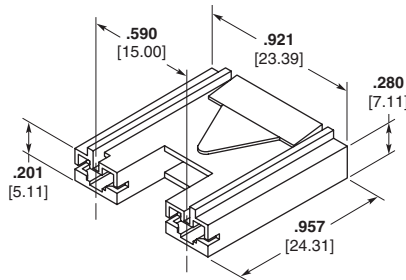
**Positive Lock Receptacles (Continued)**

**Mark II**  
**187 Series**  
**Receptacle Housings**  
**2 Circuit**

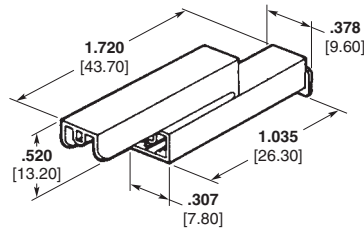


Style	Material	UL 94	Color	UL	CS	Part Number
A	6/6 Nylon	V2	Natural	—	—	172210-1
			Black	—	—	172210-2
			Yellow	—	—	172210-4
			Blue	—	—	172210-6
	6/6 Nylon	V0	Natural	X	X	1-172210-1
			Black	X	X	1-172210-2
			Yellow	—	—	1-172210-4
			Green	—	—	1-172210-5
			Blue	—	—	1-172210-6
			Red	—	—	1-172210-7
B	6/6 Nylon	V2	Natural	X	X	174587-1
			Yellow	—	—	174587-4
			Natural	—	—	1-174587-1
			Yellow	—	—	1-174587-4
	6/6 Nylon	V0	Green	—	—	1-174587-5
			Blue	—	—	1-174587-6
			Red	—	—	1-174587-7

Style	Material	UL 94	Color	UL	CS	Part Number
C	6/6 Nylon	V2	Natural	X	X	175578-1
			Black	—	—	175578-2
			Yellow	X	X	175578-4
			Blue	—	—	175578-6
6/6 Nylon	V0	Natural	—	—	1-175578-1	
		Black	—	—	1-175578-2	
		Yellow	—	—	1-175578-4	
		Green	—	—	1-175578-5	
		Blue	—	—	1-175578-6	
		Red	—	—	1-175578-7	
		D	6/6 Nylon	V0	Natural	—
Black	—				—	179720-2
Yellow	—				—	179720-4
Blue	—				—	179720-6
6/6 Nylon	V0	Red	—	—	179720-7	
		Natural	X	X	176498-1	
		Black	—	—	176498-2	
		Yellow	—	—	176498-4	
6/6 Nylon	V0	Blue	—	—	176498-6	



**F — 16 mm Pitch**



**G — For Microswitch**

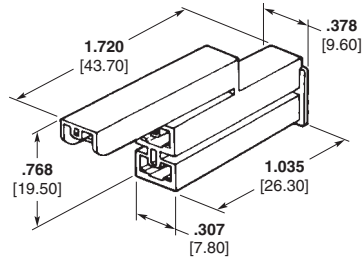
Style	Material	UL 94	Color	UL	CS	Part Number
F	6/6 Nylon	V0	Natural	—	—	353148-1
			Yellow	—	—	353148-4
			Green	—	—	353148-5
			Blue	—	—	353148-6
6/6 Nylon	V0	V2	Natural	X	X	174712-1
			Natural	—	—	1-174712-1
			Yellow	—	—	1-174712-4
		V0	Blue	—	—	1-174712-6
			Red	—	—	1-174712-7

**Note:** All part numbers are RoHS compliant.

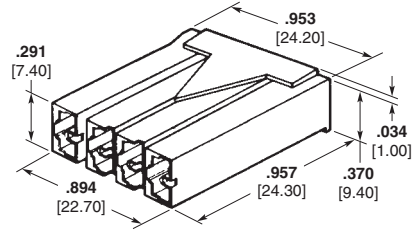


**Positive Lock Receptacles** (Continued)



**Mark II**  
**187 Series**  
**Receptacle Housings**  
**3 Circuit and**  
**4 Circuit**



**A — 3 Circuit**  
**For Micro-Switch**



**B — 4 Circuit**  
**For Timer**

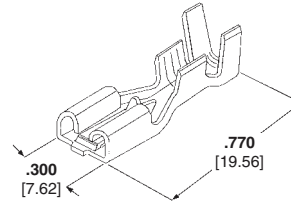
Style	Material	UL 94	Color			Part Number
A	6/6 Nylon	V2	Natural	X	X	172075-1
			Yellow	X	X	172075-4
			Blue	—	—	172075-6
		V0	Natural	—	—	1-172075-1
			Yellow	—	—	1-172075-4
B	6/6 Nylon	V0	Natural	X	X	174513-1

**Note:** All part numbers are RoHS compliant.

**Positive Lock Receptacles (Continued)**

**Mark III  
250 Series  
Receptacles**

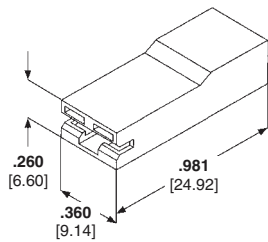
Stock Thickness — .016  
Accepts .032 Tab



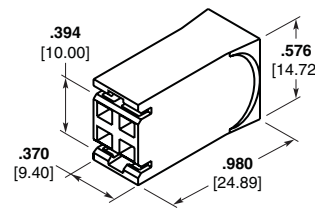
Wire Range AWG	Insulation Diameter	Material and Finish	UL	CSA	Part Number	
					Receptacles	Quick Change Applicator No. <sup>1</sup>
22-18	.060-.110 1.52-2.79	Brass	X	X	63933-1	680161-2
		Brass/Tin	X	X	63933-2	680161-2
18-14	.090-.155 2.28-3.93	Brass	X	X	63854-1	680411-2
		Brass/Tin	X	X	63854-2	680411-2
16-12 or (2) 18 or (2) 16 or (1) 18 and (1) 16	.120-.170 3.04-4.31	Brass	X	X	1217092-1	680646-2
		Brass/Tin	X	X	1217092-2	680646-2

<sup>1</sup> Quick-Change applicator Part No. with -1 is for a "T" terminating unit used in automatic machines; -2 is for a "K" AMP-O-LECTRIC bench machine.

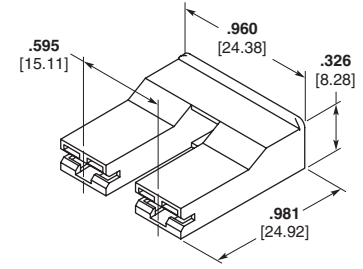
**Mark III  
Receptacle Housings**



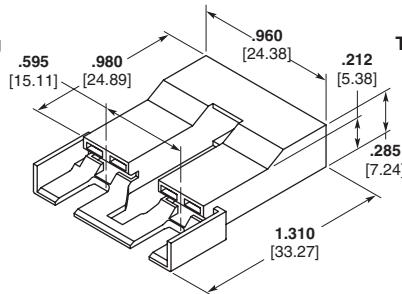
One Circuit Housing  
A



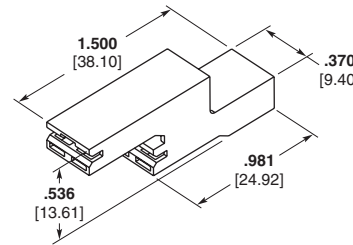
Two Circuit Wax Motor Housing  
B



Two Circuit Water Valve Housing  
C



Two Circuit Water Valve Housing  
with Latch  
D



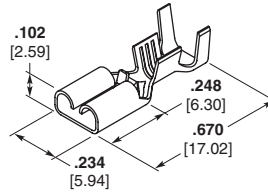
Two Circuit Housing  
E

Style	Material	UL 94 <sup>1</sup>	Color <sup>2</sup>	Part Number	Accepts	UL	CSA
A	Nylon	V2	Natural	521120-1	250 Series Positive Lock Mark III Terminals.	X	X
B	Nylon	V0	Natural	521253-1	250 Series FASTON and Positive Lock Mark III Terminals. Examples include 63306 and 63854.	X	X
			Red	521253-2		X	X
			Green	1-521253-2		X	X
			Blue	1-521253-3		X	X
			Putty	1-521253-7		X	X
C	Nylon	V2	Natural	521119-1	250 Series FASTON and Positive Lock Mark III Terminals. Examples Include 63306 and 63854	X	X
			Putty	521119-2		X	X
			Blue	521119-4		X	X
E	Nylon	V0	Natural	521955-1	250 Series MK III Positive Lock Receptacles 63993, 63854, 1217092	X	X

**Note:** All part numbers are RoHS compliant.

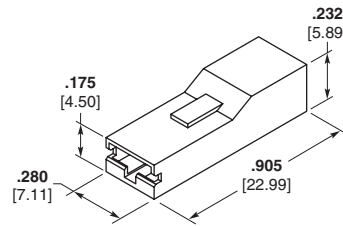
**Positive Lock Receptacles (Continued)**

**Mark III  
187 Series Receptacles**

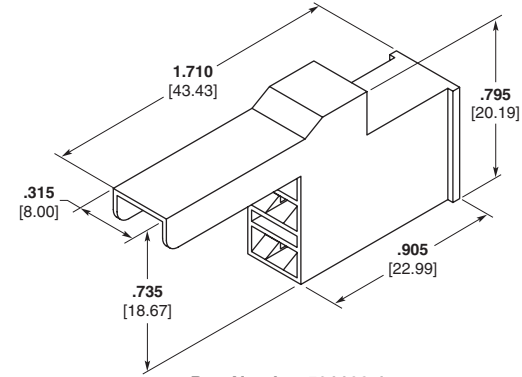


Wire Range AWG	Insulation Dia.	Mating Tab Thickness	Material and Finish	Terminal Part No.	UL	SR	Applicator
22-18	.090-.130 2.29-3.30	.020 0.51	Tin Plated Brass	1217113-2	—	—	680645-2
		.032 0.81	Tin Plated Brass	1217097-2	—	—	680645-2
18-14	.150-.200 3.81-5.08	.020 0.51	Brass	1217114-1	—	—	680652-2
		.020 0.51	Tin Plated Brass	1217114-2	—	—	680652-2
18-14 (2) 18	.150-.200 3.81-5.08	.032 0.81	Brass	1217096-1	X	X	680652-2

**Mark III  
187 Series  
Receptacle Housings**



Part Number 521187-1



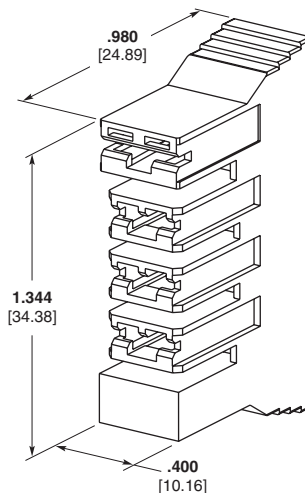
Part Number 521198-1

Material	UL 94	Color	UL	SR	Part Number
Nylon	V2	Natural	X	X	521187-1
Nylon	V2	Natural	X	—	521198-1

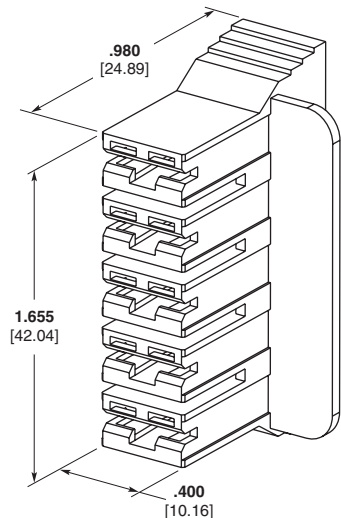
Positive Lock Receptacles

**Mark III  
HVAC Motor  
Receptacle Housings**

Material	Color	UL	SR	Part Number
Nylon	Natural	X	X	521780-1
Nylon	Natural	X	X	521781-1



Part Number 521781-1  
4-Position

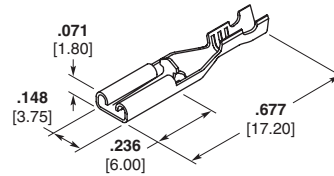


Part Number 521780-1  
5-Position

**Note:** All part numbers are RoHS compliant.

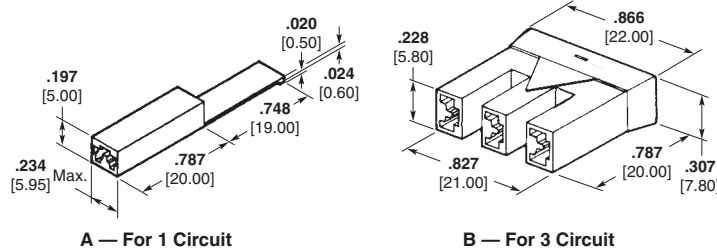
**Positive Lock Receptacles (Continued)**

**110 Series  
Straight Receptacles**



Wire Range AWG	Tab Fit	Insulation Diameter	Material and Finish	Stock Thickness	UL	CS	Terminal Part No.
24-20	.020 0.51	.040-.070 1.02-1.78	Pre-Tin Brass	.010 0.25	—	—	175411-1
20-16	.020 0.51	.080-.122 2.03-3.10	Pre-Tin Brass	.010 0.25	—	—	174777-1

**Receptacle Housing  
Applicable Contact  
Part Number 175411, 174777**

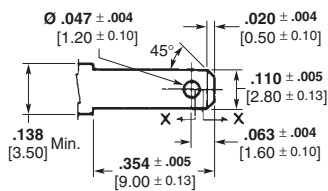


Style	Material	UL 94	Color	UL	CS	Part Number
A	6/6 Nylon	V2	Natural	X	X	174779-1
			Natural	—	—	178832-1
B	6/6 Nylon	V0	Yellow	—	—	178832-4
			Blue	—	—	178832-6
			Red	—	—	178832-7

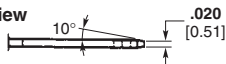
**Tab Dimension  
For Signal Circuit**

**For 1 Circuit**

**Top View**

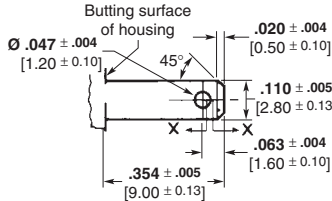


**Side View**

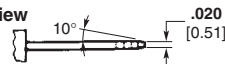


**Type A**  
(When using tab shoulder for butting)

**Top View**

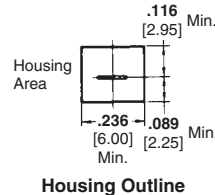
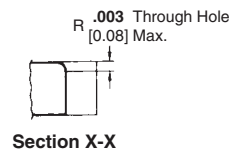


**Side View**

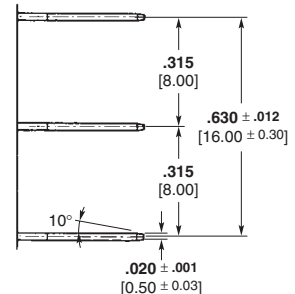
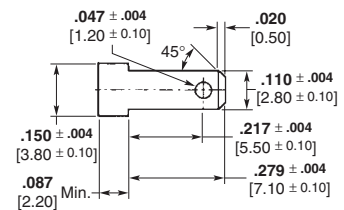


**Type B**  
(When using resin, etc., for butting)

Sagging of the tab's hole must not exceed 0.08 mm.



**For 3 Circuit**



**Note:** All part numbers are RoHS compliant.