MIL-DTL-24308 D-Sub 連接器

當空間和重量對您的設計至關重要時，MIL-DTL-24308 微型連接器可提供航空航天，導彈或地面應用的最佳性能。也被稱為 D-subminiature 或 D-sub 連接器，用於金屬屏蔽件的形狀，這些組件能夠結合大量的電路，儘管它們的尺寸。最重要的是，MIL-DTL-24308 微型連接器是通用的。它們可在一些材料類的，隨時滿足最苛刻的環境和應用需求。

- G 類適用於一般應用。
- N 級提供低剩餘磁性。
- H 級設計氣密性能應用。
- D、K 或 M 類專門用於空間應用。

這些連接器最通常在機架和面板應用中使用，但它們容易地適應其他佈線構造與正確的積分夾具或配件。無論您有什麼樣的設計需求，我們的專家能幫你找到合適產品。

MIL-DTL-24308 產品規格

Slant	Class	Mounting method	Contact type	Termination type	Contact size	Positions available
M24308/1	D, G	Panel	Socket	Solder cup	20 22D	9, 15, 25, 37, 50 none
M24308/2	D, G	Panel	Socket	Crimp	20 22D	9, 15, 25, 37, 50 15, 26, 44, 62, 78, 104
M24308/3	D, G	Panel	Pin	Solder cup	20 22D	9, 15, 25, 37, 50 none
M24308/4	D, G	Panel	Pin	Crimp	20 22D	9, 15, 25, 37, 50 15, 26, 44, 62, 78, 104
M24308/5	M, N	Panel	Socket	Solder cup	20 22D	9, 15, 25, 37, 50 none
M24308/6	M, N	Panel	Socket	Crimp	20 22D	9, 15, 25, 37, 50 15, 26, 44, 62, 78, 104
M24308/7	M, N	Panel	Pin	Solder cup	20 22D	9, 15, 25, 37, 50 none
M24308/8	M, N	Panel	Pin	Crimp	20 22D	9, 15, 25, 37, 50 15, 26, 44, 62, 78, 104
M24308/9 (防水)	K, H	Panel	Pin	Solder cup, eyelet	20 22D	9, 15, 25, 37, 50 none
M24308/23	G	PCB	Socket	Straight, right angle	20 22D	9, 15, 25, 37, 50 15, 26, 44, 62, 78

M24308/24	G	PCB	Pin	Straight, right angle	20 22D	9, 15, 25, 37, 50 15, 26, 44, 62, 78
M24308/25	Male screw lock					
M24308/26	Female screw lock					
M24308/27	G	Panel	Socket	IDC	20 22D	9, 15, 25, 37, 50
M24308/28	G	Panel	Pin	IDC	20 22D	9, 15, 25, 37, 50

M24308/19、20、21 為本系列連接器之 Backshell 產品，更多相關規格請洽佳昭公司。

佳昭企業有限公司
NEARSON ENTERPRISE CORP.
・TEL:886-2-2957-9823・FAX:886-2-2957-9712
・http://www.nearson.com.tw

Overview

Description

To respond to miniaturization and weight saving trends in aeronautical and defense applications SOURIAU has developed an innovative high density connector range: *micro*Comp® 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...)

RoHS Compliant

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

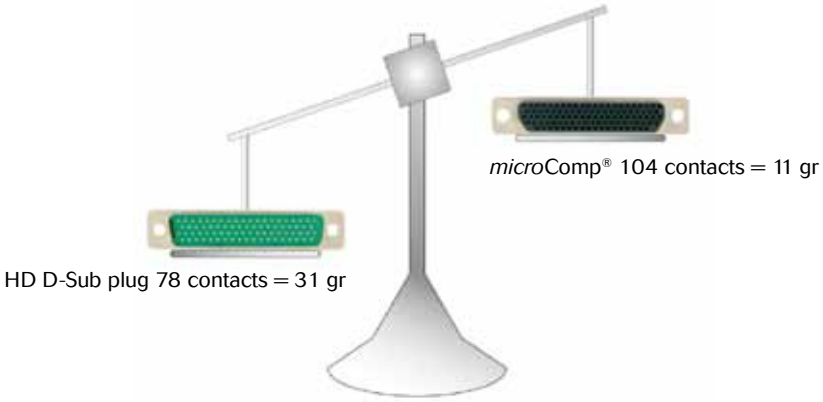
For space applications please consult our dedicated Space Grade *micro*Comp® catalog

Features and benefits

Composite Shell Benefit

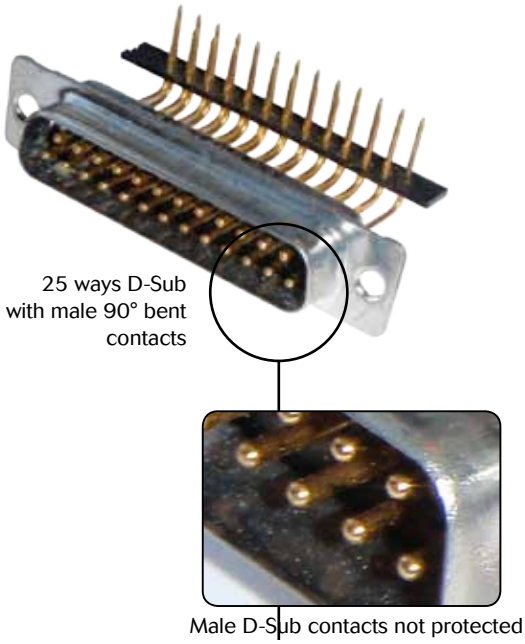
*micro*Comp® shells are available in strengthened fiber glass material for a maximum mechanical resistance. Composite shells are up to 36% lighter than aluminum shells.

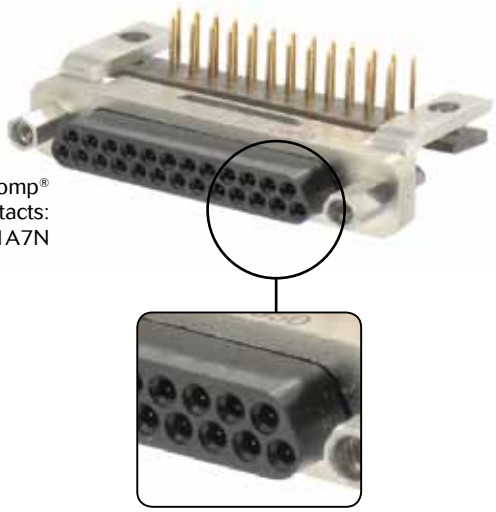
The advanced «Nickel over composite» plating process used on microComp® has been qualified on SOURIAU MIL-DTL-38999 product range (technology selected by Boeing and Airbus, provides optimized shielding and shell-to-shell continuity.



*micro*Comp® male contacts are protected

*micro*Comp® 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 *micro*Comp® male contacts are fully shrouded by the insulator: they are protected and can't be bent.





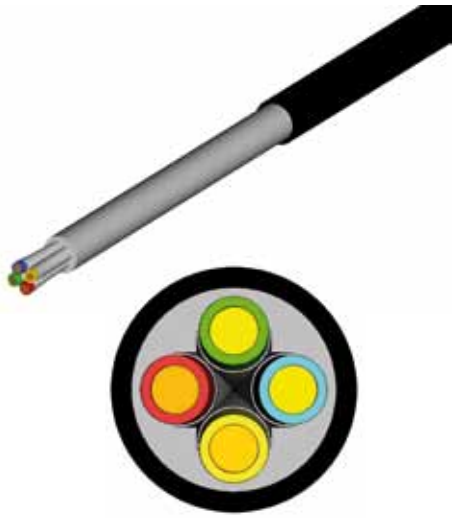
Features and benefits

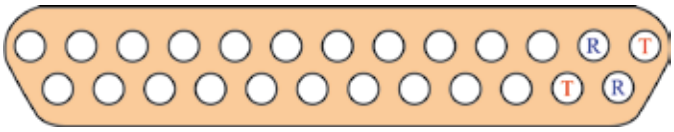
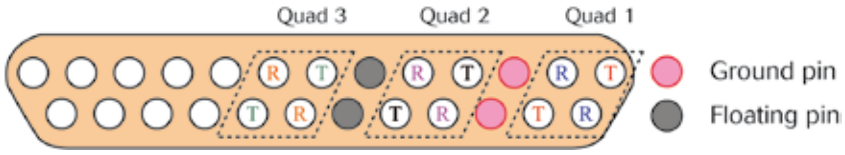
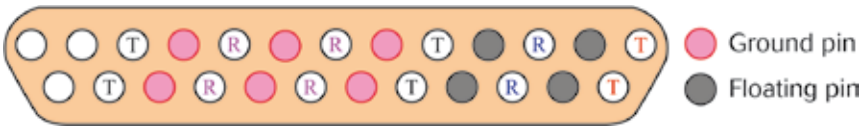
Ethernet performances

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

Fully Ethernet 100 base T compatible :
Fit up to 4 Ethernet links into a 25 ways *micro*Comp®
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 *micro*Comp®
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

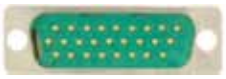
Please consult us (microcomp@souriau.com) for more information about the wiring for Ethernet links

Comparison with high density D-Sub

*micro*Comp® benefits:

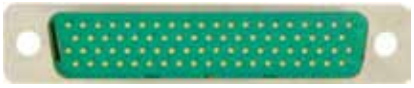
Save room and weight on your equipment: for signal applications, replace your HD D-Sub with *micro*Comp® and reduce your equipment dimensions and weight.

HD D-Sub



26 cts

44 cts



78 cts

*micro*Comp®

25 cts

51 cts

104 cts

Size comparison: *micro*Comp® is smaller

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

	*micro*Comp®	HD-DSub	*micro*Comp®	HD-DSub	*micro*Comp®	HD-DSub
Number of contacts	25	26	51	44	104	78
Front dimension (max)	2,9 cm²	5,1 cm²	4,3 cm²	6,9 cm²	7,8 cm²	12,1 cm²
Size saving / HD Dsub	-42%		-37%		-35%	
Surface per contact	11,8 mm²	19,7 mm²	8,5 mm²	15,7 mm²	7,5 mm²	11,6 mm²
Size saving per contact / HD Dsub	-40%		-46%		-35%	

Weight comparison: →*micro*Comp® is lighter

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

	*micro*Comp®	HD-DSub	*micro*Comp®	HD-DSub	*micro*Comp®	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 *micro*Comp® (%)	-64%		-66%		-65%	

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

even with more than 100 contacts.

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

	*micro*Comp®	HD-Dsub	*micro*Comp®	HD-Dsub	*micro*Comp®	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

*micro*Comp® benefits:

Save money: global cost of ownership is less expensive for *micro*Comp® 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. *micro*Comp® solution is more flexible thanks to the removable crimp contacts.

Save time in development: *micro*Comp® 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 *micro*Comp® very light and robust.

Same panel cut-out: *micro*Comp® 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 *micro*Comp® than for micro-D.

Weight comparison: →*micro*Comp® is lighTer

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

	*micro*Comp®	micro-D	*micro*Comp®	micro-D	*micro*Comp®	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 *micro*Comp® (%)	-58%		-43%		-39%	

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

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

even with more than 100 contacts.
Comparison between the max mating and unmating force given in *micro*Comp® standard (ESCC 3401/081, 082, 083) and in micro-D standard (MIL-DTL 83513).

	*micro*Comp®	micro-D	*micro*Comp®	micro-D	*micro*Comp®	micro-D	*micro*Comp®	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 83513 8 cycles/minute maximum
Insert retention in shell	34,4 N/cm² (50 psi)		MIL-DTL 83513
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/s²	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/removale
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 mesured 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 mesured 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 83513 EIA-364-20
Dielectric Withstanding Voltage (2mA leakage current max) 70,000 feet	200 VRMS	MIL-DTL 83513 IEC 60512 test 4a methB
Insulation resistance	5,000 MΩ	MIL-DTL 83513 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 solvant 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

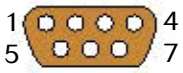
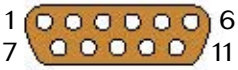
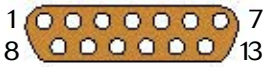
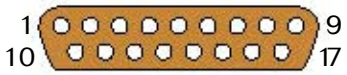
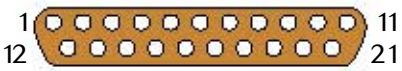
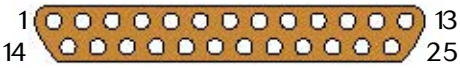
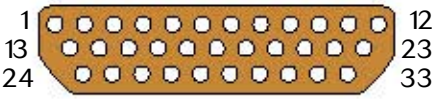
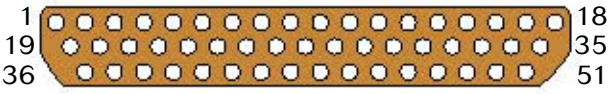
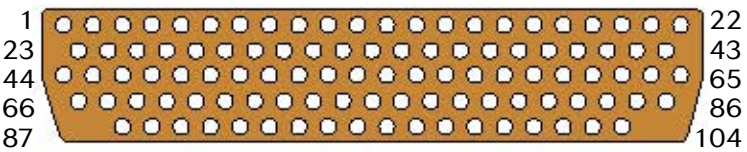
Contact max weight in g *(oz)*		
Contacts	Male	Female
Crimp contacts	0.04 *(0.0014)*	0.06 *(0.0021)*
Straight PC tails (spills) contacts	0.08 *(0.0028)*	
90° PC tails (spills) contacts for shell size A to F*	00.9 *(0.0032)*	
90° PC tails (spills) contacts for shell size G and H*	0.097 *(0.0034)*	
90° 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

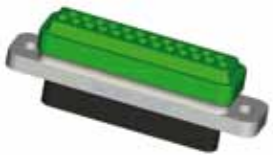
Contact layouts

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	

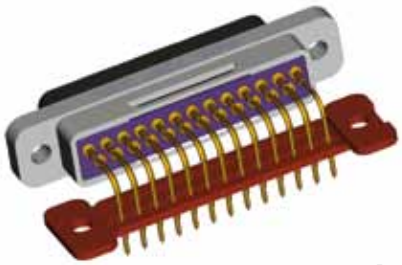
Contact size: #26
Contact pitch: 2.0 mm

*** 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 jacksposts (– P1A7N)
90° bent PCB	 Rear view	 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 *For Space Grade plating (gold) - consult our Space Grade microComp® catalog*					
Environment:	**E**: sealed version *With P1AxN termination: non standard, consult us* *With POL3 termination: non standard, consult us* **T**: sealed version, interfacial seal only *The interfacial seal is always on the female connector (-S- contact type)* **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 **male** contacts, without bracket, with removable drilled bar, 2,54 mm pitch between rows **1A7N:** 90° bent PCB **male** 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 *For Space Grade plating (gold) - consult our Space Grade microComp®» catalogue*					
Environment:	**E**: sealed version *With P011, P011B or PL termination: grommet* *With S011, S011B or SL termination: grommet + interfacial seal* **T:** sealed version, interfacial seal only *The interfacial seal is always on the female connector (-S- contact type)* **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					

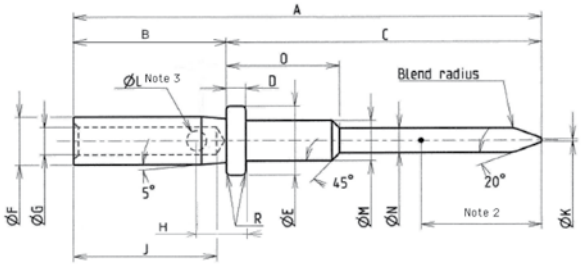
Insertion/extraction tool 8MCIET is always included with -S011, -S011B, -P011B and -P011 versions, but not with -L versions.
Termination codes -011, -011B and -L are not marked on the connector (only for order)

***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 *micro*Comp®. 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.

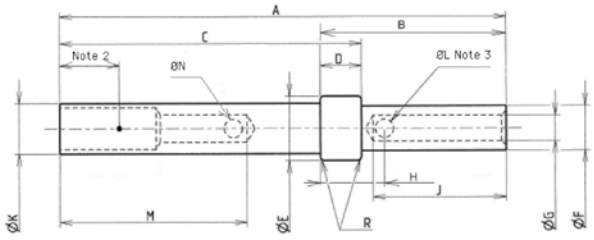
Male contact (pin):



#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)*

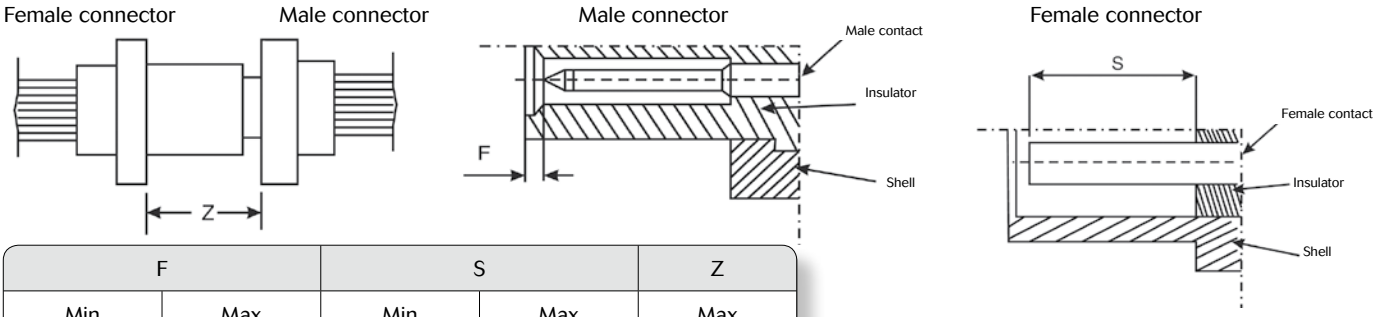
Female contact (socket):



#26 MIL grade male 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)*	1,13 *(.044)*	0,50 *(.020)*	4,20 *(.165)*	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 *micro*Comp® crimp contacts #26 is always included with crimp versions of *micro*Comp® connectors (except for delivery without contacts).

MIL-DTL 22520 crimp tool and specific locator:

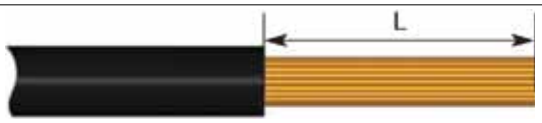
Use standard M22520/2-01 crimp tool with the following locators:

	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 strippping

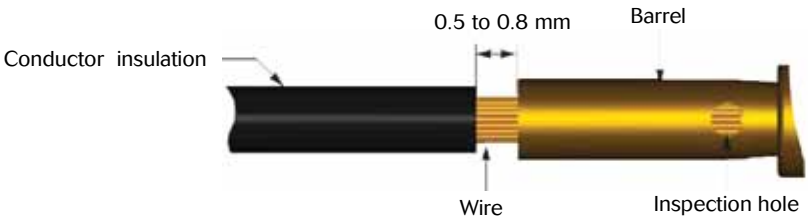
L = Length of wire stripping

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

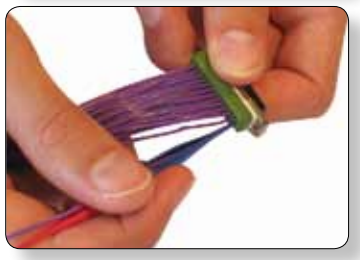
Insertion of the contacts

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.

1-

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

2-



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.

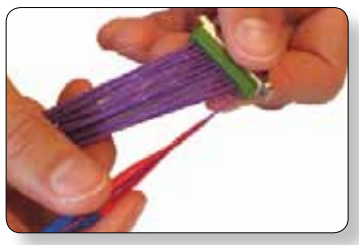
3-

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.

1-

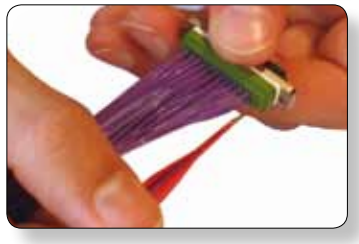


2 - Slide the tool down towards the contact. Insert the tool in the insulator until it abuts the contact shoulder.

2-

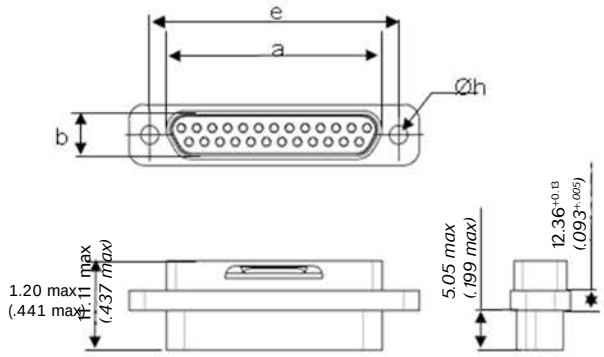
3 - Holding the tool-contact and cable assembly together, remove them simultaneously.

3-

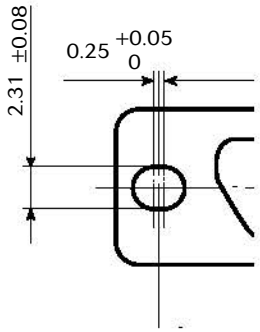


Dimensions

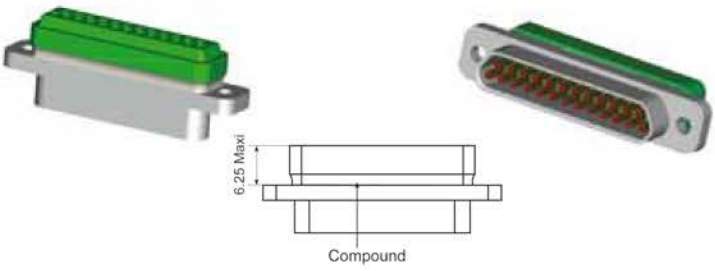
Female shell



Optional Design
Oblong Holes Shell Size H



Sealed version (grommet and interfacial seal)

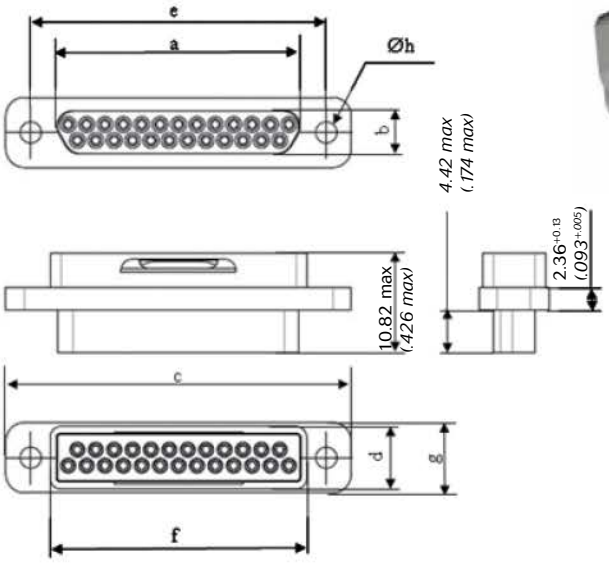


Shell Size	a	b	c		d		e		f		g	h
	Max	Max	min	Max	min	Max	min	Max	min	Max	Max	min
A	10,16 *(.400)*	6,38 *(.251)*	19,43 *(.765)*	19,94 *(.785)*	7,31 *(.288)*	7,82 *(.307)*	14,22 *(.559)*	14,48 *(.570)*	9,45 *(.372)*	10,16 *(.400)*	6,86 *(.270)*	2,26 *(.089)*
B	13,97 *(.550)*	6,38 *(.251)*	23,25 *(.915)*	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 *(1.377)*	47,40 *(1.866)*	47,65 *(1.876)*	11,25 *(.443)*	3,70 *(.146)*

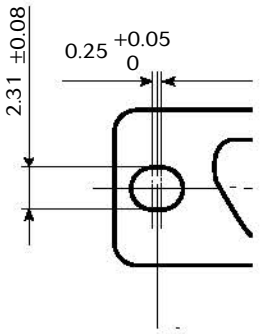
All dimensions in mm *(inches)*

Dimensions

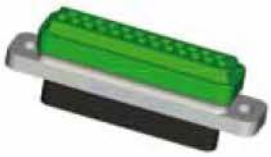
Male shell

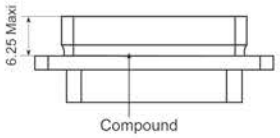


Optional Design
Oblong Holes Shell Size H



Sealed version (with grommet)



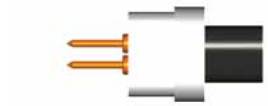


Shell size	a	b	c		d		e		f		g	h
	Max	Max	min	Max	min	Max	min	Max	min	Max	Max	min
A	8,48 *(.334)*	4,69 *(.185)*	19,43 *(.765)*	19,94 *(.785)*	7,31 *(.288)*	7,82 *(.307)*	14,22 *(.559)*	14,48 *(.570)*	9,45 *(.372)*	10,16 *(.400)*	6,86 *(.270)*	2,26 *(.089)*
B	12,29 *(.484)*	4,69 *(.185)*	23,25 *(.915)*	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 *(.992)*	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 *(1.377)*	47,40 *(1.866)*	47,65 *(1.876)*	11,25 *(.443)*	3,70 *(.146)*

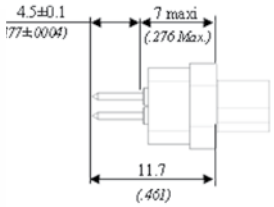
All dimensions in mm *(inches)*

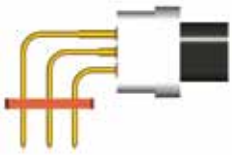
Dimensions

PCB versions – male connectors P1AON

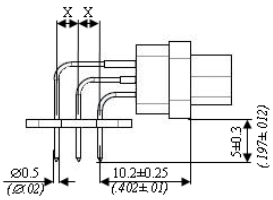


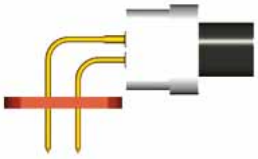
Straight - All shell sizes



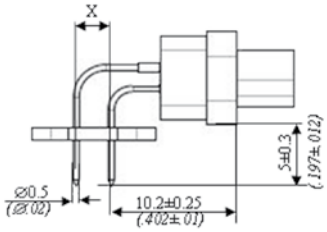


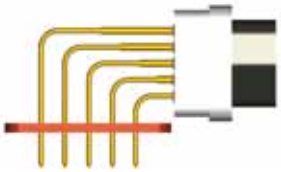
90° - Shell sizes G and H



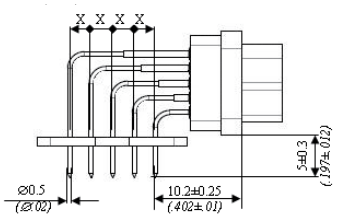


90° - shell sizes A to F





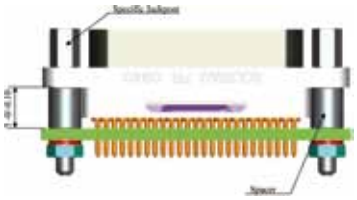
90° - Shell size J



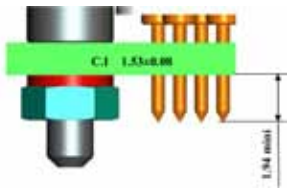
X=2.54 *(.1)*

All dimensions in mm *(inches)*

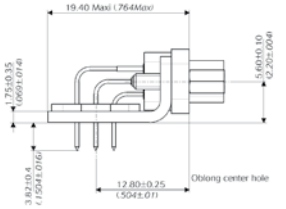
PCB versions – male connectors with mounting accessories P1A7N

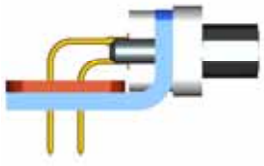


Straight - All shell sizes

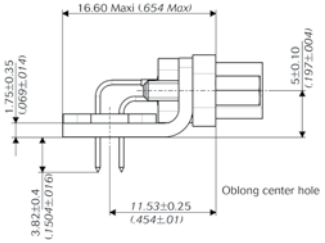


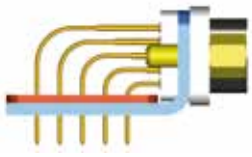
90° - Shell sizes G and H



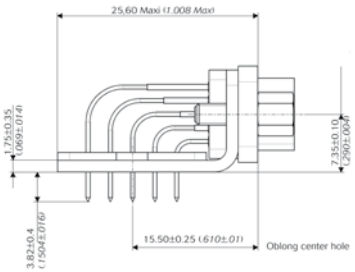


90° - shell sizes A to F





90° - Shell size J



X=2.54 *(.1)*

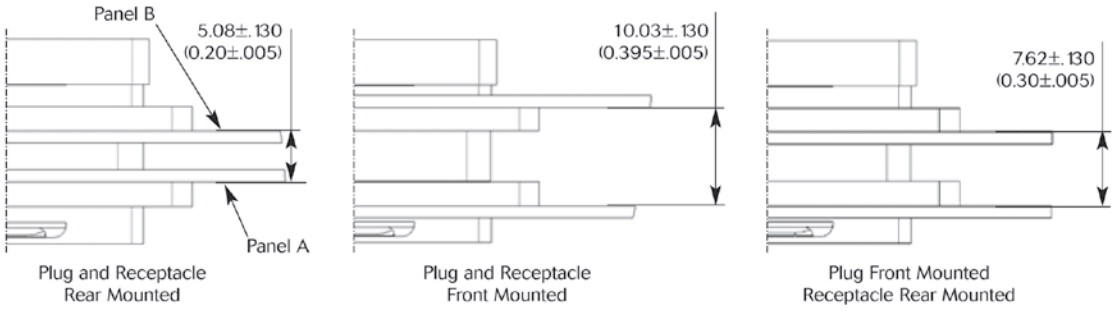
All dimensions in mm *(inches)*

Mounting operations and hardware

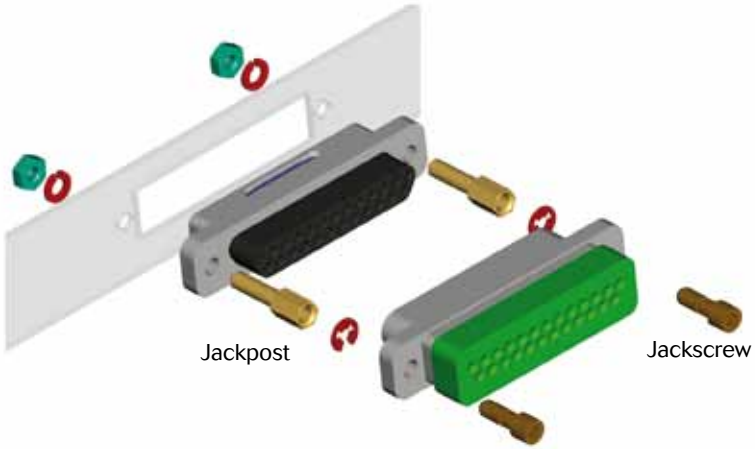
For hardware dimensions consult the mounting hardware section

Double panel mounting dimensions

Dimensions in mm *(inches)*



Option 1: Front mounting on panel



Mounting hardware for front mounting on panel:

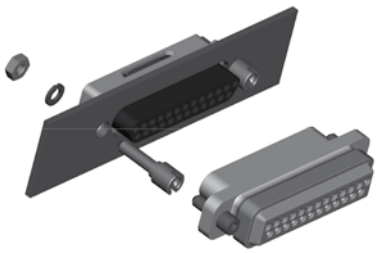
Individual packaging (one package for one mated pair)			
Type		P/N	Description
Standard Jackpost (not for rear panel mounting)	Size A-H	8MCJP507	Jackpost Kit for *micro*Comp® shell size A to H (2 jackposts + 2 washers + 2 nuts). Front panel or cable-to-cable mounting.
	Size J	8MCJP517	Jackpost Kit for *micro*Comp® 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 *micro*Comp® shell size A to H (100 jackposts + 100 washers + 100 nuts). Front panel or cable-to-cable mounting.
	Size J	8MCJP51750	Jackpost Kit for *micro*Comp® 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 *micro*Comp® shell size A to H (2 jackposts + 2 washers + 2 nuts).
		8MCJP012	1,2 mm *(.047 in)*	Jackpost Kit for *micro*Comp® shell size A to H (2 jackposts + 2 washers + 2 nuts).
		8MCJP016	1,6 mm *(.063 in)*	Jackpost Kit for *micro*Comp® shell size A to H (2 jackposts + 2 washers + 2 nuts).
		8MCJP024	2,4 mm *(.094 in)*	Jackpost Kit for *micro*Comp® shell size A to H (2 jackposts + 2 washers + 2 nuts).
		8MCJP032	3,2 mm *(.126 in)*	Jackpost Kit for *micro*Comp® shell size A to H (2 jackposts + 2 washers + 2 nuts).
	Size J	8MCJP508	0,8 mm *(.031 in)*	Jackpost Kit for *micro*Comp® shell size J (2 jackposts + 2 washers + 2 nuts).
		8MCJP512	1,2 mm *(.047 in)*	Jackpost Kit for *micro*Comp® shell size J (2 jackposts + 2 washers + 2 nuts).
		8MCJP516	1,6 mm *(.063 in)*	Jackpost Kit for *micro*Comp® shell size J (2 jackposts + 2 washers + 2 nuts).
		8MCJP524	2,4 mm *(.094 in)*	Jackpost Kit for *micro*Comp® shell size J (2 jackposts + 2 washers + 2 nuts).
		8MCJP532	3,2 mm *(.126 in)*	Jackpost Kit for *micro*Comp® shell size J (2 jackposts + 2 washers + 2 nuts).

Packaging per 50 kits (one package for 50 mated pairs)

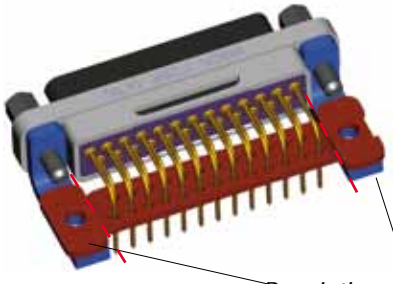
Type		P/N	Panel	Description
Jackpost for rear panel mounting	Size A-H	8MCJP00850	0,8 mm *(.031 in)*	Jackpost Kit for *micro*Comp® shell size A to H (100 jackposts + 100 washers + 100 nuts).
		8MCJP01250	1,2 mm *(.047 in)*	Jackpost Kit for *micro*Comp® shell size A to H (100 jackposts + 100 washers + 100 nuts).
		8MCJP01650	1,6 mm *(.063 in)*	Jackpost Kit for *micro*Comp® shell size A to H (100 jackposts + 100 washers + 100 nuts).
		8MCJP02450	2,4 mm *(.094 in)*	Jackpost Kit for *micro*Comp® shell size A to H (100 jackposts + 100 washers + 100 nuts).
		8MCJP03250	3,2 mm *(.126 in)*	Jackpost Kit for *micro*Comp® shell size A to H (100 jackposts + 100 washers + 100 nuts).
	Size J	8MCJP50850	0,8 mm *(.031 in)*	Jackpost Kit for *micro*Comp® shell size J (100 jackposts + 100 washers + 100 nuts).
		8MCJP51250	1,2 mm *(.047 in)*	Jackpost Kit for *micro*Comp® shell size J (100 jackposts + 100 washers + 100 nuts).
		8MCJP51650	1,6 mm *(.063 in)*	Jackpost Kit for *micro*Comp® shell size J (100 jackposts + 100 washers + 100 nuts).
		8MCJP52450	2,4 mm *(.094 in)*	Jackpost Kit for *micro*Comp® shell size J (100 jackposts + 100 washers + 100 nuts).
		8MCJP53250	*3,2 mm (.126 in)*	Jackpost Kit for *micro*Comp® shell size J (100 jackposts + 100 washers + 100 nuts).

Mounting operations and hardware

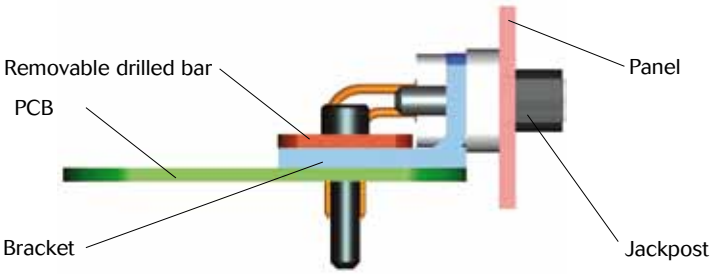
Option 3: Mounting on PCB with 90° bent contacts

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

Optional: break the sides of the plastic drilled bar and remove all parts of the bar



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



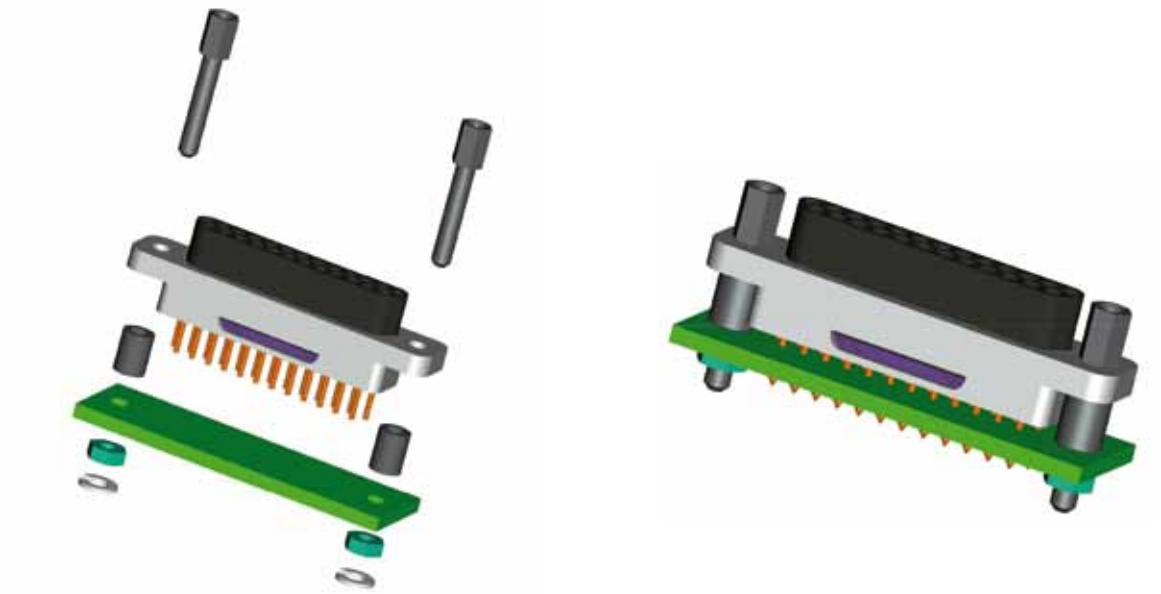
Mounting hardware for mounting on PCB with 90° bent contacts

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 *micro*Comp® shell size A to H (2 jackposts + 2 washers + 2 nuts). Front panel or cable-to-cable mounting.
	Size J	8MCJP517	Jackpost Kit for *micro*Comp® 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 *micro*Comp® shell size A to H (100 jackposts + 100 washers + 100 nuts). Front panel or cable-to-cable mounting.
	Size J	8MCJP51750	Jackpost Kit for *micro*Comp® 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



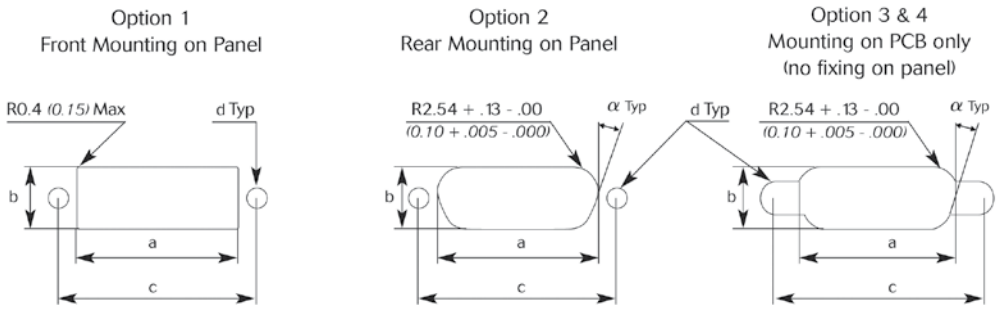
Mounting hardware for mounting on PCB with straight PCB contacts

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 *micro*Comp® 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 *micro*Comp® 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



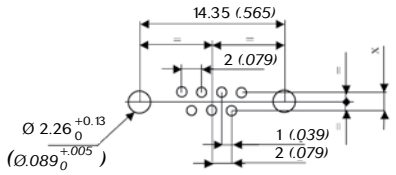
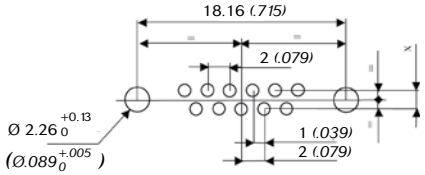
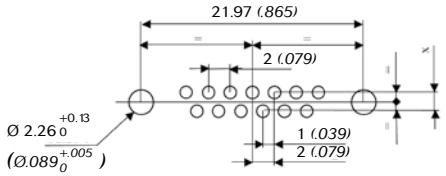
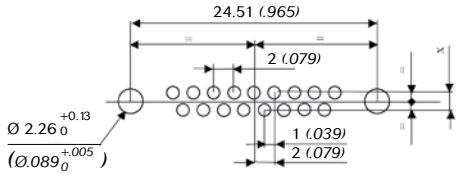
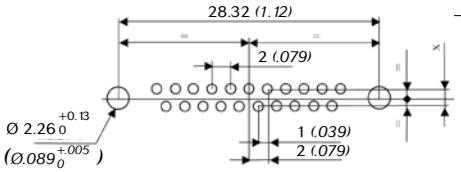
Note : Shell size A to H: α = 27°/26° - Shell size J: α = 0°

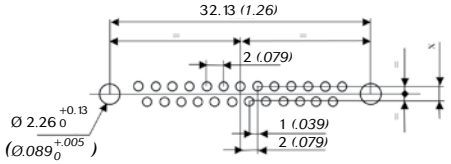
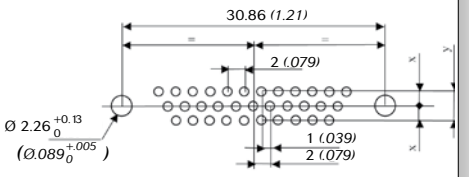
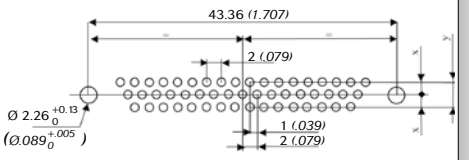
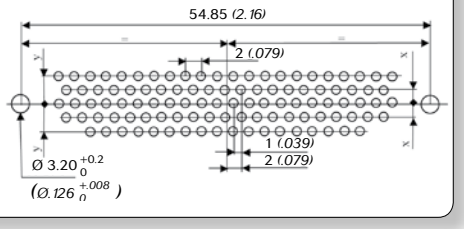
		Cut-out dimensions in mm *(inch)*			
Shell size	**Mounting option**	**a** **+0.1** *(+.004)* **-0.0** *(.000)*	**b** **+0.1** *(+.004)* **-0.0** *(.000)*	**c** **+0.1** *(+.004)* **-0.1** *(-.004)*	**d** **+0.1** *(+.004)* **-0.0** *(.000)*
A	1	10.36 *(.408)*	7.00 *(.276)*	14.35 *(.565)*	2.26 *(.089)*
	2	10.36 *(.408)*	6.50 *(.256)*	14.35 *(.565)*	3.20 *(.126)*
	3 & 4	10.36 *(.408)*	6.50 *(.256)*	14.35 *(.565)*	3.90 *(.154)*
B	1	14.17 *(.558)*	7.00 *(.276)*	18.16 *(.715)*	2.26 *(.089)*
	2	14.17 *(.558)*	6.50 *(.256)*	18.16 *(.715)*	3.20 *(.126)*
	3 & 4	14.17 *(.558)*	6.50 *(.256)*	18.16 *(.715)*	3.90 *(.154)*
C	1	17.98 *(.708)*	7.00 *(.276)*	21.97 *(.865)*	2.26 *(.089)*
	2	17.98 *(.708)*	6.50 *(.256)*	21.97 *(.865)*	3.20 *(.126)*
	3 & 4	17.98 *(.708)*	6.50 *(.256)*	21.97 *(.865)*	3.90 *(.154)*
D	1	20.52 *(.808)*	7.00 *(.276)*	24.51 *(.965)*	2.26 *(.089)*
	2	20.52 *(.808)*	6.50 *(.256)*	24.51 *(.965)*	3.20 *(.126)*
	3 & 4	20.52 *(.808)*	6.50 *(.256)*	24.51 *(.965)*	3.90 *(.154)*
E	1	24.33 *(.958)*	7.00 *(.276)*	28.32 *(1.115)*	2.26 *(.089)*
	2	24.33 *(.958)*	6.50 *(.256)*	28.32 *(1.115)*	3.20 *(.126)*
	3 & 4	24.33 *(.958)*	6.50 *(.256)*	28.32 *(1.115)*	3.90 *(.154)*
F	1	28.14 *(1.108)*	7.00 *(.276)*	32.13 *(1.265)*	2.26 *(.089)*
	2	28.14 *(1.108)*	6.50 *(.256)*	32.13 *(1.265)*	3.20 *(.126)*
	3 & 4	28.14 *(1.108)*	6.50 *(.256)*	32.13 *(1.265)*	3.90 *(.154)*
G	1	26.87 *(1.058)*	8.15 *(.321)*	30.86 *(1.215)*	2.26 *(.089)*
	2	26.87 *(1.058)*	7.62 *(.300)*	30.86 *(1.215)*	3.20 *(.126)*
	3 & 4	26.87 *(1.058)*	7.62 *(.300*	30.86 *(1.215)*	3.90 *(.154)*
H	1	39.05 *(1.537)*	8.15 *(.321)*	43.36 *(1.707)*	2.26 *(.089)*
	2	38.85 *(1.530)*	7.62 *(.300)*	43.36 *(1.707)*	3.20 *(.126)*
	3 & 4	38.85 *(1.530)*	7.62 *(.300)*	43.36 *(1.707))*	3.90 *(.154)*
J	1	48.05 *(1.892)*	11.40 *(.449)*	54.85 *(2.159)*	3.20 *(.126)*
	2	47.00 *(1.851)*	11.20 *(.441)*	54.85 *(2.159)*	3.70 *(.146)*
	3 & 4	47.00 *(1.851)*	11.20 *(.441)*	54.85 *(2.159)*	5.70 *(.224)*

All dimensions in mm *(inches)*

Mounting operations and hardware

PCB drilling

Shell size	Number of contacts	Drilling dimensions
A	7	
B	11	
C	13	
D	17	
E	21	

Shell size	Number of contacts	Drilling dimensions
F	25	
G	33	
H	51	
J	104	

All dimensions in mm *(inches)*

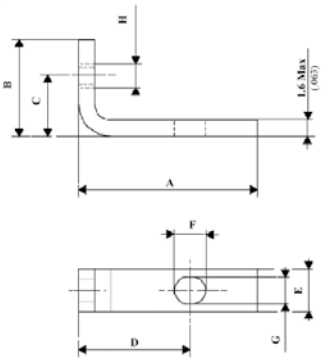
	X	y
OL3	1.732 *(.068)*	3.464 *(.136)*
1AON	2.540 *(.1)*	5.08 *(.2)*

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

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

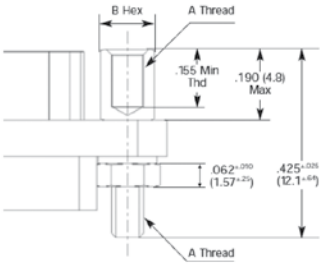


Shell size	A to H		J	
Torque value	Min (Nm)	Max (Nm)	Min (Nm)	Max (Nm)
	0.44	0.48	0.6	0.66

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±.004)*	9.17 ±0.10 *(.361 ±.004)*	4.0 ±0.10 *(.158 ±.004)*	3.15 *(.124)*	2.44 ±0.10 *(.096 ±.004)*	#20-56 UNC-2B
G and H	8MCBKGH	8MCBKGH50	16.90 *(.665)*	9.10 *(.359)*	5.6±0.10 *(.220 ±.004)*	10.44±0.10 *(.411 ±.004)*	4.0±0.10 *(.158 ±.004)*	3.15 *(.124)*	2.44 ±0.10 *(.096 ±.004)*	#20-56 UNC-2B
J	8MCBKJ	8MCBKJ50	23.10 *(.909)*	13.10 *(.515)*	7.35±0.10 *(.290 ±.004)*	13.13±0.10 *(.516 ±.004)*	6.50±0.10 *(.256 ±.004)*	4.20 *(.165)*	3.15 ±0.15 *(.124 ±.006)*	#20-56 UNC-2B

All dimensions in mm *(inches)*

Standard Jackpost

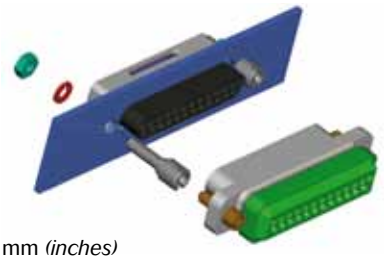


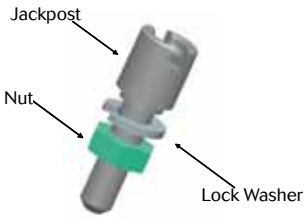
Shell size	A to H		J	
Torque Values	Min (Nm)	Max (Nm)	Min (Nm)	Max (Nm)
Jackpost male side	0.11	0.13	0.6	0.66
Jackpost female side	0.28	0.32	0.4	0.44
Nut	0.44	0.48	0.6	0.66

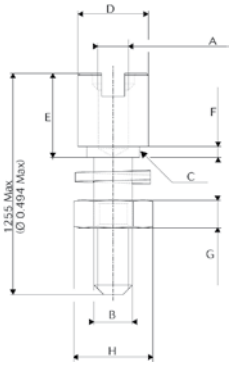
For shell size	A to H	J
A thread size	#2-56 UNC	#4-40 UNC
B hex size in mm *(inch)*	3,18 *(.125)*	4,75 *(.187)*
Lock washer	NASM35338-134	NASM35338-135
Material & Finish	303 stainless steel, passivated per QQ-P-35	
P/N for Individual packaging (one package for one mated pair: 2 posts, 2 washers and 2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







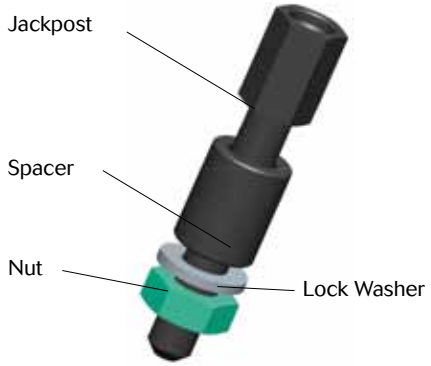
All dimensions in mm *(inches)*

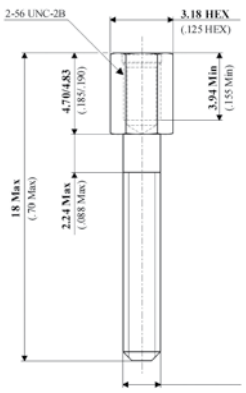
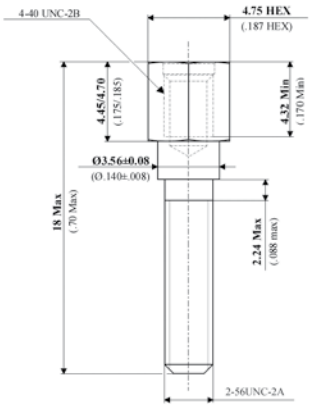
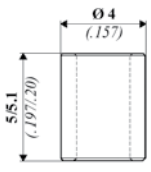
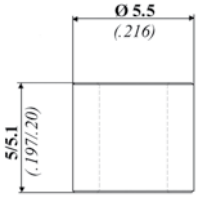
For shell size A to H					
Panel thickness	0,8 mm *(.031 in)*	1,2 mm *(.047 in)*	1,6 mm *(.063 in)*	2,4 mm *(.094 in)*	3,2 mm *(.126 in)*
A thread size	#2-56 UNC-2B				
B thread size	#2-56 UNC-2A				
C max	Ø 3,0 *(.118)*				
D max	Ø 4,1 *(.161)*				
E	4,70/4,83 *(.185/.190)*				
F max	0,615 *(.002)*	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 *(.002)*	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

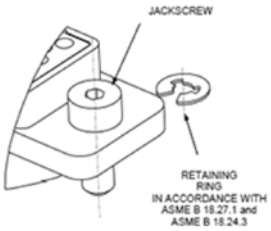
Jackposts for PCB mounting (straight spills/PC tails):

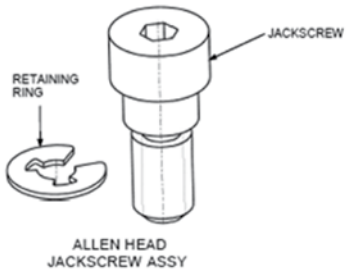


For shell size	A to H	J
A thread size	#2-56 UNC	#4-40 UNC
B hex size in mm (inch)	3,18 *(.125)*	4,75 *(.187)*
Lock washer	NASM35338-134	NASM35338-135
Material & Finish	303 stainless steel, passivated per QQ-P-35	
P/N for Individual packaging (one package for one mated pair: 2 posts, 2 washers and 2 nuts)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

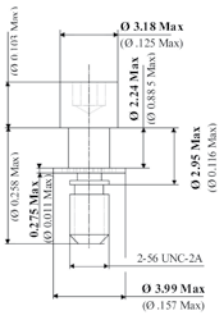
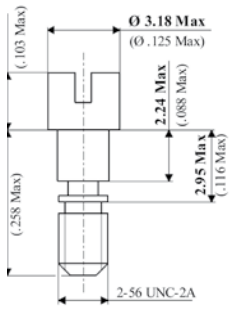
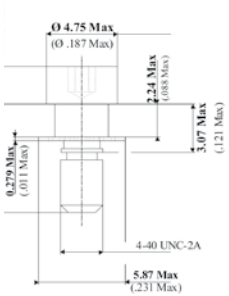
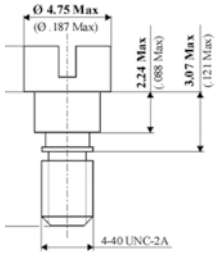
Mounting hardware

Standard Jackscrews





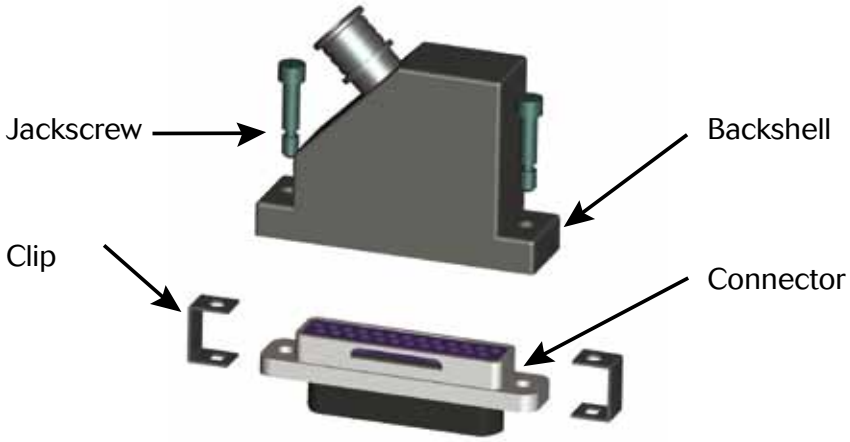
Torque Values	Min (Nm)	Max (Nm)
Screw	0.40	0.44

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

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 *micro*Comp® 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 mm² *(inch²)*
			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)*

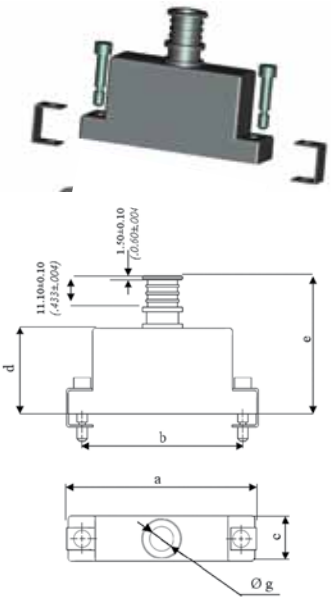
EMI Backshells

Straight backshell

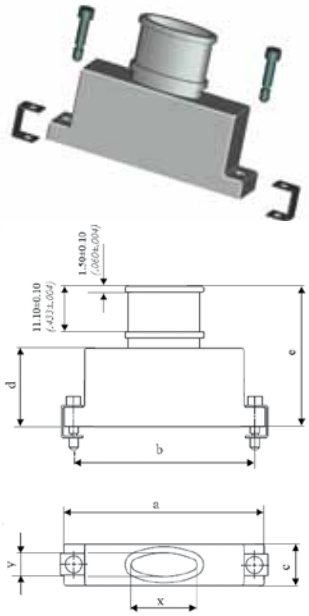
Straight backshell	**8MCBS**	**F**		**001**	**03**	**N**
Shell size:	**A - B - C - D - E - F - G - H - J**					
Environment:	**None:** for connector without grommet					
Straight version:	001					
Cable entry type:	see «Cable entry size» table					
Finish:	**N:** electroless Nickel					
Mounting hardware:	**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.	26.50 (1.043)	28.50 (1.122)	30.50 (1.200	32.50 (1.279)	33.50 (1.319)	34.50 (1.358)	35.50 (1.398)	37.30 (1.468)	37.30 (1.468)

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)*

All dimensions in mm *(inches)*

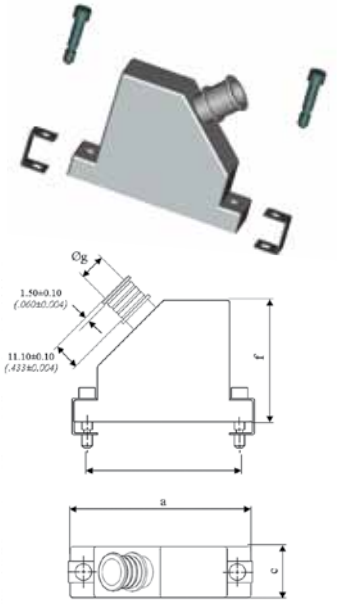
EMI Backshells

45° backshell

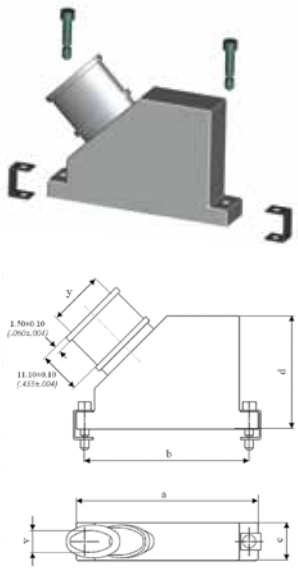
Straight backshell	**8MCBS**	**F**		**101**	**03**	**N**
Shell size:	**A - B - C - D - E - F - G - H - J**					
Environment:	**None:** for connector without grommet					
Straight version:	101					
Cable entry type:	see «Cable entry size» table					
Finish:	**N:** electroless Nickel					
Mounting hardware: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

All dimensions in mm *(inches)*

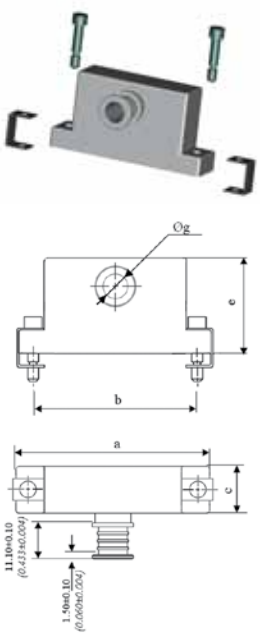
EMI Backshells

90° backshell

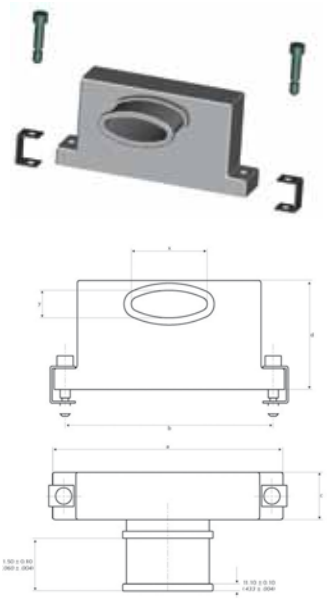
Straight backshell	**8MCBS**	**F**		**201**	**03**	**N**
Shell size:	**A - B - C - D - E - F - G - H - J**					
Environment:	**None:** for connector without grommet					
Straight version:	201					
Cable entry type:	see «Cable entry size» table					
Finish:	**N:** electroless Nickel					
Mounting hardware: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

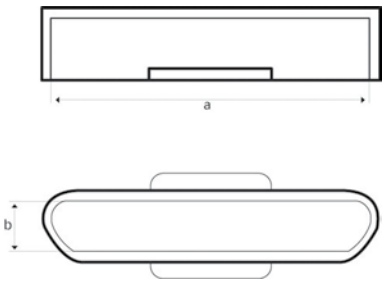
Max weight in g (oz)	5,13 *(0.18)*	6,20 *(0.22)*	7,31 *(0.26)*	8,44 *(0.30)*	9,25 *(0.33)*	10,44 *(0.38)*	11,44 *(0.40)*	12,00 *(0.42)*	19.00 *(0.67)*

All dimensions in mm *(inches)*

Dust Caps

Molded plastic dust caps

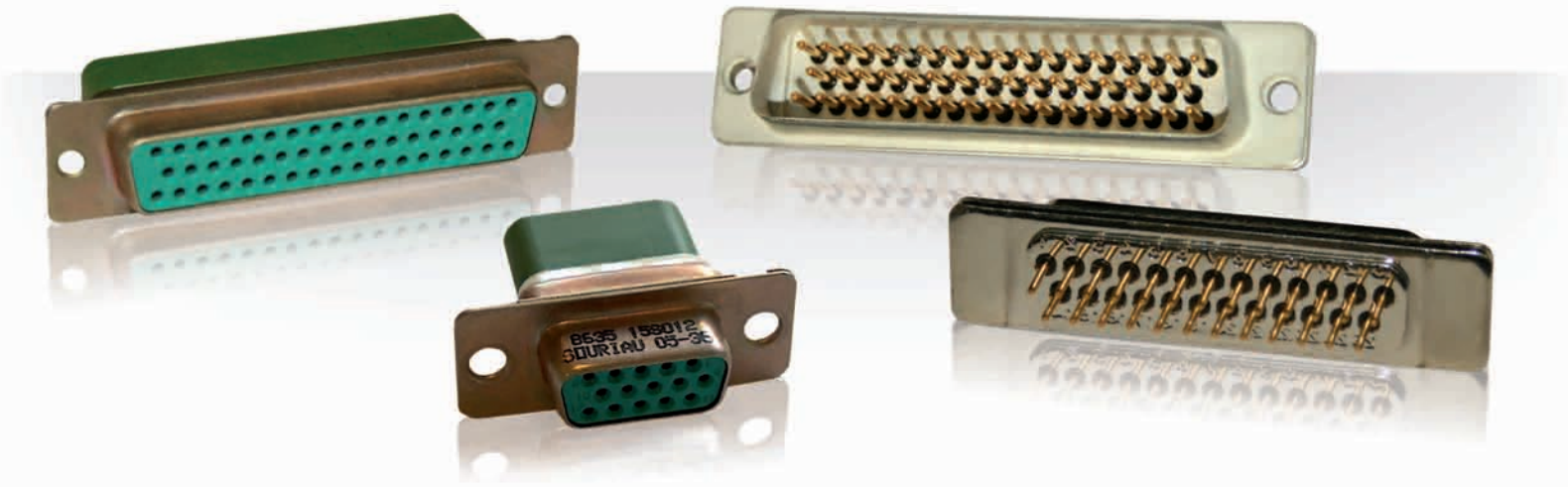
- Anti-static dust caps in rugged plastic material that resists cracking
- Material : Polypropylene
- Color : black.



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



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 fonction in all applications where weight and dimension are very important.

• They are especially used as Input/Output connectors in interface fonctions. So, they are subjects to mechanical constraints that are sometimes severes.

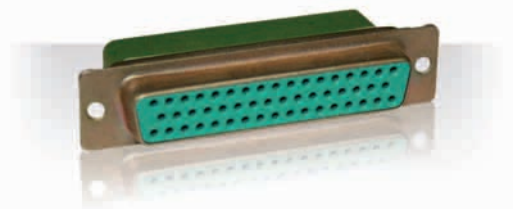
• In order to prevent risks (pulling up, accidental unmating...), a large range of accessories is supplied.

Contents

D-Sub Mark III standard ranges

8630 Series HE 501

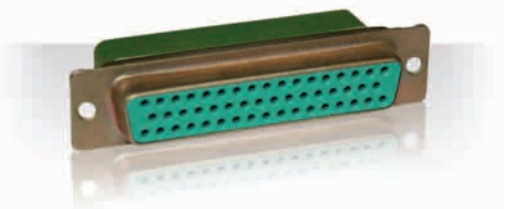
See page 12



- Up to 125 °C
- Crimped contact #20

8630 Series HE 508

See page 14



- Up to 155 °C
- Crimped contact #20

SMA MIL-C Series

See page 16

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

8635 Series

See page 19

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

Hermetic Series

See page 21

- Solder buckets and eyelets
- Straight spills & Crimped contact #20
- Hermeticity level: 10^{-7} atm.cm^3/s
- Individual glass bead

Technical characteristics

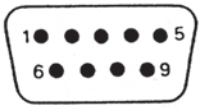
Characteristics \ Series		8630 HE501	8630 HE508	SMA MIL	8635 High Density	Hermetic
		Crimp version	Crimp version	Crimp version	Crimp or PCB version	Solder or PCB vesrsion
Environmental	Temperature	-55°C to +125°C	-55°C to +155°C	-55°C to +125°C	-55°C to +155°C	-55°C to +125°C
	Salt spray	48h (cadmium) 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 ≤ $1.04x10^{-5}$ $Atm.cm^3/s$
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 MΩ	≥ 5000 MΩ	≥ 5000 MΩ	≥ 5000 MΩ	≥ 5000 MΩ
	Contact resistance	≤ 7.3 mΩ	≤ 7.3 mΩ	≤ 7.3 mΩ	≤ 7.3 mΩ	≤ 14 mΩ
Mechanical & Dimentional	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.

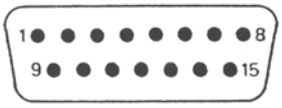
Standard connectors: 8630/1 (HE501/HE508), SMA and Hermetic

E



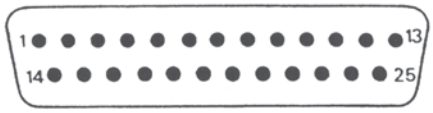
9 contacts

A



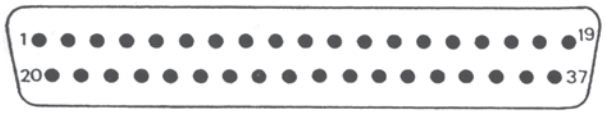
15 contacts

B



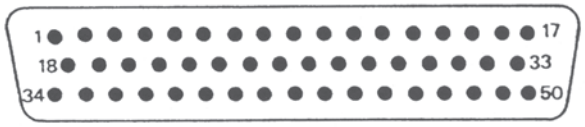
25 contacts

C



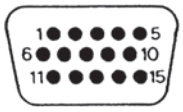
37 contacts

D

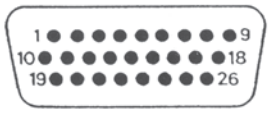


50 contacts

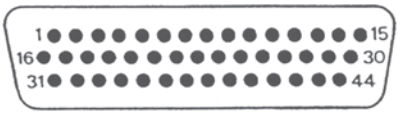
High density connectors: 8635



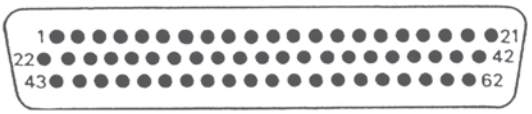
15 contacts



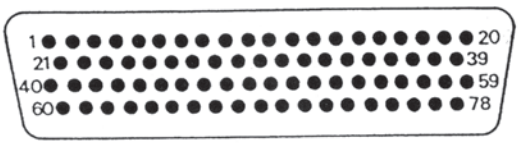
26 contacts



44 contacts



62 contacts



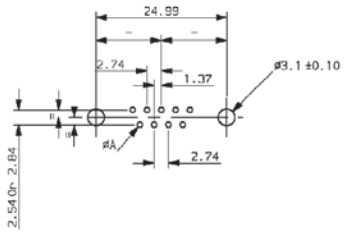
78 contacts

PCB drilling dimensions (mm) for solder version

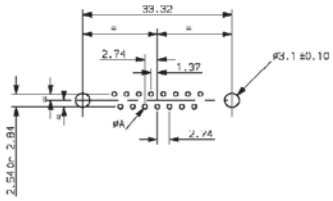
Standard connectors: 8630/1 (HE501/HE508), SMA and Hermetic

Note: ØA=0.9mm for HE501, HE508 and MIL C.

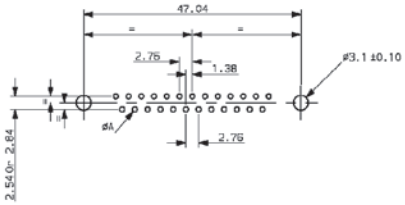
9 contacts



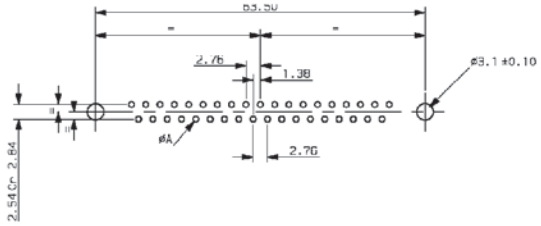
15 contacts



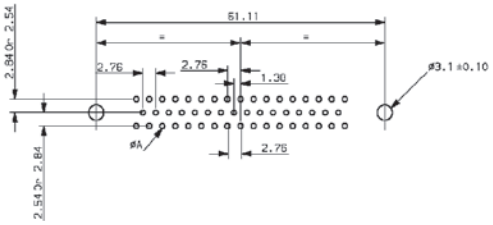
25 contacts



37 contacts

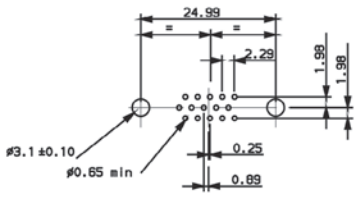


50 contacts

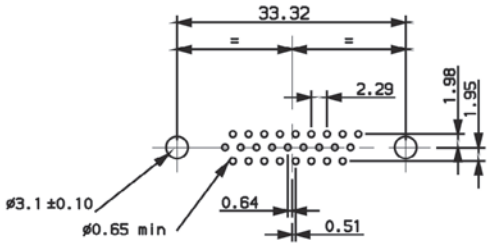


High density connectors: 8635

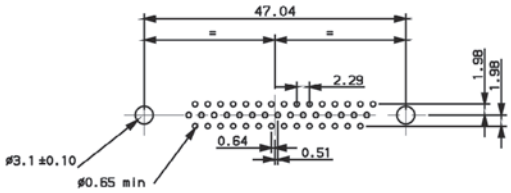
15 contacts



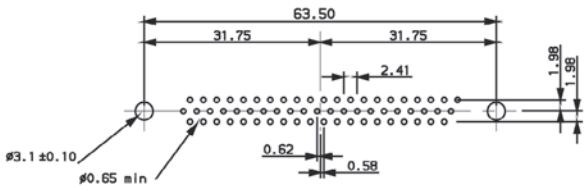
26 contacts



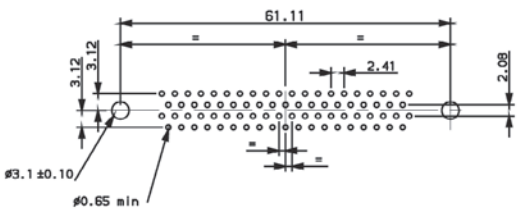
44 contacts



62 contacts



78 contacts



8630 Series HE501

Connector accomodating 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)

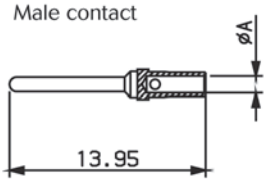
Shell plating
None: Cadmium
T: Tin
Z: Zinc

Front type
None: Standard
X: With indents (only for front of male connector)

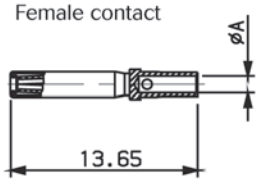
8630 Series HE501

Removable crimp contact ordering information

Male contact



Female contact



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	8630 ** P
		Socket	HE501 N ** BS	8630 ** S
	Float mounting	Pin	HE501 F ** BP	8631 ** P
		Socket	HE501 F ** BS	8631 ** S

8630 Series HE508

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

For heavy duty applications
Class -55°C to +125°C
Standard shell plating: Cadmium
Other platings: Tin & Zinc
Special proof version

Ordering information

Basic Series	863	0	25	P	012	L	N		

Option
0: Standard mounting holes (Ø=3.10)
1: Float mounting

Number of contacts
09, 15, 25, 37, 50

Contact type
P: Pin
S: Socket

Specification
None: Standard
012: Splash proof
015: Dust proof

Contacts
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
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)

8630 Series HE508

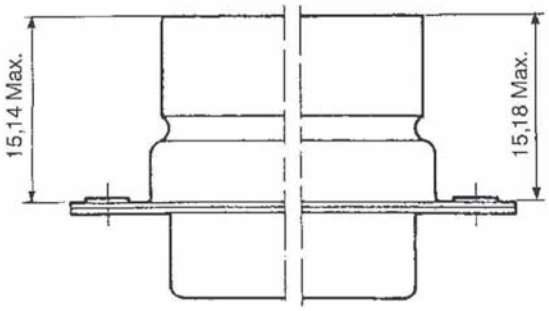
Cross reference list for qualified part number HE508 & SOURIAU

Example:
HE508 N 25 BP = 8630 25 PN

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

Special proof versions (available in HE508 Series only)

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



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

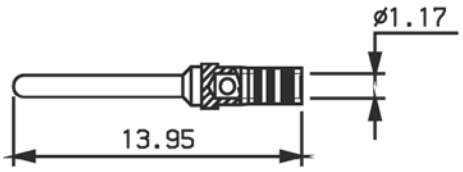
Basic Series	S	B	MA		25	P	L	N
Shell size **E, A, B, C, D**								
S-MA Series **MA:** Mandatory								
Option **None:** Standard **F:** Float mounting								
Number of contacts **09, 15, 25, 37, 50**								
Type **P:** Pin **S:** Socket								
Contact **None:** With MIL contacts **L:** Without MIL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

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

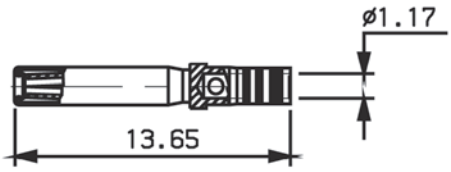
SMA MIL-C Series

Crimp contact for AWG 20/24 wire

Male contact



Female contact



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

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	SAMA 15PN	M24308/2-2F	SAMA 15SN
	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	SAMA 15PLN	M24308/2-282F	SAMA 15SLN
	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	SAMAF 15PN	M24308/2-343F	SAMAF 15SN
	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	SEMAF09SLN
			M24308/2-483F	SAMAF 15SLN
			M24308/2-484F	SBMAF25SLN
			M24308/2-485F	SCMAF37SLN
			M24308/2-486F	SDMAF50SLN

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

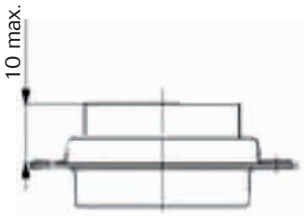
Basic Series	8635		44	P	012	L			
Option **None:** Standard mounting holes (Ø=3.10) **F:** Float mounting **L:** Clinch nut M3 **O:** Clinch nut UMC 4.40 **V:** Female screw lock UNC 4.40									
Number of contacts **15, 26, 44, 62, 78**									
Contact type **P:** Pin **S:** Socket									
Specification **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.

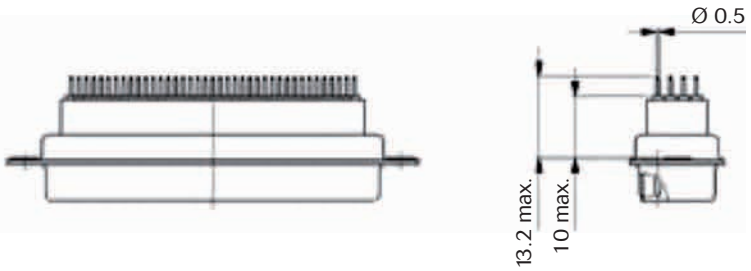
8635 Series

Dimensions

Standard version
(crimp contacts)



Straight spill version
(spec 017)



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	Standard
#22D	Pin	8476-01	M22520/2-01	8476-09	M22520/2-09	M81969 14-01
	Socket			8476-06	M22520/2-06	

D-Sub hermetic connectors

D-Sub hermetic connector

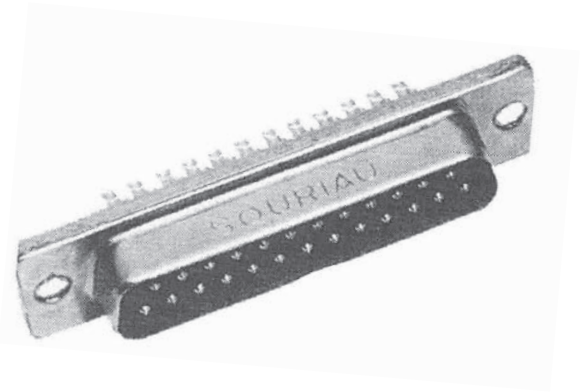
Hermetic rectangular connectors are manufactured with glass bead insulator.

They are used in all applications requiring perfect hermeticity.

Shell housing may be solder or screw mounted.

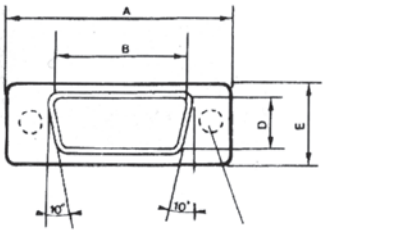
3 types of contacts terminations are available: Solder bucket, Solder eyelet or Straight spill.

They are compliant to MIL C 24308 C.

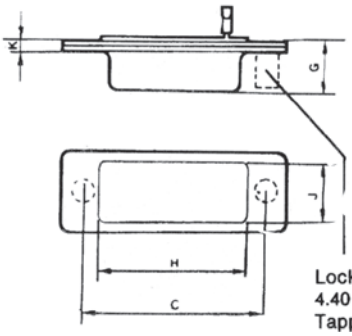


Dimensions (mm)

Shell size	A 0/+0.30	B	C Screw mounting	D	E 0/+0.30	G max	H +/-0.20	J +/-0.20	K +0.10 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			8.75	53.97		
D	66.92	52.86	61.11	11.10	15.36		50.80	12.70	2.70

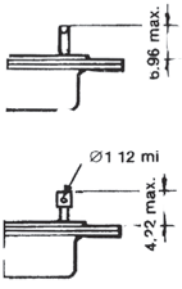


Hole Ø3.20 $^{0.10}_{0.05}$
for screw mounting

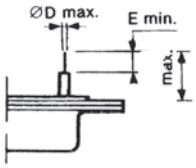


Locking stud
4.40 UNC 2B
Tapped hole

Solder bucket



Straight spills



MIL-C 24308 D-Sub hermetic connectors part numbers & specifications

RoHS connectors: only gold & nickel-plated connectors are RoHS under MIL-C 24308.
SOURIAU can provide you with tin-plated RoHS connectors under manufacturer part numbers. Please consult us.

Shell size	Plating		Solder mounting				Screw mounting		
			Without locking stub		With locking stub				
	Shell	Cts	Solder bucket	Straight spill	Solder bucket	Straight spill	Solder bucket	Straight spill	Eyelet
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

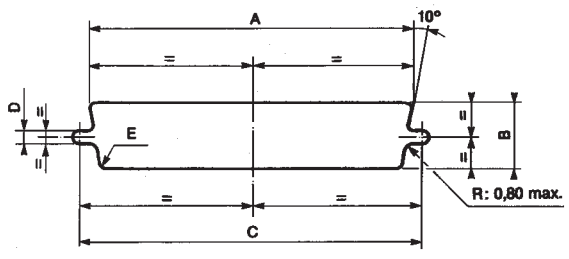
N° specification	004	008	009	010	011 A	012	014	015	016
L max	7.62				3.40	5.25	3.83	9.60	7.62
E min	6.40				2.00	4.02	2.13	8.43	6.40
ø D max	0.83				0.60	0.68	0.63	0.83	0.83

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		

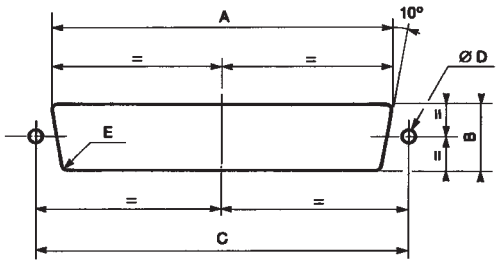
Panel cut-out

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	-	-

Cut-out front panel mounting
(screw mounting)

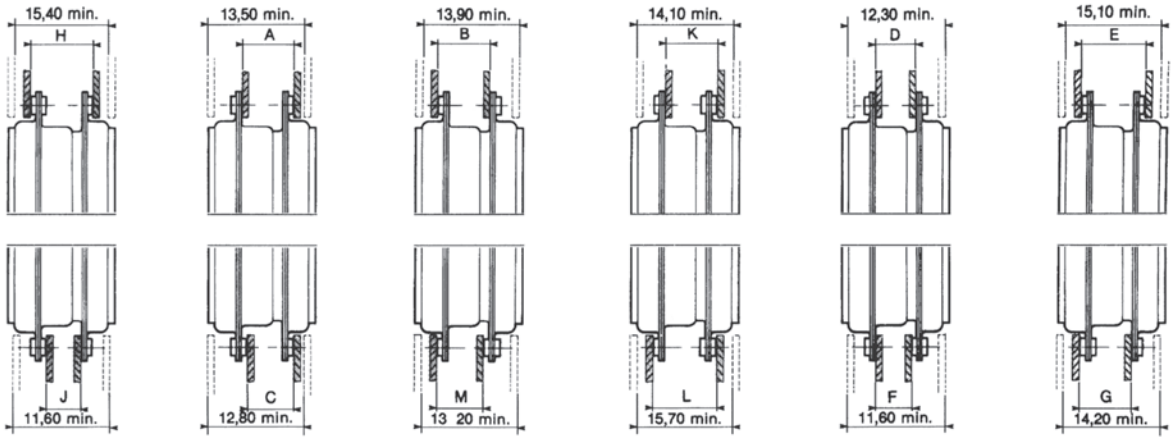


Cut-out rear panel mounting
(screw mounting)



Panel mounting

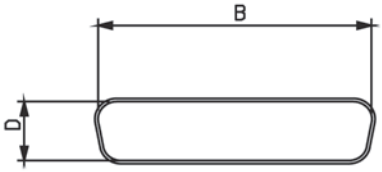
It is recommanded that only one pair of connectors should be float mounted.
Rigid mounted connectors require 2 screws Ø3mm.
Float mounting connectors require Ø2mm.

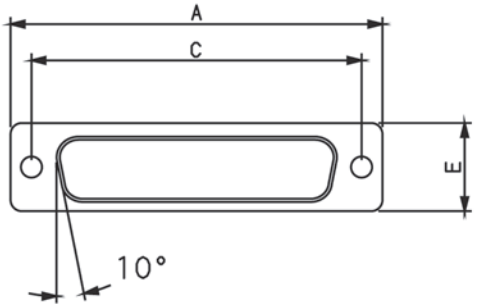


Shell size	A 0/+0.6	B 0/+0.6	C 0/+0.6	D 0/+0.6	E 0/+0.6	F 0/+0.6	G 0/+0.6	H 0/+0.6	J 0/+0.6	K 0/+0.6	L 0/+0.6	M 0/+0.6
E	7.65	7.65	6.85	6.45	8.85	5.65	8.25	9.45	5.65	8.25	9.45	6.85
A												
B	7.55	7.55	6.75	6.35		5.55	8.15	9.35	5.55	8.15	9.35	6.75
C					9.15		8.35				9.75	7.15
D												

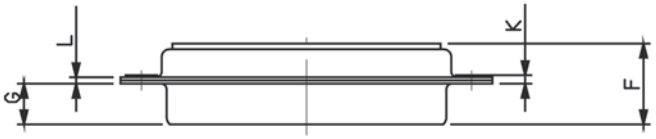
Shell dimensions

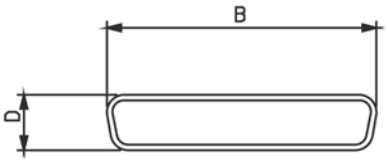
Inner dimension
male connector



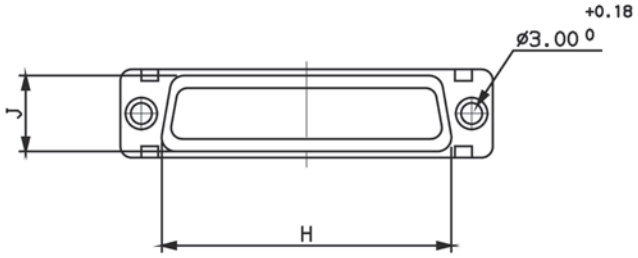


View of
mating faces





Outer view
female connector

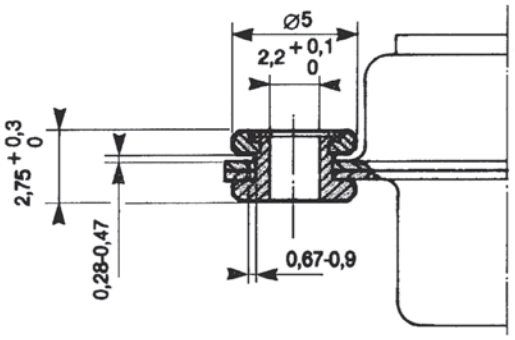


Shell size	Contact type	A +/-0.38	B +/-0.13	C +/-0.13	D +/-0.13	E +/-0.38	F Max	G +/-0.25	H +/-0.25	J +/-0.25	K Max	L +/-0.12
E	Pin	30.81	16.91	24.99	8.35	12.55	10.99	5.85	19.27	10.71	1.50	0.90
	Socket		16.33		7.89		11.21	6.05				
A	Pin	39.14	25.24	33.32	8.35		10.99	5.85	27.50			
	Socket		24.66		7.89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

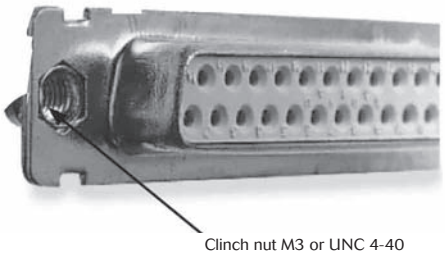
Mounting options

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