ARINC 600 SERIES

Rack & Panel Rectangular Connectors

High Density and Modularity

SOURIAU - SUNBANK
Connection Technologies

Presentation

BUILD THE CONNECTOR THAT MATCHES EXACTLY YOUR REQUIREMENTS

Modular
- Wide range of insulators compliant with all type of technology from **signal to power, high speed and fiber optic**

Configurable
- **RoHS Surtec,** nickel, alodine
- **EMI RFI** shielding solution
- Up to 100A power capabilty
- Multiple fixing type
- Grounding options
- Filtering solutions

High Density
- Up to **800 #22** signal contacts
- Up to **56 #8 Quadrax or ELIO®** contacts

Rackable
- **Blind mate,** clearance device for better rackability
- **Low insertion force**

Easy Repairable
- **Front and rear release removable contacts** for easy integration with Printed Card Board, flex circuit or cabled harnesses.

Contents

ARINC 600 SERIES

ARINC 600 Series

Overview

Typical applications

Cockpit Display Units

Landing Gear Management

Cabin: IFE & Air Conditioning

Avionic Bay/Data Acquisition

Engine Management

Features & Benefits

TIME SAVING

Rackable Solution & Easy Maintenance

Blind mate, clearance device for better rackability.
Low insertion force.
Front and rear release removable contacts.

MAKE IT YOURS

Modular Solution

A wide range of insulators compliant with all types of technologies: signal, power, high speed and fiber optic.
Compliant with PCB, flex circuit and harness implementation.

WEIGHT & SPACE SAVING

High Density Solution

Up to 800 #22 signal contacts.
Up to 56 #8 quadrax contacts.

COST SAVING

Configurable Solution

Cost effective option with no removable contacts.
Contacts number to match your need.

A wide product range

3 shell sizes, **3** platings

A Full **Contacts** Offer

Many **Options**

Shells & Layouts
Shell sizes **1, 2** and **3**
Equipment Receptacle and **Rack Plug**
More than **30 insert** layouts available

Plating
Surtec, Alodine and **Nickel**

High Density
Up to **800** signal contacts in the same shell

Versatility
Coax, Triax, Twinax and **Power** Contacts

High Speed Data
Quadrax and **Fiber Optic**

Make it Yours!
Sealed and **Unsealed** version
Multiple **Polarizing** positions
Grounding options

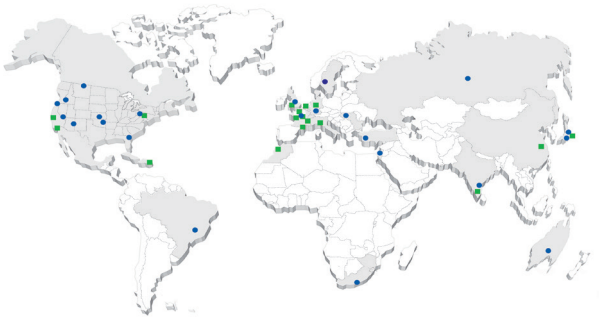
Cost Effective version
Harpooned contacts

Worldwide sales network

SOURIAU is recognized as one of the top international manufacturers of connectors for harsh environment and is continuously strengthening its leading position through its solid structure as an international group. Today the **SOURIAU** group has a strong worldwide global presence on 4 continents.

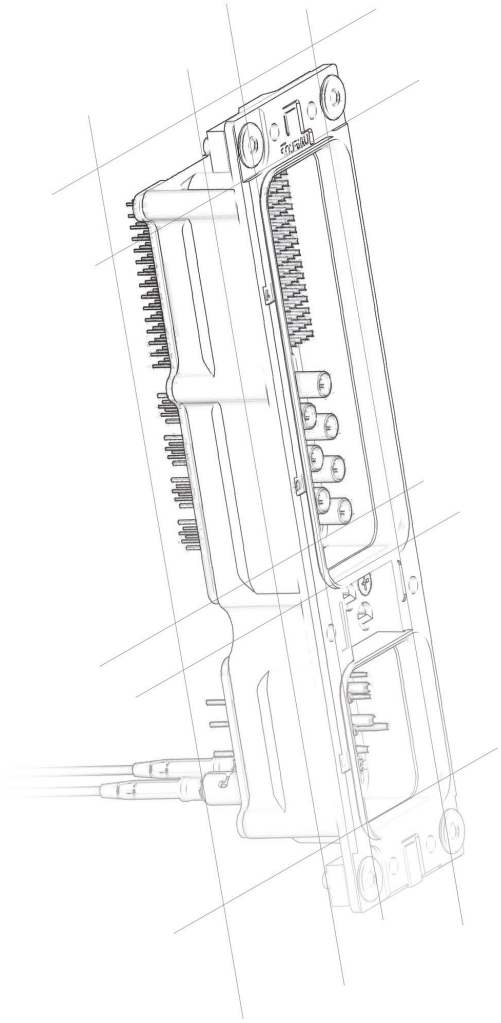
Our international presence is reinforced by franchised and value added distributors in many countries.

We also rely upon an extensive network of distributors and resellers worldwide. This coverage, together with a strong commitment towards service, ensures rapid responses to the specific needs of our customers.



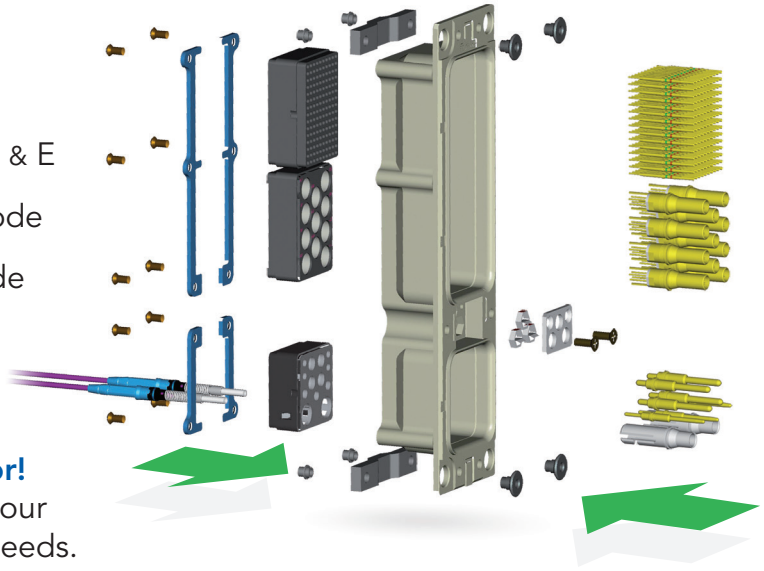
- **SOURIAU** Operations and Sales Offices
- Franchised and Value Added Distributors

How to build an ARINC 600



For a new project, gather all informations:

1. Sealing level & plating
2. Shell size
3. Shell type
4. Contact mounting & release
5. Mounting style
6. Inserts C & F
7. Contact type
8. Inserts A, B, D & E
9. Polarization code
10. Packaging code



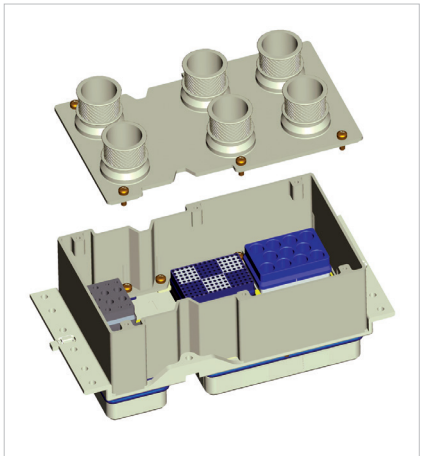
= Your Connector!
Match perfectly your box connection needs.

A global offer with SUNBANK

SOURIAU in partnership with **SUNBANK** can offer dedicated **ARINC 600 Series backshells** for a global offer solution.
Please see pages 39 to 41 for available configurations.

Based in California since 1958, and with a firm presence in aerospace and military markets, **SUNBANK** is the world's second-largest producer of accessories for electrical wiring harness connectors and conduits.

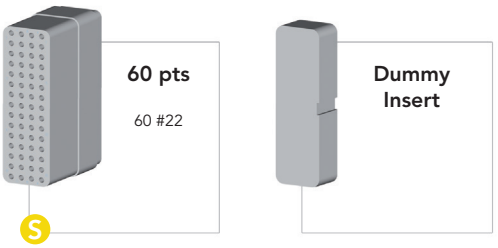
For more information about **SUNBANK** please visit our website: **www.sunbankcorp.com**



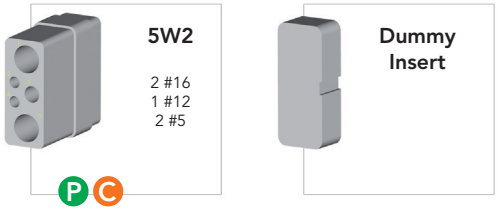
Insert layouts

Shell size 1

Cavity A & B

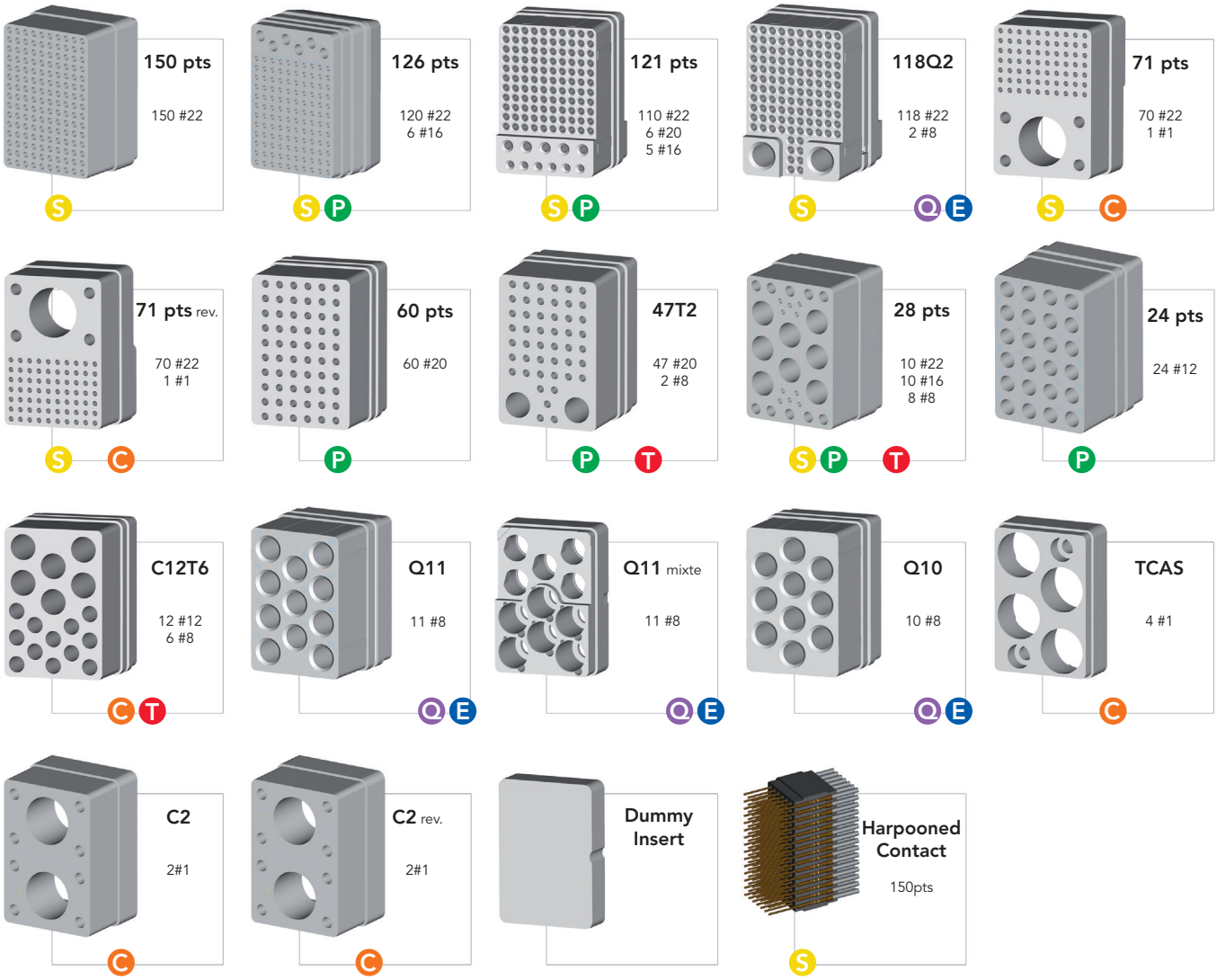


Cavity C



Shell size 2 & 3

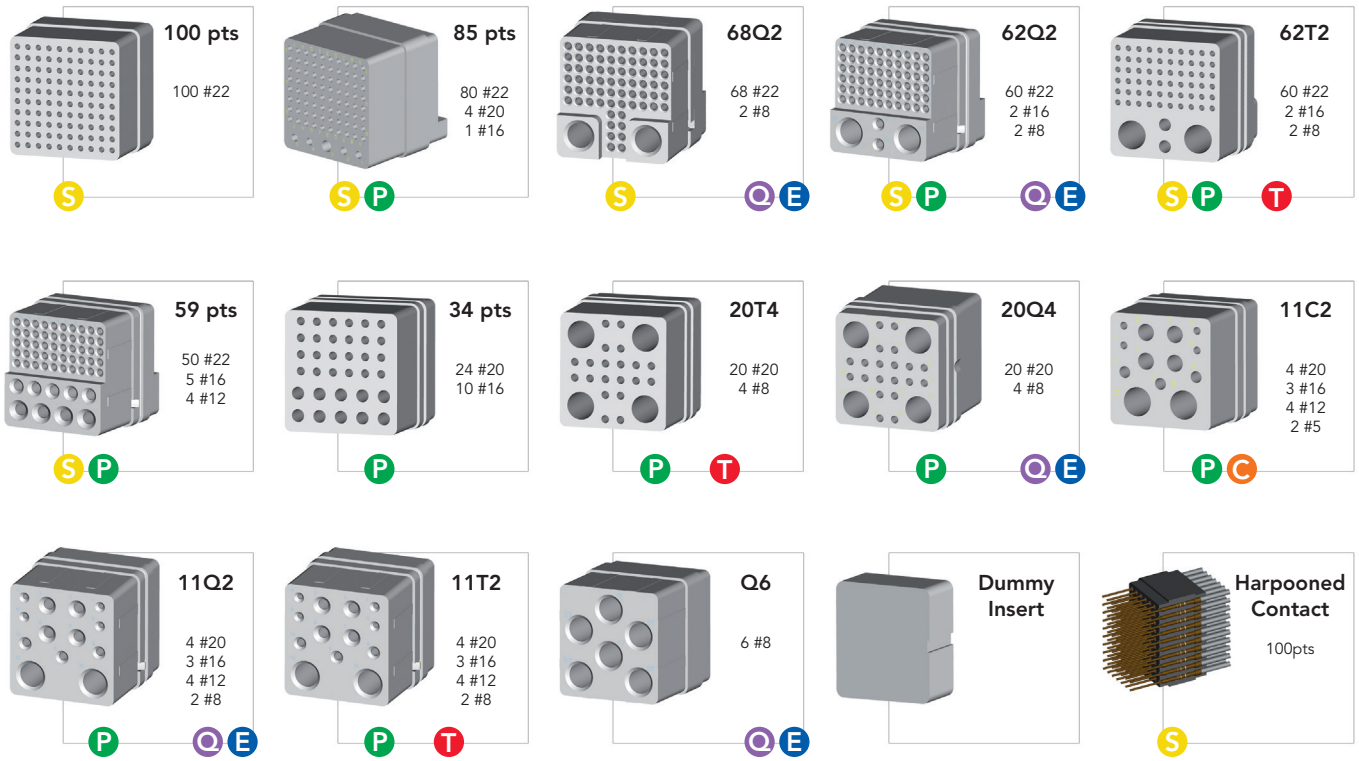
Cavity A, B, D & E



Contact types: S Signal · P Power · C Coax · T Triax · Q Quadrax or Twinax · E ELIO® Fiber Optic

Shell size 2 & 3

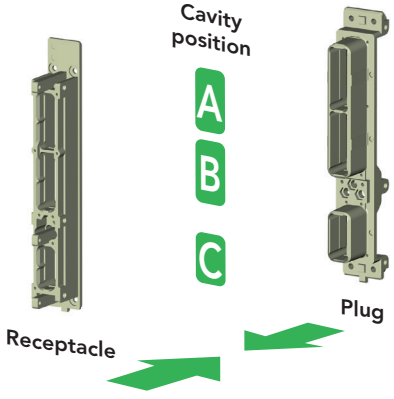
Cavity C & F



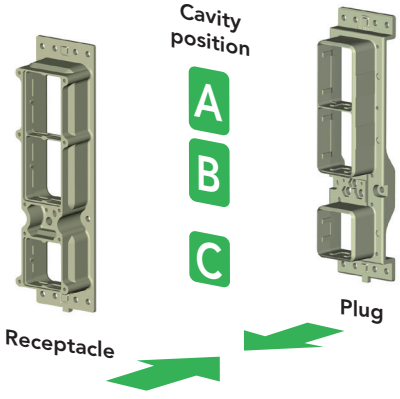
Contact types: S Signal · P Power · C Coax · T Triax · Q Quadrax or Twinax · E ELIO® Fiber Optic

Shell types and cavity overview

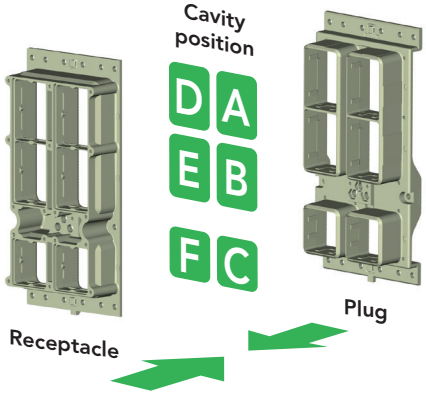
Shell size 1



Shell size 2



Shell size 3



Insert layouts matrix

Insert	Shell size	Cavity	Contacts type	Number of cavities						
				#22	#20	#16	#12	#8[5]	#5	#1
60 pts	1	A, B	S	60						
5W2		C	P C			2	1		2	
150 pts	2 & 3	A, B, D, E	S	150						
126 pts			S P	120		6				
121 pts			S P	110	6	5				
118Q2			S Q E	118				2		
71 pts			S C	70						1
71 pts rev.			S C	70						1
60 pts			P		60					
47T2			P T		47			2		
28 pts[1]			S P T	10		10		8		
24 pts			P				24			
C12T6			C T				12	6		
Q11			Q E					11		
Q11 mixte[2]			Q E					11		
Q10			Q E					10		
TCAS			C							4
C2			C							2
C2 rev.			C							2
100 pts		C, F	S	100						
85 pts[3]			S P	80	4	1				
68Q2			S Q E	68				2		
62Q2			S P Q E	60		2		2		
62T2			S P T	60		2		2		
62T2S mixte[4]			S P T	60		2		2		
59 pts			S P	50		5	4			
34 pts			P		24	10				
20T4			P T		20			4		
20Q4			P Q E		20			4		
11C2			P C		4	3	4		2	
11Q2			P Q E		4	3	4	2		
11T2			P T		4	3	4	2		
Q6			Q E					6		
T6			T					6		

Contact release/Sealing compatibility

Sealed (see p.17 and 18)		Unsealed (see p.17 and 18)		
Receptacle rear release crimp cts	Plug rear release crimp cts	Receptacle rear release crimp cts	Receptacle front release PC tail cts	Plug rear release crimp cts
OK	OK	OK	OK	OK
OK	OK	OK	Consult us	OK
OK	OK	OK	OK	OK
OK	OK	OK	Consult us	OK
Consult us	OK	Consult us	OK	OK
Consult us	OK	OK	OK	OK
OK	OK	OK	OK	OK
OK	OK	OK	Consult us	OK
OK	OK	OK	OK	OK
OK	OK	OK	Consult us	OK
OK	OK	OK	Consult us	OK
OK	OK	OK	Consult us	OK
OK	OK	OK	Consult us	OK
Consult us	OK	OK	OK	OK
N/A	Consult us	OK [2]	OK [2]	Consult us
Consult us	Consult us	OK	OK	OK
Consult us	Consult us	OK	Consult us	OK
Consult us	Consult us	OK	Consult us	OK
Consult us	Consult us	OK	N/A	OK
OK	OK	OK	OK	OK
Consult us	OK	OK	OK	OK
Consult us	Consult us	Consult us	OK	OK
Consult us	Consult us	Consult us	OK	OK
Consult us	OK	OK	Consult us	OK
N/A	Consult us	OK [4]	OK [4]	Consult us
Consult us	Consult us	Consult us	OK	OK
OK	OK	OK	OK	OK
OK	OK	OK	Consult us	OK
Consult us	Consult us	Consult us	Consult us	OK
OK	OK	OK	OK	OK
Consult us	OK	Consult us	OK	OK
OK	OK	OK	Consult us	OK
Consult us	Consult us	OK	OK	OK
OK	OK	OK	OK	OK

[1] Triax #8 & #16 cavities (38999) specifics
[2] 5 rear & 6 front or 6 rear & 5 front
[3] #20 and #16 always rear release
[4] Triax rear and other contacts front release
[5] Quadrax #8 or Optical way

Contact types: S Signal · P Power · C Coax · T Triax · Q Quadrax or Twinax · E ELIO® Fiber Optic

Contacts overview

Crimped contacts

- **Signal #22**
  Standard, Standard with selective plating, Chromel, Alumel
- **Power #20, #16, #12**
  Standard and small barrel
- **Coax #8, #5, #1**

Cable #8	RG 400 / U		
Cable #5	RG 58 C/U RG 142 B/U RG 141 A/U RG 174 A/U RG 178 B/U RG 180 B/U	RG 188 A/U RG 195 A/U RG 196 A/U RG 233 / U RG 316 / U RG 400 / BU	KX 21A KX 22A KX 23 5021K1011 NSA 935359 WB
Cable #1	RG 141 A/U RG 142 B/U KX 23 RG 165 / U	RG 214 / U RG 225 / U RG 393 / U	Ficela 1703/3 Filotex 50MTKT RG 400 / BU
Cable #1 for TCAS	Filotex E0406WD Filotex 50MFCFB Gore SW39214		

- **Triax #8**
  For cable EN3375-004, MIL-C-17176
- **Quadrax #8** and **Twinax #8**

PC tail contacts

- **Signal #22** and **Power #20, #16, #12, #8**
  0.15 inch (3.81 mm)
  0.25 inch (6.35 mm)
  0.375 inch (9.52 mm)
  0.5 inch (12.7 mm)
  Gold or tin plated
- **Triax #8**
  With PC tail L = 0.25 inch (6.35 mm)
- **Quadrax #8**
  With PC tail L = 0.25 inch (6.35 mm)
  Gold or tin plated

- **ELIO® fiber optic** with #8 adaptor

- **Wire wrap #22**
  0.25 inch (6.35 mm)
  0.375 inch (9.52 mm)
  0.5 inch (12.7 mm)

- **Cavity reducer**
  #5 to #12, rear and front release
  #8 to #12, rear release
  #8 to #16, rear release

- **Filler plug** for sealed version only
  #22, #20, #16, #12, #8 and #5 available
- **Dummy contact** for all sizes

Contact types: Signal | Power | Coax | Triax | Quadrax or Twinax | ELIO® Fiber Optic

ARINC 600 SERIES

ARINC 600 Series

Product Series

Description

- High performance avionic rack equipment rectangular connectors compliant with ARINC 600 specifications
- Rack and panel connector
- High density up to 800 signal contacts
- Low insertion force contact design (tapered pin, LIF socket)
- Sealed and unsealed versions
- Multiple polarizing positions
- Field replaceable inserts
- Choice of front and rear removable contacts
- Signal, power, coaxial, twinax, quadrax and optical fiber contacts

Technical features

Mechanical

- **Shell:**
  Aluminum alloy to QQ-A-591
- **Shell plating:**
  Surtec, RoHS
  Nickel, RoHS
  Alodine 1200 passivation to MIL-C 5541 class 1
- **Insulator:**
  Epoxy resin thermoset
  Thermoplastic
- **Seals and grommets:**
  Fluorinated silicon compliant to MIL-R-25988
- **Contact:** Copper alloy to QQ-B-626
- **Contact plating:**
  Gold plated compliant to MIL-G-45204 over nickel to QQ-N-290
- **Endurance:** 500 mating cycles
- **Insertion and extraction forces max:**
  Shell size 1: 120N (27 lbs)
  Shell size 2: 267N (60 lbs)
  Shell size 3: 467N (105 lbs)
- **Dynamic shock:**
  3 impacts of 50 g in all axis, duration 11µs (half wave) to MIL-STD-202 method 213
- **Vibration:**
  8 hours in each axis
  Random at 16.4 g Rms from 50 to 2000 Hz
  MIL-STD-1344 A method 2005-1

Electrical

- **Dielectric withstanding voltage:**
  Sea level: 1 500 Vrms
  15 000 m: 500 Vrms
- **Voltage rating:**
  500 Vac Max
  125 Vac at 21 000 m
- **Insulation resistance:** ≥ 5000 MΩ
- **Current ratings, continuous:**

Contact	Wire gauge	Current (A)	Voltage drop max (mV)*
22	22 24 26	5 3 2	40 30 25
20	20 22 24	7.5 3 5	55 40 30
16	16	13	50
12	12	23	45

* measured over a conductor length of 150 mm

- **Quadrax contact size 8**
  Contact resistance (low level): initial 15 MΩ, after tests 30 MΩ
  Voltage rating:
  500 Vac max
  125 Vac at 21 000 m
  Insulation resistance:
  at ambient temperature > 5000 MΩ
  at high temperature > 1000 MΩ
  Characteristic impedance: 100Ω at 100MHz
  Attenuation < 0.3 dB at 100 MHz typical per contact pair
  Contact to shell continuity
- **Triaxial contact size 8**
  Bandwidth: 0-20 MHz
  Voltage rating:
  500 Vac max
  125 Vac at 21 000 m
  Voltage drop:
  Inner & middle contact ≤ 55 mV under 1A
  Outer contact ≤ 75 mV under 12A
- **Optical ELIO® Contact**
  ARINC 600 connector can integrate ELIO® fiber optic contacts in #8 quadrax cavities with the addition of ELIO® #8 adaptor
  Insertion loss: 0.3 dB per contact
  Possibility to mix optical and electrical signals in the same insert
  Flight proven at -65°C +125°C
  Designed to comply with ELIO® contact optical performances

Environmental

- **Temperature rating:** -65°C to +125°C
- **Fluid resistance:**
  Hydraulic to MIL-H 5606
  Lubricating to MIL-L 23699
  Isopropyl alcohol
- **Resistance to salt spray:**
  48 hours (MIL-STD-202 method 101 or MIL-STD-1344 method 1001)
- **Sealing:**
  Environment resistant (sealed version)

Ordering information

BUILD YOUR OWN CONNECTOR IN 10 STEPS!

SOURIAU part number

		1	2	3	4	5	6	7	8	9	10
Basic Series	SB6	5	2	F	K	13	W2	S	00	01	UD

Sealing Level & Plating
4: Unsealed (surtec plated)
5: Sealed (surtec plated)
More information & other configuration: see pages 17 and 18

Shell Size: 1, 2, 3
Drawings and panel cut out: see pages 19 to 21

Shell Type
F: Equipment receptacle
M: Rack plug
Drawings: see pages 19 to 21

Contact Mounting & Release
More information and coding: see page 22

Mounting Style
More information and coding: see page 22

Inserts Arrangement Code - Cavities C and F (2 digits)
Insert layouts: see pages 10 to 12. Coding: see page 23

Contact Type
P: Pin signal contact #22 (rack plug)
S: Socket signal contact #22 (equipment receptacle)
More information: see pages 30 to 35

Inserts Arrangement Code - Cavities A, B, D and E (2 digits)
Insert layouts: see pages 10 to 12. Coding: see page 23

Polarization Code
00: Rack plug and Equipment receptacle = polarizing eyes delivered unmounted
01 to **M6:** Rack plug and Equipment receptacle = location of polarizing eyes delivered mounted
Coding: see page 24

Packaging Code
1st letter: signal and power contacts
2nd letter: twinax, triax, coaxial and quadrax contacts
Coding: see page 25

For any other requirement, please consult us.

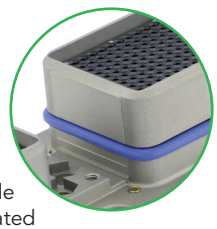
Sealing level - Digit n° 1 (step 1 - see table next page)

Compound

- Allows to seal the insert
- Sealing from rear to front of connector

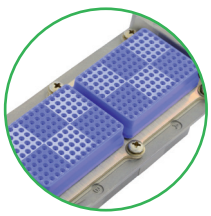
O-Ring
for plug only

- Fluorinated silicon compliant to MIL-R-25988
- Interfacial sealing between receptacle and plug when mated



Grommet

- Fluorinated silicon compliant to MIL-R-25988
- Sealing on cable, only available for crimp contact



Plating & Grounding - Digit n° 1 (step 2 - see table below)

Surtec RoHS NEW, and Alodine plating

Standard polarization

- Without specific grounding

or Ground finger

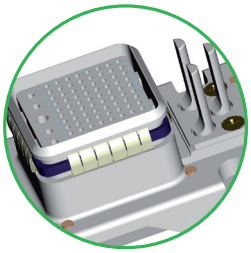
- Cost effective solution
- Connection is ensured by a cable on the equipment
- Available in shell sizes 1, 2 & 3
- Sealed and unsealed versions

or Ground blade

- Cost effective solution
- Enables continuity between plug and receptacle
- Available in shell sizes 2 & 3
- Sealed and unsealed versions

Nickel RoHS

Standard polarization



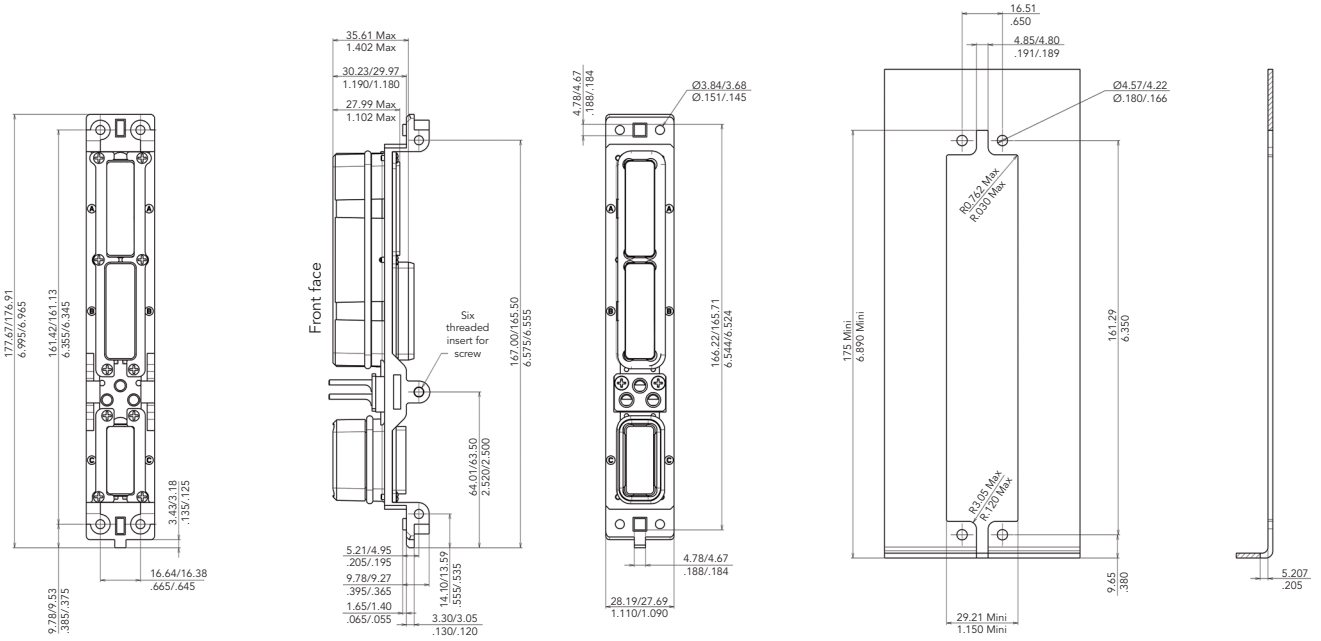
- Ground spring mandatory on the plug
- Best continuity performance
- Available in shell sizes 2 & 3
- Sealed and unsealed versions

Select your sealing (step 1)	Select your plating (step 2)	RoHS	Choose your sealing features (step 1)			Choose your grounding option (step 2)			Get your digit n° 1	SOURIAU best choice for
			Compound	O-ring for plug only	Grommet	Standard polarization	Ground finger	Ground blade		
Unsealed	NEW Surtec	YES*				OK			5	New projects or retrofit
	Nickel	YES				OK			N	Best continuity performances
	Alodine	No				OK			1	Maintenance
				OK		OK			9	
								OK	B	
							OK		D	
Sealed	NEW Surtec	YES*	OK	OK	OK	OK			4	New projects or retrofit
					OK				6	
	Nickel	YES			OK	OK			G	Best continuity performances
			OK	OK	OK	OK			P	
	Alodine	No	OK	OK	OK	OK			0	Maintenance
			OK		OK	OK			2	
					OK	OK			3	
					OK			OK	A	
			OK	OK	OK		OK		C	
			OK		OK		OK		H	
					OK			OK	L	

* Please confirm with us configuration available depending of mounting style. For other specification, please consult us.

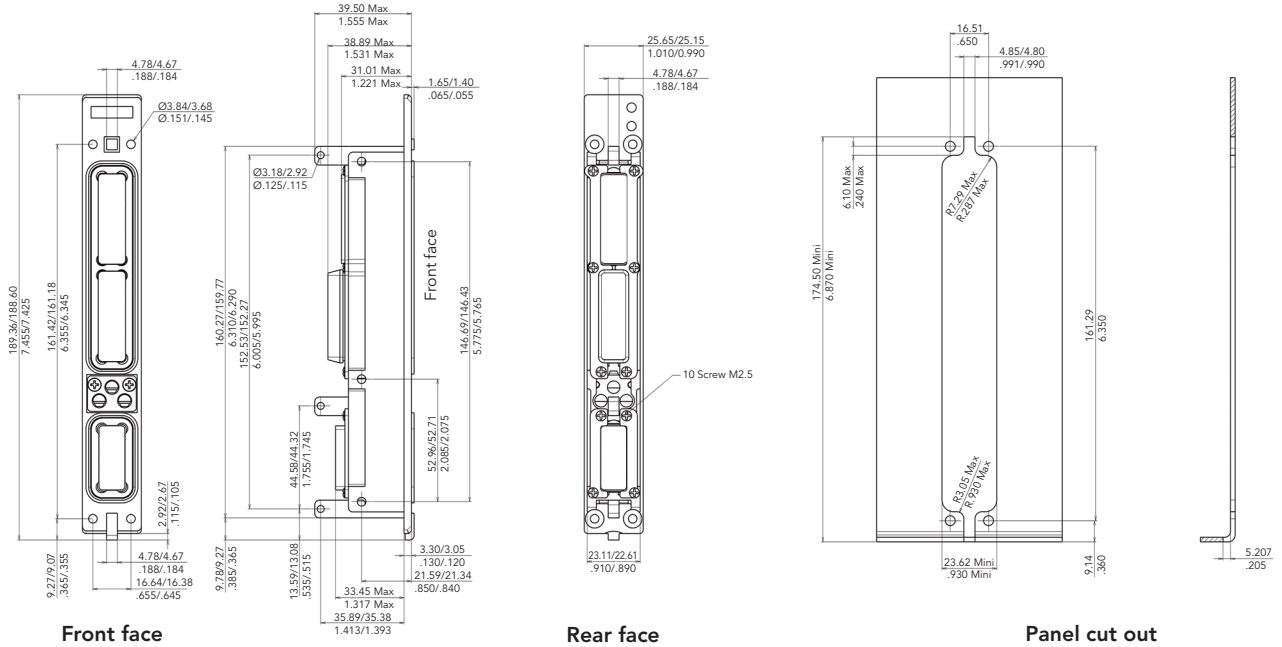
Dimensions shell size 1 - Shell size digit n° 2 & Shell type digit n° 3

Rack Plug (M) (mm/inch)



Rear face | Front face | Panel cut out

Equipment Receptacle (F) (mm/inch)

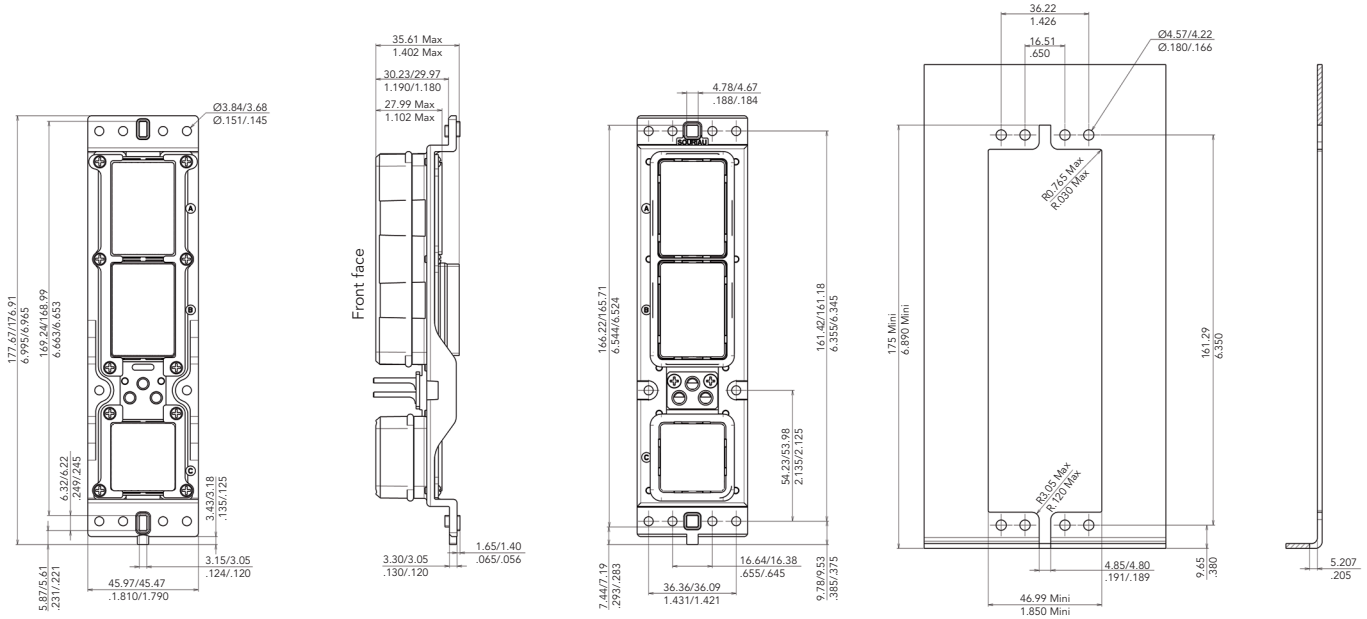


Front face | Rear face | Panel cut out

Note: All dimensions are in millimeters/inches (mm/inch)

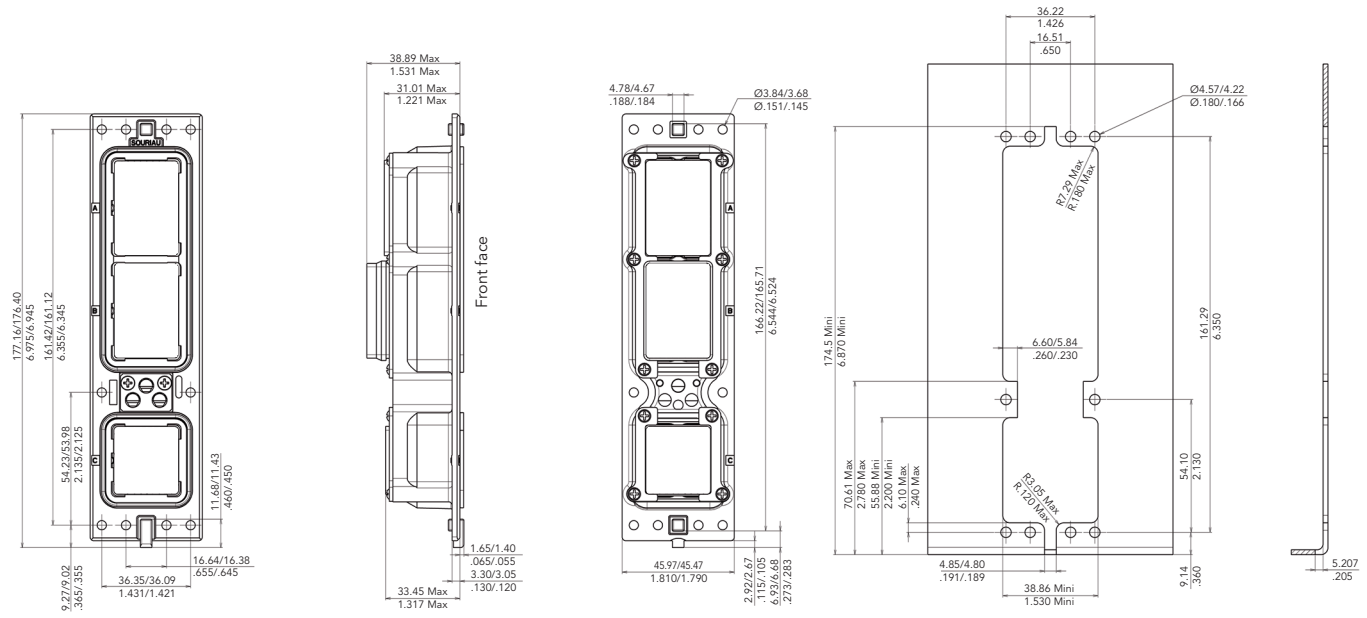
Dimensions shell size 2 - Shell size digit n° 2 & Shell type digit n° 3

Rack Plug (M) (mm/inch)



Rear face | Front face | Panel cut out

Equipment Receptacle (F) (mm/inch)

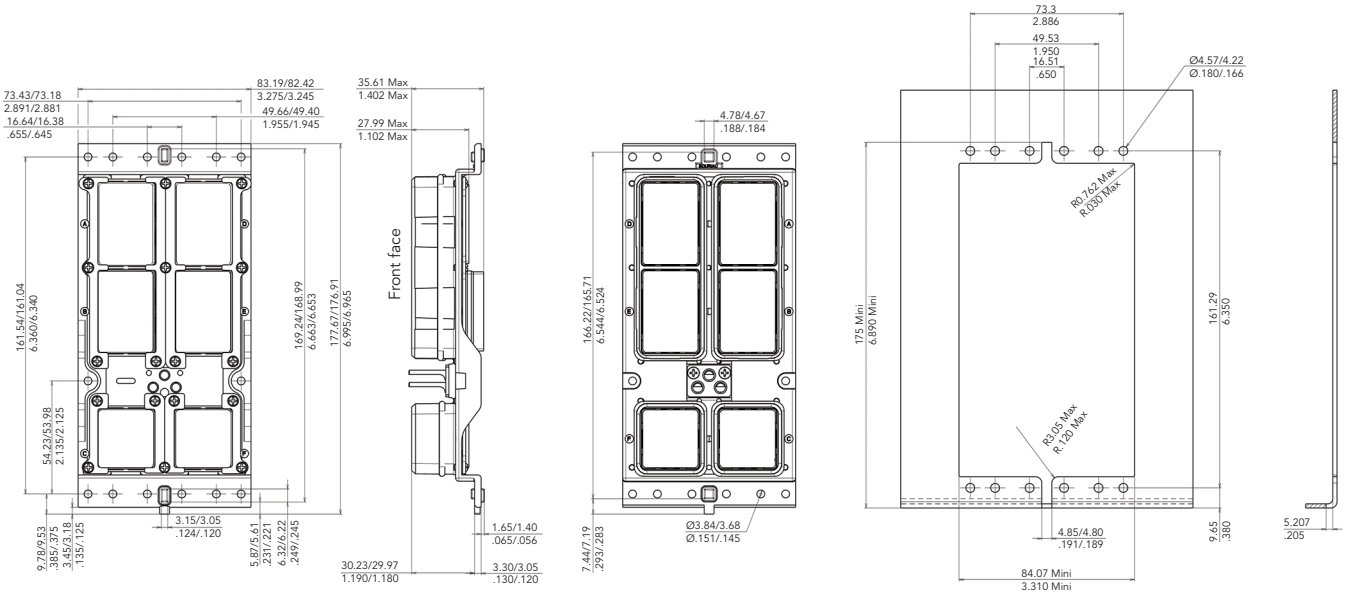


Front face | Rear face | Panel cut out

Note: All dimensions are in millimeters/inches (mm/inch)

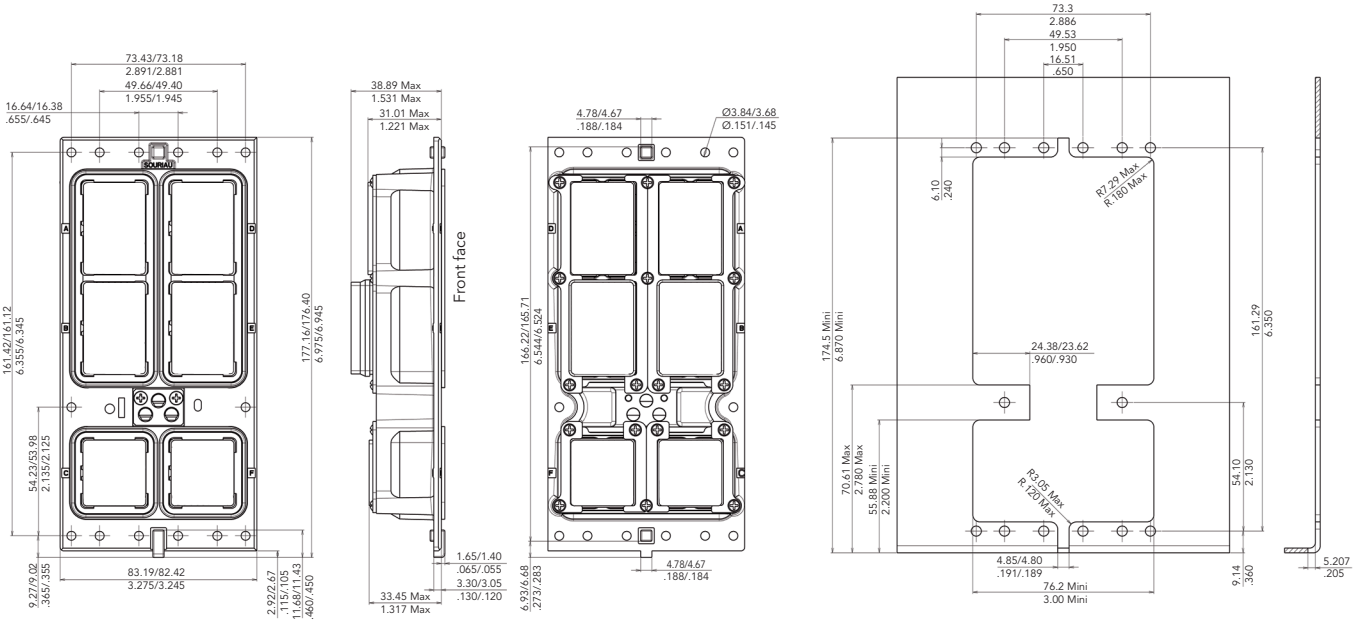
Dimensions shell size 3 - Shell size digit n° 2 & Shell type digit n° 3

Rack Plug (M) (mm/inch)



Rear face | Front face | Panel cut out

Equipment Receptacle (F) (mm/inch)



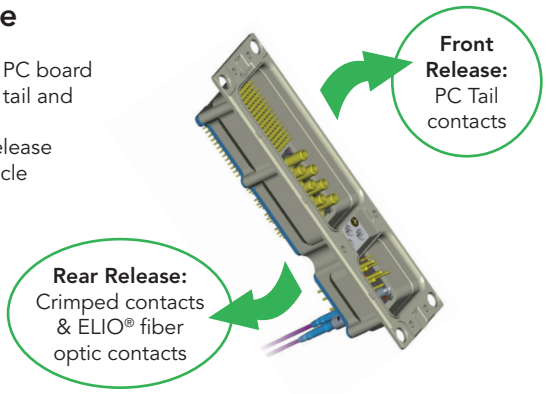
Front face | Rear face | Panel cut out

Note: All dimensions are in millimeters/inches (mm/inch)

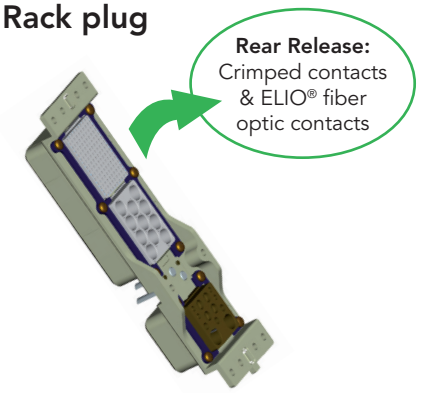
Contacts release - Digit n° 4

Equipment receptacle

- Only receptacles are used with PC board with PC tail contacts or mix PC tail and crimped contacts
- Possibility to mix rear & front release inserts within the same receptacle



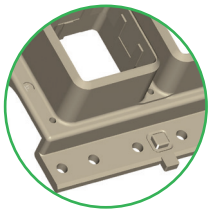
Rack plug



Digit n° 4	Contact release configuration
G	Rear release signal and power contacts
H	Front release signal contacts (PC Tail and wire wrap terminations for receptacle) and rear release power contacts
J	Mix of front and rear release contacts (consult us)
K	Front release signal contacts (PC Tail and wire wrap terminations for receptacle) and power contacts
X	For receptacle only. Non removable signal contacts for insert 100 and 150 points. Other contacts are front release.
Y	For receptacle only. Non removable signal contacts for insert 100 and 150 points. Front release for other signal contacts. Rear release for power contacts.
Z	For receptacle only. Mix of non-removable contact for insert 100 and 150 points, and front and rear release contacts - consult us

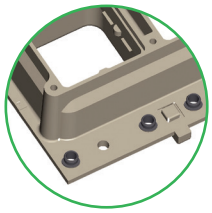
Mounting style - Digit n° 5

Standard mounting



Float mounting

Self-locking threaded inserts



Mounting style	Digit n° 5	Configuration
Standard mounting	05	Standard mounting shell size 1
	13	Standard mounting shell size 2 & 3
Float mounting	FL	Float mounting, 6-32 eyelet (quantity 4)
	FN	Float mounting, 6-32 self-locking threaded inserts (quantity 4)
	FT	Float mounting, 4-40 (quantity 4)
	FS	Float mounting, 4-40 self-locking threaded inserts (quantity 4)
Self-locking threaded inserts	M3	M3 self-locking inserts, shells size 2 & 3 (quantity: 2)
	N3	M3 self-locking inserts in all holes shells size 1, 2 & 3
	LN	6-32 self-locking threaded inserts (see table beside)
	SL	4-40 self-locking threaded inserts (see table beside)
	TL	4-40 self-locking threaded inserts in all holes
	TN	6-32 self-locking threaded inserts in all holes

Configurations LN and SL
Numbers of self-locking threaded inserts

Shell type and size	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.

Inserts arrangement code

Cavities C and F - Digit n° 6

Shell Size	Digit 6	Cavity C	Cavity F
1	W2	5W2	
1, 2 & 3	01	D.I.	D.I.
	07	D.I. (a)	D.I. (a)
	K4	Empty	Empty
2 & 3	08	D.I. (n)	D.I. (n)
	34	34 pts	34 pts
	A6	85 pts	85 pts
	K1	100 pts	100 pts
	Q1	68Q2	68Q2
	Q3	11Q2	11Q2
	Q4	62Q2	62Q2
	Q6	Q6	Q6
	Q9	20Q4	20Q4
	T8	20T4	20T4
	T9	62T2	62T2
	W2	11C2	11C2
3	02	11C2	D.I.
	03	D.I.	11C2
	A2	11C2	Empty
	A8	85 pts	D.I.
	K2	11C2	100 pts
	K3	100 pts	11C2
	Q2	100 pts	68Q2
	Q8	68Q2	85 pts
	QA	34 pts	Q6
	R1	11Q2	68Q2
	R2	11Q2	100 pts
	R3	11Q2	Empty
	R4	68Q2	11Q2

D.I.: Dummy insert polyamide
D.I. (a): Dummy insert alodine
D.I. (n): Dummy insert nickel
See page 38 for more information.

For other inserts arrangement code, please consult us.

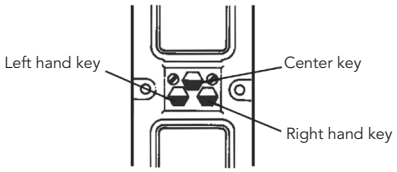
Cavities A, B, D and E - Digit n° 8

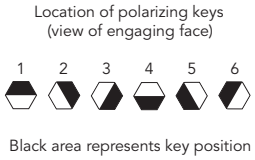
Shell Size	Digit 8	Cavity A	Cavity B
1	00	60 pts	60 pts
	E2	60 pts	Empty
	E3	Empty	60 pts
	L2	60 pts	D.I.
	L3	D.I.	60 pts
1 & 2	E1	Empty	Empty
	HY	D.I.	D.I.
2	02	150 pts	71 pts
	03	71 pts	150 pts
	04	Empty	71 pts
	07	D.I.	71 pts
	60	60 pts	60 pts
	B2	121 pts	121 pts
	E2	150 pts	Empty
	E3	Empty	150 pts
	E5	Empty	28 pts
	E6	C2	71 pts rev.
	H4	71 pts	28 pts
	H5	28 pts	D.I.
	K2	126	126
	K3	150 pts	126
	K4	126	150 pts
	L2	150 pts	D.I.
	QF	D.I.	Q11
	QM	D.I.	118Q2
	QN	71 pts	118Q2
	QV	Q11	Empty
	T3	TCAS	TCAS
	T4	TCAS	150 pts
	T5	150 pts	TCAS
	T7	C12T6	150 pts
	T8	TCAS	118Q2
	T9	TCAS	118T2

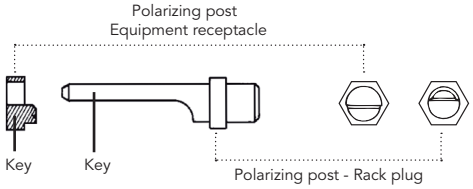
Shell Size	Digit 8	Cavity A	Cavity B	Cavity D	Cavity E
2 & 3	00	150 pts	150 pts	150 pts	150 pts
	01	71 pts	71 pts	71 pts	71 pts
	H3	28 pts	150 pts	28 pts	150 pts
	HQ	28 pts	28 pts	28 pts	28 pts
	L3	D.I.	150 pts	150 pts	150 pts
	QA	Q11	Q11	Q11	Q11
	QB	150 pts	Q11	150 pts	Q11
	QD	Q11	D.I.	Q11	D.I.
	QE	Q11	150 pts	Q11	150 pts
	QJ	118Q2	118Q2	118Q2	118Q2
	QL	Q10	150 pts	Q10	150 pts
	QR	150 pts	118Q2	150 pts	118Q2
3	05	C2	C2	Empty	150 pts
	09	150 pts	150 pts	150 pts	71 pts
	78	TCAS	TCAS	D.I.	150 pts
	E7	C2	C2	C2	150 pts
	HA	150 pts	150 pts	150 pts	28 pts
	HB	150 pts	150 pts	28 pts	150 pts
	HC	150 pts	150 pts	28 pts	28 pts
	HD	150 pts	28 pts	150 pts	150 pts
	HE	150 pts	28 pts	150 pts	28 pts
	HF	150 pts	28 pts	28 pts	150 pts
	HG	150 pts	28 pts	28 pts	28 pts
	HH	28 pts	150 pts	150 pts	150 pts
	HJ	28 pts	150 pts	150 pts	28 pts
	HL	28 pts	150 pts	28 pts	28 pts
	HM	28 pts	28 pts	150 pts	150 pts
	HN	28 pts	28 pts	150 pts	28 pts
	HP	28 pts	28 pts	28 pts	150 pts
	HR	28 pts	150 pts	28 pts	D.I.
	HS	Empty	Empty	D.I.	150 pts
	HV	150 pts	150 pts	D.I.	D.I.
	HX	D.I.	D.I.	D.I.	28 pts
	HY	D.I.	D.I.	D.I.	D.I.
	HZ	D.I.	150 pts	28 pts	28 pts
	QC	TCAS	TCAS	118Q2	118Q2
	QG	150 pts	71 pts	150 pts	Q11
	QH	Q11	Q11	150 pts	Q11
	QK	Q11	Q11	Q11	150 pts
	QT	Q11	Q11	150 pts	150 pts
	QU	Q11	150 pts	150 pts	150 pts
	QW	24 pts	Q10	60 pts	Q10
	QX	Empty	150 pts	Empty	Q11
	T6	TCAS	TCAS	150 pts	150 pts

See pages 17 and 30 to 35 for contacts information and get your digit n° 7

Polarization code - Digit n° 9







Code		Receptacle			Plug		
Normalized	SOURIAU 9	Left key	Center key	Right key	Left post	Center post	Right post
00	00	-	-	-	-	-	-
01	01	4	4	4	1	1	1
02	02	4	4	3	2	1	1
03	03	4	4	2	3	1	1
04	04	4	4	1	4	1	1
05	05	4	4	6	5	1	1
06	06	4	4	5	6	1	1
07	07	5	4	4	1	1	6
08	08	5	4	3	2	1	6
09	09	5	4	2	3	1	6
10	10	5	4	1	4	1	6
11	11	5	4	6	5	1	6
12	12	5	4	5	6	1	6
13	13	6	4	4	1	1	5
14	14	6	4	3	2	1	5
15	15	6	4	2	3	1	5
16	16	6	4	1	4	1	5
17	17	6	4	6	5	1	5
18	18	6	4	5	6	1	5
19	19	1	4	4	1	1	4
20	20	1	4	3	2	1	4
21	21	1	4	2	3	1	4
22	22	1	4	1	4	1	4
23	23	1	4	6	5	1	4
24	24	1	4	5	6	1	4
25	25	2	4	4	1	1	3
26	26	2	4	3	2	1	3
27	27	2	4	2	3	1	3
28	28	2	4	1	4	1	3
29	29	2	4	6	5	1	3
30	30	2	4	5	6	1	3
31	31	3	4	4	1	1	2
32	32	3	4	3	2	1	2
33	33	3	4	2	3	1	2
34	34	3	4	1	4	1	2
35	35	3	4	6	5	1	2
36	36	3	4	5	6	1	2
37	37	4	3	4	1	2	1
38	38	4	3	3	2	2	1
39	39	4	3	2	3	2	1
40	40	4	3	1	4	2	1
41	41	4	3	6	5	2	1
42	42	4	3	5	6	2	1
43	43	5	3	4	1	2	6
44	44	5	3	3	2	2	6
45	45	5	3	2	3	2	6
46	46	5	3	1	4	2	6
47	47	5	3	6	5	2	6
48	48	5	3	5	6	2	6
49	49	6	3	4	1	2	5
50	50	6	3	3	2	2	5
51	51	6	3	2	3	2	5
52	52	6	3	1	4	2	5
53	53	6	3	6	5	2	5

Code		Receptacle			Plug		
Normalized	SOURIAU 9	Left key	Center key	Right key	Left post	Center post	Right post
54	54	6	3	5	6	2	5
55	55	1	3	4	1	2	4
56	56	1	3	3	2	2	4
57	57	1	3	2	3	2	4
58	58	1	3	1	4	2	4
59	59	1	3	6	5	2	4
60	60	1	3	5	6	2	4
61	61	2	3	4	1	2	3
62	62	2	3	3	2	2	3
63	63	2	3	2	3	2	3
64	64	2	3	1	4	2	3
65	65	2	3	6	5	2	3
66	66	2	3	5	6	2	3
67	67	3	3	4	1	2	2
68	68	3	3	3	2	2	2
69	69	3	3	2	3	2	2
70	70	3	3	1	4	2	2
71	71	3	3	6	5	2	2
72	72	3	3	5	6	2	2
73	73	4	2	4	1	3	1
74	74	4	2	3	2	3	1
75	75	4	2	2	3	3	1
76	76	4	2	1	4	3	1
77	77	4	2	6	5	3	1
78	78	4	2	5	6	3	1
79	79	5	2	4	1	3	6
80	80	5	2	3	2	3	6
81	81	5	2	2	3	3	6
82	82	5	2	1	4	3	6
83	83	5	2	6	5	3	6
84	84	5	2	5	6	3	6
85	85	6	2	4	1	3	5
86	86	6	2	3	2	3	5
87	87	6	2	2	3	3	5
88	88	6	2	1	4	3	5
89	89	6	2	6	5	3	5
90	90	6	2	5	6	3	5
91	91	1	2	4	1	3	4
92	92	1	2	3	2	3	4
93	93	1	2	2	3	3	4
94	94	1	2	1	4	3	4
95	95	1	2	6	5	3	4
96	96	1	2	5	6	3	4
97	97	2	2	4	1	3	3
98	98	2	2	3	2	3	3
99	99	2	2	2	3	3	3
100	A0	2	2	1	4	3	3
101	A1	2	2	6	5	3	3
102	A2	2	2	5	6	3	3
103	A3	3	2	4	1	3	2
104	A4	3	2	3	2	3	2
105	A5	3	2	2	3	3	2
106	A6	3	2	1	4	3	2
107	A7	3	2	6	5	3	2

Code		Receptacle			Plug		
Normalized	SOURIAU 9	Left key	Center key	Right key	Left post	Center post	Right post
108	A8	3	2	5	6	3	2
109	A9	4	1	4	1	4	1
110	B0	4	1	3	2	4	1
111	B1	4	1	2	3	4	1
112	B2	4	1	1	4	4	1
113	B3	4	1	6	5	4	1
114	B4	4	1	5	6	4	1
115	B5	5	1	4	1	4	6
116	B6	5	1	3	2	4	6
117	B7	5	1	2	3	4	6
118	B8	5	1	1	4	4	6
119	B9	5	1	6	5	4	6
120	C0	5	1	5	6	4	6
121	C1	6	1	4	1	4	5
122	C2	6	1	3	2	4	5
123	C3	6	1	2	3	4	5
124	C4	6	1	1	4	4	5
125	C5	6	1	6	5	4	5
126	C6	6	1	5	6	4	5
127	C7	1	1	4	1	4	4
128	C8	1	1	3	2	4	4
129	C9	1	1	2	3	4	4
130	D0	1	1	1	4	4	4
131	D1	1	1	6	5	4	4
132	D2	1	1	5	6	4	4
133	D3	2	1	4	1	4	3
134	D4	2	1	3	2	4	3
135	D5	2	1	2	3	4	3
136	D6	2	1	1	4	4	3
137	D7	2	1	6	5	4	3
138	D8	2	1	5	6	4	3
139	D9	3	1	4	1	4	2
140	E0	3	1	3	2	4	2
141	E1	3	1	2	3	4	2
142	E2	3	1	1	4	4	2
143	E3	3	1	6	5	4	2
144	E4	3	1	5	6	4	2
145	E5	4	6	4	1	5	1
146	E6	4	6	3	2	5	1
147	E7	4	6	2	3	5	1
148	E8	4	6	1	4	5	1
149	E9	4	6	6	5	5	1
150	F0	4	6	5	6	5	1
151	F1	5	6	4	1	5	6
152	F2	5	6	3	2	5	6
153	F3	5	6	2	3	5	6
154	F4	5	6	1	4	5	6
155	F5	5	6	6	5	5	6
156	F6	5	6	5	6	5	6
157	F7	6	6	4	1	5	5
158	F8	6	6	3	2	5	5
159	F9	6	6	2	3	5	5
160	G0	6	6	1	4	5	5
161	G1	6	6	6	5	5	5

Code		Receptacle			Plug		
Normalized	SOURIAU 9	Left key	Center key	Right key	Left post	Center post	Right post
162	G2	6	6	5	6	5	5
163	G3	1	6	4	1	5	4
164	G4	1	6	3	2	5	4
165	G5	1	6	2	3	5	4
166	G6	1	6	1	4	5	4
167	G7	1	6	6	5	5	4
168	G8	1	6	5	6	5	4
169	G9	2	6	4	1	5	3
170	H0	2	6	3	2	5	3
171	H1	2	6	2	3	5	3
172	H2	2	6	1	4	5	3
173	H3	2	6	6	5	5	3
174	H4	2	6	5	6	5	3
175	H5	3	6	4	1	5	2
176	H6	3	6	3	2	5	2
177	H7	3	6	2	3	5	2
178	H8	3	6	1	4	5	2
179	H9	3	6	6	5	5	2
180	J0	3	6	5	6	5	2
181	J1	4	5	4	1	6	1
182	J2	4	5	3	2	6	1
183	J3	4	5	2	3	6	1
184	J4	4	5	1	4	6	1
185	J5	4	5	6	5	6	1
186	J6	4	5	5	6	6	1
187	J7	5	5	4	1	6	6
188	J8	5	5	3	2	6	6
189	J9	5	5	2	3	6	6
190	K0	5	5	1	4	6	6
191	K1	5	5	6	5	6	6
192	K2	5	5	5	6	6	6
193	K3	6	5	4	1	6	5
194	K4	6	5	3	2	6	5
195	K5	6	5	2	3	6	5
196	K6	6	5	1	4	6	5
197	K7	6	5	6	5	6	5
198	K8	6	5	5	6	6	5
199	K9	1	5	4	1	6	4
200	L0	1	5	3	2	6	4
201	L1	1	5	2	3	6	4
202	L2	1	5	1	4	6	4
203	L3	1	5	6	5	6	4
204	L4	1	5	5	6	6	4
205	L5	2	5	4	1	6	3
206	L6	2	5	3	2	6	3
207	L7	2	5	2	3	6	3
208	L8	2	5	1	4	6	3
209	L9	2	5	6	5	6	3
210	M0	2	5	5	6	6	3
211	M1	3	5	4	1	6	2
212	M2	3	5	3	2	6	2
213	M3	3	5	2	3	6	2
214	M4	3	5	1	4	6	2
215	M5	3	5	6	5	6	2
216	M6	3	5	5	6	6	2

Packaging code - 1st letter + 2nd letter = Digit n° 10

Packaging code not applicable to connectors where no contacts are specified.
Do not use the suffix L (1st letter) and N (2nd letter) together.

Delivery conditions of Signal and Power contacts - Digit n° 10 (1st letter - see table below)

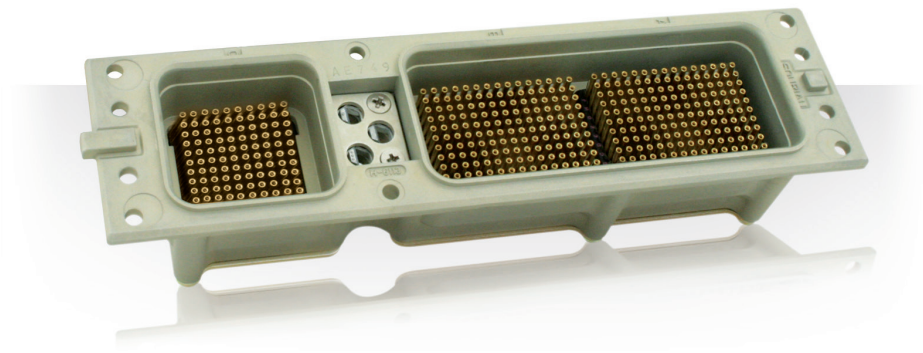
Contact type	Signal contacts	Power contacts	PC Tail length (mm/inch)	PC Tail plating	1st letter
Crimp contacts only	Delivered without contacts	Delivered without contacts	N/A	N/A	L
		Delivered with contacts	N/A	N/A	N
	Delivered with contacts	Delivered with contacts	N/A	N/A	A
		Delivered without contacts	N/A	N/A	B
Mix PC Tail + Crimp contacts	Delivered with PC Tail contacts	Delivered with crimp contacts	3.81/0.125	Tin plated	I
			6.35/0.25	Tin plated	3
				Gold plated	E
			9.52/0.375	Gold plated	P
PC Tail contacts only	Delivered with contacts	Delivered without contacts	3.81/0.125	Gold plated	G
	Delivered with contacts	Delivered with contacts	6.35/0.25	Tin plated	H
				Gold plated	Y
	Delivered without contacts	Delivered with contacts		Tin plated	5
	Delivered with contacts	Delivered without contacts	9.52/0.375	Gold plated	R
	Delivered with contacts	Delivered with contacts	12.7/0.5	Tin plated	4
	Delivered with contacts	Delivered without contacts		Tin plated	2
				Gold plated	X

Delivery conditions of #5 Coax, #1 Coax and #8 Quadrax contacts - Digit n° 10 (2nd letter - see table below)

#5 Coax contacts	#1 Coax contacts	2nd letter
Delivered with #5 coax for RG 58 C/U cable	Delivered with #1 coax for RG165/U and RG 225/U cable	A
Delivered with #5 coax for 5021K1011 cable	Delivered with #1 coax for RG 393/U cable	F
Delivered with #5 coax for 5021K1011 cable	Delivered without contacts	D
Delivered with #5 coax for RG 316 cable		J
Delivered with #5 coax for KX23 cable		K
Delivered with #5 coax for RG 58C/U cable		M
Delivered with #5 to #12 cavity reducer		I
Delivered with #5 dummy contacts		H
Delivered without contacts		N
	Delivered with #1 TCAS Coax	S
	Delivered with #1 coax for RG 141A/U, RG 142 and KX23 cable	B
	Delivered with #1 coax for UT 141 and RG 400B/U cable	C
	Delivered with #1 coax for RG 393/U cable	E

#8 Quadrax contacts	2nd letter
• If signal and power contacts are crimped, delivered with crimp Quadrax contacts • If not, delivered with PC tails Quadrax contacts. Same plating than signal and power contacts, or tin plated if not applicable.	Q

For other code packaging, please consult us.



Description

- **High performance** avionic equipment
- Rack and panel rectangular connectors **compliant to ARINC 600 specifications**
- High density up to 800 signal contacts
- **Low insertion force** contact design (tapered pin, LIF socket)
- Unsealed versions
- Multiple polarizing positions
- **Field replaceable inserts, featuring:**
  - **Non removable contacts**
  - Signal contacts

Technical features

Mechanical

- **Shell:**
  Aluminum alloy to QQ-A-591
- **Shell plating:**
  Nickel
  Alodine 1200 passivation to MIL-C-5541 class 1
- **Contact:**
  Copper alloy to QQ-B-626
- **Contact plating:**
  Gold plated compliant to MIL-G-45204 over nickel to QQ-N290
- **Insulator:**
  Thermoplastic
- **Endurance:**
  500 mating/unmating operations
- **Insertion and extraction forces max:**
  Shell size 2: 267N (60 lbs)
  Shell size 3: 467N (105 lbs)
- **Vibrations:**
  8 hours in each axis
  Random vibration at 16.4 g Rms from 50 to 2000 Hz (MIL-STD-1344 A method 2005-1)
- **Dynamic shock:**
  3 impacts of 50 g in all axis, duration 11µs (half wave) to MIL-STD-202 method 213

Environmental

- **Operating temperature:**
  -65°C to +125°C
- **Resistance to salt spray:**
  48 hours (MIL-STD-202 method 101 or MIL-STD-1344 method 1001)

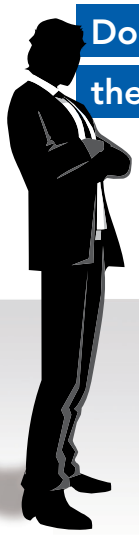
Electrical

- Dielectric withstanding voltage**:**

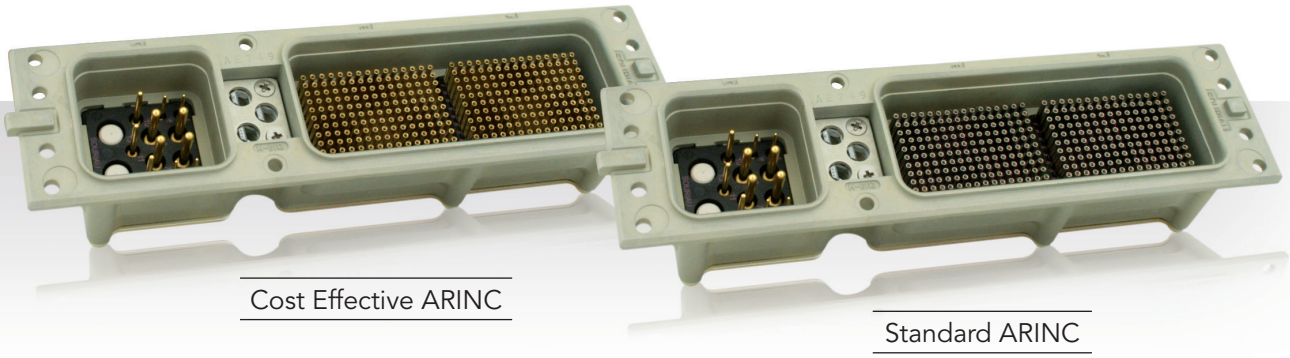
	Sea level	15 000 m
Mated	1500 Vrms	500 Vrms
Unmated	1500 Vrms	500 Vrms

- **Voltage rating:**
  500 Vac Max
  125 Vac at 21000 m
- **Insulation resistance:**
  ≥ 5000 MΩ

Comparison with standard ARINC 600



Do you see any difference between these two connectors?



Cost Effective ARINC

Standard ARINC

No? Read below

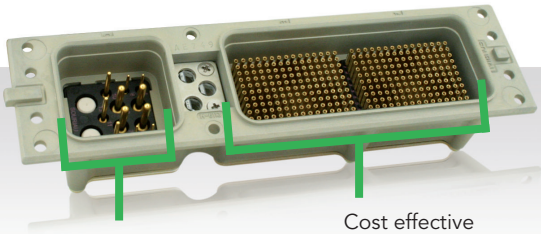
The technical characteristics of the Cost Effective ARINC compared to the Standard are:

- **Selective gold plating** - Active part
- **Non removable contacts**
- Insert modification (one piece part)
- No contact marking, no insert marking
- Insert always pre-loaded with contacts

This technology allows you to SAVE money!

In Addition:

Possibility to MIX cost effective and standard inserts in the same shell



Standard insert

Cost effective inserts