



Rack & Panel Rectangular Connectors

High Density and Modularity



Presentation

BUILD THE CONNECTOR THAT MATCHES EXACTLY YOUR REQUIREMENTS

Modular

- Wide range of insulators compliant for 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 capability
- 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 a easy intergration with Printed Card Board, flex circuit or cabled harnesses.

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ARINC 600 SERIES

ARINC 600 Series

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Typical applications



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Cockpit Display Units



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Landing Gear Management



© Mario Beauregard / Fotolia

Cabin: IFE & Air Conditioning



Courtesy of NORD-MICRO

Avionic Bay/Data Acquisition



© Icholakov / Fotolia
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Engine Management



We Connect
THE HEART
of your
System

Avionic Bay

Cockpit

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 for all types of technologies:
signal, power, high speed and fiber optic.
Compliant for PCB, flex circuit and harness implementation.

WEIGHT & SPACE SAVING

High Density Solution

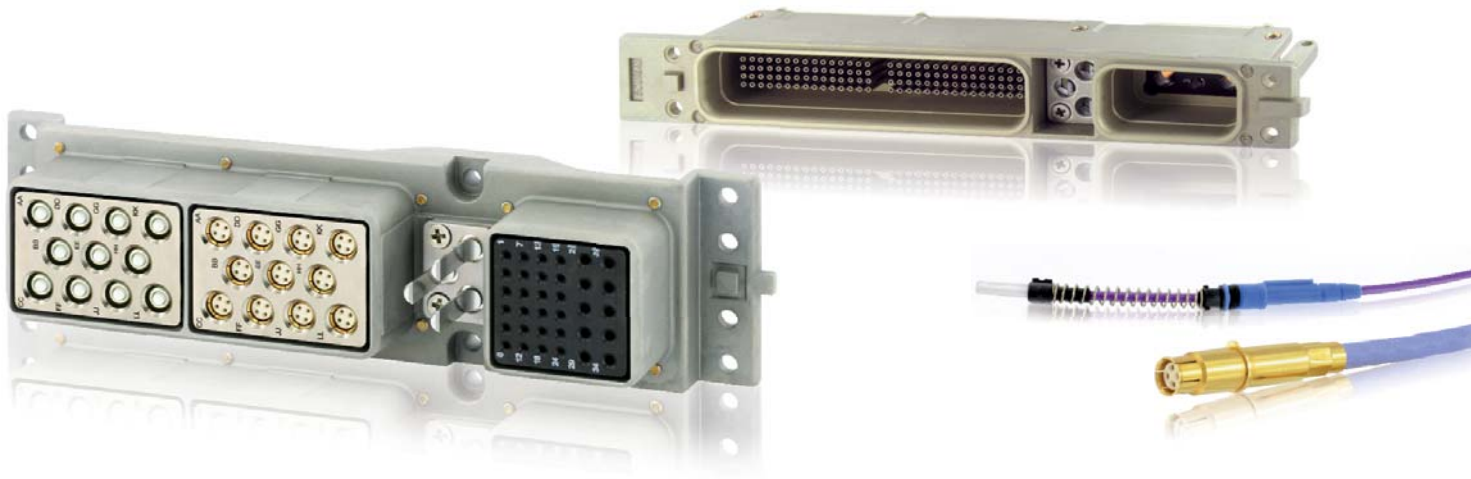
Up to 800 #22 signal contacts.
Up to 56 #8 quadrax contacts.

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

Shells & Layouts

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

Plating

Surtec, Alodine and **Nickel**

A Full
Contacts
Offer

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**

Many
Options

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.



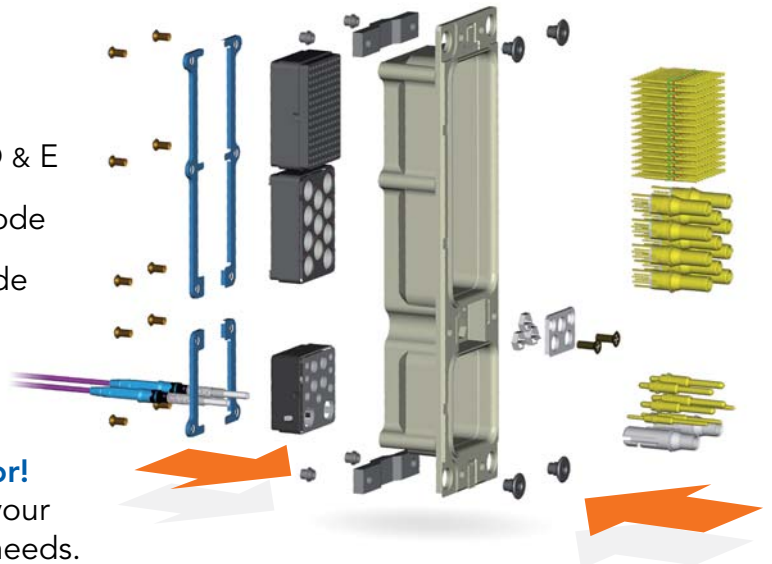
- **SOURIAU** Operations & Sales Offices
- Franchised & Value Added Distributors

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

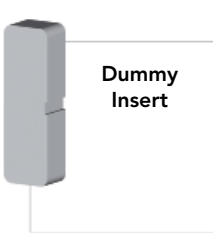
Shell size 1

Cavity A & B



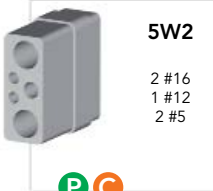
60 pts
60 #22

S




Dummy Insert

Cavity C



5W2
2 #16
1 #12
2 #5

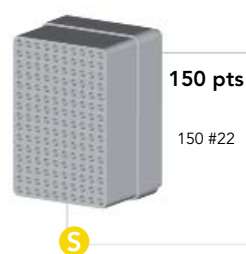
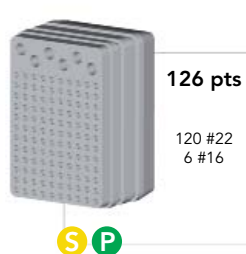
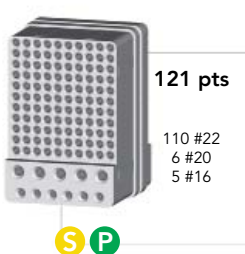
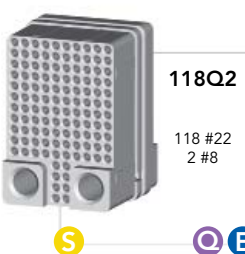



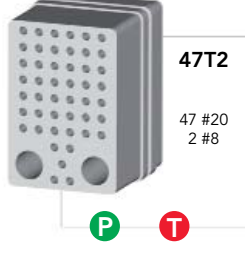
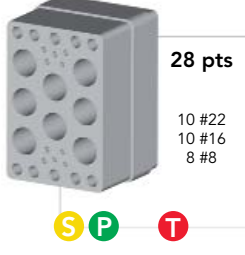







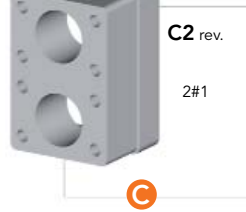

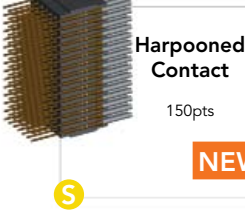
P C



Dummy Insert

Shell size 2 & 3







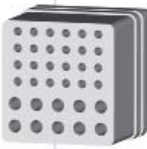








Cavity A, B, D & E

 <p>150 pts 150 #22</p> <p>S</p>	 <p>126 pts 120 #22 6 #16</p> <p>S P</p>	 <p>121 pts 110 #22 6 #20 5 #16</p> <p>S P</p>	 <p>118Q2 118 #22 2 #8</p> <p>S Q E</p>	 <p>71 pts 70 #22 1 #1</p> <p>S C</p>
 <p>71 pts rev. 70 #22 1 #1</p> <p>S C</p>	 <p>60 pts 60 #20</p> <p>P</p>	 <p>47T2 47 #20 2 #8</p> <p>P T</p>	 <p>28 pts 10 #22 10 #16 8 #8</p> <p>S P T</p>	 <p>24 pts 24 #12</p> <p>P</p>
 <p>C12T6 12 #12 6 #8</p> <p>C T</p>	 <p>Q11 11 #8</p> <p>Q E</p>	 <p>Q11 mixte 11 #8</p> <p>Q E</p>	 <p>Q10 10 #8</p> <p>Q E</p>	 <p>TCAS 4 #1</p> <p>C</p>
 <p>C2 2 #1</p> <p>C</p>	 <p>C2 rev. 2 #1</p> <p>C</p>	 <p>Dummy Insert</p>	 <p>Harpooned Contact 150pts</p> <p>S NEW</p>	

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

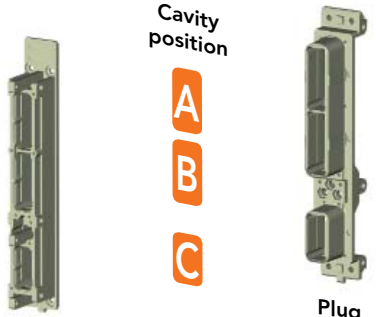
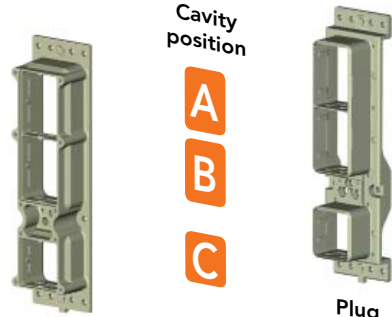
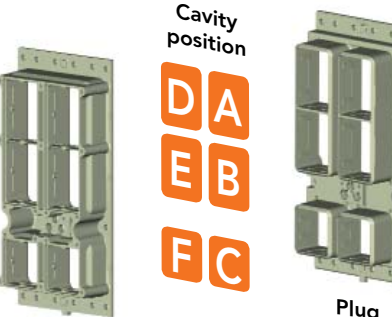
Shell size 2 & 3

Cavity C & F

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

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

Shell types and cavity overview

<p>Shell size 1</p>  <p>Receptacle Plug</p> <p>Cavity position: A, B, C</p>	<p>Shell size 2</p>  <p>Receptacle Plug</p> <p>Cavity position: A, B, C</p>	<p>Shell size 3</p>  <p>Receptacle Plug</p> <p>Cavity position: DA, EB, FC</p>
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Insert layouts matrix

Contact release/Sealing compatibility

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 G			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 G	70						1
71 pts rev.			S G	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		G 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 G			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		

Sealed (see p.17 and 18)		Unsealed (see p.17 and 18)		
Receptacle rear release crimp cts	Plug rear release crimp cts	Receptacle		Plug rear release crimp cts
		rear release crimp cts	front release PC tail 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	OK	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	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 G Coax T Triax Q Quadrax or Twinax E ELIO® Fiber Optic

Contacts overview

Crimped contacts

- S** • **Signal #22**
Standard, Standard with selective plating, Chromel, Alumel
- P** • **Power #20, #16, #12**
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
Cable #1	RG 180 B/U	RG 400 / BU	
	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
Cable #1 for TCAS	RG 165 / U		
	Filotex E0406WD		
	Filotex 50MFCFB GORES39214		

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

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
- 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

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

- | | |
|--|---|
| <ul style="list-style-type: none"> • Wire wrap #22
0.25 inch (6.35 mm)
0.375 inch (9.52 mm)
0.5 inch (12.7 mm) | <ul style="list-style-type: none"> • 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: **S** Signal **P** Power **C** Coax **T** Triax **Q** Quadrax or Twinax **E** ELIO® Fiber Optic

ARINC 600 SERIES

ARINC 600 Series

Product Series

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■ 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 | 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
- **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)

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

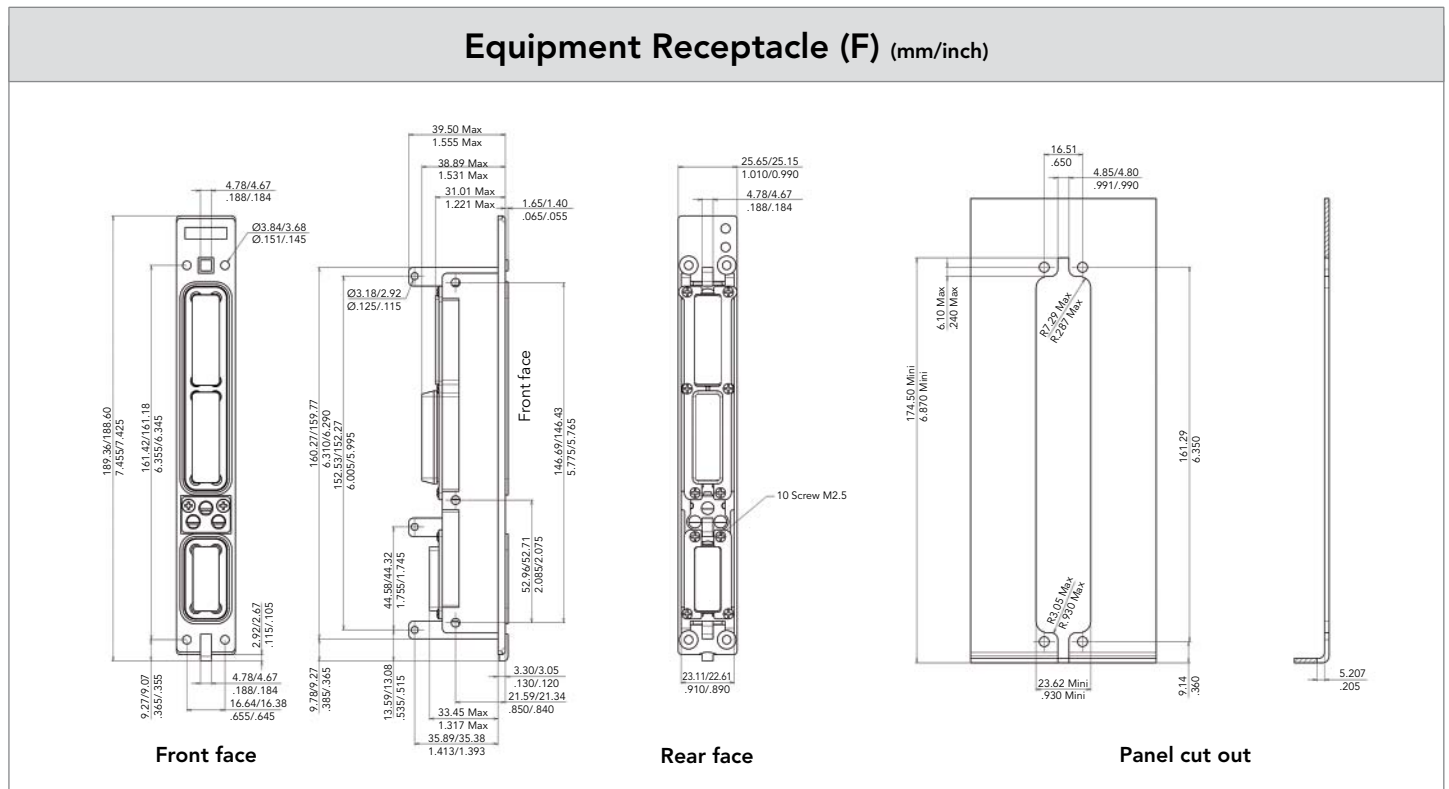
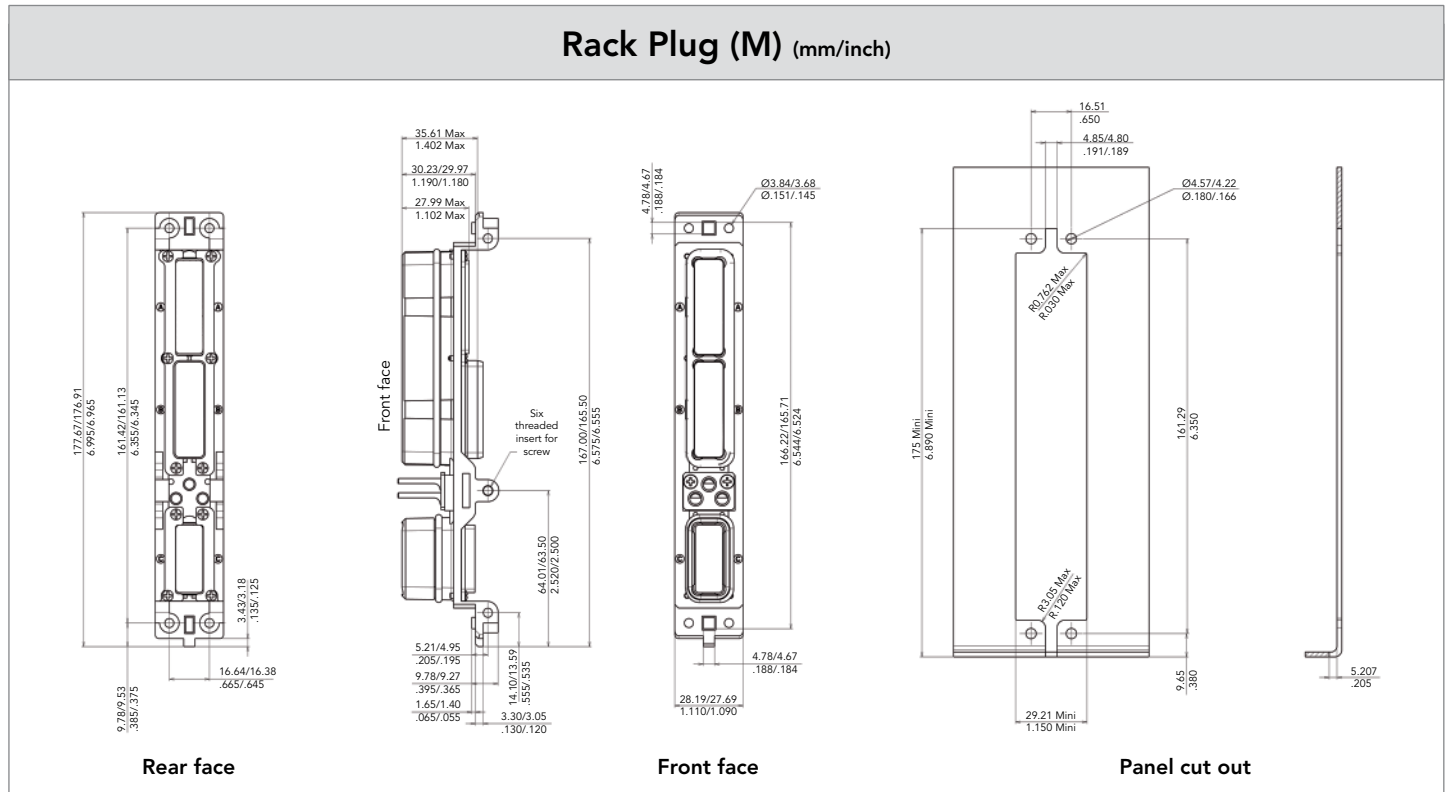


- Ground spring mandatory on the plug
- Best continuity performance
- Available in shell sizes 2 & 3
- Sealed and unsealed versions

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		OK		OK	1 9 B D	Maintenance	
Sealed	NEW Surtec	YES*	OK	OK	OK	OK			4 6	New projects or retrofit	
	Nickel	YES			OK	OK			G P	Best continuity performances	
	Alodine	No	No	OK	OK	OK	OK			0 2 3	Maintenance
						OK	OK			A	
				OK	OK	OK		OK		C	
				OK		OK		OK		H	
						OK			OK	L	
					OK	OK					
				OK		OK					
						OK					

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

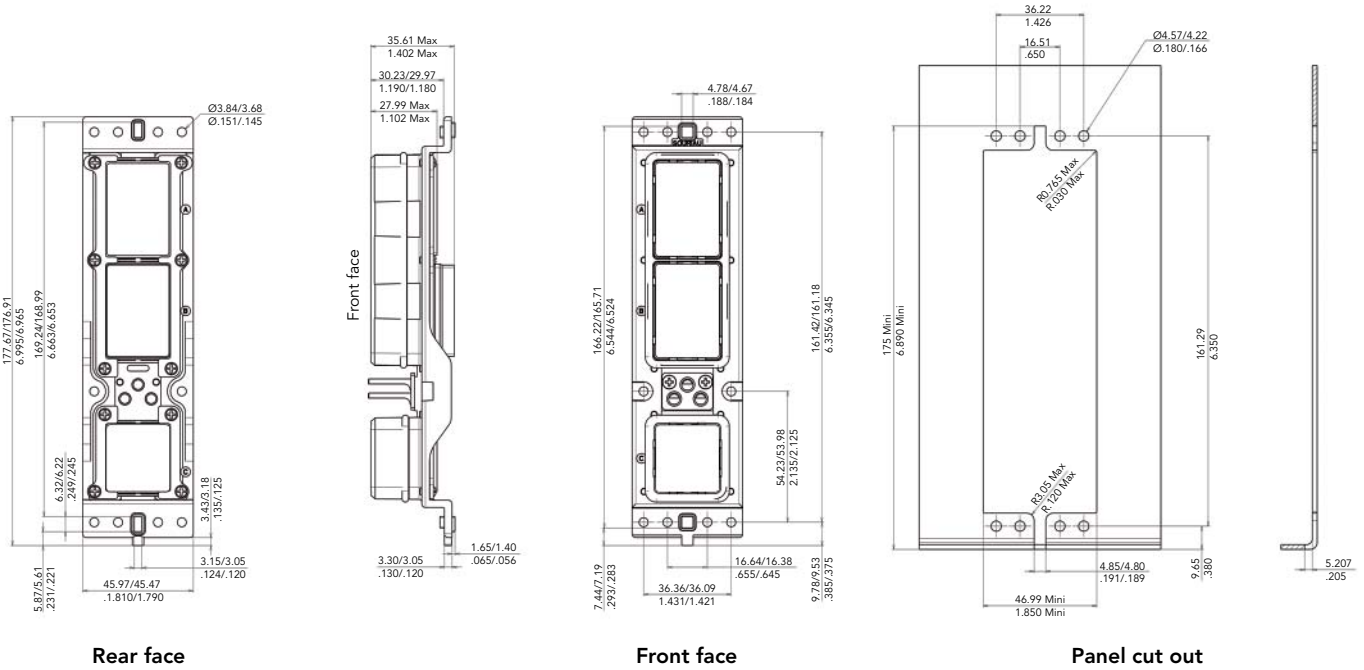
Dimensions shell size 1 - Shell size digit n° ② & Shell type digit n° ③



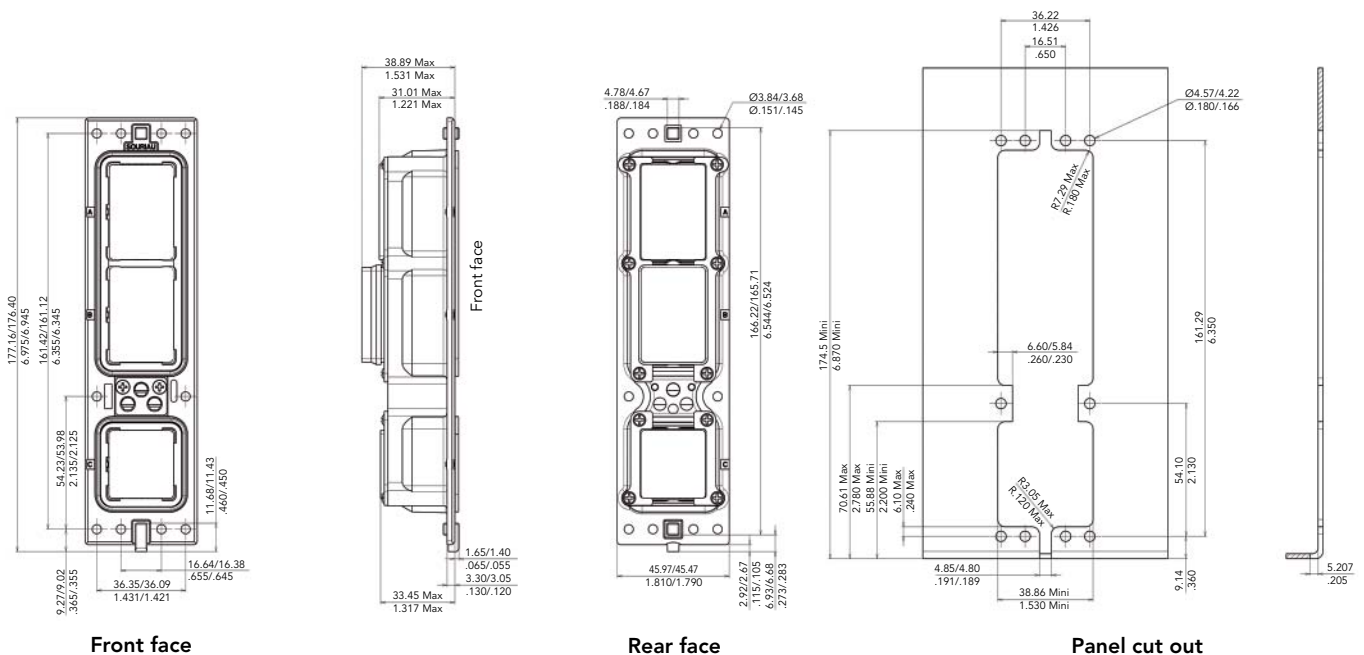
Note: All dimensions are in millimeters/inches (mm/inch)

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

Rack Plug (M) (mm/inch)



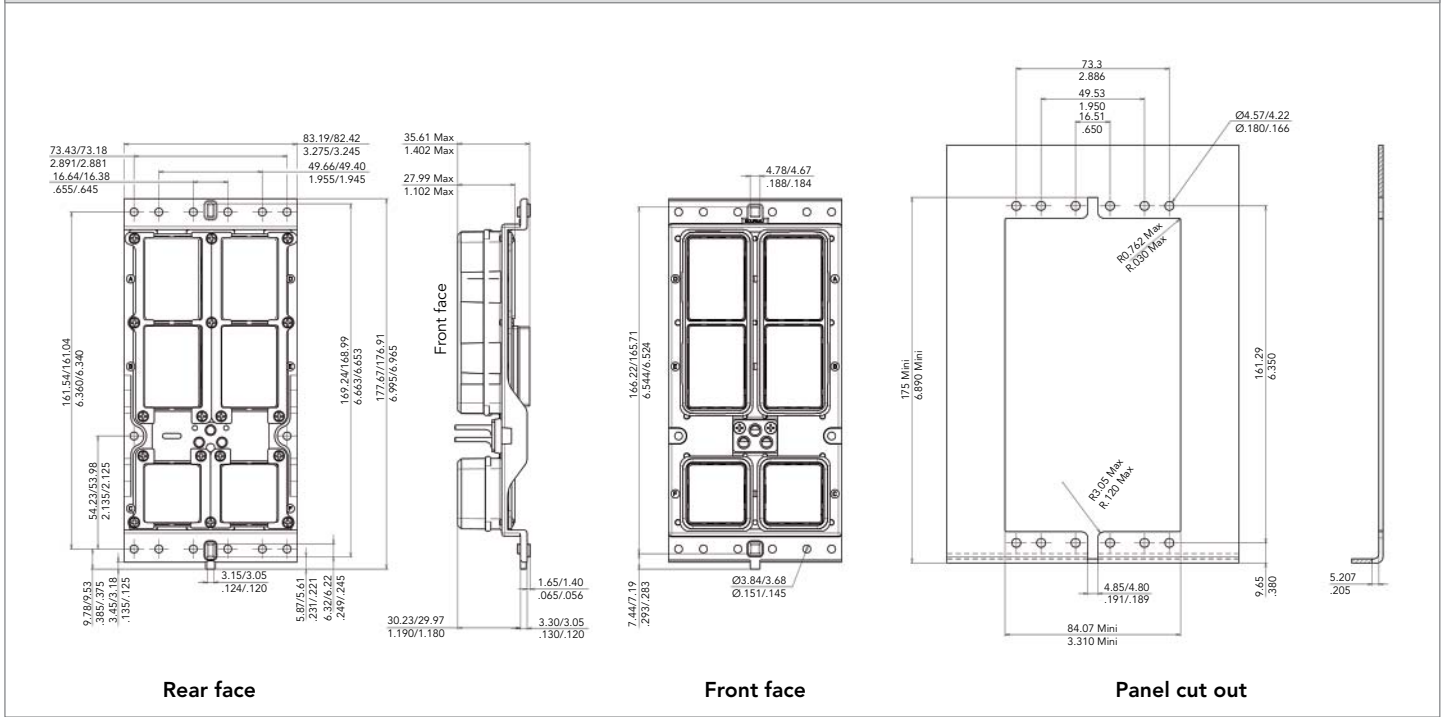
Equipment Receptacle (F) (mm/inch)



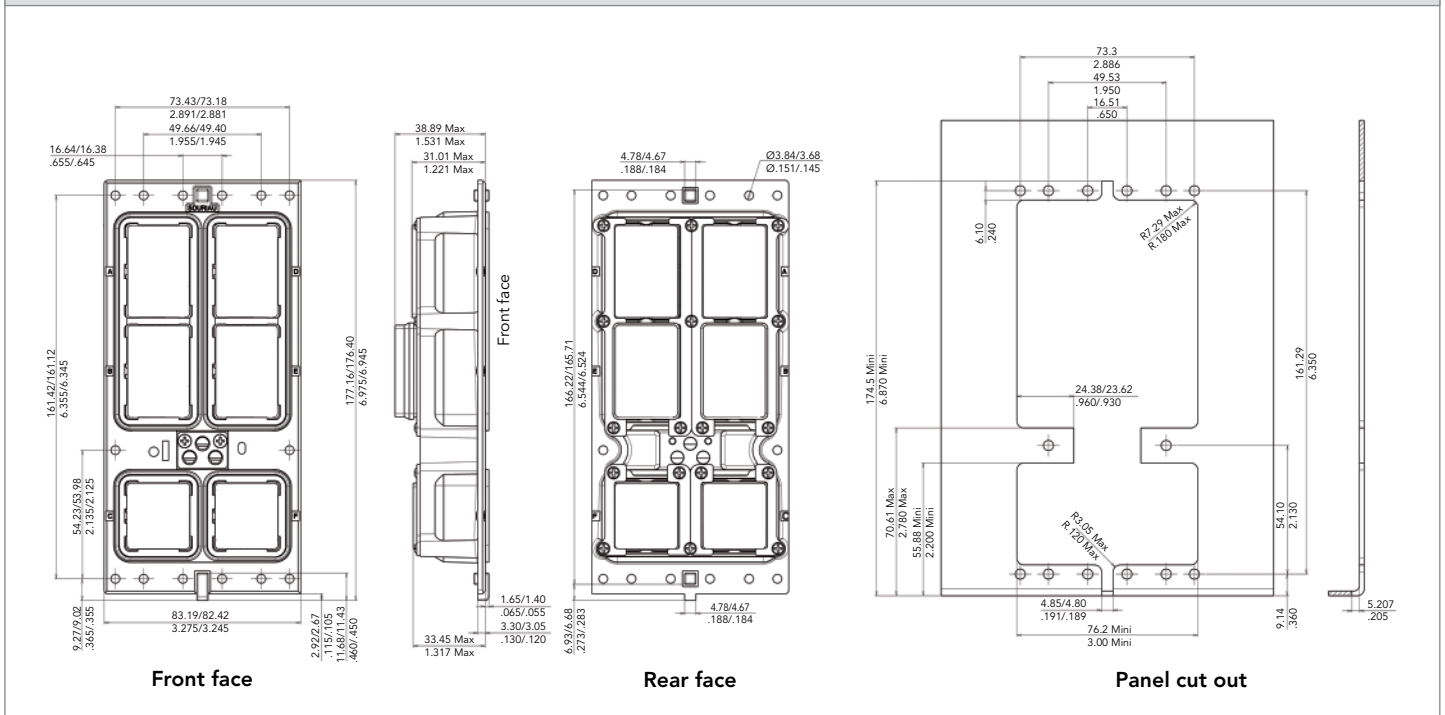
Note: All dimensions are in millimeters/inches (mm/inch)

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

Rack Plug (M) (mm/inch)



Equipment Receptacle (F) (mm/inch)

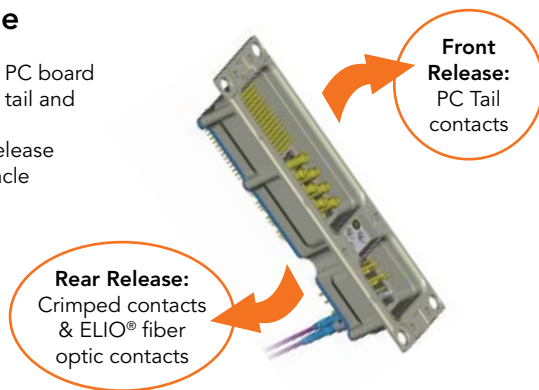


Note: All dimensions are in millimeters/inches (mm/inch)

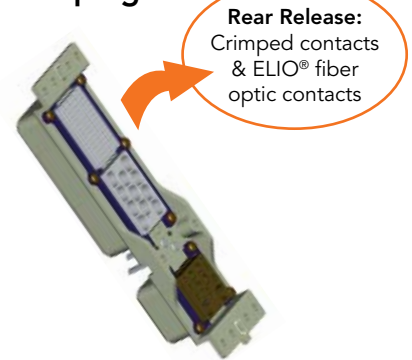
Contacts release - Digit n° 4

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



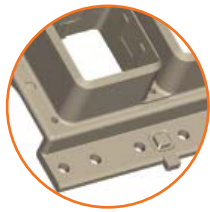
Rack plug



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	Non removable contacts for insert 100 and/or 150 points. Other contacts are front release (only for receptacles)
Y	Non removable signal contact for insert 100 and 150 points. Front release for other signal contacts. Rear release for power contacts (only for receptacles)
Z	Mix of non-removable contact for insert 100 and 150 points, and front and rear release contacts (only for receptacles) - 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
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.

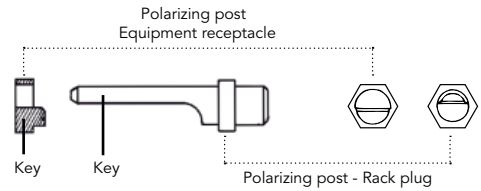
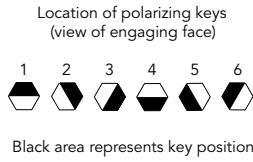
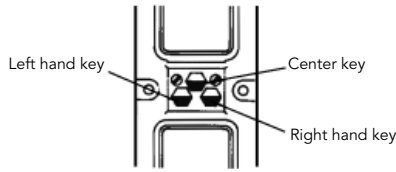
Cavities A, B, D and E - Digit n° 8

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 sealed	
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
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	
	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	
	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	
	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	
	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	1 st 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
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	9.52/0.375	Tin plated	5
	Delivered with contacts	Delivered without contacts		Gold plated	R
	Delivered with contacts	Delivered with contacts	12.7/0.5	Tin plated	4
				Gold plated	2
Delivered with contacts	Delivered without contacts		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	2 nd 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		Delivered with #1 TCAS Coax
	Delivered with #1 coax for RG 141A/U, RG 142 and KX23 cable	S
	Delivered with #1 coax for UT 141 and RG 400B/U cable	B
	Delivered with #1 coax for RG 393/U cable	C
#8 Quadrax contacts		2nd letter
Delivered with PC tail 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 11 μ s (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)

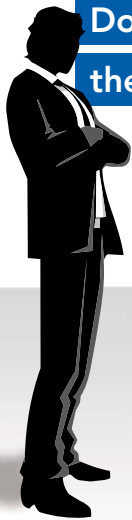
Electrical

- **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:**
 $\geq 5000 M\Omega$

Comparison with standard ARINC 600



Do you see any difference between these two connectors?



No? Read below

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

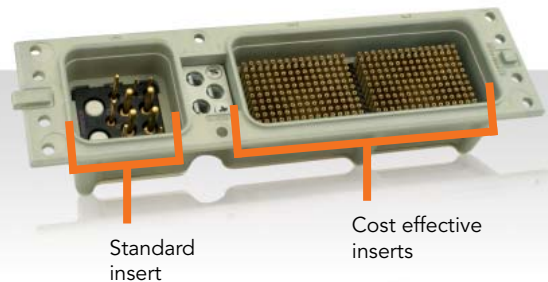
- Selective gold plating - Active part
- Non removable contacts
- Insert modification (one piece part)
- No contact marking, no insert marking
- Insert always pre-loaded with contacts



This technology allows you to SAVE money!

In Addition:

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



ARINC 600 SERIES





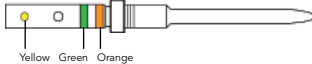

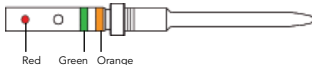
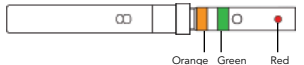
ARINC 600 Series

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
Specific contacts for 62Q2 and 121 pts inserts	34
■ 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





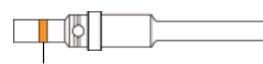





Crimp contacts

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

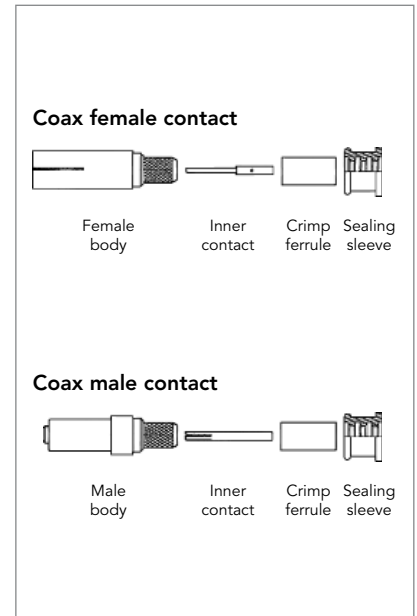
Contact size	For equipment receptacle			For rack plug			Cable
	Contact type	Part number	Profile	Contact type	Part number	Profile	
#8 twinax	Pin	ETH2-1104A		Socket	ETH2-1105A		ABS0386WF24
		ETH2-1106A			ETH2-1107A		ASNE0272TK22
		ETH2-1102A			ETH2-1103A		ASNE0272TK24
		ETH2-1100A			ETH2-1101A		ASNE0807WX26

Triax contacts

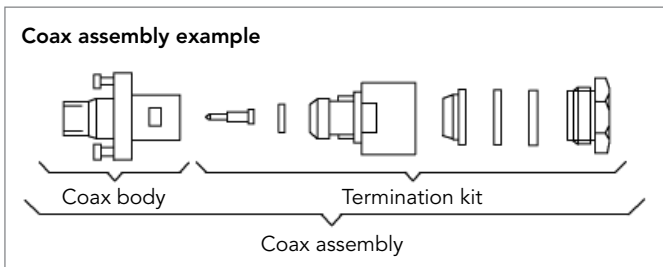
Contact size	Class	Boot included	For rack plug: Socket contact	For equipment receptacle: Pin contact	Cable
#8 Triax	Sealed	Yes	8667-D03-08R-52A/01	8667-D02-08R-52A/01	EN3375-004 MIL-C-17176
	Unsealed	No	8667-D03-08R-02A/01	8667-D02-08R-02A/01	

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



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

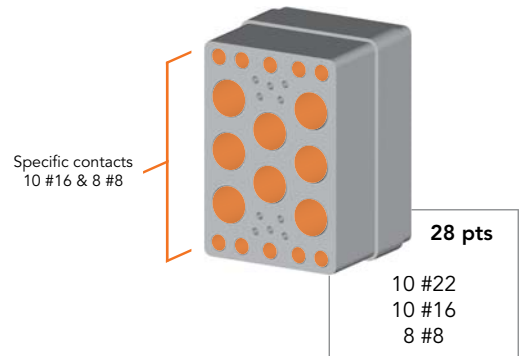


Contact size	Shell style	Part number	Profile	Cable
#1 Coax for TCAS insert	Rack plug	8660-D21-100-01A/05		FILOTEX E0406WD FILOTEX 50MFCFB
		8660-6413		GORESW39214
	Equipment receptacle	8660-6136		Output SMA

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	 Yellow Blue Orange
	Socket	8599-0708 900	M39029/56-352	 Red Green Orange

#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

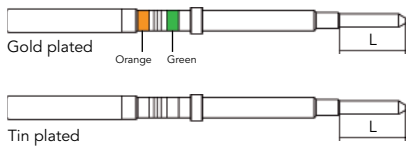
Contact size	Cables		Ø over insulation (mm/inch)	
	mm ²	AWG	min	max
#22	0.15 to 0.38	26 - 24 - 22	0.66 / 0.026	1.371 / 0.054
#20	0.21 to 0.60	24 - 22 - 20	1.016 / 0.04	1.803 / 0.071
#16	0.60 to 1.34	20 - 18 - 16	1.727 / 0.068	2.616 / 0.103
#16 Small barrel	0.21 to 0.93	24 - 22 - 20 - 18	1.73 / 0.068	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

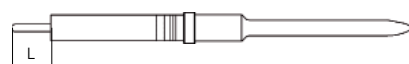
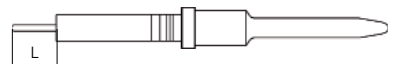
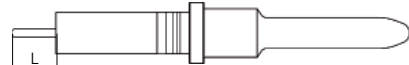
Signal contacts

For equipment receptacle: Socket contacts - front release

Contact size	Gold plated	Tin plated	L = Length PC tail	Ø PC tail	Profile
#22	8660-550	8660-C23-22V-01A/06	3.81 / 0.15	0.60 / 0.024 min 0.67 / 0.026 max	
	8660-555	8660-C23-22V-02A/06	6.35 / 0.25		
	8660-560	8660-C23-22V-03A/06	9.52 / 0.375		
	8660-565 900	8660-C23-22V-04A/06	12.7 / 0.5		

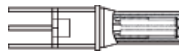
Power contacts

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

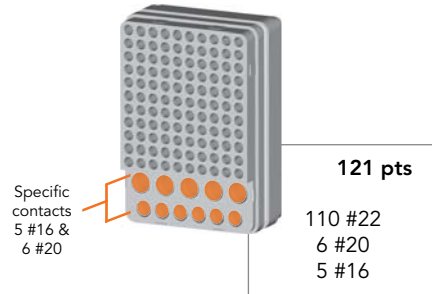
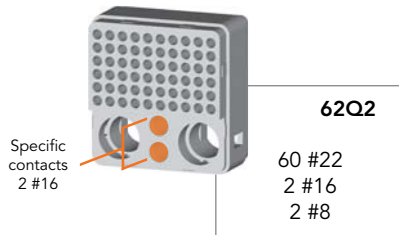
For equipment receptacle: Pin contacts - front release

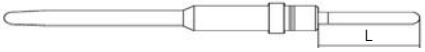
Contact size	Tin plated	L = Length PC tail	Profile
#8	8660-6271	6.35 / 0.25	

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

Specific PC tail contacts for 62Q2 & 121 pts inserts


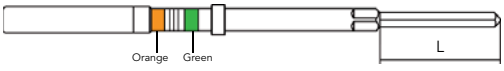
For equipment receptacle: Pin specific contacts



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	


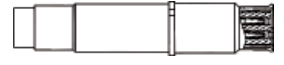


Wire wrap contacts

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.
- Flight proven at temperature range -65°C +125°C.
- Designed to comply with ELIO® contact optical performances.

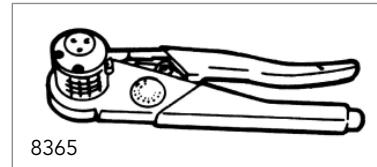
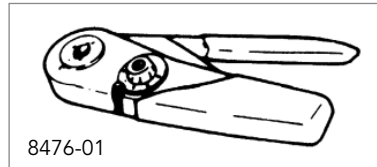
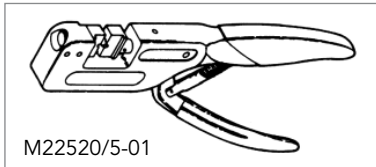
Part number	Adaptor type	Profile
ELIOAQOP <small>Delivered with alignment boot</small>	Rear release Male Insert For receptacle	
ELIOAQ1P	Front release Male Insert For receptacle	
ELIOAQOS	Rear release Female insert For plug	

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

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

Tooling

Crimping tools



Contact size	Plier	Contact type	Locator		Cables	
			Norm / Spec	SOURIAU	mm ²	AWG
#8 Quadrax	M22520/5-01	Outer	M22520/5-45 die set repere B	-	-	-
		Central	K709 setting number 5	-	-	-
#22	8476-01 M22520/2-01	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 50MFCEB
	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	Yellow	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

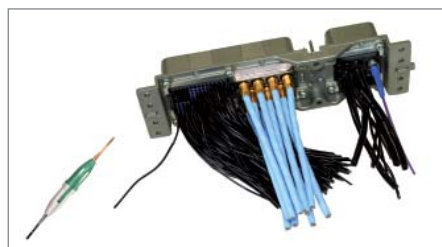
Insertion of the contacts



1 Engage the crimp cable/contact assembly 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 axially, 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 abuts the contact shoulder.



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

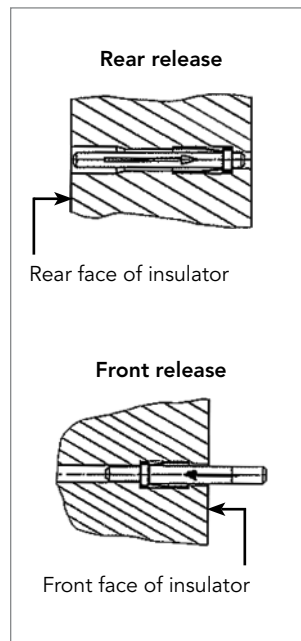
Accessories

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	

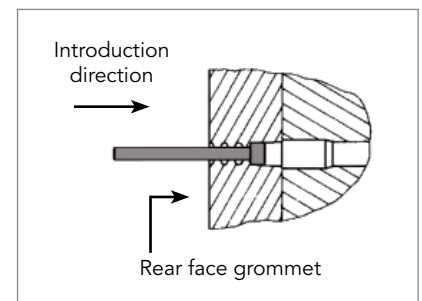
Dummy contacts unsealed version

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

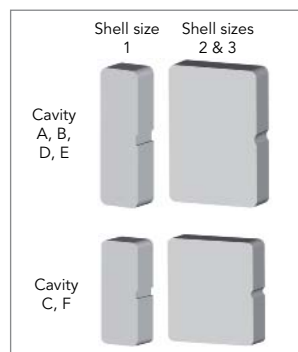
Cavity size	Part number	Color
#22	8660-212	Black
#20	8522-389A	Red
#16	8522-390A	Blue
#12	8522-391A	Yellow
#8	8660-3035	Red
#5	8660-726	White



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

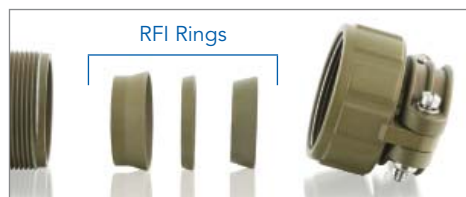
Backshell for shell size 2, up to 3 entries

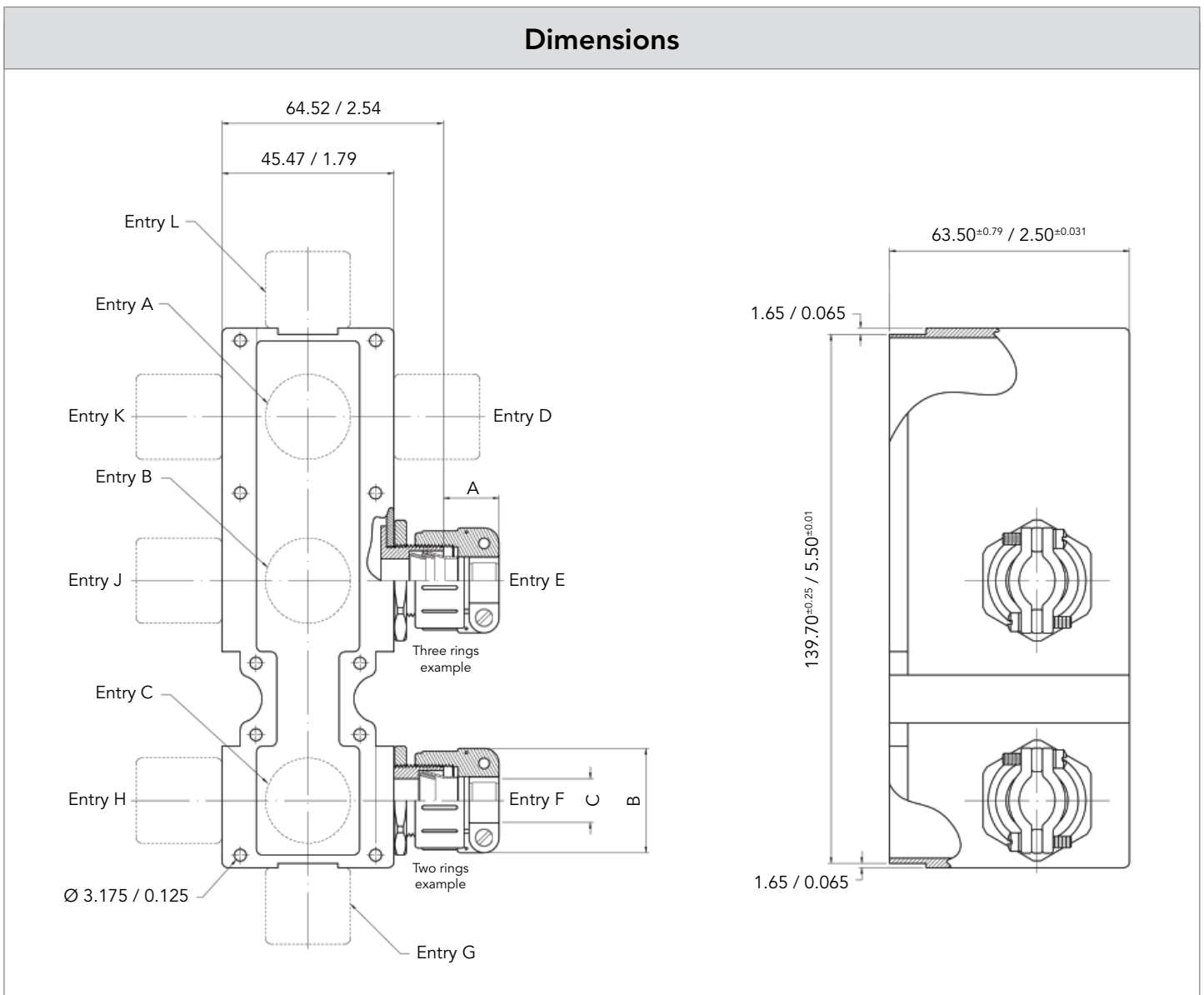
Ordering information

	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





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

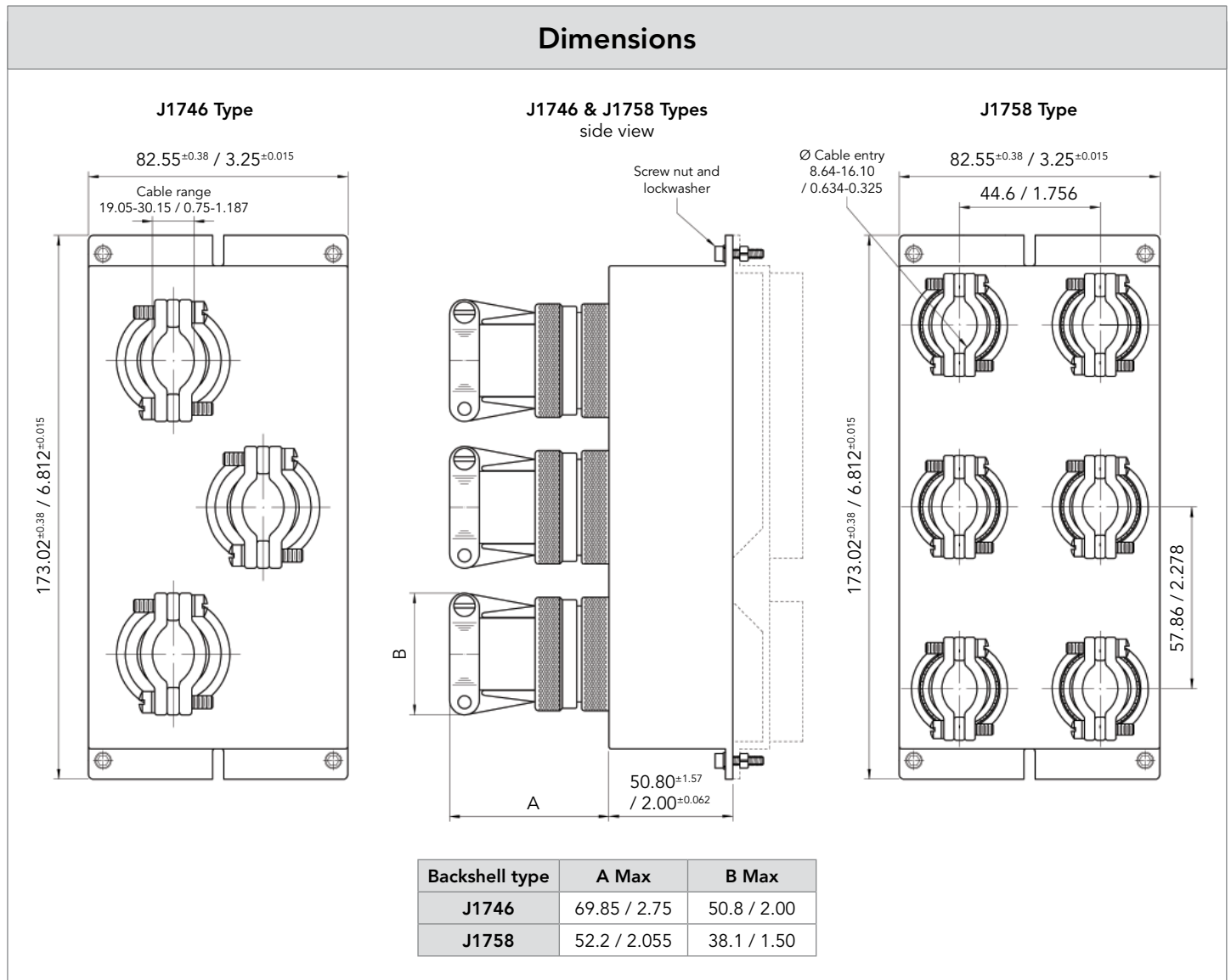
Basic Series J17 46

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



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

ARINC 600 SERIES

Range Extension

■ Custom product	44
■ <i>microComp</i> ® Series	44
■ Nafi 1 & 2 Series	45
■ D-Subminiature Series	45
■ Box mount interconnect solutions	46



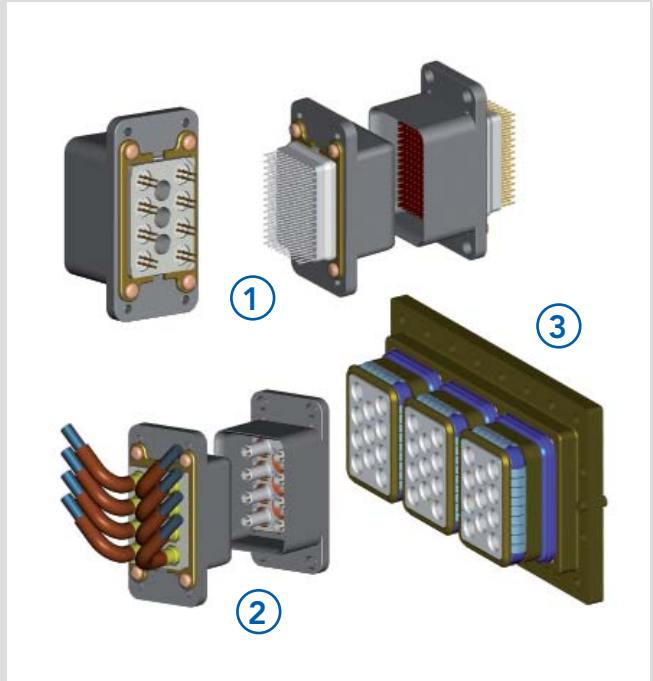
Product range extension

Custom Product

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



microComp® 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 *microComp*® 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:

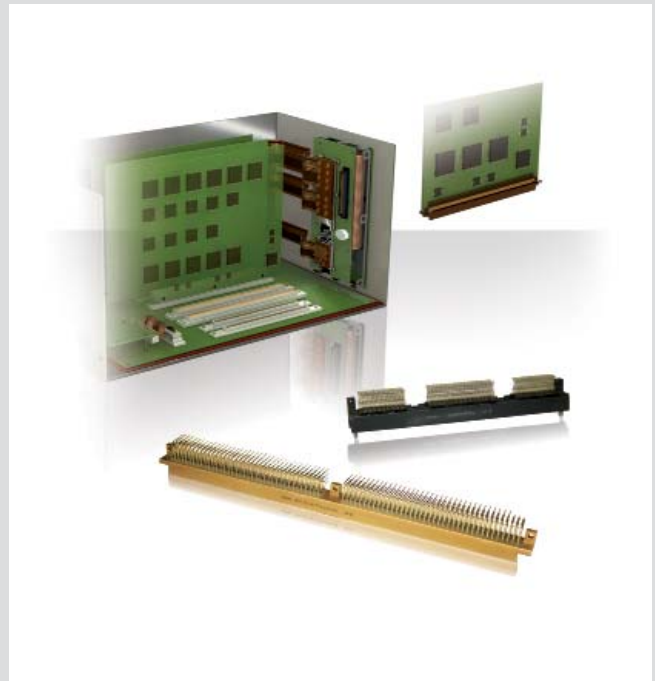
- . Perfectly adapted to military PCB connection.

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 function 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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