



Applications

Satellite
Launcher
Space station
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Probe

Standards

D*M-NMB



Standard density D-Sub, Non Removable Contacts (Space Grade)

D*M-NMB non-magnetic connectors use the same components as the 3401/001 ESA/SCC and S311-P-10 GSFC connectors. However they are manufactured in accordance full ESA or NASA, MIL-DTL-24308. Consequently no traceability information can be delivered for these items. They are available with solder buckets, straight spills, 90° spills, wire wrap contacts and mixed layouts with coaxial and power contacts. This version is suitable for Engineering Models as well as Flight Models.

Part Number / Ordering information

Series : D*M (contact # 20)	D	B	M	F	25	P	511	U	NMB	***
Shell Size										
E = 9 cts ; A = 15 cts ; B = 25 cts ; C = 37 cts ; D = 50 cts										
Mounting										
Nothing : standard mount										
F : float mount										
O : UNC 4-40 clinch nut										
L : M3 clinch nut										
Contact Layout Code										
(see below 11)										
Contact Type										
P : Pin (male)										
S : Socket (female)										
Contact Termination Code										
(see page 21)										
Nothing : delivered without bracket but with bar										
U : delivered with bracket & bar, but without clinch nut (*)										
Residual Magnetism and Shell Plating										
NMB : ≤ 200 gamma maximum residual magnetism : shell plated 1.27 micron gold mini over copper (conform to GSFC)										
Special Modification										

(*) **Note** : Code U only used for the 5**, 8** & 7** series.

Contact layouts

Contact layouts are indicated by the codes specified hereafter :

Shell size	Code	Nb cts # 20	Nb cts # 8
E	09	9	0
	5W1	4	1
A	15	15	0
	3W3	0	3
	3WK3	0	3
	7W2	5	2
	11W1	10	1
B	25	25	0
	5W5	0	5
	9W4	5	4
	13W3	10	3
	17W2	15	2

Shell size	Code	Nb cts # 20	Nb cts # 8
C	37	37	0
	8W8	0	8
	17W5	12	5
	21WA4	17	4
	25W3	22	3
	27W2	25	2
D	50	50	0
	24W7	17	7
	36W4	32	4

See layouts p. 11

Note : Mixed layout are not available in 90° spills



Contact termination code

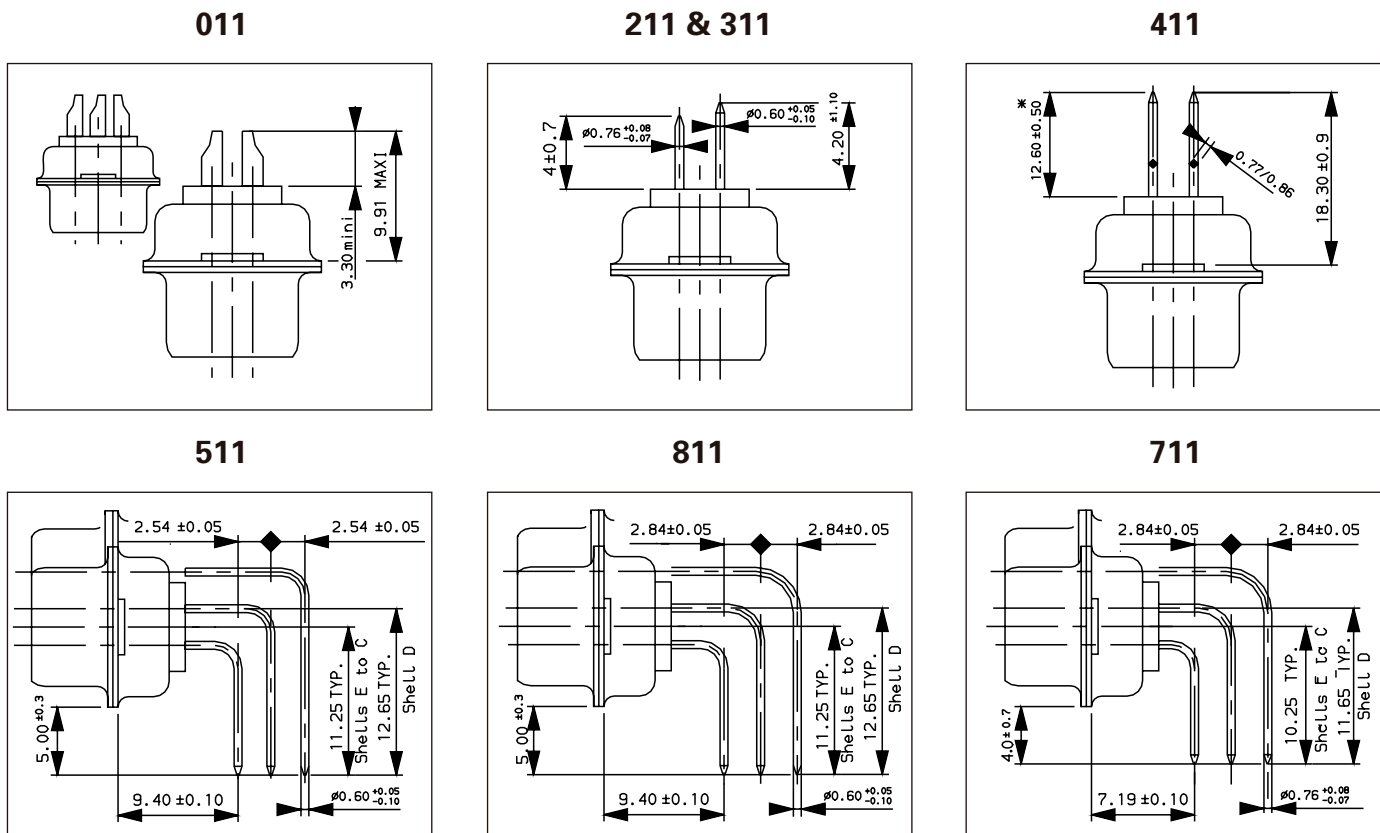
Contact terminations are indicated as follows :

Contact termination code for D*M-NMB		
Code for Ø 0,63	Code for Ø 0,76	Contact type
	011	Solder bucket
311	211	Straight spills
	411	Wire wrap, 3 wraps
	711	90° spills, 2.84 mm pitch & US Footprint (2)
511	2A0N	90° spills, without bracket, 2.54 mm pitch & European Footprint (1)
811	2B0N	90° spills, without bracket, 2.84 mm pitch & European Footprint (1)
1A9N	2A9N	90° spills, with bracket, 2.54 mm pitch, M3 clinch nuts & European Footprint (1)
1B9N	2B9N	90° spills, with bracket, 2.84 mm pitch, M3 clinch nuts & European Footprint (1)
	2AUN	90° spills, with bracket, 2.54 mm pitch & European Footprint (1)
	2BUN	90° spills, with bracket, 2.84 mm pitch & European Footprint (1)
1A7N	2A7N	90° spills, with bracket, 2.54 mm pitch, # 4-40 clinch nuts & European Footprint (1)
1B7N	2B7N	90° spills, with bracket, 2.84 mm pitch, # 4-40 clinch nuts & European Footprint (1)
	2B7S	90° spills, with bracket, 2.84 mm pitch, # 4-40 clinch nuts & US Footprint (2)
	2B9S	90° spills, with bracket, 2.84 mm pitch, M3 clinch nuts & US Footprint (2)

(1) **European Footprint** : Distance from rear of flange to first row ⇒ 9.40 mm (.37 inch)
 (2) **US Footprint** : Distance from rear of flange to first row ⇒ 7.19 mm (.283 inch)

Dimensions for termination code (in mm)

Male & Female Connectors



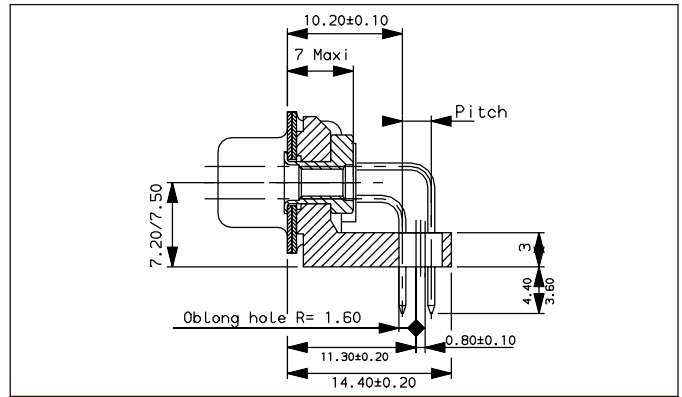
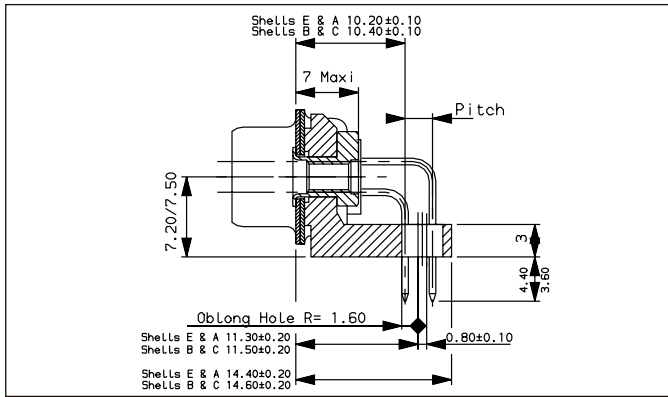
(*) The dimension is the length of the square part of the contact.



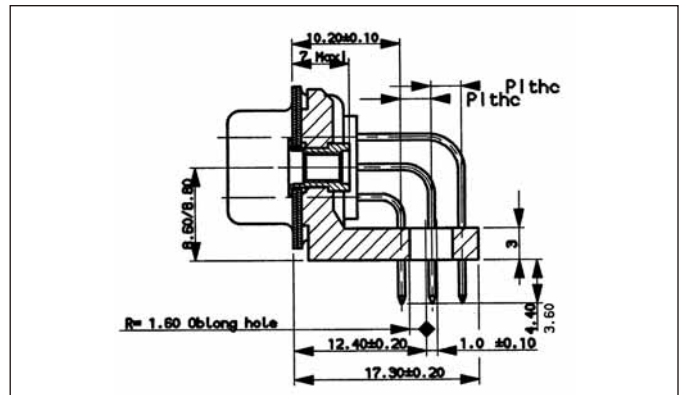
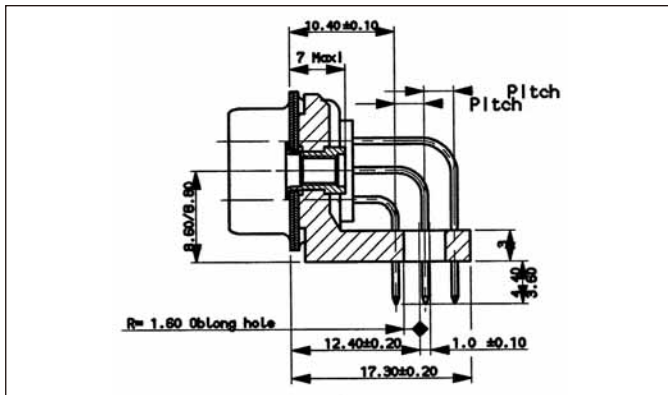
Male connectors

Female connectors

90° spills with bracket - European footprint (shell size E to C)

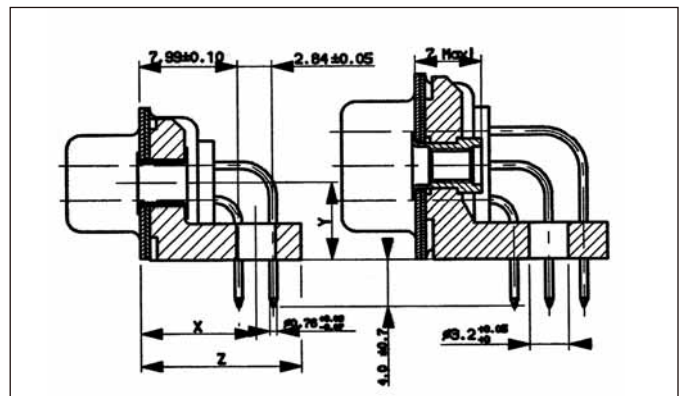
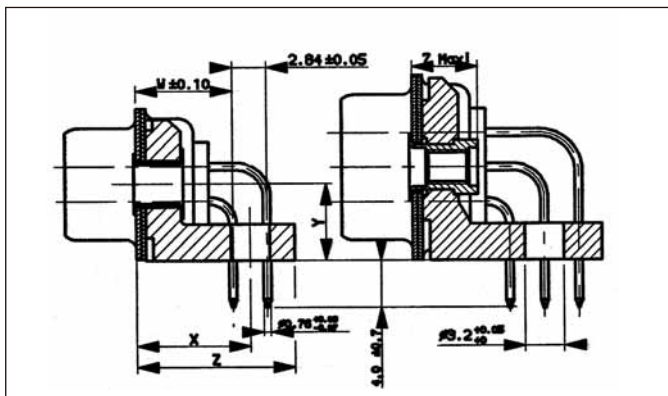


90° spills with bracket - European footprint (shell size D)



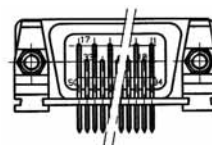
For the pitch :
 ⇒ 2,54 mm for **1A9N, 2A9N, 1A7N & 2A7N**
 ⇒ 2,84 mm for **1B9N, 2B9N, 1B7N & 2B7N**

90° spills with bracket - US footprint (711U, 2B7S & 2B9S)



Shell size	W	X	Y	Z		
E & A	7,99 .315	9,28 .365	9,60 .378	6,34 .250	12,94 .509	13,16 .518
B & C	8,19 .322	9,48 .373	9,80 .386	6,34 .250	13,14 .517	13,36 .526
D	8,19 .322	10,87 .428	11,19 .441	7,67 .302	15,63 .615	15,85 .624

Shell size	X	Y	Z		
E to C	9,28 .365	9,60 .378	6,34 .250	12,94 .509	13,16 .518
D	10,67 .420	10,99 .433	7,67 .302	15,43 .607	15,65 .616



8630-NMB (Crimp)



Applications

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Standards

8630-NMB



Standard density D-Sub Removable Contacts (Space Grade)

8630-NMB non-magnetic connectors use the same components as the ESA/SCC 3401 001 01B and S-311-P-4/09 GSFC.

However they are manufactured in accordance with ESA NASA, MIL-DTL-24308. Consequently no traceability information can be delivered for these items. They are used with removable crimp contacts. This version is suitable for Engineering Models as well as Flight Models.

Part Number / Ordering information

Series : 8630 (standard density) # 20 contacts layouts	863	0	L	25	P	0	11	NMB	L	***
Mounting style 0 : standard mount 1 : floating mount										
Other mounting style Nothing : standard or floating mount O : UNC 4-40 clinch nuts L : M3 clinch nuts										
Contact layout Code 09 cts - 15 cts - 25 cts - 37 cts - 50 cts										
Contact Type P : Pin S : Socket										
(*) 0 : for wire # 20 to 24 R : for wire # 26 to 28 E : for wire # 18										
(*) Contact plating 11 = 1.27 micron gold over copper Note : to be indicated if connectors are ordered with contacts (no «L» at the end of the P/N)										
Residual magnetism NMB : ≤ 200 gamma maximum residual magnetism ; shell plated 1.27 micron gold mini over copper (conform to GSFC)										
(*) Without indication : connectors delivered with contacts for wire AWG 20-24 L : connectors delivered without contacts										
Special modifier										

(*) : The codes 0, 11 & L are not marked on the connector. They are only used for the P/N.

Special modifier

Code	Characteristics
601	Grommet and compound, non outgassing
604	Grommet without compound non outgassing

See layouts p. 17

8635-NMB (Spill)



Applications

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8635-NMB with Spill Contacts



High density D-Sub, Non Removable Contacts (Space Grade)

These 8635-NMB non-magnetic connectors use the same components as the ESA/SCC 3401 001 02B. However they are manufactured in accordance with ESA and NASA specification.

Consequently no traceability information can be delivered for these items. They are used with non removable contacts. This version is suitable for Engineering Models as well as Flight Models.

Part Number / Ordering information

Series : 8635 (high density) # 22 contacts layouts	8635	F	26	P	0L3	NMB	***
Mounting style & Grommet Nothing : standard mount F : Floating mount O : UNC 4-40 clinch nuts L : M3 clinch nuts							
Contact layout 15 cts - 26 cts - 44 cts - 62 cts - 78 cts							
Contact Type P : Pin S : Socket							
Termination type (see below)							
Residual magnetism NMB : ≤ 200 gamma maximum residual magnetism ; shell plated 1.27 micron gold mini over copper							
Special modification							

Contact termination code

Termination type	
1.27 mm shell plating	Contact type
0L3	Straight spills
1CON	90°, disposable drilled bar, 15 to 62 contacts, 1.98 pitch
1DON	90°, disposable drilled bar, 78 contacts (only D size), 2.08 pitch
1CUN	90°, with brackets, 15 to 62 contacts, 1.98 pitch (1)
1DUN	90°, with brackets, 78 contacts, 2.08 pitch (1)
1C7N	90°, with brackets and UNC 4-40 clinch nuts, 15 to 62 contacts, 1.98 pitch
1D7N	90°, with brackets and UNC 4-40 clinch nuts, 78 contacts, 2.08 pitch
1C9N	90°, with brackets and M3 clinch nuts, 15 to 62 contacts, 1.98 pitch
1D9N	90°, with brackets and M3 clinch nuts, 78 contacts, 2.08 pitch

(1) : no ESA/SCC equivalent version.

See layouts p.18

8635-NMB (Crimp)



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8635-NMB with Crimp Contacts



High density D-Sub Removable Contacts (Space Grade)

These 8635-NMB non-magnetic connectors use the same components as the ESA/SCC 3401 002 02B and S311-P-4/07 GSFC connectors. However they are manufactured in accordance with ESA and NASA specification.

Consequently no traceability information can be delivered for these items. They are used with removable crimp contacts. This version is suitable for Engineering Models as well as Flight Models.

Part Number / Ordering information

Series : 8635 (high density) # 22 contacts layouts	8635	F	26	P	0	11	NMB	L	***
Mounting style & Grommet Nothing : standard mount F : Float mount O : UNC 4-40 clinch nuts L : M3 clinch nuts									
Contact layout Code 15 cts - 26 cts - 44 cts - 62 cts - 78 cts									
Contact Type P : Pin S : Socket									
(*) 0 : for wire # 22 to 26									
(*) Contact plating 11 : 1.27 micron gold over copper Note : to be modified if connectors are ordered with contacts (no «L» at the end of the P/N)									
Residual magnetism NMB : ≤ 200 Gamma maximum residual magnetism ; shell plated 1.27 micron gold mini over copper (conform to GSFC)									
(*) Without indication : connector delivered with contacts for wire AWG 22-26 L : connector delivered without contacts									
Special modification									

(*) : The codes 011 & L are not marked on the connector. They are only used for the P/N.

Special modifier

Code	Characteristics
601	Grommet and compound, non outgassing
604	Grommet, without compound, non outgassing

See layouts p. 18



D*BMA-NMB

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D*BMA-NMB



D-Sub savers (Space Grade)

D*BMA-NMB savers connectors are derived from ESA/SCC 3401 020 savers.

However they are manufactured in accordance with ESA.

Consequently no traceability information can be delivered for these items. They are used with removable crimp contacts.

This version is suitable for Engineering Models as well as Flight Models.

Part Number / Ordering information

• Standard density with removable contacts # 20

Series : D*BMA	D	B	BMA	25	PS	011	NMB	L
Shell size E = 9 cts - A = 15 cts - B = 25 cts - C = 37 cts - D = 50 cts								
Contact layout Code 09 cts - 15 cts - 25 cts - 37 cts - 50 cts								
Contact Type PS : Pin - Socket								
Contact plating 011 : 1.27 micron gold over copper								
Residual magnetism NMB : ≤ 200 Gamma maximum residual magnetism, shell plated 1.27 micron gold mini over copper								
Without indication : connectors delivered with contacts L : connectors delivered without contacts								

• High density with removable contacts # 22

Series : D*BMA	D	B	BMA	44	PS	011	NMB	L
Shell size E = 15 cts - A = 26 cts - B = 44 cts - C = 62 cts - D = 78 cts								
Contact layout Code 15 cts - 26 cts - 44 cts - 62 cts - 78 cts								
Contact Type PS : Pin - Socket								
Contact plating 011 : 1.27 micron gold over copper								
Residual magnetism NMB : ≤ 200 Gamma maximum residual magnetism, shell plated 1.27 micron gold mini over copper								
Without indication : connectors delivered with contacts L : connectors delivered without contacts								

(*) : The codes 011 & L are not marked on the connector. They are only used for the P/N.

See contact layouts for saver connectors p.17 for standard density and p.18 for high density.