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Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



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Introduction

Product Facts

- Designed to meet relevant ARINC 600 Connector specifications
- Available in three sizes
- Low mating-force contacts — suitable for ARINC 404 Connectors
- Full range of contact inserts

Specifications

Temperature Range —

-85° F to 257° F [-65° C to 125° C]

Mating and Unmating Forces —

(Max. after 3 cycles)

Size 1 — 27 pounds [120 N]

Size 2 — 60 pounds [267 N]

Size 3 — 105 pounds [467 N]

Contact Retention against axial load —

Size 22 — 12 pounds [53 N]

Size 20 — 20 pounds [89 N]

Size 16 — 25 pounds [111 N]

Size 12 — 30 pounds [133 N]

Coaxial — 35 pounds [156 N]

(In testing, exposure to rated loads produced no contact damage and resulted in displacement less than .015 [0.38])

Voltage/Current Ratings —

Contact	AWG	Max. Current (A)
Size 22	22	5.0
Size 20	20	7.5
Size 16	16	13.0
Size 12	12	23.0

Durability — 500 cycles min. — mating and unmating (In testing, wired mated connectors cycled at a rate slower than 300 cycles per hour, showed no apparent damage or contact resistance greater than rated values)

High Temperature Tolerance —

1000 hours min. at 257° F [125° C]

(Wired, mated connectors)

Salt Spray Tolerance — As specified

by MIL-STD-1344, method 1001,

Condition B

Fluid Imperviousness — MIL-L-

23699; MIL-H-5606: 1:3 mix isopropyl

alcohol and mineral spirits (Test immer-

sions of mated connectors in these flu-

ids caused no evident deterioration)

Vibration and Shock Tolerance —

Per MIL-STD-1344, methods 2004-1

and 2005-1 (Testing to these conditions,

including vibration for 8 hours in each of

3 mutually perpendicular axes, caused

no visible cracking, breaking or loosening

of parts, and no discontinuities

exceeding 1 microsecond)

Humidity Tolerance — Insulation

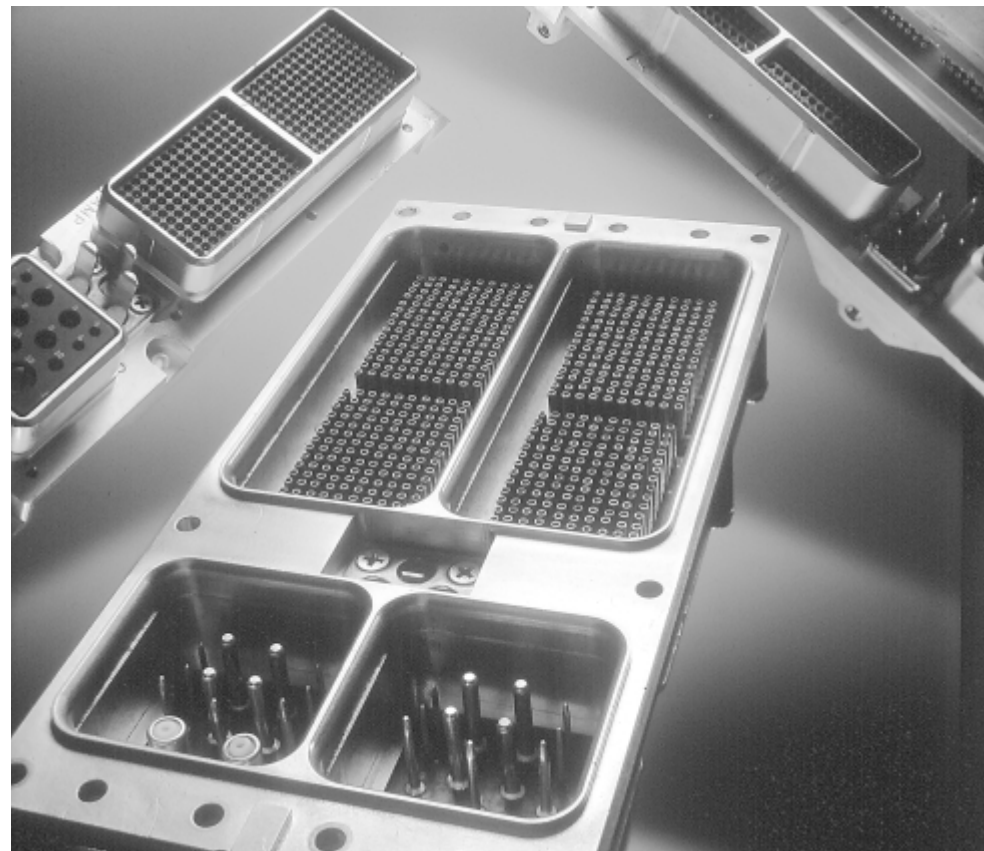
resistance 1 megohm min., 1-2 hours

after exposure to humidity per MIL-STD-

1344, Method 1002-1, Type II; 5000

megohm min. after 24 hours at 77° F

[25° C].



Dielectric Withstanding Voltage —

(Min.) 1500 VAC, RMS 60 Hz at sea

level; 500 VAC, RMS 60 Hz at 50,000 ft.

[15240 M] (Testing at rated voltages for

60 seconds produced no flash over and

1 mA leakage, max.)

Insulation Resistance — 1000

megohms min. (Test conducted on

unmated connector after 30 min. expo-

sure to 248° F-257° F [120° C-125° C])

Contact Resistance — Mated pairs

tested per MIL-STD-1344, Method

3004-1

Technical Document — ARINC 600

Product Specification 108-10050

ARINC 600 Connectors are used in virtually all airframes

and today's state-of-the-art avionics equipment. From

collision avoidance (TCAS,

TAWS) to in-flight entertain-

ment/networking, new avion-

ics equipment demands

higher data transmission

rates. Whether it's Fibre

Channel, or 100-Base-T or

100-Base-FX Ethernet and

beyond, Tyco Electronics

has the insert configurations

and copper and fiber hard-

ware (Quadrax contacts, RF,

and Mini-Expanded Beam

Fiber Optics) to meet the

need. Standard industry

configurations are available.

For designs that require

custom configurations,

Tyco Electronics will work

with you to provide the

connector solution required.

ARINC 600 Connectors

represent a new generation

of standardized rack and

panel connectors for aircraft

applications. Compared to

the preceding ARINC 404

standard, the new avionics

connectors feature signifi-

cantly reduced mating

forces; increased numbers

of contacts in housings

proportioned to thinner

black-box shapes; and

floating, front-release keying.

ARINC 600 Connectors cap-

italize on the new design by

adding unique features while

maintaining interchangeability.

For instance, AMP contact

inserts are field replaceable

and manufactured to precise

tolerances.

AMP contacts for ARINC 600

Connectors are applied with

standard crimping tools—the

same ones used for ARINC

404 contacts. Automatic

crimping equipment is avail-

able for higher productivity

and lower applied costs.

The benefits of ARINC 600

reduced engagement force

contacts (for example: size

22 contacts averaging 1.5

ounces [0.42 N]) can be

realized in ARINC 404 con-

nectors through the use of

the interchangeable ARINC

600 contacts. ARINC 600

coaxial contacts also are

crimp applied for reliable,

solder-free installation.

It is easy to specify ARINC

600 Connectors by descrip-

tive part numbers. An exam-

ple of a descriptive part

number is shown on page

3003, with an explanation of

each component of the part

number and page references

for complete information.

Descriptive Part Numbering System

Use this guide to construct descriptive part numbers for ARINC 600 Connectors. Consult the referenced pages for additional information.

Materials

Shell — Die cast aluminum or machined aluminum per ASTM-B-85

Insert Retention Plates — Aluminum alloy

Finish — Chemical conversion coating per MIL-C-5541, Class 1A or electroless nickel per MIL-C-26074, Class 3 or 4, Grade B

Screws and Lockwashers — Steel with chromate over zinc or stainless steel

Polarizing Keyways — Zinc alloy

Polarizing Posts — Aluminum alloy or stainless steel

Insulators — Thermoset or Thermoplastic

Ordering Information

Sample Descriptive Part Number

NIC66 E 11 A 01 AA 1

Series Designation — All ARINC 600 Connectors (For "Single Mod" ARINC Connectors, see page 3027.)

Shell Size/Plating — (See pages 3004 through 3007)

Shells With Chromate Conversion Coating

- E—Size 1 Receptacle
- F—Size 1 Plug
- G—Size 2 Receptacle
- H—Size 2 Plug
- J—Size 3 Receptacle
- K—Size 3 Plug

Shells With Electroless Nickel Plating

- EN—Size 1 Receptacle
- FN—Size 1 Plug
- GN—Size 2 Receptacle
- HN—Size 2 Plug
- JN—Size 3 Receptacle
- KN—Size 3 Plug

Contact Inserts & Arrangement Codes — (See pages 3008 through 3010) Describes size, number of contacts, style of contacts and arrangement of inserts. Insert styles are further defined by both **Class** and **Contact Style/Shell Modifications** below. Insert arrangement codes are not defined for connectors using either Quadrax or Expanded Beam Fiber Optic inserts. Contact Tyco Electronics for specific part numbers.

- Class** —
- A—Nonenvironmental, rear release (unsealed inserts)
 - B—Environmental, rear release (sealed inserts)
 - C—Environmental, rear release without O-ring or sealant around inserts (sealed inserts)
 - F—Class C with cantilever style EMI/grounding spring (plug connectors only)
 - G—Class A with cantilever style EMI/grounding spring (plug connectors only)
 - H—Class C with canted coil style EMI/grounding spring (plug connectors only)
 - J—Class A with canted coil style EMI/grounding spring (plug connectors only)
 - FA—Nonenvironmental, front release/remove size 22 contacts (other contact sizes rear release/remove)
 - FF—Nonenvironmental, all contact sizes front release/remove except size 1 COAX remains rear removal

Keying — (See pages 3012 and 3013) Describes arrangement of keys

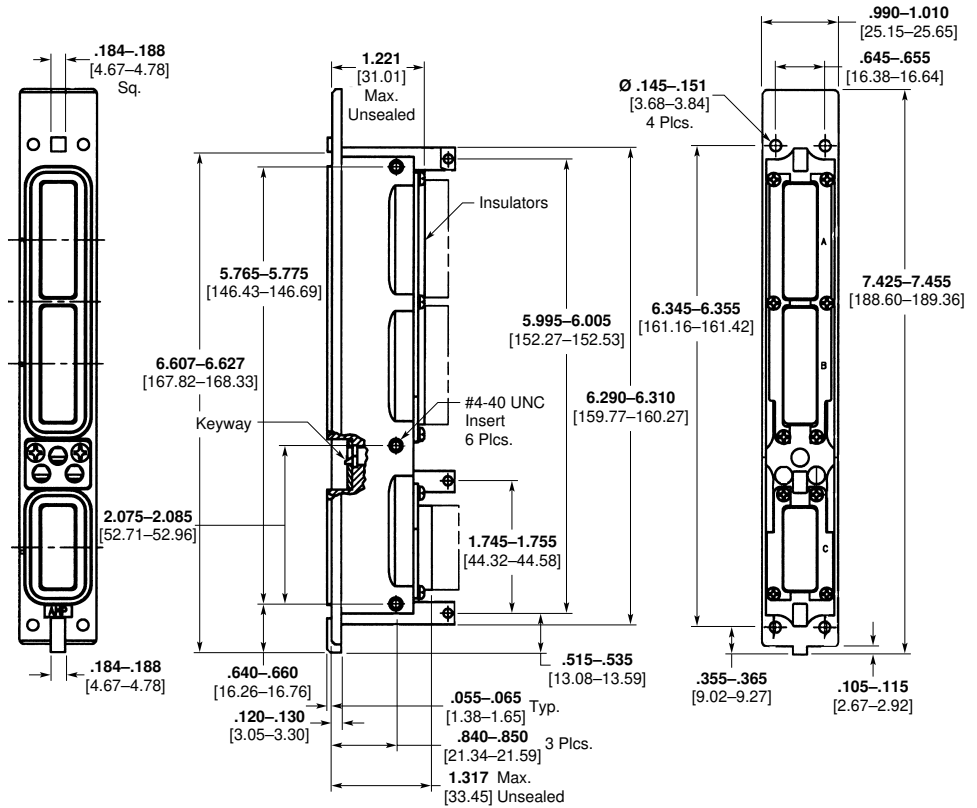
Contact Style/Shell Modifications — (See pages 3014 and 3015) Describes connector mounting configuration and contact style. The insert style is further modified by the contact style specified. Even when the connectors are ordered unloaded, the appropriate code must be used so that contacts fit properly.

Contact Loading —

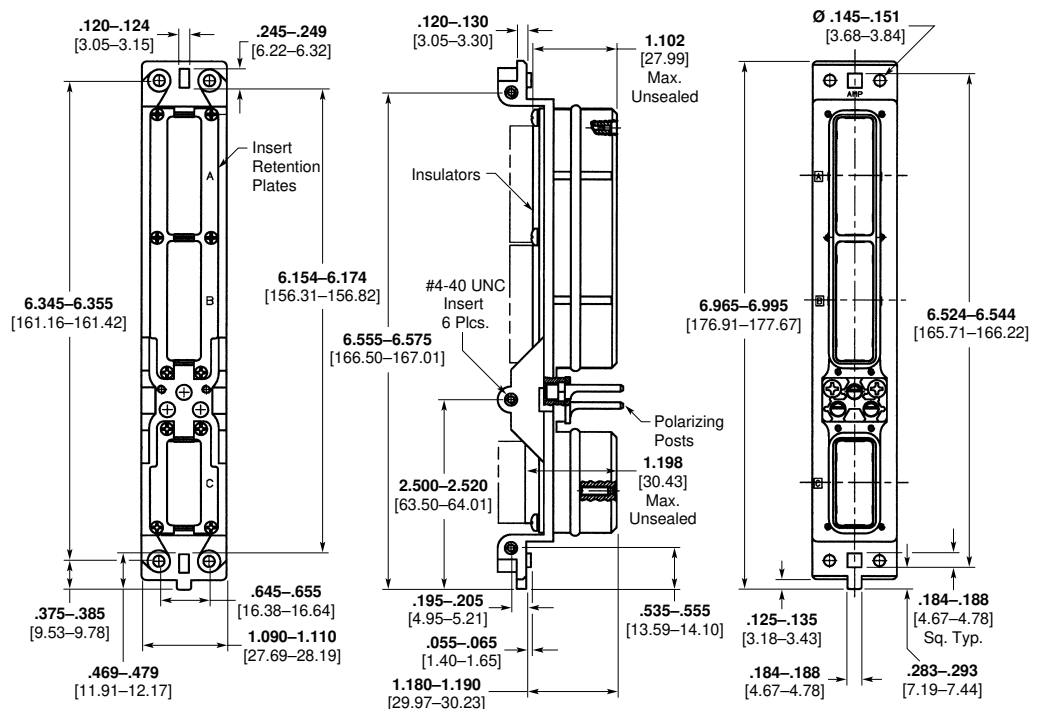
- 0—Contacts included with connector, as indicated in contact style code above (no digit in this space also indicates connector includes contacts). COAXICON contacts must always be ordered separately.
- 1—Contacts not included with connector; must be ordered separately by AMP Part Number.

Shell Size 1

Receptacle

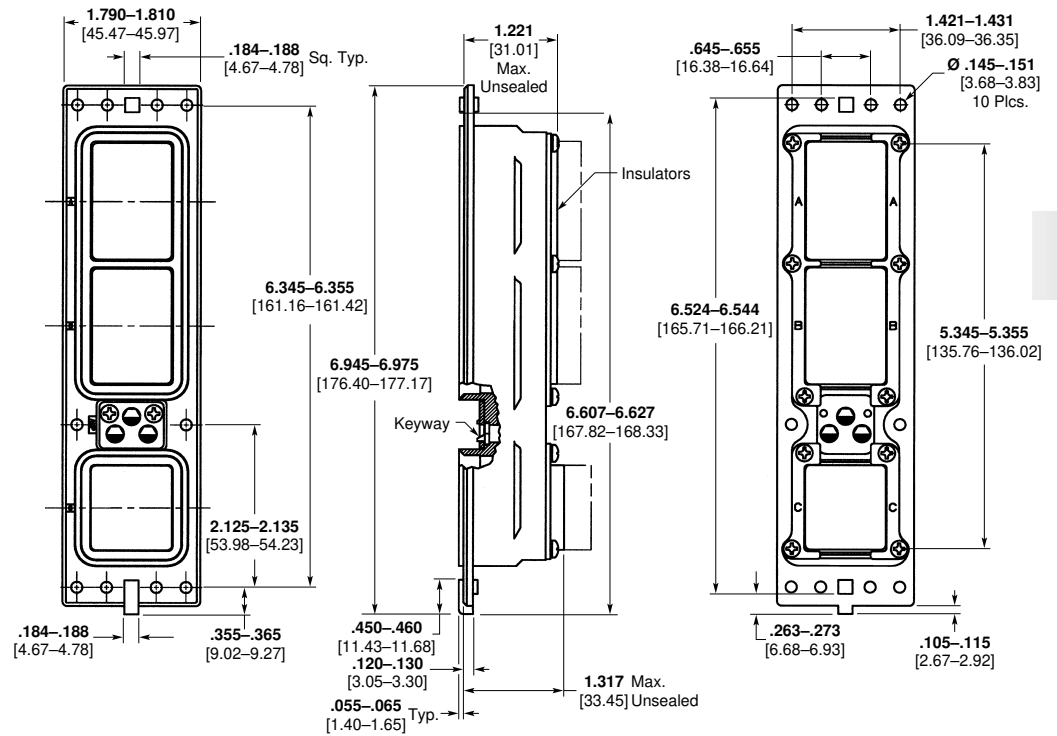


Plug

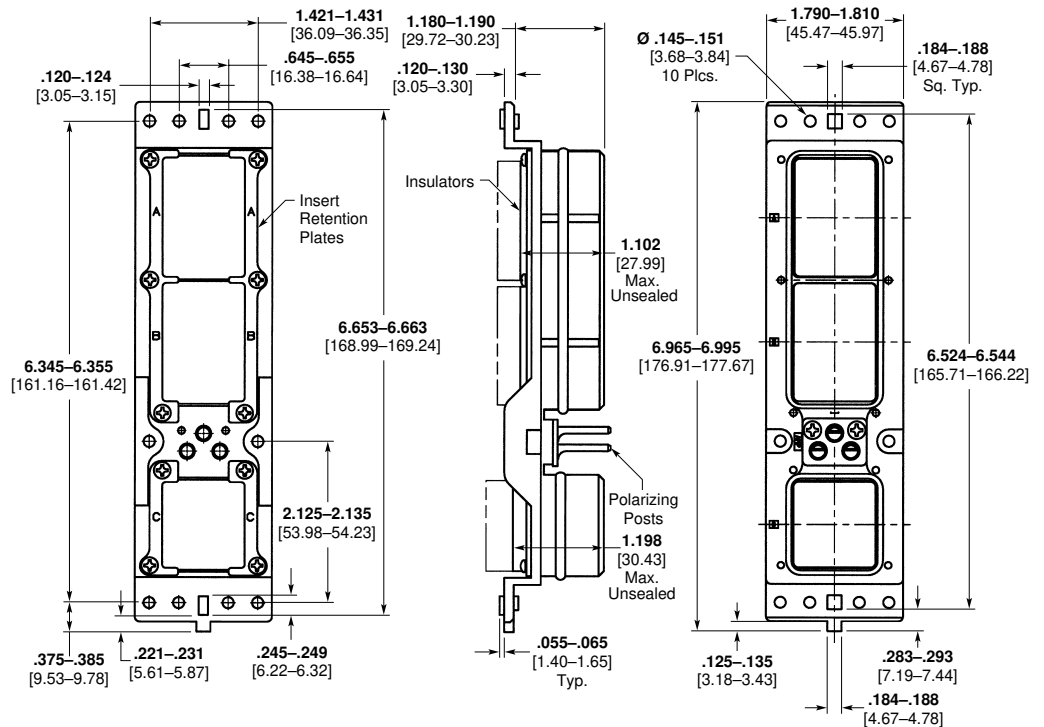


Shell Size 2

Receptacle

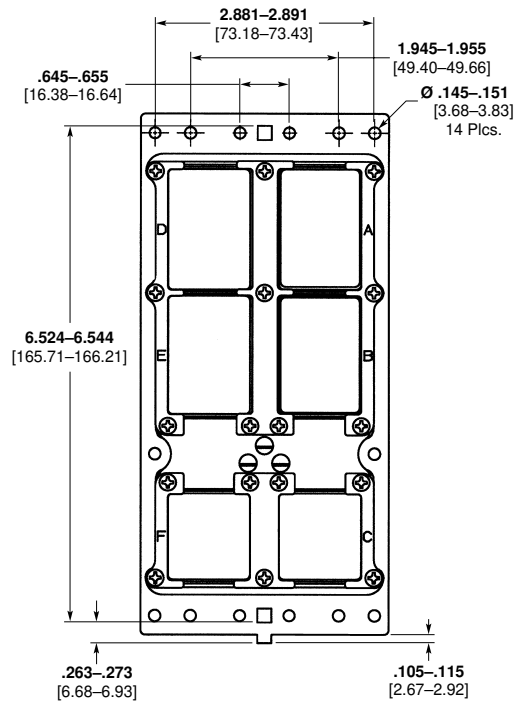
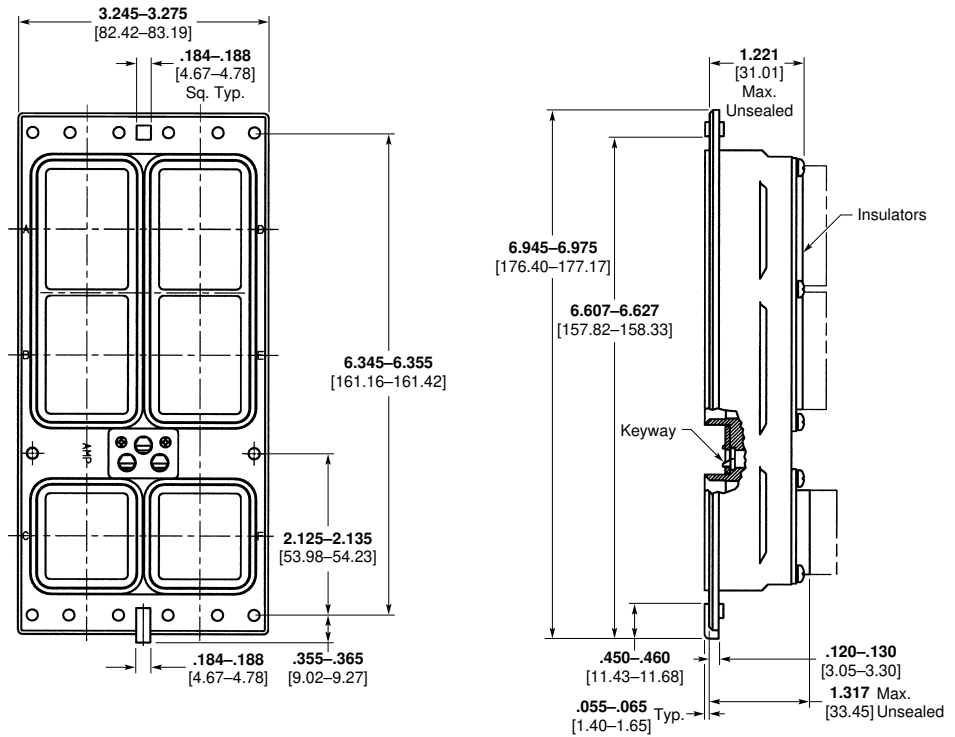


Plug



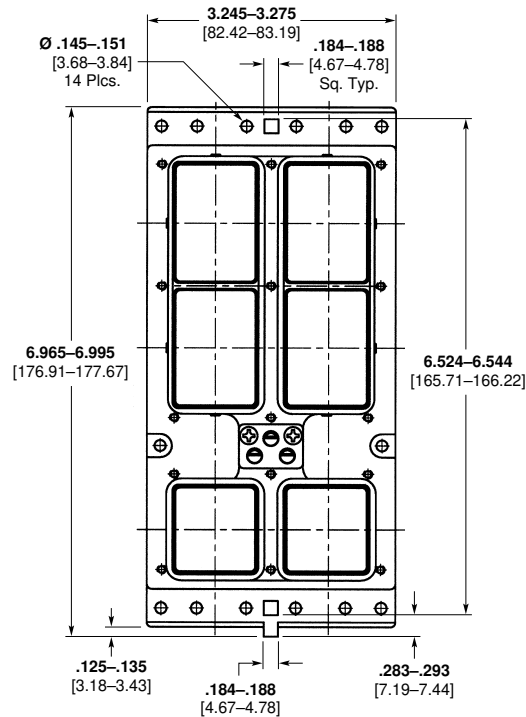
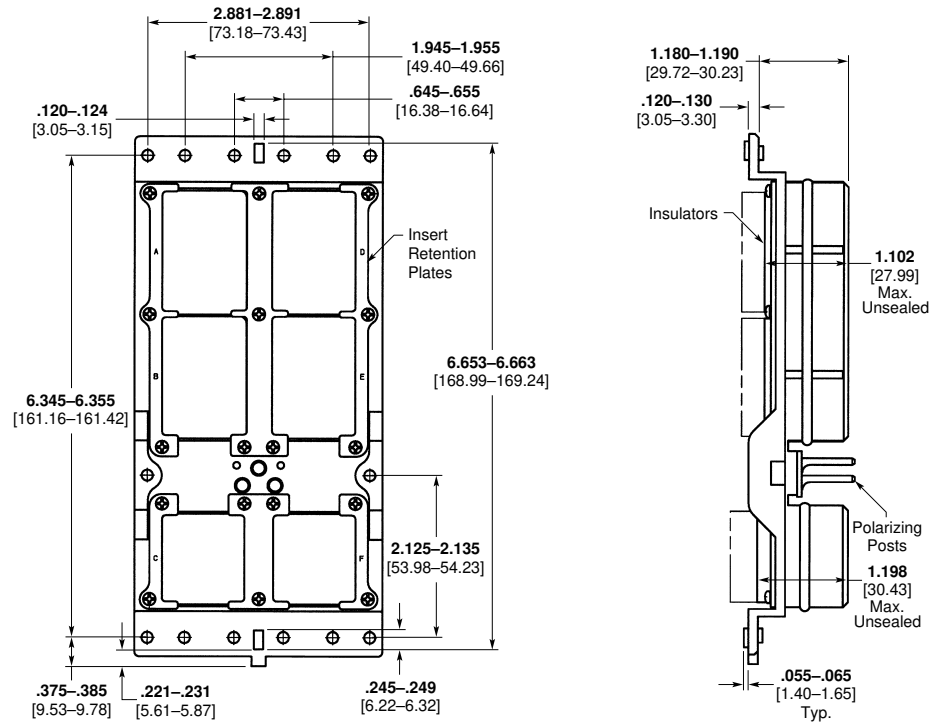
Shell Size 3

Receptacle



Shell Size 3 (Continued)

Plug

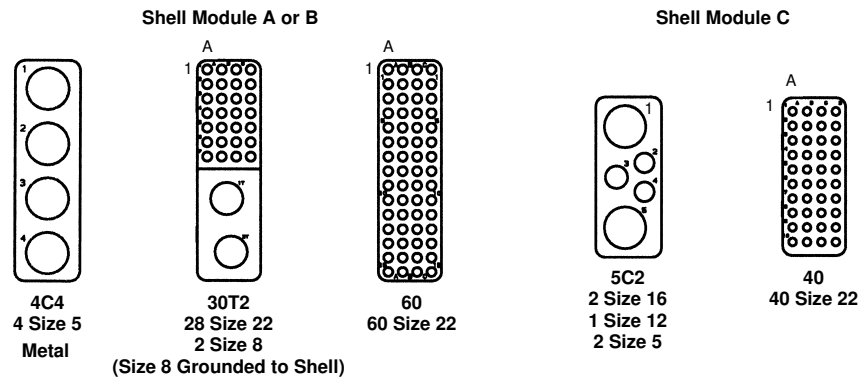


3
Rack and Panel Connectors

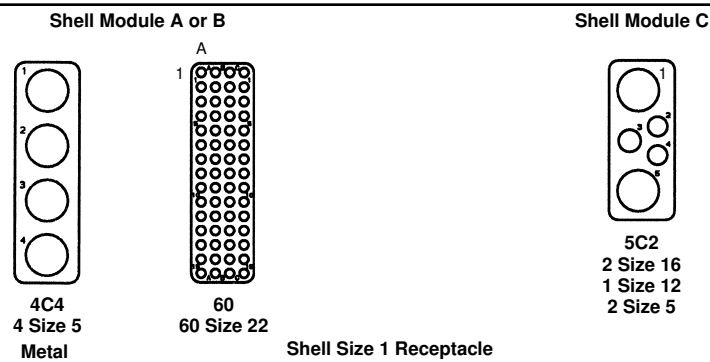
Contact Inserts and Arrangement Codes

Shell Size 1

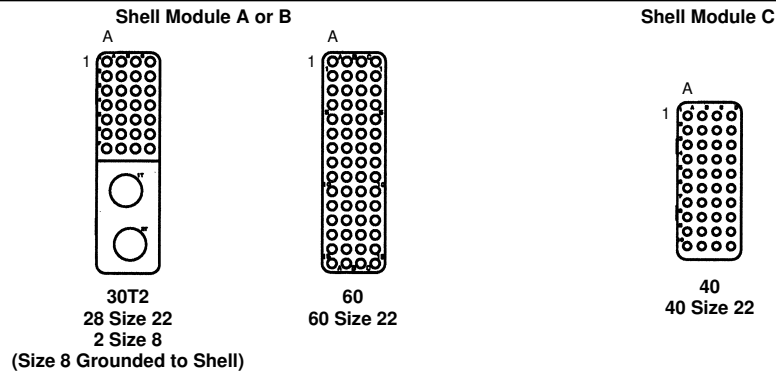
Note: For Expanded Beam Fiber Optic Inserts, see page 3011.



Shell Size 1 Plug
Rear Release/Remove Contacts



Shell Size 1 Receptacle
Rear Release/Remove Contacts



Shell Size 1 Receptacle Only
Front Release/Remove Size 22 Contacts (Other Size Contacts are Rear Release/Remove)

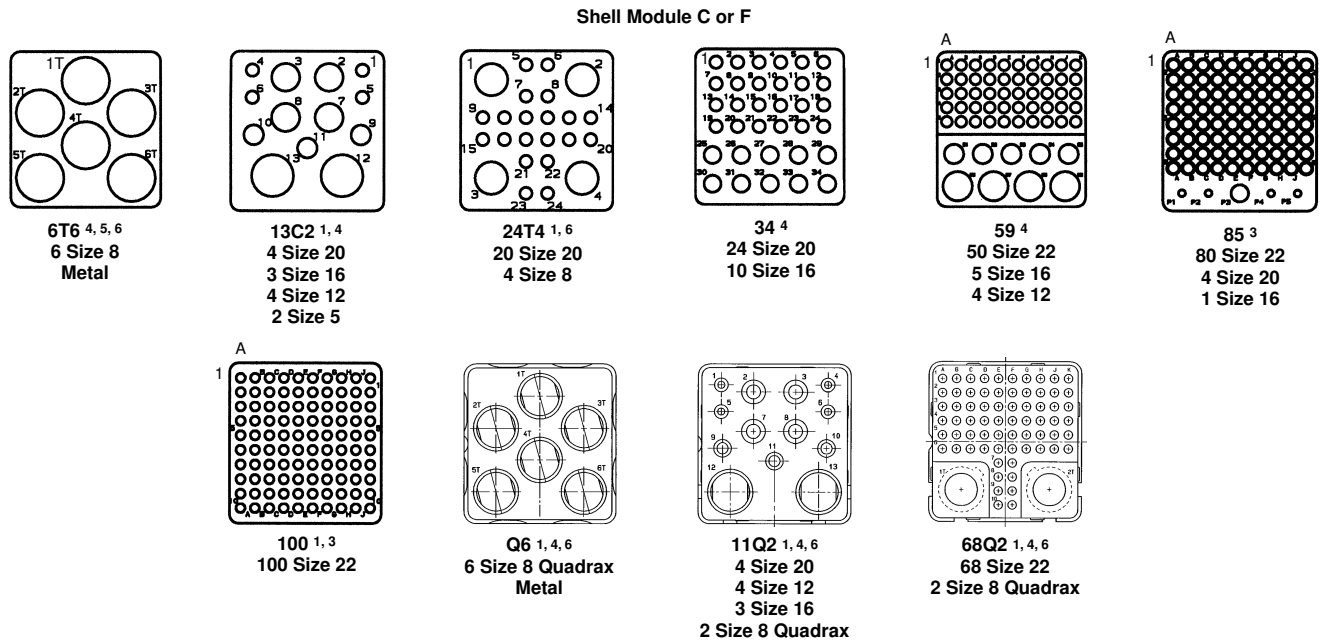
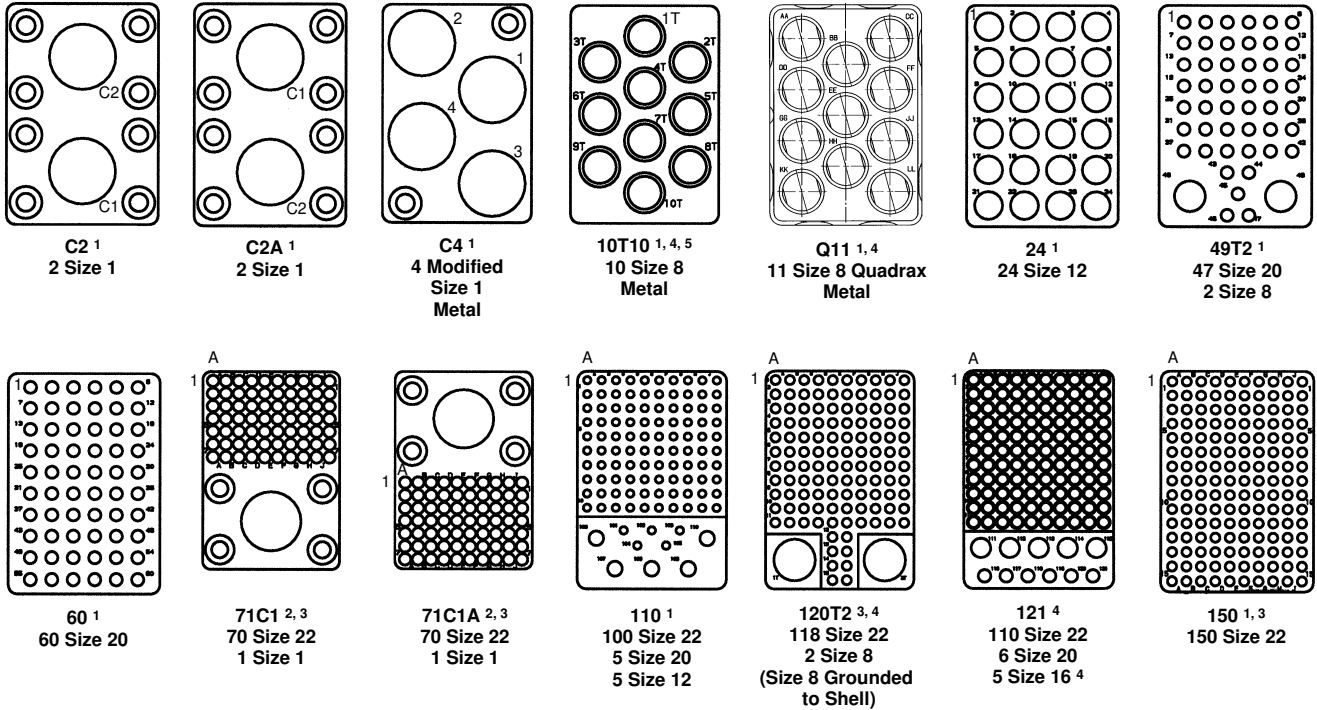
Shell Size	Arrangement Code	Module A	Module B	Module C
1	11	60	60	5C2
1	12	60	BLANK	BLANK
1	13	BLANK	60	BLANK
1	14	BLANK	60	5C2
1	15	60	60	40
1	16	OPEN	60	5C2
1	71	30T2	30T2	40
1	102	60	60	OPEN
1	104	60	OPEN	5C2
1	105	OPEN	OPEN	5C2
1	106	60	4C4	40
1	107	30T2	30T2	40
1	110	60	60	4
1	111	OPEN	30T2	40
1	112	60	4C4	5C2
1	113	60	OPEN	OPEN

Arrangement codes not shown are available upon request. Contact Tyco Electronics.

Shell Size 2 or 3

Note: For Expanded Beam Fiber Optic Inserts, see page 3011.

Shell Module A, B, D or E



- Notes:** 1. Available for plug or receptacle with rear release/remove contacts.
 2. Available for plug only with rear release

Shell Size 2 or 3 (Continued)

Shell Size	Arrangement Code	Module A	Module B	Module C
2	20	71C1A	71C1	13C2
2	21	150	150	13C2
2	22	71C1	150	13C2
2	23	71C1	71C1	13C2
2	25	150	71C1	13C2
2	26	150	150	100
2	27	C2	71C1	13C2
2	28	C2	71C1A	85
2	29	150	150	BLANK
2	30	71C1A	71C1A	13C2
2	50	71C1	71C1A	13C2
2	51	BLANK	150	13C2
2	52	150	150	85
2	53	C4	150	13C2
2	54	150	73C3	13C2
2	55	150	BLANK	13C2
2	56	150	C2	13C2
2	57	24	150	13C2
2	58	24	24	6T6
2	59	C4	C4	13C2
2	72	120T2	120T2	100
2	74	121	121	6T6
2	75	121	10T10	6T6
2	80	120T2	150	100
2	81	120T2	120T2	6T6
2	82	71C1A	150	13C2
2	83	150	C4	34

Shell Size	Arrangement Code	Module A	Module B	Module C
2	84	C4	C4	34
2	85	150	150	34
2	86	150	121	100
2	207	71C1	150	100
2	208	150	71C1	100
2	209	71C1	71C1	100
2	212	71C1	71C1	OPEN
2	216	C2A	71C1A	85
2	220	71C1	C2A	85
2	234	60	60	13C2
2	237	150	120T2	100
2	240	120T2	10T10	13C2
2	241	150	150	6T6
2	242	150	10T10	13C2
2	245	71C1	71C1	85
2	253	C2A	150	13C2
2	254	C2A	71C1A	100
2	255	C2A	71C1A	13C2
2	256	C2A	71C1	13C2
2	257	C2A	C2A	13C2
2	259	C4	C4	85
2	262	150	60	34
2	266	121	121	85
2	268	60	121	59
2	269	10T10	150	13C2
2	270	150	150	59
2	271	C4	120T2	13C2
2	272	10T10	10T10	85
2	273	121	60	6T6

Shell Size	Arrangement Code	Module A	Module B	Module C	Module D	Module E	Module F
3	31	150	150	13C2	150	150	13C2
3	32	150	150	100	150	150	13C2
3	33	150	150	13C2	150	150	100
3	34	150	150	100	150	150	100
3	36	C4	C4	13C2	BLANK	150	100
3	37	150	150	85	150	150	85
3	76	120T2	150	34	120T2	150	34
3	77	121	121	6T6	121	121	6T6
3	306	150	71C1	13C2	150	71C1	13C2
3	307	71C1	71C1	13C2	71C1	71C1	13C2
3	308	C2A	C2A	13C2	C2A	150	100
3	309	150	150	13C2	150	71C1	100
3	319	121	120T2	6T6	121	120T2	6T6
3	320	150	60	100	150	60	100
3	322	150	150	100	150	150	34
3	323	150	150	100	71C1	71C1	100
3	325	150	150	13C2	C2A	C2A	13C2
3	326	150	71C1	100	150	150	100
3	327	150	71C1	100	150	150	13C2
3	328	C2A	C2A	13C2	150	150	13C2
3	331	71C1	150	100	150	150	100
3	332	C4	C4	13C2	C4	C4	85
3	333	71C1	71C1	100	71C1	71C1	100
3	335	71C1	C4	100	71C1	C4	100
3	338	C2A	150	100	150	150	100
3	339	C2A	C2A	100	C2A	C2A	100
3	340	C2A	C2A	13C2	C2A	C2A	13C2
3	341	C4	C4	100	C4	C4	100
3	342	C4	C4	13C2	C4	C4	13C2
3	344	24	150	13C2	24	150	13C2
3	346	150	24	100	150	150	34
3	347	150	150	6T6	121	10T10	13C2
3	348	150	150	11Q2	150	150	11Q2

Note: Arrangement codes not shown are available upon request. Contact Tyco Electronics.

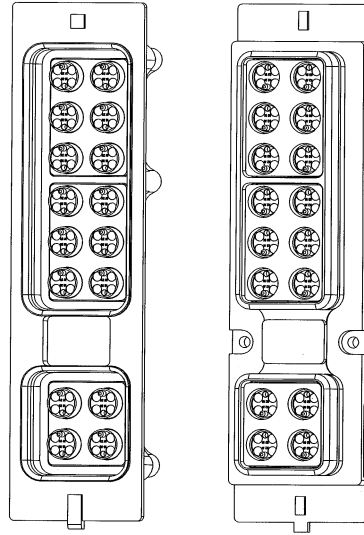
Inserts available to accept AMP Mini-Expanded Beam or Junior Expanded Beam Fiber Optic Cable Assemblies. Custom design configurations can be provided.

Contact Tyco Electronics for more information about Expanded Beam Fiber Optic Connectors and Cable Assemblies, see Section 4, on pages 4001-4017.

Product Facts

- For Mini-Expanded Beam and Junior Expanded Beam inserts
- Insert holders designed to ARINC 600, Supplement 13 or to specific customer needs
- For use in 100 base-FX Ethernet LAN applications per ARINC 664 and 763
- Drop-in insert holders utilize standard ARINC 600 retainers
 - Hard stop on plug side
 - Spring-loaded stop on receptacle side
 - Captive hardware
- Sealing available
- Smaller size of Mini-Expanded Beam inserts permits greater packaging density

Inserts for Expanded Beam Fiber Optics

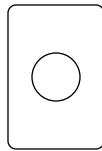


Junior Expanded Beam

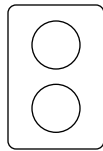
Shell Size 2 or 3

Shell Module A, B, D or E

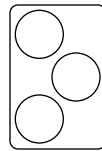
Shell Module C or F



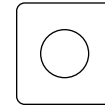
1 Position
1JS



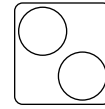
2 Position
2JS



3 Position
3JS



1 Position
1JP



2 Position
2JP

Mini-Expanded Beam

Shell Size 1

Shell Module A or B

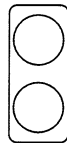
Shell Module C

Shell Module A, B, D or E

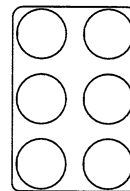
Shell Module C or F



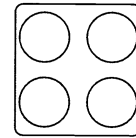
3MS



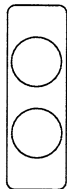
2MP



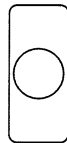
6MS



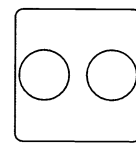
4MP



2MS



1MP



2MP



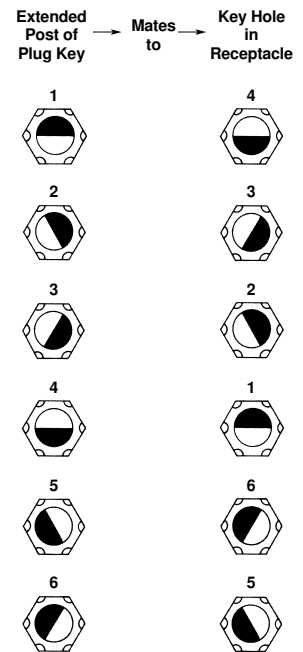
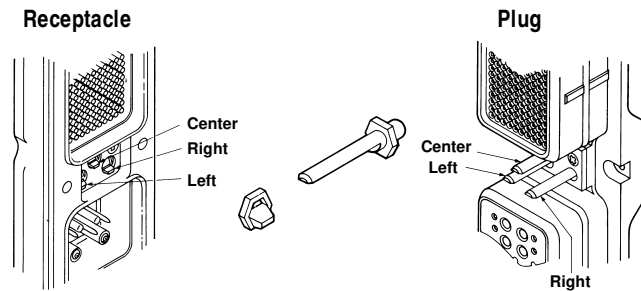
1MS

Shell Size 2 or 3

Keying

Notes:

1. Darkened portion of diagram indicates extended post of plug key; light portion indicates key hole in receptacle keyway.
2. If the keying code is omitted, keying is assembled in the 01 arrangement; the keying code is not stamped on the connector.
3. If the keying code is 00, keying is supplied unassembled.
4. Diagrams show mating face of connector, "Top" up.



Keying Components	Quantity Required Per Connector	Part Numbers	
		Receptacle	Plug
Male Key Post	3	—	1218693-2
Female Keyway	3	208019-1	—
Plate	1	1218692-1	1218692-1
Screw	2	208021-1	208021-1
Kit Containing Above	1	448013-1	448012-1

Keying Code	Plug			Receptacle		
	Left Post	Center Post	Right Post	Left Keyway	Center Keyway	Right Keyway
00	—	—	—	—	—	—
01	1	1	1	4	4	4
02	2	1	1	4	4	3
03	3	1	1	4	4	2
04	4	1	1	4	4	1
05	5	1	1	4	4	6
06	6	1	1	4	4	5
07	1	1	6	5	4	4
08	2	1	6	5	4	3
09	3	1	6	5	4	2
10	4	1	6	5	4	1
11	5	1	6	5	4	6
12	6	1	6	5	4	5
13	1	1	5	6	4	4
14	2	1	5	6	4	3
15	3	1	5	6	4	2
16	4	1	5	6	4	1
17	5	1	5	6	4	6
18	6	1	5	6	4	5
19	1	1	4	1	4	4
20	2	1	4	1	4	3
21	3	1	4	1	4	2
22	4	1	4	1	4	1
23	5	1	4	1	4	6
24	6	1	4	1	4	5
25	1	1	3	2	4	4
26	2	1	3	2	4	3
27	3	1	3	2	4	2
28	4	1	3	2	4	1
29	5	1	3	2	4	6
30	6	1	3	2	4	5
31	1	1	2	3	4	4
32	2	1	2	3	4	3
33	3	1	2	3	4	2
34	4	1	2	3	4	1
35	5	1	2	3	4	6
36	6	1	2	3	4	5
37	1	2	1	4	3	4
38	2	2	1	4	3	3

Keying Code	Plug			Receptacle		
	Left Post	Center Post	Right Post	Left Keyway	Center Keyway	Right Keyway
39	3	2	1	4	3	2
40	4	2	1	4	3	1
41	5	2	1	4	3	6
42	6	2	1	4	3	5
43	1	2	6	5	3	4
44	2	2	6	5	3	3
45	3	2	6	5	3	2
46	4	2	6	5	3	1
47	5	2	6	5	3	6
48	6	2	6	5	3	5
49	1	2	5	6	3	4
50	2	2	5	6	3	3
51	3	2	5	6	3	2
52	4	2	5	6	3	1
53	5	2	5	6	3	6
54	6	2	5	6	3	5
55	1	2	4	1	3	4
56	2	2	4	1	3	3
57	3	2	4	1	3	2
58	4	2	4	1	3	1
59	5	2	4	1	3	6
60	6	2	4	1	3	5
61	1	2	3	2	3	4
62	2	2	3	2	3	3
63	3	2	3	2	3	2
64	4	2	3	2	3	1
65	5	2	3	2	3	6
66	6	2	3	2	3	5
67	1	2	2	3	3	4
68	2	2	2	3	3	3
69	3	2	2	3	3	2
70	4	2	2	3	3	1
71	5	2	2	3	3	6
72	6	2	2	3	3	5
73	1	3	1	4	2	4
74	2	3	1	4	2	3
75	3	3	1	4	2	2
76	4	3	1	4	2	1
77	5	3	1	4	2	6

Keying Code	Plug			Receptacle		
	Left Post	Center Post	Right Post	Left Keyway	Center Keyway	Right Keyway
78	6	3	1	4	2	5
79	1	3	6	5	2	4
80	2	3	6	5	2	3
81	3	3	6	5	2	2
82	4	3	6	5	2	1
83	5	3	6	5	2	6
84	6	3	6	5	2	5
85	1	3	5	6	2	4
86	2	3	5	6	2	3
87	3	3	5	6	2	2
88	4	3	5	6	2	1
89	5	3	5	6	2	6
90	6	3	5	6	2	5
91	1	3	4	1	2	4
92	2	3	4	1	2	3
93	3	3	4	1	2	2
94	4	3	4	1	2	1
95	5	3	4	1	2	6
96	6	3	4	1	2	5
97	1	3	3	2	2	4
98	2	3	3	2	2	3
99	3	3	3	2	2	2
100	4	3	3	2	2	1
101	5	3	3	2	2	6
102	6	3	3	2	2	5
103	1	3	2	3	2	4
104	2	3	2	3	2	3
105	3	3	2	3	2	2
106	4	3	2	3	2	1
107	5	3	2	3	2	6
108	6	3	2	3	2	5
109	1	4	1	4	1	4
110	2	4	1	4	1	3
111	3	4	1	4	1	2
112	4	4	1	4	1	1
113	5	4	1	4	1	6
114	6	4	1	4	1	5
115	1	4	6	5	1	4
116	2	4	6	5	1	3
117	3	4	6	5	1	2
118	4	4	6	5	1	1
119	5	4	6	5	1	6
120	6	4	6	5	1	5
121	1	4	5	6	1	4
122	2	4	5	6	1	3
123	3	4	5	6	1	2
124	4	4	5	6	1	1
125	5	4	5	6	1	6
126	6	4	5	6	1	5
127	1	4	4	1	1	4
128	2	4	4	1	1	3
129	3	4	4	1	1	2
130	4	4	4	1	1	1
131	5	4	4	1	1	6
132	6	4	4	1	1	5
133	1	4	3	2	1	4
134	2	4	3	2	1	3
135	3	4	3	2	1	2
136	4	4	3	2	1	1
137	5	4	3	2	1	6
138	6	4	3	2	1	5
139	1	4	2	3	1	4
140	2	4	2	3	1	3
141	3	4	2	3	1	2
142	4	4	2	3	1	1
143	5	4	2	3	1	6
144	6	4	2	3	1	5
145	1	5	1	4	6	4
146	2	5	1	4	6	3
147	3	5	1	4	6	2

Keying Code	Plug			Receptacle		
	Left Post	Center Post	Right Post	Left Keyway	Center Keyway	Right Keyway
148	4	5	1	4	6	1
149	5	5	1	4	6	6
150	6	5	1	4	6	5
151	1	5	6	5	6	4
152	2	5	6	5	6	3
153	3	5	6	5	6	2
154	4	5	6	5	6	1
155	5	5	6	5	6	6
156	6	5	6	5	6	5
157	1	5	5	6	6	4
158	2	5	5	6	6	3
159	3	5	5	6	6	2
160	4	5	5	6	6	1
161	5	5	5	6	6	6
162	6	5	5	6	6	5
163	1	5	4	1	6	4
164	2	5	4	1	6	3
165	3	5	4	1	6	2
166	4	5	4	1	6	1
167	5	5	4	1	6	6
168	6	5	4	1	6	5
169	1	5	3	2	6	4
170	2	5	3	2	6	3
171	3	5	3	2	6	2
172	4	5	3	2	6	1
173	5	5	3	2	6	6
174	6	5	3	2	6	5
175	1	5	2	3	6	4
176	2	5	2	3	6	3
177	3	5	2	3	6	2
178	4	5	2	3	6	1
179	5	5	2	3	6	6
180	6	5	2	3	6	5
181	1	6	1	4	5	4
182	2	6	1	4	5	3
183	3	6	1	4	5	2
184	4	6	1	4	5	1
185	5	6	1	4	5	6
186	6	6	1	4	5	5
187	1	6	6	5	5	4
188	2	6	6	5	5	3
189	3	6	6	5	5	2
190	4	6	6	5	5	1
191	5	6	6	5	5	6
192	6	6	6	5	5	5
193	1	6	5	6	5	4
194	2	6	5	6	5	3
195	3	6	5	6	5	2
196	4	6	5	6	5	1
197	5	6	5	6	5	6
198	6	6	5	6	5	5
199	1	6	4	1	5	4
200	2	6	4	1	5	3
201	3	6	4	1	5	2
202	4	6	4	1	5	1
203	5	6	4	1	5	6
204	6	6	4	1	5	5
205	1	6	3	2	5	4
206	2	6	3	2	5	3
207	3	6	3	2	5	2
208	4	6	3	2	5	1
209	5	6	3	2	5	6
210	6	6	3	2	5	5
211	1	6	2	3	5	4
212	2	6	2	3	5	3
213	3	6	2	3	5	2
214	4	6	2	3	5	1
215	5	6	2	3	5	6
216	6	6	2	3	5	5

- AA** Crimp, Snap-In Contacts, Rear Release, Standard Mounting
- AB** .025 [0.64] Square Post — 208215-1 Contacts, 1-Wrap High, Snap-In, Standard Mounting
- AC** .025 [0.64] Square Post — 208215-2 Contacts, 2-Wrap High, Snap-In, Standard Mounting
- AD** .025 [0.64] Square Post — 208215-3 Contacts, 3-Wrap High, Snap-In, Standard Mounting
- BA** (4) Floating Bushings

#6-32 Clinch Nuts, see Table 1 on page 3015 for clinch nut locations

- CA** (10) #6-32 Clinch Nuts
- CB** (4) #6-32 Clinch Nuts
- CC** (6) #6-32 Clinch Nuts
- CD** (8) #6-32 Clinch Nuts

Captivated Contact Codes

- DA** Captivated Inserts — No Contacts
- DF** 208275-7 (.150 [3.81] Extension), Standard Mounting
- DG** 208275-3 (.190 [4.83] Extension), Standard Mounting
- DH** 208275-4 (.250 [6.35] Extension), Standard Mounting

Clinch Nuts with Captivated Contacts, see Table 1 on page 3015 for clinch nut locations

- EA** (4) #6-32 Clinch Nuts, and 208275-7 Signal Contacts
- EB** (4) #6-32 Clinch Nuts, and 208275-3 Signal Contacts
- EC** (4) #6-32 Clinch Nuts, and 208275-4 Signal Contacts

Front Release, standard mounting

- FA** Indicates Front Release Inserts without Contacts
- FB** Standard Mounting, 211245-2 Contacts
- FC** Standard Mounting, 211245-4 Contacts
- FD** Standard Mounting, 211245-6 Contacts
- FE** Standard Mounting, 211431-2 Contacts
- FF** Standard Mounting, 211431-4 Contacts
- FG** Standard Mounting, 211431-6 Contacts
- FH** Standard Mounting, 211431-8 Contacts

Front Release Contacts and Clinch Nuts, see Table 1 on page 3015 for clinch nut locations

- GA** (4) #4-40 Clinch Nuts, 211431-4 Contacts
- GB** (6) #4-40 Clinch Nuts, 211431-4 Contacts
- GC** (6) #4-40 Clinch Nuts, 211431-6 Contacts
- GD** (6) #6-32 Clinch Nuts, 211431-4 Contacts
- GE** (10) #4-40 Clinch Nuts, 211431-8 Contacts
- GF** (6) #6-32 Clinch Nuts, 211431-2 Contacts
- GG** (4) #4-40 Clinch Nuts, 211431-2 Contacts
- GH** (4) #6-32 Clinch Nuts, 211431-2 Contacts
- GJ** (6) #6-32 Clinch Nuts, 211431-8 Contacts
- GK** (4) #6-32 Clinch Nuts, 211431-8 Contacts
- GL** (10) #6-32 Clinch Nuts, 211431-4 Contacts
- GM** (4) #6-32 Clinch Nuts, 211431-4 Contacts
- GN** (4) #6-32 Clinch Nuts, 211245-2 Contacts
- FJ** (10) #6-32 Clinch Nuts, 211245-4 Contacts
- FK** (6) #6-32 Clinch Nuts, 211245-4 Contacts

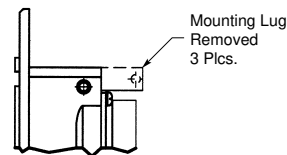
#4-40 Clinch Nuts, see Table 1 on page 3015 for clinch nut locations

- SA** (4) #4-40 Clinch Nuts
- SB** (6) #4-40 Clinch Nuts
- SC** (10) #4-40 Clinch Nuts
- SD** (8) #4-40 Clinch Nuts
- SE** (14) #4-40 Clinch Nuts
- SF** (6) #4-40 Clinch Nuts (Special)

Size 1 Receptacle Shell with Lugs Removed, see drawing below. See Table 1 on page 3015 for clinch nut locations

- HA** Size 1 Receptacle Shell
- HB** Size 1 Receptacle Shell — (4) #4-40 Clinch Nuts

Size 1 Receptacle



**Modification Code
HA and HB only**

Contact Style/Shell Modification Codes (Continued)

Table 1

Quantity	Clinch Nut Locations on Mounting Flange (Unless otherwise noted with modification code)		
	Shell Size		
	1	2	3
4	All	4 corners	4 corners
6	N/A	4 corners and 2 at polarizing keys	4 corners and 2 at polarizing keys
6 code SF only	N/A	See Figure 3	N/A
8	N/A	See Figure 4	See Figure 1
10	N/A	All	See Figure 2
14	N/A	N/A	All

Size 3 Receptacle

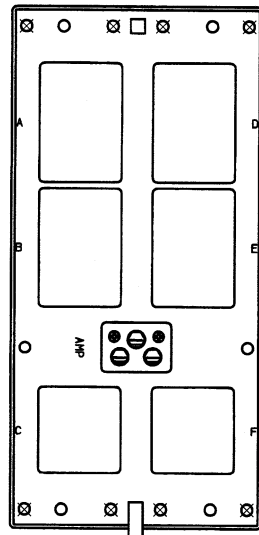


Figure 1
x = Clinch Nut Installed in These Holes

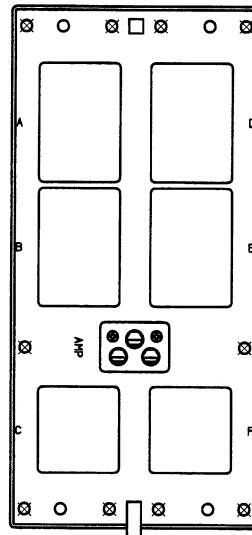


Figure 2
x = Clinch Nut Installed in These Holes

Size 2 Receptacle

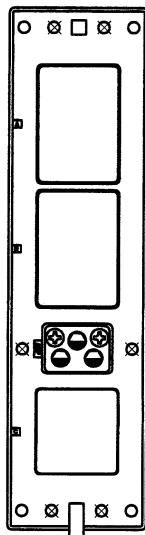


Figure 3
Modification Code SF Only
x = Clinch Nut Installed in These Holes

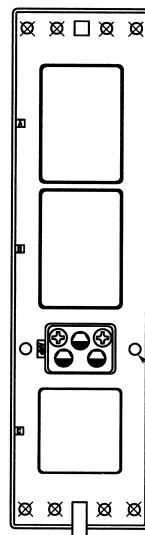


Figure 4
x = Clinch Nut Installed in These Holes

Ø .186
[4.72]
2 Plcs.

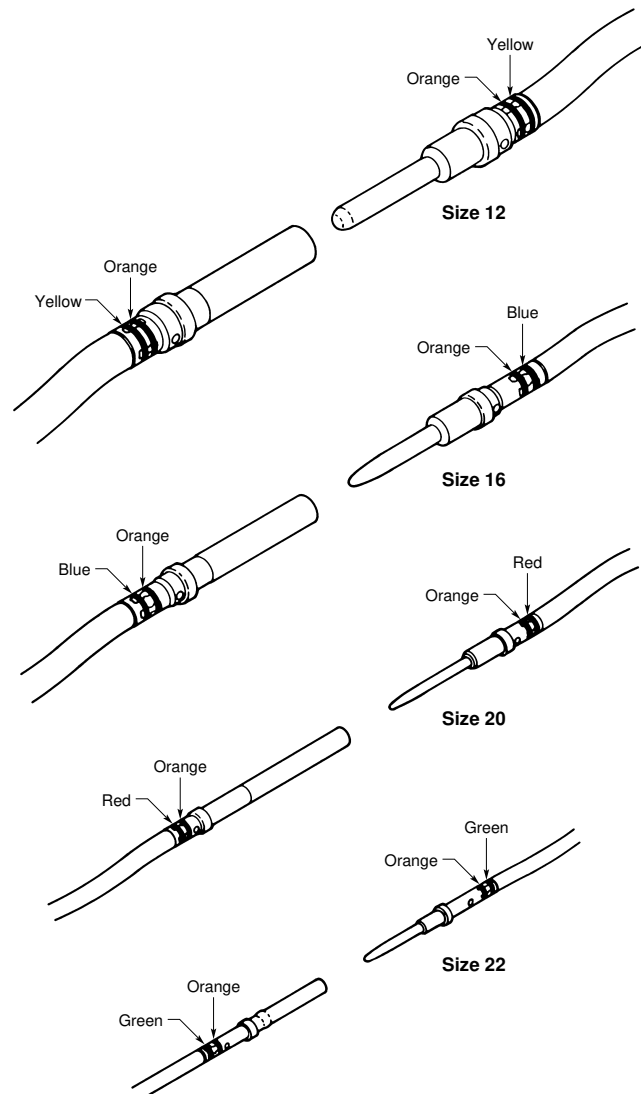
Crimp, Snap-In Contacts

Contact Loading Codes

0 (or blank) — Contacts included

1 — Contacts not included; must be ordered separately by AMP Part Number.

Note: When connectors are ordered with contacts, the contact style section (AA in the example code at the top of this page) must be specified so that the proper, unloaded inserts are included. COAXICON contacts are not supplied in connector kits and must be ordered separately.



Insertion and Extraction



Typical Tool

Crimp, Snap-In, Rear-Release Contacts (also suitable for ARINC 404)

Average Contact Size	Wire Size		Color Code	Average Engagement Force	Part Numbers		Tooling Part Numbers			Color Code
	AWG	mm ²			Pin Contact	Socket Contact	Crimp Tool	Positioner	Insertion/Extraction Tool	
22	26-22	0.12-0.4	Green	1.5 oz. [.42 N]	208262-3	208264-2	M22520/2-01	M22520/2-23	91066-1	Green
20	24-20	0.2-0.6	Red	2.0 oz. [.56 N]	208265-3	208267-2	M22520/2-01	M22520/2-08	91066-4	Red
16	20-16	0.5-1.4	Blue	3.0 oz. [.83 N]	208268-3	208270-2	M22520/1-01	M22520/1-02	91066-3	Blue
12	14-12	2-3	Yellow	12.0 oz. [3.34 N]	208271-3	208273-2	M22520/1-01	M22520/1-11	445147-1	—

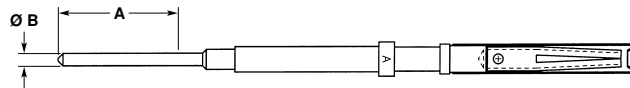
Posted Contacts

Size 22 Posted Contacts

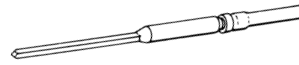
Contact Loading

0 (or blank) — Contacts included

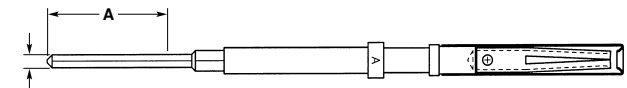
1 — Contacts not included; must be ordered separately.



Round Post



Square or Rounded Posts



Square Post

Size 22, Snap-In, Rear Release Socket Contacts

Use Insertion/Extraction Tool Part Number 91066-1

with .025 [0.64] Square Posts

Number of Wraps	Post Extension from Rear of Insert (Dim. A)	Part Number
1	0.275 6.98	208215-1
2	0.390 9.91	208215-2
3	0.520 13.21	208215-3

with Round Posts

Minimum Post Extension from Rear (Dim. A)	Post Diameter (Dim. B)	Part Number
0.190 4.82	0.025 0.64	445814-1
0.230 5.84	0.025 0.64	445814-2
0.180 4.57	0.020 0.51	445814-3

Size 22, Snap-In, Front Release Socket Contacts

Use Insertion/Extraction Tool Part Number 445815-1

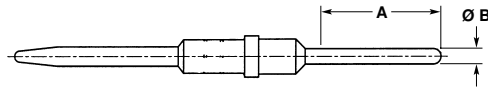
with Round Posts

Minimum Post Extension from Rear of Insert (Dim. A)	Post Diameter (Dim. B)	Part Number	Solder Dipped
0.150 3.81	0.025 0.64	211431-2	No
0.250 6.35	0.025 0.64	211431-4	No
0.375 9.52	0.025 0.64	211431-6	No
0.500 12.70	0.025 0.64	211431-8	No
0.150 3.81	0.0195 0.50	1-211431-0	No
0.250 6.35	0.0195 0.50	1-211431-2	No
0.150 3.81	0.030 0.76	1-211431-3	Yes
0.375 9.52	0.030 0.76	1-211431-4	Yes
0.250 6.35	0.025 0.64	1-211431-5	Yes

with .025 [0.64] Square Posts

Number of Wraps	Post Extension from Rear of Insert (Dim. A)	Part Number
1	0.250 6.35	211245-2
2	0.375 9.52	211245-4
3	0.500 12.70	211245-6

Posted Contacts (Continued)



Size 16
Part Number 448139

Front Release/Remove
Size 12, Posted Pin Contacts
Use Insertion/Extraction Tool
Part Number 445147-1

Minimum Post Extension from Rear of Insert (Dim. A)	Post Diameter (Dim. B)	Part Number	Solder Dipped
0.264 6.70	.079-.083 2.01-2.11	448140-3	No
0.379 9.62	.079-.083 2.01-2.11	448140-6	No
0.264 6.70	.079-.083 2.01-2.11	448140-9	Yes
0.143 3.63	.079-.083 2.01-2.11	448140-8	No

Front Release/Remove
Size 16, Posted Pin Contacts
Use Insertion/Extraction Tool
Part Number 91066-3

Minimum Post Extension from Rear of Insert (Dim. A)	Post Diameter (Dim. B)	Part Number	Solder Dipped
0.379 9.62	.048-.052 1.22-1.32	448139-6	No
0.264 6.70	.048-.052 1.22-1.32	1-448139-1	No
0.233 5.91	.048-.052 1.22-1.32	1-448139-4	No
0.264 6.70	.048-.052 1.22-1.32	1-448139-5	Yes
0.143 3.63	.061-.064 1.55-1.63	448139-8	No

Front Release/Remove
Size 20, Posted Pin Contacts
Use Insertion/Extraction Tool
Part Number 91066-4

Minimum Post Extension from Rear of Insert (Dim. A)	Post Diameter (Dim. B)	Part Number	Solder Dipped
0.236 5.99	.030-.034 0.76-0.86	1-448138-2	No
0.272 6.90	.030-.034 0.76-0.86	1-448138-5	No
0.272 6.90	.030-.034 0.76-0.86	1-448138-6	Yes
0.236 5.99	.030-.034 0.76-0.86	1-448138-7	Yes

COAXICON Contacts

COAXICON Contacts

COAXICON Contacts are not supplied in connector kits; they must be ordered separately.



Size 1

Size 5

Size 1 Contacts

Performance Characteristics

Nominal Impedance — 50 ohms

Frequency Range — 0 to 5 GHz

Operating Temperature — -85°F to +329°F [-65°C to +165°C]

Operating Voltage (Rated) — 1000 VAC rms, 60 Hz at Sea Level

Contact Resistance (Milliohms) — 1.0 max. — Center Contact
0.2 max. — Outer Contact

Insulation Resistance — 5,000 megohms min. @ 500 vdc per MIL-STD-1344, Method 3003 or MIL-STD-202, Method 302, Cond. B

Dielectric Withstanding Voltage (60 Hz, rms)—

RG 214/U 2500 at Sea Level
RG 142/U 1900 at Sea Level

VSWR — 1.35 to 1.00 at 5 GHz

Insertion/Withdrawal Force — Insertion (max.) 15 lb [66.72 N]
Withdrawal (min.) 1 lb [4.45 N]

Cable Retention — RG 214/U 125 lb [556 N] min.
RG 142/U 60 lb [266.9 N] min.

Thermal Shock — per MIL-STD-1344, Method 1003, Cond. A or MIL-STD-202, Method 107, Cond. A

Physical Shock — per MIL-STD-1344, Method 2004, Cond. D or MIL-STD-202, Method 213, Cond. D except 300 G max.

Vibration — per MIL-STD-1344, Method 2005, Cond. VI, Letter J or MIL-STD-202, Method 204, Cond. E except 42 G max.

Humidity Temperature Cycling — per MIL-STD-1344, Method 1002, Type II, Cond. A or MIL-STD-202, Method 106

Salt Spray — per MIL-STD-1344, Method 1001, Cond. B or MIL-STD-202, Method 101, Cond. B

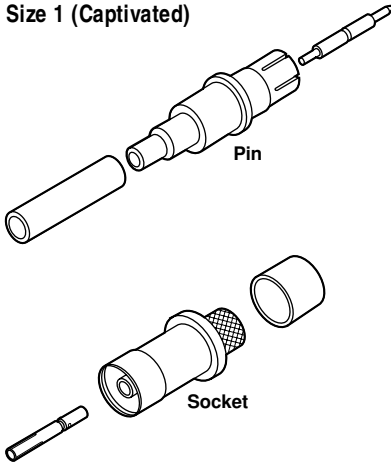
Temperature Life — per MIL-STD-1344, Method 1005, Cond. D or MIL-STD-202, Method 108, Cond. D

Material and Finish

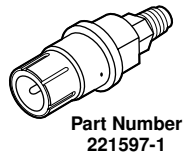
Contact — Beryllium Copper per ASTM-B-196/ASTM-B-197, Brass per ASTM-B-16, TEFLON per ASTM-D-1710, Silicon Rubber per ZZ-R-765, Gold plate per MIL-G-45204, Nickel plate per QQ-N-290

Ferrule — Copper per ASTM-B-188, Tin plate per ASTM-B-545

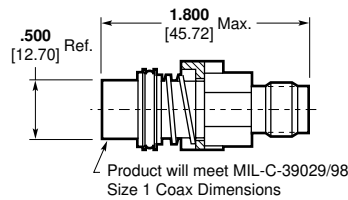
Size 1 (Captivated)



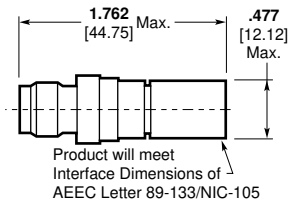
Adapter — Size 1 Pin to SMA Jack



Part Number 221597-1



Adapter Standard Size 1 Socket to TNC Part Number 449908-1



TCAS Size 1 Socket to TNC Adapter Part Number 447346-1

Contact Size	RG/U Cable	Contact Part No.		"O" Crimp Tooling			Military Hex Crimp Tooling				Compression Crimp Tooling			
				Center Contact			Center Contact		Ferrule					
				Pin	Socket	Tool (M22520/)	Positioner/ Die	Ferrule	Tool (M22520/)	Die (M22520/)	Tool (M22520/)	Die (M22520/)	Tool (M22520/)	Locator (M22520/)
O Crimp														
	402 Semi-Rigid .141 [3.58]	225837-1	—	601966-1 (2-01)	1-601966-9	91905-1' or 91904'	—	—	—	—	—	—	—	
	402 Semi-Rigid .141 [3.58]	222018-1	—	—	—	—	—	—	—	—	—	59980-1 (36-01)	220220-2 (36-06)	312253-1 (36-03)
	405 Semi-Rigid .086 [2.18]	222018-2	—	—	—	—	—	—	—	—	—	59980-1 (36-01)	220220-2 (36-06)	312253-2 (36-02)
1	214	—	225831-1 211229-1*	220015-1	—	220015-1	—	—	—	—	—	—	—	—
	142, 142A, 142B	—	225831-3 446709-1*	91902-1'	—	91902-1'	—	—	—	—	—	—	—	—
	393	—	225831-6 446709-3*	220015-1	—	220015-1	—	—	—	—	—	—	—	—
Military Hex Crimp														
	214	447095-1	447087-1	—	—	—	608650-1 (5-01)	(5-25)	608650-1 (5-01)	(5-25)	—	—	—	—
	213	447095-2	447087-2 446709-5*	—	—	—	608650-1 (5-01)	(5-25)	608650-1 (5-01)	(5-25)	—	—	—	—
1	142, 142A, 142B	447095-3	447087-3 446709-6*	—	—	—	608650-1 (5-01)	(5-11)	608650-1 (5-01)	(5-11)	—	—	—	—
	393	447095-4	447087-4 446709-7*	—	—	—	608650-1 (5-01)	(5-25)	608650-1 (5-01)	(5-25)	—	—	—	—
	ECS 311201	—	447087-5 446709-2*	—	—	—	608650-1 (5-01)	(5-29)	608650-1 (5-01)	(5-29)	—	—	—	—
	214	—	446549-3*	—	—	—	M22520/5-01**	—	—	M22520/5-25	—	—	M22520/5-25	—
	142	—	446549-1	—	—	—	M22520/5-01**	—	—	M22520/5-11	—	—	M22520/5-11	—
	393	—	446549-5*	—	—	—	M22520/5-01**	—	—	M22520/5-25	—	—	M22520/5-25	—
Modified 1 Straight Exit	Times AA5886	—	446549-6*	—	—	—	M22520/5-01**	—	—	M22520/5-25	—	—	M22520/5-04	—
	Times AA5887	—	446549-2*	—	—	—	M22520/5-01**	—	—	M22520/5-29	—	—	M22520/5-29	—
	ESC 311201	—	446549-4*	—	—	—	M22520/5-01**	—	—	M22520/5-29	—	—	M22520/5-29	—
	SMA ADAPTER	446748-1	—	—	—	—	—	—	—	—	—	—	—	—

*Socket with mounting hardware. Mounting hardware for Size 1 Straight Exit Contacts includes: backup plate, spring, retaining ring, O-ring, washers and screws.
 **Tyco Electronics does not sell Hand Tool M22520/5-01. However, it can be purchased from: Daniels Manufacturing Corp, 6103 Anno Ave., Orlando, FL 32809, 800-327-2432.

- Notes:**
1. SDE die used with hand tool frame 354940-1.
 2. Hardware kit for Size 1 COAXICON Socket Contacts (used on 71C1 or C2 inserts) includes all mounting hardware required (retention plate, washers, O-ring, spring, screws and retention clip). Kit Number 447118-1.
 3. Size 1 Coaxicon Pin Contacts require retention plate 211217-2 and four screws 211558-1.

COAXICON Contacts (Continued)

Size 5 and 8 Contacts

Performance Characteristics for size 5 contacts

- Nominal Impedance — 50 ohms
- Frequency Range — 0 to 500 MHz
- Operating Temperature — -85°F to +329°F [-65°C to +165°C]
- Operating Voltage (Rated) — 325 VAC rms, 60 Hz
- Contact Resistance (Milliohms) — Size 5 with RG 58/U cable:
Center Contact — 10
Outer Contact — 1.5

- Insulation Resistance — 5,000 megohms min. @ 500 vdc per MIL-STD-1344, Method 3003 or MIL-STD-202, Method 302, Cond. B
- Dielectric Withstanding Voltage (60 Hz, rms) — Sizes 5 with RG 58/U and 316/U cable:
750 - Sea Level
350 - 50,000 ft [15 240 m]
- VSWR — 1.3 to 1.0 @ 500 MHz
- Insertion/Withdrawal Force — Size 5:

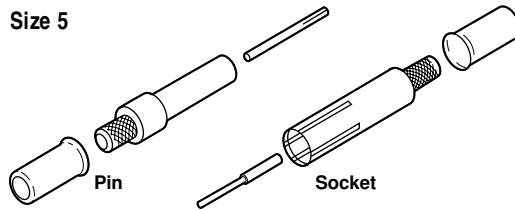
Insertion Force Maximum		Withdrawal Force Minimum	
lb	[N]	lb	[N]
5	22.24	1	4.45

- Cable Retention — Size 5:
60 lb [266.9 N]
- Durability — 500 cycles
- Thermal Shock — per MIL-STD-1344, Method 1003, Cond. A or MIL-STD-202, Method 107, Cond. A
- Physical Shock — per MIL-STD-1344, Method 2004, Cond. A or MIL-STD-202, Method 213, Cond. A
- Vibration — per MIL-STD-1344, Method 2005, Cond. IV or MIL-STD-202, Method 204, Cond. D
- Moisture Resistance — per MIL-STD-202, Method 106, omit steps 7a and 7b

Salt Spray — 48 hours per MIL-STD-1344, Method 1001, Cond. B or MIL-STD-202, Method 101, Cond. B

Material and Finish

- Contact — Beryllium copper per ASTM-B-196/ASTM-B-197, Brass per ASTM-B-16, TEFLON per ASTM-D-1710, Gold plate per MIL-G-45204, Nickel plate per QQ-N-290
- Ferrule — Copper per ASTM-B-188, tin plate per ASTM-B-545



Size 5 Extraction Tool Part Number 91074-1

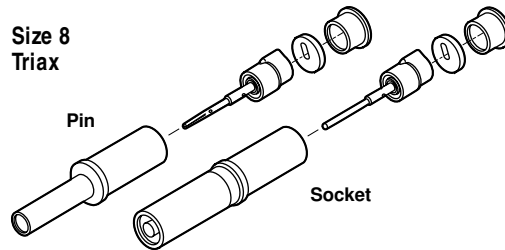
Contact Size	RG/U Cable	Contact Part No.		"O" Crimp Tooling			Military Hex Crimp Tooling			
		Pin	Socket	Center Contact			Center Contact		Ferrule	
				Tool (M22520/)	Positioner/Die	Ferrule	Tool (M22520/)	Die (M22520/)	Tool (M22520/)	Die (M22520/)
O Crimp										
5	58C	225790-1	225791-1	601966-1 (2-01)	1-601966-6 K345	91905-1*	—	—	—	—
	400, 142, 142A, 142B	225790-2	225791-2	91904-1*	—	91905-1*	—	—	—	—
	141A	225790-1	225791-1	91904-1*	—	91905-1*	—	—	—	—
	402 Semi-Rigid .141 [3.58]	225790-3	225791-6	91904-1*	—	91905-1*	—	—	—	—
	174, 188, 316	225790-5	225791-3	601966-1 (2-01)	1-601966-6 K345	91905-1*	—	—	—	—
	180, 195	225790-4	225791-8	601966-1 (2-01)	1-601966-6 K345	91905-1*	—	—	—	—
	179, 187	225790-6	225791-4	601966-1 (2-01)	1-601966-6 K345	91905-1*	—	—	—	—
	178, 196	225790-7	225791-5	601966-1 (2-01)	1-601966-6 K345	220020-1	—	—	—	—
	223	225790-2	225791-2	601966-1 (2-01)	1-601966-6 K345	91905-1*	—	—	—	—
Military Hex Crimp										
5	316 Double Shield 188 Double Shield	225790-8	1-225791-0	—	—	—	601966-1 (2-01)	1-601966-6 K345	608650-1 (5-01)	(Y159)
	58C, 141A	447850-1	447851-1	—	—	—	601966-1 (2-01)	1-601966-6 K345	608650-1 (5-01)	(5-45B)
	142, 142A, 142B	447850-2	447851-2	—	—	—	601966-1 (2-01)	1-601966-6 K345	608650-1 (5-01)	(5-45B)
	402 Semi-Rigid .141 [3.58]	447850-3	447851-3	—	—	—	601966-1 (2-01)	1-601966-6 K345	608650-1 (5-01)	(5-45A)
	174, 188, 316	447850-4	447851-4	—	—	—	601966-1 (2-01)	1-601966-6 K345	608650-1 (5-01)	(5-37B)

* SDE die used with hand tool frame 354940-1.

COAXICON Contacts (Continued)

Size 8 TWINAX/TRIAX/COAX Contacts

Size 8 Triax

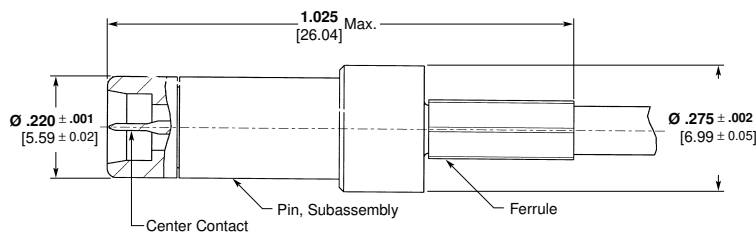


Size 8 Contact Extraction Tooling

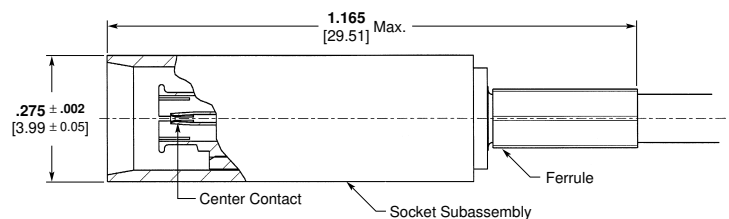
Contact Style	Tool Part Number
Rear Release/Rear Remove	58284-1
Front Release/Front Remove	58284-1
Front Release/Rear Remove	448703-1

Contact Size	Style	Cable	Contact Part No.		Crimp Tooling	Crimp Tooling	
			Pin	Socket		Center Contact	Ferrule
8 TWINAX	RR/RR	M17/176-00002	—	222191-4	Hand Tool Frame M22520/5-01 (AMP 608650-1) Crimping Die AMP 58316-1 or Daniels Y793 or Y793A or AMP Hand Crimping Tool 91907-1*	—	—
	RR/RR	Tensolite 24463/9P025X-2(LD) or 24463/9B017X-2 (LD)	—	222191-5		—	—
	RR/RR	M17/176-00002	222190-4 (short engagement)	—		—	—
	RR/RR	Tensolite 24463/9P025X-2(LD) or 24463/9B017X-2 (LD)	222190-3 (short engagement)	—		—	—
	RR/RR	Tensolite 24463/9P025X-2(LD) or 24463/9B017X-2(LD)	448313-2 (long engagement)	—		—	—
	FR/RR	Tensolite 24463/9P025X-2(LD) or 24463/9B017X-2(LD)	448312-2 (long engagement)	—		—	—
8 TRIAX	FR/FR	Posted (.250 [6.35] min. post extension)	448541-1 (long engagement)	—	—	—	—
8 COAX	RR/RR	Adams Russell FC11Z	—	448543-1	—	M22520/2-01 (AMP 601966-1)	91907-1*
	RR/RR	Adams Russell FC14Z	—	448543-2	—	M22520/2-01 (AMP 601966-1)	91907-1*
	RR/RR	RG/U-316, 188	1218687-3 (long engagement)	1218820-1	—	M22520/2-01 (AMP 601966-1)	91907-1*
	RR/RR	RG/U-142	1218689-1 (long engagement)	1218821-1	—	M22520/2-01 (AMP 601966-1)	91907-1*
	FR/RR	Adams Russell FC11Z	448542-1 (long engagement)	—	—	M22520/2-01 (AMP 601966-1)	91907-1*
	FR/RR	Adams Russell FC14Z	448542-2 (long engagement)	—	—	M22520/2-01 (AMP 601966-1)	91907-1*
	FR/FR	Posted (.250 [6.35] min. post extension)	448540-2 (long engagement)	—	—	—	—

*SDE die used with hand tool frame 354940-1.



Pin



Socket

Size 5 COAX Contacts, Spring Loaded 75 Ohm

Style	Cable	Contact Part No.		Crimp Tooling	
		Pin	Socket	Center Contact	Braid
Rear Release/ Rear Remove	RG/U-179	443971-1	443972-1	Daniels HMR Tool AFM8 or AMP 601966-1 with Daniels positioner K1289 (socket) or K1288S (pin)	Daniels HX4 with Die-set Y196 cavity A or AMP 35940-1 with with Die-set 58483-1 Cavity B

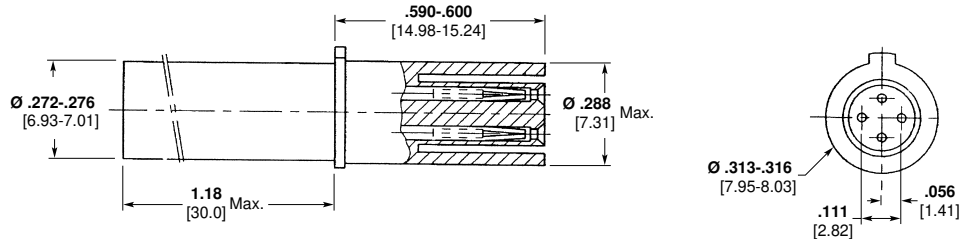
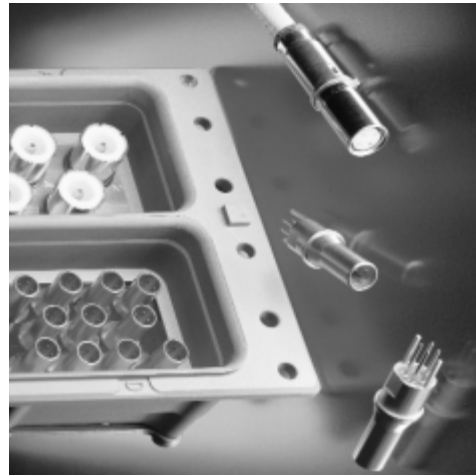
ARINC Size 8 Quadrx Contacts

Product Facts

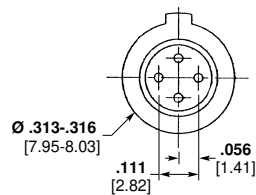
- Utilizes four size 24 screw-machined contacts with standard crimp tooling per M22520/2-01 and M22520/5-01 for ease of termination
- Front release/front removable PCB mount contact design for use in ARINC 600 receptacle connectors
- Rear release/rear remove crimp contact design for use in ARINC 600 plug connectors & receptacles
- Quadrx housing is keyed to assure mating alignment
- Contacts are on 2mm centerline per ARINC 600 specification
- Electrical:
 - 10/100/1000 Base-T Ethernet cable performance
 - 100 Ohm characteristic impedance
- Solder contact also available, see page 3024
- To extract Quadrx contact from connector insert, use Extraction Tool Part Number 58284-1

Pin and Socket contact assemblies for use with quad axial cable, per ARINC 664 & 763 specifications. Designed to fit inside ARINC 600 size 8 Quadrx connector cavities.

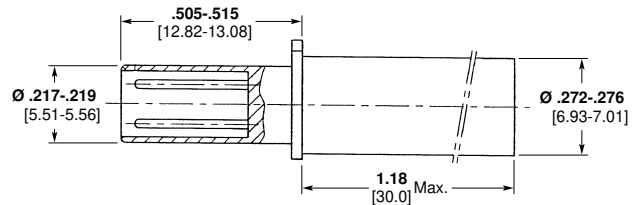
Adaptable to a variety of connectors (ARINC 600, 404, D-Subminiature connectors, MIL-C-38999, etc.)



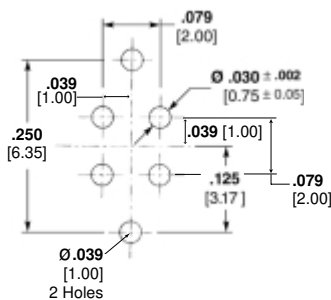
Size 8 Quadrx Socket Contact — Crimp Style Rear Release/Rear Remove Design Part Number 1445693-1



Size 8 Quadrx Pin Contact — Crimp Style Rear Release/Rear Remove Design Part Number 1445692-1



Size 8 Quadrx PCB Pin Contact Front Release/Front Remove Design Part Number 1445626-1



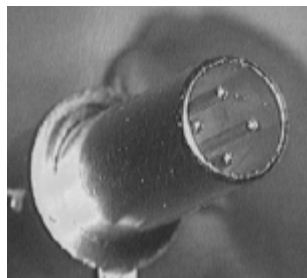
Hole Positioning for Front Release/Front Removable Design of PCB Size 8 Quadrx Contact

ARINC Size 2 Connectors	Insert Arrangement	Style	Shell Features	Contacts			
Part No.	Type	A	B	C			
1484373-1	Receptacle	150	Q11	13C2	Front Release Front Remove	Electroless Nickel Plated, with ten 4-40 clinch nuts	Size 22 signal & quadrx contacts supplied loaded in inserts; post extension = .15 [3.81]. Contacts supplied in 13C2 positions 1, 2, 3, 7 and 8 only
1484374-1	Plug	150	Q11	13C2	Rear Release Rear Remove	Electroless Nickel Plated, no clinch nuts	Crimp style size 22 signal and quadrx contacts supplied unloaded. Contacts supplied for 13C2: positions 1, 2, 3, 7 and 8 only
1484406-1	Receptacle	Q11	Q11	68Q2	Front Release Front Remove	Electroless Nickel Plated, no clinch nuts	Size 22 signal & quadrx contacts supplied loaded in inserts; post extension = .25 [6.35]
1484407-1	Plug	Q11	Q11	68Q2	Rear Release Rear Remove	Electroless Nickel Plated, no clinch nuts	Crimp style size 22 signal and quadrx contacts supplied unloaded

ARINC Size 8 Quadrax Solder Contacts

Product Features

- Four molded-in-place size 24 contacts using SolderSleeve technology
- Minimum parts count (2) simplifies termination
- Inspectable solder connections
- Outer body keyed for proper mating alignment
- Rear release / rear removable contacts
- Electrical:
 - 100 ohm characteristic impedance
 - 10Base-T/100Base-T Ethernet data rate compatibility
- Standard extraction tool applies



Pin and Socket contact assemblies for use with 100 ohm quadaxial cable in data networking applications per ARINC 600, 664 & 763 specifications.

Materials

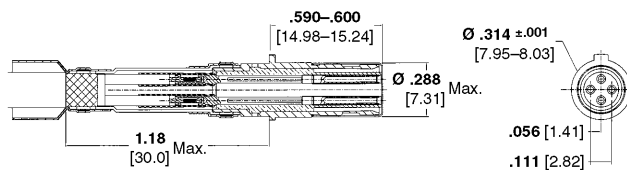
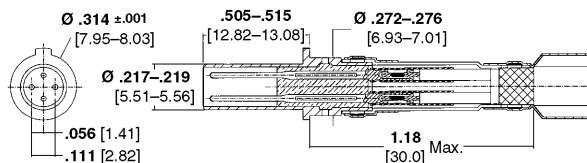
Contact — Beryllium copper alloy 173, gold plated
Solder — SN96 per ANSI/J-STD-006
Flux — Type ROL1 per ANSI/J-STD-004 or RMA per QQ-S-571
Insulation Tubing — Heat shrinkable, radiation crosslinked polyvinylidene fluoride
Dielectric — MFA

Installation

Installation procedure in ES-61442
 Holding fixture AD-1319-9 with adapter AT-1319-30

Product Offering

Part No	Type	Description
1604784	Pin	Kit including Pin Contact and Shield braid terminator
1604785	Socket	Kit including Socket Contact and Shield braid terminator



Traffic Alert and Collision Avoidance System (TCAS) Connectors and Mode S Transponder Connectors

Product Facts

Plug Connector

- AMP modified Size 1 coaxial contacts use standard military crimp tooling for reliable connections without the need for special tooling
- AMP plug allows repair or replacement of the coaxial contacts without connector disassembly. Two front-release captivated screws release the backup plate
- AMP connector conforms to the ARINC 600 specification, for connector intermateability and contact interchangeability

Receptacle Connector

- AMP modified Size 1 coaxial contact incorporates a SMA jack for easy assembly
- AMP connector conforms to the ARINC 600 specification, for connector intermateability and contact interchangeability

Connector	Description	Part Numbers	Descriptive Part Number
TCAS Plug	Semi-environmental w/o contacts	445717-1	NIC66 K 36 C 40 AA 1
	Semi-environmental w/contacts, w/o coaxial contacts	445717-2	NIC66 K 36 C 40 AA 0
	Non-environmental w/o contacts	445717-3	NIC66 K 36 A 40 AA 1
	Non-environmental w/contacts, w/o coaxial contacts	445717-4	NIC66 K 36 A 40 AA 0
	Non-environmental w/o contacts, (8) #6-32 clinch nuts	445717-5	NIC66 K 36 A 40 CD 1
	Semi-environmental w/o contacts, (10) #4-40 clinch nuts	445717-6	NIC66 K 36 A 40 SC 1
TCAS Receptacle	Front release w/o contacts	445718-1	NIC66 J 36 FA 40 FA 1
Mode S Plug	Non-environmental w/contacts, w/o coaxial contacts	208972-5	NIC66 H 23 A 01 AA 0
	Non-environmental w/o contacts	208972-7	NIC66 H 23 A 01 AA 1
	Environmental w/contacts, w/o coaxial contacts	208973-5	NIC66 H 23 B 01 AA 0
	Semi-environmental w/o contacts	208973-6	NIC66 H 23 C 01 AA 1
Mode S Receptacle	Front release w/o contacts	211991-1	NIC66 G 23 FA 01 FA 1

Note: All standard ARINC 600 shell modifications are available.

The TCAS System includes one mated pair of Size 3 ARINC 600 connectors, called TCAS Connectors. The plug connector is mounted in the rack, and the receptacle connector is in the avionics box.

The TCAS System also includes one or two mated pairs of Size 2 ARINC 600 Connectors, called Mode S Transponder Connectors. The plug connectors are mounted in the rack, and the receptacle connectors are in the avionics box.