



REMOVABLE CONTACT TECHNICAL CHARACTERISTICS

SIZE 22 REMOVABLE CONTACT



MATERIALS AND FINISHES:

Precision machined copper alloy with gold flash over nickel. Other finishes are available, see page 69 for optional finishes.

MECHANICAL CHARACTERISTICS:

Insert contact to rear face of insulator, release from rear face of insulator. Size 22 contacts, 0.030 inch [0.76 mm] mating diameter male contacts. Female PosiBand closed entry contact design. Terminations for 20, 22, 24, 26, 28, and 30 AWG. Closed barrel crimp.

ELECTRICAL CHARACTERISTICS:

Contact Current Rating: 5 amperes nominal.
Initial Contact Resistance: 0.010 ohms maximum.

THERMOCOUPLE CONTACTS:

Straight and right angle (90°) PCB mount contacts are available, contact Technical Sales for details.

Size 22 crimp contacts are available, see page 71 for details.

SIZE 20 REMOVABLE CONTACT

MATERIALS AND FINISHES:

Precision machined copper alloy with gold flash over nickel. Other finishes are available, see page 69 for optional finishes.

MECHANICAL CHARACTERISTICS:

Insert contact to rear face of insulator, release from rear face of insulator. Size 20 contacts, 0.040 inch [1.02 mm] mating diameter male contacts. Female PosiBand closed entry or "Robi-D" open entry contact design.

ELECTRICAL CHARACTERISTICS:

Contact Current Rating: 7.5 amperes nominal.
Initial Contact Resistance: 0.008 ohms max. per IEC 512-2, test 2b.

THERMOCOUPLE CONTACTS:

Straight and right angle (90°) PCB mount contacts are available, contact Technical Sales for details.

Size 20 crimp contacts are available, see page 74 for details.

SIZE 16 REMOVABLE CONTACT



MATERIALS AND FINISHES:

STANDARD: Precision machined copper alloy with gold flash over nickel. Other finishes are available, see page 69 for optional finishes.

HIGH CONDUCTIVITY: High conductivity copper alloy, gold flash over nickel. Other finishes are available, see page 69 for optional finishes.

MECHANICAL CHARACTERISTICS:

STANDARD AND HIGH CONDUCTIVITY: Insert contact to rear face of insulator, release from front face of insulator. Size 16 contacts, 0.062 inch [1.57 mm] mating diam-

eter male contacts. Female PosiBand closed entry contact design. Terminations for 12, 14, 16, 18, 20, 22, 24, 26, and 28 AWG.

ELECTRICAL CHARACTERISTICS:

Contact Current Rating - Tested per U.L. 1977:

Standard Contact Material: 28 amperes.

High Conductivity Contact Material: 40 amperes.

See Temperature Rise Curves on page 2 for details.

Initial Contact Resistance:

Standard Contact Material: 0.0016 ohms max. Per IEC 512-2, Test 2b.

High Conductivity Contact Material: 0.001 ohms max. Per IEC 512-2, Test 2b.

SIZE 8 REMOVABLE CONTACT

MATERIALS AND FINISHES:

STANDARD: Precision machined copper alloy with gold flash over nickel. Other finishes are available, see page 69 for optional finishes.

HIGH CONDUCTIVITY: High conductivity copper alloy, gold flash over nickel. Other finishes are available, see page 69 for optional finishes.

HIGH VOLTAGE:

Insulator Material: PTFE teflon
Contacts: Precision machined copper alloy with 0.000030 inch [0.76μ] gold over nickel. Other finishes are available, see page 69 for optional finishes.

SHIELDED:

Dielectric Material: PTFE teflon
Inner Contacts: Precision machined copper alloy with 0.000030 inch [0.76μ] gold over nickel. Other finishes are available, see page 69 for optional finishes.

Outer Contacts: Precision machined copper alloy with gold flash over nickel. Other finishes are available, see page 69 for optional finishes.

AIR LINE COUPLER: Stainless steel, see page 80.

MECHANICAL CHARACTERISTICS:

STANDARD AND HIGH CONDUCTIVITY:

Insert contact to rear face of insulator, release from front face of insulator. Size 8 contacts, 0.142 inch [3.61 mm] mating diameter male contacts, closed entry female contacts.

HIGH VOLTAGE:

Insert contact to rear face of insulator, release 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.

... continued on next page

For information regarding crimp tool and crimping tool techniques, see Application Tools section, pages 81-89.



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REMOVABLE CONTACTS

Combo-D
D-Sub

REMOVABLE CONTACT TECHNICAL CHARACTERISTICS

continued from previous page . . .

MECHANICAL CHARACTERISTICS, continued:

SHIELDED: Insert contact to rear face of insulator, release from front face of insulator. Size 8 contacts. See page 78 table of cable sizes for contact termination dimensions.

Durability: 500 cycles minimum.
Vibration: 20g from 10 Hz to 500 Hz.
Shock: 30g-11ms.

AIR LINE COUPLER: Insert contact to rear face of insulator, release from front face of insulator.

ELECTRICAL CHARACTERISTICS:

POWER CONTACTS:

For electrical characteristics, see page 4.

HIGH VOLTAGE:

Flash over Voltage: 3600 V r.m.s.
Proof Voltage: 2700 V r.m.s.
Initial Contact Resistance: 0.008 ohms maximum.

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.

OPTIONAL PLATING FINISHES

-14 0.000030 [0.76 μ] gold over nickel by adding "-14" suffix onto part number. *Example:* FC120N4-14.
-15 0.000050 inch [1.27 μ] gold over nickel by adding "-15". *Example:* FC120N4-15.

RoHS OPTIONS:

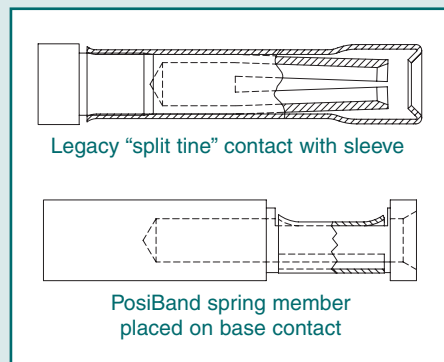
/AA Environmental Compliance Option (RoHS), compliant per EU Directive 2002/95/EC can be achieved by adding "/AA" suffix onto part number. *Examples:* FC120N4/AA or for optional finishes use FC120N4/AA-14.

What makes Positronic's PosiBand® contact interface significant?



Authentic POSITRONIC®
PosiBand®

These contacts utilize authentic Positronic™ PosiBand® technology.



- ✓ Higher reliability in harsh environments and repeated mating cycles.
- ✓ PosiBand crimp contacts do not need to be annealed. Split tine D-subminiature contacts are commonly annealed at the crimp barrel, with the possibility of reliability problems at the contact interface if the annealing is performed incorrectly.
- ✓ Electrical and mechanical function of the contact interface are separated since the PosiBand contact is a two-piece design. Contact normal force is provided by the "Posiband spring member", which allows higher mechanical reliability. The electrical continuity path is supported through the base contact, which allows a greater number of electrical paths on a "micro" level when compared to split tine contact design.
- ✓ Higher reliability at prices comparable to the "split tine" design.

For a detailed white paper visit: www.connectpositronic.com/content/37/

For information regarding crimp tool and crimping tool techniques, see Application Tools section, pages 81-89.



REMOVABLE CRIMP SIGNAL CONTACT

FOR USE WITH CBCD SERIES CONNECTORS

SIZE 22

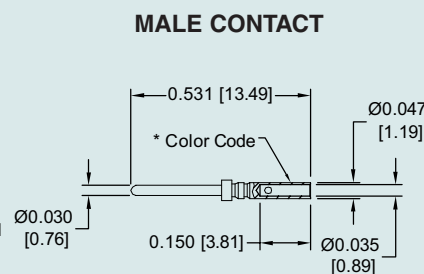
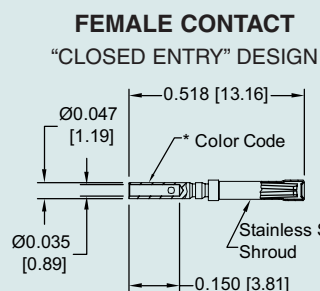
CLOSED CRIMP BARREL

*MILITARY SPECIFICATION CONTACTS

STANDARD FINISH:
0.000050 inch [1.27μ] gold over
nickel.

COLOR CODE:
MALE CONTACT:
ORANGE/BLUE/WHITE
FEMALE CONTACT:
ORANGE/BLUE/GRAY

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



FEMALE PART NUMBER	WIRE SIZE AWG/[mm ²]
*M39029/57-354	22 / 24 / 26 / 28 [0.3/0.25/0.12/0.08]

MALE PART NUMBER	WIRE SIZE AWG/[mm ²]
*M39029/58-360	22 / 24 / 26 / 28 [0.3/0.25/0.12/0.08]

REMOVABLE CRIMP SIGNAL CONTACT

FOR USE WITH CBCD SERIES CONNECTORS

SIZE 22

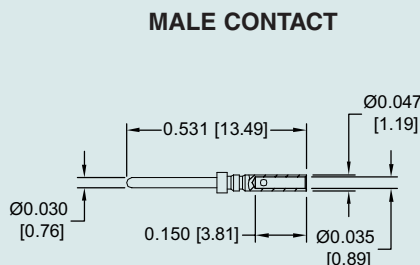
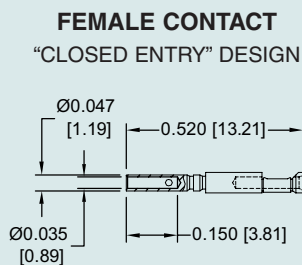
CLOSED CRIMP BARREL



Authentic POSITRONIC™
PosiBand®

These contacts utilize authentic Positronic™ PosiBand® technology.

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



FEMALE PART NUMBER	WIRE SIZE AWG/[mm ²]
FC8022D2	22 / 24 / 26 / 28 / 30 [0.3/0.25/0.12/0.08/0.05]

MALE PART NUMBER	WIRE SIZE AWG/[mm ²]
MC8022D	22 / 24 / 26 / 28 / 30 [0.3/0.25/0.12/0.08/0.05]

For information regarding crimp tool and crimping tool techniques, see Application Tools section, pages 81-89.



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REMOVABLE CONTACTS

Combo-D
D-Sub

REMOVABLE CRIMP SIGNAL CONTACT FOR USE WITH CBCD SERIES CONNECTORS

CONTACTS USED WITH 20 AWG WIRE

SIZE 22

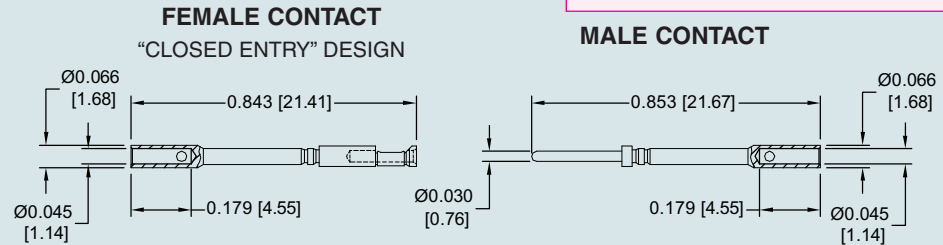


Authentic POSITRONIC™
PosiBand®

These contacts utilize authentic Positronic™ PosiBand® technology.

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

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.



Crimp area extends above connector molding.

FEMALE PART NUMBER	WIRE SIZE AWG/[mm²]
FC8020D2	20 [0.5] max

MALE PART NUMBER	WIRE SIZE AWG/[mm²]
MC8020D	20 [0.5] max

REMOVABLE THERMOCOUPLE CRIMP SIGNAL CONTACT FOR USE WITH CBCD SERIES CONNECTORS

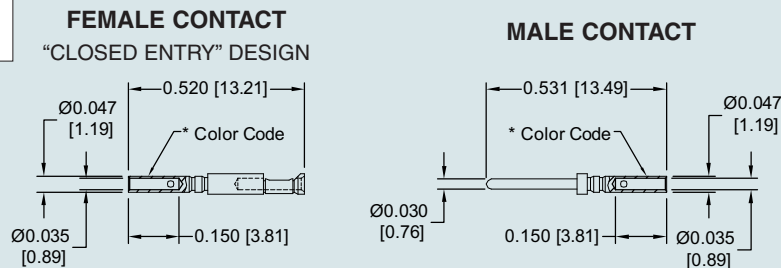
SIZE 22



Authentic POSITRONIC™
PosiBand®

These contacts utilize authentic Positronic™ PosiBand® technology.

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



TYPE	MATERIAL	FEMALE PART NUMBER	MALE PART NUMBER	COLOR CODE*	WIRE SIZE AWG [mm²]
K	CHROMEL (+)	FC8022D2CH	MC8022DCH	WHITE	22 / 24 / 26 [0.3 / 0.25 / 0.12]
	ALUMEL (-)	FC8022D2AL	MC8022DAL	GREEN	22 / 24 / 26 [0.3 / 0.25 / 0.12]
T	COPPER (+)	FC8022D2CU	MC8022DCU	RED	22 / 24 / 26 [0.3 / 0.25 / 0.12]
	CONSTANTAN (-)	FC8022D2CO	MC8022DCO	YELLOW	22 / 24 / 26 [0.3 / 0.25 / 0.12]
E	CHROMEL (+)	FC8022D2CH	MC8022DCH	WHITE	22 / 24 / 26 [0.3 / 0.25 / 0.12]
	CONSTANTAN (-)	FC8022D2CO	MC8022DCO	YELLOW	22 / 24 / 26 [0.3 / 0.25 / 0.12]

For more information on the availability of Type J thermocouple contacts, please contact Technical Sales.

For more information about thermocouple contacts with PCB solder termination, please contact Technical Sales..

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For information regarding crimp tool and crimping tool techniques, see Application Tools section, pages 81-89.



MILITARY LEVEL REMOVABLE CRIMP SIGNAL CONTACT

FOR USE WITH CBC SERIES CONNECTORS

SIZE 20

CLOSED CRIMP BARREL

*MILITARY SPECIFICATION CONTACTS

STANDARD FINISH:
0.000050 inch [1.27μ] gold over
nickel

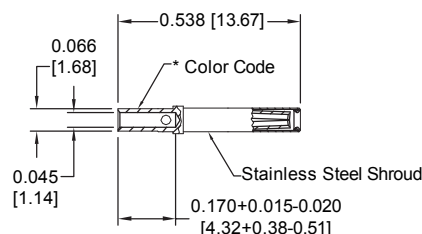
COLOR CODE:

MALE CONTACT:
ORANGE/BLUE/WHITE

FEMALE CONTACT:
ORANGE/BLUE/GRAY

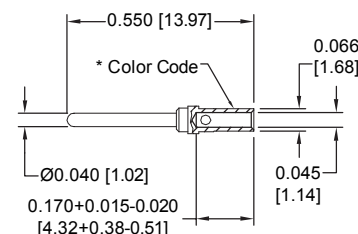
*Note: Connectors can be kitted with
all applicable crimp contacts,
contact Technical Sales for
connector part number.*

FEMALE CONTACT "CLOSED ENTRY" DESIGN



FEMALE PART NUMBER	WIRE SIZE AWG/[mm ²]
*M39029/63-368	20 / 22 / 24 [0.5/0.3/0.25]

MALE CONTACT



MALE PART NUMBER	WIRE SIZE AWG/[mm ²]
*M39029/64-369	20 / 22 / 24 [0.5/0.3/0.25]

INDUSTRIAL / MILITARY LEVEL REMOVABLE CRIMP SIGNAL CONTACT

FOR USE WITH CBC SERIES CONNECTORS

SIZE 20

CLOSED CRIMP BARREL

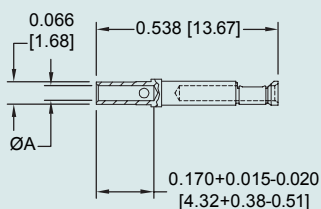


Authentic POSITRONIC™
PosiBand®

These contacts utilize authentic Positronic™ PosiBand® technology.

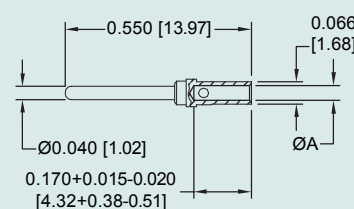
*Note: Connectors can be kitted with
all applicable crimp contacts,
contact Technical Sales for
connector part number.*

FEMALE CONTACT "CLOSED ENTRY" DESIGN



FEMALE PART NUMBER	WIRE SIZE AWG/[mm ²]	ØA
FC6020D2	20 / 22 / 24 [0.5/0.3/0.25]	0.045 [1.14]
FC6026D2	26 / 28 / 30 [0.12/0.08/0.05]	0.027 [0.69]

MALE CONTACT



MALE PART NUMBER	WIRE SIZE AWG/[mm ²]	ØA
MC6020D	20 / 22 / 24 [0.5/0.3/0.25]	0.045 [1.14]
MC6026D	26 / 28 / 30 [0.12/0.08/0.05]	0.027 [0.69]

For information regarding crimp tool and crimping tool techniques, see Application Tools section, pages 81-89.



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REMOVABLE CONTACTS

Combo-D
D-Sub

INDUSTRIAL / MILITARY LEVEL REMOVABLE CRIMP SIGNAL CONTACT

FOR USE WITH CBC SERIES CONNECTORS

CONTACTS USED WITH 18 AWG WIRE

SIZE 20



Authentic POSITRONIC™
PosiBand®

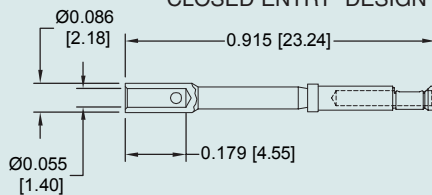
These contacts utilize authentic Positronic™ PosiBand® technology.

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

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

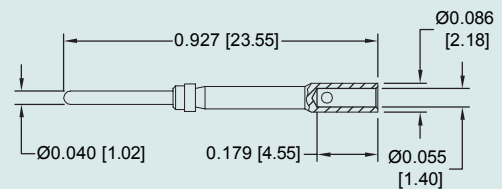
FEMALE CONTACT

“CLOSED ENTRY” DESIGN



FEMALE PART NUMBER	WIRE SIZE AWG/[mm²]
FC6018D2	18 [1.0] max

MALE CONTACT



MALE PART NUMBER	WIRE SIZE AWG/[mm²]
MC6018D	18 [1.0] max

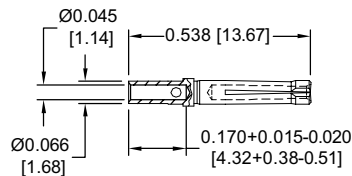
PROFESSIONAL LEVEL REMOVABLE CRIMP SIGNAL CONTACT

FOR USE WITH CBC AND QB SERIES CONNECTORS

SIZE 20

FEMALE CONTACT

“ROBI-D OPEN ENTRY” DESIGN



FEMALE PART NUMBER	WIRE SIZE AWG/[mm²]
FC6520D	20 / 22 / 24 [0.5/0.3/0.25]

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

For information regarding crimp tool and crimping tool techniques, see Application Tools section, pages 81-89.



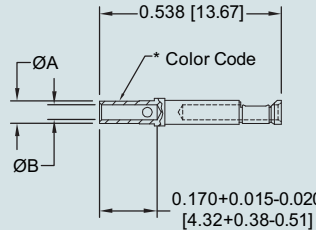
REMOVABLE THERMOCOUPLE CRIMP SIGNAL CONTACT

FOR USE WITH CBC SERIES CONNECTORS

SIZE 20

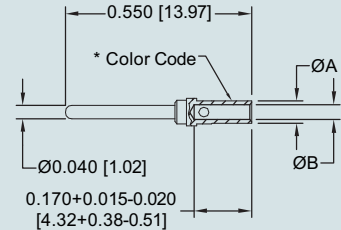
FEMALE CONTACT

"CLOSED ENTRY" DESIGN



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

MALE CONTACT



TYPE	MATERIAL	FEMALE PART NUMBER	MALE PART NUMBER	COLOR CODE	WIRE SIZE AWG [mm ²]	ØA	ØB
K	CHROMEL (+)	FC6020D2CH ^{††}	MC6020DCH [†]	WHITE	20 / 22 / 24 [0.5 / 0.3 / 0.25]	0.066 [1.68]	0.045 [1.14]
		FC6026D2CH	MC6026DCH		26 / 28 / 30 [0.12 / 0.08 / 0.05]	0.048 [1.23]	0.027 [0.69]
	ALUMEL (-)	FC6020D2AL ^{††}	MC6020DAL [†]	GREEN	20 / 22 / 24 [0.5 / 0.3 / 0.25]	0.066 [1.68]	0.045 [1.14]
		FC6026D2AL	MC6026DAL		26 / 28 / 30 [0.12 / 0.08 / 0.05]	0.048 [1.23]	0.027 [0.69]
T	COPPER (+)	FC6020D2CU ^{††}	MC6020DCU [†]	RED	20 / 22 / 24 [0.5 / 0.3 / 0.25]	0.066 [1.68]	0.045 [1.14]
		FC6026D2CU	MC6026DCU		26 / 28 / 30 [0.12 / 0.08 / 0.05]	0.048 [1.23]	0.027 [0.69]
	CONSTANTAN (-)	FC6020D2CO ^{††}	MC6020DCO [†]	YELLOW	20 / 22 / 24 [0.5 / 0.3 / 0.25]	0.066 [1.68]	0.045 [1.14]
		FC6026D2CO	MC6026DCO		26 / 28 / 30 [0.12 / 0.08 / 0.05]	0.048 [1.23]	0.027 [0.69]
E	CHROMEL (+)	FC6020D2CH ^{††}	MC6020DCH [†]	WHITE	20 / 22 / 24 [0.5 / 0.3 / 0.25]	0.066 [1.68]	0.045 [1.14]
		FC6026D2CH	MC6026DCH		26 / 28 / 30 [0.12 / 0.08 / 0.05]	0.048 [1.23]	0.027 [0.69]
	CONSTANTAN (-)	FC6020D2CO ^{††}	MC6020DCO [†]	YELLOW	20 / 22 / 24 [0.5 / 0.3 / 0.25]	0.066 [1.68]	0.045 [1.14]
		FC6026D2CO	MC6026DCO		26 / 28 / 30 [0.12 / 0.08 / 0.05]	0.048 [1.23]	0.027 [0.69]

For more information on the availability of Type J thermocouple contacts, and information about thermocouple contacts with PCB solder termination, please contact Technical Sales.

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[†]Dimensionally equivalent to M39029/64-369

^{††}Dimensionally equivalent to M39029/63-368

REMOVABLE CRIMP POWER CONTACT

FOR USE WITH CBCD SERIES CONNECTORS

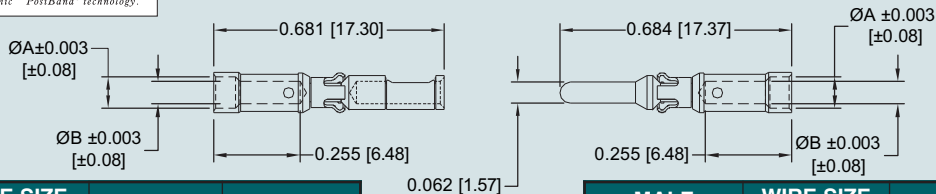
SIZE 16

*1 FEMALE CONTACT

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

MALE CONTACT

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



FEMALE PART NUMBER	WIRE SIZE [AWG] mm ²	ØA	ØB
FC112N4S	12 / [4.0]	N/A	0.098 [2.49]
FC112N4	12 / [4.0]	N/A	0.098 [2.49]
FC114N4	14-16 [2.5-1.5]	0.105 [2.67]	0.081 [2.06]
FC116N4	16-18 [1.5-1.0]	0.093 [2.36]	0.067 [1.70]
FC120N4	20-22-24 [0.5-0.3-0.25]	0.065 [1.65]	0.045 [1.14]

"S" in part number indicates high conductivity copper alloy material.

MALE PART NUMBER	WIRE SIZE [AWG] mm ²	ØA	ØB
MC112NS-133.0	12 / [4.0]	N/A	0.098 [2.49]
MC112N-133.0	12 / [4.0]	N/A	0.098 [2.49]
MC114N-133.0	14-16 [2.5-1.5]	0.105 [2.67]	0.081 [2.06]
MC116N-133.0	16-18 [1.5-1.0]	0.093 [2.36]	0.067 [1.70]
MC120N-133.0	20-22-24 [0.5-0.3-0.25]	0.065 [1.65]	0.045 [1.14]

*1 NOTE: 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 tool and crimping tool techniques, see Application Tools section, pages 81-89.



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REMOVABLE CONTACTS

Combo-D
D-Sub

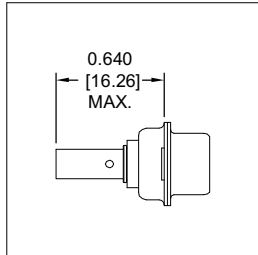
REMOVABLE CRIMP POWER CONTACT

FOR USE WITH CBD, CBC, CBCD AND CBDD SERIES CONNECTORS

SIZE 8

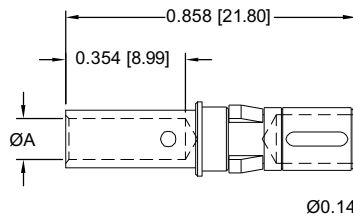
Note: Connectors can be kitted with all applicable crimp contacts, contact Technical Sales for connector part number.

For contact current rating, see page 4.

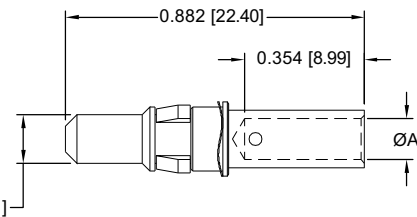


*1 FEMALE CONTACT

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



MALE CONTACT



FEMALE PART NUMBER	WIRE SIZE [AWG] mm ²	Ø A
FC4008DS	8 [10.0]	0.181 [4.60]
FC4008D	8 [10.0]	0.181 [4.60]
FC4010D	10 [5.3]	0.122 [3.10]
FC4012D	12 [4.0]	0.101 [2.57]
FC4016D	16 [1.5]	0.067 [1.70]

"S" in part number indicates high conductivity copper alloy material.

MALE PART NUMBER	WIRE SIZE [AWG] mm ²	Ø A
MC4008DS	8 [10.0]	0.181 [4.60]
MC4008D	8 [10.0]	0.181 [4.60]
MC4010D	10 [5.3]	0.122 [3.10]
MC4012D	12 [4.0]	0.101 [2.57]
MC4016D	16 [1.5]	0.067 [1.70]

*1 NOTE: 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.

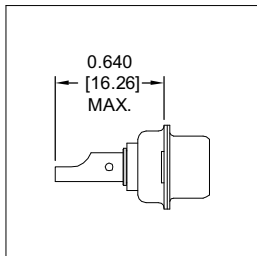
REMOVABLE SOLDER CUP POWER CONTACT

FOR USE WITH CBD, CBC, CBCD AND CBDD SERIES CONNECTORS

SIZE 8

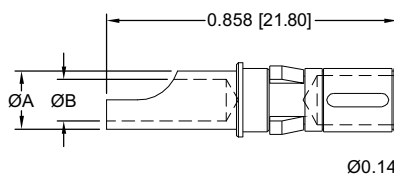
Note: Connectors can be kitted with all applicable crimp contacts, contact Technical Sales for connector part number.

For contact current rating, see page 4.

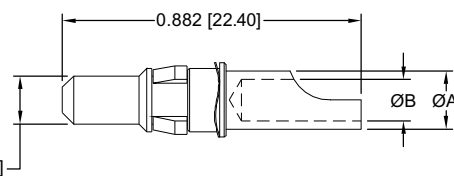


*1 FEMALE CONTACT

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



MALE CONTACT



FEMALE PART NUMBER	WIRE SIZE [AWG] mm ²	Ø A	Ø B
FS4008D	8 [10.0]	0.219 [5.56]	0.188 [4.78]
FS4012D	12 [4.0]	0.143 [3.63]	0.112 [2.84]
FS4016D	16 [1.5]	0.100 [2.54]	0.069 [1.75]

MALE PART NUMBER	WIRE SIZE [AWG] mm ²	Ø A	Ø B
MS4008D	8 [10.0]	0.219 [5.56]	0.188 [4.78]
MS4012D	12 [4.0]	0.143 [3.63]	0.112 [2.84]
MS4016D	16 [1.5]	0.100 [2.54]	0.069 [1.75]

*1 NOTE: 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 tool and crimping tool techniques, see Application Tools section, pages 81-89.



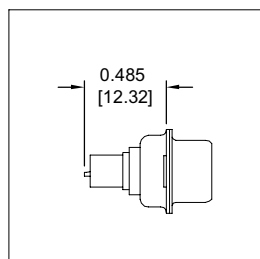
REMOVABLE HIGH VOLTAGE POWER CONTACT

FOR USE WITH CBD, CBC, CBCD AND CBDD SERIES CONNECTORS

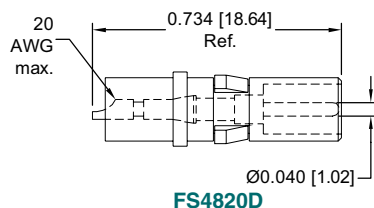
SIZE 8

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

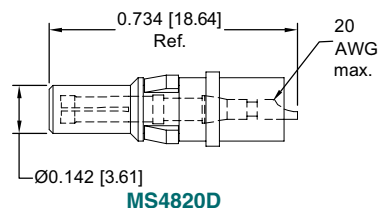
STRAIGHT SOLDER WIRE TERMINATION



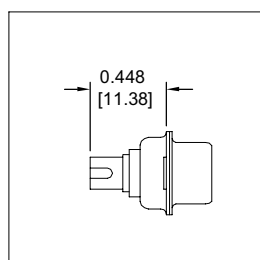
FEMALE CONTACT



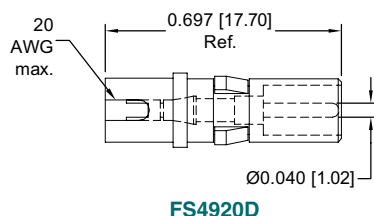
MALE CONTACT



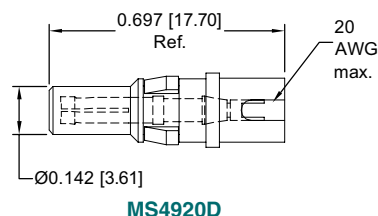
RIGHT ANGLE (90°) SOLDER WIRE TERMINATION



FEMALE CONTACT



MALE CONTACT



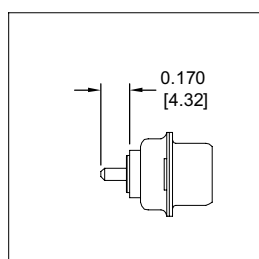
STRAIGHT PRINTED BOARD MOUNT POWER CONTACT

FOR USE WITH CBD AND CBDD SERIES CONNECTORS

SIZE 8

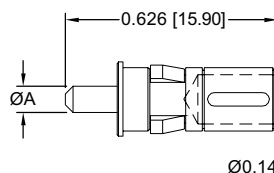
For contact current rating, see page 4.

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

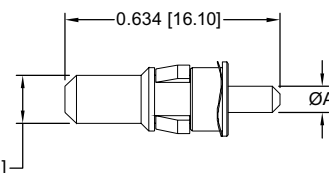


*1 FEMALE CONTACT

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



MALE CONTACT



FEMALE PART NUMBER	A Ø	CONTACT CODE
FDS4314D	0.078 [1.98]	35
FDS4312D	0.094 [2.39]	36
FDS4310D	0.125 [3.18]	37

MALE PART NUMBER	A Ø	CONTACT CODE
MDS4314D	0.078 [1.98]	35
MDS4312D	0.094 [2.39]	36
MDS4310D	0.125 [3.18]	37

*1 NOTE: 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 tool and crimping tool techniques, see Application Tools section, pages 81-89.



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REMOVABLE CONTACTS

Combo-D
D-Sub

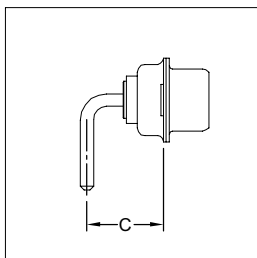
RIGHT ANGLE (90°) PRINTED BOARD MOUNT POWER CONTACT

FOR USE WITH CBD AND CBDD SERIES CONNECTORS

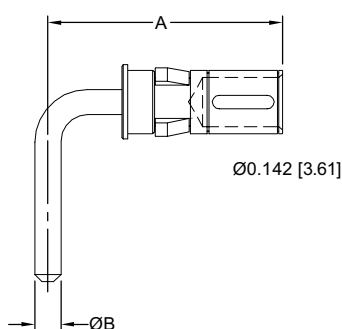
SIZE 8

For contact current rating, see page 4.

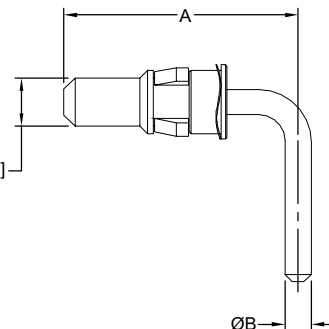
Note: Connectors can be kitted with all applicable crimp contacts, contact Technical Sales for connector part number.



***1 FEMALE CONTACT**
“CLOSED ENTRY” DESIGN, L.S.A.



MALE CONTACT



FEMALE PART NUMBER	A REF.	Ø B	C	SHELL SIZE	CONTACT CODE
FRT4314D	0.580 [14.73]	0.078 [1.98]	0.339 [8.61]	1, 2, 3 & 4	55
FRT4414D	0.692 [17.58]	0.078 [1.98]	0.451 [11.46]	5	55
FRT4714D	0.661 [16.79]	0.078 [1.98]	0.420 [10.67]	1, 2, 3 & 4	75
FRT4814D	0.773 [19.63]	0.078 [1.98]	0.520 [13.21]	5	75
FRT4310D	1.051 [26.70]	0.125 [3.18]	0.810 [20.57]	1, 2, 3 & 4	57
FRT4410D	1.051 [26.70]	0.125 [3.18]	0.810 [20.57]	5	57

MALE PART NUMBER	A REF.	Ø B	C	SHELL SIZE	CONTACT CODE
MRT4314D	0.580 [14.73]	0.078 [1.98]	0.339 [8.61]	1, 2, 3 & 4	55
MRT4414D	0.692 [17.58]	0.078 [1.98]	0.451 [11.46]	5	55
MRT4714D	0.661 [16.79]	0.078 [1.98]	0.420 [10.67]	1, 2, 3 & 4	75
MRT4814D	0.773 [19.63]	0.078 [1.98]	0.520 [13.21]	5	75
MRT4310D	1.051 [26.70]	0.125 [3.18]	0.810 [20.57]	1, 2, 3 & 4	57
MRT4410D	1.051 [26.70]	0.125 [3.18]	0.810 [20.57]	5	57

***1 NOTE:** 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 tool and crimping tool techniques, see Application Tools section, pages 81-89.



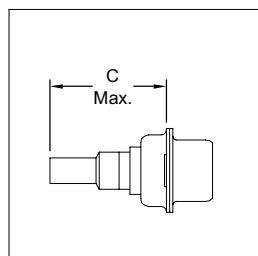
REMOVABLE SHIELDED CONTACT

FOR USE WITH CBD, CBC, CBCD AND CBDD SERIES CONNECTORS

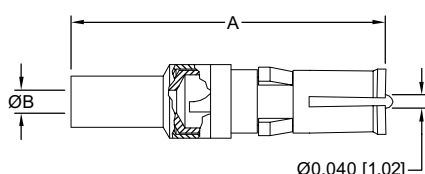
SIZE 8

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

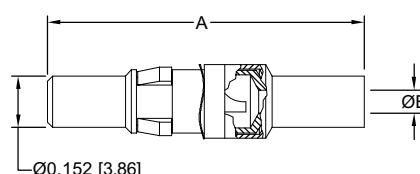
STRAIGHT SOLDER/CRIMP CONTACTS



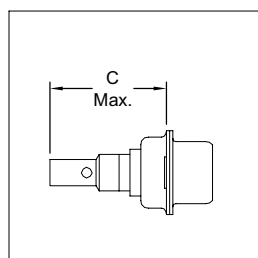
FEMALE CONTACT



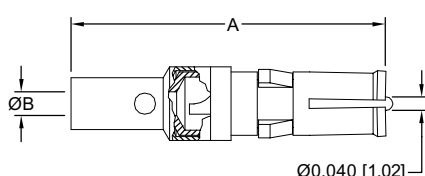
MALE CONTACT



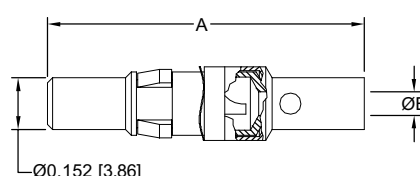
STRAIGHT SOLDER/SOLDER CONTACTS



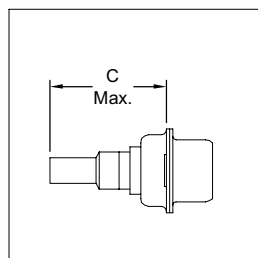
FEMALE CONTACT



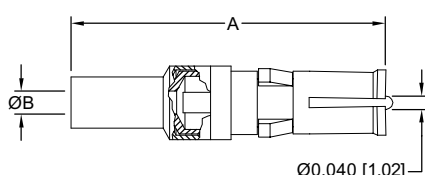
MALE CONTACT



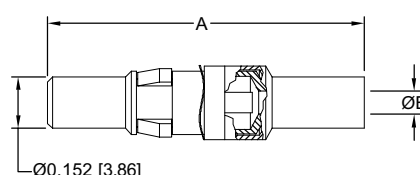
STRAIGHT CRIMP/CRIMP CONTACTS



FEMALE CONTACT



MALE CONTACT



TYPE OF CONTACT	FEMALE PART NUMBER	MALE PART NUMBER	A	Ø B	C MAX.	RG CABLE NUMBER
SOLDER/CRIMP	FC4101D	MC4101D	0.929 [23.60]	0.040 [1.02]	0.739 [18.77]	178 B/U 196 B/U
SOLDER/CRIMP	FC4102D	MC4102D	0.929 [23.60]	0.067 [1.70]	0.739 [18.77]	179 B/U 316 /U
SOLDER/CRIMP	FC4103D	MC4103D	1.037 [26.34]	0.108 [2.74]	0.847 [21.51]	180 B/U
SOLDER/CRIMP	FC4104D	MC4104D	1.037 [26.34]	0.120 [3.05]	0.847 [21.51]	58 B/U
SOLDER/SOLDER	FS4101D	MS4101D	0.929 [23.60]	0.040 [1.02]	0.739 [18.77]	178 B/U 196 B/U
SOLDER/SOLDER	FS4102D	MS4102D	0.929 [23.60]	0.067 [1.70]	0.739 [18.77]	179 B/U 316 /U
SOLDER/SOLDER	FS4103D	MS4103D	1.037 [26.34]	0.108 [2.74]	0.847 [21.51]	180 B/U
SOLDER/SOLDER	FS4104D	MS4104D	1.037 [26.34]	0.120 [3.05]	0.847 [21.51]	58 B/U
CRIMP/CRIMP	FCC4101D	MCC4101D	0.929 [23.60]	0.040 [1.02]	0.739 [18.77]	178 B/U 196 B/U
CRIMP/CRIMP	FCC4102D	MCC4102D	0.929 [23.60]	0.067 [1.70]	0.739 [18.77]	179 B/U 316 /U
CRIMP/CRIMP	FCC4103D	MCC4103D	1.037 [26.34]	0.108 [2.74]	0.847 [21.51]	180 B/U
CRIMP/CRIMP	FCC4104D	MCC4104D	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 tool and crimping tool techniques, see Application Tools section, pages 81-89.



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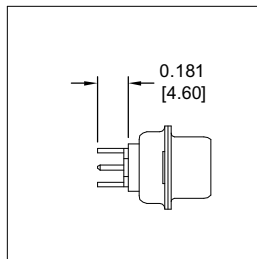
REMOVABLE CONTACTS

Combo-D
D-Sub

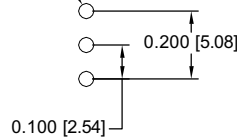
STRAIGHT PRINTED BOARD MOUNTED SHIELDED CONTACT FOR USE WITH CBD AND CBDD SERIES CONNECTORS

SIZE 8

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

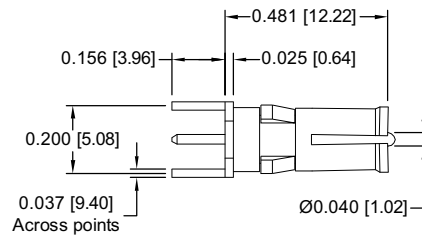


Suggest $\varnothing 0.045$
[1.14] hole



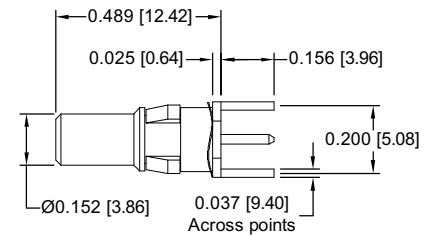
CONTACT HOLE PATTERN

FEMALE CONTACT



FDS4201D

MALE CONTACT

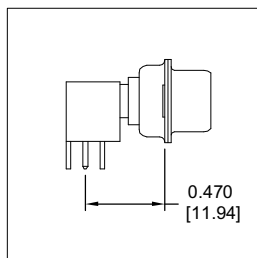


MDS4201D

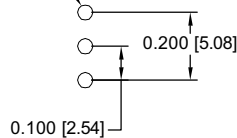
RIGHT ANGLE (90°) PRINTED BOARD MOUNT SHIELDED CONTACTS FOR USE WITH CBD AND CBDD SERIES CONNECTORS

SIZE 8

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

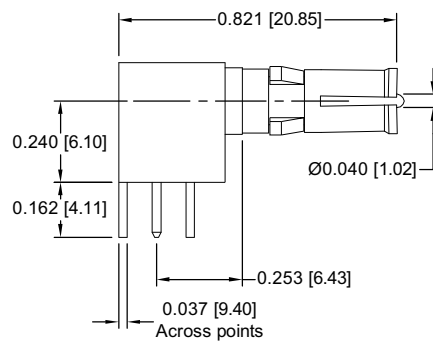


Suggest $\varnothing 0.045$
[1.14] hole



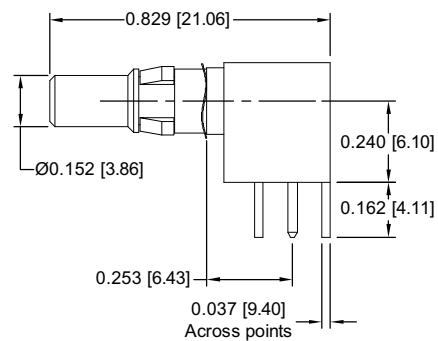
CONTACT HOLE PATTERN

FEMALE CONTACT



FRT4201D

MALE CONTACT



MRT4201D

For information regarding crimp tool and crimping tool techniques, see Application Tools section, pages 81-89.



REMOVABLE AIR LINE COUPLERS

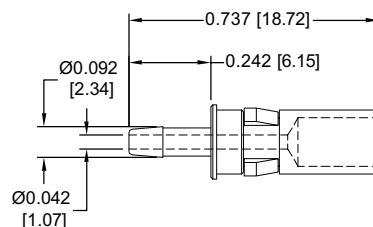
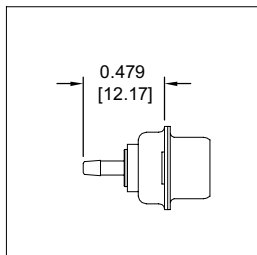
FOR USE WITH CBD, CBC, CBCD AND CBDD SERIES CONNECTORS

SIZE 8

AIR LINE COUPLER CONTACTS
REQUIRE JACKSCREWS TO
COUPLE MATING CONNECTORS

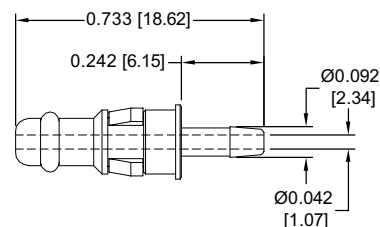
*Note: Connectors can be kitted with
all applicable crimp contacts,
contact Technical Sales for
connector part number.*

FEMALE CONTACT



FA4063S

MALE CONTACT



MA4063S



TECHNICAL CHARACTERISTICS

MATERIALS AND FINISHES:

Contacts: Stainless steel

MECHANICAL CHARACTERISTICS:

Size 8 Removable
Contacts:

Rear insertion, front release.

CLIMATIC CHARACTERISTICS:

Temperature Range: -55°C to +125°C.

CONTACT TECHNICAL SALES FOR MORE INFORMATION!

For information regarding crimp tool and crimping tool techniques, see Application Tools section, pages 81-89.

POSITRONIC PRODUCTS

Power

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



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

D-subminiature

Contact Sizes: 8, 16, 20 and 22
Current Ratings: To 40 amperes nominal
Terminations: Crimp, wire solder, straight solder, right angle (90°) solder and straight press-fit
Configurations: Multiple variants in both standard and high densities
Qualifications: MIL-DTL-24308, Goddard Space Flight S-311-P, SAE AS 39029, IP65, IP67



FEATURES: Four performance levels available: professional, industrial, military and space-flight quality for best cost/performance ratio • Options include thermocouple contacts, air coupling, environmentally sealed and dual port package including mixed density • Broad selection of accessories

Rectangular

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



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

Circular

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



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

Cable

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



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

Hermetic

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



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

For more information, visit www.connectpositronic.com or call your nearest Positronic sales office as given on the back of this catalog.

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Factory Sales and Engineering Offices (800) 641-4054

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Factory Sales and Engineering Offices (800) 872-7674

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Italy Sales Office	39 02 54 1161 06	rmagni@connectpositronic.com
Germany Sales Office	49 2351 63 47 39	cbouche@connectpositronic.com
UK Sales Office	44 1993 831 939	lbridwell@connectpositronic.com

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MIDEAST, Technical Agents

Technical Agents in Israel and Turkey



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singapore@connectpositronic.com

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