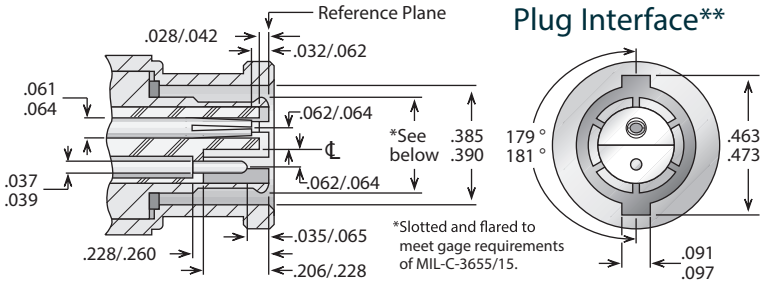
General Description

Delta TWBNC connectors are compact, 78 Ω impedance twinaxial connectors with two-stud bayonet coupling. They are similar in size to BNC connectors, and are best suited for use with RG-108/U and similar twinaxial cables.

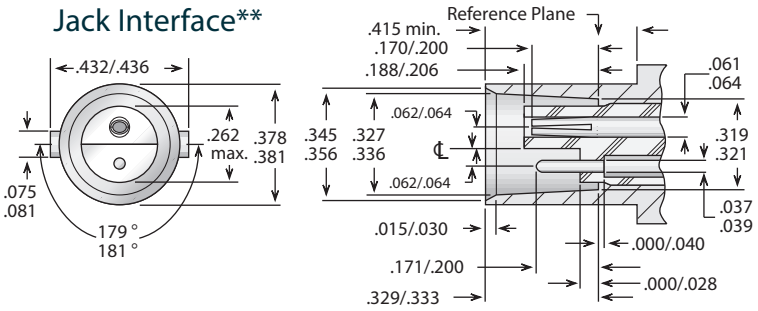
Both plugs and jacks in TWBNC series contain one male contact and one female contact, with mating polarization provided by a stepped insulator. Delta TWBNC connectors are designed and manufactured to meet the requirements of MIL-C-3655.

TWBNC Specifications*



Plug Interface**

Jack Interface**



Electrical:

Nominal Impedance: 78 Ω.
Frequency Range: DC–500 MHz.
Voltage Rating: 500 volts RMS.
Dielectric Withstanding Voltage: 1,500 VRMS.
Insulation Resistance: 5,000 megohms.

Materials/Finishes:

Insulators: Teflon per ASTM D1710.
Male Contacts: Brass per ASTM B16.
Female Contacts: Beryllium Copper per ASTM B196.
Contact Plating: Silver per ASTM B700, or Gold per MIL-DTL-45204.
Gaskets: Silicone rubber per ZZ-R-765, Class II, Grade 50.
Other Metal Parts: Brass per ASTM B16, plated: Silver per ASTM B700, or Nickel per AMS-QQ-N-290.

All other specifications are in accordance with the latest issues of MIL-PRF-39012, or MIL-C-3655, or other applicable MIL specifications, and interfaces are in accordance with MIL-STD-348.

*These specifications are typical and may not apply to all connectors. Detailed specifications for individual connectors are available on request.

**Some proportions altered to illustrate detail.

Cable Connectors - For Flexible Cable

Figure 1
(Cable plug, clamp type)

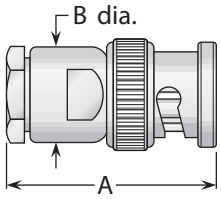


Figure 2
(Cable plug, crimp type)

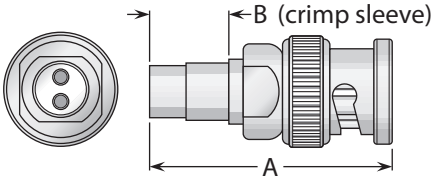


Figure 3
(Straight jack, clamp type)

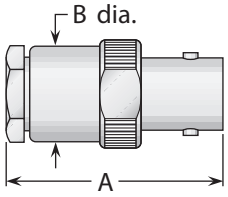
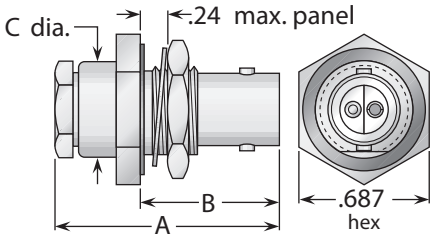


Figure 4
(Bulkhead jack, rear mount, clamp type)



Cable Group	Fig.	Dimensions			Mounting Figure	Plating		Delta P/N	Assembly Procedure/ Trim Code
		A	B	C		Body	Contact		
27	1	1.16	.500	—	—	Nickel	Gold (C)	6101099N001-000	***
27	2	1.28	.410	—	—	Nickel	Silver (C)	6102099N001-000	***
27	3	1.13	.500	—	—	Nickel	Gold (C)	6108099N001-000	***
27	4	1.13	.810	.500	59	Nickel	Gold (C)	6116099N591-000	***

Jack Receptacles

Figure 1
(Bulkhead jack receptacle, front mount, solder pot contacts)

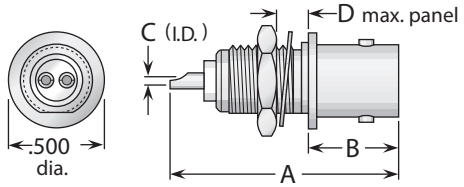
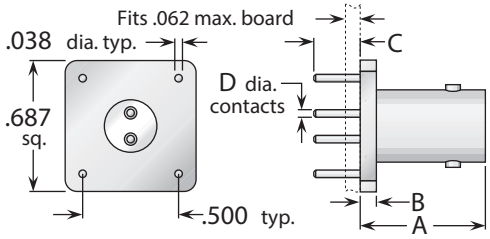


Figure 2
(Straight PCB receptacle)



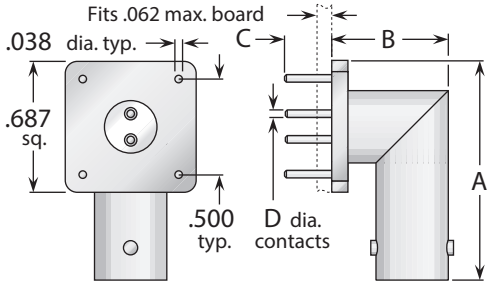


Figure 3
(Right angle PCB receptacle)

Figure	Dimensions				Mounting Figure	Plating		Delta P/N
	A	B	C	D		Body	Contact	
1	1.05	.470	.042	.106	65	Nickel	Gold (C)	6120000N651-000
2	.650	.085	.125	.038	PCB04	Nickel	Silver (C)	6158000N13P-000
3	1.34	.520	.125	.038	PCB04	Nickel	Silver (C)	6169000N13P-000

Adapters

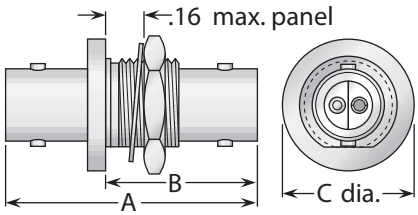


Figure 1
(Straight jack-jack bulkhead adapter; connects two plugs)

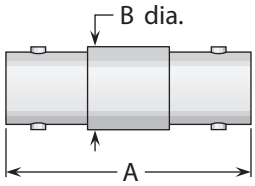


Figure 2
(Straight jack-jack adapter; connects two plugs)

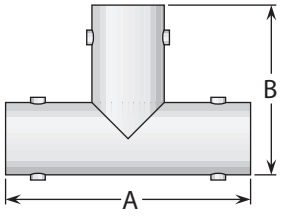


Figure 3
(Tee jack–jack–jack; connects three plugs)

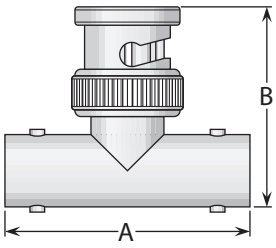


Figure 4
(Tee jack–jack–plug; connects two plugs and one jack)

Figure	Dimensions			Mounting Figure	Plating		Delta P/N
	A	B	C		Body	Contact	
1	1.28	.800	.625	59	Nickel	Gold (C)	6126000N591-000
2	1.28	.440	—	—	Nickel	Gold (C)	6128000N000-000
3	1.28	.890	—	—	Nickel	Gold (C)	6150000N000-000
4	1.28	1.03	—	—	Nickel	Gold (C)	6130000N000-000

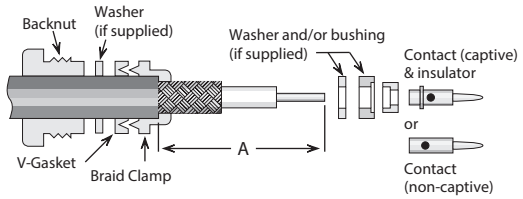
• See page 209 for cable groups. • See page 6 for alternate body plating information. • ***Contact factory for cable assembly instructions.
• See page 208 for mounting dimensions. • (C) in contact plating column indicates captive contact.

DELTA
Electronics Mfg. Corp.

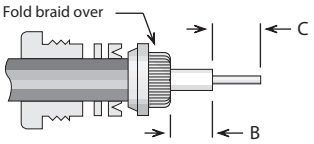
Assembly Procedures

Assembly Procedure A

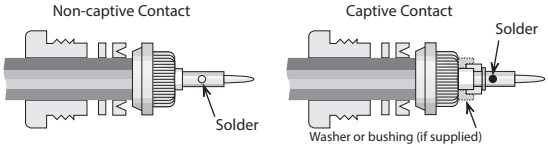
1) Trim cable jacket to dimension A. Slide backnut, washer, V-gasket, and braid clamp onto cable as shown. Cable jacket should bottom on step in braid clamp.



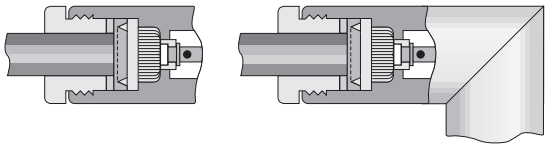
2) Comb braid wires out straight and fold back over front shoulder of braid clamp (braid wires should not overlap one another after folding). Trim braid wires flush with step of braid clamp. Trim cable dielectric and center conductor to dimensions B and C.



3) If support insulator is provided for RG-62 or 71 cable, insert into hollow in dielectric. Assemble rear bushing or washer (if supplied), rear insulator (if captive contact) and contact, and solder contact to center conductor. Rear of contact should be flush with cable dielectric end. For right angle connectors with access cap, omit this step entirely.



4) Insert prepared cable and hardware into body and tighten backnut. For right angle connectors with access cap, solder center conductor into slot in contact and tighten access cap.

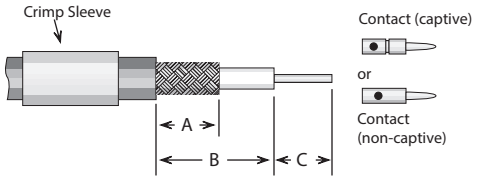


Trim Codes For Assembly Procedure A

Code	A	B	C	Code	A	B	C
A/01	.375 (3/8)	.047 (3/64)	.203 (13/64)	A/20	.375 (3/8)	.047 (3/64)	.172 (11/64)
A/02	.375 (3/8)	.109 (7/64)	.203 (13/64)	A/21	.500 (1/2)	.313 (5/16)	.172 (11/64)
A/03	.438 (7/16)	.250 (1/4)	.188 (3/16)	A/22	.375 (3/8)	.188 (3/16)	.141 (9/64)
A/04	.281 (9/32)	.047 (3/64)	.125 (1/8)	A/23	.438 (7/16)	.078 (5/64)	.172 (11/64)
A/05	.313 (5/16)	.125 (1/8)	.109 (7/64)	A/24	.500 (1/2)	.094 (3/32)	.141 (9/64)
A/06	.594 (19/32)	.391 (25/64)	.156 (5/32)	A/25	.438 (7/16)	.141 (9/64)	.172 (11/64)
A/07	.375 (3/8)	.047 (3/64)	.125 (1/8)	A/26	.625 (5/8)	.281 (9/32)	.250 (1/4)
A/08	.281 (9/32)	.109 (7/64)	.094 (3/32)	A/27	.688 (11/16)	.281 (9/32)	.125 (1/8)
A/09	.344 (11/32)	.109 (7/64)	.094 (3/32)	A/28	.656 (21/32)	.297 (19/64)	.250 (1/4)
A/10	.406 (13/32)	.109 (7/64)	.203 (13/64)	A/29	.688 (11/16)	.125 (1/8)	.313 (5/16)
A/11	.500 (1/2)	.281 (9/32)	.156 (5/32)	A/30	.688 (11/16)	.469 (15/32)	.156 (5/32)
A/12	.343	.040	.219	A/31	.700 (21/32)	.453 (29/64)	.250 (1/4)
A/13	.375 (3/8)	.125 (1/8)	.156 (5/32)	A/32	.313 (5/16)	.078 (5/64)	.188 (3/16)
A/14	.355	.090	.188 (3/16)	A/33	.250 (1/4)	.078 (5/64)	.094 (3/32)
A/15	.425	.094 (3/32)	.259	A/34	.250 (1/4)	.062 (1/16)	.109 (7/64)
A/16	.328 (21/64)	.094 (3/32)	.188 (3/16)	A/35	.837	.575	.150
A/17	.375 (3/8)	.109 (7/64)	.125 (1/8)	A/36	.450	.250	.150
A/18	.375 (3/8)	.062 (1/16)	.172 (11/64)	A/37	.281	.038	.188
A/19	.375 (3/8)	.188 (3/16)	.094 (3/32)	A/38	.281	.069	.156

Assembly Procedure B

1) Trim cable per chart. Slide crimp sleeve back onto cable.

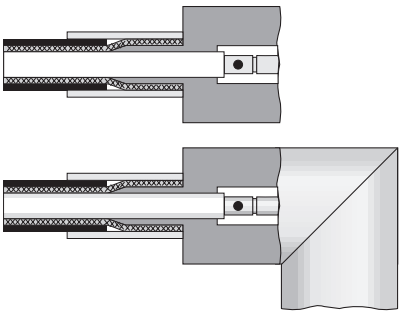


2) If support insulator is provided for RG-62 or 71 cable, insert into hollow in dielectric. Solder contact onto center conductor; back of contact flush with trimmed end of cable dielectric (omit this step for right angle connectors with access caps). Flare cut end of braid slightly by rotating dielectric.

3) Insert cable/contact into rear of body, with all braid wires on outside of crimp tail.
   a) For captive contact connectors, push cable in until contact snaps into insulator.
   b) For noncaptive contact connectors, push cable in until cable dielectric bottoms in connector.
   c) For right angle or tee connectors with access caps, push cable in until end of braid touches connector body shoulder, and cable center conductor rests in contact slot.

   Trim excess braid wires even with shoulder of body. Slide crimp sleeve forward until flush with body and crimp (see page 211 for hex die sizes).

   For right angle or tee connectors with access caps: Solder center conductor into contact slot, assemble insulator disc (if supplied), then press cap into body until seated or screw into place.



Trim Codes For Assembly Procedure B

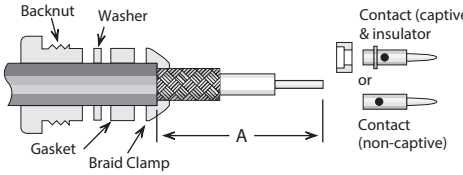
Code	A	B	C	Code	A	B	C
B/01	.320	.470	.140	B/20	.250	.375	.156
B/02	.422	.578	.172	B/21	.425	.550	.156
B/03	.406	.500	.187	B/22	.375	.500	.156
B/04	.285	.505	.140	B/23	.281	.469	.125
B/05	.335	.460	.140	B/24	.250	.700	.109
B/06	.187	.437	.219	B/25	.343	.775	.125
B/07	.422	.610	.156	B/26	.343	.437	.109
B/08	.422	.562	.219	B/27	.313	.437	.187
B/09	.313	.610	.203	B/28	.219	.271	.078
B/10	.280	.436	.187	B/29	.200	.320	.060
B/11	.430	.542	.156	B/30	.500	.650	.219
B/12	.300	.434	.156	B/31	.350	.840	.150
B/13	.300	.447	.156	B/32	.175	.260	.095
B/14	.420	.645	.187	B/33	.195	.270	.045
B/15	.300	.420	.120	B/34	.150	.250	.105
B/16	.312	.609	.125	B/35	.195	.280	.170
B/17	.250	.500	.156	B/36	.150	.325	.090
B/18	.437	.562	.109	B/37	.195	.295	.075
B/19	.343	.437	.156	B/38	.150	.225	.095
				B/39	.250	.300	.135

DELTA
Electronics Mfg. Corp.

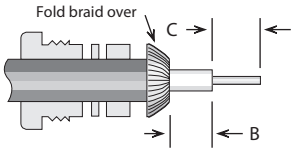
Assembly Procedures

Assembly Procedure C

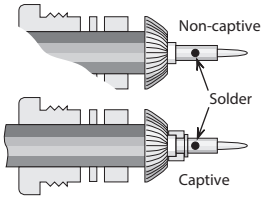
Trim Codes			
Code	A	B	C
C/01	.656 (21/32)	.141 (9/64)	.250 (1/4)
C/02	.500 (1/2)	.125 (1/8)	.250 (1/4)
C/03	.450	.136	.187
C/04	.375 (3/8)	.109 (7/64)	.125 (1/8)
C/05	.375 (3/8)	.062 (1/16)	.250 (1/4)
C/06	.500 (1/2)	.188 (3/16)	.125 (1/8)
C/07	.575	.438	.094
C/08	.625 (5/8)	.141 (9/64)	.219 (7/32)



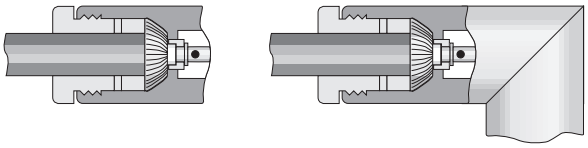
1) Trim cable jacket to dimension A. Slide backnut, washer, gasket, and braid clamp onto cable as shown. Cable jacket should bottom on step in braid clamp.



2) Comb braid wires out straight and fold back over front shoulder of braid clamp (braid wires should not overlap one another after folding). Trim braid wires flush with edge of braid clamp. Trim cable dielectric and center conductor to dimensions B and C.

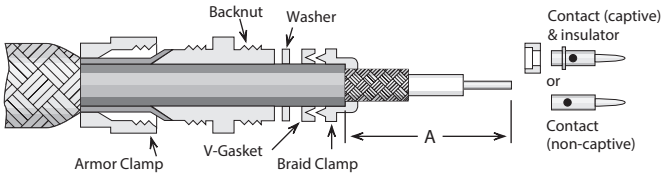


3) If support insulator is provided for RG-62 or 71 cable, insert into hollow in dielectric. Assemble rear insulator (if captive contact) and contact, and solder contact to center conductor. Rear of contact should be flush with cable dielectric end.

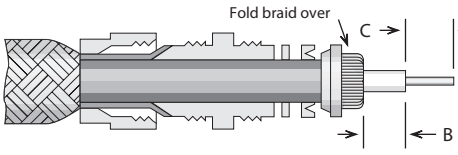


4) Insert prepared cable and hardware into body and tighten backnut. For right angle connectors with access cap, solder cable center conductor to slot in contact and tighten access cap.

Assembly Procedure D

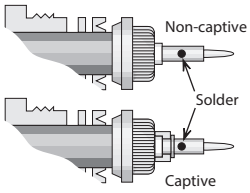


1) Slide armor clamp over cable. Push armor back to expose cable end. Slide backnut, washer (if supplied), gasket, and braid clamp onto cable as shown. Cable jacket should bottom on step in braid clamp. Trim cable jacket to dimension A.

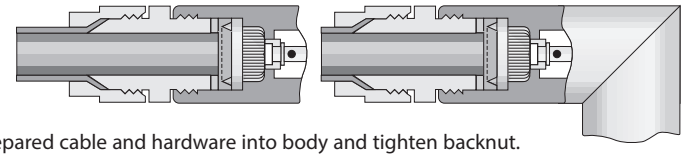


2) Comb braid wires out straight and fold back over front shoulder of braid clamp (braid wires should not overlap one another after folding). Trim braid wires flush with edge of braid clamp. Trim cable dielectric and center conductor to dimensions B and C.

Trim Codes			
Code	A	B	C
D/01	.375 (3/8)	.047 (3/64)	.250 (1/4)
D/02	.500 (1/2)	.188 (3/16)	.219 (7/32)
D/03	.344 (11/32)	.047 (3/64)	.219 (7/32)
D/04	.313 (5/16)	.047 (3/64)	.172 (11/64)
D/05	.625 (5/8)	.281 (9/32)	.250 (1/4)
D/06	.313 (5/16)	.062 (1/16)	.109 (7/64)

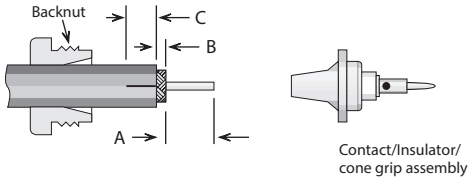


3) Assemble rear insulator (if captive contact) and contact, and solder contact to center conductor. Rear of contact should be flush with cable dielectric end.



4) Insert prepared cable and hardware into body and tighten backnut. Trim armor to fit between armor clamp and braid clamp. Tighten armor clamp.

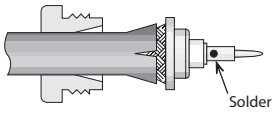
Assembly Procedure E



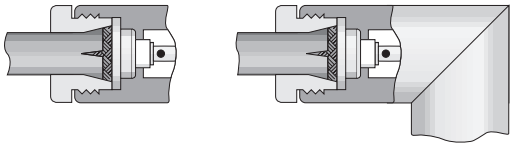
1) Slide backnut onto cable as shown. Trim cable to dimensions A and B as shown. Slit jacket to dimension C in two places, 180° apart.

Trim Codes

Code	A	B	C
E/01	.250 (1/4)	.141 (9/64)	.313 (5/16)
E/02	.219 (7/32)	.063 (1/16)	.250 (1/4)
E/03	.250 (1/4)	.031 (1/32)	.250 (1/4)

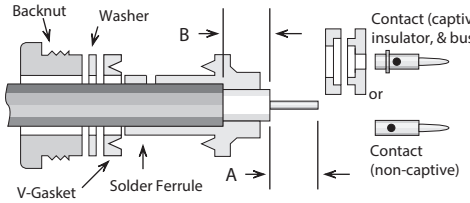


2) Slide cone/insulator/contact assembly under braid until braid is flush with shoulder. Solder contact to center conductor.



3) Insert prepared cable and hardware into body; tighten assembly by holding nut stationary and turning body.

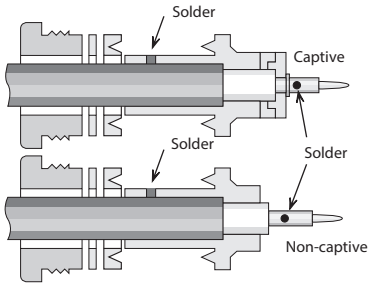
Assembly Procedure F



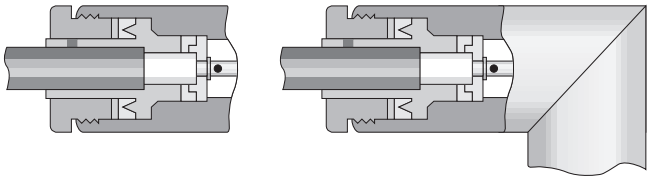
1) Trim cable per chart. Slide backnut, washer, v-gasket, and solder ferrule onto cable. Trimmed end of cable jacket should bottom on step in solder ferrule.

Trim Codes

Code	A	B
F/01	.250 (1/4)	.219 (7/32)
F/02	.250 (1/4)	.172 (11/64)
F/03	.188 (3/16)	.188 (3/16)
F/04	.109 (7/64)	.265 (17/64)
F/05	.156 (5/32)	.250 (1/4)
F/06	.219 (7/32)	.250 (1/4)
F/07	.156 (5/32)	.172 (11/64)
F/08	.109 (7/64)	.219 (7/32)



2) Solder ferrule to cable jacket as shown. Retrim cable dielectric to proper length if it has extruded from soldering heat. Slide bushing and rear insulator over cable dielectric if captive contact. Solder contact onto center conductor; back of contact flush with trimmed end of cable dielectric.

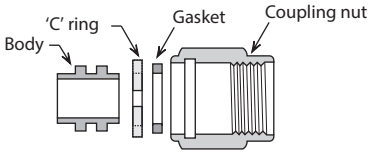


3) Insert prepared cable and hardware into body and tighten backnut.

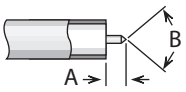
DELTA
Electronics Mfg. Corp.

Assembly Procedures

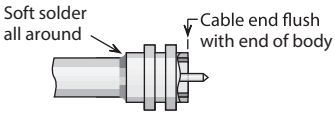
Assembly Procedure G



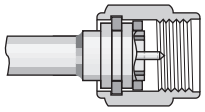
Trim Codes		
Code	A	B
G/01	.090	70-90°



1) Trim cable as shown. Remove any burrs from jacket and center conductor.

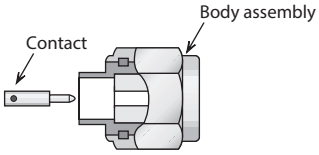


2) Soft solder cable jacket to body, making sure that end of cable is flush with end of body. After solder joint has cooled, retrim any protruding dielectric flush with end of body.

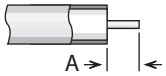


3) Assemble 'C' ring and gasket to body. Compress 'C' ring and slide body assembly into coupling nut until ring is seated in groove.

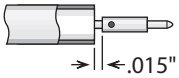
Assembly Procedure H



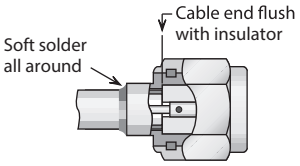
Trim Codes	
Code	A
H/01	.090
H/02	.060
H/03	.115
H/04	.150



1) Trim cable as shown. Remove any burrs from jacket and center conductor.



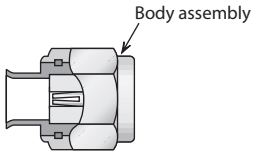
2) Solder contact to center conductor, fixturing to maintain gap as shown. Remove any excess solder from outside of contact.



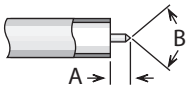
3) Insert cable into body and solder cable jacket to body, keeping end of cable flush with insulator as shown.

Plug body assembly and contact shown; procedure is identical for jack connectors.

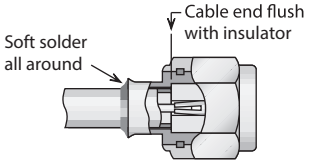
Assembly Procedure I



Trim Codes		
Code	A	B
I/01	.090	70-90°



1) Trim cable as shown. Remove any burrs from jacket and center conductor.



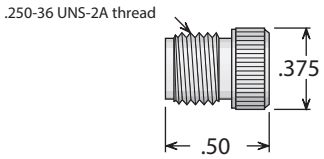
2) Insert cable into body and solder cable jacket to body, keeping end of cable flush with insulator as shown.

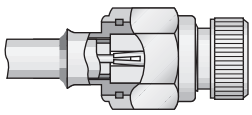
Plug body assembly and contact shown; procedure is identical for jack connectors.

Cable Positioner

For .085" Cable:
P/N 63-10072-2

For .141" Cable:
P/N 63-10072-1

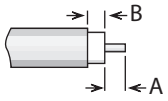




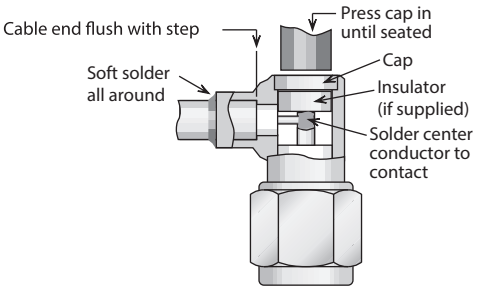
Using this positioner in the final step of assembly procedure H or I (for plugs only) will ensure that the contact and insulator are retained in the proper position to meet MIL-C-39012 requirements. The positioner should be screwed finger-tight into the mating end of the connector (as shown at right) before the cable jacket is soldered to the body assembly.

Assembly Procedure J

Trim Codes		
Code	A	B
J/01	.109	.047
J/02	.059	.039
J/03	.059	.079
J/04	.050	.059

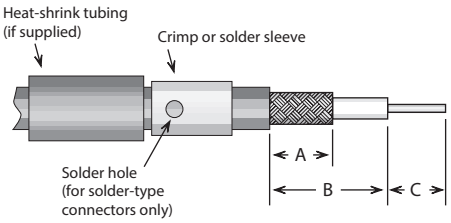


1) Trim cable as shown. Remove any burrs from jacket and center conductor.

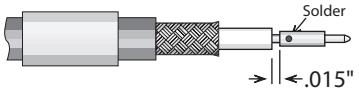


2) Soft solder cable jacket to body, making sure that end of cable is flush with step in body. Solder center conductor into contact slot, assemble insulator disc (if supplied), then press cap into body until seated or screw into place.

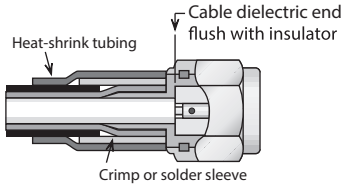
Assembly Procedure K



1) Trim cable per chart. Slide crimp (or solder) sleeve and heat-shrink tubing (if supplied) back onto cable.



2) Solder contact onto center conductor, fixturing to maintain gap as shown. Flare cut end of braid slightly by rotating dielectric.



3) Insert cable/contact into rear of body, with all braid wires on outside of crimp tail. Push cable in until cable dielectric bottoms in connector. Trim excess braid wires even with shoulder of body. Slide crimp sleeve forward until flush with body and crimp (see page 211 for hex die sizes). (For solder-type connectors, solder braid to body and sleeve through hole in sleeve.) Slide heat-shrink tubing into place and shrink with hot-air gun.

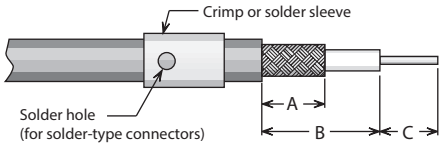
Plug body assembly and contact shown; procedure is identical for jack connectors.

Trim Codes							
Code	A	B	C	Code	A	B	C
K/01	.250	.270	.110	K/07	.220	.290	.135
K/02	.200	.270	.140	K/08	.420	.620	.090
K/03	.225	.290	.110	K/09	.090	.135	.160
K/04	.225	.330	.110	K/10	.250	.415	.115
K/05	.250	.330	.110	K/11	.250	.400	.150
K/06	.250	.315	.095	K/12	.282	.390	.140

Assembly Procedure L

Trim Codes			
Code	A	B	C
L/01	.250	.438	.109
L/02	.125	.219	.109
L/03	.234	.344	.109
L/04	.195	.270	.050
L/05	.095	.155	.050
L/06	.281	.390	.070

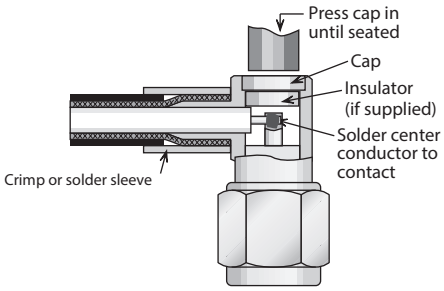
1) Trim cable per chart. Slide crimp (or solder) sleeve onto cable.



2) Insert cable into rear of body, with all braid wires on outside of crimp tail. Push cable in until end of braid touches connector body shoulder and center conductor rests in contact slot.

Slide crimp sleeve forward until flush with body and crimp (see page 211 for hex die sizes). (For solder-type connectors, solder braid to body and sleeve through hole in sleeve.)

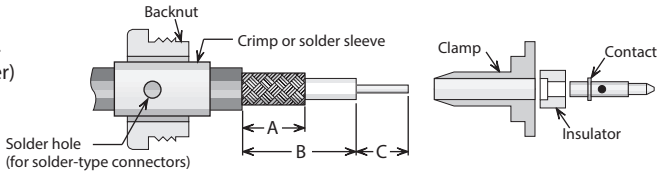
Solder center conductor into contact slot, assemble insulator disc (if supplied), then press cap into body until seated or screw into place.



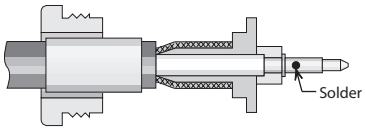
Assembly Procedure M

Cable Trim Codes			
Code	A	B	C
M/01	.281	.390	.140

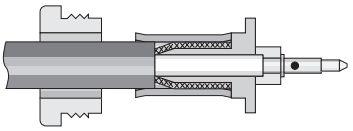
1) Trim cable per chart. Slide crimp (or solder) sleeve and backnut onto cable.



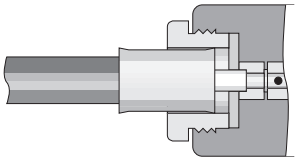
2) Flare cut end of braid slightly by rotating dielectric. Insert cable into rear of clamp, with all braid wires on outside of crimp tail.Slide insulator over cable dielectric until it is flush with front of clamp, and cable insulation bottoms inside insulator. Slide contact onto center conductor, with contact shoulder flush with front of insulator. Solder contact to center conductor.



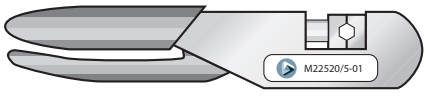
3) Slide crimp sleeve forward until flush with clamp shoulder; crimp as close to shoulder as possible. (see page 211 for hex die sizes). (For solder-type connectors, solder braid to body and sleeve through hole in sleeve.)



4) Insert prepared cable into back of body. Slide nut forward and tighten to 12–15 inch-pounds.



Crimp Tools For Flexible Cable



Frame only—P/N M22520/5-01 —Use with interchangeable dies listed below.

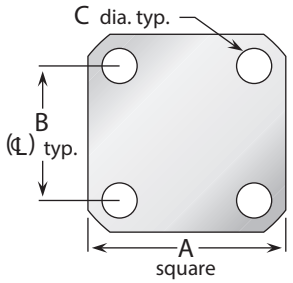
Cable Group*	Hex Die Size	Die Set P/N	Closure
2, 3, 4	.429 hex, .400 wide	M22520/5-61	A
5, 6	.213 hex, .400 wide	M22520/5-19	B
7	.255 hex, .400 wide	M22520/5-19	A
9	.128 hex, .400 wide	M22520/5-35	B
10	.151 hex, .400 wide	M22520/5-37	B
11	.105 hex, .400 wide	M22520/5-33	B

* For Delta cable groups. See MIL-PRF-39012 specifications for dies sizes used with M39012 cable groups.

DELTA
Electronics Mfg. Corp.

Mounting Figures

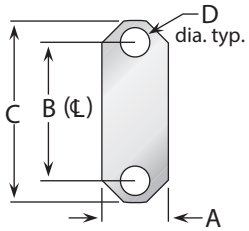
Connector Flanges
(Panel Mounted Connectors)



4-hole flanges

Figure	A	B	C
04	1/2	.360	.089
05	1/2	.340	.102
07	11/16	.500	#3-56 tap
08	11/16	.500	.136
09	11/16	.500	.125
10	11/16	.500	.120
12	11/16	.500	.109
18	3/4	.531	.136
26	1	.718	#6-32 tap
27	1	.718	#4-40 tap
30	1	.718	.166
32	1	.718	.136
32A	1	.718	.136*
33	1	.718	.125
34	1 3/32	.812	.150
36	1 3/16	.906	#6-32 tap
39	1 3/16	.906	.152
40	1 3/16	.906	.125
45	2	1.437	.257
91	.375	.250	.067
91A	.375	.232	.093

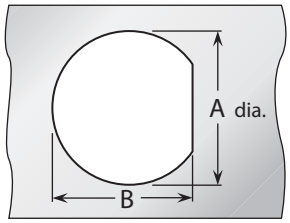
* Countersunk to .245 dia.



2-hole flanges

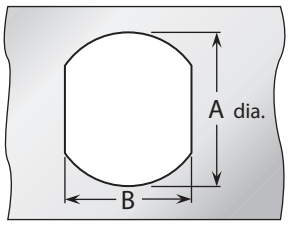
Figure	A	B	C	D
92	.223	.481	.625	.102
92A	.260	.481	.625	.102
95	.640	1.015	1.30	.125

Panel Cutouts
(Bulkhead Mounted Connectors)



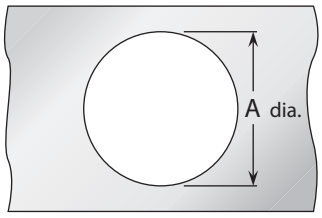
D-Hole

Figure	A	B
51	.755	.723
54	.630	.598
55	.630	.583
57	.557	.531
59	.505	.473
62	.442	.410
63	.407	.362
65	.380	.348
66	.319	.292
67	.255	.236
68	.195	.176



Double D-Hole

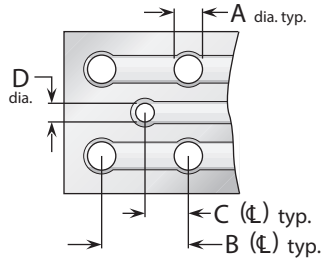
Figure	A	B
69	.755	.692
72	.630	.536
75	.380	.341
84	.319	.278



Round Hole

Figure	A
82	.255
89	.380

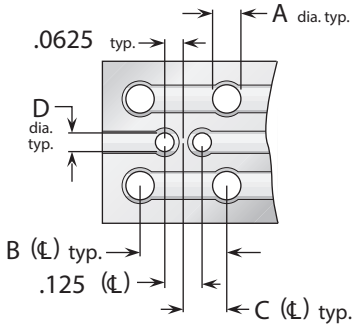
P.C. Board Drilling



(PCB traces are shown for illustrative purpose only, and are not representative of actual circuitry.)

Coaxial connectors

Figure	A	B	C	D
PCB01	.067	.400	.200	.045
PCB02	.045	.500	.250	.045
PCB03	.067	.300	.150	.035
PCB05	.067	.200	.100	.055
PCB06	.067	.200	.100	.045
PCB07	.045	.177	.088	.045
PCB08	.032	.100	.050	.032



(PCB traces are shown for illustrative purpose only, and are not representative of actual circuitry.)

Twinax Connectors

Figure	A	B	C	D
PCB04	.045	.500	.250	.045

Delta Cable Groups

Group		Cables
1	1A	RG-5, 5A, 5B, 21, 21A; M17/73, /162
	1B	RG-6, 6A; M17/2
	1C	RG-143, 143A, 212, 222; M17/73, /112, /162
2	2A	RG-8, 8A, 213; M17/74
	2B	RG-11, 11A; M17/6
3	3A	RG-9, 9A, 9B, 214; M17/75
	3B	RG-13A, 216; M17/77
	3C	RG-225; M17/127
4		RG-393; M17/127
5		RG-58, 58A, 58C, 141, 141A; M17/28, /111
6	6A	RG-55A, 142, 142A, 223, 400; M17/60, /84, /128
	6B	RG-55, 55B, 142B; M17/60, /84
7	7A	RG-59, 59A, 59B, 62, 62A, 62B, 62C, 210; M17/29, /30, /97
	7B	RG-71, 71A, 71B; M17/90
8	8A	RG-122; M17/54
	8B	RG-180, 180A, 180B, 195; M17/95, /137
9	9A	RG-174, 188, 188A, 316; M17/152
	9B	RG-179A, 179B, 187, 187A; M17/94, /136
10		Double-Shielded RG-174, 316; M17/152
11		RG-178, 178A, 178B, 196, 196A; M17/93
12		.250" semi-rigid; RG-401; M17/129
13		.141" semi-rigid; RG-402; M17/130
14		.085" semi-rigid; RG-405; M17/133
15		RG-10, 12, 215; M17/6, /74
16		RG-14A, 217; M17/78, /165
17		RG-17A, 218
18		RG-18A, 219
19		RG-115A
20		RG-118A, 228A
21		RG-126
22		RG-302
23		RG-303
24		RG-304
25		Special 8X cable; contact factory for details.
26		Belden 8281
27		RG-108, 108A; M17/45
28		RG-22, 22A, 22B; M17/15
29		Belden 9207; Dearborn 6207; IBM 7362211
30		M17/176
31		AT&T 735A

Cable Group Finder

Cable	Group	Cable	Group
RG-5, 5A, B	1A	RG-225	3C
RG-6, 6A	1B	RG-228A	20
RG-8, 8A	2A	RG-302	22
RG-9, 9A, B	3A	RG-303	23
RG-10	15	RG-304	24
RG-11, 11A	2B	RG-316	9A
RG-12	15	RG-316DS	10
RG-13A	3B	RG-393	4
RG-14A	16	RG-400	6A
RG-17A	17	RG-401	12
RG-18A	18	RG-402	13
RG-21, 21A	1A	RG-405	14
RG-22, 22A, B	28	M17/2	1B
RG-55, 55B	6B	M17/6	2B
RG-55A	6A	M17/15	28
RG-58, 58A, C	5	M17/28	5
RG-59, 59A, B	7A	M17/29	7A
RG-62, 62A, B, C	7A	M17/30	7A
RG-71, 71A, B	7B	M17/45	27
RG-108, 108A	27	M17/73	1A
RG-115A	19	M17/162	1A
RG-118A	20	M17/112	1C
RG-122	8A	M17/74	2A
RG-126	21	M17/75	3A
RG-141, 141A	5	M17/127	3C
RG-142, 142A	6A	M17/77	3B
RG-142B	6B	M17/60	6A
RG-143, 143A	1C	M18/84	6A
RG-174	9A	M17/128	6A
RG-174DS	10	M17/97	7A
RG-178, 178A, B	11	M17/54	8A
RG-179A, 179B	9B	M17/95	8B
RG-180, 180A, B	8B	M17/137	8B
RG-187, 187A	9B	M17/152	9A
RG-188, 188A	9A	M17/93	11
RG-195	8B	M17/129	12
RG-196, 196A	11	M17/130	13
RG-210	7A	M17/133	14
RG-212	1C	M17/78	16
RG-213	2A	M17/165	16
RG-214	3A	M17/176	30
RG-215	15	AT&T 735A	31
RG-217	16	Belden 8281	26
RG-218	17	Belden 9207	29
RG-219	18	Dearborn 6207	29
RG-222	1C	IBM 7362211	29
RG-223	6A		

Note: MIL-PRF-39012 QPL connectors have cable groups defined by the MIL specification, not the Delta cable groups shown here. See page 185 for M39012 cable groups.

Ordering & Warranty Information

Warranty

We warrant our parts to be free of defects and workmanship for one year from purchase. During that time we will repair or replace (at our option) any parts found to be defective. The warranty does not apply to parts that have been modified, used in conditions exceeding Seller's, or military specifications, or disassembled. We will not, under any circumstances, be responsible for consequential or incidental damages or installation costs. No other warranties apply, and no other liability may be assumed or extended by representatives or distributors. The terms of the applicable warranty or warranties, as the case may be, as set forth herein are the sole and exclusive warranty terms that shall have any force or effect in the any product order, resulting from the quotation and such terms and in lieu of all other warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose, which are hereby expressly excluded.

Returns

Returns will be accepted only with a Return Authorization number issued by Delta, and are subject to inspection and acceptance upon arrival. Restocking charges will be determined prior to issusnce of Return Authorization. All claims for shortages must be made within 30 days of receipt by customer.

Ordering Information

Orders are subject to the terms and conditions on our order acknowledgement, which may only be modified by written agreement prior to sale. Order changes, cancellation, or termination will be accepted only with written approval from Delta Electronics Manufacturing.

Copyright, Trademarks, & Patents

Entire contents copyright 2017, Delta Electronics Manufacturing Corporation. Reproduction rights are hereby granted for, and specifically limited to, printing or other reproduction of drawings and specifications for inclusion in specification or source control drawings, or purchasing procedures, by Delta customers only.

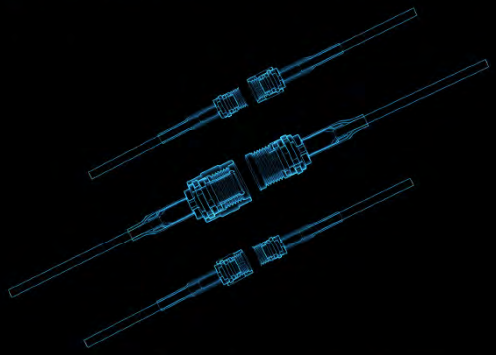
Heli-Grip® , PressMount® , and Global Manufacturer logo are trademarks. The Heli-Grip design is covered by U.S. and foreign patents

Delta Electronics Manufacturing Corporation
416 Cabot Street, P.O. Box 53
Beverly, MA 01915
FSCM/CAGE 00795

DELTA
Electronics Mfg. Corp.

CREATE

COLLABORATE



CONNECT

Delta Electronics Mfg. Corp.

www.deltarf.com
978-927-1060
sales@deltarf.com

PO Box 53
416 Cabot St.
Beverly, MA 01915