• Four power contact options: 55 amps, 38 amps, 12 amps and 3 amps versions plus high density signal lines.

• Blind mating, float mount, panel mount and cable connector options with unique locking system.

• Ventilation option to offer increased air cooling.
### Ordering Information - Code Numbering System

Specify complete connector by selecting an option from step 1 through 9
(Consult sales for connectors' length exceeding 101mm or part numbers using more than 30 characters)

<table>
<thead>
<tr>
<th>STEP</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example</td>
<td>LSP</td>
<td>2</td>
<td>YKNRS</td>
<td>4</td>
<td>M</td>
</tr>
</tbody>
</table>

#### STEP 1: BASIC SERIES
LSP : Low Profile Scorpion Series.

#### STEP 2: GUIDE AND LOCKING OPTIONS
2 : Blind Mating System.
4 : Locking Latch System, for male cable to female panel/board connectors only.
5 : Locking Latch System, for female cable to male panel/board connectors only.

#### STEP 3: CONNECTOR VARIANTS
Size 12 power contact module, E or Y or G

<table>
<thead>
<tr>
<th>E</th>
<th>Y</th>
<th>G</th>
</tr>
</thead>
</table>

Size 20 power contact module, R or S or U

<table>
<thead>
<tr>
<th>R</th>
<th>S</th>
<th>U</th>
</tr>
</thead>
</table>

Size 22 signal contact module, H or J or K or T

<table>
<thead>
<tr>
<th>H</th>
<th>J</th>
<th>K</th>
<th>T</th>
</tr>
</thead>
</table>

Blank module, N or N2 or N3 or N4

<table>
<thead>
<tr>
<th>N</th>
<th>N2</th>
<th>N3</th>
<th>N4</th>
</tr>
</thead>
</table>

Consult sales for availability of other modules. It is recommended signal contacts are positioned at the center of connector.

#### STEP 4: CONTACT TERMINATION TYPE
1 : Crimp contacts, order separately.
3 : Solder, straight PCB mount.
38 : Solder, right angle (90°) PCB mount.
48 : Solder, right angle (90°) PCB mount. High conductivity power contacts.

*93 : Press-fit compliant terminations, straight PCB mount, for use with PCB not thinner than 2.29[0.090].
*938 : Press-fit compliant terminations, straight PCB mount, for use with PCB not thinner than 2.29[0.090]. High conductivity power contacts.

Consult sales for availability of press-fit compliant terminations or mixed contact termination type.

#### STEP 5: CONNECTOR GENDER
M : Male
F : Female - Standard contacts.
S : Female - Posiband contacts

#### STEP 6: PANEL MOUNT
0 : Not applicable / No added accessories.
6 : Easy release mounting clip for 1.50mm[0.059 inch] thick panel, for male panel mount connector only.
82 : Float mount for 1.50 mm (0.059 inch) thick panel.
83 : Float mount for 2.30 mm (0.091 inch) thick panel.

#### STEP 7: MOUNTING STYLE
0 : Not applicable / No additional accessories.
B : 90° metal mounting bracket (through hole), for right angle PCB mounted connectors use code 4 or 48, see step 4.
LN : 90° metal mounting bracket (board lock), for right angle PCB mounted connectors use code 4 or 48, see step 4.
N : Push-on fastener for PCB mounted connectors use code 3, 38, 4 or 48, see step 4.

#### STEP 8: VENT OPTIONS (For power contacts)
0 : Connector body is not vented.
9 : Connector body vented for air cooling.

#### STEP 9: CONTACT PLATING
1 : Gold flash over nickel on mating end termination end.
A1 : Gold flash over nickel on mating end and 0.005[0.0002] tin-lead solder coat on termination end. Not available with code 93, 938 in step 4.
C1 : 0.0076[0.0003] gold over nickel on mating end and termination end.
C2 : 0.0076[0.0003] gold over nickel on mating end and 0.005[0.0002] tin-lead solder coat on termination end. Not available with code 93, 938 in step 4.
D1 : 0.00127[0.00050] gold over nickel on mating end and termination end.
D2 : 0.00127[0.00050] gold over nickel on mating end and 0.005[0.0002] tin-lead solder coat on termination end. Not available with code 93, 938 in step 4.
Consult sales for availability of silver plating.

#### STEP 10: ENVIRONMENTAL COMPLIANCE OPTIONS
/AA : Compliant per EU Directive 2002/95/EC (RoHS)
Example: LSP5YN2HK4M000A1/AA
Note: This step will not be used if compliance to environmental legislation is not required.
Example: LSP5YN2HK4M000A1

#### STEP 11: SPECIAL OPTIONS
Consult sales for Special Options

---

Notes:
1. A Low Profile Scorpion part number can be a maximum of 30 characters. If the connector configuration exceeds this number, please consult sales for a special part number for your unique requirement.
2. Consult sales for connector length exceeding 101.00 mm [3.976 inch].
3. Alignment bar is only available for size 20 and size 22 right angle (90°) contacts.

---

**Example:**
LSP2
YKNRS
4 M
Materials and Finishes:
- **Insulators:** Glass-filled polyester, UL 94V-0. Black color (Blue optional).
- **Contacts:** Precision machined copper alloy with gold flash over nickel plate. Other finishes available upon request.
- **Mounting Brackets:** Brass with tin plate.
- **Push-on Fasteners:** Copper alloy with tin plate.
- **Float Mount Bushings:** Steel with zinc plate.

Electrical Characteristics:
- **Contact Current Rating (See Page 5 for Power Contact Details)**
- **Standard Conductivity Contacts:**
  - Size 12 Contacts: 38 amperes, continuous.
  - Size 20 Contacts: 12 amperes, continuous.
  - Size 22 Contacts: 3 amperes, nominal.
- **High Conductivity Contacts:**
  - Size 12 Contacts: 55 amperes, continuous.
  - Size 12 Contacts:
    - Initial Contact Resistance (Standard Conductivity Contacts) per IEC 512-2, Test 2b:
      - Size 12 Contacts: 0.001 ohms, maximum.
      - Size 20 Contacts: 0.002 ohms, maximum.
      - Size 22 Contacts: 0.005 ohms, maximum.
  - Initial Contact Resistance (High Conductivity Contacts) per IEC 512-2, Test 2b:
    - Size 12 Contacts: 0.0007 ohms, maximum.
- **Insulation Resistance per IEC 512-2, Test 3a, Method A:**
  - 5 G ohms.
- **Voltage Proof per IEC 512-2, Test 4a, Method C:**
  - Size 12 and size 20 contacts, 2200 V r.m.s.
  - Size 22 contacts, 1800 V r.m.s.
- **Working Voltage, Clearance and Creepage Distances:**
  - Consult sales for information about your specific connector choice.
- **Working Temperature:**
  - -55°C to +125°C.

Mechanical Characteristics:
- **Blind Mating System:**
  - Integral guide feature allows for misalignment up to 2.00 mm [0.079 inch].
- **Locking Latch System:**
  - Design of connector body provides locking system for cable to cable, cable to printed board and cable to panel mount applications.
- **Polarization:**
  - Design of connector body provides polarization features.
- **Removable Crimp Contacts:**
  - Size 12, 20 and 22 female contacts feature closed entry design for highest reliability. Install contacts from rear of insulator. To remove contacts, release from front of insulator with extraction tool and remove from rear of insulator.
- **Non Removable Crimp Contacts (Size 22 only):**
  - Size 22 female contacts feature closed entry design for highest reliability. Insert contact from rear of insulator.

Fixed Contact Retention in Connector Body:
- **Fixed Contact Retention in Connector Body per IEC 512-8, Test 15a:**
  - **Size 12 Contacts:** 67N [15 lbs.] minimum.
  - **Size 20 and Size 22 Contacts:** 27N [6 lbs.] minimum.
- **Non Removable Contact Retention in Connector Body per IEC 512-8, Test 15a:**
  - **Size 22 Contacts:** 27N [6 lbs.] minimum.
- **Fixed Contacts:**
  - Printed board terminations, both straight and right angle. Size 12 female contacts feature closed entry design for highest reliability. Size 20 and 22 female contact has open entry design.
- **Non Removable Crimp Contact Retention in Connector Body per IEC 512-8, Test 15a:**
  - **Size 22 Contacts:** 27N [6 lbs.] minimum.
- **Sequential Contact Mating System:**
  - Size 12 Contacts: Two levels.
  - Size 20 Contacts: One level. (Two levels for Printed Board mount connectors.)
  - Size 22 Contacts: One level. (Two levels for Printed Board mount connectors.)

Printing Board and Panel Mounting Holes:
- Mounting holes provided in connector body for both printed board and panel mounting. Self-tapping screws or push-on fastener options are available.

Mechanical Operations per IEC 512-5:
- 1000 cycles minimum.

Recognized:
- **UL and TÜV:** Consult sales.

Technical Characteristics

Products described within this catalog may be protected by one or more of the following U.S. patents:
- #4,721,472
- #4,900,281
- #5,255,580
- #5,329,697
- #6,260,268


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Typical LSP Modular Connectors

**Board to Panel with Blind Mating System**
- Female Panel Mount Connector
  - **Typical part number:** LSP2YKNRS1F0001
    - (Contacts ordered separately)
- Male Right Angle PCB Mount Connector
  - **Typical part number:** LSP2YKNRS4M0B0A1

**Board to Board with Crimp Contacts Pass-through**
- Male Right Angle (90°) PCB Connector
  - **Typical part number:** LSP2YGN2UN2T4M009A1
- Female Straight PCB Connector
  - **Typical part number:** LSP2YGN2UN2T3F009A1-PAxxx
    - (Crimp contacts ordered separately)

**Board to Board with Blind Mating System**
- Female Right Angle (90°) PCB Connector
  - **Typical part number:** LSP2EN3EN3EN3GN2ST4F009A1
- Male Right Angle (90°) PCB Connector
  - **Typical part number:** LSP2EN3EN3EN3GN2ST4M009A1

**Cable to Cable with Locking Latch System**
- Female Cable Connector
  - **Typical part number:** LSP3U1F0001
    - (Contacts ordered separately)
- Male Cable Connector
  - **Typical part number:** LSP3U1M0001
    - (Contacts ordered separately)

**Cable to Board with Locking Latch System**
- Male Right Angle PCB Mount Connector
  - **Typical part number:** LSP5YN2HK4M000A1
- Female Cable Connector
  - **Typical part number:** LSP5YN2HK1F0001
    - (Contacts ordered separately)

---

How to calculate Over All Length (OAL) of a Low Profile Scorpion connector:

Overall Length (OAL) of a connector is the sum of all the modules length. Refer to example below for OAL calculation. See page 5 and 7 for individual module dimensions.

![Diagram of connector components](image)

1. **Step 1**
   - LSP
   - E
   - E
   - E
   - N2
   - R
   - S

2. **Step 2**
   - 5.00 [0.197]
   - 5.90 [0.232]
   - 5.90 [0.232]
   - 5.90 [0.232]
   - 2.00 [0.079]
   - 3.65 [0.144]
   - 7.30 [0.287]
   - 5.00 [0.197]

3. **Step 3**

4. **Step 4**
   - 48
   - M
   - 0
   - 0
   - A2

5. **Step 5**
6. **Step 6**
7. **Step 7**
8. **Step 8**
9. **Step 9**

**Step 10**

(OAL) = 40.65 [1.600]
Temperature Rise Curves
Tested per IEC Publication 512-3, Test 5a

Temperature Rise Curves
- Developed with 3 size 12 high conductivity contacts seated in code EEE module.
- Developed with 3 size 12 standard conductivity contacts seated in code EEE module.
- Developed with 7 size 12 high conductivity contacts seated in code EN3EN3EN3EEE module.
- Developed with 7 size 12 standard conductivity contacts seated in code EN3EN3EN3EEE module.

Contact sales if additional testings and current ratings are required.

Guide Systems and Locking Options
See Step 2 of Ordering Information

Blind Mating Guide System
Specify Code 2 in Step 2

Cable to Cable Locking Latch System
Specify Code 3 in Step 2

Male Cable to Female Panel/Board Locking Latch System
Specify Code 4 in Step 2

Female Cable to Male Panel/Board Locking Latch System
Specify Code 5 in Step 2

Rated Current (Amps)

Rated Current (Amps)
Insulator Dimensions and Venting Features

Insulator Dimensions when using Blind Mating System

* Dimension applicable for Size 12 power contact module only.

Insulator Dimensions when using Locking Latch System

* Dimension applicable for Size 12 power contact module only.

Venting Features
Specify Code 9 in Step 8 of Ordering Information

Venting feature is an outlet hole enabling air cooling onto a power contact.

In compliance with UL 1977 safety standard, section 10.2 Accessibility of live parts.
Module Options
See Step 3 of Ordering information

Size 12 Power Contact Modules
- Module E
- Module G

Size 20 Power / Signal Contact Modules
- Module R
- Module S
- Module U

Size 22 Signal Contact Modules
- Module H
- Module J
- Module K
- Module T

Blank Modules
- Module N
- Module N2
- Module N3
- Module N4

All modules shown above are male modules. Available in female straight and right angle (90°) PCB mount. Consult sales for availability of other modules.

Contact Termination Dimensions
See Step 4 of Ordering information

Straight PCB Mount Connectors
Specify Code 3 or 38 in Step 4

Size 12 contacts
Size 20 contacts
Size 22 contacts

Code 3 is standard conductive material contact and code 38 is high conductivity material power contact.
Right Angle (90°) PCB Mount Connectors
Specify Code 4 or 48 in Step 4

<table>
<thead>
<tr>
<th>Size 12 contacts</th>
<th>Size 20 contacts</th>
<th>Size 22 contacts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Code 4 is standard conductive material contact and code 48 is high conductivity material power contact.

Press-Fit Straight PCB Mount Connectors
Specify Code 93 or 938 in Step 4

<table>
<thead>
<tr>
<th>Size 12 contacts</th>
<th>Size 20 contacts</th>
<th>Size 22 contacts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Code 93 is standard conductive material contact and code 938 is high conductivity material power contact.

Male connector shown for reference. Dimensions also apply to female connector.

Note: Outline dimensions for Press-Fit Connectors are the same as those of Straight PCB Mount Versions. For Suggested Straight Mount PCB Holes Sizes of Compliant Press-Fit Connectors, please refer to SK6370 or consult sales for more informations.

Press-Fit User Information
Connectors-to-PCB installation instructions:
1. Insert the connector into the PCB or backplane and seat connector fully with seating/support tool.
2. Secure the connector to the PCB or backplane using two self-tapping screws for plastic.
3. Consult factory for appropriate installation tools.

Mounting Screw

<table>
<thead>
<tr>
<th>Material Options</th>
<th>Part Number</th>
<th>Thread Length</th>
<th>P.C.B Thickness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steel</td>
<td>4546-7-1-16</td>
<td>6.35±0.76 [0.250±0.030]</td>
<td>2.36 [0.093]</td>
</tr>
<tr>
<td>Steel</td>
<td>4546-7-2-16</td>
<td>7.93±0.76 [0.312±0.030]</td>
<td>3.18 [0.125]</td>
</tr>
<tr>
<td>Steel</td>
<td>4546-7-3-16</td>
<td>9.53±0.76 [0.375±0.030]</td>
<td>4.45 [0.175]</td>
</tr>
<tr>
<td>Stainless Steel</td>
<td>4546-7-6-4</td>
<td>6.35±0.76 [0.250±0.030]</td>
<td>2.36 [0.093]</td>
</tr>
<tr>
<td>Stainless Steel</td>
<td>4546-7-7-4</td>
<td>7.93±0.76 [0.312±0.030]</td>
<td>3.18 [0.125]</td>
</tr>
<tr>
<td>Stainless Steel</td>
<td>4546-7-8-4</td>
<td>9.53±0.76 [0.375±0.030]</td>
<td>4.45 [0.175]</td>
</tr>
</tbody>
</table>
Accessories

Accessories for PCB Mount
See Step 7 of Ordering Information

90° Through Hole Brackets
Specify code B in Step 7

Material and Finish: Brass with tin plate.

90° Board Lock Brackets
Specify code LN in Step 7

Material and Finish: Brass with tin plate.

Push-on Fasteners
Specify code N in Step 7

Material and Finish: Copper alloy with tin plate.

Straight PCB Mount Connector
Right Angle (90°) PCB Mount Connector

Male connector shown for reference only. Consult sales for mounting screw information.

Accessories for Panel Mount
See Step 6 of Ordering Information

Easy Release Mounting Clips
Specify code 6 in Step 6

Material and Finish: Beryllium copper with nickel plate.
For male connector only.

Float Mount Bushings
Specify Code 82 or 83 in Step 6

Material and Finish: Steel with zinc plate.

<table>
<thead>
<tr>
<th>Code</th>
<th>Panel Thickness</th>
<th>Dimension F</th>
</tr>
</thead>
<tbody>
<tr>
<td>82</td>
<td>1.50 [0.059]</td>
<td>1.80 [0.071]</td>
</tr>
<tr>
<td>83</td>
<td>2.30 [0.091]</td>
<td>2.60 [0.102]</td>
</tr>
</tbody>
</table>

Panel Cutout Dimensions

For Mounting Screws
Specify code 0 in Step 6

For Float Mounting
Specify code 82 or 83 in Step 6

For Quick Release Mounting Clip
Specify code 6 in Step 6
(Maximum panel thickness: 1.60 [0.063] nominal)

General tolerance for panel cutout dimensions is ±0.13 [±0.005].

To calculate OAL of connector. See example at bottom of page 4 Typical LSP Modular Connectors
## Low Profile Scorpion

### Removable and Non Removable Crimp Contacts

(Contacts Ordered Separately)

#### Size 12 Removable Crimp Contacts

<table>
<thead>
<tr>
<th>Part Number (Standard Conductivity Contacts)</th>
<th>Part Number (High Conductivity Contacts)</th>
<th>Wire Size AWG [mm²]</th>
<th>ØA</th>
<th>Sequential Mate</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female Contacts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FC1210P2</td>
<td>FC1210P2S</td>
<td>10 [6.0]</td>
<td>3.10 [0.122]</td>
<td>N/A</td>
<td>21.25 [0.837]</td>
</tr>
<tr>
<td>FC1212P2</td>
<td>FC1212P2S</td>
<td>12 [4.0]</td>
<td>2.54 [0.100]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male Contacts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MC1210N-PA563</td>
<td>MC1210NS-PA563</td>
<td>10 [6.0]</td>
<td>3.10 [0.122]</td>
<td>First</td>
<td>23.18 [0.912]</td>
</tr>
<tr>
<td>MC1210N</td>
<td>MC1210NS</td>
<td>Standard</td>
<td>20.18 [0.794]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MC1212N-PA563</td>
<td>MC1212NS-PA563</td>
<td>12 [4.0]</td>
<td>2.54 [0.100]</td>
<td>First</td>
<td>23.18 [0.912]</td>
</tr>
<tr>
<td>MC1212N</td>
<td>MC1212NS</td>
<td>Standard</td>
<td>20.18 [0.794]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N/A - Not Applicable

#### Size 20 Removable Crimp Contacts

<table>
<thead>
<tr>
<th>Part Number (Standard Conductivity Contacts)</th>
<th>Wire Size AWG [mm²]</th>
<th>ØA</th>
<th>ØB</th>
<th>Sequential Mate</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female Contacts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FC718P3</td>
<td>18 [1.0]</td>
<td>1.40 [0.055]</td>
<td>N/A</td>
<td>N/A</td>
<td>19.19 [0.756]</td>
</tr>
<tr>
<td>FC720P3</td>
<td>20-22-24 [0.5-0.3-0.25]</td>
<td>1.14 [0.045]</td>
<td>1.73 [0.068]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male Contacts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MC718N</td>
<td>18 [1.0]</td>
<td>1.40 [0.055]</td>
<td>N/A</td>
<td>Standard</td>
<td>18.80 [0.740]</td>
</tr>
<tr>
<td>MC720N</td>
<td>20-22-24 [0.5-0.3-0.25]</td>
<td>1.14 [0.045]</td>
<td>1.73 [0.068]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N/A - Not Applicable

#### Size 22 Non Removable Crimp Contacts

<table>
<thead>
<tr>
<th>Removable Contact</th>
<th>Non Removable Contact</th>
<th>Wire Size AWG [mm²]</th>
<th>ØA</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female Contacts</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FC422P9</td>
<td>FC422T-PA908</td>
<td>22 - 26 [0.30 - 0.12]</td>
<td>0.89 [0.035]</td>
<td>11.41 [0.449]</td>
</tr>
<tr>
<td>Male Contacts</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MC422N9</td>
<td>MC422T-PA908</td>
<td>22 - 26 [0.30 - 0.12]</td>
<td>0.89 [0.035]</td>
<td>15.49 [0.610]</td>
</tr>
</tbody>
</table>

#### Size 22 Removable Crimp Contacts

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Wire Size AWG [mm²]</th>
<th>ØA</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FC422T-PA908</td>
<td>22 - 26 [0.30 - 0.12]</td>
<td>0.89 [0.035]</td>
<td>11.41 [0.449]</td>
</tr>
<tr>
<td>Male</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MC422N9</td>
<td>22 - 26 [0.30 - 0.12]</td>
<td>0.89 [0.035]</td>
<td>15.49 [0.610]</td>
</tr>
</tbody>
</table>

### Materials and Finishes:

Precision machined copper alloy with gold flash over nickel.

Consult sales for other contact sizes, materials, finishes, termination styles and more details.
Recommended Tools for Crimp Contacts

<table>
<thead>
<tr>
<th>Contact Size</th>
<th>Contact Extraction Tool</th>
<th>Contact Insertion Tool</th>
<th>Hand Crimp Tool</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size 12</td>
<td>2711-0-0</td>
<td>9099-3-0</td>
<td>9509-6-1 with 9509-6-2 positioner (<em>C1210</em>* contacts)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>9501-0 with 9502-38-0 positioner (MC1212** contacts)</td>
</tr>
<tr>
<td></td>
<td></td>
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<td>9501-0 with 9502-37-0 positioner (FC1212** contacts)</td>
</tr>
<tr>
<td>Size 20</td>
<td>9081-2-0</td>
<td>9099-4-0</td>
<td>9507-0 with 9502-21 positioner (male contacts)</td>
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<td>9507-0 with 9502-22 positioner (female contacts)</td>
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<tr>
<td>Size 22</td>
<td>^ 9081-3-0</td>
<td>9099-7-0</td>
<td>9507-0 with 9502-12-0 positioner (male contacts)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>9507-0 with 9502-13-0 positioner (female contacts)</td>
</tr>
</tbody>
</table>

^ Not Applicable for Size 22 non-removable crimp contacts.
Consult sales for additional crimping tools and crimping information.

SCORPION MODULAR CONNECTORS
Complete Connector Customization - Quick and Affordable

- Six power contact options: 20 amp versions through 85 amp.
- High density signal lines.
- Shielded contacts and high voltage options.
- Blind mating, float mount, panel mount and cable connector options with unique locking system.
- PC mount, crimp, and press fit terminations.
- Ventilation option to increase air cooling.
- Blank modules to increase voltage performance.

blind mating guide systems
50 amp power contacts modules
Blank modules for voltage considerations
High density signal contact modules
unique locking systems
30 amp power contacts modules
Size 22 signal contact modules
85 amp power contacts modules
Size 18 20 amp contacts
Jackscrew option

OTHER HIGH DENSITY CONNECTORS
FROM POSITRONIC®

**High Density Rectangular Connectors**

**CRIMP & SOLDER TERMINATIONS**

**FOURTEEN CONTACT VARIANTS**

4 through 104 poles

CONTACTS: Fixed and removable. Precision machined of solid copper alloy. Female contact is “closed entry” design for highest reliability. Current rating to 5 amperes continuous per contact. Gold flash over nickel plate. Other finishes available upon request. TERMINATIONS: Crimp; solder cup; straight and right angle solder printed board mount.


**ODD- LOW COST**

76% CONTACT DENSITY INCREASE. CONTACTS: Fixed and removable. Precision machined of solid high tensile copper alloy; female contact is rugged “Robi-D open entry” design. Current rating to 5 amperes. Gold flash over nickel plate. Other finishes available upon request. TERMINATIONS: Crimp; solder cup; straight or right angle solder printed board mount.


**High Density D-subminiature Connectors**

**Miniature, Economical & Rugged Circular Connector Systems**

CONTACTS: Removable or fixed. Precision machined of solid copper alloy. Screw termination contact is available. Current rating 7.5 amperes nominal. Gold flash over nickel plate. Other finishes available upon request. TERMINATIONS: Crimp; solder cup; straight and right angle solder printed board mount.

INSULATORS: Glass filled nylon, UL 94V-0. Two variants: three size 20, and 6 size 22. POLARIZATION: Provided by insulator. LOCKING SYSTEM: Threaded or Twist Locking Shroud. CABLE ADAPTERS: Hoods; nylon, IP65 with overmolded Assemblies (Consult Factory for details). CABLIZED CONNECTORS: Customer specified wire or cable can be supplied terminated to connector with cable adapters or over-molded cable assemblies. MOUNTING: Panel and printed board. WORKING TEMPERATURE: -55°C to +125°C. CRIMPING TOOLS: Automatic and manual.
## NORTH AMERICAN SALES OFFICES

<table>
<thead>
<tr>
<th>Location</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States, Springfield, Missouri</td>
<td>800 641 4054</td>
<td><a href="mailto:info@connectpositronic.com">info@connectpositronic.com</a></td>
</tr>
<tr>
<td>Puerto Rico Sales Office</td>
<td>800 641 4054</td>
<td><a href="mailto:info@connectpositronic.com">info@connectpositronic.com</a></td>
</tr>
<tr>
<td>Mexico Sales Office</td>
<td>800 872 7674</td>
<td><a href="mailto:info@connectpositronic.com">info@connectpositronic.com</a></td>
</tr>
<tr>
<td>Canada Sales Office</td>
<td>800 327 8272</td>
<td><a href="mailto:info@connectpositronic.com">info@connectpositronic.com</a></td>
</tr>
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## EUROPEAN SALES OFFICES

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<tr>
<th>Location</th>
<th>Phone</th>
<th>Email</th>
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<tbody>
<tr>
<td>France, Auch Factory and Sales</td>
<td>33 (0) 5 6263 4491</td>
<td><a href="mailto:contact@connectpositronic.com">contact@connectpositronic.com</a></td>
</tr>
<tr>
<td>Northern France Sales Office</td>
<td>33 (0) 1 4588 1388</td>
<td><a href="mailto:jchalaux@connectpositronic.com">jchalaux@connectpositronic.com</a></td>
</tr>
<tr>
<td>Southern France Sales Office</td>
<td>33 (0) 6 8648 4023</td>
<td><a href="mailto:plafon@connectpositronic.com">plafon@connectpositronic.com</a></td>
</tr>
<tr>
<td>Italy Sales Office</td>
<td>39 (0) 2 5411 6106</td>
<td><a href="mailto:rmagni@connectpositronic.com">rmagni@connectpositronic.com</a></td>
</tr>
<tr>
<td>Germany Sales Office</td>
<td>49 (0) 23 5163 4739</td>
<td><a href="mailto:cbouche@connectpositronic.com">cbouche@connectpositronic.com</a></td>
</tr>
<tr>
<td>United Kingdom Sales Office</td>
<td>44 (0) 7975 682 488</td>
<td><a href="mailto:lbridwell@connectpositronic.com">lbridwell@connectpositronic.com</a></td>
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## ASIA/PACIFIC LOCATIONS

<table>
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<tr>
<th>Location</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>SINGAPORE, Asia/Pacific Headquarters</td>
<td>+65 6842 1419</td>
<td><a href="mailto:singapore@connectpositronic.com">singapore@connectpositronic.com</a></td>
</tr>
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</table>

### ASIA, Direct Sales Offices China

<table>
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<tr>
<th>Location</th>
<th>Phone</th>
<th>Email</th>
</tr>
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<tbody>
<tr>
<td>Factory - Zhuhai</td>
<td>+86 756 3626 466</td>
<td><a href="mailto:zhuhai@connectpositronic.com">zhuhai@connectpositronic.com</a></td>
</tr>
<tr>
<td>Shenzhen</td>
<td>+86 158 2907 9779</td>
<td><a href="mailto:shenzhen@connectpositronic.com">shenzhen@connectpositronic.com</a></td>
</tr>
<tr>
<td>Shanghai</td>
<td>+86 158 2907 9779</td>
<td><a href="mailto:shanghai@connectpositronic.com">shanghai@connectpositronic.com</a></td>
</tr>
<tr>
<td>Xian Sales Office</td>
<td>+86 029 8839 5306</td>
<td><a href="mailto:xian@connectpositronic.com">xian@connectpositronic.com</a></td>
</tr>
<tr>
<td>Beijing Sales Office</td>
<td>+86 10 8203 7718</td>
<td><a href="mailto:beijing@connectpositronic.com">beijing@connectpositronic.com</a></td>
</tr>
<tr>
<td>Japan Sales and Engineering Offices</td>
<td>+81 3 6310 5830</td>
<td><a href="mailto:japan@connectpositronic.com">japan@connectpositronic.com</a></td>
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### India

<table>
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<tr>
<th>Location</th>
<th>Phone</th>
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<tbody>
<tr>
<td>factory Sales and Engineering Offices</td>
<td>+91 20 2469 9910</td>
<td><a href="mailto:india@connectpositronic.com">india@connectpositronic.com</a></td>
</tr>
<tr>
<td>Bangalore Sales Office</td>
<td>+91 94 4907 3251</td>
<td><a href="mailto:bangalore@connectpositronic.com">bangalore@connectpositronic.com</a></td>
</tr>
<tr>
<td>New Delhi Sales Office</td>
<td>+91 80107 11175</td>
<td><a href="mailto:delhi@connectpositronic.com">delhi@connectpositronic.com</a></td>
</tr>
</tbody>
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### Korea Sales Office

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<thead>
<tr>
<th>Location</th>
<th>Phone</th>
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<tbody>
<tr>
<td>+82 31 909 8047 <a href="mailto:korea@connectpositronic.com">korea@connectpositronic.com</a></td>
<td></td>
<td></td>
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</tbody>
</table>

### Taiwan Sales Office

<table>
<thead>
<tr>
<th>Location</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>+86 6 2 2937 8775 <a href="mailto:taiwan@connectpositronic.com">taiwan@connectpositronic.com</a></td>
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### ASIA/PACIFIC, Technical Agents

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