

Positronic Industries

Handbook of Power Connection Systems 25 amperes continuous

+

Photo Unavailable

+



Unless otherwise specified, dimensional tolerances are:

- 1) 0.001 inches (±0.03 mm) for male contact mating diameters.
- 2) 0.003 inches (±0.08 mm) for contact termination diameters.
- 3) 0.005 inches (±0.13 mm) for all other diameters.
- 4) 0.015 inches (±0.38 mm) for all other dimensions.

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Positronic's Power Connection Systems...



Positronic's Power Connection Systems are very unique in the electronics industry and were developed with extensive customer input to meet a wide variety of customer needs. They include:

Solid, metal machined, true power, contacts

Large surface area mating system

Long-life

High reliability

Sequential mating options

Integral locking system

Wide variety of termination styles

Broad range of accessories

U.L., C.S.A. recognized

Positronic's Power Connection Systems is the fastest growing product line in the Company's 30 year history. Positronic is dedicated to expanding this connector family to meet ever changing industry requirements.





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Power
Connection
SystemsPrinted Board To Printed
Board Connection SystemsPower
Connection
Systems





POWER CONNECTION SYSTEMS PANEL MOUNT AND CABLE ADAPTERS



Technical Information

Power Connection Systems

U.S. Patent #4,900,261

Patented in Canada, 1992

POWER CONNECTION SYSTEMS TECHNICAL CHARACTERISTICS

MATERIALS AND FINISHES:		MECHANICAL CHARACTER	RISTICS:	
Insulator:	Glass-filled polyester, UL 94V-0.	Removable Contacts:	Insert contact to rear face of insulator, release from front face of insulator. Size	
Contacts:	Precision machined copper alloy with 0.000010 inch (0.25 microns) gold over nickel, or 0.000030 inch (0.8 microns) gold over nickel Solder coated terminations		16, 0.062 inch (1.57 mm) diameter male contact. Female contact "closed entry" design for highest reliability.	
	optional.	Removable Contact Retention		
Mounting Clip:	Beryllium copper with tin plate.		15 lbs. (67N) per IEC 512-8, lest 15a.	
Hood:	Glass filled polyester, UL 94V-0.	Fixed Contacts:	Solder cup and printed board terminations. Size 16, 0.062 inch (1.57 mm) diameter	
Mounting Bracket:	Brass with tin plate.		male contact. Female contact has "closed entry" design for highest reliability.	
Push-on Fastener:	Spring tempered copper alloy, tin plate	Fixed Contact Retention in Insulator:	6 lbs. (26N).	
ELECTRICAL CHARACTERI	STICS:	Resistance to Solder		
Contact Current Rating:	25 amperes continuous, derated per IEC 512-3, Test 5b. See page 5 for performance curves.	Iron Heat:	500°F (260°C) for 10 seconds duration per IEC 512-6, Test 12e, 25 watt soldering iron	
Initial Contact Resistance: After 1000 Operations:	0.003 ohms max. per IEC 512-2, Test 2b. 0.007 ohms max. per IEC 512-2, Test 2b.	Contact Terminations:	Crimp or solder removable contacts from wire sizes 12 AWG (4.0 mm ²) through 24	
Insulation Resistance:	5 G ohms per IEC 512-2, Test 3a, Method A.		AWG (0.25 mm ²). Straight and 90° solde printed board mount, 0.062 inch (1.5	
Voltage Proof:	2000 V rms per IEC 512-2, Test 4a, Method C.		mm) tail diameter. Compliant termination press-fit. Fixed contact solder cup termi- nation. 18 AWG (1.0 mm ²) maximum.	
Creepage Distance:	0.157 inch (4 mm) minimum.	Contact Insertion and		
Clearance Distance:	0.125 inch (3.2 mm) minimum.	Withdrawal Forces:	8 oz. (2.2N) nominal per contact.	
Working Voltage:	Designed to meet UL 600 VAC and CSA 600 VAC.	Connection Systems:	Connector provides cable to cable, cable to printed board, cable to panel mount and	
Working Temperature:	-55°C to +125°C		printed board to printed board application.	
SHIELDED CONTACT TECH CHARACTERISTICS:	NICAL	Sequential Mating System:	Cable and printed board mount connec- tors. Male contacts provide as many as three mating lengths.	
See page 22.		Locking System:	Insulators provide locking between cable to cable, cable to printed board and cable to panel mount applications.	
		Polarizations:	Provided in insulator design. Further polarization in cable connectors can be provided by mixing male contacts in female insulators and female contacts in	

Mounting to Printed Board:

Mechanical Operations: 1000 operations per IEC 512-5.



CSA Recognized File #LR54219





male insulators.

Rapid installation push-on fasteners.

POWER CONNECTION SYSTEMS CONTACTS

"LARGE SURFACE AREA CONTACT MATING SYSTEM"

HIGH RELIABILITY "CLOSED ENTRY" DESIGN PRECISION MACHINED SOLID COPPER ALLOY



All contacts of Positronic's Power Connection Systems utilize the "Large Surface Area (L.S.A.) Contact Mating System." The "L.S.A. Contact Mating System" insures the lowest level of contact resistance during mechanical endurance tests of 1000 coupling cycles or more. Contact insertion/withdrawal forces remain substantially the same during the life of the connector.

Power Connection Systems use only "Closed Entry" design female contacts. The "Closed Entry" design prevents probe damage to the female contacts, and will not allow the female



SECTION A-A ENLARGED

Spring Retention Member

contact to accept misaligned or bent male contacts.

All Power Connection Systems contacts are precision machined from solid copper alloy barstock. They are durable, smooth in construction, and have greater amperage capacities than hollow, sheet metal style contacts.

Power Connection Systems contacts, having a large contact surface area, produce less heat at the contact surface, thereby permitting the connector to operate at high amperage levels continuously, and still maintain lower connector temperatures.

TEMPERATURE RISE CURVE

(TESTED PER IEC PUBLICATION 512-3, TEST 5a)

CURRENT-TEMPERATURE DERATING CURVE (TESTED PER IEC PUBLICATION 512-3, TEST 5b)



- - - CURVES DEVELOPED USING MC112NS AND FC112N2S TELLURIUM COPPER CRIMP

PLC24

PLB12

PLA03



ALL DIMENSIONS ARE SUBJECT TO CHANGE.

Straight Solder Printed Board Connectors

Power Connection Systems



*Asterisk determines gender of connector, M for male, F for female. 2.112

(53.64)

2.506

(63.65)

PLC24*3200A1

PLC30*3200A1

0.802

(20.37)

0.802

(20.37)

0.600

(15.24)

0.600

(15.24)

Straight Solder Contact Hole Pattern

Power Connection **Systems**



Suggest 0.080 (2.03) Ø holes in printed board for solder contact termination positions.

Suggest 0.100 (2.54) Ø holes in printed board when mounting connectors with # 2 thread forming screws.

DIMENSIONS ARE IN INCHES (MILLIMETERS). ALL DIMENSIONS ARE SUBJECT TO CHANGE.

φ

-A

æ



*Asterisk determines gender of connector, M for male, F for female.

(20.37)

0.802

(20.37

2.506 (63.65)

PLC30*400A1

(15.24)

0.600 (15.24)

DIMENSIONS ARE IN INCHES (MILLIMETERS). ALL DIMENSIONS ARE SUBJECT TO CHANGE.

9



90° Solder Printed Board Contact Hole Pattern

Power Connection Systems



Suggest 0.080 (2.03) Ø holes in printed board for contact termination positions.

Suggest 0.123 ± 0.003 (3.15) Ø holes in printed board for mounting connector with push-on fasteners.

TECHNICAL CHARACTERISTICS POWER CONNECTION SYSTEMS BLIND MATING SYSTEM





Typical Part Number: PLB08F10120

PANEL CUTOUT FOR FLOATING CONNECTOR



MATERIALS AND FINISHES:

Blind mating plate – Steel, zinc plate with dichromate seal. Blind mating guide – Stainless steel, passivated. Float screw – steel, zinc plate with dichromate seal.

Blind mating system provides lead in for 0.100(2.54) axial misalignment.

Blind mating system sold in a kit containing a connector–plate assembly, Blind mating guides, and float screws.

PART NUMBER	PANEL THICKNESS
PL****11*	<u>0.040</u> (1.02)
PL****12*	<u>0.060</u> (1.52)
PL****13*	<u>0.090</u> (2.28)
PL****14*	<u>0.120</u> (3.05)

DIMENSIONS ARE IN INCHES (MILLIMETERS). ALL DIMENSIONS ARE SUBJECT TO CHANGE.



PANEL CUTOUT FOR



NOTE: Panel thickness may impact the orientation of mating end of blind mate pin. Shimming between the panel and the head of the blind mate pin may be necessary to minimize tilt of the blind mate system. Contact factory for additional technical information.

CONNECTOR VARIANTS	Α	B ±0.005	С	D ±0.005	D1 ±0.005	E ±0.005	E1 ±0.005	F ±0.005
PLA03	<u>2.340</u>	<u>0.882</u>	<u>0.750</u>	<u>0.650</u>	<u>0.860</u>	<u>0.430</u>	<u>0.640</u>	<u>1.522</u>
	(59.44)	(22.40)	(19.05)	(16.51)	(21.84)	(10.92)	(16.26)	(38.66)
PLA04	<u>2.537</u>	<u>1.079</u>	<u>0.750</u>	<u>0.847</u>	<u>1.057</u>	<u>0.430</u>	<u>0.640</u>	<u>1.719</u>
	(64.44)	(27.41)	(19.05)	(21.51)	(26.85)	(10.92)	(16.26)	(43.66)
PLA06	<u>2.931</u>	<u>1.473</u>	<u>0.750</u>	<u>1.241</u>	<u>1.451</u>	<u>0.430</u>	<u>0.640</u>	<u>2.113</u>
	(74.45)	(37.41)	(19.05)	(31.52)	(36.86)	(10.92)	(16.26)	(53.67)
PLA08	<u>3.325</u>	<u>1.867</u>	<u>0.750</u>	<u>1.635</u>	<u>1.845</u>	<u>0.430</u>	<u>0.640</u>	<u>2.507</u>
	(84.46)	(47.42)	(19.05)	(41.53)	(46.86)	(10.92)	(16.26)	(63.68)
PLB06	<u>2.340</u>	<u>0.882</u>	<u>0.947</u>	<u>0.650</u>	<u>0.860</u>	<u>0.627</u>	<u>0.837</u>	<u>1.522</u>
	(59.44)	(22.40)	(24.05)	(16.51)	(21.84)	(15.93)	(21.26)	(38.66)
PLB08	<u>2.537</u>	<u>1.079</u>	<u>0.947</u>	<u>0.847</u>	<u>1.057</u>	<u>0.627</u>	<u>0.837</u>	<u>1.719</u>
	(64.44)	(27.41)	(24.05)	(21.51)	(26.85)	(15.93)	(21.26)	(43.66)
PLB12	<u>2.931</u>	<u>1.473</u>	<u>0.947</u>	<u>1.241</u>	<u>1.451</u>	<u>0.627</u>	<u>0.837</u>	<u>2.113</u>
	(74.45)	(37.41)	(24.05)	(31.52)	(36.86)	(15.93)	(21.26)	(53.67)
PLB16	<u>3.325</u>	<u>1.867</u>	<u>0.947</u>	<u>1.635</u>	<u>1.845</u>	<u>0.627</u>	<u>0.837</u>	<u>2.507</u>
	(84.46)	(47.42)	(24.05)	(41.53)	(46.86)	(15.93)	(21.26)	(63.68)
PLC09	<u>2.340</u>	<u>0.882</u>	<u>1.144</u>	<u>0.650</u>	<u>0.860</u>	<u>0.824</u>	<u>1.034</u>	<u>1.522</u>
	(59.44)	(22.40)	(29.06)	(16.51)	(21.84)	(20.93)	(26.26)	(38.66)
PLC12	<u>2.537</u>	<u>1.079</u>	<u>1.144</u>	<u>0.847</u>	<u>1.057</u>	<u>0.824</u>	<u>1.034</u>	<u>1.719</u>
	(64.44)	(27.41)	(29.06)	(21.51)	(26.85)	(20.93)	(26.26)	(43.66)
PLC18	<u>2.931</u>	<u>1.473</u>	<u>1.144</u>	<u>1.241</u>	<u>1.451</u>	<u>0.824</u>	<u>1.034</u>	<u>2.113</u>
	(74.45)	(37.41)	(29.06)	(31.52)	(36.86)	(20.93)	(26.26)	(53.67)
PLC24	<u>3.325</u>	<u>1.867</u>	<u>1.144</u>	<u>1.635</u>	<u>1.845</u>	<u>0.824</u>	<u>1.034</u>	<u>2.507</u>
	(84.46)	(47.42)	(29.06)	(41.53)	(46.86)	(20.93)	(26.26)	(63.68)
PLC30	<u>3.720</u>	<u>2.262</u>	<u>1.144</u>	<u>2.029</u>	<u>2.239</u>	<u>0.824</u>	<u>1.034</u>	<u>2.902</u>
	(94.49)	(57.45)	(29.06)	(51.54)	(56.87)	(20.93)	(26.26)	(73.71)

Sequential Contact Mating Connectors

POWER CONNECTION SYSTEMS SEQUENTIAL MATING SYSTEM

EXAMPLE 1





Typical Part Number: PLA06M300A1-E1B2B3D4D

Length Code	"X" Contact length
А	0.370 (9.40)
В	0.330 (8.38)
С	0.310 (7.87)
D	0.290 (7.37)
E	0.250 (6.35)

Mating Connector Type	Contact Options
Board to Board	B, D, E
Board to Cable*	A, C, E
Cable to Cable*	A, D

EXAMPLE 2 POSITION NUMBERS



PLA08M4B0C1-D8B

* Removable contacts for cable connectors must be ordered separately.

SEQUENTIAL MATING SYSTEM CRIMP REMOVABLE CONTACT PART NUMBERS

Wire size AWG/(mm ²)	Length Code "A"	Length Code "C"	Length Code "D"	Length Code "E"
$\frac{12 - 14}{(4.0 - 2.5)}$	MC112N-133.3	MC112N-133.2	MC112N-133.1	MC112N-133.0
$\frac{16 - 18 - 20}{(1.5 - 1.0 - 0.5)}$	MC116N-133.3	MC116N-133.2	MC116N-133.1	MC116N-133.0

SELECTION GUIDE FOR ORDERING DIFFERENT CONTACT LENGTHS STEP 8 OF ORDERING INFORMATION

SEE ORDERING INFORMATION ON PAGE 29 FOR STEPS 1 THROUGH 7 TO ORDER SEQUENTIAL MATING SYSTEM CONNECTORS

										•
STEP	1	2	3	4	5	6	7	8	9	
EXAMPLE	Е	1	В	2	В	3	D	4	D	
STEP 1 Specify code for most frequently used contact mating length. This length is used for all contacts not specified in steps 2 through 9. STEP 2 Position number for first special										STEP 9Length of contact specified in step 8(Choose from length code chart).STEP 8Position number for fourth speciallength contact.
length contact.										STEP 7 Length of contact specified in step 6
Length of contact specified in step 2 (Choose from length code chart)	2.									STEP 6 Position number for third special
STEP 4 Position number for second special				•						length contact.
length contact.										Length of contact specified in step 4 (Choose from length code chart).



Panel Mount Connectors

Power Connection **Systems**

POWER CONNECTION SYSTEMS PANEL MOUNT CONNECTORS ***FIXED STYLE MOUNTING CLIP**





Mounting clip

factory installed

FEMALE

Mounting clip factory installed





Typical part number: PLB06M10810

PART	PANEL
NUMBER	THICKNESS
DI ****81*	<u>0.040</u>
1 01	(1.02)
DI *****92*	<u>0.060</u>
FL 02	(1.52)
DI ******00*	0.090

(2.29)

PL****83*



Typical part number: PLB06F10810

For connection system 8

* May be used with either fixed solder or removable contact connector insulators.

Clip material: Beryllium copper, tin plated

CONNECTOR VARIANT	Α	В	С	D	Е
PLA 03	<u>1.380</u>	<u>1.150</u>	<u>0.445</u>	<u>0.193</u>	<u>1.598</u>
	(35.05)	(29.21)	(11.30)	(4.90)	(40.59)
PLA 04	<u>1.578</u>	<u>1.348</u>	<u>0.445</u>	<u>0.193</u>	<u>1.796</u>
	(40.08)	(34.24)	(11.30)	(4.90)	(45.62)
PLA 06	<u>1.972</u>	<u>1.742</u>	<u>0.445</u>	<u>0.193</u>	<u>2.190</u>
	(50.09)	(44.25)	(11.30)	(4.90)	(55.63)
PLA 08	<u>2.366</u>	<u>2.136</u>	<u>0.445</u>	<u>0.193</u>	<u>2.584</u>
	(60.10)	(54.25)	(11.30)	(4.90)	(65.63)
PLB 06	<u>1.380</u>	<u>1.150</u>	<u>0.643</u>	<u>0.300</u>	<u>1.598</u>
	(35.05)	(29.21)	(16.33)	(7.62)	(40.59)
PLB 08	<u>1.578</u>	<u>1.348</u>	<u>0.643</u>	<u>0.300</u>	<u>1.796</u>
	(40.08)	(34.24)	(16.33)	(7.62)	(45.62)
PLB 12	<u>1.972</u>	<u>1.742</u>	<u>0.643</u>	<u>0.300</u>	<u>2.190</u>
	(50.09)	(44.25)	(16.33)	(7.62)	(55.63)
PLB 16	<u>2.366</u>	<u>2.136</u>	<u>0.643</u>	<u>0.300</u>	<u>2.584</u>
	(60.10)	(54.25)	(16.33)	(7.62)	(65.63)
PLC 09	<u>1.380</u>	<u>1.150</u>	<u>0.839</u>	<u>0.300</u>	<u>1.598</u>
	(35.05)	(29.21)	(21.31)	(7.62)	(40.59)
PLC 12	<u>1.578</u>	<u>1.348</u>	<u>0.839</u>	<u>0.300</u>	<u>1.796</u>
	(40.08)	(34.24)	(21.31)	(7.62)	(45.62)
PLC 18	<u>1.972</u>	<u>1.742</u>	<u>0.839</u>	<u>0.300</u>	<u>2.190</u>
	(50.09)	(44.25)	(21.31)	(7.62)	(55.63)
PLC 24	<u>2.366</u>	<u>2.136</u>	<u>0.839</u>	<u>0.300</u>	<u>2.584</u>
	(60.10)	(54.25)	(21.31)	(7.62)	(65.63)
PLC 30	<u>2.760</u>	<u>2.530</u>	<u>0.839</u>	<u>0.300</u>	<u>2.978</u>
	(70.10)	(64.26)	(21.31)	(7.62)	(75.64)

..... ±0.010 Α ±0.010 В ±0.010 ±0.010 С D ∠ 0.015(0.38)R. MAX. TYP.





POWER CONNECTION SYSTEMS FEMALE INSULATOR DIMENSIONS



























PLC 24

±0.020 2.256 (57.30) 0.802 ±0.015 0.00 0.00 0.00 0.00 0.00 0.00 0.000 0.00 0.00 0.00 0.00 0.00 0.000 ±0.015 0.00 0.00 0.00 0.00 0.00 0.000 ±0.015 0.00 0.00 0.00 0.00 0.00 0.000 ±0.015

POWER CONNECTION SYSTEMS MALE INSULATOR DIMENSIONS

REMOVABLE CONTACT TYPE

PANEL MOUNT CONNECTORS



















±0.020

















±0.015 0.802 (20.37)

2.506 (63.65)

PLC 30



PLC 24

DIMENSIONS ARE IN INCHES (MILLIMETERS). ALL DIMENSIONS ARE SUBJECT TO CHANGE.

For panel cutout see page 20.

POWER CONNECTION SYSTEMS FEMALE INSULATOR DIMENSIONS



Panel Cutout

Power Connection Systems

PANEL CUTOUT

CONNECTOR	A	В	С
VARIANI	±0.005	±0.005	±0.005
	<u>0.882</u>	<u>0.650</u>	<u>0.430</u>
PLA 03	(22.40)	(16.51)	(10.92)
	<u>1.079</u>	<u>0.847</u>	<u>0.430</u>
1 LA 04	(27.41)	(21.51)	(10.92)
	<u>1.473</u>	<u>1.241</u>	<u>0.430</u>
I LA UU	(37.41)	(31.52)	(10.92)
	<u>1.867</u>	<u>1.635</u>	<u>0.430</u>
I LA UO	(47.42)	(41.53)	(10.92)
	<u>0.882</u>	<u>0.650</u>	<u>0.627</u>
	(22.40)	(16.51)	(15.93)
	<u>1.079</u>	<u>0.847</u>	<u>0.627</u>
FLB Vo	(27.41)	(21.51)	(15.93)
DI B 12	<u>1.473</u>	<u>1.241</u>	<u>0.627</u>
	(37.41)	(31.52)	(15.93)
PI B 16	<u>1.867</u>	<u>1.635</u>	<u>0.627</u>
I LD IV	(47.42)	(41.53)	(15.93)
PLC 09	<u>0.882</u>	<u>0.650</u>	<u>0.824</u>
1 20 03	(22.40)	(16.51)	(20.93)
PLC 12	<u>1.079</u>	<u>0.847</u>	<u>0.824</u>
1 20 12	(27.41)	(21.51)	(20.93)
PLC 18	<u>1.473</u>	<u>1.241</u>	<u>0.824</u>
1 20 10	(37.41)	(31.52)	(20.93)
PLC 24	1.867	1.635	0.824
1 20 24	(47.42)	(41.53)	(20.93)
PLC 30	2.262	<u>2.029</u>	0.824
1 20 30	(57.45)	(51.54)	(20.93)



Power Connection Systems

POWER CONNECTION SYSTEMS CRIMP CONTACTS

FEMALE CONTACT ('CLOSED ENTRY" DESIGN)





MALE CONTACT

Contacts are not supplied with connectors and must be ordered separately

PART NUMBERS	WIRE SIZE AWG/(mm ²)	Α	В	NOMINAL RATING
FC112N2	<u>12</u> (4.0)	<u>0.098</u> (2.49)		25 amp
FC114N2	<u>14-16</u> (2.5-1.5)	<u>0.081</u> (2.06)	<u>0.105</u> (2.67)	25 amp
FC116N2	<u>16-18</u> (1.5-1.0)	<u>0.067</u> (1.70)	<u>0.093</u> (2.36)	25 amp
FC120N2	<u>20-22-24</u> (0.5-0.3-0.25)	<u>0.045</u> (1.14)	<u>0.065</u> (1.65)	25 amp

PART NUMBERS	WIRE SIZE AWG/(mm ²)	Α	В	СØ	NOMINAL RATING
MC112N	<u> 12</u> (4.0)	<u>0.098</u> (2.49)		0 <u>.0625</u> (1.588)	25 amp
MC114N	<u>14-16</u> (2.5-1.5)	<u>0.081</u> (2.06)	<u>0.105</u> (2.67)	<u>0.0625</u> (1.588)	25 amp
MC116N	<u>16-18</u> (1.5-1.0)	<u>0.067</u> (1.70)	<u>0.093</u> (2.36)	0 <u>.0625</u> (1.588)	25 amp
MC120N	<u>20-22-24</u> (0.5-0.3-0.25)	<u>0.045</u> (1.14)	<u>0.065</u> (1.65)	<u>0.0625</u> (1.65)	25 amp

Material: Copper alloy.

Finish: 0.000010 (0.25μ) gold over nickel or copper. 0.000030 (0.75μ) gold over nickel available by adding -14 suffix onto part number. Example: FC120N2-14.

POWER CONNECTION SYSTEMS SOLDER CONTACTS

FEMALE CONTACT ('CLOSED ENTRY" DESIGN)







Contacts are not supplied with connectors and must be ordered separately

PART NUMBERS	WIRE SIZE MAX.	Α	в	NOMINAL RATING
FS112N2	12 AWG (4.0 mm ²)	<u>0.098</u> (2.49)		25 amp
FS114N2	<u>14 AWG</u> (2.5 mm ²)	<u>0.081</u> (2.06)	<u>0.105</u> (2.67)	25 amp
FS116N2	16 AWG (1.5 mm ²)	<u>0.067</u> (1.70)	<u>0.093</u> (2.36)	25 amp
FS120N2	20 AWG (0.5 mm ²)	<u>0.045</u> (1.14)	<u>0.065</u> (1.65)	25 amp

PART NUMBERS	WIRE SIZE MAX.	А	В	CØ	NOMINAL RATING
MS112N	<u>12 AWG</u> (4.0 mm ²)	<u>0.098</u> (2.49)		<u>0.0625</u> (1.588)	25 amp
MS114N	14 AWG (2.5 mm ²)	<u>0.081</u> (2.06)	<u>0.105</u> (2.67)	<u>0.0625</u> (1.588)	25 amp
MS116N	16 AWG (1.5 mm ²)	<u>0.067</u> (1.70)	<u>0.093</u> (2.36)	0 <u>.0625</u> (1.588)	25 amp
MS120N	20 AWG (0.5 mm ²)	<u>0.045</u> (1.14)	<u>0.065</u> (1.65)	<u>0.0625</u> (1.588)	25 amp

Material: Copper alloy.

Finish: 0.000010 (0.25µ) gold over nickel or copper. 0.000030 (0.75µ) gold over nickel available by adding -14 suffix onto part number. Example: FS120N2-14.



PART NUMBER: FC112N2S

PART NUMBER: MC112NS

Material: High conductivity tellurium copper.

Finish: 0.000010 (0.25µ) gold over nickel or copper. 0.000030 (0.75µ) gold over nickel available by adding -14 suffix onto part number.

Example: FC112N2S-14

Wire size: 12 AWG (4.0mm²)

Current rating: 25 ampere nominal, see page 5 for temperature rise and derating curves Contacts are not supplied with connectors and must be ordered separately.

POWER CONNECTION SYSTEMS CRIMP SHIELDED CONTACTS



MALE CONTACT

SHIELDED CABLE STRIP LENGTH



See page 25 for hand crimp tool part # 9506-0

FEMALE CONTACT

CONTACT DESIGNATION	PART NUMBER	А	ВØ	CABLE SIZE
MALE	MCS126N	<u>0.993</u> (25.22)	<u>0.045</u> (1.14)	RG 178 B/U RG 196 A/U
FEMALE	FCS126N2	<u>0.967</u> (24.56)	<u>0.045</u> (1.14)	RG 178 B/U RG 196 B/U
MALE	MCS226N	<u>1.048</u> (26.62)	<u>0.070</u> (1.78)	RG 179 B/U RG 316 /U
FEMALE	FCS226N2	<u>1.022</u> (25.96)	<u>0.070</u> (1.78)	RG 179 B/U RG 316 /U

DIMENSIONS ARE IN INCHES (MILLIMETERS). ALL DIMENSIONS ARE SUBJECT TO CHANGE.

SHIELDED CONTACT TECHNICAL CHARACTERISTICS

MATERIALS AND FINISHES:

Insulating Material:	(Dielectric) PCTFE			
Inner Contacts:	Phospher bronze, 0.000030 inch			
	(0.8 microns) gold over nickel.			
Outer Contacts:	Brass and beryllium copper, 0.000010			
	inch (0.2 microns) gold over nickel.			

MECHANICAL CHARACTERISTICS

Contact Retention	
n Insulator:	18 lbs. (80N).
Removable Contacts:	Rear insertion, front removable.
Insertion Force	
Per Contact:	8 oz. (2.2N) per contact maximum
Durability:	100 cycles minimum.
Vibration:	20g from 10 Hz to 500 Hz
Shock:	30g - 11 ms

ELECTRICAL CHARACTERISTICS

Miero Cooxial	Contact/Wire Combinations				
Contacts	12	6N	226N		
contacts	RG178	RG196	RG179	RG316	
Characteristic Impedance (ohms)	50	50	75	50	
Frequency Range	0–500 MHz				
VSWR					
0 to 200 MHz	1.25				
200 to 500 MHz	1.70 2.25			25	
Insertion Loss @ 500 MHz	0.2 dB 1.0 dB				
Dielectric Strength At Sea Level: 600) V rms				

 Initial Contact Resistance:
 0.012 ohms maximum

 Insulator Resistance:
 5 G ohms

 CLIMACTIC CHARACTERISTICS:

 Temperature Range:
 -55°C to +125°C

22

CRIMPING INFORMATION FOR POWER CONNECTION SYSTEMS CRIMP CONTACTS

USE INDICATED POSITRONIC TOOLS FOR BEST RESULTS

Step 1: Strip wire to indicated length



- Remove crimped contact

For automatic feed pneumatic crimp tool: - Insert wire into the contact, positioned in the crimp tool by the plastic carrier.

- Depress the activating device of the
- crimping tool to start crimping cycle - Remove crimped contact

Step 3: Inspect crimp

CRIMPING INFORMATION FOR POWER CONNECTION SYSTEMS CRIMP CONTACTS



Examp	les	of	crimp	ina t	faults
слатр	100	U 1	ormp		uuito

	AXIAL LOAD
12 AWG	110 lbs.
(4.0mm ²)	(489 N)
14 AWG	70 lbs.
(2.5mm ²)	(311 N)
16 AWG	50 lbs.
(1.5mm ²)	(222 N)
18 AWG	28 lbs.
(1.0mm ²)	(125 N)
20 AWG	20 lbs.
(0.5mm ²)	(89 N)
22 AWG	12 lbs.
(0.3mm ²)	(53 N)
24 AWG	8 lbs.
(0.25mm ²)	(36 N)
26 AWG	5 lbs.
(0.12mm ²)	(22 N)
28 AWG	3 lbs.
(0.08mm ²)	(13 N)
30 AWG	1.5 lbs.
(0.05mm ²)	(6.7 N)
32 AWG	1.0 lbs.
(0.03mm ²)	(4.4 N)

Positronic recommended tools.

Hand crimp tools:	9501 with 9502-1 positioner	
Automatic feed pneumatic strip and crimp tools:	9550–0	
Insertion tool:	9099	
Extraction tool:	9081	

Conductor tensile strength values are derived using silver-tin plated copper wires. Values may change depending upon what type of wire is used.

Contact Crimp Tools and Accessories

Power Connection Systems

CYCLE-CONTROLLED STEP ADJUSTABLE HAND CRIMP TOOL

MS22520/1-01 Part No. 9501

Features of this positive ratchet action tool include accommodations for wire sizes 12 AWG (4.0mm²) through 26 AWG (0.12mm²) and eight (8) impression crimp on wires and contacts of various compositions. Required for use with this basic tool is the turret head part number 9502-1.



CONTACT CARRIERS FOR AUTOMATIC FEED TOOL

Molded thermoplastic carriers in a continuous belt feed contacts to the crimp station of the automatic feed tool. They also locate the contacts in respect to the tool's indenters. The carriers are colorcoded white and natural for contact identification for both MS and proprietary applications.



AUTOMATIC FEED, STRIP AND CRIMP TOOL, PNEUMATICALLY ACTUATED

Part No. 9550-0

This fast cycling and reliable automatic feed strip and crimp tool produces a four double-indent crimp, meeting Military Standard and proprietary specifications on wire sizes 12 AWG (4.0mm²) through 30 AWG (0.05mm²).

The tool is a bench mount unit of compact size and weight. Contacts must be ordered separately and are supplied on a reel in quantities of 2000.

To order, specify part number 9550-0. Foot pedal control valve is supplied as a standard accessory.



CYCLE-CONTROLLED HAND CRIMP TOOL

Part No. 9506-0

Single-step crimping action for both signal and shielding conductors of micro-miniature shielded contacts.



Contact Crimp Tools and Accessories

Power Connection Systems

CONTACT INSERTION TOOL

Part No. 9099

An easy to use contact insertion tool for 12 AWG (4.0mm²) and smaller wires. See photographic demonstration shown below for recommended insertion procedures.





CONTACT EXTRACTION TOOL

Part No. 9081

The spring loaded contact extraction tool simplifies the extraction of removable contacts from the connector insulators. Simply insert the hollow 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 "pop out" of the rear face of the insulator. See photo below for recommended removal procedure.





90° METAL MOUNTING BRACKETS



	Α	В	С	D
PLA	<u>0.204</u>	<u>0.321</u>	<u>0.375</u>	<u>0.492</u>
	(5.18)	(8.15)	(9.53)	(12.50)
PLB	<u>0.303</u>	<u>0.420</u>	<u>0.375</u>	<u>0.492</u>
	(7.70)	(10.67)	(9.53)	(12.50)
PLC	<u>0.401</u>	<u>0.518</u>	<u>0.375</u>	<u>0.492</u>
	(10.19)	(13.16)	(9.53)	(12.50)

Material: Brass, tin plate.

90° PLASTIC MOUNTING BRACKET WITH CROSS BAR AND PUSH-ON FASTENERS



CONNECTOR VARIANT	Α	В	
PLA 03	<u>1.126</u> (28.60)	<u>0.882</u> (22.40)	
PLA 04	<u>1.324</u> (33.63)	<u>1.080</u> (27.43)	
PLA 06	<u>1.718</u> (43.64)	<u>1.474</u> (37.44)	
PLA 08	<u>2.112</u> (53.64)	<u>1.868</u> (47.45)	
PLB 06	<u>1.126</u> (28.60)	<u>0.882</u> (22.40)	
PLB 08	<u>1.324</u> (33.63)	<u>1.080</u> (27.43)	
PLB 12	<u>1.718</u> (43.64)	<u>1.474</u> (37.44)	
PLB 16	<u>2.112</u> (53.64)	<u>1.868</u> (47.45)	
PLC 09	<u>1.126</u> (28.60)	<u>0.882</u> (22.40)	
PLC 12	<u>1.324</u> (33.63)	<u>1.080</u> (27.43)	
PLC 18	<u>1.718</u> (43.64)	<u>1.474</u> (37.44)	
PLC 24	<u>2.112</u> (53.64)	<u>1.868</u> (47.45)	
PLC 30	<u>2.506</u> (63.65)	<u>2.262</u> (57.45)	

Material-

Mounting bracket/cross bar: Glass filled polyester, UL 94V-0. Push-on fasteners: Copper alloy, tin plated.

Accessories

Power Connection Systems

POWER CONNECTION SYSTEMS CABLE ADAPTERS







CONNECTOR VARIANT	Α	В	С
	1.000	<u>0.752</u>	<u>0.594</u>
PLA 03	(25.40)	(19.10)	(15.09)
	1.000	<u>0.950</u>	<u>0.594</u>
FLA 04	(25.40)	(24.13)	(15.09)
	<u>1.000</u>	<u>1.344</u>	<u>0.594</u>
I LA UU	(25.40)	(34.14)	(15.09)
	<u>1.000</u>	<u>1.738</u>	<u>0.594</u>
I LA 00	(25.40)	(44.15)	(15.09)
PLB 06	<u>1.000</u>	<u>0.752</u>	<u>0.792</u>
1 25 00	(25.40)	(19.10)	(20.12)
PLB 08	<u>1.000</u>	<u>0.950</u>	<u>0.792</u>
1 25 00	(25.40)	(24.13)	(20.12)
PI B 12	<u>1.000</u>	<u>1.344</u>	<u>0.792</u>
1 20 12	(25.40)	(34.14)	(20.12)
PLB 16	<u>1.000</u>	<u>1.738</u>	<u>0.792</u>
	(25.40)	(44.15)	(20.12)
PLC 09	<u>1.000</u>	<u>0.752</u>	<u>0.990</u>
	(25.40)	(19.10)	(25.15)
PLC 12	<u>1.000</u>	<u>0.950</u>	<u>0.990</u>
	(25.40)	(24.13)	(25.15)
PLC 18	<u>1.000</u>	<u>1.344</u>	<u>0.990</u>
3 10	(25.40)	(34.14)	(25.15)
PLC 24	<u>1.000</u>	<u>1.738</u>	<u>0.990</u>
	(25.40)	(44.15)	(25.15)
PLC 30	<u>1.000</u>	<u>2.132</u>	<u>0.990</u>
1 20 30	(25.40)	(54.15)	(25.15)

PUSH-ON FASTENERS

RIGHT ANGLE CONNECTORS

STRAIGHT SOLDER CONNECTORS



Material-

Spring tempered copper alloy, tin plated.

Suggest 0.123 ±0.002 (3.12) Ø hole in printed board for mounting connector with push-on fasteners.

ORDERING INFORMATION – CODE NUMBERING SYSTEM

Specify Complete Connector By Following Steps 1 Through 8 Insert "0" When Step Is Not Used

	1				<u> </u>	- T	_	-	
S	TEP	1	2	3	4	5	6	<i>'</i>	
		PLB	06		3	N	0	A1	
STEP 1 - Basic Series PLA - 1 Row PLB - 2 Row PLC - 3 Row STEP 2 - Connector Variants 1 Row - 03, 04, 06, 08 2 Row - 06, 08, 12, 16 3 Row - 09, 12, 18, 24, 30 STEP 3 - Connector Gender M - Male F - Female STEP 4 - Type of Contact 0 - Order contacts separately for or connection systems 5, 6, 7, 8 at 1 - Removable contact, panel more connection system 8. Order c 2 - Solder, 18 AWG (1.0mm ²) mate connector, for connection system	cable c and 9. unted c contacts x. for p em 8.	PLB onnecto separa anel mo	ors for or for ately. ount	F	3	N	0	A1 STEI 0 A1 mat- over A2 mat- C1 C2	 STEP 8 - Special Options See page 13 for sequential mating systems. Consult factory for other options. P 7 - Contact Plating for Printed Board Connectors Crimp Contacts ordered separately. 0.000010 inch (0.25 microns) gold over nickel on ing end and 0.000010 inch (0.25 microns) gold nickel on termination end. 0.000010 inch (0.25 microns) gold over nickel on ing end and 0.00020 inch (5.0 microns) solder coat on termination end. 0.000030 inch (0.8 microns) gold over nickel on mat- ing end and 0.00030 inch (0.8 microns) gold over nickel on termination end. 0.000030 inch (0.8 microns) gold over nickel on mat- ing end and 0.00020 inch (5.0 microns) solder coat on termination end.
 3 - Solder, Straight Printed Board (3.71) tail extension for connect and 6. 32 - Solder, Straight Printed Board (9.58) tail extension for connect systems 1, 4 and 6. 4 - Solder, 90° Printed Board Mout tail extension for connection sy 1,2 and 5. 7 - Order contacts separately for of connection systems 5, 6, 7, 8 side of insulator has 0.165 (4.1) wire sizes. 8 - Removable contact, panel moto connection system 8. Order con Terminating side of insulator h ø c'bore for large wire sizes. 	Mount ction sy Mount ction sy unt with ystems cable c and 9. 19) ø c unted c contacts as 0.16	with 0. vstems with 0.3 vstem 3 0.146 1, 2 ar 0.377 3 and s onnector Termin bore for separa 55 (4.19	146 1, 4 377 and (3.71) (d 5. (9.58) ystems ors for ating r large or for ately.)			STEP 0 B BN B3N N	0 5 6 81 82 83 11 12 13 14 - No a - Meta - Plas Fast - Pusl	 None Top (Pane Pane Pane Blind Blind Blind Blind added a al 90° M al 90° M al 90° N tener. h-On Fa 	A construct and a funct mount be. Dening Hood. el Mount, quick release. el Mount, fixed for 0.040 (1.02) thick panel. el Mount, fixed for 0.090 (2.29) thick panel. I Mating System for 0.040 (1.02) thick panel. I Mating System for 0.060 (1.52) thick panel. I Mating System for 0.090 (2.29) thick panel. I Mating System for 0.120 (3.05) thick panel. I Mating System for 0.120 (3.05) thick panel. I Mating Bracket. Nounting Bracket. Mounting Bracket, with Push-on Fastener. Mounting Bracket, with Cross Bar and Push-on Mathematical Statement of Straight Printed Board Mount

Compliant Termination Repairable Contact Press-Fit Power Connectors



Low average insertion 10 lbs. (44N) and extraction 8.5 lbs (38N) forces are typical of Compliant Bi-Spring power contacts when tested on a 0.125 inch (3.2mm) multi-layer printed wiring board. These low forces help to eliminate back panel pressure warp and twisting stresses which can damage stripline traces and break conductor lines. Consequently, expensive repair or replacement of printed wiring boards and back panels is eliminated.

The Bi-Spring contact may be inserted into and removed from the printed wiring board a minimum of three times without damaging or deforming the platedthrough-holes.

The individual contacts may be removed and replaced without removing the connector from the printed wiring board.

Power Connection Systems Press-Fit contact termination lengths are available to accommodate back panel thicknesses from 0.093 inch (2.4mm) through 0.219 inch (5.6mm). Other termination lengths are possible.

The effective press-fit length of the compliant contact termination may also be varied and can be selectively positioned and centered at several points along the contact termination length. This permits high or low profile mounting of the connector on printed wiring boards.

Extensive laboratory corrosion tests have verified the gas-tight fit between the contact and the platedthrough-hole. The electrical integrity during shock and vibration is maintained in accordance with MIL-STD-1344, Method 2005.

ed board into rear face of connector.

500 operations per IEC 512-5.

POWER CONNECTION SYSTEMS PRESS-FIT CONNECTOR **TECHNICAL CHARACTERISTICS**

MATERIALS AND FINIS	HES:	MECHANICAL CHARACTERISTICS OF CONNECTOR:			
Insulator:	Glass filled polyester, UL 94V-0, blue.	Repairable Contacts,			
Contacts:	Male and female contacts are precision machined high tensile copper alloy with gold flash over nickel or 0.000030 inch (0.8 microso) add over nickel oto	Precision Machined:	Size 16 contacts, male-0.062 (1.6mm) diameter. Female contact, closed entry with Be Cu retention member.		
	microns) gold over micker plate	Contact Retention in			
	TERISTICS OF CONNECTOR.	Insulator and 0.125 inch			
Contact Current Pating	1E ampares continuous surrent flow all con	(3.2mm) thick printed board:	5 lbs. (22N) minimum combined retention		
Contact Current Kating.	tacts under load with less than 30°C connec-		forces per MIL-STD-2166, Type III compliant		
	tor external surface temperature rise per IEC		contact classification, after third repair-		
	512-3, Test 5a.		through-hole 0.064 inch (1.63mm) diameter		
Initial Contact Resistance:	0.003 ohms maximum per IEC 512-2, Test 2b.		in a 0.125 inch (3.2mm) thick printed board.		
		Press-Fit Contact Bi-Spring			
Insulation Resistance:	5 G ohms.	Construction,			
Proof voltage:	2000 V r.m.s. 0 157 inch (4mm) minimum	Compliant Termination:	0.0695 inch (1.77mm) diameter with 0.050		
Clearance Distance:	0.125 inch (3 2mm) minimum		inch (1.27mm) lead-in diameter. Offered with		
Working Voltage:	600 V		four termination lengths accommodating		
5 5			0.093 Inch (2.4mm), 0.125 Inch (3.2mm), 0.187 inch (4.7mm) and 0.219 inch (5.6mm)		
			back panel thicknesses.		
ELECTRICAL CHAR	ACTERISTICS OF COMPLIANT	Initial Press-In Force of Individual			
PRESS-FIT CONNECT	ON TO PLATED-THROUGH-HOLE	Contact into Plated-Through-Hole:	10 lbs. (44N) average when pushed into a		
OF PRINTED BOARD.	0.064 inch (1.63mm) diameter hole of a 0.125		0.064 inch (1.63mm) Ø hole in a 0.125 inch		
	inch (3 2mm) thick printed board		(3.2mm) thick printed board.		
Initial Contact Resistance		Initial Push-Out Force of			
of Connection:	Less than 1.0 milliohms per IEC 512-2, Test	Individual Contact into			
	2a.	Plated-Inrough-Hole:	8.5 lbs. (38N) average when pushed out of an		
Change in Contact			(3.2mm) thick printed board		
Resistance of Connection		Vibration:	No electrical discontinuity of 1µ second or		
After Mechanical, Electrical	Loss than 0.5 millighms increase per IEC 512		greater when tested per MIL-STD-1344,		
or chinactic conditioning.	2 Test 2a		Method 2005, Test conditioning.		
Gas Tight Connections	2, 100124.	Sequential Mating System:	Male contacts may be ordered with three dif-		
Test:	Less than 0.2 milliohms increase in contact		ferent mating lengths.		
	resistance after 1 hour per EIA 364, TP36,	Polarization:	Provided in insulator design.		
	Method One.	Locking System:	Insulator design provides discriminating locking system.		
		Mounting to			
		Printed Board:	By means of self tapping screws through print-		

Mechanical Operations:

POWER CONNECTION SYSTEMS CONTACTS "LARGE SURFACE AREA CONTACT MATING SYSTEM" HIGH RELIABILITY "CLOSED ENTRY" DESIGN PRECISION MACHINED SOLID COPPER ALLOY



All contacts of Positronic's Power Connection Systems utilize the "Large Surface Area (L.S.A.) Contact Mating System." The "L.S.A. Contact Mating System" insures the lowest of contact resistance during mechanical endurance tests of 1000 coupling cycles or more. Contact insertion/withdrawal forces remain substantially the same during the life of the connector.

Power Connection Systems use only "Closed Entry" design female contacts. The "Closed Entry" design prevents probe damage to the female contacts, and will not allow the female contact to



SECTION A – A ENLARGED accept misaligned or bent male contacts.

All Power Connection Systems contacts are precision machined from solid copper alloy barstock. They are durable, smooth in construction, and have greater amperage capacities than hollow, sheet metal style contacts.

Power Connection Systems contacts, having a large contact surface area, produce less heat at the contact surface, thereby permitting the connector to operate at high amperage levels continuously, and still maintain lower connector temperatures.

CURRENT – TEMPERATURE DERATING CURVE (TESTED PER IEC PUBLICATION 512–3, TEST 5b



TEMPERATURE RISE CURVE

(TESTED PER IEC PUBLICATION 512-3, TEST 5a



CURVES DEVELOPED USING FC112N2S TELLURIUM COPPER CRIMP CONTACTS AND PHOSPHOR BRONZE MALE COMPLIANT TERMINATION CONTACTS AND 12 AWG (4.0 mm²) SIZE WIRE. ALL CONTACTS UNDER LOAD.

Compliant Termination Repairable Contact Press-Fit Power Connectors

Power Connection **Systems**

PLA COMPLIANT TERMINATION CONNECTORS



PLB COMPLIANT TERMINATION CONNECTORS



±0.015

L

(0.0.1)	PLB06F93ST30A1				
CONTACT CODE	L	PCB THICKNESS	SCREW CODE		
92	<u>0.183</u> (4.65)	<u>0.093</u> (2.36)	ST2		
93	<u>0.218</u> (5.54)	<u>0.125</u> (3.18)	ST3		
94	<u>0.294</u> (7.47)	<u>0.187</u> (4.75)	ST4		
	0.309	0.219	075		

(7.85)

+0.015

В

+

±0.020

000

000

(5.56)

Typical part number:

ST5

Ļ

±0.020

Α

PLC COMPLIANT TERMINATION CONNECTORS fi Î.Î Male ±0.020 А 0 00 ±0.015 000 B 000

(33.63)

1.718

(43.64)

2.112

(15.39)

0.606

(15.39)

0.606

(15.24)

0.600

(15.24)

0.600

(15.24)

±0.015

C-

 \square

 \square

Power

Connection

Systems

Typical part number: PLC09M93ST30A1

PLB12**00A1

PLB16**00A1

PART NUMBER	Α	В	С
PLC09**00A1	<u>1.126</u>	<u>0.802</u>	<u>0.600</u>
	(28.60)	(20.37)	(15.24)
PLC12**00A1	<u>1.324</u>	<u>0.802</u>	<u>0.600</u>
	(33.63)	(20.37)	(15.24)
PLC18**00A1	<u>1.718</u>	<u>0.802</u>	<u>0.600</u>
	(43.64)	(20.37)	(15.24)
PLC24**00A1	<u>2.112</u>	<u>0.802</u>	<u>0.600</u>
	(53.64)	(20.37)	(15.24)
PLC30**00A1	<u>2.506</u>	<u>0.802</u>	<u>0.600</u>
	(63.65)	(20.37)	(15.24)

Plating - 0.000010 (2.54µ) gold over nickel or 0.000030 (0.75µ) gold over nickel on contacts.

* For connection systems

1,4 and 6.

* For connection systems 1,4 and 6.

**Asterisks determine gender of connector, M for male, F for female and contact code 92, 93, 94 or 95.



L.

95

000 ±0.015 П 000 B 000 \Box Typical part number:

А

PLC09F93ST30A1

CONTACT CODE	L	PCB THICKNESS	SCREW CODE
92	<u>0.183</u> (4.65)	<u>0.093</u> (2.36)	ST2
93	<u>0.218</u> (5.54)	<u>0.125</u> (3.18)	ST3
94	<u>0.294</u> (7.47)	<u>0.187</u> (4.75)	ST4
95	<u>0.309</u> (7.85)	<u>0.219</u> (5.56)	ST5

DIMENSIONS ARE IN INCHES (MILLIMETERS). ALL DIMENSIONS ARE SUBJECT TO CHANGE.

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Compliant Termination Repairable Contact Press-Fit Power Connectors

COMPLIANT TERMINATION PRESS-FIT CONNECTOR



Power

Connection

Systems

CONTACT	L	PCB	SCREW
CODE		THICKNESS	CODE
92	<u>0.183</u>	<u>0.093</u>	<u>0.250</u>
	(4.65)	(2.36)	(6.35)
93	<u>0.218</u>	<u>0.125</u>	<u>0.312</u>
	(5.54)	(3.18)	(7.92)
94	<u>0.294</u>	<u>0.187</u>	<u>0.375</u>
	(7.47)	(4.75)	(9.53)
95	0.309	0.219	0.375
	(7.85)	(5.56)	(9.53)





COMPLIANT CONTACT HOLE REQUIREMENT



COMPLIANT TERMINATION PRESS-FIT CONTACT HOLE PATTERN







Suggest 0.100 (2.54) Ø hole in printed board for connector mounting holes.



PowerCompliant TerminationPowerConnectionRepairable ContactConnectionSystemsPress-Fit Power ConnectorsSystems

POWER CONNECTION SYSTEMS COMPLIANT TERMINATION PRESS-FIT CONNECTOR INSTALLATION TOOLS



Positronic recommended tools for Power Connection Systems Connectors and Contacts

CONNECTOR	CONNECTO	R SEATING	SINGLE CONTACT INSERTION		SINGLE	
VARIANT	Male	Female	Male	Female	REMOVAL	
PLA03	9513-1-0-37	9513-13-0-37				
PLA04	9513-2-0-37	9513-14-0-37				
PLA06	9513-3-0-37	9513-15-0-37				
PLA08	9513-4-0-37	9513-16-0-37				
PLB06	9513-5-0-37	9513-17-0-37				
PLB08	9513-6-0-37	9513-18-0-37	9513-100-0 for all Connector	9513-101-0 for all Connector Variants	9513-102-0 for all Connector Variants	
PLB12	9513-7-0-37	9513-19-0-37				
PLB16	9513-8-0-37	9513-20-0-37	Variants			
PLC09	9513-9-0-37	9513-21-0-37				
PLC12	9513-10-0-37	9513-22-0-37				
PLC18	9513-11-0-37	9513-23-0-37				
PLC24	9513-12-0-37	9513-24-0-37				
PLC30	9513-25-0-37	9513-26-0-37				
Arbor press	s for connector	seating tools:	9530-1-0 (1 t	on capacity, 4	inch throat)	
Rep	Replacement pins for connector seating tool: 855-658-1 (female)					

ORDERING INFORMATION – CODE NUMBERING SYSTEM

Specify Complete Connector By Following Steps 1 Through 8 Insert "0" When Step Is Not Used



NORTH AMERICAN HEADQUARTERS

UNITED STATES, Springfield, Missouri	
Factory Sales and Engineering Offices	(800)641-4054
PUERTO RICO, Ponce Factory	
Factory Sales and Engineering Offices	(787)841-0920
MEXICO	
Factory Sales and Engineering Offices	(800)872-7674
CANADA	
Factory Sales and Engineering Offices	(800)327-8272

PACIFIC BASIN HEADQUARTERS

SINGAPORE, Asian Factory

-	- , ,	
	Factory Sales and Engineering Offices	65-6842-1419
	Malaysia Sales Office	65-6842-1419
	Taiwan Sales Office	8862-2937-8775
	China (Shanghai) Sales Office	8621-6308-3640
	Japan Sales Office	8135-661-3047
	*Additional Technical Agents in Australia,	New Zealand, India
	South Korea, Thailand, Philippines, Hong	Kong and Indonesia.

EUROPEAN HEADQUARTERS

FRANCE, Auch Factory	
Factory Sales and Engineering Offices	33 5 62 63 44 91
EUROPE, Direct Sales Offices	
Northern France Sales Office	33 1 45 88 13 88
Southern France Sales Office	33 4 67 72 80 28
Italy Sales Office	39 2 54 116 106
Germany Sales Office	49 2351 63 47 39
EUROPE. Technical Agents	

Technical Agents in Austria, Benelux, Denmark, Finland, Greece, Ireland, Scotland, Slovenia, Spain, Sweden, Switzerland and the United Kingdom

MIDEAST, Technical Agents Technical Agents in Israel and Turkey

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