



**ACCESSORIES FOR RECTANGULAR  
CONNECTORS  
3401/001, 3401/002 AND  
CONNECTOR SAVERS 3401/020  
ESCC Detail Specification No. 3401/022**

**ISSUE 1  
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**ACCESSORIES FOR RECTANGULAR  
CONNECTORS**

**3401/001, 3401/002 AND**

**CONNECTOR SAVERS 3401/020**

**ESA/SCC Detail Specification No. 3401/022**



**space components  
coordination group**

Issue/Rev.	Date	Approved by	
		SCCG Chairman	ESA Director General or his Deputy
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**DOCUMENTATION CHANGE NOTICE**

Rev. Letter	Rev. Date	Reference	CHANGE Item	Approved DCR No.
		This Issue supersedes Issue 3 and incorporates all modifications defined in Revision 'A' to Issue 3 and the changes agreed in the following DCR's:- Cover Page DCN Para. 1.6 : Deleted in toto Table 1(a) : Variants 07 to 43, Descriptions amended : Variants 07 to 16, 21, 24 to 47 and 49 to 57, Weights amended : Variants 60 to 64 added Figure 1 : Entry added Figure 2(a) : Figure completely amended Figure 2(b) : "Used with Shell Size" column deleted from Table and flange added to drawing Figure 2(e) : Drawing and Table for Angled Clamps added Para. 4.2.1 : Existing text deleted and new text added Para. 4.2.2 : Existing text deleted and new text added Para. 4.2.3 : Title amended Para. 4.2.4 : Title amended Para. 4.3.1 : Text amended Para. 4.3.4 : Deleted in toto Para. 4.4.2 : ", black" added to text Para. 4.4.3 : New paragraph added Para. 4.5.1 : Existing text deleted and new text added Para. 4.5.2 : Final sentence deleted Para. 4.5.3 : New paragraph added Para. 4.5.3.1 : New paragraph added Para. 4.5.4 : New paragraph added Para. 4.7 : Title amended		None None 23790 221300 221300 221300 23790 221300 221300 221300 23790 23790 23790 23790 23790 221300 221300 221300/ 23790 23790 23790 23790 221300/ 23790 23790 23790 221300/ 23790 23790
'A'	Jun. '98	P1. Cover Page P2. DCN P12. Figure 2(e)	: For Right Angle Clamp, in the drawing, Dimension "C" corrected	None None 23891
'B'	Apr. '99	P1. Cover Page P2. DCN P8. Figure 2(a)	: Dimension 'S' added to MALE Drawing and Table : For Variants 04 and 05, Dimension Q amended	None None 221511 221511
'C'	Feb. '00	P1. Cover Page P2. DCN P5. Table 1(a) P6. Table 1(a) P6A. Table 1(a) P8. Figure 2(a) P11. Figure 2(e)	: Variants 01 to 05, Description amended : Variants 44 to 47, 49 to 52 and 54 to 57, Description amended : Page added to include Variants 65 to 80 : MALE drawing and table amended to include new variants 65 to 80 : In the Table for Straight Clamp, column headings "D to F" corrected to "E to G"	None None 221544 221544 221544 221544 23918

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**APPENDICES (Applicable to specific Manufacturers only)**

None.

**1. GENERAL****1.1 SCOPE**

This specification details the ratings, physical and electrical characteristics, test and inspection data for Accessories for Rectangular, Connectors and Connector Savers (D\*M and D\*MA). It shall be read in conjunction with ESA/SCC Generic Specification No. 3401, the requirements of which are supplemented herein and ESA/SCC Detail Specifications Nos. 3401/001, 3401/002 and 3401/020.

**1.2 COMPONENT TYPE VARIANTS**

The type variants of accessories covered by this specification are given in Table 1(a).

**1.3 MAXIMUM RATINGS**

The maximum ratings, which shall not be exceeded at any time during use or storage, applicable to the accessories specified herein, are given in Table 1(b).

**1.4 PARAMETER DERATING INFORMATION**

Not applicable.

**1.5 PHYSICAL DIMENSIONS**

The physical dimensions of the accessories specified herein are shown in Figure 2.

**2. APPLICABLE DOCUMENTS**

The following documents form part of this specification and shall be read in conjunction with it:-

- (a) ESA/SCC Generic Specification No. 3401 for Connectors, Electrical, Circular and Rectangular.
- (b) ESA/SCC Detail Specification No. 3401/001, Connectors, Electrical, Rectangular, Miniature, Non-removable Solder and Wire-Wrap-Type Contacts and, Removable Coaxial and Power, Crimp-Type and Solder-Type Contacts, based on Type D\*M.
- (c) ESA/SCC Detail Specification No. 3401/002, Connectors, Electrical, Rectangular, Miniature, Removable Crimp Type Contacts and, Removable Coaxial and Power Crimp-Type and Solder-Type Contacts, based on type D\*MA.
- (d) ESA/SCC Detail Specification 3401/020, Connector Savers, Electrical, Rectangular, Miniature, Removable Contacts, based on type D\*BMA.
- (e) QQ-BB-613, Brass Material.
- (f) QQ-S-764/766 and QQ-P-35, Stainless steel material.
- (g) MIL-G-45204, Gold Plating, Electro-deposited.
- (h) MIL-C-14550, Copper Plating, Electro-deposited.

**3. TERMS, DEFINITIONS, ABBREVIATIONS, SYMBOLS AND UNITS**

For the purpose of this specification, the terms, definitions, abbreviations, symbols and units specified in ESA/SCC Basic Specification No. 21300 shall apply.



**TABLE 1(a) - TYPE VARIANTS**

VARIANT	DESCRIPTION	WEIGHT (g)
01	Screw Lock Assembly Brass (Female)	1.9
02	Screw Lock Assembly Brass (Male/slotted head screw)	Without Back Shell 0.85
03	Screw Lock Assembly Brass (Male/slotted head screw)	Without Back Shell 0.85
04	Screw Lock Assembly Brass (Male/slotted head screw)	Without Back Shell 1.0
05	Screw Lock Assembly Brass (Male/slotted head screw)	Without Back Shell 1.0
06	Screw Lock Assembly Brass (Female) for Savers	2.0
07	Dust Cap (Female)	Size E N/A
08	Dust Cap (Male)	Size E N/A
09	Dust Cap (Female)	Size A N/A
10	Dust Cap (Male)	Size A N/A
11	Dust Cap (Female)	Size B N/A
12	Dust Cap (Male)	Size B N/A
13	Dust Cap (Female)	Size C N/A
14	Dust Cap (Male)	Size C N/A
15	Dust Cap (Female)	Size D N/A
16	Dust Cap (Male)	Size D N/A
17	Potting Shell	Size A N/A
18	Potting Shell	Size B N/A
19	Potting Shell	Size C N/A
20	Potting Shell	Size D N/A
21	Back-Shell for Strapped Connections	Size A 5.0
22	Back-Shell for Strapped Connections	Size B 6.0
23	Back-Shell for Strapped Connections	Size C 8.0
24	Back-Shell for Strapped Connections	Size D 8.0
25	Cable Clamp, Straight	Size A 6.0
26	Cable Clamp, Straight	Size B 7.0
27	Cable Clamp, Straight	Size C 10
28	Cable Clamp, Straight	Size D 10
29	Cable Clamp, Round	Size E 9.0
30	Cable Clamp, Round	Size A 11
31	Cable Clamp, Round	Size B 12
32	Cable Clamp, Round	Size C 15
33	Cable Clamp, Round	Size D 16

**TABLE 1(a) - TYPE VARIANTS (CONTINUED)**

VARIANT	DESCRIPTION	WEIGHT (g)
34	Deep Straight Clamp <span style="float: right;">Size E</span>	10
35	Deep Straight Clamp <span style="float: right;">Size A</span>	12
36	Deep Straight Clamp <span style="float: right;">Size B</span>	17
37	Deep Straight Clamp <span style="float: right;">Size C</span>	24
38	Deep Straight Clamp <span style="float: right;">Size D</span>	27
39	Right Angle Clamp <span style="float: right;">Size E</span>	12
40	Right Angle Clamp <span style="float: right;">Size A</span>	14
41	Right Angle Clamp <span style="float: right;">Size B</span>	17.5
42	Right Angle Clamp <span style="float: right;">Size C</span>	24
43	Right Angle Clamp <span style="float: right;">Size D</span>	27
44	Screw Lock Assembly Brass (Male/slotted head screw) <span style="float: right;">With Back Shell</span>	0.85
45	Screw Lock Assembly Brass (Male/slotted head screw) <span style="float: right;">With Back Shell</span>	0.85
46	Screw Lock Assembly Brass (Male/slotted head screw) <span style="float: right;">With Back Shell</span>	1.0
47	Screw Lock Assembly Brass (Male/slotted head screw) <span style="float: right;">With Back Shell</span>	1.0
48	Screw Lock Assembly Stainless Steel (Female)	1.80
49	Screw Lock Assembly Stainless Steel (Male/slotted head screw) <span style="float: right;">Without Back Shell</span>	0.8
50	Screw Lock Assembly Stainless Steel (Male/slotted head screw) <span style="float: right;">Without Back Shell</span>	0.8
51	Screw Lock Assembly Stainless Steel (Male/slotted head screw) <span style="float: right;">Without Back Shell</span>	1.0
52	Screw Lock Assembly Stainless Steel (Male/slotted head screw) <span style="float: right;">Without Back Shell</span>	1.0
53	Screw Lock Assembly Stainless Steel (Female) for Savers	1.9
54	Screw Lock Assembly Stainless Steel (Male/slotted head screw) <span style="float: right;">With Back Shell</span>	0.8
55	Screw Lock Assembly Stainless Steel (Male/slotted head screw) <span style="float: right;">With Back Shell</span>	0.8
56	Screw Lock Assembly Stainless Steel (Male/slotted head screw) <span style="float: right;">With Back Shell</span>	1.0
57	Screw Lock Assembly Stainless Steel (Male/slotted head screw) <span style="float: right;">With Back Shell</span>	1.0
58	Screw Lock Assembly Brass (Female) for Feedthrough	2.0
59	Screw Lock Assembly Stainless Steel (Female) for Feedthrough	1.86
60	60° Angled Clamp <span style="float: right;">Size E</span>	9.0
61	60° Angled Clamp <span style="float: right;">Size A</span>	11
62	60° Angled Clamp <span style="float: right;">Size B</span>	12
63	60° Angled Clamp <span style="float: right;">Size C</span>	15
64	60° Angled Clamp <span style="float: right;">Size D</span>	16



**TABLE 1(a) - TYPE VARIANTS (CONTINUED)**

VARIANT	DESCRIPTION	WEIGHT (g)
65	Screw Lock Assembly Brass (Male/hex. hole head screw) Without Back Shell	0.85
66	Screw Lock Assembly Brass (Male/hex. hole head screw) Without Back Shell	0.85
67	Screw Lock Assembly Brass (Male/hex. hole head screw) Without Back Shell	1.0
68	Screw Lock Assembly Brass (Male/hex. hole head screw) Without Back Shell	1.0
69	Screw Lock Assembly Brass (Male/hex. hole head screw) With Back Shell	0.85
70	Screw Lock Assembly Brass (Male/hex. hole head screw) With Back Shell	0.85
71	Screw Lock Assembly Brass (Male/hex. hole head screw) With Back Shell	1.0
72	Screw Lock Assembly Brass (Male/hex. hole head screw) With Back Shell	1.0
73	Screw Lock Assembly Stainless Steel (Male/hex. hole head screw) Without Back Shell	0.8
74	Screw Lock Assembly Stainless Steel (Male/hex. hole head screw) Without Back Shell	0.8
75	Screw Lock Assembly Stainless Steel (Male/hex. hole head screw) Without Back Shell	1.0
76	Screw Lock Assembly Stainless Steel (Male/hex. hole head screw) Without Back Shell	1.0
77	Screw Lock Assembly Stainless Steel (Male/hex. hole head screw) With Back Shell	0.8
78	Screw Lock Assembly Stainless Steel (Male/hex. hole head screw) With Back Shell	0.8
79	Screw Lock Assembly Stainless Steel (Male/hex. hole head screw) With Back Shell	1.0
80	Screw Lock Assembly Stainless Steel (Male/hex. hole head screw) With Back Shell	1.0

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**TABLE 1(b) - MAXIMUM RATINGS**

No.	CHARACTERISTIC	SYMBOL	MAXIMUM RATING	UNIT	REMARKS	
1	Operating Temperature Range	$T_{op}$	-55 to +125 (1)	°C	$T_{amb}$	
2	Storage Temperature Range	$T_{stg}$	-55 to +125 (1)	°C		
3	Torque Value for Screws	$T_{qe}$	BRASS	S.S.	cm.daN cm.daN	For Female (2) For Male
			5.5 3.3	6.6 4.4		

**NOTES**

1. Except for dust cap: +100°C.
2. Except for Variants 6, 53, 58 and 59 which shall be tightened to the torque specified for the Male.

**FIGURE 1 - PARAMETER DERATING INFORMATION**

Not applicable.

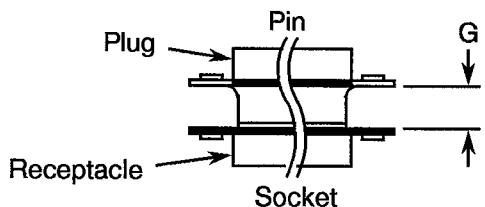


**FIGURE 2 - PHYSICAL DIMENSIONS**

**FIGURE 2(a) - SCREW LOCK ASSEMBLIES**

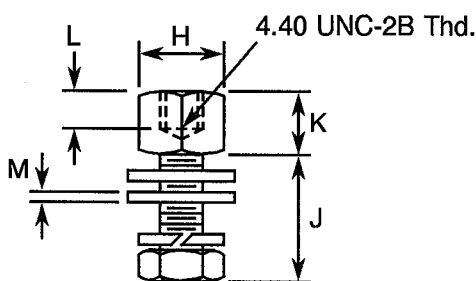
(All dimensions in millimetres)

**MATED SPACING BETWEEN SHELL FRONT SURFACES**



	MIN.	MAX.	NOTES
G	6.35	7.11	1
	6.12	6.88	2
H	4.37	5.13	-
	7.54	8.30	3
	14.35	14.65	4
J	15.49	16.25	5
	4.60	5.10	-
K	4.60	5.10	-
L	3.18	-	-
M	0.66	0.86	6

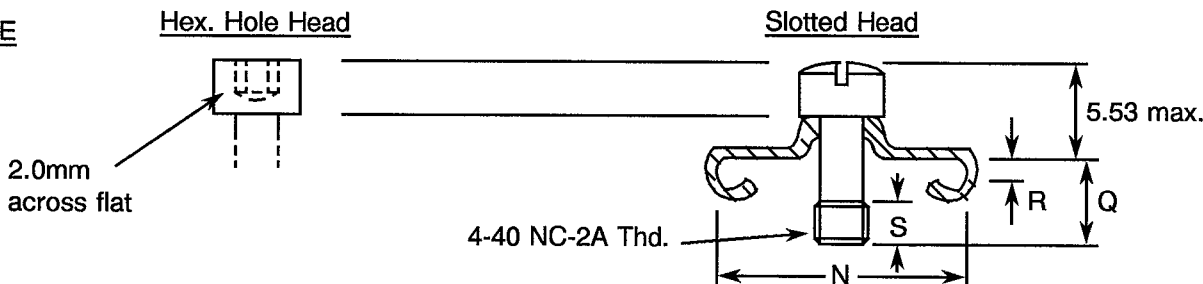
**FEMALE**



**NOTES**

1. For shell sizes E and A.
2. For shell sizes B, C and D.
3. Variants 01 and 48 (standard). To be used with all sizes of shells, P or S, with or without backshell.
4. Variants 06 and 53 (for savers). To be used with all sizes of shells.
5. Variants 58 and 59 (for feedthrough). To be used with all sizes of shells.
6. The spacing between the reference planes of 2 mated connectors shall be adjusted by the use of 0, 1 or 2 washers so that this spacing equals to dimension G.

**MALE**



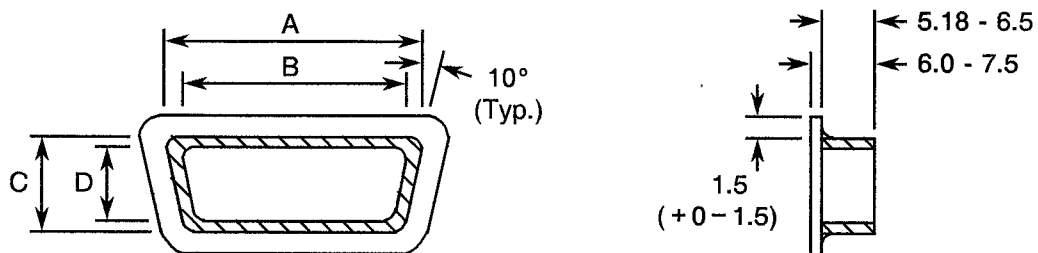
VARIANT		USE WITH SHELL SIZE	N		Q		R		S
BRASS	S.S.		MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.
<u>Without Back Shell</u>									
02-65	49-73	DA DE : (P or S) DB, DC : S	12.96	13.72	3.22	3.98	0.75	0.95	2.80
03-66	50-74	DB DC : P	12.96	13.72	3.22	3.98	0.95	1.15	2.80
04-67	51-75	DD : S	15.75	16.26	4.02	4.78	0.75	0.95	2.80
05-68	52-76	DD : P	15.75	16.26	4.02	4.78	0.95	1.15	2.80
<u>With Back Shell</u>									
44-69	54-77	DA DE : (P or S) DB, DC : S	12.96	13.72	4.02	4.78	1.75	1.95	2.80
45-70	55-78	DB DC : P	12.96	13.72	4.02	4.78	2.00	2.20	2.80
46-71	56-79	DD : S	15.75	16.26	4.02	4.78	1.75	1.95	2.80
47-72	57-80	DD : P	15.75	16.26	4.02	4.78	2.00	2.20	2.80



**FIGURE 2 - PHYSICAL DIMENSIONS (CONTINUED)**

**FIGURE 2(b) - DUST CAPS**

(All dimensions in millimetres)



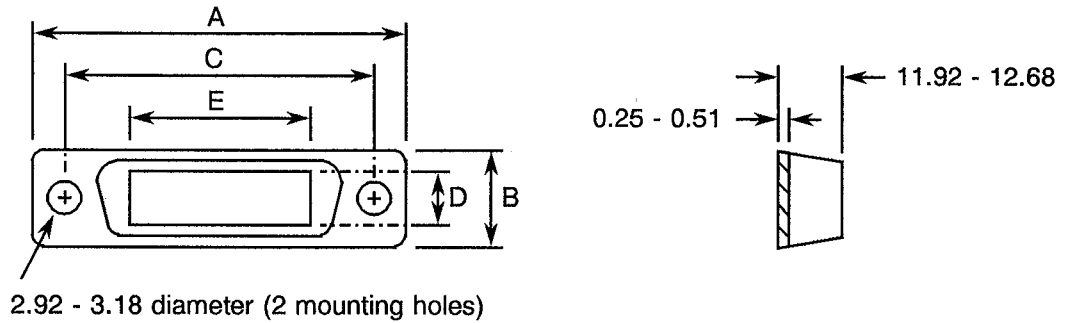
VARIANT	A		B		C		D	
	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.
07	17.3	17.9	15.6	16.2	8.9	9.5	7.2	7.8
08	18.7	19.3	17.0	17.6	10.2	10.8	8.5	9.1
09	25.7	26.3	24.0	24.6	8.9	9.5	7.2	7.8
10	27.1	27.7	25.4	26.0	10.2	10.8	8.5	9.1
11	39.4	40.0	37.7	38.3	8.9	9.5	7.2	7.8
12	41.2	41.8	39.5	40.1	10.2	10.8	8.9	9.6
13	55.8	56.4	54.1	54.7	8.9	9.5	7.2	7.8
14	57.6	58.2	56.0	56.6	10.2	10.8	8.9	9.6
15	53.4	54.0	51.7	52.3	11.7	12.3	10.0	10.6
16	55.0	55.6	53.3	53.9	13.3	13.9	11.6	12.2



**FIGURE 2 - PHYSICAL DIMENSIONS (CONTINUED)**

**FIGURE 2(c) - POTTING SHELLS**

(All dimensions in millimetres)

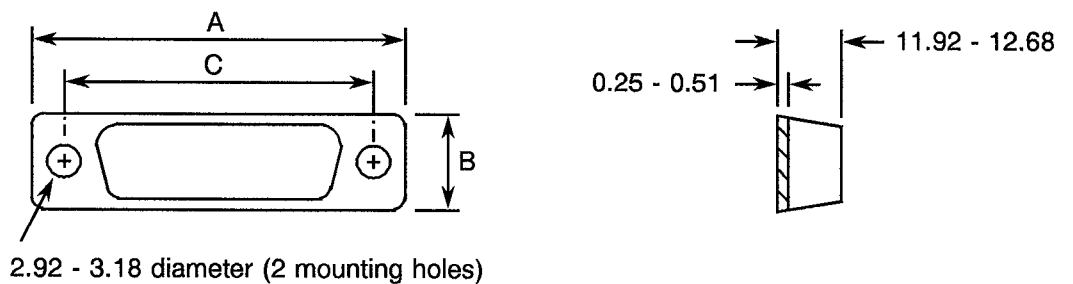


**NOTES**

1. Weight : Not applicable because not on board.

VARIANT	A		B		C		D		E	
	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.
17	38.51	39.27	12.32	13.08	33.07	33.58	7.1	8.1	14.4	15.44
18	52.4	53.16	12.32	13.08	46.79	47.29	7.1	8.1	28.0	29.08
19	68.66	69.42	12.32	13.08	63.25	63.75	7.1	8.1	43.94	45.0
20	66.29	67.05	15.09	15.85	60.86	61.37	9.4	10.4	43.94	45.0

**FIGURE 2(d) - BACK-SHELLS (FOR STRAPPED CONNECTIONS)**



VARIANT	A		B		C	
	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.
21	38.35	39.12	12.19	14.48	33.02	33.27
22	52.4	53.16	12.32	13.08	46.79	47.29
23	68.66	69.42	12.32	13.08	63.25	63.75
24	66.29	67.05	15.09	15.85	60.86	61.37

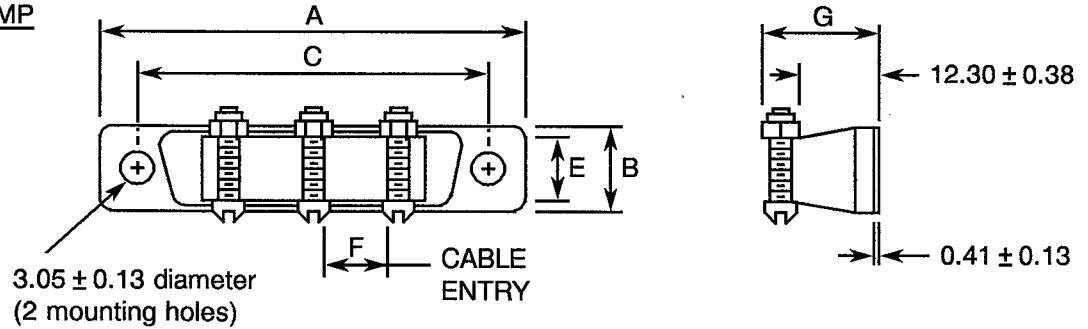


**FIGURE 2 - PHYSICAL DIMENSIONS (CONTINUED)**

**FIGURE 2(e) - CABLE CLAMPS**

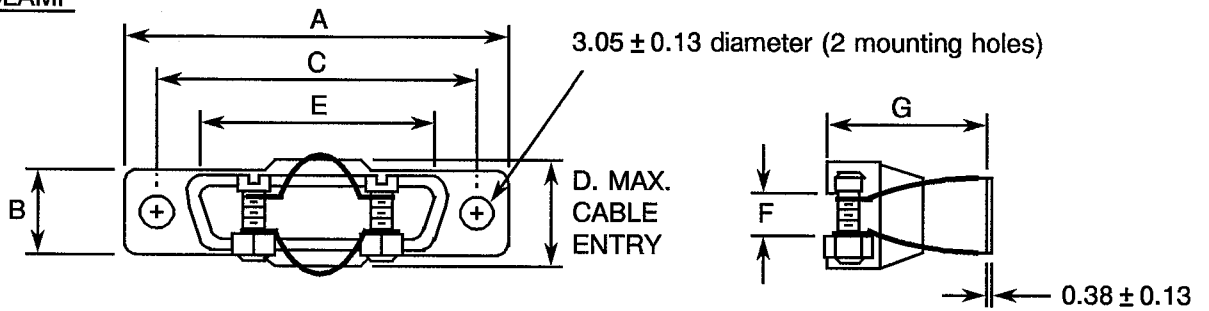
(All dimensions in millimetres)

**STRAIGHT CLAMP**



VARIANT	NO. OF CABLE-LOCKING SCREWS REQ'ED	A		B		C		E		F		G	
		MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.
25	2	38.51	39.27	12.32	13.08	33.17	33.45	7.12	7.88	7.52	8.28	15.7	16.7
26	2	52.4	53.16	12.32	13.08	46.87	47.17	7.12	7.88	19.82	20.58	15.7	16.7
27	3	68.66	69.42	12.32	13.08	63.37	63.63	7.12	7.88	17.07	17.83	15.7	16.7
28	3	66.29	67.05	15.09	15.85	60.97	61.23	9.52	10.28	17.07	17.83	17.3	18.3

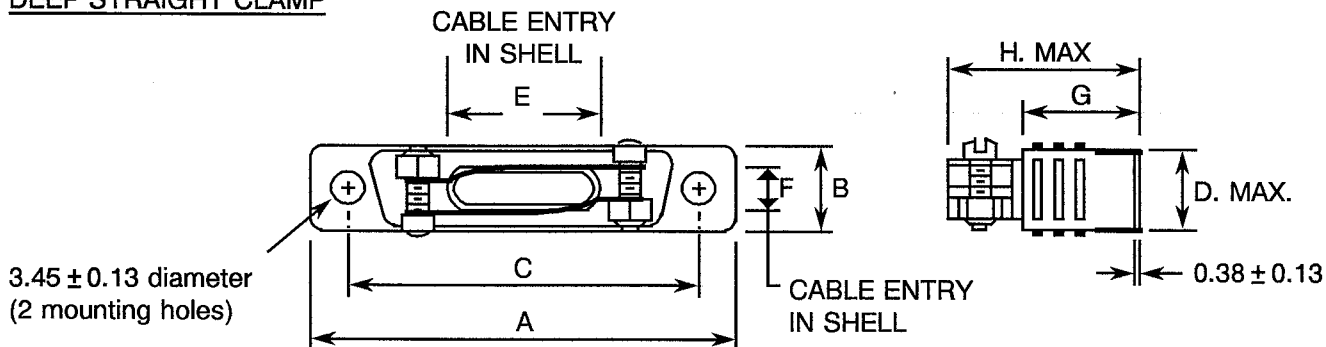
**ROUND CLAMP**



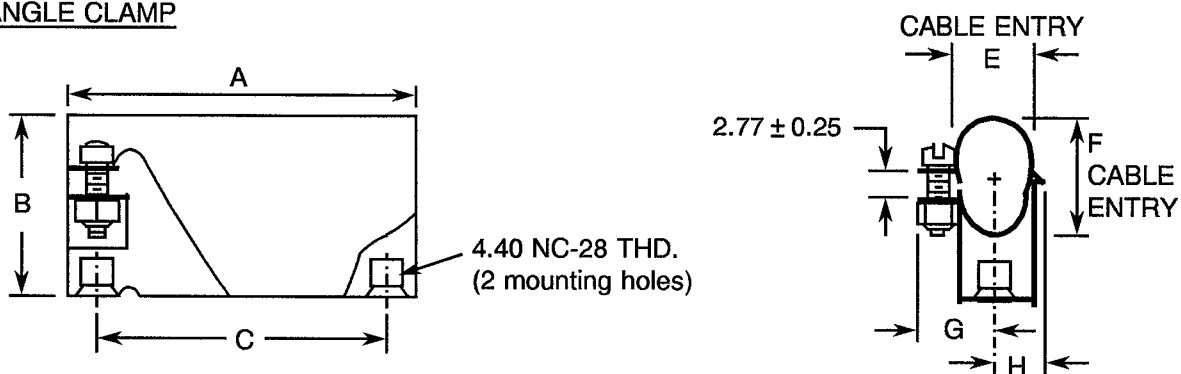
VARIANT	A		B		C		D		E		F		G	
	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.
29	30.32	31.08	12.32	13.08	24.87	25.13	-	10.3	16.42	19.78	2.82	3.58	25.4	27.0
30	38.52	39.28	12.32	13.08	33.17	33.45	-	10.3	24.62	28.28	2.82	3.58	25.4	27.0
31	52.42	53.18	12.32	13.08	46.87	47.17	-	15.1	38.12	40.58	4.32	5.08	26.2	27.8
32	68.62	69.38	12.32	13.08	63.37	63.63	-	18.2	54.72	57.78	5.92	6.73	26.2	27.8
33	66.32	67.08	15.09	15.85	60.97	61.23	-	20.6	52.82	54.88	7.52	8.28	26.2	27.8

**FIGURE 2 - PHYSICAL DIMENSIONS (CONTINUED)**
**FIGURE 2(e) - CABLE CLAMPS (CONTINUED)**

(All dimensions in millimetres)

**DEEP STRAIGHT CLAMP**


VARIANT	A		B		C		D	E		F		G		H
	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.		MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	
34	30.22	30.98	11.9	13.1	24.75	25.25	14.7	9.12	9.88	9.12	9.88	18.62	19.38	31.7
35	38.52	39.28	11.9	13.1	33.07	33.57	14.7	17.72	18.48	7.52	8.28	18.62	19.38	31.7
36	52.42	53.18	11.9	13.1	46.79	47.29	14.7	25.02	25.78	7.52	8.28	25.02	25.78	39.7
37	68.62	69.38	11.9	13.1	63.25	63.75	14.7	34.52	35.28	7.52	8.28	25.02	25.78	39.7
38	66.32	67.08	14.7	15.9	60.86	61.36	17.4	35.32	36.08	9.92	10.68	28.22	28.98	42.9

**RIGHT ANGLE CLAMP**


VARIANT	A		B		C		E		F		G		H	
	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.
39	30.22	30.98	17.4	19.0	24.87	25.13	10.3	11.9	10.3	11.9	11.1	12.7	6.3	7.9
40	38.52	39.28	17.4	19.0	33.17	33.4	10.3	11.9	10.3	11.9	11.1	12.7	6.3	7.9
41	52.42	53.18	23.8	25.4	46.87	47.1	10.3	11.9	15.1	16.7	11.1	12.7	6.3	7.9
42	68.62	69.38	29.3	30.9	63.37	63.63	10.3	11.9	19.8	21.4	11.1	12.7	6.3	7.9
43	66.32	67.08	30.9	32.5	60.97	61.23	13.5	15.1	22.3	23.9	12.7	14.3	6.9	9.5

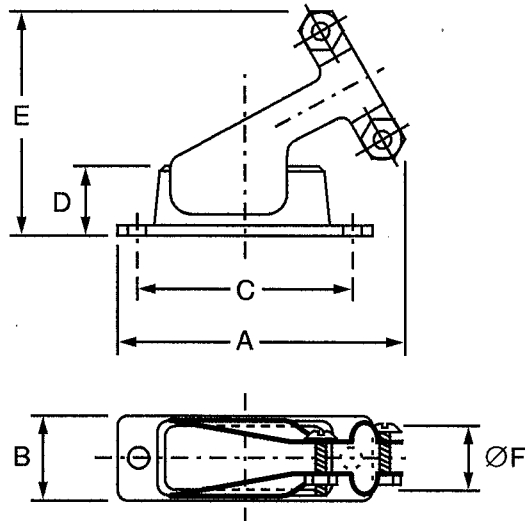


**FIGURE 2 - PHYSICAL DIMENSIONS (CONTINUED)**

**FIGURE 2(e) - CABLE CLAMPS (CONTINUED)**

(All dimensions in millimetres)

60° ANGLED CLAMP



VARIANT	A	B	C	D	E	ØF
60	39.00	12.70	24.99	12.30	30.60	10.00
61	43.10	12.70	32.32	12.30	32.50	10.00
62	55.40	12.70	47.04	12.30	34.50	15.00
63	75.30	12.70	63.50	12.30	37.50	18.00
64	72.80	15.40	61.11	12.30	37.60	20.00





#### **4. REQUIREMENTS**

##### **4.1 GENERAL**

The complete requirements for procurement of the accessories specified herein are stated in this specification and ESA/SCC Generic Specification No. 3401 for Connectors, Electrical, Circular and Rectangular. Deviations from the Generic Specification, applicable to this specification only, are listed in Para. 4.2

Deviations from the applicable Generic Specification and this Detail Specification, formally agreed with specific Manufacturers on the basis that the alternative requirements are equivalent to the ESA/SCC requirements and do not affect the components' reliability, are listed in the appendices attached to this specification.

##### **4.2 DEVIATIONS FROM GENERIC SPECIFICATION**

###### **4.2.1 Deviations from Special In-process Controls**

- (a) Para. 5.2.2, Gold Plating Porosity: Not applicable.
- (b) Para. 5.2.3, Plating Thickness: Not applicable.

###### **4.2.2 Deviations from Final Production Tests (Chart II)**

Only the following tests shall be performed:-

- (a) Para. 4.4, Marking.
- (b) Para. 9.6, Dimension Check.
- (c) Para. 9.7, External Visual Inspection. The magnification shall be X3.

###### **4.2.3 Deviations from Burn-in and Electrical Measurements (Chart III)**

Not applicable.

###### **4.2.4 Deviations from Qualification Tests (Chart IV)**

Not applicable.

###### **4.2.5 Deviations from Lot Acceptance Tests (Chart V)**

Not applicable.

##### **4.3 MECHANICAL REQUIREMENTS**

###### **4.3.1 Dimension Check**

The dimensions of the accessories specified herein shall be verified in accordance with the requirements set out in Para. 9.6 of ESA/SCC Generic Specification No. 3401 and shall conform to those shown in Figure 2 of this specification.

###### **4.3.2 Weight**

The maximum weight of the accessories specified herein shall be as shown in Table 1(a) of this specification.

###### **4.3.3 Torque Value**

The torque value to be used for tightening of the screws of the accessories specified herein shall be as mentioned in Table 1(b) of this specification.



4.4 MATERIALS AND FINISHES

The materials and finishes shall be as specified herein. Where a definite material is not specified, a material which will enable the accessories specified herein to meet the performance requirements of this specification shall be used. Acceptance or approval of any constituent material does not guarantee acceptance of the finished product.

4.4.1 Screw-Lock Assemblies (Male and Female)

Potting shells and back-shells:-

Material : Brass in accordance with QQ-B-613, Composition II.

Stainless steel in accordance with QQ-S-764/766 for screw Lock Variants 48 to 57.

Finish : Gold (0.7µm minimum) over copper (1µm minimum) in accordance with MIL-C-14450 and MIL-G-45204.

Passivated in accordance with QQ-P-35 for screw Lock Variants 48 to 57.

4.4.2 Dust Caps

Material : Red, black or white polyethelene.

4.4.3 Magnetism Level

The allowable value of magnetism shall not exceed that specified for the relevant level (see Para. 4.5.3.1).

4.5 MARKING

4.5.1 General

The marking of all components delivered to this specification shall be in accordance with the requirements of ESA/SCC Basic Specification No. 21700 and the following paragraphs. When the component is too small to accomodate all of the marking as specified, as much as space permits shall be marked and the marking information, in full, shall accompany the component in its primary package.

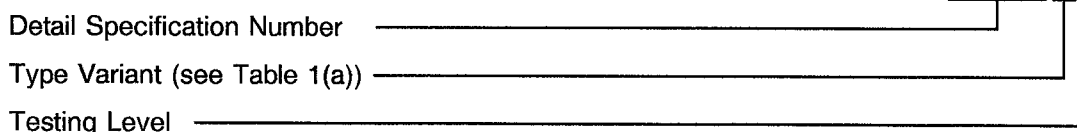
The information to be marked and the order of precedence, shall be as follows:-

- (a) The SCC Component Number.
- (b) Characteristics.
- (c) Traceability Information.

4.5.2 The SCC Component Number

Each component shall bear the SCC Component Number which shall be constituted and marked as follows:

340102201B





#### 4.5.3 Characteristics

The characteristics to be marked in the following order of precedence are:-

(a) Magnetism Level.

##### 4.5.3.1 Magnetism Level (For Variants 01 to 06, 17 to 47, 58 and 60 to 64)

The following codes shall be used for magnetism level:-

CODE	DEFINITION
NMA	Magnetism Level: $\leq$ 2000 gamma
NMB	Magnetism Level: $\leq$ 200 gamma
NMC	Magnetism Level: $\leq$ 20 gamma
NMD	Magnetism Level: $\leq$ 2 gamma

#### 4.5.4 Traceability Information

Traceability information shall be marked in accordance with the requirements of ESA/SCC Basic Specification No. 21700.

#### 4.6 ELECTRICAL MEASUREMENTS (TABLES 2 AND 3)

Not applicable.

#### 4.7 BURN-IN AND ELECTRICAL MEASUREMENTS (TABLES 4 AND 5)

Not applicable.

#### 4.8 ENVIRONMENTAL AND ENDURANCE TESTS (TABLE 6)

Not applicable.