



DOCUMENT CHANGE REQUEST

DCR number	529	Changes required for:	N/A	Originator:	Olivier Masson Chief
Date:	2009/07/06	Date sent:	2009/07/06	Organisation:	CNES
Status:	IMPLEMENTED				

Title: Connectors Electrical Rectangular Microminiature, based on type MDM

Number: 3401/029 Issue: 5

Other documents affected:

Page:

Variants size 51 FR139 to be added

Paragraph:

Variants size 51 FR139 to be added

Original wording:

Proposed wording:

New variant to be added after page 26 of the 3401/029 issue 5

Justification:

Variants added in the re-qualification programm and tested successfully

Attachments:

DCR529att.pdf, DCR529_change_wording.pdf, null

Modifications:

Additional changes required to fully implement this DCR are:

Page 7, Table 1(a), replace "N/A" for Max. Weight (g) for shell size 51 for FR139 by 10.5

Clarify addition of new Pages 27 & 28, new Figures 2.2I & 2.2J based on the drawing provided in DCR529 (with 51 contacts), similar to Figures 2.2G & 2.2H including notes (see attached mark-ups).

i.e.

Figure 2.2I – Connectors Type -FR139

Plug Male Contacts

Figure 2.2J – Connectors Type -FR139

Receptacle Female Contacts

Page 24 & 26, Figures 2.2G & 2.2H, delete note 2 and renumber subsequent notes accordingly.

Approval signature:

W. C. H. H. H.

Date signed:

2009-07-06

Doc 529 MARKUP.

S.T. 13/7/9.

27


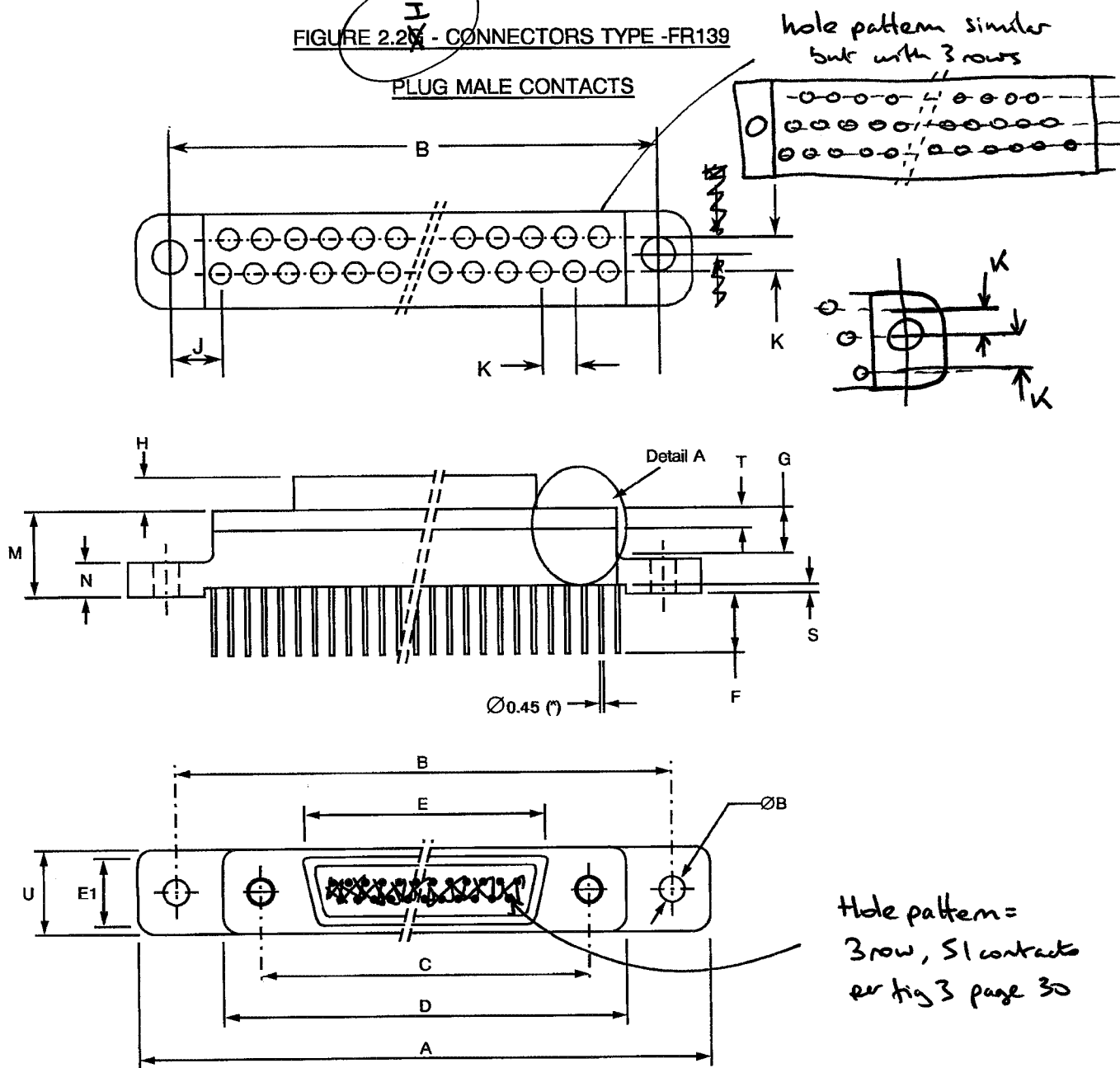
	<p>ESCC Detail Specification No. 3401/029</p>	<p>PAGE 28 ISSUE 5</p>
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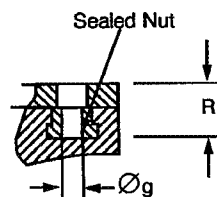
FIGURE 2 - PHYSICAL DIMENSIONS (CONTINUED)

FIGURE 2.2 - CONNECTORS TYPE -FR139

PLUG MALE CONTACTS



DETAIL A





ESCC Detail Specification
No. 3401/029

PAGE 28
ISSUE 5

FIGURE 2 - PHYSICAL DIMENSIONS (CONTINUED)

FIGURE 2.2G - CONNECTOR TYPE - FR139 (CONTINUED)

PLUG MALE CONTACTS (CONTINUED)

SI	Shell Size	A		B		ØB (4)(3)		C		D	E	E1	F		G	H	J
		Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.				Max.	Min.			
9	9	35.31	29.03	29.39	2.31	2.59	14.22	14.48	19.94	8.46	4.69	4.15	4.85	4.6	4.72	4.72	3.91
15	15	35.81	29.03	29.39	2.31	2.59	18.08	18.29	23.75	12.27	4.69	4.15	4.85	4.6	4.72	4.72	5.72
21	21	42.93	36.65	37.01	2.31	2.59	21.84	22.1	27.56	16.08	4.69	4.15	4.85	4.6	4.72	4.72	5.72
25	25	44.2	37.92	38.28	2.31	2.59	24.38	24.64	30.10	18.62	4.69	4.15	4.85	4.6	4.72	4.72	3.81
31	31	51.82	45.54	45.9	2.31	2.59	28.19	28.45	33.91	22.43	4.69	4.15	4.85	4.6	4.72	4.72	3.81
37	37	59.44	53.16	53.52	2.31	2.59	32.0	32.26	37.72	26.24	4.69	4.15	4.85	4.6	4.72	4.72	3.87

Shell Size	K	Typ.	M		N		R	S		T		U
			Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.	
9	2.54	1.27	8.62	9.02	4.0	4.2	4.6	0.9	1.1	2.23	2.49	7.82
15	2.54	1.27	8.62	9.02	4.0	4.2	4.6	0.9	1.1	2.23	2.49	7.82
21	2.54	1.27	8.62	9.02	4.0	4.2	4.6	0.9	1.1	2.23	2.49	7.82
25	2.54	1.27	8.62	9.02	4.0	4.2	4.6	0.9	1.1	2.23	2.49	7.82
31	2.54	1.27	8.62	9.02	4.0	4.2	4.6	0.9	1.1	2.23	2.49	7.82
37	2.54	1.27	8.62	9.02	4.0	4.2	4.6	0.9	1.1	2.23	2.49	7.82
51	2.54	1.27	8.62	9.02	4	4.2	4	0.9	1.1	2.23	2.49	9

NOTES

1. All dimensions are in millimetres.

2. For reference to Para. 4.5.2.3 of this specification.

3. Qg: 2-56-UNC-2B.

4. Maximum torque 0.44Nm.

delete K1



FIGURE 2 - PHYSICAL DIMENSIONS (CONTINUED)

FIGURE 2.2H - CONNECTORS TYPE -FR139

RECEPTACLE FEMALE CONTACTS

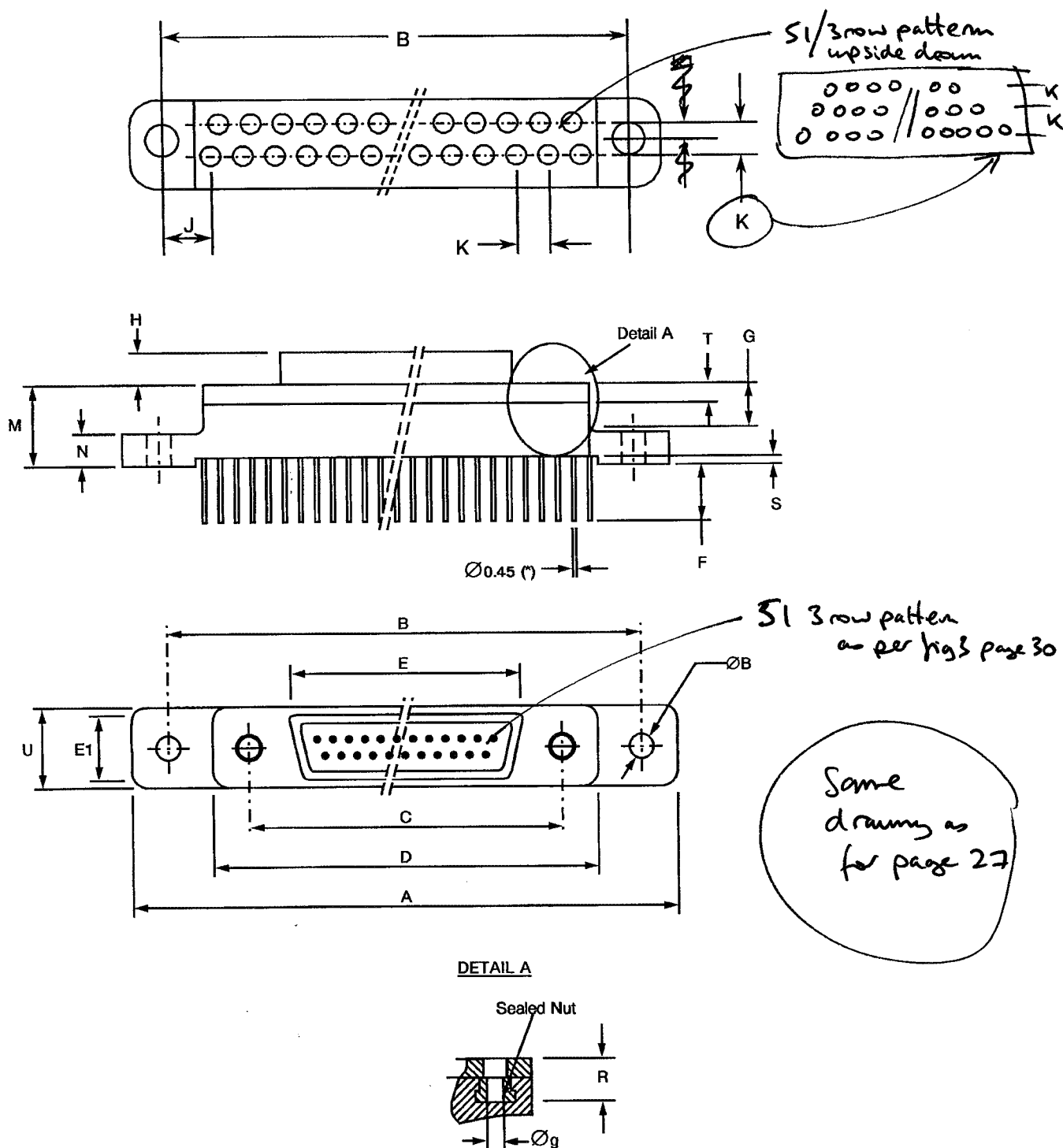


FIGURE 2 - PHYSICAL DIMENSIONS (CONTINUED)

FIGURE 2.2H - CONNECTOR TYPE - FR139 (CONTINUED)

RECEPTACLE FEMALE CONTACTS (CONTINUED)

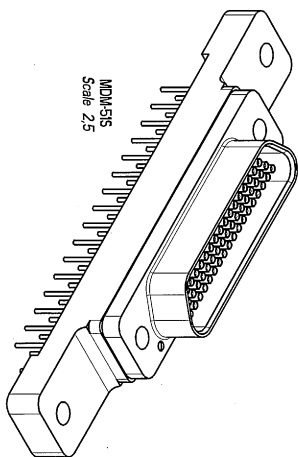
Shell Size	A		B		$\varnothing B (H(3))$		C		D	E	E1	E		G	H	J	K
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Max.	Max.	Min.	Max.	Min.	Max.	Typ.	Typ.
9	35.31	29.03	29.39	2.31	2.59	14.22	14.48	19.94	10.16	6.38	4.15	4.85	4.6	5.05	5.05	9.53	2.54
15	35.31	29.03	29.39	2.31	2.59	18.03	18.29	28.35	13.97	6.38	4.15	4.85	4.6	5.05	5.05	5.72	2.54
21	42.93	36.65	37.01	2.31	2.59	21.84	22.1	27.56	17.78	6.38	4.15	4.85	4.6	5.05	5.05	5.72	2.54
25	44.2	37.92	38.28	2.31	2.59	24.38	24.64	30.10	20.32	6.38	4.15	4.85	4.6	5.05	5.05	3.81	2.54
31	51.82	45.54	45.9	2.31	2.59	28.19	28.45	33.91	24.13	6.38	4.15	4.85	4.6	5.05	5.05	3.81	2.54
37	59.44	53.16	53.52	2.31	2.59	32.0	32.26	37.72	27.94	6.38	4.15	4.85	4.6	5.05	5.05	3.81	2.54

Shell Size	Z1	M		N		R	S		T		U
	Min.	Min.	Max.	Min.	Max.	Min.	Min.	Max.	Min.	Max.	Max.
9	1.27	8.62	9.02	4.0	4.2	4.6	0.9	1.1	2.23	2.49	7.82
15	1.27	8.62	9.02	4.0	4.2	4.6	0.9	1.1	2.23	2.49	7.82
21	1.27	8.62	9.02	4.0	4.2	4.6	0.9	1.1	2.23	2.49	7.82
25	1.27	8.62	9.02	4.0	4.2	4.6	0.9	1.1	2.23	2.49	7.82
31	1.27	8.62	9.02	4.0	4.2	4.6	0.9	1.1	2.23	2.49	7.82
37	1.27	8.62	9.02	4.0	4.2	4.6	0.9	1.1	2.23	2.49	7.82
51	9.62		9.02	4	4.2	4	0.9	1.1	2.23	2.49	9.

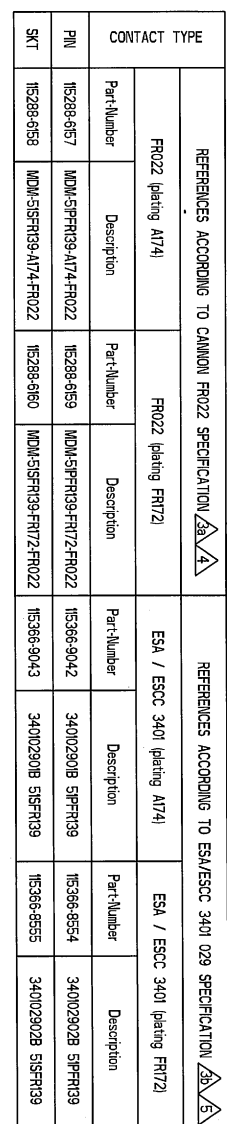
NOTES

1. All dimensions are in millimetres.
2. ~~Refer to Para 4.5.3 of this specification.~~
3. $\varnothing g$: 2-56-UNC-2B.
4. Maximum torque 0.44Nm.

delete K1



SYSTEM CONFIDENTIAL

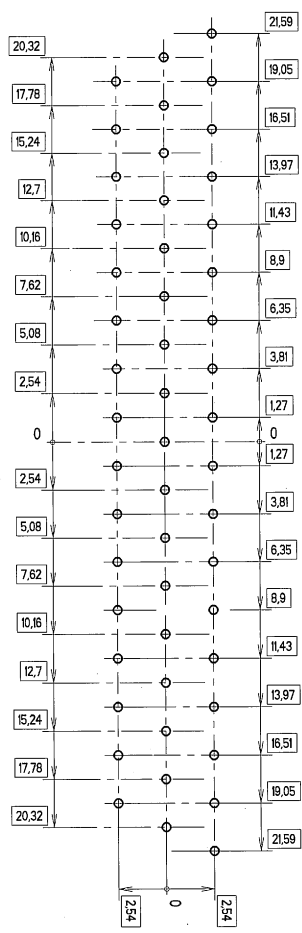


PARTS LIST	MATERIALS	PLATING
SHELL (A174 Code)	ALUMINIUM ALLOY 6061-T6	CHEMICAL NICKEL
SHELL (P472 Code)	ALUMINIUM ALLOY 6061-T6	GOLD OVER CHEMICAL NICKEL
INSULATOR	THERMOPLASTIC LCP	-
HOUSING	THERMOPLASTIC LCP	-
CONTACTS	COPPER ALLOY	GOLD OVER COPPER
PIGTAILS	COPPER	GOLD OVER SILVER
CAPTIVE NUT	STAINLESS STEEL	PASSIVATED

NOTES :
- 1 - Materials and finish :

- 2. Insulation with epoxy resin.
- 3. Marking : Year / Week / CK / FR (example : 0806 CK FR)
- 4. Δ : Description (see tabulation)
- 5. Δ : 34010204B 51MR93 (see tabulation)
- 6. Δ : Controls according to CANNON FR022 specification
- 7. Δ : Controls according to ESA-ESCC 3401 029 specification
- 8. Δ : Packaging : Individual plastic bag with identification label
- 9. Δ : For cavities identification, refer to drawing CU3024310009

RECOMMENDED PCB HOLE PATTERN
Scale 5

[illegible]