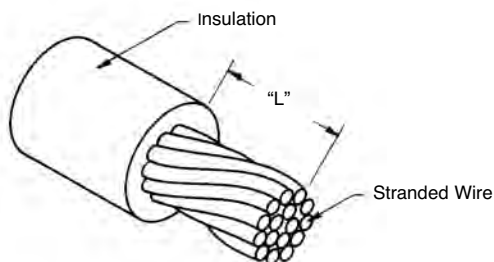




CRIMPING INFORMATION FOR REMOVABLE CRIMP CONTACTS USE INDICATED POSITRONIC TOOLS FOR BEST RESULTS

STEP 1: STRIP WIRE TO INDICATED LENGTH.

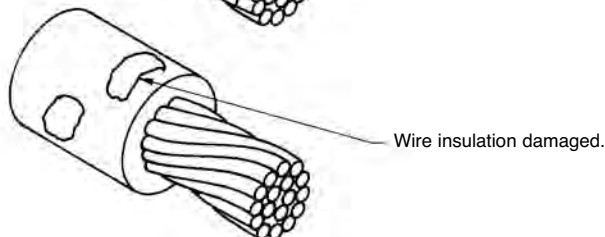
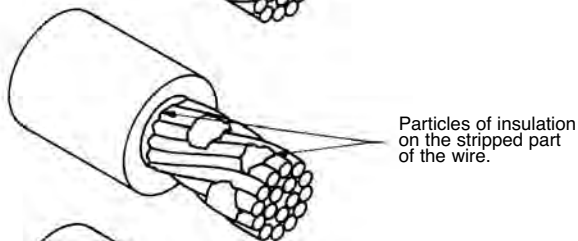
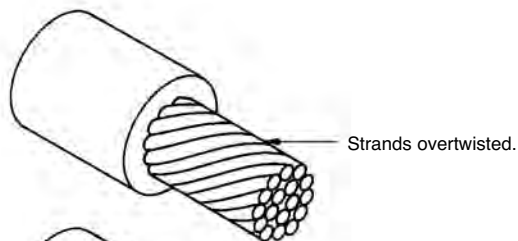
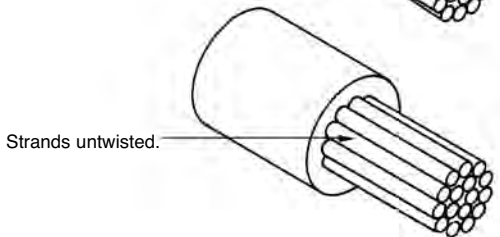
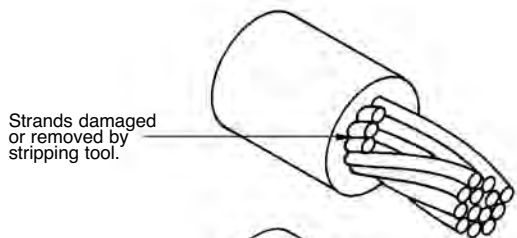
Correctly Stripped Wire



- Take Care Not To:
- Damage or remove strands.
 - Untwist or overtwist strands.
 - Leave insulation particles on strands.
 - Damage insulation.

CONTACT SIZE	CONTACT PART NUMBER		"L" ±0.020 [±0.51]
	FEMALE	MALE	
20	FC720N2	MC720N3	0.230 [5.84]
16	F*1**N2	M*1**N	0.230 [5.84]
16	FC112N2S	MC112NS	0.230 [5.84]
12	F*610N2	M*610N	0.230 [5.84]
12	-	M*610N-228.2	0.230 [5.84]
12	F*610N2S	M*610NS	0.235 [5.37]
12	-	M*610NS-228.2	0.235 [5.37]
12	F*612N2	M*612N	0.290 [7.37]
12	-	M*612N-228.2	0.290 [7.37]
12	F*612N2S	M*612NS	0.290 [7.37]
12	-	M*612NS-228.2	0.290 [7.37]
8	F*40**D	M*40**D	0.350 [8.89]
8	FC4008DS	MC4008DS	0.350 [8.89]
8	FS4*20D	MS4*20D	0.100 [2.54]

Examples of Stripping Faults



CRIMPING INFORMATION FOR REMOVABLE CRIMP CONTACTS

USE INDICATED POSITRONIC TOOLS FOR BEST RESULTS

STEP 2: CRIMP WIRE TO CONTACT.

- For Hand Crimp Tool:**
- Place contact into crimping tool.
 - Insert wire into contact.
 - Center contact by slowly closing the crimping tool until the crimp indenters make contact with the crimp barrel.
 - Complete the cycle of the crimping tool in one smooth motion.
 - Remove the crimped contact.

- For Automatic Crimp Tool:**
- Insert the wire into the contact, positioned in the crimp tool by the plastic carrier.
 - Depress the activating device of the crimping tool to start the crimping cycle.
 - Remove the crimped contact.

Positronic Recommended Conductor Tensile Strength	
WIRE SIZE AWG/[mm ²]	AXIAL LOAD POUNDS/[N]
8 [10.0]	110 [489]
10 [5.3]	110 [489]
12 [4.0]	110 [489]
14 [2.5]	70 [311]
16 [1.5]	50 [222]
18 [1.0]	28 [125]
20 [0.5]	20 [89]
22 [0.3]	12 [53]
24 [0.25]	8 [36]

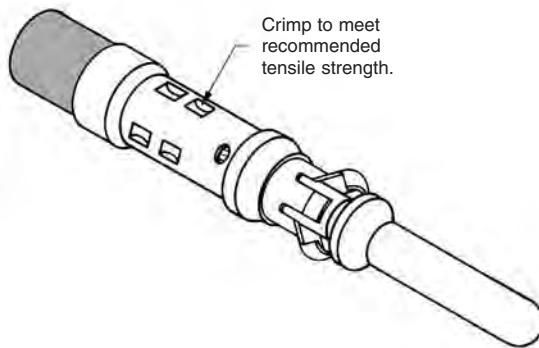
Conductor tensile strength values are derived using silver-tin plated copper wires.

Values may change depending upon what type of wire is used.

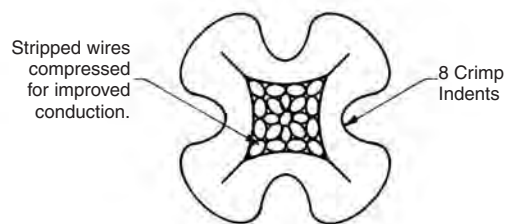
STEP 3: INSPECT THE CRIMP.

- For All Tools:**
- Strands to be visible through the inspection hole.
 - Strands not to be visible beyond the insulation support.
 - Crimped contact to meet recommended conductor tensile force shown in chart.
 - Check for peeled gold and bent contacts.

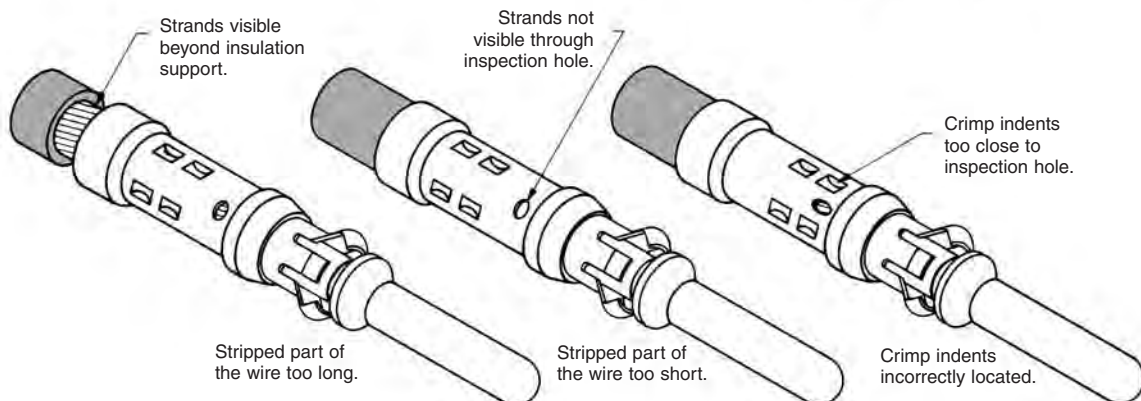
Correctly Crimped Contact



Cross Section of Correctly Crimped Contact



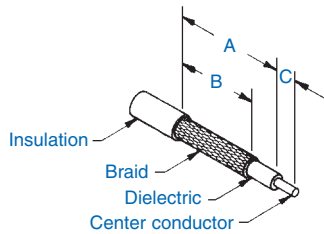
Examples of Crimping Faults





SOLDERING AND CRIMPING INFORMATION FOR SHIELDED CONTACTS

STEP 1: STRIP WIRE TO INDICATED LENGTH



Shielded Contact Hand Crimp Tool

For crimp tool part numbers, see Contact Application Tools Cross Reference Chart on pages 58 & 59.

TAKE CARE NOT TO:

- Damage or remove strands.
- Untwist or overtwist strands.
- Leave insulation particles on strands.
- Damage insulation.

STEP 2: CRIMP WIRE TO CONTACT

- Trim cable.
- Slide ferrule over jacket. Insert dielectric and center conductor into barrel. Crimp center conductor into contact.
- Butt ferrule against shoulder. Crimp ferrule over braid.

STEP 2: SOLDER WIRE TO CONTACT

- Trim cable. Tin center conductor.
- Slide ferrule over jacket. Insert dielectric and center conductor into barrel. Solder center conductor into contact.
- Butt ferrule against shoulder. Solder cable to barrel through hole in ferrule. Solder cap into body.

STEP 2: SOLDER/CRIMP WIRE TO CONTACT

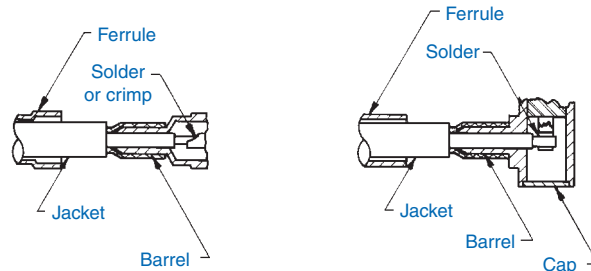
- Trim cable. Tin center conductor.
- Slide ferrule over jacket. Insert dielectric and center conductor into barrel. Solder center conductor into contact.
- Butt ferrule against shoulder. Crimp ferrule over braid. Solder cap into body.



	CONTACT SIZE	PART NUMBER	RG CABLE NUMBER	A	B	C
PCS SERIES	16	MCS126N	178 B/U	0.190 [4.83]	0.160 [4.06]	0.175 [4.45]
		FC126N2	196 A/U			
		MCS226N	179 B/U	0.281 [7.14]	0.250 [6.35]	0.078 [1.98]
		FCS226N2	316 A/U			
PCS MIXED DENSITY SERIES	8	*C4101D	178 B/U	0.281 [7.14]	0.250 [6.35]	0.078 [1.98]
		*S4101D				
		*C4102D	179 B/U	0.281 [7.14]	0.250 [6.35]	0.078 [1.98]
		*S4102D				
		*C4103D	180 B/U	0.375 [9.53]	0.312 [7.92]	0.078 [1.98]
		*S4103D				
		*C4104D	58 B/U	0.375 [9.53]	0.312 [7.92]	0.078 [1.98]
		*S4104D				
		*CC4101D	178 B/U	0.281 [7.14]	0.250 [6.35]	0.120 [3.05]
		*CC4102D	179 B/U			
*CC4103D	180 B/U	0.375 [9.53]	0.312 [7.92]	0.120 [3.05]		
*CC4104D	58 B/U					

*Contact gender is designated by M for male contacts and F for female contacts.

Typical Part Number:
FC4101D





**AUTOMATIC CRIMP TOOL,
PNEUMATICALLY ACTUATED
(SHOWN FOR REFERENCE ONLY)**

This fast cycling automatic crimp tool produces a four double-indent crimp on wire sizes. For use with size 8, 12, 16 and 20 contacts. Contacts must be ordered on reels. Foot control valve is supplied as a standard accessory.

For complete automatic crimp tool selection part numbers, see Contact Application Tools Cross Reference Chart on pages 58 & 59.

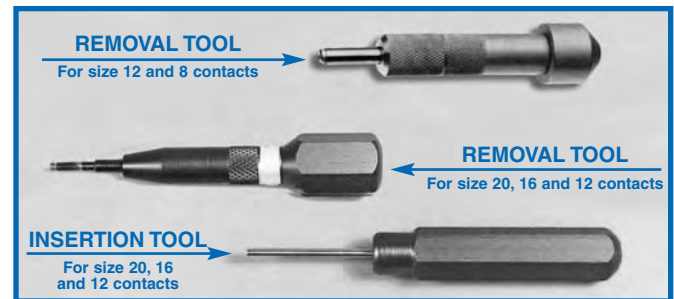


**CYCLE-CONTROLLED HAND CRIMP TOOLS
(SHOWN FOR REFERENCE ONLY)**

The hand crimp tool, pictured at the top of the image uses 8 AWG wire with produces a hex shaped crimp.

All other wire are eight step adjustable hand crimping tool produces a four double-indent crimp configuration. Each positioner is equipped with a data plate which gives the correct crimp-depth setting for each wire size.

For complete crimp tool and positioner selection part numbers, see Contact Application Tools Cross Reference Chart on pages 58 & 59.

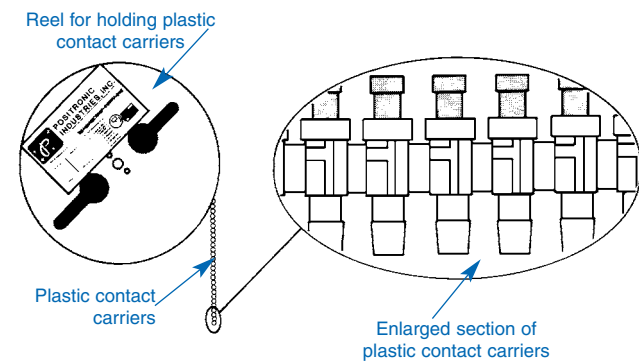


**INSERTION AND REMOVAL TOOLS
(SHOWN FOR REFERENCE ONLY)**

An easy-to-use contact insertion tool used for rear insertion of contacts into connector, see illustration below.

The contact removal tool is spring-loaded to simplify the extraction of removable contacts from the connector insulators. For contact removal, simply insert the hollow tool tip over the male or female contact from the front face of the insulator, rotate the tool slightly while increasing the pushing force against the butt of the extraction tool. The contact will be released from the insulator retention system and will "pop out" of the rear face of the insulator.

For insertion and removal tool selection part numbers, see Contact Application Tools Cross Reference Chart on pages 58 & 59.



**CONTACT REELS FOR
AUTOMATIC PNEUMATIC CRIMP TOOLS**

Contacts may be supplied in plastic carriers, packaged in reels holding 2,000 contacts for use with the automatic pneumatic crimp tools, catalog part numbers 9550-0 and 9550-1; packaged in reels holding 1,000 contacts for use with the automatic pneumatic crimp tools, catalog part number 9555-0-2. The same type carrier is used for both male and female contacts.

All male and female crimp contacts can be ordered in reels by adding letter "R" after the contact part number, such as MC6020DR for a male contact and FC6026DR for a female contact.

CONTACT INSERTION



CONTACT REMOVAL





Positronic Industries
connectpositronic.com



CONTACT APPLICATION TOOLS CROSS REFERENCE LIST

Power
Connection
Systems

CONTACT APPLICATION TOOLS CROSS REFERENCE LIST USE INDICATED POSITRONIC TOOLS FOR BEST RESULTS

P C S S E R I E S										SAFETY SHROUD & POWER INPUT SERIES									
SIZE 16 CONTACTS										SIZE 12 CONTACTS									
Positronic Contact P/N	Handle & Positioner P/N	Hand Crimp Tool P/N	Mfg. Cross	Mill Equip	Positioner	Mfg. Cross	Mill Equip	Insertion Tool	Mfg. Cross	Mill Equip	Removal Tool	Mfg. Cross	Mill Equip	Automatic Crimp Tool					
FC610N2S	9509-6-0-0	9509-6-1-0	GS223		9509-6-2-0	TP-1386		9099-3-0-0	ITP 1168		2711-0-0-0	P+		9550-0-0-0					
FC612N2		9501-0-0-0	AF8	M22520/1-01	9502-19-0-0	TP-1199		9099-3-0-0	ITP 1168		2711-0-0-0	P+		9550-0-0-0					
FS610N2S								9099-3-0-0	ITP 1168		2711-0-0-0	P+							
FS612N2								9099-3-0-0	ITP 1168		2711-0-0-0	P+							
MC610NS	9509-6-0-0	9509-6-1-0	GS223		9509-6-2-0	TP-1386		9099-3-0-0	ITP 1168		2711-0-0-0	P+		9550-0-0-0					
MC610NS-228.2	9509-6-0-0	9509-6-1-0	GS223		9509-6-2-0	TP-1386		9099-3-0-0	ITP 1168		2711-0-0-0	P+		9550-0-0-0					
MC612N		9501-0-0-0	AF8	M22520/1-01	9502-19-0-0	TP1199		9099-3-0-0	ITP 1168		2711-0-0-0	P+		9550-0-0-0					
MC612N-228.2		9501-0-0-0	AF8	M22520/1-01	9502-19-0-0	TP1199		9099-3-0-0	ITP 1168		2711-0-0-0	P+		9550-0-0-0					
MS610NS								9099-3-0-0	ITP 1168		2711-0-0-0	P+							
MS610NS-228.2								9099-3-0-0	ITP 1168		2711-0-0-0	P+							
MS612N								9099-3-0-0	ITP 1168		2711-0-0-0	P+							
MS612N-228.2								9099-3-0-0	ITP 1168		2711-0-0-0	P+							
FS1612N2								9099-3-0-0	ITP 1168		2711-0-0-0	P+							
FC11+N2		9501-0-0-0	AF8	M22520/1-01	9502-1-0-0	TH4	M22520/1-03	9099-0-0-0	ITH 1094	M81969/18-01	9081-0-0-0	RTG 2103	M81969/20-01	9550-0-0-0					
FC12N2S	9509-3-0-0	9509-4-0-0	GS222		9509-5-0-0	TP-1366		9099-0-0-0	ITH 1094	M81969/18-01	9081-0-0-0	RTG 2103	M81969/20-01	9550-0-0-0					
FC120N2		9501-0-0-0	AF8	M22520/1-01	9502-1-0-0	TH4	M22520/1-03	9099-0-0-0	ITH 1094	M81969/18-01	9081-0-0-0	RTG 2103	M81969/20-01	9550-0-0-0					
FCS*26N2	9506-0-0-0	9506-1-0-0	HX3		9506-2-0-0	X530		9099-0-0-0	ITH 1094	M81969/18-01	9081-0-0-0	RTG 2103	M81969/20-01	9550-0-0-0					
FS11+N2								9099-0-0-0	ITH 1094	M81969/18-01	9081-0-0-0	RTG 2103	M81969/20-01	9550-0-0-0					
FS12N2S								9099-0-0-0	ITH 1094	M81969/18-01	9081-0-0-0	RTG 2103	M81969/20-01	9550-0-0-0					
FS120N2								9099-0-0-0	ITH 1094	M81969/18-01	9081-0-0-0	RTG 2103	M81969/20-01	9550-0-0-0					
MC11+N		9501-0-0-0	AF8	M22520/1-01	9502-1-0-0	TH4	M22520/1-03	9099-0-0-0	ITH 1094	M81969/18-01	9081-0-0-0	RTG 2103	M81969/20-01	9550-0-0-0					
MC11+N-133*		9501-0-0-0	AF8	M22520/1-01	9502-17-0-0	TP1110		9099-0-0-0	ITH 1094	M81969/18-01	9081-0-0-0	RTG 2103	M81969/20-01	9550-0-0-0					
MC12N2S	9509-3-0-0	9509-4-0-0	GS222		9509-5-0-0	TP-1366		9099-0-0-0	ITH 1094	M81969/18-01	9081-0-0-0	RTG 2103	M81969/20-01	9550-0-0-0					
MC120N		9501-0-0-0	AF8	M22520/1-01	9502-1-0-0	TH4	M22520/1-03	9099-0-0-0	ITH 1094	M81969/18-01	9081-0-0-0	RTG 2103	M81969/20-01	9550-0-0-0					
MCS*26N	9506-0-0-0	9506-1-0-0	HX3		9506-2-0-0	X530		9099-0-0-0	ITH 1094	M81969/18-01	9081-0-0-0	RTG 2103	M81969/20-01	9550-0-0-0					
MS11+N								9099-0-0-0	ITH 1094	M81969/18-01	9081-0-0-0	RTG 2103	M81969/20-01	9550-0-0-0					
MS12N2S								9099-0-0-0	ITH 1094	M81969/18-01	9081-0-0-0	RTG 2103	M81969/20-01	9550-0-0-0					
MS120N								9099-0-0-0	ITH 1094	M81969/18-01	9081-0-0-0	RTG 2103	M81969/20-01	9550-0-0-0					

APPLICATION TOOLS



CONTACT APPLICATION TOOLS CROSS REFERENCE LIST

USE INDICATED POSITRONIC TOOLS FOR BEST RESULTS

P C S M I X E D D E N S I T Y S E R I E S														
SIZE 8 CONTACTS										SIZE 20				
Positronic Contact P/N	Handle & Positioner P/N	Hand Crimp Tool P/N	Mfg. Cross	Mil Equip	Positioner	Mfg. Cross	Mil Equip	Insertion Tool	Mfg. Cross	Mil Equip	Removal Tool	Mfg. Cross	Mil Equip	Automatic Crimp Tool
FC720N2		9507-0-0-0	AFM8	M22520/2-01	9502-22-0-0	K1196		9089-4-0-0	TP1076		9081-2-0-0	RNG2103		9550-1-0-0
MC720N3		9507-0-0-0	AFM8	M22520/2-01	9502-27-0-0	K1506		9089-4-0-0	TP1076		9081-2-0-0	RNG2103		9550-1-0-0
*C4008D	9504-19-0-0	9504-1-0-0	HX4		9504-19-1-0	Y524		N/A			4311-0-0-0	P+		9555-0-2-0
*C4008DS	9504-19-0-0	9504-1-0-0	HX4		9504-19-1-0	Y524		N/A			4311-0-0-0	P+		9555-0-2-0
*C4010D	9509-0-0-0	9509-1-0-0	M310		9509-2-0-0	TP-974		N/A			4311-0-0-0	P+		9555-0-2-0
*C4012D	9509-0-0-0	9509-1-0-0	M310		9509-2-0-0	TP-974		N/A			4311-0-0-0	P+		9555-0-2-0
*C4016D	9509-0-0-0	9509-1-0-0	M310		9509-2-0-0	TP-974		N/A			4311-0-0-0	P+		9555-0-2-0
*S40**D								N/A			4311-0-0-0	P+		
*S4120D								N/A			4311-0-0-0	P+		
*C4101D	9504-0-0-0	9504-1-0-0	HX4	M22520/5-01	9504-2-0-0	Y322		N/A			4311-0-0-0	P+		
*C4102D	9504-0-0-0	9504-1-0-0	HX4	M22520/5-01	9504-2-0-0	Y322		N/A			4311-0-0-0	P+		
*C4103D	9504-0-0-0	9504-1-0-0	HX4	M22520/5-01	9504-2-0-0	Y322		N/A			4311-0-0-0	P+		
*C4104D	9504-0-0-0	9504-1-0-0	HX4	M22520/5-01	9504-2-0-0	Y322		N/A			4311-0-0-0	P+		
*S4101D								N/A			4311-0-0-0	P+		
*S4102D								N/A			4311-0-0-0	P+		
*S4103D								N/A			4311-0-0-0	P+		
*S4104D								N/A			4311-0-0-0	P+		
*CC4101D	9504-14-0-0	9504-1-0-0	HX4	M22520/5-01	9504-14-1-0	Y878		N/A			4311-0-0-0	P+		
*CC4102D	9504-13-0-0	9504-1-0-0	HX4	M22520/5-01	9504-13-1-0	Y937		N/A			4311-0-0-0	P+		
*CC4103D	9504-15-0-0	9504-1-0-0	HX4	M22520/5-01	9504-15-1-0	Y877		N/A			4311-0-0-0	P+		
*CC4104D	9504-15-0-0	9504-1-0-0	HX4	M22520/5-01	9504-15-1-0	Y877		N/A			4311-0-0-0	P+		

APPLICATION TOOLS



PRESS-FIT USER INFORMATION

When properly used, Positronic Industries' Bi-Spring Power Press-Fit terminations provide reliable service even under severe conditions.

Connectors utilizing this leading technology press-fit contact are easy to install:

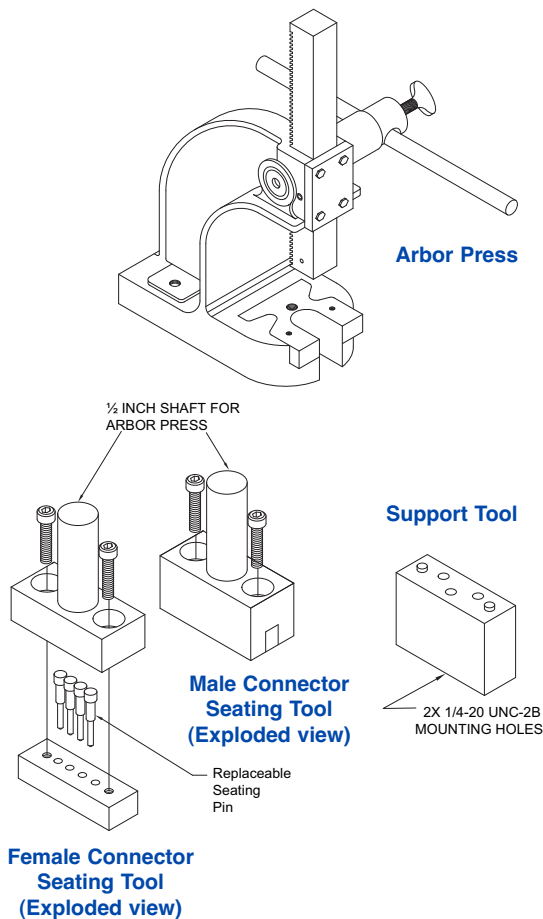
1. Choose the proper tooling. Inexpensive insertion tooling and single contact repair tooling are available from Positronic.
2. Insert the connector into the P.C. board or backplane and seat connector fully.
3. Secure the connector to the P.C. board or backplane using two self-tapping screws. The screws should be #2 self-tapping screws for plastic.

Need to repair a single contact because of damage in manufacturing, testing, or field use?

- 1. Choose the proper contact extraction tool.***
- 2. Push the contact out with a firm, steady force. Remember, excessive force is not required.***
- 3. Install a new contact with the proper contact insertion tool. You are finished. Replacing a single contact instead of an entire connector can allow considerable cost savings. This is particularly true when considering the risk of damage to P.C. boards and backplanes that can occur if the entire connector must be replaced.***

COMPLIANT TERMINATION PRESS-FIT CONNECTOR INSTALLATION TOOLS

APPLICATION TOOLS



POSITRONIC RECOMMENDED TOOLS				
CONNECTOR VARIANT	CONNECTOR SEATING TOOL WITH ARBOR PRESS SHAFT		CONNECTOR SEATING TOOL WITHOUT ARBOR PRESS SHAFT	
	MALE	FEMALE	MALE	FEMALE
PLA03	9513-1-0-41	9513-13-0-41	—	—
PLA04	9513-2-0-41	9513-14-0-41	—	—
PLA06	9513-3-0-41	9513-15-0-41	—	—
PLA08	9513-4-0-41	9513-16-0-41	—	—
PLB06	9513-5-0-41	9513-17-0-41	—	—
PLB08	9513-6-0-41	9513-18-0-41	—	—
NEW PLB10W2	9513-7-0-41	9513-30-0-41	—	—
PLB12	9513-7-0-41	9513-19-0-41	—	—
PLB16	9513-8-0-41	9513-20-0-41	—	—
NEW PLB20	9513-33-0-41	9513-34-0-41	—	—
PLB3W3	9513-6-0-41	9513-18-1-41	9513-6-10-41	9513-18-11-41
PLC09	9513-9-0-41	9513-21-0-41	—	—
PLC12	9513-10-0-41	9513-22-0-41	—	—
NEW PLC16W4	9513-11-0-41	9513-31-0-41	—	—
PLC18	9513-11-0-41	9513-23-0-41	—	—
PLC24	9513-12-0-41	9513-24-0-41	—	—
PLC30	9513-25-0-41	9513-26-0-41	—	—
Arbor press for connector seating tools: 9530-1-0-0 1 ton capacity 4 inch throat				
Replacement pins for connector seating tool	PCS Mixed Density Series Size 20		855-347-18-41	
	PCS Series Size 16		855-658-1-41 (female)	
	PLB3W3 Series Size 12		855-347-11-41 (female)	
	PCS Mixed Density Series Size 8		855-347-19-41	
Support tool for PLB3W3: 9513-401-6-41				



SUGGESTED PRINTED BOARD HOLE SIZES FOR COMPLIANT PRESS-FIT CONNECTORS

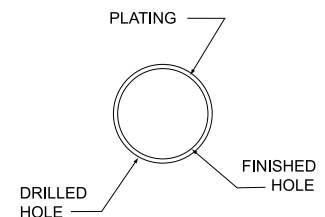
Traditionally, tin-lead has been a popular plating for PBC holes. However, many PCB hole platings must now be RoHS Compliant. Positronic is pleased to offer **PCB HOLE SIZE FOR RoHS** PCB plating as shown below.

OMEGA & BI-SPRING COMPLIANT PRESS-FIT CONTACT HOLE				
BOARD TYPE	CONTACT SIZE / TYPE	RECOMMENDED DRILL HOLE SIZE	RECOMMENDED PLATING	FINISHED HOLE SIZES
TIN-LEAD SOLDER PCB	20 OMEGA	$\phi 0.0453 \pm 0.0010$ [$\phi 1.150 \pm 0.025$]	0.0006 [15 μ] minimum solder over 0.0010 [25 μ] min. copper	$\phi 0.0394 \pm 0.0035 - 0.0024$ [$\phi 1.000 \pm 0.090 - 0.060$]
	16 BI-SPRING	$\phi 0.069 \pm 0.001$ [$\phi 1.750 \pm 0.025$]		$\phi 0.0630 \pm 0.0035 - 0.0024$ [$\phi 1.600 \pm 0.090 - 0.060$]
	12 BI-SPRING	$\phi 0.102 \pm 0.001$ [$\phi 2.59 \pm 0.025$]		$\phi 0.096 \pm 0.002$ [$\phi 2.44 \pm 0.05$]
	8 BI-SPRING	$\phi 0.125 \pm 0.001$ [$\phi 3.180 \pm 0.025$]		$\phi 0.119 \pm 0.002$ [$\phi 3.02 \pm 0.05$]
RoHS PCB PLATING OPTIONS				
COPPER PCB	20 OMEGA	$\phi 0.047 \pm 0.001$ [$\phi 1.19 \pm 0.025$]	0.0010 [25 μ] min. copper	$\phi 0.043 \pm 0.002$ [$\phi 1.09 \pm 0.05$]
	16 BI-SPRING	$\phi 0.069 \pm 0.001$ [$\phi 1.750 \pm 0.025$]		$\phi 0.0630 \pm 0.0035 - 0.0024$ [$\phi 1.600 \pm 0.090 - 0.060$]
	12 BI-SPRING	$\phi 0.102 \pm 0.001$ [$\phi 2.59 \pm 0.025$]		$\phi 0.096 \pm 0.002$ [$\phi 2.44 \pm 0.05$]
	8 BI-SPRING	$\phi 0.125 \pm 0.001$ [$\phi 3.180 \pm 0.025$]		$\phi 0.119 \pm 0.002$ [$\phi 3.02 \pm 0.05$]
IMMERSION TIN PCB	20 OMEGA	$\phi 0.047 \pm 0.001$ [$\phi 1.19 \pm 0.025$]	0.000033 \pm 0.000006 [0.85 \pm 0.15 μ] immersion tin over 0.0010 [25 μ] min. copper	$\phi 0.043 \pm 0.002$ [$\phi 1.09 \pm 0.05$]
	16 BI-SPRING	$\phi 0.069 \pm 0.001$ [$\phi 1.750 \pm 0.025$]		$\phi 0.0630 \pm 0.0035 - 0.0024$ [$\phi 1.600 \pm 0.090 - 0.060$]
	12 BI-SPRING	$\phi 0.102 \pm 0.001$ [$\phi 2.59 \pm 0.025$]		$\phi 0.096 \pm 0.002$ [$\phi 2.44 \pm 0.05$]
	8 BI-SPRING	$\phi 0.125 \pm 0.001$ [$\phi 3.180 \pm 0.025$]		$\phi 0.119 \pm 0.002$ [$\phi 3.02 \pm 0.05$]
IMMERSION SILVER PCB	20 OMEGA	$\phi 0.047 \pm 0.001$ [$\phi 1.19 \pm 0.025$]	0.000013 \pm 0.000007 [0.34 \pm 0.17 μ] immersion silver over 0.0010 [25 μ] min. copper	$\phi 0.043 \pm 0.002$ [$\phi 1.09 \pm 0.05$]
	16 BI-SPRING	$\phi 0.069 \pm 0.001$ [$\phi 1.750 \pm 0.025$]		$\phi 0.0630 \pm 0.0035 - 0.0024$ [$\phi 1.600 \pm 0.090 - 0.060$]
	12 BI-SPRING	$\phi 0.102 \pm 0.001$ [$\phi 2.59 \pm 0.025$]		$\phi 0.096 \pm 0.002$ [$\phi 2.44 \pm 0.05$]
	8 BI-SPRING	$\phi 0.125 \pm 0.001$ [$\phi 3.18 \pm 0.025$]		$\phi 0.119 \pm 0.002$ [$\phi 3.02 \pm 0.05$]
ELECTROLESS NICKEL / IMMERSION GOLD PCB	20 OMEGA	$\phi 0.047 \pm 0.001$ [$\phi 1.19 \pm 0.025$]	0.000002 [0.05 μ] min. immersion gold over 0.000177 \pm 0.000059 [4.5 \pm 1.5 μ] electroless nickel per IPC-452 over 0.0010 [25 μ] min. copper	$\phi 0.043 \pm 0.002$ [$\phi 1.09 \pm 0.05$]
	16 BI-SPRING	$\phi 0.069 \pm 0.001$ [$\phi 1.750 \pm 0.025$]		$\phi 0.0630 \pm 0.0035 - 0.0024$ [$\phi 1.600 \pm 0.090 - 0.060$]
	12 BI-SPRING	$\phi 0.102 \pm 0.001$ [$\phi 2.59 \pm 0.025$]		$\phi 0.096 \pm 0.002$ [$\phi 2.44 \pm 0.05$]
	8 BI-SPRING	$\phi 0.125 \pm 0.001$ [$\phi 3.180 \pm 0.025$]		$\phi 0.119 \pm 0.002$ [$\phi 3.02 \pm 0.05$]

“Omega” Termination



“Bi-Spring” Termination

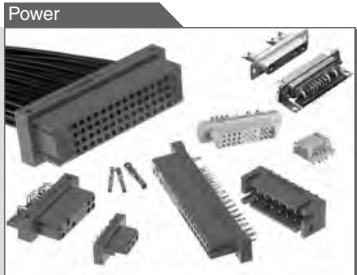


COMPLIANT PRESS-FIT TERMINATION CONTACT HOLE

NOTE: For PCB plating compositions not shown, consult Technical Sales.

POSITRONIC PRODUCTS

Contact Sizes: 0, 8, 12, 16, 20 and 22
Current Ratings: To 100 amperes
Terminations: Crimp, wire solder, straight solder, right angle solder, straight press-fit and right angle (90°) press-fit
Configurations: Multiple variants in a variety of package sizes
Compliance: PICMG 2.11, PICMG 3.0, VITA 41



FEATURES: Hot swap capability • AC/DC operation in a single connector • Signal contacts for hardware management • Blind mating • Sequential mating • Large surface area contact mating system • Wide variety of accessories • Customer specified contact arrangements

Contact Sizes: 8, 20 and 22
Current Ratings: To 40 amperes nominal
Terminations: Crimp, wire solder, straight solder, right angle (90°) solder and straight press-fit
Configurations: Multiple variants in both standard and high densities
Qualifications: MIL-DTL-24308, Goddard Space Flight S-311-P, SAE AS 39029, IP65, IP67



FEATURES: Three performance levels available: professional quality, military quality and space-flight quality provide multiple performance-to-cost choices • Options include thermocouple contacts, air coupling, environmentally sealed and dual port package including mixed density • Broad selection of accessories

Contact Sizes: 16, 20 and 22
Current Ratings: To 13 amperes
Terminations: Crimp, wire solder, straight solder and right angle (90°) solder
Configurations: Multiple variants in both standard and high densities
Qualifications: MIL-DTL-28748, SAE AS 39029, CCITT V.35



FEATURES: Two performance levels available: industrial quality and military quality provide two performance to cost choices • Large surface area contact mating system • A wide variety of accessories • Broad selection of contact variants and package sizes

Contact Sizes: 12, 16, 20 and 22
Current Ratings: To 25 amperes nominal
Terminations: Crimp, wire solder, straight solder and right angle (90°) solder
Configurations: Multiple variants
Qualifications: Environmental protection to IP67



FEATURES: Non-corrodible / lightweight composite construction • EMI/RFI shielded versions • Thermocouple contacts • Environmentally sealed versions • Rear insertion/front release of removable contacts • Two level sequential mating • Overmolding available on full assemblies

All Positronic connector products can be supplied as part of cable assemblies whose technical characteristics would reflect those of the connectors being used within the assembly.



FEATURES: Shorten the supply chain and reduce additional costs and delays by "cablizing" • Overmolding available • Shielded and environmentally sealed versions available • Power cables and access boxes which meet the SAE J2496 specification

Contact Sizes: 8, 12, 16, 20 and 22
Current Ratings: To 40 amperes nominal
Terminations: Feedthrough is standard; flying leads and board mount available upon request
Configurations: See D-subminiature and circular configurations above
Qualifications: Space-D32



FEATURES: Intended for use as an electrical feedthrough in high vacuum applications • Leakage rate: 5×10^{-9} mbar.l/s @ vacuum 1.5×10^{-5} atm • Signal, power, coax and high voltage versions available • Connectors can be mounted on flange assembly per customer specification

NORTH AMERICAN LOCATIONS

UNITED STATES, Springfield, Missouri, Corporate Headquarters

Factory Sales and Engineering Offices (800) 641-4054

PUERTO RICO, Ponce Factory

Factory Sales and Engineering Offices (800) 641-4054

MEXICO

Factory Sales and Engineering Offices (800) 872-7674

CANADA

Factory Sales and Engineering Offices (800) 327-8272

ASIA/PACIFIC LOCATIONS

SINGAPORE, Asia/Pacific Headquarters

Factory Sales and Engineering Offices (65) 6842 1419 singapore@connectpositronic.com

ASIA, Direct Sales Offices

China -Shenzhen Sales Office (86) 755 2643 7578 shenzhen@connectpositronic.com

China -Shanghai Sales Office (86) 158 2907 9779 shanghai@connectpositronic.com

China -Xian/Beijing Sales Office (86) 29 8839 5306 xian@connectpositronic.com

Korea Sales Office (82) 31 909 8047 or 8 korea@connectpositronic.com

Taiwan Sales Office (88) 62 2937 8775 taiwan@connectpositronic.com

JAPAN, Direct Sales Offices

Sales and Engineering Offices (81) 3 5812 7720 japan@connectpositronic.com

INDIA, Direct Sales Offices

Factory Sales and Engineering Offices (91) 20 2439 4810 india@connectpositronic.com

Bangalore Sales Office bangalore@connectpositronic.com

New Delhi Sales Office delhi@connectpositronic.com

ASIA/PACIFIC, Technical Agents

Technical Agents in Malaysia, Australia, New Zealand, Philippines, Hong Kong, Vietnam, Thailand

EUROPEAN LOCATIONS

FRANCE, Auch Factory, European Headquarters

Factory Sales and Engineering Offices 33 5 62 63 44 91 contact@connectpositronic.com

EUROPE, Direct Sales Offices

Northern France Sales Office 33 1 45 88 13 88 jchalaux@connectpositronic.com

Southern France Sales Office 33 5 62 63 44 91 plafon@connectpositronic.com

Italy Sales Office 39 02 54 1161 06 rmagni@connectpositronic.com

Germany Sales Office 49 2351 63 47 39 cbouche@connectpositronic.com

UK Sales Office 44 1993 831 939 lbridwell@connectpositronic.com

EUROPE, Technical Agents

Technical Agents in Austria, Benelux, Eastern Europe Countries, Greece, Ireland, Scandinavia, Spain, Switzerland and the United Kingdom

MIDEAST, Technical Agents

Technical Agents in Israel and Turkey



POSITRONIC™
GLOBAL *Connector* SOLUTIONS

POSITRONIC INDUSTRIES, INC.

423 N Campbell Avenue • PO Box 8247 • Springfield, MO 65801
Tel (417) 866-2322 • Fax (417) 866-4115 • Toll Free (800) 641-4054
info@connectpositronic.com

POSITRONIC INDUSTRIES, S.A.S.

Zone Industrielle d'Engachies • 46 Route d'Engachies
France 32020 Auch Cedex 9
Telephone 33 5 62 63 44 91 • Fax 33 5 62 63 51 17
contact@connectpositronic.com

POSITRONIC ASIA PTE LTD.

3014A Ubi Road 1 #07-01 • Singapore 408703
Telephone (65) 6842 1419 • Fax (65) 6842 1421
singapore@connectpositronic.com

POSITRONICS