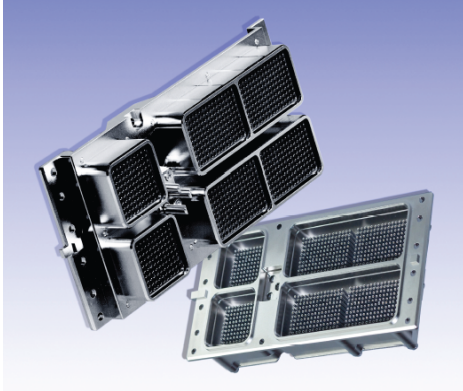


# ARinc 600 Series

## Rack & Panel Rectangular Connector



### Brief introduction

- Good performance of environment resistance
- 216 kinds of anti-misoperation styles
- High density up to 800 signal contacts
- Low insertion force contacts
- Mounting panel are insulator modules for free collocation.
- Apply to aviation and military equipment cabinet
- Accord to ARINC600 specification.

- Contacts: signal, power, coaxial, tripe coaxial, opticalfiber 2 pin differential, 4 pin differential
- Standard: Arinc600

### Specification

#### 1. Material and surface treatment

Item	Material	Plating
Shell	Aluminum alloy	----
insulator	PPS plastic	----
Contact	Copper alloy	Gold plating
Encapsulant & sealed ring	Silicon rubber	----

#### 2. Mechanical properties

- Durability: 500 times
- Vibrations: 10Hz~2000Hz, 196m/s<sup>2</sup>
- Shock: 490m/s<sup>2</sup>
- Insertion and extraction force:
  - type 1 connector: ≤ 120N;
  - type 2 connector: ≤ 267N;
  - type 3 connector: ≤ 467N;

#### 3. Electric properties

- Dielectric withstanding voltage:

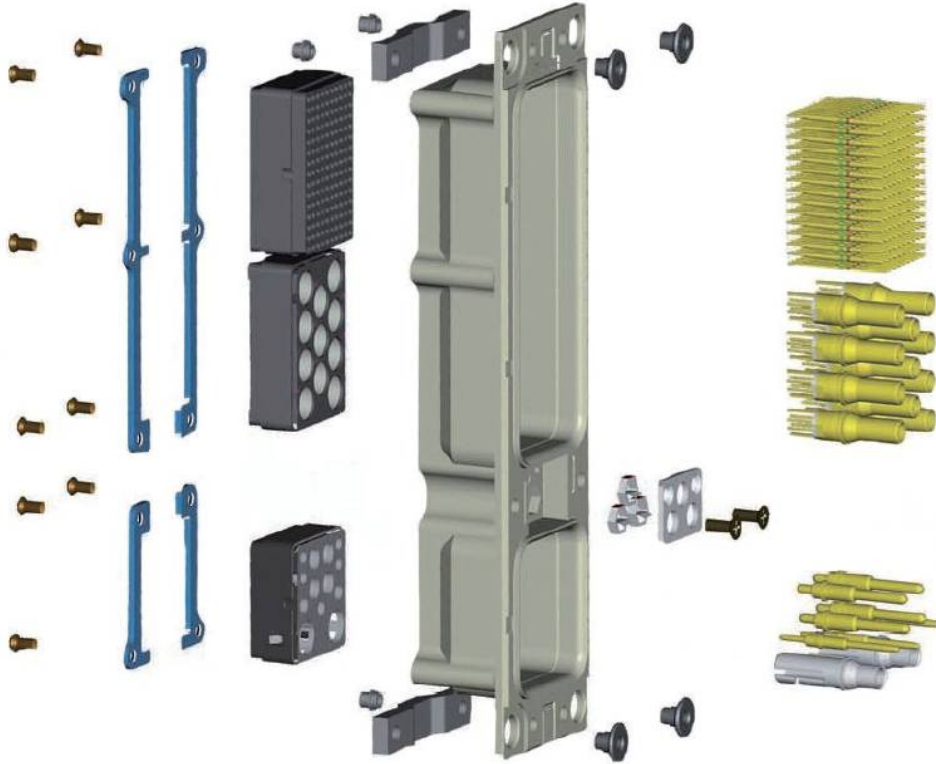
Item	Mated	Unmated
Sea level	1500V	1500V
15000m	500V	500

- Insulation resistance: ≥ 5000M $\Omega$
- Voltage rating: 500V max  
125V at 21000m
- Resistance to salt spray: 96h
- Current rating:

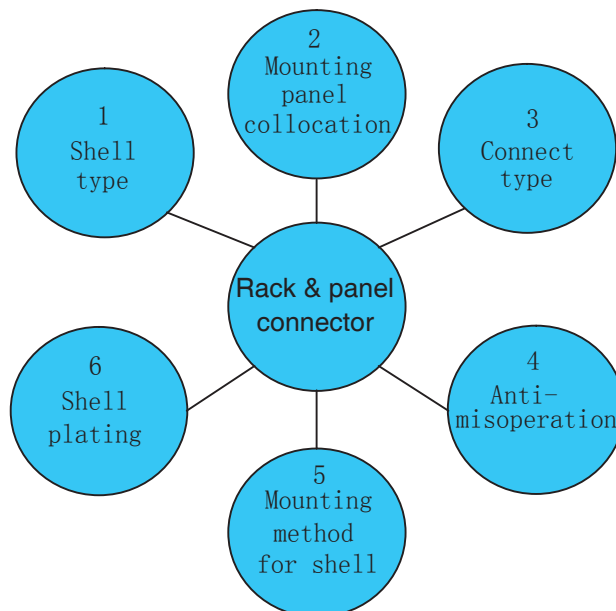
Contact Spec.	Cable type	Current Rating	(A) Max Voltage Drop(mV)
#22	22	5	40
	24	3	30
	26	2	25
#20	20	7.5	55
	22	5	40
	24	3	30
#16	16	13	50
#12	12	23	45



## R042 Collocation Components



## Options of product



## Inserts arrangement code of shell size 1&2

Insert Code	Shell Size	Cavity A	Cavity B	Cavity C	Insert Code	Shell Size	Cavity A	Cavity B	Cavity C
-005	1	-	-	5W2	158M	2	2W2	71W1A	85
-060	1	-	60	-	-163	2	-	150	13W2
A060	1	60	-	-	A163	2	150	-	13W2
-065	1	-	60	5W2	-164	2	150	Waveguide	13W2
A065	1	60	-	5W2	A164	2	Waveguide	150	13W2
-120	1	60	60	-	165M	2	150	2W2	13W2
-125	1	60	60	5W2	A165	2	2W2	150	13W2
-013	2	-	-	13W2	-167	2	4W4	150	13W2
-017	2	2W2	2W2	13W2	-173	2	150	10T10	13W2
-071	2	-	71W1	-	-205	2	71W1	121	13W2
A071	2	71W1	-	-	-234	2	150	71W1	13W2
-085	2	Waveguide	71W1	13W2	A234	2	71W1	150	13W2
A085	2	71W1	Waveguide	13W2	-244	2	150	60	34
-86M	2	2W2	71W1A	13W2	-246	2	120T2	120T2	6T6
-093	2	4W4	4W4	85	-248	2	121	121	6T6
-100	2	-	-	100	-250	2	-	150	100
-137	2	121	10T10	6T6	A250	2	150	blank	100
-137A	2	4W4	120T2	13W2	-300	2	150	150	-
T141	2	120T2	10T10	13W2	-306	2	150	150	6T6
-142	2	71W1	71W1	-	-313	2	150	150	13W2
155C	2	71W1A	71W1	13W2	-370	2	150	120T2	100
155M	2	71W1A	71W1A	13W2	-400	2	150	150	100
-155	2	71W1	71W1	13W2					

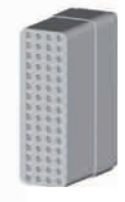

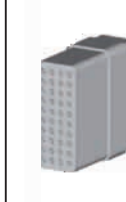


### Inserts arrangement code of shell size 3

Insert Code	Shell Size	Cavity A	Cavity B	Cavity C	Cavity D	Cavity E	Cavity F
-021	3	4W4	4W4	13W2	blank	-	-
-026	3	-	-	13W2	-	-	13W2
-113	3	-	-	100	-	-	13W2
-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	150	150	13W2	150	150	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	100	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

Notes: please contact us if the special arrangement is demanded. The above is part of the regular on

## Inserts Layout

### ■ Shell Size 1









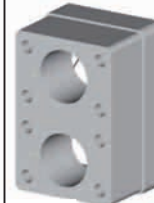

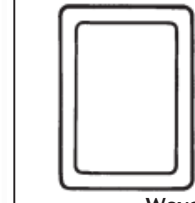
Cavity A & B	Cavity C
<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p><b>60 pts</b> 60 #22</p> </div> <div style="text-align: center;">  <p><b>Blank</b> Signal Insert</p> </div> </div>	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p><b>40 pts</b> 40 #22</p> </div> <div style="text-align: center;">  <p><b>5W2</b> 2 #16 1 #12 2 #5</p> </div> <div style="text-align: center;">  <p><b>Blank</b> Power Insert</p> </div> </div>

### ■ Shell Size 2 & 3

Cavity C & F

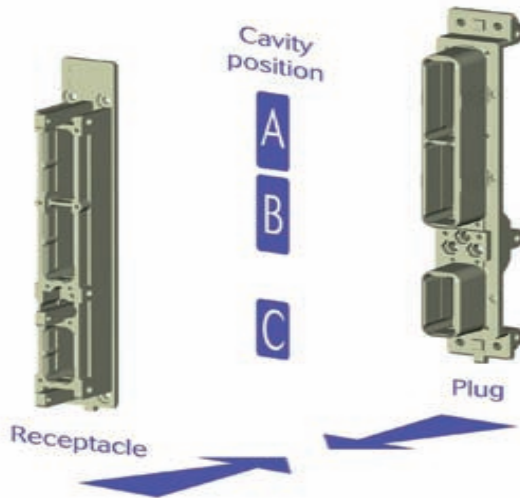
 <p><b>100</b> 100 #22</p>	 <p><b>85</b> 80 #22 4 #20 1 #16</p>	 <p><b>13W2</b> 4 #20 3 #16 4 #12 2 #8</p>	 <p><b>6T6</b> 6 #8</p>	 <p><b>Blank</b> Power Insert</p>
---	---	---	---	--

Cavity A ,B, D&E

 <p><b>150</b> 150 #22</p>	 <p><b>121</b> 110 #22 6 #20 5 #16</p>	 <p><b>120T2</b> 118 #22 2 #8</p>	 <p><b>71W1</b> 70 #22 1 #1</p>
 <p><b>71W1A</b> 70 #22 1 #1</p>	 <p><b>60</b> 60 #20</p>	 <p><b>10T10</b> 10 #8</p>	 <p><b>4W4</b> 4 #1</p>
 <p><b>2W2</b> 2#1</p>	 <p><b>Blank</b> Signal Insert</p>	 <p><b>(WG)</b> Waveguide</p>	



## Cavity Overview

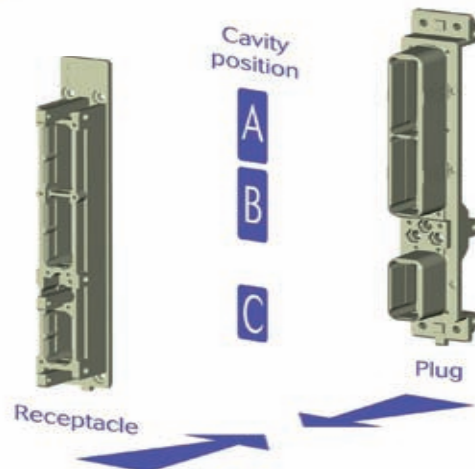


### Shell Size 1

- 2 cavities "A & B" for Signal inserts
- 1 cavity "C" for Power inserts
- See page8 for shells dimensions

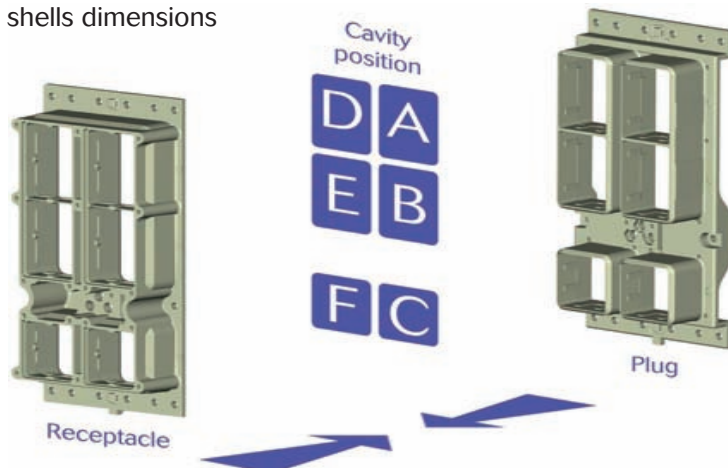
### Shell Size 2

- 2 cavities "A & B" for Signal inserts
- 1 cavity "C" for Power inserts
- See page9 for shells dimensions



### Shell Size 3

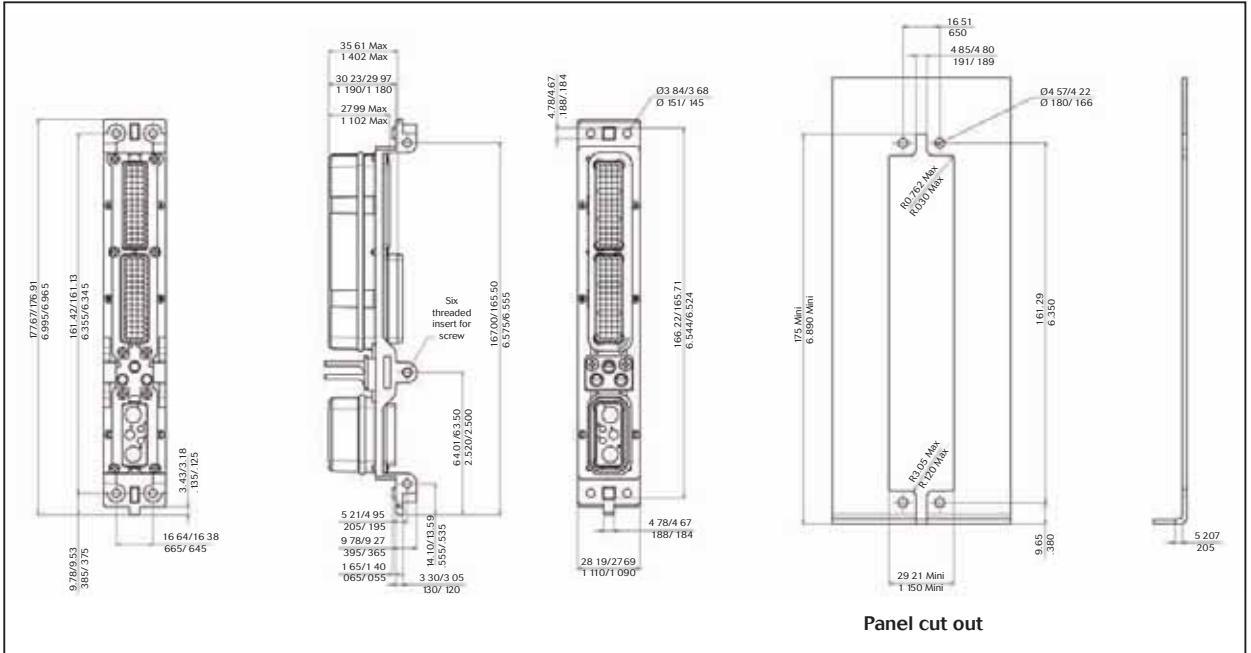
- 4 cavities "A, B, D & E" for Signal
- 2 cavities "C & F" for Power inserts
- See page10 for shells dimensions



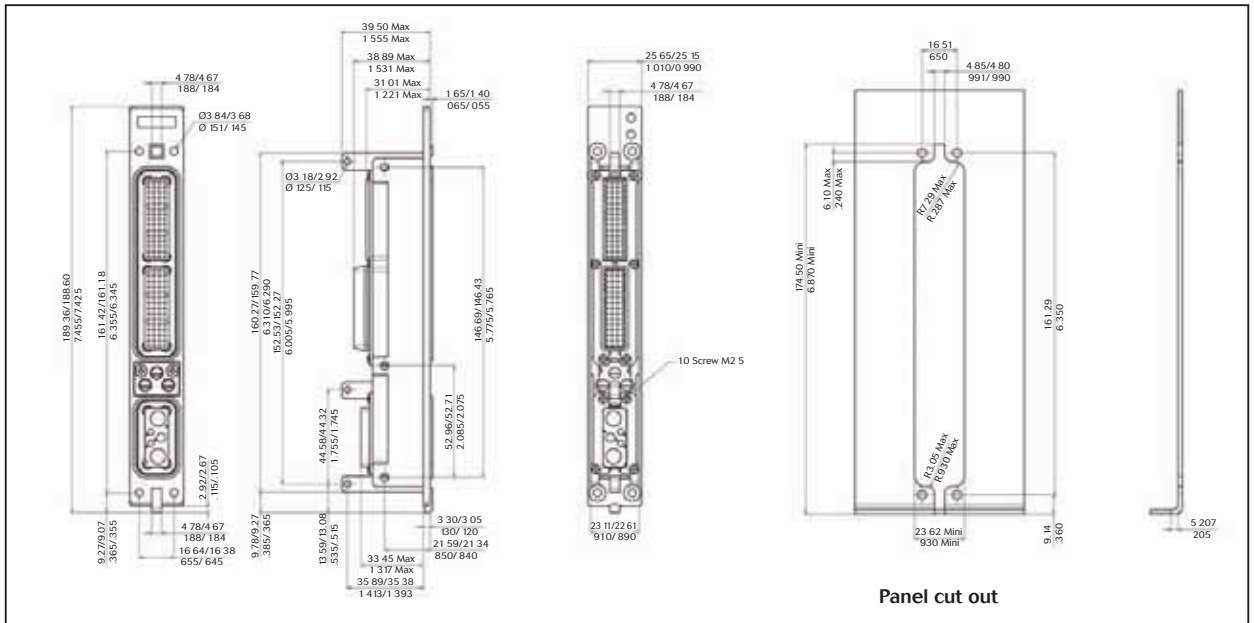


# Shell Size & Shell Type

## Shell Size 1 - Plug(mm/inch)



## Shell Size 1 - Receptacle(mm/inch)

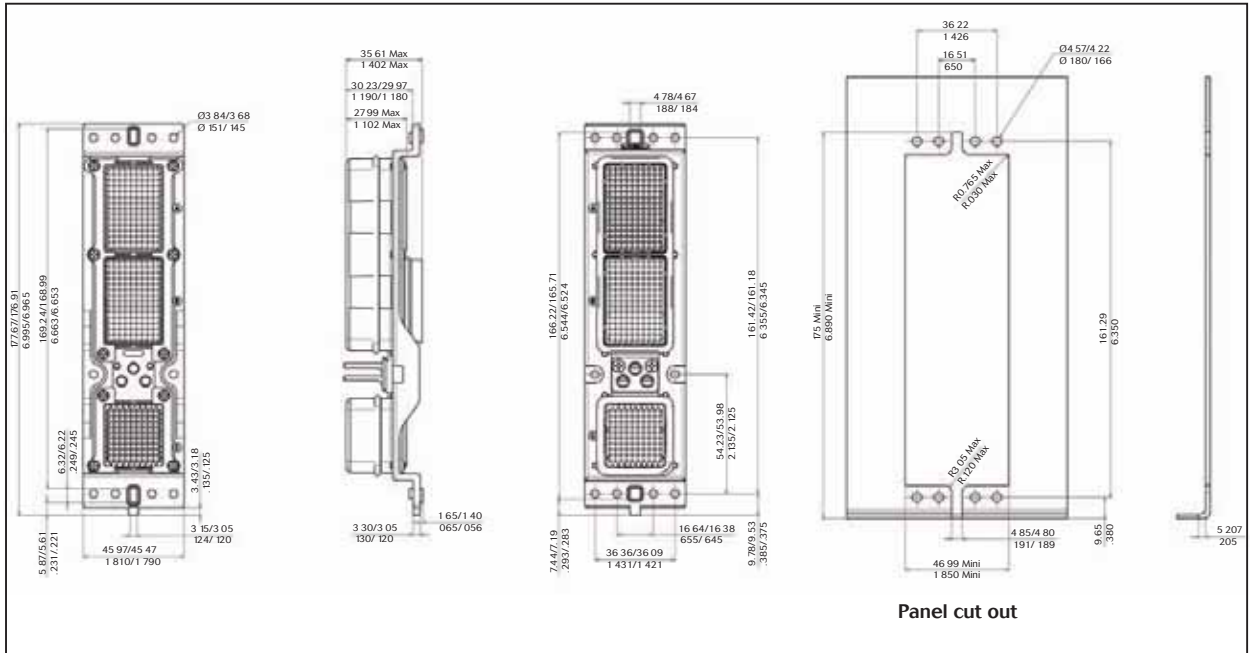


Note:Dimensions are shown in mm(inches).

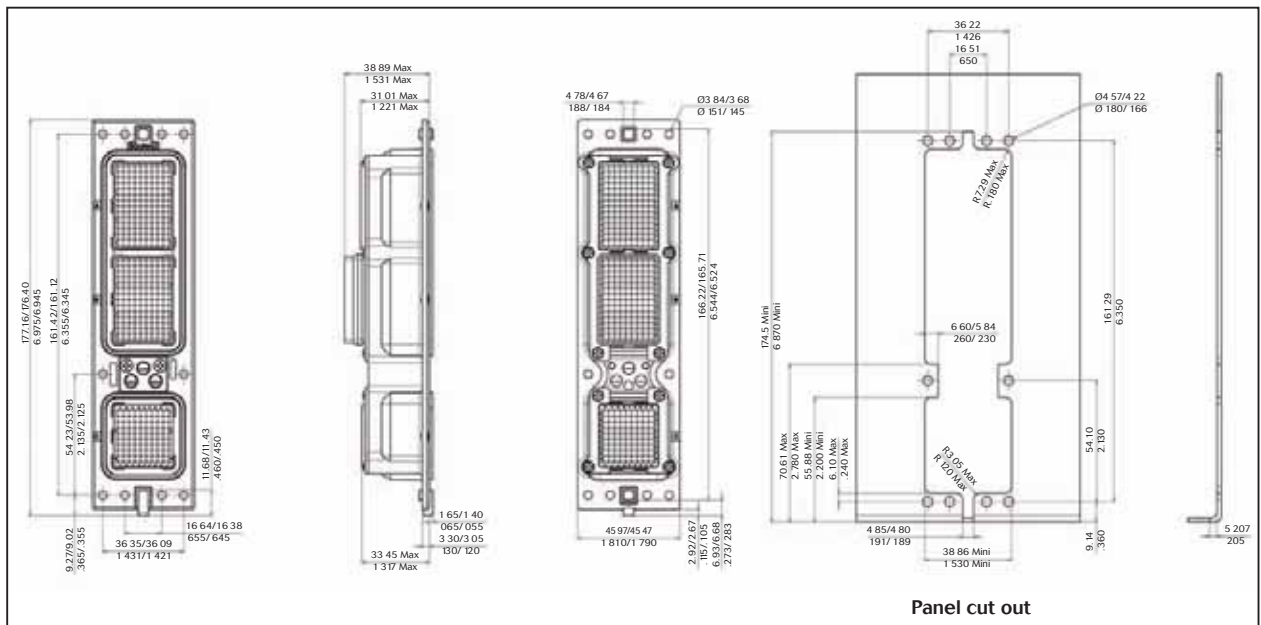


# Shell Size & Shell Type

## Shell Size 2 - Plug(mm/inch)



## Shell Size 2 - Receptacle(mm/inch)

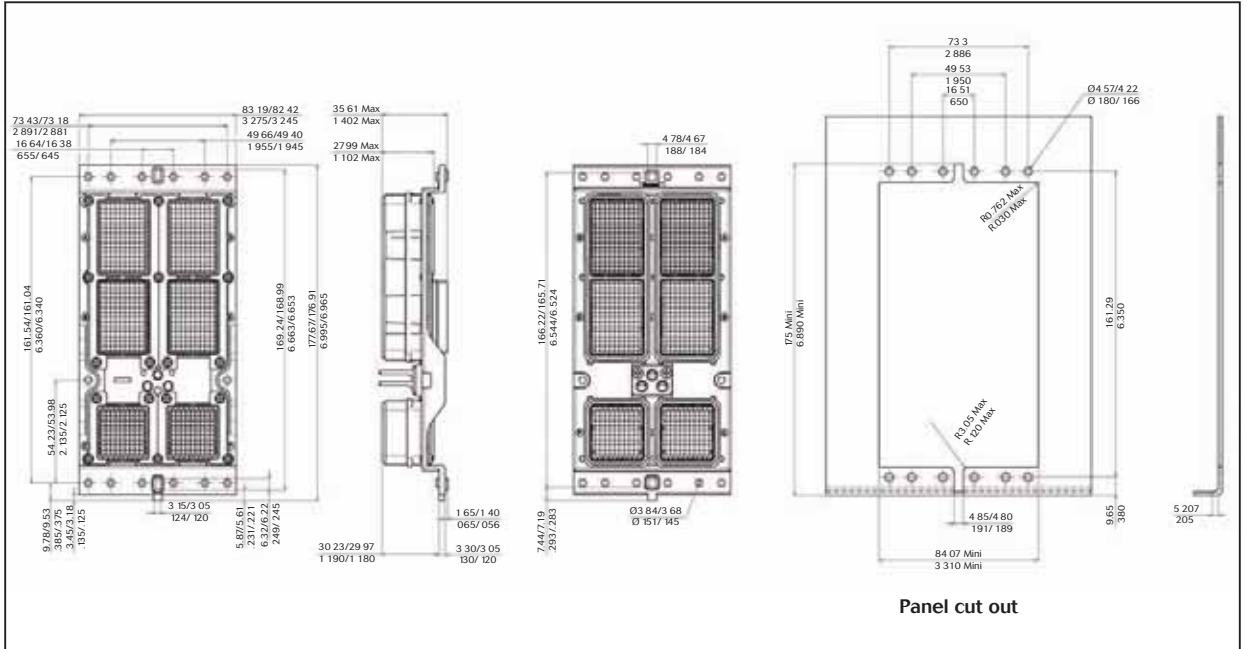


Note: Dimensions are shown in mm(inches).



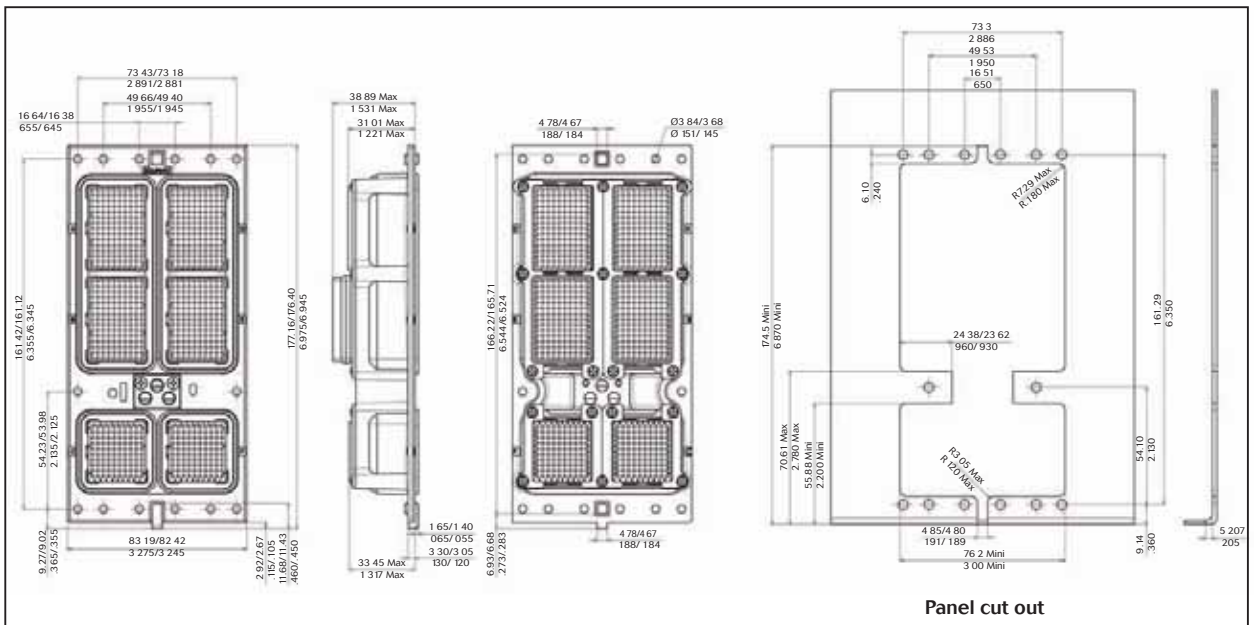
# Shell Size & Shell Type

## Shell Size 3 -Plug(mm/inch)



Panel cut out

## Shell Size 3 -Receptacle(mm/inch)



Panel cut out

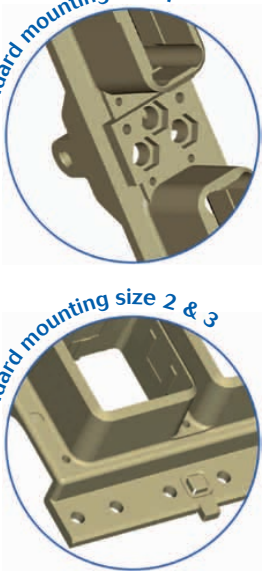
Note:Dimensions are shown in mm(inches).

# Mounting Style

## Mounting Style

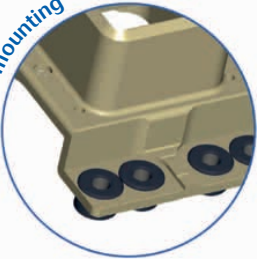
### Standard mounting

**05:** Standard mounting shell size 1  
**13:** Standard mounting shell size 2 & 3



### Float mounting

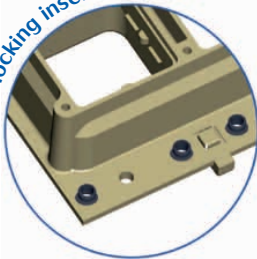
**FL:** Float mounting, 6-32 eyelet (qty 4)  
**FN:** Float mounting, 6-32 self-locking threaded inserts (qty 4)  
**FT:** Float mounting, 4-40 (qty 4)  
**FS:** Float mounting, 4-40 self-locking threaded inserts (qty 4)



### Self-locking inserts

**M3:** M3 self-locking inserts, shells size 2 & 3 (qty 2)  
**N3:** M3 self-locking inserts in all holes shells size 1, 2 & 3  
**LN:** 6-32 self-locking threaded inserts \*  
**SL:** 4-40 self-locking threaded inserts \*  
**TL:** 4-40 self-locking threaded inserts in all holes  
**TN:** 6-32 self-locking threaded inserts in all holes

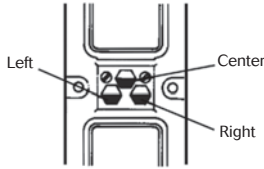
Shells	Receptacle			Plug		
	1	2	3	1	2	3
Numbers of self-locking threaded inserts	4	6	10	4	4	8



For other mounting styles, please consult us.



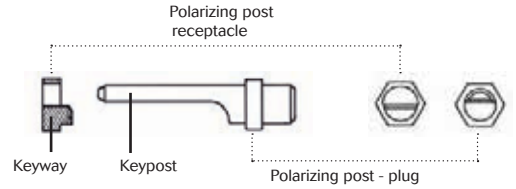
## Polarization Code



Location of polarizing keys  
(view of engaging face)



Dark area represents the key post.  
Light area indicates the keyway.



Code number	Receptacle Shell			Plug shell		
	Left key	Center key	Right key	Left post	Center post	Right post
00	-	-	-	-	-	-
01	4	4	4	1	1	1
02	4	4	3	2	1	1
03	4	4	2	3	1	1
04	4	4	1	4	1	1
05	4	4	6	5	1	1
06	4	4	5	6	1	1
07	5	4	4	1	1	6
08	5	4	3	2	1	6
09	5	4	2	3	1	6
10	5	4	1	4	1	6
11	5	4	6	5	1	6
12	5	4	5	6	1	6
13	6	4	4	1	1	5
14	6	4	3	2	1	5
15	6	4	2	3	1	5
16	6	4	1	4	1	5
17	6	4	6	5	1	5
18	6	4	5	6	1	5
19	1	4	4	1	1	4
20	1	4	3	2	1	4
21	1	4	2	3	1	4
22	1	4	1	4	1	4
23	1	4	6	5	1	4
24	1	4	5	6	1	4
25	2	4	4	1	1	3
26	2	4	3	2	1	3
27	2	4	2	3	1	3
28	2	4	1	4	1	3
29	2	4	6	5	1	3
30	2	4	5	6	1	3
31	3	4	4	1	1	2
32	3	4	3	2	1	2
33	3	4	2	3	1	2
34	3	4	1	4	1	2
35	3	4	6	5	1	2
36	3	4	5	6	1	2
37	4	3	4	1	2	1
38	4	3	3	2	2	1
39	4	3	2	3	2	1
40	4	3	1	4	2	1
41	4	3	6	5	2	1
42	4	3	5	6	2	1
43	5	3	4	1	2	6
44	5	3	3	2	2	6
45	5	3	2	3	2	6
46	5	3	1	4	2	6
47	5	3	6	5	2	6
48	5	3	5	6	2	6
49	6	3	4	1	2	5

Code number	Receptacle Shell			Plug shell		
	Left key	Center key	Right key	Left post	Center post	Right post
50	6	3	3	2	2	5
51	6	3	2	3	2	5
52	6	3	1	4	2	5
53	6	3	6	5	2	5
54	6	3	5	6	2	5
55	1	3	4	1	2	4
56	1	3	3	2	2	4
57	1	3	2	3	2	4
58	1	3	1	4	2	4
59	1	3	6	5	2	4
60	1	3	5	6	2	4
61	2	3	4	1	2	3
62	2	3	3	2	2	3
63	2	3	2	3	2	3
64	2	3	1	4	2	3
65	2	3	6	5	2	3
66	2	3	5	6	2	3
67	3	3	4	1	2	2
68	3	3	3	2	2	2
69	3	3	2	3	2	2
70	3	3	1	4	2	2
71	3	3	6	5	2	2
72	3	3	5	6	2	2
73	4	2	4	1	3	1
74	4	2	3	2	3	1
75	4	2	2	3	3	1
76	4	2	1	4	3	1
77	4	2	6	5	3	1
78	4	2	5	6	3	1
79	5	2	4	1	3	6
80	5	2	3	2	3	6
81	5	2	2	3	3	6
82	5	2	1	4	3	6
83	5	2	6	5	3	6
84	5	2	5	6	3	6
85	6	2	4	1	3	5
86	6	2	3	2	3	5
87	6	2	2	3	3	5
88	6	2	1	4	3	5
89	6	2	6	5	3	5
90	6	2	5	6	3	5
91	1	2	4	1	3	4
92	1	2	3	2	3	4
93	1	2	2	3	3	4
94	1	2	1	4	3	4
95	1	2	6	5	3	4
96	1	2	5	6	3	4
97	2	2	4	1	3	3
98	2	2	3	2	3	3
99	2	2	2	3	3	3

## Polarization Code



Code number		Receptacle Shell			Plug shell		
Sunkye	Norm	Left key	Center key	Right key	Left post	Center post	Right post
A0	100	2	2	1	4	3	3
A1	101	2	2	6	5	3	3
A2	102	2	2	5	6	3	3
A3	103	3	2	4	1	3	2
A4	104	3	2	3	2	3	2
A5	105	3	2	2	3	3	2
A6	106	3	2	1	4	3	2
A7	107	3	2	6	5	3	2
A8	108	3	2	5	6	3	2
A9	109	4	1	4	1	4	1
B0	110	4	1	3	2	4	1
B1	111	4	1	2	3	4	1
B2	112	4	1	1	4	4	1
B3	113	4	1	6	5	4	1
B4	114	4	1	5	6	4	1
B5	115	5	1	4	1	4	6
B6	116	5	1	3	2	4	6
B7	117	5	1	2	3	4	6
B8	118	5	1	1	4	4	6
B9	119	5	1	6	5	4	6
C0	120	5	1	5	6	4	6
C1	121	6	1	4	1	4	5
C2	122	6	1	3	2	4	5
C3	123	6	1	2	3	4	5
C4	124	6	1	1	4	4	5
C5	125	6	1	6	5	4	5
C6	126	6	1	5	6	4	5
C7	127	1	1	4	1	4	4
C8	128	1	1	3	2	4	4
C9	129	1	1	2	3	4	4
D0	130	1	1	1	4	4	4
D1	131	1	1	6	5	4	4
D2	132	1	1	5	6	4	4
D3	133	2	1	4	1	4	3
D4	134	2	1	3	2	4	3
D5	135	2	1	2	3	4	3
D6	136	2	1	1	4	4	3
D7	137	2	1	6	5	4	3
D8	138	2	1	5	6	4	3
D9	139	3	1	4	1	4	2
E0	140	3	1	3	2	4	2
E1	141	3	1	2	3	4	2
E2	142	3	1	1	4	4	2
E3	143	3	1	6	5	4	2
E4	144	3	1	5	6	4	2
E5	145	4	6	4	1	5	1
E6	146	4	6	3	2	5	1
E7	147	4	6	2	3	5	1
E8	148	4	6	1	4	5	1
E9	149	4	6	6	5	5	1
F0	150	4	6	5	6	5	1
F1	151	5	6	4	1	5	6
F2	152	5	6	3	2	5	6
F3	153	5	6	2	3	5	6
F4	154	5	6	1	4	5	6
F5	155	5	6	6	5	5	6
F6	156	5	6	5	6	5	6
F7	157	6	6	4	1	5	5

Code number		Receptacle Shell			Plug shell		
Sunkye	Norm	Left key	Center key	Right key	Left post	Center post	Right post
F8	158	6	6	3	2	5	5
F9	159	6	6	2	3	5	5
G0	160	6	6	1	4	5	5
G1	161	6	6	6	5	5	5
G2	162	6	6	5	6	5	5
G3	163	1	6	4	1	5	4
G4	164	1	6	3	2	5	4
G5	165	1	6	2	3	5	4
G6	166	1	6	1	4	5	4
G7	167	1	6	6	5	5	4
G8	168	1	6	5	6	5	4
G9	169	2	6	4	1	5	3
H0	170	2	6	3	2	5	3
H1	171	2	6	2	3	5	3
H2	172	2	6	1	4	5	3
H3	173	2	6	6	5	5	3
H4	174	2	6	5	6	5	3
H5	175	3	6	4	1	5	2
H6	176	3	6	3	2	5	2
H7	177	3	6	2	3	5	2
H8	178	3	6	1	4	5	2
H9	179	3	6	6	5	5	2
J0	180	3	6	5	6	5	2
J1	181	4	5	4	1	6	1
J2	182	4	5	3	2	6	1
J3	183	4	5	2	3	6	1
J4	184	4	5	1	4	6	1
J5	185	4	5	6	5	6	1
J6	186	4	5	5	6	6	1
J7	187	5	5	4	1	6	6
J8	188	5	5	3	2	6	6
J9	189	5	5	2	3	6	6
K0	190	5	5	1	4	6	6
K1	191	5	5	6	5	6	6
K2	192	5	5	5	6	6	6
K3	193	6	5	4	1	6	5
K4	194	6	5	3	2	6	5
K5	195	6	5	2	3	6	5
K6	196	6	5	1	4	6	5
K7	197	6	5	6	5	6	5
K8	198	6	5	5	6	6	5
K9	199	1	5	4	1	6	4
L0	200	1	5	3	2	6	4
L1	201	1	5	2	3	6	4
L2	202	1	5	1	4	6	4
L3	203	1	5	6	5	6	4
L4	204	1	5	5	6	6	4
L5	205	2	5	4	1	6	3
L6	206	2	5	3	2	6	3
L7	207	2	5	2	3	6	3
L8	208	2	5	1	4	6	3
L9	209	2	5	6	5	6	3
M0	210	2	5	5	6	6	3
M1	211	3	5	4	1	6	2
M2	212	3	5	3	2	6	2
M3	213	3	5	2	3	6	2
M4	214	3	5	1	4	6	2
M5	215	3	5	6	5	6	2
M6	216	3	5	5	6	6	2





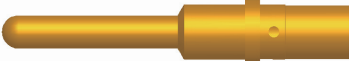

# ARINC 600 Series

## Contacts

### ■ Signal contact

Contacts Type	Pin	Socket
#22		

### ■ Power contact

Contacts Type	Pin	Socket
#20		
#16		
#12		

### ■ Matching cable

Contact Spec.	Cable		Outer Dia.(mm)	
	Sectional area (mm <sup>2</sup> )	Cable Spec. (AWG)	Min.	Max.
#22	0.15~0.38	26,24,22	Φ 0.7	Φ 1.35
#20	0.21~0.60	24,22,20	Φ 1.02	Φ 1.8
#16	0.60~1.34	20,18,16	Φ 1.73	Φ 2.6
#12	1.91~3.18	14,12	Φ 2.48	Φ 3.4







## Contacts

### ■ Coaxial contact

Contact Spec.	frequency range	characteristic impedance
#8 Coaxial	0Hz~500MHz	75 Ω
#5 Coaxial	0Hz~500MHz	50 Ω
#1 Coaxial	0Hz~5GHz	50 Ω

## Solid Picture

Contacts Type	Pin	Socket
#8 Coaxial		
#5 Coaxial		
#1 Coaxial	