



SOURIAU

Rack and Panel Rectangular Connectors
Selector Guide

Typical applications



Cockpit Display Units



Landing Gear Management



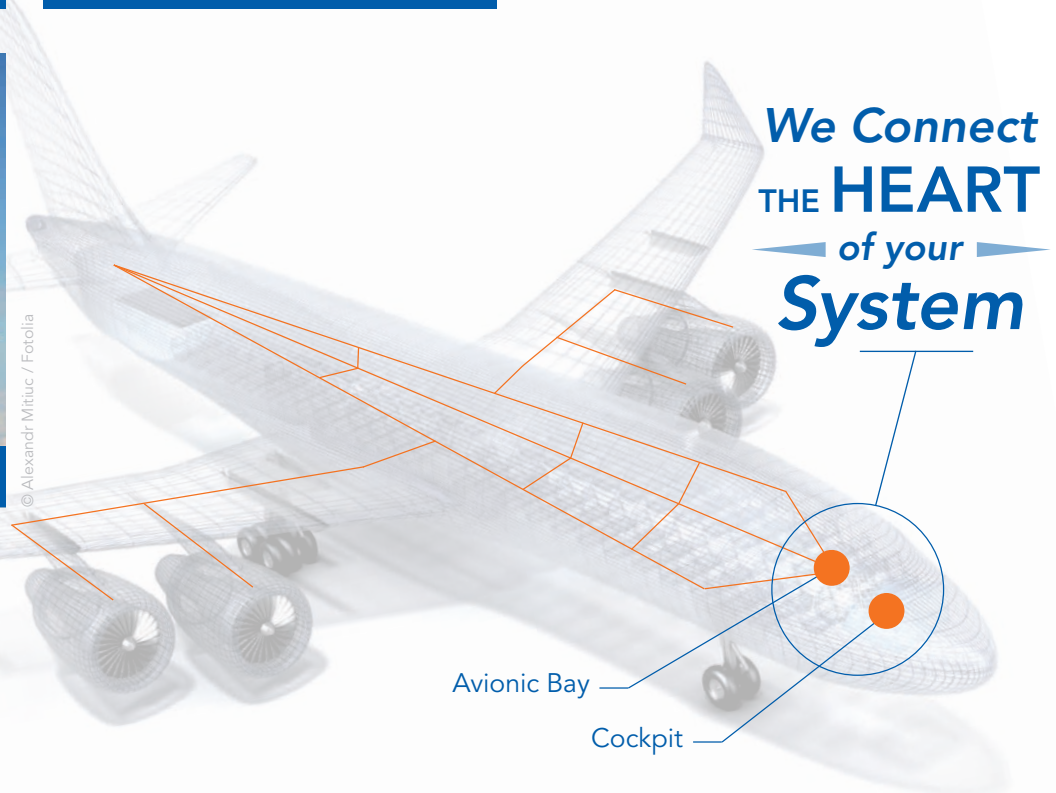
Cabin: IFE & Air Conditioning



Avionic Bay/Data Acquisition



Engine Management



Features & Benefits

TIME SAVING

Rackable Solution

Blind mate, Clearance device for better rackability.
Low insertion force.

MAKE IT YOURS

Modular Solution

Front and rear release removable contacts.
Flex circuit integration and cabling.
Build your own connector matching your exact needs.

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.
Grounding finger and blade with alodine plating.
Possibility to have specific population of contacts.

Technical features

Materials

	Material	Plating
Shells	Aluminum alloy	Alodine 1200 passivation
		Nickel plating
Insulator	Epoxy resin thermoset	
	Thermoplastic	
Seal & grommet	Fluorinated silicon	
Contacts	Copper alloy	Gold plated

- Endurance: 500 matings
- Insertion and extraction forces max:
 - . Shell size 1: 120N (27 lbs)
 - . Shell size 2: 267N (60 lbs)
 - . Shell size 3: 467N (105 lbs)

Electrical

- Dielectric withstanding voltage:
 - . Sea level: 1 500 Vrms
 - . 15 000 m: 500 Vrms
- Voltage rating: 500 Vac Max
- Insulation resistance: $\geq 5000 \text{ M}\Omega$
- Current ratings, continuous:

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

* measured over a conductor length of 150 mm

Optical

- ARINC 600 connector can integrate ELIO® fiber optic contacts in #8 quadrax cavities with the addition of ELIO® #8 adaptor

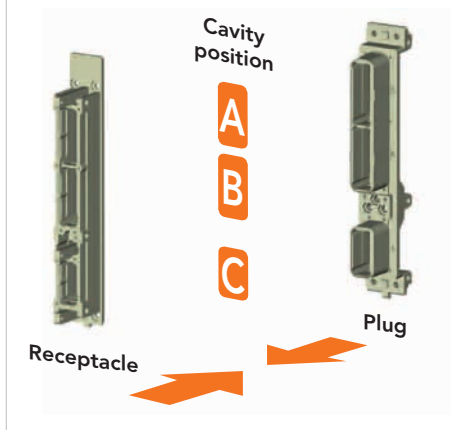
Environmental

- 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)

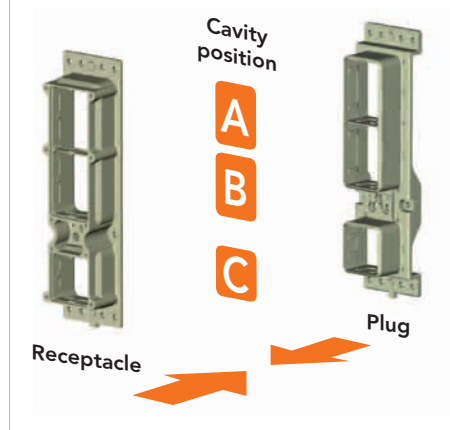
For more information and details, please consult "ARINC 600 Series" catalog on www.souriau.com

Shell types & Cavity overview

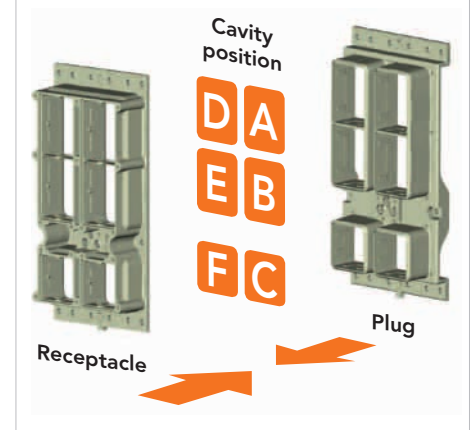
Shell size 1



Shell size 2



Shell size 3



Sealing level

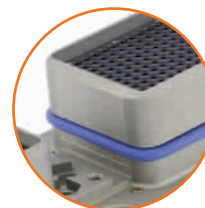
Compound

- Allows to seal the insert



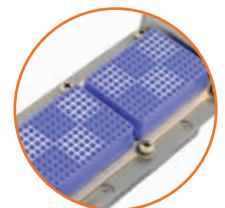
O-Ring for plug only

- Fluorinated silicon compliant to MIL-R-25988



Grommet

- Fluorinated silicon compliant to MIL-R-25988



Plating & Grounding

Alodine plating

Standard polarization

- Without specific grounding



or Ground finger

- Cost effective solution



or Ground blade

- Cost effective solution



Nickel plating

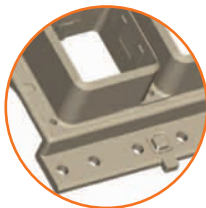
Standard polarization

- Ground spring mandatory on the plug



Mounting style

Standard mounting



Float mounting

- with eyelet or threaded inserts



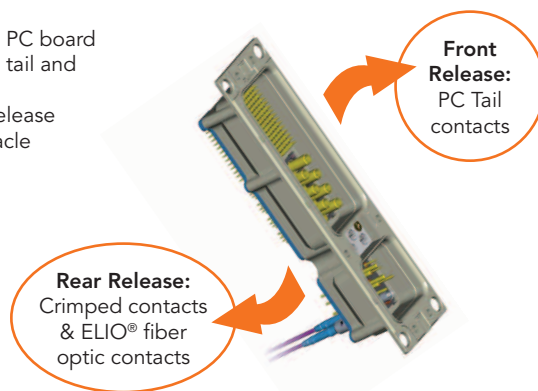
Self-locking threaded inserts



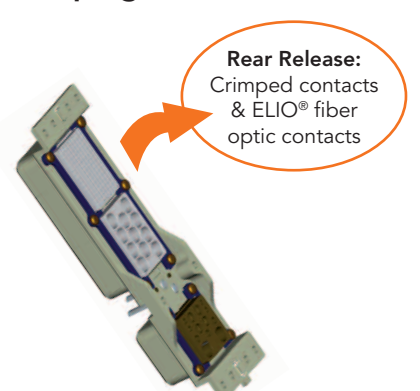
Contacts release

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

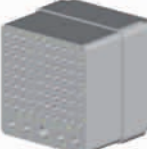
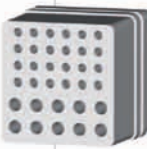
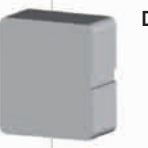
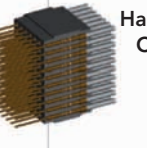


Rack plug



Shell size 2 & 3

Cavity C & F

 100 pts 100 #22 S	 85 pts 80 #22 4 #20 1 #16 S P	 68Q2 68 #22 2 #8 S Q E	 62Q2 60 #22 2 #16 2 #8 S P Q E	 62T2 60 #22 2 #16 2 #8 S P T
 59 pts 50 #22 5 #16 4 #12 NEW S P	 34 pts 24 #20 10 #16 P	 20T4 20 #20 4 #8 P T	 20Q4 20 #20 4 #8 P Q E	 11C2 4 #20 3 #16 4 #12 2 #5 P C
 11Q2 4 #20 3 #16 4 #12 2 #8 P Q E	 11T2 4 #20 3 #16 4 #12 2 #8 P T	 Q6 6 #8 Q E	 Dummy Insert	 Harpooned Contact 100pts NEW

Contacts type

Crimped contacts

- S** • **Signal #22**
Standard, Standard with selective plating, Chromel, Aludel
- P** • **Power #20, #16, #12, #8**
Standard and small barrel
- C** • **Coax #8, #5, #1**

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

- T** • **Triax #8**
For cable EN3375-004, MIL-C-17176
- **TCAS #1**
For cable Filotex E0406WD, Filotex 50MFCFB and GORESW39214
- Q** • **Quadrax #8 and Twinax #8**
- E** • **ELIO® fiber optic**
With #8 adaptor

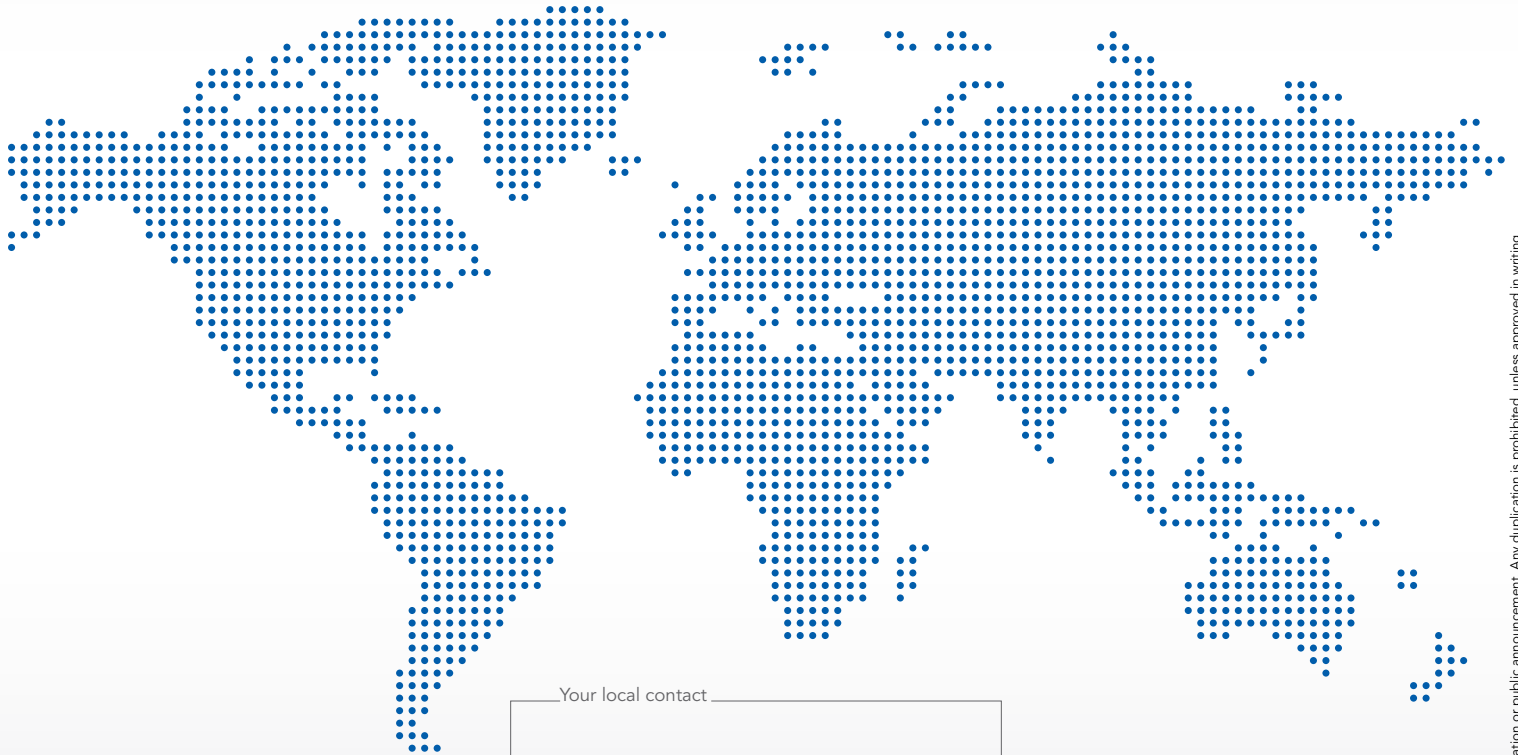
PC tail contacts

- S** • **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
- P** • **Wire wrap #22**
0.25 inch (6.35 mm)
0.375 inch (9.52 mm)
0.5 inch (12.7 mm)
- T** • **Triax #8**
With PC tail L = 0.25 inch (6.35 mm)
- Q** • **Quadrax #8**
With PC tail L = 0.25 inch (6.35 mm)
Gold or tin plated

Accessories

- **Cavity reducer**
Size 5 to size 12 - rear and front release
Size 8 to size 12 and Size 8 to size 16 - rear release
- **Filler plug** for sealed version only
#22, #20, #16, #12, #8 and #5 available
- **Dummy contact** for all sizes

Reliable People, Reliable Solutions



Your local contact _____



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