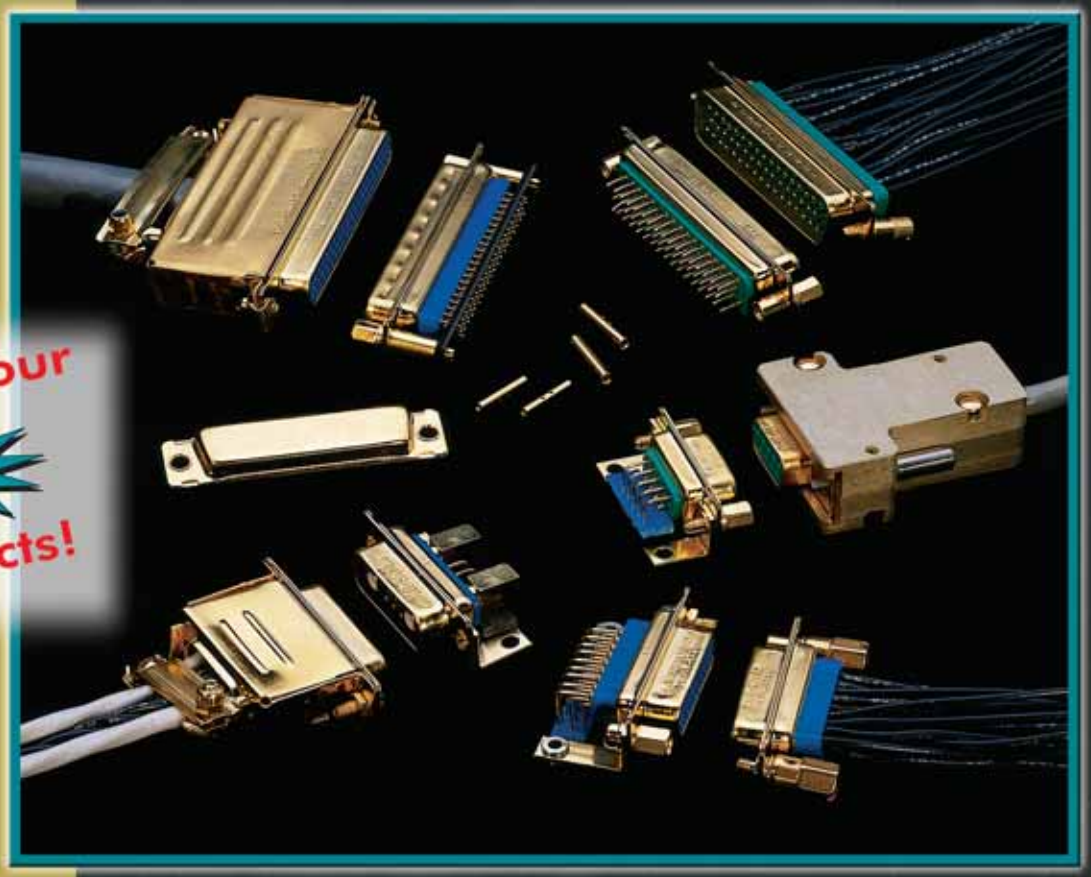
Positronic Industries

High Performance D-subminiature Connectors

Authentic Positronic D-subminiature Connectors

Suitable for use in any applications requiring high performance, non-outgassing and non-magnetic characteristics.



Look for our NEW! Products!

Goddard Space Flight Center S-311-P-4
Goddard Space Flight Center S-311-P-10
MIL-DTL-24308 Class M

Catalog C-005 Rev. A1

www.connectpositronic.com

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Connector Excellence®

POSITRONIC INDUSTRIES

About Us

Founded in 1966, Positronic Industries is a vertically integrated manufacturer of high quality interconnect products. Positronic has earned the worldwide reputation as a service oriented, quick-reaction, top quality connector supplier. We are committed to maintaining this reputation by continuous implementation of our **Complete Capability** concept.

Complete Capability



Machining

Design & Development

- Designs new connectors and modifies existing connectors to meet industry requirements
- Continuously conducts marketing studies to identify industry needs for new products
- Ongoing interest in unique connector designs

Tooling

- Tooling support for all manufacturing areas within company
- Provides 80% of new tooling, punch press dies, molds, jigs and fixtures used at Positronic factory locations worldwide

Machining

- Automatic screw machines produce finely crafted contacts and hardware for connector bodies
- Trained technicians operate machines from Tornos, Bechler and Brown & Sharpe



Molding

Molding

- Molds all plastic connector components such as insulators, hoods, angle brackets and more
- Overmold capability available

Plating

- Applies gold and other metal finishes to connector components to any required thickness
- Plating conforms to all military specifications

Quality Assurance Lab

- Quality assurance system certified to ISO 9001
- Maintains aggressive TQM program
- Able to test to IEC, EIA, UL, MIL-DTL-24308, MIL-DTL-28748, SAE AS 39029 and MIL-C-85049 requirements



Finished Stock Inventory

Finished Stock Inventory

- Each main factory location maintains a large inventory of connector components and accessories
- Same day shipments available on many standard connector products
- Stocking agreements available for qualified customers

Worldwide Sales & Service

- Responsive attitude toward customer needs
- Fully trained sales staff located worldwide

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

Patented in Canada, 1992 Other Patents Pending

Unless otherwise specified, **dimensional tolerances** are:

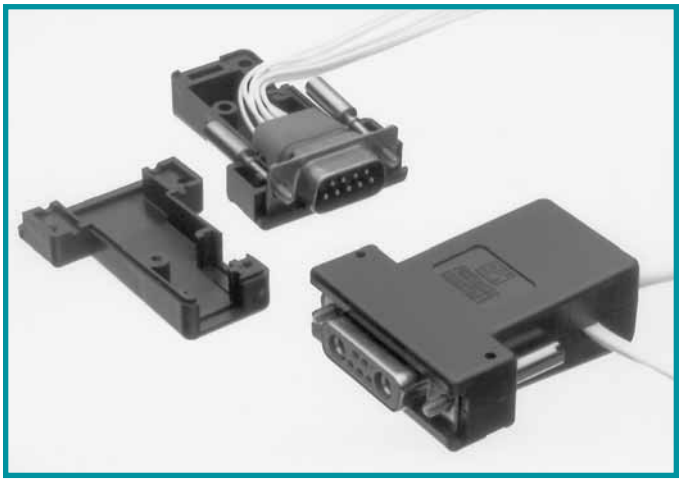
1] ±0.001 inches [0.03 mm] for male contact mating diameters.
2] ±0.003 inches [0.08 mm] for contact termination diameters.
3] ±0.005 inches [0.13 mm] for all other diameters.
4] ±0.015 inches [0.38 mm] for all other dimensions.

Positronic Industries believes the data contained herein to be reliable. Since the technical information is given free of charge, the User employs such information at his own discretion and risk. Positronic Industries assumes no responsibility for results obtained or damages incurred from use of such information in whole or in part.

Positronic Industries' FEDERAL SUPPLY CODE (Cage Code) FOR MANUFACTURERS is 28198

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THIS CATALOG SHOULD BE ACCOMPANIED BY A COPY OF POSITRONIC INDUSTRIES' SUBMINIATURE-D CONNECTOR AND CABLE ACCESSORY CATALOG.

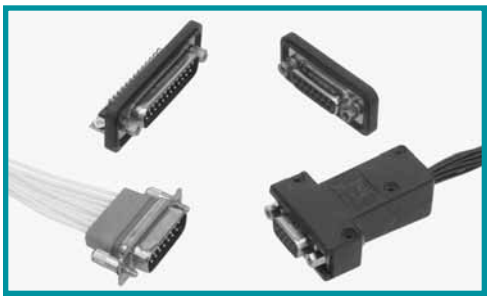


ADDITIONAL SPECIAL APPLICATION SUBMINIATURE-D CONNECTOR CATALOGS ARE AVAILABLE UPON REQUEST. CONTACT OUR TECHNICAL SALES OFFICE OR YOUR DISTRICT SALES MANAGER FOR COPIES OF THESE CATALOGS:

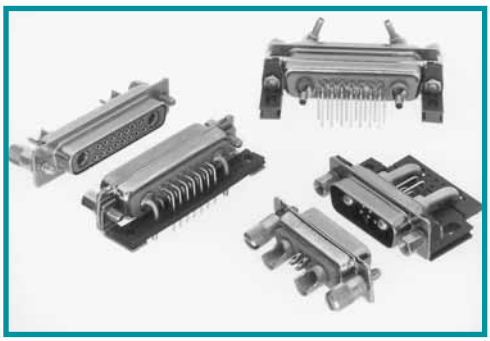
INDUSTRIAL & HIGH PERFORMANCE SUBMINIATURE-D CONNECTORS



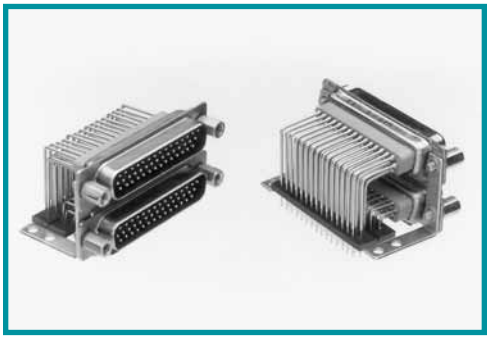
ENVIRONMENTAL-D CONNECTORS



COMBO-D CONNECTORS



DUAL-PORT CONNECTORS



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Maximum Torque Values for 4-40 UNC Threads

MATERIAL	TORQUE		
	Nm	in-lb	in-oz
Phos. Bronze	0.90	8.0	128
Brass	0.68	6.0	96
Aluminum	0.45	4.0	64
Nylon	0.11	1.0	16

These torque values are applicable for threads only and do not apply to hardware assemblies. These torque values are approximate and should not be accepted as accurate limits. Indeterminant factors in specific applications preclude the publication of accurate torque values for universal use.

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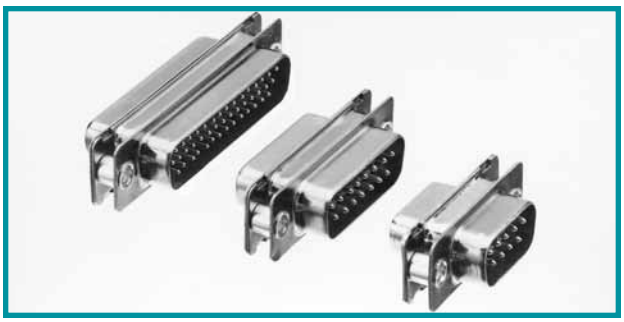












CONNECTOR DESCRIPTIONS

SND NORMAL DENSITY SUBMINIATURE-D CONNECTORS

SND Series. Removable or fixed contacts, 7.5 ampere nominal rating. Crimp, solder and straight and 90˚ printed board mount contact terminations. Five connector variants, 9 through 50 contacts. Military quality connectors compatible with MIL-DTL-24308, conforming to GSFC-S-311-P-4 and GSFC-S-311-P-10 where applicable.

SDD HIGH DENSITY SUBMINIATURE-D CONNECTORS

SDD Series. Removable or fixed contacts, 5 ampere nominal rating. Crimp and straight and 90˚ printed board contact terminations. Six connector variants, 15 through 104 contacts. Military quality connectors compatible with MIL-DTL-24308, conforming to GSFC-S-311-P-4 where applicable.

SCBM COMBINATION SUBMINIATURE-D CONNECTORS

Fixed signal contacts, Size 20, 7.5 ampere nominal rating. Size 8 shielded and power contacts. Solder cup and printed board mount contact terminations available on both Size 20 and Size 8 contacts. Twenty-two connector variants, 2WK2 through 46W4, using shell sizes 1 through 6. Military quality connectors compatible with MIL-DTL-24308, conforming to GSFC-S-311-P-4 and GSFC-S-311-P-10 where applicable.

SIZE 8 REMOVABLE CONTACTS POWER, SHIELDED AND HIGH VOLTAGE

Shielded and high voltage and power crimp and solder terminations. Functional in SCBM and SCBC connector bodies.

SCBC COMBINATION SUBMINIATURE-D CONNECTORS WITH REMOVABLE CRIMP CONTACTS

Size 20 signal and Size 8 shielded and power removable contacts. Fourteen connector variants, shell sizes 1 through 5. Military quality connectors compatible with MIL-DTL-24308, conforming to GSFC-S-311-P-4 where applicable.

NORMAL AND HIGH DENSITY SUBMINIATURE-D CONNECTOR SAVERS

SAD, SADD and SACBM Series connector savers. Normal density, 9 through 50 contacts. High density, 15 through 104 contacts. Combination size 20 contact/ Size 8 contact connectors using shell sizes 1 through 6.

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Offering. . . .

NEW!

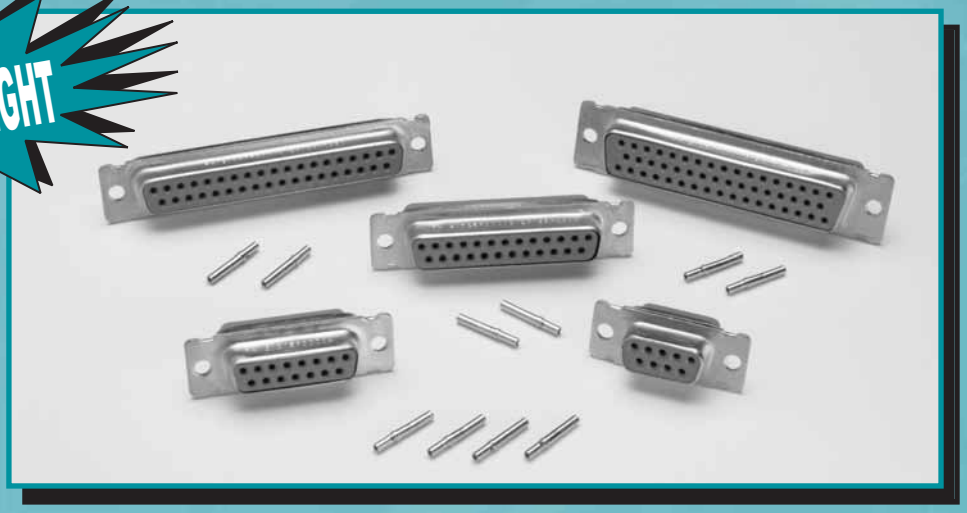
SND/SDD/SCBM/SCBC Series

Lightweight

Subminiature-D Connectors

Positronic Industries has developed a new lightweight aluminum shell option for its popular D-subminiature connector line. These aluminum shells, which conform to the dimensional requirements of our standard brass shells, are identical in appearance and are suitable for use in any application requiring high performance, non-outgassing and non-magnetic characteristics. The important difference is a significant reduction in weight, which translates to savings in any weight sensitive application.

LIGHTWEIGHT



SAVE $

SAVE $

Weight comparison between SND Female Connectors			
Size/Gender	Weight in ounces		Weight Difference in ounces
	Brass	Aluminum	
9F	0.192	0.128	0.064
15F	0.256	0.192	0.064
25F	0.380	0.256	0.124
37F	0.530	0.384	0.146
50F	0.620	0.488	0.172

Goddard Space Flight Center S-311-P-4
Goddard Space Flight Center S-311-P-10
MIL-DTL-24308 Class M

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SND Series

NORMAL DENSITY SUBMINIATURE-D CONNECTORS

HIGH PERFORMANCE, NON-OUTGASSING, NON-MAGNETIC

Positronic Industries
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Size 20 Contacts

Removable Crimp
or
Fixed Contact
Printed Board Mount



SND Series are suitable for use in any applications requiring high performance, non-outgassing and non-magnetic characteristic. These removable crimp contact or fixed contact printed board mount connectors conform to all materials, dimensional and performance requirements of MIL-DTL-24308, GSFC S-311-P-4 and GSFC S-311-P-10, as well as the outgassing requirements of ASTM E-595 and NASA-RP-1124.

SND Series connectors utilize precision machined contacts. The female contact features a rugged closed entry design contact with a brass shroud.

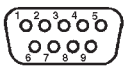
Five standard connector variants are offered in arrangements of 9, 15, 25, 37 and 50 contacts. Each connector variant is available with contact terminations for crimp, solder and straight and 90˚ printed board terminations with inch and metric footprints. SND Series connectors are mateable and compatible with all D-subminiature connectors conforming to materials and dimensional requirements of IEC 807-2 and MIL-DTL-24308.

Non-magnetic cable supports and jackscrew systems are available.

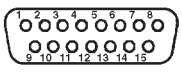
Visual and mechanical inspection per MIL-DTL-24308 is performed, additional testing is available. Contact Technical Sales.

CONTACT VARIANTS

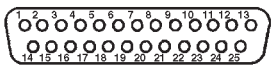
FACE VIEW OF MALE OR REAR VIEW OF FEMALE



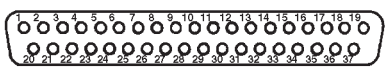
SND 9



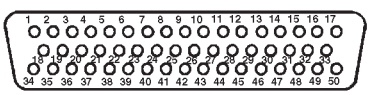
SND 15



SND 25



SND 37



SND 50

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TECHNICAL CHARACTERISTICS

MATERIALS AND FINISHES:

Insulator: Glass-filled DAP per ASTM-D-5948, Type SDG-F, UL 94V-0, ASTM E-595, NASA-RP-1124, green color.

Contacts: **Male Contacts:** Precision-machined brass alloy. **Female Contacts:** Precision machined high tensile copper alloy with brass shroud.

Contact Plating: 0.000050 inch [1.27 microns] gold over copper plate.

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

NEW! **Lightweight Shell Option:** Aluminum with 0.000050 inch [1.27 microns] gold over non-magnetic electroless nickel.

Mounting Spacers and Brackets: Brass with 0.000050 inch [1.27 microns] gold over copper plate.

NEW! **Lightweight Spacer Option:** Aluminum with 0.000050 inch [1.27 microns] gold over non-magnetic electroless nickel.

NEW! **Lightweight Bracket Option:** Glass-filled polyester per MIL-M-24519, UL 94V-0 blue color.

Push-On Fasteners: Phosphor bronze or beryllium copper 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.

Hoods: Brass with 0.000050 inch [1.27 microns] gold over copper plate or aluminum with yellow chromate conversion or black anodize finish.

ELECTRICAL CHARACTERISTICS:

Contact Current Rating: 7.5 amps, nominal.
Initial Contact Resistance: 0.005 ohms, maximum.
Proof Voltage: 1,000 V r.m.s.
Insulation Resistance: 5 G ohms.
Clearance and Creepage Distance: 0.039 inch [1.0 mm], minimum.
Working Voltage: 300 V r.m.s.
Residual Magnetism: 20 Gamma, maximum.

MECHANICAL CHARACTERISTICS:

Fixed Contacts: Size 20 contacts. **Male Contact:** 0.040 inch [1.02 mm] diameter. **Female Contact:** Closed entry design with brass shroud.

Removable Contacts: Insert contact to rear face of insulator and release from rear face of insulator. Size 20 contact. **Male Contact:** 0.040 inch [1.02 mm] diameter. **Female Contact:** Closed entry design with brass shroud.

Contact Retention in Insulator: 9 lbs. [40 N].

Resistance to Solder Iron Heat: 650˚F [350˚C] for 10 seconds duration per IEC 512-6, solder cup contacts.

Contact Terminations:
Closed Barrel Crimp: Wire sizes 20 AWG [0.5 mm^2] through 30 AWG [0.05 mm^2].
Solder Contacts: 0.042 inch [1.06 mm] minimum hole diameter in solder style contact for 20 AWG [0.5 mm^2] wire maximum.
Straight Printed Board Mount: 0.028 inch [0.71 mm] diameter and 0.024 inch [0.61 mm] diameter.
90˚ Printed Board Mount: 0.028 [0.71 mm] diameter for Inch System footprint, and 0.024 inch [0.64 mm] diameter for European Metric footprint.

Shells: Male shells may be dimpled for EMI/ESD ground paths.

Polarization: Trapezoidally shaped shells and polarized jackscrews.

Mounting to Angle Brackets: Jackscrews and riveted fasteners with 0.120 inch [3.05 mm] clearance hole, and threaded riveted fasteners with 4-40 thread and polyester lock inserts.

Mounting to Printed Board: Rapid installation push-on fasteners and mounting posts.

Locking Systems: Jackscrews.

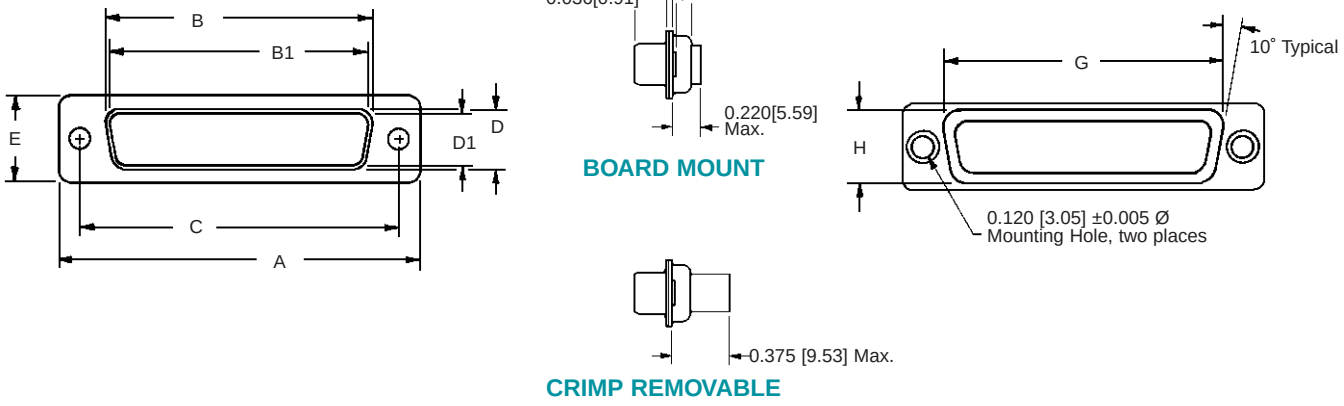
Mechanical Operations: 1,000 operations minimum per IEC 512-5.

CLIMATIC CHARACTERISTICS:

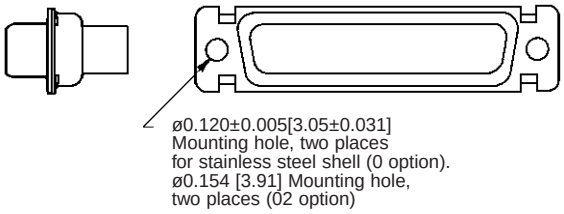
Temperature Range: -55˚C to +125˚C.
Damp Heat, Steady State: 21 days.

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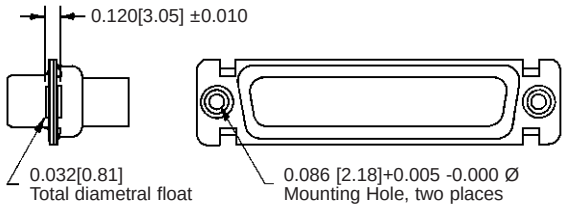
STANDARD SHELL ASSEMBLY



OPTIONAL SHELL ASSEMBLY (0, 02)



OPTIONAL SHELL ASSEMBLY WITH UNIVERSAL FLOAT MOUNTS (F)



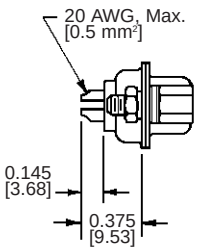
CONNECTOR VARIANT SIZES	A ±0.015	B ±0.005	B1 ±0.005	C ±0.005	D ±0.005	D1 ±0.005	E ±0.015	G ±0.010	H ±0.010	K ±0.005	M ±0.010
SND 9 M	1.213 [30.81]		0.666 [16.92]	0.984 [24.99]		0.329 [8.36]	0.494 [12.55]	0.759 [19.28]	0.422 [10.72]	0.233 [5.92]	0.422 [10.72]
SND 9 F	1.213 [30.81]	0.643 [16.33]		0.984 [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]
SND 15 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]
SND 15 F	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]
SND 25 M	2.088 [53.04]		1.534 [38.96]	1.852 [47.04]		0.329 [8.36]	0.494 [12.55]	1.625 [41.28]	0.422 [10.72]	0.230 [5.84]	0.426 [10.82]
SND 25 F	2.088 [53.04]	1.511 [38.38]		1.852 [47.04]	0.311 [7.90]		0.494 [12.55]	1.625 [41.28]	0.422 [10.72]	0.243 [6.17]	0.429 [10.90]
SND 37 M	2.729 [69.32]		2.182 [55.42]	2.500 [63.50]		0.329 [8.36]	0.494 [12.55]	2.272 [57.71]	0.422 [10.72]	0.230 [5.84]	0.426 [10.82]
SND 37 F	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]
SND 50 M	2.635 [66.93]		2.079 [52.81]	2.406 [61.11]		0.441 [11.20]	0.605 [15.37]	2.178 [55.32]	0.534 [13.56]	0.230 [5.84]	0.426 [10.82]
SND 50 F	2.635 [66.93]	2.064 [52.43]		2.406 [61.11]	0.423 [10.74]		0.605 [15.37]	2.178 [55.32]	0.534 [13.56]	0.243 [6.17]	0.429 [10.90]

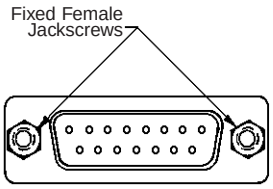
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SOLDER CUP CONNECTOR

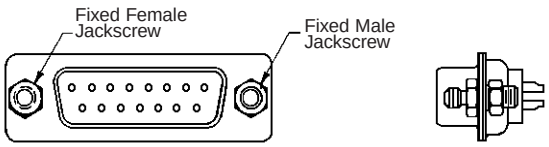
CODE 2





For solder contacts, specify Code 2 in Step 4 of the Ordering Information.

Typical Part Number:
SND15M200T2G



Fixed male and female polarized jackscrews available. Specify Code T6 in Step 7 of Ordering Information.

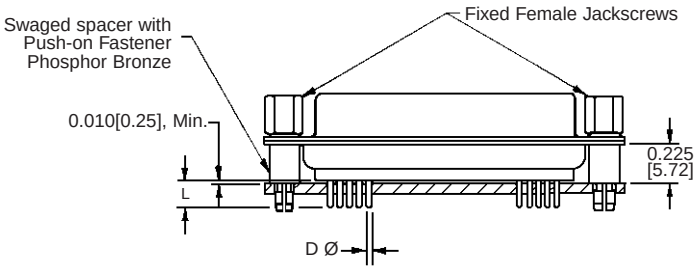
Typical Part Number:
SND15M200T6G

STRAIGHT PRINTED BOARD MOUNT CONNECTOR

CODES 3, 32 AND 36

CODE NUMBER	L	D
3	0.170 [4.32]	0.028 [0.71]
32	0.375 [9.53]	0.028 [0.71]
36	0.236 [6.00]	0.024 [0.61]

For straight printed board mount contacts, specify Code Number in Step 4 of the Ordering Information.



Typical Part Number:
SND25F3S60TG

DIMENSIONS ARE IN INCHES [MILLIMETERS].
ALL DIMENSIONS ARE SUBJECT TO CHANGE.

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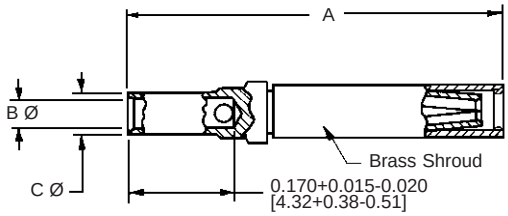
REMOVABLE CRIMP SIGNAL CONTACTS

CODE 1 AND 12

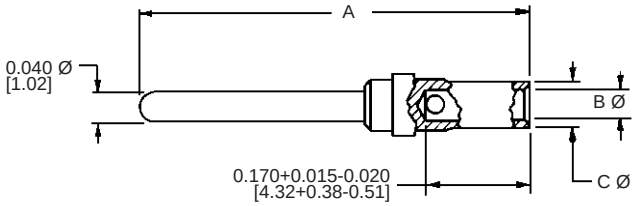
CONTACTS MAY BE SUPPLIED WITH CONNECTOR OR ORDERED SEPARATELY.

CLOSED CRIMP BARREL

FEMALE CONTACT
"CLOSED ENTRY" DESIGN



MALE CONTACT



PART NUMBER	WIRE SIZE AWG/[mm²]	A	B Ø	C Ø
FC6020D-50-1202.1	20 / 22 / 24 [0.5/0.3/0.25]	0.538 [13.67]	0.045 [1.14]	0.066 [1.68]
FC6026D-50-1202.1	26 / 28 / 30 [0.12/0.08/0.05]	0.538 [13.67]	0.027 [0.69]	0.066 [1.68]

Material: Leaded nickel copper.
Plating: 0.000050 inch [1.27 µ] gold over copper.

PART NUMBER	WIRE SIZE AWG/[mm²]	A	B Ø	C Ø
MC6020D-50	20 / 22 / 24 [0.5/0.3/0.25]	0.550 [13.97]	0.045 [1.14]	0.066 [1.68]
MC6026D-50	26 / 28 / 30 [0.12/0.08/0.05]	0.550 [13.97]	0.027 [0.69]	0.066 [1.68]

Material: Brass.
Plating: 0.000050 inch [1.27 µ] gold over copper.

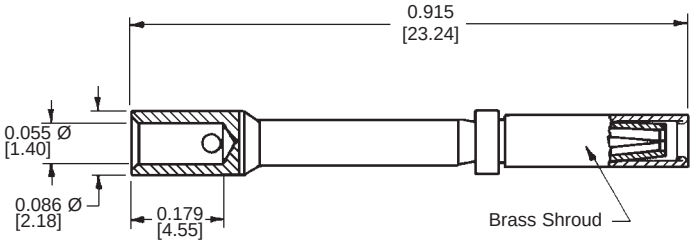
REMOVABLE CRIMP SIGNAL CONTACTS

18 AWG CRIMP CONTACTS

18 AWG [1.0mm²] max.

CONTACTS MUST BE ORDERED SEPARATELY.

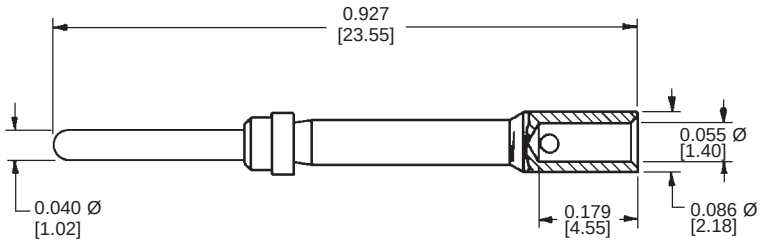
FEMALE CONTACT
"CLOSED ENTRY" DESIGN



Part number:
FC6018M

Material: Leaded nickel copper.
Plating: 0.000050 inch [1.27 µ] gold over copper.

MALE CONTACT



Part number:
MC6018M

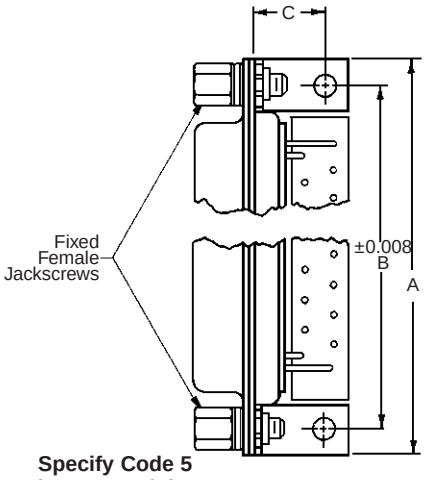
Material: Brass.
Plating: 0.000050 inch [1.27 µ] gold over copper.

For crimping information and crimp tools, see Application Tools section, pages 61-64.

Downloaded from Arrow.com.

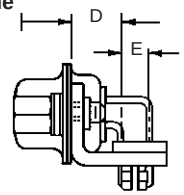
90° PRINTED BOARD MOUNT CONNECTOR

CODE 5, 0.283 [7.19] CONTACT EXTENSION

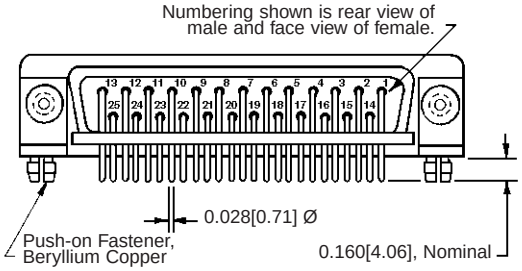


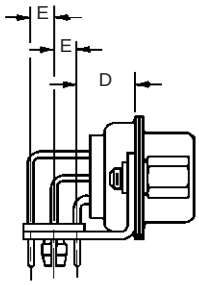
SND**5R7*** 0.283 [7.19] CONTACT EXTENSION					
PART NUMBER	A	B	C	D	E
SND9*5R7***	1.204 [30.58]	0.984 [24.99]	0.339 [8.61]	0.283 [7.19]	0.112 [2.84]
SND15*5R7***	1.532 [38.91]	1.312 [33.32]	0.339 [8.61]	0.283 [7.19]	0.112 [2.84]
SND25*5R7***	2.072 [52.63]	1.852 [47.04]	0.339 [8.61]	0.283 [7.19]	0.112 [2.84]
SND37*5R7***	2.720 [69.09]	2.500 [63.50]	0.339 [8.61]	0.283 [7.19]	0.112 [2.84]
SND50*5R7***	2.626 [66.70]	2.406 [61.11]	0.395 [10.03]	0.283 [7.19]	0.112 [2.84]

Specify Code 5 in Step 4 of the Ordering Information.



Typical Part Number:
SND25M5R7NT2G

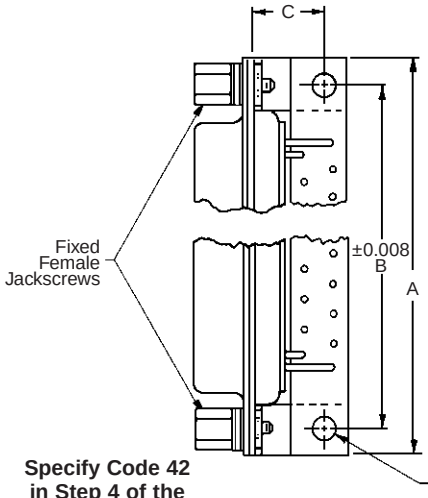




Typical Part Number:
SND50F5R7NTG

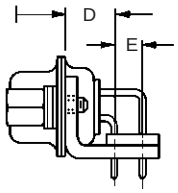
90° PRINTED BOARD MOUNT CONNECTOR

CODE 42, 0.370 [9.40] CONTACT EXTENSION

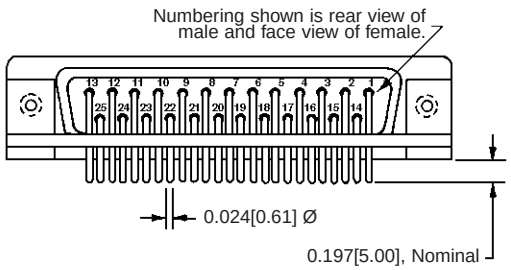


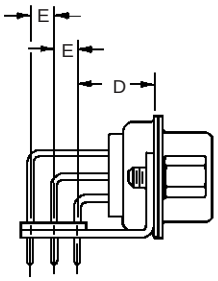
SND**42B3*** 0.370 [9.40] CONTACT EXTENSION					
PART NUMBER	A	B	C	D	E
SND9*42B3***	1.204 [30.58]	0.984 [24.99]	0.420 [10.67]	0.370 [9.40]	0.100 [2.54]
SND15*42B3***	1.532 [38.91]	1.312 [33.32]	0.420 [10.67]	0.370 [9.40]	0.100 [2.54]
SND25*42B3***	2.072 [52.63]	1.852 [47.04]	0.420 [10.67]	0.370 [9.40]	0.100 [2.54]
SND37*42B3***	2.720 [69.09]	2.500 [63.50]	0.420 [10.67]	0.370 [9.40]	0.100 [2.54]
SND5*42B3***	2.626 [66.70]	2.406 [61.11]	0.470 [11.94]	0.370 [9.40]	0.100 [2.54]

Specify Code 42 in Step 4 of the Ordering Information.



Typical Part Number:
SND25M42B30T2G





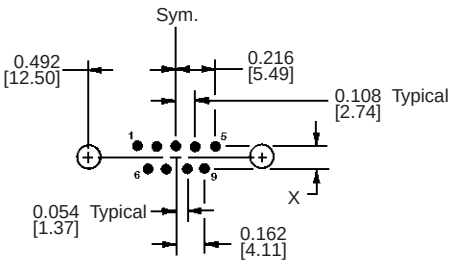
Typical Part Number:
SND50M42B30TG

DIMENSIONS ARE IN INCHES [MILLIMETERS].
ALL DIMENSIONS ARE SUBJECT TO CHANGE.

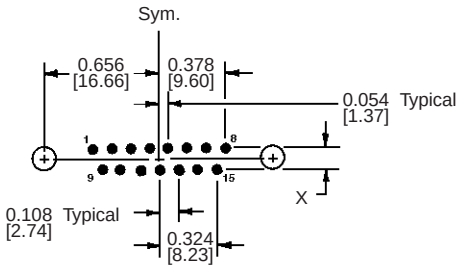
Downloaded from Arrow.com.

90° AND STRAIGHT PRINTED BOARD CONTACT HOLE PATTERN

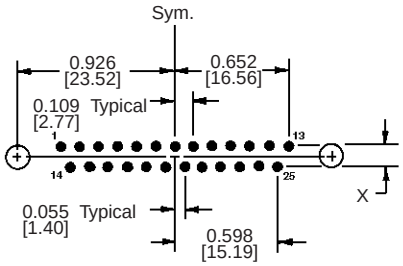
HOLE IDENTIFICATION SHOWN FOR MALE CONNECTOR; USE MIRROR IMAGE FOR FEMALE CONNECTOR.
MOUNT CONNECTOR WITH MATING FACE POSITIONED TO FOLLOW DIRECTION OF ARROWS.



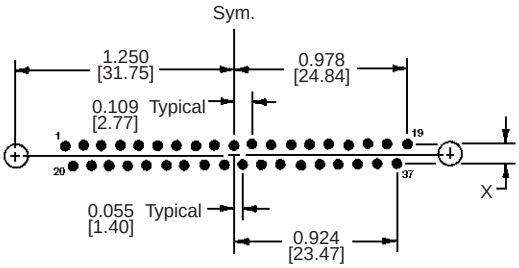
SND9



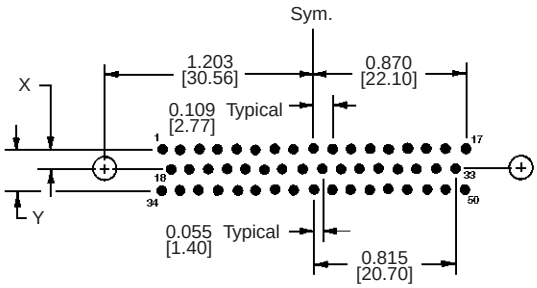
SND15



SND25



SND37



SND50

CODE NUMBER	X	Y
3	0.112 [2.84]	0.224 [5.69]
5	0.112 [2.84]	0.224 [5.69]
32	0.112 [2.84]	0.224 [5.69]
36	0.112 [2.84]	0.224 [5.69]
*42	0.100 [2.54]	0.200 [5.08]

Suggest 0.039 [0.99] Ø hole for 0.024 [0.61] Ø contact termination positions.
Suggest 0.045 [1.14] Ø hole for 0.028 [0.71] Ø contact termination positions.
Suggest 0.123 ±0.003 [3.12] Ø hole for mounting connector with push-on fasteners.

***Metric system, European contact hole pattern.**

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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	SND	37	F	5	B3	0	T2	G	—	

STEP 1 - BASIC SERIES

SND Series

STEP 2 - CONNECTOR VARIANTS

9, 15, 25, 37, 50

STEP 3 - CONNECTOR GENDER

M - Male
F - Female

STEP 4 - CONTACT TERMINATION TYPE

0 - Ordered without contacts.
1 - Crimp, 20 AWG - 24 AWG [0.5 mm^2 - 0.25 mm^2].
12 - Crimp, 26 AWG - 30 AWG [0.12 mm^2 - 0.05 mm^2].
2 - Solder Cup.
3 - Solder, Straight Printed Board Mount with 0.170 [4.32] Tail Length.
32 - Solder, Straight Printed Board Mount with 0.375 [9.52] Tail Length.
36 - Solder, Straight Printed Board Mount with 0.236 [5.99] Tail Length.
42 - Solder, Metric System 90˚ Printed Board Mount with 0.370 [9.40] Contact Extension.
5 - Solder, 90˚ Printed Board Mount with 0.283 [7.19] Contact Extension.

*STEP 5 - MOUNTING STYLE

0 - Mounting Hole, 0.120[3.05] Ø.
02 - Mounting Hole, 0.154[3.91] Ø.
F - Float Mounts, Universal.
P - Threaded Post, Brass, 0.225[5.71] Length.
R2 - Bracket, Mounting, 90˚ Metal, Swaged to Connector with 4-40 Thread Fixed Female Jackscrews with Cross Bar.
R6 - Bracket, Mounting, 90˚ Metal, Swaged to Connector with 0.120 [3.05] Ø Mounting Hole with Cross Bar.
R7 - Bracket, Mounting, 90˚ Metal, Swaged to Connector with 4-40 Threads with Cross Bar.
R8 - Bracket, Mounting, 90˚ Metal, Swaged to Connector with 4-40 Locknut with Cross Bar.
S - Swaged Spacer, 4-40 Threads, 0.225[5.71] Length.
S2 - Swaged Spacer, 4-40 Threads, 0.125[3.18] Length.
S5 - Swaged Locknut, 4-40 Threads.
S6 - Swaged Spacer with Push-on Fastener, 4-40 Threads, 0.225[5.71] Length.

*STEP 6 - HOODS AND PUSH-ON FASTENERS

0 - None.
H - Hood, Top Opening, Brass.
M - Hood, Top Opening, Aluminum, see page 58 for complete listing of options.
N - Push-on Fastener for 90˚ Mounting Brackets.

*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.

STEP 8 - SHELL OPTIONS

G - Gold over Copper Plate.
D - Gold over Copper Plate and Dimpled.

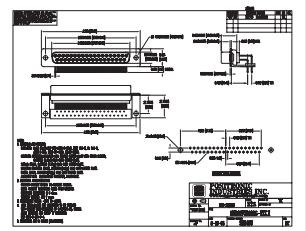
STEP 9 - SPECIAL OPTIONS

CONTACT TECHNICAL SALES FOR SPECIAL OPTIONS

*** NOTE:**
For additional information on accessories listed in Steps 5, 6, and 7, see the Accessories section, pages 54-60.

For crimping information and crimp tools, see Application Tools section, pages 61-64.

NOTE: Once you have made a connector selection, contact Technical Sales if you would like to receive a drawing in DXF, PDF format or a 3-dimensional IGES, STEP, or SOLIDWORKS file.



SK Drawing



3-dimensional model

DIMENSIONS ARE IN INCHES [MILLIMETERS].
ALL DIMENSIONS ARE SUBJECT TO CHANGE.

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NEW!

Lightweight

Subminiature-D Connectors

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	SND	37	F	5	P4	0	T2	A	—	

STEP 1 - BASIC SERIES

SND Series

STEP 2 - CONNECTOR VARIANTS

9, 15, 25, 37, 50

STEP 3 - CONNECTOR GENDER

M - Male
F - Female

STEP 4 - CONTACT TERMINATION TYPE

0 - Ordered without contacts.
1 - Crimp, 20 AWG - 24 AWG [0.5 mm^2 - 0.25 mm^2].
12 - Crimp, 26 AWG - 30 AWG [0.12 mm^2 - 0.05 mm^2].
2 - Solder Cup.
3 - Solder, Straight Printed Board Mount with 0.170 [4.32] Tail Length.
32 - Solder, Straight Printed Board Mount with 0.375 [9.52] Tail Length.
36 - Solder, Straight Printed Board Mount with 0.236 [5.99] Tail Length.
42 - Solder, Metric System 90˚ Printed Board Mount with 0.370 [9.40] Contact Extension.
5 - Solder, 90˚ Printed Board Mount with 0.283 [7.19] Contact Extension.

*STEP 5 - MOUNTING STYLE

0 - Mounting hole, 0.120 [3.05] Ø.
02 - Mounting hole, 0.154 [3.91] Ø.
P4 - Threaded post, aluminum with gold plate.
B9 - Bracket, mounting, 90˚ plastic with cross bar.
B10 - Bracket, mounting, 90˚ with threaded insert and cross bar.

*STEP 6 - HOODS AND PUSH-ON FASTENERS

0 - None.
H - Hood, Top Opening, Brass.
M - Hood, Top Opening, Aluminum, see page 58 for complete listing of options.

*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.

STEP 8 - SHELL OPTIONS

A - Aluminum with gold plate.

STEP 9 - SPECIAL OPTIONS

CONTACT TECHNICAL SALES FOR SPECIAL OPTIONS

* **NOTE: For additional information on accessories listed in Steps 5, 6, and 7, see the Accessories section, pages 54-60.**

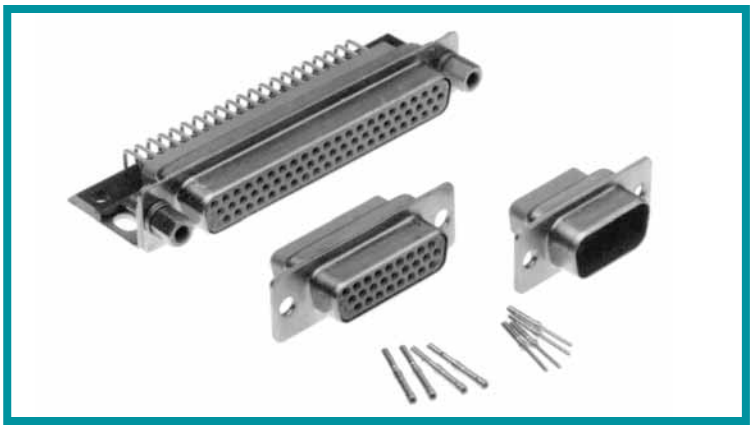
** **NOTE: Material: Brass with gold plate.**

For crimping information and crimp tools, see Application Tools section, pages 61-64.

Downloaded from Arrow.com.

Size 22 Contacts

Removable Crimp and Printed Board Mount



SDD Series are suitable for use in any applications requiring high performance, non-outgassing and non-magnetic characteristic. These removable crimp contact or fixed contact printed board mount connectors conform to all materials, dimensional and performance requirements of MIL-DTL-24308 and GSFC S-311-P-4, as well as the outgassing requirements of ASTM E-595 and NASA-RP-1124.

SDD Series connectors utilize precision machined contacts with closed barrel crimp terminations and solder terminations for straight and 90˚ printed board mount. All female contacts are closed entry design, featuring a fluted brass shroud.

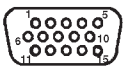
Six standard contact variants are offered in arrangements of 15, 26, 44, 62, 78, and 104 contacts. SDD Series connectors are mateable and compatible with other high density D-subminiature connectors conforming to materials and dimensional requirements of IEC 807-2 and MIL-DTL-24308 where applicable.

Non-magnetic cable supports and jackscrew systems are available.

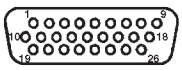
Visual and mechanical inspection per MIL-DTL-24308 is performed, additional testing is available. Contact Technical Sales.

CONTACT VARIANTS

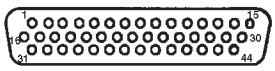
FACE VIEW OF MALE OR REAR VIEW OF FEMALE



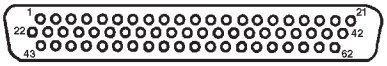
SDD 15



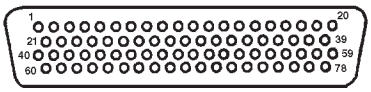
SDD 26



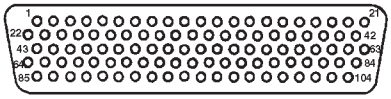
SDD 44



SDD 62



SDD 78



SDD 104

DIMENSIONS ARE IN INCHES [MILLIMETERS].
ALL DIMENSIONS ARE SUBJECT TO CHANGE.

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TECHNICAL CHARACTERISTICS

MATERIALS AND FINISHES:

Insulator: Glass-filled polyester per MIL-M-24519, UL 94V-0, ASTM E-595, NASA-RP-1124, blue color.

Contacts: **Male Contacts:** Precision machined high tensile copper alloy. **Female Contacts:** Precision machined high tensile copper alloy with brass shroud.

Contact Plating: 0.000050 inch [1.27 microns] gold over copper plate.

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

NEW! **Lightweight Shell Option:** Aluminum with 0.000050 inch [1.27 microns] gold over non-magnetic electro-less nickel.

Mounting Spacers and Brackets: Brass with 0.000050 inch [1.27 microns] gold over copper plate.

NEW! **Lightweight Spacer Option:** Aluminum with 0.000050 inch [1.27 microns] gold over non-magnetic electro-less nickel.

NEW! **Lightweight Bracket Option:** Glass-filled polyester per MIL-M-24519, UL 94V-0 blue color.

Push-On Fasteners: Phosphor bronze or beryllium copper 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.

Hoods: Brass with 0.000050 inch [1.27 microns] gold over copper plate or aluminum with yellow chromate conversion or black anodize finish.

ELECTRICAL CHARACTERISTICS:

Contact Current Rating: 5 amps, nominal.
Initial Contact Resistance: 0.005 ohms, maximum.
Proof Voltage: 1,000 V r.m.s.
Insulation Resistance: 5 G ohms.
Clearance and Creepage Distance: 0.042 inch [1.06 mm], minimum.
Working Voltage: 300 V r.m.s.
Residual Magnetism: 20 Gamma, maximum.

MECHANICAL CHARACTERISTICS:

Removable Contacts: Insert contact to rear face of insulator and release from rear face of insulator. Size 22 contacts. **Male Contact:** 0.030 inch [0.76 mm] diameter. **Female Contact:** Closed entry design with brass shroud.

Contact Retention in Insulator: 9 lbs. [40 N].

Contact Terminations: Closed barrel crimp, wire sizes 22 AWG [0.3 mm^2] through 30 AWG [0.05 mm^2]. 0.020 inch [0.51 mm] diameter Straight and 90˚ Printed Board Mount contact terminations.

Shells: Male shells may be dimpled for EMI/ESD ground paths.

Polarization: Trapezoidally shaped shells and polarized jackscrews.

Mounting to Angle Brackets: Jackscrews and riveted fasteners with 0.120 inch [3.05 mm] clearance hole, and threaded fasteners with 4-40 threads and polyester lock inserts.

Mounting to Printed Board: Rapid installation push-on fasteners and mounting posts.

Locking Systems: Jackscrews.

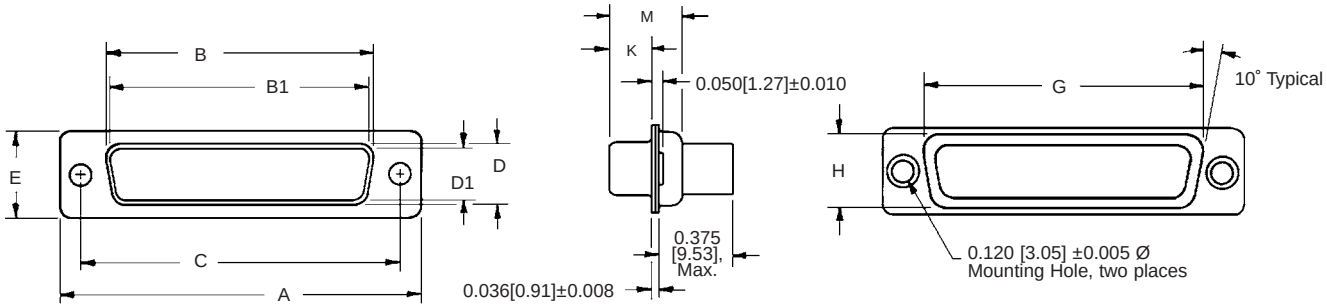
Mechanical Operations: 1,000 operations, minimum, per IEC 512-5.

CLIMATIC CHARACTERISTICS:

Temperature Range: -55˚C to +125˚C.
Damp Heat, Steady State: 21 days.

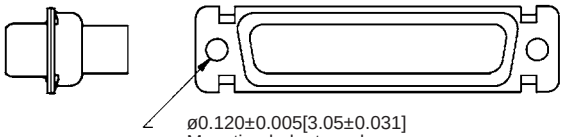
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STANDARD SHELL ASSEMBLY

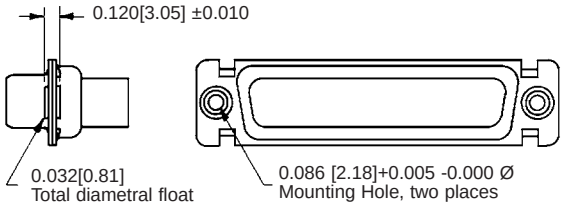


OPTIONAL SHELL ASSEMBLY (0, 02)

STANDARD FOR SIZE 104 CONNECTORS



OPTIONAL SHELL ASSEMBLY WITH UNIVERSAL FLOAT MOUNTS (F)



CONNECTOR VARIANT SIZES	A ±0.015	B ±0.005	B1 ±0.005	C ±0.005	D ±0.005	D1 ±0.005	E ±0.015	G ±0.010	H ±0.010	K ±0.005	M ±0.010
SDD 15 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]
SDD 15 F	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]
SDD 26 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]
SDD 26 F	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]
SDD 44 M	2.088 [53.04]		1.534 [38.96]	1.852 [47.04]		0.329 [8.36]	0.494 [12.55]	1.625 [41.28]	0.422 [10.72]	0.230 [5.84]	0.426 [10.82]
SDD 44 F	2.088 [53.04]	1.511 [38.38]		1.852 [47.04]	0.311 [7.90]		0.494 [12.55]	1.625 [41.28]	0.422 [10.72]	0.243 [6.17]	0.429 [10.90]
SDD 62 M	2.729 [69.32]		2.182 [55.42]	2.500 [63.50]		0.329 [8.36]	0.494 [12.55]	2.272 [57.71]	0.422 [10.72]	0.230 [5.84]	0.426 [10.82]
SDD 62 F	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]
SDD 78 M	2.635 [66.93]		2.079 [52.81]	2.406 [61.11]		0.441 [11.20]	0.605 [15.37]	2.178 [55.32]	0.534 [13.56]	0.230 [5.84]	0.426 [10.82]
SDD 78 F	2.635 [66.93]	2.064 [52.43]		2.406 [61.11]	0.423 [10.74]		0.605 [15.37]	2.178 [55.32]	0.534 [13.56]	0.243 [6.17]	0.429 [10.90]
SDD 104 M	2.729 [69.32]		2.212 [56.18]	2.500 [63.50]		0.503 [12.78]	0.668 [16.97]	2.302 [58.47]	0.596 [15.14]	0.230 [5.84]	0.426 [10.82]
SDD 104 F	2.729 [69.32]	2.189 [55.60]		2.500 [63.50]	0.485 [12.32]		0.668 [16.97]	2.302 [58.47]	0.596 [15.14]	0.243 [6.17]	0.429 [10.90]

DIMENSIONS ARE IN INCHES [MILLIMETERS].
ALL DIMENSIONS ARE SUBJECT TO CHANGE.

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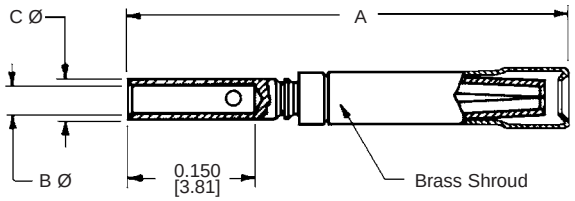
REMOVABLE CRIMP SIGNAL CONTACTS

CODE 1

CONTACTS MAY BE SUPPLIED WITH CONNECTOR OR ORDERED SEPARATELY.

CLOSED CRIMP BARREL

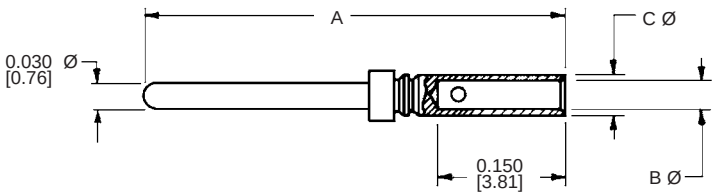
FEMALE CONTACT "CLOSED ENTRY" DESIGN



PART NUMBER	WIRE SIZE AWG / [mm²]	A	B Ø	C Ø
FC8022D-50-1202.0	22 / 24 / 26 / 28 / 30 [0.3/0.25/0.12/0.08/0.05]	0.518 [13.16]	0.035 [0.89]	0.047 [1.19]

Material: Leaded nickel copper.
Plating: 0.000050 inch [1.27 µ] gold over copper.

MALE CONTACT



PART NUMBER	WIRE SIZE AWG/[mm²]	A	B Ø	C Ø
MC8022D-50	22 / 24 / 26 / 28 / 30 [0.3/0.25/0.12/0.08/0.05]	0.531 [13.49]	0.035 [0.89]	0.047 [1.19]

Material: Brass.
Plating: 0.000050 inch [1.27 µ] gold over copper.

For crimping information and crimp tools, see Application Tools section, pages 61-64.

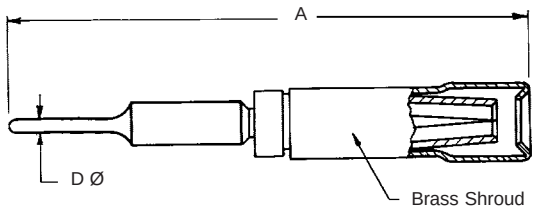
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STRAIGHT PRINTED BOARD MOUNT CONTACTS

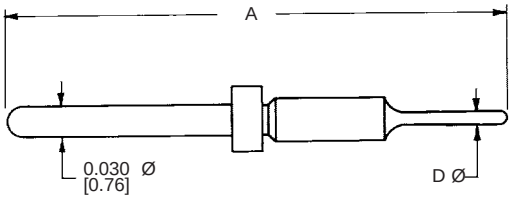
CODE 3 AND 32

CONTACTS ARE SUPPLIED IN CONNECTOR WHEN ORDERED.

FEMALE CONTACT "CLOSED ENTRY" DESIGN



MALE CONTACT

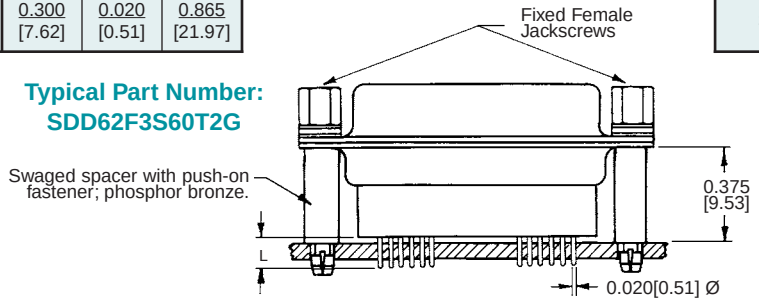


CODE NUMBER	L	D Ø	A
3	0.150 [3.81]	0.020 [0.51]	0.725 [18.42]
32	0.300 [7.62]	0.020 [0.51]	0.865 [21.97]

For straight printed board mount contacts, specify Code Number in Step 4 of the Ordering Information.

CODE NUMBER	L	D Ø	A
3	0.150 [3.81]	0.020 [0.51]	0.737 [18.72]
32	0.300 [7.62]	0.020 [0.51]	0.877 [22.28]

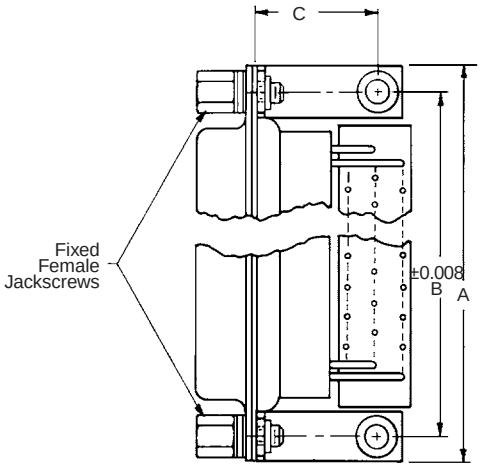
Typical Part Number:
SDD62F3S60T2G



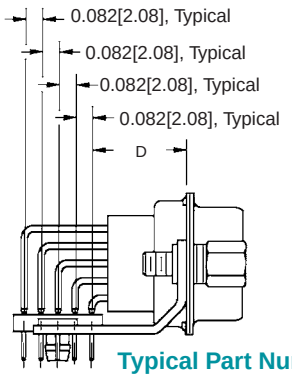
Contact
Material: Phosphor bronze.
Plating: 0.000050 inch [1.27 µ] gold over copper.

90° PRINTED BOARD MOUNT CONNECTOR

CODE 4, 0.450 [11.43] CONTACT EXTENSION

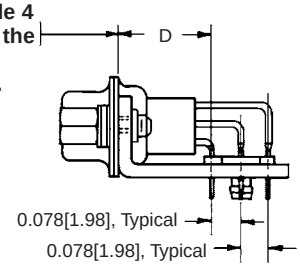


SDD**4R7*** 0.450 [11.43] CONTACT EXTENSION				
PART NUMBER	A	B	C	D
SDD15*4R7***	1.204 [30.58]	0.984 [24.99]	0.528 [13.41]	0.450 [11.43]
SDD26*4R7***	1.532 [38.91]	1.312 [33.32]	0.528 [13.41]	0.450 [11.43]
SDD44*4R7***	2.072 [52.63]	1.852 [47.04]	0.528 [13.41]	0.450 [11.43]
SDD62*4R7***	2.720 [69.09]	2.500 [63.50]	0.528 [13.41]	0.450 [11.43]
SDD78*4R7***	2.626 [66.70]	2.406 [61.11]	0.573 [14.55]	0.450 [11.43]
SDD104*4R7***	2.720 [69.09]	2.500 [63.50]	0.614 [15.60]	0.450 [11.43]

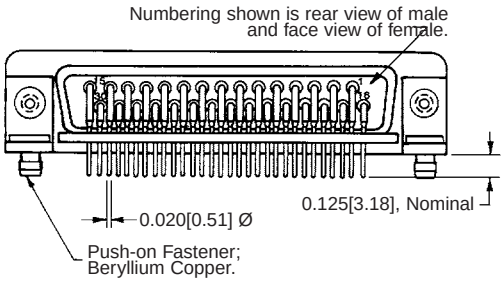


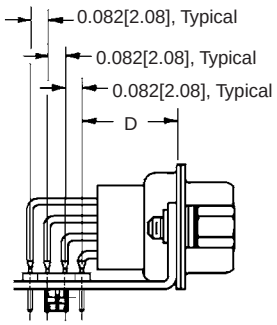
Typical Part Number:
SDD104M4R7NT2G

Specify Code 4 in Step 4 of the Ordering Information.



Typical Part Number: SDD44F4R7NT2G





Typical Part Number:
SDD78M4R7NT2G

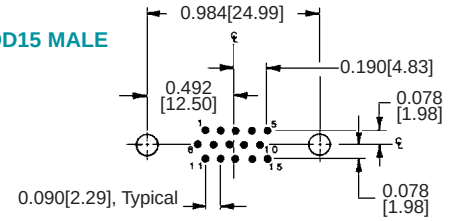
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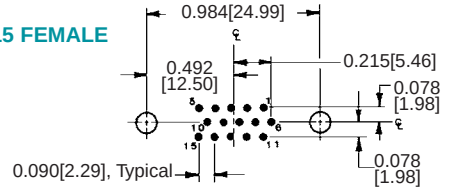
90° AND STRAIGHT PRINTED BOARD CONTACT HOLE PATTERN

MOUNT CONNECTOR WITH MATING FACE POSITIONED TO FOLLOW DIRECTION OF ARROWS.

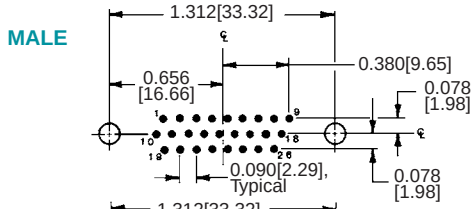
SDD15 MALE



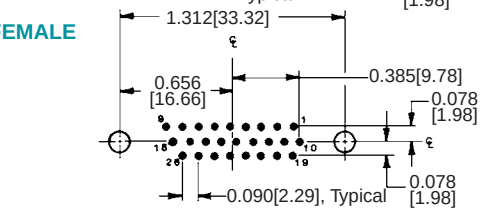
SDD15 FEMALE



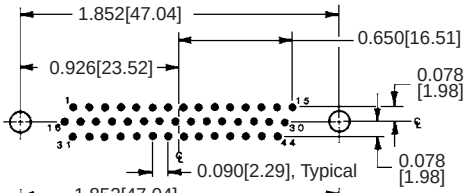
SDD26 MALE



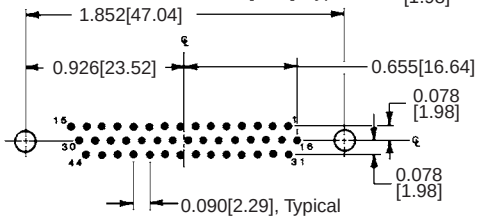
SDD26 FEMALE



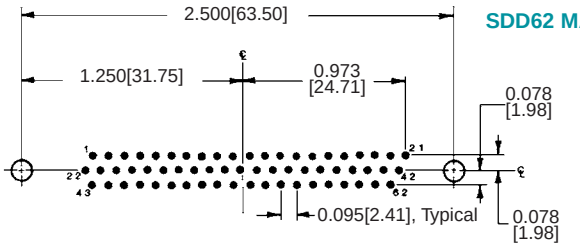
SDD44 MALE



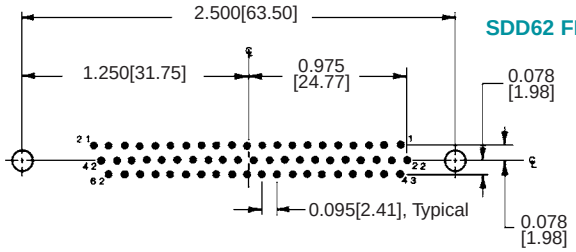
SDD44 FEMALE



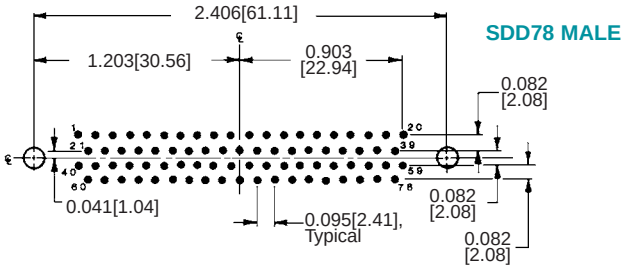
SDD62 MALE



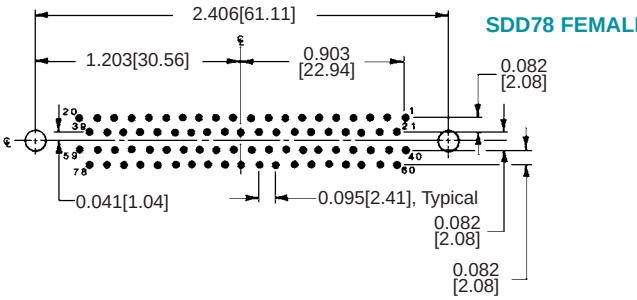
SDD62 FEMALE



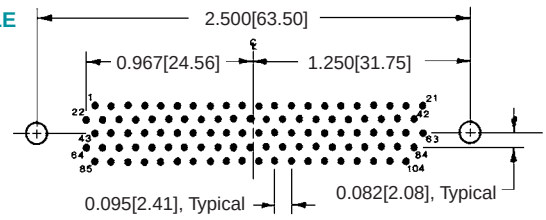
SDD78 MALE



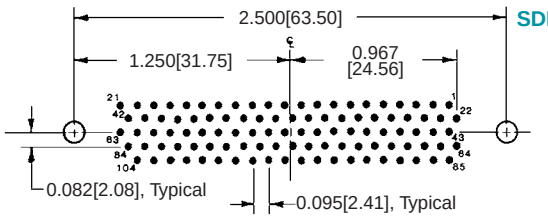
SDD78 FEMALE



SDD104 MALE



SDD104 FEMALE



Suggest 0.035[0.89] Ø hole for contact termination positions.
Suggest 0.123 ±0.003[3.12] Ø hole for mounting connector with push-on fasteners.

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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	SDD	62	F	4	R7	N	T6	G	—	

STEP 1 - BASIC SERIES

SDD Series

STEP 2 - CONNECTOR VARIANTS

15, 26, 44, 62, 78, 104

STEP 3 - CONNECTOR GENDER

M - Male
F - Female

STEP 4 - CONTACT TERMINATION TYPE

0 - Ordered without contacts.
1 - Crimp, 22 AWG - 30 AWG [0.3 mm² - 0.05 mm²].
3 - Solder, Straight Printed Board Mount with 0.150[3.81] Tail Length.
32 - Solder, Straight Printed Board Mount with 0.300[7.62] Tail Length.
4 - Solder, 90˚ Printed Board Mount with 0.450[11.43] Contact Extension.

*STEP 5 - MOUNTING STYLE

0 - Mounting Hole, 0.120[3.05] Ø.
02 - Mounting Hole, 0.154[3.91] Ø.
B3 - Bracket, Mounting, 90˚ Metal with Cross Bar.
F - Float Mounts, Universal.
P - Threaded Post, Brass, 0.375[9.53] Length.
R2 - Bracket, Mounting, 90˚ Metal, Swaged to Connector with 4-40 Thread Fixed Female Jackscrews with Cross Bar.
R6 - Bracket, Mounting, 90˚ Metal, Swaged to Connector with 0.120 [3.05] Ø Mounting Hole with Cross Bar.
R7 - Bracket, Mounting, 90˚ Metal, Swaged to Connector with 4-40 Threads with Cross Bar.
R8 - Bracket, Mounting, 90˚ Metal, Swaged to Connector with 4-40 Locknut with Cross Bar.
S - Swaged Spacer, 4-40 Threads, 0.375[9.53] Length.
S2 - Swaged Spacer, 4-40 Threads, 0.125[3.18] Length.
S5 - Swaged Locknut, 4-40 Threads.
S6 - Swaged Spacer with Push-on Fastener, 4-40 Threads, 0.375[9.53] Length.

*STEP 6 - HOODS AND PUSH-ON FASTENERS

0 - None.
H - Hood, Top Opening, Brass.
M - Hood, Top Opening, Aluminum, see page 58 for complete listing of options.
N - Push-on Fastener for 90˚ Mounting Brackets.

* 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.

STEP 8 - SHELL OPTIONS

G - Gold over Copper Plate.
D - Gold over Copper Plate and Dimpled.

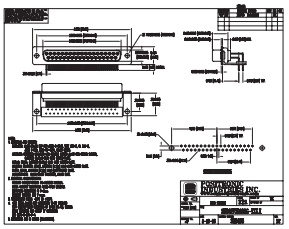
STEP 9 - SPECIAL OPTIONS

CONTACT TECHNICAL SALES FOR SPECIAL OPTIONS

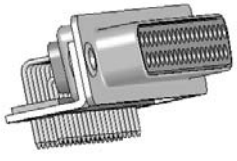
*** NOTE: For additional information on accessories listed in Steps 5, 6, and 7, see the Accessories section, pages 54-60.**

For crimping information and crimp tools, see Application Tools section, pages 61-64.

NOTE: Once you have made a connector selection, contact Technical Sales if you would like to receive a drawing in DXF, PDF format or a 3-dimensional IGES, STEP, or SOLIDWORKS file.



SK Drawing



3-dimensional model

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NEW!

Lightweight Subminiature-D Connectors

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	SDD	44	F	3	P4	0	T2	A	—	

STEP 1 - BASIC SERIES

SDD Series

STEP 2 - CONNECTOR VARIANTS

15, 26, 44, 62, 78, 104

STEP 3 - CONNECTOR GENDER

M - Male
F - Female

STEP 4 - CONTACT TERMINATION TYPE

0 - Ordered without contacts.
1 - Crimp, 22 AWG - 30 AWG [0.3 mm^2 - 0.05 mm^2].
3 - Solder, Straight Printed Board Mount with 0.150[3.81] Tail Length.
32 - Solder, Straight Printed Board Mount with 0.300[7.62] Tail Length.
4 - Solder, 90˚ Printed Board Mount with 0.450[11.43] Contact Extension.

*STEP 5 - MOUNTING STYLE

0 - Mounting hole, 0.120 [3.05] Ø.
02 - Mounting hole, 0.154 [3.91] Ø.
P4 - Threaded post, aluminum with gold plate.
B9 - Bracket, mounting, 90˚ plastic with cross bar.
B10 - Bracket, mounting, 90˚ with threaded insert and cross bar.

*STEP 6 - HOODS AND PUSH-ON FASTENERS

0 - None.
H - Hood, Top Opening, Brass.
M - Hood, Top Opening, Aluminum, see page 58 for complete listing of options.

*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.

STEP 8 - SHELL OPTIONS

A - Aluminum with gold plate.

STEP 9 - SPECIAL OPTIONS

CONTACT TECHNICAL SALES FOR SPECIAL OPTIONS

* **NOTE: For additional information on accessories listed in Steps 5, 6, and 7, see the Accessories section, pages 54-60.**

** **NOTE: Material: Brass with gold plate.**

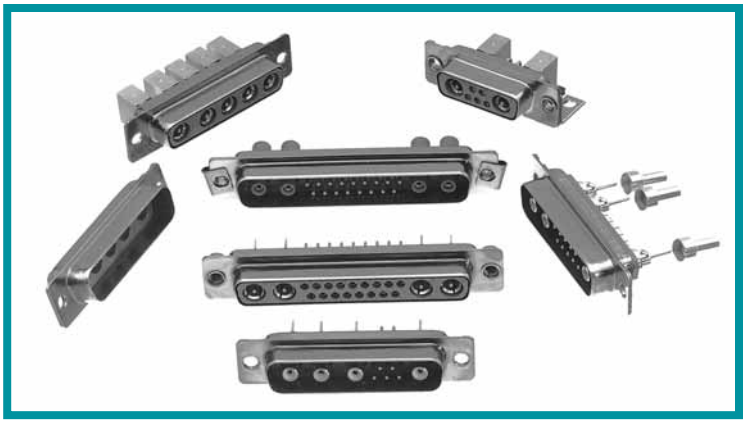
For crimping information and crimp tools, see Application Tools section, pages 61-64.

SDD SERIES

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Size 20 Signal Contacts, Fixed Solder Cup and Printed Board Mountable

Size 8 Shielded and Power Removable, Printed Board Mountable



SCBM Series are suitable for use in any applications requiring high performance, non-outgassing and non-magnetic characteristic. The SCBM Series features fixed contacts having solder cup terminations and printed board mount terminations for panel mounting and 90˚ and straight printed board applications.

The materials, dimensions, and performance of the SCBM Series conform to the requirements of DESC drawing 85039 and GSFC S-311-P-10 where applicable. The SCBM Series fully complies to the outgassing requirements of ASTM E-595 and NASA-RP-1124.

The SCBM Series utilizes precision machined contacts with the female contact featuring a “Closed-Entry” design having a brass protective shroud.

Twenty standard combination contact variants are available, utilizing six shell sizes. Each connector variant is offered with contact terminations for solder cup and 90˚ terminations for printed board mounting.

Non-magnetic cable supports and jackscrew systems are available.

Visual and mechanical inspection per MIL-DTL-24308 is performed, additional testing is available. Contact Technical Sales.

CONTACT VARIANTS

FACE VIEW OF MALE OR REAR VIEW OF FEMALE

SHELL SIZE 1

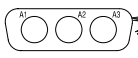


2WK2*



5W1

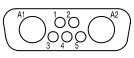
SHELL SIZE 2



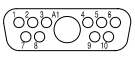
3W3



3WK3**

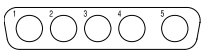


7W2

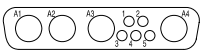


11W1

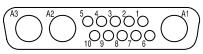
SHELL SIZE 3



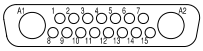
5W5



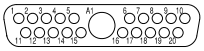
9W4



13W3

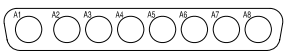


17W2

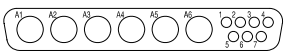


21W1

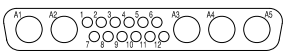
SHELL SIZE 4



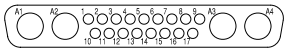
8W8



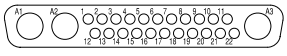
13W6



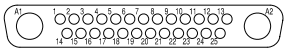
17W5



21WA4

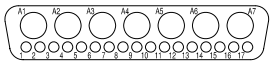


25W3

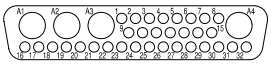


27W2

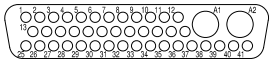
SHELL SIZE 5



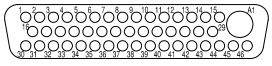
24W7



36W4

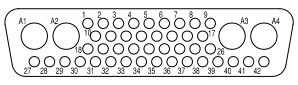


43W2



47W1

SHELL SIZE 6



46W4

*2WK2: **Connectors have 1 male and 1 female contacts. Female connector should be loaded with female contact in A2 position.**

3WK3: **Male variant contains 2 male contacts and 1 female contact. Female variant contains 2 female contacts and 1 male contact

DIMENSIONS ARE IN INCHES [MILLIMETERS]. ALL DIMENSIONS ARE SUBJECT TO CHANGE.

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TECHNICAL CHARACTERISTICS

MATERIALS AND FINISHES:

Insulator: Glass-filled polyester per MIL-M-24519, UL 94V-0, ASTM E-595, NASA-RP-1124, blue color.

Signal Contacts: **Male Contacts:** Precision machined brass alloy. **Female Contacts:** Precision machined high tensile phosphor bronze with brass shroud.

Signal Contact Plating: 0.000050 inch [1.27 microns] gold over copper plate.

Power Contacts: Machined of high conductivity copper alloy for both male and female contacts.

Power Contact Plating: 0.000050 inch [1.27 microns] gold over copper plate.

Shielded Contacts: **Male Contacts:** Precision machined brass. **Female Contacts:** Precision machined high tensile phosphor bronze.

Shielded Contact Plating: **Signal Contacts:** 0.000050 inch [1.27 microns] gold over copper plate.

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

NEW! **Lightweight Shell Option:** Aluminum with 0.000050 inch [1.27 microns] gold over non-magnetic electroless nickel.

Mounting Spacers and Brackets: Brass with 0.000050 inch [1.27 microns] gold over copper plate.

NEW! **Lightweight Spacer Option:** Aluminum with 0.000050 inch [1.27 microns] gold over non-magnetic electroless nickel.

NEW! **Lightweight Bracket Option:** Glass-filled polyester per MIL-M-24519, UL 94V-0 blue color.

Push-On Fasteners: Phosphor bronze or beryllium copper 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.

Hoods: Brass with 0.000050 inch [1.27 microns] gold over copper plate or aluminum yellow chromate conversion or black anodize.

ELECTRICAL CHARACTERISTICS:

SIGNAL CONTACTS:
- **Contact Current Rating:** 7.5 amps, nominal.
- **Initial Contact Resistance:** 0.008 ohms, maximum.
- **Proof Voltage:** 1,000 V r.m.s.

POWER CONTACTS:
- **Contact Current Rating:** 10, 15, 20, 30, and 40 amperes, nominal.
- **Initial Contact Resistance:** 0.0005 ohms, maximum, per IEC 512-2, test 2b.
- **Proof Voltage:** 1,000 V r.m.s.

SHIELDED CONTACTS:
- **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:** 1,000 V r.m.s.

ELECTRICAL CHARACTERISTICS, contiuned:

CONNECTOR:
- **Insulator Resistance:** 5 G ohms.
- **Creepage and Clearance Distance:** 0.039 inch [1.0 mm], minimum.
- **Working Voltage:** 300 V r.m.s.
- **Residual Magnetism:** 20 Gamma, maximum.

CLIMATIC CHARACTERISTICS:

- **Temperature Range:** -55˚C to +125˚C.
- **Damp Heat, Steady State:** 21 days.

MECHANICAL CHARACTERISTICS:

Signal Contacts, Fixed: Size 20 contacts. **Male Contact:** 0.040 inch [1.02 mm] diameter. **Female Contact:** Closed entry design with brass shroud.

Contact Retention in Insulator: **Signal Contacts:** 9 lbs. [40N]. **Power, and Shielded Contacts:** 22 lbs. [98N].

Resistance to Solder Iron Heat: 500˚F [260˚C] for 10 seconds duration per IEC 512-6.

Signal Contact Terminations:
- **Solder Contacts:** 0.042 inch [1.06 mm] minimum hole diameter for 20 AWG [0.5 mm^2] wire, maximum.
- **Straight Printed Board Mount:** 0.028 inch [0.71 mm] diameter.
- **90˚ Printed Board Mount:** 0.028 inch [0.71 mm] diameter.

Power Contacts, Removable, Crimp or Solder Terminations: Size 8 contacts. **Male Contact:** 0.142 inch [3.61 mm] diameter. **Female Contact:** Features Large Surface Area (L.S.A.) Closed entry design utilizing BeCu mechanical retention member. Male and female contacts have terminations for wire sizes 8, 12, and 16 AWG.

Power Contacts, Printed Board Mount: Size 8 contact. **Male Contact:** 0.142 inch [3.61 mm] diameter. Printed board terminations with 0.078 inch [1.98 mm] and 0.125 inch [3.18 mm] diameters.

Shielded Contacts, Removable: See table of maximum cable sizes for contact termination dimensions, pages 42 and 43.

Shells: Male shells may be dimpled for EMI/ESD ground paths.

Polarization: Trapezoidally shaped shells and polarized jackscrews.

Mounting to Angle Brackets: Jackscrews and riveted fasteners with 0.120 inch [3.05 mm] diameter hole, and threaded riveted fasteners with 4-40 threads and polyester inserts.

Mounting to Printed Board: Rapid installation push-on fasteners and threaded posts.

Locking Systems: Jackscrews.

Mechanical Operations: 1,000 operations per IEC 512-5.

SCBM SERIES

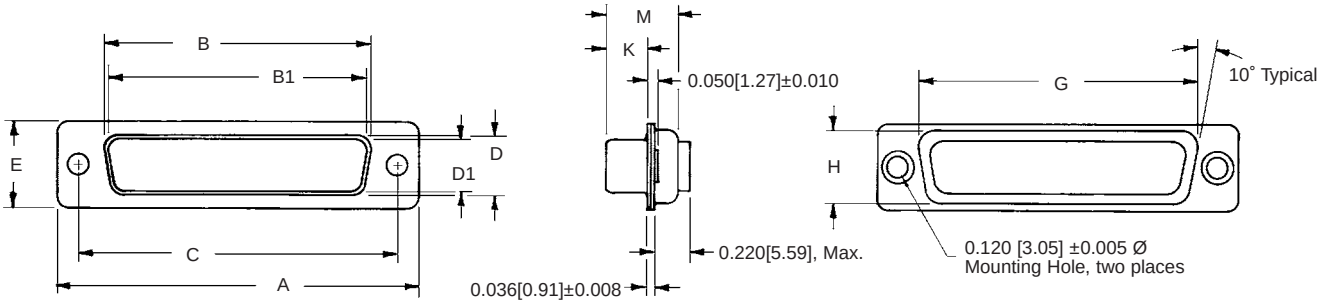
DIMENSIONS ARE IN INCHES [MILLIMETERS].
ALL DIMENSIONS ARE SUBJECT TO CHANGE.

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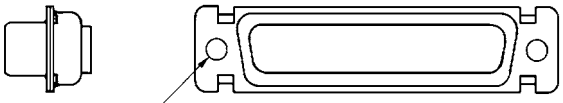


SCBM3W3M0000G SCBM5W5M0000G

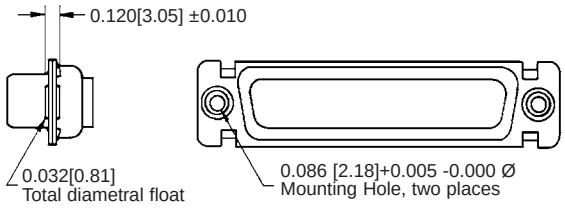
STANDARD SHELL ASSEMBLY



OPTIONAL SHELL ASSEMBLY (0, 02)



OPTIONAL SHELL ASSEMBLY WITH UNIVERSAL FLOAT MOUNTS (F)

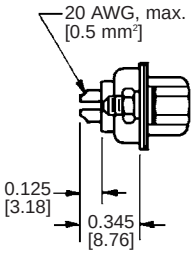


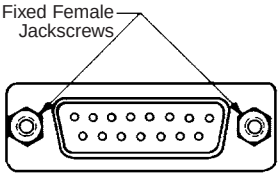
SHELL SIZE	A ±0.015	B ±0.005	B1 ±0.005	C ±0.005	D ±0.005	D1 ±0.005	E ±0.015	G ±0.010	H ±0.010	K ±0.005	M ±0.010
SHELL SIZE 1 MALE	1.213 [30.81]		0.666 [16.92]	0.984 [24.99]		0.329 [8.36]	0.494 [12.55]	0.759 [19.28]	0.422 [10.72]	0.233 [5.92]	0.422 [10.72]
SHELL SIZE 1 FEMALE	1.213 [30.81]	0.643 [16.33]		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]
SHELL SIZE 2 MALE	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]
SHELL SIZE 2 FEMALE	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]
SHELL SIZE 3 MALE	2.088 [53.04]		1.534 [38.96]	1.852 [47.04]		0.329 [8.36]	0.494 [12.55]	1.625 [41.28]	0.422 [10.72]	0.230 [5.84]	0.426 [10.82]
SHELL SIZE 3 FEMALE	2.088 [53.04]	1.511 [38.38]		1.852 [47.04]	0.311 [7.90]		0.494 [12.55]	1.625 [41.28]	0.422 [10.72]	0.243 [6.17]	0.429 [10.90]
SHELL SIZE 4 MALE	2.729 [69.32]		2.182 [55.42]	2.500 [63.50]		0.329 [8.36]	0.494 [12.55]	2.272 [57.71]	0.422 [10.72]	0.230 [5.84]	0.426 [10.82]
SHELL SIZE 4 FEMALE	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]
SHELL SIZE 5 MALE	2.635 [66.93]		2.079 [52.81]	2.406 [61.11]		0.441 [11.20]	0.605 [15.37]	2.178 [55.32]	0.534 [13.56]	0.230 [5.84]	0.426 [10.82]
SHELL SIZE 5 FEMALE	2.635 [66.93]	2.064 [52.43]		2.406 [61.11]	0.423 [10.74]		0.605 [15.37]	2.178 [55.32]	0.534 [13.56]	0.243 [6.17]	0.429 [10.90]
SHELL SIZE 6 MALE	2.729 [69.32]		2.212 [56.18]	2.500 [63.50]		0.503 [12.78]	0.668 [16.97]	2.302 [58.47]	0.596 [15.14]	0.230 [5.84]	0.426 [10.82]
SHELL SIZE 6 FEMALE	2.729 [69.32]	2.189 [55.60]		2.500 [63.50]	0.485 [12.32]		0.668 [16.97]	2.302 [58.47]	0.596 [15.14]	0.243 [6.17]	0.429 [10.90]

DIMENSIONS ARE IN INCHES [MILLIMETERS].
ALL DIMENSIONS ARE SUBJECT TO CHANGE.

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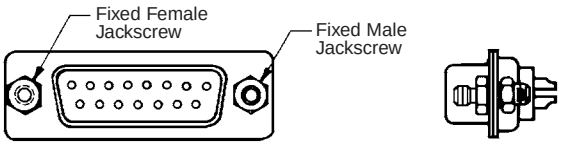
SOLDER CUP CONNECTOR
CODE 2





For solder contacts, specify Code 2 in Step 4 of the Ordering Information.

Typical Part Number:
SCBM7W2M200T2G



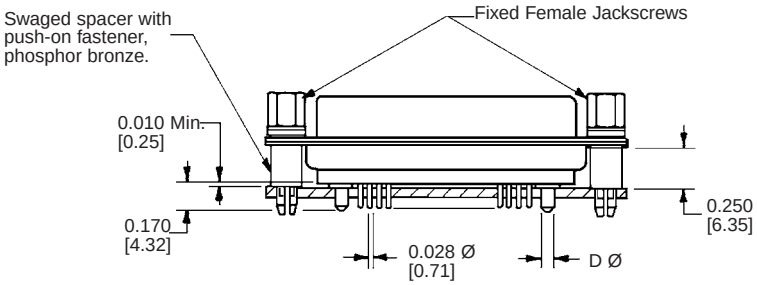
Fixed male and female polarized jackscrews available. Specify Code T6 in Step 7 of the Ordering Information.

Typical Part Number: SCBM7W2F200T6G

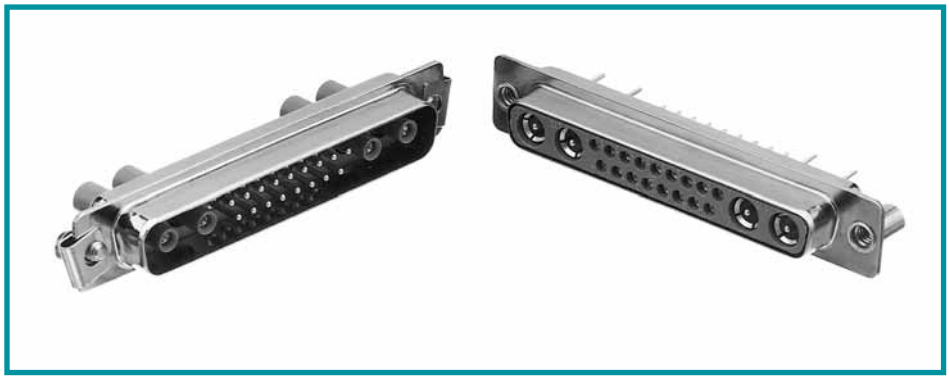
STRAIGHT PRINTED BOARD MOUNT CONNECTOR WITH SIZE 8 CONTACTS
CODE 3, 35, AND 37

CODE NUMBER	D Ø
3	---------
35	0.078 [1.98]
37	0.125 [3.18]

For straight printed board mount contacts, specify Code Number in Step 4 of the Ordering Information.



Typical Part Number:
SCBM17W2F35S60T2G



SCBM21WA4M2000G WITH MS4820M

SCBM21WA4F65S00G

SCBM SERIES

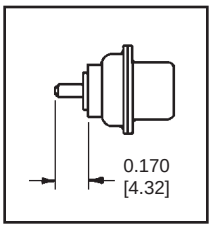
DIMENSIONS ARE IN INCHES [MILLIMETERS].
ALL DIMENSIONS ARE SUBJECT TO CHANGE.

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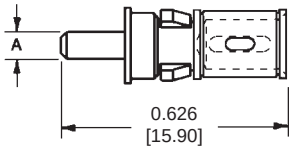
STRAIGHT PRINTED BOARD MOUNT POWER CONTACTS

CODE 35 AND 37

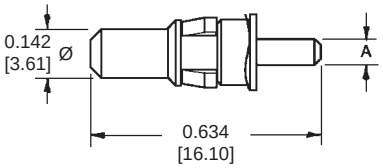
CONTACTS MAY BE SUPPLIED IN CONNECTOR OR ORDERED SEPARATELY.



***FEMALE**
CLOSED ENTRY, L.S.A.



MALE



PART NUMBER	A Ø	CURRENT RATING
FDS4314M	0.078 [1.98]	15 Amps.
FDS4310M	0.125 [3.18]	30 Amps.

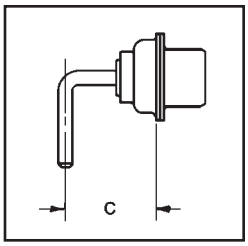
PART NUMBER	A Ø	CURRENT RATING
MDS4314M	0.078 [1.98]	15 Amps.
MDS4310M	0.125 [3.18]	30 Amps.

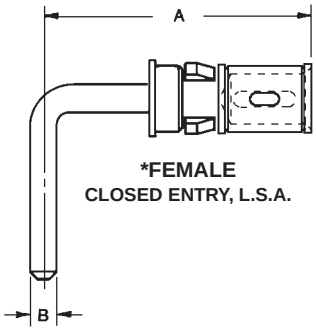
Material - High conductivity copper alloy.
Plating - 0.000050 inch [1.27µ] gold over copper.

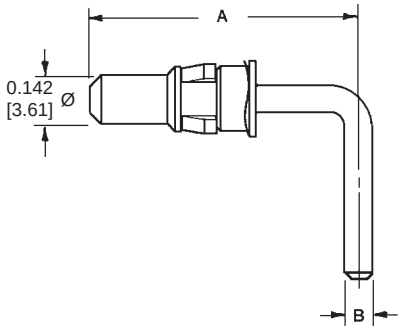
90° PRINTED BOARD MOUNT POWER CONTACTS

CODE 55 AND 75

CONTACTS MAY BE SUPPLIED IN CONNECTOR OR ORDERED SEPARATELY.







PART NUMBER	CURRENT	A REF.	B Ø	C	SHELL SIZE	BEND CODE
FRT4314M	15 Amps	0.580 [14.73]	0.078 [1.98]	0.339 [8.61]	1, 2, 3 & 4	55
FRT4414M	15 Amps	0.692 [17.58]	0.078 [1.98]	0.451 [11.46]	5	55
FRT4714M	15 Amps	0.661 [16.79]	0.078 [1.98]	0.420 [10.67]	1, 2, 3 & 4	75
FRT4814M	15 Amps	0.773 [19.63]	0.078 [1.98]	0.520 [13.21]	5	75
FRT4310M	30 Amps	1.036 [26.31]	0.125 [3.18]	0.810 [20.57]	1, 2, 3 & 4	*
FRT4410M	30 Amps	1.036 [26.31]	0.125 [3.18]	0.810 [20.57]	5	*

PART NUMBER	CURRENT	A REF.	B Ø	C	SHELL SIZE	BEND CODE
MRT4314M	15 Amps	0.580 [14.73]	0.078 [1.98]	0.339 [8.61]	1, 2, 3 & 4	55
MRT4414M	15 Amps	0.692 [17.58]	0.078 [1.98]	0.451 [11.46]	5	55
MRT4714M	15 Amps	0.661 [16.79]	0.078 [1.98]	0.420 [10.67]	1, 2, 3 & 4	75
MRT4814M	15 Amps	0.773 [19.63]	0.078 [1.98]	0.520 [13.21]	5	75
MRT4310M	30 Amps	1.036 [26.31]	0.125 [3.18]	0.810 [20.57]	1, 2, 3 & 4	*
MRT4410M	30 Amps	1.036 [26.31]	0.125 [3.18]	0.810 [20.57]	5	*

Material - High conductivity copper alloy.
Plating - 0.000050 inch [1.27µ] gold over copper.

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

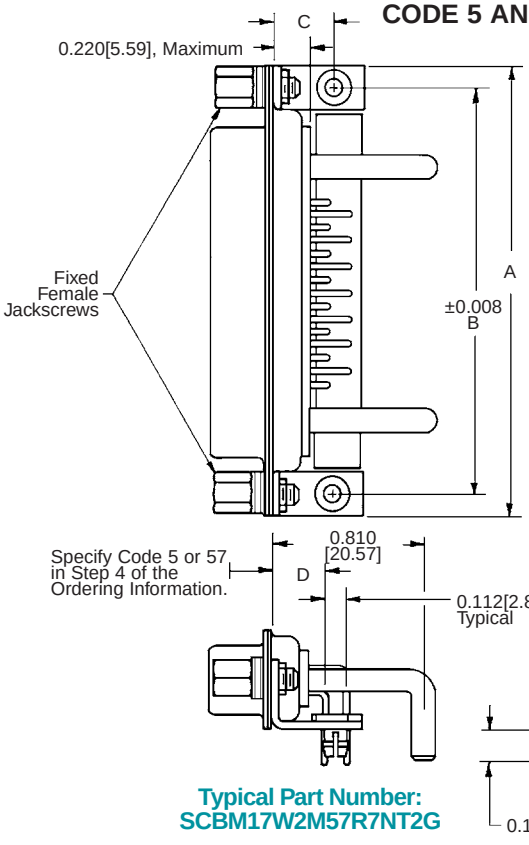
**DIMENSIONS ARE IN INCHES [MILLIMETERS].
ALL DIMENSIONS ARE SUBJECT TO CHANGE.**

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90° PRINTED BOARD MOUNT CONNECTOR WITH 0.125 [3.18] Ø POWER CONTACTS

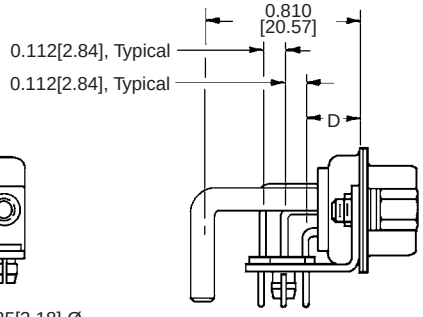
CODE 5 AND 57, 0.283 [7.19] CONTACT EXTENSION

(30 AMPS NOMINAL)



SCBM***R7*** 0.283 [7.19] CONTACT EXTENSION				
SHELL SIZE	A	B	C	D
SHELL SIZE 1	1.204 [30.58]	0.984 [24.99]	0.339 [8.61]	0.283 [7.19]
SHELL SIZE 2	1.532 [38.91]	1.312 [33.32]	0.339 [8.61]	0.283 [7.19]
SHELL SIZE 3	2.072 [52.63]	1.852 [47.04]	0.339 [8.61]	0.283 [7.19]
SHELL SIZE 4	2.720 [69.09]	2.500 [63.50]	0.339 [8.61]	0.283 [7.19]
SHELL SIZE 5	2.626 [66.70]	2.406 [61.11]	0.395 [10.03]	0.283 [7.19]

Typical Part Number:
SCBM17W2M57R7NT2G

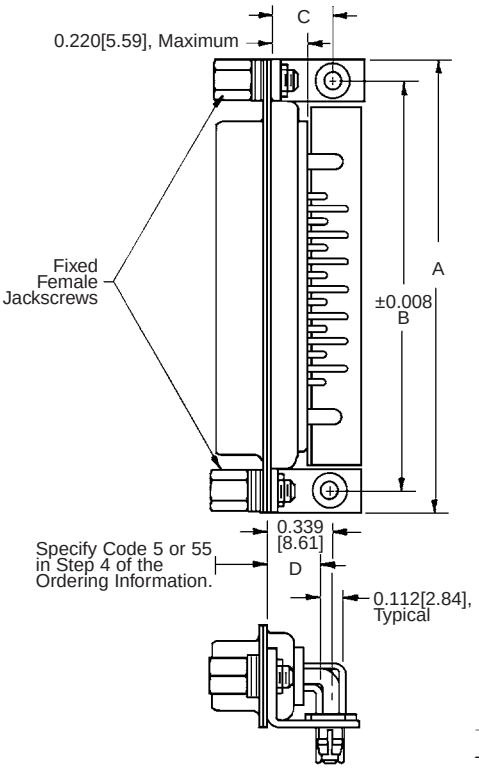


Typical Part Number:
SCBM36W4F57R7NT2G

90° PRINTED BOARD MOUNT CONNECTOR WITH 0.078 [1.98] Ø POWER CONTACTS

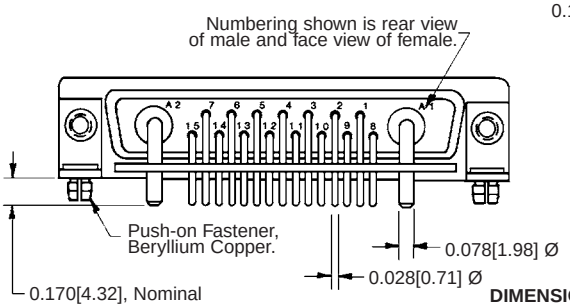
CODE 5 AND 55, 0.283 [7.19] CONTACT EXTENSION

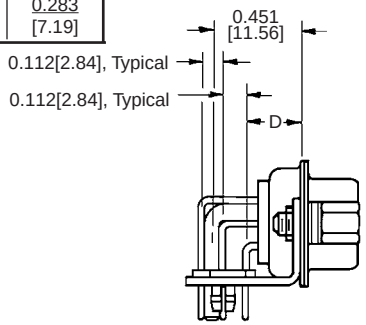
(15 AMPS NOMINAL)



SCBM***R7*** 0.283 [7.19] CONTACT EXTENSION				
SHELL SIZE	A	B	C	D
SHELL SIZE 1	1.204 [30.58]	0.984 [24.99]	0.339 [8.61]	0.283 [7.19]
SHELL SIZE 2	1.532 [38.91]	1.312 [33.32]	0.339 [8.61]	0.283 [7.19]
SHELL SIZE 3	2.072 [52.63]	1.852 [47.04]	0.339 [8.61]	0.283 [7.19]
SHELL SIZE 4	2.720 [69.09]	2.500 [63.50]	0.339 [8.61]	0.283 [7.19]
SHELL SIZE 5	2.626 [66.70]	2.406 [61.11]	0.395 [10.03]	0.283 [7.19]

Typical Part Number:
SCBM17W2M55R7NT2G





Typical Part Number:
SCBM36W4F55R7NT2G

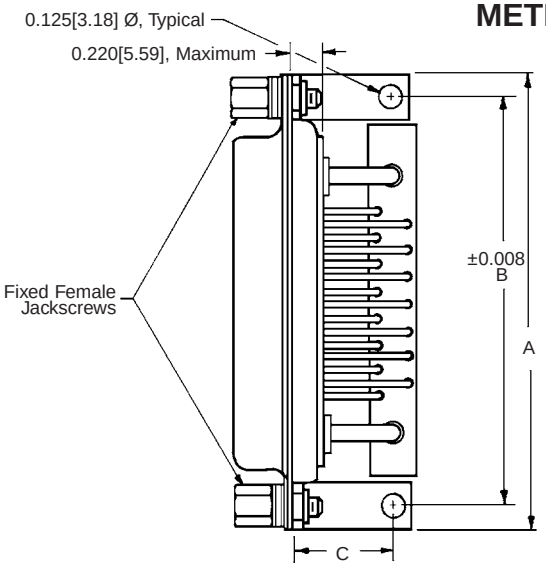
DIMENSIONS ARE IN INCHES [MILLIMETERS].
ALL DIMENSIONS ARE SUBJECT TO CHANGE.

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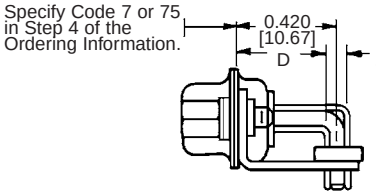
METRIC SYSTEM 90° PRINTED BOARD MOUNT CONNECTOR WITH 0.078 [1.98] Ø POWER CONTACTS

CODE 7 AND 75, 0.370 [9.40] CONTACT EXTENSION

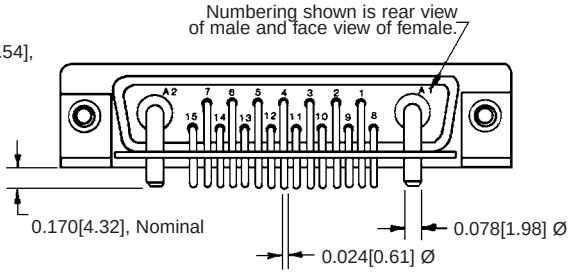
(15 AMPS NOMINAL)

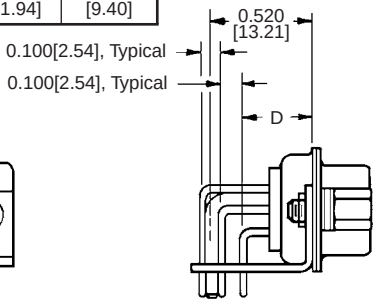


SCBM***R7*** 0.370 [9.40] CONTACT EXTENSION				
SHELL SIZE	A	B	C	D
SHELL SIZE 1	1.204 [30.58]	0.984 [24.99]	0.420 [10.67]	0.370 [9.40]
SHELL SIZE 2	1.532 [38.91]	1.312 [33.32]	0.420 [10.67]	0.370 [9.40]
SHELL SIZE 3	2.072 [52.63]	1.852 [47.04]	0.420 [10.67]	0.370 [9.40]
SHELL SIZE 4	2.720 [69.09]	2.500 [63.50]	0.420 [10.67]	0.370 [9.40]
SHELL SIZE 5	2.626 [66.70]	2.406 [61.11]	0.470 [11.94]	0.370 [9.40]



Typical Part Number:
SCBM17W2M75R70T2G



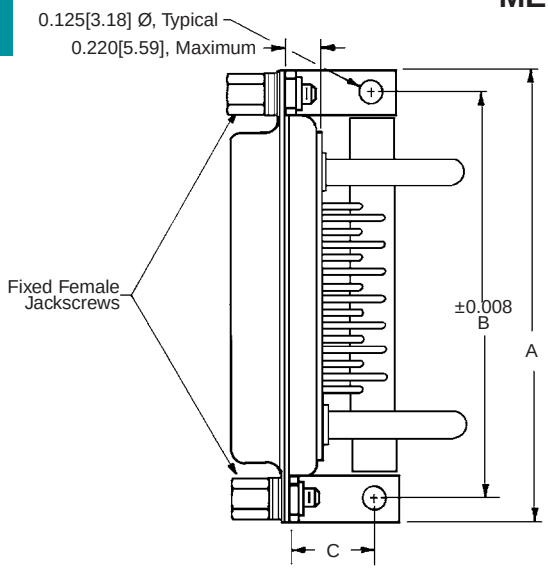


Typical Part Number:
SCBM36W4M75R70T2G

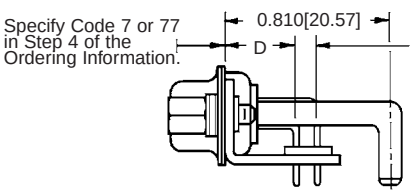
METRIC SYSTEM 90° PRINTED BOARD MOUNT CONNECTOR WITH 0.125 [3.18] Ø POWER CONTACTS

CODE 7 AND 77, 0.370 [9.40] CONTACT EXTENSION

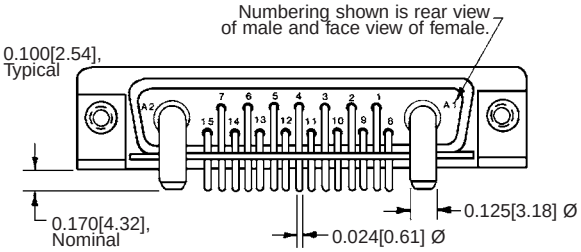
(30 AMPS NOMINAL}

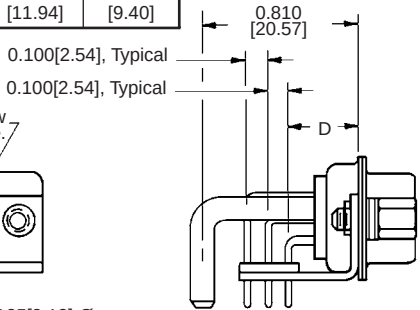


SCBM***R7*** 0.370 [9.40] CONTACT EXTENSION				
SHELL SIZE	A	B	C	D
SHELL SIZE 1	1.204 [30.58]	0.984 [24.99]	0.420 [10.67]	0.370 [9.40]
SHELL SIZE 2	1.532 [38.91]	1.312 [33.32]	0.420 [10.67]	0.370 [9.40]
SHELL SIZE 3	2.072 [52.63]	1.852 [47.04]	0.420 [10.67]	0.370 [9.40]
SHELL SIZE 4	2.720 [69.09]	2.500 [63.50]	0.420 [10.67]	0.370 [9.40]
SHELL SIZE 5	2.626 [66.70]	2.406 [61.11]	0.470 [11.94]	0.370 [9.40]



Typical Part Number:
SCBM17W2M77R70T2G





Typical Part Number:
SCBM36W4M77R70T2G

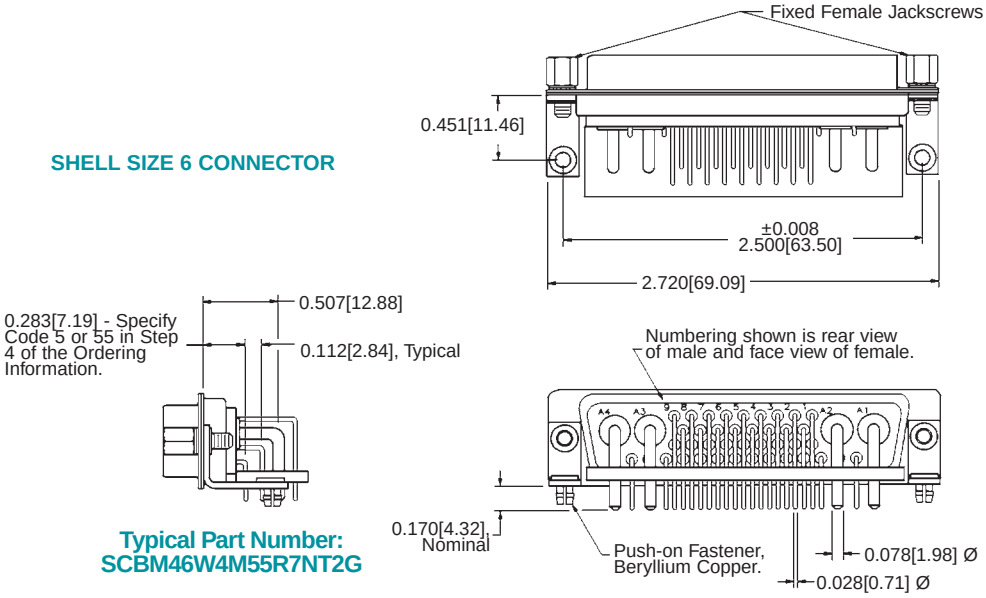
DIMENSIONS ARE IN INCHES [MILLIMETERS].
ALL DIMENSIONS ARE SUBJECT TO CHANGE.

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SHELL SIZE 6
90° PRINTED BOARD MOUNT CONNECTOR WITH 0.078 [1.98] Ø POWER CONTACTS
CODE 5 AND 55, 0.283 [7.19] CONTACT EXTENSION

CONNECTOR VARIANT 46W4
(15 AMPS NOMINAL)

SHELL SIZE 6 CONNECTOR

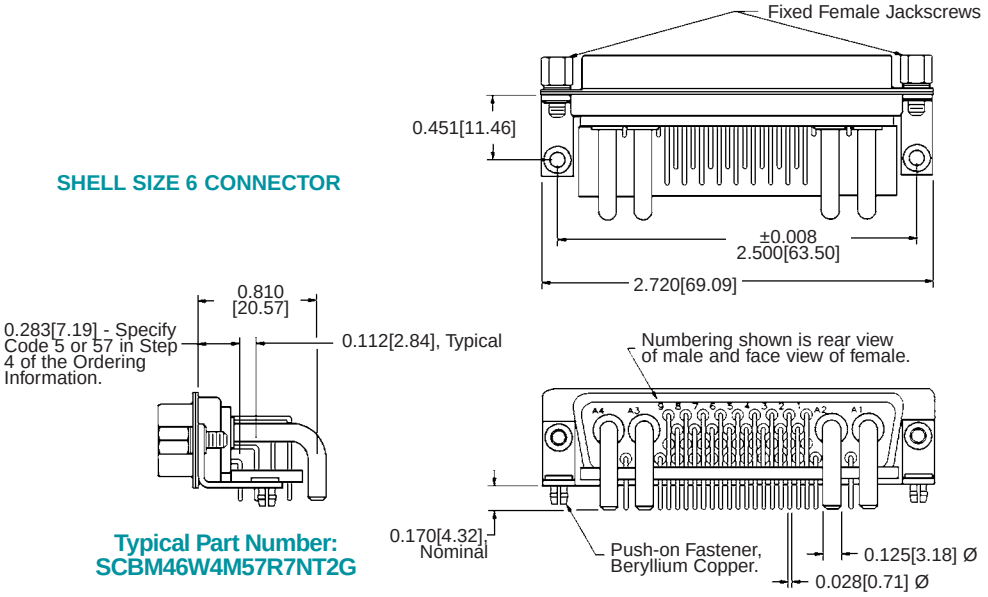


Typical Part Number:
SCBM46W4M55R7NT2G

SHELL SIZE 6
90° PRINTED BOARD MOUNT CONNECTOR WITH 0.125 [3.18] Ø POWER CONTACTS
CODE 5 AND 57, 0.283 [7.19] CONTACT EXTENSION

CONNECTOR VARIANT 46W4
(30 AMPS NOMINAL)

SHELL SIZE 6 CONNECTOR

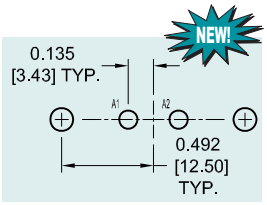


Typical Part Number:
SCBM46W4M57R7NT2G

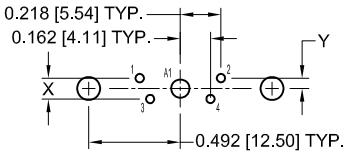
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90° AND STRAIGHT PRINTED BOARD CONTACT HOLE PATTERN WITH 0.078 [1.98] Ø AND STRAIGHT PRINTED BOARD MOUNT 0.125 [3.18] Ø POWER CONTACTS

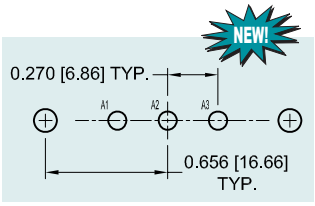
HOLE IDENTIFICATION SHOWN FOR MALE CONNECTOR; USE MIRROR IMAGE FOR FEMALE CONNECTOR.
MOUNT CONNECTOR WITH MATING FACE POSITIONED TO FOLLOW DIRECTION OF ARROWS.



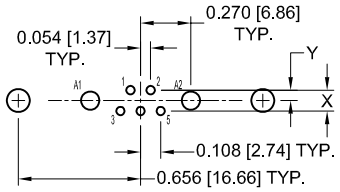
2WK2



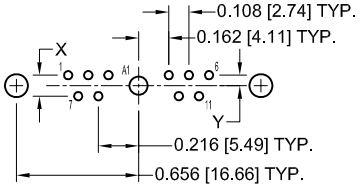
5W1



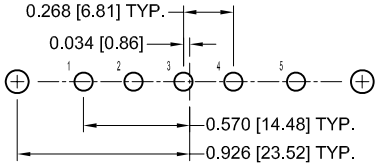
3W3/3WK3



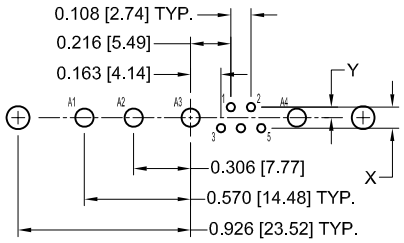
7W2



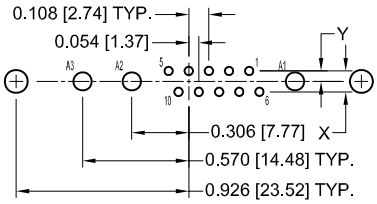
11W1



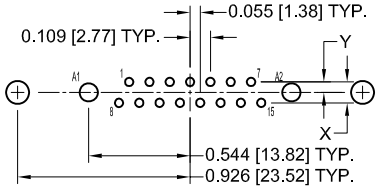
5W5



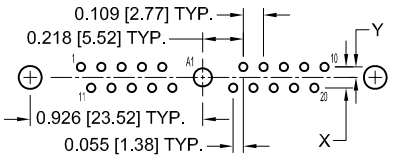
9W4



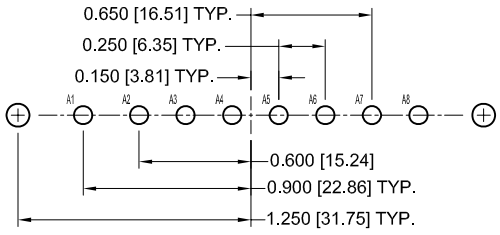
13W3



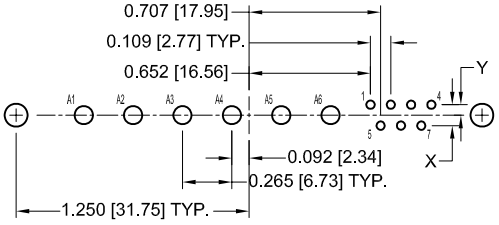
17W2



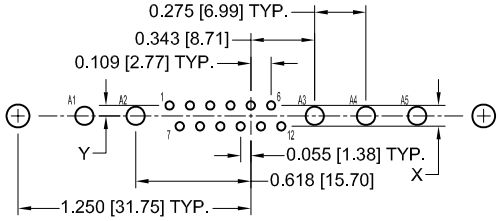
21W1



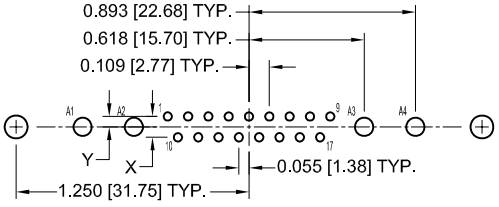
8W8



13W6



17W5



21WA4

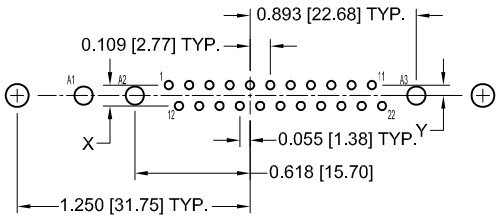
Suggest 0.045[1.14] Ø hole for signal contact termination positions.
Suggest 0.098[2.49] Ø hole for 0.078[1.98] Ø power contact terminations.
Suggest 0.145[3.68] Ø hole for 0.125[3.18] Ø power contact termination positions.
Suggest 0.123 ±0.003 [3.12] Ø hole for mounting connector with push-on fasteners.

DIMENSIONS ARE IN INCHES [MILLIMETERS].
ALL DIMENSIONS ARE SUBJECT TO CHANGE.

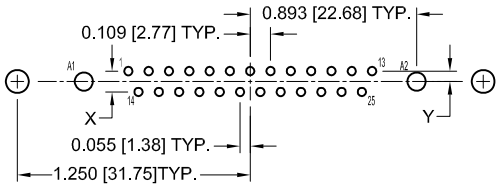
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90° AND STRAIGHT PRINTED BOARD CONTACT HOLE PATTERN WITH 0.078 [1.98] Ø AND STRAIGHT PRINTED BOARD MOUNT 0.125 [3.18] Ø POWER CONTACTS

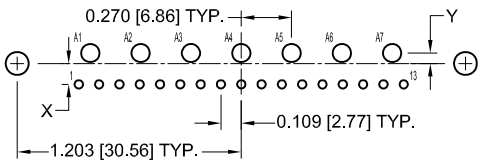
HOLE IDENTIFICATION SHOWN FOR MALE CONNECTOR; USE MIRROR IMAGE FOR FEMALE CONNECTOR.
MOUNT CONNECTOR WITH MATING FACE POSITIONED TO FOLLOW DIRECTION OF ARROWS.



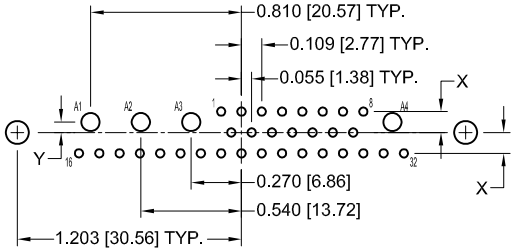
25W3



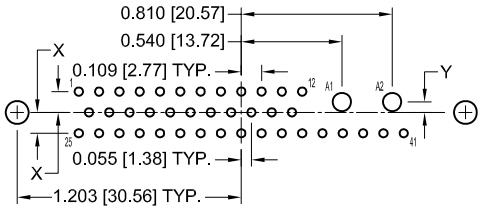
27W2



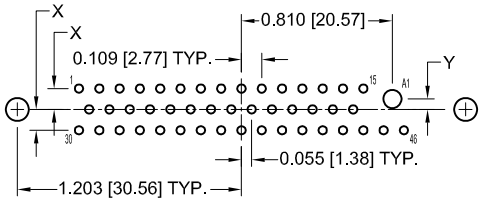
24W7



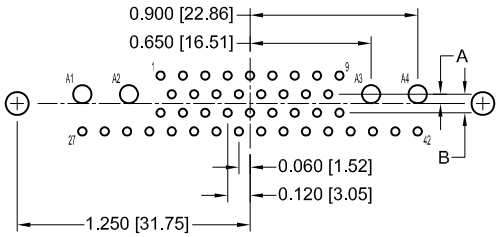
36W4



43W2



47W1



46W4

CODE NUMBER	3, 35, & 37	5 & 55	7 & 75
X	0.112 [2.84]	0.112 [2.84]	0.100 [2.54]
Y	0.056 [1.42]	0.056 [1.42]	0.050 [1.27]
A	0.050 [1.27]	0.056 [1.42]	0.050 [1.27]
B	0.100 [2.54]	0.112 [2.84]	0.100 [2.54]

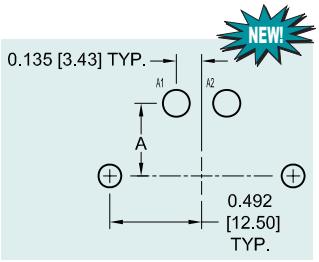
Suggest 0.045[1.14] Ø hole for signal contact termination positions.
Suggest 0.098[2.49] Ø hole for 0.078[1.98] Ø power contact terminations.
Suggest 0.145[3.68] Ø hole for 0.125[3.18] Ø power contact termination positions.
Suggest 0.123 ±0.003 [3.12] Ø hole for mounting connector with push-on fasteners.

DIMENSIONS ARE IN INCHES [MILLIMETERS].
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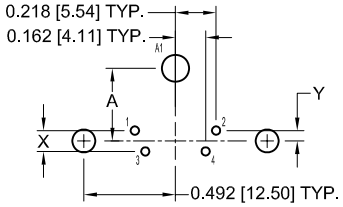
Downloaded from Arrow.com.

90° PRINTED BOARD CONTACT HOLE PATTERN WITH 0.125 [3.18] Ø POWER CONTACTS

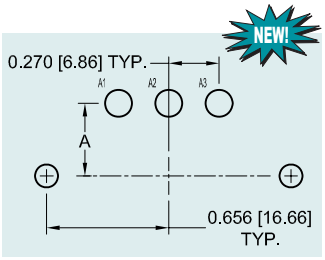
HOLE IDENTIFICATION SHOWN FOR MALE CONNECTOR; USE MIRROR IMAGE FOR FEMALE CONNECTOR.
MOUNT CONNECTOR WITH MATING FACE POSITIONED TO FOLLOW DIRECTION OF ARROWS.



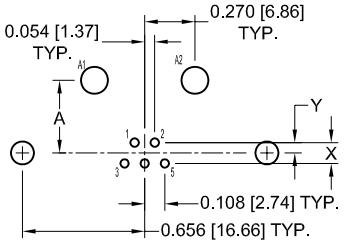
2WK2



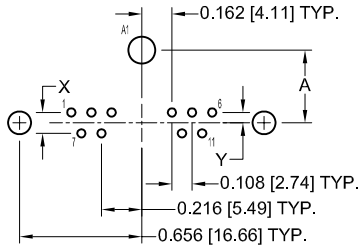
5W1



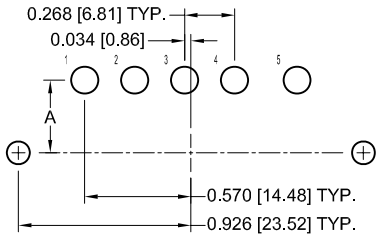
3W3/3WK3



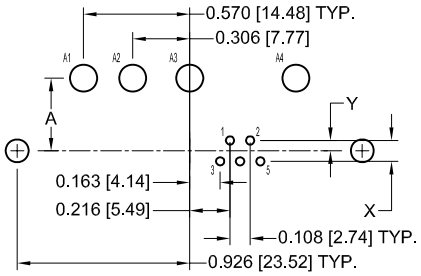
7W2



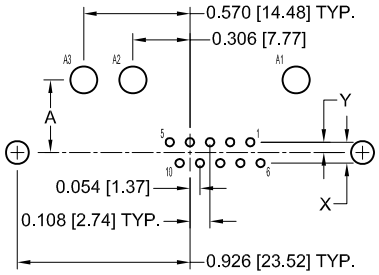
11W1



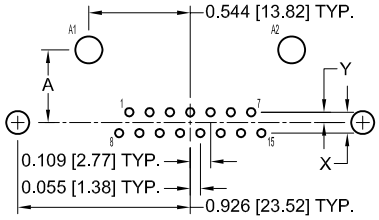
5W5



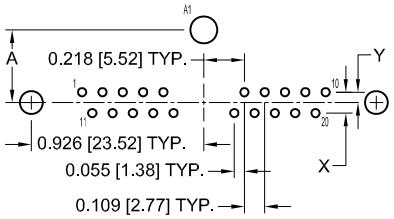
9W4



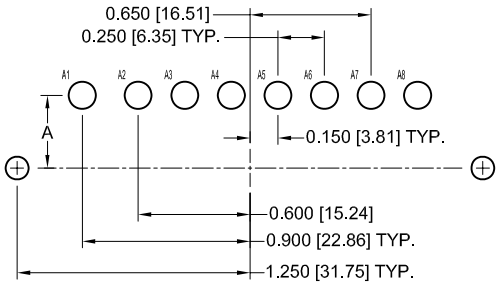
13W3



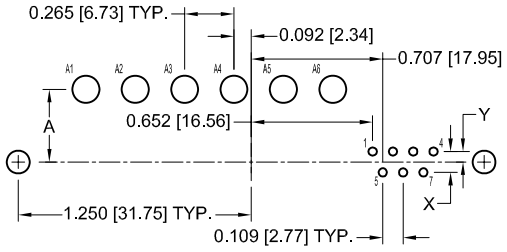
17W2



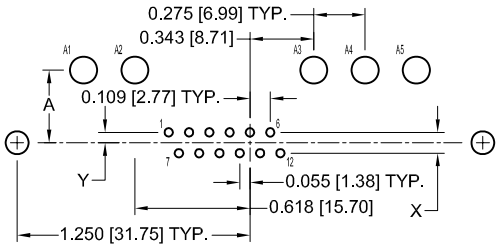
21W1



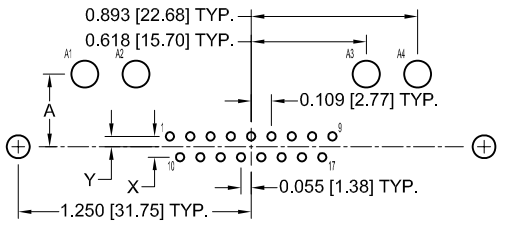
8W8



13W6



17W5



21WA4

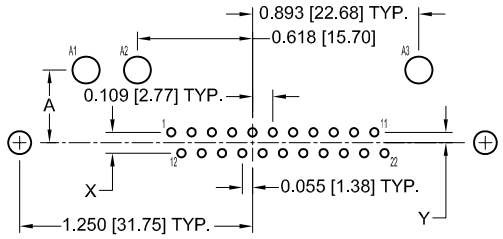
DIMENSIONS ARE IN INCHES [MILLIMETERS].
ALL DIMENSIONS ARE SUBJECT TO CHANGE.

Suggest 0.045 [1.14] Ø hole for signal contact termination positions.
Suggest 0.145 [3.68] Ø hole for 0.125 [3.18] Ø power contact termination positions.
Suggest 0.123 ±0.003 [3.12] Ø hole for mounting connector with push-on fasteners.

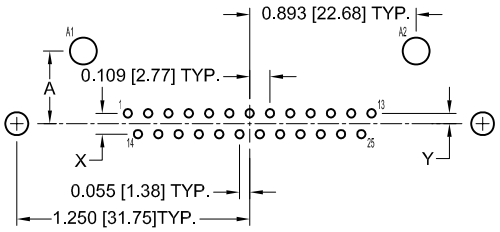
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90° PRINTED BOARD CONTACT HOLE PATTERN WITH 0.125 [3.18] Ø POWER CONTACTS

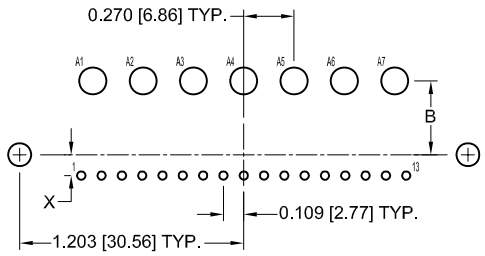
HOLE IDENTIFICATION SHOWN FOR MALE CONNECTOR; USE MIRROR IMAGE FOR FEMALE CONNECTOR.
MOUNT CONNECTOR WITH MATING FACE POSITIONED TO FOLLOW DIRECTION OF ARROWS.



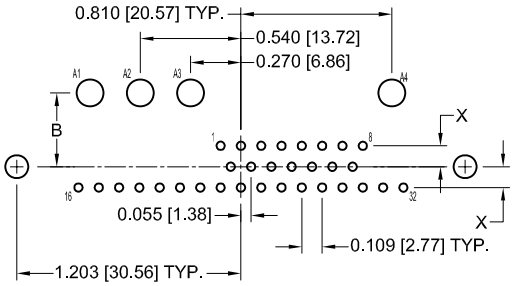
25W3



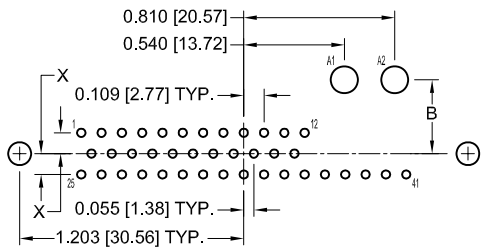
27W2



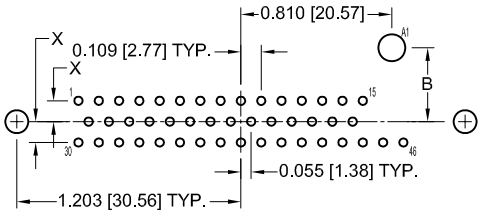
24W7



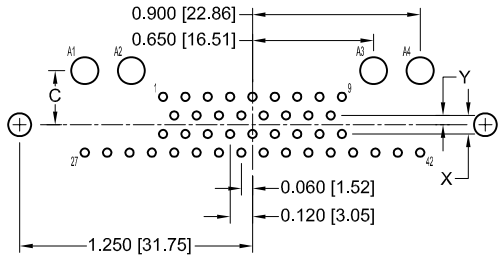
36W4



43W2



47W1



46W4

CODE NUMBER	A	B	C	X	Y
5 & 57	0.471 [11.96]	0.415 [10.54]	0.359 [9.12]	0.112 [2.84]	0.056 [1.42]
7 & 77	0.390 [9.91]	0.340 [8.64]	0.290 [7.37]	0.100 [2.54]	0.050 [1.27]

Suggest 0.045 [1.14] Ø hole for signal contact termination positions.
Suggest 0.145 [3.68] Ø hole for 0.125 [3.18] Ø power contact termination positions.
Suggest 0.123 ±0.003 [3.12] Ø hole for mounting connector with push-on fasteners.

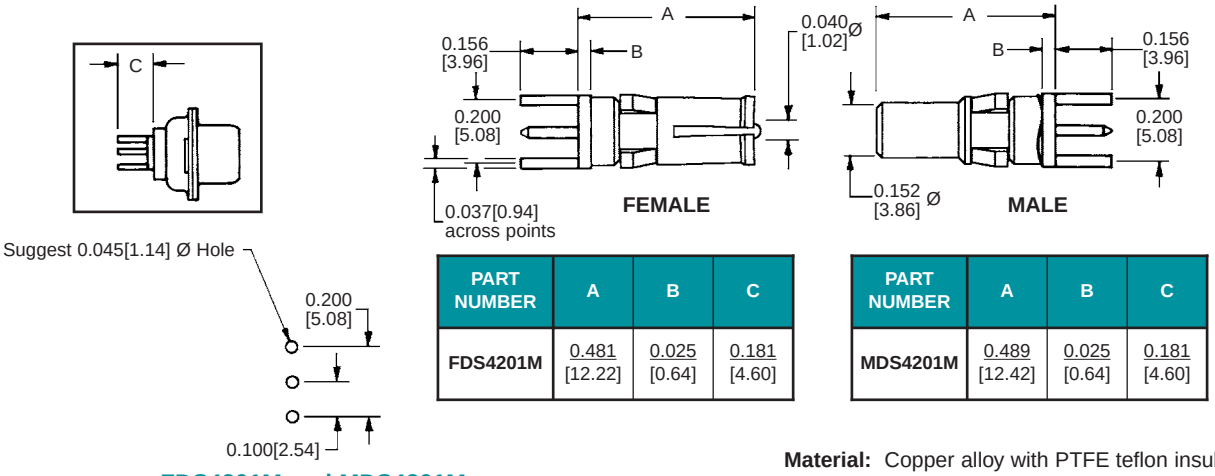
DIMENSIONS ARE IN INCHES [MILLIMETERS].
ALL DIMENSIONS ARE SUBJECT TO CHANGE.

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STRAIGHT PRINTED BOARD MOUNT SHIELDED CONTACTS

CODE 65

CONTACTS MAY BE SUPPLIED IN CONNECTOR OR ORDERED SEPARATELY.



PART NUMBER	A	B	C
FDS4201M	0.481 [12.22]	0.025 [0.64]	0.181 [4.60]

PART NUMBER	A	B	C
MDS4201M	0.489 [12.42]	0.025 [0.64]	0.181 [4.60]

FDS4201M and MDS4201M Contact Hole Pattern

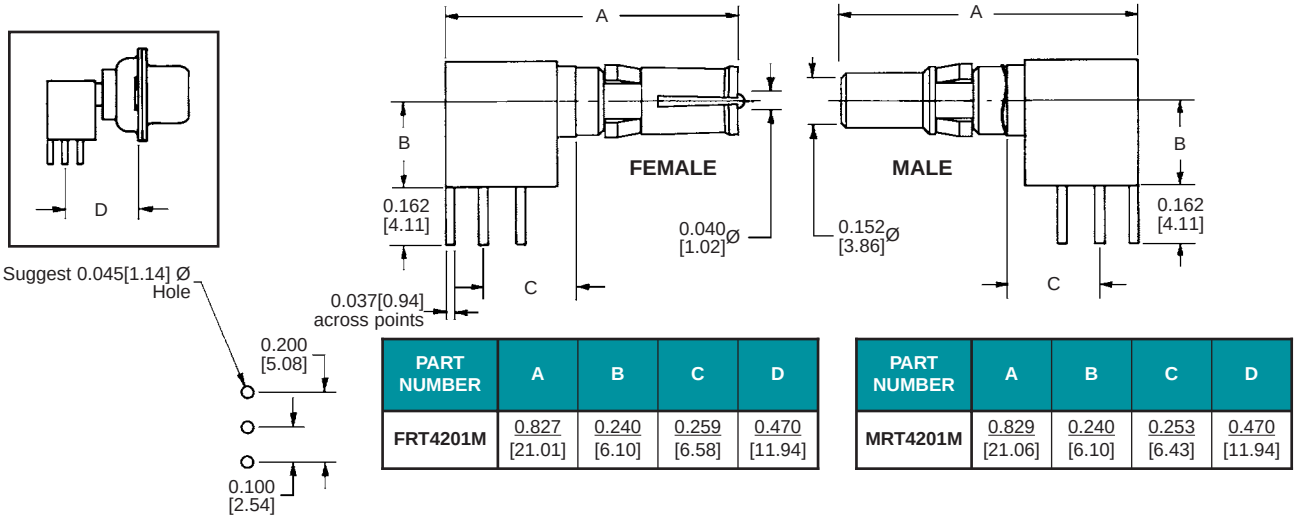
Material: Copper alloy with PTFE teflon insulator.
Signal Contact Plating: 0.000050 inch [1.27 µ] gold over copper.
Contact Body Plating: 0.000050 inch [1.27 µ] gold over copper.

***Technical characteristics are listed on page 41.**

90° PRINTED BOARD MOUNT SHIELDED CONTACTS

CODE 85

CONTACTS MAY BE SUPPLIED IN CONNECTOR OR ORDERED SEPARATELY.



PART NUMBER	A	B	C	D
FRT4201M	0.827 [21.01]	0.240 [6.10]	0.259 [6.58]	0.470 [11.94]

PART NUMBER	A	B	C	D
MRT4201M	0.829 [21.06]	0.240 [6.10]	0.253 [6.43]	0.470 [11.94]

FRT4201M and MRT4201M Contact Hole Pattern

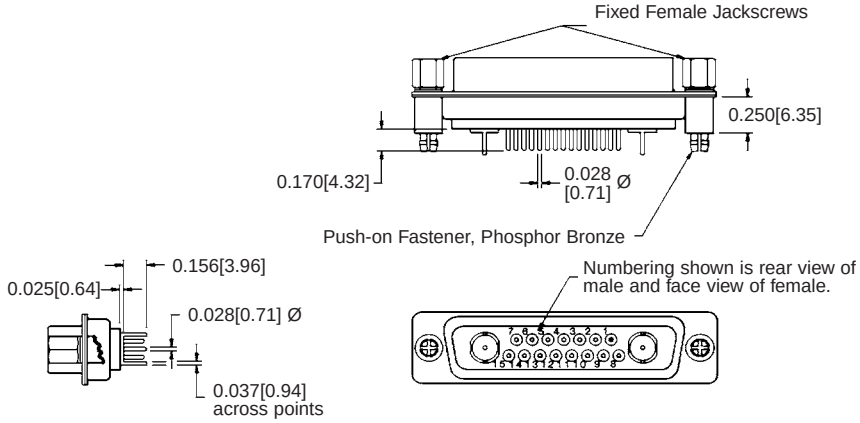
Material: Copper alloy with PTFE teflon insulator.
Signal Contact Plating: 0.000050 inch [1.27 µ] gold over copper.
Contact Body Plating: 0.000050 inch [1.27 µ] gold over copper.

***Technical characteristics are listed on page 41.**

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STRAIGHT PRINTED BOARD MOUNT CONNECTOR WITH SHIELDED CONTACTS

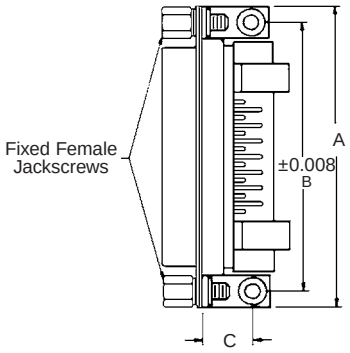
CODE 65, CONNECTOR WITH FDS4201M OR MDS4201M CONTACTS



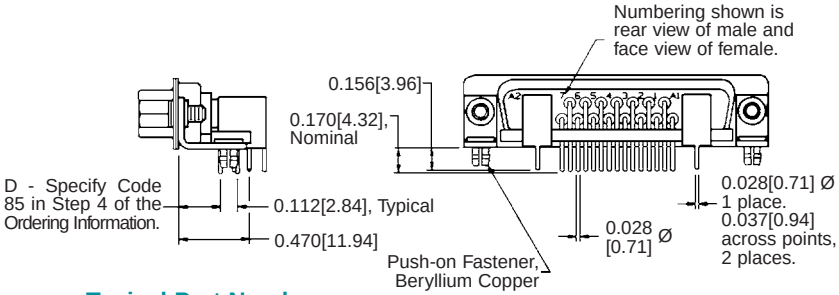
Typical Part Number:
SCBM17W2M65S60T2G

90˚ PRINTED BOARD MOUNT CONNECTOR WITH SHIELDED CONTACTS

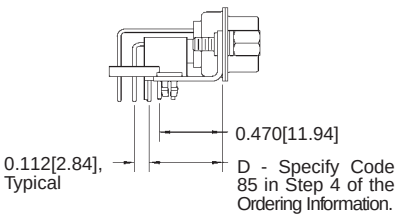
CODE 85, CONNECTOR WITH FRT4201M OR MRT4201M CONTACTS



SCBM**85**** 0.283 [7.19] CONTACT EXTENSION				
SHELL SIZE	A	B	C	D
SHELL SIZE 1	1.204 [30.58]	0.984 [24.99]	0.339 [8.61]	0.283 [7.19]
SHELL SIZE 2	1.532 [38.91]	1.312 [33.32]	0.339 [8.61]	0.283 [7.19]
SHELL SIZE 3	2.072 [52.63]	1.852 [47.04]	0.339 [8.61]	0.283 [7.19]
SHELL SIZE 4	2.720 [69.09]	2.500 [63.50]	0.339 [8.61]	0.283 [7.19]
SHELL SIZE 5	2.626 [66.70]	2.406 [61.11]	0.395 [10.03]	0.545 [13.84]



Typical Part Number:
SCBM17W2M85R7NT2G



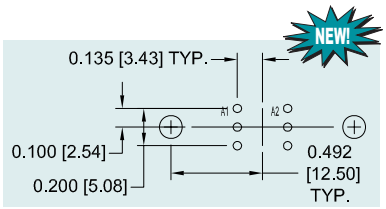
Typical Part Number:
SCBM36W4M85R7NT2G

NOTE: Shell size 5 connectors are supplied inverted when ordered with 90° printed board mount shielded contact.

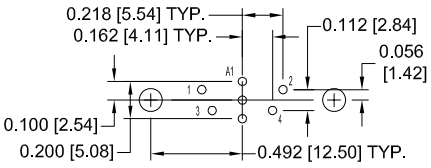
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STRAIGHT PRINTED BOARD MOUNT CONTACT HOLE PATTERN WITH FDS4201M AND MDS4201M SHIELDED CONTACTS

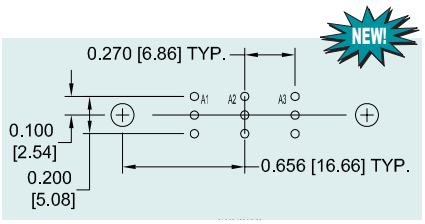
HOLE IDENTIFICATION SHOWN IS FOR MALE CONNECTOR; USE MIRROR IMAGE FOR FEMALE CONNECTOR.



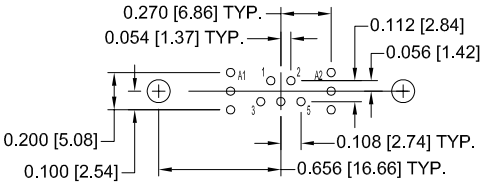
2WK2



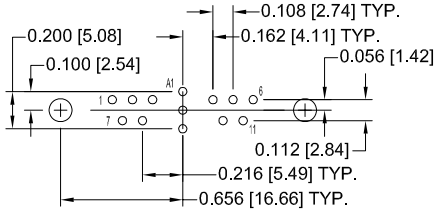
5W1



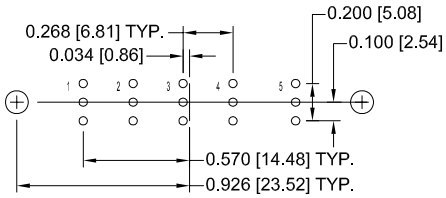
3W3/3WK3



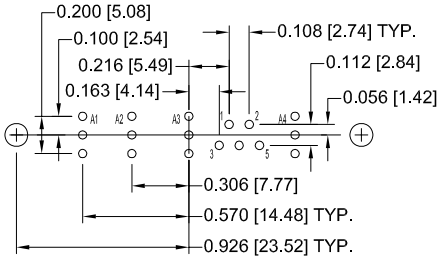
7W2



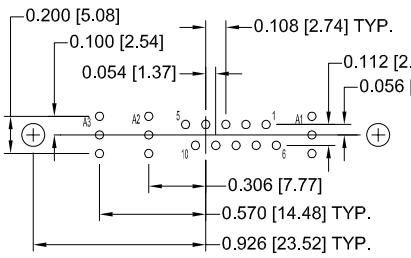
11W1



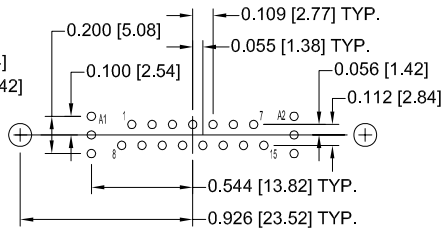
5W5



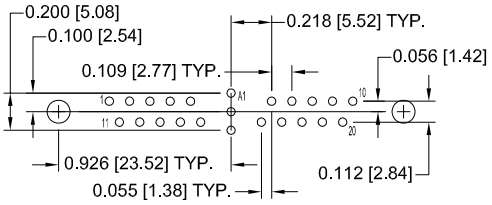
9W4



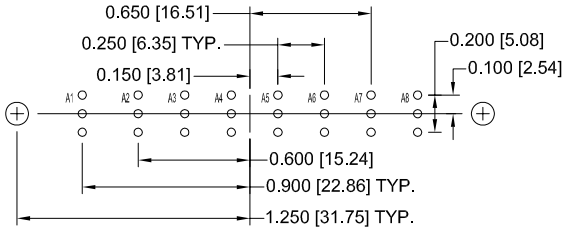
13W3



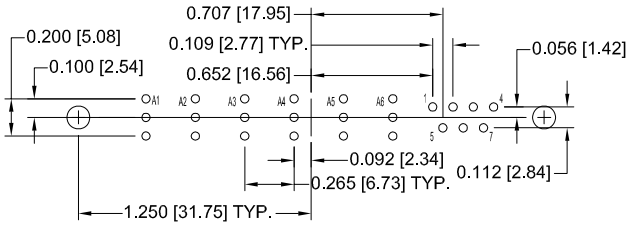
17W2



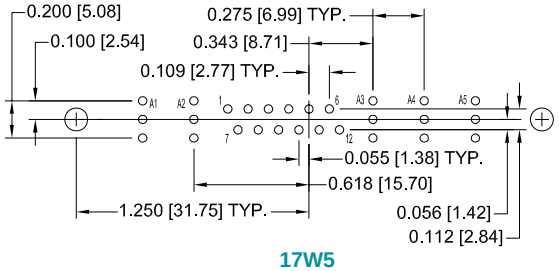
21W1



8W8



13W6



17W5

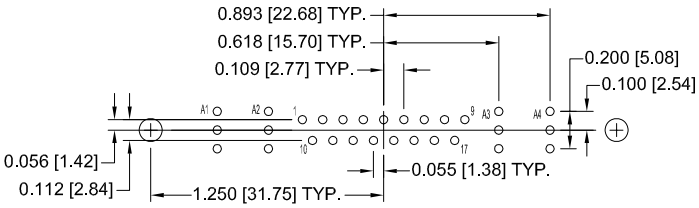
Suggest 0.045[1.14] Ø hole for signal contact termination position.
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**DIMENSIONS ARE IN INCHES [MILLIMETERS].
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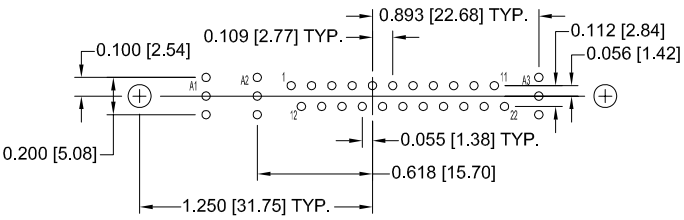
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STRAIGHT PRINTED BOARD MOUNT CONTACT HOLE PATTERN WITH FDS4201M AND MDS4201M SHIELDED CONTACTS

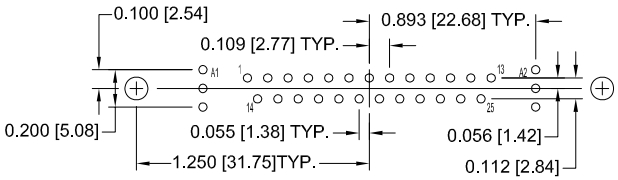
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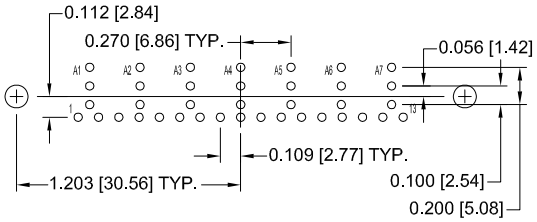
21WA4



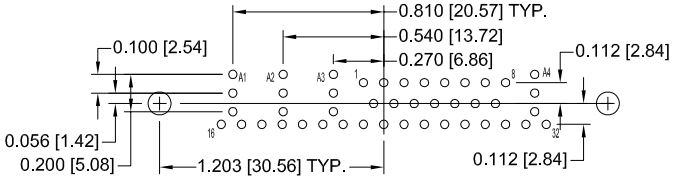
25W3



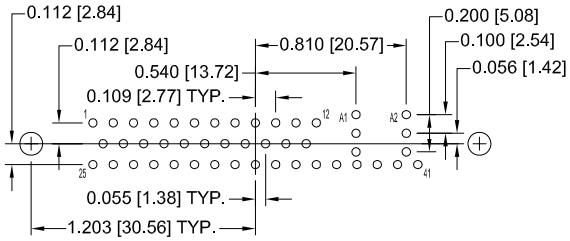
27W2



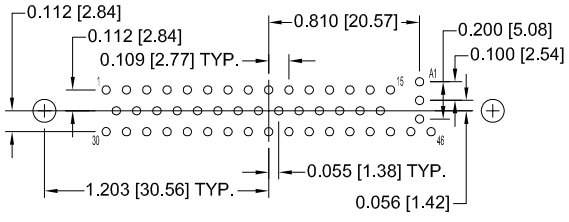
24W7



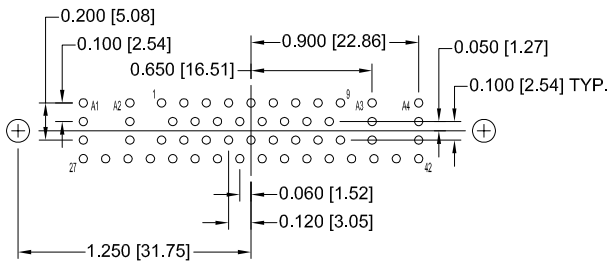
36W4



43W2



47W1



46W4

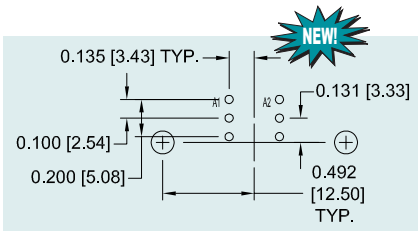
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DIMENSIONS ARE IN INCHES [MILLIMETERS].
ALL DIMENSIONS ARE SUBJECT TO CHANGE.

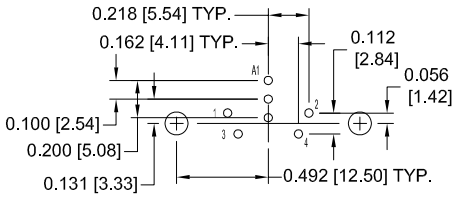
Downloaded from Arrow.com.

90° PRINTED BOARD MOUNT CONTACT HOLE PATTERN WITH FRT4201M AND MRT4201M SHIELDED CONTACTS

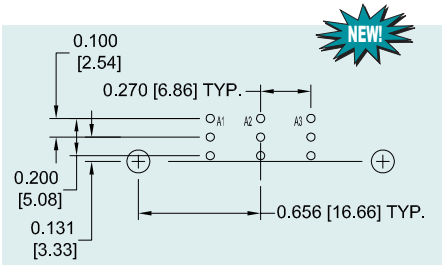
HOLE IDENTIFICATION SHOWN IS FOR MALE CONNECTOR; USE MIRROR IMAGE FOR FEMALE CONNECTOR.
MOUNT CONNECTOR WITH MATING FACE POSITIONED TO FOLLOW DIRECTION OF ARROW.



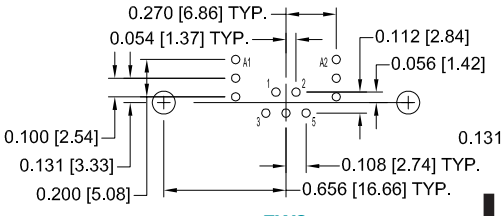
2WK2



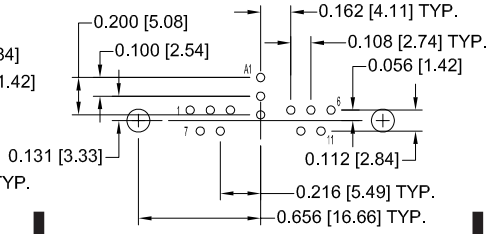
5W1



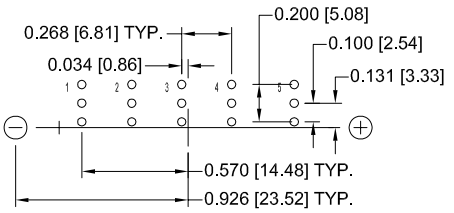
3W3/3WK3



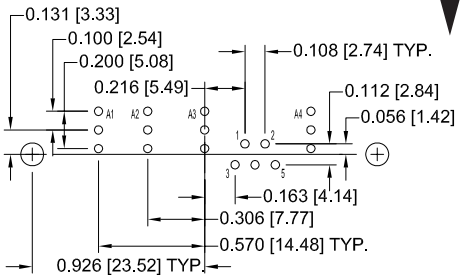
7W2



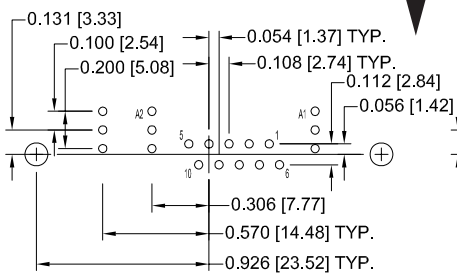
11W1



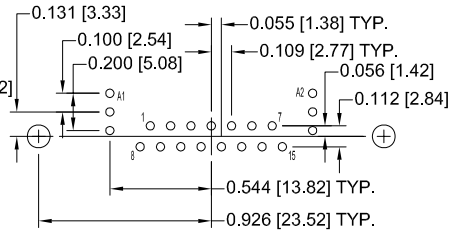
5W5



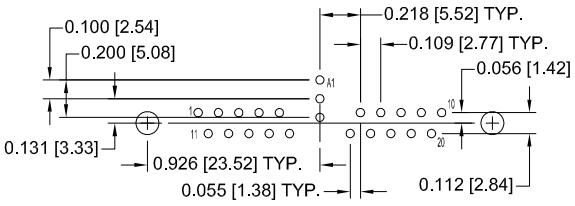
9W4



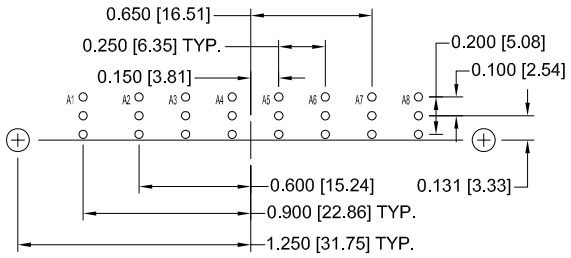
13W3



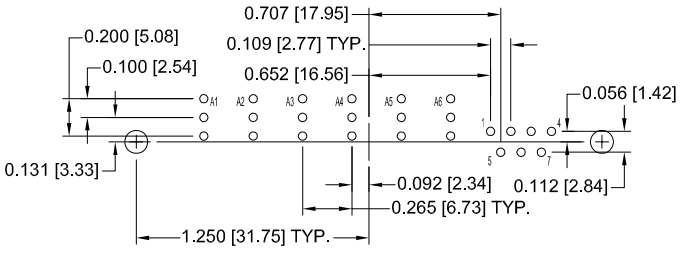
17W2



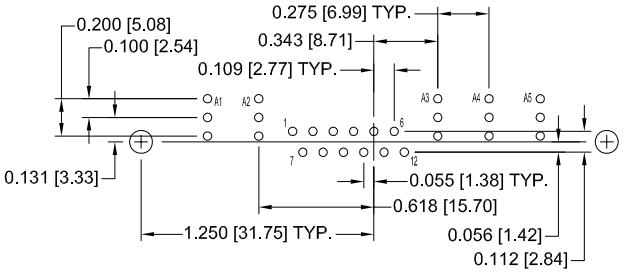
21W1



8W8



13W6



17W5

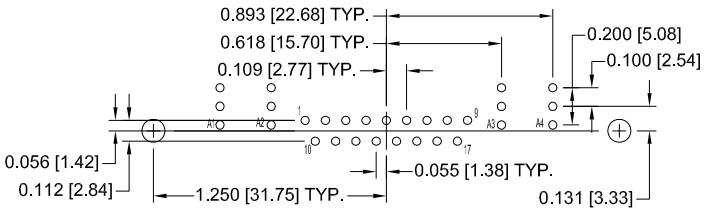
Suggest 0.045[1.14] Ø hole for signal contact termination position.
Suggest 0.123 ±0.003 [3.12] Ø hole for mounting connector with push-on fastener.

**DIMENSIONS ARE IN INCHES [MILLIMETERS].
ALL DIMENSIONS ARE SUBJECT TO CHANGE.**

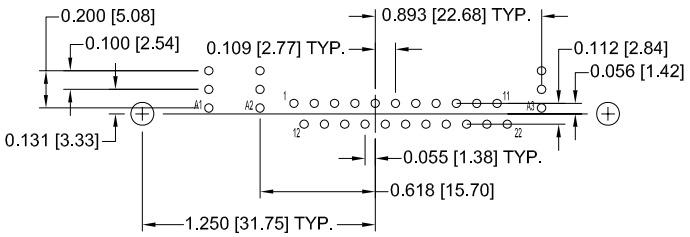
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90° PRINTED BOARD MOUNT CONTACT HOLE PATTERN WITH FRT4201M AND MRT4201M SHIELDED CONTACTS

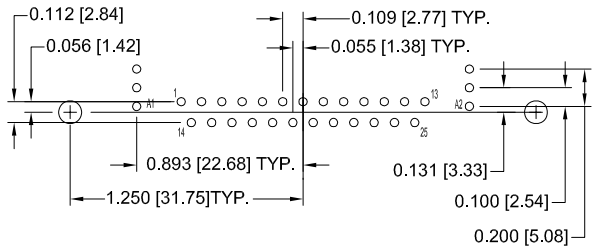
HOLE IDENTIFICATION SHOWN IS FOR MALE CONNECTOR; USE MIRROR IMAGE FOR FEMALE CONNECTOR.
MOUNT CONNECTOR WITH MATING FACE POSITIONED TO FOLLOW DIRECTION OF ARROW.



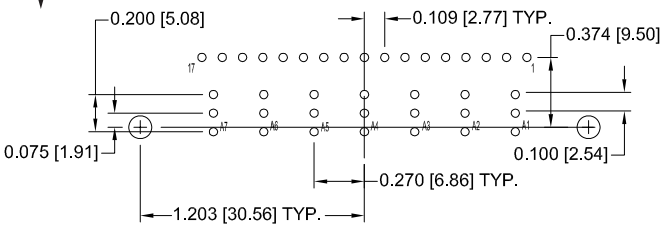
21WA4



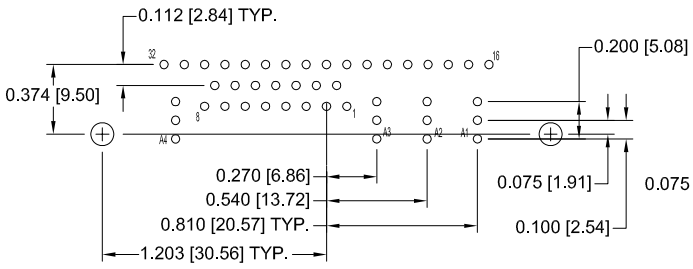
25W3



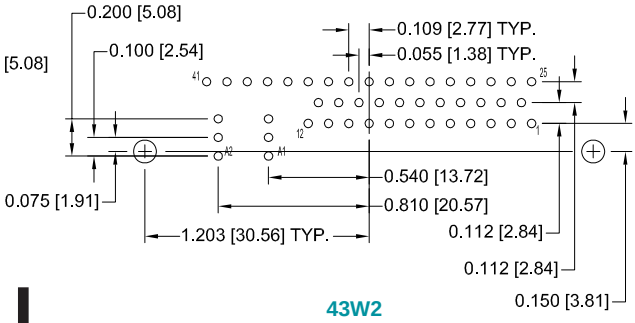
27W2



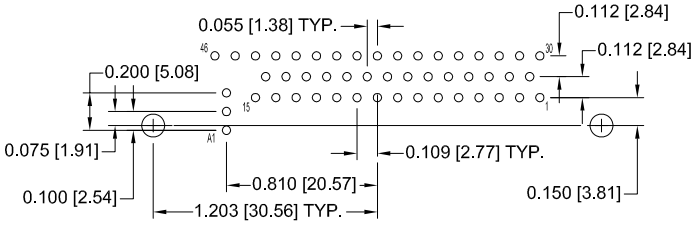
24W7



36W4



43W2



47W1

Suggest 0.045[1.14] Ø hole for signal contact termination position.
Suggest 0.123 ±0.003 [3.12] Ø hole for mounting connector with push-on fastener.

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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	SCBM	17W2	F	55	R7	N	T2	G	—	

STEP 1 - BASIC SERIES

SCBM Series

STEP 2 - CONNECTOR VARIANTS

Shell Size 1
2WK2, 5W1

Shell Size 2
3W3, 3WK3, 7W2, 11W1

Shell Size 3
5W5, 9W4, 13W3, 17W2, 21W1

Shell Size 4
8W8, 13W6, 17W5, 21WA4, 25W3, 27W2

Shell Size 5
24W7, 36W4, 43W2, 47W1

Shell Size 6
46W4

STEP 3 - CONNECTOR GENDER

M - Male
F - Female

STEP 4 - CONTACT TERMINATION TYPE

0 - Connector ordered without size 8 power shielded or high voltage removable contacts. See pages 39-42 for contact part numbers. Available on 2WK2, 3W3, 3WK3, 5W5 and 8W8.
2 - Solder Cup, Signal Contacts only.
3 - Solder, Straight Printed Board Mount with Signal Contacts, 0.170[4.32] Tail Length.
35 - Solder, Straight Printed Board Mount with Signal and 0.078[1.98] Ø Power Contacts, 0.170[4.32] Tail Length.
37 - Solder, Straight Printed Board Mount with Signal and 0.125[3.18] Ø Power Contacts, 0.170[4.32] Tail Length.
5 - Solder, 90˚ Printed Board Mount with Signal Contacts only, 0.283[7.19] Signal Contact Extension.
55 - Solder, 90˚ Printed Board Mount with Signal and 0.078[1.98] Ø Power Contacts, 0.283[7.19] Signal Contact Extension.
57 - Solder, 90˚ Printed Board Mount with Signal and 0.125[3.18] Ø Power Contacts, 0.283[7.19] Signal Contact Extension.
65 - Solder, Straight Printed Board Mount with Signal and Shielded Contacts, MDS/FDS 4201M footprint, 0.170[4.32] Signal Contact Tail Length.
7 - Solder, Metric System 90˚ Printed Board Mount with Signal Contacts only, 0.370[9.40] Signal Contact Extension.
75 - Solder, Metric System 90˚ Printed Board Mount with Signal and 0.078[1.98] Ø Power Contacts, 0.370[9.40] Signal Contact Extension.
77 - Solder, Metric System 90˚ Printed Board Mount with Signal and 0.125[3.18] Ø Power Contacts, 0.370[9.40] Signal Contact Extension.
** 85 - Solder, 90˚ Printed Board Mount with Signal and Shielded Contacts, MRT/FRT 4201M Footprint, 0.283[7.19] Signal Contact Extension.

*STEP 5 - MOUNTING STYLE

0 - Mounting Hole, 0.120[3.05] Ø.
02 - Mounting Hole, 0.154[3.91] Ø.
B3 - Bracket, Mounting, 90˚ Metal with Cross Bar.
F - Float Mounts, Universal.
P - Threaded Post, Brass, 0.250[6.35] Length.
R2 - Bracket, Mounting, 90˚ Metal, Swaged to Connector with 4-40 Thread Fixed Female Jackscrews with Cross Bar.
R6 - Bracket, Mounting, 90˚ Metal, Swaged to Connector with 0.120 [3.05] Ø Mounting Hole with Cross Bar.
R7 - Bracket, Mounting, 90˚ Metal, Swaged to Connector with 4-40 Threads with Cross Bar.
R8 - Bracket, Mounting, 90˚ Metal, Swaged to Connector with 4-40 Locknut with Cross Bar.
S - Swaged Spacer, 4-40 Threads, 0.250[6.35] Length.
S2 - Swaged Spacer, 4-40 Threads, 0.125[3.18] Length.
S5 - Swaged Locknut, 4-40 Threads.
S6 - Swaged Spacer with Push-on Fastener, 4-40 Threads, 0.250[6.35] Length.

*STEP 6 - HOODS AND PUSH-ON FASTENERS

0 - None.
H - Hood, Top Opening, Brass.
M - Hood, Top Opening, Aluminum, see page 58 for complete listing of options.
N - Push-on Fastener for 90˚ Mounting Brackets.

* 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.

STEP 8 - SHELL OPTIONS

G - Gold over Copper Plate.
D - Gold over Copper Plate and Dimpled.

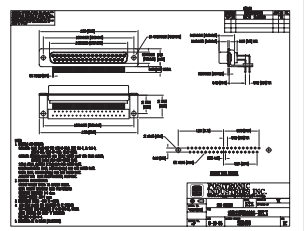
STEP 9 - SPECIAL OPTIONS

CONTACT TECHNICAL SALES FOR SPECIAL OPTIONS

*** NOTE: For additional information on accessories listed in Steps 5, 6, and 7, see the Accessories section, pages 54-60.**

**** NOTE: Not available on Shell Size 6, CBD 46W4.**

NOTE: Once you have made a connector selection, contact Technical Sales if you would like to receive a drawing in DXF, PDF format or a 3-dimensional IGES, STEP, or SOLIDWORKS file.



SK Drawing



3-dimensional model

DIMENSIONS ARE IN INCHES [MILLIMETERS].
ALL DIMENSIONS ARE SUBJECT TO CHANGE.

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NEW!

Lightweight Subminiature-D Connectors

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	SCBM	17W2	F	55	B10	0	T2	A	—	

STEP 1 - BASIC SERIES

SCBM Series

STEP 2 - CONNECTOR VARIANTS

Shell Size 1
2WK2, 5W1

Shell Size 2
3W3, 3WK3, 7W2, 11W1

Shell Size 3
5W5, 9W4, 13W3, 17W2, 21W1

Shell Size 4
8W8, 13W6, 17W5, 21WA4, 25W3, 27W2

Shell Size 5
24W7, 36W4, 43W2, 47W1

Shell Size 6
46W4

STEP 3 - CONNECTOR GENDER

M - Male
F - Female

STEP 4 - CONTACT TERMINATION TYPE

0 - Connector ordered without size 8 power shielded or high voltage removable contacts. See pages 39-42 for contact part numbers. Available on 2WK2, 3W3, 3WK3, 5W5 and 8W8.
2 - Solder Cup, Signal Contacts only.
3 - Solder, Straight Printed Board Mount with Signal Contacts, 0.170[4.32] Tail Length.
35 - Solder, Straight Printed Board Mount with Signal and 0.078[1.98] Ø Power Contacts, 0.170[4.32] Tail Length.
37 - Solder, Straight Printed Board Mount with Signal and 0.125[3.18] Ø Power Contacts, 0.170[4.32] Tail Length.
5 - Solder, 90˚ Printed Board Mount with Signal Contacts only, 0.283[7.19] Signal Contact Extension.
55 - Solder, 90˚ Printed Board Mount with Signal and 0.078[1.98] Ø Power Contacts, 0.283[7.19] Signal Contact Extension.
57 - Solder, 90˚ Printed Board Mount with Signal and 0.125[3.18] Ø Power Contacts, 0.283[7.19] Signal Contact Extension.
65 - Solder, Straight Printed Board Mount with Signal and Shielded Contacts, MDS/FDS 4201M footprint, 0.170[4.32] Signal Contact Tail Length.
7 - Solder, Metric System 90˚ Printed Board Mount with Signal Contacts only, 0.370[9.40] Signal Contact Extension.
75 - Solder, Metric System 90˚ Printed Board Mount with Signal and 0.078[1.98] Ø Power Contacts, 0.370[9.40] Signal Contact Extension.
77 - Solder, Metric System 90˚ Printed Board Mount with Signal and 0.125[3.18] Ø Power Contacts, 0.370[9.40] Signal Contact Extension.
** 85 - Solder, 90˚ Printed Board Mount with Signal and Shielded Contacts, MRT/FRT 4201M Footprint, 0.283[7.19] Signal Contact Extension.

*STEP 5 - MOUNTING STYLE

0 - Mounting hole, 0.120 [3.05] Ø.
02 - Mounting hole, 0.154 [3.91] Ø.
P4 - Threaded post, aluminum with gold plate.
B9 - Bracket, mounting, 90˚ plastic with cross bar.
B10 - Bracket, mounting, 90˚ with threaded insert and cross bar.

*STEP 6 - HOODS AND PUSH-ON FASTENERS

0 - None.
H - Hood, Top Opening, Brass.
M - Hood, Top Opening, Aluminum, see page 58 for complete listing of options.

*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.

STEP 8 - SHELL OPTIONS

A - Aluminum with gold plate.

STEP 9 - SPECIAL OPTIONS

CONTACT TECHNICAL SALES FOR SPECIAL OPTIONS

* **NOTE: For additional information on accessories listed in Steps 5, 6, and 7, see the Accessories section, pages 54-60.**

** **NOTE: Not available on Shell Size 6, CBD 46W4.**

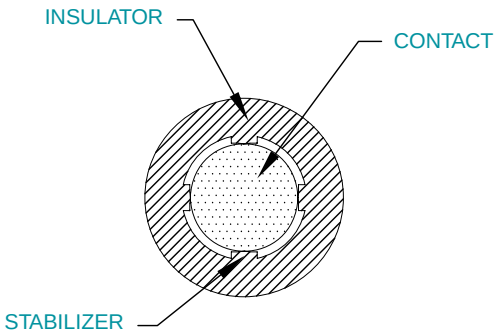
*** **NOTE: Material: Brass with gold plate.**

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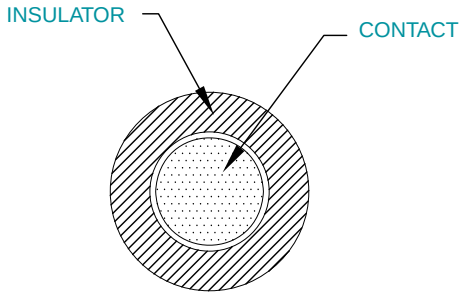
NEW!

SIZE 8 CONTACT STABILIZATION FEATURE

MINIMIZES FLOAT IN SIZE 8 CONTACT POSITIONS



WITH STABILIZER

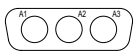


WITHOUT STABILIZER

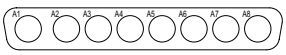
SCBM size 8 male contacts are removed toward the rear after utilizing front release tooling. Space must be provided between the contact and the connector molding so the tooling can slide over the mating portion of the contact. This fact allows the contact to float.

In some applications this float creates problems in alignment during mating. Many male contact SCBM variants offer an integral stabilizing feature to minimize problems created by float in size 8 contacts. An alternate tool is used to remove the contact if necessary. Tool number is 4311-0-1-0.

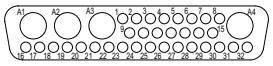
The stablization feature is currently available for the following male contact variants:



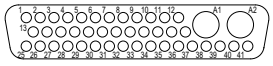
SCBM3W3M



SCBM8W8M



SCBM36W4M



SCBM43W2M

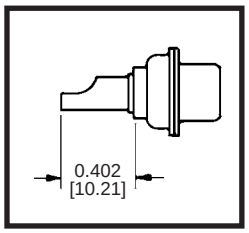
Add MOS -1570.4 to end of part number. Example: SCBM3W3M0000G-1570.4

DIMENSIONS ARE IN INCHES [MILLIMETERS].
ALL DIMENSIONS ARE SUBJECT TO CHANGE.

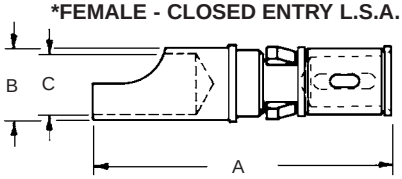
Downloaded from Arrow.com.

REMOVABLE SOLDER CUP POWER CONTACTS

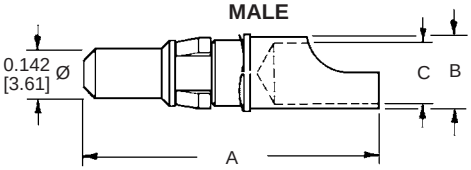
CONTACTS MUST BE ORDERED SEPARATELY.



*FEMALE - CLOSED ENTRY L.S.A.



MALE



Material: High conductivity copper alloy.
Plating: 0.000050 inch [1.27 µ] gold over copper.

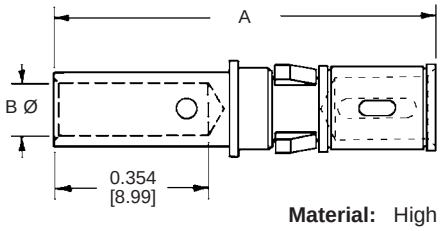
PART NUMBER	CURRENT RATING	WIRE SIZE	A REF.	B Ø	C Ø
FS4008M	40 AMPS	8	0.858 [21.79]	0.219 [5.56]	0.188 [4.78]
FS4012M	20 AMPS	12	0.858 [21.79]	0.143 [3.63]	0.112 [2.84]
FS4016M	10 AMPS	16	0.858 [21.79]	0.100 [2.54]	0.069 [1.75]

PART NUMBER	CURRENT RATING	WIRE SIZE	A REF.	B Ø	C Ø
MS4008M	40 AMPS	8	0.868 [22.05]	0.219 [5.56]	0.188 [4.78]
MS4012M	20 AMPS	12	0.868 [22.05]	0.143 [3.63]	0.112 [2.84]
MS4016M	10 AMPS	16	0.868 [22.05]	0.100 [2.54]	0.069 [1.75]

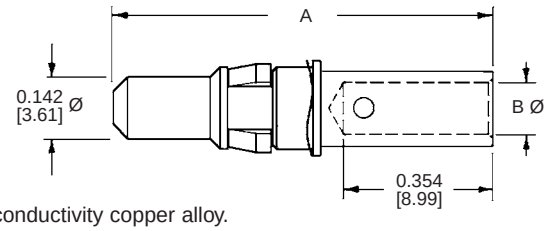
REMOVABLE CRIMP POWER CONTACTS

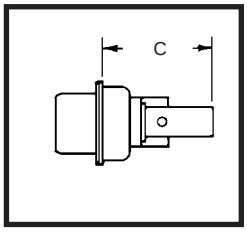
CONTACTS MUST BE ORDERED SEPARATELY.

*FEMALE - CLOSED ENTRY L.S.A.



MALE





Material: High conductivity copper alloy.
Plating: 0.000050 inch [1.27 µ] gold over copper.

PART NUMBER	CURRENT RATING	WIRE SIZE	A REF.	B Ø	C MAX.
FC4008M	40 AMPS	8	0.858 [21.79]	0.181 [4.60]	0.640 [16.26]
FC4012M	20 AMPS	12	0.858 [21.79]	0.101 [2.57]	0.640 [16.26]
FC4016M	10 AMPS	16	0.858 [21.79]	0.067 [1.70]	0.640 [16.26]

PART NUMBER	CURRENT RATING	WIRE SIZE	A REF.	B Ø	C MAX.
MC4008M	40 AMPS	8	0.882 [22.40]	0.181 [4.60]	0.640 [16.26]
MC4012M	20 AMPS	12	0.882 [22.40]	0.101 [2.57]	0.640 [16.26]
MC4016M	10 AMPS	16	0.882 [22.40]	0.067 [1.70]	0.640 [16.26]



9509-0-0 Power Contact Hand Crimp Tool
For use with
*C4012M and *C4016M Contacts



9504-19 Power Contact Hand Crimp Tool
For use with *C4008M Contacts



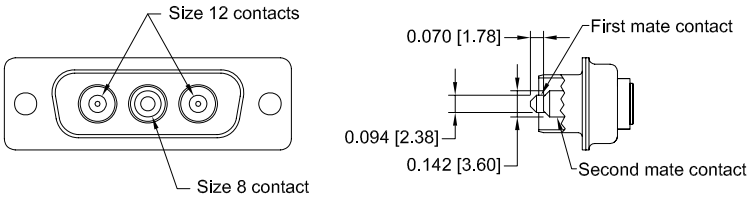
4311-0-0 Power Contact Removal Tool

***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.**

DIMENSIONS ARE IN INCHES [MILLIMETERS].
ALL DIMENSIONS ARE SUBJECT TO CHANGE.

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SEQUENTIAL MATING CONTACTS



Note: A third level can be accomplished with signal contacts where applicable.

Three levels of sequential mating are possible as follows:

- First mate accomplished by a size 12 power contact. Male contact diameter is 0.094 inch.
- Second mate accomplished by a size 8 power contact. Male contact diameter is 0.142 inch.
- Third mate accomplished by size 20 signal contacts, as applicable.

Contact Technical Sales for more information.

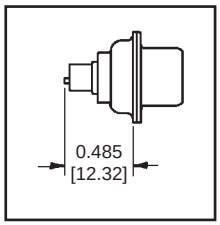
DIMENSIONS ARE IN INCHES [MILLIMETERS].
ALL DIMENSIONS ARE SUBJECT TO CHANGE.

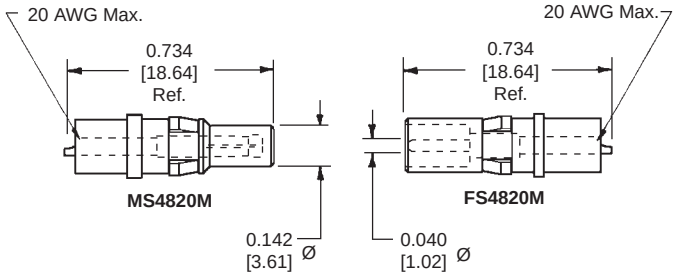
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REMOVABLE HIGH VOLTAGE CONTACTS

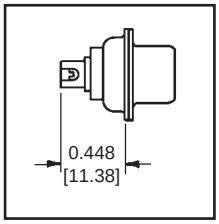
CONTACTS MUST BE ORDERED SEPARATELY.

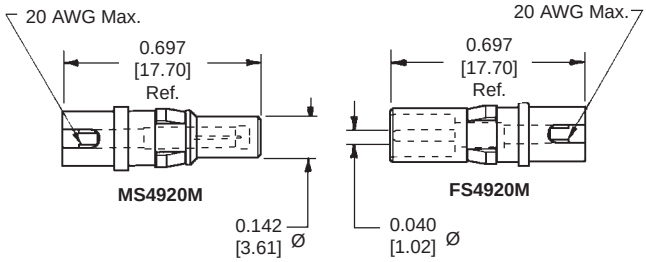
STRAIGHT SOLDER WIRE TERMINATION





90° SOLDER WIRE TERMINATION





TECHNICAL CHARACTERISTICS

MATERIALS AND FINISHES:

Insulators: Teflon, PTFE.

Contacts: Male contacts, brass. Female contacts, phosphor bronze.

Plating: 0.000050 inch [1.27 microns] gold over copper.

ELECTRICAL CHARACTERISTICS:

HIGH VOLTAGE CONTACTS

Flash Over Voltage: 3600 V r.m.s.

Proof Voltage: 2700 V r.m.s.

Initial Contact Resistance: 0.008 ohms maximum.

MECHANICAL CHARACTERISTICS:

Size 8 Removable Contacts: Rear insertion, front release.

Durability: 500 cycles minimum.

Vibration: 20g from 10 Hz to 500 Hz.

Shock: 30g-11ms.

CLIMATIC CHARACTERISTICS:

Temperature Range: -55˚C to +125˚C.

SHIELDED CONTACTS
TECHNICAL CHARACTERISTICS

MATERIALS AND FINISHES:

Insulating Material: (Dielectric) Teflon, PTFE.

Inner Contacts: Brass and Phosphor Bronze, 0.000050 inch [1.27 microns] gold over copper.

Outer Contacts: Brass and Phosphor Bronze, 0.000050 inch [1.27 microns] gold over copper.

ELECTRICAL CHARACTERISTICS:

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

Proof Voltage: 1,000 V r.m.s.

***Above values measured using frequency domain techniques.**

MECHANICAL CHARACTERISTICS:

Removable Contacts: Rear Insertion, front release.

Durability: 500 cycles, minimum.

Vibration: 20g from 10 HZ to 500 HZ.

Shock: 30g - 11 ms.

CLIMATIC CHARACTERISTICS:

Temperature Range: -55˚C to +125˚C.

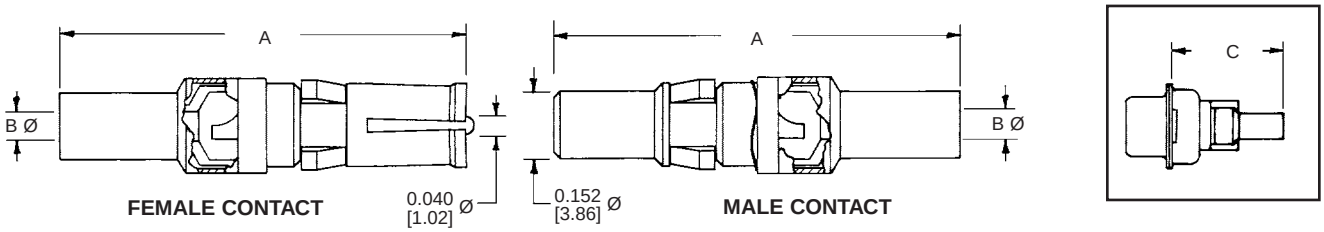
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REMOVABLE SHIELDED CONTACTS

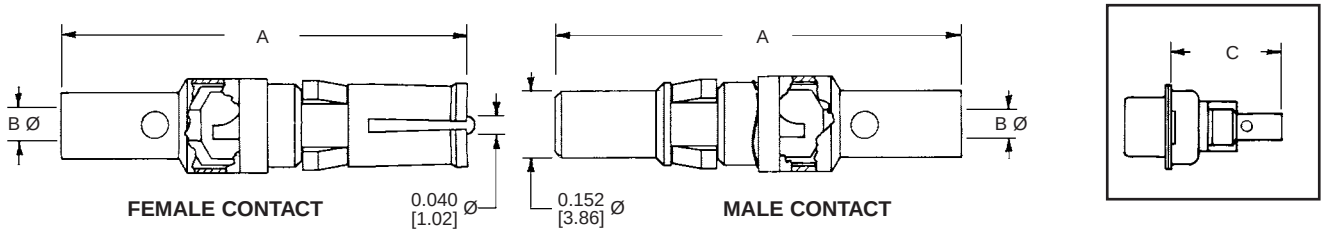
CODE 13 AND 14

CONTACTS MAY BE SUPPLIED WITH CONNECTOR OR ORDERED SEPARATELY

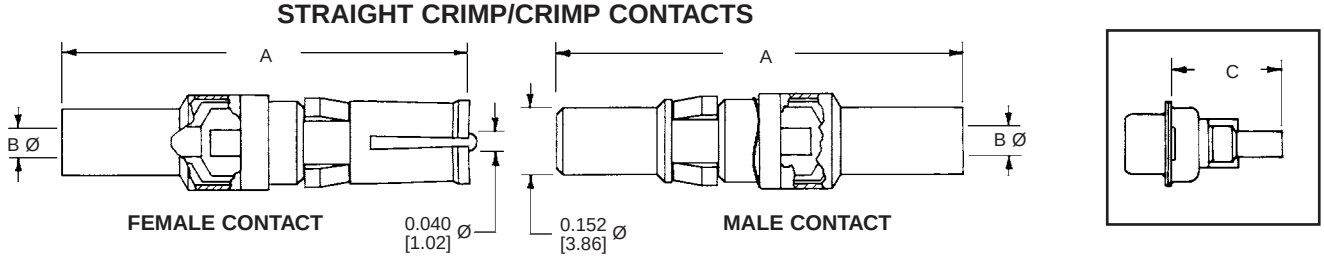
STRAIGHT SOLDER/CRIMP CONTACTS



STRAIGHT SOLDER/SOLDER CONTACTS



STRAIGHT CRIMP/CRIMP CONTACTS



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

Material: Copper alloy with PTFE teflon insulator.

Signal Contact Plating:
0.000050 inch [1.27 µ] gold over copper.
Contact Body Plating:
0.000050 inch [1.27 µ] gold over copper.

Two-step crimping action for signal and shielding conductors.

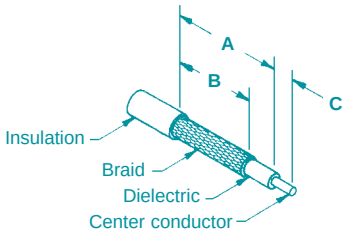
For crimping information and crimp tools, see page 43.

DIMENSIONS ARE IN INCHES [MILLIMETERS].
ALL DIMENSIONS ARE SUBJECT TO CHANGE.

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SOLDERING AND CRIMPING INFORMATION FOR SCBC AND SCBM SERIES SHIELDED CONTACTS

STEP 1: STRIP WIRE TO INDICATED LENGTH.



TAKE CARE NOT TO:
- Damage or remove strands.
- Untwist or overtwist strands.
- Leave insulation particles on strands.
- Damage insulation.

STEP 2: CRIMP WIRE TO CONTACT.

- Trim cable.
- Slide ferrule over jacket. Insert dielectric and center conductor into barrel. Crimp center conductor into contact.
- Butt ferrule against shoulder. Crimp ferrule over braid.

STEP 2: SOLDER WIRE TO CONTACT.

- Trim cable. Tin center conductor.
- Slide ferrule over jacket. Insert dielectric and center conductor into barrel. Solder center conductor into contact.
- Butt ferrule against shoulder. Solder cable to barrel through hole in ferrule. Solder cap into body.

STEP 2: SOLDER/CRIMP WIRE TO CONTACT.

- Trim cable. Tin center conductor.
- Slide ferrule over jacket. Insert dielectric and center conductor into barrel. Solder center conductor into contact.
- Butt ferrule against shoulder. Crimp ferrule over braid. Solder cap into body.

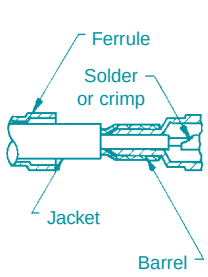


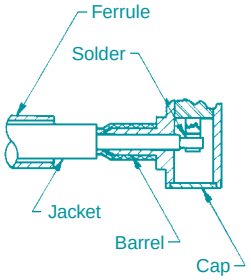
Shielded Contact Hand Crimp Tool
See Chart below for Crimp Tool Part Numbers.

PART NUMBER	RG CABLE NUMBER	A	B	C	CRIMP TOOL
*C4101M *S4101M	178 B/U	0.281 [7.14]	0.250 [6.35]	0.078 [1.98]	9504-0
*C4102M *S4102M	179 B/U 316 /U	0.281 [7.14]	0.250 [6.35]	0.078 [1.98]	9504-0
*C4103M *S4103M	180 B/U	0.375 [9.53]	0.312 [7.92]	0.078 [1.98]	9504-0
*C4104M *S4104M	58 B/U	0.375 [9.53]	0.312 [7.92]	0.078 [1.98]	9504-0
*CC4101M	178 B/U	0.281 [7.14]	0.250 [6.35]	0.120 [3.05]	9504-14
*CC4102M	179 B/U 316 /U	0.281 [7.14]	0.250 [6.35]	0.120 [3.05]	9504-13
*CC4103M	180 B/U	0.375 [9.53]	0.312 [7.92]	0.120 [3.05]	9504-15
*CC4104M	58 B/U	0.375 [9.53]	0.312 [7.92]	0.120 [3.05]	9504-15

***Contact gender is designated by M for male contacts and F for female contacts.**

Typical Part Number:
FC4101M





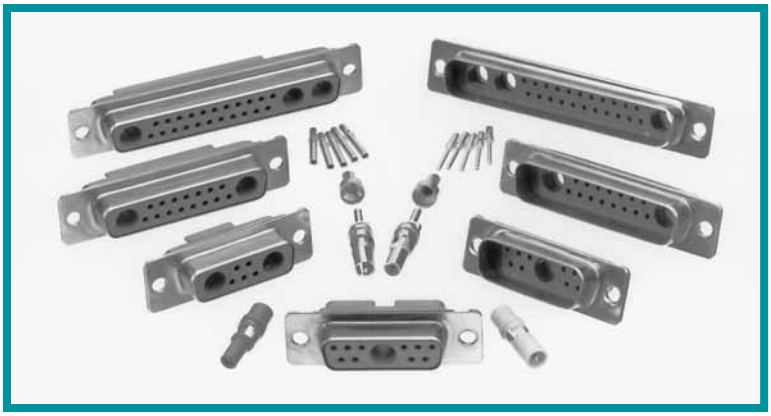
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COMBINATION SUBMINIATURE-D CONNECTORS WITH REMOVABLE CRIMP CONTACTS

HIGH PERFORMANCE, NON-OUTGASSING, NON-MAGNETIC

Size 20 Signal Contacts, Crimp Removable

Size 8 Shielded and Power Crimp Removable, Printed Board Mountable



SCBC Series are suitable for use in any applications requiring high performance, non-outgassing and non-magnetic characteristic. The SCBC Series features crimp removable Size 20 signal contacts and Size 8 power and shielded contacts.

The materials, dimensions, and performance of the SCBC Series conform to the requirements of DESC drawing 85039 and GSFC S-311-P-405 where applicable. The SCBC Series fully complies to the outgassing requirements of ASTM E-595 and NASA-RP-1124.

The SCBC Series utilizes precision machined contacts with the female contact featuring a "Closed-Entry" design having a brass protective shroud.

Eleven standard combination contact variants are available, utilizing six shell sizes. All connector variants of the SCBC Series are plug compatible with equivalent SCBM printed board mounted or panel mounted connectors.

Non-magnetic cable supports and jackscrew systems are available.

Visual and mechanical inspection per MIL-DTL-24308 is performed, additional testing is available. Contact Technical Sales.

*CONTACT VARIANTS

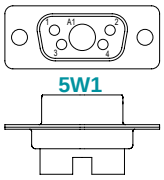
FACE VIEW OF MALE OR REAR VIEW OF FEMALE

NOTES:

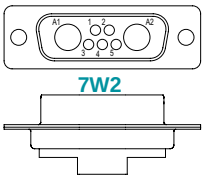
*** Additional contact variants may be tooled at customer request.**

**** 27W2 variant currently available in female only.**

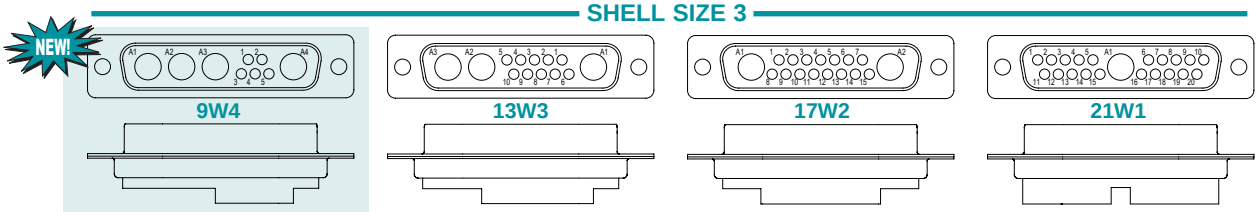
SHELL SIZE 1



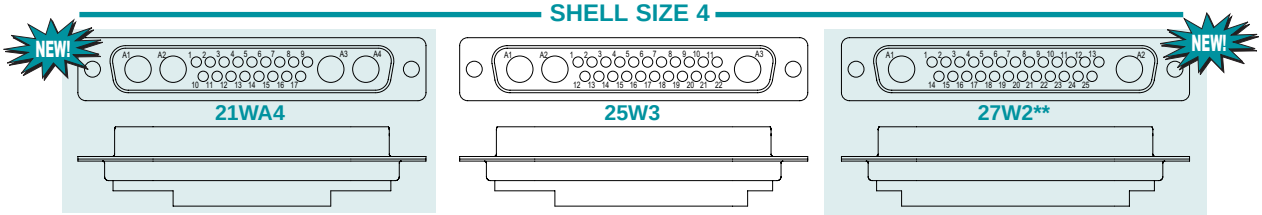
SHELL SIZE 2



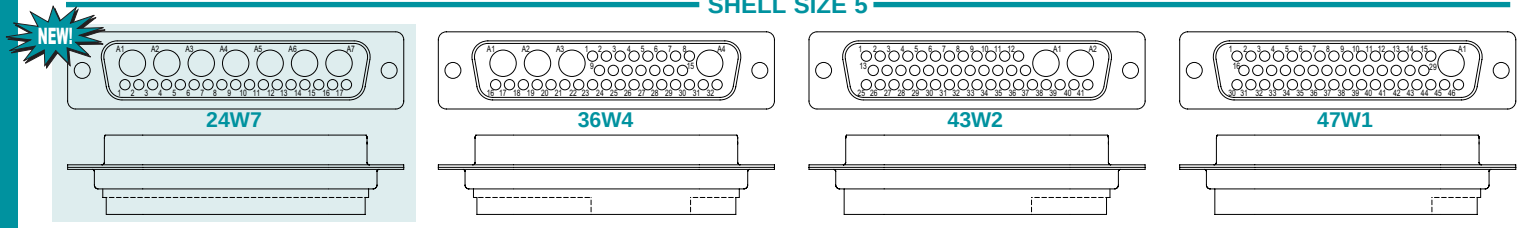
SHELL SIZE 3



SHELL SIZE 4



SHELL SIZE 5



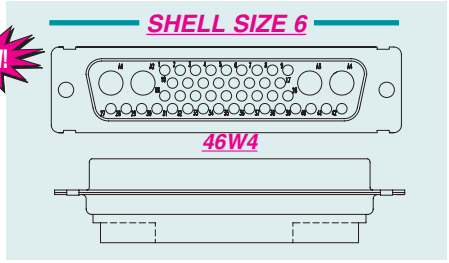
DIMENSIONS ARE IN INCHES [MILLIMETERS].
ALL DIMENSIONS ARE SUBJECT TO CHANGE.

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*CONTACT VARIANTS

FACE VIEW OF MALE OR REAR VIEW OF FEMALE

NEW!



DIMENSIONS ARE IN INCHES [MILLIMETERS].
ALL DIMENSIONS ARE SUBJECT TO CHANGE.

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TECHNICAL CHARACTERISTICS

MATERIALS AND FINISHES:

Insulator: Glass-filled polyester per MIL-M-24519, UL 94V-0, ASTM E-595, NASA-RP-1124, blue color.

Contacts: **Male Contacts:** Precision machined brass alloy. **Female Contacts:** Precision machined high tensile copper alloy with brass shroud; "Closed Entry" design.

Signal Contact Plating: 0.000050 inch [1.27 microns] gold over copper plate.

Power Contacts: Machined of high conductivity copper alloy for both male and female contacts.

Power Contact Plating: 0.000050 inch [1.27 microns] gold over copper plate.

Shielded Contacts: Precision-machined copper alloy male contacts and female contacts. Retainers of beryllium copper.

Shielded Contact Plating: **Signal Contact Plating:** 0.000050 inch [1.27 microns] gold over copper. **Shielded Body Plating:** 0.000050 inch [1.27 microns] gold over copper.

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

NEW! **Lightweight Shell Option:** Aluminum with 0.000050 inch [1.27 microns] gold over non-magnetic electroless nickel.

Mounting Spacers and Brackets: Brass with 0.000050 inch [1.27 microns] gold over copper plate.

NEW! **Lightweight Spacer Option:** Aluminum with 0.000050 inch [1.27 microns] gold over non-magnetic electroless nickel.

NEW! **Lightweight Bracket Option:** Glass-filled polyester per MIL-M-24519, UL 94V-0 blue color.

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

Hoods: Brass with 0.000050 inch [1.27 microns] gold over copper plate or aluminum with yellow chromate conversion or black anodize finish.

ELECTRICAL CHARACTERISTICS:

SIGNAL CONTACTS

Contact Current Rating: 7.5 amperes, nominal.
Initial Contact Resistance: 0.008 ohms, maximum.
Proof Voltage: 1,000 V r.m.s.

POWER CONTACTS

Contact Current Rating: 10, 15, 20, 30, and 40 amperes, nominal.
Initial Contact Resistance: 0.0005 ohms, maximum, per IEC 512-2, test 2b.
Proof Voltage: 1,000 V r.m.s.

SHIELDED CONTACTS

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: 1,000 V r.m.s.

ELECTRICAL CHARACTERISTICS, continued:

CONNECTORS

Insulator Resistance: 5 G ohms.
Clearance and Creepage Distance: 0.039 inch [1.0 mm], minimum.
Working Voltage: 300 V r.m.s.
Residual Magnetism: 20 Gamma, maximum.

MECHANICAL CHARACTERISTICS:

Signal Contacts, Crimp Removable: Size 20 contact. **Male Contact:** 0.040 inch [1.02 mm] diameter. **Female Contact:** Closed entry design with brass shroud.

Contact Retention in Insulator: 9 lbs. [40 N]. Power and shielded - 22 lbs. [98 N].

Crimp Contact Terminations: Closed barrel crimp, wire sizes 20 AWG [1.0 mm^2] through 30 AWG [0.05 mm^2].

Power Contacts, Removable, Crimp or Solder Terminations: Size 8 contacts. **Male Contact:** 0.142 inch [3.61 mm] diameter. **Female Contact:** Features Large Surface Area (L.S.A.) Closed entry design utilizing BeCu mechanical retention member. Male and female contacts have terminations for wire sizes 8, 12, and 16 AWG.

Shielded Contacts, Removable: See table of maximum cable sizes for contact termination dimensions, pages 42 and 43.

Shells: Male shells may be dimpled for EMI/ESD ground paths.

Polarization: Trapezoidally shaped shells and polarized jackscrews.

Locking Systems: Jackscrews.

Mechanical Operations, Signal Contacts: SCBC Series, 1,000 operations, closed entry contact with 0.000050 [1.27 microns] gold plating per IEC 512-5.

CLIMATIC CHARACTERISTICS:

Temperature Range: -55˚C to +125˚C.
Damp Heat, Steady State: 21 days.



SCBC17W2M0000G WITH MC4101M

SCBC17W2F0000G WITH FC4101M

DIMENSIONS ARE IN INCHES [MILLIMETERS].
ALL DIMENSIONS ARE SUBJECT TO CHANGE.

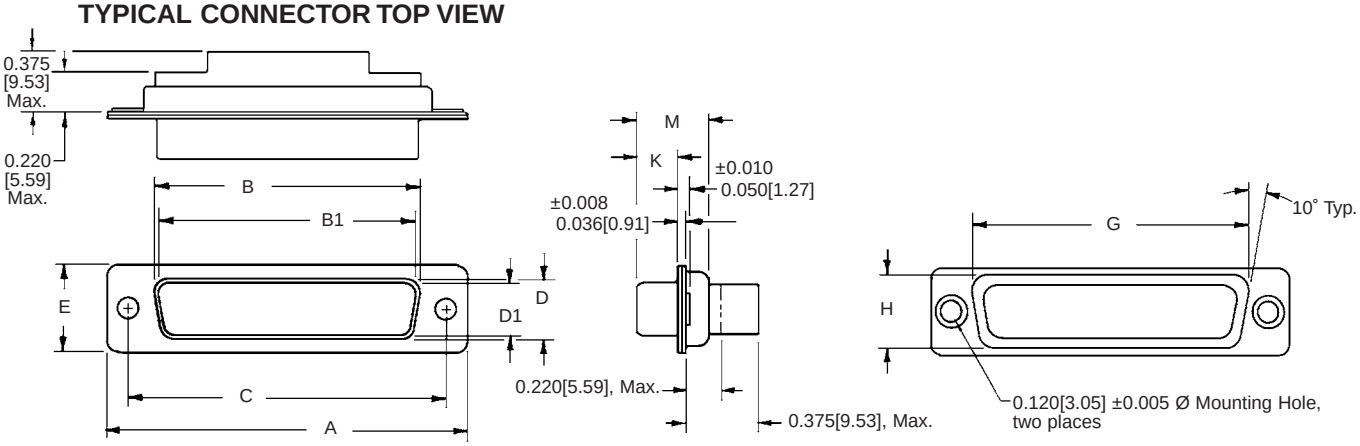
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STANDARD SHELL ASSEMBLY

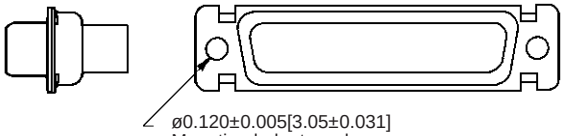


SCBC7W2F0000G SCBC17W2M0000G

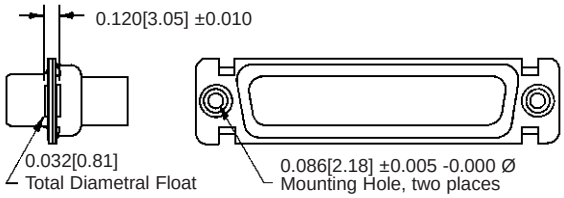
TYPICAL CONNECTOR TOP VIEW



OPTIONAL SHELL ASSEMBLY (0, 02)



OPTIONAL SHELL ASSEMBLY WITH UNIVERSAL FLOAT MOUNTS (F)



SHELL SIZE	A ±0.015	B ±0.005	B1 ±0.005	C ±0.005	D ±0.005	D1 ±0.005	E ±0.015	G ±0.010	H ±0.010	K ±0.005	M ±0.010
SHELL SIZE 1 MALE	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]
SHELL SIZE 1 FEMALE	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]
SHELL SIZE 2 MALE	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]
SHELL SIZE 2 FEMALE	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]
SHELL SIZE 3 MALE	2.088 [53.04]		1.534 [38.96]	1.852 [47.04]		0.329 [8.36]	0.494 [12.55]	1.625 [41.28]	0.422 [10.72]	0.230 [5.84]	0.426 [10.82]
SHELL SIZE 3 FEMALE	2.088 [53.04]	1.511 [38.38]		1.852 [47.04]	0.311 [7.90]		0.494 [12.55]	1.625 [41.28]	0.422 [10.72]	0.243 [6.17]	0.429 [10.90]
SHELL SIZE 4 MALE	2.729 [69.32]		2.182 [55.42]	2.500 [63.50]		0.329 [8.36]	0.494 [12.55]	2.272 [57.71]	0.422 [10.72]	0.230 [5.84]	0.426 [10.82]
SHELL SIZE 4 FEMALE	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]
SHELL SIZE 5 MALE	2.635 [66.93]		2.079 [52.81]	2.406 [61.11]		0.441 [11.20]	0.605 [15.37]	2.178 [55.32]	0.534 [13.56]	0.230 [5.84]	0.426 [10.82]
SHELL SIZE 5 FEMALE	2.635 [66.93]	2.064 [52.43]		2.406 [61.11]	0.423 [10.74]		0.605 [15.37]	2.178 [55.32]	0.534 [13.56]	0.243 [6.17]	0.429 [10.90]

DIMENSIONS ARE IN INCHES [MILLIMETERS].
ALL DIMENSIONS ARE SUBJECT TO CHANGE.

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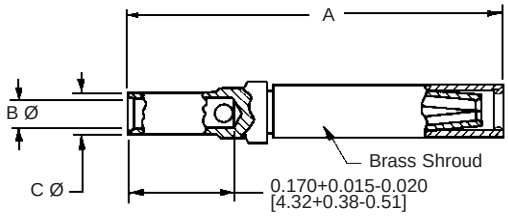
REMOVABLE CRIMP SIGNAL CONTACTS

CODE 1

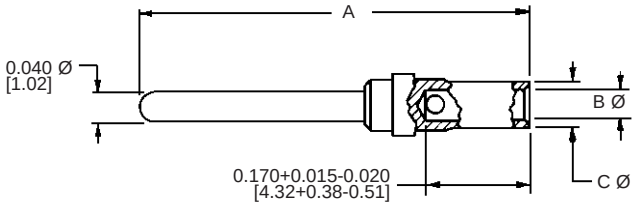
CONTACTS MAY BE SUPPLIED WITH CONNECTOR OR ORDERED SEPARATELY.

CLOSED CRIMP BARREL

FEMALE CONTACT
"CLOSED ENTRY" DESIGN



MALE CONTACT



PART NUMBER	WIRE SIZE AWG/[mm²]	A	B Ø	C Ø
FC6020D-50-1202.1	20 / 22 / 24 [0.5/0.3/0.25]	0.538 [13.67]	0.045 [1.14]	0.066 [1.68]
FC6026D-50-1202.1	26 / 28 / 30 [0.12/0.08/0.05]	0.538 [13.67]	0.027 [0.69]	0.066 [1.68]

Material: Leaded nickel copper.
Plating: 0.000050 inch [1.27 µ] gold over copper.

PART NUMBER	WIRE SIZE AWG/[mm²]	A	B Ø	C Ø
MC6020D-50	20 / 22 / 24 [0.5/0.3/0.25]	0.550 [13.97]	0.045 [1.14]	0.066 [1.68]
MC6026D-50	26 / 28 / 30 [0.12/0.08/0.05]	0.550 [13.97]	0.027 [0.69]	0.066 [1.68]

Material: Brass.
Plating: 0.000050 inch [1.27 µ] gold over copper.

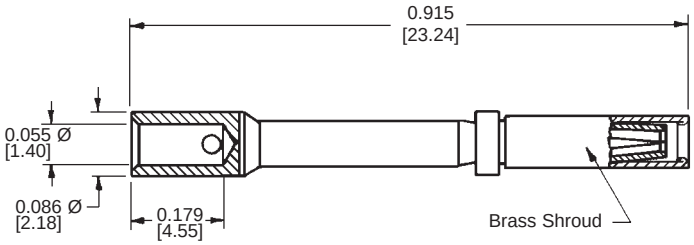
REMOVABLE CRIMP SIGNAL CONTACTS

18 AWG CRIMP CONTACTS

18 AWG [1.0mm²] max.

CONTACTS MUST BE ORDERED SEPARATELY.

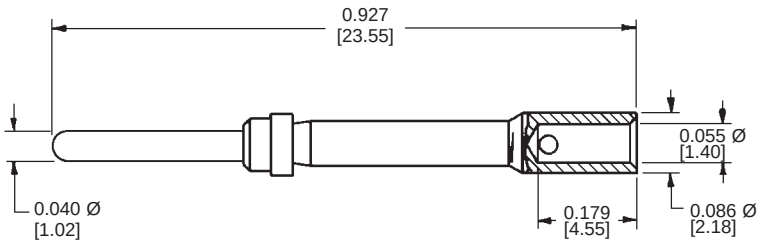
FEMALE CONTACT
"CLOSED ENTRY" DESIGN



Part number:
FC6018M

Material: Leaded nickel copper.
Plating: 0.000050 inch [1.27 µ] gold over copper.

MALE CONTACT



Part number:
MC6018M

Material: Brass.
Plating: 0.000050 inch [1.27 µ] gold over copper.

For crimping information and crimp tools, see Application Tools section, pages 61-64.

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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	SCBC	7W2	M	14	0	0	E	D	—	

STEP 1 - BASIC SERIES

SCBC Series

STEP 2 - CONNECTOR VARIANTS

Shell Size 1
5W1

Shell Size 2
7W2, 11W1

Shell Size 3
9W4, 13W3, 17W2, 21W1

Shell Size 4
21WA4, 25W3, 27W2

Shell Size 5
24W7, 36W4, 43W2, 47W1

Shell Size 6
46W4

STEP 3 - CONNECTOR GENDER

M - Male
F - Female

STEP 4 - CONTACT TERMINATION TYPE

0 - Connector ordered without contacts. Order Signal and Shielded contacts separately. See pages 39-42, and 47 for contact part numbers. Kitted contacts supplied in sealed bags.
1 - Signal Contacts, 20 AWG - 24 AWG [0.5 mm² - 0.25 mm²].
13 - Signal Contacts, 20 AWG - 24 AWG [0.5 mm² - 0.25 mm²] with MCC/FCC 4101M Shielded Contacts.
14 - Signal Contacts, 20 AWG - 24 AWG [0.5 mm² - 0.25 mm²] with MCC/FCC 4102M Shielded Contacts.

*STEP 5 - MOUNTING STYLE

0 - Mounting Hole, 0.120[3.05] Ø.
02 - Mounting Hole, 0.154[3.91] Ø.
F - Float Mounts, Universal.
S2 - Swaged Spacer, 4-40 Threads, 0.125[3.18] Length.
S5 - Swaged Locknut, 4-40 Threads.

*STEP 6 - HOODS

0 - None.
H - Hood, Top Opening, Brass.
M - Hood, Top Opening, Aluminum, see page 58 for complete listing of options.

*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.

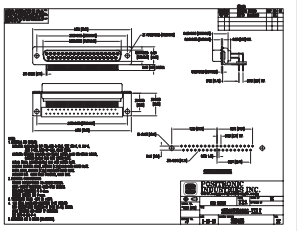
STEP 8 - SHELL OPTIONS

G - Gold over Copper Plate.
D - Gold over Copper Plate and Dimpled.

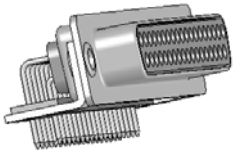
STEP 9 - SPECIAL OPTIONS

CONTACT TECHNICAL SALES FOR SPECIAL OPTIONS

NOTE: Once you have made a connector selection, contact Technical Sales if you would like to receive a drawing in DXF, PDF format or a 3-dimensional IGES, STEP, or SOLIDWORKS file.



SK Drawing



3-dimensional model

* **NOTE: For additional information on accessories listed in Steps 5, 6, and 7, see the Accessories section, pages 54-60.**

For crimping information and crimp tools, see Application Tools section, pages 61-64.

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NEW!

Lightweight
Subminiature-D Connectors

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	SCBC	7W2	M	14	0	0	E	A	—	

STEP 1 - BASIC SERIES

SCBC Series

STEP 2 - CONNECTOR VARIANTS

Shell Size 1
5W1

Shell Size 2
7W2, 11W1

Shell Size 3
9W4, 13W3, 17W2, 21W1

Shell Size 4
21WA4, 25W3, 27W2

Shell Size 5
24W7, 36W4, 43W2, 47W1

Shell Size 6
46W4

STEP 3 - CONNECTOR GENDER

M - Male
F - Female

STEP 4 - CONTACT TERMINATION TYPE

0 - Connector ordered without contacts. Order Signal and Shielded contacts separately. See pages 39-42, and 47 for contact part numbers. Kitted contacts supplied in sealed bags.
1 - Signal Contacts, 20 AWG - 24 AWG [0.5 mm^2 - 0.25 mm^2].
13 - Signal Contacts, 20 AWG - 24 AWG [0.5 mm^2 - 0.25 mm^2] with MCC/FCC 4101M Shielded Contacts.
14 - Signal Contacts, 20 AWG - 24 AWG [0.5 mm^2 - 0.25 mm^2] with MCC/FCC 4102M Shielded Contacts.

*STEP 5 - MOUNTING STYLE

0 - Mounting hole, 0.120 [3.05] Ø.
02 - Mounting hole, 0.154 [3.91] Ø.
P4 - Threaded post, aluminum with gold plate.

*STEP 6 - HOODS

0 - None.
H - Hood, Top Opening, Brass.
M - Hood, Top Opening, Aluminum, see page 58 for complete listing of options.

*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.

STEP 8 - SHELL OPTIONS

A - Aluminum with gold plate.

STEP 9 - SPECIAL OPTIONS

CONTACT TECHNICAL SALES FOR SPECIAL OPTIONS

* NOTE: **For additional information on accessories listed in Steps 5, 6, and 7, see the Accessories section, pages 54-60.**

** NOTE: **Material: Brass with gold plate.**

For crimping information and crimp tools, see Application Tools section, pages 61-64.

NOTE: Error in print catalog on Step 5

B9 and B10 are not available as standard part number and have been removed on this supplement.

B9 - Bracket, mounting, 90° plastic with cross bar.
B10 - Bracket, mounting, 90° with threaded insert and cross bar.

These options can be ordered with MOS number, please contact Technical Sales for MOS part number.

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Positronic Industries
connectpositronic.com

NORMAL AND HIGH DENSITY CONNETOR SAVERS

HIGH PERFORMANCE, NON-OUTGASSING, NON-MAGNETIC

Adapter-D Series

Series SAD
Size 20 Contacts

Series SADD
Size 22 Contacts

Series SACBM
Size 20 and
Size 8 Contacts

Connector Saver



Adapter-D Series connectors suitable for use in any applications requiring high performance, non-outgassing and non-magnetic characteristic. The normal density SAD Series is available in five standard connector variants of 9, 15, 25, 37 and 50 contacts. The high density SADD Series is available in six standard connector variants of 15, 26, 44, 62, 78 and 104 contacts. The SACBM Series is available in twenty standard combination contact variants.

Adapter-D Series connectors utilize precision machined contacts for strength and durability. The female contact features a rugged “Closed Entry” design having a brass shroud.

The materials and finishes, as well as the technical characteristics of the Adapter-D Series connectors conform to MIL-DTL-24308, GSFC S-311-P-4 and GSFC S-311-P-10.

Visual and mechanical inspection per MIL-DTL-24308 is performed, additional testing is available. Contact Technical Sales.

TECHNICAL CHARACTERISTICS

MATERIALS AND FINISHES:

Insulator:	Glass-filled DAP per ASTM-D-5948 or polyester glass-filled per MIL-M-24519, UL 94V-0, ASTM E-595, NASA-RP-1124.
Contacts:	Precision machined high tensile copper alloy with brass shrouds.
Contact Plating:	0.000050 inch [1.27 microns] gold over copper plate.
Shells:	Brass with 0.000050 inch [1.27 microns] gold over copper plate.

ELECTRICAL CHARACTERISTICS:

Contact Current Rating:	40 amperes, nominal, Size 8. 7.5 amperes, nominal, Size 20. 5 amperes, nominal, Size 22.
Initial Contact Resistance:	0.008 ohms, maximum.
Proof Voltage:	1,000 V r.m.s.
Insulator Resistance:	5 G ohms.
Clearance and Creepage Distance:	0.039 inch [1.0 mm], minimum.
Working Voltage:	300 V r.m.s.
Residual Magnetism:	20 Gamma, maximum.

MECHANICAL CHARACTERISTICS:

Fixed Contacts:	**Size 8 Contact:** 0.142 inch [3.61 mm] diameter. **Female Contact:** Features large surface area (L.S.A.) closed entry design utilizing BeCu mechanical retention member. **Size 20 Contact:** 0.040 inch [1.02 mm] diameter. **Female Contact:** Closed entry design with brass shroud. **Size 22 Contact:** 0.030 inch [0.76 mm] diameter. **Female Contact:** Closed entry design with brass shroud.
Connector Saver:	Male to female.
Contact Retention:	9 lbs. [40 N].
Shells:	Male shells may be dimpled for EMI/ESD ground paths.
Polarization:	Trapezoidally shaped shells.
Mechanical Operations:	1,000 operations, minimum, per IEC 512-5.

CLIMATIC CHARACTERISTICS:

Temperature Range:	-55˚C to +125˚C.

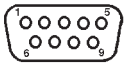
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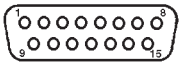
SAD SERIES SIZE 20 CONTACT CONNECTOR SAVER

CONNECTOR VARIANTS

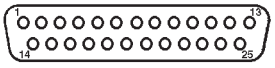
FACE VIEW OF MALE OR REAR VIEW OF FEMALE



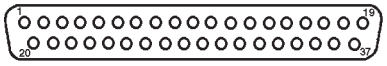
SAD9



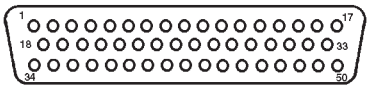
SAD15



SAD25



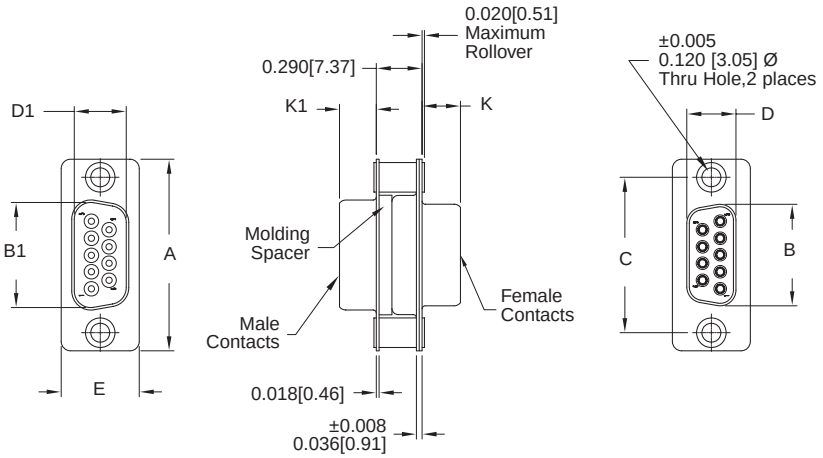
SAD37



SAD50

MALE TO FEMALE CONNECTOR SAVER

SIZE 20 CONTACTS



Typical Part Number: SAD9M/F

CONNECTOR PART NUMBER	A ±0.015	B ±0.005	B1 ±0.005	C ±0.005	D ±0.005	D1 ±0.005	E ±0.015	K ±0.005	K1 ±0.005
SAD9M/F	1.213 [30.81]	0.643 [16.33]	0.666 [16.92]	0.984 [24.99]	0.311 [7.90]	0.329 [8.36]	0.494 [12.55]	0.243 [6.17]	0.233 [5.92]
SAD15M/F	1.541 [39.14]	0.971 [24.66]	0.994 [25.25]	1.312 [33.32]	0.311 [7.90]	0.329 [8.36]	0.494 [12.55]	0.243 [6.17]	0.233 [5.92]
SAD25M/F	2.088 [53.04]	1.511 [38.38]	1.534 [38.96]	1.852 [47.04]	0.311 [7.90]	0.329 [8.36]	0.494 [12.55]	0.243 [6.17]	0.230 [5.84]
SAD37M/F	2.729 [69.32]	2.159 [54.84]	2.182 [55.42]	2.500 [63.50]	0.311 [7.90]	0.329 [8.36]	0.494 [12.55]	0.243 [6.17]	0.230 [5.84]
SAD50M/F	2.635 [66.93]	2.064 [52.43]	2.079 [52.81]	2.406 [61.11]	0.423 [10.74]	0.441 [11.20]	0.605 [15.37]	0.243 [6.17]	0.230 [5.84]

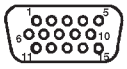
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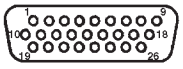
SADD SERIES SIZE 22 CONTACT CONNECTOR SAVER

CONNECTOR VARIANTS

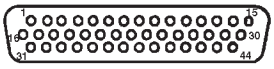
FACE VIEW OF MALE OR REAR VIEW OF FEMALE



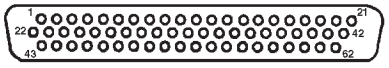
SADD15



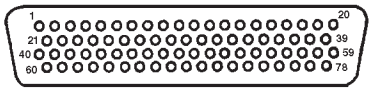
SADD26



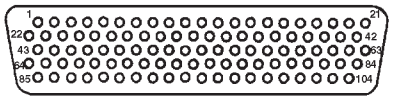
SADD44



SADD62



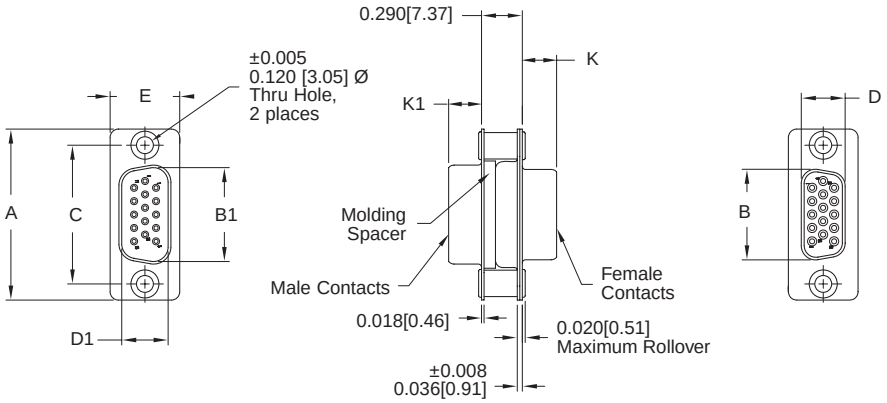
SADD78



SADD104

MALE TO FEMALE CONNECTOR SAVER

SIZE 22 CONTACTS



Typical Part Number: SADD15M/F

CONNECTOR PART NUMBER	A ±0.015	B ±0.005	B1 ±0.005	C ±0.005	D ±0.005	D1 ±0.005	E ±0.015	K ±0.005	K1 ±0.005
SADD15M/F	1.213 [30.81]	0.643 [16.33]	0.666 [16.92]	0.984 [24.99]	0.311 [7.90]	0.329 [8.36]	0.494 [12.55]	0.243 [6.17]	0.233 [5.92]
SADD26M/F	1.541 [39.14]	0.971 [24.66]	0.994 [25.25]	1.312 [33.32]	0.311 [7.90]	0.329 [8.36]	0.494 [12.55]	0.243 [6.17]	0.233 [5.92]
SADD44M/F	2.088 [53.04]	1.511 [38.38]	1.534 [38.96]	1.852 [47.04]	0.311 [7.90]	0.329 [8.36]	0.494 [12.55]	0.243 [6.17]	0.230 [5.84]
SADD62M/F	2.729 [69.32]	2.159 [54.84]	2.182 [55.42]	2.500 [63.50]	0.311 [7.90]	0.329 [8.36]	0.494 [12.55]	0.243 [6.17]	0.230 [5.84]
SADD78M/F	2.635 [66.93]	2.064 [52.43]	2.079 [52.81]	2.406 [61.11]	0.423 [10.74]	0.441 [11.20]	0.605 [15.37]	0.243 [6.17]	0.230 [5.84]
SADD104M/F	2.729 [69.32]	2.189 [55.60]	2.212 [56.18]	2.500 [63.50]	0.485 [12.32]	0.503 [12.78]	0.668 [16.97]	0.243 [6.17]	0.230 [5.84]

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SACBM SERIES SIZE 20 AND SIZE 8 CONTACT CONNECTOR SAVER

CONTACT VARIANTS

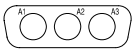
FACE VIEW OF MALE OR REAR VIEW OF FEMALE

SHELL SIZE 1

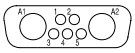


5W1

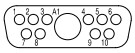
SHELL SIZE 2



3W3

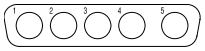


7W2

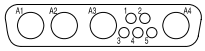


11W1

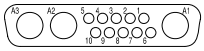
SHELL SIZE 3



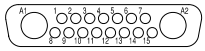
5W5



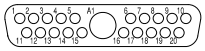
9W4



13W3

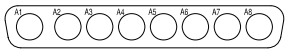


17W2

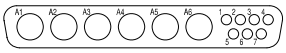


21W1

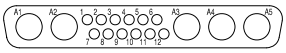
SHELL SIZE 4



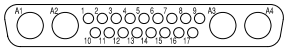
8W8



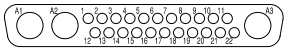
13W6



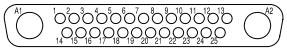
17W5



21WA4

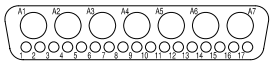


25W3

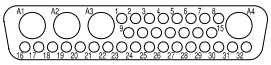


27W2

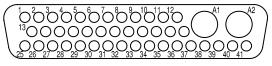
SHELL SIZE 5



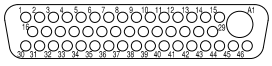
24W7



36W4

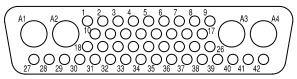


43W2



47W1

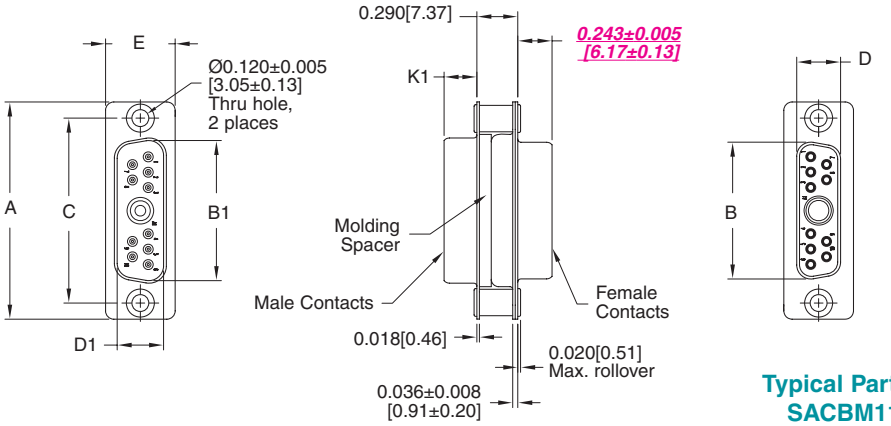
SHELL SIZE 6



46W4

2WK2 and 3WK3 variants for shell size 1 and 2 are not available and were in print catalog by mistake.

MALE TO FEMALE CONNECTOR SAVER
SIZE 20 AND SIZE 8 CONTACTS



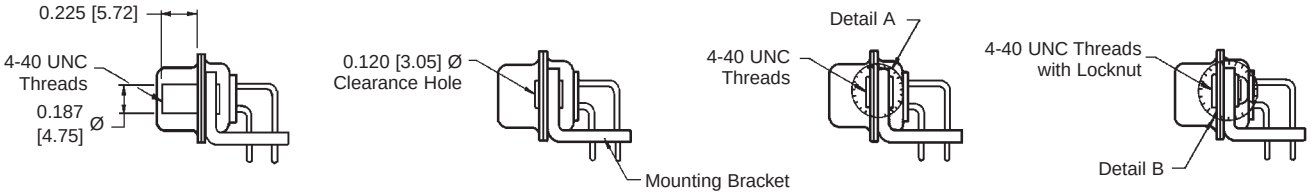
Typical Part Number:
SACBM11W1M/F

CONNECTOR PART NUMBER	SHELL SIZE	A ±0.015	B ±0.005	B1 ±0.005	C ±0.005	D ±0.005	D1 ±0.005	E ±0.015	K1 ±0.005
SCBM5W1M/F	1	1.213 [30.81]	0.643 [16.33]	0.666 [16.92]	0.984 [24.99]	0.311 [7.90]	0.329 [8.36]	0.494 [12.55]	0.233 [5.92]
SCBM*M/F	2	1.541 [39.14]	0.971 [24.66]	0.994 [25.25]	1.312 [33.32]	0.311 [7.90]	0.329 [8.36]	0.494 [12.55]	0.233 [5.92]
SCBM*M/F	3	2.088 [53.04]	1.511 [38.38]	1.534 [38.96]	1.852 [47.04]	0.311 [7.90]	0.329 [8.36]	0.494 [12.55]	0.230 [5.84]
SCBM*M/F	4	2.729 [69.32]	2.159 [54.84]	2.182 [55.42]	2.500 [63.50]	0.311 [7.90]	0.329 [8.36]	0.494 [12.55]	0.230 [5.84]
SCBM*M/F	5	2.635 [66.93]	2.064 [52.43]	2.079 [52.81]	2.406 [61.11]	0.423 [10.74]	0.441 [11.20]	0.605 [15.37]	0.230 [5.84]
SCBM46W4M/F	6	2.729 [69.32]	2.189 [55.60]	2.212 [56.18]	2.500 [63.50]	0.485 [12.32]	0.503 [12.78]	0.668 [16.97]	0.230 [5.84]

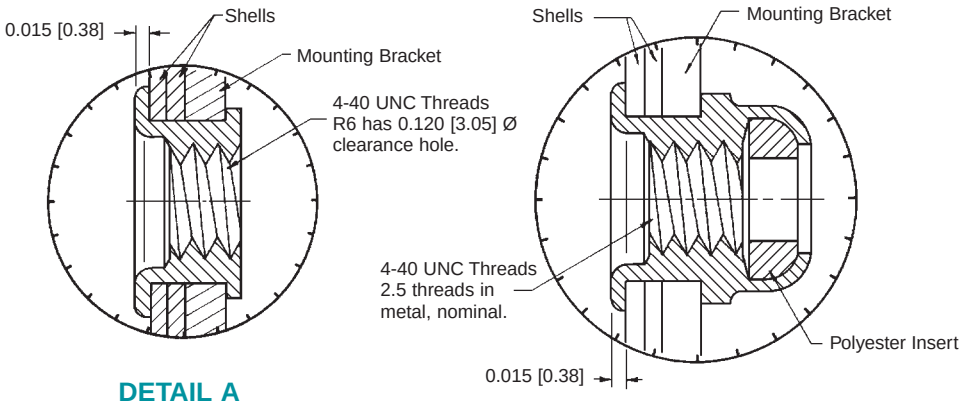
** indicates desired connector variant*

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RIVETED ON 90˚ MOUNTING BRACKETS
CODE R2, R6, R7 AND R8



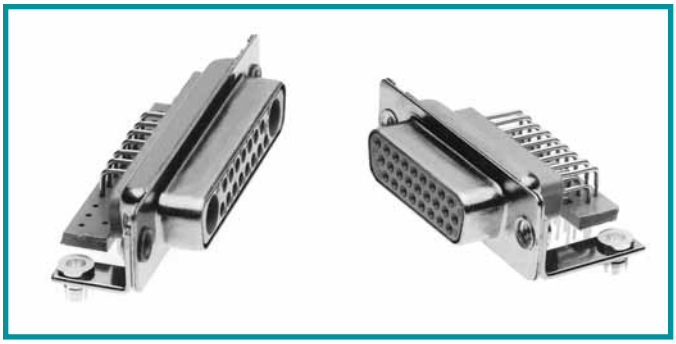
R2 R6 R7 R8



DETAIL A DETAIL B

Material: Brass, 0.000050 inch [1.27 µ] gold over copper plate.

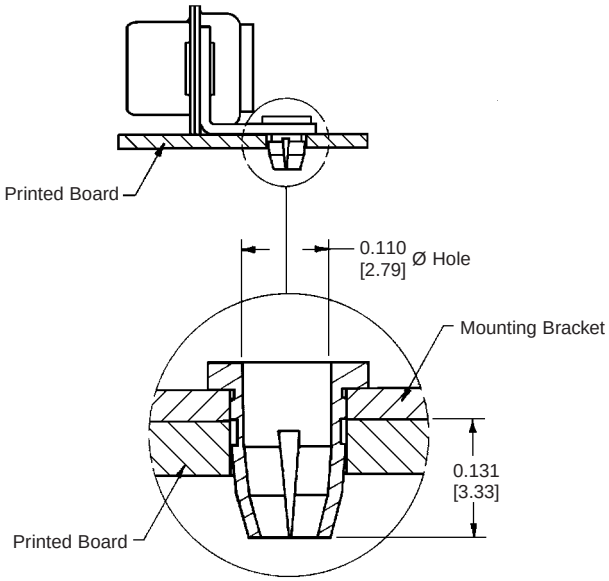
PUSH-ON FASTENER FOR RIVETED ON 90˚ MOUNTING BRACKETS
CODE N



SCBM17W2F5R7N0G
(shown left)

SDD26F4R7N0G
(shown right)

SAMPLE #	PRINTED BOARD HOLE Ø	INSERTION FORCE [LBS.]	RETENTION FORCE [LBS.]
1	0.120 [3.05]	7-1/4	5-3/4
2	0.123 [3.12]	5-3/4	5-1/2
3	0.125 [3.18]	2-3/4	2-1/2
4	0.128 [3.25]	1-3/4	2-1/4
5	0.126 [3.20] PLATED	1-3/4	2-1/4



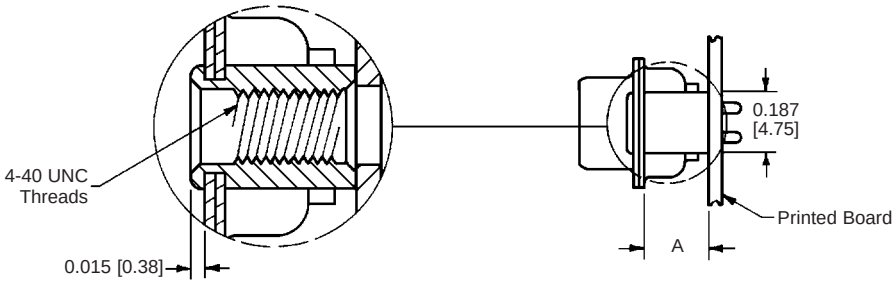
Printed board mounting hole to be 0.123 [3.12] Ø ±0.003 for use with push-on fastener.

Material: Beryllium copper, 0.000050 inch [1.27 µ] gold over copper plate.

DIMENSIONS ARE IN INCHES [MILLIMETERS].
ALL DIMENSIONS ARE SUBJECT TO CHANGE.

Downloaded from Arrow.com.

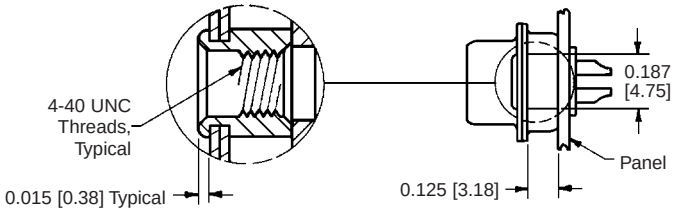
SWAGED SPACER
CODE S



CONNECTOR SERIES	A
SND	0.225 [5.72]
SCBM	0.250 [6.35]
SDD	0.375 [9.53]

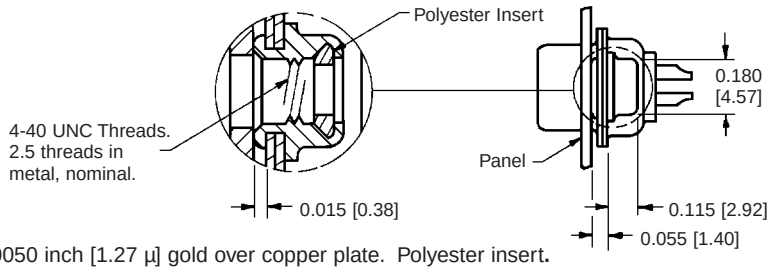
Material: Brass, 0.000050 inch [1.27 µ] gold over copper plate.

SWAGED SPACER
CODE S2



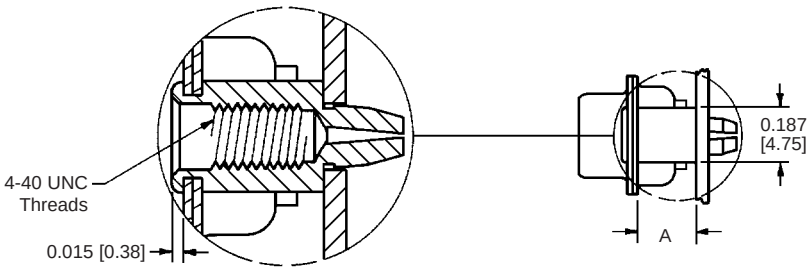
Material: Brass, 0.000050 inch [1.27 µ] gold over copper plate.

SWAGED LOCKNUT
CODE S5



Material: Brass, 0.000050 inch [1.27 µ] gold over copper plate. Polyester insert.

SWAGED SPACER WITH PUSH-ON FASTENER
CODE S6



CONNECTOR SERIES	A
SND	0.225 [5.72]
SCBM	0.250 [6.35]
SDD	0.375 [9.53]

Printed board mounting hole to be 0.123 [3.12] Ø ±0.003 for use with push-on fastener.

Material: Phosphor bronze, 0.000050 inch [1.27 µ] gold over copper plate.

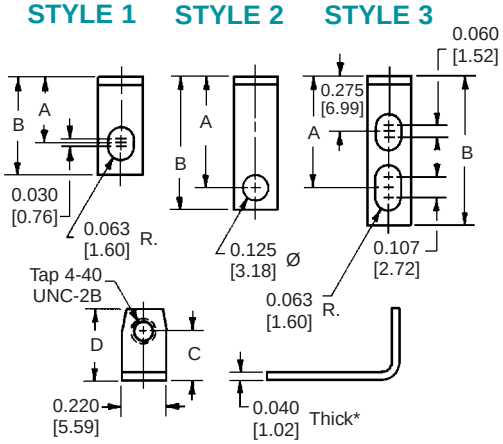
Downloaded from Arrow.com.

90° METAL MOUNTING BRACKET
CODE B3

PART NO.	STYLE	A	B	C	D	SIZE	SCBM	SND	SDD
4535-2-0	1	0.324 [8.23]	0.484 [12.29]	0.244 [6.20]	0.358 [9.09]	9 - 37	5, 55, 57	5	
4535-3-0	1	0.380 [9.65]	0.594 [15.09]	0.303 [7.70]	0.417 [10.59]	50	5, 55, 57	5	
4535-5-0	3	0.554 [14.07]	0.739 [18.77]	0.244 [6.20]	0.358 [9.09]	15 - 62			4
4535-6-0	3	0.604 [15.34]	0.800 [20.32]	0.303 [7.70]	0.417 [10.59]	78			4
4535-8-0	2	0.405 [10.29]	0.522 [13.26]	0.246 [6.25]	0.358 [9.09]	9 - 37	7, 75, 77	42	
4535-9-0	2	0.455 [11.56]	0.572 [14.53]	0.303 [7.70]	0.414 [10.52]	50	7, 75, 77	42	
4535-62-0	2	0.614 [15.60]	0.731 [18.57]	0.334 [8.48]	0.445 [11.30]	104			4

NOTE: Sold only as part of a connector assembly.

STYLE 1 STYLE 2 STYLE 3



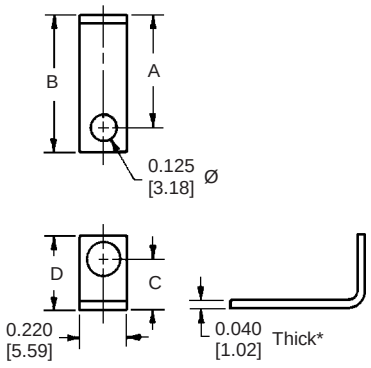
*0.062 [1.57] thick for Size 104 SDD Series.

Material: Brass, 0.000050 inch [1.27 µ] gold over copper plate.

90° METAL MOUNTING BRACKET USED WITH R2, R6, R7 AND R8 RIVETED-ON BRACKET ASSEMBLIES
CODE R2, R6, R7 AND R8

PART NO.	A	B	C	D	SIZE	SCBM	SND	SDD
4535-2-1	0.339 [8.61]	0.456 [11.58]	0.246 [6.25]	0.358 [9.09]	9 - 37	5, 55, 57	5	
4535-3-1	0.395 [10.03]	0.512 [13.00]	0.303 [7.70]	0.414 [10.52]	50	5, 55, 57	5	
4535-8-1	0.420 [10.67]	0.537 [13.64]	0.246 [6.25]	0.358 [9.09]	9 - 37	7, 75, 77	42	
4535-9-1	0.470 [11.94]	0.587 [14.91]	0.303 [7.70]	0.414 [10.52]	50	7, 75, 77	42	
4535-34-1	0.528 [13.41]	0.645 [16.38]	0.246 [6.25]	0.358 [9.09]	15 - 62			4
4535-35-1	0.573 [14.55]	0.690 [17.53]	0.303 [7.70]	0.414 [10.52]	78			4
4535-62-1	0.614 [15.60]	0.731 [18.57]	0.334 [8.48]	0.445 [11.30]	104			4

NOTE: Sold only as part of a connector assembly.



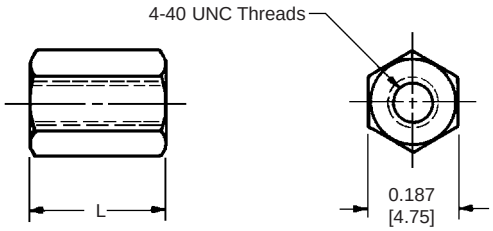
*0.062 [1.57] thick for Size 104 SDD Series.

Material: Brass, 0.000050 inch [1.27 µ] gold over copper plate.

DIMENSIONS ARE IN INCHES [MILLIMETERS].
ALL DIMENSIONS ARE SUBJECT TO CHANGE.

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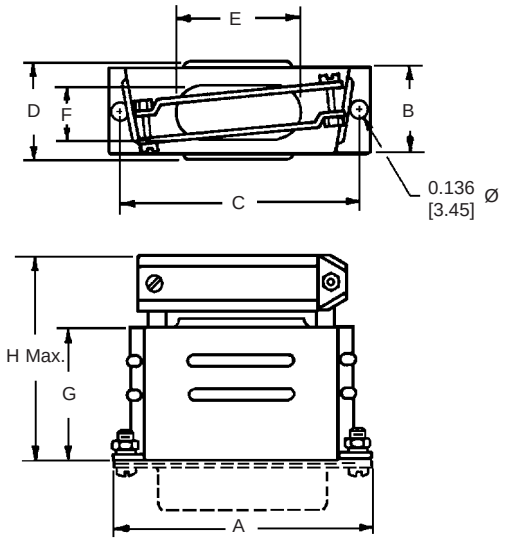
THREADED POST
CODE P



Material: Brass, 0.000050 inch [1.27 µ] gold over copper plate.

CONNECTOR SERIES	L
SND	0.225 [5.72]
SCBM	0.250 [6.35]
SDD	0.375 [9.53]

METAL HOOD
CODE H



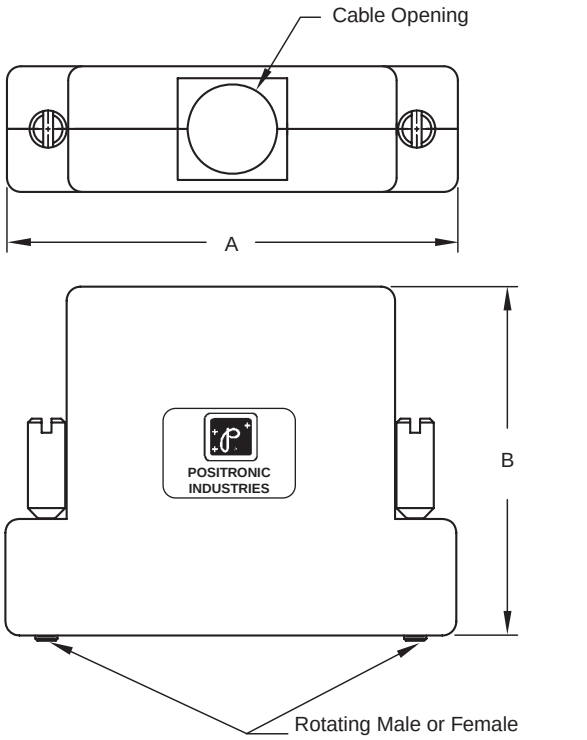
PART NO.	A	B	C	D MAX.	E	F	G	H MAX.
SND15000H0G	1.531 [38.88]	0.492 [12.50]	1.312 [33.32]	0.578 [14.68]	0.713 [18.11]	0.312 [7.92]	0.750 [19.05]	1.219 [30.96]
SND25000H0G	2.078 [52.78]	0.492 [12.50]	1.852 [47.04]	0.578 [14.68]	1.000 [25.40]	0.312 [7.92]	1.000 [25.40]	1.532 [38.91]
SND37000H0G	2.718 [69.03]	0.492 [12.50]	2.500 [63.50]	0.578 [14.68]	1.375 [34.93]	0.312 [7.92]	1.000 [25.40]	1.532 [38.91]
SND50000H0G	2.625 [66.68]	0.601 [15.27]	2.406 [61.11]	0.687 [17.45]	1.406 [35.71]	0.406 [10.31]	1.125 [28.58]	1.657 [42.09]

Material: Brass, 0.000050 inch [1.27 µ] gold over copper plate.

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EMI/RFI METAL HOOD

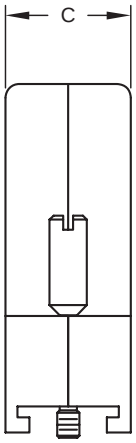
CODE M



PART NUMBER	A	B	C	CABLE OPENING MAX.
D9000*00	1.397 [35.48]	1.750 [44.45]	0.630 [16.00]	Ø 0.375 [9.53]
D15000*00	1.725 [43.82]	1.750 [44.45]	0.630 [16.00]	Ø 0.375 [9.53]
D25000*00	2.265 [57.53]	1.750 [44.45]	0.630 [16.00]	Ø 0.450 [11.43]
D37000*00	2.913 [73.99]	1.750 [44.45]	0.630 [16.00]	Ø 0.450 [11.43]
D50000*00	2.819 [71.60]	1.750 [44.45]	0.740 [18.80]	Ø 0.550 [13.97]
D104000*00	2.913 [73.99]	1.750 [44.45]	0.803 [20.40]	Ø 0.625 [15.88]

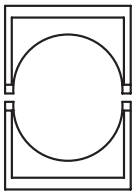
* - DESIGNATES HOOD ACCESSORIES OPTION

ALUMINUM HOOD WITH ROTATING MALE OR FEMALE JACKSCREWS



Typical Part Number:
(FOR HOOD ASSEMBLY)
D25000M00

TYPICAL INSERTS



Typical Part Number:
(FOR CABLE ENTRY INSERT)
4595 - * - *** - **

NOTE: Inserts are not supplied with hood and must be ordered separately.

Consult Technical Sales for part number completion based upon customer requirements.

Material: Hood - Aluminum per QQ-A-225, yellow chromate conversion per MIL-C-5541 or black anodize per MIL-A-8625 optional.

Hardware - Non-magnetic stainless steel per QQ-S-763, passivated per QQ-P-35, or brass per QQ-B-626 with 0.000050 [1.27µ] gold plate over copper per MIL-G-45204 optional.

HOOD ACCESSORIES PART NUMBERS				
HARDWARE OPTIONS	YELLOW CHROMATE CONVERSION HOOD WITH STAINLESS STEEL HARDWARE	YELLOW CHROMATE CONVERSION HOOD WITH COPPER ALLOY HARDWARE	BLACK ANODIZED HOOD WITH STAINLESS STEEL HARDWARE	BLACK ANODIZED HOOD WITH COPPER ALLOY HARDWARE
MALE ROTATING JACKSCREWS	D*000M00	D*000MG00	D*000MB00	D*000MC00
FEMALE ROTATING JACKSCREWS	D*000M700	D*000M7G00	D*000M7B00	D*000M7C00
ONE (1) MALE ROTATING JACKSCREW AND ONE (1) FEMALE ROTATING JACKSCREW	D*000M600	D*000M6G00	D*000M6B00	D*000M6C00
* - DESIGNATES CONNECTOR SIZE				

DIMENSIONS ARE IN INCHES [MILLIMETERS].
ALL DIMENSIONS ARE SUBJECT TO CHANGE.

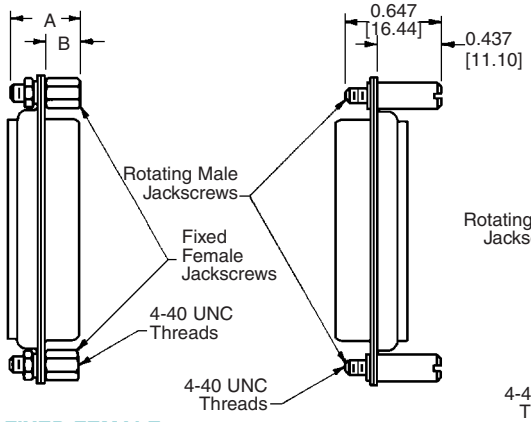
Downloaded from Arrow.com.

JACKSCREW SYSTEMS

CODE T, T2, E, E2 AND E3

CODE	A	B
T	0.437 [11.10]	0.250 [6.35]
T2	0.500 [12.70]	0.198 [5.03]

T/T2

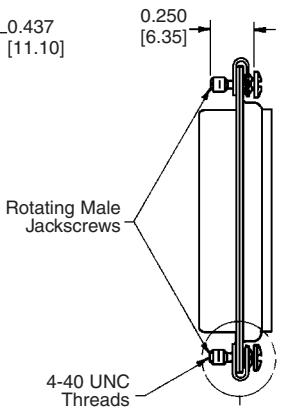


FIXED FEMALE JACKSCREWS

E/E3

ROTATING MALE JACKSCREWS

E2

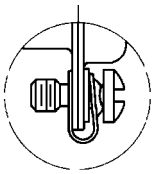


ROTATING MALE SCREW LOCKS

Jackscrew Material: Brass, 0.000050 inch [1.27 µ] gold over copper plate.

NEW!

E = slotted for screw driver
E3 = internal hex for 3/32 hex drives



Material: Screw - Brass, 0.000050 inch [1.27 µ] gold over copper plate.

U-Clip - Copper Alloy, 0.000050 inch [1.27 µ] gold over copper plate.

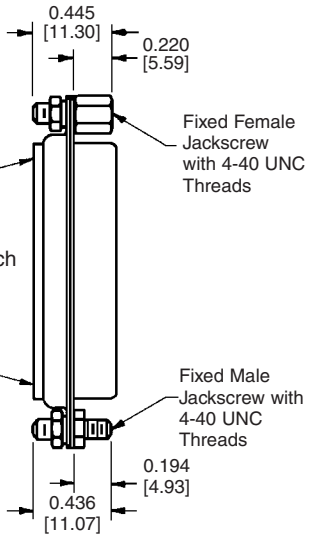
NOTE: Stainless steel Jackscrews are available. Consult Technical Sales for ordering information.

POLARIZED JACKSCREW SYSTEMS

CODE T6 AND E6

**** For customer installations of knobs onto jackscrews, recommend set screw torque value of 16 in/oz. Recommend application of thread lock to set screw.***

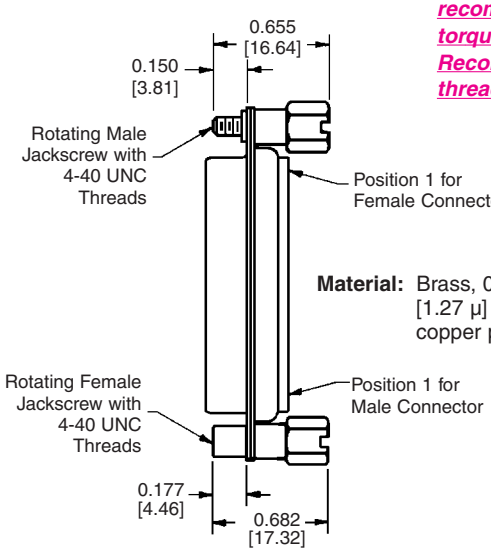
T6



Material: Brass, 0.000050 inch [1.27 µ] gold over copper plate.

FIXED MALE AND FEMALE JACKSCREWS

E6*

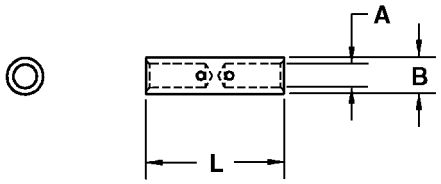


Material: Brass, 0.000050 inch [1.27 µ] gold over copper plate.

ROTATING MALE AND FEMALE JACKSCREWS

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IN-LINE CRIMP SPLICE



* To order crimp splice with insulating sleeve, add "-W" suffix to part number. To order without sleeve, add "-N" suffix.

Consult Technical Sales for crimp tool part number.

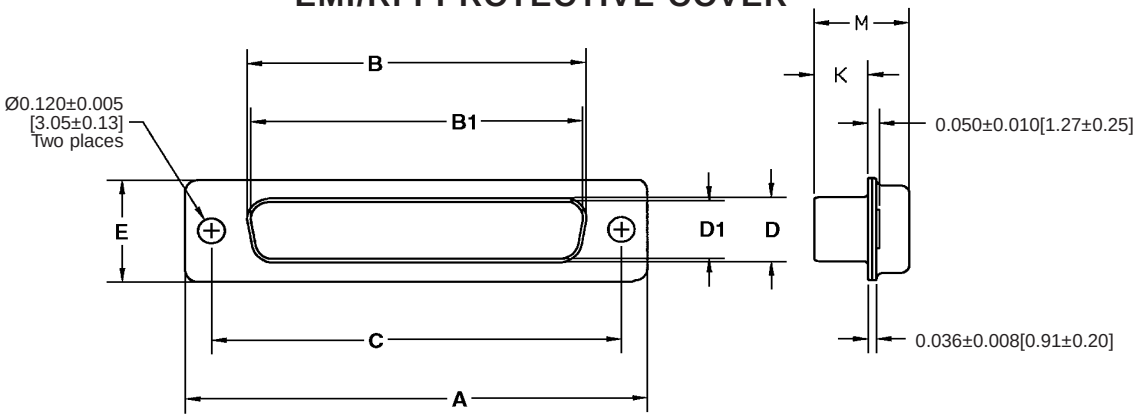
PART NUMBER	WIRE SIZE AWG / [mm²]	L	A	B
PSK43636-*	20-26 AWG [0.5/0.12 mm²]	0.500 [12.70]	0.045 [1.14]	0.076 [1.93]
PSK43637-*	16-20 AWG [1.5/0.5 mm²]	0.575 [14.61]	0.066 [1.68]	0.101 [2.57]
PSK43638-*	12-18 AWG [4.0-1.0 mm²]	0.577 [14.66]	0.097 [2.46]	0.150 [3.81]

Materials:

Splice: Copper alloy, 0.000050 [1.27 µ] gold over copper.

Sleeve: Shrink-fit polyvinylidene fluoride.

EMI/RFI PROTECTIVE COVER



PART NUMBER	CONNECTOR VARIANT SIZES	A ±0.015	B ±0.005	B1 ±0.005	C ±0.005	D ±0.005	D1 ±0.005	E ±0.015	K ±0.005	M ±0.010
PSK633-9MG*	9 M/15 M	1.213 [30.81]		0.666 [16.92]	0.984 [24.99]		0.329 [8.36]	0.494 [12.55]	0.233 [5.92]	0.422 [10.72]
PSK633-9FG*	9 F/15 F	1.213 [30.81]	0.643 [16.33]		0.984 [24.99]	0.311 [7.90]		0.494 [12.55]	0.243 [6.17]	0.429 [10.90]
PSK633-15MG*	15 M/26 M	1.541 [39.14]		0.994 [25.25]	1.312 [33.32]		0.329 [8.36]	0.494 [12.55]	0.233 [5.92]	0.422 [10.72]
PSK633-15FG*	15 F/26 F	1.541 [39.14]	0.971 [24.66]		1.312 [33.32]	0.311 [7.90]		0.494 [12.55]	0.243 [6.17]	0.429 [10.90]
PSK633-25MG*	25 M/44 M	2.088 [53.04]		1.534 [38.96]	1.852 [47.04]		0.329 [8.36]	0.494 [12.55]	0.230 [5.84]	0.426 [10.82]
PSK633-25FG*	25 F/44 F	2.088 [53.04]	1.511 [38.38]		1.852 [47.04]	0.311 [7.90]		0.494 [12.55]	0.243 [6.17]	0.429 [10.90]
PSK633-37MG*	37 M/62 M	2.729 [69.32]		2.182 [55.42]	2.500 [63.50]		0.329 [8.36]	0.494 [12.55]	0.230 [5.84]	0.426 [10.82]
PSK633-37FG*	37 F/62 F	2.729 [69.32]	2.159 [54.84]		2.500 [63.50]	0.311 [7.90]		0.494 [12.55]	0.243 [6.17]	0.429 [10.90]
PSK633-50MG*	50 M/78 M	2.635 [66.93]		2.079 [52.81]	2.406 [61.11]		0.441 [11.20]	0.605 [15.37]	0.230 [5.84]	0.426 [10.82]
PSK633-50FG*	50 F/78 F	2.635 [66.93]	2.064 [52.43]		2.406 [61.11]	0.423 [10.74]		0.605 [15.37]	0.243 [6.17]	0.429 [10.90]
PSK633-104MG*	– /104 M	2.729 [69.32]		2.212 [56.18]	2.500 [63.50]		0.503 [12.78]	0.668 [16.97]	0.230 [5.84]	0.426 [10.82]
PSK633-104FG*	– /104 F	2.729 [69.32]	2.189 [55.60]		2.500 [63.50]	0.485 [12.32]		0.668 [16.97]	0.243 [6.17]	0.429 [10.90]

* To order protective cover with E2 rotating male screw locks (see page 59), insert "N" into the last digit of part number. Omit this digit if thread locks are not required.

Material: Brass, 0.000050 [1.27 µ] gold over copper.

DIMENSIONS ARE IN INCHES [MILLIMETERS].
ALL DIMENSIONS ARE SUBJECT TO CHANGE.

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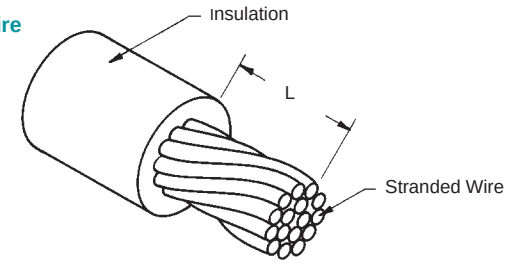
CRIMPING INFORMATION FOR REMOVABLE CRIMP SIGNAL CONTACTS

USE INDICATED POSITRONIC TOOLS FOR BEST RESULTS

STEP 1: STRIP WIRE TO INDICATED LENGTH.

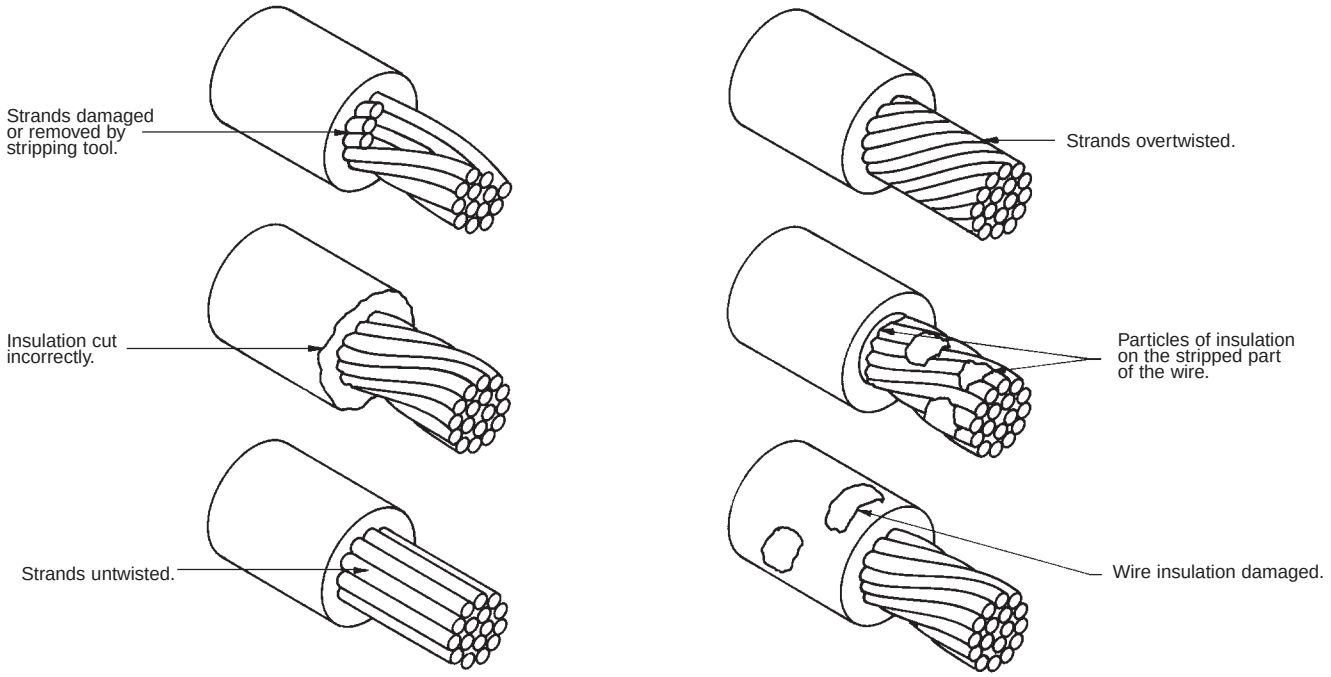
Take Care Not To:
- **Damage or remove strands.**
- **Untwist or overtwist strands.**
- **Leave insulation particles on strands.**
- **Damage insulation.**

Correctly Stripped Wire



CONNECTOR SERIES	L
SND	0.160±0.020 [4.06±0.51]
SDD	0.150±0.010 [3.81±0.25]
SCBC	0.160±0.020 [4.06±0.51]

Examples of Stripping Faults



STEP 2: CRIMP WIRE TO CONTACT.

For Hand Crimp Tool:
- **Place contact into crimping tool.**
- **Insert wire into contact.**
- **Center contact by slowly closing the crimping tool until the crimp indenters make contact with the crimp barrel.**
- **Complete the cycle of the crimping tool in one smooth motion.**
- **Remove the crimped contact.**

For Automatic Crimp Tool:
- **Insert the wire into the contact, positioned in the crimp tool by the plastic carrier.**
- **Depress the activating device of the crimping tool to start the crimping cycle.**
- **Remove the crimped contact.**

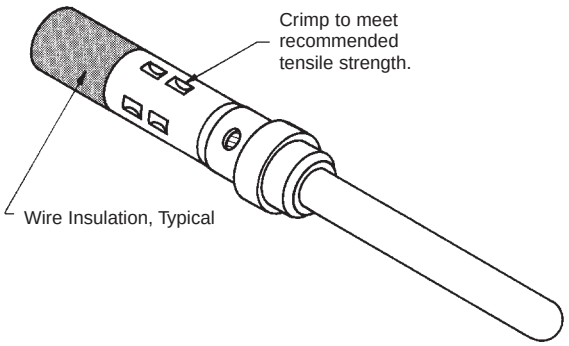
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CRIMPING INFORMATION FOR REMOVABLE CRIMP SIGNAL CONTACTS

USE INDICATED POSITRONIC TOOLS FOR BEST RESULTS

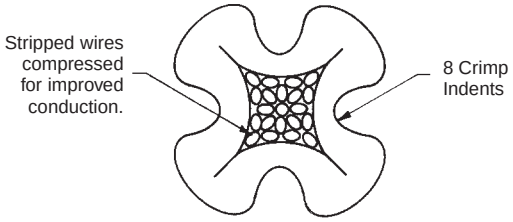
STEP 3: INSPECT THE CRIMP.

Correctly Crimped Contact

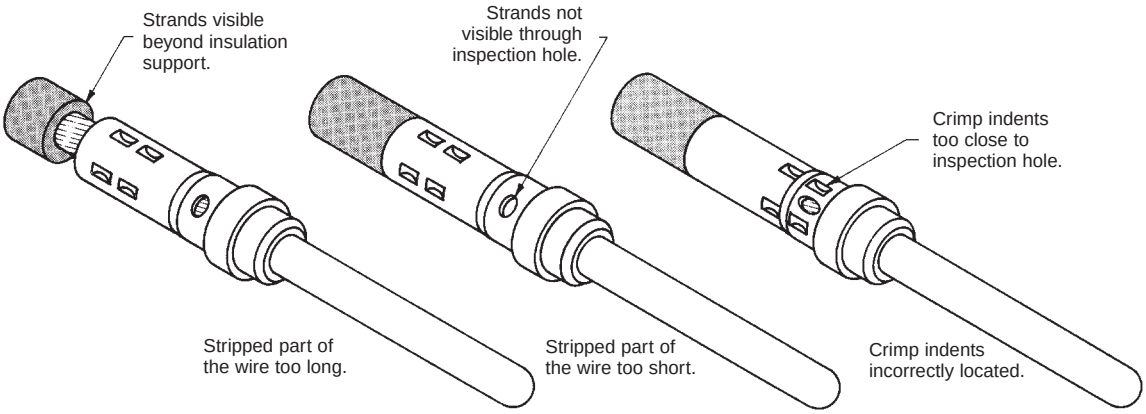


For All Tools:
- **Strands to be visible through the inspection hole.**
- **Strands not to be visible beyond the insulation support.**
- **Crimped contact to meet recommended conductor tensile force shown in chart.**
- **Check for peeled gold and bent contacts.**

Cross Section of Correctly Crimped Contact



Examples of Crimping Faults



Positronic Recommended Conductor Tensile Strength	
WIRE SIZE AWG/[mm²]	AXIAL LOAD POUNDS/[N]
20 [0.5]	20 [89]
22 [0.3]	12 [53]
24 [0.25]	8 [36]
26 [0.12]	5 [22]
28 [0.08]	3 [13]
30 [0.05]	1.5 [6.7]

Conductor tensile strength values are derived using silver-tin plated copper wires.

Values may change depending upon what type of wire is used.

DIMENSIONS ARE IN INCHES [MILLIMETERS].
ALL DIMENSIONS ARE SUBJECT TO CHANGE.

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NEW! CONTACT APPLICATION TOOLS CROSS REFERENCE LIST

USE INDICATED POSITRONIC TOOLS FOR BEST RESULTS

	Positronic Contact P/N	Handle & Positioner P/N	Hand Crimp Tool P/N	Mfg. Cross	Mil Equiv	Positioner	Mfg. Cross	Mil Equiv	Insertion Tool	Mfg. Cross	Mil Equiv	Removal Tool	Mfg. Cross	Mil Equiv	Automatic Crimp Tool
SND / SCBC SERIES	MC6020D-50		9507	AFM8	M22520/2-01	9502-5	K13-1	M22520/2-08	4711-2-0-0	91067-2	M81969/1-02	4711-2	91067-2	M81969/1-02	9550-1
	MC6026D-50		9507	AFM8	M22520/2-01	9502-5	K13-1	M22520/2-08	4711-2-0-0	91067-2	M81969/1-02	4711-2	91067-2	M81969/1-02	9550-1
	FC6020D-50-1202.1		9507	AFM8	M22520/2-01	9502-5	K13-1	M22520/2-08	4711-2-0-0	91067-2	M81969/1-02	4711-2	91067-2	M81969/1-02	9550-1
	FC6026D-50-1202.1		9507	AFM8	M22520/2-01	9502-5	K13-1	M22520/2-08	4711-2-0-0	91067-2	M81969/1-02	4711-2	91067-2	M81969/1-02	9550-1
	MC6018M		9507	AFM8	M22520/2-01	9502-11	K774		4711-2-0-0	91067-2	M81969/1-02	4711-2	91067-2	M81969/1-02	
	FC6018M		9507	AFM8	M22520/2-01	9502-11	K774		4711-2-0-0	91067-2	M81969/1-02	4711-2	91067-2	M81969/1-02	
SDD SERIES	MC8022D-50		9507	AFM8	M22520/2-01	9502-4	K-42	M22520/2-09	4811-2-0-0	91067-1	M81969/1-04	4811-2	91067-1	M81969/1-04	9550-1
	FC8022D-50-1202.0		9507	AFM8	M22520/2-01	9502-3	K-41	M22520/2-06	4811-2-0-0	91067-1	M81969/1-04	4811-2	91067-1	M81969/1-04	9550-1
SCBC / SCBM SERIES	MC4008M	9504-19-0-0	9504-1-0-0	HX4	M22520/5-01	9504-19-1-0	Y524					4311-0	P+		9555-0-2
	MC4012M	9509-0-0-0	9509-1-0-0	M310		9509-2-0-0	TP-974					4311-0	P+		9555-0-2
	MC4016M	9509-0-0-0	9509-1-0-0	M310		9509-2-0-0	TP-974					4311-0	P+		9555-0-2
	FC4008M	9504-19-0-0	9504-1-0-0	HX4	M22520/5-01	9504-19-1-0	Y524					4311-0	P+		9555-0-2
	FC4012M	9509-0-0-0	9509-1-0-0	M310		9509-2-0-0	TP-974					4311-0	P+		9555-0-2
	FC4016M	9509-0-0-0	9509-1-0-0	M310		9509-2-0-0	TP-974					4311-0	P+		9555-0-2
	*S40**M											4311-0	P+		9555-0-2
	**410*M	9504-0	9504-1-0-0	HX4	M22520/5-01	9504-2-0-0	Y322					4311-0	P+		9555-0-2
	*CC4101M	9504-14-0-0	9504-1-0-0	HX4	M22520/5-01	9504-14-1-0	Y878					4311-0	P+		9555-0-2
	*CC4102M	9504-13-0-0	9504-1-0-0	HX4	M22520/5-01	9504-13-1-0	Y937					4311-0	P+		9555-0-2
	*CC4103M	9504-15-0-0	9504-1-0-0	HX4	M22520/5-01	9504-15-1-0	Y877					4311-0	P+		9555-0-2
	*CC4104M	9504-15-0-0	9504-1-0-0	HX4	M22520/5-01	9504-15-1-0	Y877					4311-0	P+		9555-0-2
IN-LINE SPLICE	PSK43636	9504-18-0-0	9504-1-0-0	HX4	M22520/5-01	9504-18-1-0	Y516					N/A			
	PSK43637	9504-18-0-0	9504-1-0-0	HX4	M22520/5-01	9504-18-1-0	Y516					N/A			
	PSK43638	9504-18-0-0	9504-1-0-0	HX4	M22520/5-01	9504-18-1-0	Y516					N/A			

DIMENSIONS ARE IN INCHES [MILLIMETERS].
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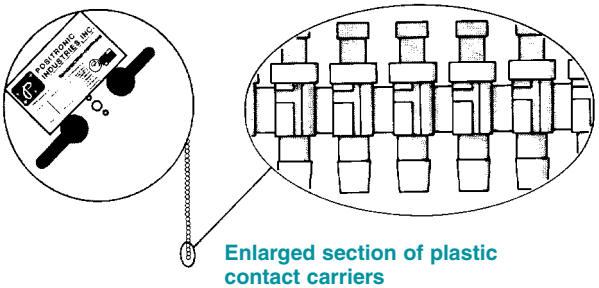
AUTOMATIC CRIMP TOOL, PNEUMATICALLY ACTUATED

(PART NO. 9550-1 SHOWN FOR REFERENCE ONLY, SEE PAGE 63 FOR RECOMMENED TOOLING PART NUMBER.)

This fast-cycling automatic crimp tool produces an 8 indent crimp on wire sizes 20 AWG [0.5 mm²] through 30 AWG [0.05 mm²]. SND, SDD and SCBC Series contacts must be ordered on reels.

To order, specify part number 9550-1. Foot control valve is supplied as a standard accessory.

REELS FOR AUTOMATIC PNEUMATIC CRIMP TOOLS



Enlarged section of plastic contact carriers

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 MC8022DR-50 for a male contact and FC6026DR-50-1202.1 for female contact.



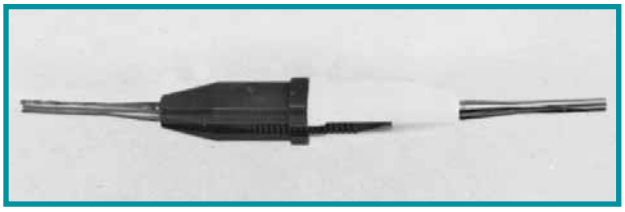
MINIATURE STEP ADJUSTABLE TOOL

(M22520/2-01 PART NO. 9507 SHOWN FOR REFERENCE ONLY, SEE PAGE 63 FOR RECOMMENED TOOLING PART NUMBER.)

This miniature step adjustable hand crimping tool produces an 8 indent crimp configuration and will crimp wire sizes 20 AWG [0.5 mm²] through 30 AWG [0.05 mm²].

Each positioner is equipped with a data plate which gives the correct crimp-depth setting for each wire size, and must be used with 9507 tool frame for best results.

For complete crimp tool and positioner selection, see recommended tooling chart on page 63.



INSERTION/REMOVAL TOOL

(M8196/1-04 PART NO. 4711-2 SHOWN FOR REFERENCE ONLY, SEE PAGE 63 FOR RECOMMENED TOOLING PART NUMBER.)

One end of this tool is used to insert contacts into connectors. The other end is used to extract contacts. This is accomplished by sliding the extraction tip down the wire into the connector until it bottoms against the contact. A slight rotation while pushing will release the contacts, which are then extracted by simultaneously pulling on the wire.

For insertion and removal tool selection, see recommended tooling chart on page 63.

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GODDARD SPACE FLIGHT S-311 QUALIFIED PARTS LIST DIRECTORY

*NOTE: Parts are to be ordered to the military number, the Positronic part number is for reference only.

Positronic Industries offers the following listing of connectors and accessories, which are products qualified under GSFC Specifications GSFC-S-311-P-4 and GSFC-S-311-P-10.

GSFC PART NUMBER	REFERENCE NUMBER*
311P10-1P-B-12	SND9M2000G-1082.24
311P10-1P-B-15	SND9M20200G-1082.24
311P10-1S-B-12	SND9F2000G-1082.24
311P10-1S-B-15	SND9F20200G-1082.24
311P10-2P-B-12	SND15M2000G-1082.24
311P10-2P-B-15	SND15M20200G-1082.24
311P10-2S-B-12	SND15F2000G-1082.24
311P10-2S-B-15	SND15F20200G-1082.24
311P10-3P-B-12	SND25M2000G-1082.24
311P10-3P-B-15	SND25M20200G-1082.24
311P10-3S-B-12	SND25F2000G-1082.24
311P10-3S-B-15	SND25F20200G-1082.24
311P10-4P-B-12	SND37M2000G-1082.24
311P10-4P-B-15	SND37M20200G-1082.24
311P10-4S-B-12	SND37F2000G-1082.24
311P10-4S-B-15	SND37F20200G-1082.24
311P10-5P-B-12	SND50M2000G-1082.24
311P10-5P-B-15	SND50M20200G-1082.24
311P10-5S-B-12	SND50F2000G-1082.24
311P10-5S-B-15	SND50F20200G-1082.24
311P10-6P-B-12	SCBM5W1M2000G-1082.24
311P10-6P-B-15	SCBM5W1M20200G-1082.24
311P10-6S-B-12	SCBM5W1F2000G-1082.24
311P10-6S-B-15	SCBM5W1F20200G-1082.24
311P10-7P-B-12	SCBM3W3M0000G-1082.24
311P10-7P-B-15	SCBM3W3M00200G-1082.24
311P10-7S-B-12	SCBM3W3F0000G-1082.24
311P10-7S-B-15	SCBM3W3F00200G-1082.24
311P10-8P-B-12	SCBM7W2M2000G-1082.24
311P10-8P-B-15	SCBM7W2M20200G-1082.24
311P10-8S-B-12	SCBM7W2F2000G-1082.24
311P10-8S-B-15	SCBM7W2F20200G-1082.24
311P10-9P-B-12	SCBM11W1M2000G-1082.24
311P10-9P-B-15	SCBM11W1M20200G-1082.24
311P10-9S-B-12	SCBM11W1F2000G-1082.24
311P10-9S-B-15	SCBM11W1F20200G-1082.24
311P10-10P-B-12	SCBM5W5M0000G-1082.24
311P10-10P-B-15	SCBM5W5M00200G-1082.24
311P10-10S-B-12	SCBM5W5F0000G-1082.24
311P10-10S-B-15	SCBM5W5F00200G-1082.24
311P10-11P-B-12	SCBM9W4M2000G-1082.24
311P10-11P-B-15	SCBM9W4M20200G-1082.24
311P10-11S-B-12	SCBM9W4F2000G-1082.24
311P10-11S-B-15	SCBM9W4F20200G-1082.24
311P10-12P-B-12	SCBM13W3M2000G-1082.24
311P10-12P-B-15	SCBM13W3M20200G-1082.24
311P10-12S-B-12	SCBM13W3F2000G-1082.24
311P10-12S-B-15	SCBM13W3F20200G-1082.24
311P10-13P-B-12	SCBM17W2M2000G-1082.24
311P10-13P-B-15	SCBM17W2M20200G-1082.24
311P10-13S-B-12	SCBM17W2F2000G-1082.24
311P10-13S-B-15	SCBM17W2F20200G-1082.24
311P10-14P-B-12	SCBM21W1M2000G-1082.24
311P10-14P-B-15	SCBM21W1M20200G-1082.24
311P10-14S-B-12	SCBM21W1F2000G-1082.24
311P10-14S-B-15	SCBM21W1F20200G-1082.24
311P10-15P-B-12	SCBM8W8M0000G-1082.24
311P10-15P-B-15	SCBM8W8M00200G-1082.24
311P10-15S-B-12	SCBM8W8F0000G-1082.24
311P10-15S-B-15	SCBM8W8F00200G-1082.24
311P10-16P-B-12	SCBM13W6M2000G-1082.24
311P10-16P-B-15	SCBM13W6M20200G-1082.24
311P10-16S-B-12	SCBM13W6F2000G-1082.24
311P10-16S-B-15	SCBM13W6F20200G-1082.24
311P10-17P-B-12	SCBM17W5M2000G-1082.24
311P10-17P-B-15	SCBM17W5M20200G-1082.24
311P10-17S-B-12	SCBM17W5F2000G-1082.24
311P10-17S-B-15	SCBM17W5F20200G-1082.24
311P10-18P-B-12	SCBM21WA4M2000G-1082.24
311P10-18P-B-15	SCBM21WA4M20200G-1082.24
311P10-18S-B-12	SCBM21WA4F2000G-1082.24
311P10-18S-B-15	SCBM21WA4F20200G-1082.24
311P10-20P-B-12	SCBM25W3M2000G-1082.24
311P10-20P-B-15	SCBM25W3M20200G-1082.24
311P10-20S-B-12	SCBM25W3F2000G-1082.24
311P10-20S-B-15	SCBM25W3F20200G-1082.24
311P10-21P-B-12	SCBM27W2M2000G-1082.24
311P10-21P-B-15	SCBM27W2M20200G-1082.24
311P10-21S-B-12	SCBM27W2F2000G-1082.24
311P10-21S-B-15	SCBM27W2F20200G-1082.24
311P10-22P-B-12	SCBM24W7M2000G-1082.24
311P10-22P-B-15	SCBM24W7M20200G-1082.24
311P10-22S-B-12	SCBM24W7F2000G-1082.24
311P10-22S-B-15	SCBM24W7F20200G-1082.24
311P10-23P-B-12	SCBM36W4M2000G-1082.24
311P10-23P-B-15	SCBM36W4M20200G-1082.24
311P10-23S-B-12	SCBM36W4F2000G-1082.24
311P10-23S-B-15	SCBM36W4F20200G-1082.24
311P10-24P-B-12	SCBM43W2M2000G-1082.24
311P10-24P-B-15	SCBM43W2M20200G-1082.24
311P10-24S-B-12	SCBM43W2F2000G-1082.24
311P10-24S-B-15	SCBM43W2F20200G-1082.24
311P10-25P-B-12	SCBM47W1M2000G-1082.24
311P10-25P-B-15	SCBM47W1M20200G-1082.24
311P10-25S-B-12	SCBM47W1F2000G-1082.24
311P10-25S-B-15	SCBM47W1F20200G-1082.24
311P10-1P-C-12	SND9M2000G-1082.24
311P10-1P-C-15	SND9M20200G-1082.24
311P10-1S-C-12	SND9F2000G-1082.24
311P10-1S-C-15	SND9F20200G-1082.24
311P10-2P-C-12	SND15M2000G-1082.24
311P10-2P-C-15	SND15M20200G-1082.24
311P10-2S-C-12	SND15F2000G-1082.24
311P10-2S-C-15	SND15F20200G-1082.24
311P10-3P-C-12	SND25M2000G-1082.24
311P10-3P-C-15	SND25M20200G-1082.24
311P10-3S-C-12	SND25F2000G-1082.24
311P10-3S-C-15	SND25F20200G-1082.24
311P10-4P-C-12	SND37M2000G-1082.24
311P10-4P-C-15	SND37M20200G-1082.24
311P10-4S-C-12	SND37F2000G-1082.24
311P10-4S-C-15	SND37F20200G-1082.24
311P10-5P-C-12	SND50M2000G-1082.24
311P10-5P-C-15	SND50M20200G-1082.24
311P10-5S-C-12	SND50F2000G-1082.24
311P10-5S-C-15	SND50F20200G-1082.24
311P10-6P-C-12	SCBM5W1M2000G-1082.24
311P10-6P-C-15	SCBM5W1M20200G-1082.24
311P10-6S-C-12	SCBM5W1F2000G-1082.24
311P10-6S-C-15	SCBM5W1F20200G-1082.24
311P10-7P-C-12	SCBM3W3M0000G-1082.24
311P10-7P-C-15	SCBM3W3M00200G-1082.24
311P10-7S-C-12	SCBM3W3F0000G-1082.24
311P10-7S-C-15	SCBM3W3F00200G-1082.24
311P10-8P-C-12	SCBM7W2M2000G-1082.24
311P10-8P-C-15	SCBM7W2M20200G-1082.24
311P10-8S-C-12	SCBM7W2F2000G-1082.24
311P10-8S-C-15	SCBM7W2F20200G-1082.24
311P10-9P-C-12	SCBM11W1M2000G-1082.24
311P10-9P-C-15	SCBM11W1M20200G-1082.24
311P10-9S-C-12	SCBM11W1F2000G-1082.24
311P10-9S-C-15	SCBM11W1F20200G-1082.24
311P10-10P-C-12	SCBM5W5M0000G-1082.24
311P10-10P-C-15	SCBM5W5M00200G-1082.24
311P10-10S-C-12	SCBM5W5F0000G-1082.24
311P10-10S-C-15	SCBM5W5F00200G-1082.24
311P10-11P-C-12	SCBM9W4M2000G-1082.24
311P10-11P-C-15	SCBM9W4M20200G-1082.24
311P10-11S-C-12	SCBM9W4F2000G-1082.24
311P10-11S-C-15	SCBM9W4F20200G-1082.24
311P10-12P-C-12	SCBM13W3M2000G-1082.24
311P10-12P-C-15	SCBM13W3M20200G-1082.24
311P10-12S-C-12	SCBM13W3F2000G-1082.24
311P10-12S-C-15	SCBM13W3F20200G-1082.24
311P10-13P-C-12	SCBM17W2M2000G-1082.24
311P10-13P-C-15	SCBM17W2M20200G-1082.24
311P10-13S-C-12	SCBM17W2F2000G-1082.24
311P10-13S-C-15	SCBM17W2F20200G-1082.24
311P10-14P-C-12	SCBM21W1M2000G-1082.24
311P10-14P-C-15	SCBM21W1M20200G-1082.24
311P10-14S-C-12	SCBM21W1F2000G-1082.24
311P10-14S-C-15	SCBM21W1F20200G-1082.24
311P10-15P-C-12	SCBM8W8M0000G-1082.24
311P10-15P-C-15	SCBM8W8M00200G-1082.24
311P10-15S-C-12	SCBM8W8F0000G-1082.24
311P10-15S-C-15	SCBM8W8F00200G-1082.24
311P10-16P-C-12	SCBM13W6M2000G-1082.24
311P10-16P-C-15	SCBM13W6M20200G-1082.24
311P10-16S-C-12	SCBM13W6F2000G-1082.24
311P10-16S-C-15	SCBM13W6F20200G-1082.24
311P10-17P-C-12	SCBM17W5M2000G-1082.24
311P10-17P-C-15	SCBM17W5M20200G-1082.24
311P10-17S-C-12	SCBM17W5F2000G-1082.24
311P10-17S-C-15	SCBM17W5F20200G-1082.24
311P10-18P-C-12	SCBM21WA4M2000G-1082.24
311P10-18P-C-15	SCBM21WA4M20200G-1082.24
311P10-18S-C-12	SCBM21WA4F2000G-1082.24
311P10-18S-C-15	SCBM21WA4F20200G-1082.24
311P10-20P-C-12	SCBM25W3M2000G-1082.24
311P10-20P-C-15	SCBM25W3M20200G-1082.24
311P10-20S-C-12	SCBM25W3F2000G-1082.24
311P10-20S-C-15	SCBM25W3F20200G-1082.24
311P10-21P-C-12	SCBM27W2M2000G-1082.24
311P10-21P-C-15	SCBM27W2M20200G-1082.24
311P10-21S-C-12	SCBM27W2F2000G-1082.24
311P10-21S-C-15	SCBM27W2F20200G-1082.24
311P10-22P-C-12	SCBM24W7M2000G-1082.24
311P10-22P-C-15	SCBM24W7M20200G-1082.24
311P10-22S-C-12	SCBM24W7F2000G-1082.24
311P10-22S-C-15	SCBM24W7F20200G-1082.24
311P10-23P-C-12	SCBM36W4M2000G-1082.24
311P10-23P-C-15	SCBM36W4M20200G-1082.24
311P10-23S-C-12	SCBM36W4F2000G-1082.24
311P10-23S-C-15	SCBM36W4F20200G-1082.24
311P10-24P-C-12	SCBM43W2M2000G-1082.24
311P10-24P-C-15	SCBM43W2M20200G-1082.24
311P10-24S-C-12	SCBM43W2F2000G-1082.24
311P10-24S-C-15	SCBM43W2F20200G-1082.24
311P10-25P-C-12	SCBM47W1M2000G-1082.24
311P10-25P-C-15	SCBM47W1M20200G-1082.24
311P10-25S-C-12	SCBM47W1F2000G-1082.24
311P10-25S-C-15	SCBM47W1F20200G-1082.24

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GODDARD SPACE FLIGHT S-311 QUALIFIED PARTS LIST DIRECTORY

*NOTE: Parts are to be ordered to the military number, the Positronic part number is for reference only.

Positronic Industries offers the following listing of connectors and accessories, which are products qualified under GSFC Specifications GSFC-S-311-P-4 and GSFC-S-311-P-10.

GSFC PART NUMBER	REFERENCE NUMBER*
311P405-6P-B-12	SCBC5W1M0000G-1082.24
311P405-6P-B-15	SCBC5W1M00200G-1082.24
311P405-6S-B-12	SCBC5W1F0000G-1082.24
311P405-6S-B-15	SCBC5W1F00200G-1082.24
311P405-7P-B-12	SCBM3W3M0000G-1082.24
311P405-7P-B-15	SCBM3W3M00200G-1082.24
311P405-7S-B-12	SCBM3W3F0000G-1082.24
311P405-7S-B-15	SCBM3W3F00200G-1082.24
311P405-8P-B-12	SCBC7W2M0000G-1082.24
311P405-8P-B-15	SCBC7W2M00200G-1082.24
311P405-8S-B-12	SCBC7W2F0000G-1082.24
311P405-8S-B-15	SCBC7W2F00200G-1082.24
311P405-9P-B-12	SCBC11W1M0000G-1082.24
311P405-9P-B-15	SCBC11W1M00200G-1082.24
311P405-9S-B-12	SCBC11W1F0000G-1082.24
311P405-9S-B-15	SCBC11W1F00200G-1082.24
311P405-10P-B-12	SCBM5W5M0000G-1082.24
311P405-10P-B-15	SCBM5W5M00200G-1082.24
311P405-10S-B-12	SCBM5W5F0000G-1082.24
311P405-10S-B-15	SCBM5W5F00200G-1082.24
311P405-11P-B-12	SCBC9W4M0000G-1082.24
311P405-11P-B-15	SCBC9W4M00200G-1082.24
311P405-11S-B-12	SCBC9W4F0000G-1082.24
311P405-11S-B-15	SCBC9W4F00200G-1082.24
311P405-12P-B-12	SCBC13W3M0000G-1082.24
311P405-12P-B-15	SCBC13W3M00200G-1082.24
311P405-12S-B-12	SCBC13W3F0000G-1082.24
311P405-12S-B-15	SCBC13W3F00200G-1082.24
311P405-13P-B-12	SCBC17W2M0000G-1082.24
311P405-13P-B-15	SCBC17W2M00200G-1082.24
311P405-13S-B-12	SCBC17W2F0000G-1082.24
311P405-13S-B-15	SCBC17W2F00200G-1082.24
311P405-14P-B-12	SCBC21W1M0000G-1082.24
311P405-14P-B-15	SCBC21W1M00200G-1082.24
311P405-14S-B-12	SCBC21W1F0000G-1082.24
311P405-14S-B-15	SCBC21W1F00200G-1082.24
311P405-15P-B-12	SCBM8W8M0000G-1082.24
311P405-15P-B-15	SCBM8W8M00200G-1082.24
311P405-15S-B-12	SCBM8W8F0000G-1082.24
311P405-15S-B-15	SCBM8W8F00200G-1082.24
**311P405-16P-B-12	SCBC13W6M0000G-1082.24
**311P405-16P-B-15	SCBC13W6M00200G-1082.24
**311P405-16S-B-12	SCBC13W6F0000G-1082.24
**311P405-16S-B-15	SCBC13W6F00200G-1082.24
**311P405-17P-B-12	SCBC17W5M0000G-1082.24
**311P405-17P-B-15	SCBC17W5M00200G-1082.24
**311P405-17S-B-12	SCBC17W5F0000G-1082.24
**311P405-17S-B-15	SCBC17W5F00200G-1082.24
311P405-18P-B-12	SCBC21WA4M0000G-1082.24
311P405-18P-B-15	SCBC21WA4M00200G-1082.24
311P405-18S-B-12	SCBC21WA4F0000G-1082.24
311P405-18S-B-15	SCBC21WA4F00200G-1082.24
311P405-20P-B-12	SCBC25W3M0000G-1082.24
311P405-20P-B-15	SCBC25W3M00200G-1082.24
311P405-20S-B-12	SCBC25W3F0000G-1082.24
311P405-20S-B-15	SCBC25W3F00200G-1082.24
**311P405-21P-B-12	SCBC27W2M0000G-1082.24
**311P405-21P-B-15	SCBC27W2M00200G-1082.24
311P405-21S-B-12	SCBC27W2F0000G-1082.24
311P405-21S-B-15	SCBC27W2F00200G-1082.24
311P405-22P-B-12	SCBC24W7M0000G-1082.24
311P405-22P-B-15	SCBC24W7M00200G-1082.24
311P405-22S-B-12	SCBC24W7F0000G-1082.24
311P405-22S-B-15	SCBC24W7F00200G-1082.24

GSFC PART NUMBER	REFERENCE NUMBER*
311P405-23P-B-12	SCBC36W4M0000G-1082.24
311P405-23P-B-15	SCBC36W4M00200G-1082.24
311P405-23S-B-12	SCBC36W4F0000G-1082.24
311P405-23S-B-15	SCBC36W4F00200G-1082.24
311P405-24P-B-12	SCBC43W2M0000G-1082.24
311P405-24P-B-15	SCBC43W2M00200G-1082.24
311P405-24S-B-12	SCBC43W2F0000G-1082.24
311P405-24S-B-15	SCBC43W2F00200G-1082.24
311P405-25P-B-12	SCBC47W1M0000G-1082.24
311P405-25P-B-15	SCBC47W1M00200G-1082.24
311P405-25S-B-12	SCBC47W1F0000G-1082.24
311P405-25S-B-15	SCBC47W1F00200G-1082.24
311P407-1P-B-12	SDD15M0000G-1082.24
311P407-1P-B-15	SDD15M00200G-1082.24
311P407-1S-B-12	SDD15F0000G-1082.24
311P407-1S-B-15	SDD15F00200G-1082.24
311P407-2P-B-12	SDD26M0000G-1082.24
311P407-2P-B-15	SDD26M00200G-1082.24
311P407-2S-B-12	SDD26F0000G-1082.24
311P407-2S-B-15	SDD26F00200G-1082.24
311P407-3P-B-12	SDD44M0000G-1082.24
311P407-3P-B-15	SDD44M00200G-1082.24
311P407-3S-B-12	SDD44F0000G-1082.24
311P407-3S-B-15	SDD44F00200G-1082.24
311P407-4P-B-12	SDD62M0000G-1082.24
311P407-4P-B-15	SDD62M00200G-1082.24
311P407-4S-B-12	SDD62F0000G-1082.24
311P407-4S-B-15	SDD62F00200G-1082.24
311P407-5P-B-12	SDD78M0000G-1082.24
311P407-5P-B-15	SDD78M00200G-1082.24
311P407-5S-B-12	SDD78F0000G-1082.24
311P407-5S-B-15	SDD78F00200G-1082.24
311P407-6P-B-12	SDD104M0000G-1082.24
311P407-6P-B-15	SDD104M00200G-1082.24
311P407-6S-B-12	SDD104F0000G-1082.24
311P407-6S-B-15	SDD104F00200G-1082.24
311P409-1P-B-12	SND9M0000G-1082.24
311P409-1P-B-15	SND9M00200G-1082.24
311P409-1S-B-12	SND9F0000G-1082.24
311P409-1S-B-15	SND9F00200G-1082.24
311P409-2P-B-12	SND15M0000G-1082.24
311P409-2P-B-15	SND15M00200G-1082.24
311P409-2S-B-12	SND15F0000G-1082.24
311P409-2S-B-15	SND15F00200G-1082.24
311P409-3P-B-12	SND25M0000G-1082.24
311P409-3P-B-15	SND25M00200G-1082.24
311P409-3S-B-12	SND25F0000G-1082.24
311P409-3S-B-15	SND25F00200G-1082.24
311P409-4P-B-12	SND37M0000G-1082.24
311P409-4P-B-15	SND37M00200G-1082.24
311P409-4S-B-12	SND37F0000G-1082.24
311P409-4S-B-15	SND37F00200G-1082.24
311P409-5P-B-12	SND50M0000G-1082.24
311P409-5P-B-15	SND50M00200G-1082.24
311P409-5S-B-12	SND50F0000G-1082.24
311P409-5S-B-15	SND50F00200G-1082.24

GSFC PART NUMBER	REFERENCE NUMBER*
CRIMP CONTACTS	
G08P1	MC8022D-50-1202.4
G08S1	FC8022D-50-1202.4
G10P1	MC6020D-50-1202.4
G10S1	FC6020D-50-1202.4
***GCP1	MC4101M
***GCP2	MC4102M
***GCP3	MC4103M
***GCP4	MC4104M
***GCRP1	MC4201M
***GCRP2	MC4202M
***GCRP3	MC4203M
***GCRP4	MC4204M
***GCS1	FC4101M
***GCS2	FC4102M
***GCS3	FC4103M
***GCS4	FC4104M
***GCRS1	FC4201M
***GCRS2	FC4202M
***GCRS3	FC4203M
***GCRS4	FC4204M
SOLDER CONTACTS	
***GHP6	MS4820M
***GHS6	FS4820M
***GHRP6	MS4920M
***GHRS6	FS4920M

NOTE: Items denoted by * are undergoing qualification. Consult Technical Sales for availability of items denoted by **.**

DIMENSIONS ARE IN INCHES [MILLIMETERS].
ALL DIMENSIONS ARE SUBJECT TO CHANGE.

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MIL-DTL-24308 / SAE AS 39029 QUALIFIED PARTS LIST DIRECTORY

*NOTE: Parts are to be ordered to the military number, the Positronic part number is for reference only.

Positronic has qualified standard density, board mount connector products to MIL-DTL-24308 per test report number 24308-618-79/24308-1210-85.
Positronic has qualified accessory products to MIL-C-85049 per test report number 85049-870-84.
Positronic has qualified high density connector products to MIL-DTL-24308 per test report number 24308-1209-85/24308-1210-85/24308-117-89.
Positronic has qualified standard density, crimp contact products to MIL-DTL-24308 per test report number 24308-211-79/24308-1210-85.
Positronic crimp contacts are qualified approved to MIL-C-39029 per test report number 39029-694-79.

MILITARY PART NUMBER	REFERENCE NUMBER*
M24308/5-34	HDC9F20000-50-403.3
M24308/5-35	HDC15F20000-50-403.3
M24308/5-36	HDC25F20000-50-403.3
M24308/5-37	HDC37F20000-50-403.3
M24308/5-38	HDC50F20000-50-403.3
M24308/5-56	HDC9F2F000-50-403.4
M24308/5-57	HDC15F2F000-50-403.4
M24308/5-58	HDC25F2F000-50-403.4
M24308/5-59	HDC37F2F000-50-403.4
M24308/5-60	HDC50F2F000-50-403.4
M24308/6-502	RD9F10000-50-403.3
M24308/6-503	RD15F10000-50-403.3
M24308/6-504	RD25F10000-50-403.3
M24308/6-505	RD37F10000-50-403.3
M24308/6-506	RD50F10000-50-403.3
M24308/6-507	RD9F10000-50-403.5
M24308/6-508	RD15F10000-50-403.5
M24308/6-509	RD25F10000-50-403.5
M24308/6-510	RD37F10000-50-403.5
M24308/6-511	RD50F10000-50-403.5
M24308/6-512	DD15F10000-50-403.3
M24308/6-513	DD26F10000-50-403.3
M24308/6-514	DD44F10000-50-403.3
M24308/6-515	DD62F10000-50-403.3
M24308/6-516	DD78F10000-50-403.3
M24308/6-517	DD104F10000-50-403.3
M24308/6-518	DD15F10000-50-403.5
M24308/6-519	DD26F10000-50-403.5
M24308/6-520	DD44F10000-50-403.5
M24308/6-521	DD62F10000-50-403.5
M24308/6-522	DD78F10000-50-403.5
M24308/6-523	DD104F10000-50-403.5
M24308/6-540	RD9F00000-403.3
M24308/6-541	RD15F00000-403.3
M24308/6-542	RD25F00000-403.3
M24308/6-543	RD37F00000-403.3
M24308/6-544	RD50F00000-403.3
M24308/6-545	DD15F00000-403.3
M24308/6-546	DD26F00000-403.3
M24308/6-547	DD44F00000-403.3
M24308/6-548	DD62F00000-403.3
M24308/6-549	DD78F00000-403.3
M24308/6-550	DD104F00000-403.3
M24308/6-551	RD9F1F000-50-403.4
M24308/6-552	RD15F1F000-50-403.4
M24308/6-553	RD25F1F000-50-403.4
M24308/6-554	RD37F1F000-50-403.4
M24308/6-555	RD50F1F000-50-403.4
M24308/6-556	DD15F1F000-50-403.4
M24308/6-557	DD26F1F000-50-403.4
M24308/6-558	DD44F1F000-50-403.4
M24308/6-559	DD62F1F000-50-403.4
M24308/6-560	DD78F1F000-50-403.4
M24308/6-561	DD104F1F000-50-403.4
M24308/6-562	RD9F1F000-50-403.6
M24308/6-563	RD15F1F000-50-403.6
M24308/6-564	RD25F1F000-50-403.6
M24308/6-565	RD37F1F000-50-403.6
M24308/6-566	RD50F1F000-50-403.6
M24308/6-567	DD15F1F000-50-403.6
M24308/6-568	DD26F1F000-50-403.6
M24308/6-569	DD44F1F000-50-403.6
M24308/6-570	DD62F1F000-50-403.6
M24308/6-571	DD78F1F000-50-403.6
M24308/6-572	DD104F1F000-50-403.6
M24308/6-573	RD9F0F000-403.4
M24308/6-574	RD15F0F000-403.4
M24308/6-575	RD25F0F000-403.4
M24308/6-576	RD37F0F000-403.4
M24308/6-577	RD50F0F000-403.4
M24308/6-578	DD15F0F000-403.4
M24308/6-579	DD26F0F000-403.4
M24308/6-580	DD44F0F000-403.4
M24308/6-581	DD62F0F000-403.4
M24308/6-582	DD78F0F000-403.4
M24308/6-583	DD104F0F000-403.4
M24308/7-23	HDC9M20000-50-403.3
M24308/7-24	HDC15M20000-50-403.3
M24308/7-25	HDC25M20000-50-403.3
M24308/7-26	HDC37M20000-50-403.3
M24308/7-27	HDC50M20000-50-403.3
M24308/7-34	HDC9M2F000-50-403.4
M24308/7-35	HDC15M2F000-50-403.4
M24308/7-36	HDC25M2F000-50-403.4
M24308/7-37	HDC37M2F000-50-403.4
M24308/7-38	HDC50M2F000-50-403.4
M24308/8-335	RD9M10000-50-403.3
M24308/8-336	RD15M10000-50-403.3
M24308/8-337	RD25M10000-50-403.3
M24308/8-338	RD37M10000-50-403.3
M24308/8-339	RD50M10000-50-403.3
M24308/8-340	RD9M10000-50-403.5
M24308/8-341	RD15M10000-50-403.5
M24308/8-342	RD25M10000-50-403.5
M24308/8-343	RD37M10000-50-403.5
M24308/8-344	RD50M10000-50-403.5
M24308/8-345	DD15M10000-50-403.3
M24308/8-346	DD26M10000-50-403.3
M24308/8-347	DD44M10000-50-403.3
M24308/8-348	DD62M10000-50-403.3
M24308/8-349	DD78M10000-50-403.3
M24308/8-350	DD104M10000-50-403.3
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M24308/8-352	DD26M10000-50-403.5
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M24308/8-354	DD62M10000-50-403.5
M24308/8-355	DD78M10000-50-403.5
M24308/8-356	DD104M10000-50-403.5
M24308/8-357	RD9M00000-403.3
M24308/8-358	RD15M00000-403.3
M24308/8-359	RD25M00000-403.3
M24308/8-360	RD37M00000-403.3
M24308/8-361	RD50M00000-403.3
M24308/8-362	DD15M00000-403.3
M24308/8-363	DD26M00000-403.3
M24308/8-364	DD44M00000-403.3
M24308/8-365	DD62M00000-403.3
M24308/8-366	DD78M00000-403.3
M24308/8-367	DD104M00000-403.3
M24308/8-401	RD9M1F000-50-403.4
M24308/8-402	RD15M1F000-50-403.4
M24308/8-403	RD25M1F000-50-403.4
M24308/8-404	RD37M1F000-50-403.4
M24308/8-405	RD50M1F000-50-403.4
M24308/8-406	DD15M1F000-50-403.4
M24308/8-407	DD26M1F000-50-403.4
M24308/8-408	DD44M1F000-50-403.4
M24308/8-409	DD62M1F000-50-403.4
M24308/8-410	DD78M1F000-50-403.4
M24308/8-411	DD104M1F000-50-403.4
M24308/8-412	RD9M1F000-50-403.6
M24308/8-413	RD15M1F000-50-403.6
M24308/8-414	RD25M1F000-50-403.6
M24308/8-415	RD37M1F000-50-403.6
M24308/8-416	RD50M1F000-50-403.6
M24308/8-417	DD15M1F000-50-403.6
M24308/8-418	DD26M1F000-50-403.6
M24308/8-419	DD44M1F000-50-403.6
M24308/8-420	DD62M1F000-50-403.6
M24308/8-421	DD78M1F000-50-403.6
M24308/8-422	DD104M1F000-50-403.6
M24308/8-423	RD9M0F000-403.4
M24308/8-424	RD15M0F000-403.4
M24308/8-425	RD25M0F000-403.4
M24308/8-426	RD37M0F000-403.4
M24308/8-427	RD50M0F000-403.4
M24308/8-428	DD15M0F000-403.4
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M24308/8-432	DD78M0F000-403.4
M24308/8-433	DD104M0F000-403.4
M24308/23-101	HDC9F3P00-50-403.27
M24308/23-101	HDC9F3P00-50-403.27
M24308/23-102	HDC15F3P000-50-403.27
M24308/23-103	HDC25F3P000-50-403.27
M24308/23-104	HDC37F3P000-50-403.27
M24308/23-105	HDC50F3P000-50-403.27
M24308/23-107	HDC9F3P000-50-403.28
M24308/23-108	HDC15F3P000-50-403.28
M24308/23-109	HDC25F3P000-50-403.28
M24308/23-110	HDC37F3P000-50-403.28
M24308/23-111	HDC50F3P000-50-403.28
M24308/23-113	HDC9F3P000-50-403.46
M24308/23-114	HDC15F3P000-50-403.46
M24308/23-115	HDC25F3P000-50-403.46
M24308/23-116	HDC37F3P000-50-403.46
M24308/23-117	HDC50F3P000-50-403.46
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M24308/23-120	HDC15F3P000-50-403.32
M24308/23-121	HDC25F3P000-50-403.32
M24308/23-122	HDC37F3P000-50-403.32
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M24308/23-125	HDC9F5B8000-50-403.34
M24308/23-126	HDC15F5B8000-50-403.34
M24308/23-127	HDC25F5B8000-50-403.34
M24308/23-128	HDC37F5B8000-50-403.34
M24308/23-129	HDC50F5B8000-50-403.34
M24308/23-131	HDC9F5B8000-50-403.36
M24308/23-132	HDC15F5B8000-50-403.36
M24308/23-133	HDC25F5B8000-50-403.36
M24308/23-134	HDC37F5B8000-50-403.36
M24308/23-135	HDC50F5B8000-50-403.36
M24308/23-137	HDC9F5B8000-50-403.38
M24308/23-138	HDC15F5B8000-50-403.38
M24308/23-139	HDC25F5B8000-50-403.38
M24308/23-140	HDC37F5B8000-50-403.38
M24308/23-141	HDC50F5B8000-50-403.38
M24308/23-143	HDC9F5B8000-50-403.48
M24308/23-144	HDC15F5B8000-50-403.48
M24308/23-145	HDC25F5B8000-50-403.48
M24308/23-146	HDC37F5B8000-50-403.48
M24308/23-147	HDC50F5B8000-50-403.48
M24308/23-149	HDC9F5B8000-50-403.42
M24308/23-150	HDC15F5B8000-50-403.42
M24308/23-151	HDC25F5B8000-50-403.42
M24308/23-152	HDC37F5B8000-50-403.42
M24308/23-153	HDC50F5B8000-50-403.42
M24308/23-155	HDC9F5B8000-50-403.44
M24308/23-156	HDC15F5B8000-50-403.44
M24308/23-157	HDC25F5B8000-50-403.44
M24308/23-158	HDC37F5B8000-50-403.44
M24308/23-159	HDC50F5B8000-50-403.44
M24308/23-161	DD15F3P000-50-403.27
M24308/23-162	DD26F3P000-50-403.27
M24308/23-163	DD44F3P000-50-403.27
M24308/23-164	DD62F3P000-50-403.27
M24308/23-165	DD78F3P000-50-403.27
M24308/23-167	DD15F32P000-50-403.27
M24308/23-168	DD26F32P000-50-403.27
M24308/23-169	DD44F32P000-50-403.27
M24308/23-170	DD62F32P000-50-403.27
M24308/23-171	DD78F32P000-50-403.27
M24308/23-173	DD15F4B8000-50-403.36
M24308/23-174	DD26F4B8000-50-403.36
M24308/23-175	DD44F4B8000-50-403.36
M24308/23-176	DD62F4B8000-50-403.36
M24308/23-177	DD78F4B8000-50-403.36
M24308/24-101	HDC9M3P000-50-403.27
M24308/24-102	HDC15M3P000-50-403.27
M24308/24-103	HDC25M3P000-50-403.27
M24308/24-104	HDC37M3P000-50-403.27
M24308/24-105	HDC50M3P000-50-403.27
M24308/24-107	HDC9M3P000-50-403.28
M24308/24-108	HDC15M3P000-50-403.28
M24308/24-109	HDC25M3P000-50-403.28
M24308/24-110	HDC37M3P000-50-403.28
M24308/24-111	HDC50M3P000-50-403.28
M24308/24-113	HDC9M3P000-50-403.30
M24308/24-114	HDC15M3P000-50-403.30
M24308/24-115	HDC25M3P000-50-403.30
M24308/24-116	HDC37M3P000-50-403.30
M24308/24-117	HDC50M3P000-50-403.30
M24308/24-119	HDC9M3P000-50-403.32
M24308/24-120	HDC15M3P000-50-403.32
M24308/24-121	HDC25M3P000-50-403.32
M24308/24-122	HDC37M3P000-50-403.32
M24308/24-123	HDC50M3P000-50-403.32
M24308/24-125	HDC9M5B8000-50-403.34
M24308/24-126	HDC15M5B8000-50-403.34
M24308/24-127	HDC25M5B8000-50-403.34
M24308/24-128	HDC37M5B8000-50-403.34
M24308/24-129	HDC50M5B8000-50-403.34
M24308/24-131	HDC9M5B8000-50-403.36

DIMENSIONS ARE IN INCHES [MILLIMETERS].
ALL DIMENSIONS ARE SUBJECT TO CHANGE.

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MIL-DTL-24308 / SAE AS 39029
QUALIFIED PARTS LIST DIRECTORY

***NOTE: Parts are to be ordered to the military number, the Positronic part number is for reference only.**

Positronic has qualified standard density, board mount connector products to MIL-DTL-24308 per test report number 24308-618-79/24308-1210-85.
Positronic has qualified accessory products to MIL-C-85049 per test report number 85049-870-84.
Positronic has qualified high density connector products to MIL-DTL-24308 per test report number 24308-1209-85/24308-1210-85/24308-117-89.
Positronic has qualified standard density, crimp contact products to MIL-DTL-24308 per test report number 24308-211-79/24308-1210-85.
Positronic crimp contacts are qualified approved to MIL-C-39029 per test report number 39029-694-79.

MILITARY PART NUMBER	REFERENCE NUMBER*	MILITARY PART NUMBER	REFERENCE NUMBER*	MILITARY PART NUMBER	REFERENCE NUMBER*	MILITARY PART NUMBER	REFERENCE NUMBER*
M24308/24-132	HDC15M5B8000-50-403.36						
M24308/24-133	HDC25M5B8000-50-403.36						
M24308/24-134	HDC37M5B8000-50-403.36						
M24308/24-135	HDC50M5B8000-50-403.36						
M24308/24-137	HDC9M5B8000-50-403.38						
M24308/24-138	HDC15M5B8000-50-403.38						
M24308/24-139	HDC25M5B8000-50-403.38						
M24308/24-140	HDC37M5B8000-50-403.38						
M24308/24-141	HDC50M5B8000-50-403.38						
M24308/24-143	HDC9M5B8000-50-403.40						
M24308/24-144	HDC15M5B8000-50-403.40						
M24308/24-145	HDC25M5B8000-50-403.40						
M24308/24-146	HDC37M5B8000-50-403.40						
M24308/24-147	HDC50M5B8000-50-403.40						
M24308/24-149	HDC9M5B8000-50-403.42						
M24308/24-150	HDC15M5B8000-50-403.42						
M24308/24-151	HDC25M5B8000-50-403.42						
M24308/24-152	HDC37M5B8000-50-403.42						
M24308/24-153	HDC50M5B8000-50-403.42						
M24308/24-155	HDC9M5B8000-50-403.44						
M24308/24-156	HDC15M5B8000-50-403.44						
M24308/24-157	HDC25M5B8000-50-403.44						
M24308/24-158	HDC37M5B8000-50-403.44						
M24308/24-159	HDC50M5B8000-50-403.44						
M24308/24-161	DD15M3P000-50-403.27						
M24308/24-162	DD26M3P000-50-403.27						
M24308/24-163	DD44M3P000-50-403.27						
M24308/24-164	DD62M3P000-50-403.27						
M24308/24-165	DD78M3P000-50-403.27						
M24308/24-167	DD15M32P000-50-403.27						
M24308/24-168	DD26M32P000-50-403.27						
CRIMP CONTACTS							
M39029/57-354	FC8522D-50						
M39029/58-360	MC8522D-50						
M39029/63-368	FC5020D-50						
M39029/64-369	MC5020D-50						

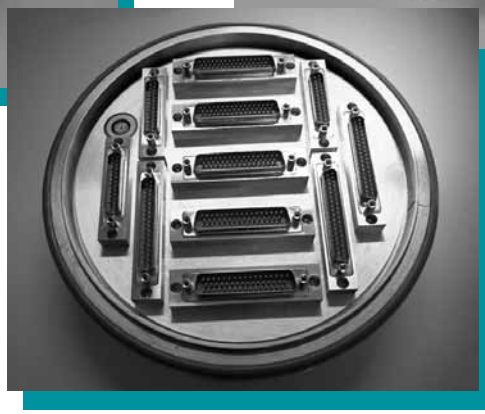
**DIMENSIONS ARE IN INCHES [MILLIMETERS].
ALL DIMENSIONS ARE SUBJECT TO CHANGE.**

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Positronic Hermetic Connector Assemblies







- **Leakage Rate: $5x10^{-9}$ mbar.l/s @ vacuum 1.5 x 10^{-5} atm**
- **Shock and vibration resistant**
- **Application Specific Design**

Positronic Industries can supply hermetic connector assemblies for use in vacuum applications. All Positronic hermetic connectors are designed to act as feedthroughs through the bulkhead/chamber wall. Typically both sides of the connector have mating faces, but certain contact terminations are also available per customer requirement. Typical configurations include:

- Standard Density D-Subminiature (Contact size 20)
- High Density D-Subminiature (Contact size 22)
- Mixed Density D-Subminiature (Contact sizes 8 and 20 in a single package)
- Circular (Variety of contact sizes and configurations)

In addition to simply providing the hermetic connector itself, Positronic can provide a fully-assembled flange/plate according to customer specification (see above). For more information on Positronic hermetic capabilities, please call (800) 641-4054 and request to speak to someone about the Positronic hermetic product line.

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

FEATURES: Three performance levels available: professional quality, military quality and space-flight quality provide multiple performance-to-cost choices • Options include thermocouple contacts, 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 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 solder
Configurations: Multiple variants in two package sizes
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 x 10-9 mbar.l/s @ vacuum 1.5 x 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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MEXICO

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Factory Sales and Engineering Offices	(800) 327-8272

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Taiwan Sales Office	(88) 62-2937-8775	taiwan@connectpositronic.com

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Southern Germany Sales Office	49 (0)2351 63 47 39	cbouche@connectpositronic.com

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