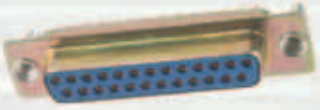
D-SUBMINIATURE

LOOK FOR OUR NEW PRODUCTS!

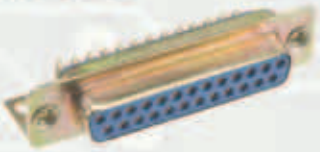
NEW!

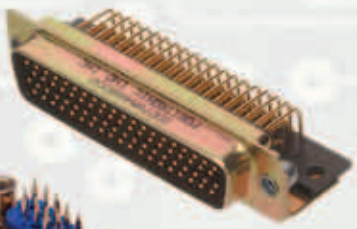
Positronic®
global connector solutions



Professional, Industrial and Military Performance

THREE PERFORMANCE LEVELS FOR BEST COST/PERFORMANCE RATIO





Catalog C-001 Rev. G

www.connectpositronic.com

Connector Excellence®

Positronic Provides Complete Capability

Mission Statement

"To utilize product flexibility and application assistance to present quality interconnect solutions which represent value to customers worldwide."

Experience

- Founded in **1966**
- **Involvement** in the development of international connector specifications through EIA®, IEC and ISO as well as PICMG®.
- Introduction of new and **unique connector products** to the electronics industry.
- Patent holder for many **unique connector features and manufacturing techniques.**
- **Vertically integrated** manufacturing – raw materials to finished connectors.

Technology

- **Expertise** with solid machined contacts provides a variety of high reliability connectors including high current density power connectors.
- Quality Assurance lab is **capable of testing** to IEC, EIA, UL, CUL, military and customer-specified requirements.
- **In-house design and development** of connectors based on market need or individual customer requirements.
- **Internal manufacturing capabilities** include automatic precision contact machining, injection molding, stamping, plating operations and connector assembly.
- **Manufacturing locations** in southwest Missouri, U.S.A. (headquarters); Puerto Rico, France, China, Singapore, and India. Total square footage: 407,441.

Support

- **Quality Systems:** Select locations qualified to ISO 9001, ISO 14001, AS9100, MIL-STD-790 and customer "dock to stock" programs. Applicable products qualified to MIL-DTL-24308, SAE AS39029, DSCC 85039, MIL-DTL-28748, Space D32, GSFC S-311-P-4 and GSFC S-311-P-10.
- Compliance to a variety of international and customer specific **environmental requirements.**
- Large **in-house inventory** of finished connectors. Customer specific **stocking programs.**
- Factory direct **technical sales support** in major cities worldwide.
- **One-on-one customer support** from worldwide factory locations.
- World class **web site**.
- **Value-added solutions** and willingness to **develop custom products** with reasonable price and delivery.

Regional Headquarters

Springfield, MO

Auch, France

Singapore

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

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

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® IS AN ITAR REGISTERED COMPANY

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CONNECTOR DESCRIPTIONS

MELO-D and EURO-D CONNECTORS

MD series and ED series, professional level, fixed contacts. Solder cup, wrap post, and printed board contact terminations for inch and metric printed board hole patterns. Six connector variants, 9 through 50 contacts. Female open entry contacts. Connectors conform to IEC 60807-2, Performance Level Two.

MDX SERIES CONNECTORS

MDX series, industrial level, fixed contacts. Solder cup, straight and right angle (90°) printed board mount contact terminations. Five connector variants, 9 through 50 contacts. PosiBand closed entry female contacts. Connectors conform to IEC 60807-2, Performance Level One.

SOLI-D CONNECTORS

SD series, professional level, removable contacts. Solder cup, crimp and straight printed board mount contact terminations. Five connector variants, 9 through 50 contacts. PosiBand® closed entry female contacts. Connectors conform to IEC 807-3, Performance Level Two.

ORD SERIES CONNECTORS

ORD series, professional and industrial levels, removable contacts. Crimp contact terminations. Thermocouple contact options available. Six connector variants, 9 through 50 contacts. IEC 60807-3, Performance Level One or Two.

HARMO-D CONNECTORS

HDC series, MIL-DTL-24308 level, fixed contact. Solder cup, wrap post and straight and right angle (90°) printed board contact terminations. Thermocouple contact options available. Five connector variants, 9 through 50 contacts.

RHAPSO-D CONNECTORS

RD series, MIL-DTL-24308 / SAE AS39029 levels, removable contacts. Crimp contact terminations. Thermocouple contact options available. Six connector variants, 9 through 50 contacts.

ODD SERIES CONNECTORS

ODD series, professional and industrial levels, removable contacts. Solder cup, crimp and straight and right angle (90°) printed board contact terminations. Thermocouple contact options available. Six connector variants, 15 through 104 contacts.

DENSI-D CONNECTORS

DD series, MIL-DTL-24308 / SAE AS39029 levels, removable contacts. Solder cup, crimp and straight and right angle (90°) printed board contact terminations. Thermocouple contact options available. Six connector variants, 15 through 104 contacts.

STANDARD DENSITY COMPLIANT PRESS-FIT CONNECTORS

PCD series, professional, industrial and military levels, machined contact, compliant termination. Five connector variants, 9 through 50 contacts. IEC 60807-2, Performance Levels One or Two. Military contact plating optional.

HIGH DENSITY COMPLIANT PRESS-FIT CONNECTORS

PCDD series, professional, industrial and military levels, machined contact, compliant termination. Five connector variants, 15 through 104 contacts. Military contact plating optional.

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Visit our website for the latest catalog updates and supplements at www.connectpositronic.com/dsub/catalog

WIRE HARNESS CONNECTORS

SAVE TIME AND MONEY!

Let Positronic support you by cablizing your
SD / RD / ORD / ODD / DD connector selection.

Cable Assembly Design Support

We work closely with customers to:

1. Design assemblies in accordance with customer specifications.
2. Prepare wire harness connector configuration and performance specifications.
3. Design each system in accordance with applicable customer, domestic, and international standards.
4. Define and conduct performance and verification testing.

Technical Sales Support

Puerto Rico Cable Assembly

Engineering Support

Quality Assurance

FOR MORE DETAILS CONTACT ***TECHNICAL SALES***
OR VISIT OUR ***WEB SITE*** AT:
CONNECTPOSITRONIC.COM/CABLE-ASSEMBLIES

APPLICATION TOOLS SECTION

SD / RD / ORD / ODD / DD connectors are offered with removable crimp contacts.

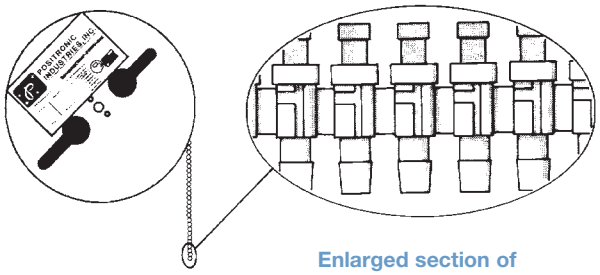
Positronic recognizes the importance of supplying application tooling to support our customers' use of our products.

Information on application tooling is available on our web site at

www.connectpositronic.com/design-tools/tooling

There you will find downloadable PDF cross reference charts for removable and compliant press-fit contacts. These charts will supply part numbers for insertion, removal and crimping tools, along with information regarding use of tools and techniques.

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 MC6020DR for a male contact and FC6020D2R for female contact.

CONTACT APPLICATION TOOLS CROSS REFERENCE LIST

USE INDICATED POSITRONIC TOOLS FOR BEST RESULTS

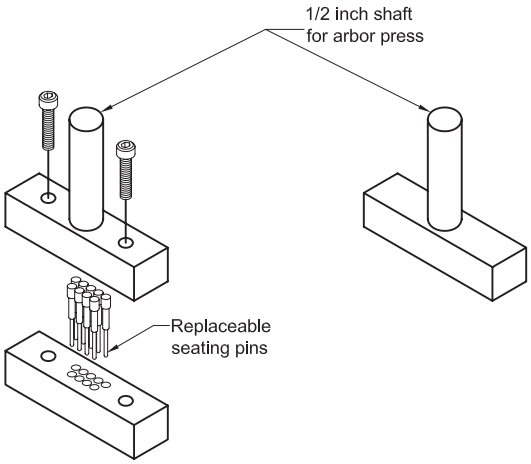
	Positronic Contact P/N	Handle & Positioner P/N	Hand Crimp Tool P/N	Mfg. Cross	Mil Equiv	Positioner	Mfg. Cross	Mil Equiv	Insertion Tool	Mfg. Cross	Mil Equiv	Removal Tool	Mfg. Cross	Mil Equiv	Automatic Crimp Tool *1 See Note
SD SERIES	MC7520D		9507-0-0-0	AFM8	M22520/2-01	9502-10-0-0	K694		M81969/1-02	91067-2	M81969/1-02	91067-2	M81969/1-02	9550-1-0-0	
	MC7526D		9507-0-0-0	AFM8	M22520/2-01	9502-10-0-0	K694		M81969/1-02	91067-2	M81969/1-02	91067-2	M81969/1-02	9550-1-0-0	
	MC7518D		9507-0-0-0	AFM8	M22520/2-01	9502-11-0-0	K774		M81969/1-02	91067-2	M81969/1-02	91067-2	M81969/1-02		
	FC7520D		9507-0-0-0	AFM8	M22520/2-01	9502-10-0-0	K694		M81969/1-02	91067-2	M81969/1-02	91067-2	M81969/1-02	9550-1-0-0	
	FC7526D		9507-0-0-0	AFM8	M22520/2-01	9502-10-0-0	K694		M81969/1-02	91067-2	M81969/1-02	91067-2	M81969/1-02	9550-1-0-0	
	FC7518D		9507-0-0-0	AFM8	M22520/2-01	9502-11-0-0	K774		M81969/1-02	91067-2	M81969/1-02	91067-2	M81969/1-02		
	MC6020D		9507-0-0-0	AFM8	M22520/2-01	9502-5-0-0	K13-1	M22520/2-08	M81969/1-02	91067-2	M81969/1-02	91067-2	M81969/1-02	9550-1-0-0	
	MC6026D		9507-0-0-0	AFM8	M22520/2-01	9502-10-0-0	K694	M22520/2-08	M81969/1-02	91067-2	M81969/1-02	91067-2	M81969/1-02	9550-1-0-0	
	MC6018D		9507-0-0-0	AFM8	M22520/2-01	9502-11-0-0	K774	M22520/2-08	M81969/1-02	91067-2	M81969/1-02	91067-2	M81969/1-02		
	M39029/63-368		9507-0-0-0	AFM8	M22520/2-01	9502-5-0-0	K13-1	M22520/2-08	M81969/1-02	91067-2	M81969/1-02	91067-2	M81969/1-02	9550-1-0-0	
	FC6020D2		9507-0-0-0	AFM8	M22520/2-01	9502-5-0-0	K13-1	M22520/2-08	M81969/1-02	91067-2	M81969/1-02	91067-2	M81969/1-02	9550-1-0-0	
	FC6026D2		9507-0-0-0	AFM8	M22520/2-01	9502-5-0-0	K13-1	M22520/2-08	M81969/1-02	91067-2	M81969/1-02	91067-2	M81969/1-02	9550-1-0-0	
	FC6018D2		9507-0-0-0	AFM8	M22520/2-01	9502-11-0-0	K774		M81969/1-02	91067-2	M81969/1-02	91067-2	M81969/1-02		
	M39029/64-369		9507-0-0-0	AFM8	M22520/2-01	9502-5-0-0	K13-1	M22520/2-08	M81969/1-02	91067-2	M81969/1-02	91067-2	M81969/1-02	9550-1-0-0	
	MC602*D** thermocouple		9507-0-0-0	AFM8	M22520/2-01	9502-5-0-0	K13-1	M22520/2-08	M81969/1-02	91067-2	M81969/1-02	91067-2	M81969/1-02	9550-1-0-0	
	FC602*D2** thermocouple														
RD SERIES	MC6020D		9507-0-0-0	AFM8	M22520/2-01	9502-5-0-0	K13-1	M22520/2-08	M81969/1-02	91067-2	M81969/1-02	91067-2	M81969/1-02	9550-1-0-0	
	MC6018D		9507-0-0-0	AFM8	M22520/2-01	9502-11-0-0	K774		M81969/1-02	91067-2	M81969/1-02	91067-2	M81969/1-02		
	MC6026D		9507-0-0-0	AFM8	M22520/2-01	9502-5-0-0	K13-1	M22520/2-08	M81969/1-02	91067-2	M81969/1-02	91067-2	M81969/1-02	9550-1-0-0	
	FC6020D2		9507-0-0-0	AFM8	M22520/2-01	9502-5-0-0	K13-1	M22520/2-08	M81969/1-02	91067-2	M81969/1-02	91067-2	M81969/1-02	9550-1-0-0	
	FC6026D2		9507-0-0-0	AFM8	M22520/2-01	9502-5-0-0	K13-1	M22520/2-08	M81969/1-02	91067-2	M81969/1-02	91067-2	M81969/1-02	9550-1-0-0	
	FC6120D		9507-0-0-0	AFM8	M22520/2-01	9502-5-0-0	K13-1	M22520/2-08	M81969/1-02	91067-2	M81969/1-02	91067-2	M81969/1-02	9550-1-0-0	
	FC6118D		9507-0-0-0	AFM8	M22520/2-01	9502-11-0-0	K774		M81969/1-02	91067-2	M81969/1-02	91067-2	M81969/1-02		
	MC602*D** thermocouple		9507-0-0-0	AFM8	M22520/2-01	9502-5-0-0	K13-1	M22520/2-08	M81969/1-02	91067-2	M81969/1-02	91067-2	M81969/1-02	9550-1-0-0	
	FC602*D2** thermocouple		9507-0-0-0	AFM8	M22520/2-01	9502-5-0-0	K13-1	M22520/2-08	M81969/1-02	91067-2	M81969/1-02	91067-2	M81969/1-02	9550-1-0-0	
ORD SERIES	MC8022D		9507-0-0-0	AFM8	M22520/2-01	9502-4-0-0	K-42	M22520/2-09	M81969/1-04	91067-1	M81969/1-04	91067-1	M81969/1-04	9550-1-0-0	
	MC8020D		9507-0-0-0	AFM8	M22520/2-01	9502-3-0-0	K-41	M22520/2-06	M81969/1-04	91067-1	M81969/1-04	91067-1	M81969/1-04	9550-1-0-0	
	MS8122D														
	FS8122D														
	MC8022D** thermocouple		9507-0-0-0	AFM8	M22520/2-01	9502-4-0-0	K-42	M22520/2-09	M81969/1-04	91067-1	M81969/1-04	91067-1	M81969/1-04	9550-1-0-0	
	FC8022D2** thermocouple		9507-0-0-0	AFM8	M22520/2-01	9502-3-0-0	K-41	M22520/2-06	M81969/1-04	91067-1	M81969/1-04	91067-1	M81969/1-04	9550-1-0-0	
	MC8022D		9507-0-0-0	AFM8	M22520/2-01	9502-4-0-0	K-42	M22520/2-09	M81969/1-04	91067-1	M81969/1-04	91067-1	M81969/1-04	9550-1-0-0	
	MC8020D		9507-0-0-0	AFM8	M22520/2-01	9502-3-0-0	K-41	M22520/2-06	M81969/1-04	91067-1	M81969/1-04	91067-1	M81969/1-04	9550-1-0-0	
	MS8122D														
	FS8122D2														
	FC8022D2		9507-0-0-0	AFM8	M22520/2-01	9502-4-0-0	K-42	M22520/2-09	M81969/1-04	91067-1	M81969/1-04	91067-1	M81969/1-04	9550-1-0-0	
	FC8120D		9507-0-0-0	AFM8	M22520/2-01	9502-3-0-0	K-41	M22520/2-06	M81969/1-04	91067-1	M81969/1-04	91067-1	M81969/1-04	9550-1-0-0	
	FC8122D		9507-0-0-0	AFM8	M22520/2-01	9502-3-0-0	K-41	M22520/2-06	M81969/1-04	91067-1	M81969/1-04	91067-1	M81969/1-04	9550-1-0-0	
	FC8022D2** thermocouple		9507-0-0-0	AFM8	M22520/2-01	9502-29-0-0	K1665		M81969/1-04	91067-1	M81969/1-04	91067-1	M81969/1-04		
ODD SERIES	MC8022D		9507-0-0-0	AFM8	M22520/2-01	9502-4-0-0	K-42	M22520/2-09	M81969/1-04	91067-1	M81969/1-04	91067-1	M81969/1-04	9550-1-0-0	
	MC8020D		9507-0-0-0	AFM8	M22520/2-01	9502-3-0-0	K-41	M22520/2-06	M81969/1-04	91067-1	M81969/1-04	91067-1	M81969/1-04	9550-1-0-0	
	MS8122D														
	FS8022D2														
	FC8022D2		9507-0-0-0	AFM8	M22520/2-01	9502-4-0-0	K-42	M22520/2-09	M81969/1-04	91067-1	M81969/1-04	91067-1	M81969/1-04	9550-1-0-0	
	FC8120D		9507-0-0-0	AFM8	M22520/2-01	9502-3-0-0	K-41	M22520/2-06	M81969/1-04	91067-1	M81969/1-04	91067-1	M81969/1-04	9550-1-0-0	
	FC8122D		9507-0-0-0	AFM8	M22520/2-01	9502-3-0-0	K-41	M22520/2-06	M81969/1-04	91067-1	M81969/1-04	91067-1	M81969/1-04	9550-1-0-0	
	FC8022D2** thermocouple		9507-0-0-0	AFM8	M22520/2-01	9502-29-0-0	K1665		M81969/1-04	91067-1	M81969/1-04	91067-1	M81969/1-04		
DD SERIES	MC8022D		9507-0-0-0	AFM8	M22520/2-01	9502-4-0-0	K-42	M22520/2-09	M81969/1-04	91067-1	M81969/1-04	91067-1	M81969/1-04	9550-1-0-0	
	MC8020D		9507-0-0-0	AFM8	M22520/2-01	9502-3-0-0	K-41	M22520/2-06	M81969/1-04	91067-1	M81969/1-04	91067-1	M81969/1-04	9550-1-0-0	
	MS8022D														
	M39029/58-360		9507-0-0-0	AFM8	M22520/2-01	9502-4-0-0	K-42	M22520/2-09	M81969/1-04	91067-1	M81969/1-04	91067-1	M81969/1-04		
	FC8022D2		9507-0-0-0	AFM8	M22520/2-01	9502-3-0-0	K-41	M22520/2-06	M81969/1-04	91067-1	M81969/1-04	91067-1	M81969/1-04	9550-1-0-0	
	FC8020D2		9507-0-0-0	AFM8	M22520/2-01	9502-29-0-0	K1665		M81969/1-04	91067-1	M81969/1-04	91067-1	M81969/1-04		
	FS8022D2														
	M39029/57-354		9507-0-0-0	AFM8	M22520/2-01	9502-3-0-0	K-41	M22520/2-06	M81969/1-04	91067-1	M81969/1-04	91067-1	M81969/1-04	9550-1-0-0	
	MC8022D** thermocouple		9507-0-0-0	AFM8	M22520/2-01	9502-4-0-0	K-42	M22520/2-09	M81969/1-04	91067-1	M81969/1-04	91067-1	M81969/1-04	9550-1-0-0	
	FC8022D2** thermocouple		9507-0-0-0	AFM8	M22520/2-01	9502-3-0-0	K-41	M22520/2-06	M81969/1-04	91067-1	M81969/1-04	91067-1	M81969/1-04	9550-1-0-0	

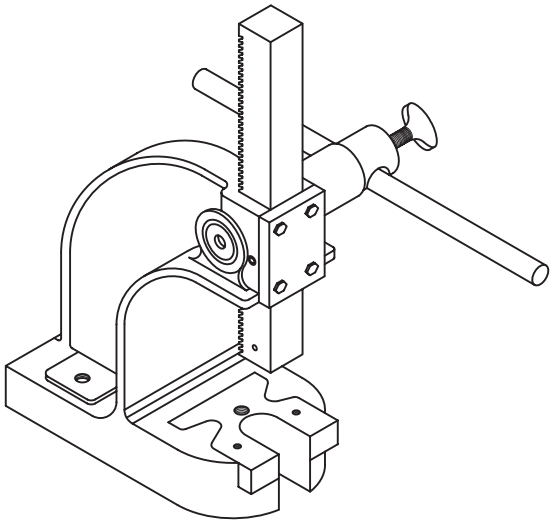
*1 All male and female crimp contacts can be ordered on reels in quantities of 2,000 by adding letter "R" after the contact part number, see page 78 for more information.

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

COMPLIANT PRESS-FIT CONNECTORS INSTALLATION TOOLS

USE INDICATED POSITRONIC TOOLS FOR BEST RESULTS





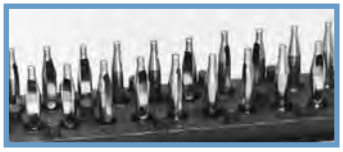
POSITRONIC RECOMMENDED TOOLS FOR PCD SERIES AND PCDD SERIES CONNECTORS AND CONTACTS		
SERIES	CONNECTOR SEATING	
	MALE	FEMALE
PCD 9	9512-1-0-41	9512-6-0-41
PCD 15	9512-2-0-41	9512-7-0-41
PCD 25	9512-3-0-41	9512-8-0-41
PCD 37	9512-4-0-41	9512-9-0-41
PCD 50	9512-5-0-41	9512-10-0-41
PCDD 15	9512-1-0-41	9512-11-0-41
PCDD 26	9512-2-0-41	9512-12-0-41
PCDD 44	9512-3-0-41	9512-13-0-41
PCDD 62	9512-4-0-41	9512-14-0-41
PCDD 78	9512-5-0-41	9512-15-0-41
PCDD 104	9512-16-0-41	9512-17-0-41
Arbor press for connector seating tools-9530-1-0 1 ton capacity 4 inch throat		
PCD series - Replacement pins for connector seating tools. Female - 855-658-0-41		
PCDD series - Replacement pins for connector seating tools. Female - 855-751-0-41		

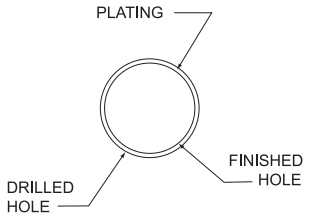
SUGGESTED PRINTED BOARD HOLE SIZES FOR COMPLIANT PRESS-FIT TERMINATION

Traditionally, tin-lead has been a popular plating for printed circuit board (PCB) holes. However, many PCB hole platings must now be RoHS compliant. Positronic is pleased to offer **PCB HOLE SIZE FOR RoHS** PCB plating as shown below.

OMEGA COMPLIANT PRESS-FIT CONTACT HOLE				
BOARD TYPE	**CONTACT SIZE / TYPE**	**RECOMMENDED DRILL HOLE SIZE**	**RECOMMENDED PLATING**	**FINISHED HOLE SIZES**
TIN-LEAD SOLDER PCB	**22 OMEGA**	ø0.0453±0.0010 [ø1.150±0.025]	0.0006 [15µ] minimum solder over 0.0010 [25µ] min. copper	ø0.0394+0.0035-0.0024 [ø1.000+0.090-0.060]
	20 OMEGA	ø0.0453±0.0010 [ø1.150±0.025]		ø0.0394+0.0035-0.0024 [ø1.000+0.090-0.060]
RoHS PCB PLATING OPTIONS				
COPPER PCB	**22 OMEGA**	ø0.047±0.001 [ø1.19±0.025]	0.0010 [25µ] min. copper	ø0.043±0.002 [ø1.09±0.05]
	20 OMEGA	ø0.047±0.001 [ø1.19±0.025]		ø0.043±0.002 [ø1.09±0.05]
IMMERSION TIN PCB	**22 OMEGA**	ø0.047±0.001 [ø1.19±0.025]	0.000033±0.000006 [0.85±0.15µ] immersion tin over 0.0010 [25µ] min. copper	ø0.043±0.002 [ø1.09±0.05]
	20 OMEGA	ø0.047±0.001 [ø1.19±0.025]		ø0.043±0.002 [ø1.09±0.05]
IMMERSION SILVER PCB	**22 OMEGA**	ø0.047±0.001 [ø1.19±0.025]	0.000013±0.000007 [0.34±0.17µ] immersion silver over 0.0010 [25µ] min. copper	ø0.043±0.002 [ø1.09±0.05]
	20 OMEGA	ø0.047±0.001 [ø1.19±0.025]		ø0.043±0.002 [ø1.09±0.05]
ELECTROLESS NICKEL / IMMERSION GOLD PCB	**22 OMEGA**	ø0.047±0.001 [ø1.19±0.025]	0.000002 [0.05µ] min. immersion gold over 0.000177±0.000059 [4.5±1.5µ] electroless nickel per IPC-4552 over 0.0010 [25µ] min. copper	ø0.043±0.002 [ø1.09±0.05]
	20 OMEGA	ø0.047±0.001 [ø1.19±0.025]		ø0.043±0.002 [ø1.09±0.05]

"Omega" Termination





COMPLIANT PRESS-FIT TERMINATION CONTACT HOLE

NOTE: For PCB plating compositions not shown, consult Technical Sales.

COMPLIANT PRESS-FIT USER INFORMATION

When properly used, Positronic Omega signal compliant press-fit terminations provide reliable service even under severe conditions.

Connectors utilizing this leading technology compliant press-fit contact are easy to install:

1. Inexpensive installation tooling is available from Positronic, to choose the proper installation tool refer to page 83 for part number ordering information.
2. Insert the connector into the printed circuit board or backplane and seat connector fully.
3. Secure the connector to the printed circuit board or backplane using two self-tapping screws. The screws should be 4-40 threads supplied by customer.

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

Positronic® offers a variety of QPL connector products

D-SUBMINIATURE CONNECTORS

MIL PREFIX	POSITRONIC SERIES
MIL-DTL-24308/1	HDC
MIL-DTL-24308/2	RD, DD
MIL-DTL-24308/3	HDC
MIL-DTL-24308/4	RD, DD
MIL-DTL-24308/5	HDC
MIL-DTL-24308/6	RD, DD
MIL-DTL-24308/7	HDC
MIL-DTL-24308/8	RD, DD
MIL-DTL-24308/23	HDC, DD

MIL PREFIX	POSITRONIC SERIES
MIL-DTL-24308/24	HDC, DD
MIL-DTL-24308/25	HDC, RD, DD
MIL-DTL-24308/26	HDC, RD, DD
GSFC S-311-P4	SND, SDD, SCBC, SCBM
GSFC S-311-P10	SND, SCBM
SAE AS39029/57	DD
SAE AS39029/58	DD
SAE AS39029/63	RD
SAE AS39029/64	RD

RECTANGULAR CONNECTORS

MIL PREFIX	POSITRONIC SERIES
MIL-DTL-28748/3	GMCT
MIL-DTL-28748/4	GMCT
MIL-DTL-28748/5	GM
MIL-DTL-28748/6	GM
MIL-DTL-28748/7	SGM

MIL PREFIX	POSITRONIC SERIES
MIL-DTL-28748/8	SGM
MIL-C-28748/13	SGMC
MIL-C-28748/14	SGMC
SAE AS39029/34	SGMC, GMCT
SAE AS39029/35	SGMC, GMCT

For a complete QPL listing available to download in PDF format, visit the desired connector family home page and click on link "Qualified Product Listing (PDF)" on our website at:

www.connectpositronic.com

or enter the URL link below to download the QPL PDF file

www.connectpositronic.com/qpl/catalog

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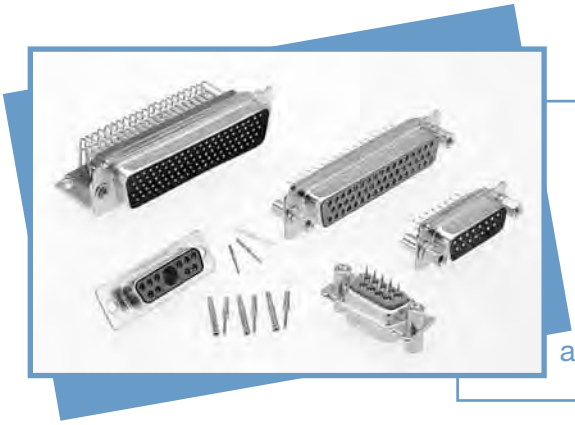
Other D-subminiature Products

Positronic offers full line of D-subminiature connectors in a wide variety of contact variants and package sizes with compliant press-fit, solder and cable terminations. All Positronic connector products provide quality, reliability, and flexibility.



HIGH PERFORMANCE D-SUBMINIATURE CONNECTORS

Standard and high density connectors manufactured to MIL-PRF-24308, Class M; Goddard Space Flight Center S-311-P-4 and Goddard Space Flight Center S-311-P-10.

ENVIRONMENTAL-D CONNECTORS

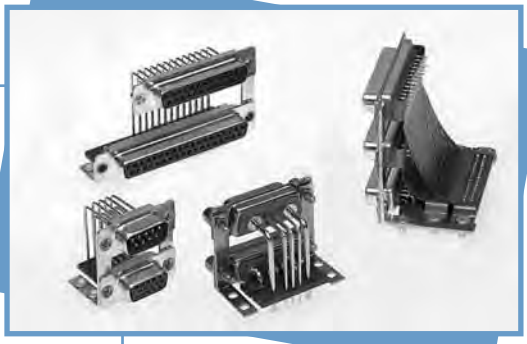
Standard and high density connectors with environmental protection features to IP67. Straight and right angle (90°), and cable terminations available.

COMBO-D CONNECTORS

Connectors with signal, shielded, power, thermocouple or high voltage contacts in a single package. Power compliant press-fit terminations now available.

DUAL PORT CONNECTORS

Right angle (90°) p.c. board mount connectors assembled stacked to maximize real estate; contact variants 9 through 62; available in standard density, high density, and mixed density.



Connector Excellence®

Positronic HIGH RELIABILITY Products

POWER

FEATURES:

- High current density • Energy saving - low contact resistance • 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
- Modular tooling which produces a single piece connector insert

Contact Sizes:	0, 8, 12, 16, 20, 22 and 24
Current Ratings:	To 200 amperes per contact
Terminations:	Crimp and fixed cable connector, straight solder, right angle (90°) solder, straight compliant press-in and right angle (90°) compliant press-in
Configurations:	Multiple variants in a variety of package sizes
Compliance:	PICMG 2.11, PICMG 3.0, VITA 41, DSCC, GSFC S-311-P-4, GSFC S-311-P-10

D-SUBMINIATURE

FEATURES:

- Four performance levels available for best cost/performance ratio: professional, industrial, military and space-flight quality
- Options include high voltage, coax, thermocouple and air coupling contacts; environmentally sealed and dual port connector packages including mixed density
- Broad selection of accessories
- Size 20 and 22 contacts suitable for use in carrying power
- IP65, IP67

Contact Sizes:	8, 16, 20 and 22
Current Ratings:	To 100 amperes
Terminations:	Crimp, wire solder, straight solder, right angle (90°) solder, straight compliant press-in and right angle (90°) compliant press-in
Configurations:	Multiple variants in both standard and high densities, seven connector housing sizes
Qualifications:	MIL-DTL-24308, GSFC S-311-P-4, GSFC S-311-P-10, SAE AS39029, DSCC

RECTANGULAR

FEATURES:

- Two performance levels available: industrial quality and military quality
- A wide variety of accessories
- Broad selection of contact arrangement and package sizes
- Connector coding device (keying) options

Contact Sizes:	16, 20 and 22
Current Ratings:	To 13 amperes nominal
Terminations:	Crimp, wire solder, straight solder, right angle (90°) solder, and straight compliant press-in
Configurations:	Multiple variants in both standard and high densities, thirty package sizes
Qualifications:	MIL-DTL-28748, SAE AS39029, CCITT V.35

CIRCULAR

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

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

CABLE

FEATURES:

- Shorten the supply chain and reduce additional costs and delays by "cablizing" your Positronic connector selection
- Overmolding available
- Shielded and environmentally sealed versions available
- Power cables and access boxes which meet the SAE J2496 specification

- ✔ Design assemblies in accordance with customer specifications.
- ✔ Prepare wire harness connector configuration and performance specifications.
- ✔ Design each system in accordance with applicable customer, domestic, and international standards.
- ✔ Define and conduct performance and verification testing.

HERMETIC

FEATURES:

- Intended for use as an electrical feedthrough in high vacuum applications
- Helium leakage rate at ambient temperature: $< 5x10^{-9}$ mbar.l/s under a vacuum $1.5x10^{-2}$ mbar
- Signal, power, coax and high voltage versions available
- Connectors can be mounted on flange assembly per customer specification

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
Compliance:	Space-D32

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

LOCATIONS

For most current sales office information, please visit www.connectpositronic.com/locations

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