Amphenol® ARINC 600
Rack and Panel Connectors

SL-379-3

Amphenol® Canada Corporation

Amphenol® ARINC 600
rack and panel connectors

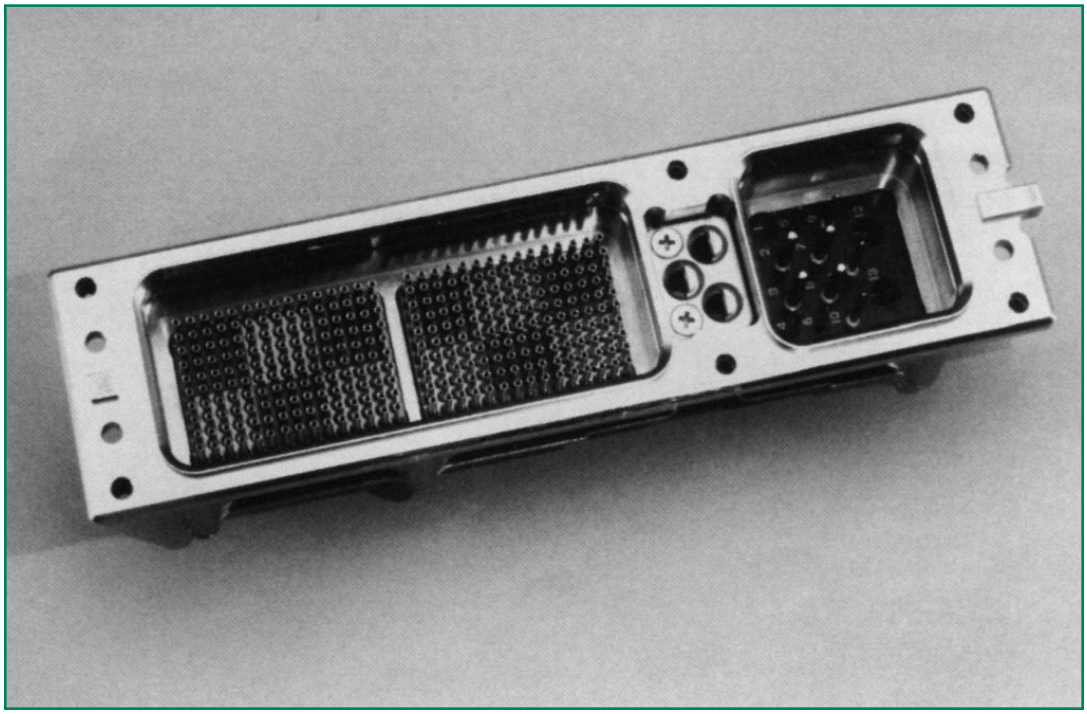
Introduction

ARINC 600 Connectors are a recognized standard rack and panel connector for aircraft applications. The ARINC 600 is the successor to the ARINC 404 for many of the new avionic designs. Compared to the ARINC 404, the ARINC 600 features lower mating force contacts, increased contact count and a front release, floating keying system.

Amphenol's extensive product offering will meet the most demanding needs of our customers. At the design-in stage, Amphenol's sales engineers will work with you to select a connector from our standard product line or coordinate the design of an application specific connector. Amphenol's ARINC 600 rack and panel connectors are designed to meet all relevant ARINC 600 connector specifications.

Amphenol ARINC 600 Connectors offer:

- Low insertion force contacts
- Both environmental and non-environmental versions
- Front removable keying posts
- Field replaceable inserts for size 22 and power contacts
- Up to 800 size 22 contact positions in one connector
- Crimp, coaxial, power, printed circuit, and wire wrap contacts
- Waveguide connections



Amphenol® ARINC 600
rack and panel connectors

Performance Specifications

Amphenol “A” Series Connectors are designed per ARINC 600 specifications and utilize pin and socket contacts manufactured in conformance with MIL-C-39029B.

Dielectric withstanding voltage (DWV):	1500Vrms 500 Vrms @ 50,000 ft. (15,240m)
Contact continuous current ratings:	Size 22 - 5.0A: Size 20 - 7.5A Size 16 - 13.0A; Size 12 - 23.0A
Contact resistance: Size 22: Size 20: Size 16: Size 12:	 8.0 milliohms, initial (max.) 11.0 milliohms, conditioned (max.) 7.0 milliohms, initial (max.) 8.5 milliohms,conditioned (max.) 3.5 milliohms, initial (max.) 5.0 milliohms, conditioned (max.) 2.0 milliohms, initial (max.) 2.5 milliohms, conditioned (max.)
Insulation resistance:	5.0 gigaohms min. at 500 VDC
Engagement/separation force:	Shell size 1 - 27 lbs. (120N) max. Shell size 2 - 60 lbs. (267N) max. Shell size 3 - 105 lbs. (467N) max.
Durability:	500 cycles min. - mating & unmating
Temperature range:	-65°C (-86° F) to +125°C (+275° F)
Fluid immersion (Class A only) resistance:	(1) Hydraulic fluid per MIL-H-5606 (2) Lubricating oil (synthetic) per MIL-L-23699 (3) 1:3 mix of isopropyl alcohol & mineral spirits per FED. SPECS. TT-I-735 &TT-T-291 respectively.
Vibration:	MIL-STD-1344, Method 2005.1, condition value E: random - 16.4G minimum severity: 8 hours in each of 3 mutually perpendicular planes with 100mA electrical load. No visible damage, breakage, cracking or loosening of parts and no discontinuities exceeding 1 microsecond.
Shock:	MIL-STD-1344, Method 2004.1, test condition A: Three shocks in each direction along each of 3 axes, mutually perpendicular to each other. No visible damage,breakage, cracking or loosening of parts and no discontinuities exceeding 1 microsecond.

Material Specifications

Shells:	Aluminum alloy per QQ-A 225/8, cadmium plate per QQ-P-416, Class 2, Type II, yellow Iridite or Die cast per QQ-A-591, with CHEM film per MIL-C-5541
Retaining plates:	Aluminum alloy per QQ-A-225/8, electroless nickel plated per MIL-C-26074
Polarizing keys:	Aluminum alloy per QQ-A-225/8, electroless nickel plated per MIL-C-26074
Insulator material:	Glass filled epoxy (Commercial) Glass filled diallyl phthalate per MIL-M-14, Type SDG-F (Military)
Inserts, grounded:	Aluminum alloy per QQ-A-225/8 electroless nickel plated per MIL-C-26074
Screws, lockwashers, washers:	Stainless steel - passivated
Contact bodies:	Copper alloy gold plated per MIL-G-45204, Type II, Grade C, Class 1
Contact retention clips:	Copper, gold plated per MIL-G-45204, Type II, Grade C, Class 1
Seals & grommets:	Silicone/fluorosilicone elastomer blend per MIL-R-25988
O-Rings:	Silicone/fluorosilicone rubber, colored blue
Waveguides:	Aluminum alloy per QQ-A-225/8, yellow Iridite finish
EMI springs:	Beryllium copper per QQ-C-533, electroless nickel plated per MIL-C-26074

ARINC 600
insert availability and identification

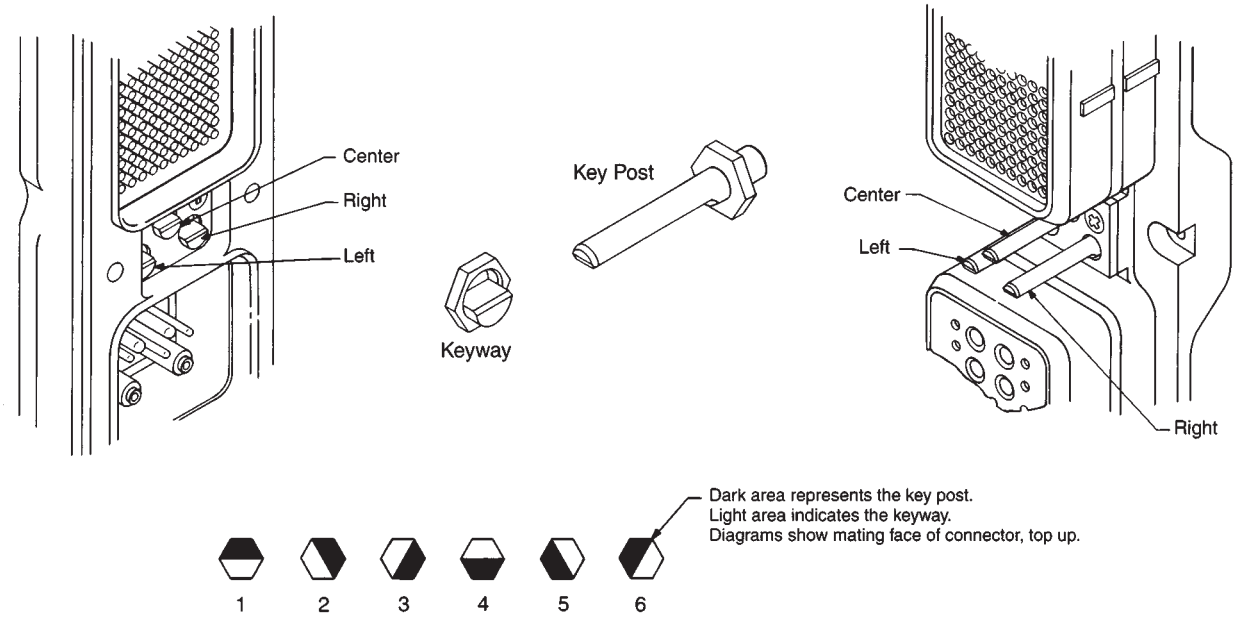
Insert Arrangement	Connector Class*	Contact		Plug	Receptacle
		Removable	Releasable	(X designates available)	
60	D	Rear	Rear	X	X
	F	Front	Front		X
	E	Rear	Rear	X	X
Blank	E&D	–	–	X	X
5W2	D	Rear	Rear	X	X
	E	Rear	Rear	X	X
Blank	E&D	–	–	X	X
150	D	Rear	Rear	X	X
	F	Front	Front		X
	E	Rear	Rear	X	X
71W1	D	Rear	Rear	X	X
	E	Rear	Rear	X	X
71W1A	D	Rear	Rear	X	X
	E	Rear	Rear	X	X
2W2	D	Rear	Rear	X	X
13W2	D	Rear	Rear	X	X
	E	Rear	Rear	X	X
Blank	E&D	–	–	X	X
100	D	Rear	Rear	X	X
	F	Front	Front		X
	E	Rear	Rear	X	X
Blank	E&D	–	–	X	X
85	D	–	–		
	F	Front	Front		
	D	Rear	Rear		
	E	–	–		
	F	Front	Front		
	E	Rear	Rear		
4W4	D	Rear	Rear	X	X
120T2	D	Rear	Rear	X	X
	F	Front	Front		
	E	Rear	Rear		
59	D	Rear	Rear		
	F	Front	Front		
	E	Rear	Rear		
10T10	D	Rear	Rear	X	X
	F	Front	Front		X
	E	Rear	Rear		
121	D	Rear	Rear	X	X
	F	Front	Front		X
	E	Rear	Rear		
6T6	D	Rear	Rear	X	X
	F	Front	Front		X
	D	Rear	Front		X
34	D	Rear	Rear	X	X

For availability of other arrangements, consult Amphenol Canada Corporation.

* E designates Environmental
D designates Non-Environmental

ARINC 600
keying and polarizing positions

Keying



		Part Number
Key post Kit	3 posts, plate, screws (for Plug)	AC-060020-P01
Keyway Kit	3 keyways, plate, screws (for Receptacle)	AC-060020-K01

The following chart lists the polarizing positions of available keying positions.
See how to order procedure on page 15 for incorporating these polarizing positions into part numbers.

	Plug			Receptacle		
Position	Left Post	Center Post	Right Post	Left Post	Center Post	Right Post
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

	Plug			Receptacle		
Position	Left Post	Center Post	Right Post	Left Post	Center Post	Right Post
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

	Plug			Receptacle		
Position	Left Post	Center Post	Right Post	Left Post	Center Post	Right Post
38	2	2	1	4	3	3
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

(Continues to next page)

ARINC 600
polarizing positions

The following chart continues (from page 4) listing the polarizing positions of available keying positions.
See how to order procedure on page 15 for incorporating these polarizing codes into part numbers.

	Plug			Receptacle		
Position	Left Post	Center Post	Right Post	Left Post	Center Post	Right Post
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
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

	Plug			Receptacle		
Position	Left Post	Center Post	Right Post	Left Post	Center Post	Right Post
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
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141	3	4	2	3	1	2
142	4	4	2	3	1	1
143	5	4	2	3	1	6
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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

	Plug			Receptacle		
Position	Left Post	Center Post	Right Post	Left Post	Center Post	Right Post
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
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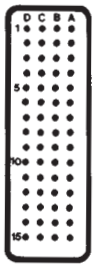
201	3	6	4	1	5	2
202	4	6	4	1	5	1
203	5	6	4	1	5	6
204	6	6	4	1	5	5
205	1	6	3	2	5	4
206	2	6	3	2	5	3
207	3	6	3	2	5	2
208	4	6	3	2	5	1
209	5	6	3	2	5	6
210	6	6	3	2	5	5
211	1	6	2	3	5	4
212	2	6	2	3	5	3
213	3	6	2	3	5	2
214	4	6	2	3	5	1
215	5	6	2	3	5	6
216	6	6	2	3	5	5

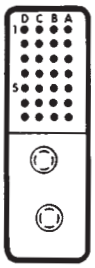
ARINC 600 Shell Size 1

Shell Size 1 Contact Layout Arrangements

Inserts for Cavities A & B, Shell Size 1



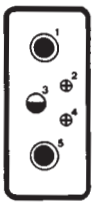
Insert 60
(60) Size 22 Contacts



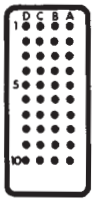
Insert 30T2
(28) Size 22 Contacts
(2) Size 8 Twinax Contacts

Blank
Signal Insert

Inserts for Cavity C, Shell Size 1

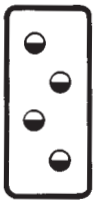


Insert 5W2
(2) Size 16 Contacts
(1) Size 12 Contact
(2) Size 5 Coax Contacts



Insert 40
(40) Size 22 Contacts

Blank
Power Insert

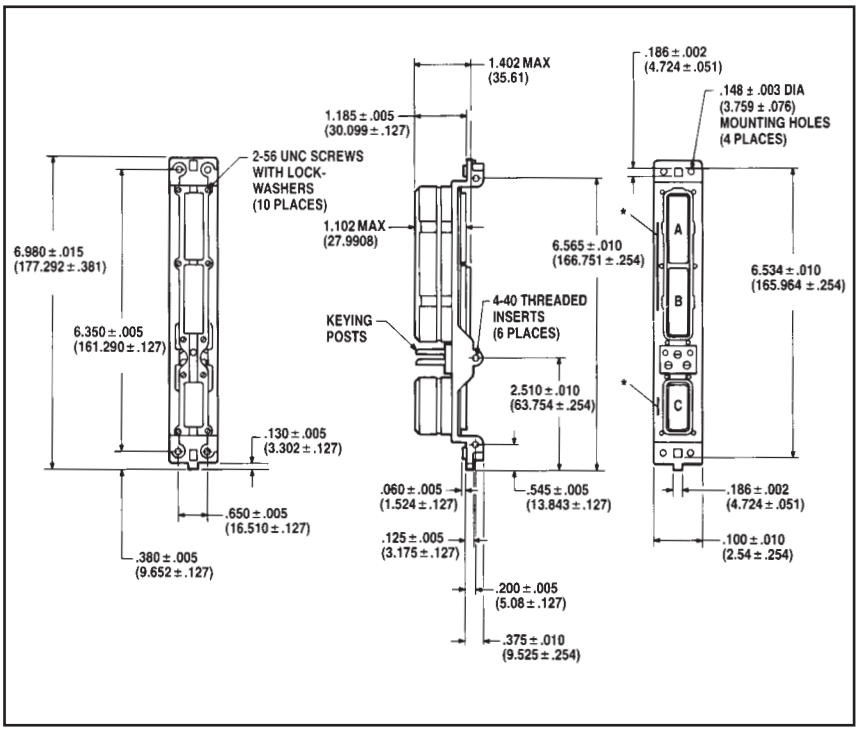


Insert 4
(4) Size 12 Contacts

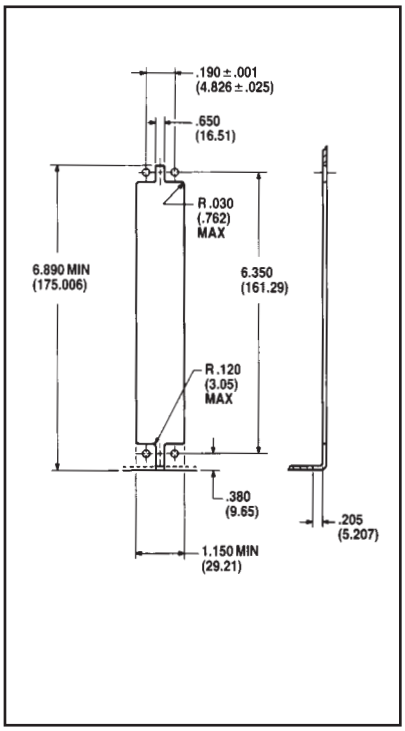
For availability of other arrangements, consult Amphenol Canada Corporation.
See pages 13-15 for how to order.

Shell Size 1 Contact Layout Arrangements

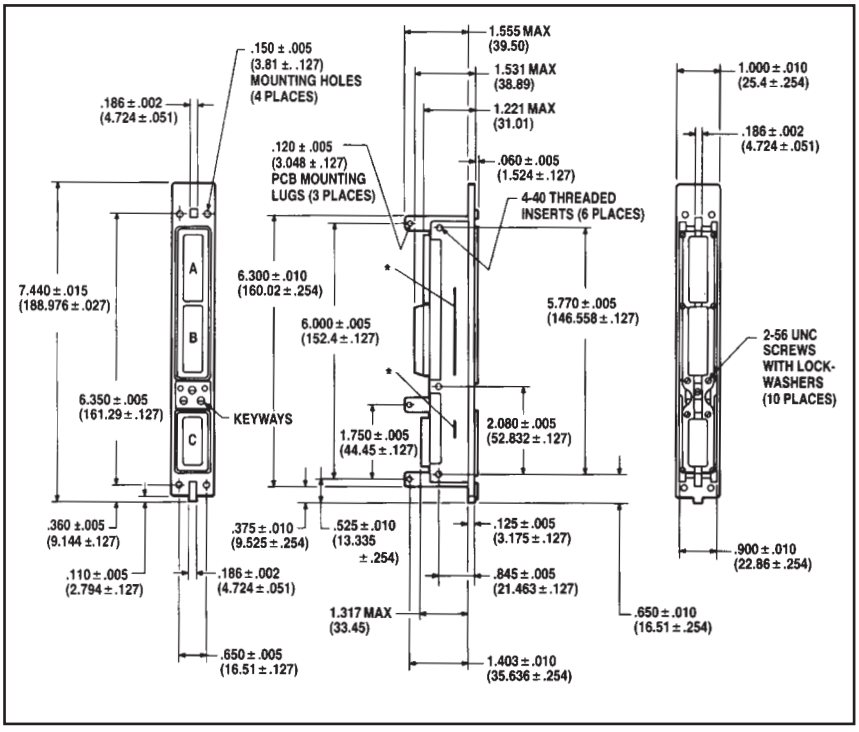
PLUG



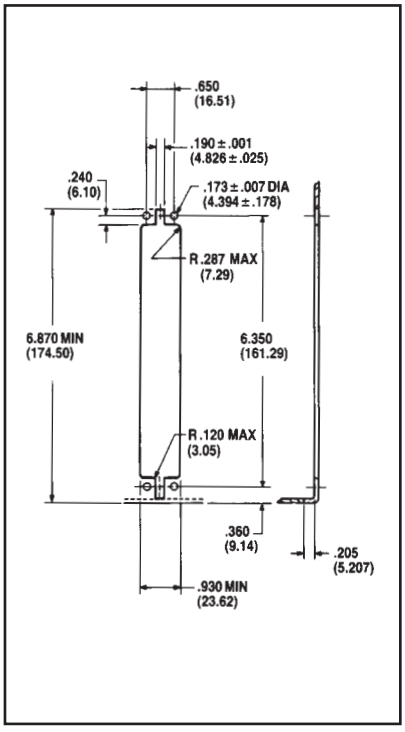
PANEL CUTOUT



RECEPTACLE



PANEL CUTOUT

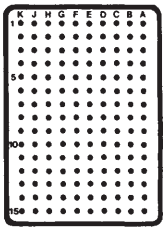


* Indicates area where "AMPHENOL", catalog number and date code will be ink stamped per 9-5788-3.
Dimensions are shown in inches, (mm).
All dimensions for reference only.

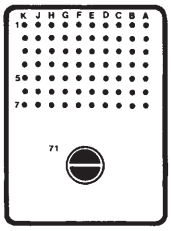
ARINC 600 Shell Size 2 & 3

Shell Size 2 & 3 Contact Layout Arrangements

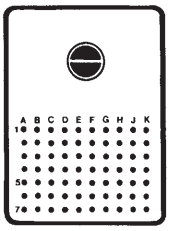
Inserts for Cavities A & B - Shell Size 2
Inserts for Cavities A, B, D & E - Shell Size 3



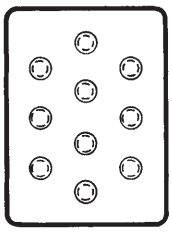
Insert 150
(150) Size 22 Contacts



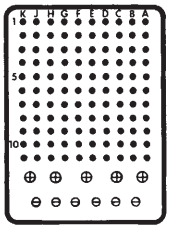
Insert 71W1
(70) Size 22 Contacts
(1) Size 1 Coax Contact



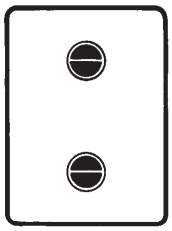
Insert 71W1A
(70) Size 22 Contacts
(1) Size 1 Coax Contact



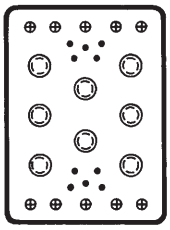
Insert 10T10
(10) Size 8 Twinax Contacts
Grounded



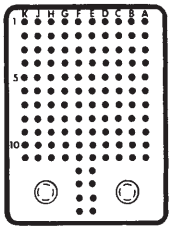
Insert 121
(110) Size 22 Contacts
(6) Size 20 Contacts
(5) Size 16 Contacts



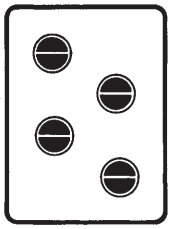
Insert 2W2
(2) Size 1 Coax Contacts



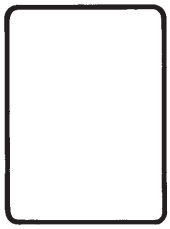
Insert 28T8
(10) Size 22 Contacts
(10) Size 16 Contacts
(8) Size 8 Twinax Contacts



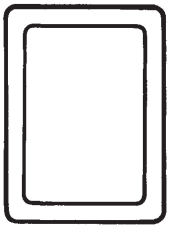
Insert 120T2
(118) Size 22 Contacts
(2) Size 8 Twinax Contacts



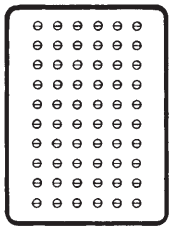
Insert 4W4
(4) Size 1 Coax Contacts



Blank
Signal Insert

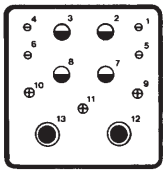


(WG)
Waveguide

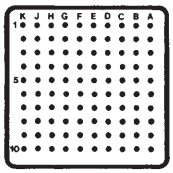


Insert 60
(60) Size 20 Contacts

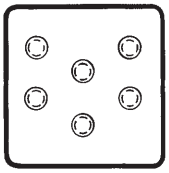
Inserts for Cavities C - Shell Size 2
Inserts for Cavities C & F - Shell Size 3



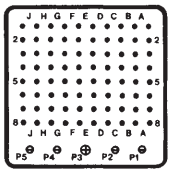
Insert 13W2
(4) Size 12 Contacts
(3) Size 16 Contacts
(4) Size 20 Contacts
(2) Size 5 Coax Contacts



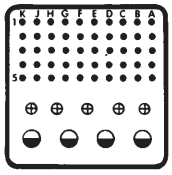
Insert 100
(100) Size 22 Contacts



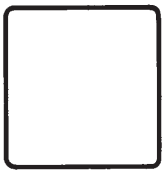
Insert 6T6
(6) Size 8 Twinax Contacts
Grounded



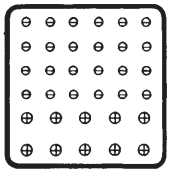
Insert 85
(80) Size 22 Contacts
(4) Size 20 Contacts
(1) Size 16 Contact



Insert 59
(50) Size 22 Contacts
(5) Size 16 Contacts
(4) Size 12 Contacts



Blank
Power Insert



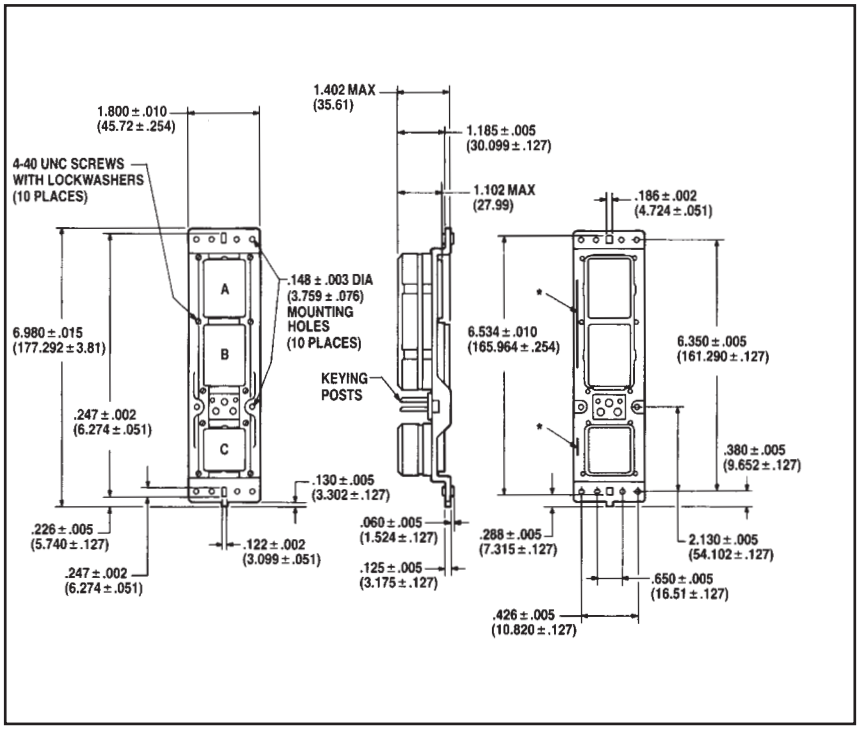
Insert 34
(24) Size 20 Contacts
(10) Size 16 Contacts

For availability of other arrangements, consult factory.
See pages 13-15 for how to order.

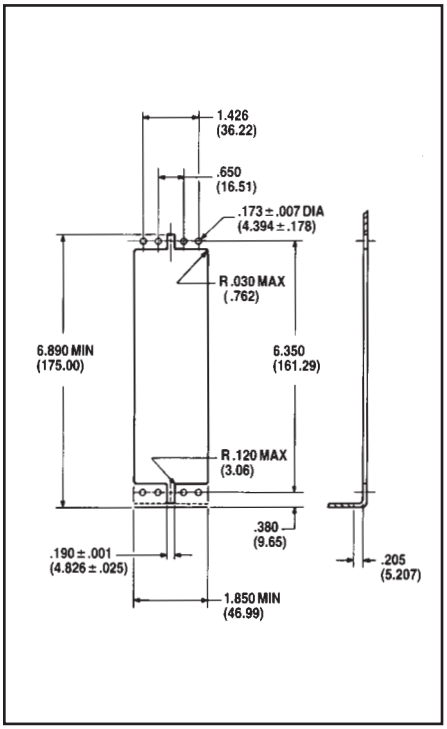
ARINC 600 Shell Size 2

Shell Size 2 Dimensional Drawings

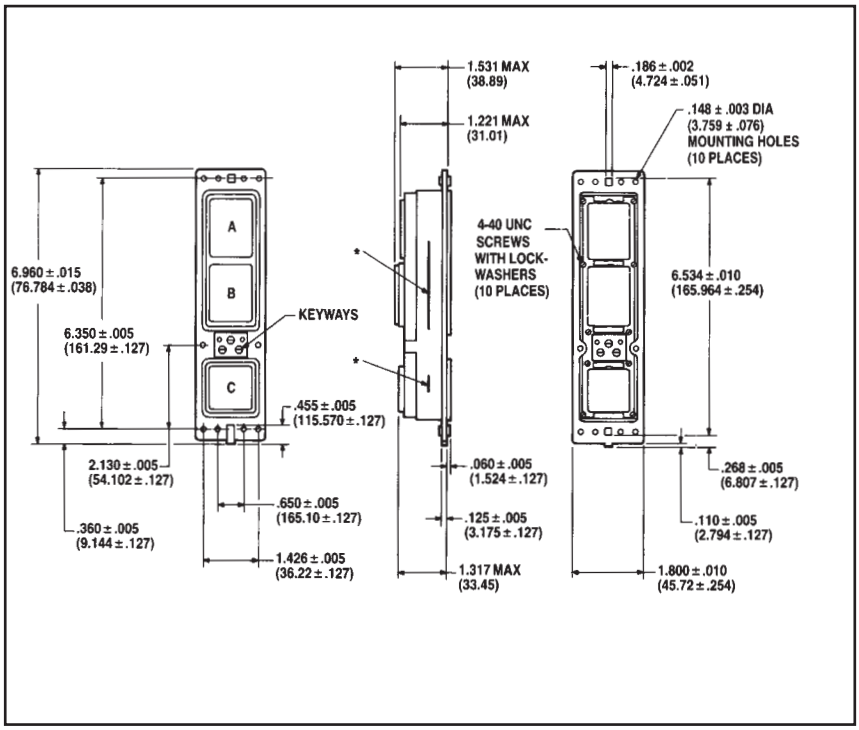
PLUG



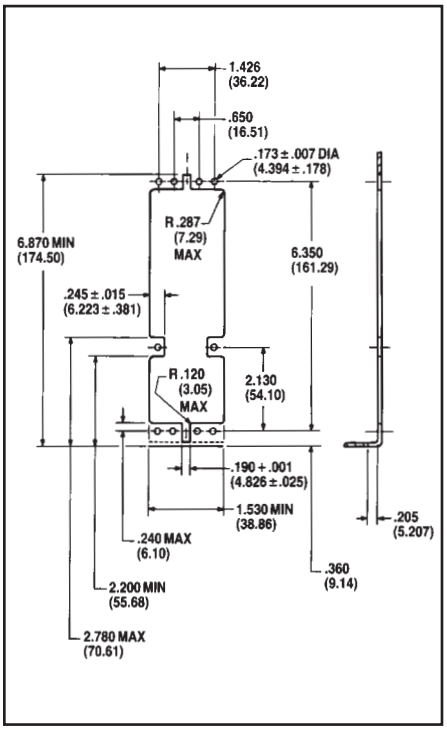
PANEL CUTOUT



RECEPTACLE



PANEL CUTOUT

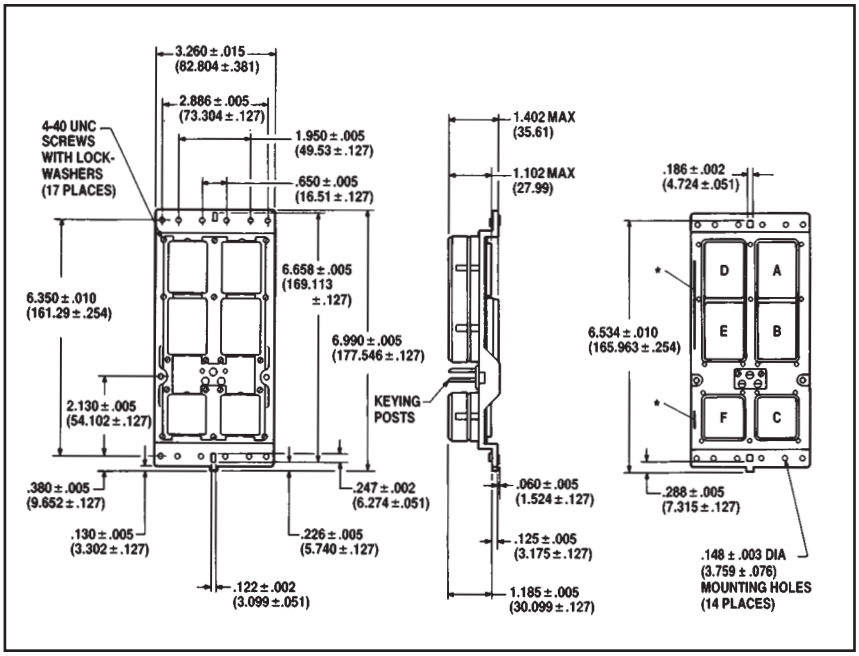


* Indicates area where "AMPHENOL", catalog number and date code will be ink stamped per 9-5788-3.
Dimensions are shown in inches, (mm).
All dimensions for reference only.

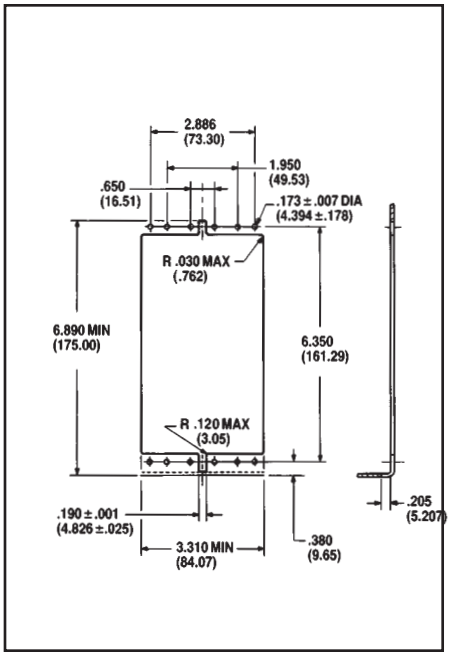
ARINC 600 Shell Size 3

Shell Size 3 Dimensional Drawings

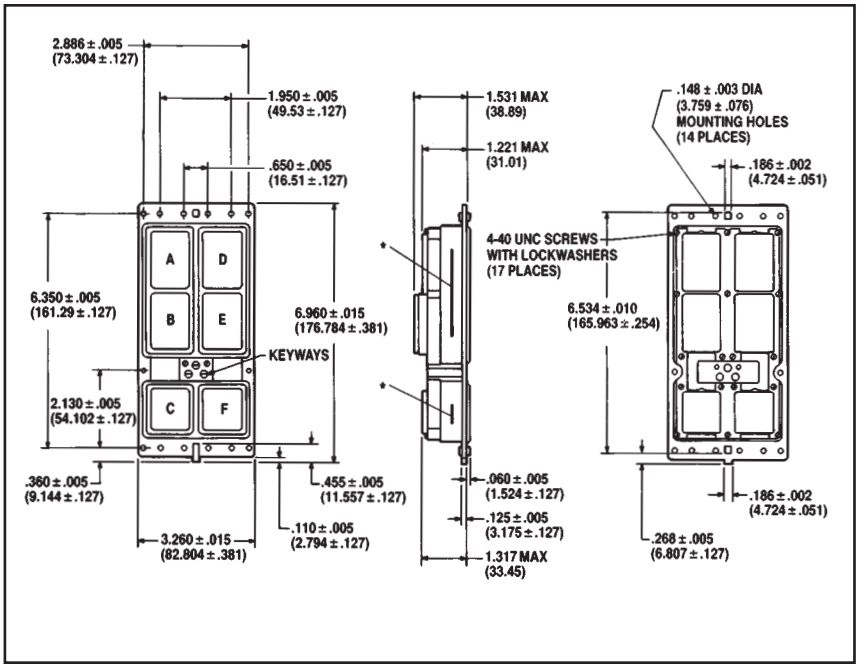
PLUG



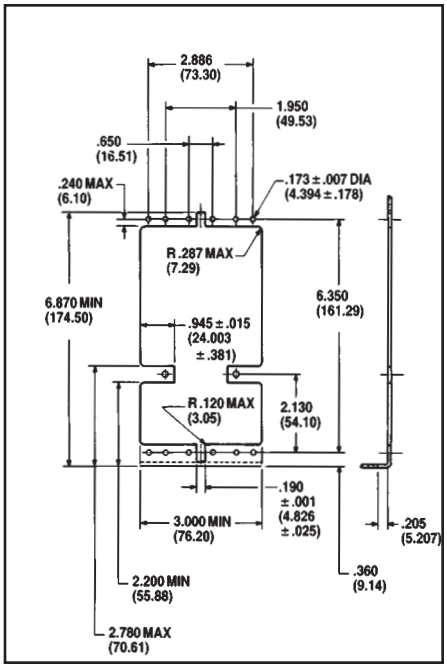
PANEL CUTOUT



RECEPTACLE



PANEL CUTOUT



* Indicates area where "AMPHENOL", catalog number and date code will be ink stamped per 9-5788-3.
Dimensions are shown in inches, (mm).
All dimensions for reference only.

ARINC 600
contact data

Contacts for Amphenol® ARINC 600 Rack and Panel Connectors can be ordered separately.
Use part numbers shown in the charts below for ordering contacts and applicable tools.
For further information consult Amphenol Canada Corporation.

ARINC 600 Power/Signal Contacts, Rear Release

Contact Size/Type	Pin		Socket		Installation Tool	Removal Tool	Crimping Tool	Positioner	Wire		
	Military Part Number	Amphenol Part Number	Military Part Number	Amphenol Part Number					AWG	Insul. Dia. Max.	Strip Length
22 Standard	M39029/93-537	AC-772222-301	M39029/94-601	AC-782222-301	M81969/1-01	M81969/1-01	M22520/2-01	M22520/2-23	26 24 22	.054 (1.4)	.120 ±.010 (3.048 ±.254)
22 Alumel	–	AC-772222-79A	–	AC-782222-79A							
22 Chromel	–	AC-772222-79C	–	AC-782222-79C							
22 Constantan	–	AC-772222-79K	–	AC-782222-79K							
20 Standard	M39029/93-538	AC-772020-302	M39029/94-602	AC-782020-302	M81969/1-02	M81969/1-02	M22520/2-01 or M22520/7-02	M22520/2-08 or M22520/7-02	22 20	.071 (1.8)	.157 ±.010 (3.988 ±.254)
16 Standard	M39029/93-539	AC-771616-303	M39029/94-603	AC-781616-303	M81969/1-03	M81969/1-03	M22520/1-01 or M22520/7-02	M22520/1-02 or M22520/7-03 (Blue)	20 18 16	.103 (2.6)	.250 ±.020 (6.350 ±.508)
16 Sml. Barrel	–	AC-771620-302	–	AC-781620-302							
12 Standard	M39029/93-540	AC-771212-304	M39029/94-604	AC-781212-304	–	M81969/28-02	M22520/1-01	M22520/1-11	14 12	.135 (3.4)	.250 ±.020 (6.350 ±.508)
12 Sml. Barrel	–	AC-771216-304	–	AC-781216-304							

~~Amphenol part numbers meet MIL specifications, but are not MIL qualified. Military part numbers are for reference only.~~

ARINC 600 Wire Wrap Socket Contacts, Front Release

Contact Size/Type	Amphenol Part Number
22 Socket - Wire Wrap (1) L = .250 (6.35)	AC-782291-801
22 Socket - Wire Wrap (2) L = .375 (9.52)	AC-782292-801
22 Socket - Wire Wrap (3) L = .500 (12.7)	AC-782293-801
22 Socket - Wire Wrap (3) L = .641 (16.3)	AC-782294-801

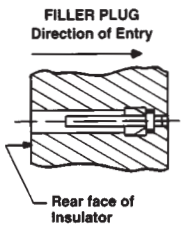
ARINC 600 PC Tail Socket Contacts, Front Release

Contact Size/Type	Amphenol Part Number
22 Socket - PC Tail .115 (2.92) (Nom.) Post Extension	AC-782206-801
22 Socket- PC Tail .150 (3.81) (Nom.) Post Extension	AC-782202-801
22 Socket - PC Tail .250 (6.35) (Nom.) Post Extension	AC-782200-801
22 Socket - PC Tail .375 (9.52) (Nom.) Post Extension	AC-782203-801
22 Socket - PC Tail .500 (12.70) (Nom.) Post Extension	AC-782204-801

Dimensions are shown in inches, (mm).

Filler Plugs

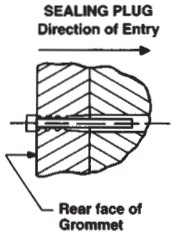
Contact Cavity Size	Amphenol Part Numbers	Color
22	AC-660022-701	Black
20	AC-660020-701	Red
16	AC-660016-701	Blue
12	AC-660012-701	Yellow
8 Coax	AC-660008-701	Red
5 Coax (Plug)	AC-660005-701	White
5 Coax (Recept.)	AC-660004-701	White



Note: Filler plugs are for non-environmental connectors.

Sealing Plugs

Contact Cavity Size	Amphenol Part Numbers	Color
22	AC-660022-801	Black
20	AC-660020-801	Red
16	AC-660016-801	Blue
12	AC-660012-801	Yellow
8 Coax	AC-660008-801	Red



ARINC 600

contact data, cont., protective covers, O-rings

ARINC 600 Coax and Concentric Twinax Contacts

Contact Type/ Wire Gage	Pin Amphenol Part Number	Socket Amphenol Part Number	Installation Tool	Removal Tool	Crimping Tool	Positioner
Coax - Size 1 SMA, 71W1	AC-661003-201	AC-661001-201		M81969/XX**	M22520/XX**(Inner) M22520/XX** (Outer)	M22520/XX** (Inner) M22520/XX** (Outer)
Coax - Size 5, RG 58	AC-665001-615	AC-665002-615			M22520/2-01 (Inner) M22520/5-01 (Outer)	M22520/XX** (Inner) M22520/5-45A
Coax - Size 5, RG 316	AC-665003-615	AC-665004-615				
Concentric Triax - Size 8, Pin, FR-RR	AC-668171-762		M81969/14-06	M8169/14-06	M22520/2-01 (Inner) M22520/5-01 (Intermediate & Outer)	M22520/2-37 (Inner) 22520/5-200 (Intermediate & Outer)
Concentric Triax - Size 8, Pin, RR-RR	AC-668171-614					
Concentric Triax - Size 8, Socket, RR-RR		AC-668181-614				
Concentric Triax - Size 8, Socket, FR-FR		AC-668189-800				

** To complete order number consult Amphenol Canada Corporation.
For installation instructions for ARINC 600 coaxial contacts, see L-2078.

Consult factory for part #s.

Note: FR-RR designates Front Release, Rear Removable
RR-RR designates Rear Release, Rear Removable
FR-FR designates Front Release, Front Removable

Protective Covers

Conductive covers for ARINC 600 connectors can be ordered from charts below. These covers are designed to protect equipment against the risks of electrostatic discharge, and are made of self-extinguishing polyethylene with graphite filler. For availability of clear, non-conductive covers consult Amphenol Canada Corporation.

Receptacle Conductive Covers

Shell Size 1	Combination - Signal and Block Cover AC-200000-911	Signal Block Cover only AC-2000000-911A
		Power Block Cover only AC-200000-911C
Shell Size 2 & 3	Combination - Signal and Block Cover AC-200000-912	Signal Block Cover only AC-200000-912A
		Power Block Cover only AC-200000-912C

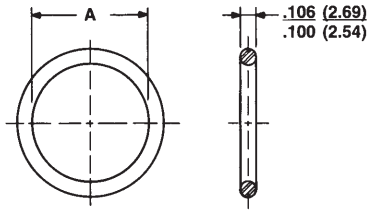
Plug Conductive Covers

Shell Size 1	Combination - Signal and Block Cover AC-200000-909	Signal Block Cover only AC-2000000-909A
		Power Block Cover only AC-200000-909C
Shell Size 2 & 3	Combination - Signal and Block Cover AC-200000-910	Signal Block Cover only AC-200000-910A
		Power Block Cover only AC-200000-910C

O-Rings

For environmentally sealed connector style, Class E.

Used on Shell/Cavity	Military Part Number	Amphenol Part Number	A Diameter
Shell Size 1, Cavity C	M25988/3-119	AC-206906-119	.934 (23.72) .914 (23.22)
Shell Sizes 2 & 3, Cavity C	M25988/3-124	AC-206906-124	1.249 (31.72) 1.225 (31.12)
Shell Size 1, Cavities A & B	M25988/3-134	AC-206906-134	1.877 (47.68) 1.847 (46.91)
Shell Sizes 2 & 3, Cavities A & B	M25988/3-142	AC-206906-142	2.382 (60.50) 2.342 (59.49)



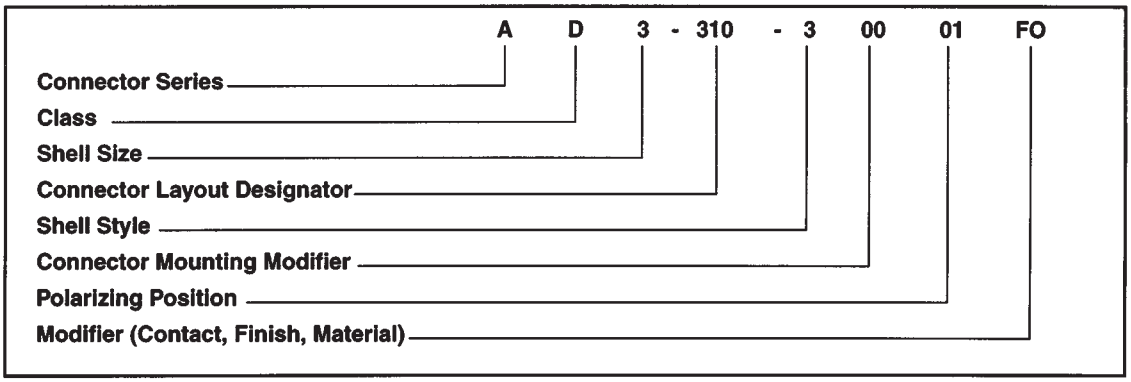
Dimensions are shown in inches, (mm).

To order separate waveguides for ARINC 600 Connectors, consult Amphenol Canada Corporation.

ARINC 600
how to order

Amphenol "A" Series Connectors

To more easily illustrate ordering procedure for ARINC 600, "A" Series connectors, part number AD3-310-30001FO is shown as follows:



Connector Series
A designates Amphenol ARINC 600

Class
D - Non-environmental (rear release, crimp contacts)
E - Environmental (rear release, crimp contacts)
F - Non-environmental (front release, solder and wrap post #22 contacts, rear release all others).
C - Same as E, less O-rings on plug side.
S - Environmental (O-ring is used to seal between connector shell and insulators) with rear release, crimp contacts.
Y - All positions front release (except coax/triax)
J - All positions front release (all sizes)

Shell Size
1 - Max. contact capacity - 160
2 - Max. contact capacity - 400
3 - Max. contact capacity - 800

Connector Layout Designator
Common available ARINC 600 configurations are listed below for shell sizes 1 and 2, and on the next page for shell size 3. The connector layout designator number represents the total number of contacts within the layout including waveguides. Consult Amphenol Canada Corporation for further availability of insert combinations.

Connector Layout Designator Number	Shell Size	Shell Cavity Identification		
		A	B	C
-005	1	–	–	5W2
-060	1	–	60	–
A060	1	60	–	–
-065	1	–	60	5W2
A065	1	60	–	5W2
-120	1	60	60	–
-125	1	60	60	5W2
-013	2	–	–	13W2
-017	2	2W2	2W2	13W2
-071	2	–	71W1	–
A071	2	71W1	–	–
-085	2	Waveguide	71W1	13W2
A085	2	71W1	Waveguide	13W2
-86M	2	2W2	71W1A	13W2
-093	2	4W4	4W4	85
-100	2	–	–	100
-137	2	121	10T10	6T6
-137A	2	4W4	120T2	13W2
T141	2	120T2	10T10	13W2
-142	2	71W1	71W1	–
155C	2	71W1A	71W1	13W2
155M	2	71W1A	71W1A	13W2
-155	2	71W1	71W1	13W2

Connector Layout Designator Number	Shell Size	Shell Cavity Identification		
		A	B	C
158M	2	2W2	71W1A	85
-163	2	–	150	13W2
A163	2	150	–	13W2
-164	2	150	Waveguide	13W2
A164	2	Waveguide	150	13W2
165M	2	150	2W2	13W2
A165	2	2W2	150	13W2
-167	2	4W4	150	13W2
-173	2	150	10T10	13W2
-205	2	71W1	121	13W2
-234	2	150	71W1	13W2
A234	2	71W1	150	13W2
-244	2	150	60	34
-246	2	120T2	120T2	6T6
-248	2	121	121	6T6
-250	2	–	150	100
250A	2	150	Blank	100
-300	2	150	150	–
-306	2	150	150	6T6
-313	2	150	150	13W2
-370	2	150	120T2	100
-400	2	150	150	100

(Chart continues with shell size 3 configurations on next page)

ARINC 600
how to order, cont.

Connector Layout Designator, cont.
Common available ARINC 600 configurations are listed below for shell size 3. The connector layout designator number represents the total number of contacts within the layout including waveguides. Consult Amphenol Canada Corporation for further availability of Insert combinations.

Connector Layout Designator Number	Shell Size	Shell Cavity Identification					
		A	B	C	D	E	F
-021	3	4W4	4W4	13W2	Blank	–	–
-026	3	–	–	13W2	–	–	13W2
113	3	–	–	100	–	–	13W2
A113	3	–	–	13W2	–	–	100
-114	3	–	–	–	–	–	–
-137A	3	4W4	120T2	13W2	–	–	–
-231	3	121	10T10	100	–	–	–
269M	3	2W2	2W2	13W2	2W2	150	100
271M	3	2W2	2W2	13W2	4W4	150	100
271C	3	4W4	4W4	13W2	Blank	150	100
-284	3	71W1	71W1	–	71W1	71W1	–
-310	3	71W1	71W1	13W2	71W1	71W1	13W2
-313A	3	150	Blank	13W2	150	Blank	Blank
-326	3	–	150	13W2	–	150	13W2
330M	3	2W2	2W2	13W2	150	150	13W2
A330	3	150	150	13W2	2W2	2W2	13W2
-444	3	150	121	13W2	150	10T10	Blank
-450	3	150	150	6T6	121	10T10	13W2
-450A	3	150	150	–	121	–	13W2
-454	3	150	150	Blank	121	Blank	13W2
-496	3	121	121	6T6	121	121	6T6
-510	3	121	121	13W2	121	121	13W2
-537	3	4W4	120T2	100	150	150	13W2
-552	3	121	121	34	121	121	34
0559	3	10T10	120T2	100	150	120T2	59
-600	3	150	150	–	150	150	–
-620	3	150	60	100	150	60	100
-626	3	150	150	13W2	150	150	13W2
0699	3	150	120T2	100	150	120T2	59
-713	3	150	150	100	150	150	13W2
A713	3	150	150	13W2	150	150	100
-734	3	150	150	100	150	150	34
-742	3	121	150	100	121	150	100
-800	3	150	150	100	150	150	100

Shell Style
3 - Plug (rack side)
4 - Receptacle (box side)

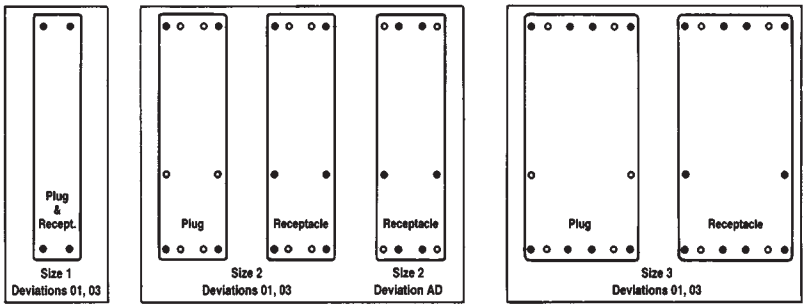
ARINC 600
how to order, cont.

Connector Mounting Modifier

00 - Standard design, .148 dia. holes
01 - With #6-32 ESNA (#12 NCFMA2-62) clinch nuts (see chart)
02 - Size 1 receptacle only - less 3 printed circuit board mounting lugs
03 - With #4-40 ESNA (#22 NCFMA2-40) clinch nuts (see chart)

Connector Size	Number of Clinch Nuts	
	Plug	Receptacle
1	4	4
2	4	6
3	8	10

Mounting Modifiers with Clinch Nuts



Darkened areas in diagrams indicate clinch nut positions.

Connector Mounting Modifier, cont

08 - Size 2 and 3 plug and receptacle only with #4-40 ESNA (#22 NCFMA2-40) clinch nuts (all mounting holes)
09 - Size 2 and 3 plug and receptacle only with #6-32 ESNA (#12 NCFMA2-62) clinch nuts (all mounting holes)
10 - Size 2 connectors with #4-40 ESNA (#22NCFMA2-40) clinch nuts installed in two mounting holes between cavities B and C

11 - Size 2 connectors with #6-32 ESNA (#12NCFMA2-62) clinch nuts installed in two mounting holes between cavities B and C
17 - Nickel and EMI, std. .148 holes
18 - Nickel and EMI with #6-32 clinch nuts (09)
23 - With floating eyelets (.048 min. radial float) 4 corner holes per connector
89 - Nickel plating, std. .148 holes
AA - 01 MOD and Nickel plated
AB - Nickel plated and #4-40 clinch nuts all holes (08 & 09)
AC - Nickel plated and #6-32 clinch nuts (09)
AD - #4-40 clinch nuts in size 2 shell (6 places as shown)
Consult factory if other modifications are required.

Polarizing Position

01 thru 216 (per ARINC 600) See listing of available keying positions, pages 4 and 5.
00 - Polarizing posts or keys not installed but supplied with connector

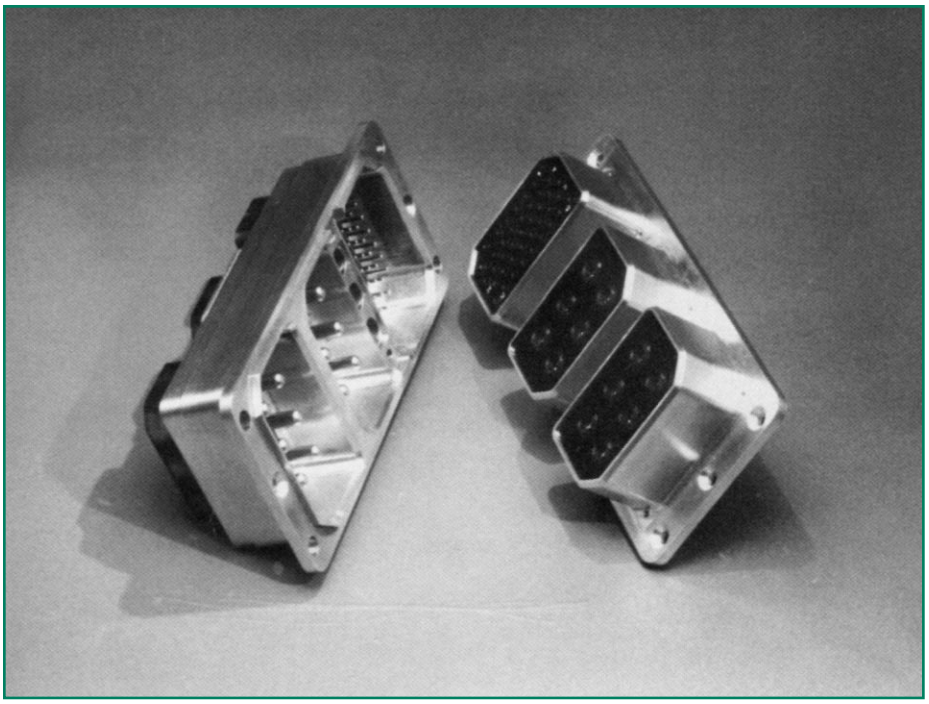
Modifier (Contact, Finish, Material)*

OO - Rear release, crimp, signal and power contacts supplied with connector (when applicable)
FO - Contacts not supplied with connector (FO not stamped on connector)
~~FR - Front release all contacts~~
SA - Front release .025 (0.63) D. x .150 (3.81) solder post and crimp, rear release power contacts (when applicable) supplied installed in connector
SB - Front release .025 (0.63) D. x .250 (6.35) solder post and crimp, rear release power contacts (when applicable) supplied installed in connector
SC - Front release .025 (0.63) D. x .375 (9.53) solder post and crimp, rear release power contacts (when applicable) supplied installed in connector
SD - Front release .025 (0.63) D. x .500 (12.7) solder post and crimp, rear release power contacts (when applicable) supplied installed in connector
WA- Front release .025 (0.63) Sq. x .250 (6.35) (1 wrap) wrap post and crimp, rear release power contacts (when applicable) supplied installed in connector
WB - Front release .025 (0.63) Sq. x .375 (9.53) (2 wraps) wrap post and crimp, rear release power contacts (when applicable) supplied installed in connector
WC - Front release .025 (0.63) Sq. x .500 (12.7) (3 wraps) wrap post and crimp, rear release power contacts (when applicable) supplied installed in connector
WD - Front release .025 (0.64) Sq. x .641 (16.28) (3 wraps) wrap post and crimp, rear release power contacts (when applicable) supplied installed in connector

* All modifiers (contact, finish, material) at end of part number are alpha (not numerical).
NOTE: Coaxial Contacts to be ordered separately.
Dimensions are shown in inches, (mm).
Dimensions subject to change.

Additional ARINC Products

ARINC 404



ARINC 404 Series

Amphenol "AR" Series Rack and Panel Connectors meet or exceed the requirements of MIL-C-81659 and ARINC Specification 404. The "AR" Series is a multi-purposed connector used in aerospace, military, and computer periphery applications.

Design features include:

- Five shell styles with up to four insert cavities
- Inserts accommodate signal and power contacts, sizes 12, 16, 20 and 22
- Coaxial contacts available in sizes 5, 9 and 11
- Up to 424 contacts in one connector
- Non-environmental and environmentally sealed connectors offered
- Transient protection design available

For detailed information on ARINC 404 Connectors ask for brochure SL-378-3.

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