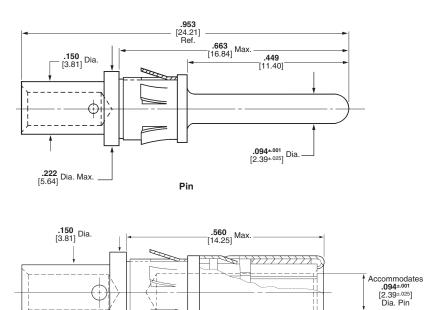
Power Contacts

Type I, Crimp, Snap-In





.222 [5.64] Dia. Max

> .843 [21.41] Ref. Socket

Material

Contact Body—Bronze Retention Spring—Beryllium copper

Finish

Contact Body—.000030 [0.00076] gold over .000050 [0.00127] nickel. Gold thickness controlled on socket 0.D. Retention Spring—Nickel plated

Related Product Data

Application Tooling—Pages 29, 30 Technical Documents

108-10108 Product Specification 114-10037 Application Specification

Size 12—Pin Diameter .094 [2.39] (Test Current, 23 Ampere)‡

Wire	e Size	Loose	Piece	Tooling Part No.			
	inge	Conta	ct No.	Dies for	Hand		
AWG	[mm ²]	Pin	Socket	Pneumatic Tool*	Tool		
18-16	0.8-1.4	202421-1	202418-1	90122	90121		
14-12	2-3	202422-1 202417-1		90122	90121		

* Use hand actuated Power Unit Part No. 189721-2 or foot actuated Power Unit Part No. 189722-2. Both units require "C" Head Die Set Adapter Part No. 318161-1 and an Adapter Holder Part No. 356304-1 (with ratchet) or Part No. 189928-1 (without ratchet). Request Catalog 124208 for more information on the 626 Pneumatic Tool System.

\$Single contact, free-air test current; not to be construed as contact rating current. Use only for testing. Refer to contact current carrying capability information, page 3.

Extraction Tool **Part No. 305183-8** (Instruction Sheet 408-1216) **Note:** All part numbers are RoHS compliant.

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Catalog 65910 Revised 7-07 Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents. Dimensions are shown for reference purposes only. Specifications subject to change. Technical Support USA: 1-800-522-6752 Canada: 1-905-475-6222 Mexico: 01-800-733-8926

High Current Size 16 Socket Part No.

High Current

Size 16 Pin

(Board Mount)

Part No. 194264-1

Tape

193846-2

796966-2

Loose Piece

193846-1

796966-1

Standard

Type II Socket

Standard Type III+ Socket

Wire Size

AWG

14

18-16



Type II and Type III+, Size 16

The features of the High Current Size 16 contact have been designed to fit into the existing AMP Multimate Connectors such as CPC (Circular Plastic Connector), CMC (Circular Metal Connector), G Series, M Series, Econoseal Metrimate Square Grid and Drawer Connector housings. An initial T-Rise test in free air has shown a 23 amp capability with a 30°C T-Rise. The contact may be crimped onto 14 AWG wire with a Tyco Electronics hand tool P/N 601967-1. Use turret TH502 (1-601967-6) for the pin and turret TH501 (1-601967-5) for the socket.

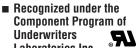
Material

Pin Body — Leaded Brass; Copper Alloy (Board Mount) Socket Body — Copper Alloy Louvertac Band — Beryllium Copper Retention Spring — Stainless Steel Finish Body - Silver Louvertac Band - Gold



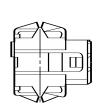
Extraction Tool Part No. 305183

Current-Carrying Capacity. The graph shows current-carrying capacity versus temperature rise for a fully energized 6 position Metrimate Square Grid plug P/N 207152-1 and receptacle P/N 207153-1. These initial representative amperage ratings were conducted with 14 AWG wires that were 2 feet long.



Laboratories Inc., File No. E28476





Plug (for Sockets)



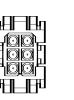
Current Rating for

30°C Temperature Rise

100% Energized

6 Circuit Metrimate

Connector (Wire-to-Wire)



TEMPERATURE RISE

30

20

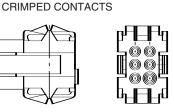
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ΰ

(DEGREES



30

Standard Type II Pin

Standard

Type III+ Pin

High Current Size 16

Pin Part No.

Tape

193844-2

796964-2

Loose Piece

193844-1

796964-1

Wire Size

AWG

14

18-16

4 Pos. CPC Posted Square Flange Receptacle Part No. 796764-1

Mates with CPC Plug (Part No. 206060-1) with either

Type II or High Current Socket contact

TEMPERATURE RISE VS. CURRENT

Receptacle (for Pins)

10

CURRENT (AMPS)

20

Notes: 1. High Current contacts with Louvertac bands are NOT intermateable with any other contact.

2. Additional information on CPC and CMC connectors is available in Catalog 82021.

- 3. Additional information on G Series connectors is available in Catalog 82046.
- 4. Additional information on M Series connectors is available in Catalog 82003.
- . Additional information on Metrimate connectors is available in Catalog 82045.
- 5 6. Additional information on Econoseal connectors is available in Catalog 82057.

7. Additional information on LGH connectors is available in Catalog 82024.

Note: All part numbers are RoHS compliant.

Catalog 65910

Revised 7-07

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change. **Technical Support** USA: 1-800-522-6752 Canada: 1-905-475-6222 Mexico: 01-800-733-8926

Central America: 52-55-5-729-0425 South America: 55-11-3611-1514 www.tycoelectronics.com

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₹ Тусо Electronics

Power Contacts (Continued)

.125 POWERBAND Contacts

Test Current—50 Amperes‡

Material and Finish

Contact — Copper Spring — Beryllium copper

Plating Code

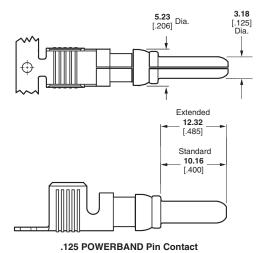
A. 0.00508 [.000200] min. silver on contact area, 0.00127 [.000050] min. on remainder, all over 0.00127 [.000050] min. nickel underplate B. 0.00076 [.000030] min. gold on contact area, gold flash on remainder, all over 0.00127 [.000050] min. nickel underplate

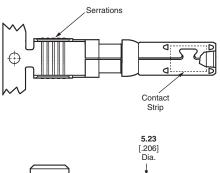
Related Product Data

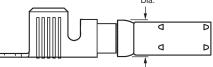
Application Tooling—Pages 29, 30 Technical Document—Page 4

Extraction Tool Part No. 318813-1

(Instruction Sheet 408-4374)







.125 POWERBAND Socket Contact

	Contact Finish	Pin Length	Contact Part No.				Tooling Part No.**		
Wire Size AWG/mm ²			Strip		Loose Piece		Heavy Duty Miniature (HDM) Applicators (for AMP-O-LECTRIC		
A			Pin	Socket	Pin	Socket	Model G Machine, Base Part No. 354500)	or 626 Pneumatic Tool System*	
	А	Standard	213845-1	213847-1	213845-3	213847-3		356612-1	
14-12	В	Standard	213845-2	213847-2	213845-4	213847-4	000105 0		
2-3	A	Extended ¹	213845-5	_	213845-7		680195-3		
	В	Extended ¹	213845-6	_	213845-8				
	А	Standard	213841-1	213843-1	213841-3	213843-3		050011.1 (0.4)4(0)	
10-8	В	Standard	213841-2	213843-2	213841-4	213843-4	000107.0	356611-1 (8 AWG)	
5-8	A	Extended ¹	213841-5	_	213841-7		680197-3	356611-2 (10 AWG)	
	В	Extended ¹	213841-6	_	213841-8				

¹For use in Metrimate Drawer Connectors listed in chart below and Two-Piece Sealed Circular Plastic Connectors (CPC), Series 5 and 6.

\$\$ Single contact, free-air test current; not to be construed as contact rating current. Use only for testing.

Refer to contact current carrying capability information, page 3.

Note: Standard Size 8, High Current Size 8 upgrade, and .125 POWERBAND contacts are not intermateable.

*A typical 626 Pneumatic Tool System requires: a power unit (Part No. 189721-2, hand actuated or 189722-2, foot actuated), an adapter

holder (Part No. 356304-1, with ratchet), and "C" Head adapter Part No. 318161-1.

**There are power options available for these tools/dies. See Battery Powered Crimp tool Kit and SDE Electric Terminator on page 30.

Note: All part numbers are RoHS compliant.

.125 POWERBAND Metrimate Drawer Connectors

No. of	Housing Part No.					
Pos.	Plug	Receptacle				
8	213886-1**	213500-3**				

Color: blue

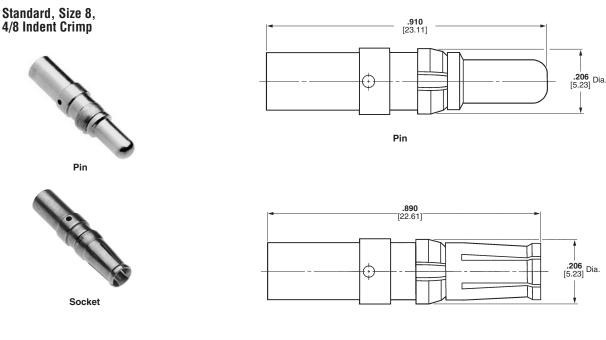
For use with .125 POWERBAND contacts (Extended Pin Length), listed above.

Note: All part numbers are RoHS compliant.

20

Dimensions are shown for reference purposes only. Specifications subject to change. **Technical Support** USA: 1-800-522-6752 Canada: 1-905-475-6222 Mexico: 01-800-733-8926

Power Contacts (Continued)



Socket

Note: Standard Size 8, High Current Upgrade Size 8 and .125 POWERBAND contacts are **not** intermateable.

Material

Contact Body—Copper alloy Retention Clip—Phosphor bronze

Finish

Contact Body—.000050 [0.00127] gold over .000050 [0.00127] nickel Retention Spring—Nickel plated

Related Product Data

Technical Documents 108-10045 Product Specification 114-10014 Application Specification

Power Contacts, Standard, Size 8 (Test Current 50 Amperes)‡

Wire Range		Con	tacts	Crimping Tools			
AWG	[mm ²]	Pin	Socket	Tool No.	Positioner		
18-16	0.8-1.4	213567-1	212014-1	608668-1	(P) SP867 (S) 608668-2		
14-12	2-3	213662-1	212008-1	608651-1	(P) SP867 (S) 608651-2		
10	5	213740-1	213737-1	608651-1	(P) 608651-3 (S) 608651-2		
8	8	213552-2	213750-1	608651-1	(P) 608651-3 (S) 608651-2		

\$\$Single contact, free-air test current; not to be construed as contact rating current. Use only for testing. Refer to contact current carrying capability information, page 3.

Note: All part numbers are RoHS compliant.

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents. Dimensions are shown for reference purposes only. Specifications subject to change. Technical Support USA: 1-800-522-6752 Canada: 1-905-475-6222 Mexico: 01-800-733-8926

Power Contacts—High Current Upgrade (Continued)

Metrimate Drawer Connector, Size 8

The Louvertac bands have the versatility of being designed into contact dimensions used in existing Tyco Electronics connectors.

Metrimate High Current contacts have been designed to fit into the existing Drawer Connector housings. A fully energized 8 position connector with 8 gage wires can handle 30 amps per line with a 30°C T-rise on either the cable-to-cable or cable-to-board.

Cable-to-Cable Material

Contact Body — Copper Alloys Louvertac Band — Beryllium Copper Retention Spring — Stainless Steel Finish — Gold

Product Specification

108-1449 Metrimate Pin and Socket with Louvertac High Current Contact

Connector Voltage Rating — 600 VAC



 Certified by Canadian Standards Association, File No. LR7189A

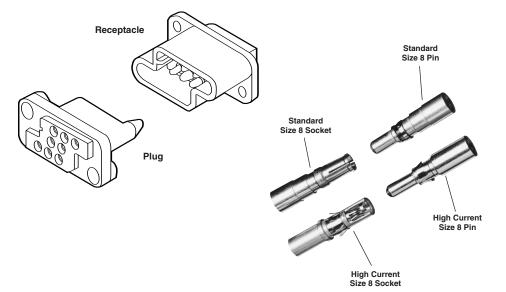
Cable-to-Board

Material

Contact Body — Copper Alloys Louvertac Band — Beryllium Copper Retention Spring — Stainless Steel Finish — Gold

A typical application would have solder tail pins mounted into the receptacle and crimp sockets mounted into the plug.

- Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476
- Certified by Canadian Standards Association, File No. LR7189A



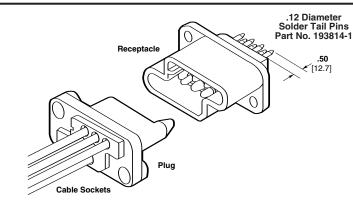
High Current Contacts

Contact Pa	rt Numbers	Crime Teals			
Pin	Socket	Crimp Tools			
193457-1	193458-1	Daniels [†]			
193642-1	193643-1	Hand Tool #M310 or AMP P/N 356114-1			
193534-1	193535-1	Positioner #TP944 or AMP P/N 356336-1			
	Pin 193457-1 193642-1	193457-1 193458-1 193642-1 193643-1			

Extraction Tool Part No. 318813-1 or 305183-6

[†]Daniels Manufacturing Corp., Orlando, FL

Note: All part numbers are RoHS compliant.



Drawer Connector Housings

Size	Housing Part Numbers		
Configuration	Plug	Receptacle	
8 Positions (8 Size 8 Cavities)	213499-1	213500-1	
15 Positions (3 Size 8 Cavities & 12 Size 16 Cavities)	213426-1	213427-1	

Extraction Tool Part No. 318813-1

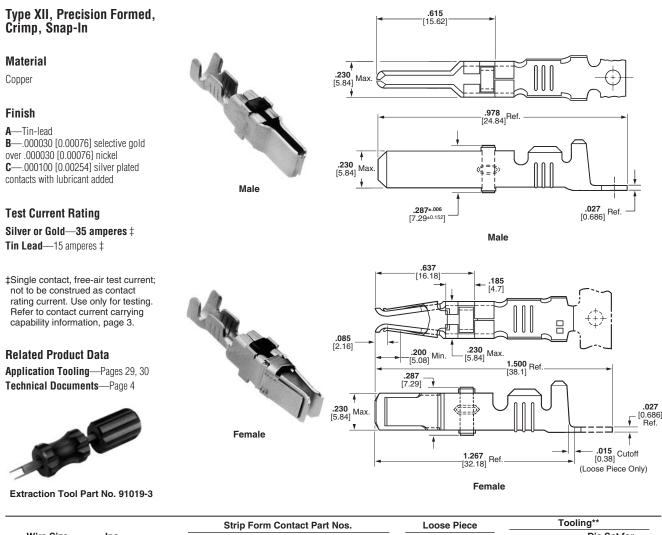
Note: All part numbers are RoHS compliant.

Notes: 1. High Current contacts with Louvertac bands are NOT intermateable with any other contact. 2. Additional information on connectors is available in Catalog 82045.

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Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents. Dimensions are shown for reference purposes only. Specifications subject to change. Technical Support USA: 1-800-522-6752 Canada: 1-905-475-6222 Mexico: 01-800-733-8926

Power Contacts (Continued)



		Ins. Dia.		St	rip Form Co	ntact Part N	os.	Loose Piece		Tooling**					
	e Size Inge ¹		Contact Finish	Stand	ard*** Heavy Duty Miniature***		Contact Part Nos.		Heavy Duty Miniature	Die Set for Hand Tool 69710-1					
AWG	mm ²	Range		Male	Female	Male	Female	Male	Female	Applicator	or 626 Pneumatic Tool System				
			А	66255-1♦	66740-7♦	66255-5♦	1-66740-2♦	66261-1♦	66740-8♦	567455-□***♦	90145-2 ^{3,7} ♦ and 90145-1 ^{4,7} ♦				
		.135160 3.43-4.06		66256-1 ²	_	66256-5 ²	—	66262-1 ²	_						
16 and	1.25-1.4 and			66255-2♦	66740-5♦	66255-6♦	1-66740-1♦	66261-2♦	66740-6♦						
14-12	2-3			66256-2 ² ♦	—	66256-4 ²	—	66262-2 ²	_						
							C^5	66255-7♦	66740-1♦	66255-8♦	66740-9♦	66261-4♦	66740-2♦		
			0.	66256-6 ²	_	66256-7 ²	_	66262-4 ²	_						
						А	66253-1♦	66741-7♦	66253-5♦	1-66741-2♦	66259-1♦	66741-8♦			
			~	66254-1 ²	—	—	—	66260-1 ²	_						
10	5-6	5-6 4.83-5.59 B $66254-2^{\circ}$ $ 66254-5^{\circ}$ $ 66260-2$ $66253-4^{\circ}$ $ 66260-2$ $66253-4^{\circ}$ $ 66260-2$ $66253-4^{\circ}$ $ 66260-2$ $ 66260-2$ $ 66260-2$ $ 66260-2$ $ 66260-2$ $ 66260-2$ $ 66260-2$ $ 66260-2$ $ 66260-2$ $ 66260-2$ $ 66260-2$ $ 66260-2$ $ 66260-2$ $ 66260-2$ $ 66260-2$ $ 66260-2$ $ 66260-2$ $ 66260-2$ $ 66260-2$ $ 66260-2$ $ 66260-2$ $ 66260-2$ $ 66260-2$ $ 66260-2$ $ 66260-2$ $ -$	66259-2♦	66741-6♦	567021-□***♦	90140-17									
10	0-0		4.83-5.59	4.83-5.59 66254-2	59 ^D	.59	66254-2 ² ♦	—	66254-5♦	_	66260-2 ² ♦	_	507021-□ ▼	90140-1/ ▼	
				C ⁵	66253-4♦	66741-1♦	66253-8♦	66741-9♦	66259-4♦	66741-2♦					
			0.	66254-4 ²	_	_	_	66260-4 ²	_						

¹Wire strip length-.281 [7.14].

²Ground contact.

³Die insert Part No. 90145-2 is for crimping 16 AWG [1.25-1.4 mm²] wire.

⁴Die insert **Part No. 90145-1** is for crimping 14-12 AWG [2-3 mm²] wire.

5Recommended for high current/vibration applications where fretting corrosion is a problem.

⁷Die Set requires "C" Head Adapter Part No. 318161-1; Adapter Holder Part No. 356304-1 (with ratchet) or 189928-1 (without); and Power Unit Part No. 189721-2 (hand actuated) or 189722-2 (foot actuated).

Extraction Tool Part No. 91019-3

**There are power options available for these tools/dies. See Battery Powered Crimp tool Kit and SDE Electric Terminator on page 30.

***Call Technical Support at 1-800-522-6752 for Automatic Machine Applicator Part Numbers.

Note: All part numbers are RoHS compliant except:
Indicates non-RoHS compliant.

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents. Dimensions are shown for reference purposes only. Specifications subject to change. Technical Support USA: 1-800-522-6752 Canada: 1-905-475-6222 Mexico: 01-800-733-8926 23

Central America: 52-55-5-729-0425

South America: 55-11-3611-1514

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Tyco Electronics



Type XII, Screw Machined

The features of the High Current Type XII contact have been designed to fit into the existing AMP Multimate Connectors such as CPC (Circular Plastic Connector), CMC (Circular Metal Connector), G Series, and M Series housings. An initial T-Rise test in free air has shown a 60 amp capability with a 30°C T-Rise with 8 gage wires. The contact may be crimped onto 8 AWG wire with a Daniels Hand Tool M310 or AMP P/N 356114-1 and Positioner TP1068S or AMP P/N 356119-1.

Cable-to-Cable Material

- - - - -

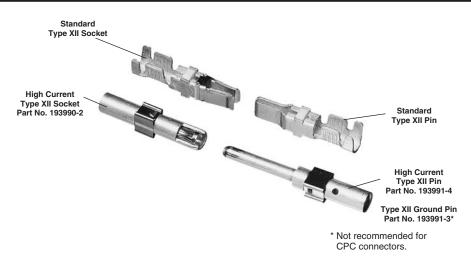
Body — Copper Alloy Louvertac Band — Beryllium Copper Retention Spring — Stainless Steel Finish Body — Silver Louvertac Band — Gold



Extraction Tool Part No. 224155-1

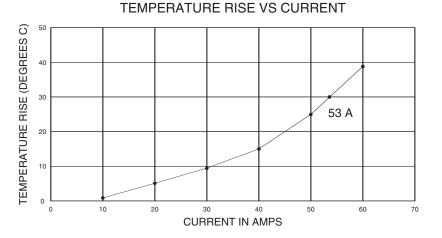
Current-Carrying Capacity. The graph shows current-carrying capacity versus temperature rise for a fully energized 3 position CPC plug P/N 206037-2 and receptacle P/N 206036-2. These initial representative amperage ratings were conducted with 8 AWG wires that were 3 feet long.

 Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476



Current Rating for 30°C Temperature Rise 100% Energized

3 Circuit Connector (Wire-to-Wire)





Plug (For Sockets)



Square Flange Receptacle (For Pins)

Notes: 1. High Current contacts with Louvertac bands are NOT intermateable with any other contact.

- 2. Additional information on CPC and CMC connectors is available in Catalog 82021.
- 3. Additional information on G Series connectors is available in Catalog 82046.
- 4. Additional information on M Series connectors is available in Catalog 82003.
- 5. Additional information on LGH connectors is available in Catalog 82024.

Note: All part numbers are RoHS compliant.

Catalog 65910 Revised 7-07

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents. Dimensions are shown for reference purposes only. Specifications subject to change. Technical Support USA: 1-800-522-6752 Canada: 1-905-475-6222 Mexico: 01-800-733-8926

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TE Connectivity: 213841-4