

Positronic Industries
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SCBCD SERIES

MILITARY / SPACE FLIGHT QUALITY

HIGH DENSITY REMOVABLE CONTACTS

High
Performance
D-sub



- ✓ High performance for use in harsh environments, including space flight.
- ✓ Size 22, Size 16 and Size 8 **removable** contacts.
- ✓ All female closed entry signal contacts utilize the "PosiBand®" system. *See page 1 for details.* GSFC S-311-P-4/08 offers two contact engagement test options. Size 22 PosiBand contacts meet the higher 40 gram requirements per 4.2.2.b.
- ✓ Three connector variants with a mixture of signal, power, shielded and high voltage contacts.
- ✓ Terminations include cable or wire crimp and solder.
- ✓ Current ratings to 70 amperes.
See temperature rise curves on page 3 & 4 for details.
- ✓ A wide variety of options and accessories.

Conforming To Applicable Material, Dimensional and Performance Requirements:

- GSFC S-311-P4 & GSFC S-311-P10
- DSCC Specification 85039

Conforming To Outgassing Requirements:

- ASTM E-595 & NASA-RP-1124

TECHNICAL CHARACTERISTICS

MATERIALS AND FINISHES:

Connector Insert:	Glass-filled polyester per ASTM-D-5927, UL 94V-0, ASTM E-595, NASA-RP-1124 blue color.
Contacts:	
Size 22:	Precision machined copper alloy. 0.000050 inch [1.27 microns] gold over copper plate. Other finishes are available; see page 95.
Size 16:	Precision machined high conductivity copper alloy. 0.000050 inch [1.27 microns] gold over copper plate. Other finishes are available; see page 95.
Size 8:	
Power:	Precision machined high conductivity copper alloy. 0.000050 inch [1.27 microns] gold over copper plate. Other finishes are available; see page 95.
Shielded:	<i>For material and finishes, see page 77.</i>
High Voltage:	<i>For material and finishes, see page 77.</i>
Connector Housing (Shells):	Brass with 0.000050 inch [1.27 microns] gold over copper plate.
Mounting Spacers and Brackets:	Brass with 0.000050 inch [1.27 microns] gold over copper plate.

Jackscrew Systems:

Brass with 0.000050 inch [1.27 microns] gold over copper plate.

Cable Adapter (Hood):

Brass with 0.000050 inch [1.27 microns] gold over copper plate; aluminum with electroless nickel plate. Other finishes available, contact Technical Sales.

MECHANICAL CHARACTERISTICS:

Size 22 Removable:

Male contact - 0.030 inch [0.76 mm] mating diameter. Female contact - PosiBand closed entry design; *see page 1 for details.* *For removable size 22 contacts, see page 79.*

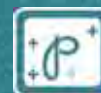
Size 16 Removable:

Male - 0.062 inch [1.57mm] mating diameter. Female contact - PosiBand closed entry design; *see page 1 for details.* *For removable size 16 contacts, see page 81.*

Size 8 Removable:

Male contact - 0.142 inch [3.61 mm] mating diameter. Female contact - features Large Surface Area (L.S.A.) closed entry design utilizing BeCu mechanical retention member. Closed crimp barrel. *For removable size 8 contacts, see pages 81-85.*

continued on next page. . .



TECHNICAL CHARACTERISTICS, *continued*

continued from previous page. . .

MECHANICAL CHARACTERISTICS, *continued*:

Shielded:	For mechanical characteristics, see page 77.
High Voltage:	For mechanical characteristics, see page 77.
Contact Retention in Connector Insert:	
Size 22:	9 lbs. [40N] minimum.
Size 16:	15 lbs. [67N] minimum.
Size 8 Power / Shielded:	22 lbs. [98N].
Contact Terminations:	
Size 22:	Closed barrel crimp - wire sizes 20 AWG [0.5 mm ²] through 30 AWG [0.05 mm ²]. Closed barrel solder - wire size 22 AWG [0.3 mm ²] maximum; see page 79 for details.
Size 16:	Closed barrel crimp - wire sizes 12 AWG [4.0 mm ²] through 24 AWG [0.25 mm ²].
Size 8:	
Power:	Closed barrel crimp or solder cup - wire sizes 8 [10.0 mm ²], 10 [5.3 mm ²], 12 [4.0 mm ²], and 16 [1.5 mm ²] AWG.
Shielded:	Refer to RF Cable in chart on page 84 for contact terminations.
High Voltage:	Straight and right angle (90°) terminations - 0.041 inch [1.04 mm] minimum hole diameter.
Connector Housing (Shells):	Male connector housings may be dimpled for EMI/ESD ground paths.
Polarization:	Trapezoidally-shaped connector housings and polarized jackscrews.

Locking Systems:	Jackscrews.
Mechanical Operations:	1,000 operations per IEC 60512-5.

ELECTRICAL CHARACTERISTICS:

SIZE 22 CONTACTS

Contact Current Rating:	5 amperes, nominal
Initial Contact Resistance:	0.005 ohms maximum.
Proof Voltage:	1000 V r.m.s.

SIZE 16 CONTACTS

Contact Current Rating, Tested per UL 1977:	28 amperes
<i>See temperature rise curves on page 4 for details.</i>	
Initial Contact Resistance:	0.0016 ohms maximum, per IEC 60512-2, Test 2b.
Proof Voltage:	1000 V r.m.s.

SIZE 8 CONTACTS

POWER CONTACTS

For electrical characteristics, see page 21.

SHIELDED CONTACTS

For electrical characteristics, see page 77.

HIGH VOLTAGE CONTACTS

For electrical characteristics, see page 77.

CONNECTOR

Insulation Resistance:	5 G ohms.
Clearance and Creepage Distance:	0.042 inch [1.06 mm], minimum.
Working Voltage:	300 V r.m.s.

CLIMATIC CHARACTERISTICS:

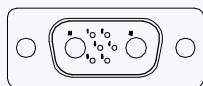
Temperature Range:	-55°C to +125°C.
Damp Heat, Steady State:	10 days.

Visit our website for the latest catalog updates and supplements at
<http://www.connectpositronic.com/products/62/HighPerformanceD-subminiature/catalogs/>

*1 CONTACT VARIANT

FACE VIEW OF MALE OR REAR VIEW OF FEMALE

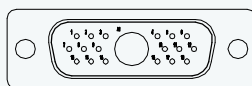
— SHELL SIZE 1 —



8W2

Six (6) Size 22 Signal Contacts and Two (2) Size 16 Power Contacts

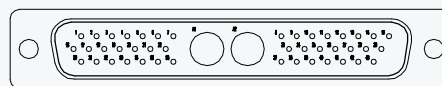
— SHELL SIZE 2 —



19W1

Eighteen (18) Size 22 Signal Contacts and One (1) Size 8 Power Contact

— SHELL SIZE 4 —



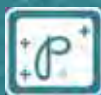
***2 45W2**

Forty-three (43) Size 22 Signal Contacts and Two (2) Size 8 Power Contacts

OTHER VARIANTS WILL BE ADDED, CONSULT OUR WEBSITE OR CONTACT TECHNICAL SALES FOR UPDATED INFORMATION.

NOTES:

- *1 Additional contact variants may be tooled at customer request.
- *2 45W2 variant currently available in female only. Contact Technical Sales for availability of male connector.



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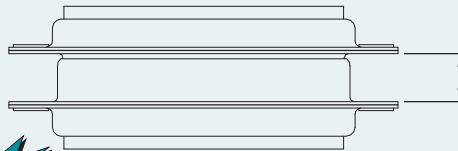
STANDARD CONNECTOR HOUSING (SHELLS) ASSEMBLY



SCBCD45W2S0000G

SCBCD8W2S0000G

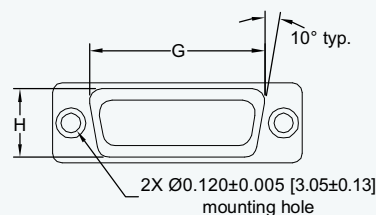
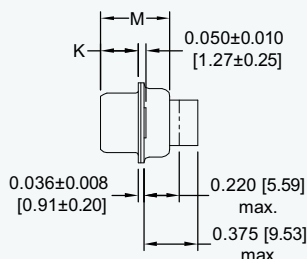
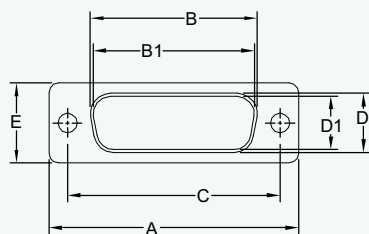
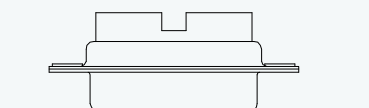
RECOMMENDED MATING DIMENSIONS



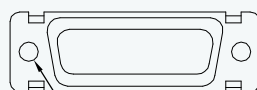
Shell Sizes 1 & 2 =
0.265±0.015 [6.73±0.38]
Shell Sizes 3, 4, 5 & 6 =
0.256±0.015 [6.50±0.38]



TYPICAL CONNECTOR TOP VIEW

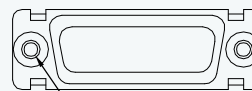


OPTIONAL CONNECTOR HOUSING ASSEMBLY (0, 02)



2X Ø120±0.005 [3.05±0.13]
mounting hole for stainless
steel shell (0 option).
2X Ø0.154 [3.91] mounting
hole (02 option).

OPTIONAL CONNECTOR HOUSING ASSEMBLY WITH UNIVERSAL FLOAT MOUNTS (F)



0.120±0.010 [3.05±0.25]
0.032 [0.81] total
diametral float
2X Ø0.086±0.005-0.000
[2.18+0.13-0.00]
mounting hole

SHELL SIZES	VARIANT	A ±0.015 [0.38]	B ±0.005 [0.13]	B1 ±0.005 [0.13]	C ±0.005 [0.13]	D ±0.005 [0.13]	D1 ±0.005 [0.13]	E ±0.015 [0.38]	G ±0.010 [0.25]	H ±0.010 [0.25]	K ±0.005 [0.13]	M ±0.010 [0.25]
1	8W2 M	1.213 [30.81]		0.666 [16.92]	0.984 [24.99]		0.329 [8.36]	0.494 [12.55]	0.759 [19.28]	0.422 [10.72]	0.233 [5.92]	0.422 [10.72]
	8W2 S	1.213 [30.81]	0.643 [16.33]		0.984 [24.99]	0.311 [7.90]		0.494 [12.55]	0.759 [19.28]	0.422 [10.72]	0.243 [6.17]	0.429 [10.90]
2	19W1 M	1.541 [39.14]		0.994 [25.25]	1.312 [33.32]		0.329 [8.36]	0.494 [12.55]	1.083 [27.51]	0.422 [10.72]	0.233 [5.92]	0.422 [10.72]
	19W1 S	1.541 [39.14]	0.971 [24.66]		1.312 [33.32]	0.311 [7.90]		0.494 [12.55]	1.083 [27.51]	0.422 [10.72]	0.243 [6.17]	0.429 [10.90]
4	45W2 S	2.729 [69.32]	2.159 [54.84]		2.500 [63.50]	0.311 [7.90]		0.494 [12.55]	2.272 [57.71]	0.422 [10.72]	0.243 [6.17]	0.429 [10.90]



REMOVABLE CONTACT ORDERING ASSISTANCE CHART



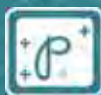
SCBCD SERIES CRIMP AND SOLDER TERMINATION CONTACTS

TYPE	PAGE NUMBER REFERENCE IN CATALOG	CONTACT SIZE	FEMALE PART NUMBER	MALE PART NUMBER	WIRE SIZE AWG [mm ²]
CRIMP	see page 78 for additional information	22	FC8022M2	MC8022M	22 [0.3] / 24 [0.25] / 26 [0.12] / 28 [0.08] / 30 [0.5]
			FC8020M2	MC8020M	20 [0.5] max.
	see page 81 for additional information	16	FC112N4-50	MC112N-50-133.0	12 [4.0]
			FC114N4-50	MC114N-50-133.0	14 [2.5] / 16 [1.5]
			FC116N4-50	MC116N-50-133.0	16 [1.5] / 18 [1.0]
			FC120N4-50	MC120N-50-133.0	20 [0.5] / 22 [0.3] / 24 [0.25]
	see page 81 for additional information	8	FC4008M	MC4008M	8 [10.0]
			FC4010M	MC4010M	10 [5.3]
			FC4012M	MC4012M	12 [4.0]
			FC4016M	MC4016M	16 [1.5]
SOLDER	see page 79 for additional information	22	FS8022M2	MS8022M	22 [0.3] max.
SOLDER CUP	see page 82 for additional information	8	FS4008M	MS4008M	8 [10.0]
			FS4012M	MS4012M	12 [4.0]
			FS4016M	MS4016M	16 [1.5]
HIGH VOLTAGE Straight Solder Wire	see page 83 for additional information	8	FS4820M	MS4820M	20 [0.5]
HIGH VOLTAGE Right Angle (90°) Solder Wire		8	FS4920M	MS4920M	20 [0.5]
SHIELDED	see page 84 for additional information	SOLDER / CRIMP	FC4101M	MC4101M	RG 178 B/U, 196 B/U
			FC4102M	MC4102M	RG 179 BU/, 316 B/U
			FC4103M	MC4103M	RG 180 B/U
			FC4104M	MC4104M	RG 58 B/U
		SOLDER / SOLDER	FS4101M	MS4101M	RG 178 B/U, 196 B/U
			FS4102M	MS4102M	RG 179 B/U, 316 B/U
			FS4103M	MS4103M	RG 180 B/U
			FS4104M	MS4104M	RG 58 B/U
		CRIMP / CRIMP	FCC4101M	MCC4101M	RG 178 B/U, 196 B/U
			FCC4102M	MCC4102M	RG 179 BU/, 316 B/U
			FCC4103M	MCC4103M	RG 180 B/U
			FCC4104M	MCC4104M	RG 58 B/U

NOTE: For ordering crimp contacts on reels, add "R" to part number, see page 77 for details. Examples: FC4008MR or MC4008MR

For information regarding REMOVABLE CONTACTS, see contact illustration drawings and charts on pages 77-85.

For information regarding CRIMP TOOLS & CRIMPING TOOL TECHNIQUES, see page 96.



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ORDERING INFORMATION - CODE NUMBERING SYSTEM

Specify Complete Connector By Selecting An Option From Step 1 Through 8

STEP	1	2	3	4	5	6	7	8		9
EXAMPLE	SCBCD	8W2	S	0	0	0	0	G	—	

STEP 1 - BASIC SERIES

SCBCD Series

STEP 2 - CONNECTOR VARIANTS

Shell Size 1 - 8W2

Shell Size 2 - 19W1

*1 Shell Size 4 - 45W2

STEP 3 - CONNECTOR GENDER

M - Male

S - Female - PosiBand closed entry contacts,
see page 1 for more information.

STEP 4 - CONTACT TERMINATION TYPE

0 - Contacts ordered separately, see contact chart on
page 60 for details.

1 - Signal contacts, 22 AWG-30 AWG [0.03mm²-
0.05mm²].

*2 11 - Signal contacts, 22 AWG-30 AWG [0.03mm²-
0.05mm²] with MC/FC 4012M power contact.

*2 12 - Signal contacts, 22 AWG-30 AWG [0.03mm²-
0.05mm²] with MC/FC 4016M power contact.

*2 13 - Signal contacts, 22 AWG-30 AWG [0.03mm²-
0.05mm²] with MCC/FCC 4101M shielded contacts.

*2 14 - Signal contacts, 22 AWG-30 AWG [0.03mm²-
0.05mm²] with MCC/FCC 4102M shielded contacts.

*3 STEP 5 - MOUNTING STYLE

0 - Mounting hole, 0.120 [3.05] Ø

02 - Mounting hole, 0.154 [3.91] Ø

C5 - Swaged spacer, Cul-de-Sac style, 4-40 threads, 0.350 [8.89] length.

F - Float mounts, universal

S2 - Swaged spacer, 4-40 threads, 0.125 [3.18] length

S5 - Swaged locknut, 4-40 threads

STEP 9 - SPECIAL OPTIONS

SEE APPENDIX ON PAGE 95.

STEP 8 - CONNECTOR HOUSING (SHELLS) OPTION

G - Gold over copper plate.

D - Gold over copper plate and dimpled
(male connectors only).

*3 STEP 7 - LOCKING AND POLARIZING SYSTEMS

0 - None.

T - Fixed female jackscrews.

T2 - Fixed female jackscrews.

T6 - Fixed male and female polarized jackscrews.

E - Rotating male jackscrews.

E2 - Rotating male screw locks.

E3 - Rotating male with internal hex for 3/32 hex drives

E6 - Rotating male and female polarized jackscrews.

*3 STEP 6 - CABLE ADAPTER (HOOD) AND PUSH-ON FASTENER

0 - None

AN - Cable adapter, lightweight aluminum, electroless nickel
plate, see page 91 for details.

H - Cable adapter, top opening, brass

N - Push-on fastener, for right angle (90°) mounting brackets

NOTES

*1 45W2 variant currently available in female only.

*2 Available on 19W1 and 45W2 connectors only.

*3 For additional information of options listed in steps 5, 6,
and 7, see Accessories Section on pages 86-94.

Do you need 2-D drawings or 3-D models?

See page 18 for more information!

For information regarding CRIMP TOOLS & CRIMPING TOOL TECHNIQUES, see page 96.



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REMOVABLE CONTACTS

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REMOVABLE CONTACT TECHNICAL CHARACTERISTICS

SIZE 22 CONTACT

MATERIALS AND FINISHES:

Precision machined copper alloy. 0.000050 inch [1.27 microns] gold over copper plate. Other finishes are available; see page 95.

MECHANICAL CHARACTERISTICS:

Install contact to rear face of connector insert and remove from rear face of connector insert. Size 22 contacts, male – 0.030 inch [0.76 mm] mating diameter. Female contact - PosiBand closed entry design; see page 1 for details. Terminations for 20, 22, 24, 26, 28, and 30 AWG. Closed barrel crimp or solder.

ELECTRICAL CHARACTERISTICS:

For SDD series: For electrical characteristics, see page 14.
For SCBCD series: For electrical characteristics, see page 58.

SIZE 20 CONTACT

MATERIALS AND FINISHES:

Precision machined copper alloy. 0.000050 inch [1.27 microns] gold over copper plate. Other finishes are available; see page 95.

MECHANICAL CHARACTERISTICS:

Install contact to rear face of connector insert and remove from rear face of connector insert. Size 20 contact, male – 0.040 inch [1.02 mm] mating diameter. Female contact - PosiBand closed entry design; see page 1 for details. Terminations for 18, 20, 22, 24, 26, 28, and 30 AWG. Closed barrel crimp or solder.

ELECTRICAL CHARACTERISTICS:

For SND series: For electrical characteristics, see page 6.
For SCBC series: For electrical characteristics, see page 40.

SIZE 16 CONTACT

MATERIALS AND FINISHES:

Precision machined copper alloy. 0.000050 inch [1.27 microns] gold over copper plate. Other finishes are available; see page 95.

MECHANICAL CHARACTERISTICS:

Install contact to rear face of insulator, release from front face of insulator. Size 16 contacts, male – 0.062 inch [1.57mm] mating diameter. Female contact - PosiBand closed entry design; see page 1 for details. Terminations for 12, 14, 16, 18, 20, 22 and 24 AWG. Closed barrel crimp.

ELECTRICAL CHARACTERISTICS:

For electrical characteristics, see SCBCD series on page 58.

SIZE 8 CONTACT

MATERIALS AND FINISHES:

POWER: Precision machined copper alloy. 0.000050 inch [1.27 microns] gold over copper plate. Other finishes are available; see page 95.

HIGH VOLTAGE:

Insulator Material: PTFE teflon
Contacts: Precision machined copper alloy. 0.000050 inch [1.27 microns] gold over copper plate. Other finishes are available; see page 95.

SHIELDED:

Dielectric Material: PTFE teflon
Inner Contacts: Precision machined copper alloy. 0.000050 inch [1.27 microns] gold over copper plate. Other finishes are available; see page 95.
Outer Contacts: Precision machined copper alloy. 0.000050 inch [1.27 microns] gold over copper plate. Other finishes are available; see page 95.

MECHANICAL CHARACTERISTICS:

POWER:

Install contact to rear face of connector insert and remove from front face of connector insert. Size 8 contacts, male – 0.142 inch [3.61 mm] mating diameter. Female contact - features Large Surface Area (L.S.A.) closed entry design utilizing BeCu mechanical retention member. Closed barrel crimp.

SHIELDED:

Install contact to rear face of insulator and remove from front face of insulator. Size 8 contacts. See page 84 table of cable sizes for contact termination dimensions.

Durability:

500 cycles minimum.

Vibration:

20g from 10 Hz to 500 Hz.

Shock:

30g-11ms.

HIGH VOLTAGE:

Install contact to rear face of insulator and remove from front face of insulator. Size 8 contacts. Straight and right angle (90°) terminations. 0.041 inch [1.04 mm] minimum hole diameter.

Durability:

500 cycles minimum.

Vibration:

20g from 10 Hz to 500 Hz.

Shock:

30g-11ms.

ELECTRICAL CHARACTERISTICS:

POWER:

For electrical characteristics, see page 21.

SHIELDED:

Initial Contact Resistance: 0.008 ohms maximum.

Nominal Impedance: 50 ohms.

Insertion Loss: -0.46 dB at 1 GHz

-1.5 dB at 2 GHz

VSWR:

1.15 average at 1 GHz

1.56 average at 2 GHz

Above values measured using frequency domain techniques.

Proof Voltage:

1000 V r.m.s.

HIGH VOLTAGE:

Flash over Voltage:

3600 V r.m.s.

Proof Voltage:

2700 V r.m.s.

Initial Contact Resistance: 0.008 ohms maximum.

OPTIONAL PLATING FINISHES

-54

0.000100 [2.54 μ] gold over copper by adding "-54" suffix onto part number. Example: FC6026M2-54.

REELED CONTACTS:

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

All male and female crimp contacts can be ordered in reels by adding letter "R" after the contact part number, such as MC4008MR for a male contact and FC120N4R-50 for female contact.



Enlarged section of
plastic contact carriers

For information regarding CRIMP TOOLS & CRIMPING TOOL TECHNIQUES, see page 96.



REMOVABLE CRIMP CONTACTS

FOR USE WITH SDD AND SCBCD SERIES CONNECTORS

SIZE 22

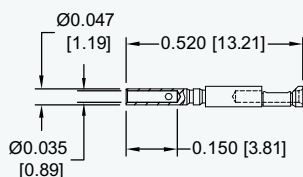


Note: Connectors can be kitted with all applicable crimp/solder contacts, contact Technical Sales for connector part number.

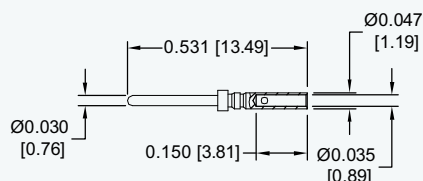


FEMALE CONTACT

"PosiBand" Closed Entry Design



MALE CONTACT



FEMALE PART NUMBER	WIRE SIZE AWG/[mm ²]
FC8022M2	22 / 24 / 26 / 28 / 30 [0.3/0.25/0.12/0.08/0.05]

MALE PART NUMBER	WIRE SIZE AWG/[mm ²]
MC8022M	22 / 24 / 26 / 28 / 30 [0.3/0.25/0.12/0.08/0.05]



REMOVABLE CRIMP CONTACT

FOR USE WITH SDD AND SCBCD SERIES CONNECTORS

CONTACTS USED WITH 20 AWG WIRE

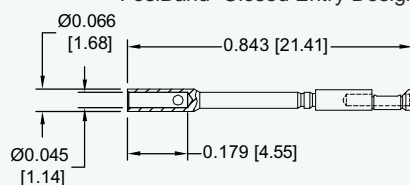
SIZE 22



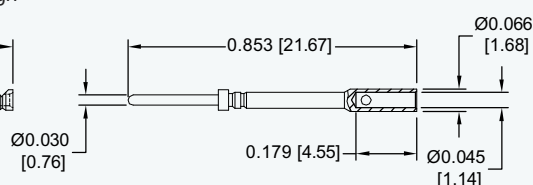
The crimp area of these contacts is not protected when fully seated in the connector molding. These contacts require shrink tubing after installation. Not suitable for fully loaded connector.

FEMALE CONTACT

"PosiBand" Closed Entry Design



MALE CONTACT



Note: Connectors can be kitted with all applicable crimp/solder contacts, contact Technical Sales for connector part number.

Crimp area extends above connector molding.



FEMALE PART NUMBER	WIRE SIZE AWG/[mm ²]
FC8020M2	20 [0.5] max



MALE PART NUMBER	WIRE SIZE AWG/[mm ²]
MC8020M	20 [0.5] max

For information regarding CRIMP TOOLS & CRIMPING TOOL TECHNIQUES, see page 96.



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REMOVABLE CONTACTS

MILITARY / SPACE FLIGHT QUALITY

High
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REMOVABLE CLOSED BARREL SOLDER CONTACTS

FOR USE WITH SDD AND SCBCD SERIES CONNECTORS

SIZE 22



Authentic **POSITRONIC**
PosiBand

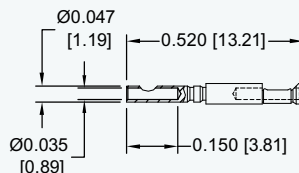
These contacts utilize authentic Positronic® PosiBand® technology.

Note: Connectors can be kitted with all applicable crimp/solder contacts, contact Technical Sales for connector part number.

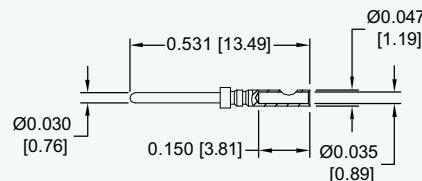


FEMALE CONTACT

"PosiBand" Closed Entry Design



MALE CONTACT



FEMALE PART NUMBER	WIRE SIZE AWG/[mm ²]
FS8022M2	22 [0.3] max



MALE PART NUMBER	WIRE SIZE AWG/[mm ²]
MS8022M	22 [0.3] max



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REMOVABLE CONTACTS

MILITARY / SPACE FLIGHT QUALITY

High
Performance
D-sub



REMOVABLE CRIMP POWER CONTACT

FOR USE WITH SCBCD SERIES CONNECTORS

SIZE 16



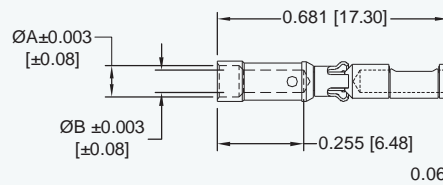
Authentic POSITRONIC[®]
PosiBand[®]

These contacts utilize authentic Positronic[®] PosiBand[®] technology.

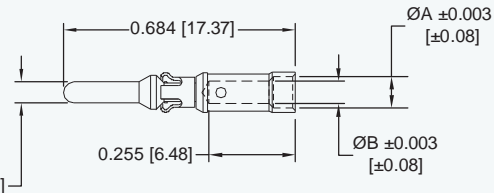
Note: Connectors can be kitted with all applicable crimp/solder contacts, contact Technical Sales for connector part number.

FEMALE CONTACT

"PosiBand" Closed Entry Design



MALE CONTACT



FEMALE PART NUMBER	WIRE SIZE [AWG] mm ²	ØA	ØB
FC112N4-50	12 / [4.0]	N/A	0.098 [2.49]
FC114N4-50	14-16 [2.5-1.5]	0.105 [2.67]	0.081 [2.06]
FC116N4-50	16-18 [1.5-1.0]	0.093 [2.36]	0.067 [1.70]
FC120N4-50	20-22-24 [0.5-0.3-0.25]	0.065 [1.65]	0.045 [1.14]

MALE PART NUMBER	WIRE SIZE mm ² [AWG]	ØA	ØB
MC112N-50-133.0	12 / [4.0]	N/A	0.098 [2.49]
MC114N-50-133.0	14-16 [2.5-1.5]	0.105 [2.67]	0.081 [2.06]
MC116N-50-133.0	16-18 [1.5-1.0]	0.093 [2.36]	0.067 [1.70]
MC120N-50-133.0	20-22-24 [0.5-0.3-0.25]	0.065 [1.65]	0.045 [1.14]

REMOVABLE CRIMP POWER CONTACT

FOR USE WITH SCBM, SCBC, SCBDD AND SCBCD SERIES CONNECTORS

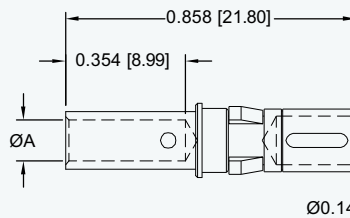
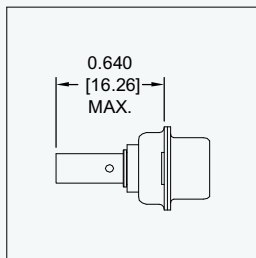
SIZE 8

For contact current rating, see page 21.

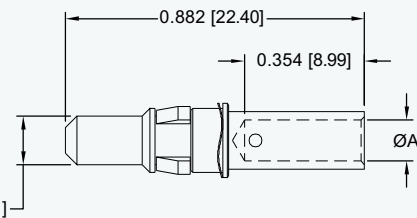
Note: Connectors can be kitted with all applicable crimp/solder contacts, contact Technical Sales for connector part number.

*1 FEMALE CONTACT

"CLOSED ENTRY" DESIGN, L.S.A.



MALE CONTACT



FEMALE PART NUMBER	WIRE SIZE [AWG] mm ²	Ø A
FC4008M	8 [10.0]	0.181 [4.60]
FC4010M	10 [5.3]	0.122 [3.10]
FC4012M	12 [4.0]	0.101 [2.57]
FC4016M	16 [1.5]	0.067 [1.70]

MALE PART NUMBER	WIRE SIZE [AWG] mm ²	Ø A
MC4008M	8 [10.0]	0.181 [4.60]
MC4010M	10 [5.3]	0.122 [3.10]
MC4012M	12 [4.0]	0.101 [2.57]
MC4016M	16 [1.5]	0.067 [1.70]

NOTE: *1 Female contacts feature Large Surface Area (L.S.A.) closed entry contact design which provides maximum mating surfaces between male and female contact and reduced contact resistance during operation.

For information regarding CRIMP TOOLS & CRIMPING TOOL TECHNIQUES, see page 96.



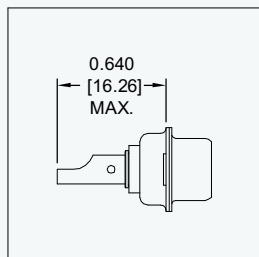
REMOVABLE SOLDER CUP POWER CONTACT

FOR USE WITH SCBM, SCBC, SCBDD AND SCBCD SERIES CONNECTORS

SIZE 8

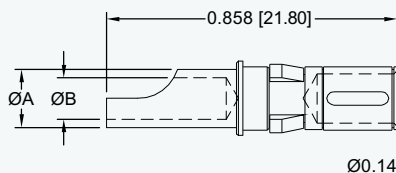
For contact current rating, see page 21

Note: Connectors can be kitted with all applicable crimp/solder contacts, contact Technical Sales for connector part number.

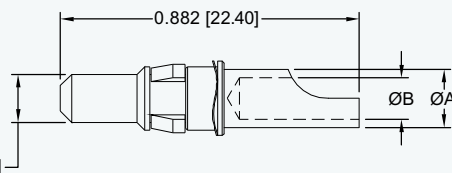


*1 FEMALE CONTACT

"CLOSED ENTRY" DESIGN, L.S.A.



MALE CONTACT



FEMALE PART NUMBER	WIRE SIZE [AWG] mm ²	Ø A	Ø B
FS4008M	8 [10.0]	0.219 [5.56]	0.188 [4.78]
FS4012M	12 [4.0]	0.143 [3.63]	0.112 [2.84]
FS4016M	16 [1.5]	0.100 [2.54]	0.069 [1.75]

MALE PART NUMBER	WIRE SIZE [AWG] mm ²	Ø A	Ø B
MS4008M	8 [10.0]	0.219 [5.56]	0.188 [4.78]
MS4012M	12 [4.0]	0.143 [3.63]	0.112 [2.84]
MS4016M	16 [1.5]	0.100 [2.54]	0.069 [1.75]

NOTE: *1 Female contacts feature Large Surface Area (L.S.A.) closed entry contact design which provides maximum mating surfaces between male and female contact and reduced contact resistance during operation.

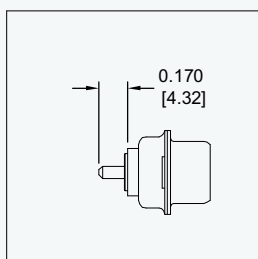
STRAIGHT SOLDER PRINTED BOARD MOUNT POWER CONTACT

FOR USE WITH SCBM AND SCBDD SERIES CONNECTORS

SIZE 8

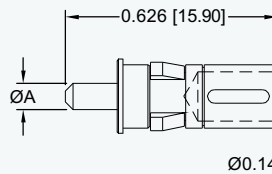
For contact current rating, see page 21.

Note: Connectors can be kitted with all applicable crimp/solder contacts, contact Technical Sales for connector part number.

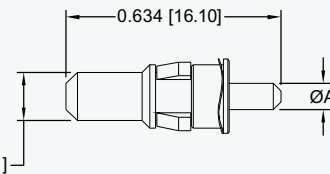


*1 FEMALE CONTACT

"CLOSED ENTRY" DESIGN, L.S.A.



MALE CONTACT



FEMALE PART NUMBER	Ø A	CONTACT CODE
FDS4314M	0.078 [1.98]	35
NEW! FDS4312M	0.094 [2.39]	36
FDS4310M	0.125 [3.18]	37

MALE PART NUMBER	Ø A	CONTACT CODE
MDS4314M	0.078 [1.98]	35
NEW! MDS4312M	0.094 [2.39]	36
MDS4310M	0.125 [3.18]	37

NOTE: *1 Female contacts feature Large Surface Area (L.S.A.) closed entry contact design which provides maximum mating surfaces between male and female contact and reduced contact resistance during operation.

For information regarding CRIMP TOOLS & CRIMPING TOOL TECHNIQUES, see page 96.



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REMOVABLE CONTACTS

MILITARY / SPACE FLIGHT QUALITY

High
Performance
D-sub

RIGHT ANGLE (90°) PRINTED BOARD MOUNT POWER CONTACT

FOR USE WITH SCBM AND SCBDD SERIES CONNECTORS

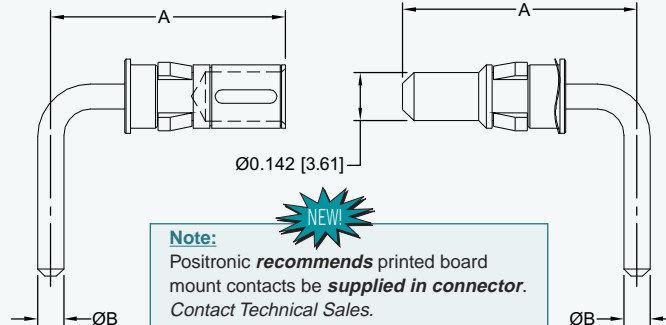
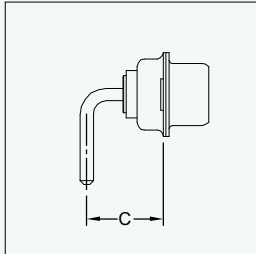
SIZE 8

For contact current rating, see page 21

*1 FEMALE CONTACT

"CLOSED ENTRY" DESIGN, L.S.A.

MALE CONTACT



NOTE:

*1 Female contacts feature Large Surface Area (L.S.A.) closed entry contact design which provides maximum mating surfaces between male and female contact and reduced contact resistance during operation.

Note:

Positronic **recommends** printed board mount contacts be **supplied in connector**.
Contact Technical Sales.

FEMALE PART NUMBER	A REF.	Ø B	C	SHELL SIZE	CONTACT CODE
FRT4314M	0.580 [14.73]	0.078 [1.98]	0.339 [8.61]	1, 2, 3 & 4	55
FRT4414M	0.692 [17.58]	0.078 [1.98]	0.451 [11.46]	5	55
FRT4714M	0.661 [16.79]	0.078 [1.98]	0.420 [10.67]	1, 2, 3 & 4	75
FRT4814M	0.773 [19.63]	0.078 [1.98]	0.520 [13.21]	5	75
FRT4310M	1.051 [26.70]	0.125 [3.18]	0.810 [20.57]	1, 2, 3 & 4	57, 77
FRT4410M	1.051 [26.70]	0.125 [3.18]	0.810 [20.57]	5	57, 77

MALE PART NUMBER	A REF.	Ø B	C	SHELL SIZE	CONTACT CODE
MRT4314M	0.580 [14.73]	0.078 [1.98]	0.339 [8.61]	1, 2, 3 & 4	55
MRT4414M	0.692 [17.58]	0.078 [1.98]	0.451 [11.46]	5	55
MRT4714M	0.661 [16.79]	0.078 [1.98]	0.420 [10.67]	1, 2, 3 & 4	75
MRT4814M	0.773 [19.63]	0.078 [1.98]	0.520 [13.21]	5	75
MRT4310M	1.051 [26.70]	0.125 [3.18]	0.810 [20.57]	1, 2, 3 & 4	57, 77
MRT4410M	1.051 [26.70]	0.125 [3.18]	0.810 [20.57]	5	57, 77

Note: Connectors can be kitted with all applicable crimp/solder contacts, contact Technical Sales for connector part number.

REMOVABLE HIGH VOLTAGE POWER CONTACT

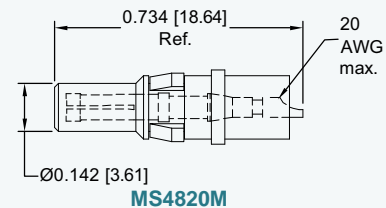
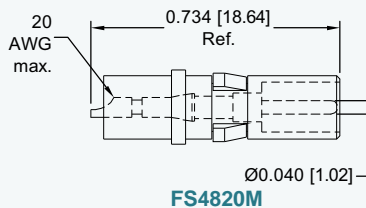
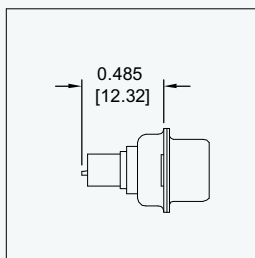
FOR USE WITH SCBM, SCBC, SCBDD AND SCBCD SERIES CONNECTORS

SIZE 8

STRAIGHT SOLDER WIRE TERMINATION

FEMALE CONTACT

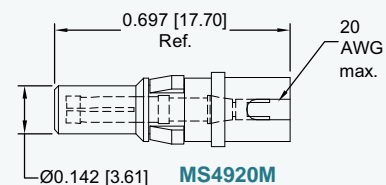
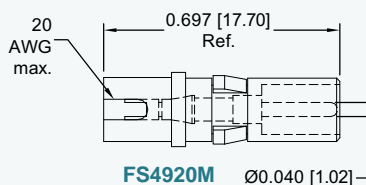
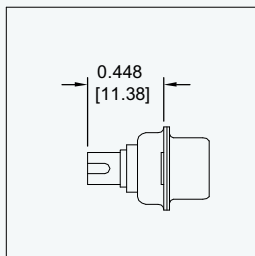
MALE CONTACT



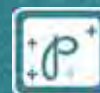
RIGHT ANGLE (90°) SOLDER WIRE TERMINATION

FEMALE CONTACT

MALE CONTACT



For information regarding CRIMP TOOLS & CRIMPING TOOL TECHNIQUES, see page 96.

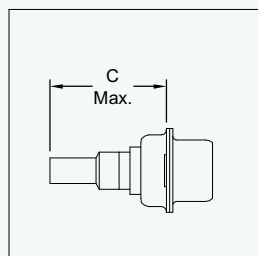


REMOVABLE SHIELDED CONTACT

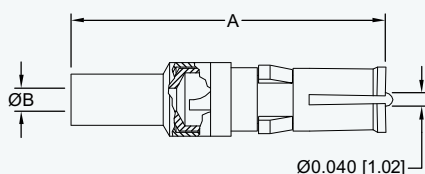
FOR USE WITH SCBM, SCBC, SCBDD AND SCBCD SERIES CONNECTORS

SIZE 8

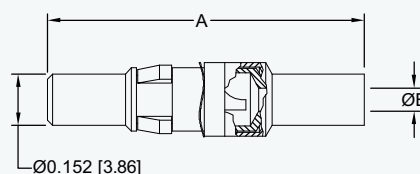
STRAIGHT SOLDER/CRIMP CONTACTS



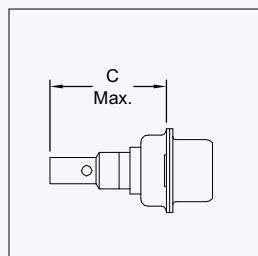
FEMALE CONTACT



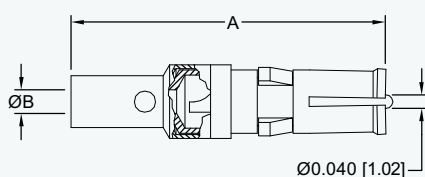
MALE CONTACT



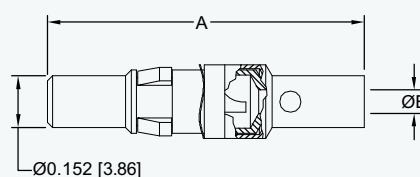
STRAIGHT SOLDER/SOLDER CONTACTS



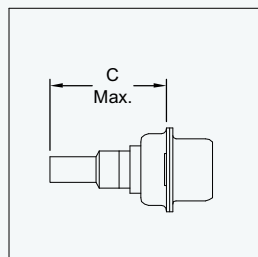
FEMALE CONTACT



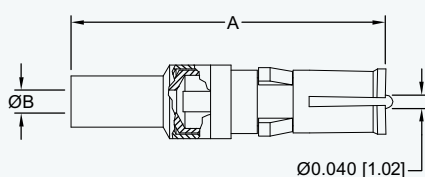
MALE CONTACT



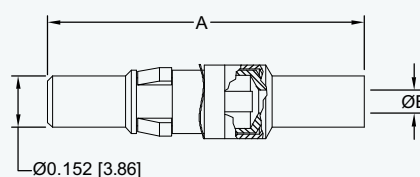
STRAIGHT CRIMP/CRIMP CONTACTS



FEMALE CONTACT



MALE CONTACT



Note: Connectors can be kitted with all applicable crimp/solder contacts, contact Technical Sales for connector part number.

TYPE OF CONTACT	FEMALE PART NUMBER	MALE PART NUMBER	A	Ø B	C MAX.	RG CABLE NUMBER
SOLDER/CRIMP	FC4101M	MC4101M	0.929 [23.60]	0.040 [1.02]	0.739 [18.77]	178 B/U 196 B/U
	FC4102M	MC4102M	0.929 [23.60]	0.067 [1.70]	0.739 [18.77]	179 B/U 316 /U
	FC4103M	MC4103M	1.037 [26.34]	0.108 [2.74]	0.847 [21.51]	180 B/U
	FC4104M	MC4104M	1.037 [26.34]	0.120 [3.05]	0.847 [21.51]	58 B/U
SOLDER/SOLDER	FS4101M	MS4101M	0.929 [23.60]	0.040 [1.02]	0.739 [18.77]	178 B/U 196 B/U
	FS4102M	MS4102M	0.929 [23.60]	0.067 [1.70]	0.739 [18.77]	179 B/U 316 /U
	FS4103M	MS4103M	1.037 [26.34]	0.108 [2.74]	0.847 [21.51]	180 B/U
	FS4104M	MS4104M	1.037 [26.34]	0.120 [3.05]	0.847 [21.51]	58 B/U
CRIMP/CRIMP	FCC4101M	MCC4101M	0.929 [23.60]	0.040 [1.02]	0.739 [18.77]	178 B/U 196 B/U
	FCC4102M	MCC4102M	0.929 [23.60]	0.067 [1.70]	0.739 [18.77]	179 B/U 316 /U
	FCC4103M	MCC4103M	1.037 [26.34]	0.108 [2.74]	0.847 [21.51]	180 B/U
	FCC4104M	MCC4104M	1.037 [26.34]	0.120 [3.05]	0.847 [21.51]	58 B/U



SHIELDED CONTACTS

Two-step crimping action for signal and shielding conductors.

For information regarding CRIMP TOOLS & CRIMPING TOOL TECHNIQUES, see page 96.