SCORPION 3

MODULAR POWER, SIGNAL CONNECTORS

- The most versatile modular power/signal connector on the planet
- Rated up to 100 amperes per contact plus ability to add signal contacts and a variety of accessories
- Venting options for improved air cooling
- Blank modules for greater creepage and clearance for higher voltage needs
- Unique locking systems for blind mating, float mount and cable connector options





THE SCIENCE OF CERTAINTY®

M015 Rev A 19/10





Scorpion brings a unique approach to modular connector design that is only available from Positronic. **Scorpion** provides the flexibility to configure the connector to meet your specifications. The difference is how Positronic builds the final connector, using our innovative tooling and injection molding process. The result is a **Scorpion** with solid body and machined contacts, ready to perform.

Trust the Scorpion to deliver The Science of Certainty

TECH SPECS

| GENERAL | |
|--------------------|--|
| Part Number Prefix | SP |
| Performance Level | Industrial Mil/aero |
| Qualifications | UL #E49351*1 |
| | Partial UL certification only. Contact Technical Sales for specific connector qualifications and for UL status of Hyperboloid contacts. |

| Working Voltage (rms) | 100 V to 1000 | 0 V |
|----------------------------|--|--|
| Initial Contact Resistance | Power Signal | 0.2 mΩ *1 5 mΩ |
| Contact Current Rating*2 | Power Signal | Up to 100A*1 3A*3 |
| | *1 Value established *2 See page 9-10 fo *3 Hyperboloid contactor to 4A | using high conductivity alloy r temperature rise curves acts 0.60 [0.0236] rated |

| MATERIAL | | |
|---------------------|--|--|
| Insulator Material | Polyester | |
| Insulator Color | Blue | |
| Flammability Rating | UL94 V-0 | |
| Contact Material | Copper alloy | |
| Contact Plating | Gold flash 0.76µm Au (min) 1.27µm Au (min) | |

| MECHANICAL | |
|-----------------------|---------------------------------------|
| Contact Style | Fixed Removable |
| Female Contact Design | Open entry Closed entry |
| Mating Cycles*1 | Up to 1000 |
| | *1 Hyperboloid contacts up to 100,000 |

ENVIRONMENTAL

ELECTRICAL

Operating Temperature

-55 to 125°C

OVERALL LENGTH (OAL)

HOW TO CALCULATE OAL

Overall Length (OAL) of a connector is the sum of all the modules' length. Refer to example below for OAL maximum calculation. See page 6-8 for individual module dimensions.





Positronic is proud to participate in PICMG 3.8. The Scorpion series was chosen as the PICMG 3.8 power connector.

CREATE A PART

Mating connector part numbers will have the same letters in the same order. Female connector modules are placed right to left; Male modules are placed left to right when viewed from their mating faces.

| Sorios | SP | 1 | UU | 1 | Ν |
|--|---|---------------------------------------|---------------------------------------|-----|---|
| | | | | | |
| SP Scorpion | | | | | |
| Body Style For more information, r | efer to page 6 | | | | |
| Skip this step, if no end modu | les are required *1 | | | | |
| Blind Mating | · | | | | |
| 1 Blind mating, 3.80 [0.150 | I] misalignment | | | | |
| Blind mating, 2.00 [0.07] Blind mating, 2.00 [0.07] |)] misalignment)] misalignment (use for code 0, F | 3S or N in Mounting Optio | ns sten) | | |
| 8 Extreme blind mating, u | to 3.90 [0.154] misalignment, u | p to 5° angular misalignme | ent | | |
| Latching System | | | | | |
| 3 Locking latch, use with f | emale free cable to male cable | | | | |
| 4 Locking latch, use with r | nale free cable to female panel m | ount (wire or PCB) | | | |
| 5 Locking latch, use with f | emale free cable to male panel m | ount (wire or PCB) | | | |
| Jackscrews | | | | | |
| 6 For use with jackscrew s | ystem | | | | |
| *1 If using a backshell on this co the Body Style step, Consult | nnector, you must choose N5 in Layout Technical Sales for backshell availability | step as first and last modules a | and skip Jules. | | |
| | , , , , , , , , , , , , , , , , , , , | | | | |
| Layout For more information, refer to | pages 7-8 | | | | |
| One or more modules can be | selected in this section to crea | ate desired contact layo | ut | | |
| Contact Module | Hyperboloid | | | | |
| U (1) #4 contact | V (10) Hyper | boloid Ø0.60 [0.0236]*1 | | | |
| R (1) #8 contact | W (20) Hyper | boloid Ø0.60 [0.0236]*' | | | |
| E (2) #0 contacts | Keying | | | | |
| Y (4) #12 contacts | 0 Keying mc | dule | | | |
| A (1) #16 contacts | Blank module | | | | |
| B (2) #16 contacts | N Spacer/bla | ank | | | |
| C (4) #16 contacts | N2 Spacer/bla | ank | | | |
| D (8) #16 contacts | N3 Spacer/bla | ank | | | |
| X (3) #18 contacts | N4 Spacer/bla | ank | | | |
| H (4) #22 contacts | NO Spacer/bla | INK" | abiand ain diamatar (20, 60, 10, 000) | 21 | |
| J (8) #22 contacts | for straight a | and right angle (90°) PCB moun | t only. Contact Technical Sales for | ס], | |
| K (12) #22 contacts | availability of | crimp terminal. | | | |
| T (24) #22 contacts | *2 For a backsh | tell application, use code N5 ne | ext to each body style module. | | |
| | | | | | |
| Termination For more information, | refer to page 8 | | | | |
| 1 Wire, order contacts sep | arately*1 | | | _ | |
| 3 Straight solder | al call day a success of the t | | | | |
| 38 Straight solder, high con | auctivity power contacts | 10 0001*2 | | | |
| 938 Straight press-fit for use | with PCB not thinner than 2.29 (| 0.090] = i0.090] high conductivity | nower contacte*2 | | |
| 4 Right angle solder | | o.oooj, nign oonuuouvity j | JOWGE GUILLOUS | | |
| 48 Right angle solder, high | conductivity power contacts | | | | |
| *1 To order contacts separately, | see pages 11-13 for contact part numb | iers. | r | | |
| For contacts size 8, 12, 16, 1 | 5 anu 22 only. Contact Technical Sales | ior press-lit tooling part numbe | ι. | | |
| | | | | | |
| Contact Gender | | | | | |
| M Male pin | | | | | |

- F Female socket, open and closed entry signal contacts
- **S** Female socket, PosiBand closed entry signal contacts

CREATE A PART



^{*4} For use with code 1 in Body Style step, contact Technical Sales for more floating options.

BODY STYLE

For the sake of brevity, only the left side of the end module face view is shown.

Scale 1:1

| MALE | FEMALE | CODE | GENDER | А | В | FEATURE | Images below are shown for reference only, not shown at 1:1 scale. | | | |
|--------------------|--------------------------------|--|--------|------------------|----------------------------|-----------------|--|----------------------------|-----------------|--|
| | | 1 | Male | 14.60 [0.575] | 8.26 [0.325]* ¹ | Blind mating | | | | |
| | | | Female | 14.60 [0.575] | 8.26 [0.325]* ¹ | Blind mating | | | | |
| ►+ B += ↑ / / 1 | -+ B + | 2 | Male | 14.60 [0.575] | 5.00 [0.197]* ¹ | Blind mating | | | | |
| | | | Female | 14.60 [0.575] | 5.00 [0.197]* ¹ | Blind mating | | | | |
| ■+ B + ■ | ►+B+◄ | 7 | Male | 14.60 [0.575] | 4.50 [0.177]* ¹ | Blind mating | | | | |
| | | | Female | 14.60 [0.575] | 4.50 [0.177]* ¹ | Blind mating | | | | |
| | ►+ B +■ ↓ | 8 | Male | 14.60 [0.575] | 9.50 [0.374]* ¹ | Blind mating | | | | |
| | | | Female | 14.60 [0.575] | 9.50 [0.374]* ¹ | Blind mating | | | | |
| ┍┼╊┼╼ ┥┌┴Й | ╼╾ <mark>╞</mark> ┣┝═╴ ┥┎╢╵ | 3 | Male | 14.60 [0.575] | 4.00 [0.157]* ¹ | Latching system | | | | |
| | | | Female | 14.60 [0.575] | 2.80 [0.110]* ¹ | Latching system | | | | |
| ►┼₿┼╼ ∮╓╓ | ►+ B +- | 4 | Male | 14.60 [0.575] | 4.76 [0.157] | Latching system | | | | |
| | | | Female | 14.60 [0.575] | 5.00 [0.197]* ¹ | Latching system | | | | |
| | ╺┼₿┼╸ ╷╷╷╠ ╺┼╓ | ╺┼ ^B ┤╸ ┥┌┎╢ | | 3+a _→ B ज → | | Male | 14.60 [0.575] | 5.00 [0.197]* ¹ | Latching system | |
| | | | Female | 14.60 [0.575] | 2.80 [0.110]* ¹ | Latching system | | | | |
| | | 6 | Male | 14.60 [0.575] | 9.20 [0.362]* ¹ | Jackscrew | | | | |
| | | | Female | 14.60 [0.575] | 9.20 [0.362]* ¹ | Jackscrew | | | | |







MODULE LAYOUTS*1

*1 All modules shown are male modules. Contact Technical Sales for availability of other modules.

Scale 1:1

| CONTACT MODULES | CODE | SIZE | Α | В | | CONTACT MODULES | CODE | SIZE | А | В |
|-----------------|-----------------|--|--|---|---|--|--|---|---|---|
| | U | #4 | 14.60 [0.575] | 14.20 [0.559] | | | x | #18 | 14.60 [0.575 |] 3.80 [0.150] |
| | R | #8 | 14.60 [0.575] | 9.40 [0.370] | | | z | #18 | 14.60 [0.575 |] 7.60 [0.299] |
| | S | #8 | 14.60 [0.575] | 18.80 [0.740] | | | н | #22 | 14.60 [0.575 |] 2.70 [0.106] |
| | E | #12 | 14.60 [0.575] | 5.90 [0.232] | | | J | #22 | 14.60 [0.575 |] 5.40 [0.213] |
| | Y | #12 | 14.60 [0.575] | 11.80 [0.465] | | | к | #22 | 14.60 [0.575 |] 8.10 [0.319] |
| | A | #16 | 14.60 [0.575] | 4.96 [0.195] | | | т | #22 | 14.60 [0.575 |] 16.20 [0.638] |
| | В | #16 | 14.60 [0.575] | 4.96 [0.195] | | | | | | |
| | С | #16 | 14.60 [0.575] | 9.92 [0.391] | | | | | | |
| ► B | | | | | | #4 | #8 | Contact | Size Chart | #220_60mm |
| | D | #16 | 14.60 [0.575] | 19.84 [0.781] | | | | | machined contect | • • |
| | CONTACT MODULES | CONTACT MODULESCODEImage: Description of the section | CONTACT MODULESCODESIZEImage: Barbon of the stateU#4Image: Barbon of the stateR#8Image: Barbon of the stateS#8Image: Barbon of the stateR#12Image: Barbon of the stateR#12Image: Barbon of the stateR#12Image: Barbon of the stateR#12Image: Barbon of the stateR#16Image: Barbon of the stateRRImage: Barbon of the stateRRImage: Barbon of the stateRR | CONTACT MODULES CODE SIZE A Image: Size intermediate intermedia | CONTACT MODULES CODE SIZE A B I < | CONTACT MODULES CODE SIZE A B IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII | CONTACT MODULES CODE SIZE A B CONTACT MODULES Image: Size intermediate intermediat | CONTACT MODULESCODESIZEABCONTACT MODULESCODEImage: Size in the size in th | CONTACT MODULES CODE SIZE A B CONTACT MODULES CODE SIZE Image: Size in the second | OUTACT MODULES COME SIZE A B COMTACT MODULES COME SIZE A Image: Size Size Size Size Size Size Size Size |

MODULE LAYOUTS

Scale 1:1

| HYPERBOLOID MODULES 0.60 [0.0236] | CODE | А | В |
|--------------------------------------|------|---------------|--------------|
| | v | 14.60 [0.575] | 4.40 [0.173] |
| ■ B - ■ A · · · · · V · · · · | w | 14.60 [0.575] | 8.80 [0.346] |

| KEYING MODULE | CODE | А | В |
|---------------|------|---------------|---------------|
| | 0 | 14.60 [0.575] | 11.80 [0.465] |

| Contact Size Chart | | | | | | | | | |
|------------------------------|--|--|---|---|---|---|--|--|--|
| #4 #8 #12 #16 #18 #22 0.60mm | | | | | | | | | |
| | | | • | • | • | • | | | |

| BLANK MODULES | CODE | А | В |
|---------------|------|---------------|--------------|
| | N | 14.60 [0.575] | 1.62 [0.064] |
| | N2 | 14.60 [0.575] | 2.00 [0.079] |
| | N3 | 14.60 [0.575] | 3.46 [0.136] |
| | N4 | 14.60 [0.575] | 4.88 [0.192] |
| | N5 | 14.60 [0.575] | 5.60 [0.220] |

All Positronic products utilize solid, machined contacts.

CONTACT TERMINATIONS DIMENSIONS

For the sake of brevity, only the Male single row size 8 contact modules are shown. Dimension shown apply for all contacts regardless of size and gender.



*1 For information of suggested straight mount PCB hole sizes, please visit our website to download SK 6370.

MATING DIMENSIONS







24.70 [0.972]



TEMPERATURE RISE CURVES



Size 18 Temperature rise (°C)

- Developed with (6) #18 high conductivity Α contacts seated in code Z modules.
- Developed with (6) #18 standard conductivity В contacts seated in code Z modules.



Right Angle Board Mount (Male) to Panel Mount Crimp (Female)

Size 16 Temperature rise (°C)

- Developed with (2) #16 high conductivity Α contacts seated in code B modules.
- Developed with (2) #16 standard conductivity В contacts seated in code B modules.



Tested per IEC Publication 60512-3, Test 5a

Size 16 Temperature rise (°C)

- Developed with (8) #16 high conductivity Α contacts seated in code CC modules.
- Developed with (8) #16 standard conductivity В contacts seated in code CC modules.

TEMPERATURE RISE CURVES



Size 12 Temperature rise (°C)

A Developed with (2) #12 high conductivity contacts seated in code E modules.

B Developed with (2) #12 standard conductivity contacts seated in code E modules.



Size 8 Temperature rise (°C)

A Developed with (2) #8 high conductivity contacts seated in code RR modules.

B Developed with (2) #8 standard conductivity contacts seated in code RR modules.



Size 12 Temperature rise (°C)

- A Developed with (10) #12 high conductivity contacts seated in code EYY modules.
- B Developed with (10) #12 standard conductivity contacts seated in code EYY modules.



Size 4 Temperature rise (°C)

- A Developed with (2) #4 high conductivity contacts seated in code UU modules.
- B Developed with (2) #4 standard conductivity contacts seated in code UU modules.

Tested per IEC Publication 60512-3, Test 5a

CONTACTS^{*1}

*1 Contact Technical Sales for more details on additional contact sizes, material, finishes, and termination styles.

SCStandard conductivity contactsHCHigh conductivity contacts

REMOVABLE CRIMP CONTACTS

| PART NUMBER | | Size | Gender | Female Contact Style | Stranded | Sequential Mate |
|----------------|--------------|------|--------|-------------------------|-----------|-----------------|
| EC0404N2 | sc | #4 | Female | Closed entry | #4 [25 0] | |
| FC0404N2S | НС | #4 | Female | Closed entry | #4 [25.0] | |
| MC0404N | SC | #4 | Male | n/a | #4 [25.0] | |
| MC0404NS | НС | #4 | Male | n/a | #4 [25.0] | |
| FC4008DS | нс | #8 | Female | Closed entry | #8 [10.0] | |
| FC4008DS-PA781 | нс | #8 | Female | Closed entry | #8 [10.0] | First |
| FC4010D | SC | #8 | Female | Closed entry | #10 [5 3] | |
| FC4010D-P4781 | sc | #8 | Female | Closed entry | #10 [5.3] | First |
| FC4010DS | нс | #8 | Female | Closed entry | #10 [5 3] | |
| FC4010DS-PA781 | но | #8 | Female | Closed entry | #10 [5:3] | Firet |
| EC4012D | 80 | #0 | Fomalo | Closed entry | #10 [0.0] | T list |
| EC4012D PA781 | - 30 - SC | #0 | Fomalo | Closed entry | #12 [4.0] | Firet |
| EC4012D-FA761 | но | #0 | Fomale | Closed entry | #12 [4.0] | 11150 |
| | | #0 | Female | Closed entry | #12 [4.0] | First |
| FC4012DS-PA761 | HC CC | #0 | Female | Closed entry | #12 [4.0] | FIISL |
| FC4016D | SC | #8 | Female | Closed entry | #10[1.5] | F |
| FC4016D-PA781 | SC | #8 | Female | Closed entry | #16 [1.5] | First |
| FC4016DS | HC | #8 | Female | Closed entry | #16 [1.5] | |
| FC4016DS-PA781 | нс | #8 | Female | Closed entry | #16 [1.5] | First |
| MC4008DS | нс | #8 | Male | n/a | #8 [10.0] | |
| MC4008DS-PA781 | нс | #8 | Male | n/a | #8 [10.0] | First |
| MC4010D | SC | #8 | Male | n/a | #10 [5.3] | |
| MC4010D-PA781 | SC | #8 | Male | n/a | #10 [5.3] | First |
| MC4010DS | нс | #8 | Male | n/a | #10 [5.3] | |
| MC4010DS-PA781 | нс | #8 | Male | n/a | #10 [5.3] | First |
| MC4012D | SC | #8 | Male | n/a | #12 [4.0] | |
| MC4012D-PA781 | SC | #8 | Male | n/a | #12 [4.0] | First |
| MC4012DS | нс | #8 | Male | n/a | #12 [4.0] | |
| MC4012DS-PA781 | нс | #8 | Male | n/a | #12 [4.0] | First |
| MC4016D | SC | #8 | Male | n/a | #16 [1.5] | |
| MC4016D-PA781 | SC | #8 | Male | n/a | #16 [1.5] | First |
| MC4016DS | нс | #8 | Male | n/a | #16 [1.5] | |
| MC4016DS-PA781 | нс | #8 | Male | n/a | #16 [1.5] | First |
| FC1210P2 | SC | #12 | Female | Closed entry | #10 [6.0] | |
| FC1210P2S | нс | #12 | Female | Closed entry | #10 [6.0] | |
| FC1212P2 | SC | #12 | Female | Closed entry | #12 [4.0] | |
| FC1212P2S | нс | #12 | Female | Closed entry | #12 [4.0] | |
| MC1210N-PA563 | SC | #12 | Male | n/a | #10 [6.0] | First |
| MC1210NS-PA563 | HC | #12 | Male | n/a | #10 [6.0] | First |
| MC1210N | SC | #12 | Male | n/a | #10 [6.0] | |
| MC1210NS | нс | #12 | Male | n/a | #10 [6.0] | |
| MC1212N-PA563 | SC | #12 | Male | n/a | #12 [4.0] | First |
| MC1212NS-PA563 | нс | #12 | Male | n/a | #12 [4.0] | First |
| MC1212N | SC | #12 | Male | n/a | #12 [4.0] | |
| MC1212NS | нс | #12 | Male | n/a | #12 [4.0] | |

CONTACTS*1

*1 Contact Technical Sales for more details on additional contact sizes, material, finishes, and termination styles.

SC HC

Standard conductivity contacts High conductivity contacts

REMOVABLE CRIMP CONTACTS

| PART NUMBER | | Size | Gender | Female Contact Style | Stranded AWG [mm ²] | Sequential Mate |
|------------------|----|------|--------|-------------------------|------------------------------------|-----------------|
| FC112P2-PA907 | sc | #16 | Female | Closed entry | #12 [4.0] | |
| FC112P2S-PA907 | нс | #16 | Female | Closed entry | #12 [4.0] | |
| FC114P2-PA907 | SC | #16 | Female | Closed entry | #14-16 [2.5-1.5] | |
| FC116P2-PA907 | sc | #16 | Female | Closed entry | #16-18-20 [1.5-1.0-0.5] | |
| FC120P2-PA907 | sc | #16 | Female | Closed entry | #20-22-24 [0.5-0.3-0.25] | |
| MC112N-133.5 | sc | #16 | Male | n/a | #12 [4.0] | First |
| MC112NS-133.5 | нс | #16 | Male | n/a | #12 [4.0] | First |
| MC112N | sc | #16 | Male | n/a | #12 [4.0] | |
| MC112NS | нс | #16 | Male | n/a | #12 [4.0] | |
| MC114N-133.5 | sc | #16 | Male | n/a | #14-16 [2.5-1.5] | First |
| MC114N | sc | #16 | Male | n/a | #14-16 [2.5-1.5] | |
| MC116N-133.5 | sc | #16 | Male | n/a | #16-18-20 [1.5-1.0-0.5] | First |
| MC116N | sc | #16 | Male | n/a | #16-18-20 [1.5-1.0-0.5] | |
| MC120N-133.5 | sc | #16 | Male | n/a | #20-22-24 [0.5-0.3-0.25] | First |
| MC120N | sc | #16 | Male | n/a | #20-22-24 [0.5-0.3-0.25] | |
| FC1816P2 | sc | #18 | Female | Closed entry | #16-18 [1.5-1.0] | |
| FC1816P2S | нс | #18 | Female | Closed entry | #16-18 [1.5-1.0] | |
| FC1820P2 | sc | #18 | Female | Closed entry | #20 [0.5] | |
| FC1820P2S | нс | #18 | Female | Closed entry | #20 [0.5] | |
| MC1816N-PA561 | sc | #18 | Male | n/a | #16-18 [1.5-1.0] | First |
| MC1816NS-PA561 | нс | #18 | Male | n/a | #16-18 [1.5-1.0] | First |
| MC1816N | sc | #18 | Male | n/a | #16-18 [1.5-1.0] | |
| MC1816NS | нс | #18 | Male | n/a | #16-18 [1.5-1.0] | |
| MC1820N-PA561 | SC | #18 | Male | n/a | #20 [0.5] | First |
| MC1820NS-PA561 | нс | #18 | Male | n/a | #20 [0.5] | First |
| MC1820N | SC | #18 | Male | n/a | #20 [0.5] | |
| MC1820NS | HC | #18 | Male | n/a | #20 [0.5] | |
| FC422P9 | SC | #22 | Female | Closed entry | #22-26 [0.3-0.12] | |
| MC422N9 | SC | #22 | Male | n/a | #22-26 [0.3-0.12] | |
| MC422N9-PA1116*1 | SC | #22 | Male | n/a | #22-26 [0.3-0.12] | |

*1 For use with alignment insert.

NON-REMOVABLE CRIMP CONTACTS

| PART NUMBER | | Size | Gender | Female Contact Style | Stranded AWG [mm²] | |
|--------------|----|------|--------|-------------------------|-----------------------|--|
| FC422T-PA908 | sc | #22 | Female | Closed entry | #22-26 [0.3-0.12] | |
| MC422T-PA908 | sc | #22 | Male | n/a | #22-26 [0.3-0.12] | |

NON-REMOVABLE HYPERBOLOID CRIMP CONTACTS

| PART NUMBER | | Size | Gender | Female Contact Style | Stranded AWG [mm²] |
|-------------|----|---------------|--------|-------------------------|-----------------------|
| FC3124T | SC | 0.60 [0.0236] | Female | Closed entry | #24-28 [0.25-0.08] |
| MC3124T | SC | 0.60 [0.0236] | Male | n/a | #24-28 [0.25-0.08] |

CONTACTS^{*1}

*1 Contact Technical Sales for more details on additional contact sizes, material, finishes, and termination styles.

SC Standard conductivity contacts High conductivity contacts

Scale 1:1

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Female

REMOVABLE CONTACTS, BUS BAR INTERNAL THREADS

| PART NUMBER | Size | Gender Female Contact Style | | Thread | |
|-------------|------|--------------------------------|--------|--------------|--------------|
| SPFIT04M | sc | #4 | Female | Closed entry | M5 x 0.8 |
| SPFIT04MS | нс | #4 | Female | Closed entry | M5 x 0.8 |
| SPFIT04S | sc | #4 | Female | Closed entry | 10-24 UNC 2B |
| SPFIT04SS | нс | #4 | Female | Closed entry | 10-24 UNC 2B |
| SPMIT04M | sc | #4 | Male | n/a | M5 x 0.8 |
| SPMIT04MS | нс | #4 | Male | n/a | M5 x 0.8 |
| SPMIT04S | sc | #4 | Male | n/a | 10-24 UNC 2B |
| SPMIT04SS | нс | #4 | Male | n/a | 10-24 UNC 2B |



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REMOVABLE CONTACTS, BUS BAR EXTERNAL THREADS

| PART NUMBER | | Size | Gender | Female Contact Style | Thread |
|-------------|----|------|--------|-------------------------|--------------|
| SPFET04M | sc | #4 | Female | Closed entry | M5 x 0.8 |
| SPFET04MS | нс | #4 | Female | Closed entry | M5 x 0.8 |
| SPFET04S | SC | #4 | Female | Closed entry | 10-24 UNC 2A |
| SPFET04SS | нс | #4 | Female | Closed entry | 10-24 UNC 2A |
| SPMET04M | SC | #4 | Male | n/a | M5 x 0.8 |
| SPMET04MS | нс | #4 | Male | n/a | M5 x 0.8 |
| SPMET04S | SC | #4 | Male | n/a | 10-24 UNC 2A |
| SPMET04SS | нс | #4 | Male | n/a | 10-24 UNC 2A |

REMOVABLE CONTACTS, RIGHT ANGLE THREAD FOR RING TERMINAL

| PART NUMBER | | Size | Gender | Female Contact Style | Thread | Stranded | Scale 1:1 |
|-------------|----|------|--------|-------------------------|--------------|-------------|-----------|
| | 1 | 1 | I | oontaot otylo | 1 | And finin 1 | Female |
| SPFRA04M | SC | #4 | Female | Closed entry | M5 x 0.8 | #10 [5.3] | |
| SPFRA04MS | нс | #4 | Female | Closed entry | M5 x 0.8 | #10 [5.3] | |
| SPFRA04S | SC | #4 | Female | Closed entry | 10-24 UNC 2B | #10 [5.3] | |
| SPFRA04SS | нс | #4 | Female | Closed entry | 10-24 UNC 2B | #10 [5.3] | |
| SPMRA04M | sc | #4 | Male | n/a | M5 x 0.8 | #10 [5.3] | |
| SPMRA04MS | нс | #4 | Male | n/a | M5 x 0.8 | #10 [5.3] | |
| SPMRA04S | SC | #4 | Male | n/a | 10-24 UNC 2B | #10 [5.3] | |
| SPMRA04SS | нс | #4 | Male | n/a | 10-24 UNC 2B | #10 [5.3] | |

ACCESSORIES



ACCESSORIES

JACKPOST/JACKSCREW SYSTEMS TN ΤВ TLN Boardlocks, fixed Angle brackets, fixed Angle brackets, female jackposts female jackposts" boardlocks, fixed female jackposts1 *1 For use with right angle PCB mount using code 4 or 48 in Termination step. Е т Rotating male MATERIALS jackscrews Fixed female Screw Steel with zinc plate jackposts Jackpost, hex nut and lock washer Stainless steel, passivated Knobs Aluminum, yellow anodized



*1 For use with two N5 spacer modules in Layout step, one spacer will be needed on each end of connector.

| MATERIALS | | | | | |
|--------------------|--|--|--|--|--|
| Backshell | Glass-filled polyester, UL94 V-0, blue | | | | |
| Screws | Steel, zinc plate with chromate seal | | | | |
| Cable clamp | Steel with nickel plate | | | | |
| Cable clamp screws | Brass, zinc plate with chromate seal | | | | |

VENTING FEATURES

Venting feature is a outlet hole enabling air cooling onto a power contact. In compliance with UL 1977, section 10.2 accessibility of live parts.





*1 Not for use with module A in Layout step or with signal contacts.

All dimensional tolerances are \pm 0.38 [0.015], unless otherwise specified: \pm 0.03 mm [0.001 inches] for male contact mating diameters; \pm 0.08 mm [0.003 inches] for contact termination diameters; \pm 0.13 mm [0.005 inches] for all other diameters; \pm 0.38 mm [0.015 inches] for all other diameters. Dimensions are in millimeter [inches]. All dimensions are subject to change. Product pictures may not be identical in appearance to actual production parts.

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Products described within this catalog may be protected by one or more of the following US patents:

#4,900,261[°] #5,255,580 #5,329,697 #6,260,268 #6,835,079 #7,115,002 #8,944,697 #9,304,263

Patented in Canada, 1992 Other patents pending

Federal Supply Code for Manufacturers

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Positronic | Americas

423 N Campbell Ave Springfield MO 65806 USA +1 800 641 4054 info@connectpositronic.com

Positronic | Europe

46 route d'Engachies F-32020 Auch Cedex 9 France +33 5 6263 4491 contact@connectpositronic.com

Positronic | Asia

3014A Ubi Rd 1 #07-01 Singapore 408703 +65 6842 1419 singapore@connectpositronic.com

Sales Offices

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Other:

<u>MC0404N</u> <u>MC0404N/AA</u> <u>MC0404NS</u> <u>MC0404NS/AA</u> <u>MC112N/AA-133.5</u> <u>MC114N/AA-133.5</u> <u>FC1820P2/AA-96</u> MC114N/AA-14-133.5 <u>MC114N-14-133.5</u> <u>MC114N-133.5</u> <u>MC114N-133.5</u> <u>MC114N-133.5</u> <u>MC114N-14-133.5</u> <u>MC114N-14-133.5</u> <u>MC114N-133.5</u> <u>MC114N-133.5} <u>MC114N-133.5</u> <u>MC114N-133.5} MC114N-133.5</u> <u>MC114N-133.5} MC114N-133.5</u> <u>MC114N-133.5} MC114N-133.5</u> <u>MC114N-133.5} MC114N-133.5</u> <u>MC114N-133.5</u> <u>MC114N-133.5} MC114N-133.5</u> <u>MC114N-133.5} MC114N-133.5} MC114N-133.5</u> <u>MC114N-133.5} MC114N-133.5</u> <u>MC114N-133.5} MC114N-133.5</u> <u>MC114N-130.5</u> <u>MC114N-130.5</u> <u>MC114N-130.5</u> <u>MC114N-130.5</u> <u>MC114N-130.5</u> <u>MC114N-130.5</u> <u>MC114N-130.5</u></u>