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.

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ARINC 600 SERIES

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ARINC 600 Series

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Typical applications


© StudioSmart / Shutterstock

Cockpit Display Units


© Lee Yiu Tung / Shutterstock

Landing Gear Management


© Avatar_023 / Shutterstock

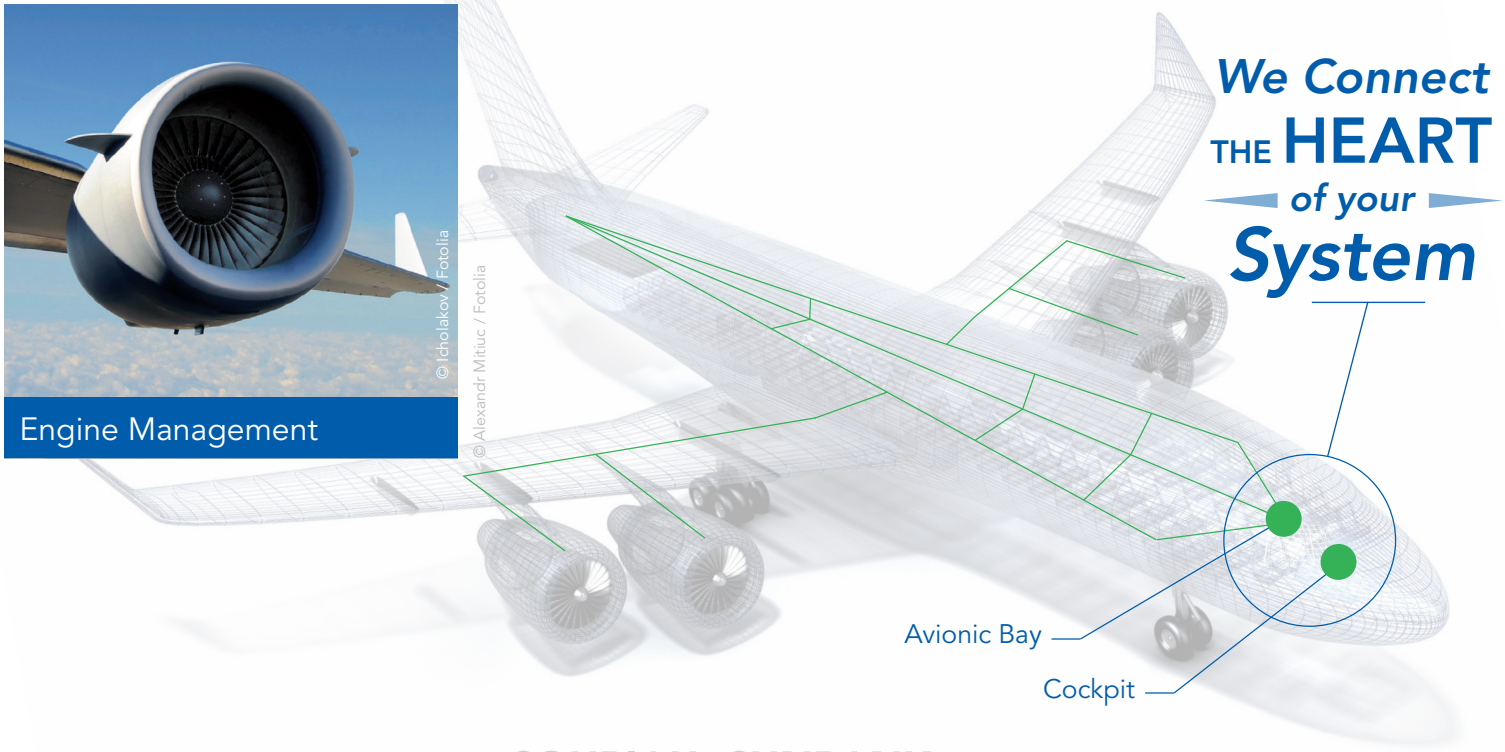
Cabin: IFE & Air Conditioning


Courtesy of NORD-MICRO

Avionic Bay/Data Acquisition

© Idholakov / Fotolia

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

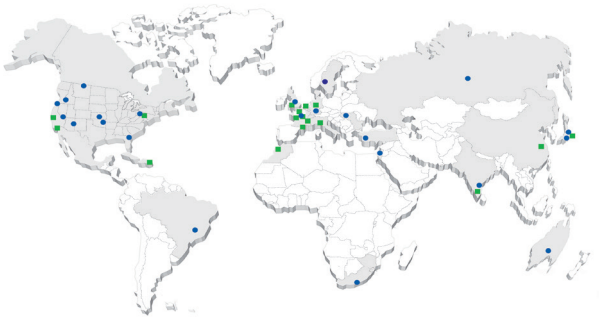
Cost Effective version
Harpooned contacts

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.

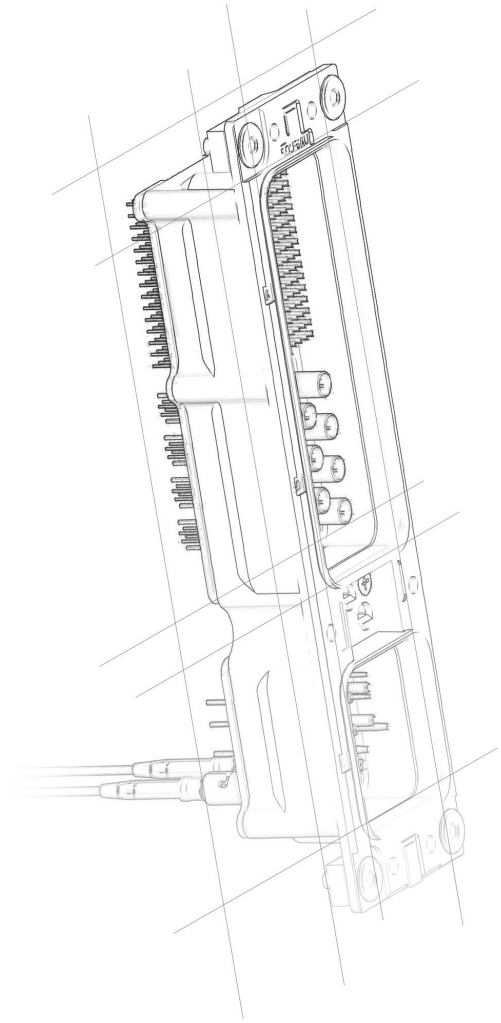
Our international presence is reinforced by franchised and value added distributors in many countries.

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.



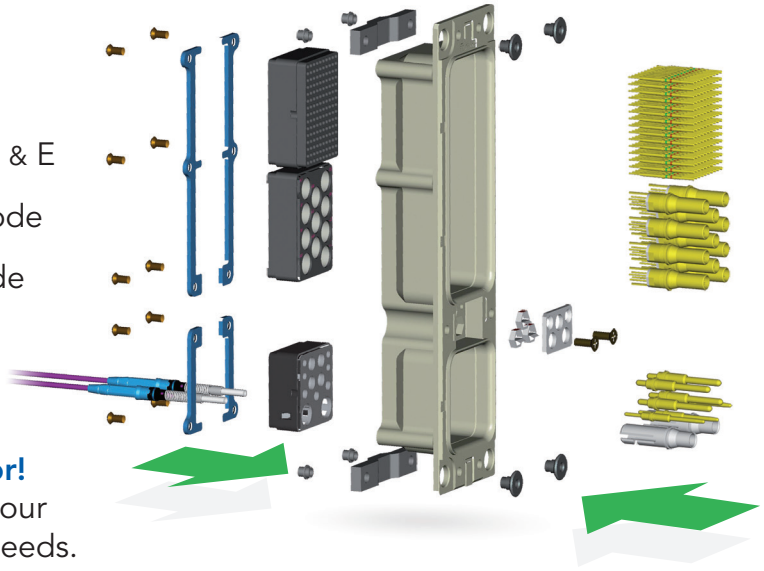
- **SOURIAU** Operations and Sales Offices
- Franchised and Value Added Distributors

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



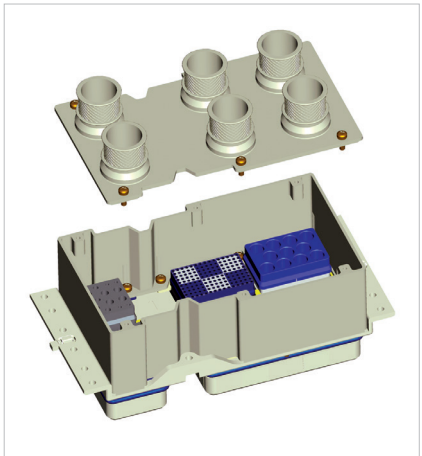
= Your Connector!
Match perfectly your box connection needs.

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.

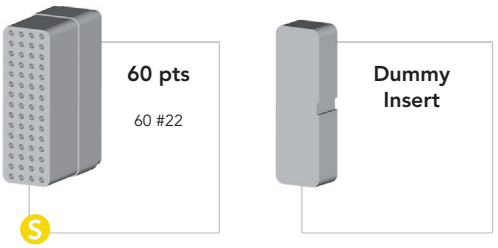
For more information about **SUNBANK** please visit our website: **www.sunbankcorp.com**



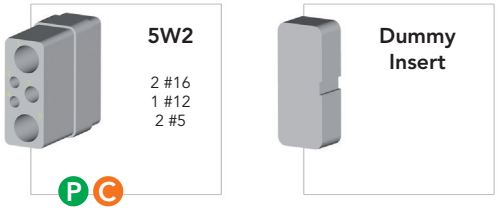
Insert layouts

Shell size 1

Cavity A & B

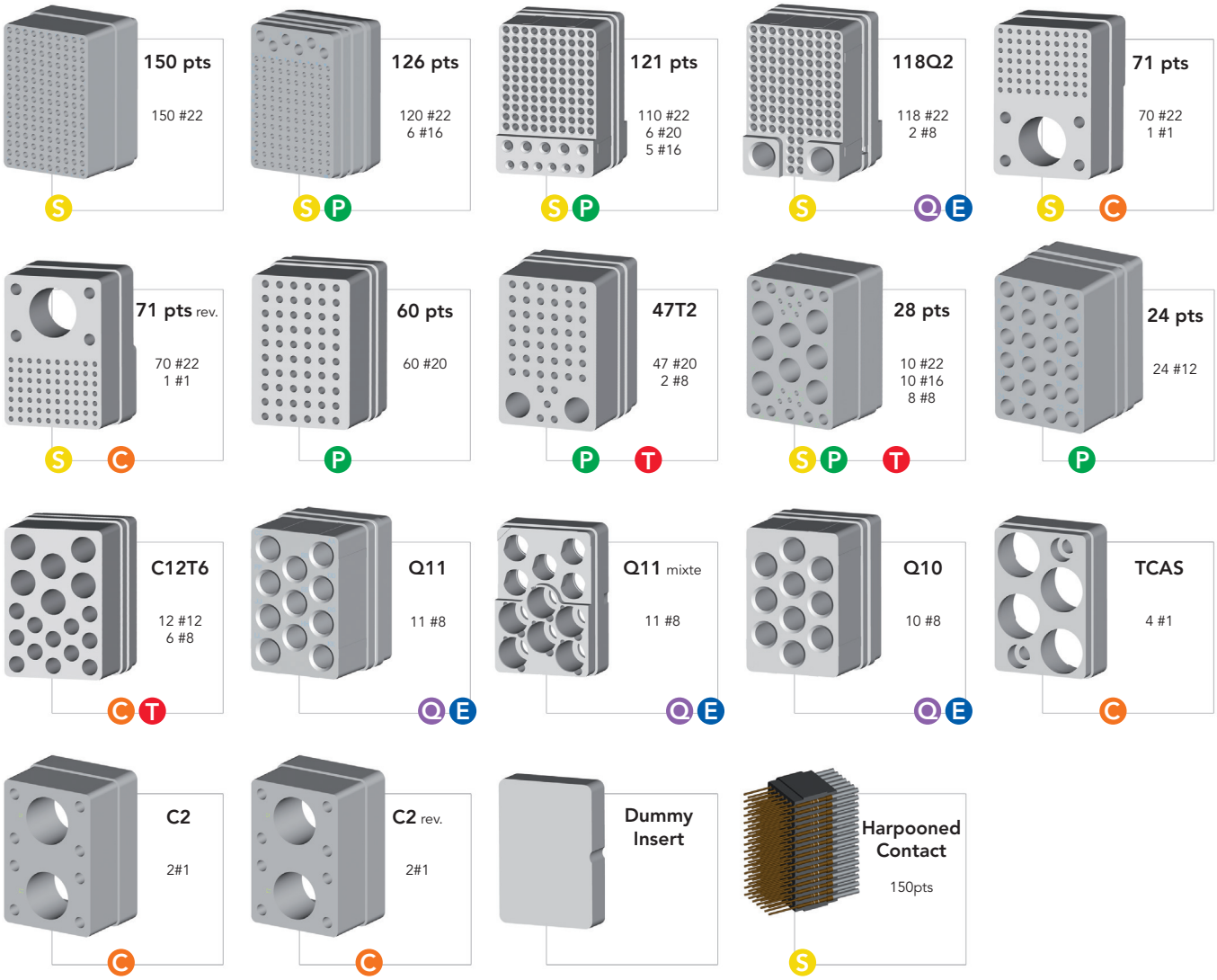


Cavity C



Shell size 2 & 3

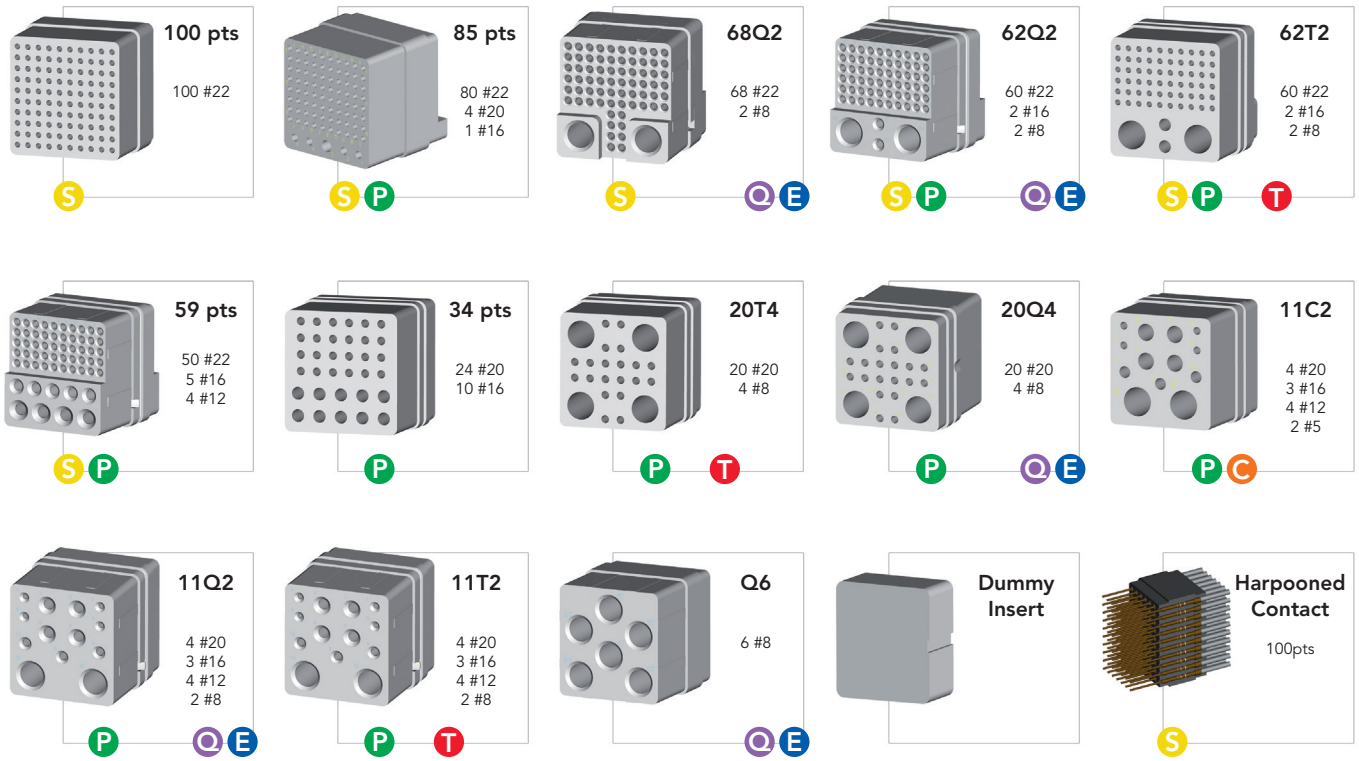
Cavity A, B, D & E



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

Shell size 2 & 3

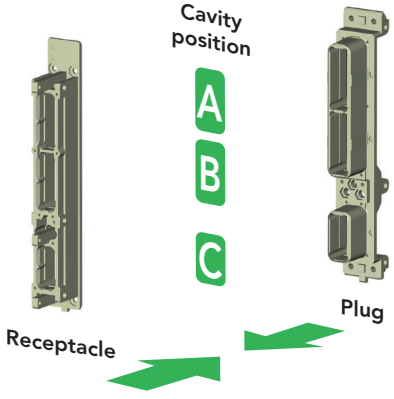
Cavity C & F



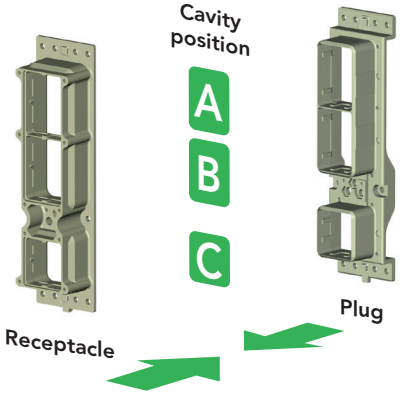
Contact types: S Signal · P Power · C Coax · T Triax · Q Quadrax or Twinax · E ELIO® Fiber Optic

Shell types and cavity overview

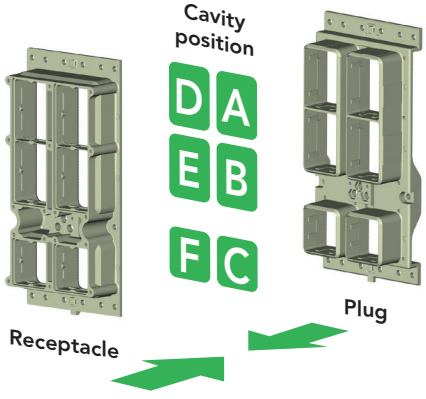
Shell size 1



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

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ARINC 600 Series

Product Series

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- Ordering information 17
- Sealing level 17
- Plating & Grounding 18
- Dimensions - Shell sizes 1, 2 & 3 19
- Contacts release 22
- Mounting style 22
- Inserts arrangement code 23
- Polarization code 24
- Packaging code 25
- Cost effective version 26



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)

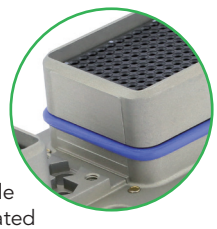
Compound

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



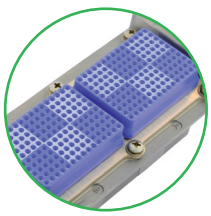
O-Ring
for plug only

- 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

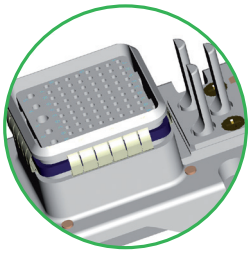
or Ground blade



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

Nickel RoHS

Standard polarization



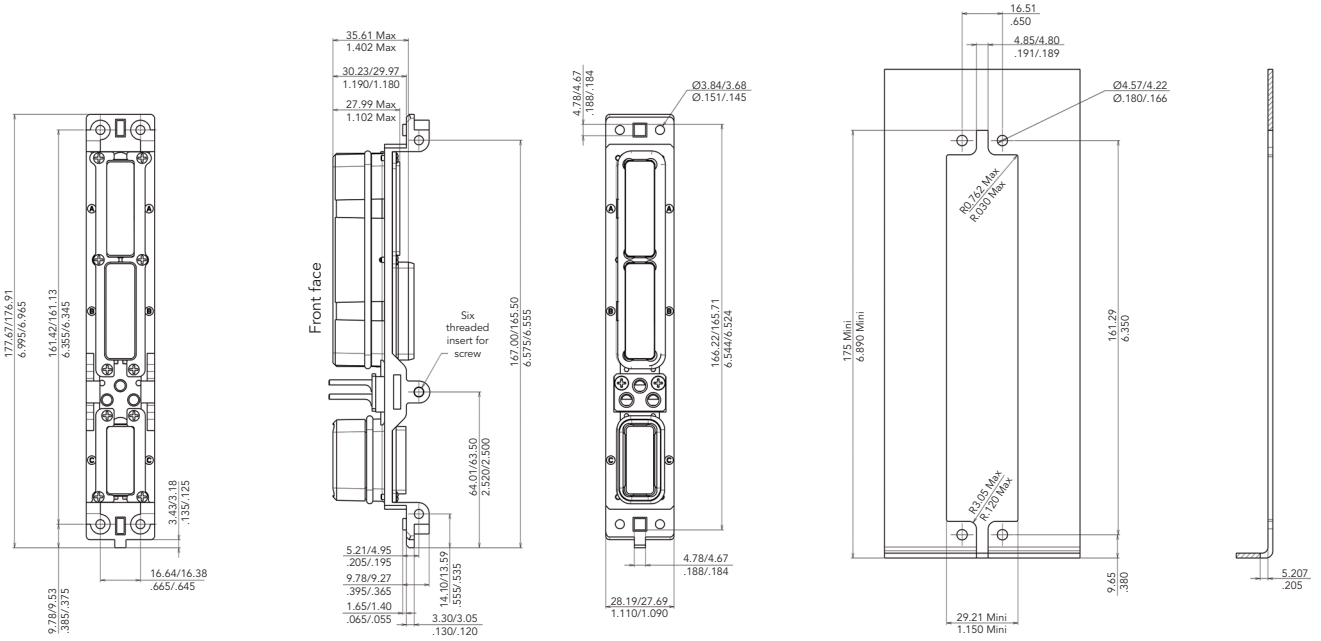
- Ground spring mandatory on the plug
- Best continuity performance
- Available in shell sizes 2 & 3
- Sealed and unsealed versions

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.

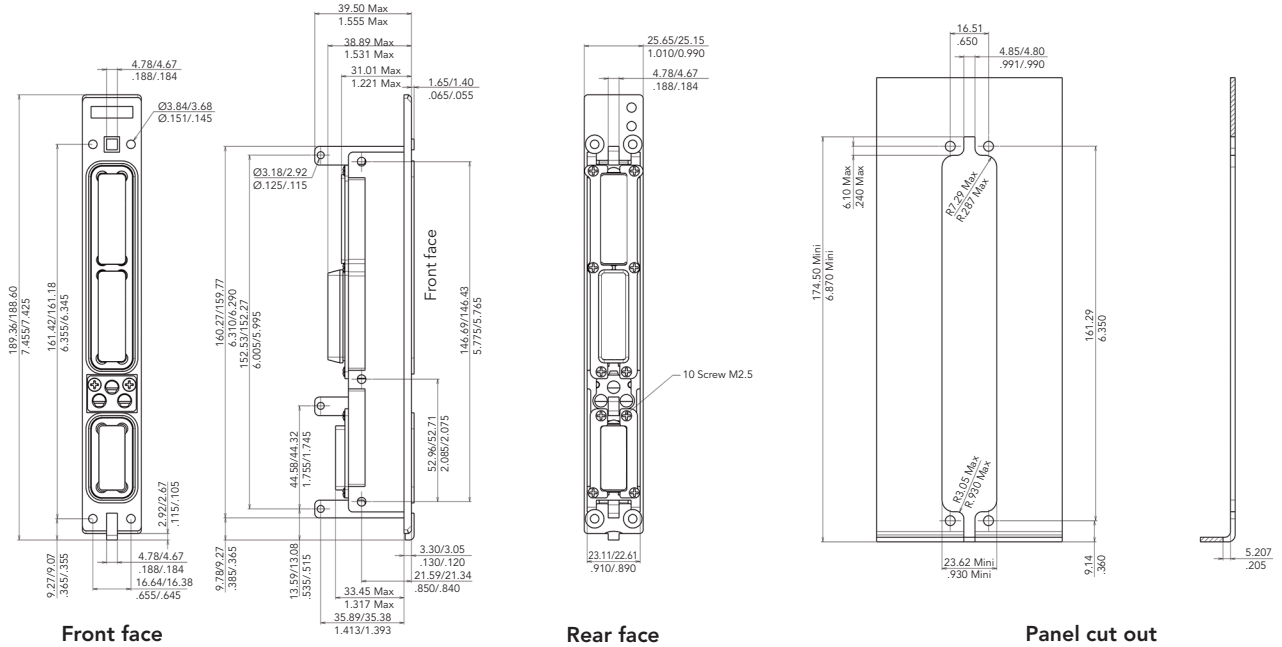
Dimensions shell size 1 - Shell size digit n° 2 & Shell type digit n° 3

Rack Plug (M) (mm/inch)



Rear face | Front face | Panel cut out

Equipment Receptacle (F) (mm/inch)

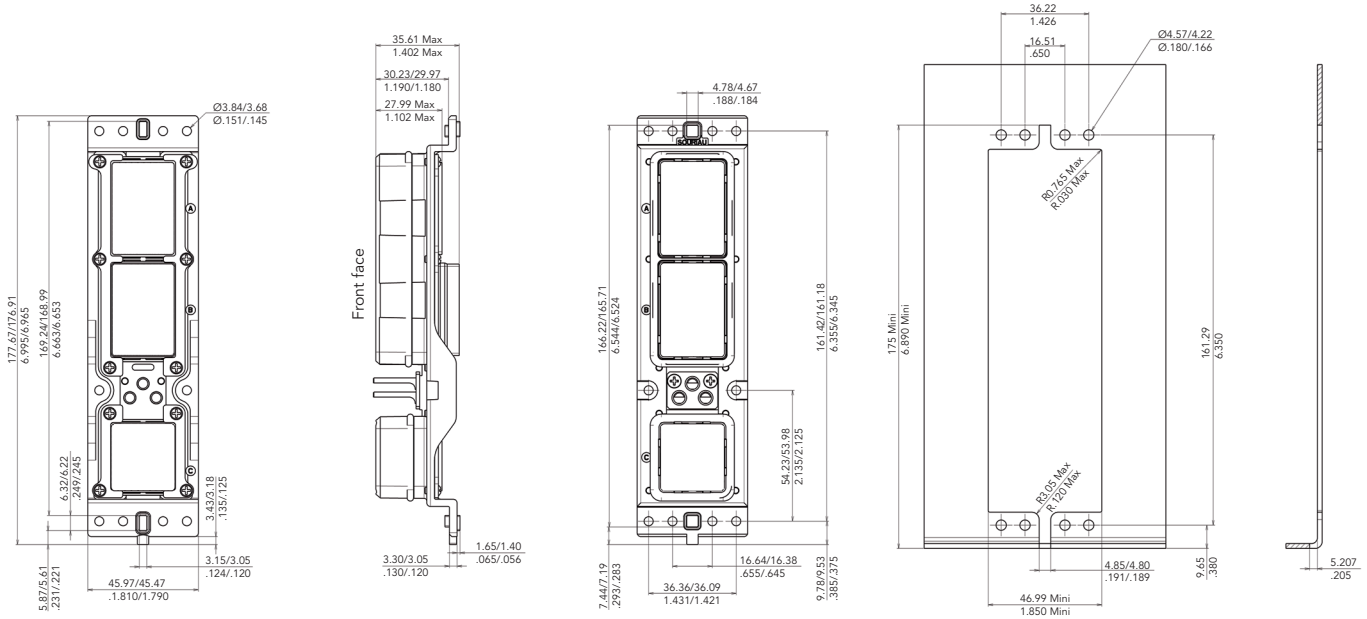


Front face | Rear face | Panel cut out

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

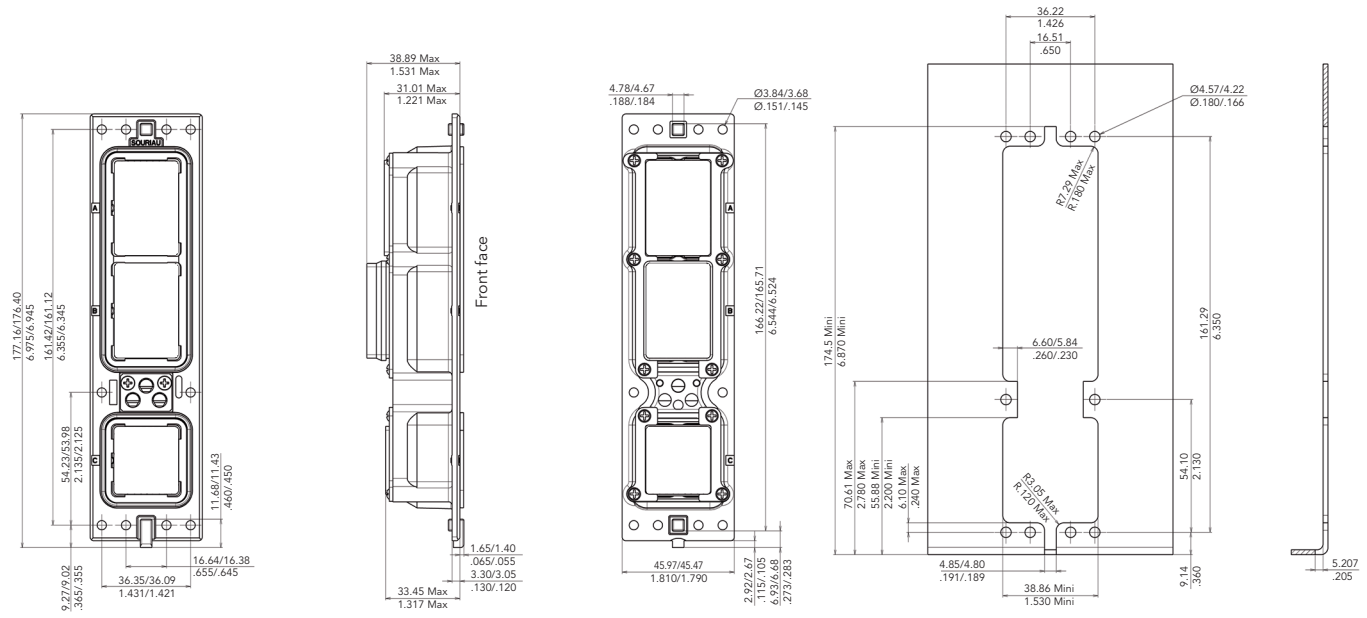
Dimensions shell size 2 - Shell size digit n° 2 & Shell type digit n° 3

Rack Plug (M) (mm/inch)



Rear face | Front face | Panel cut out

Equipment Receptacle (F) (mm/inch)

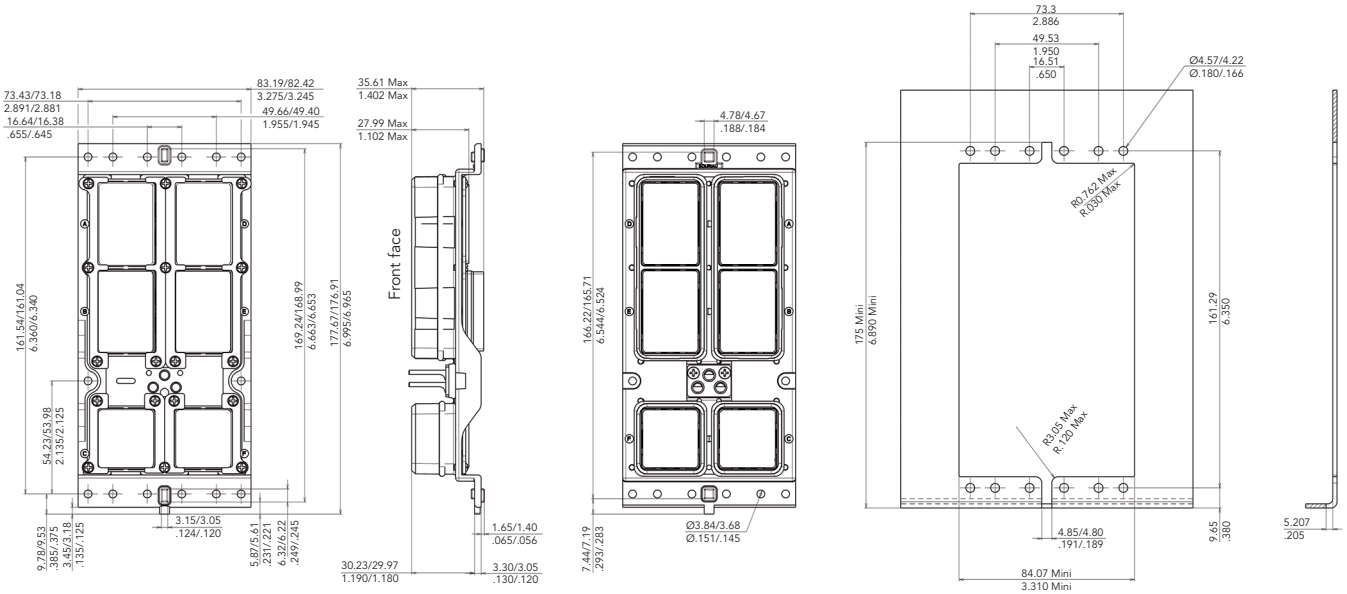


Front face | Rear face | Panel cut out

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

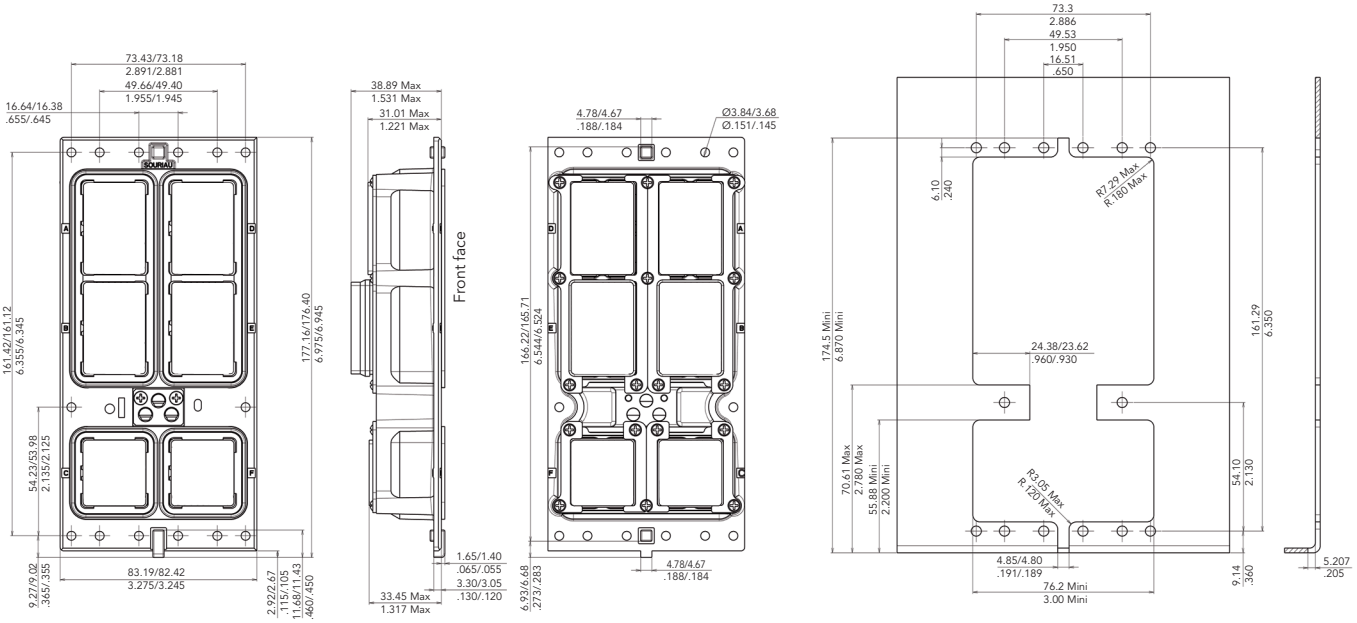
Dimensions shell size 3 - Shell size digit n° 2 & Shell type digit n° 3

Rack Plug (M) (mm/inch)



Rear face | Front face | Panel cut out

Equipment Receptacle (F) (mm/inch)



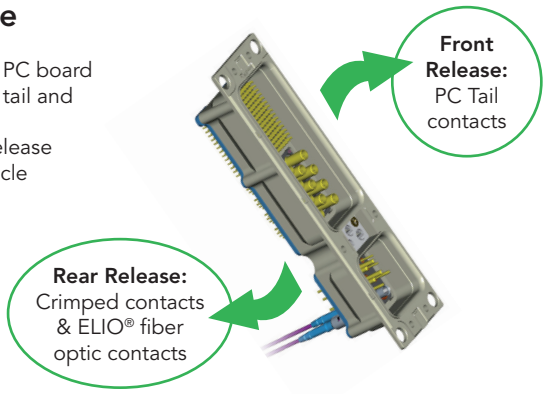
Front face | Rear face | Panel cut out

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

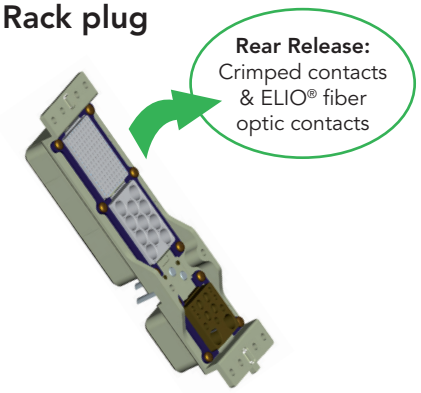
Contacts release - Digit n° 4

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



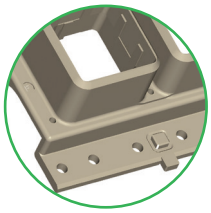
Rack plug



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

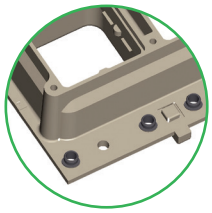
Standard mounting



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.

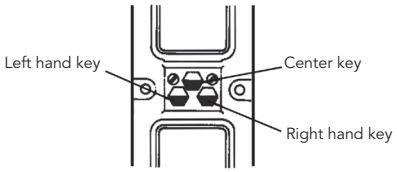
Cavities A, B, D and E - Digit n° 8

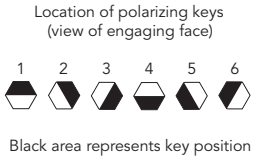
Shell Size	Digit 8	Cavity A	Cavity B
1	00	60 pts	60 pts
	E2	60 pts	Empty
	E3	Empty	60 pts
	L2	60 pts	D.I.
	L3	D.I.	60 pts
1 & 2	E1	Empty	Empty
	HY	D.I.	D.I.
2	02	150 pts	71 pts
	03	71 pts	150 pts
	04	Empty	71 pts
	07	D.I.	71 pts
	60	60 pts	60 pts
	B2	121 pts	121 pts
	E2	150 pts	Empty
	E3	Empty	150 pts
	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

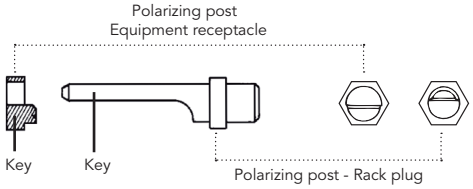
Shell Size	Digit 8	Cavity A	Cavity B	Cavity D	Cavity E
2 & 3	00	150 pts	150 pts	150 pts	150 pts
	01	71 pts	71 pts	71 pts	71 pts
	H3	28 pts	150 pts	28 pts	150 pts
	HQ	28 pts	28 pts	28 pts	28 pts
	L3	D.I.	150 pts	150 pts	150 pts
	QA	Q11	Q11	Q11	Q11
	QB	150 pts	Q11	150 pts	Q11
	QD	Q11	D.I.	Q11	D.I.
	QE	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)

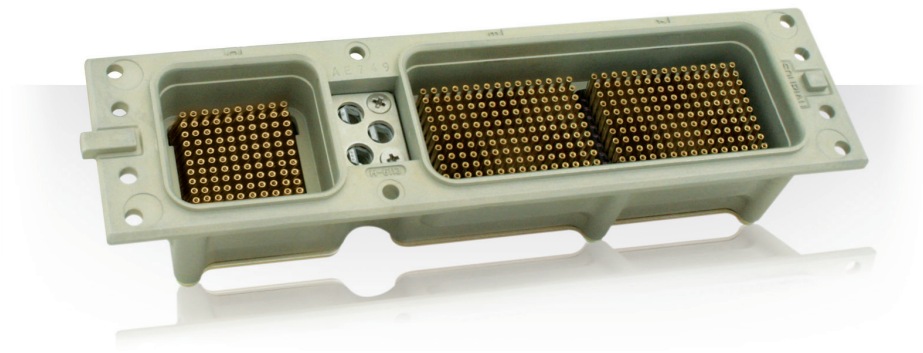
Contact type	Signal contacts	Power contacts	PC Tail length (mm/inch)	PC Tail plating	1st letter
Crimp contacts only	Delivered without contacts	Delivered without contacts	N/A	N/A	L
		Delivered with contacts	N/A	N/A	N
	Delivered with contacts	Delivered with contacts	N/A	N/A	A
		Delivered without contacts	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)

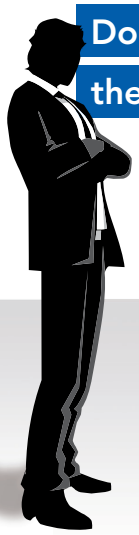
Electrical

- Dielectric withstanding voltage**:**

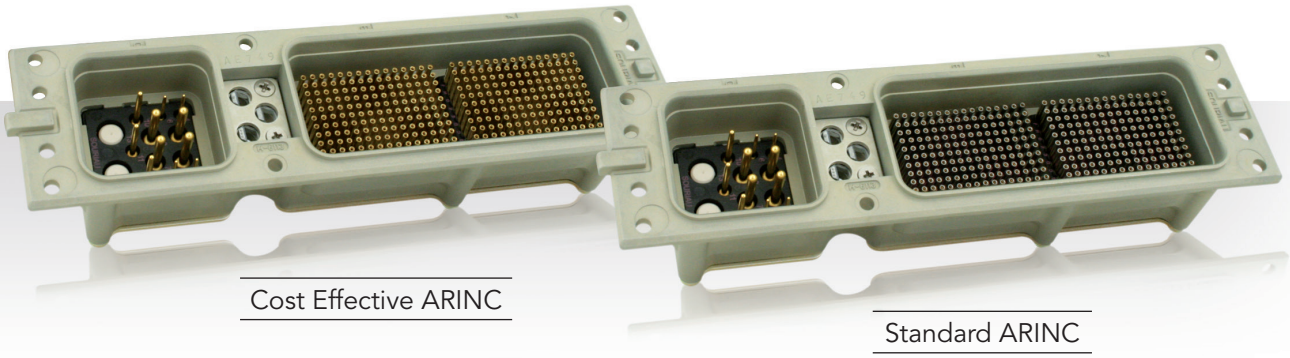
	Sea level	15 000 m
Mated	1500 Vrms	500 Vrms
Unmated	1500 Vrms	500 Vrms

- **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:

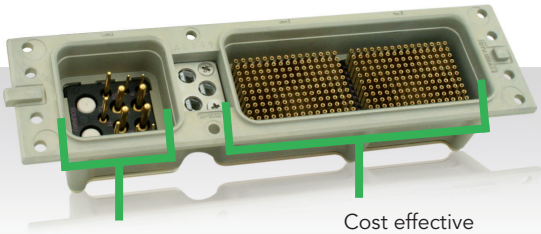
- **Selective gold plating** - Active part
- **Non removable contacts**
- Insert modification (one piece part)
- No contact marking, no insert marking
- Insert always pre-loaded with contacts



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

ARINC 600 SERIES

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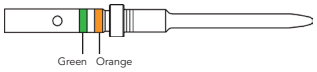
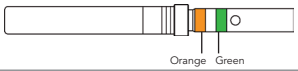
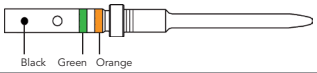
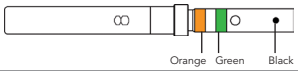
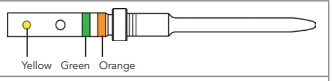
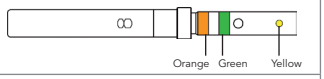
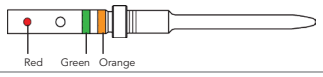
ARINC 600 Series

Common Section

- Crimp contacts:
  - Signal contacts, Power contacts, Twinax contacts, Triax contacts 30
  - Coax contacts 31
  - Specific contacts for 28 pts insert, Wire data for crimp contacts 32
- PC tail contacts:
  - Signal contacts, Power contacts, Triax contacts, Coax contacts 33
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- Wire wrap contacts 34
- Quadrax contats 35
- ELIO® fiber optic contacts + Adaptors #8 35
- Tooling:
  - Crimping tools 36
  - Insertion and extraction tools + Instructions 37
- Accessories:
  - Cavity reducers, Dummy contacts, Filler plug, Dummy inserts 38
  - Plastic covers, Backshells SUNBANK 39

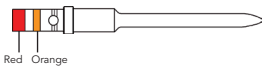
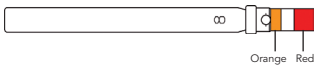
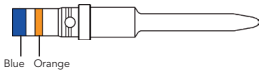
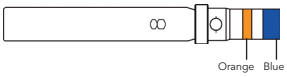
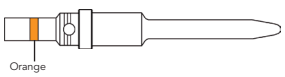
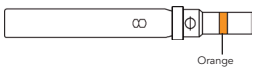
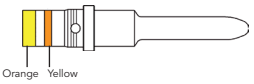
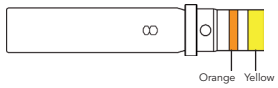
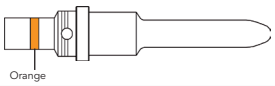
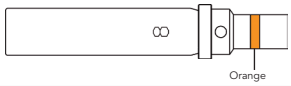
Crimp contacts

Signal contacts

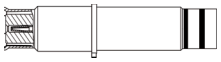
Contact size	For rack plug: rear release			For equipment receptacle: rear release		
	Contact type	Part number	Profile and color code	Contact type	Part number	Profile and color code
#22 Standard	Pin	8660-6412*		Socket	8660-206	
#22 Alumel		8660-209			8660-211 900	
#22 Chromel		8660-208			8660-210 900	
#22 Constantan		8660-2029			8660-2034	

* Selective plating ASNE0170FA2200 - Best value for money solution! Available without selective plating: 8660-202

Power contacts

Contact size	For equipment receptacle: rear release			For rack plug: rear release		
	Contact type	Part number	Profile and color code	Contact type	Part number	Profile and color code
#20 Power	Pin	8660-230		Socket	8660-248	
#16 Power		8660-233			8660-249	
#16 Power Small barrel		8660-1048			8660-2575	
#12 Power		8660-236			8660-250	
#12 Power Small barrel		8660-1049			8660-257 900	

Twinax contacts

Contact size	For equipment receptacle			For rack plug			Cable
	Contact type	Part number	Profile	Contact type	Part number	Profile	
#8 twinax	Pin	ETH2-1104A		Socket	ETH2-1105A		ABS0386WF24
		ETH2-1106A			ETH2-1107A		ASNE0272TK22
		ETH2-1102A			ETH2-1103A		ASNE0272TK24
		ETH2-1100A			ETH2-1101A		ASNE0807WX26

Triax contacts

Contact size	Class	Boot included	For rack plug: Socket contact	For equipment receptacle: Pin contact	Cable
#8 Triax	Sealed	Yes	8667-D03-08R-52A/01	8667-D02-08R-52A/01	EN3375-004 MIL-C-17176
	Unsealed	No	8667-D03-08R-02A/01	8667-D02-08R-02A/01	

Coax contacts

Contact size	Class	For rack plug: Socket contact	For equipment receptacle: Pin contact	Cable
#8 Coax	Unsealed	8660-6211	8660-6251	RG 400 / U
#5 Coax (Sealing sleeve supplied for sealed connectors)	Sealed	8660-2485	8660-2480	RG 58 C / U RG 142 B / U RG 141 A / U NSA 935359 WB
	Unsealed	8660-2285 900	8660-2280	
	Sealed	8660-2486	8660-2481	RG 174 A / U RG 188 A / U
	Unsealed	8660-2286	8660-2281	
	Sealed	8660-2487	8660-2482	RG 223 / U RG 400 BU KX 23
	Unsealed	8660-2287	8660-2282	
	Sealed	8660-2488	8660-2483	RG 178 B / U RG 196 A / U RG 316 / U KX 21 A KX 22 A
	Unsealed	8660-2288	8660-2283	
	Sealed	8660-2489	8660-2484	RG 180 B / U RG 195 A / U
	Unsealed	8660-2289	8660-2284	
	Sealed	8660-2298E	-	5021 K 1011
	Unsealed	8660-2498E	8660-2494	

Coax female contact



Female body | Inner contact | Crimp ferrule | Sealing sleeve

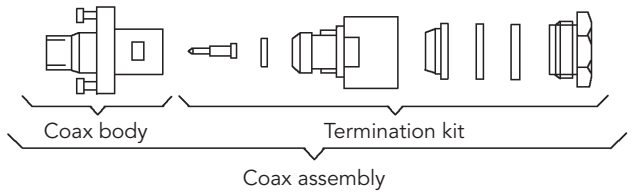
Coax male contact

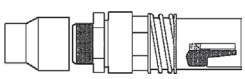
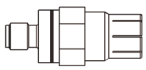


Male body | Inner contact | Crimp ferrule | Sealing sleeve

Contact size	Class	For rack plug: Socket contact			For equipment receptacle: Pin contact			Cable
		Coax body	Termination kit	Coax assembly	Coax body	Termination kit	Coax assembly	
#1 Coax	Sealed	8660-2277	8660-2587 900	8660-2296 900	8660-2272 900	8660-2581 900	8660-2251 900	RG 141 A / U RG 142 B / U KX 23
	Unsealed	8660-2278 900		8660-2261 900	8660-2274 900		8660-2241 900	
	Sealed	-	-	-	8660-2272 900	8660-2582 900	8660-2252 900	UT141
	Unsealed				8660-2274 900		8660-2242	
	Sealed	8660-2277	8660-2580 900	8660-2295 900	8660-2272 900	8660-2583 900	8660-2250 900	RG 165 / U RG 214 / U RG 225 / U
	Unsealed	8660-2278 900		8660-2260 900	8660-2274 900		8660-2240 900	
	Sealed	8660-2277	8660-2585 900	8660-2299	8660-2272 900	8660-2588 900	8660-2254 900	RG 393 / U
	Unsealed	8660-2278 900		8660-2263 900	8660-2274 900		8660-2244	
	Sealed	8660-2277	8660-2237 900	8660-2311	8660-2272 900	8660-2236 900	8660-2313 900	Fileca1703 / 3 Filotex50MT KT
	Unsealed	8660-2278 900		8660-2259 900	8660-2274 900		8660-2314 900	
	Unsealed	8660-2278 900	8660-2341 900	8660-2141 900	-	-	-	RG 400 / BU

Coax assembly example

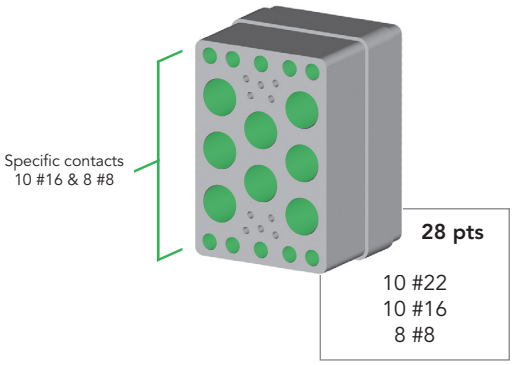


Contact size	Shell style	Part number	Profile	Cable
#1 Coax for TCAS insert	Rack plug	8660-D21-100-01A/05		FILOTEX E0406WD FILOTEX 50MFCFB
		8660-6413		GORESW39214
	Equipment receptacle	8660-6136		Output SMA

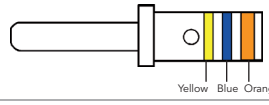
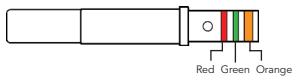
Specific crimp contacts for 28 pts insert

#8 Triaxial contact

Contact size	Class	For rack plug: Socket contact	For equipment receptacle: Pin contact	Cable
#8 Triaxial	Sealed	8599-5220 900 Included boot	8599-5210 900 Included boot	MIL-C17176 -00002
	Unsealed	8599-0998	8599-0988	



#16 Power rear release

Contact size	Contact type	Part number without colour code	MIL-DTL-38999 contacts	
			Part number	Profile and colour code
#16 Power	Pin	8599-0704 MJ	M39029/58-364	
	Socket	8599-0708 900	M39029/56-352	

#16 Dummy contacts (unsealed version)

Contact size	Shell style	Part number	Color
#16 (38999)	Rack plug	8660-3138	Blue
	Equipment receptacle	8660-3139	

Wire data for crimp contacts

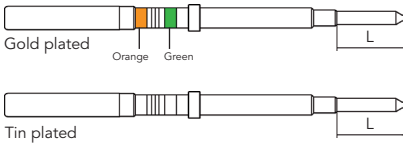
Contact size	Cables		Ø over insulation (mm/inch)	
	mm²	AWG	min	max
#22	0.15 to 0.38	26 - 24 - 22	0.66 / 0.026	1.371 / 0.054
#20	0.21 to 0.60	24 - 22 - 20	1.016 / 0.04	1.803 / 0.071
#16	0.60 to 1.34	20 - 18 - 16	1.727 / 0.068	2.616 / 0.103
#16 Small barrel	0.21 to 0.93	24 - 22 - 20 - 18	1.73 / 0.068	2.6 / 0.102
#12	1.91 to 3.18	14 - 12	2.464 / 0.097	3.429 / 0.135
#12 Small barrel	0.21 to 0.93	24 - 22 - 20 - 18	2.48 / 0.098	3.4 / 0.134

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

PC tail contacts

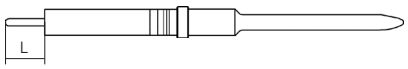
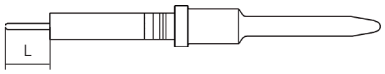
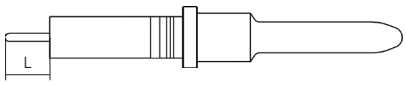
Signal contacts

For equipment receptacle: Socket contacts - front release

Contact size	Gold plated	Tin plated	L = Length PC tail ±0.1	Ø PC tail	Profile
#22	8660-550	8660-C23-22V-01A/06	4.5 / 0.18	0.60 / 0.024 min 0.67 / 0.026 max	
	8660-555	8660-C23-22V-02A/06	7.05 / 0.28		
	8660-560	8660-C23-22V-03A/06	10.25 / 0.4		
	8660-565 900	8660-C23-22V-04A/06	13.4 / 0.53		

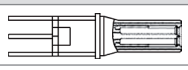
Power contacts

For equipment receptacle: Pin contacts - front release

Contact size	Gold plated	Tin plated	L = Length PC tail	Ø PC tail	Profile
#20	8660-420-200-04AMJ	8660-420-200-04A06	3.81 / 0.15	0.81 / 0.032 min 0.88 / 0 .035 max	
	8660-420-200-01AMJ	8660-420-200-01A06	6.35 / 0.25		
	8660-420-200-02AMJ	8660-420-200-02A06	9.52 / 0.375		
	8660-420-200-03AMJ	8660-420-200-03A06	12.7 / 0.5		
#16	8660-420-160-04AMJ	8660-420-160-04A06	3.81 / 0.15	1.27 / 0.050 min 1.33 / 0.052 max	
	8660-420-160-01AMJ	8660-420-160-01A06	6.35 / 0.25		
	8660-420-160-02AMJ	8660-420-160-02A06	9.52 / 0.375		
	8660-420-160-03AMJ	8660-420-160-03A06	12.7 / 0.5		
#12	8660-420-120-04AMJ	8660-420-120-04A06	3.81 / 0.15	2.05 / 0.081 min 2.11 / 0.083 max	
	8660-420-120-01AMJ	8660-420-120-01A06	6.35 / 0.25		
	8660-420-120-02AMJ	8660-420-120-02A06	9.52 / 0.375		
	8660-420-120-03AMJ	8660-420-120-03A06	12.7 / 0.5		
#8	Please consult us				

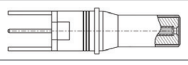
Triax contacts

For equipment receptacle: Pin contacts - front release

Contact size	Tin plated	L = Length PC tail	Profile
#8	8660-6046	6.35 / 0.25	

Coax contacts

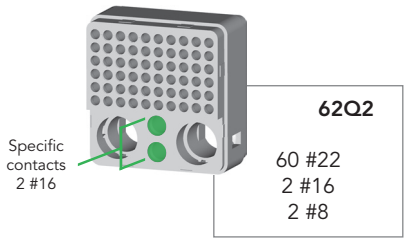
For equipment receptacle: Pin contacts - front release

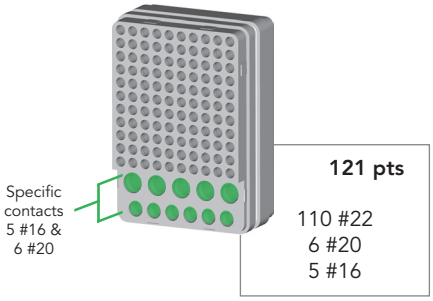
Contact size	Tin plated	L = Length PC tail	Profile
#8	8660-6271	6.35 / 0.25	

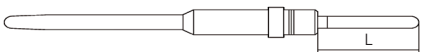
Note: All dimensions are in millimeters/inches (mm/inch)

Specific PC tail contacts for 62Q2 & 121 pts inserts

For equipment receptacle: Pin specific contacts

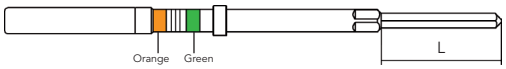




Contact size	Plating	Part number	L = Length PC tail	Ø PC tail (mm)	Profile
#20	Tin plated	8660-420-200-05A/06	6.35 / 0.25	0.81 / 0.032 min 0.88 / 0 .035 max	-
#16	Tin plated	8660-420-160-05A/06	6.35 / 0.25	1.27 / 0.050 min 1.33 / 0.052 max	

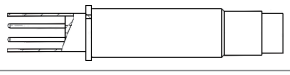
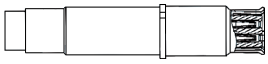
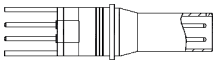
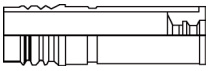
Wire wrap contacts

For equipment receptacle: Socket contacts - front release

Contact Size	Plating	Part number	L = Length PC tail		Profile
#22	Gold plated	8660-223	6.35 / 0.25	0.82 / 0.032 min 0.90 / 0.035 max	
		8660-224	9.52 / 0.375		
		8660-225	12.7 / 0.5		

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

Quadrax contacts

Contact size	Contact type	Part number	Version	Class	Release	Profile
#8 Quadrax	Pin	ETH1-1100A	Crimp version	Unsealed	Rear	
	Socket	ETH1-1101A				
	Pin	ETH1-1110A	PC tail, L = 6.35 / 0.25	Unsealed	Front	
		ETH1-1123A	Tinned PC tail, L = 6.35 / 0.25			
Sealing boot	-	8660-6053	-	Sealed	-	

Cable: ABS0972 - KB24 - ABS1503 - KD24

ELIO® fiber optic contacts



ELIO® Contacts Ordering Information

ELIO	09	N	G	L	A

Cable external diameter:
09: 0.9mm or cable wider than 1.9mm with 0.9mm jacket inside
18: from 1.5mm to 1.9mm

Contact sealing:
W: waterproof (1.8mm +/- 0.1mm cable only)
N: non waterproof

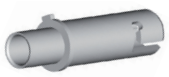
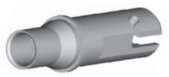
Fibre type:
G: 50 or 62,5/125µm
D: 100/140µm
For singlemode fibre (9/125) please consult us.

Boot type:
L: Long boot
S: Short boot
N: No boot (non waterproof version only)

Contact version index

ELIO® AQ: Adaptor for Quadrax #8 Cavities

- ARINC 600 connector can integrate ELIO® fiber optic contacts in #8 quadrax cavities with the addition ELIO® #8 adaptor.
- Insertion loss: 0.3 dB per contact.
- Possibility to mix optical and electrical signals in the same insert.
- Fligh proven at temperature range -65°C +125°C.
- Designed to comply with ELIO® contact optical performances.

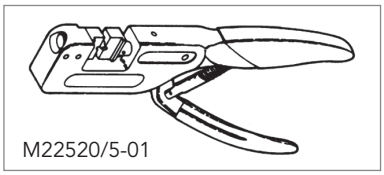
Part number	Adaptor type	Profile
ELIOAQOP Delivered with alignment boot	Rear realease Male Insert For receptacle	
ELIOAQ1P	Front release Male Insert For receptacle	
ELIOAQOS	Rear release Female insert For plug	

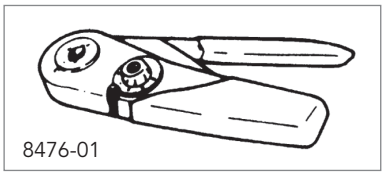
See SOURIAU «ELIO® Fiber Optic Technology» catalog for more information.

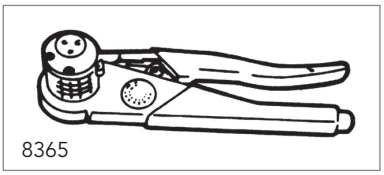
Note: All dimensions are in millimeters/inches (mm/inch)

Tooling

Crimping tools


M22520/5-01


8476-01


8365

Contact size	Plier	Contact type	Locator		Cables	
			Norm / Spec	SOURIAU	mm²	AWG
#8 Quadrax	M22520/5-01	Outer	M22520/5-45 die set repere B	-	-	-
	8476-01 M22520/2-01	Central	K709 setting number 5	-	-	-
#22		Pin & Socket	M22520/2-23	8660-216	0.15 to 0.38	26 - 24 - 22
#20		Pin & Socket	M22520/2-08	8476-08	0.21 to 0.60	24 - 22 - 20
#16	8365 M22520/1-01	Pin & Socket	M22520/1-02	8365-02	0.60 to 1.34	20 - 18 - 16
#16 small barrel		Pin & Socket	M22520/1-02	8365-02	0.21 to 0.93	24 - 22 - 20 - 18
#12		Pin & Socket	M22520/1-02	8365-02	1.91 to 3.18	14 - 12
#12 small barrel		Pin & Socket	M22520/1-02	8365-02	0.21 to 0.93	24 - 22 - 20 - 18

Note: Quadrax & Twinax contacts, consult us for wiring instruction.

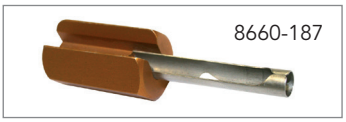
Contact size	Plier for inner contact 8476-01 M22520/2-01	Plier for external contact M22520/5-01	Contact part numbers	
	Locator	Hex dies	Sealed connector	Unsealed connector
#5 coax	M22520/2-14	M22520/5-45B	8660-2480/2485	8660-2280/2285
		M22520/5-37B	8660-2481/2486	8660-2281/2286
		M22520/5-45B	8660-2482/2487	8660-2282/2287
		M22520/5-37B	8660-2483/2488	8660-2283/2288
		M22520/5-43B	8660-2484/2489	8660-2284/2289
#1 coax	No assembly tooling required			

Contact size	Plier	Contact type	Locator	Cables
#1 coax for TCAS insert	M22520/1-01	Inner contact	M22520/13SEL-8	FILOTEX E0406WD FILOTEX 50MFCFB
	M22520/5-01	External contact	M22520/5-61	

Insertion and extraction tools

Contact size	Release	Material	Part number		Color	
			Norm / Spec	SOURIAU	Insertion	Extraction
#22	Rear release	Metallic	M81969/1-01	8660-160	Green	White
#20		Metallic	M81969/1-02	8660-188	Red	White
#16		Metallic	M81969/1-03	-	Blue	White
#12		Plastic	M81969/14-04	M81969/14-04	Yelow	White
#5 manual insertion		Metallic	M81969/2801	8660-187	-	Yellow
#8 manual insertion	Front & rear release	Metallic	-	8660-197	-	-
#22 PC tail & wire wrap	Front release	Metallic	-	8660-162	Red	White

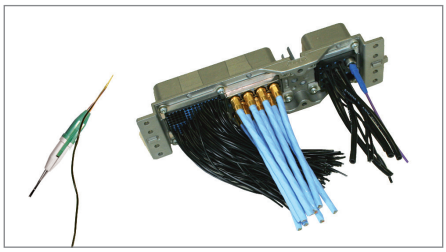




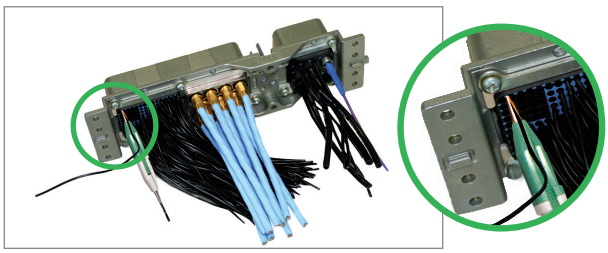


Insertion and extraction instructions

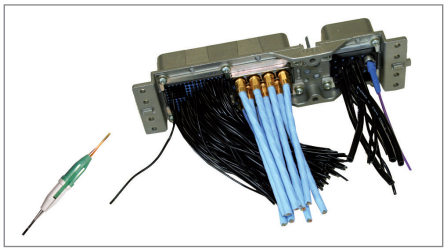
Insertion of the contacts



1. Engage the crimp cable/contact asembly into the longitudinal slot of the plastic tool coloured tip). Slide the tool down the cable until the tip of the tool abuts the contact retention shoulder.

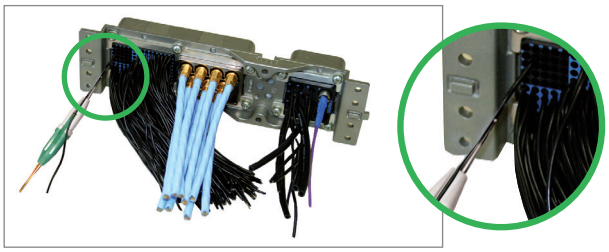


2. Introduce the contact into the required contact cavity in the insulator, pushing tool axialy, until the contact snaps into position in clip.

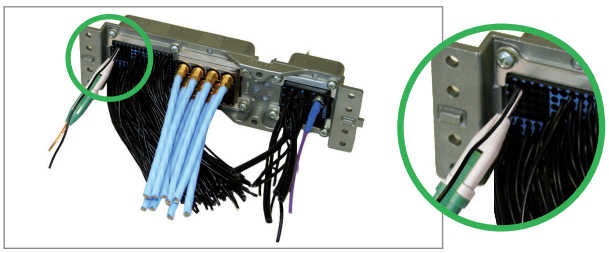


3. Withdraw the tool (from rear). Check that contact is firmly locked by pulling wire gently. When connector is fully loaded, check the position of contact tips. They should all be in the same plane.
Nota: For larger sizes of cable which are stiff enough manual insertion without tool is preferable.

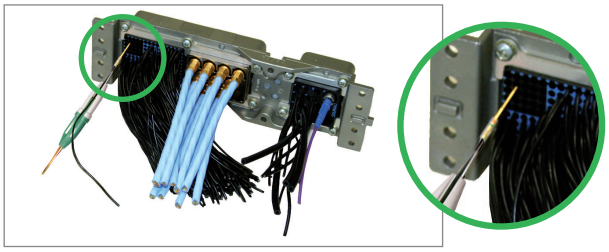
Extraction of the contacts



1. Engage the appropriate cable into the longitudinal slot of the tool with the white tip towards connector.



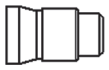
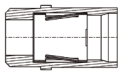
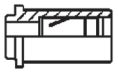
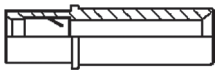
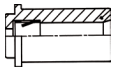
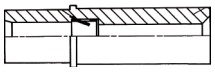
2. Slide the tool down towards the contact. Insert the tool in the insulator until it abouts the contact shoulder.



3. Holding the tool-contact and cable assembly together, remove them simultaneously.

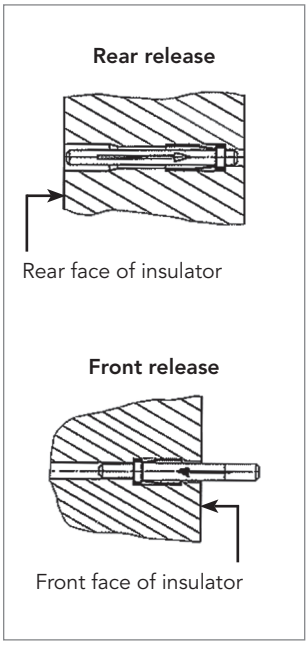
Accessories

Cavity reducers - rear release insert

Cavity Reducers	For equipment receptacle		For rack plug	
	Part number	Profile	Part number	Profile
From size 5 cavities to size 12 contacts	8660-343		8660-344	
	8660-6440 front release		-	
From size 8 cavities to size 12 contacts	8660-537		8660-536	
From size 8 cavities to size 16 contacts (38999 type)	8660-3134		8660-3133	

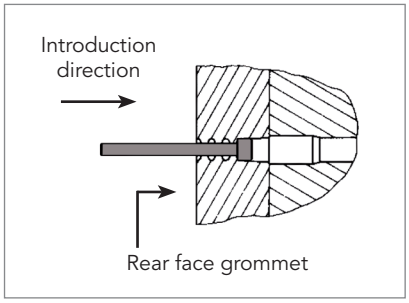
Dummy contacts unsealed version

Cavity size	Part number	Color
#22 Rear release	8660-500 (for receptacle)	Black
#22 Front release	8660-499 MH (for receptacle)	Aluminium
#20	8660-501	Red
#16	8660-502	Blue
#12	8660-503	Yellow
#8	8660-3131A (for plug)	Red
	8660-3132 (for receptacle)	
#8 Quadrax Front release	8660-6045 (for receptacle)	Metallic
#8 Rear release	8660-6108 (for receptacle)	
#5	8660-505 (for plug)	White
	8660-504 (for receptacle)	
#5 Front release	8660-942 (for receptacle)	Metallic
#1 Coax TCAS insert	8660-6145A (for receptacle)	White



Filler plug sealed version

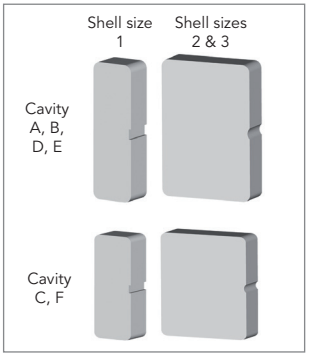
Cavity size	Part number	Color
#22	8660-212	Black
#20	8522-389A	Red
#16	8522-390A	Blue
#12	8522-391A	Yellow
#8	8660-3035	Red
#5	8660-726	White



Dummy inserts

Standard dummy inserts are in polyamide.

Shell Size	Cavity	Material	Part Number
1	A, B	Polyamide	8660-31A-100-01A/AA
	C		8660-31A-100-02A/AA
2 & 3	A, B, D, E	Polyamide	8660-31A-100-01A/AA
		Alodine	8660-34A-200-01A/F3
		Nickel	8660-34A-200-01A/SW
	C, F	Polyamide	8660-31A-200-02A/AA
		Alodine	8660-34A-200-02A/F3
		Nickel	8660-34A-200-02A/SW



Plastic covers

Shell sizes	Cavity	Plug cover		Receptacle cover	
1	A, B	8660 - 141		8660 - 1405	
	C	8660 - 140		8660 - 1404	
2 & 3	A, B, D, E	8660 - 143		8660 - 1407	
	C, F	8660 - 142		8660 - 1406	

Standard covers are supplied with connector.
Covers may be supplied separately.

Plug covers: Yellow color.

Receptacle covers: Black color, antistatic.
These covers are designed to protect equipments against electrostatic discharge risks. They are in self-extinguishing polyphenylene with graphite filler.

Backshells

SOURIAU in partnership with **SUNBANK** can offer dedicated ARINC 600 Series backshells for a global offer solution.
For more information about **SUNBANK** please visit our website: **www.sunbankcorp.com**

Backshell for shell size 2, up to 3 entries

Ordering information

		First entry (mandatory)		Second entry (optional)			Third entry (optional)		
Basic Series	**J1764**	**A**	**16**	**C**	**08**	**R**	**H**	**08**	**12**

First entry position (see drawing next page)
A, B, C, D, E, F, G, H, J, K, L

Entry size code (see table next page)
03, 04, 06, 08, 10, 12, 16

RFI rings configuration (see table below)
empty: 2 RFI rings
R: 3 RFI rings

Second entry position (see drawing next page, use a different letter from first entry size)
A, B, C, D, E, F, G, H, J, K, L

Entry size code (see table next page)
03, 04, 06, 08, 10, 12, 16

RFI rings configuration (see table below)
empty: 2 RFI rings
R: 3 RFI rings

Third entry position (see drawing next page, use a different letter from first and second entry size)
A, B, C, D, E, F, G, H, J, K, L

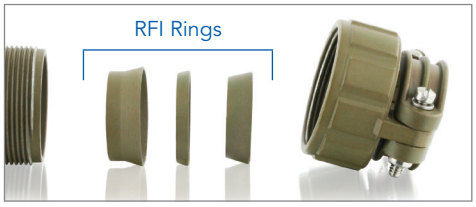
Entry size code (see table next page)
03, 04, 06, 08, 10, 12, 16

RFI rings configuration (see table below)
empty: 2 RFI rings
R: 3 RFI rings

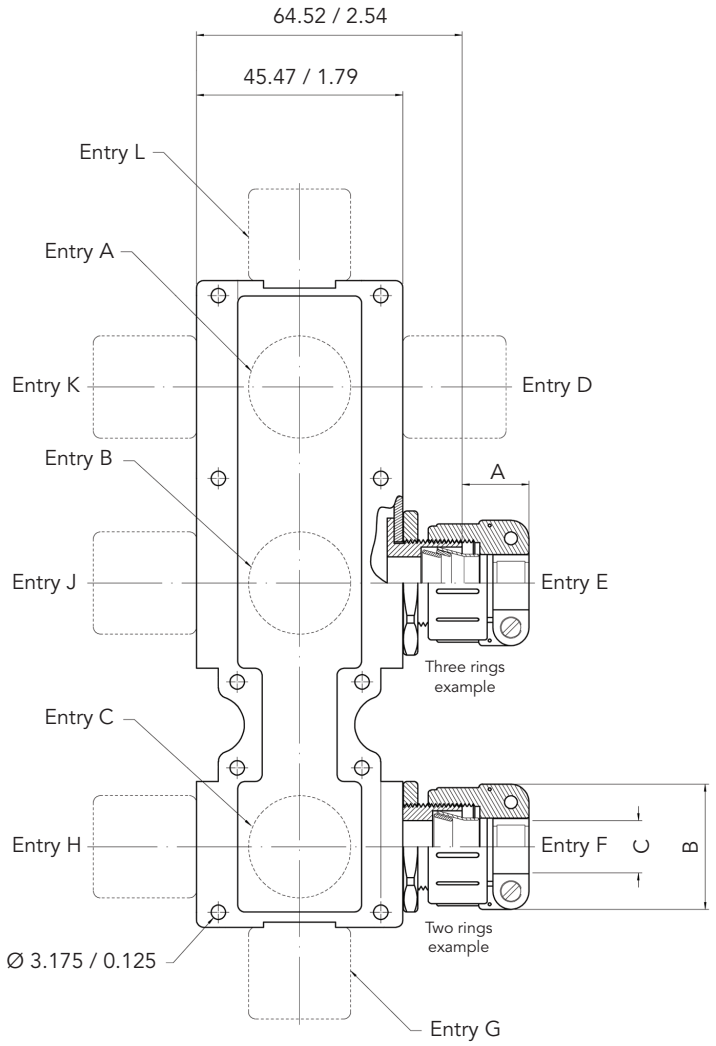
Material and plating
12: Aluminum alloy, electroless nickel
29: Aluminum alloy, cadmium plated, bright dip over electroless nickel

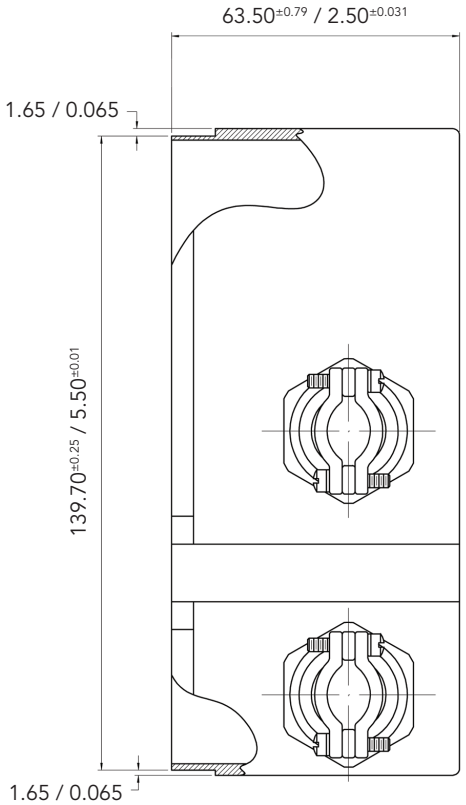
RFI rings configuration

Shield termination	Recommended number of rings
Overall only	2
Individual only	2
Overall and individual	3



Dimensions





Entry size code

Entry size code	Millimeters				Inches			
	A Max	B Max	C (cable range)		A Max	B Max	C (cable range)	
			Min	Max			Min	Max
03	19.30	21.44	3.99	6.35	0.76	0.844	0.157	0.25
04	19.30	23.01	4.75	7.92	0.76	0.906	0.187	0.312
06	19.30	27.76	7.14	11.10	0.76	1.093	0.281	0.437
08	19.30	30.15	8.74	14.27	0.76	1.187	0.344	0.562
10	19.30	32.54	9.53	15.88	0.76	1.281	0.375	0.625
12	19.30	38.10	11.13	19.05	0.76	1.50	0.438	0.75
16	27.25	43.66	14.27	23.83	1.073	1.719	0.562	0.938

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

Backshell for ARINC 600 Series shell size 3, with 3 or 6 entries

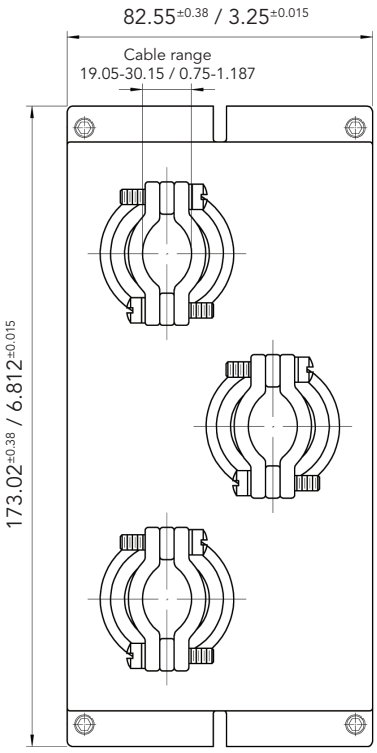
Ordering information

Basic Series	J17	46

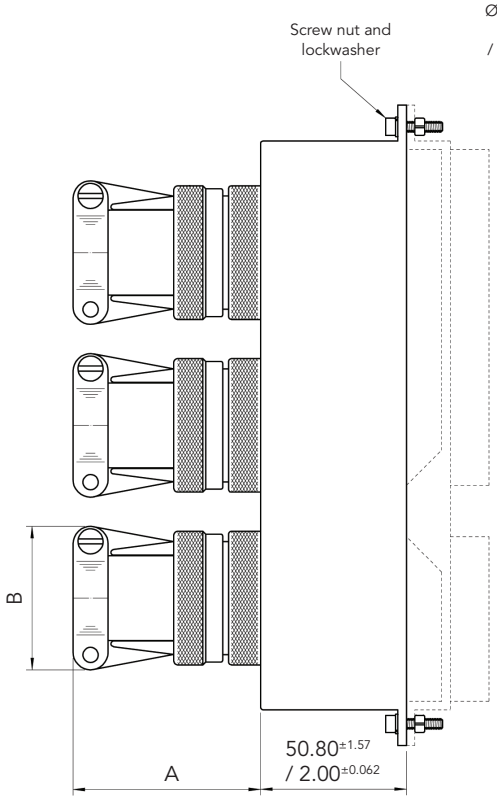
Backshell type (number of entry, material and plating - see drawings below)
46: 3 entries. Aluminum alloy, electroless nickel
58: 6 entries. Aluminum alloy, iridite n°14-2 yellow MIL-C-5541 class3

Dimensions

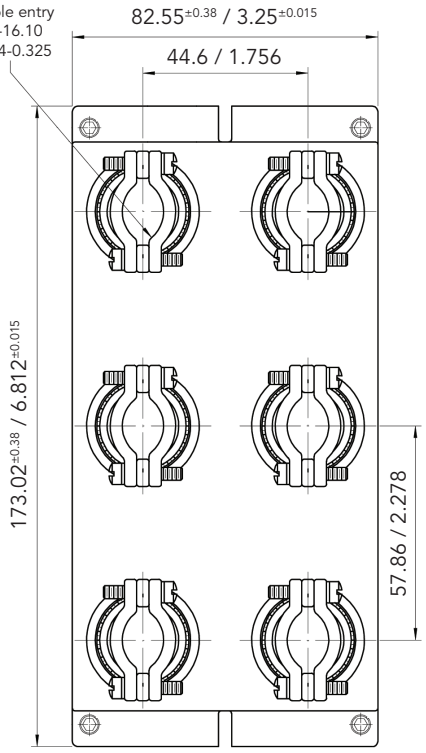
J1746 Type



J1746 & J1758 Types
side view



J1758 Type



Backshell type	A Max	B Max
J1746	69.85 / 2.75	50.8 / 2.00
J1758	52.2 / 2.055	38.1 / 1.50

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

ARINC 600 SERIES

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ARINC 600 Series

Range Extension

- Custom product 44
- *micro*Comp® Series 44
- Nafi 1 & 2 Series 45
- D-Subminiature Series 45
- Box mount interconnect solutions 46

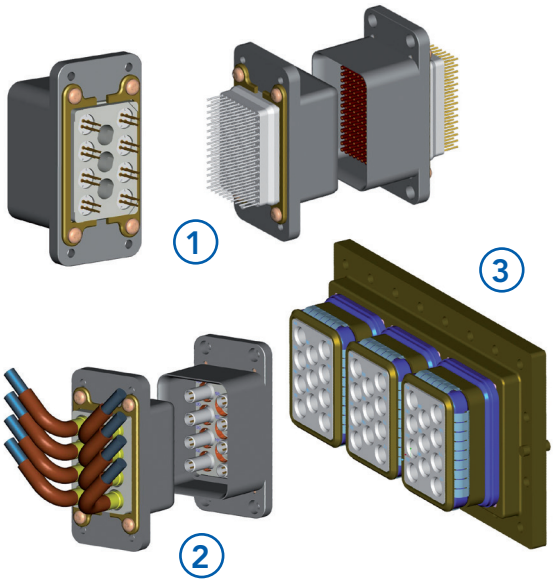
Product range extension

Custom Products

SOURIAU is offering a high development capability for your specific needs

1. • **Specific monocavity**
   - available for any Souriau insulators (pictures: Q11 and 150 points layouts)
2. • **Space saving solution**
   - With right angle cable orientator
   - 35mm outing length
3. • **Specific machined shells for customized needs**

CONSULT US



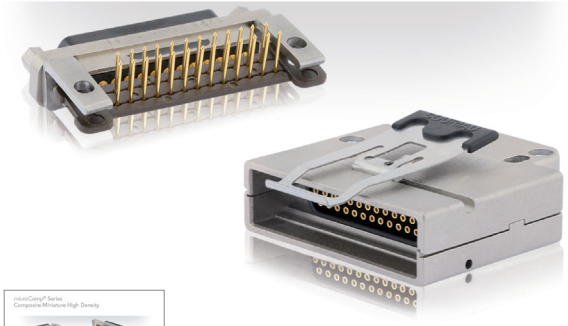
*micro*Comp® Series

To respond to miniaturization and weight saving trends in aeronautical and defense applications SOURIAU has developed an innovative high density connector range.

Very light & high density:
. Shell in composite (or aluminum).
. Up to 66% lighter than HD D-Sub.
. Very high density up to 40% smaller than HD D-Sub.

Excellent features:
. With crimp removable contacts for wire AWG 24 to 28.
. Temperature up to 175°C.
. High vibration and shock withstanding.
. Standard MIL-STD 83513 accessories.
. Compatible with high speed data rates (Gigabit Ethernet...).

Quick connect version:
. MCQL *micro*Comp® Quick Latch.





See «microComp® Series - Miniature High Density» datasheet on www.souriau.com

Product range extension

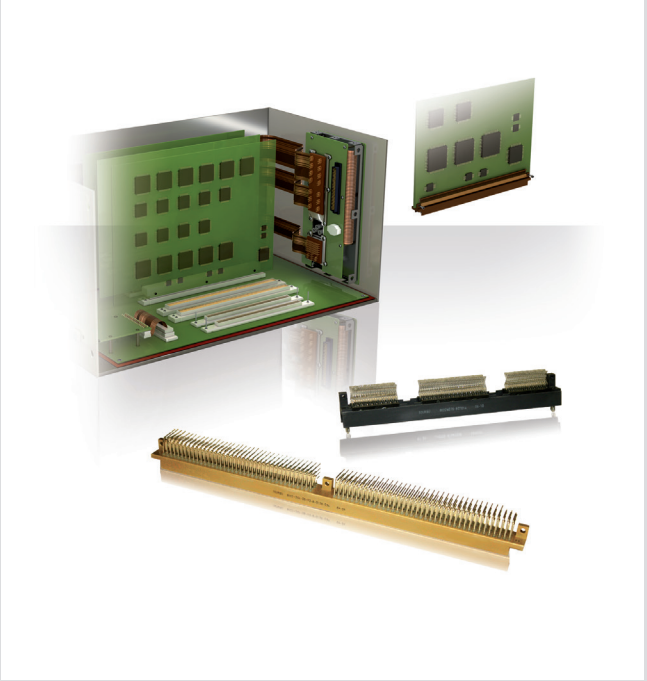
Nafi 1 & 2 Series

PCB interconnection according to MIL-C 28754. Board-mounted connectors used as interface between daughter-boards and back planes or between two adjacent daughter-boards.

High vibration resistance:
. Perfectly adapted to military PCB connection.

High Density:
. 2.54 pitch (NAFI 1).
. 1.27 pitch (NAFI 2).
. Up to 556 contacts.

Large contacts offer:
. Straight & angle contacts.
. Straight PC tail with flex connection.
. Press fit contacts.



D-Subminiature Series

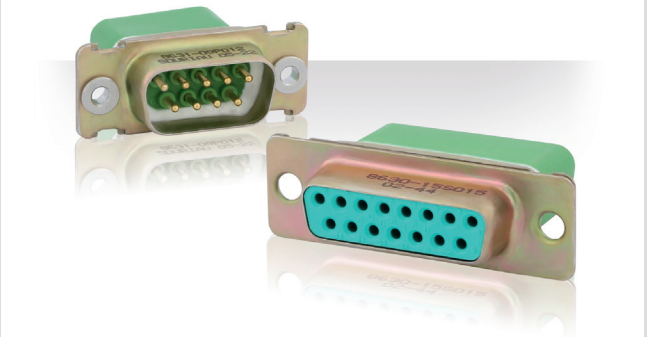
Connectors designed to ensure the connection fonction in all applications where weight and dimension are very important. Especially used as Input/Output connectors in interface fonctions. Compliant with MIL/HE/NFC.

Space saving:
. Miniature design.

A wide range:
. 8630, SMA, 8635, hermetic, feedthrough.

Removable crimp contacts:
. Size 20 for the Mark III.
. Size 22D for the High Density Series.
. PC tail version available.

Versatility:
. Easy to handle.





See «D-Subminiature Series, Rectangular Connectors» catalog on www.souriau.com

Product range extension

Box Mount Interconnect Solutions

Box Interconnect Solutions: Inside/Outside. Anything you need - we can do !

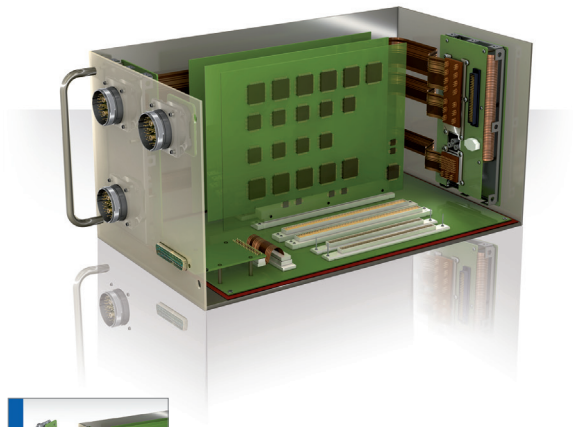
PCB terminations:
. with many lengths and different types of plating.

Shape of connector can be adapted:
. to meet the board application as double flange receptacles.

Receptacles with short shell:
. to minimize space inside the box.

Any customized design:
. to make box mount easier when space is a constraint.

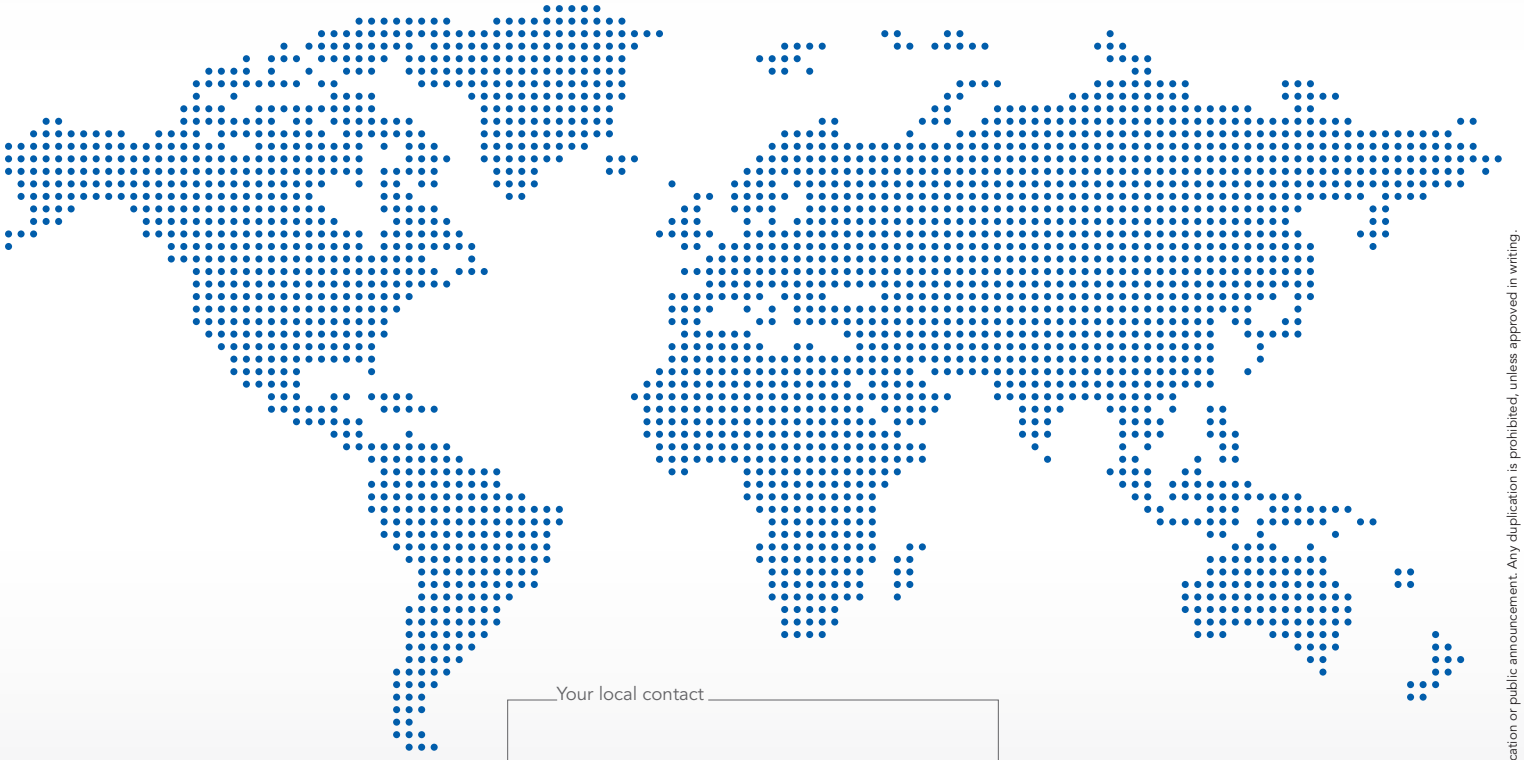
Blindmate/hermetic/thin panel assembly solutions...





See «Box Mount Interconnect Solutions» catalog on www.souriau.com

Reliable People, Reliable Solutions



Your local contact

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SOURIAU - SUNBANK
Connection Technologies

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