

Glenair's World of Miniaturized Interconnect Solutions



Series 80
"Mighty Mouse"
Connectors and Cables



MIL-DTL-83513
Micro-D
Connectors and Cables



MIL-DTL-32139
Nano Miniature
Connectors and Cables



Ultra Low-Profile Composite Backshells



CB Series Compact
Bayonet "PogoPin"
Connectors



Glenair High Density
Fiber Optic Connectors
and APC Termini

High-Performance, Ultra-Miniature Interconnect Systems for Military and Commercial Applications



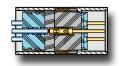
1211 Air Way Glendale, California 91201-2497

Telephone: 818-247-6000 · Facsimile: 818-500-9912 · E-mail: sales@glenair.com

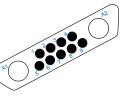
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Plug With Socket Contacts



Receptacle With Pin Contacts



Crimp, Rear-Release
M39029 type contacts accept up to #12

AWG wire.

360° EMI Spring

Innovative spring assures excellent shielding performance.

Environmentally Sealed

Fluid-resistant gaskets and seals provide IP67 ingress protection.

Fluorosilicone

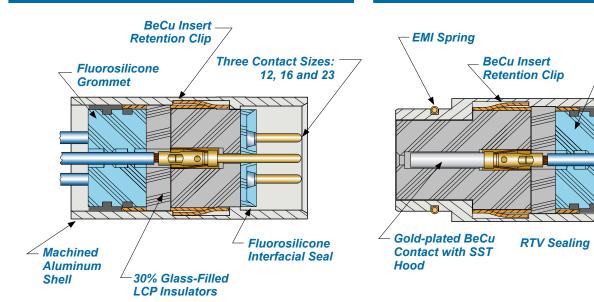
Grommet

Glenair's Series 79 Micro-Crimp Micro-D Connector

Today's defense/aerospace systems require advanced levels of environmental protection, electromagnetic shielding and size/weight reduction. The Series 79 Micro-Crimp connector was created to meet the need for environmental sealing, improved shielding, and reduced size/weight. Available in a wide range of insert arrangements, the Micro-Crimp offers size #12, #16 and #23 contacts. Snap-in rear release signal, power and coaxial contacts meet the requirements of SAE AS39029. Printed circuit board versions complete the product range.

"MICRO-CRIMP" RECEPTACLE

"MICRO-CRIMP" PLUG



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EMI ADAPTERS



Lightweight, low profile shielding adapters allow direct attachment of cable shields for excellent EMI performance. These two-piece adapters lock into a groove on the connector body.

BLIND MATE CONNECTORS



Micro-Crimp panel mount connectors are ideal for moduleto-chassis packaging. Stainless steel guide pins assure connector alignment for blind mate applications. Float bushings are also available.

ENVIRONMENTAL EMI BACKSHELL



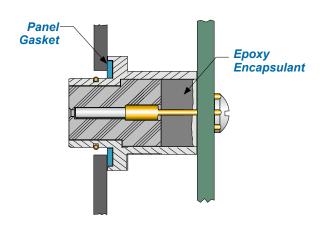
This rugged, watertight backshell features screw locks, sealing gasket and direct attachment to the connector.

EMI SPRING



The EMI springs utilized onGlenair Micro-Crimp plug onnectors provide 360 degrees of contact with the mating connector. The closely spaced spring coils reduce EMI apertures to a minimum.

PRINTED CIRCUIT BOARD



PANEL GASKET



Conductive Rubber Gaskets: Panel mount Micro-Crimp connectors are furnished with gaskets made from Chomerics CHO-SEAL 1287 fluorosilicone filled with silver-plated aluminum. These gaskets provide excellent resistance to avionics fluids and low resistivity.

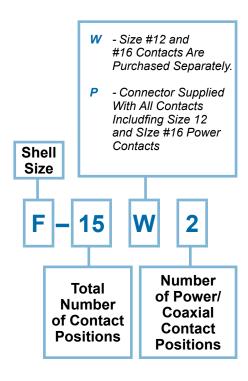
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Insert Arrangements Explained

The first letter represents the shell size. The number following the shell size represents the total number of contacts. If the insert arrangement is a mixed layout with signal contacts and coaxial/power contacts, the letter "W" specifies the connector to be furnished with signal contacts only (coax/power contacts purchased separately), and the letter "P" specifies the connector to be furnished with both signal and power contacts.



	MICRO-CRIMP	INSERT ARRAN	IGEMEN	ITS	
Shell	Full	#12 and #16 Contacts Purchased	Contact Q		antity
Size	Complement of Contacts	Separately	#23	#16	#12
Α	A-5	-	5		
	B-2P2	B-2W2		2	
В	B-9		9		
С	C-13		13		
	D-15		15		
D	D-3P3	D-3W3		3	
	D-7P2	D-7W2	5	2	
	E-11P2	E-11W2	9	2	
E	E-19		19		
	E-7P3	E-7W3	4	3	
	F-15P2	F-15W2	13	2	
F	F-23		23		
	F-5P5	F-5W5		5	
G	G-33		33		
	H-10P4	H-10W4	6		4
	H-29P7	H-29W7	22	7	
l	H-36P2	H-36W2	34		2
Н	H-54P2	H-54W2	52	2	
	H-5P5	H-5W5			5
	H-66		66		
	J-17P4	J-17W4	13	4	
	J-25P2	J-25W2	23	2	
J	J-33		33		
	J-7P7	J-7W7		7	
	K-27P4	K-27W4	23	4	
v	K-35P2	K-35W2	33	2	
K	K-43		43		
	K-9P9	K-9W9		9	
L	L-6P6	L-6W6			6

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MICRO-CRIMP INSERT ARRANGEMENTS						
Shell Size	Insert Arr.	No. of Contacts and Contact Size	Mating Face Pin Connector			
А	A-5	5 #23 CONTACTS				
В	B-2P2 B-2W2	2 #16 CONTACTS	A1			
В	B-9	9 #23 CONTACTS				
С	C-13	13 #23 CONTACTS				
D	D-15	15 #23 CONTACTS				
D	D-3P3 D-3W3	3 #16 CONTACTS	A1 A2 A3			
D	D-7P2 D-7W2	5 #23 CONTACTS 2 #16 CONTACTS	$ \begin{array}{c cccc} & & & & & & & & & & & & & & & & & & &$			
E	E-11P2 E-11W2	9 #23 CONTACTS 2 #16 CONTACTS				
E	E-19	19 #23 CONTACTS	10203040506070802010 11012013014015016017018015			
E	E-7P3	4 #23 CONTACTS 3 #16 CONTACTS	$ \begin{array}{c c} 1 & A1 & A2 & A3 & $			
F	F-15P2 F-15W2	13 #23 CONTACTS 2 #16 CONTACTS	A1			
F	F-23	23 #23 CONTACTS				
F	F-5P5 F-5W5	5 #16 CONTACTS	A1 A2 A3 A4 A5			
G	G-33	33 #23 CONTACTS	10 20 30 40 50 80 70 80 90 10 11 012 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			

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	MICRO-CRIMP INSERT ARRANGEMENTS						
Shell Size	Insert Arr.	No. of Contacts and Contact Size	Mating Face Pin Connector				
Н	H-10P4 H-10W4	6 #23 CONTACTS 4 #12 CONTACTS	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$				
Н	H-29P7	22 #23 CONTACTS 7 #16 CONTACTS	2 3 5 6 8 9 11 12 14 15 17 18 20 21 1 4 7 10 13 16 19 22				
н	H-36P2 H-36W2	34 #23 CONTACTS 2 #12 CONTACTS	A1				
Н	H-54P2 H-54W2	52 #23 CONTACTS 2 #16 CONTACTS	1 2 3 4 5 6 7 8 9 10 11 12 13 14 A2				
Н	H-5P5 H-5W5	5 #12 CONTACTS	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$				
Н	H-66	66 #23 CONTACTS	1 2 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 17 17 17 17 17 17 17 17 17 17 17 17				
J	J-17P4 J-17W4	13 #23 CONTACTS 4 #16 CONTACTS	A1 A2 10 30 40 50 60 70 A3 A4				
J	J-25P2 J-25W2	23 #23 CONTACTS 2 #16 CONTACTS	A1 102030405060708090101020 A2 1301401501001001001001000000000000000000				
J	J-33	33 #23 CONTACTS	10 20 30 40 50 60 70 80 20 10 11 12 20 30 14 15 16 17 0 18 18 18 20 21 22 23 24 25 28 27 28 28 30 31 32 33				

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	MICRO-CRIMP INSERT ARRANGEMENTS							
Shell Size	Insert Arr.	No. of Contacts and Contact Size	Mating Face Pin Connector					
J	J-7P7 J-7W7	7 #16 CONTACTS	A1 A2 A3 A4 A5 A6 A7					
К	K-27P4 K-27W4	25 #23 CONTACTS 4 #16 CONTACTS	A1					
K	K-35P2 K-35W2	33 #23 CONTACTS 2 #16 CONTACTS	A1					
K	K-43	43 #23 CONTACTS						
K	K-9P9 K-9W9	9 #16 CONTACTS	A1					
L	L-6P6 L-6W6	6 #12 CONTACTS	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$					

Size #23 Beryllium Copper Crimp Contacts





CRIMP TENSILE STRENGTH Silver or Tin

Coated Copper

Wire

12

8

5

3

1.5

Nickel

Coated

Copper Wire

8

6

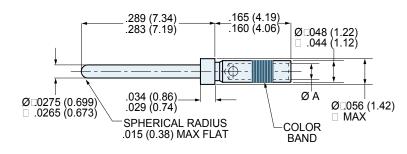
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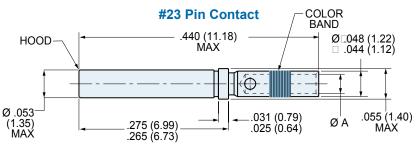
2

1.5

Standard size #23 contacts accept #22 to #28 AWG wire. Choose "small bore" versions for #26 to #30 AWG wire. For thermocouple applications, specify alumel or chromel contacts. Contacts are bulk packaged. Terminate with standard M22520 crimper with special positioner.

Contact				ØA		Color	Tool
Type	Wire Size	Material	Part Number	ln.	mm.	Band	Code
Pin	#22 - #28	BeCu	809-001	.03350355	0.851-0.902	None	Α
Pin	#26 - #30	BeCu	809-042	.02290245	0.582-0.622	Blue	В
Pin	#22 - #28	Alumel	809-065A	.03350355	0.851-0.902	None	Α
Pin	#22 - #28	Chromel	809-065C	.03350355	0.851-0.902	None	Α
Socket	#22 - #28	BeCu	809-002	.03350355	0.851-0.902	None	Α
Socket	#26 - #30	BeCu	809-043	.02290245	0.582-0.622	Blue	В
Socket	#22 - #28	Alumel	809-066A	.03350355	0.851-0.902	None	Α
Socket	#22 - #28	Chromel	809-066C	.03350355	0.851-0.902	None	Α





#23 Socket Contact

Material and Finish

Beryllium copper alloy per ASTM B196 or B197, 50 microinches gold plated per ASTM B488 Type 3 Code C Class 1,27 over nickel plate per QQ-N-290 Class 2, 50-100 microinches. Thermocouple contacts: alumel or chromel alloy, unplated, per ANSI 96.1 Socket contact hood: stainless steel, passivated per AMS-QQ-P-35.

Specifications

Current Rating: 5 Amps maximum

Voltage Drop (at 5 Amps and 25° C): 70 millivolts maximum

Temperature Range: -65° to + 200° C

Socket Contact Minimum Separation Force: 0.5 ounces

Crimp Tools and Insertion/Removal Tools

Crimper: 809-015

Positioner: 809-005 (standard). Use P/N 809-057 for small bore contacts 809-065 and 809-066

Standard Insertion/Removal Tool: 809-088 Tweezer Type Metal Extraction Tool: 809-007

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Wire

Gage

#22 #24

#26

#28

#30



How To Terminate, Install and Remove Size #23 Contacts

Set Up Crimp Tool. Install proper positioner into crimp tool. The label on the positioner shows the proper tool setting for each wire size. Turn the adjustment wheel to the correct setting.

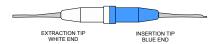
2 Strip Wire. Remove wire insulation, taking care to avoid nicking or cutting wire strands. Strip wire to length shown.

Insert wire into contact. The wire should be visible in the inspection hole.

Insert contact into crimp tool as shown. Make sure that the contact is fully inserted into the tool. Squeeze handle completely. The ratchet mechanism will not allow a partial crimp. Release handle and remove contact.

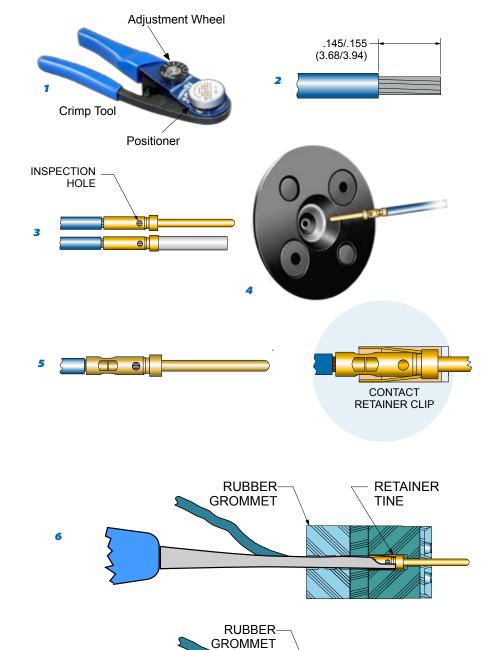
5 *Inspect crimped contact*. Wire should be fully inserted and the crimp should be uniform in appearance.

Insertion/Extraction Tool 809-088



Install contact into connector. Push the contact through the rear grommet until the contact locks into place. This can usually be done by hand without the need for a tool. If the wire gage is #26 or smaller, a tool is helpful. There are two techniques for installing contacts with a tool. One method is to push the contact in by hand, then use the tool to finish the insertion. The other method is to position the insertion tip against the contact shoulder, then insert the contact. Use insertion/extraction tool 809-088 to install contacts. Slide the wire into the groove on the blue end of the tool. Slide the tool tip up the contact until it touches the contact shoulder. USE CARE TO AVOID DAMAGING THE CONNECTOR.

Contact Extraction. Use tool 809-088. The white end is used for contact extraction. First, push the wire into the groove of the metal tip. Slide the tip of the tool into the connector. Push the tool into the connector cavity until the tip bottoms in the connector. Avoid wiggling or rocking the tip. This may damage the cavity. A straight push is best. Pinch the wire between your finger and the white plastic grip and slide the tool and contact out of the connector. Wire insulation diameter greater than 0.045 inches (1.14mm) is too large to work properly with the extraction tool. connector damage is possible.



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Adapter for Crimping #20 AWG Wire to Size #23 Series 80 Contacts

Size #22 AWG wire is the largest wire size that fits the standard "Mighty Mouse" size 23 contacts. Use this adapter to attach larger #20 gage wire. First, crimp wire to adapter, then crimp the adapter into the size #23 contact. Adapters are made of tellurium copper alloy #1452, and are gold plated. Crimp with M22520/1-01 tool and 809-138 (Daniels TH653) positioner. These adapters cannot be removed from connectors.



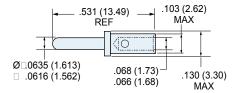
Ada Size	pter	Wire Size	Part Number	Tool Code	
#22-2	20	#20	809-093	C	
		.031/.026 0.8/0.7) .160 (4.1)	.430 (10.9) - MAX	.048/.040	.059 (1.5) MAX
		STE	D. #23 PIN —	809-093	#20 AWG WIRE

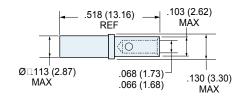
Size #16 Power Contacts, Crimp Termination



Standard size #16 contacts accept #16 to #20 AWG wire. At rated test current of 13 amps, the maximum voltage drop is 74 millivolts. Contacts are gold-plated copper alloy. Socket contacts feature stainless steel hoods to protect $against\ probe\ damage.\ Approved\ to\ SAE-AMS-39029.\ Contacts\ are\ bulk\ packaged.\ Terminate\ with\ M22520/1-01$ crimper and M22520/1-04 positioner.

Contact			Military Part Color Band		Tool	
Туре	Wire Size	Part Number	Numbér	1st 2nd	3rd	Code
Pin	#16 - #20	809-110	M39029/58-364	Orange Blue	Yellow	D
Socket	#16 - #20	809-111	M39029/57-358	Orange Green	Gray	D



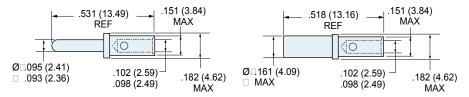


Size #12 Power Contacts, Crimp Termination



Standard size #12 contacts accept #12 to #14 AWG wire. At rated test current of 23 amps, the maximum voltage drop is 63 millivolts. Contacts are gold-plated copper alloy. Socket contacts feature stainless steel hoods to protect against probe damage. Approved to SAE AS39029. Contacts are bulk packaged. Terminate with M22520/1-01 crimper and M22520/1-04 positioner.

Contact			Military Part	Color Ba	nd	Tool
Type	Wire Size	Part Number	Number	1st 2nd	3rd	Code
Pin	#12 - #14	809-112	M39029/58-365	Orange Blue	Green	D
Socket	#12 - #14	809-113	M39029/57-359	Orange Green	White	D



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Size #16 Coaxial Contacts, Crimp Termination



These #16 contacts accept 50 ohm and 75 ohm coaxial cable. Inner contact is rated at 1 amp, the outer contact 12 amps. DWV voltage rating is 800 Vac rms sea level, 250 Vac at 50,000 feet. Contacts are packaged individually and are unassembled with instruction sheet. One contact consists of outer contact, fluorocarbon dielectric, inner contact and shield crimp sleeve. Inner and outer contacts are gold-plated copper alloy. Approved to SAE AS39029. VSWR rating 1.5:1 maximum up to 700 MHz. 5000 megohm insulation resistance.

			Military Part	Co	olor Ban	ıd	Tool
Type	Cable Size	Part Number	Number	1st	2nd	3rd	Code
Pin	RG174, RG316, RG179	809-114	M39029/76-424	Yellow	Red	Yellow	E
Pin	RG178	809-115	M39029/76-425	Yellow	Red	Green	E
Socket	RG174, RG316, RG179	809-116	M39029/78-432	Yellow	Orange	Red	E
Socket	RG178	809-117	M39029/78-433	Yellow	Orange	Orange	E
	.570 (14.48) MAX	130 (3.30) MAX		560 (14 MA>		130 (3 MA	
7					Ţ		
Ø□0635 □ .0616	(1.562) ← SHI	ELD CRIMP SLEEVE	Ø□113 (2.87) MAX			ELD CRIN	ИP

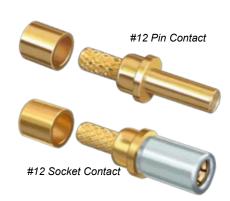
Size #12 Coaxial Contacts, Crimp Termination



These #12 contacts accept 50 ohm and 75 ohm coaxial cable. Inner contact is rated at 1 amp, the outer contact 12 amps. DWV voltage rating is 1000 Vac rms sea level, 250 Vac at 50,000 feet. Contacts are packaged individually and shipped unassembled with instruction sheet. One contact consists of outer contact, fluorocarbon dielectric, inner contact and shield crimp sleeve. Inner and outer contacts are gold-plated copper alloy. Approved to SAE AS39029. VSWR rating 1.5:1 maximum up to 700 MHz. 5000 megohm insulation resistance.

			Military Part	Co	olor Bar	ıd	Tool
Type	Cable Size	Part Number	Numbér	1st	2nd	3rd	Code
Pin	RG174, RG316, RG179	809-118	M39029/28-211	Red	Brown	Brown	F
Pin	RG180	809-119	M39029/28-409	Yellow	Black	White	F
Socket	RG174, RG316, RG179	809-120	M39029/27-210	Red	Brown	Black	F
Socket	RG180	809-121	M39029/27-402	Yellow	Black	Red	F
- - Ø□095 □ .093	.570 (14.48) — MAX — MAX — S (2.41) S (2.36)	HIELD CRIMP SLEEVE	Ø□161 (4.09)	560 (14 MA)	SHI	182 (AMA	X - - -

Size #12 50 Ohm High Frequency Coaxial Contacts, Crimp Termination



These contacts offer improved frequency response compared to standard coaxial contacts above. VSWR is 1.32:1 at 3GHz. Insertion loss at 3GHz is 20 dB maximum. Inner contact is rated at 1 amp, the outer contact 12 amps. DWV voltage rating is 1000 Vac rms sea level, 250 Vac at 50,000 feet. Contacts are packaged individually and shipped unassembled with instruction sheet. One contact consists of outer contact, fluorocarbon dielectric, inner contact and shield crimp sleeve. Inner and outer contacts are gold-plated copper alloy. 5000 megohm insulation resistance.

Contact Type	Cable Size	Part Number	Tool Code	
Pin	RG178	809-123	G	
Socket	RG178	809-122	G	
Ø 095 (2.41) 093 (2.36)		182 (4.62) MAX MAX ELD CRIMP	Ø□161 (4	.09) SHIELD CRIMP SLEEVE

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Miniature Adjustable Crimp Tools



These crimp tools perform precision eight indent crimps for gas-tight wire terminations and excellent tensile strength. Adjustment wheel has 8 settings. Ratchet mechanism prevents improper crimps. Use with bayonet-type positioners. Check calibration with M22520/3 gages. Length is 6.75 inches, weight is approx. 10 oz.

1 Standard M22520/2-01 crimper. Use with standard size #23 "Mighty Mouse" contacts and with M39029/76 and /78 coaxial center contacts. Requires positioner, ordered separately.

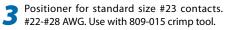
2 Special MH992 crimper used with 50 ohm matched impedance coaxial inner contacts. Requires positioner 809-124 (K1360).

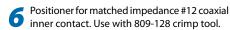
Figure	Part Number	Military Part Number	Daniels Part Number	Tool Code
1	809-015	M22520/2-01	AFM8	A, B, E
2	809-128	(none)	MH992	G

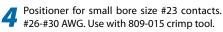
Positioners For Use With Miniature Adjustable Crimp Tools



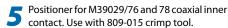
These bayonet-type positioners hold contacts at correct height for crimping with M22520/2 type miniature step adjustable tools, above. Face plate shows correct tool settings.







Positioner for M39029/27 and 28 #12 coaxial inner contact. Use with 809-015 crimp tool.



7

Figure	Part Number	Military Part Number	Daniels Part Number	Tool Code
3	809-005	(none)	K1461	Α
4	809-057	(none)	(none)	В
5	809-125	M22520/2-35	K532-1	E
6	809-124	None	K1360	G
7	809-135	M22520/2-34	K323	F

Crimp Tool And Positioner For #12 and #16 Power Contacts and 809-093 Adapters



Crimp tool for use with size #16 and #12 power pins. 9.75 inches OAL, 1.25 pounds. Use with M39029/57 and /58 contacts and 809-093 adapters.

Positioner for use with size #12 and #16 Power contacts.

Positioner for use with 809-093 adapters.



Figure	Part Number	Military Part Number	Daniels Part Number	Tool Code
1	809-136	M22520/1-01	AF8	C, D
2	809-137	M22520/1-02	TH163	D
3	809-138	(none)	TH653	C

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Crimp Tool And Positioner For #16 Coaxial Outer Contact



For crimping size #16 shield sleeves. These mil spec approved tools feature a ratchet mechanism to prevent damage from overcrimping. Check calibration with M22520/3 gage.

Crimp tool for use with size #16 coaxial contacts. Blue handles. 9.75 inches OAL, 1.25 pounds. Positioner for use with size #16 coaxial contacts. Use with 809-127 (M22520/4-01) crimp tool.

Figure	Part Number	Military Part Number	Daniels Part Number	Tool Code	
1	809-127	M22520/4-01	GS100-1	E	
2	809-126	M22520/4-02	GP295	E	

Crimp Tool And Positioner For #12 Coaxial Outer Contact



For crimping size #12 shield sleeves. These mil spec approved tools feature a ratchet mechanism to prevent damage from overcrimping. Check calibration with M22520/3 gage.

Crimp tool for use with size #12 coaxial contacts. Black handles. 9.75 inches OAL, 1.25 pounds.

Positioner for use with size #12 coaxial contacts. Use with 809-133 (M22520/31-01) crimp tool.

Figure	Part Number	Military Part Number	Daniels Part Number	Tool Code
1	809-133	M22520/31-01	GS200-1	F
2	809-134	M22520/31-02	G2P330	F

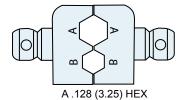
Parallel Action Crimp Tool and Hex Die Set for 50 Ohm Matched Impedance #12 Coax



Parallel action tool for use with hex crimp dies. 11 inches OAL, 2.0 pounds. Anodized aluminum frame, steel mechanism, plastic handles. Includes tool for die set removal. Accepts all M22520/5 die sets.

Die set for terminating coaxial shield to outer contact. Use with size #12 matched impedance M39029/102 and 103 type coaxial contacts. Set consists of upper and lower halves. Made of hardened steel with black oxide finish. Approximately 2 inches in length, assembled. Die set has two closures per illustration.

Figure	Part Number	Military Part Number	Daniels Part Number	Tool Code	
1	809-129	M22520/5-01	HX4	G	
2	809-130	M22520/5-03	Y196	G	



B .105 (2.67) HEX

Dimensions in inches (millimeters) and are subject to change without notice.

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Contact Insertion and Removal Tools



- Insertion/Extraction Tool for #23 Contacts. For use with all Series 80 connectors with size #23 contacts, this economical tool features molded plastic grips and sturdy stainless steel tips.
- Insertion/Extraction Tool for #16 Contacts. Use with size #16 coaxial or power contacts. Economical molded plastic. White extraction tip, blue insertion tip.
- Insertion Tool for #23 Contacts. For use with all Series 80 connectors with size #23 contacts, this tool features anodized aluminum handle and stainless steel insertion tip.
- Insertion/Extraction Tool for #12 Contacts.
 Use with size #12 coaxial or power contacts.
 Economical molded plastic. White extraction tip, yellow insertion tip.

Figure	Size	Туре	Part Number	Military Part Number	Daniels Part Number
1	#23	Insertion/Extraction	809-088	(None)	(None)
2	#23	Insertion Only	809-013	(None)	DAK225-22
3	#16	Insertion/Extraction	809-131	M81969/14-03	(None)
4	#12	Insertion/extraction	809-132	M81969/14-04	(None)

Contact Retention Tester



Check for properly seated contacts with this springloaded tester. Apply the tool tip to the mating end of a contact. Push on the handle until the spring compresses to the recommended force. A visual indicator shows full compression. The contact is properly retained if it is not displaced. The adjustable handle should be set to 3.2 pounds (14.2 N). The pin tip is used with #23 pin contacts. The socket tip is used with #23 socket contacts.

Order the complete kit, or order the tips and handle separately.

Figure	Description	Part Number	Daniels Part Number
1	Handle	809-107-1	HT250-2
2	Pin Tip	809-107-2	68-023-01
	Socket Tip (not shown)	809-107-3	67-023-01
	Complete Kit	809-107-4	(None)



BAND-IT® Shield Termination System



Fast, cost-effective shield termination. Attach cable shields to Series 80 connectors or backshells with **BAND-IT*** stainless steel straps. The **BAND-IT*** system offers fast termination and the flexibility to handle a wide range of parts with just one band size. Approved for aerospace and defense, these straps have successfully passed rigorous shock, vibration and environmental testing.

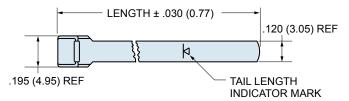
Micro Band Installation Tool. Use with .120" (3.05 mm) wide bands. 6.75 inches (172 mm.) length, 1.2 pounds (0.6 Kg.)

Micro Band, .120" (3.05 mm) wide. Available in two lengths, flat or pre-coiled. Stainless steel.

Figure	Description	Part Number
1	Micro Band Installation Tool	600-061

	Length		Part Numb	per	Acommodates Diameter			
Figure	in.	mm.	Flat	Pre-Coiled	in.	mm.		
2	8.125	206.38	600-057	600-057-1	.88	22.35		
2	14.250	361.95	600-083	600-083-1	1.88	47.75		

Contact Glenair or visit our website (glenair.com) to view our complete line of **BAND-IT®** products, including pneumatic tools for high volume production and calibration kits.



BAND-IT® Shield Termination Instructions

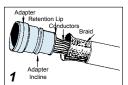
- Prepare Cable Braid for termination process (Figure 1).
- Push Braid forward over Adapter Retention Lip to the Adapter Incline Point (or .4" [10.2mm] minimum braid length). Milk Braid as required to remove slack and insure a snug fit around the shield termination area (Figure 2).
- Prepare the Band in the following manner: IMPORTANT: Due to Connector/Adapter circumference, it may be necessary to prepare the Band around the Cable or Retention Area.
 - A. Roll Band through the Buckle Slot twice. (Bands must be double-coiled.)
 - B. Pull on Band until Mark () is within approximately .250 inch (6.4mm) of Buckle Slot (Figure 3). The Band may be tightened further if desired.

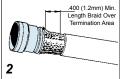
NOTE: Prepared Band should have (\triangleright) Mark visible approximately where shown in Figure 3.

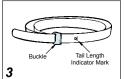
<u>Shield Termination</u> <u>Clamping Process (Figures 4 thru 8)</u>

NOTE: To free Tool Handles, move Holding Clips to center of Tool.

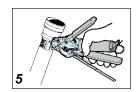
- Squeeze Gripper Release Lever and insert Band into the front end opening of the Tool. (NOTE: Circular portion of looped band must always face downward.)
- Aligning the Band and Tool with the Shield Termination Area, squeeze Black Pull-Up Handle repeatedly using short strokes until it locks against Tool Body. (This indicates the Band is compressed to the Tool Precalibrated Tension.)
 - NOTE: If alignment of band and shield is unsatisfactory, tension on band can be relaxed by pushing on slotted release lever on top of tool. Make adjustments as necessary and again squeeze black pull-up handle.
- Complete the Clamping Process by squeezing the Gray Cut-Off Handle.
- Remove excess band from tool and dispose.
- 8. Inspect Shield Termination.





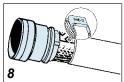












Dimensions in inches (millimeters) and are subject to change without notice.

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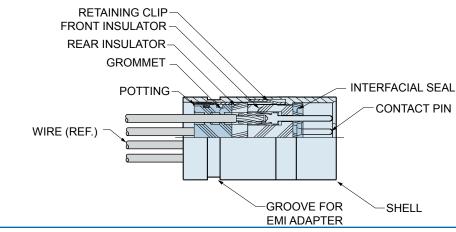
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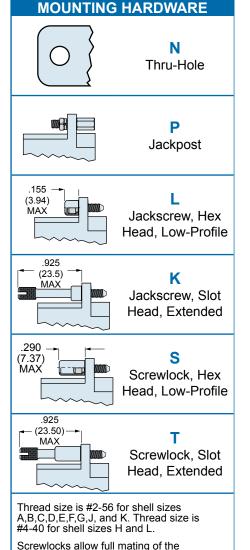
Cable Receptacles With Male Pins, Crimp Termination, 790-024



Connectors feature machined aluminum housings, beryllium copper contact retention clips and fluorosilicone rubber seals. Connectors are supplied with loose contacts for crimping to wire. Choose RoHS-compliant electroless nickel for best EMI performance. Contacts snap in place and are removable. Contacts are plated with 50 millionths thick gold over nickel underplate. Signal contacts are size #23 and accept #22 through #28 AWG copper wire.



How To Order

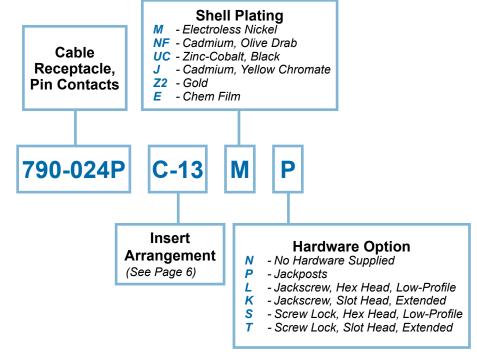


connectors before the screws are fastened. jackscrews must be tightened to mate the

connectors.

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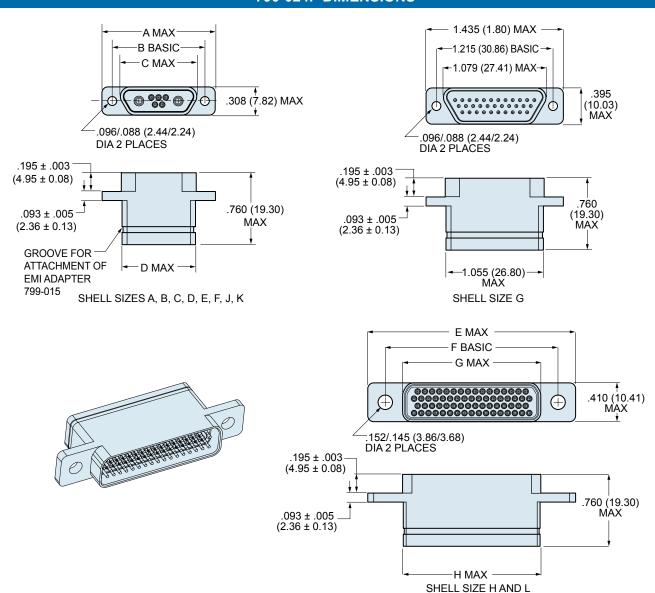


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E-Mail: sales@glenair.com



790-024P DIMENSIONS



Shell	ΑN	lax.	ВВ	asic	C N	C Max. D		lax.	ΕN	lax.	F Ba	asic	G N	lax.	H Max.	
Size	ln.	mm.	ln .	mm.	ln.	mm.	ln.	mm.	ln.	mm.	ln.	mm.	ln.	mm.	ln.	mm.
Α	.785	19.94	.565	14.35	.400	10.16	.390	9.91	_	_			_	_		_
В	.935	23.75	.715	18.16	.551	14.00	.540	13.72	_		_	_	_	_	_	_
С	1.085	27.65	.865	21.97	.701	17.81	.690	17.53	_	_	_	_	_	_	_	_
D	1.185	30.10	.965	24.51	.801	20.35	.790	20.07	_	_	_		_	_	_	_
E	1.335	33.91	1.115	28.32	.951	24.16	.940	23.88	_	_	_		_	_	_	_
F	1.485	37.72	1.265	32.13	1.101	27.96	1.090	27.69	_	_	_		_	_	_	_
Н	_	_	_	_	_	_	_	_	2.175	55.25	1.800	45.72	1.450	36.83	1.440	36.58
J	1.845	46.86	1.615	41.02	1.460	37.08	1.450	36.83	_	_	_		_	_	_	_
K	2.240	56.90	2.015	51.18	1.860	47.24	1.840	46.74	_	_	_	_	_	_	_	_
L	_	_	_	_	_	_	_	_	2.420	61.47	2.036	51.71	1.686	42.82	1.675	42.55

Dimensions in inches (millimeters) and are subject to change without notice.

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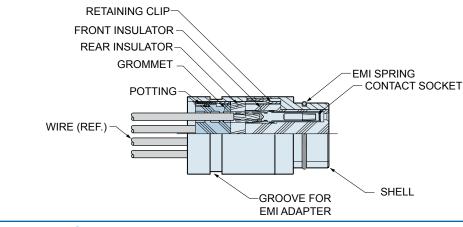
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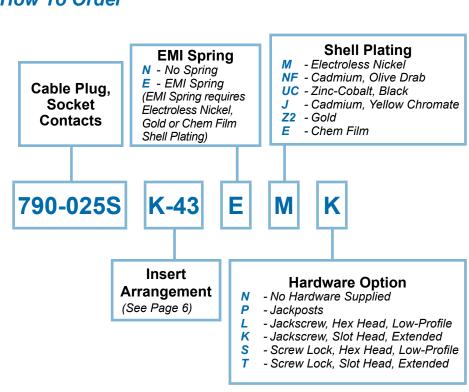
Cable Plugs with Female Socket Contacts, Crimp Termination, 790-025

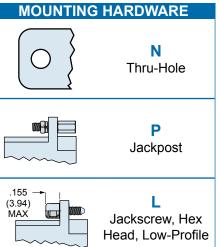


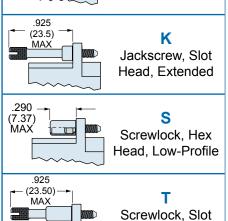
Connectors feature machined aluminum housings, beryllium copper contact retention clips and fluorosilicone rubber seals. Connectors are supplied with loose contacts for crimping to wire. Choose RoHS-compliant electroless nickel for best EMI performance. Contacts snap in place and are removable. Contacts are plated with 50 millionths thick gold over nickel underplate. Signal contacts are size #23 and accept #22 through #28 AWG copper wire.



How To Order







Thread size is #2-56 for shell sizes A,B,C,D,E,F,G,J, and K. Thread size is #4-40 for shell sizes H and L.

Screwlocks allow full mating of the connectors before the screws are fastened. jackscrews must be tightened to mate the connectors.

Head, Extended

Dimensions in inches (millimeters) and are subject to change without notice. CAGE Code 06324

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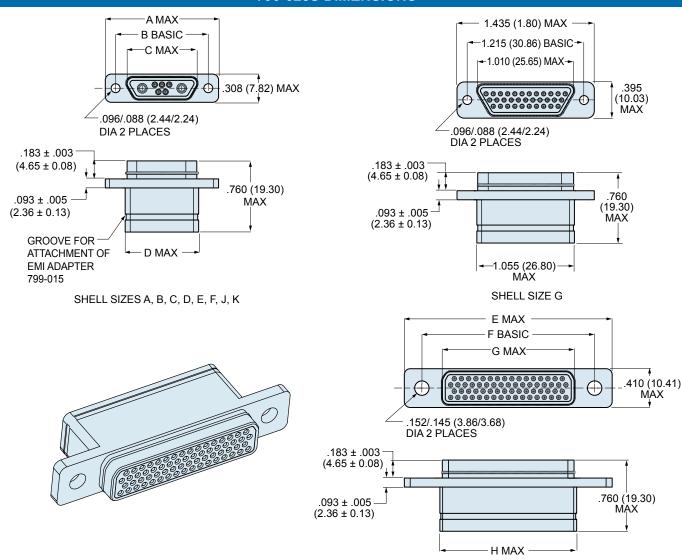
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790-025S DIMENSIONS



Shell	A Max.		B Basic		CN	lax.	D N	lax.	ΕN	lax.	F Basic		G Max.		H Max.	
Size	ln.	mm.	ln .	mm.	ln.	mm.	ln.	mm.	ln.	mm.	ln.	mm.	ln.	mm.	ln.	mm.
Α	.785	19.94	.565	14.35	.335	8.51	.390	9.91	_	_	_	_	_	_	_	_
В	.935	23.75	.715	18.16	.485	12.32	.540	13.72	_	_	_	_	_	_	_	_
၁	1.085	27.65	.865	21.97	.635	16.13	.690	17.53	_	_	_	_	_	_	_	_
D	1.185	30.10	.965	24.51	.735	18.67	.790	20.07	_	_	_	_	_	_	_	_
Е	1.335	33.91	1.115	28.32	.885	22.48	.940	23.88	_	_	_	_	_	_	_	_
F	1.485	37.72	1.265	32.13	1.035	26.29	1.090	27.69	_	_	_	_	_	_	_	_
H	_	_	_	_	_		_	_	2.175	55.25	1.800	45.72	1.385	35.18	1.440	36.58
J	1.845	46.86	1.615	41.02	1.390	35.61	1.450	36.83	1	_	_	_	_	_	_	ı
K	2.240	56.90	2.015	51.18	1.795	45.59	1.840	46.74	_	_	_	_	_	_	_	_
L	_	_	_	_	_		_	_	2.420	61.47	2.036	51.71	1.623	41.22	1.675	42.55

SHELL SIZE HAND L

Dimensions in inches (millimeters) and are subject to change without notice. CAGE Code 06324

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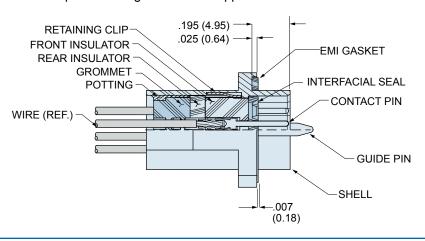
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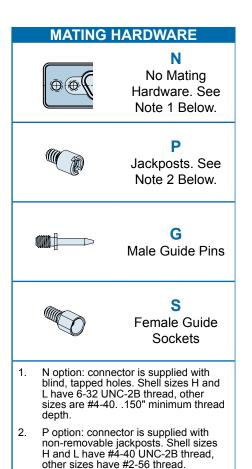


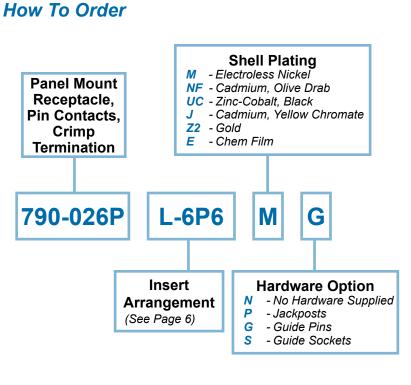
Panel Mount Receptacles, Pin Contacts, Crimp Termination, 790-026

Connectors feature machined aluminum housings, beryllium copper contact retention clips and fluorosilicone rubber seals. Silver-filled fluorosilicone panel gasket provides environmental seal to panel. Connectors are supplied with loose contacts for crimping to wire. Contacts snap in place and are removable. Contacts are plated with 50 millionths thick gold over nickel underplate. Signal contacts are size #23 and accept #22 through #28 AWG copper wire.









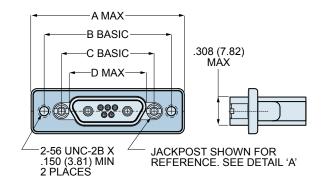
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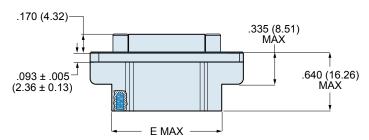
Dimensions in inches (millimeters) and are subject to change without notice.

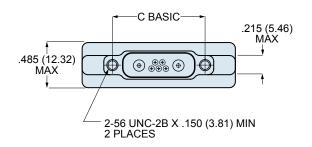
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790-026P SHELL SIZE A,B,C,D,E,F,J,K DIMENSIONS





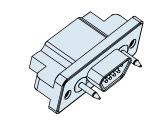


Shell	A Max.		B Basic		C Basic		D Max.		E Max.	
Size	ln.	mm.	ln .	mm.	ln.	mm.	ln.	mm.	ln.	mm.
Α	1.211	30.76	.925	23.50	.565	14.35	.401	10.19	.760	19.30
В	1.361	34.57	1.075	27.31	.715	18.16	.551	14.00	.910	21.11
С	1.511	38.38	1.225	31.12	.865	21.97	.701	17.81	1.060	26.92
D	1.611	40.92	1.325	33.66	.965	24.51	.801	20.35	1.160	29.46
Е	1.761	44.73	1.475	37.47	1.115	28.32	.951	24.16	1.310	33.27
F	1.911	48.54	1.625	41.28	1.265	32.13	1.101	27.96	1.460	37.08
J	2.261	57.43	1.975	50.17	1.615	41.02	1.456	36.98	1.810	45.97
K	2.661	67.59	2.375	60.33	2.015	51.18	1.860	47.24	2.210	56.13

NOTES

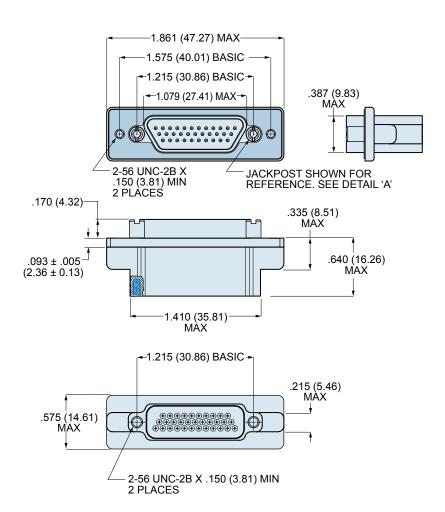
- REFER TO DRAWING 799-009 FOR INSERT ARRANGEMENTS.
- **REFER TO DRAWING 799-008** FOR MATERIALS, FINISHES, AND PERFORMANCE SPECIFICATIONS.
- REFER TO DRAWING 799-010 FOR APPLICATION TOOLING INFORMATION.
- REFER TO DRAWING 799-005 FOR PANEL CUTOUTS.

BLIND MATE



SHELL SIZES A, B, C, D, E, F, G, J, K +/- .030 (0.76) ALLOWABLE MISALIGNMENT FROM CENTERLINE

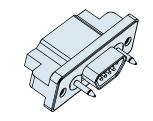
790-026P SHELL SIZE G DIMENSIONS



NOTES

- REFER TO DRAWING 799-009 FOR INSERT ARRANGEMENTS.
- **REFER TO DRAWING 799-008** FOR MATERIALS, FINISHES, AND PERFORMANCE SPECIFICATIONS.
- REFER TO DRAWING 799-010 FOR APPLICATION TOOLING INFORMATION.
- REFER TO DRAWING 799-005 FOR PANEL CUTOUTS.

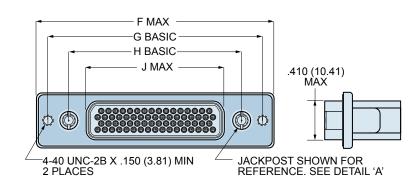
BLIND MATE



SHELL SIZES A, B, C, D, E, F, G, J, K +/- .030 (0.76) ALLOWABLE MISALIGNMENT FROM CENTERLINE



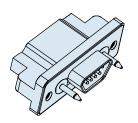
790-026P SHELL SIZE H AND L DIMENSIONS



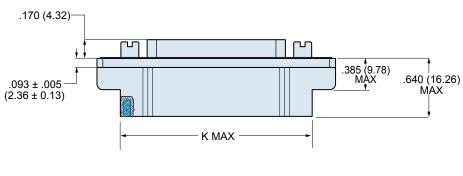
NOTES

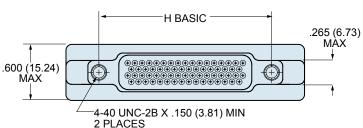
- REFER TO DRAWING 799-009 FOR INSERT ARRANGEMENTS.
- **REFER TO DRAWING 799-008** FOR MATERIALS, FINISHES, AND PERFORMANCE SPECIFICATIONS.
- REFER TO DRAWING 799-010 FOR APPLICATION TOOLING INFORMATION.
- REFER TO DRAWING 799-005 FOR PANEL CUTOUTS.

BLIND MATE



SHELL SIZES H. L +/- .040 (1.02) ALLOWABLE MISALIGNMENT FROM CENTERLINE





Shell	F Max.		G Basic		H Basic		J Max.		K Max.	
Size	ln.	mm.	ln .	mm.	ln.	mm.	ln.	mm.	ln.	mm.
Н	2.500	63.50	2.236	56.79	1.800	45.72	1.450	36.83	2.045	51.94
L	2.736	69.49	2.472	62.79	2.036	51.71	1.686	42.82	2.281	57.94

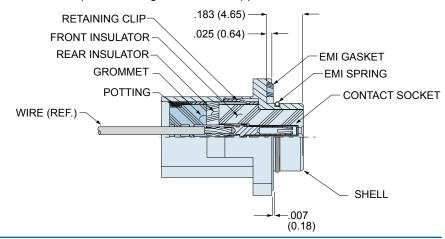
25

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Panel Mount Plugs, Socket Contacts, Crimp Termination, 790-027



Connectors feature machined aluminum housings, beryllium copper contact retention clips and fluorosilicone rubber seals. Silver-filled fluorosilicone panel gasket provides environmental seal to panel. Connectors are supplied with loose contacts for crimping to wire. Contacts snap in place and are removable. Contacts are plated with 50 millionths thick gold over nickel underplate. Signal contacts are size #23 and accept #22 through #28 AWG copper wire.



MATING HARDWARE



N No Mating Hardware. See Note 1 Below.



Jackposts. See Note 2 Below.



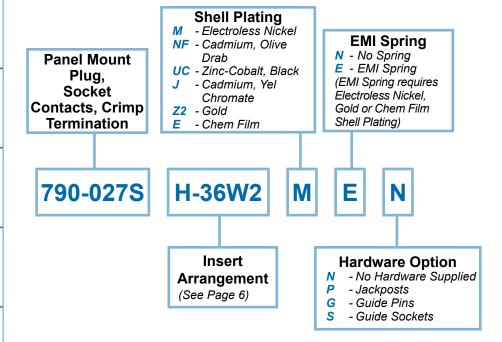
G Male Guide Pins



S Female Guide Sockets

- N option: connector is supplied with blind, tapped holes. Shell sizes H and L have 6-32 UNC-2B thread, other sizes are #4-40. .150" minimum thread
- P option: connector is supplied with non-removable jackposts. Shell sizes H and L have #4-40 UNC-2B thread, other sizes have #2-56 thread.

How To Order



Dimensions in inches (millimeters) and are subject to change without notice.

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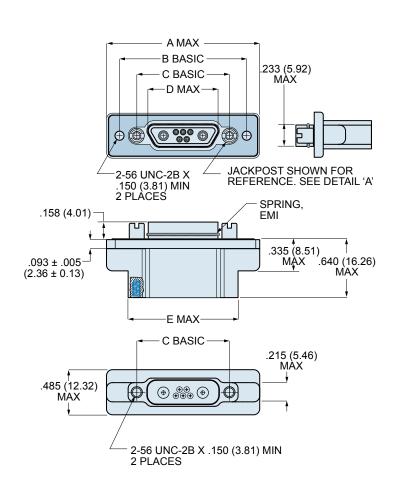
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790-027S SHELL SIZE A,B,C,D,E,F,J,K DIMENSIONS

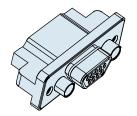


Shell	A Max.		B Basic		C Basic		D Max.		E Max.	
Size	ln.	mm.	ln .	mm.	ln.	mm.	ln.	mm.	ln.	mm.
Α	1.211	30.76	.925	23.50	.565	14.35	.335	8.51	.760	19.30
В	1.361	34.57	1.075	27.31	.715	18.16	.485	12.32	.910	21.11
С	1.511	38.38	1.225	31.12	.865	21.97	.635	16.13	1.060	26.92
D	1.611	40.92	1.325	33.66	.965	24.51	.735	18.67	1.160	29.46
Е	1.761	44.73	1.475	37.47	1.115	28.32	.885	22.48	1.310	33.27
F	1.911	48.54	1.625	41.28	1.265	32.13	1.035	26.29	1.460	37.08
J	2.261	57.43	1.975	50.17	1.615	41.02	1.390	35.31	1.810	45.97
K	2.661	67.59	2.375	60.33	2.015	51.18	1.795	45.59	2.210	56.13

NOTES

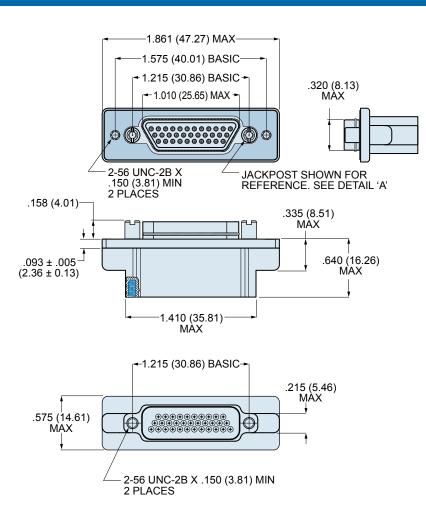
- REFER TO DRAWING 799-009 FOR INSERT ARRANGEMENTS.
- **REFER TO DRAWING 799-008** FOR MATERIALS, FINISHES, AND PERFORMANCE SPECIFICATIONS.
- REFER TO DRAWING 799-010 FOR APPLICATION TOOLING INFORMATION.
- REFER TO DRAWING 799-005 FOR PANEL CUTOUTS.

BLIND MATE



SHELL SIZES A, B, C, D, E, F, G, J, K +/- .030 (0.76) ALLOWABLE MISALIGNMENT FROM CENTERLINE

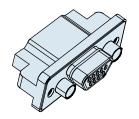
790-027S SHELL SIZE G DIMENSIONS



NOTES

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- 2. **REFER TO DRAWING 799-008** FOR MATERIALS, FINISHES, AND PERFORMANCE SPECIFICATIONS.
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BLIND MATE



SHELL SIZES A, B, C, D, E, F, G, J, K +/- .030 (0.76) ALLOWABLE MISALIGNMENT FROM CENTERLINE

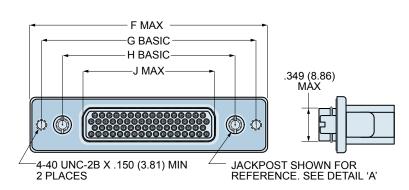
Dimensions in inches (millimeters) and are subject to change without notice.

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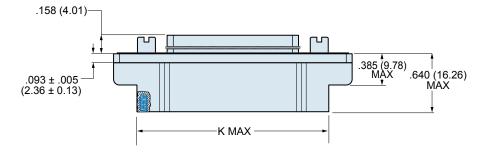


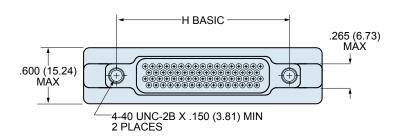
790-027S SHELL SIZE H AND L DIMENSIONS



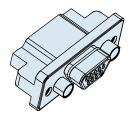
NOTES

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- REFER TO DRAWING 799-010 FOR APPLICATION TOOLING INFORMATION.
- REFER TO DRAWING 799-005 FOR 4. PANEL CUTOUTS.





BLIND MATE



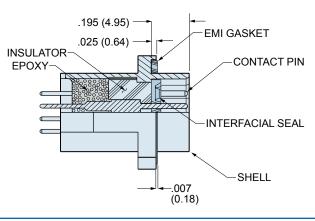
SHELL SIZES H. L +/- .040 (1.02) ALLOWABLE MISALIGNMENT FROM CENTERLINE

Shell	F Max.		G Basic		H Basic		J Max.		K Max.	
Size	ln.	mm.	ln .	mm.	ln.	mm.	ln.	mm.	ln.	mm.
Н	2.500	63.50	2.236	56.79	1.800	45.72	1.385	35.18	2.045	51.94
L	2.736	69.49	2.472	62.79	2.036	51.71	1.623	41.22	2.281	57.94

Panel Mount Receptacles, Pin Contacts, PCB Termination, 790-028

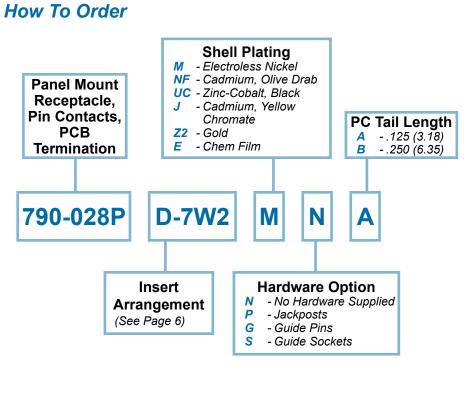


Connectors feature machined aluminum housings, beryllium copper contact retention clips and fluorosilicone rubber seals. Silver-filled fluorosilicone panel gasket provides environmental seal to panel. Connectors are supplied with gold-plated printed circuit board contacts. Contacts are sealed with epoxy and are non-removable. Contacts are plated with 50 millionths thick gold over nickel underplate. Connector shell features integral board strandoffs and threaded mounting holes.



MATING HARDWARE N No Mating Hardware, See Note 1 Below. Jackposts. See Note 2 Below. G Male Guide Pins S Female Guide Sockets N option: connector is supplied with blind, tapped holes. Shell sizes H and L have 6-32 UNC-2B thread, other sizes are #4-40. .150" minimum thread

P option: connector is supplied with non-removable jackposts. Shell sizes H and L have #4-40 UNC-2B thread, other sizes have #2-56 thread.

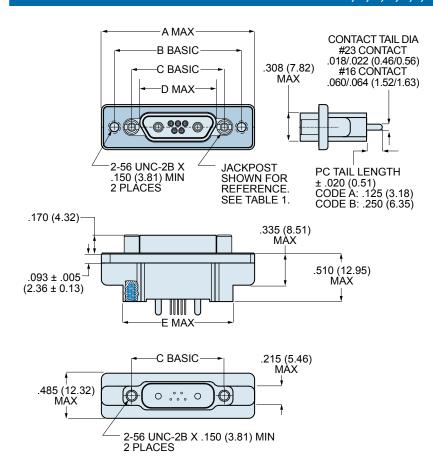


Dimensions in inches (millimeters) and are subject to change without notice. CAGE Code 06324

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790-028P SHELL SIZE A,B,C,D,E,F,J,K DIMENSIONS

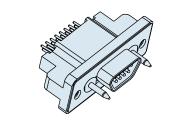


Shell	A Max.		B Basic		C Basic		D Max.		E Max.	
Size	ln.	mm.	ln .	mm.	ln.	mm.	ln.	mm.	ln.	mm.
Α	1.211	30.76	.925	23.50	.565	14.35	.401	10.19	.760	19.30
В	1.361	34.57	1.075	27.31	.715	18.16	.551	14.00	.910	21.11
С	1.511	38.38	1.225	31.12	.865	21.97	.701	17.81	1.060	26.92
D	1.611	40.92	1.325	33.66	.965	24.51	.801	20.35	1.160	29.46
Е	1.761	44.73	1.475	37.47	1.115	28.32	.951	24.16	1.310	33.27
F	1.911	48.54	1.625	41.28	1.265	32.13	1.101	27.96	1.460	37.08
J	2.261	57.43	1.975	50.17	1.615	41.02	1.456	36.98	1.810	45.97
K	2.661	67.59	2.375	60.33	2.015	51.18	1.860	47.24	2.210	56.13

NOTES

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- **REFER TO DRAWING 799-008** FOR MATERIALS, FINISHES, AND PERFORMANCE SPECIFICATIONS.
- REFER TO DRAWING 799-010 FOR APPLICATION TOOLING INFORMATION.
- REFER TO DRAWING 799-005 FOR PANEL CUTOUTS.
- REFER TO DRAW3ING 799-004 FOR PRINTED CIRCUIT BOARD HOLE **PATTERNS**

BLIND MATE



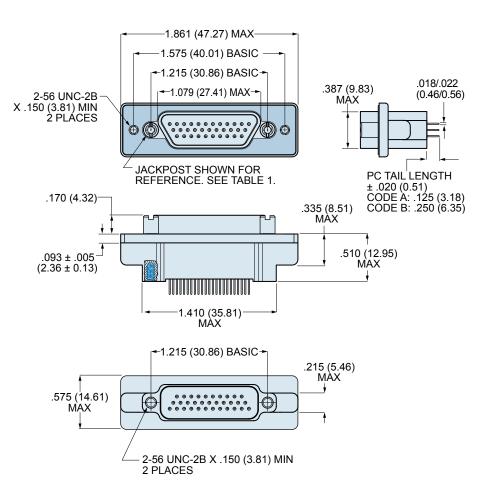
SHELL SIZES A, B, C, D, E, F, G, J, K +/- .030 (0.76) ALLOWABLE MISALIGNMENT FROM CENTERLINE

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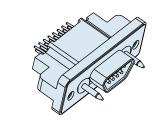
790-028P SHELL SIZE G DIMENSIONS



NOTES

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- REFER TO DRAW3ING 799-004 FOR PRINTED CIRCUIT BOARD HOLE PATTERNS

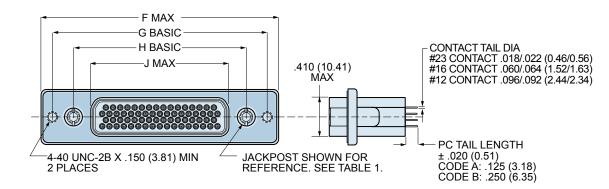
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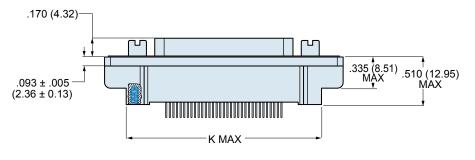


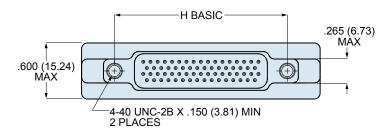
SHELL SIZES A, B, C, D, E, F, G, J, K +/- .030 (0.76) ALLOWABLE MISALIGNMENT FROM CENTERLINE



790-028P SHELL SIZE H, L DIMENSIONS





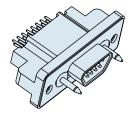


Shell	Shell F Max.		G Basic		H Basic		J Max.		K Max.	
Size	ln.	mm.	ln .	mm.	ln.	mm.	ln.	mm.	ln.	mm.
Н	2.500	63.50	2.236	56.79	1.800	45.72	1.450	36.83	2.045	51.94
L	2.736	69.49	2.472	62.79	2.036	51.71	1.686	42.82	2.281	57.94

NOTES

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- REFER TO DRAWING 799-005 FOR PANEL CUTOUTS.
- REFER TO DRAW3ING 799-004 FOR PRINTED CIRCUIT BOARD HOLE **PATTERNS**

BLIND MATE



SHELL SIZES H. L +/- .040 (1.02) ALLOWABLE MISALIGNMENT FROM CENTERLINE

Dimensions in inches (millimeters) and are subject to change without notice. CAGE Code 06324

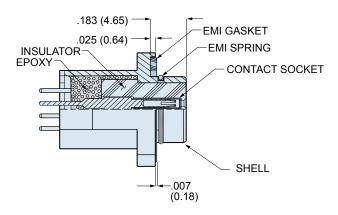
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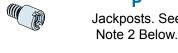
Panel Mount Plugs, Socket Contacts, PCB Termination, 790-029S



Connectors feature machined aluminum housings, beryllium copper contact retention clips and fluorosilicone rubber seals. Silver-filled fluorosilicone panel gasket provides environmental seal to panel. Connectors are supplied with goldplated printed circuit board contacts. Contacts are sealed with epoxy and are nonremovable. Contacts are plated with 50 millionths thick gold over nickel underplate. Connector shell features integral board standoffs and tapped mounting holes.

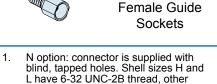


MATING HARDWARE N No Mating Hardware. See Note 1 Below. Jackposts. See



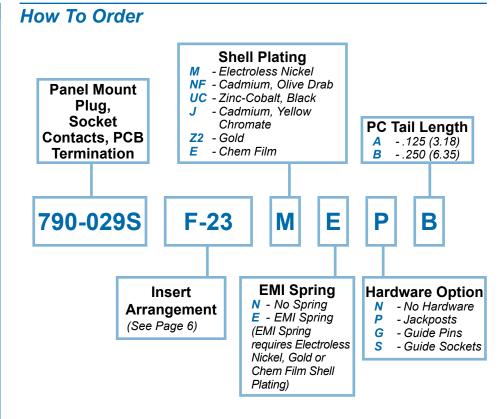


S



sizes are #4-40. .150" minimum thread

P option: connector is supplied with non-removable jackposts. Shell sizes H and L have #4-40 UNC-2B thread, other sizes have #2-56 thread.



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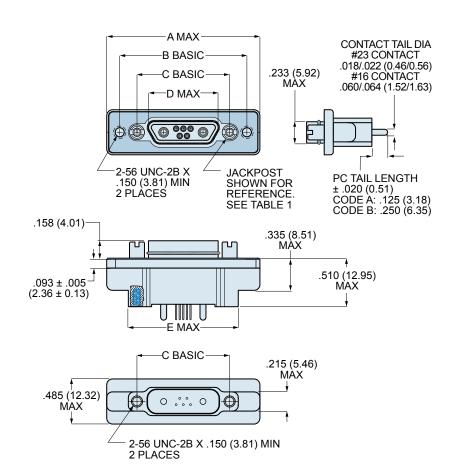
Dimensions in inches (millimeters) and are subject to change without notice. CAGE Code 06324

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790-029S SHELL SIZE A,B,C,D,E,F,J,K DIMENSIONS

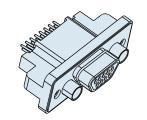


Shell	AN	lax.	B Basic		C Basic		D Max.		E Max.	
Size	ln.	mm.	ln .	mm.	ln.	mm.	ln.	mm.	ln.	mm.
Α	1.211	30.76	.925	23.50	.565	14.35	.335	8.51	.760	19.30
В	1.361	34.57	1.075	27.31	.715	18.16	.485	12.32	.910	21.11
С	1.511	38.38	1.225	31.12	.865	21.97	.635	16.13	1.060	26.92
D	1.611	40.92	1.325	33.66	.965	24.51	.735	18.67	1.160	29.46
Е	1.761	44.73	1.475	37.47	1.115	28.32	.885	22.48	1.310	33.27
F	1.911	48.54	1.625	41.28	1.265	32.13	1.035	26.29	1.460	37.08
J	2.261	57.43	1.975	50.17	1.615	41.02	1.390	35.31	1.810	45.97
K	2.661	67.59	2.375	60.33	2.015	51.18	1.795	45.59	2.210	56.13

NOTES

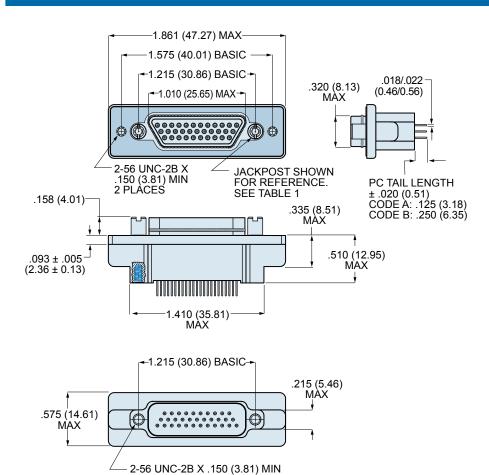
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- REFER TO DRAWING 799-010 FOR APPLICATION TOOLING INFORMATION.
- REFER TO DRAWING 799-005 FOR PANEL CUTOUTS.
- REFER TO DRAWING 799-004 FOR PRINTED CIRCUIT BOARD HOLE PATTERNS.
- GROUND SPRING IS AVAILABLE ONLY WITH NICKEL, GOLD OR CHEM FILM PLATING ON THE SHELL.

BLIND MATE



SHELL SIZES A, B, C, D, E, F, G, J, K +/- .030 (0.76) ALLOWABLE MISALIGNMENT FROM CENTERLINE

790-029S SHELL SIZE G DIMENSIONS

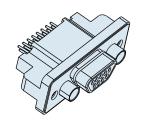


2 PLACES

NOTES

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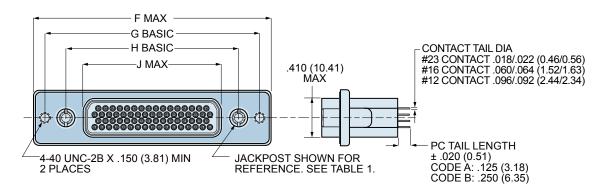
BLIND MATE

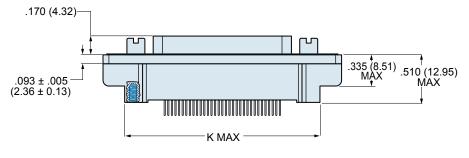


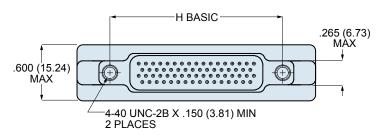
SHELL SIZES A, B, C, D, E, F, G, J, K +/- .030 (0.76) ALLOWABLE MISALIGNMENT FROM CENTERLINE



790-029S SHELL SIZE H AND L DIMENSIONS





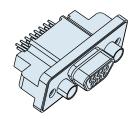


Shell	hell F Max.		G Basic		H Basic		J Max.		K Max.	
Size	ln.	mm.	ln .	mm.	ln.	mm.	ln.	mm.	ln.	mm.
Н	2.500	63.50	2.236	56.79	1.800	45.72	1.385	35.18	2.045	51.94
L	2.736	69.49	2.472	62.79	2.036	51.71	1.623	41.22	2.281	57.94

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- REFER TO DRAWING 799-004 FOR PRINTED CIRCUIT BOARD HOLE PATTERNS.
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BLIND MATE



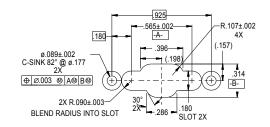
SHELL SIZES H. L +/- .040 (1.02) ALLOWABLE MISALIGNMENT FROM CENTERLINE

Dimensions in inches (millimeters) and are subject to change without notice.

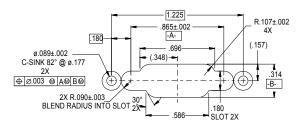
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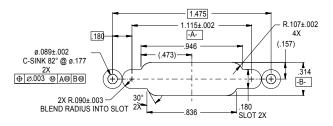
RECOMMENDED PANEL CUTOUTS



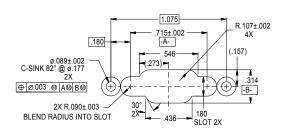
Shell Size A



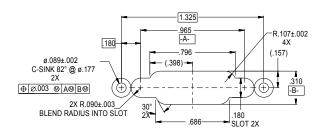
Shell Size C



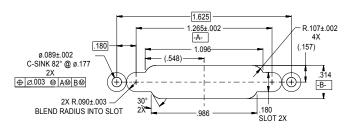
Shell Size E



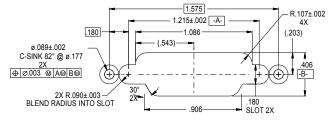
Shell Size B



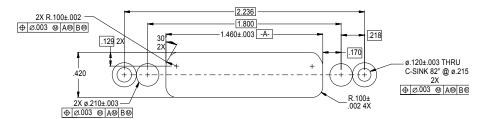
Shell Size D



Shell Size F



Shell Size G



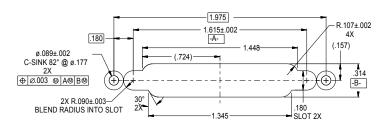
Shell Size H

Dimensions in inches (millimeters) and are subject to change without notice.

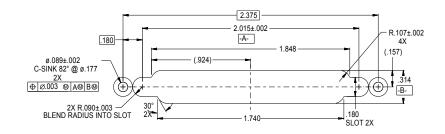
CAGE Code 06324



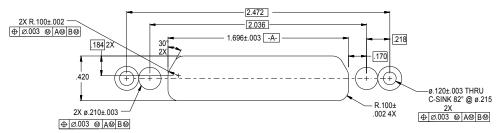
RECOMMENDED PANEL CUTOUTS



Shell Size J



Shell Size K



Shell Size L

Series 79 "Micro-Crimp" Printed Circuit Board Connectors



Available Soon. Consult the Factory.

lenair is committed to bringing full-spectrum "No-Gap" product lines to market. We understand that in many ways an innovative connector series, such as the "Micro-Crimp," is only truly useful to our customers if it offers the full range of connector styles, tools, and accessories. That's why we are hard at work at Glenair putting the finishing

touches on our PCB mount versions of the "Micro-Crimp" together with a targeted range of shield termination backshells and other accessories.

Most customers have a simple expectation: fast and accurate service. But we know you also wouldn't mind if we anticipated some of your other needs, such as building all the right parts for both cable-to-cable *and* cable-to-board applications.



Glendale, California 91201-2497

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MILLIMETERS - NEWTONS

SPECIFICATION 799-008 REVISION 2 20 MARCH 2008

SUPERCEDING REVISION 1

PRODUCT SPECIFICATION SERIES 79 "MICRO-CRIMP" CONNECTORS



CONNECTORS, MICROMINIATURE ENVIRONMENTAL, RECTANGULAR, RECEPTACLES AND PLUGS, GENERAL SPECIFICATION FOR



DISTRIBUTION STATEMENT: General release, unlimited distribution

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SCOPE

- Scope. This specification covers performance requirements for Glenair Series 79 CB microminiature rectangular connectors.
- 1.2 <u>Description</u>. Series 79 connectors with crimp, rear-release or non-removable printed circuit board contacts, environmental sealing, aluminum and corrosion resistant steel shells, friction coupling. Series 79 connectors combine M83513 type shells with M39029 type contact systems. Interfacial seal and rear grommet provide environmental protection. Beryllium copper contact retention clips.

APPLICABLE DOCUMENTS

1.1 Industrial Standards.

EIA-364 Electrical Connector/Socket Test Procedures Including Environmental Classifications Electromechanical Components for Electronic Equipment; Basic Testing IEC-60512 Procedures and Measuring Methods Part 1: General Degrees of protection Provided By Enclosures (IP Code) Environmental Testing Part 1: General and Guidance

1.2 Military Standards and Specifications

MIL-STD-810F Test Method Standard for Environmental Engineering Considerations and

Laboratory Tests Connectors, Electrical, Rectangular, Microminiature, Polarized Shell, General MIL-DTL-83513

Specification

1.3 Aerospace Standards

SAE AS39029 Contacts, Electrical Connector, General Specification For

2 REQUIREMENTS

2.1 Ratings

Voltage(DWV): #23 contacts 500 Volts AC. #12 and #16 contacts 1800 Volts AC Current: #23 contact 5 amperes, #16 contact 13 amperes, #12 contact 23 amperes.

Temperature: -65° C to +200° C.

Dimensions in inches (millimeters) and are subject to change without notice.

2.2 **Materials**

DESCRIPTION	MATERIAL	FINISH		
#23 Contacts	Beryllium copper	Gold plated 50 microinches minimum over nickel underplate.		
#12 and #16 Contacts	Copper alloy	Gold plated 50 microinches minimum over nickel underplate.		
Socket Contact Hood	Stainless steel	Passivated		
Shells	Aluminum alloy 6061	Code C: black anodize per MIL-A-8625 Code M: electroless nickel per ASTM B-733 Code NF: Olive drab cadmium per AMS-QQ-P-416 over electroless nickel Code E: Chem film per MIL-DTL-5541 Code J: Yellow chromate over cadmium per AMS-QQ-P-416		
		Code UC: Black zinc cobalt		
Insulators	Liquid crystal polymer (LCP) per MIL-M-24519	None		
Interfacial seals, grommets	Fluorosilicone elastomer	None		
EMI spring	Stainless Steel	Gold plated		
Contact retention clip, insert assembly retention clip	Beryllium copper	None		
Jackscrews, jackposts, washers, threaded inserts, nuts	300 series stainless steel	passivated		

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2.3 Performance requirements.

DESCRIPTION	REQUIREMENT	PROCEDURE			
ELECTRICAL					
Contact resistance	SAE AS39029 Table V Max Wire Test Voltage Size Current Drop 12 23 42 14 17 40 16 13 49 20 7.5 55 22 5 73 24 3 45 26 2 52 28 1.5 54	EIA-364-06 IEC 60512-2-1 Test current in amperes. Voltage drop in millivolts. Silver-coated copper wire, +25°C.			
Low Level Contact Resistance	Wire Max. Size Milliohms 16 5 20 9 22 15 24 20 26 31 28 50	EIA-364-23 100 milliamperes maximum and 20 millivolts maximum open circuit voltage			
Insulation resistance	5000 megohms minimum	EIA-364-21 IEC-60512-3-1 500 volts DC ± 50 volts. Test between adjacent contacts and contacts to shell.			
Dielectric withstanding voltage	No breakdown or flashover	EIA-364-20 IEC-60512-4-1 Sea level AC rms 50 or 60 Hz. One minute dwell. #23 contacts 500 volts #16 contacts 1800 volts #12 contacts 1800 volts			
Current carrying capacity	Contact Max Size Current 12 23 16 13 23 5	EIA-364-70 Method 1 IEC-60512-5 Test 9b			

Dimensions in inches (millimeters) and are subject to change without notice.

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DESCRIPTION	REQUIREMENT	PROCEDURE		
Shell-to-shell resistance (connectors with ground springs)	5 millivolt drop maximum	EIA-364-83 IEC-60512-2-6 Electroless nickel plated connectors.		
Shielding Effectiveness	60 dB attenuation minimum from 100MHz to 10GHz	EIA-364-66 IEC-60512-23-3		
	MECHANICAL			
Water Immersion	No evidence of water penetration into mated connectors. No evidence of water penetration into an unmated panel mounted PCB receptacle. ≥ 100 MΩ insulation resistance.	MIL-STD-810F Method 512.4 1 meter immersion 1 hour		
Air Pressure	No detectable moisture. \geq 100 M Ω insulation resistance.	IEC-60512-7 Test 14b 0.4 bar overpressure 48 hours immersion at a depth of 150mm 25° C tap water.		
Ingress Protection	IP67 rating	IEC-60529		
Vibration, Sine	No discontinuity of greater than 1 microseconds, no cracking, breaking or loosening of parts, plug shall not become disengaged from receptacle. Connectors shall meet electrical requirements after vibration test.	EIA-364-28 Test Condition IV IEC-60512-6-4 100 milliamp test current 10- 2,000 Hz 20 g, 196 m/s ²		
Vibration, Random	No discontinuity of greater than 1 microseconds, no cracking, breaking or loosening of parts, plug shall not become disengaged from receptacle. Connectors shall meet electrical requirements after vibration test.	EIA-364-28 Test Condition VI Letter J IEC-60512-6-4 100 milliamp test current 50- 2,000 Hz 43.92 g rms		
Mechanical Shock	No discontinuity of greater than 1 microsecond, no cracking, breaking or loosening of parts, plug shall not become disengaged from receptacle. Connectors shall meet electrical requirements after shock test.	EIA-364-27 Condition D IEC-60512-6-3 3 shocks X 3 axes X 2 directions = 18 shocks 2941 m/s² (300 g's), 3 ms, half-sine		

Dimensions in inches (millimeters) and are subject to change without notice.

GLENAIR, INC. • 1211 AIR WAY • GLENDALE, CA 91201-2497 • 818-247-6000 • FAX 818-500-9912

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DESCRIPTION	REQUIREMENT	PROCEDURE		
Thermal Shock	No mechanical damage or loosening of parts. Following thermal shock, connector shall meet contact resistance, DWV, insulation resistance and shell-to-shell resistance requirements.	EIA-364-32 Test Condition IV IEC-60512-11-4 5 cycles consisting of -65° C 30 minutes, +25° C 5 minutes max., +150° C 30 minutes, +25° C 5 minutes max.		
Humidity, Cyclic (Damp Heat, Cyclic) (Moisture Resistance)	No deterioration which will adversely affect the connector. 100 megohms minimum insulation resistance during the final cycle. Following the recovery period, connectors shall meet contact resistance, shell-to-shell resistance and DWV requirements.	EIA-364-31 Condition B Method III IEC-60512-11-12 80-98% RH 10 cycles (10 days) +25° C to +65° C Step 7b vibration deleted. 24 hour recovery period.		
21 Day Humidity (Damp heat, Long Term)	No deterioration which will adversely affect the connector. Following the drying period, connectors shall meet 100 megohms minimum, contact resistance, shell-to-shell resistance, DWV, mating and unmating requirements.	EIA-364-31 Condition C Method II IEC-60512-11-3 Severity C 90-95% RH 40° C Apply 100 volts DC during test. 4 hours drying time at ambient temperature prior to final measurements.		
Mechanical Durability, at Ambient Temperature	No deterioration which will adversely affect the connector after 2000 cycles of mating and unmating. Connectors shall meet contact resistance, insulation resistance, shell-to-shell resistance, DWV, and mating and unmating force.	EIA-364-09 IEC-60512-5 Test 9a		
Corrosion (Salt Mist)	No exposure of base metal. Connectors shall meet DWV and contact resistance requirements following the test.	EIA-364-26 IEC 60512-11-6 5% salt solution 35° C Unmated connectors Code C: black anodize 48 hours Code M: electroless nickel 48 hours Code NF: Olive drab cadmium over electroless nickel 500 hours Code E: Chem film 48 hours Code J: Yellow chromate over cadmium 48 hours Code ZNU: Black zinc nickel 500 hours		

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DESCRIPTION	REQUIREMENT	PROCEDURE		
Solderability, PC Tail Contacts	95% solder coverage. Smooth, bright and even finish.	EIA-364-52 Category 3 IEC-60512-12-1 IEC-68-2-20 Test Ta, method 1 8 hours steam aging prior to test 245° C 4-5 sec. dwell 10X magnification		
Resistance To Soldering Heat	No damage to connector. Connectors shall meet insulation resistance and waterproof sealing requirements.	EIA-364-56 IEC-60512-12-5 Test 12e 260° C, 10 seconds (PC tail)		
Impact, Cable Connectors	No impairment of function. Connector shall meet contact resistance, insulation resistance and waterproof sealing.	EIA-364-42 IEC-60512-5 test 7b 1 meter 8 drops		
Fluid Immersion	No damage from immersion in various fuels and oils. Connector shall meet mating/unmating force and dielectric withstanding voltage.	EIA-364-10		
Altitude Immersion	No evidence of moisture on connector interface or contacts. Connector shall meet dielectric withstanding voltage.	EIA-364-03 Wired connectors with supplemental potting.		
Contact Retention	Contact Min. Min. Size Pounds Newtons 23 6 27 20 15 67 16 25 111 12 25 111	EIA-364-29		
Contact Separation Force	Contact Min. Min. Size Ounces Newtons 23 0.5 0.14 20 0.7 0.19 16 2.0 0.56 12 3.0 0.83	SAE AS39029		
Mating and Unmating Force	Maximum Mating/unmating force: (6 pounds) + (# of size 23 contacts X .35) + (# of size 12 or #16 contacts X 1.8)	EIA-364-13		
Residual Magnetism	2 μ maximum.	EIA-364-54		

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Glenair UK Ltd

Glenair, Inc.

1211 Air Way • Glendale, California • 91201-2497
Telephone: 818-247-6000 • Fax: 818-500-9912 • sales@glenair.com
www.glenair.com

Glenair Industrial Power and
Signal Connector GroupTelephone:
203-741-111525 Village LaneFacsimile:Wallingford, CT203-741-0053
sales@glenair.com

Glenair Microway Systems
7000 North Lawndale Avenue
Lincolnwood, IL
60712

Telephone:
847-679-8833
Facsimile:
847-679-8849

Glenair Electric GmbH
Siemensstrasse 9
D-61449 Steinbach
Germany
49-6171-5905-0
49-6171-5905-90
germany@glenair.com

Glenair Italia S.R.L.Telephone:Via Santi, 139-02-9108212120037 Paderno DugnanoFacsimile:Milano, Italy39-02-99043565sales-italia@glenair.it

40 Lower Oakham Way
Oakham Business Park
P.O. Box 37, Mansfield
Notts, NG18 5BY England
44-1623-638100
44-1623-638100
44-1623-638100
sales@glenair.co.uk

Telephone:

Glenair Nordic AB

Gustav III: S Boulevard 46
S - 169 27 Solna

Sweden

46-8-50550000
Facsimile:
46-8-50550001
sales@glenair.se

Glenair Iberica

C/ La Vega, 16

45612 Velada

Spain

Telephone:
34-925-89-29-88
Facsimile:
34-925-89-29-87
sales@glenair.es

Glenair France SARL
7, Avenue Parmentier
10mmeuble Central Parc #2
1200 Toulouse
1200 Toulouse
1200 Toulouse
1300 Toulouse

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