

Micro Comp ® Series

Aeronautical & Defense

Miniature High Density / M83513 Micro-D

M24308 D-Sub Series

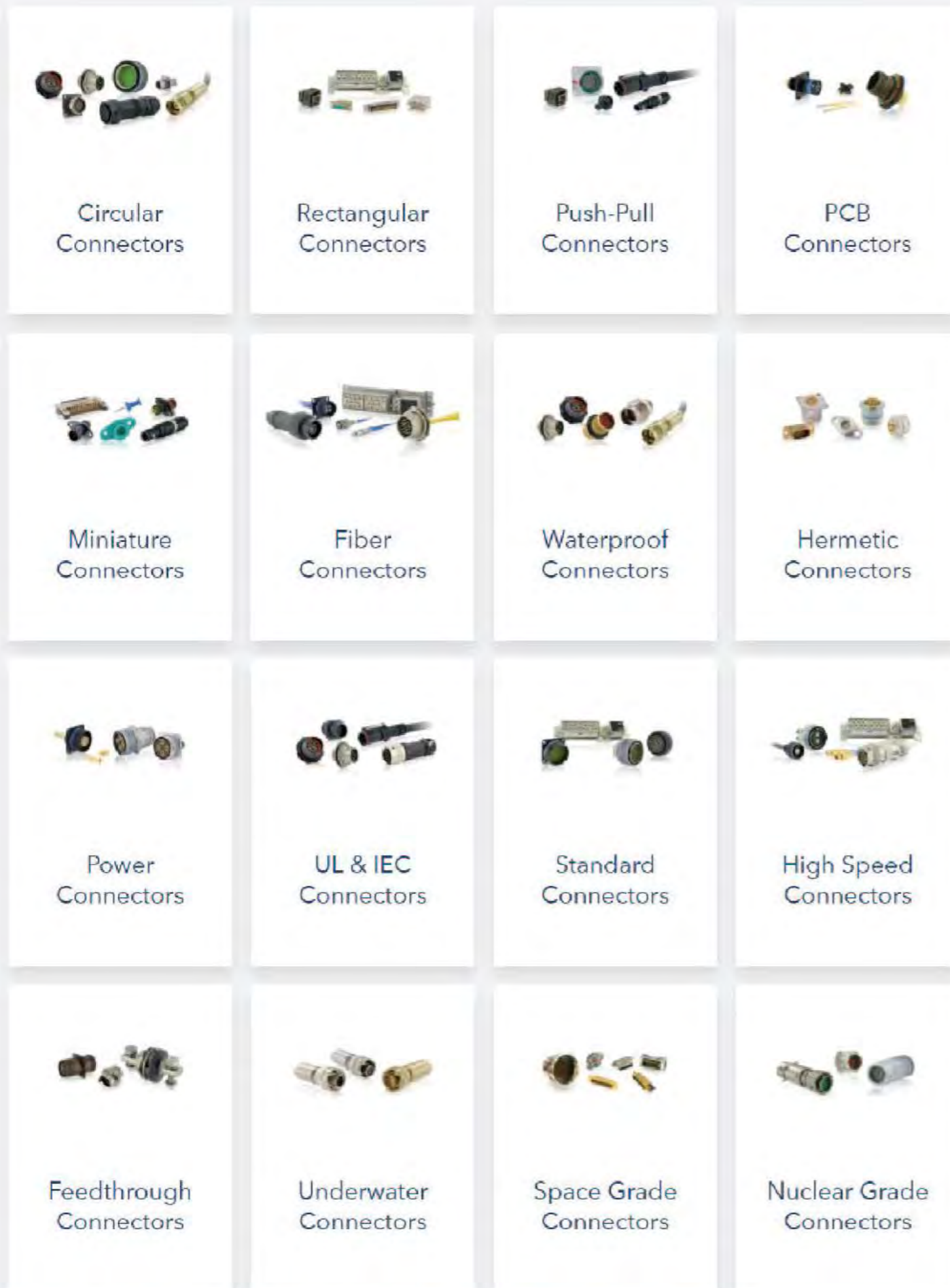
ARINC 600 Series

AIRBUS QUALIFIED

Esterline
Connection Technologies
SOURIAU



大綱目錄



Contents	
micro Comp Series	
• Overview	2
• Features and benefits	3
• Comparison with high density D-Sub	5
• Comparison with micro-D	6
• Technical Features	7
• Weight - Mating Forces	10
• Contact layouts	11
• Contact types	12
• Ordering information	13
• Crimp removable contacts	14
• Mating dimensions and contact position	15
• Wiring instructions	15
• Dimensions	17
• Mounting operations and hardware	20
• Mounting hardware	26
• Hermetic feedthrough	30
• EMI Backshells	33
• Dust Caps	37
• Under development	38
D-Sub Series	
• D-Sub Mark III standard ranges	40
• Technical characteristics	41
• Layouts	42
• PCB drilling dimensions	43
• 8630 Series HE501.....	44
• 8630 Series HE508	46
• SMA MIL-C Series M24308	48
• 8635 Series	51
• D-Sub hermetic connectors	53
• Panel mounting	56
• Shell dimensions	57
• Mounting options	58
• M24308 & M83513 Backshells.....	59
ARINC 600 Series	
Typical applications	63
Features & Benefits	64
A wide product range	65
How to build an ARINC 600	66
Insert layouts	67
Shell types and cavities overview	68
Insert layouts matrix	69
Contacts overview	70
Cost effective version	71
Technical features	72
Ordering information	73
Sealing level	73
Plating & Grounding	74
Dimensions	75
Contacts release & Mounting style	78
Inserts arrangement code	79
Polarization code	80
Packaging code	81
Crimp contacts:	
Signal contacts, Power contacts, Twinax contacts, Triax contacts	82
Coax contacts	83
Specific contacts for 28 pts insert, Wire data for crimp contacts	84
PC tail contacts:	
Signal contacts, Power contacts, Triax contacts, Coax contacts	85
Specific contacts for 62Q2 and 121 pts inserts	86
Wire wrap contacts	86
Quadrx contacts	87
ELIO® fiber optic contacts + Adaptors #8	87
Tooling:	
Crimping tools	88
Insertion and extraction tools + Instructions	89
Accessories:	
Cavity reducers, Dummy contacts, Filler plug, Dummy inserts	90
Plastic covers, Backshells SUNBANK	93
Rang Extension	
Custom products	94
microComp® Series	94
Nafi 1 & 2 Series	95
D-Subminiature Series	95
Box mount interconnect solutions	96



Overview

Description

To respond to miniaturization and weight saving trends in aeronautical and defense applications SOURIAU has developed an innovative high density connector range: *microComp*® is the alternative to High Density (HD), D-Sub and micro-D.

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



Applications

For civil aviation, military aircraft, rotorcraft, UAV and military equipment:

- Radar
- Engine Control Unit
- Missiles & Weapon systems
- Flight test equipment
- Data acquisition equipment
- Cockpit equipment & Avionics
- In Flight Entertainment Systems
- Displays
- Infrared cameras
- Battery management system
- ... and any electronic device with space and weight constraints



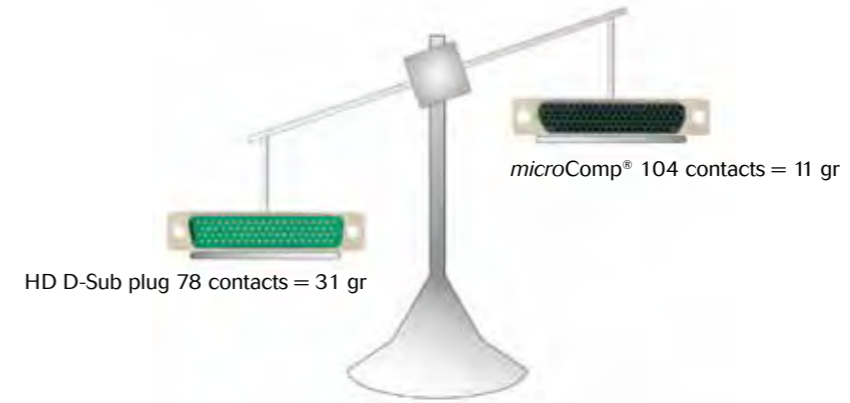
For space applications please consult our dedicated Space Grade *microComp*® catalog

Features and benefits

Composite Shell Benefit

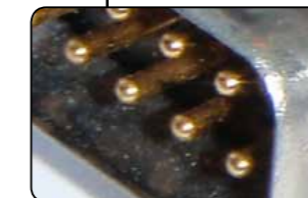
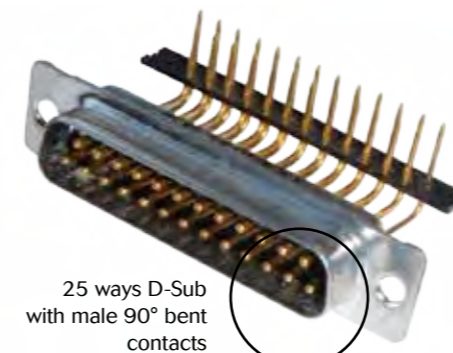
microComp® shells are available in strengthened fiber glass material for a maximum mechanical resistance. Composite shells are up to 36% lighter than aluminum shells.

The advanced «Nickel over composite» plating process used on *microComp*® has been qualified on SOURIAU MIL-DTL-38999 product range (technology selected by Boeing and Airbus, provides optimized shielding and shell-to-shell continuity.



microComp® male contacts are protected

microComp® male connectors are tamper proof. On HD D-Sub and D-Sub male contacts are the fragile parts of the connector because they can easily be bent. On *microComp*® male contacts are fully shrouded by the insulator: they are protected and can't be bent.



Male D-Sub contacts not protected



Male *microComp*® contacts protected by the insulator



Features and benefits

Ethernet performances

With its very short contacts, *microComp*® has very good performances for Ethernet.

Fully Ethernet 100 base T compatible :

Fit up to 4 Ethernet links into a 25 ways *microComp*®
Compatible with standard Ethernet Quad wires
Reach up to cat 6 performances (TIA/EIA 568-B)

Fully Ethernet 1000 base T compatible :

Fit up to 2 Ethernet links in to a 25 ways *microComp*®
No need to ground the pins between the quads.
Reach cat 5e performances (TIA/EIA 568-B)



1 quad		> Cat 6
N quad with segregation		> Cat 5e
N pairs with segregation		Cat 6



Exemple of configuration: 4 quad + 1 contact for signal in a size F shell

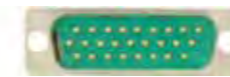
Please consult us (microcomp@souriau.com) for more information about the wiring for Ethernet links

Comparison with high density D-Sub

microComp® benefits:

Save room and weight on your equipment: for signal applications, replace your HD D-Sub with *microComp*® and reduce your equipment dimensions and weight.

HD D-Sub



26 cts



44 cts



78 cts

microComp®



25 cts



51 cts



104 cts

Size comparison: *microComp*® is smaller

Comparison between the max dimensions given in *microComp*® standard (ESCC 3401/081) and in HD D-Sub standard (MIL-DTL 24308).

	<i>microComp</i> ®	HD-DSub	<i>microComp</i> ®	HD-DSub	<i>microComp</i> ®	HD-DSub
Number of contacts	25	26	51	44	104	78
Front dimension (max)	2,9 cm ²	5,1 cm ²	4,3 cm ²	6,9 cm ²	7,8 cm ²	12,1 cm ²
Size saving / HD Dsub	-42%		-37%		-35%	
Surface per contact	11,8 mm ²	19,7 mm ²	8,5 mm ²	15,7 mm ²	7,5 mm ²	11,6 mm ²
Size saving per contact / HD Dsub	-40%		-46%		-35%	

Weight comparison: → *microComp*® is lighter

Comparison between the max weight given in *microComp*® standard (ESCC 3401/081, 082, 083) and in HD D-Sub standard (ESCC 3401 001/002/005).

	<i>microComp</i> ®	HD-DSub	<i>microComp</i> ®	HD-DSub	<i>microComp</i> ®	HD-DSub
Number of contacts	25	26	51	44	104	78
Plug without cable	3,60 gr	9,48 gr	6,01 gr	14,52 gr	10,99 gr	31,32 gr
Receptacle with 90° spills	4,60 gr	14,00 gr	8,39 gr	22,14 gr	17,54 gr	51,04 gr
Average weight per contact	0,33 gr	0,90 gr	0,28 gr	0,83 gr	0,27 gr	0,79 gr
Weight saved per contact with <i>microComp</i> ® (%)	-64%		-66%		-65%	

Mating force comparison: → *microComp*® is easier to mate and unmate

even with more than 100 contacts.

Comparison between the max mating/unmating force given in *microComp*® standart (ESCC 3401/081) and in HD D-sub standard (MIL-DTL 24308)

	<i>microComp</i> ®	HD-Dsub	<i>microComp</i> ®	HD-Dsub	<i>microComp</i> ®	HD-Dsub
Number of contacts	25	26	51	44	104	78
Max mating/unmating force (N)	43N	76N	87N	125N	179N	289N
Difference in N	33N		38N		110N	
Saving in %	-44%		-30%		-38%	



Comparison with micro-D

microComp® benefits:

Save money: global cost of ownership is less expensive for *microComp*® than for micro-D. With micro-D any change in design or quality issue leads to complete harness replacement as micro-D are pre-wired and non repairable. *microComp*® solution is more flexible thanks to the removable crimp contacts.

Save time in development: *microComp*® has removable crimp contacts so you can easily and quickly change your harness configuration.

Save weight: the high technology composite shells (strengthened fiber glass material for maximum mechanical resistance) makes *microComp*® very light and robust.

Same panel cut-out: *microComp*® connectors have the same external dimensions as MIL-DTL 83513 (except for size H and J).

Easier to use: mating and unmating force is lower for *microComp*® than for micro-D.

Weight comparison: → *microComp*® is lighter

Comparison between the max weight (connector + contacts) given in *microComp*® standard (ESCC 3401/081, 082, 083) and in micro-D standard (ESCC 3401/029).

	<i>microComp</i> ®	micro-D	<i>microComp</i> ®	micro-D	<i>microComp</i> ®	micro-D	
Number of contacts	7	9	25	25	51	51	
Plug without cable	1,42 gr	2,20 gr	3,60 gr	4,30 gr	6,01 gr	7,20 gr	
Receptacle with 90° spills	1,68 gr	7,40 gr	4,60 gr	10,20 gr	8,39 gr	16,50 gr	
Average weight per contact	0,44 gr	1,07 gr	0,33 gr	0,58 gr	0,28 gr	0,46 gr	
Weight saved per contact with <i>microComp</i> ® (%)			-58%		-43%		-39%

Note: No comparison with MIL-DTL 83513 standard because no max weight are given in this standard.

Mating force comparison: → *microComp*® is easier to mate and unmate

even with more than 100 contacts.

Comparison between the max mating and unmating force given in *microComp*® standard (ESCC 3401/081, 082, 083) and in micro-D standard (MIL-DTL 83513).

	<i>microComp</i> ®	micro-D	<i>microComp</i> ®	micro-D	<i>microComp</i> ®	micro-D	<i>microComp</i> ®	micro-D
Number of contacts	7	9	25	25	51	51	104	100
Max mating/unmating force (N)	12N	25N	43N	87N	41N	144N	179N	283N
Difference in N		14N		28N		58N		104N
Saving in %		-53%		-40%		-40%		-37%

Technical characteristics



Electrical

- Contact size: #26
- Contact pitch: 2 mm
- Current rating: 2.5 Amps
- Dielectric Withstanding Voltage sea level: 600 VRMS
70.000 feet: 200 VRMS
- Insulation resistance: 5,000 MΩ
- Low level contact resistance: 6 mΩ
- Rated current contact resistance: <5 mΩ
- Admissible wire gauge: AWG 24 to 28
- Shielding effectiveness: > 60dB attenuation from 1 to 500 MHz
- Shell to shell continuity:
Composite version: < 2mΩ
Aluminum version: < 2mΩ

Mechanical

- Endurance / Durability: 500 mating/unmating operations
- Contact retention in insert: 15 N
- Vibration:
Random: 44g
Sine: 20g
- Shock: 50g

Climatic

- Operating temperature range: -55°C to +175°C
- Storage temperature range: -65°C to +125°C
- Soldering temperature: +260°C
- Salt spray (corrosion):
Composite shell: 2000 hrs
Aluminum shell: 48 hrs
- Flammability: UL 94V-0 (self-extinguishing materials)

Material and finishes:

- Shell: composite (glass fiber reinforced) material for maximum mechanical resistance or Aluminum
- Shell plating: 10µ Ni over Cu
- Contact: copper alloy
- Contact plating: 1.27 µm (50 µin) Au according to Type 2, Grade C of MIL-DTL-45204
- Insulator: thermoplastic
- Mounting accessories (Jackscrews, jackposts, clip): stainless steel, passivated per QQ-P-35
- Grommet and seal: silicone rubber
- Drilled bar: thermoplastic

Environmental

- RoHS: compliant

For more information or questions, please contact microcomp@souriau.com



Technical features

Detailed performances

Mechanical		
Description	Requirement	Test method
Endurance / Durability	500 mating/unmating operations Connectors shall meet contact resistance, insulation resistance, DWV, mating and unmating force	MIL-DTL 835 13 8 cycles/minute maximum
Insert retention in shell	34,4 N/cm ² (50 psi)	MIL-DTL 835 13
Tensile test	F>60N for #24 cable, F>45N for #26 cable and F>30N for #28 cable	SAE AS-39029
Vibration	No discontinuity > 1µs, no cracking, breaking or loosening of parts, plug shall not become disengaged from receptacle. Connectors shall meet electrical requirements after vibration test.	Random: 44g IEC 60068-2-35, test Fda (8h x 3 axis, f1 = 20Hz, f2 = 2000Hz)
		Sine: 20g IEC 60512-4 test 6d (30min x 3 axis, 10Hz-2000Hz)
Shock and Bump	No discontinuity > 1µs, no cracking, breaking or loosening of parts, plug shall not become disengaged from receptacle. Connectors shall meet electrical requirements after shock and bump tests.	Shock: 50g for 11ms IEC 60512-4 6c (3 shocks x 3 axis x 2 directions = 18 shocks)
		Bump: 390 m/s ² IEC 60512-4 6b (4,000 ± 10 bumps x 3 axis x 2 directions = 24,000 bump)
Contact insertion/removal endurance	Contact insertion and withdrawal forces < 13.5 N Contact retention in insert > 15 N	9 cycles insertion/removal
Probe damage	Separation force mini > 0.14 N	IEC 60512-8 test 16A bending moment = 0.9 Ncm
Contact retention in insert	>15 N	An initial force of 10N shall be applied to the engagement end of the contact. Then a force at a rate not exceeding 5N per sec shall be applied: displacement shall then be measured from the insert face with the contact under load and it shall not exceed 0,3 mm (.012 in) at the required force.
Max engagement force	1,66 N	The maximum diameter test pin or minimum diameter test sleeve shall be engaged to 70% of the depth of the female mating cavity or length of the engagement male contact and separate 3 times. The engagement and separation forces shall be measured on the third engagement and separation.
Min separation force	0,14 N	

Technical features

Detailed performances

Electrical		
Description	Requirement	Test method
Dielectric Withstanding Voltage (2mA leakage current max) sea level	600 VRMS	MIL-DTL 835 13 EIA-364-20
Dielectric Withstanding Voltage (2mA leakage current max) 70,000 feet	200 VRMS	MIL-DTL 835 13 IEC 60512 test 4a methB
Insulation resistance	5,000 MΩ	MIL-DTL 835 13 EIA-364-21 IEC 60512 test 3a methB MIL-STD 202 test meth 302
Low level contact resistance	6 mΩ	MIL-DTL 83513 EIA 364-06 MIL-STD 202 Meth 307
Rated current contact resistance	5 mΩ	
Overload test	Temperature < 100°C	A current of 3 Amp for AWG 26 and AWG 28 are passed through all contacts of mated connectors for 30s. This was followed by a period of 90 s with no current flowing. This constitutes 1 cycle. The cycle has been repeated 5 times (10 minutes in total).
Shielding effectiveness	>60dB attenuation from 1 to 500 MHz	IEC-60512-23-3
Shell to shell continuity	Composite version < 2mΩ Aluminum versions < 2mΩ	EIA 364-83 EN2591-205

Climatic		
Description	Requirement	Test method
Dry heat	At 125 °C : insulation resistance > 5,000MΩ at 500 VDC	IEC 60068-2-2 test Ba 2 hours at 175°C with sudden change of temperature.
Climatic sequence: Dry heat / Damp heat 1 / Cold test / Low air pressure / Damp heat 2	No breakdown or flashover during low air pressure test, mated and unmated at 150VAC Insulation resistance > 100 MΩ at 500VDC just after Damp heat 2 test	Dry heat: IEC 60068-2-2 test Ba (2 hours at 175°C with sudden change of temperature) Damp heat: IEC 60068-2-30 test Db severity b Cold test: IEC 60068-2-1 test Aa (2 hours at -65°C with sudden change of temperature) Low Air Pressure: IEC 60068-13 test M (33,000m = 108,000 ft)
Storage temperature range	-65°C to +125°C	IEC 60512-6 test 11i for 1.000 h at +125°C
Soldering temperature	+260°C	EIA-364-56 Procedure 3 Test Condition B
Salt spray (corrosion)	No corrosion on the interfaces or mating surfaces after 2000 hours for composite shell and 48 hours for Aluminum shell.	IEC 60068-2-11 test Ka



Technical features

Detailed performances

Others		
Description	Requirement	Test method
Residual Magnetism	< 200 gamma	ESA ESCC 3401 / 9.5
Permanence of marking	No deterioration after 3 immersions of 1mn in solvent with 10 brushings after each immersion	MIL-STD 202 meth 215

Weight

Composite shells are up to 36% lighter than aluminum.

	Shell max weight* in g (oz)			
	Composite version		Aluminum version	
	Male	Female	Male	Female
A	1.05 (0.037)	1 (0.035)	1.35 (0.048)	1.45 (0.051)
B	1.35 (0.048)	1.25 (0.044)	1.75 (0.062)	1.8 (0.063)
C	1.6 (0.056)	1.45 (0.051)	2.15 (0.076)	2.2 (0.078)
D	1.8 (0.063)	1.65 (0.058)	2.35 (0.083)	2.4 (0.085)
E	2.1 (0.074)	1.88 (0.066)	2.7 (0.095)	2.69 (0.095)
F	2.35 (0.083)	2.1 (0.074)	2.95 (0.104)	2.9 (0.103)
G	2.5 (0.088)	2.2 (0.078)	3.15 (0.111)	3.05 (0.108)
H	3.44 (0.121)	2.95 (0.104)	4.2 (0.148)	4.1 (0.145)
J	6.1 (0.215)	4.75 (0.168)	7.3 (0.257)	6.45 (0.228)

* without contact

Contact max weight in g (oz)		
Contacts	Male	Female
Crimp contacts	0.04 (0.0014)	0.06 (0.0021)
Straight PC tails (spills) contacts	0.08 (0.0028)	
90° PC tails (spills) contacts for shell size A to F*	0.09 (0.0032)	
90° PC tails (spills) contacts for shell size G and H*	0.097 (0.0034)	
90° PC tails (spills) contacts for shell size J*	0.11 (0.0039)	

* average weight

Mating forces

	Shell sizes								
	A	B	C	D	E	F	G	H	J
Mating force max (N)	11.9	18.7	22.1	28.9	35.7	42.5	56.1	86.7	178.8

Contact layouts

Shell size	Number of contacts	Front view of male insert
A	7	
B*	11	
C*	13	
D*	17	
E*	21	
F	25	
G*	33	
H	51	
J	104	


Contact size: #26
Contact pitch: 2.0 mm

* Consult us for availability.





Contact types

	Unsealed	Sealed
Crimp	Male (-P011and -P011B)	Male with grommet (-E-P011and -E-P011B)
		
	Female (-S011and -S011B)	Female with grommet and interfacial seal (-E-S011 and -E-S011B)
		

	Straight PCB
Straight PCB	Male (-POL3)
	

Rear view

	Male without fixing accessories (-P1AON)	Male with standard jackposts (- P1A7N)
90° bent PCB		

Rear view

Ordering information

MIL/AERO part-numbering system

MIL/Aero series - PCB versions	8MC	N	F25	P	1A7N
Shell material:	None: composite A: aluminum				
Version:	N: MIL grade (electroless Nickel finish) None: without plating <i>For Space Grade plating (gold) - consult our Space Grade microComp® catalog</i>				
Environment:	E: sealed version <i>With P1AxN termination: non standard, consult us</i> <i>With POL3 termination: non standard, consult us</i> T: sealed version, interfacial seal only <i>The interfacial seal is always on the female connector (-S- contact type)</i> None: no sealing				
Shell size & contact layout:	A7: 7 contacts B11: 11 contacts* C13: 13 contacts* D17: 17 contacts* E21: 21 contacts* F25: 25 contacts G33: 33 contacts* H51: 51 contacts J104: 104 contacts				
Contact type:	P: Pin contacts for male connector S: socket contacts for female connector				
Termination code:	OL3: Straight PCB contacts 1AON: 90° bent PCB contacts, without bracket, with removable drilled bar, 2,54 mm pitch between rows 1A7N: 90° bent PCB contacts, 2,54 mm pitch between rows, with bracket, removable drilled bar and standard jackpost				

MIL/Aero series - Crimp versions	8MC	N	E	F25	S	011B
Shell material:	None: composite A: aluminum					
Version:	N: MIL grade (electroless Nickel finish) None: without plating <i>For Space Grade plating (gold) - consult our Space Grade microComp® catalogue</i>					
Environment:	E: sealed version <i>With P011, P011B or PL termination: grommet</i> <i>With S011, S011B or SL termination: grommet + interfacial seal</i> T: sealed version, interfacial seal only <i>The interfacial seal is always on the female connector (-S- contact type)</i> None: no sealing					
Shell size & contact layout:	A7 : 7 contacts B11: 11 contacts* C13: 13 contacts* D17: 17 contacts* E21: 21 contacts* F25: 25 contacts G33: 33 contacts* H51 : 51 contacts J104: 104 contacts					
Contact type:	P: Pin contacts for male connector S: Socket contacts for female connector					
Termination code:	011: Crimp contacts for wire AWG 26 & 28 011B: Crimp contacts for wire AWG 24 & 26 L: delivered without contact					

Insertion/extraction tool 8MCIET is always included with -S011, -S011B, -P011B and -P011 versions, but not with -L versions.
Termination codes -011, -011B and -L are not marked on the connector (only for order)

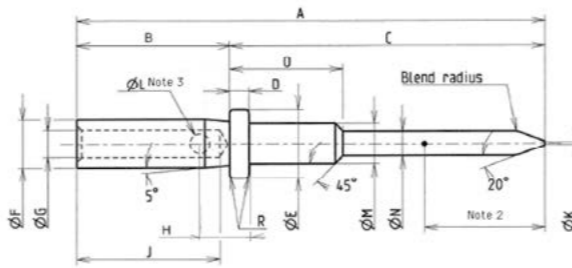
***Consult us for availability**
Jackscrews kits are never included



Crimp removable contacts

MIL/Aero standards do not define #26 crimp contacts (cf AS39029). So to offer our customers a high density connector with removable contacts we have used contacts defined in ESCC space standard. ESCC 3401/083 defines the design, dimensions and performances of contacts #26 used in *microComp*®. These contacts are in copper and are gold plated. They have been designed for high electrical and mechanical performances – they withstand high shocks and vibrations. These contacts are crimped to wire using standard MIL spec crimp tool MIL-DTL-22520 and a locator for #26 contacts.

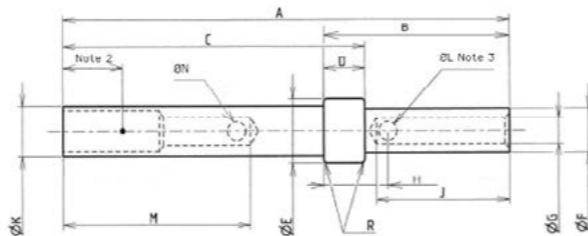
Male contact (pin):



#26 MIL grade male contacts part numbers:		
Wire size	AWG 24-26	AWG 26-28
Part number	8MC 00 103	8MC 00101

Dimensions in mm (inch)																	
	A	B	C	D	ØE	ØF		ØG		H	J	ØK	ØL	ØM	ØN	O	R
						AWG 24/26	AWG 26/28	AWG 24/26	AWG 26/28								
Min. mm (inch)	-	3,10 (.122)	6 (.236)	0,35 (.014)	1,37 (.054)	1,00 (.039)	0,92 (.036)	0,73 (.029)	0,56 (.022)	1 (.039)	2,90 (.114)	-	0,40 (.016)	0,80 (.031)	0,50 (.019)	1,85 (.073)	0,04 (.002)
Max. mm (inch)	9,80 (.386)	3,25 (.128)	6,10 (.240)	0,41 (.016)	1,41 (.055)	1,08 (.043)	0,98 (.039)	0,76 (.030)	0,60 (.024)	1,10 (.043)	3,10 (.122)	0,15 (.006)	0,50 (.020)	0,82 (.032)	0,52 (.021)	1,91 (.075)	0,08 (.003)

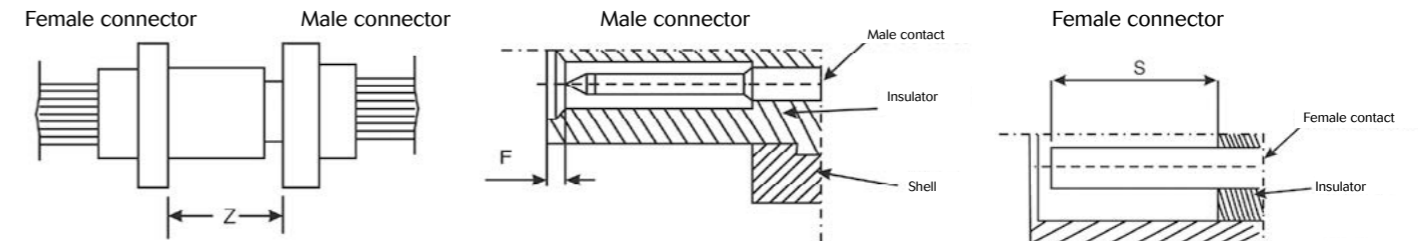
Female contact (socket):



#26 MIL grade female contacts part numbers:		
Wire size	AWG 24-26	AWG 26-28
Part number	8MC 00104	8MC 00102

Dimensions in mm (inch)																
	A	B	C	D	ØE	ØF		ØG		H	J	ØK	ØL	M	ØN	R
						AWG 24/26	AWG 26/28	AWG 24/26	AWG 26/28							
Min. mm (inch)	-	4,05 (.159)	6,55 (.258)	0,85 (.033)	1,37 (.054)	1,00 (.039)	0,92 (.036)	0,73 (.029)	0,56 (.022)	1,40 (.055)	2,90 (.114)	1,05 (.041)	0,40 (.016)	4,10 (.161)	0,40 (.016)	0,04 (.002)
Max. mm (inch)	9,80 (.386)	4,15 (.163)	6,60 (.260)	0,91 (.036)	1,41 (.055)	1,08 (.043)	0,98 (.039)	0,76 (.030)	0,60 (.024)	1,51 (.059)	3,10 (.122)	0,15 (.006)	0,50 (.020)	0,82 (.032)	0,50 (.020)	0,08 (.003)

Mating dimensions and contact position



F		S		Z
Min	Max	Min	Max	Max
0,22 (.0087)	0,72 (.028)	4,15 (.163)	4,65 (.183)	5,21 (.205)

Dimensions in mm (inch)

Wiring instructions

Insertion and extraction tool: 8MCIET

This tool for *microComp*® crimp contacts #26 is always included with crimp versions of *microComp*® connectors (except for delivery without contacts).

MIL-DTL 22520 crimp tool and specific locator:

Use standard M22520/2-01 crimp tool with the following locators:

	Male	Female
Locator P/N	8985-3093A	8985-3094A
AWG 24 - 26	Mark n°4	Mark n°4
AWG 28	Mark n°2	Mark n°2



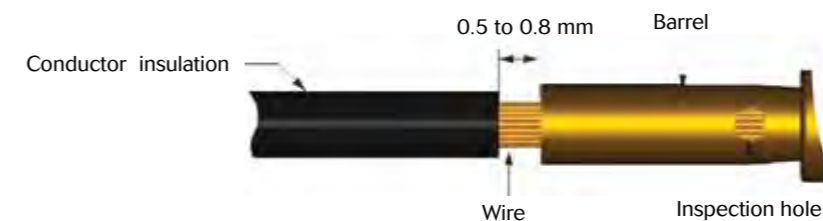
Cable preparation and wire stripping

L = Length of wire stripping

Contact size	L min.	L max.
# 26 mm (inch)	2,91 (.114)	3,41 (.134)

Insertion of wire in contact barrel

When inserting the stripped wire into the contact barrel check that no strands are left outside and that the wire is visible through the wire inspection hole in the barrel





Wiring instructions

Contacts are inserted and extracted from the rear of the connector

Insertion of the contacts

1 - Engage the crimp cable / contact assembly into the longitudinal slot of the plastic tool 8MCIET (blue side). 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 cable that is 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.



Dimensions

Female shell

Optional Design
Oblong Holes Shell Size H

Sealed version (grommet and interfacial seal)

Compound

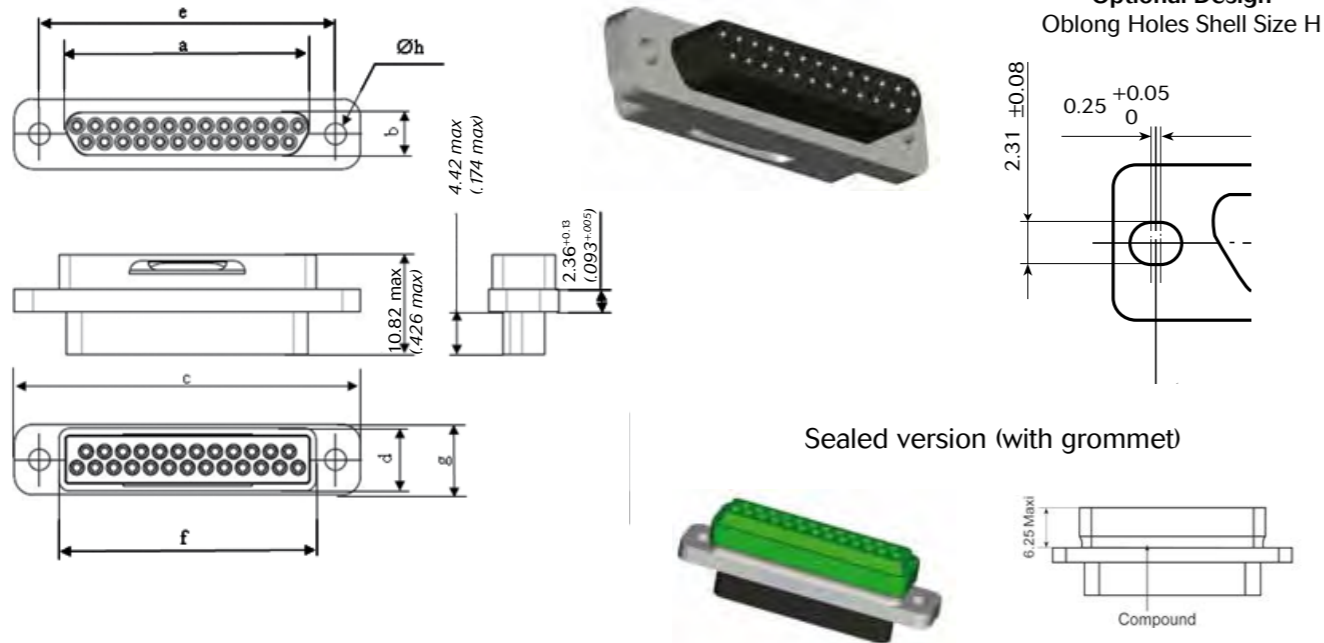
Shell Size	a	b	c		d		e		f		g	h
	Max	Max	min	Max	min	Max	min	Max	min	Max	Max	min
A	10,16 (.400)	6,38 (.251)	19,43 (.765)	19,94 (.785)	7,31 (.288)	7,82 (.307)	14,22 (.559)	14,48 (.570)	9,45 (.372)	10,16 (.400)	6,86 (.270)	2,26 (.089)
B	13,97 (.550)	6,38 (.251)	23,25 (.915)	23,75 (.935)	7,31 (.288)	7,82 (.307)	18,03 (.709)	18,29 (.720)	13,26 (.522)	13,97 (.550)	6,86 (.270)	2,26 (.089)
C	17,78 (.634)	6,38 (.251)	27,05 (1.065)	27,56 (1.085)	7,31 (.288)	7,82 (.307)	21,84 (.859)	22,10 (.870)	17,07 (.672)	17,78 (.700)	6,86 (.270)	2,26 (.089)
D	20,32 (.700)	6,38 (.251)	29,59 (1.165)	30,10 (1.185)	7,31 (.288)	7,82 (.307)	24,38 (.959)	24,64 (.970)	19,61 (.772)	20,32 (.800)	6,86 (.270)	2,26 (.089)
E	24,13 (.950)	6,38 (.251)	33,41 (1.315)	33,91 (1.335)	7,31 (.288)	7,82 (.307)	28,19 (1.149)	28,45 (1.120)	23,42 (.992)	24,13 (.950)	6,86 (.270)	2,26 (.089)
F	27,94 (1.100)	6,38 (.251)	37,21 (1.465)	37,72 (1.485)	7,31 (.288)	7,82 (.307)	32,00 (1.259)	32,26 (1.270)	27,23 (1.072)	27,94 (1.100)	6,86 (.270)	2,26 (.089)
G	26,67 (1.050)	7,47 (.294)	35,95 (1.415)	36,45 (1.435)	8,42 (.331)	8,92 (.351)	30,73 (1.229)	30,99 (1.220)	25,96 (1.022)	26,67 (1.050)	6,86 (.270)	2,26 (.289)
H	38,65 (1.521)	7,47 (.294)	48,05 (1.891)	48,55 (1.911)	8,42 (.331)	8,92 (.351)	43,23 (1.702)	43,49 (1.712)	38,40 (1.512)	38,65 (1.522)	7,87 (.310)	2,26 (.089)
J	46,80 (1.842)	10,94 (.431)	62,25 (2.451)	62,75 (2.470)	12,00 (.472)	12,50 (.492)	54,72 (2.154)	54,98 (2.177)	47,40 (1.866)	47,65 (1.876)	11,25 (.443)	3,70 (.146)

All dimensions in mm (inches)



Dimensions

Male shell

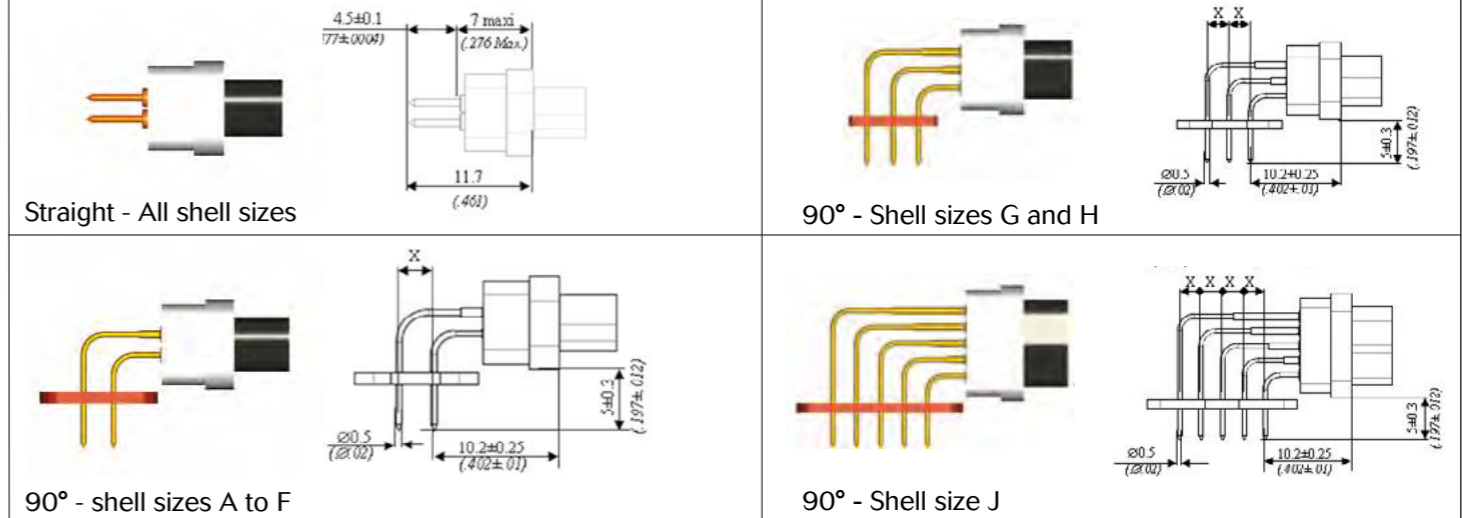


Shell size	a	b	c		d		e		f		g	h
	Max	Max	min	Max	min	Max	min	Max	min	Max	Max	min
A	8,48 (.334)	4,69 (.185)	19,43 (.765)	19,94 (.785)	7,31 (.288)	7,82 (.307)	14,22 (.559)	14,48 (.570)	9,45 (.372)	10,16 (.400)	6,86 (.270)	2,26 (.089)
B	12,29 (.484)	4,69 (.185)	23,25 (.915)	23,75 (.935)	7,31 (.288)	7,82 (.307)	18,03 (.709)	18,29 (.720)	13,26 (.522)	13,97 (.550)	6,86 (.270)	2,26 (.089)
C	16,10 (.634)	4,69 (.185)	27,05 (1.065)	27,56 (1.085)	7,31 (.288)	7,82 (.307)	21,84 (.859)	22,10 (.870)	17,07 (.672)	17,78 (.700)	6,86 (.270)	2,26 (.089)
D	18,64 (.734)	4,69 (.185)	29,59 (1.165)	30,10 (1.185)	7,31 (.288)	7,82 (.307)	24,38 (.959)	24,64 (.970)	19,61 (.772)	20,32 (.800)	6,86 (.270)	2,26 (.089)
E	22,45 (.884)	4,69 (.185)	33,41 (1.315)	33,91 (1.335)	7,31 (.288)	7,82 (.307)	29,19 (1.149)	28,45 (1.120)	23,42 (.922)	24,13 (.950)	6,86 (.270)	2,26 (.089)
F	26,26 (1.034)	4,69 (.185)	37,21 (1.465)	37,72 (1.485)	7,31 (.288)	7,82 (.307)	32,00 (1.259)	32,26 (1.270)	27,23 (1.072)	27,94 (1.100)	6,86 (.270)	2,26 (.089)
G	24,99 (.934)	4,69 (.185)	35,95 (1.415)	36,45 (1.435)	7,31 (.288)	7,82 (.307)	30,73 (1.209)	30,99 (1.220)	25,96 (1.022)	26,67 (1.050)	6,86 (.270)	2,26 (.089)
H	36,90 (1.463)	5,78 (.227)	48,05 (1.891)	48,55 (1.911)	8,42 (.331)	8,92 (.351)	43,23 (1.702)	43,49 (1.712)	38,40 (1.512)	38,65 (1.522)	7,87 (.310)	2,26 (.089)
J	45,10 (1.775)	9,25 (.364)	62,25 (2.451)	62,75 (2.470)	12,00 (.472)	12,50 (.492)	54,72 (2.154)	54,98 (2.177)	47,40 (1.866)	47,65 (1.876)	11,25 (.443)	3,70 (.146)

All dimensions in mm (inches)

Dimensions

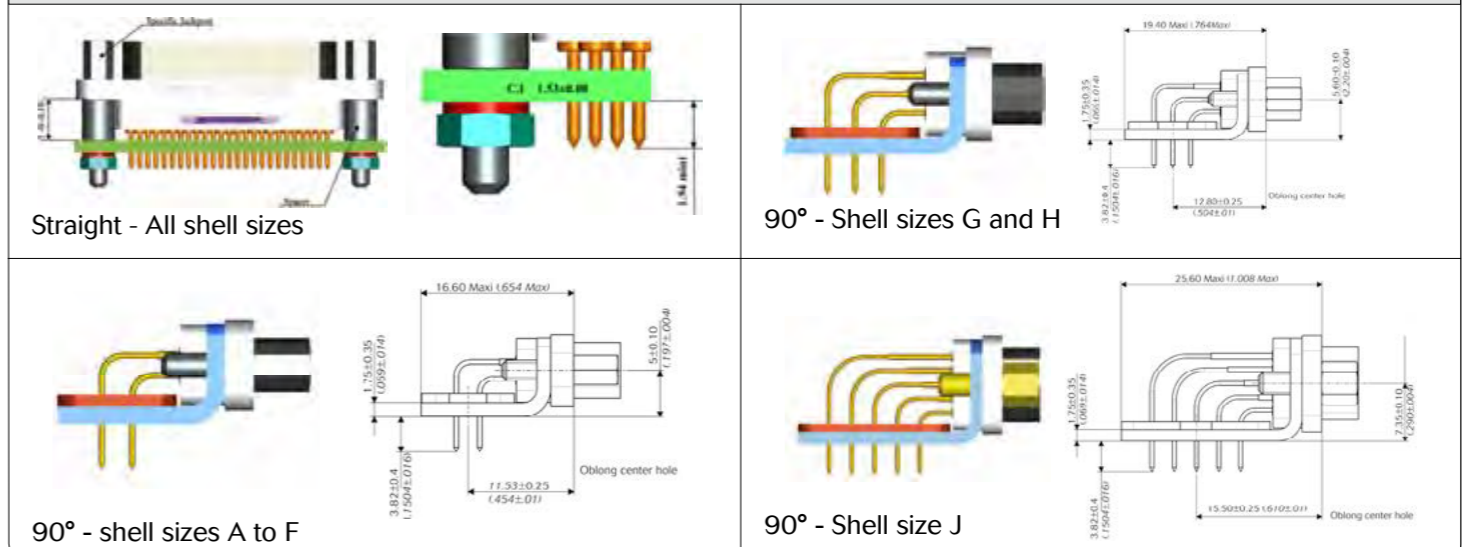
PCB versions – male connectors P1AON



X=2.54 (.1)

All dimensions in mm (inches)

PCB versions – male connectors with mounting accessories P1A7N



X=2.54 (.1)

All dimensions in mm (inches)

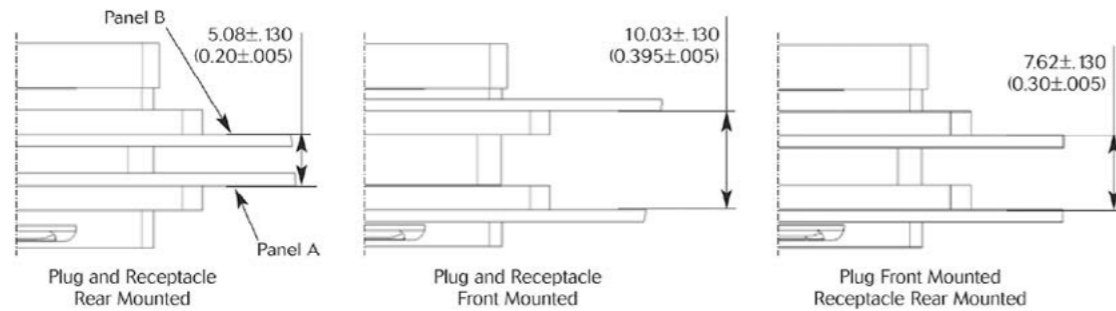


Mounting operations and hardware

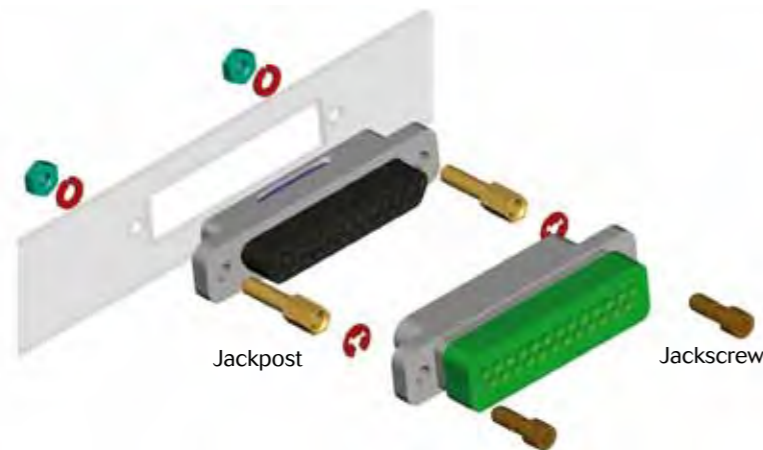
For hardware dimensions consult the mounting hardware section

Double panel mounting dimensions

Dimensions in mm (inches)



Option 1: Front mounting on panel



Mounting hardware for front mounting on panel:

Individual packaging (one package for one mated pair)			
Type	P/N	Description	
Standard Jackpost (not for rear panel mounting)	Size A-H	8MCJP507	Jackpost Kit for <i>microComp</i> ® shell size A to H (2 jackposts + 2 washers + 2 nuts). Front panel or cable-to-cable mounting.
	Size J	8MCJP517	Jackpost Kit for <i>microComp</i> ® shell size J (2 jackposts + 2 washers + 2 nuts). Front panel or cable-to-cable mounting.

Packaging per 50 kits (one package for one mated pair)			
Type	P/N	Description	
Standard Jackpost (not for rear panel mounting)	Size A-H	8MCJP50750	Jackpost Kit for <i>microComp</i> ® shell size A to H (100 jackposts + 100 washers + 100 nuts). Front panel or cable-to-cable mounting.
	Size J	8MCJP51750	Jackpost Kit for <i>microComp</i> ® shell size J (100 jackposts + 100 washers + 100 nuts). Front panel or cable-to-cable mounting.

Mounting operations and hardware

Option 2: Rear mounting on panel

With additional mounting on PCB: combined Option 2 and Option 3.

Mounting hardware for rear mounting on panel

for panel thickness from 0.8 mm to 3.2 mm:



Individual packaging (one package for one mated pair)				
Type	P/N	Panel	Description	
Jackpost for rear panel mounting	Size A-H	8MCJP008	0,8 mm (.031 in)	Jackpost Kit for <i>microComp</i> ® shell size A to H (2 jackposts + 2 washers + 2 nuts).
		8MCJP012	1,2 mm (.047 in)	Jackpost Kit for <i>microComp</i> ® shell size A to H (2 jackposts + 2 washers + 2 nuts).
		8MCJP016	1,6 mm (.063 in)	Jackpost Kit for <i>microComp</i> ® shell size A to H (2 jackposts + 2 washers + 2 nuts).
		8MCJP024	2,4 mm (.094 in)	Jackpost Kit for <i>microComp</i> ® shell size A to H (2 jackposts + 2 washers + 2 nuts).
		8MCJP032	3,2 mm (.126 in)	Jackpost Kit for <i>microComp</i> ® shell size A to H (2 jackposts + 2 washers + 2 nuts).
	Size J	8MCJP508	0,8 mm (.031 in)	Jackpost Kit for <i>microComp</i> ® shell size J (2 jackposts + 2 washers + 2 nuts).
		8MCJP512	1,2 mm (.047 in)	Jackpost Kit for <i>microComp</i> ® shell size J (2 jackposts + 2 washers + 2 nuts).
		8MCJP516	1,6 mm (.063 in)	Jackpost Kit for <i>microComp</i> ® shell size J (2 jackposts + 2 washers + 2 nuts).
		8MCJP524	2,4 mm (.094 in)	Jackpost Kit for <i>microComp</i> ® shell size J (2 jackposts + 2 washers + 2 nuts).
		8MCJP532	3,2 mm (.126 in)	Jackpost Kit for <i>microComp</i> ® shell size J (2 jackposts + 2 washers + 2 nuts).

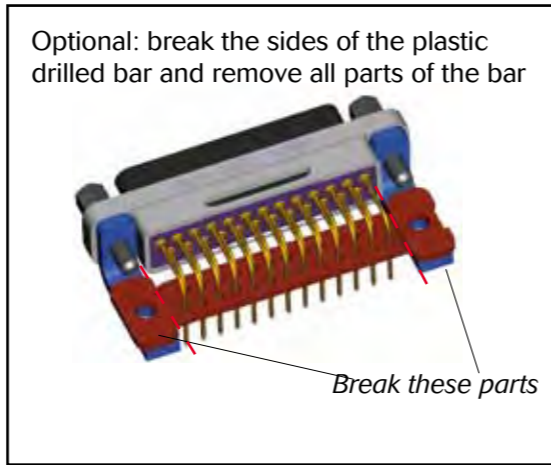
Packaging per 50 kits (one package for 50 mated pairs)				
Type	P/N	Panel	Description	
Jackpost for rear panel mounting	Size A-H	8MCJP00850	0,8 mm (.031 in)	Jackpost Kit for <i>microComp</i> ® shell size A to H (100 jackposts + 100 washers + 100 nuts).
		8MCJP01250	1,2 mm (.047 in)	Jackpost Kit for <i>microComp</i> ® shell size A to H (100 jackposts + 100 washers + 100 nuts).
		8MCJP01650	1,6 mm (.063 in)	Jackpost Kit for <i>microComp</i> ® shell size A to H (100 jackposts + 100 washers + 100 nuts).
		8MCJP02450	2,4 mm (.094 in)	Jackpost Kit for <i>microComp</i> ® shell size A to H (100 jackposts + 100 washers + 100 nuts).
		8MCJP03250	3,2 mm (.126 in)	Jackpost Kit for <i>microComp</i> ® shell size A to H (100 jackposts + 100 washers + 100 nuts).
	Size J	8MCJP50850	0,8 mm (.031 in)	Jackpost Kit for <i>microComp</i> ® shell size J (100 jackposts + 100 washers + 100 nuts).
		8MCJP51250	1,2 mm (.047 in)	Jackpost Kit for <i>microComp</i> ® shell size J (100 jackposts + 100 washers + 100 nuts).
		8MCJP51650	1,6 mm (.063 in)	Jackpost Kit for <i>microComp</i> ® shell size J (100 jackposts + 100 washers + 100 nuts).
		8MCJP52450	2,4 mm (.094 in)	Jackpost Kit for <i>microComp</i> ® shell size J (100 jackposts + 100 washers + 100 nuts).
		8MCJP53250	3,2 mm (.126 in)	Jackpost Kit for <i>microComp</i> ® shell size J (100 jackposts + 100 washers + 100 nuts).



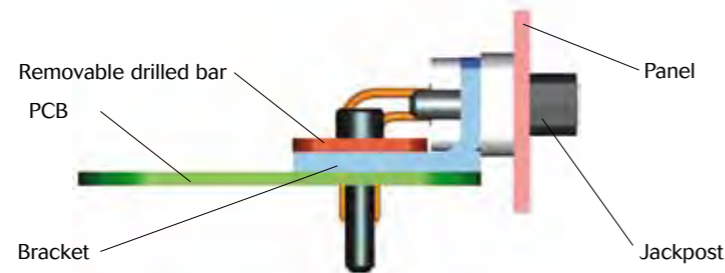
Mounting operations and hardware

Option 3: Mounting on PCB with 90° bent contacts

Solder the connector contacts to the PCB
Screw the connector to the PCB



With additional rear mounting on panel: combined Option 2 and Option 3.



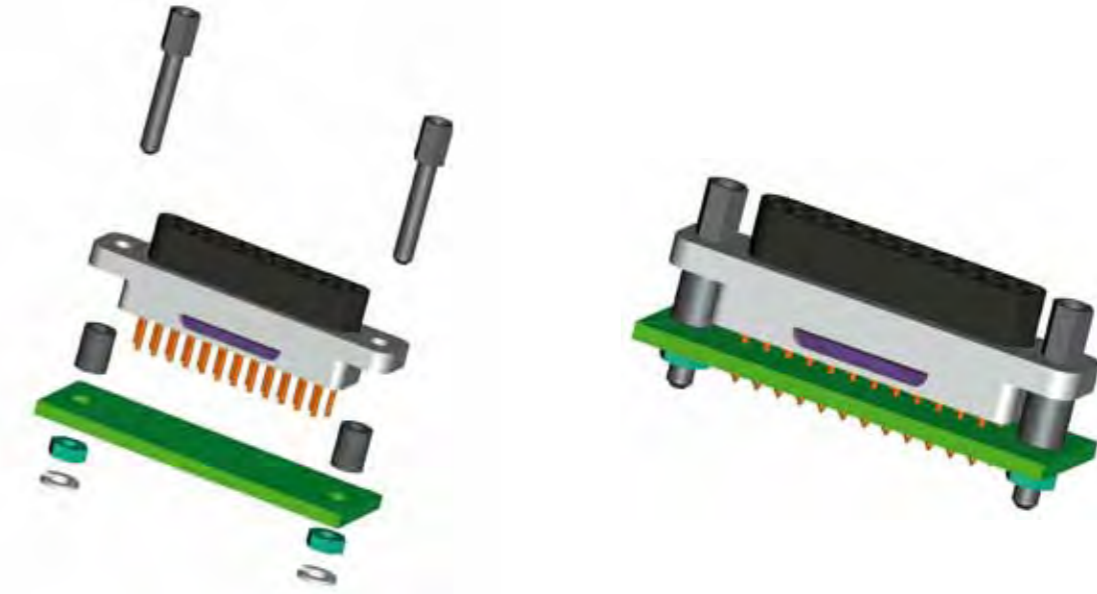
Mounting hardware for mounting on PCB with 90° bent contacts

Individual packaging (one package for one mated pair)			
Type		P/N	Description
Standard Jackpost (not for rear panel mounting)	Size A-H	8MCJP507	Jackpost Kit for <i>microComp</i> ® shell size A to H (2 jackposts + 2 washers + 2 nuts). Front panel or cable-to-cable mounting.
	Size J	8MCJP517	Jackpost Kit for <i>microComp</i> ® shell size J (2 jackposts + 2 washers + 2 nuts). Front panel or cable-to-cable mounting.
Brackets: to fix the receptacle on the PCB	Size A-F	8MCBKAF	Bracket kit for shell size A to F (2 brackets). Not for sealed version.
	Size G-H	8MCBKGH	Bracket kit for shell size G and H (2 brackets). Not for sealed version.
	Size J	8MCBKJ	Bracket kit for shell size J (2 brackets). Not for sealed version.

Packaging per 50 kits (one package for 50 mated pairs)			
Type		P/N	Description
Standard Jackpost (not for rear panel mounting)	Size A-H	8MCJP50750	Jackpost Kit for <i>microComp</i> ® shell size A to H (100 jackposts + 100 washers + 100 nuts). Front panel or cable-to-cable mounting.
	Size J	8MCJP51750	Jackpost Kit for <i>microComp</i> ® shell size J (100 jackposts + 100 washers + 100 nuts). Front panel or cable-to-cable mounting.
Brackets: to fix the receptacle on the PCB	Size A-F	8MCBKAF50	Bracket kit for shell size A to F (100 brackets). Not for sealed version.
	Size G-H	8MCBKGH50	Bracket kit for shell size G and H (100 brackets). Not for sealed version.
	Size J	8MCBKJ50	Bracket kit for shell size J (100 brackets). Not for sealed version.

Mounting operations and hardware

Option 4: Mounting on PCB with straight PCB contacts



Mounting hardware for mounting on PCB with straight PCB contacts

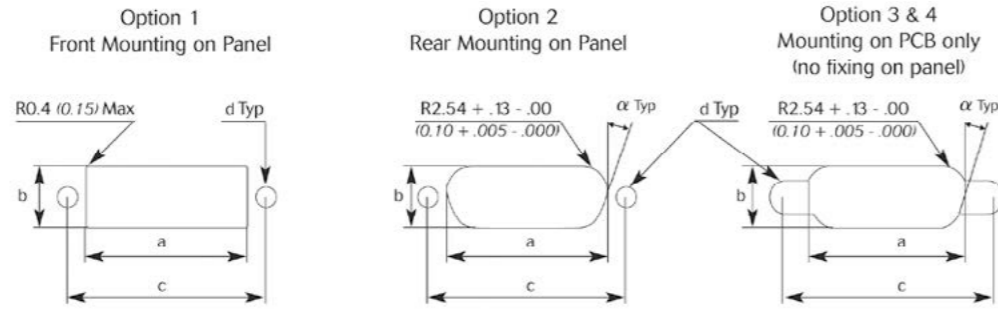
Individual packaging (one package for one mated pair)			
Type		P/N	Description
Jackpost for PCB mounting (straight spills/ PC tails)	Size A-H	8MCJPS070	Jackpost kit for straight spills / PC tails <i>microComp</i> ® shell size A to H (2 jackposts + 2 spacers + 2 washers + 2 nuts). For mounting on PCB.
	Size J	8MCJPS170	Jackpost kit for straight spills / PC tails <i>microComp</i> ® shell size J (2 jackposts + 2 spacers + 2 washers + 2 nuts). For mounting on PCB.

Packaging per 50 kits (one package for 50 mated pairs)			
Type		P/N	Description
Jackpost for PCB mounting (straight spills/ PC tails)	Size A-H	8MCJPS07050	Jackpost kit for straight spills / PC tails version shell size A to H (100 jackposts + 100 washers + 100 nuts). For mounting on PCB.
	Size J	8MCJPS17050	Jackpost kit for straight spills / PC tails shell size J (100 jackposts + 100 washers + 100 nuts). For mounting on PCB.



Mounting operations and hardware

Panel cut-out



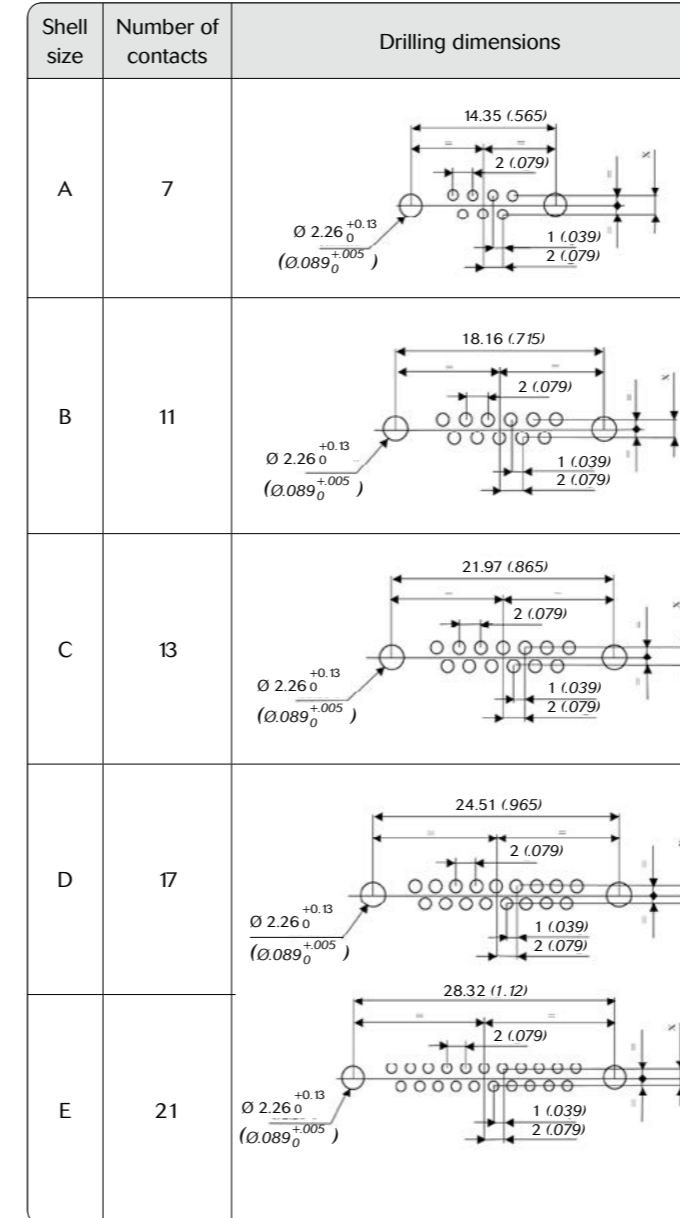
Note : Shell size A to H: $\alpha = 27^\circ/26^\circ$ - Shell size J: $\alpha = 0^\circ$

Shell size	Mounting option	Cut-out dimensions in mm (inch)			
		a +0.1 (+.004) -0.0 (.000)	b +0.1 (+.004) -0.0 (.000)	c +0.1 (+.004) -0.1 (-.004)	d +0.1 (+.004) -0.0 (.000)
A	1	10.36 (.408)	6.88 (.270)	14.35 (.565)	2.26 (.089)
	2	10.19 (.401)	6.40 (.252)	14.35 (.565)	2.26 (.089)
	3 & 4	10.19 (.401)	6.40 (.252)	14.35 (.565)	3.70 (.146)
B	1	14.17 (.558)	6.88 (.270)	18.56 (.731)	2.26 (.089)
	2	14.00 (.551)	6.40 (.252)	18.56 (.731)	2.26 (.089)
	3 & 4	14.00 (.551)	6.40 (.252)	18.56 (.731)	3.70 (.146)
C	1	17.98 (.708)	6.88 (.270)	21.97 (.865)	2.26 (.089)
	2	17.81 (.701)	6.40 (.252)	21.97 (.865)	2.26 (.089)
	3 & 4	17.81 (.701)	6.40 (.252)	21.97 (.865)	3.70 (.146)
D	1	20.52 (.808)	6.88 (.270)	24.51 (.965)	2.26 (.089)
	2	20.34 (.801)	6.40 (.252)	24.51 (.965)	2.26 (.089)
	3 & 4	20.34 (.801)	6.40 (.252)	24.51 (.965)	3.70 (.146)
E	1	24.33 (.958)	6.88 (.270)	28.32 (1.115)	2.26 (.089)
	2	24.16 (.951)	6.40 (.252)	28.32 (1.115)	2.26 (.089)
	3 & 4	24.16 (.951)	6.40 (.252)	28.32 (1.115)	3.70 (.146)
F	1	28.14 (1.108)	6.88 (.270)	32.13 (1.265)	2.26 (.089)
	2	27.97 (1.101)	6.40 (.252)	32.13 (1.265)	2.26 (.089)
	3 & 4	27.97 (1.101)	6.40 (.252)	32.13 (1.265)	3.70 (.146)
G	1	26.87 (1.058)	8.00 (.315)	30.86 (1.215)	2.26 (.089)
	2	26.70 (1.051)	7.49 (.295)	30.86 (1.215)	2.26 (.089)
	3 & 4	26.70 (1.051)	7.49 (.295)	30.86 (1.215)	3.70 (.146)
H	1	39.05 (1.537)	8.00 (.315)	43.36 (1.707)	2.26 (.089)
	2	38.65 (1.522)	7.49 (.295)	43.36 (1.707)	2.26 (.089)
	3 & 4	38.65 (1.522)	7.49 (.295)	43.36 (1.707)	3.70 (.146)
J	1	48.05 (1.892)	11.40 (.449)	54.85 (2.159)	3.20 (.126)
	2	46.80 (1.842)	11.10 (.437)	54.85 (2.159)	3.20 (.126)
	3 & 4	46.80 (1.842)	11.10 (.437)	54.85 (2.159)	5.60 (.220)

All dimensions in mm (inches)

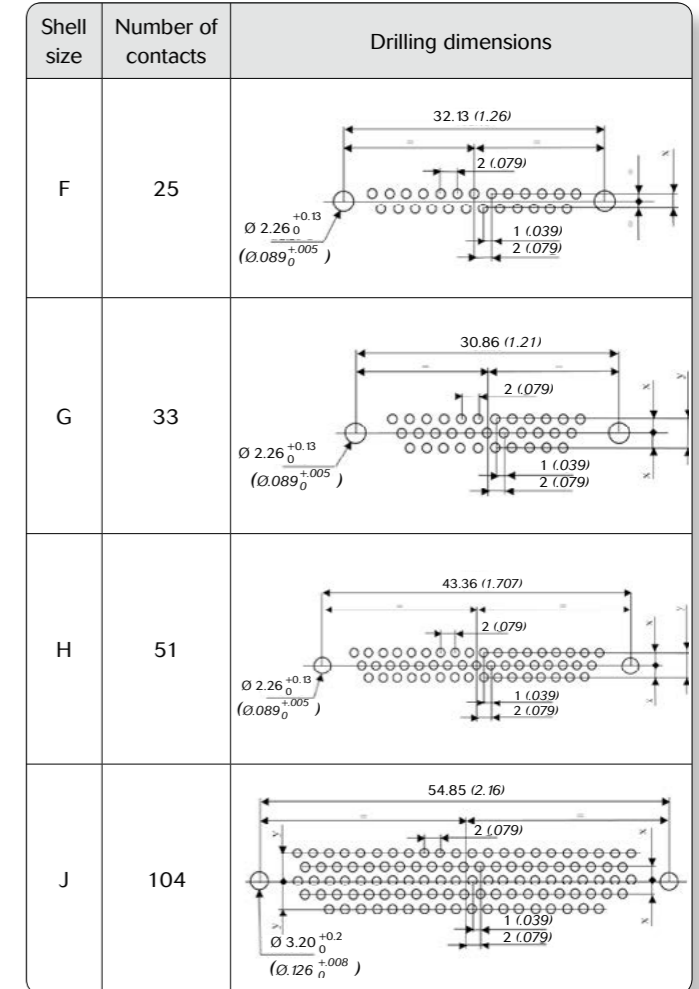
Mounting operations and hardware

PCB drilling



	x	y
OL3	1.732 (.068)	3.464 (.136)
1AON	2.540 (.1)	5.08 (.2)

Note: we suggest 0.89 (.035) Ø hole for contact termination positions on PCB (0.50 (.020) Ø spills).



All dimensions in mm (inches)

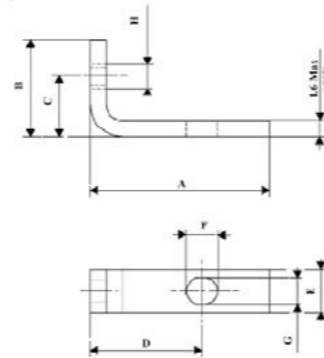


Mounting hardware

Brackets for mounting on PCB with 90° bent contacts

Use thread locking (Loctite 222) to screw standard jackpost in the brackets. Torque value: 0,44Nm to 0,48Nm

Shell size	A to H		J	
Torque value	Min (Nm)	Max (Nm)	Min (Nm)	Max (Nm)
	0.44	0.48	0.6	0.66

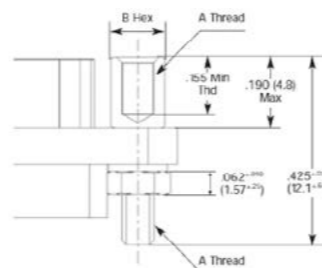


For shell size	P/N for individual packaging (one package for one mated pair: 2 brackets)	P/N for packaging per 50 (one package for 50 mated pair: 100 brackets)	A max	B max	C	D	E	F max	G	H
A to F	8MCBKAF	8MCBKAF50	14.10 (.555)	8.60 (.338)	5.0±0.10 (.197±0.04)	9.17 ±0.10 (.361 ±0.04)	4.0 ±0.10 (.158 ±0.04)	3.15 (.124)	2.44 ±0.10 (.096 ±0.04)	#20-56 UNC-2B
G and H	8MCBKGH	8MCBKGH50	16.90 (.665)	9.10 (.359)	5.6±0.10 (.220 ±0.04)	10.44±0.10 (.411 ±0.04)	4.0±0.10 (.158 ±0.04)	3.15 (.124)	2.44 ±0.10 (.096 ±0.04)	#20-56 UNC-2B
J	8MCBKJ	8MCBKJ50	23.10 (.909)	13.10 (.515)	7.35±0.10 (.290 ±0.04)	13.13±0.10 (.516 ±0.04)	6.50±0.10 (.256 ±0.04)	4.20 (.165)	3.15 ±0.15 (.124 ±0.06)	#20-56 UNC-2B

All dimensions in mm (inches)

Standard Jackpost

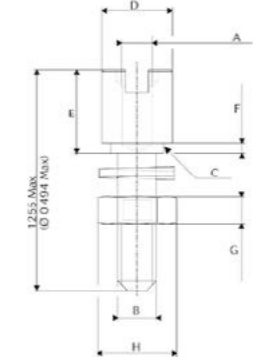
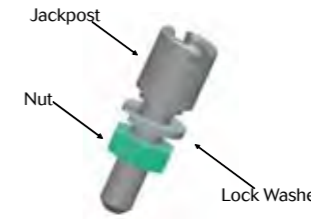
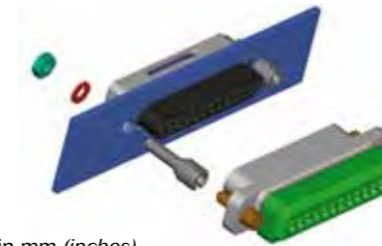
Shell size	A to H		J	
Torque Values	Min (Nm)	Max (Nm)	Min (Nm)	Max (Nm)
Jackpost male side	0.44	0.48	0.6	0.66
Jackpost female side	0.28	0.32	0.4	0.44
Nut	0.44	0.48	0.6	0.66



For shell size	A to H	J
MIL Spec	MIL 83513/05-07	MIL 83513/05-17
A thread size	#2-56 UNC	#4-40 UNC
B hex size in mm (inch)	3,18 (.125)	4,75 (.187)
Lock washer	NASM35338-134	NASM35338-135
Material & Finish	303 stainless steel, passivated per QQ-P-35	
P/N for Individual packaging (one package for one mated pair: 2 posts, 2 washers and 2 nuts)	8MCJP507	8MCJP517
P/N for packaging per 50 kits (one package for 50 mated pair: 100 posts, 100 washers and 100 nuts)	8MCJP50750	8MCJP51750

Mounting hardware

Jackposts for rear panel mounting



All dimensions in mm (inches)

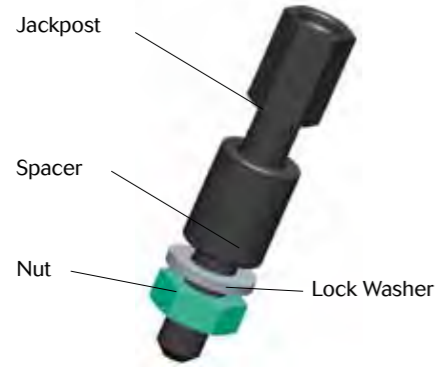
For shell size A to H					
Panel thickness	0,8 mm (.031 in)	1,2 mm (.047 in)	1,6 mm (.063 in)	2,4 mm (.094 in)	3,2 mm (.126 in)
A thread size	#2-56 UNC-2B				
B thread size	#2-56 UNC-2A				
C max	Ø 3,0 (.118)				
D max	Ø 4,1 (.161)				
E	4,70/4,83 (.185/.190)				
F max	0,615 (.022)	1,09 (.042)	1,45 (.057)	2,23 (.087)	3,05 (.120)
G max	1.67 (.066)				
H max	4,0 (.157)				
Lock washer	NASM35338-134				
Material & Finish	303 stainless steel, passivated per QQ-P-35				
P/N for Individual packaging (one package for one mated pair: 2 posts, 2 washers and 2 nuts)	8MCJP008	8MCJP012	8MCJP016	8MCJP024	8MCJP032
P/N for packaging per 50 kits (one package for 50 mated pair: 100 posts, 100 washers and 100 nuts)	8MCJP00850	8MCJP01250	8MCJP01650	8MCJP02450	8MCJP03250

For shell size J					
Panel thickness	0,8 mm (.031 in)	1,2 mm (.047 in)	1,6 mm (.063 in)	2,4 mm (.094 in)	3,2 mm (.126 in)
A thread size	#4-40 UNC-2B				
B thread size	#4-40 UNC-2A				
C max	Ø 3,6 (.141)				
D max	Ø 4,71 (.185)				
E	4,45/4,70 (.175/.185)				
F max	0,615 (.022)	1,09 (.042)	1,45 (.057)	2,23 (.087)	3,05 (.120)
G max	1.67 (.066)				
H max	4,0 (.157)				
Lock washer	NASM35338-135				
Material & Finish	303 stainless steel, passivated per QQ-P-35				
P/N for Individual packaging (one package for one mated pair: 2 posts, 2 washers and 2 nuts)	8MCJP008	8MCJP512	8MCJP516	8MCJP524	8MCJP532
P/N for packaging per 50 kits (one package for 50 mated pair: 100 posts, 100 washers and 100 nuts)	8MCJP50850	8MCJP51250	8MCJP51650	8MCJP52450	8MCJP53250



Mounting hardware

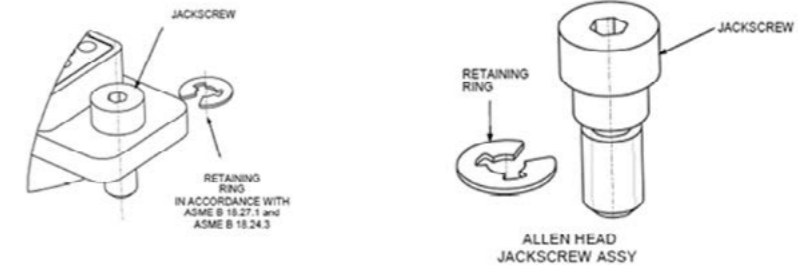
Jackposts for PCB mounting (straight spills/PC tails):



For shell size	A to H	J
A thread size	#2-56 UNC	#4-40 UNC
B hex size in mm (inch)	3,18 (.125)	4,75 (.187)
Lock washer	NASM35338-134	NASM35338-135
Material & Finish	303 stainless steel, passivated per QQ-P-35	
P/N for Individual packaging (one package for one mated pair: 2 posts, 2 washers and 2 nuts)	8MCJPS070	8MCJPS170
P/N for packaging per 50 kits (one package for 50 mated pair: 100 posts, 100 washers and 100 nuts)	8MCJPS07050	8MCJPS17050
Jackpost		
Spacer		

Mounting hardware

Standard Jackscrews

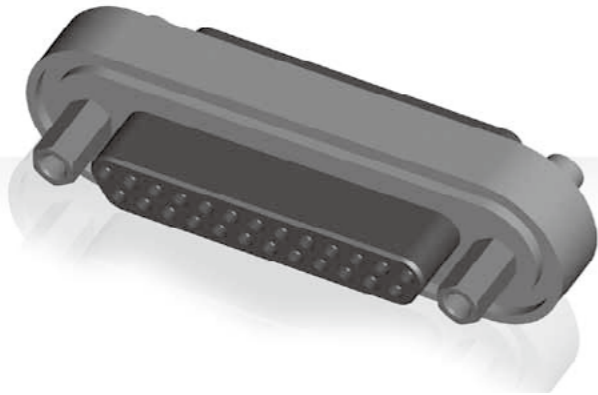


Torque Values	Min (Nm)	Max (Nm)
Screw	0.40	0.44

For shell size	A to H		J	
	#2-56 UNC		#4-40 UNC	
Dimensions in mm (inch)				
Head type	Allen head	Slot head	Allen head	Slot head
MIL Spec	MIL 83513/05-02	MIL 83513/05-05	MIL 83513/05-12	MIL 83513/05-15
Material & Finish	303 stainless steel, passivated per QQ-P-35			
P/N for Individual packaging (one package for one mated pair: 2 screws and 2 e-rings)	8MCJS502	8MCJS505	8MCJS512	8MCJS515
P/N for packaging per 50 kits (one package for 50 mated pair: 100 screws and 100 e-rings)	8MCJS50250	8MCJS50550	8MCJS51250	8MCJS51550



Hermetic Feedthrough



microComp® feedthroughs have a leak rate less than 10^{-9} atm.cm³/s thanks to a ceramic sealing technology developed by PA&E, a SOURIAU subsidiary. Both sides of the feedthrough are male contacts which are fully protected by the insulator to avoid any bent pin. Shell types: O'ring or laser weldable (consult us).



Technical characteristics

Electrical

- Contact size: #26
- Current rating: 2,5 Amp
- Insulation resistance: Greater than 500 Megohms at 500 ± 10% VDC at 25°C when tested IAW MIL-STD-1344, method 3003.
- Dielectric withstanding voltage: Must Show no evidence of breakdown or flashover when subjected to 500 VAC RMS 60 Hz IAW MIL-STD-1344, method 3001 Duration of application to be 1 Sec. Min.

Mechanical

- Endurance / durability: 500 mating/unmating operations
- Vibration: random: 44g sine: 20g
- Shock: 50g

Climatic

- Operating temperature range: -55°C /+170°C

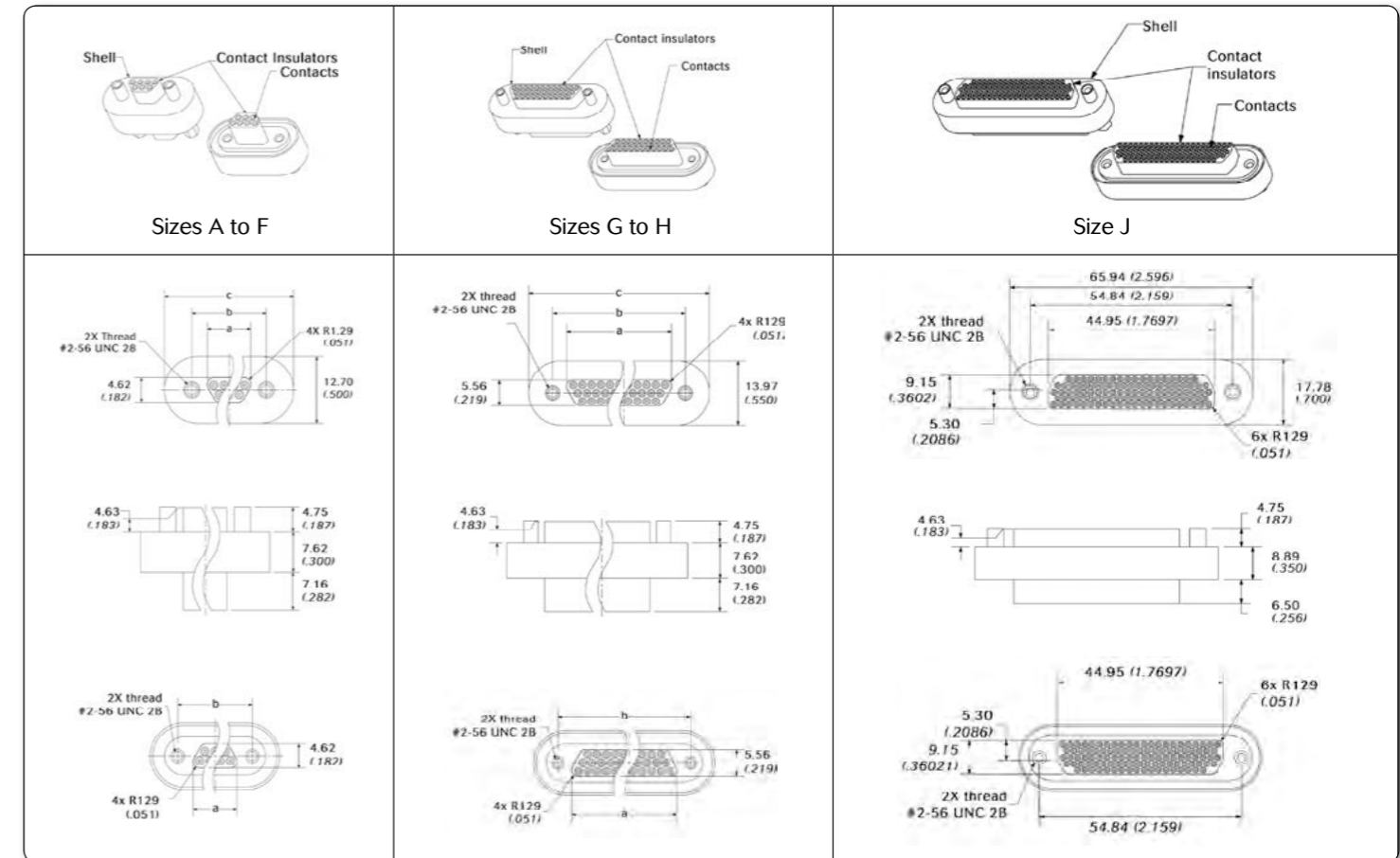
Environmental

- RoHS: compliant

Material and finishes

- Shell: Stainless steel (dismountable version) or aluminum (laser weldable version).
- Contacts: Beryllium-copper
- Hermetic insulator: Ceramic sealing
- Contact insulator: thermoplastic
- Contact plating: Electrolytic nickel plate IAW-QQ-N-290 - .000100/.000250 thick. Gold plate IAW ASTM B488, Type III, code A - .000050/.000100 thick.

Physical dimensions



Shell size	a	b	c	d
A	8,41 (.331)	14,35 (.565)	21,46 (.845)	10,19 (.401)
B	12,22 (.481)	18,16 (.715)	25,27 (.995)	14,00 (.551)
C	16,03 (.631)	22,00 (.866)	29,08 (1.145)	17,81 (.701)
D	18,57 (.731)	24,51 (.965)	31,62 (1.245)	20,35 (.801)
E	22,38 (.881)	28,32 (1.115)	35,43 (1.395)	24,16 (.951)
F	26,19 (1.031)	32,13 (1.265)	39,24 (1.545)	27,97 (1.101)
G	24,92 (.981)	30,86 (1.215)	41,33 (1.627)	38,66 (1.522)
H	36,78 (1.448)	42,85 (1.687)	53,82 (2.119)	38,66 (1.522)

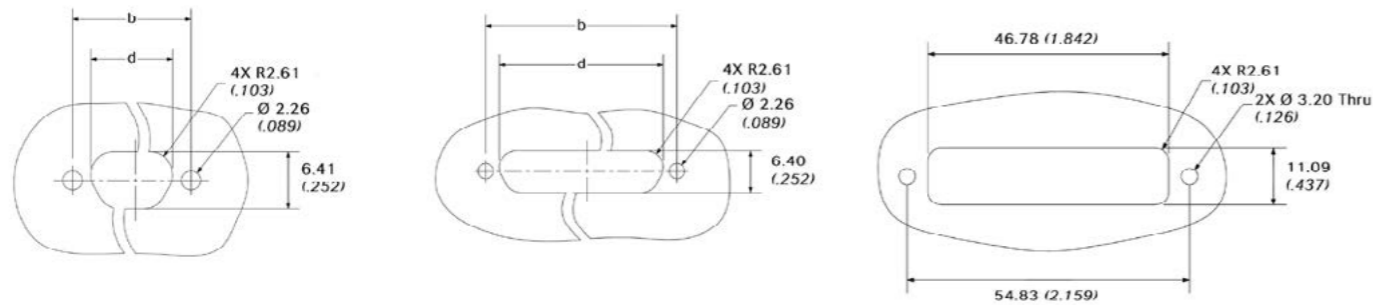
All dimensions in mm (inches)

microComp® feedthroughs have a leak rate less than 10^{-9} atm.cm³/s



Hermetic Feedthrough

Panel cutout



Sizes A to F

Sizes G to H

Size J

Use the jackposts for panel mounting defined in the Mounting Hardware section to mount the connector to the panel.

Ordering information

Hermetic series	8MCH	BD	S	N	F25	PP
Bulkhead Feedthrough:	BD: Dismountable version (with O'ring) BL: laser weldable version					
Shell Material:	A: Aluminum (laser weldable version only)* S: Stainless Steel (dismountable version only)					
Shell plating:	N: Nickel					
Shell size & contact layout:	A7: 7 contacts B11: 11 contacts* C13: 13 contacts* D17: 17 contacts E21: 21 contacts* F25: 25 contacts G33: 33 contacts* H51: 51 contacts J104: 104 contacts					
Contact type:	PP: Male/male bulkhead					

Jackpost kits are never included
 * Consult us for availability



For Laser weldable version or other hermetic microComp® with PC tails (straight or 90° bent): consult us

EMI Backshells

Technical features

- Backshell kits consist of one low profile machined aluminum alloy backshell nickel plated, two jackscrews (or jackposts) and two clips.
- Cable exits are designed for banded clamp termination. Once the braided copper shield is secure to the backshell the cable can be terminated with an heatshrink boot.
- Available with circular and/or elliptical entry, depending on shell size.
- Available with straight, 45° and 90° entry.
- For cable-to-box or cable-to-cable connection (for one cable-to-cable assembly, order one backshell with jackpost and one with jackscrew).
- These backshells are non environmental and are not for use with microComp® equipped with grommets. Fill with potting compound to prevent water intrusion.



Cable entry size

Each backshell is available with 2 entry sizes, circular and/or elliptical

Shell size	Entry code	Entry shape	Circular entry size in mm (inch)	Elliptical entry size in mm (inch)		Entry surface in mm ² (inch ²)
			ø g	x ±0.15 (±.060)	y ±0.15(±.060)	
A-B	02	Circular	3,20 (.126)	-	-	8.04 (.012)
	03	Circular	4,80 (.189)	-	-	18.1 (.028)
C-D	03	Circular	4,80 (.189)	-	-	18.1 (.028)
	04	Circular	6,40 (.252)	-	-	32.17 (.05)
E-F	03	Circular	4,80 (.189)	-	-	18.1 (.028)
	05	Elliptical	-	10,80 (.425)	5,80 (.229)	49.2 (.076)
G	04	Circular	6,40 (.252)	-	-	32.17 (.05)
	06	Circular	9,50 (.374)	-	-	70.9 (.110)
H	05	Elliptical	-	10,80 (.425)	5,80 (.229)	49.2 (.076)
	07	Elliptical	-	21,00 (.827)	5,8 (.228)	95.7 (.148)
J	08	Elliptical	-	23,50 (.925)	6,80 (.268)	125.5 (.195)
	10	Elliptical	-	33,00 (1.3)	7,8 (.307)	202.15 (.313)



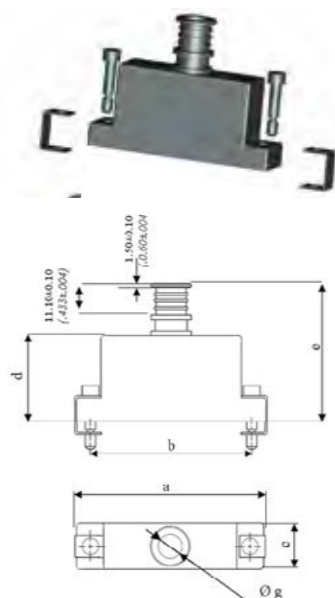
EMI Backshells

Straight backshell

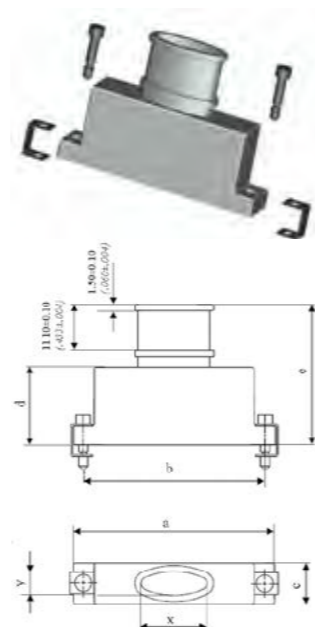
Straight backshell	8MCBS	F	001	03	N
Shell size:	A - B - C - D - E - F - G - H - J				
Environment:	None: for connector without grommet				
Straight version:	001				
Cable entry type:	see «Cable entry size» table				
Finish:	N: electroless Nickel				
Mounting hardware:	None: jackscrews (standard use) F: jackposts (for cable to cable connection only)				

Backshells are always supplied with 2 clips and 2 jackscrews or jackposts

Circular entry



Elliptical entry



Shell Size	A	B	C	D	E	F	G	H	J
a ±0.15 (±060)	19,70 (.776)	23,40 (.921)	27,30 (1.075)	29,85 (1.176)	33,70 (1.327)	37,50 (1.476)	36,10 (1.421)	48,85 (1.923)	62,80 (2.473)
b ±0.13 (±051)	14,35 (.565)	18,16 (.715)	21,97 (.865)	24,51 (.965)	28,32 (1.115)	32,13 (1.265)	30,86 (1.215)	43,36 (1.707)	54,85 (2.160)
c ±0.15 (±060)	9,00 (.354)	9,00 (.354)	9,00 (.354)	9,00 (.354)	9,00 (.354)	9,00 (.354)	10,00 (.394)	10,00 (.395)	13,00 (.512)
d Max.	10,00 (.394)	12,00 (.472)	14,00 (.551)	16,00 (.623)	17,00 (.670)	18,00 (.709)	19,00 (.748)	19,00 (.748)	21,00 (.827)
e Max.									

Max weight in g (oz)	3,50 (0.12)	3,80 (0.13)	5,00 (0.18)	5,60 (0.20)	7,00 (0.25)	7,70 (0.27)	9,20 (0.32)	9,50 (0.34)	14,50 (0.51)
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All dimensions in mm (inches)



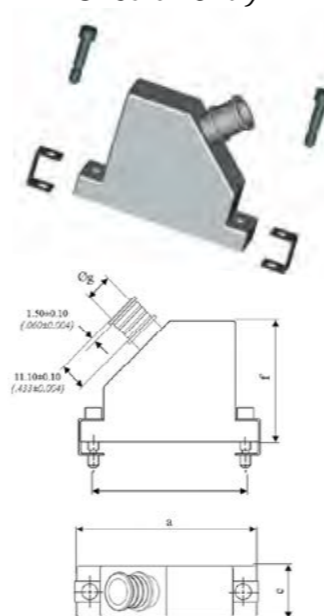
EMI Backshells

45° backshell

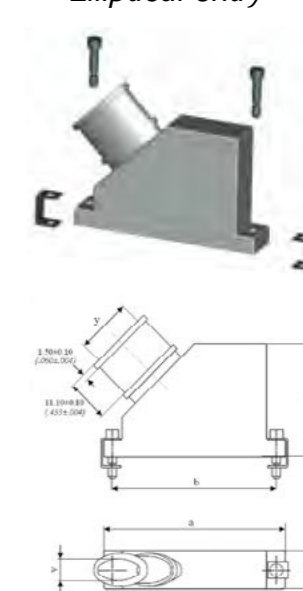
Straight backshell	8MCBS	F	101	03	N
Shell size:	A - B - C - D - E - F - G - H - J				
Environment:	None: for connector without grommet				
Straight version:	101				
Cable entry type:	see «Cable entry size» table				
Finish:	N: electroless Nickel				
Mounting hardware:	None: jackscrews (standard use) F: jackposts (for cable to cable connection only)				

Backshells are always supplied with 2 clips and 2 jackscrews or jackposts

Circular entry



Elliptical entry



Shell Size	A	B	C	D	E	F	G	H	J
a ±0.15 (±060)	19,70 (.776)	23,40 (.921)	27,30 (1.075)	29,85 (1.176)	33,70 (1.327)	37,50 (1.476)	36,10 (1.421)	48,85 (1.923)	62,80 (2.473)
b ±0.13 (±051)	14,35 (.565)	18,16 (.715)	21,97 (.865)	24,51 (.965)	28,32 (1.115)	32,13 (1.265)	30,86 (1.215)	43,36 (1.707)	54,85 (2.160)
c ±0.15 (±060)	9,00 (.354)	9,00 (.354)	9,00 (.354)	9,00 (.354)	9,00 (.354)	9,00 (.354)	10,00 (.394)	10,00 (.395)	13,00 (.512)
d Max.	10,00 (.394)	12,00 (.472)	14,00 (.551)	16,00 (.623)	17,00 (.670)	18,00 (.709)	19,00 (.748)	23,00 (.905)	25,00 (.984)
f Max.	21,00 (.827)	23,00 (.906)	25,00 (.984)	27,00 (1.063)	28,00 (1.102)	29,00 (1.142)	30,00 (1.181)	30,00 (1.058)	38,00 (1.340)

Max weight in g (oz)	5,20 (0.18)	6,20 (0.22)	7,35 (0.26)	8,45 (0.30)	9,25 (0.33)	10,70 (0.38)	11,45 (0.40)	12,00 (0.42)	19,00 (0.67)
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All dimensions in mm (inches)



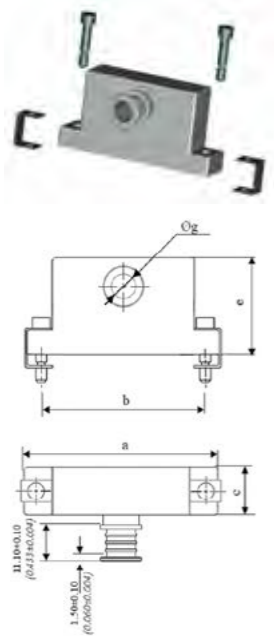
EMI Backshells

90° backshell

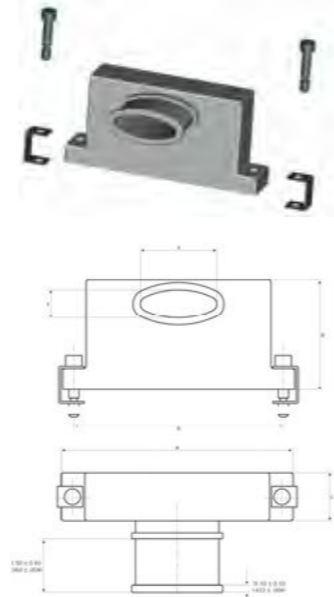
Straight backshell	8MCBS	F	201	03	N
Shell size:	A - B - C - D - E - F - G - H - J				
Environment:	None: for connector without grommet				
Straight version:	201				
Cable entry type:	see «Cable entry size» table				
Finish:	N: electroless Nickel				
Mounting hardware:	None: jackscrews (standard use) F: jackposts (for cable to cable connection only)				

Backshells are always supplied with 2 clips and 2 jackscrews or jackposts

Circular entry



Elliptical entry



Shell Size	A	B	C	D	E	F	G	H	J
a ±0.15 (±060)	19,70 (.776)	23,40 (.921)	27,30 (1.075)	29,85 (1.176)	33,70 (1.327)	37,50 (1.476)	36,10 (1.421)	48,85 (1.923)	62,80 (2.473)
b ±0.13 (±051)	14,35 (.565)	18,16 (.715)	21,97 (.865)	24,51 (.965)	28,32 (1.115)	32,13 (1.265)	30,86 (1.215)	43,36 (1.707)	54,85 (2.160)
c ±0.15 (±060)	9,00 (.354)	9,00 (.354)	9,00 (.354)	9,00 (.354)	9,00 (.354)	9,00 (.354)	10,00 (.394)	10,00 (.395)	13,00 (.512)
d Max.	10,00 (.394)	12,00 (.472)	14,00 (.551)	16,00 (.623)	17,00 (.670)	18,00 (.709)	19,00 (.748)	23,00 (.905)	25,00 (.984)

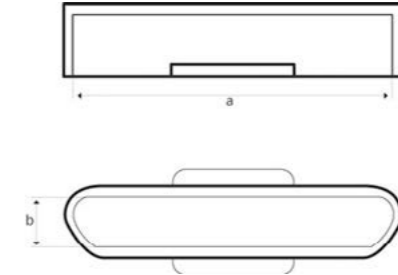
Max weight in g (oz)	5,13 (0.18)	6,20 (0.22)	7,31 (0.26)	8,44 (0.30)	9,25 (0.33)	10,44 (0.38)	11,44 (0.40)	12,00 (0.42)	19,00 (0.67)
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All dimensions in mm (inches)

Dust Caps

Molded plastic dust caps

- Anti-static dust caps in rugged plastic material that resists cracking
- Material : Polypropylene
- Color : black.



Shell size	Gender	Part number	a	b
A	P (male)	8MC DC AP	8 (.315)	4,7 (.184)
	S (female)	8MC DC AS	9,8 (.385)	6,4 (.250)
B	P	8MC DC BP	11,8 (.465)	4,7 (.184)
	S	8MC DC BS	13,6 (.535)	6,4 (.250)
C	P	8MC DC CP	15,6 (.615)	4,7 (.184)
	S	8MC DC CS	17,4 (.685)	6,4 (.250)
D	P	8MC DC DP	18,2 (.715)	4,7 (.184)
	S	8MC DC DS	19,9 (.785)	6,4 (.250)
E	P	8MC DC EP	22 (.865)	4,7 (.184)
	S	8MC DC ES	23,7 (.935)	6,4 (.250)
F	P	8MC DC FP	25,8 (1.015)	4,7 (.184)
	S	8MC DC FS	27,6 (1.085)	6,4 (.250)
G	P	8MC DC GP	24,5 (.965)	5,8 (.227)
	S	8MC DC GS	26,3 (1.035)	7,4 (.292)
H	P	8MC DC HP	37,9 (1.492)	5,8 (.228)
	S	8MC DC HS	38,8 (1.528)	7,4 (.291)
J	P	8MC DC JP	45,2 (1.78)	9,35 (.368)
	S	8MC DC JS	46,8 (1.843)	11 (.433)

All dimensions in mm (inches)



D-Subminiature Series

Under development - Consult us

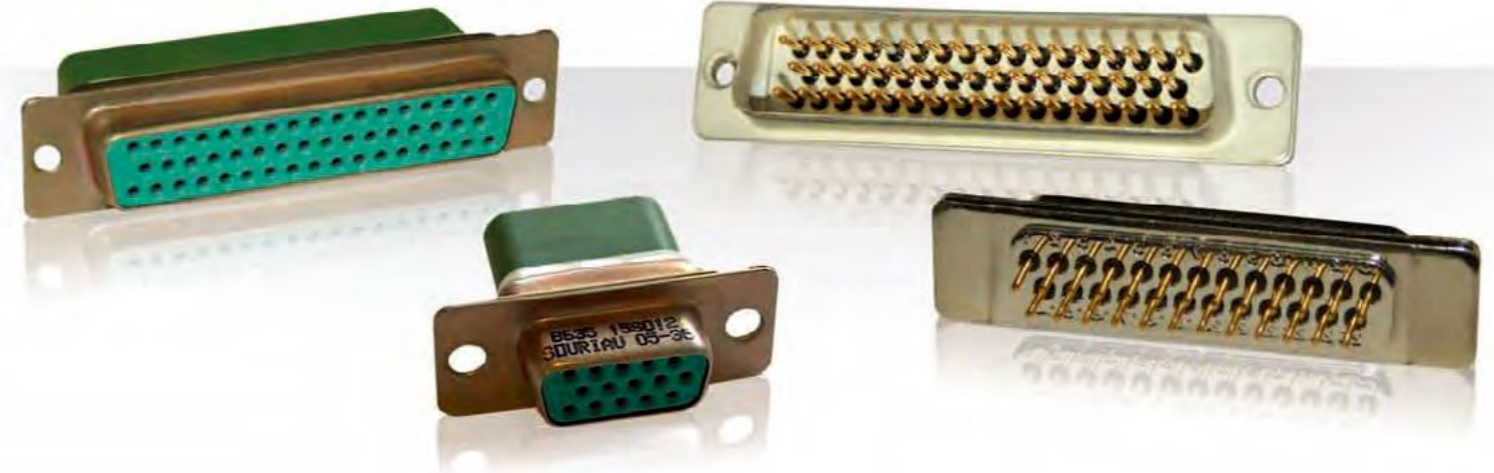
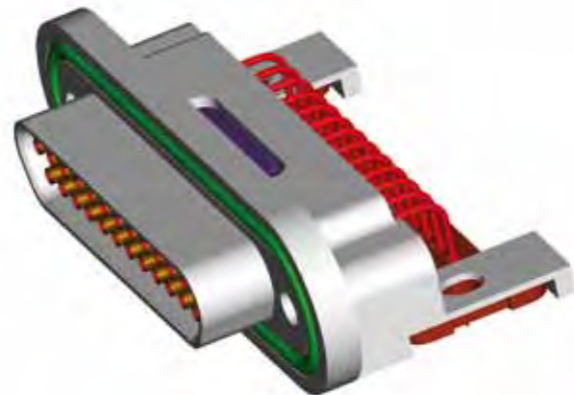
Quick connect for harsh environment - 104 contacts



Quick connect for cabin environment



Fully IP67 microComp®



Presentation

- Souriau D-Sub connectors are used for military/aerospace applications and in industrial field: information systems, communication systems, industrial electronic...
- D-Sub connectors are designed to ensure the connection function in all applications where weight and dimension are very important.
- They are especially used as Input/Output connectors in interface functions. So, they are subjects to mechanical constraints that are sometimes severes.
- In order to prevent risks (pulling up, accidental unmating...), a large range of accessories is supplied.

Contents

D-Sub series

- D-Sub Mark III standard ranges 40
- Technical characteristics 41
- Layouts 42
- PCB drilling dimensions 43

Series

- 8630 Series HE501 44
- 8630 Series HE508 46
- SMA MIL-C Series M24308 48
- 8635 Series 51
- D-Sub hermetic connectors 53

Common Section

- Panel mounting 56
- Shell dimensions 57
- Mounting options 58
- D-sub M24308 and Micro-D M83513 backshells.... 59

D-Subminiature Series



D-Sub Mark III standard ranges

8630 Series HE 501

See page 44



- ▶ Up to 125 °C
- ▶ Crimped contact #20

8630 Series HE 508

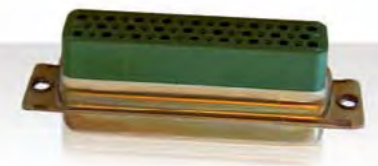
See page 46



- ▶ Up to 155 °C
- ▶ Crimped contact #20

SMA MIL-C Series

See page 48



- ▶ Compliant to MIL-C- 24308
- ▶ Crimped contact #20

8635 Series

See page 51



- ▶ High Density
- ▶ Individual glass bead
- ▶ Straight spills & Crimped contact #22

Hermetic Series

See page 53



- ▶ Solder buckets and eyelets
- ▶ Straight spills & Crimped contact #20
- ▶ Hermeticity level: 10^{-7} atm.cm³/s
- ▶ Individual glass bead

D-Subminiature Series



Technical characteristics

Characteristics		Series	8630 HE501	8630 HE508	SMA MIL	8635 High Density	Hermetic
		Crimp version	Crimp version	Crimp version	Crimp or PCB version	Solder or PCB version	
Environmental	Temperature		-55°C to +125°C	-55°C to +155°C	-55°C to +125°C	-55°C to +155°C	-55°C to +125°C
	Salt spray		48h (cadmium) 24h (tin & zinc)	48h (cadmium) 24h (tin & zinc)	48h (cadmium)	48h (cadmium) 24h (tin & zinc)	48h (cadmium)
	Damp heat		56 days	56 days	56 days	56 days	56 days
	Sealing version		No	Yes	No	Yes	Yes
	Hermeticity		-	-	-	-	Under air helium differential pressure, leakage $\leq 1.04 \times 10^{-5}$ Atm.cm ³ /s
Standard	NFC 93425		HE501	HE508	-	-	-
	MIL C 24308 C		-	-	MIL	Compliant to MIL	Compliant to MIL
Material	Shell		Steel	Steel	Steel	Steel	Steel
	Housing		Thermoplastic	Thermodur	Thermoplastic	Thermodur	Glass bead
	Contact		Copper alloy	Copper alloy	Copper alloy	Copper alloy	Ferrous alloy
Plating	Shell		Cadmium Tin Zinc	Cadmium Tin Zinc	Cadmium	Cadmium Tin Zinc	Cadmium Gold Tin bright Tin mat Nickel
	Contact		Gold over nickel	Gold over nickel	Gold over nickel	Gold over nickel	Gold Tin mat Nickel
Electrical	Contact rating (max)		7.5 A	7.5 A	7.5 A	5 A	5 A
	Test voltage Max Vrms/50Hz		1000 Vrms	1000 Vrms	1000 Vrms	1000 Vrms	750 Vrms
	Nominal voltage Vrms/50Hz		300 Vrms	300 Vrms	300 Vrms	300 Vrms	N/A
	Insulation resistance		≥ 5000 M Ω	≥ 5000 M Ω	≥ 5000 M Ω	≥ 5000 M Ω	≥ 5000 M Ω
	Contact resistance		≤ 7.3 M Ω	≤ 7.3 M Ω	≤ 7.3 M Ω	≤ 7.3 M Ω	≤ 14 M Ω
Mechanical & Dimensional	Insertion/extraction force per contact (N)		5N max/0.3 min	5N max/0.3 min	5N max/0.3 min	5N max/0.3 min	N/A
	Endurance		500	500	500	500	500
	Contact Ø		1 mm	1 mm	1 mm	0.76 mm	1 mm
Wire	Wire gauge		AWG 20 to 28	AWG 20 to 28	AWG 20 to 24	AWG 22 to 28	N/A
	Max Ø over insulator		1.7 mm	1.7 mm	1.7 mm	1.4 mm	N/A
Indents version			Available	Available	N/A	Available	N/A

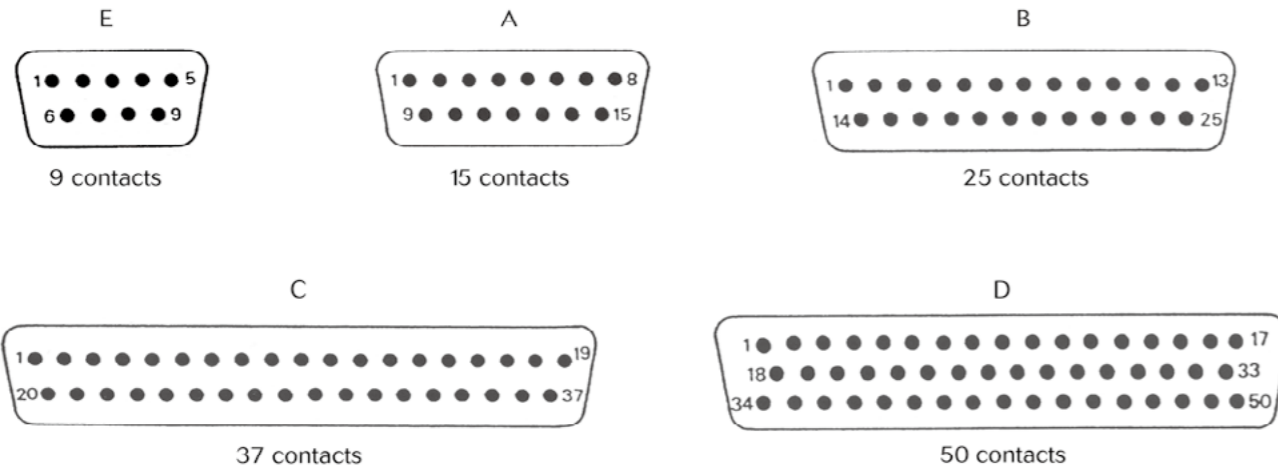


Layouts

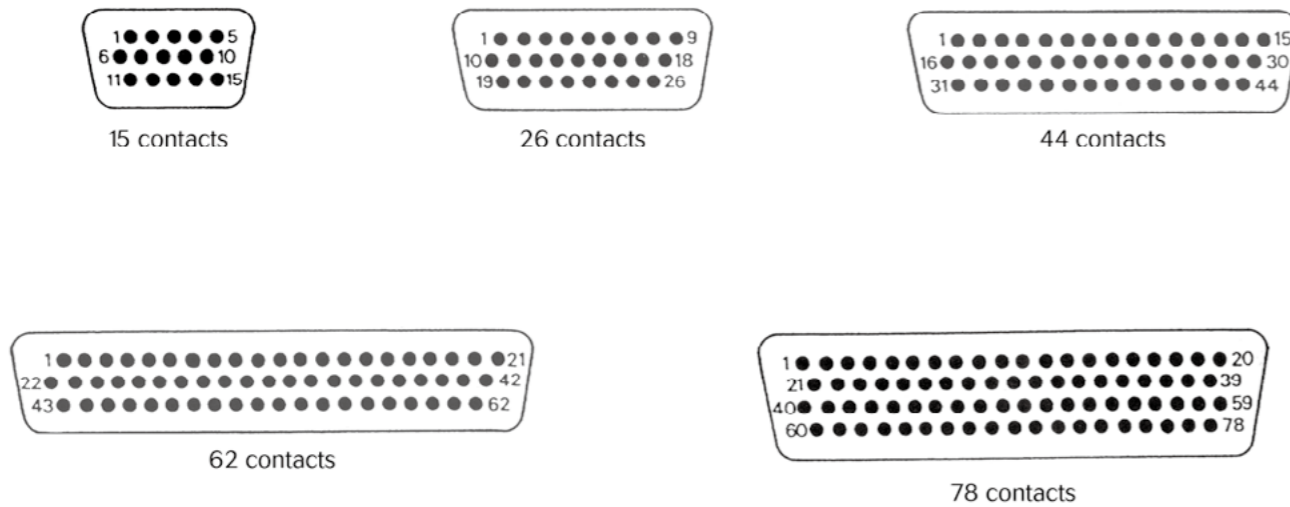
Male insulator front view

Contacts are individually numbered on both side of insulator.

Standard connectors: 8630/1 (HE501/HE508), SMA and Hermetic



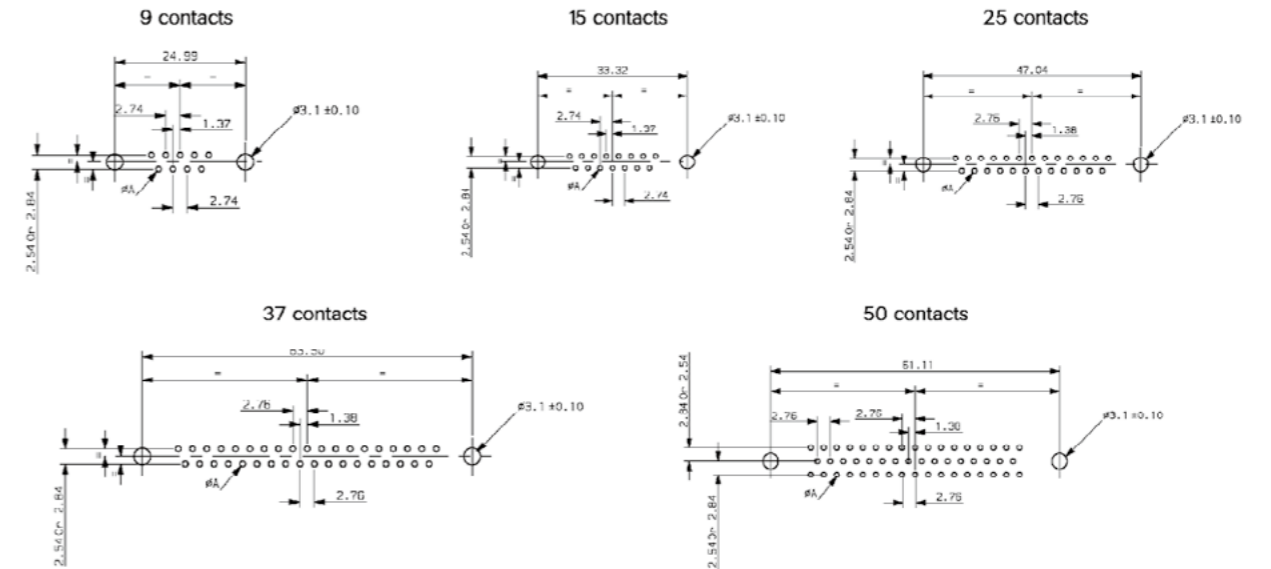
High density connectors: 8635



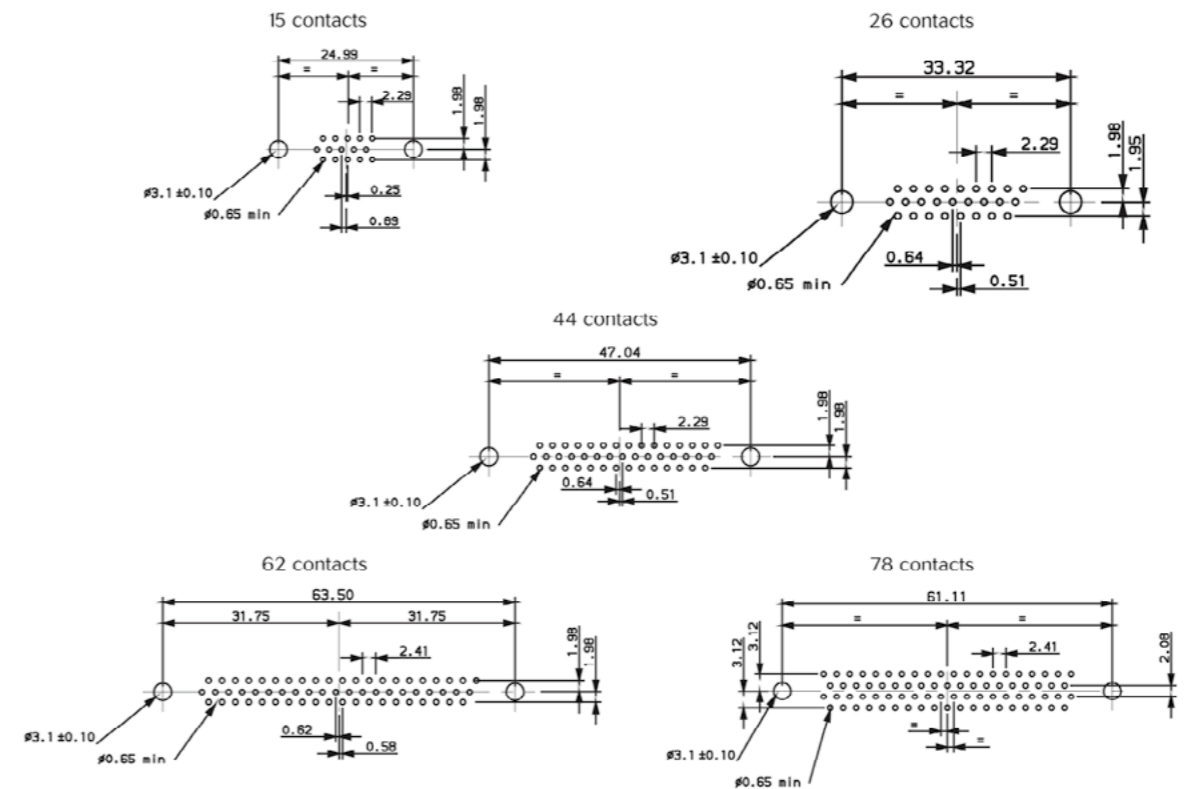
PCB drilling dimensions (mm) for solder version

Standard connectors: 8630/1 (HE501/HE508), SMA and Hermetic

Note: $\varnothing A = 0.9\text{mm}$ for HE501, HE508 and MIL C.



High density connectors: 8635



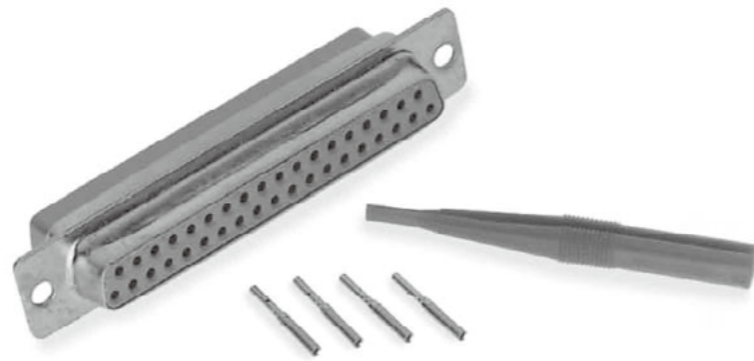
D-Subminiature Series



8630 Series HE501

Connector accommodating removable machined crimp contacts for 20/24 or 26/28 AWG wires

In compliance with NFC 93425/HE501
Standard shell plating: Cadmium
Other platings: Tin & Zinc



Ordering information

Basic Series	8630	25	P	L
Basic Series (float mounting)	8631	25	P	L
Option				
None: Standard				
L: Clinch nut M3 (8630 only)				
O: Clinch nut UNC 4.40 (8630 only)				
V: Female screw lock UNC 4.40 (8630 only)				
Number of contacts				
09, 15, 25, 37, 50				
Contact type				
P: Pin				
S: Socket				
Contacts				
None: With standard 20/24 AWG contacts				
L: Without contacts				
Rear type				
None: Standard				
H: Shielding termination fingers (only for T plating)				
Shell plating				
None: Cadmium				
T: Tin				
Z: Zinc				
Front type				
None: Standard				
X: With indents (only for front of male connector)				

D-Subminiature Series



8630 Series HE501

Removable crimp contact ordering information



AWG	Pin	Socket	ØA
AWG 26/28	8631-4111	8631-6121	0.6
AWG 20/24	8630-162	8630-165	1.17

Cross reference list for qualified part number HE501 & SOURIAU

Examples:

HE501 F 25 BP = 8631 25 P

HE501 N 37 BS = 8630 37 S

Connector type		HE501	SOURIAU Reference
Removal crimp contact AWG 20/24	Standard	Pin	HE501 N ** BP
		Socket	HE501 N ** BS
	Float mounting	Pin	HE501 F ** BP
		Socket	HE501 F ** BS

D-Subminiature Series



8630 Series HE508

Connector accomodating removable machined crimp contacts for 20/24 AWG wires

For heavy duty applications
Class -55°C to +155°C
Standard shell plating: Cadmium
Other platings: Tin & Zinc
Special proof version



Ordering information

Basic Series	863	0	25	P	012	L	N
Option	<ul style="list-style-type: none"> 0: Standard mounting holes (Ø=3.10) 1: Float mounting 						
Number of contacts	09, 15, 25, 37, 50						
Contact type	<ul style="list-style-type: none"> P: Pin S: Socket 						
Specification	<ul style="list-style-type: none"> None: Standard 012: Splash proof 015: Dust proof 						
Contacts	<ul style="list-style-type: none"> None: With standard 20/24 AWG contacts L: Without contact 						
HE508 coding	N: Mandatory for standard version (not for 012 Splash proof version and for 015 Dust proof version)						
Rear type	<ul style="list-style-type: none"> None: Standard H: Shielding termination fingers (only for T plating) 						
Shell plating	<ul style="list-style-type: none"> None: Cadmium T: Tin Z: Zinc 						
Front type	<ul style="list-style-type: none"> None: Standard X: With indents (only for front of male connector) 						

D-Subminiature Series



8630 Series HE508

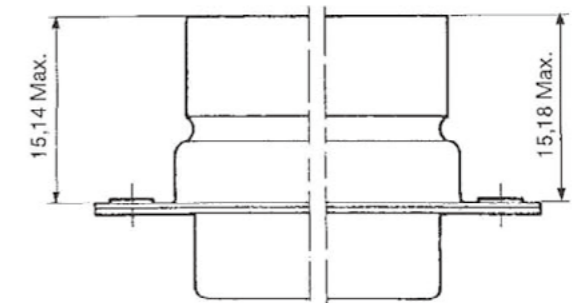
Cross reference list for qualified part number HE508 & SOURIAU

Example:
HE508 N 25 BP = 8630 25 PN

Connector type		HE508	SOURIAU Ref
Removal crimp contact AWG 20/24	Standard	Pin	HE508 N ** BP
		Socket	HE508 N ** BS
	Float mounting	Pin	HE508 F ** BP
		Socket	HE508 F ** BS
			8630 ** PN
			8630 ** SN
			8631 ** PN
			8631 ** SN

Special proof versions (available in HE508 Series only)

Examples:
8630 25 P012
012: Splash proof version, grommet + potting = male interface seal conform to IP65.
8630 25 P015
015: Dust proof version, rear grommet only.



Male interface seal conform to IP65.

D-Subminiature Series



SMA MIL-C Series

MIL C 24308 C
Connector accomodating removable machined crimp contacts for 20/24 AWG wires

Class -55°C to +125°C
 Shell plating: Cadmium
 Contact #20

Ordering information

Basic Series	S	B	MA	25	P	L	N
Shell size	E, A, B, C, D						
S-MA Series	MA: Mandatory						
Option	None: Standard F: Float mounting						
Number of contacts	09, 15, 25, 37, 50						
Type	P: Pin S: Socket						
Contact	None: With MIL contacts L: Without MIL contacts						
QPL version	N: Mandatory for classified QPL version						

Diameter of insulator cable max: 1.6 mm.
 This series can be ordered directly with MIL part number.

D-Subminiature Series



SMA MIL-C Series

Crimp contact for AWG 20/24 wire

MIL C 24308 C contact

AWG	Contact type	SOURIAU P/N	Reference	Colour code
20/24	Pin	8630 3020 A	M39029/64-369	Orange/Blue/White
	Socket	8630 3022 A	M39029/63-368	Orange/Blue/Grey

Tool part number for 8630 Series

Tools	PN	Standard	SOURIAU
		M22520/2-01	8476-01
Locator		M22520/2-08	8476-08
Extraction plastic tool		-	8630-06A
MIL extraction tool		M81969/1-02	8630-3330

D-Subminiature Series



M24308 / SMA MIL-C Series

MIL Vs SOURIAU cross reference

Connector type	Male connector		Female connector	
	MIL C 24308 C	SOURIAU	MIL C 24308 C	SOURIAU
Standard with contact	M24308/4-1F	SEMA09PN	M24308/2-1F	SEMA09SN
	M24308/4-2F	SAMA15PN	M24308/2-2F	SAMA15SN
	M24308/4-3F	SBMA25PN	M24308/2-3F	SBMA25SN
	M24308/4-4F	SCMA37PN	M24308/2-4F	SCMA37SN
	M24308/4-5F	SDMA50PN	M24308/2-5F	SDMA50SN
Standard without contact	M24308/4-259F	SEMA09PLN	M24308/2-281F	SEMA09SLN
	M24308/4-260F	SAMA15PLN	M24308/2-282F	SAMA15SLN
	M24308/4-261F	SBMA25PLN	M24308/2-283F	SBMA25SLN
	M24308/4-262F	SCMA37PLN	M24308/2-284F	SCMA37SLN
	M24308/4-263F	SDMA50PLN	M24308/2-285F	SDMA50SLN
Float mounting with contact	M24308/4-302F	SEMAF09PN	M24308/2-342F	SEMAF09SN
	M24308/4-303F	SAMAF15PN	M24308/2-343F	SAMAF15SN
	M24308/4-304F	SBMAF25PN	M24308/2-344F	SBMAF25SN
	M24308/4-305F	SCMAF37PN	M24308/2-345F	SDMAF37SN
	M24308/4-306F	SDMAF50PN	M24308/2-346F	SEMAF50SN
Float mounting without contact			M24308/2-482F	SFMAF09SLN
			M24308/2-483F	SAMAF15SLN
			M24308/2-484F	SBMAF25SLN
			M24308/2-485F	SCMAF37SLN
			M24308/2-486F	SDMAF50SLN

D-Subminiature Series



8635 Series

High density connector

SOURIAU 8635 connector for aerospace and military applications offer high density (size 22) crimp and straight spill contacts in standard A, B, C, D, E shells.

The 8635 connector meet the requirements of MIL C 24308 dust and splash proof specifications.

Standard shell plating: Cadmium
Other platings: Tin & Zinc



Ordering information

Basic Series	8635	44	P	012	L
Option	None: Standard mounting holes (Ø=3.10) F: Float mounting L: Clinch nut M3 O: Clinch nut UMC 4.40 V: Female screw lock UNC 4.40				
Number of contacts	15, 26, 44, 62, 78				
Contact type	P: Pin S: Socket				
Specification	None: Standard 012: Splash proof 015: Dust proof 017: Straight spills				
Contacts	None: With standard 20/24 AWG contacts L: Without contact				
Rear type	None: Standard H: Shielding termination fingers (only for T plating)				
Shell plating	None: Cadmium T: Tin Z: Zinc				
Front type	None: Standard X: With indents (only for front of male connector)				

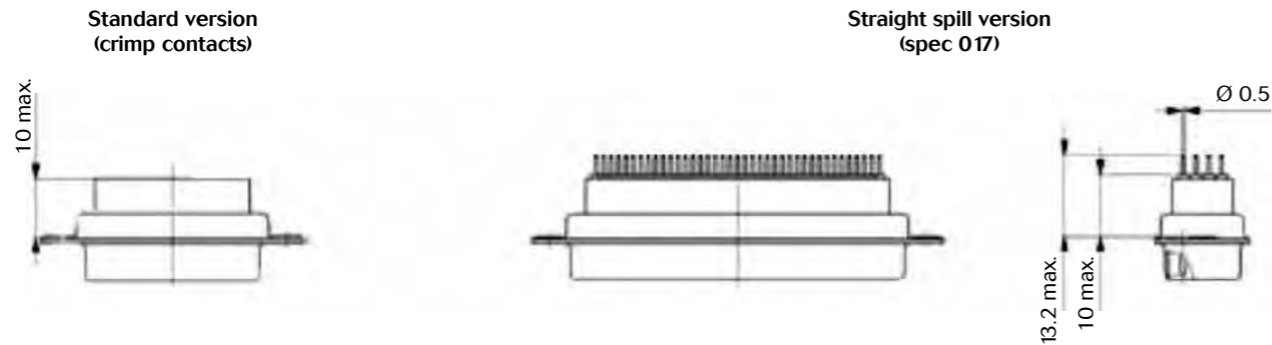
Diameter of insulator cable max: 1.4 mm.

D-Subminiature Series



8635 Series

Dimensions



Contact part numbers

	Type	Part number
Standard	Pin	8635-4100
	Socket	8635-9100
MIL C 24308	Pin	8635-4110
	Socket	8635-9110

Tooling part numbers

Contact size	Contact type	Plier Part number		Locator Part number		Plastic insertion/extraction tool Part number
		Souriau	Standard	Souriau	Standard	
#22D	Pin	8476-01	M22520/2-01	8476-09	M22520/2-09	M81969 14-01
	Socket			8476-06	M22520/2-06	

D-Subminiature Series



D-Sub hermetic connectors

D-Sub hermetic connector

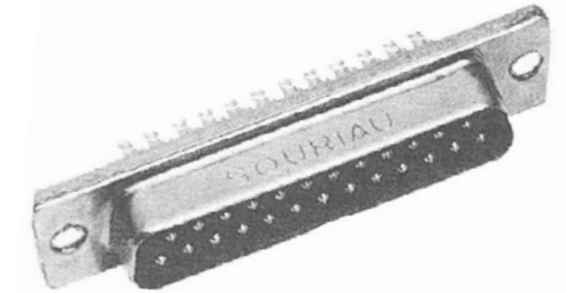
Hermetic rectangular connectors are manufactured with glass bead insulator.

They are used in all applications requiring perfect hermeticity.

Shell housing may be solder or screw mounted.

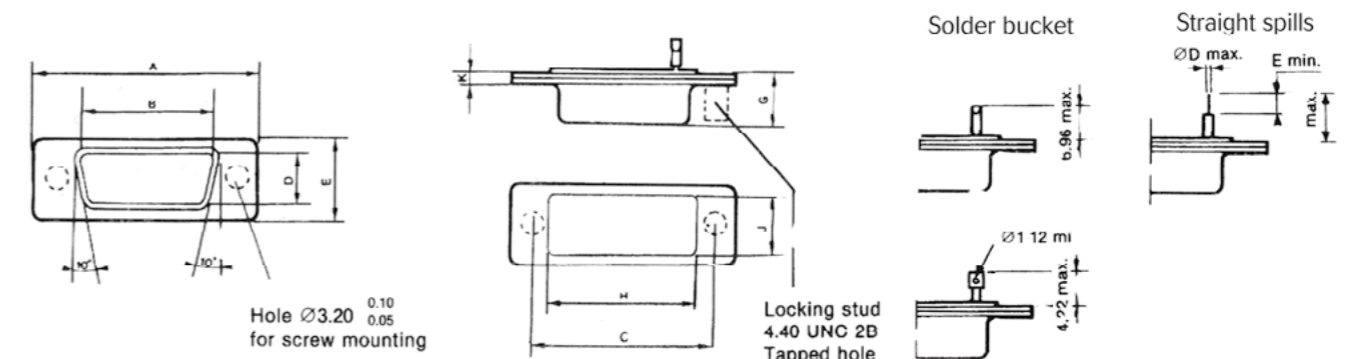
3 types of contacts terminations are available: Solder bucket, Solder eyelet or Straight spill.

They are compliant to MIL C 24308 C.



Dimensions (mm)

Shell size	A _{0/+0.30}	B	C Screw mounting	D	E _{0/+0.30}	G max	H _{+/-0.20}	J _{+/-0.20}	K ^{1.0, 1.0} _{0.20}
E	30.80	16.94	24.99	8.41	12.54	8.45	18.40	9.40	2.50
A	39.14	25.27	33.32				23.70		
B	53.03	39.00	47.04				37.56		
C	69.29	55.45	63.50			53.97			
D	66.92	52.86	61.11	11.10	15.36	8.75	50.80	12.70	2.70





Part numbers & specifications

Shell size	Plating		Solder mounting				Screw mounting		
	Shell	Cts	With locking stub		Without locking stub		Solder bucket	Straight spill	Eyelet
			Solder bucket	Straight spill	Solder bucket	Straight spill			
E 9 Cts	Cadmium	Gold	DEH09P002	DEH09P004	DEH09P006	DEH09P008	DEH09P102	DEH09P104	-
	Cadmium	Gold	-	DEH09P014	-	-	-	-	-
	Gold	Gold	-	-	-	-	DEH09P122	DEH09P124	-
	Tin bright	Gold	DEH09P007	DEH09P012	DEH09P023	DEH09P010	DEH09P107	DEH09P113	-
	Tin bright	Gold	-	DEH09P015	DEH09P025	-	-	DEH09P116	-
	Tin bright	Gold	-	DEH09P016	DEH09P005	-	-	-	-
	Tin bright	Gold	-	DEH09P017	-	-	-	-	-
	Tin mat	Tin mat	-	-	-	DEH09P009	-	-	-
	Nickel	Nickel	-	-	-	-	-	-	DEH09P121
A 15 Cts	Cadmium	Gold	DAH15P002	DAH15P004	DAH15P006	DAH15P008	DAH15P102	DAH15P104	-
	Cadmium	Gold	-	DAH15P014	-	-	-	-	-
	Gold	Gold	-	-	-	-	DAH15P122	DAH15P124	-
	Tin bright	Gold	DAH15P007	DAH15P012	DAH15P023	DAH15P010	DAH15P107	DAH15P113	-
	Tin bright	Gold	-	DAH15P015	DAH15P005	-	DAH15P119	DAH15P116	-
	Tin bright	Gold	-	DAH15P016	-	-	DAH15P120	-	-
	Tin mat	Tin mat	-	-	-	DAH15P009	-	-	-
B 25 Cts	Cadmium	Gold	DBH25P002	DBH25P004	DBH25P006	DBH25P008	DBH25P102	DBH25P104	-
	Cadmium	Gold	-	DBH25P014	DBH25P020	-	-	-	-
	Gold	Gold	-	-	-	-	DBH25P122	DBH25P124	-
	Tin bright	Gold	DBH25P007	DBH25P011A	DBH25P023	DBH25P010	DBH25P107	DBH25P113	-
	Tin bright	Gold	-	DBH25P012	DBH25P005	-	-	DBH25P115	-
	Tin bright	Gold	-	DBH25P015	-	-	-	DBH25P116	-
	Tin bright	Gold	-	DBH25P016	-	-	-	-	-
	Tin bright	Gold/Tin	-	-	-	-	-	DBH25P125	-
	Tin mat	Tin mat	-	-	-	DBH25P009	-	-	-
C 37 Cts	Cadmium	Gold	DCH37P002	DCH37P004	DCH37P006	DCH37P008	DCH37P102	DCH37P104	-
	Cadmium	Gold	-	DCH37P014	-	-	-	-	-
	Gold	Gold	-	-	-	-	DCH37P122	DCH37P124	-
	Tin bright	Gold	DCH37P007	DCH37P012	DCH37P023	DCH37P010	DCH37P107	DCH37P113	-
	Tin bright	Gold	-	DCH37P015	DCH37P005	DCH37P021	-	DCH37P114	-
	Tin bright	Gold	-	DCH37P016	-	-	-	DCH37P116	-
	Tin mat	Tin mat	-	-	-	DCH37P009	-	-	-
D 50 Cts	Cadmium	Gold	DDH50P002	DDH50P004	DDH50P006	DDH50P008	DDH50P102	DDH50P104	-
	Cadmium	Gold	-	DDH50P014	-	-	-	-	-
	Gold	Gold	-	-	-	-	DDH50P122	DDH50P124	-
	Tin bright	Gold	DDH50P007	DDH50P012	DDH50P023	DDH50P010	DDH50P107	DDH50P113	-
	Tin bright	Gold	-	DDH50P015	DDH50P005	-	-	DDH50P114	-
	Tin bright	Gold	-	DDH50P016	DDH50P019	-	-	DDH50P116	-
	Tin mat	Tin mat	-	-	-	DDH50P009	-	-	-



D-Sub hermetic connectors

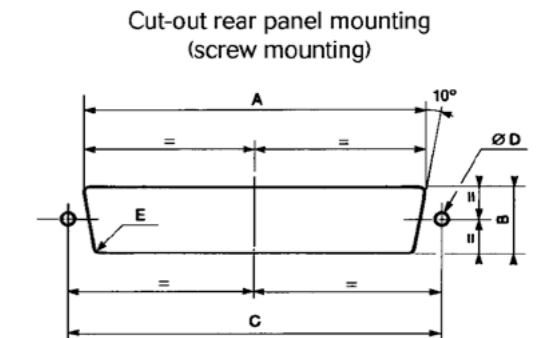
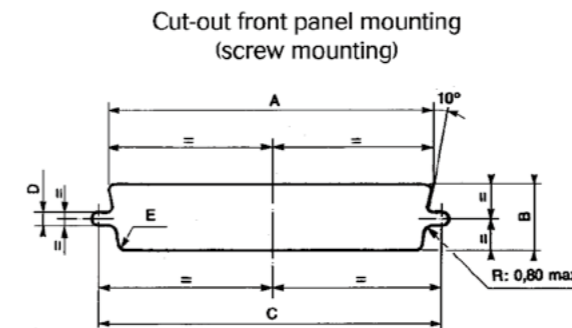
Straight spill version dimensions

N° specification	004	008	009	010	011A	012	014	015	016
L max	7.62				3.40	5.25	3.83	9.60	7.62
E min	6.40				2.00	4.02	2.13	8.43	6.40
ø D max	0.83				0.60	0.68	0.63	0.83	0.83

N° specification	017	021	104	113	114	115	116	124	125
L max	3.83	7.62		6.82		16.35	7.62		
E min	2.13	6.40		5.60		15.18	6.40		
ø D max	0.60	0.83		0.65		0.85	0.83		

Panel cut-out

Shell size	Mounting type	A +/-0.1	B +/-0.1	C +/-0.1	D +/-0.05	E +/-0.1	F min	G min
E	Front	-	-	24.99	3.20	-	18.70	9.70
	Rear	20.50	11.40	24.99	3.20	3.30	-	-
A	Front	-	-	33.32	3.20	-	24.00	9.70
	Rear	28.80	11.40	33.32	3.20	3.30	-	-
B	Front	-	-	47.04	3.20	-	37.80	9.70
	Rear	42.50	11.40	47.04	3.20	3.30	-	-
C	Front	-	-	63.50	3.20	-	54.20	9.70
	Rear	59.10	11.40	63.50	3.20	3.30	-	-
D	Front	-	-	61.11	3.20	-	51.10	13.00
	Rear	56.30	11.40	61.11	3.20	3.30	-	-

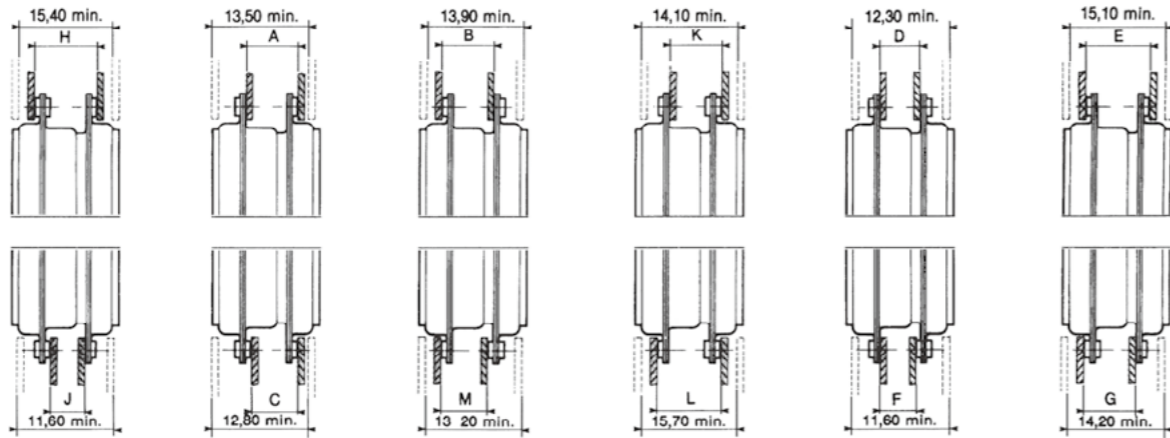


D-Subminiature Series



Panel mounting

It is recommended that only one pair of connectors should be float mounted.
Rigid mounted connectors require 2 screws Ø3mm.
Float mounting connectors require Ø2mm.

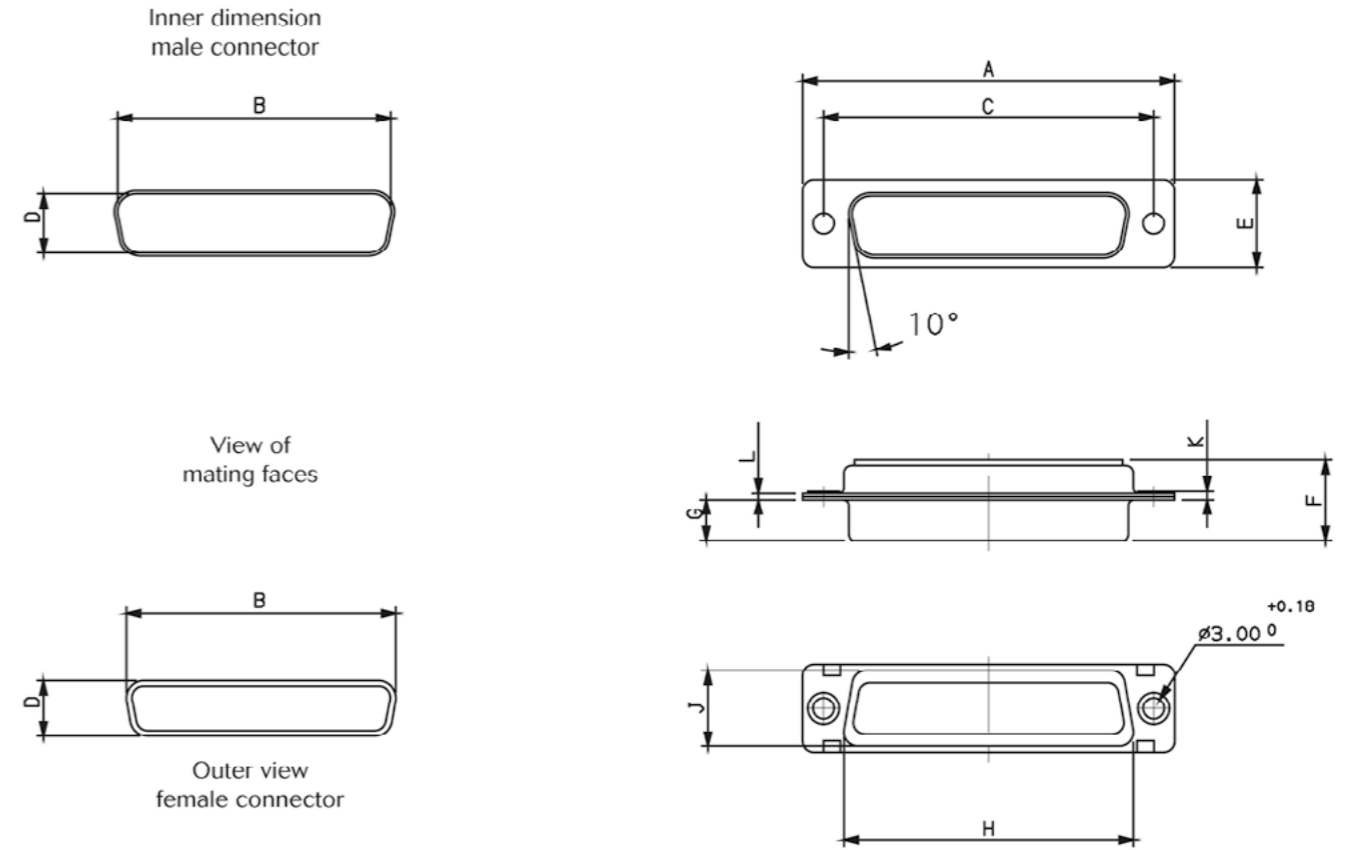


Shell size	A 0/+0.6	B 0/+0.6	C 0/+0.6	D 0/+0.6	E 0/+0.6	F 0/+0.6	G 0/+0.6	H 0/+0.6	J 0/+0.6	K 0/+0.6	L 0/+0.6	M 0/+0.6
E	7.65	7.65	6.85	6.45	8.85	5.65	8.25	9.45	5.65	8.25	9.45	6.85
A						5.65	8.15	9.35	6.75			
B					9.15	5.55	8.35	9.35	5.55	8.15	9.75	7.15
C	7.55	7.55	6.75	6.35		5.55	8.35	9.35	5.55	8.15	9.75	7.15
D												

D-Subminiature Series



Shell dimensions



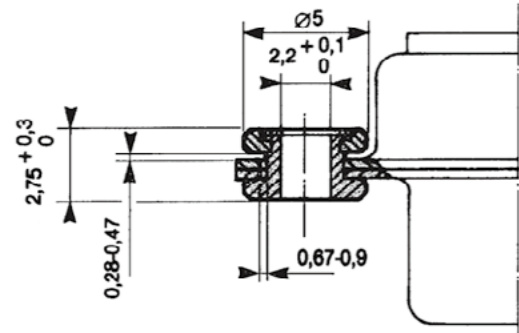
Shell size	Contact type	A +/-0.38	B +/-0.13	C +/-0.13	D +/-0.13	E +/-0.38	F Max	G +/-0.25	H +/-0.25	J +/-0.25	K Max	L +/-0.12
E	Pin	30.81	16.91	24.99	8.35	12.55	10.99	5.85	19.27	10.71	1.50	0.90
	Socket		16.33		7.89		11.21	6.05				
A	Pin	39.14	25.24	33.32	8.35	12.55	10.99	5.85	27.50	10.71	1.50	0.90
	Socket		24.66		7.89		11.21	6.05				
B	Pin	53.03	38.96	47.04	8.35	12.55	11.07	5.75	41.27	10.71	1.50	0.90
	Socket		38.37		7.89		11.21	6.05				
C	Pin	69.32	55.42	63.50	8.35	12.55	11.09	5.75	57.70	10.71	1.50	1.00
	Socket		54.83		7.89		11.21	6.05				0.90
D	Pin	66.93	52.80	61.11	11.20	15.37	11.09	5.75	55.32	13.56	1.70	1.00
	Socket		52.42		10.74		11.21	6.05			1.50	0.90



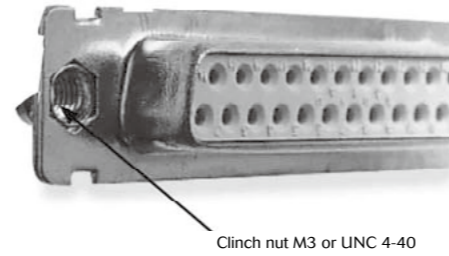
Mounting options

8630 and 8635 Series (dimensions in mm.)

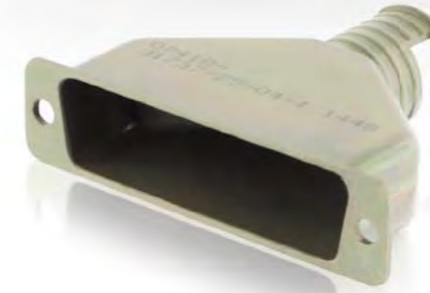
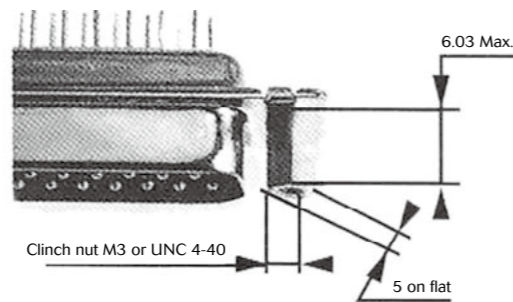
F: Float mounting



L: Clinch nut M3
O: Clinch nut UNC 4-40



V: Female screw lock UNC 4-40



D-sub and Micro-D backshells for Mil-C-24308 and Mil-C-83513 connectors

The aluminum rectangular solution for lightweight applications

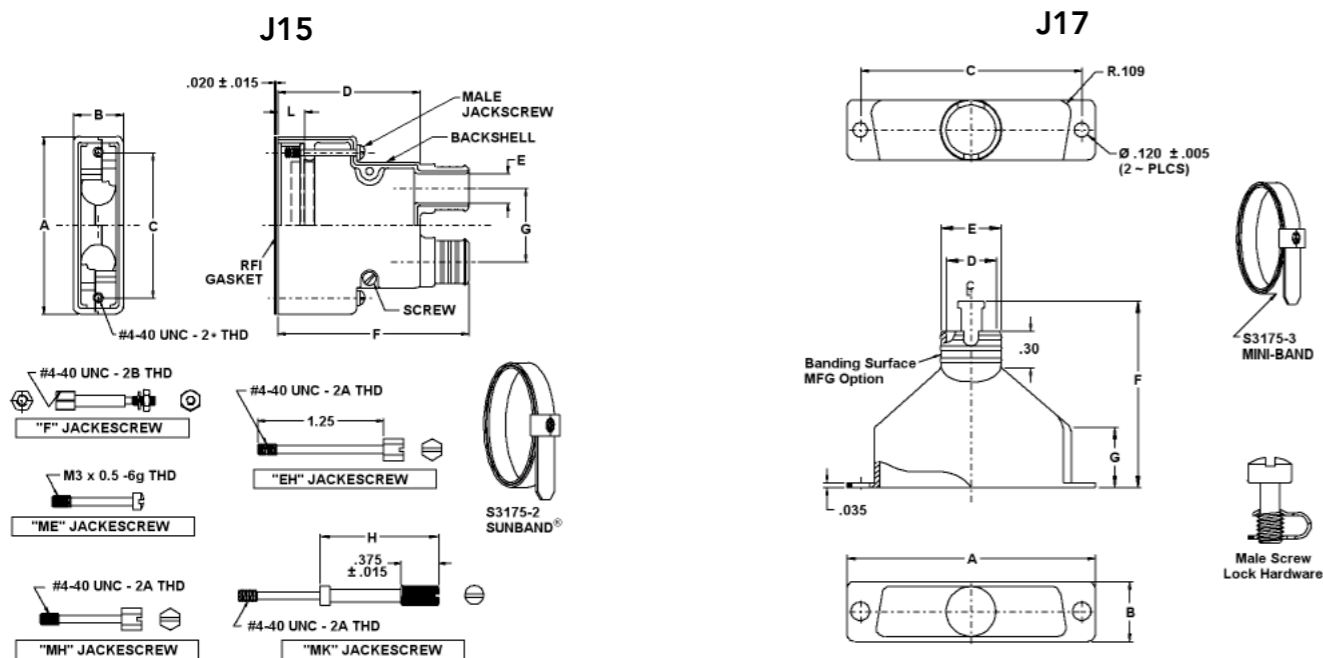
Multi-configuration ■ Straight, 45° or 90° angle, split or one-piece body.

Various entries ■ Banding platforms, tie wrap arms or cable clamp options, dual or simple entry.

Additional accessories ■ Dustcaps, shorting cans and Potting cups also available.

Conductive and non conductive finishes ■ Electroless Nickel, Zinc Nickel, Teflon Nicker, Cadmium and Anodize finishes.

Dimensions



J15

Shell size	Millimeters								Inches							
	A	B	C	D	E	F	G	H	A	B	C	D	E	F	G	H
3	57.9	16.6	47.0	47.6	11.1	65.1	23.6	30.2	2"281	0"656	1"852	1"875	0"438	2"565	0"93	1"190
4	74.6	16.6	63.5	47.6	12.7	66.0	25.6	30.2	2"938	0"656	2"500	1"875	0"500	2"600	1"01	1"190
5	72.2	19.8	61.1	50.8	14.2	66.0	25.9	34.0	2"844	0"781	2"406	2"000	0"562	2"600	1"02	1"340

J17

Shell size	Millimeters							Inches						
	A	B	C	D	E	F	G	A	B	C	D	E	F	G
9	30.5	12.7	24.9	6.8	8.8	30.2	11.1	1"203	0"500	0"984	0"270	0"350	1"190	0"440
15	38.8	12.7	33.3	10.0	12.0	32.2	11.1	1"531	0"500	1"312	0"395	0"475	1"270	0"440
25	52.7	12.7	47.0	10.6	12.7	39.3	12.7	2"078	0"500	1"852	0"420	0"500	1"550	0"500
37	69.0	12.7	63.5	10.6	12.7	42.9	12.7	2"718	0"500	2"500	0"420	0"500	1"690	0"500
50	66.6	15.4	61.1	13.4	15.4	42.4	11.1	2"625	0"609	2"406	0"529	0"609	1"670	0"440
104	69.3	17.0	63.5	13.4	15.4	42.9	12.7	2"730	0"670	2"500	0"529	0"609	1"690	0"500



Save Money with Cost Effective ARINC!

Reduce your costs with the Cost Effective ARINC equipped with harpooned contacts. This version is interchangeable in fit, form and function with standard ARINC 600 Series connectors.

New non removable contacts ■ Cost reduction up to 25%.

Interchangeability ■ Mates with a standard ARINC plug.

Adaptability ■ 3 PC tail contacts length (#22).

2 types of inserts available ■ Harpooned contacts available in 100 and 150 point inserts.





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 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 easy integration with Printed Card Board, flex circuit or cabled harnesses.

Contents

ARINC 600 Series

Typical applications 63

Features & Benefits 64

A wide product range 65

How to build an ARINC 600 66

Insert layouts 67

Shell types and cavities overview 68

Insert layouts matrix 69

Contacts overview 70

Cost effective version 71

Technical features 72

Ordering information 73

Sealing level 73

Plating & Grounding 74

Dimensions 75

Contacts release & Mounting style 78

Inserts arrangement code 79

Polarization code 80

Packaging code 81

Crimp contacts:

Signal contacts, Power contacts, Twinax contacts, Triax contacts 82

Coax contacts 83

Specific contacts for 28 pts insert, Wire data for crimp contacts 84

PC tail contacts:

Signal contacts, Power contacts, Triax contacts, Coax contacts 85

Specific contacts for 62Q2 and 121 pts inserts 86

Wire wrap contacts 86

Quadrax contacts 87

ELIO® fiber optic contacts + Adaptors #8 87

Tooling:

Crimping tools 88

Insertion and extraction tools + Instructions 89

Accessories:

Cavity reducers, Dummy contacts, Filler plug, Dummy inserts 90

Plastic covers, Backshells SUNBANK 93

Range Extension

Custom products 94

microComp® Series 94

Nafi 1 & 2 Series 95

D-Subminiature Series 95

Box mount interconnect solutions 96

Typical applications



Cockpit Display Units



Landing Gear Management



Cabin: IFE & Air Conditioning



Avionic Bay/Data Acquisition



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 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

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

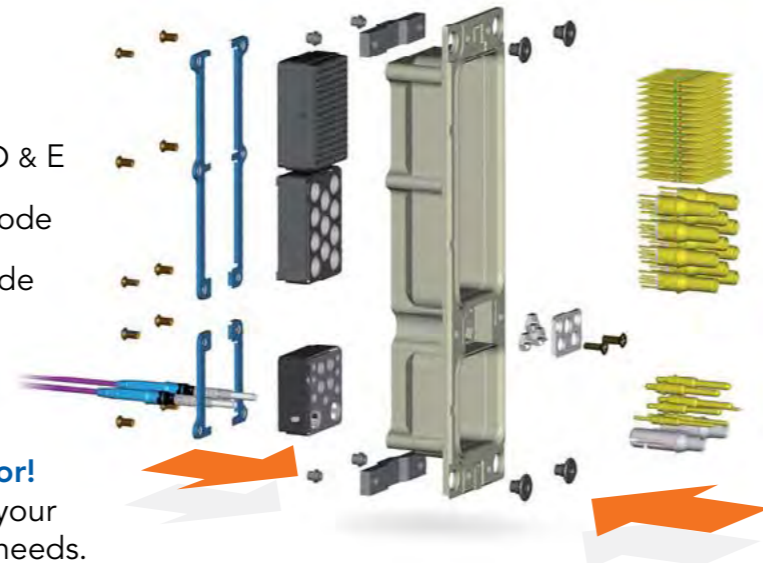
Cost Effective version
Harpooned contacts

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.

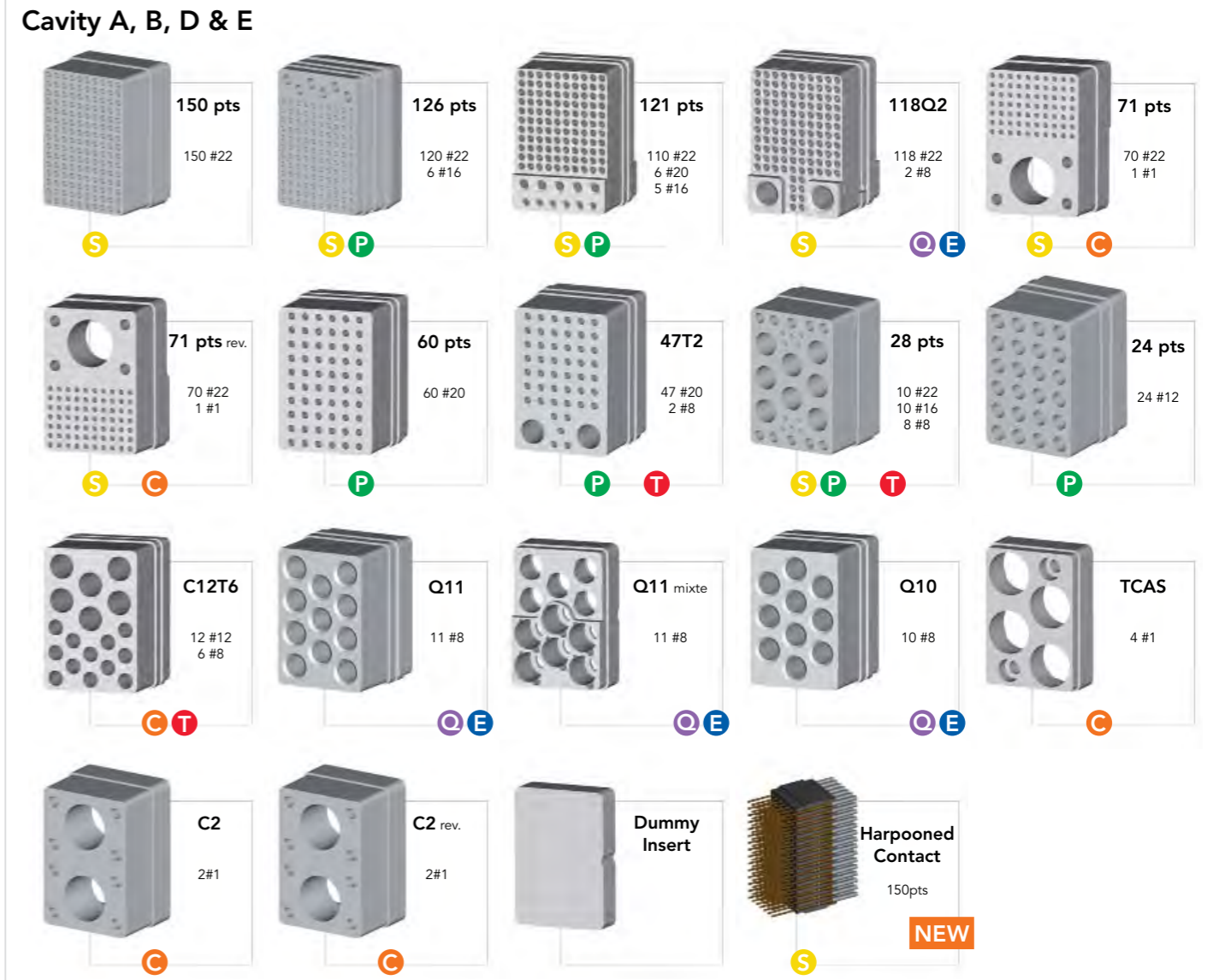


Insert layouts

Shell size 1

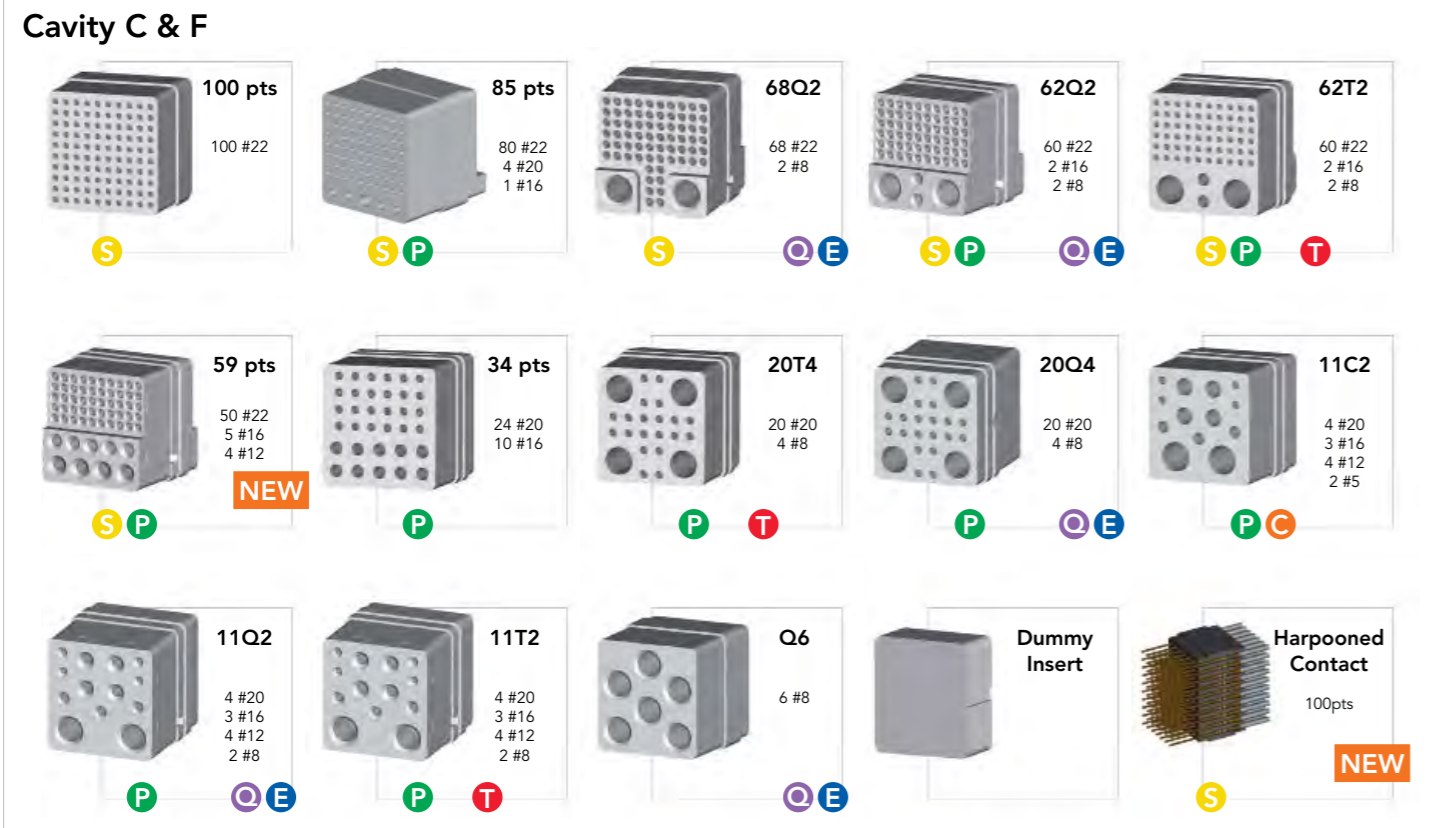


Shell size 2 & 3



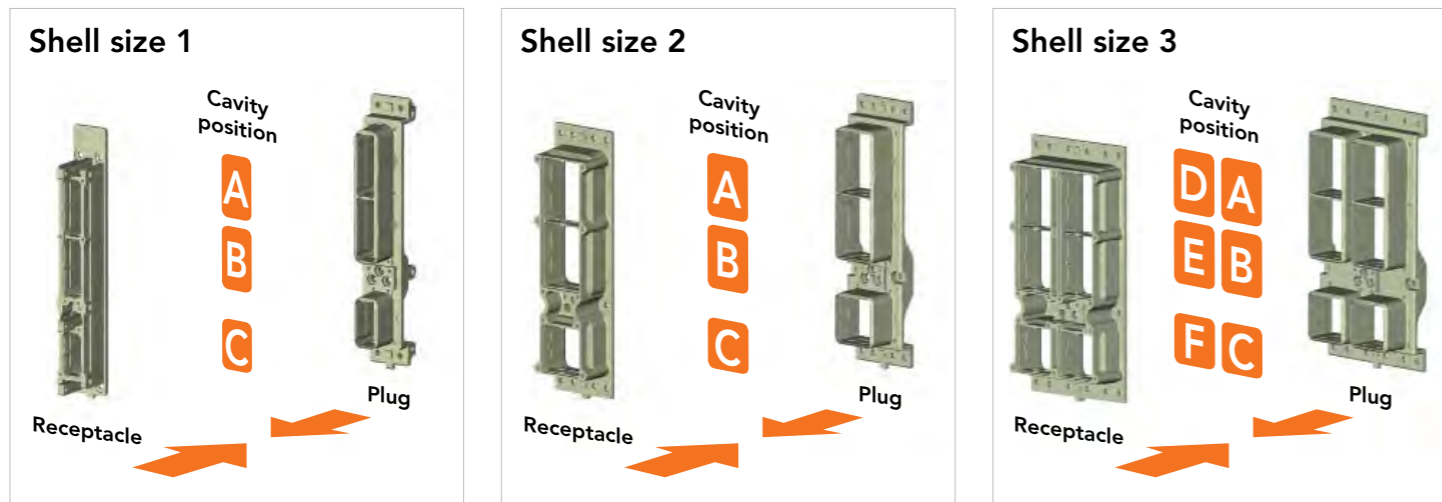
Contact types: S Signal P Power C Coax T Triax Q Quad or Twinax E ELIO® Fiber Optic

Shell size 2 & 3



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

Shell types and cavity overview



Insert layouts matrix

Insert	Shell size	Cavity	Contacts type	Number of cavities							
				#22	#20	#16	#12	#8 ⁽¹⁾	#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	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				

⁽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

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	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	OK	OK
OK	OK	OK	Consult us	OK
OK	OK	OK	OK	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	OK	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

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 141 A/U	RG 214 / U	Ficela 1703/3
	RG 142 B/U	RG 225 / U	Filotex 50MTKT
	KX 23	RG 393 / U	RG 400 / BU
	RG 165 / U		
Cable #1 for TCAS	Filotex E0406WD		
	Filotex 50MFCFB		
	Gore SW39214		

- 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

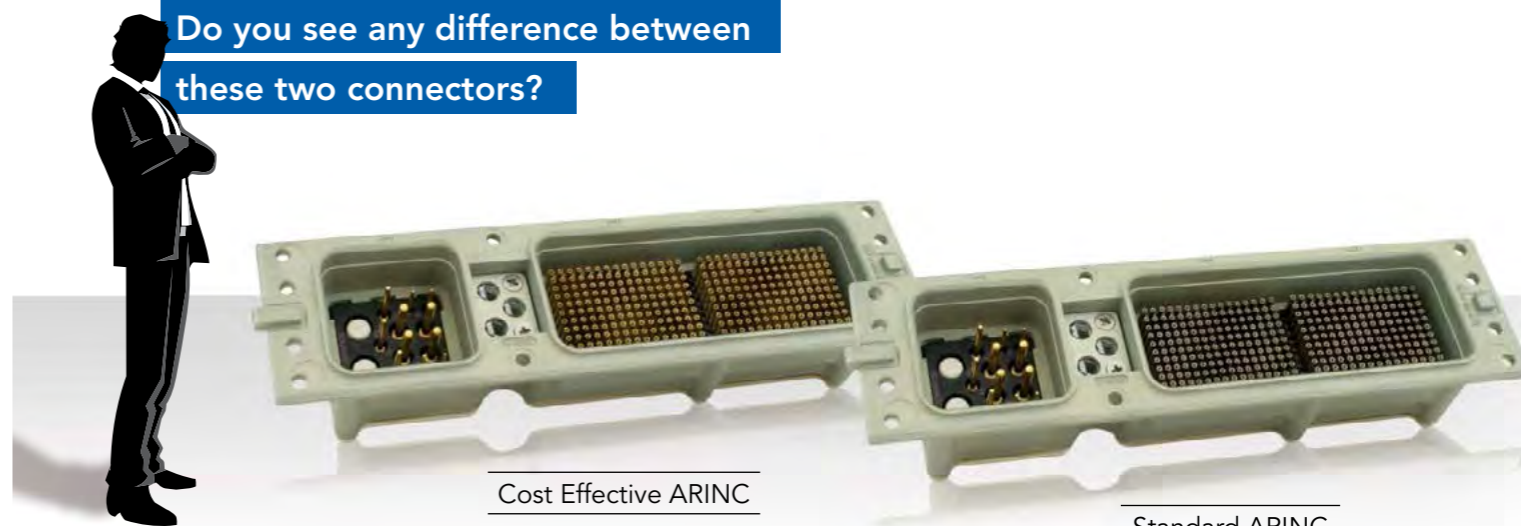
- **Wire wrap #22**
0.25 inch (6.35 mm)
0.375 inch (9.52 mm)
0.5 inch (12.7 mm)
- **Cavity reducer**
#5 to #12, rear and front release
#8 to #12, rear release
#8 to #16, rear release

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

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

Comparison with standard ARINC 600

Do you see any difference between these two connectors?



No? Read below

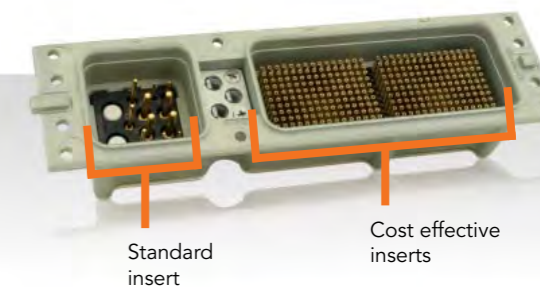
The technical characteristics of the Cost Effective ARINC compared to the Standard are:

- 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



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

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)

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: Sealed (surtec plated) 5: Unsealed (surtec plated) More information & other configuration: see pages 73 and 74																			
Shell Size: 1, 2, 3	Drawings and panel cut out: see pages 75 to 77																			
Shell Type	F: Equipment receptacle M: Rack plug Drawings: see pages 75 to 77																			
Contact Mounting & Release	More information and coding: see page 78																			
Mounting Style	More information and coding: see page 78																			
Inserts Arrangement Code - Cavities C and F (2 digits)	Insert layouts: see pages 67 to 69. Coding: see page 79																			
Contact Type	<table border="1"> <tr> <td></td> <td>Rack plug</td> <td>Equipment receptacle</td> </tr> <tr> <td>Signal contacts</td> <td>Pin (male)</td> <td>Socket (female)</td> </tr> <tr> <td>Power, Quadrax, Coax, Triax contacts</td> <td>Socket (female)</td> <td>Pin (male)</td> </tr> </table>												Rack plug	Equipment receptacle	Signal contacts	Pin (male)	Socket (female)	Power, Quadrax, Coax, Triax contacts	Socket (female)	Pin (male)
	Rack plug	Equipment receptacle																		
Signal contacts	Pin (male)	Socket (female)																		
Power, Quadrax, Coax, Triax contacts	Socket (female)	Pin (male)																		
Inserts Arrangement Code - Cavities A, B, D and E (2 digits)	Insert layouts: see pages 67 to 69 Coding: see page 79																			
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 80																			
Packaging Code	1st letter: signal and power contacts 2nd letter: twinax, triax, coaxial and quadrax contacts Coding: see page 81																			

For any other requirement, please consult us.

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

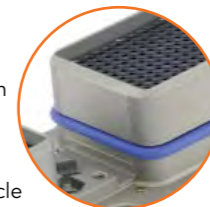
Compound

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



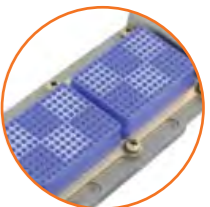
O-Ring for plug only

- 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

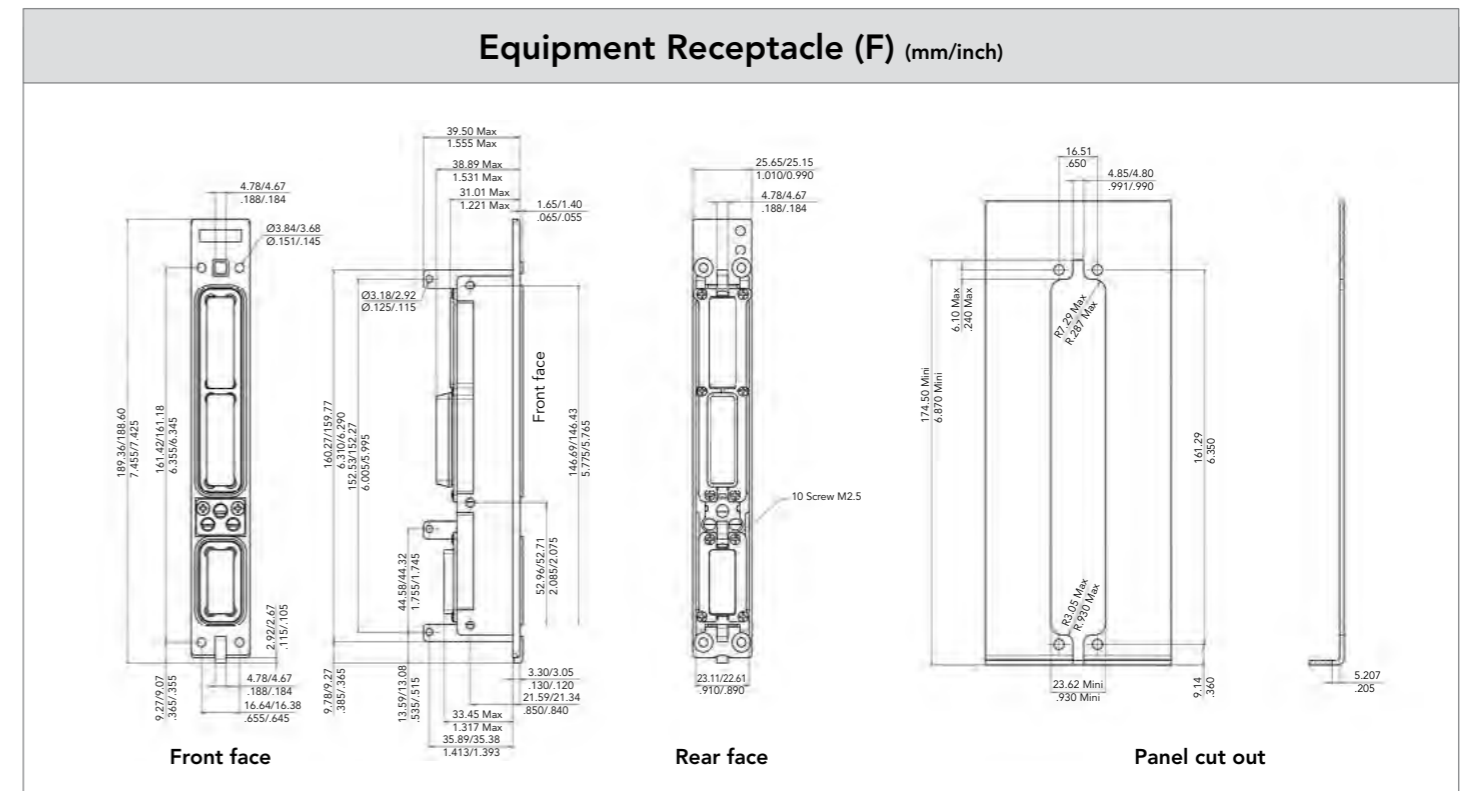
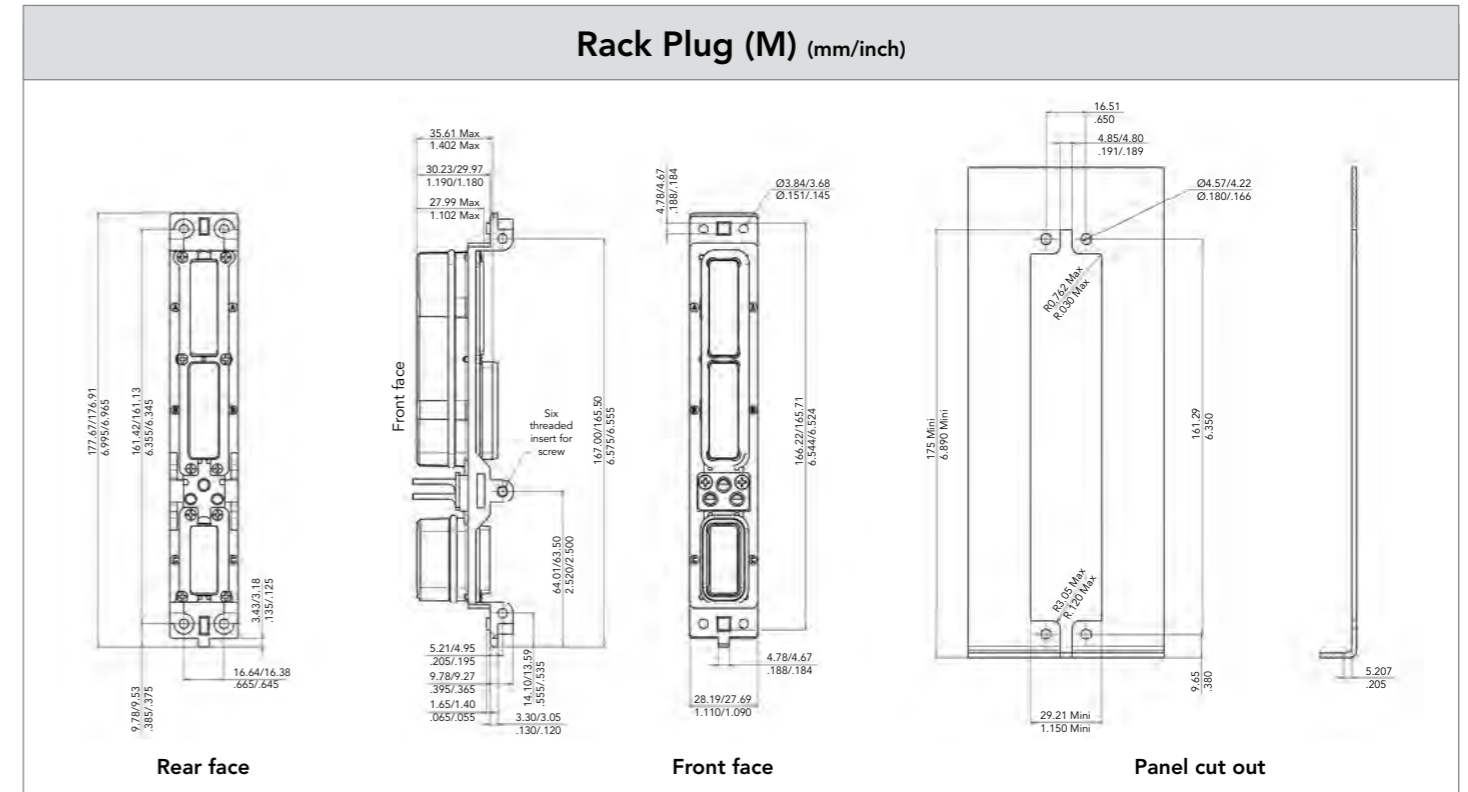


- Ground spring mandatory on the plug
- Best continuity performance
- Available in shell sizes 2 & 3
- Sealed and unsealed versions

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		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	OK	OK			G P	Best continuity performances
	Alodine	No	OK	OK	OK	OK			0 2 3	Maintenance
			OK	OK	OK	OK			A	
			OK	OK	OK	OK	OK		C	
			OK	OK	OK	OK	OK	OK	H L	

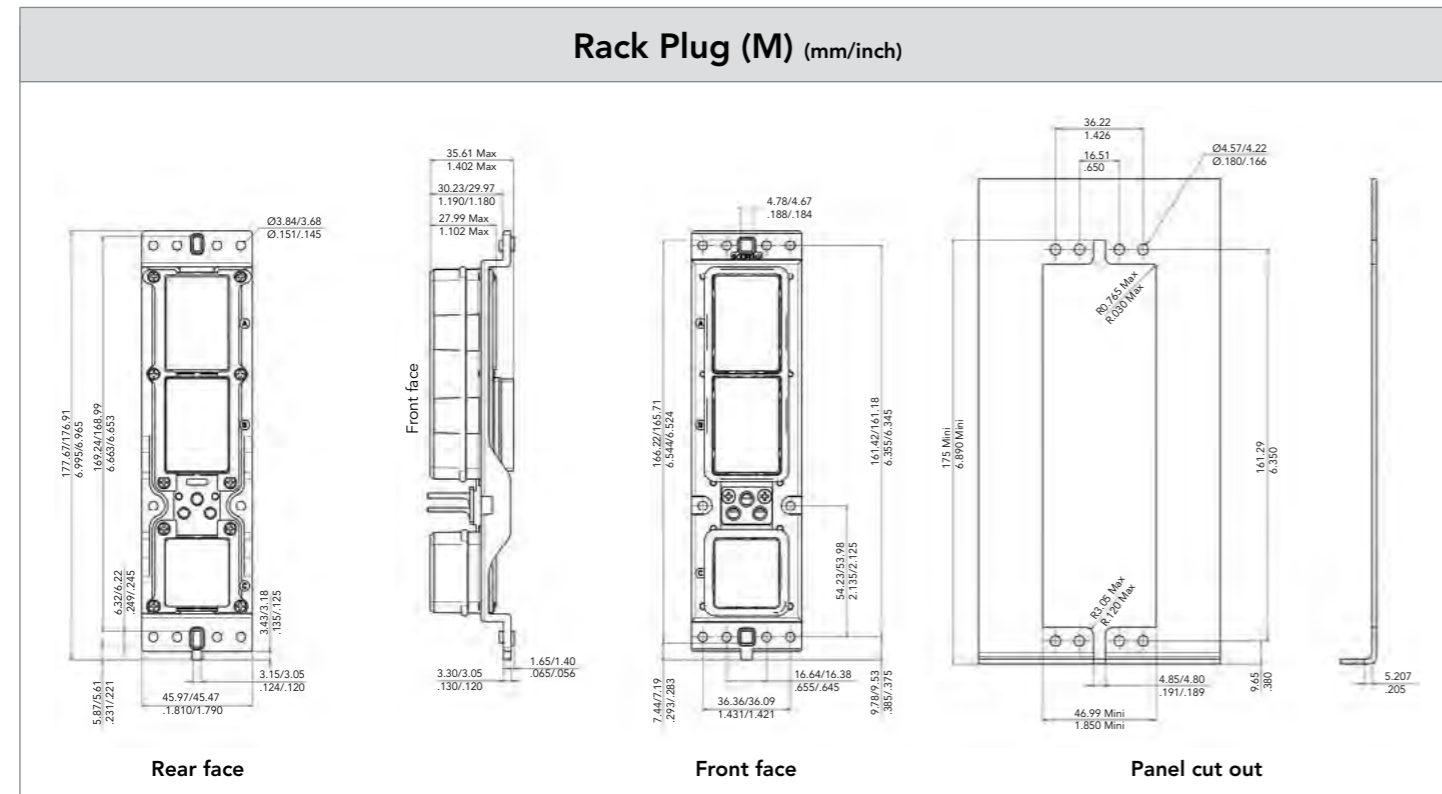
* Please confirm with us configuration available depending of mounting style. For other specification, please consult us.

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

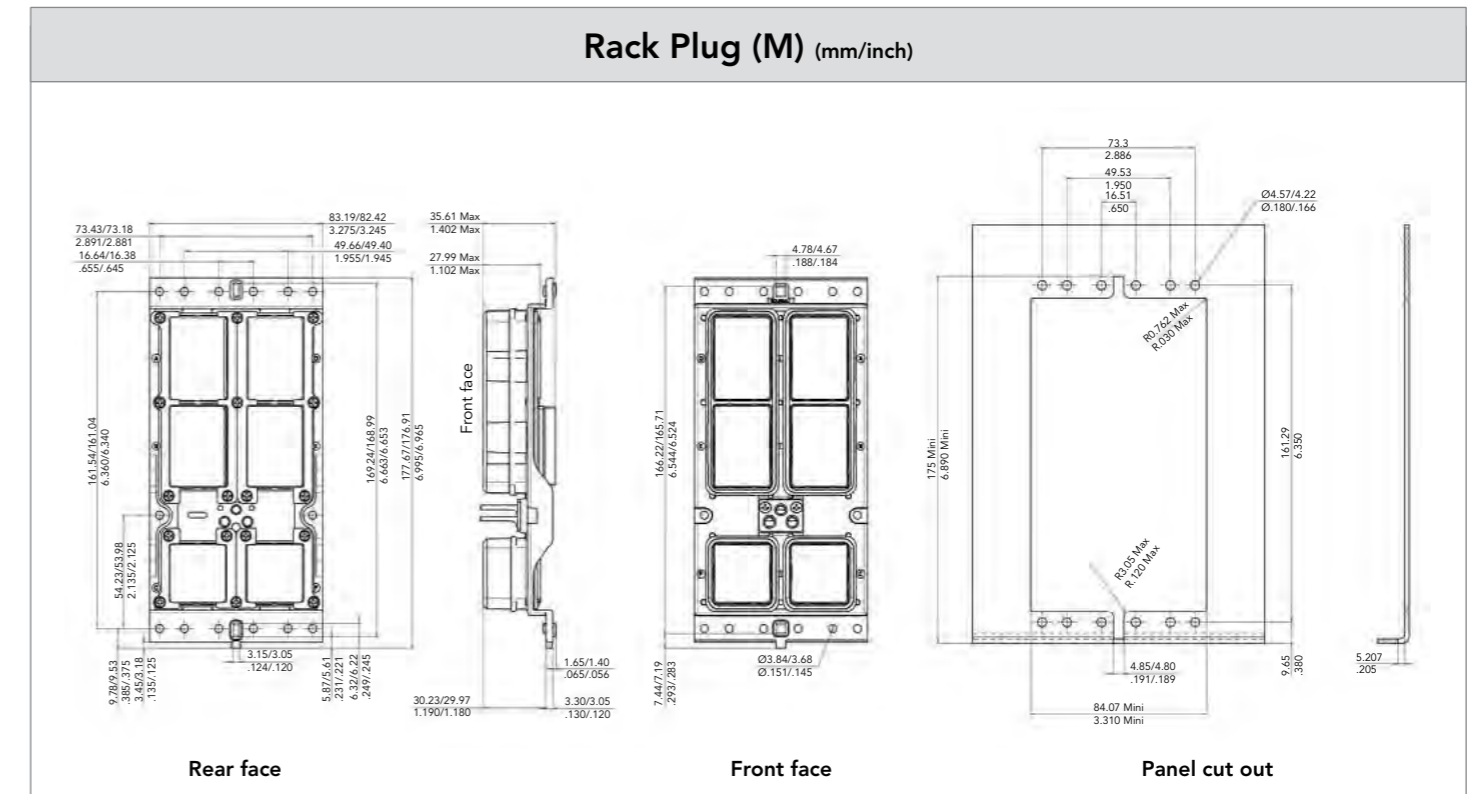


Note: All dimensions are in millimeters/inches (mm/inch)

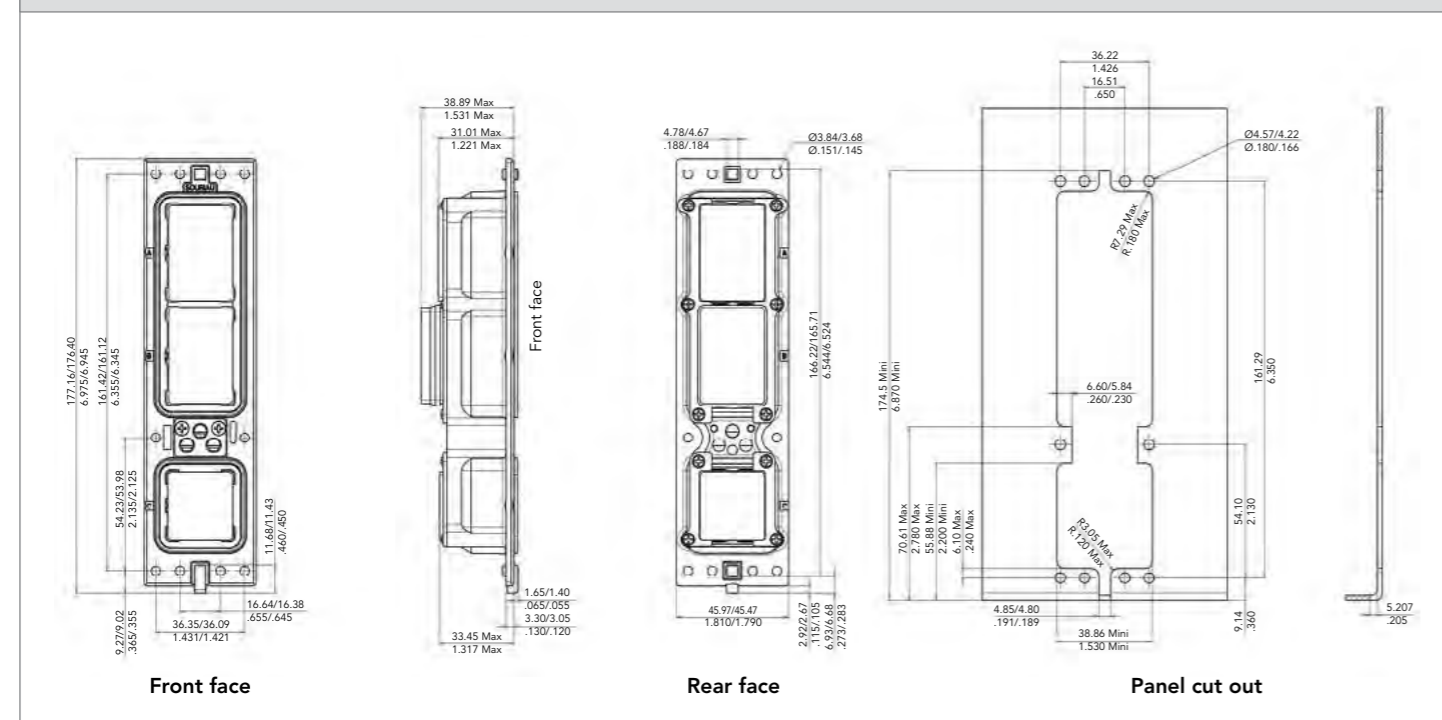
Dimensions shell size 2 - Shell size digit n° 2 & Shell type digit n° 3



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

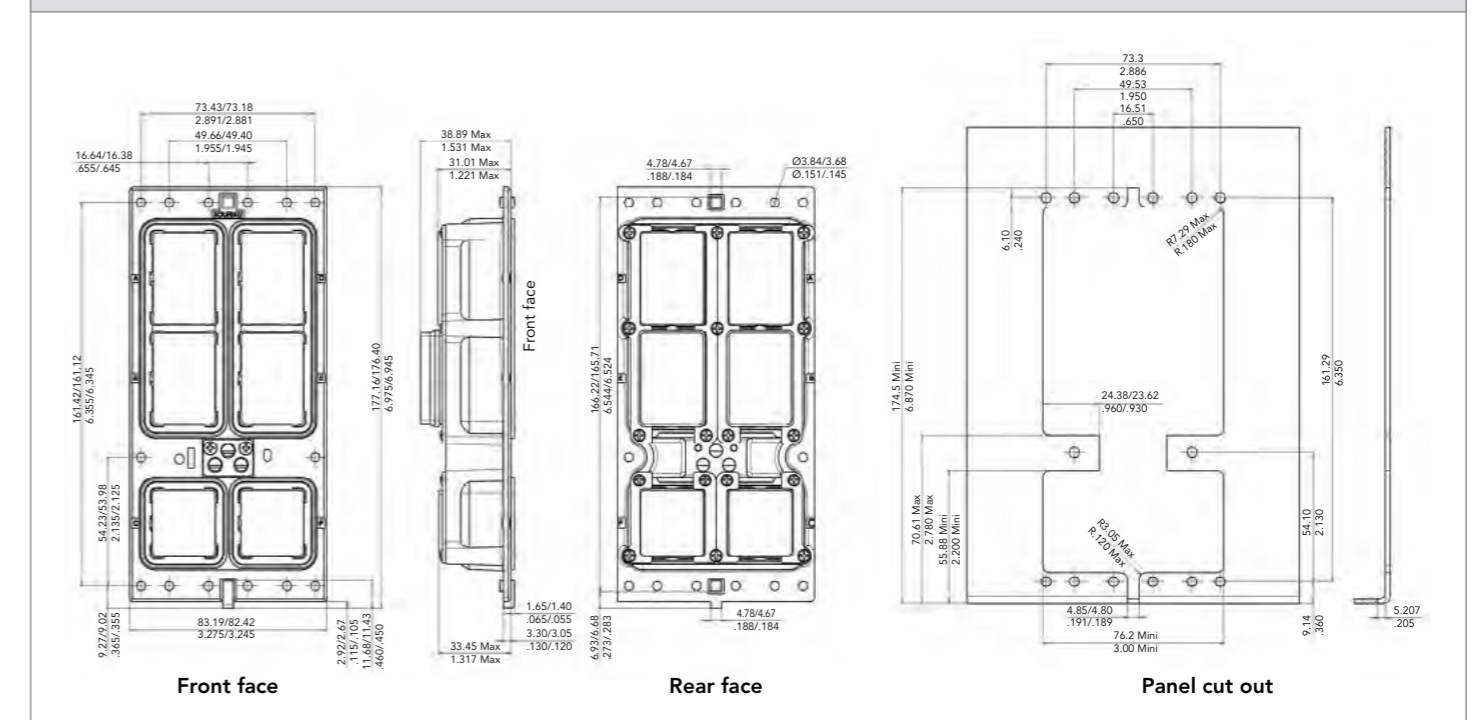


Equipment Receptacle (F) (mm/inch)



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

Equipment Receptacle (F) (mm/inch)

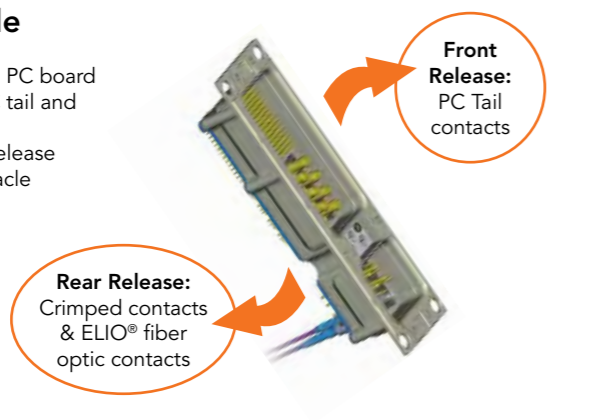


Note: All dimensions are in millimeters/inches (mm/inch)

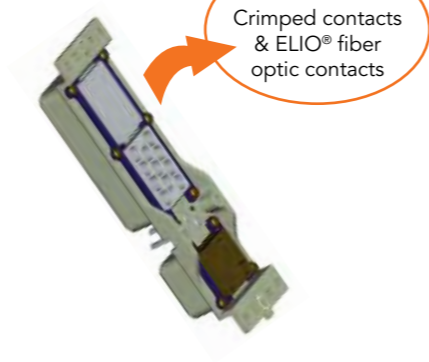
Contacts release - Digit n° 4

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)
Self-locking threaded inserts	FS	Float mounting, 4-40 self-locking threaded inserts (quantity 4)
	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
3	T9	62T2	62T2
	W2	11C2	11C2
	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	

Cavities A, B, D and E - Digit n° 8

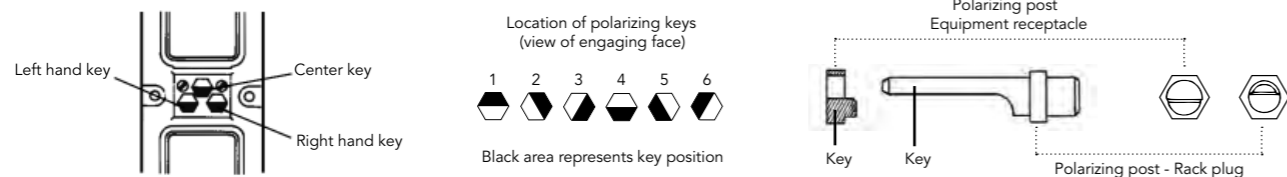
Shell Size	Digit 8	Cavity A	Cavity B	Cavity D	Cavity E	
1	00	60 pts	60 pts			
	E2	60 pts	Empty			
	E3	Empty	60 pts			
	L2	60 pts	D.I.			
	L3	D.I.	60 pts			
1 & 2	E1	Empty	Empty			
	HY	D.I.	D.I.			
2	02	150 pts	71 pts			
	03	71 pts	150 pts			
	04	Empty	71 pts			
	07	D.I.	71 pts			
	60	60 pts	60 pts			
	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			
3	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			
	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	
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		

D.I.: Dummy insert polyamide
D.I. (a): Dummy insert alodine
D.I. (n): Dummy insert nickel
See page 90 for more information.

For other inserts arrangement code, please consult us.

See pages 73 and 82 to 87 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	-	-
01	4	4
02	4	3
03	4	2
04	4	1
05	4	6
06	4	5
07	5	4
08	5	3
09	5	2
10	5	1
11	5	6
12	5	5
13	6	4
14	6	3
15	6	2
16	6	1
17	6	6
18	6	5
19	1	4
20	1	3
21	1	2
22	1	1
23	1	6
24	1	5
25	2	4
26	2	3
27	2	2
28	2	1
29	2	6
30	2	5
31	3	4
32	3	3
33	3	2
34	3	1
35	3	6
36	3	5
37	4	4
38	4	3
39	4	2
40	4	1
41	4	6
42	4	5
43	5	4
44	5	3
45	5	2
46	5	1
47	5	6
48	5	5
49	6	4
50	6	3
51	6	2
52	6	1
53	6	6

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

Code	Receptacle	Plug
Normalized	SOURIAU	
9	Left key	Center key
	Right key	Left post
	Center post	Right post
108	3	2
109	4	1
110	4	1
111	4	1
112	4	1
113	4	1
114	4	1
115	5	1
116	5	1
117	5	1
118	5	1
119	5	1
120	5	1
121	6	1
122	6	1
123	6	1
124	6	1
125	6	1
126	6	1
127	1	1
128	1	1
129	1	1
130	1	1
131	1	1
132	1	1
133	2	1
134	2	1
135	2	1
136	2	1
137	2	1
138	2	1
139	3	1
140	3	1
141	3	1
142	3	1
143	3	1
144	3	1
145	4	6
146	4	6
147	4	6
148	4	6
149	4	6
150	4	6
151	5	6
152	5	6
153	5	6
154	5	6
155	5	6
156	5	6
157	6	6
158	6	6
159	6	6
160	6	6
161	6	6

Code	Receptacle	Plug
Normalized	SOURIAU	
9	Left key	Center key
	Right key	Left post
	Center post	Right post
162	6	6
163	1	6
164	1	6
165	1	6
166	1	6
167	1	6
168	1	6
169	2	6
170	2	6
171	2	6
172	2	6
173	2	6
174	2	6
175	3	6
176	3	6
177	3	6
178	3	6
179	3	6
180	3	6
181	4	5
182	4	5
183	4	5
184	4	5
185	4	5
186	4	5
187	5	5
188	5	5
189	5	5
190	5	5
191	5	5
192	5	5
193	6	5
194	6	5
195	6	5
196	6	5
197	6	5
198	6	5
199	1	5
200	1	5
201	1	5
202	1	5
203	1	5
204	1	5
205	2	5
206	2	5
207	2	5
208	2	5
209	2	5
210	2	5
211	3	5
212	3	5
213	3	5
214	3	5
215	3	5
216	3	5

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
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
			9.52/0.375	Gold plated	E
	Delivered without contacts	Delivered without contacts	3.81/0.125	Tin plated	P
			6.35/0.25	Gold plated	G
			6.35/0.25	Tin plated	H
PC Tail contacts only	Delivered with contacts	Delivered with contacts	6.35/0.25	Gold plated	Y
			6.35/0.25	Tin plated	5
			9.52/0.375	Gold plated	R
	Delivered without contacts	Delivered without contacts	9.52/0.375	Tin plated	4
			12.7/0.5	Tin plated	2
			12.7/0.5	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	N
		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
	Delivered with #1 coax for RG 393/U cable	E	
#8 Quadrax contacts		2 nd letter	
<ul style="list-style-type: none"> 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.

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		8660-209			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

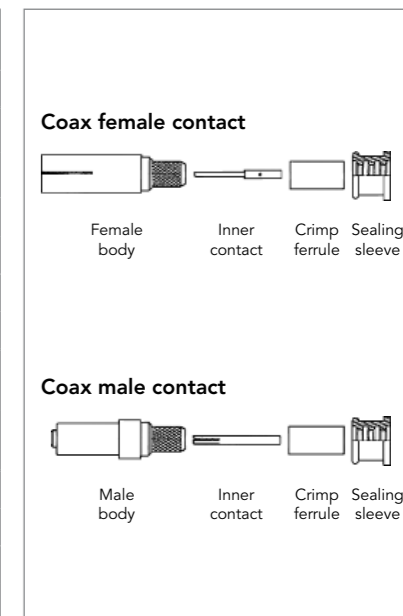
Contact size	For equipment receptacle			For rack plug			Cable
	Contact type	Part number	Profile	Contact type	Part number	Profile	
#8 twinax	Pin	ETH2-1104A		Socket	ETH2-1105A		ABS0386WF24
		ETH2-1106A			ETH2-1107A		ASNE0272TK22
		ETH2-1102A			ETH2-1103A		ASNE0272TK24
		ETH2-1100A			ETH2-1101A		ASNE0807WX26

Triax contacts

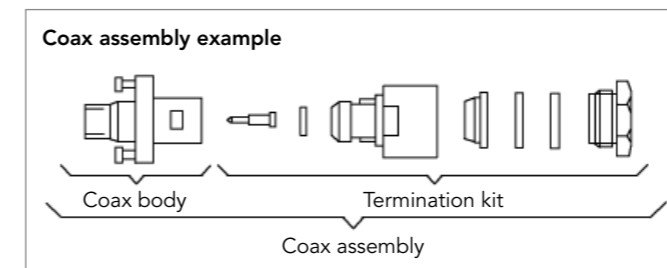
Contact size	Class	Boot included	For rack plug: Socket contact	For equipment receptacle: Pin contact	Cable
#8 Triax	Sealed	Yes	8667-D03-08R-52A/01	8667-D02-08R-52A/01	EN3375-004 MIL-C-17176
	Unsealed	No	8667-D03-08R-02A/01	8667-D02-08R-02A/01	

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

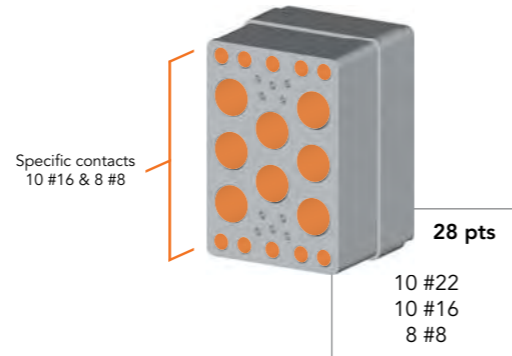


Contact size	Shell style	Part number	Profile	Cable
#1 Coax for TCAS insert	Rack plug	8660-D21-100-01A/05		FILOTEX E0406WD FILOTEX 50MFCFB
	Equipment receptacle	8660-6413		GOESW39214
		8660-6136		Output SMA

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)	
	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

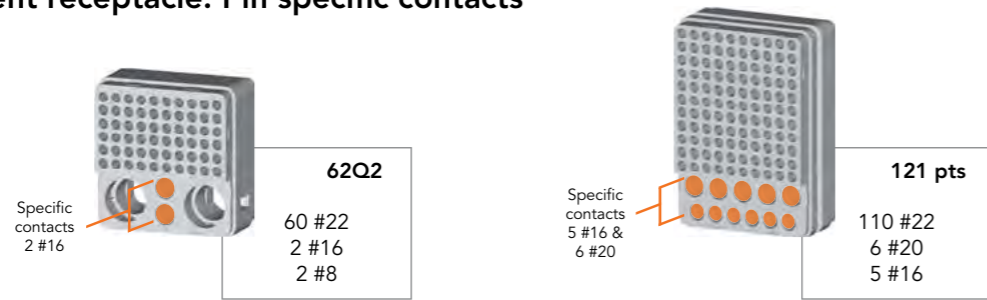
For equipment receptacle: Pin contacts - front release

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	
		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 ETH1-1123A	PC tail, L = 6.35 / 0.25 Tinned PC tail, L = 6.35 / 0.25	Unsealed	Front	
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.

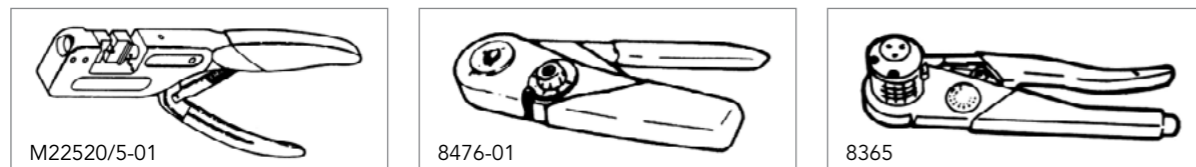
Part number	Adaptor type	Profile
ELIOAQOP Delivered with alignment boot	Rear release Male Insert For receptacle	
ELIOAQ1P	Front release Male Insert For receptacle	
ELIOAQOS	Rear release Female insert For plug	

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		Pin & Socket	M22520/1-02	8365-02	0.60 to 1.34	20 - 18 - 16
#16 small barrel	8365	Pin & Socket	M22520/1-02	8365-02	0.21 to 0.93	24 - 22 - 20 - 18
#12	M22520/1-01	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	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.

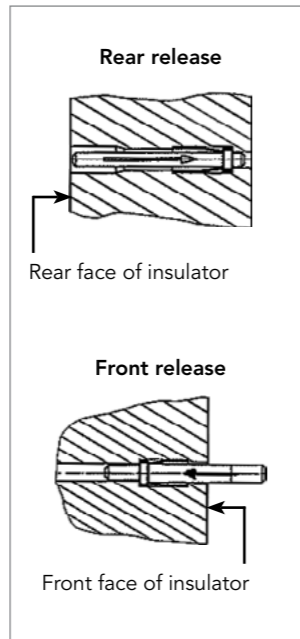
Accessories

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	

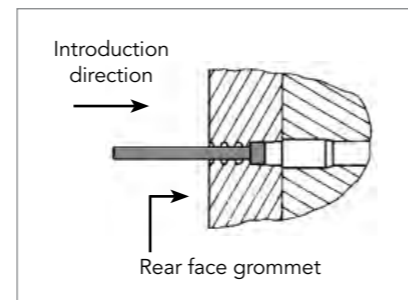
Dummy contacts unsealed version

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

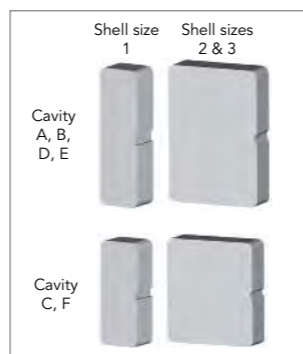
Cavity size	Part number	Color
#22	8660-212	Black
#20	8522-389A	Red
#16	8522-390A	Blue
#12	8522-391A	Yellow
#8	8660-3035	Red
#5	8660-726	White



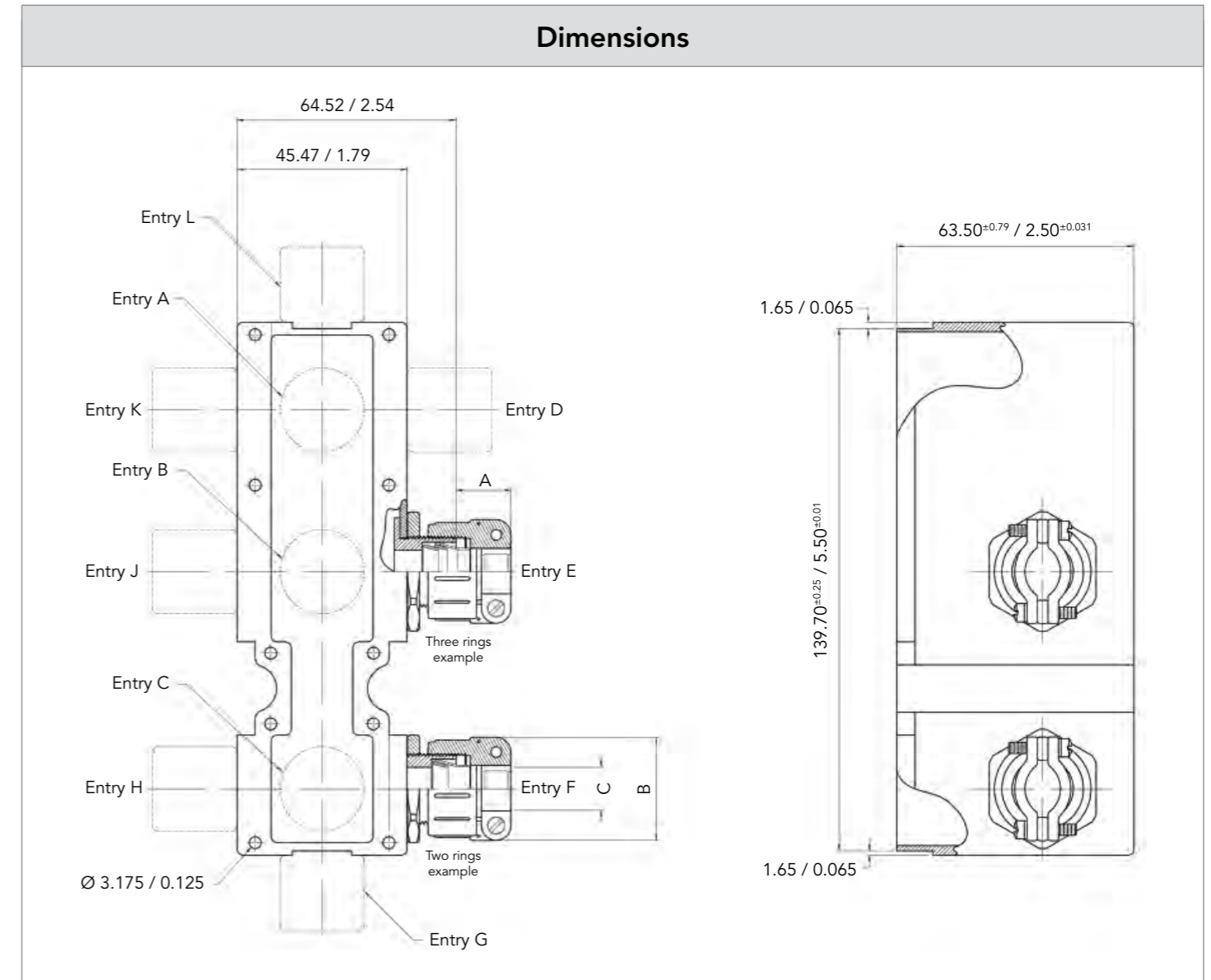
Dummy inserts

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



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

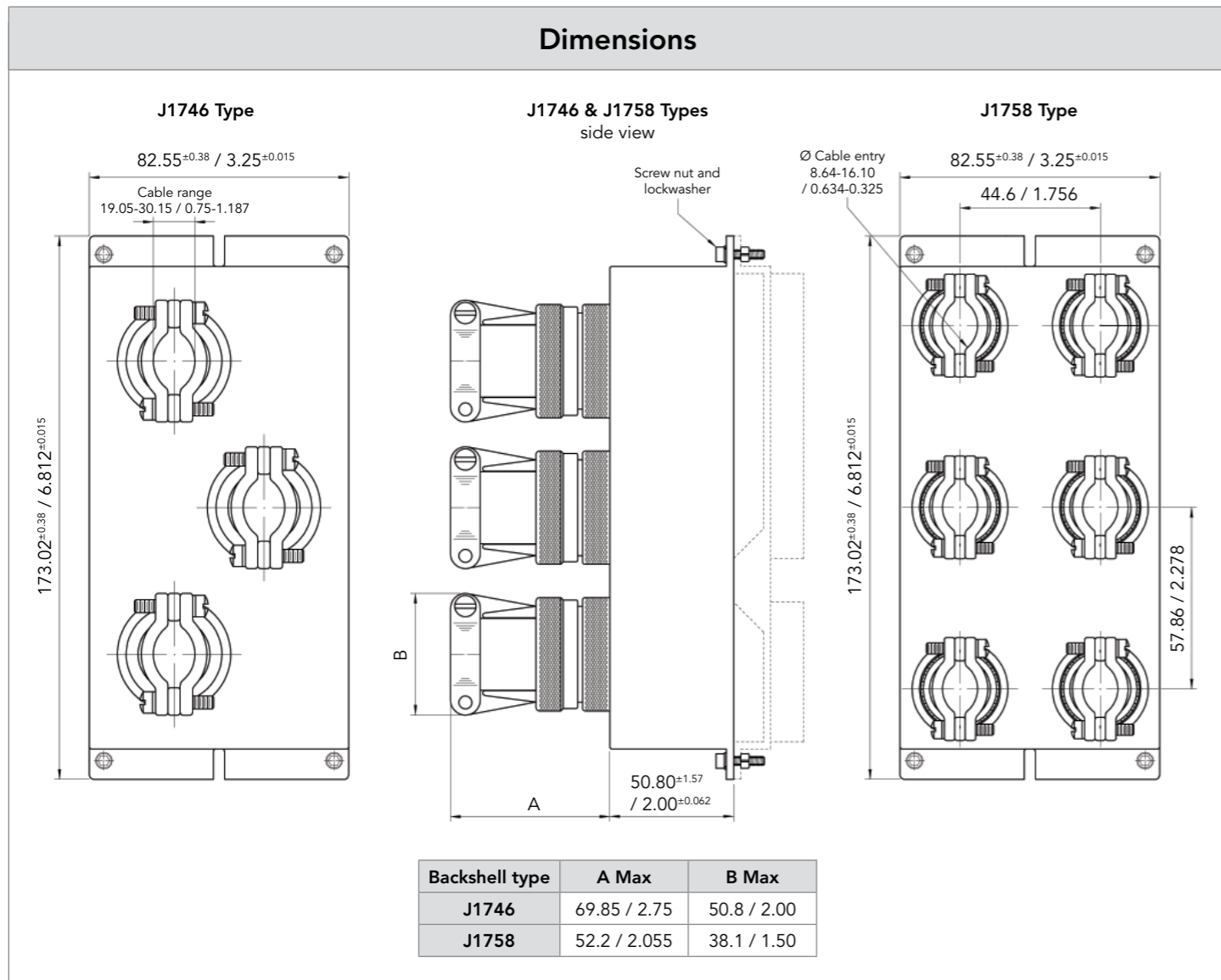
Note: All dimensions are in millimeters/inches (mm/inch)

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



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

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

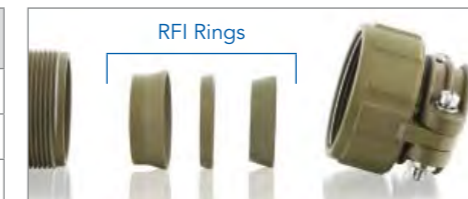
Backshell for shell size 2, up to 3 entries (RFI / EMI Capabilities)

Ordering information

Basic Series	J1764	First entry (mandatory)	Second entry (optional)	Third entry (optional)
		A 16	C 08 R	H 08 12
First entry position (see drawing 91 page) A, B, C, D, E, F, G, H, J, K, L				
Entry size code (see table 91 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 91 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 91 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 91 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 91 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



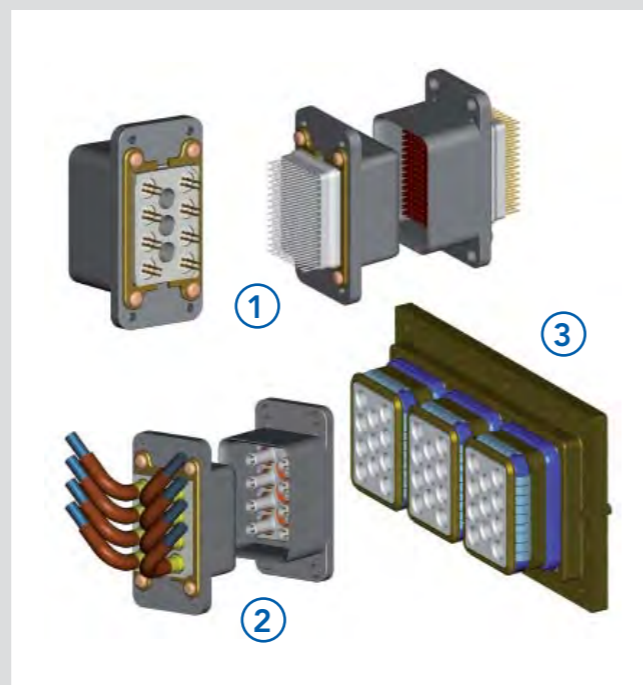
Product range extension

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



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.



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

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

公司簡介

佳昭企業有限公司 (Nearson Enterprise Corp.) 創立於 1989 年 7 月，主要供應航太及軍規等級的產品，包含電子、電機、高頻微波、零組件及特殊材料，用於衛星、飛機、飛彈、雷達及船艦使用。佳昭公司除了代理世界知名集團的高科技產品，如：API 集團、AXON 集團、COBHAM 集團、Esterline 集團、MOOG 集團等 也擁有研發設計天線能力，亦能承攬系統之整合規劃。

佳昭公司代理產品簡述如下

API 集團：

M/A Com MAL--- RF module ; TR limiter ; TR module ; W/G protector ; EW 收發模組；微波模組；導波管保護器；電戰系統

Axon 集團：

Axon Cable SA --- Wire & Cable ; Micro-D & Nano-D ; Space Prod. 各式電纜 -- 超細、防火、防水、極軟；太空等級電纜組件；特殊接頭

Cobham Defense 集團：

Air Precision --- Slip-Ring 滑環
Atlantic Microwave --- Antenna 各式天線
Atlantic Positioning --- Positioners 定位器；旋轉台
Chelton Defense --- Soldier System 軍士戰場通訊指揮系統
Continental Microwave --- Waveguide Prod. 各式導波管產品
Kevlin --- Rotary Joint ; Pedestal Systems 旋轉耦合器；載台系統
Nurad Tech. --- Radomes ; Antenna 雷達罩；鼻錐罩；天線
Remec Defense & Space --- RF Components 微波零組件；太空等級組件

Esterline 集團：

Souriau --- 陸、海、空、水底、太空、電廠及飛彈用之各式連接器
Sunbank --- 背夾器、連接器配件

Moog 集團：

Quickset --- Pan & Tilt ; Tripod 旋轉台；三角架

佳昭企業於美國姐妹公司 (Nearson Inc.) 為天線專業的研發、設計、製造公司，詳情參考 www.nearson.com，我們樂意為您設計專屬的天線產品。若有其他規格需求請洽佳昭公司。

SUNBANK

佳昭企業有限公司
NEARSON ENTERPRISE CORP.

Backshells, Conduits, Caps and Accessories

SUNBANK provides a large variety of interconnect solutions to vector and secure the cable routing. We would like to present hereby some of the major ones.



Backshells

- Large termination types: strain relief, banding platform with or without heat shrink boot, EMI/RFI shielding.
- Various Standards: MIL-DTL-38999, M28840, BACC10, AS85049, ABS1361, ABS1358, etc.
- Various materials and platings. Circular and rectangular.



Flexible conduits

- Repairable and static/dynamic cable routing.
- Wire protection from mechanical and chemical stresses.
- Metallic braided shielding that coats the flexible conduit for an excellent EMI/RFI protection.



Protective caps

- Protect from dust and moisture unmated bayonet and screw coupling connectors.
- Various platings available.
- Qualified to fit on MIL-DTL-38999, MIL C 5015 and MIL 83723 among many other connectors.



Accessories

- Shield termination band tighten the braid on the backshell and ensures excellent shielding continuity.
- Shield support ring.
- Transition accessories provide a robust fan out on the harness in multiple direction.



8916 Series
High pressure fluid contact. Power, bus and signal contact layouts



8968 Series
Low profile flex umbilical



S700 Series
High density
Wide range of contact layouts



D.SUB H Series
Glass bead insulator
Hermetically sealed



SF700 Series
DOD-C 83527
Rack connectors



D. TP Series
Mil-C 24308
D-Sub Based



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