

General Description

Delta TRB connectors are compact, triaxial connectors with three-stud bayonet coupling. They are similar in size to BNC connectors, and can be used with a wide range of twinaxial and triaxial cables.

Their three-stud mating prevents rocking of mated pairs and ensures the low leakage and excellent shielding required in data-bus and other high-speed digital applications. Delta TRB connectors are designed and manufactured to meet the requirements of MIL-C-49142.

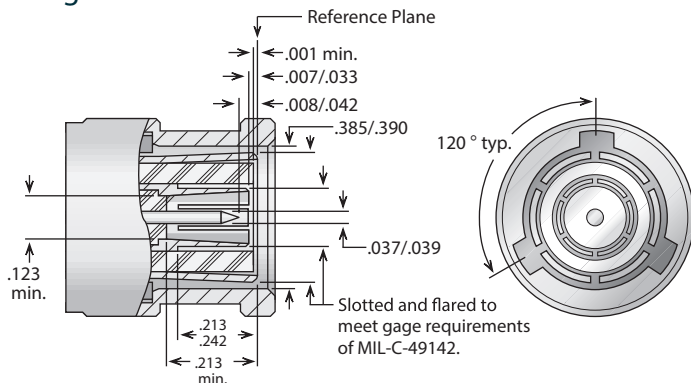
As with all other Delta connector series, we welcome your specifications for special configurations.

TRB Configurations

Straight Cable Plugs	2
Bulkhead Cable Jacks	2
Panel Jack Receptacles (square flange)	2
Bulkhead Jack Receptacles	2

TRB Specifications*

Plug Interface**



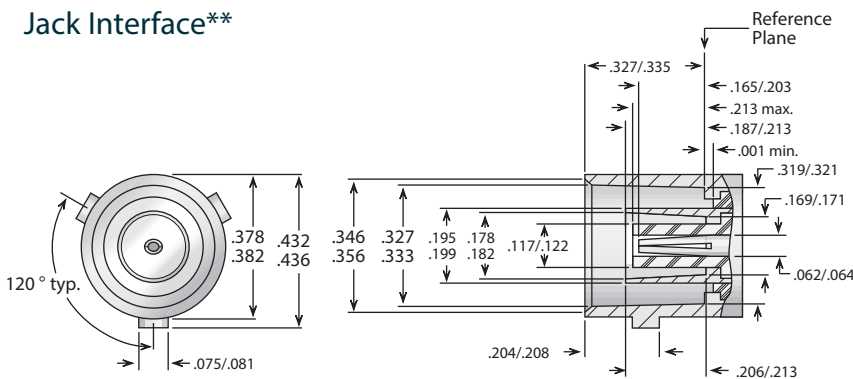
Electrical:

Nominal Impedance: Nonconstant.
 Frequency Range: DC-500 MHz.
 Voltage Rating: 400 volts RMS.
 Dielectric Withstanding Voltage: 1,200 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.

Jack Interface**



All other specifications are in accordance with the latest issues of MIL-PRF-39012, or MIL-C-49142, 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

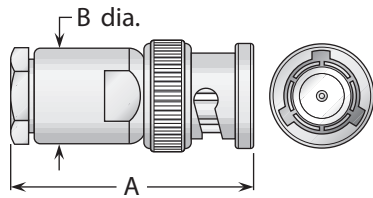


Figure 1
(Straight plug, wedge-clamp hardware)

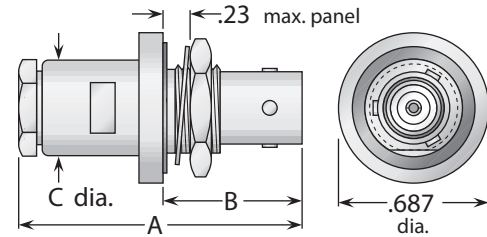


Figure 2
(Bulkhead jack, wedge-clamp hardware)

Cable Group	Fig.	Dimensions			Mounting Figure	Plating		Delta P/N	Assembly Procedure/Trim Code
		A	B	C		Body	Contact		
27	1	1.31	.500	—	—	Nickel	Gold (C)	2001099N000-000	***
27	2	1.50	.800	.500	59	Nickel	Gold (C)	2016099N591-000	***
28	1	1.88	.750	—	—	Nickel	Gold (C)	2001070N000-000	***
30	1	1.31	.500	—	—	Nickel	Gold (C)	2001235N000-000	***
30	2	1.50	.800	.500	59	Nickel	Gold (C)	2016235N591-001	***

Bulkhead & Panel Receptacles

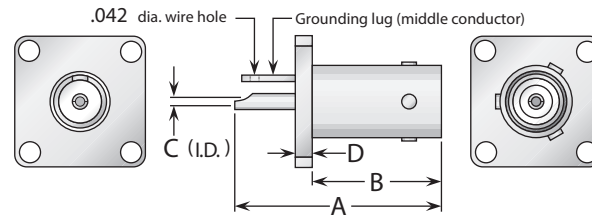


Figure 1
(Panel jack receptacle)

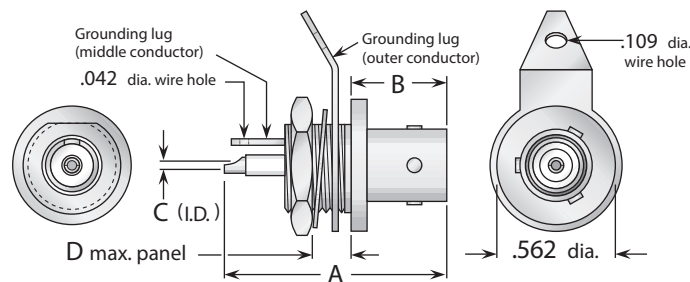
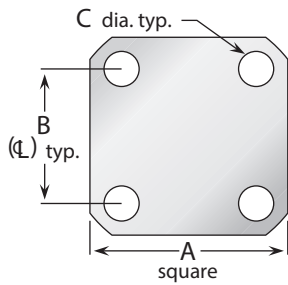


Figure 2
(Bulkhead jack receptacle, front mount)

Figure	Dimensions				Mounting Figure	Plating		Delta P/N
	A	B	C	D		Body	Contact	
1	1.07	.670	.040	.090	09	Nickel	Gold (C)	2013000N091-002
2	1.14	.490	.040	.125	62	Nickel	Gold (C)	2020000N621-003

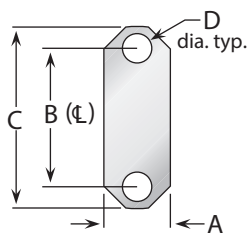
- Contact factory for other twinaxial/triaxial cable accommodations.
- See page 209 for cable groups.
- See page 6 for alternate body plating information.
- ***Contact factory for cable assembly instructions.
- See page 208 for mounting dimensions.
- (C) in contact plating column indicates captive contact.

Connector Flanges (Panel Mounted Connectors)



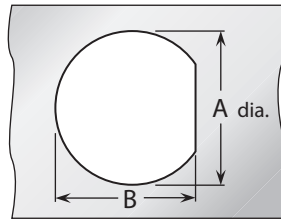
4-hole flanges			
Figure	A	B	C
04	1/2	.360	.089
05	1/2	.340	.102
07	11/16	.500	#3-56 tap
08	11/16	.500	.136
09	11/16	.500	.125
10	11/16	.500	.120
12	11/16	.500	.109
18	3/4	.531	.136
26	1	.718	#6-32 tap
27	1	.718	#4-40 tap
30	1	.718	.166
32	1	.718	.136
32A	1	.718	.136*
33	1	.718	.125
34	1 3/32	.812	.150
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.

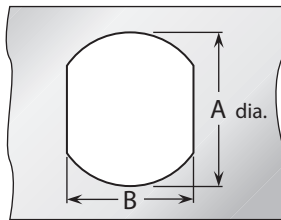


2-hole flanges				
Figure	A	B	C	D
92	.223	.481	.625	.102
92A	.260	.481	.625	.102
95	.640	1.015	1.30	.125

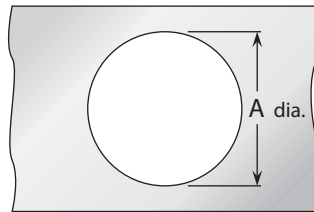
Panel Cutouts (Bulkhead Mounted Connectors)



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

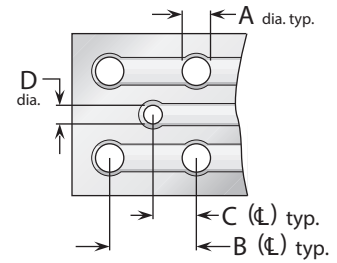


Double D-Hole		
Figure	A	B
69	.755	.692
72	.630	.536
75	.380	.341
84	.319	.278



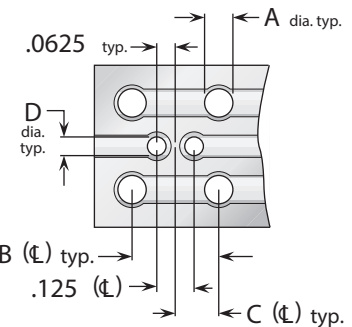
Round Hole	
Figure	A
82	.255
89	.380

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.

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 issuance of Return Authorization. All claims for shortages must be made within 30 days of receipt by customer.

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