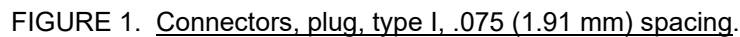


MIL-DTL-55302/156E
w/AMENDMENT 1
11 January 2025
SUPERSEDING
MIL-DTL-55302/156E
9 March 2005

CONNECTORS, PRINTED CIRCUIT SUBASSEMBLY AND ACCESSORIES:
PLUG, RIGHT ANGLE, DECADE INCREMENTS 10 THROUGH 120, 150, 160 AND 180 CONTACT
POSITIONS, FOR PRINTED WIRING BOARDS (.075 SPACING)

The requirements for acquiring the product described herein shall consist of this specification sheet and MIL-DTL-55302.



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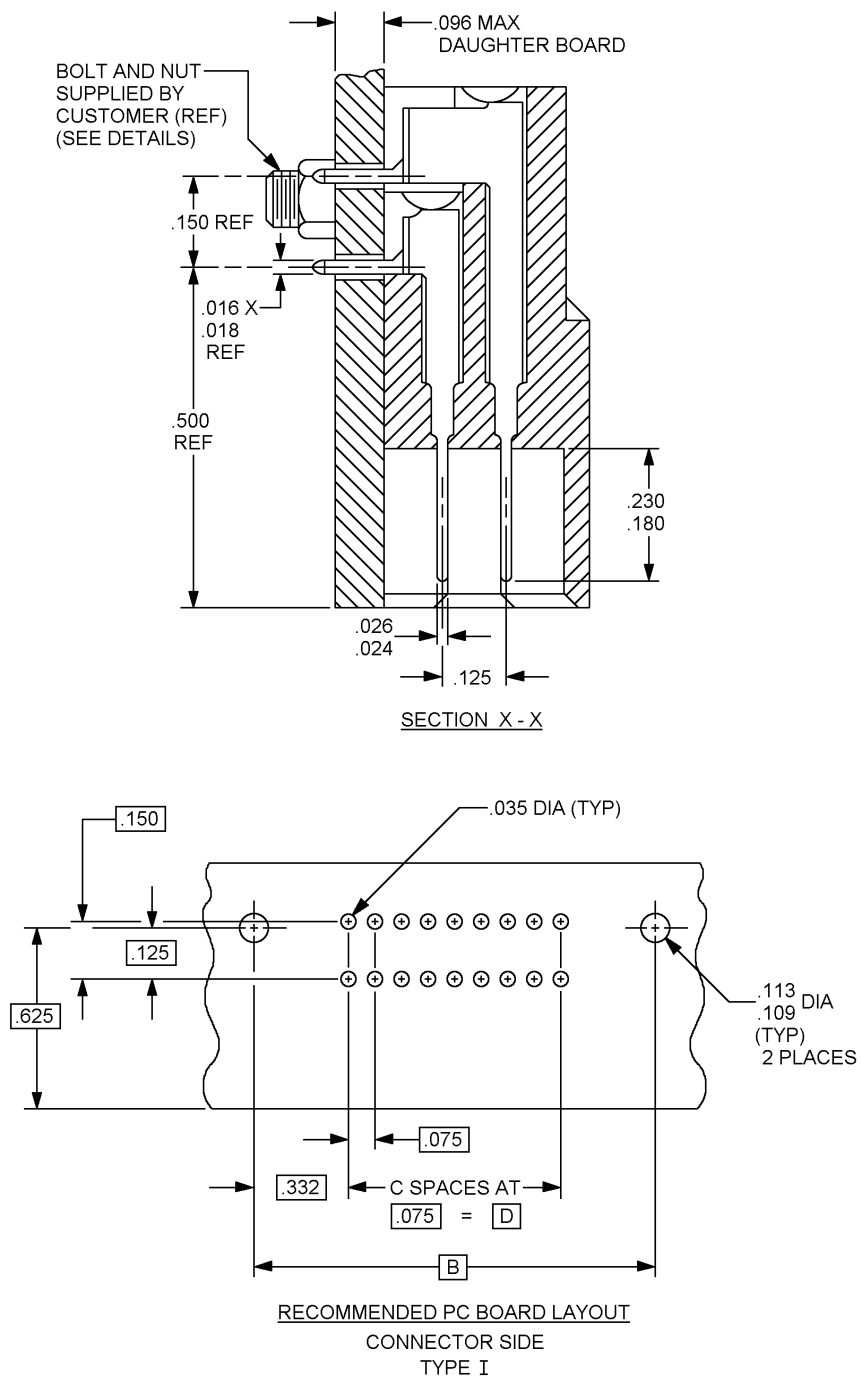


FIGURE 1. Connectors, plug, type I, .075 (1.91 mm) spacing – Continued.

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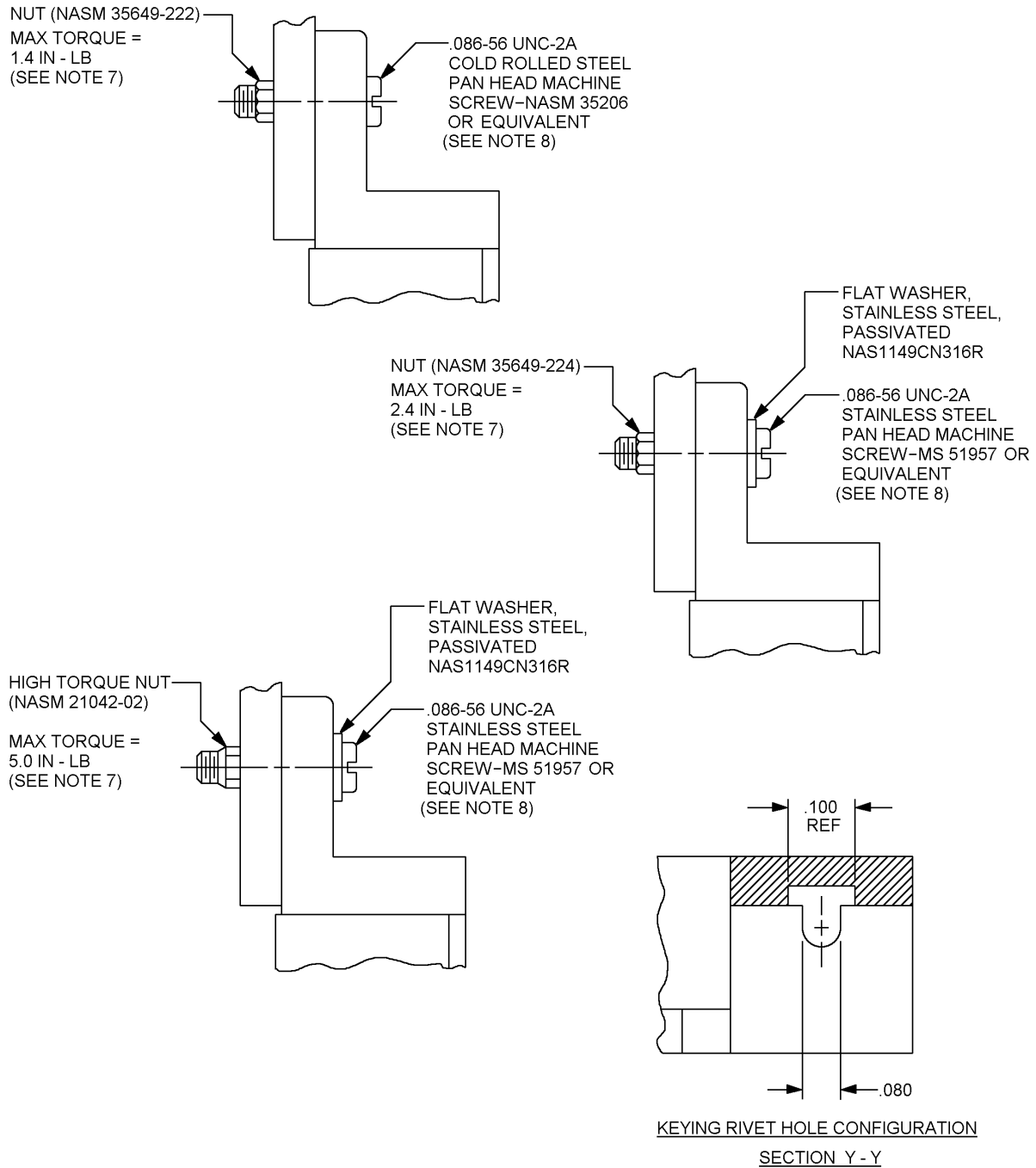


FIGURE 1. Connectors, plug, type I, .075 (1.91 mm) spacing – Continued.

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Inches	mm	Inches	mm	Inches	mm
.003	0.08	.080	2.03	.150	3.81
.005	0.13	.081	2.06	.180	4.57
.006	0.15	.085	2.16	.225	5.72
.008	0.20	.095	2.41	.230	5.84
.010	0.25	.096	2.44	.247	6.27
.012	0.30	.100	2.54	.265	6.73
.015	0.38	.105	2.67	.310	7.87
.016	0.41	.109	2.77	.330	8.38
.018	0.46	.113	2.87	.332	8.43
.024	0.61	.125	3.18	.377	9.58
.026	0.66	.130	3.30	.415	10.54
.035	0.89	.135	3.43	.500	12.70
.069	1.75	.140	3.56	.625	15.88
.075	1.90	.145	3.68	.770	19.56

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerances are ± 0.005 (0.13 mm) on three place decimals and $\pm 2^\circ$ on angles.
4. These connectors mate with connectors specified in MIL-DTL-55302/24 and MIL-DTL-55302/25.
5. Numbers indication, every 5 cavities marked or molded on side. Numbers indicating end cavities and lines indicating every 5 cavities molded or marked on mating face.
6. Key locations embossed on indicated surfaces.
7. Torque wrench must be used when fastening connector to printed circuit board..
8. Length to be determined by user.

FIGURE 1. Connectors, plug, type I, .075 (1.91 mm) spacing – Continued.

[illegible]

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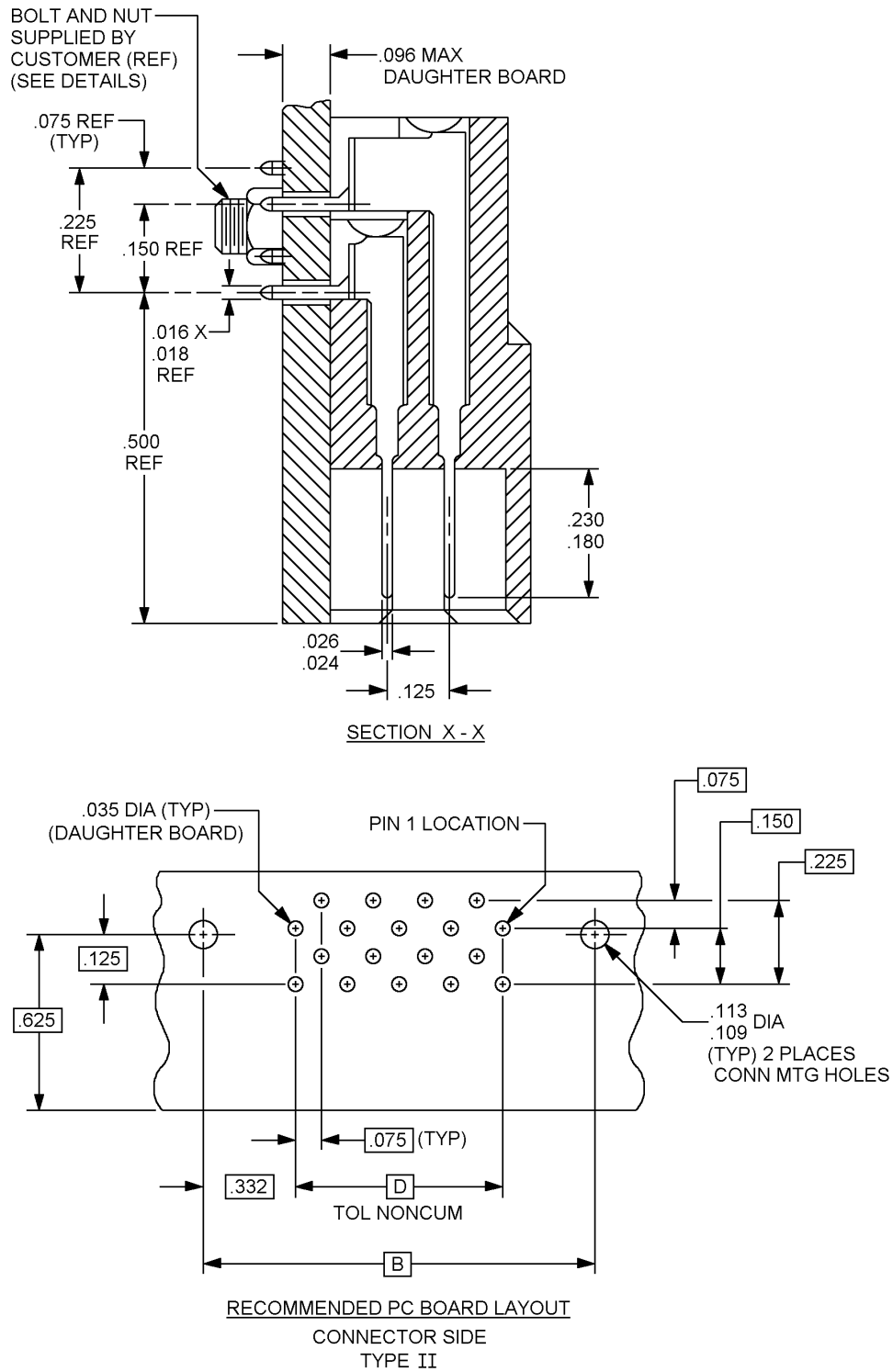


FIGURE 2. Connectors, plug, type II, .075 (1.91 mm) spacing – Continued.

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w/AMENDMENT 1

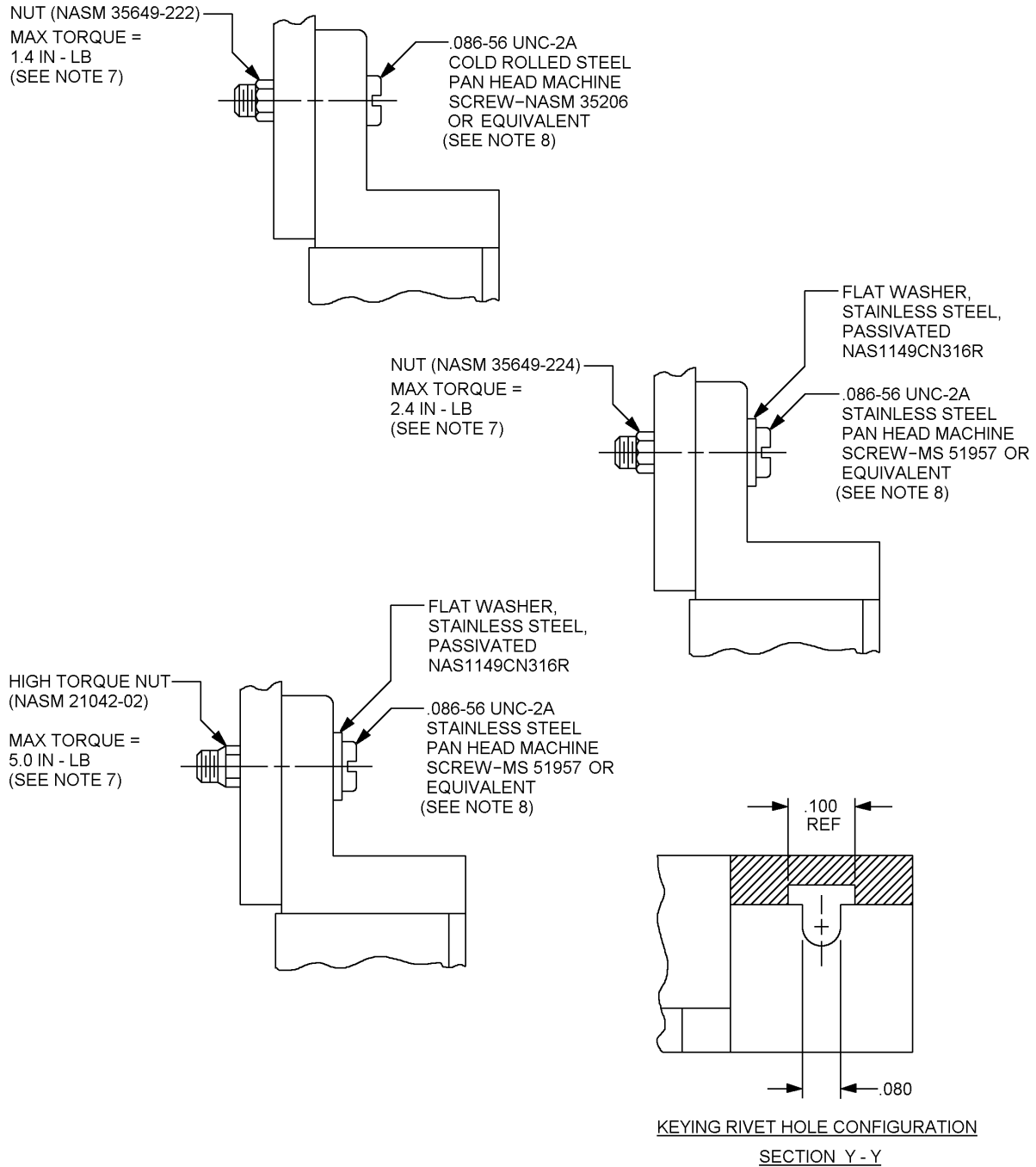


FIGURE 2. Connectors, plug, type II, .075 (1.91 mm) spacing – Continued.

MIL-DTL-55302/156E
w/AMENDMENT 1

Inches	mm	Inches	mm	Inches	mm
.003	0.08	.080	2.03	.150	3.81
.005	0.13	.081	2.06	.180	4.57
.006	0.15	.085	2.16	.230	5.84
.008	0.20	.095	2.41	.247	6.27
.010	0.25	.096	2.44	.265	6.73
.012	0.30	.100	2.54	.310	7.87
.015	0.38	.105	2.67	.330	8.38
.016	0.41	.109	2.77	.332	8.43
.018	0.46	.113	2.87	.377	9.58
.024	0.61	.125	3.18	.415	10.54
.026	0.66	.130	3.30	.500	12.70
.035	0.89	.135	3.43	.625	15.88
.069	1.75	.140	3.56	.770	19.56
.075	1.90	.145	3.68		

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerances are ± 0.005 (0.13 mm) on three place decimals and $\pm 2^\circ$ on angles.
4. These connectors mate with connectors specified in MIL-DTL-55302/24 and MIL-DTL-55302/25.
5. Numbers indication, every 5 cavities marked or molded on side. Numbers indicating end cavities and lines indicating every 5 cavities molded or marked on mating face.
6. Key locations embossed on indicated surfaces.
7. Torque wrench must be used when fastening connector to printed circuit board.
8. Length to be determined by user.

FIGURE 2. Connectors, plug, type II, .075 (1.91 mm) spacing – Continued.

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TABLE I. Dash numbers and dimensions for types I and II.

Dash numbers	Type number	Number of contacts	Dimensions <u>1/</u>				Contact identification numbers
			A	B	C	D	
01 16	I II	10	1.255 (31.88)	.965 (24.51)	4	.300 (7.62)	1, 6
02 17	I II	20	1.630 (41.40)	1.340 (34.04)	9	.675 (17.15)	1, 11
03 18	I II	30	2.005 (50.93)	1.715 (43.56)	14	1.050 (26.67)	1, 16
04 19	I II	40	2.380 (60.45)	2.090 (53.09)	19	1.425 (36.20)	1, 21
05 20	I II	50	2.755 (69.98)	2.465 (62.61)	24	1.800 (45.72)	1, 26
06 21	I II	60	3.130 (79.50)	2.840 (72.14)	29	2.175 (55.25)	1, 31
07 22	I II	70	3.505 (89.03)	3.215 (81.66)	34	2.550 (64.77)	1, 36
08 23	I II	80	3.880 (98.55)	3.590 (91.19)	39	2.925 (74.30)	1, 41
09 24	I II	90	4.255 (108.08)	3.965 (100.71)	44	3.300 (83.82)	1, 46
10 25	I II	100	4.630 (117.60)	4.340 (110.24)	49	3.675 (93.35)	1, 51
11 26	I II	110	5.005 (127.13)	4.715 (119.76)	54	4.050 (102.87)	1, 56
12 27	I II	120	5.380 (136.65)	5.090 (129.29)	59	4.425 (112.40)	1, 61
13 28	I II	150	6.505 (165.23)	6.215 (157.86)	74	5.550 (140.97)	1, 76
14 29	I II	160	6.880 (174.75)	6.590 (167.39)	79	5.925 (150.50)	1, 81
15 30	I II	180	7.630 (193.80)	7.340 (186.44)	89	6.675 (169.54)	1, 91

1/ Metric equivalents are given in parentheses.

REQUIREMENTS

Design and construction:

Dimensions and configuration: See figures 1 and 2 and table I.

Material:

Insulator body: Insulator material shall be in accordance with MIL-DTL-55302 or type GLCP-30F in accordance with ASTM D5138 or MIL-M-24519.

Contact material: Contact material in accordance with MIL-DTL-55302 or Beryllium copper alloy C17400 in accordance with ASTM B768.

Plating: The contact plating for the engagement area, (.150 inch minimum length) shall be gold in accordance with MIL-DTL-55302 over nickel in accordance with MIL-DTL-55302. The contact area between the engagement area and the solder tail shall be nickel in accordance with MIL-DTL-55302. The contact plating for the solder tail area shall be tin-lead over nickel in accordance with MIL-DTL-55302.

Contact identification: See figures 1 and 2.

Contact rating: 3.0 amperes maximum per contact, 2.25 amperes continuous per contact at 75°F.

Mating and unmating: The maximum mating force in pounds shall be the number of contacts multiplied by .25 and the withdrawal force in pounds shall be a minimum of .025 times the number of contacts and shall not exceed the measured insertion force.

Contact resistance: No individual contact pair shall have a resistance exceeding .020 ohm.

Contact retention: 3 pounds minimum.

Dielectric withstanding voltage:

Sea level: 900 volts rms.

High altitude: 200 volts rms.

Keying: See MIL-DTL-55302/31.

Part or Identifying Number (PIN): M55302/156-(and dash number from table I).

Patent number 3,404,367. The Government has a royalty free license under this patent for the benefit of manufacturers of the item either for the Government or for use in equipment to be delivered to the Government.

Amendment notations. The margins of this specification are marked with vertical lines to indicate where modifications from this amendment were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations.

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Referenced documents. In addition to MIL-DTL-55302, this document references the following:

MIL-DTL-55302/24	MS51957
MIL-DTL-55302/25	NASM 35206
MIL-DTL-55302/31	ASTM B768
MIL-M-24519	ASTM D5138

CONCLUDING MATERIAL

Custodians:

Army - CR
Navy - EC
Air Force - 11
DLA - CC

Preparing activity:
DLA - CC

(Project 5935-2024-210)

Review activities:

Army – AR, AT, AV, CR4, MI
Navy – AS, MC, OS
Air Force - 19, 99

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <https://assist.dla.mil>.