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NEMA STANDARDS PUBLICATION

CG 1

MANUFACTURED GRAPHITE/CARBON ELECTRODES

NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION

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NEMA Standards Publication No. CG 1-1999

Manufactured Graphite/Carbon Electrodes

Published by

National Electrical Manufacturers Association
1300 North 17th Street, Suite 1847
Rosslyn, Virginia 22209

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FOREWORD

User needs were considered in the development of this Standards Publication by the Carbon and Manufactured Graphite Section of the National Electrical Manufacturers Association. The section will periodically review it for any revisions necessary to keep it up to date with advancing technology. Proposed or recommended revisions should be submitted to:

Vice President, Engineering Department
National Electrical Manufacturers Association
1300 North 17th Street, Suite 1847
Rosslyn, VA 22209

NEMA Standards Publication No. CG 1-1998 supersedes CG 1-1992.

This Standards Publication was developed by the Carbon and Manufactured Graphite Section. Section approval of the standard does not necessarily imply that all section members voted for its approval or participated in its development. At the time it was approved, the group was composed of the following members:

Graphite Sales, Inc.—Chagrin Falls, OH
Showa Denko Carbon, Inc.—Ridgeville, SC
SGL Carbon Group—Charlotte, NC
Superior Graphite Co.—Chicago, IL
UCAR International, Inc.—Clarksville, TN

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Section 1
GENERAL

1.1 SCOPE

Section 2 of this Standards Publication covers lengths and diameters of cylindrical manufactured graphite and carbon electrodes for use in all types of electric arc furnaces.

Section 3 covers thread design, sizes, and other pertinent details of the joining systems of cylindrical manufactured graphite and carbon electrodes most commonly used in electric arc furnaces.

Throughout this publication, the values stated in U.S. customary units are to be regarded as the standard.

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Section 2
LENGTHS AND DIAMETERS

2.1 LENGTHS

The length of electrodes shall be in accordance with Table 2-1. The diameter of electrodes shall be in accordance with Table 2-2.

Table 2-1
LENGTH OF ELECTRODES

Nominal Length		Full Length			Minimum Under Full Length	
Inches	(mm)	Exact Conv. to mm	Inches	(mm)	Inches*	(mm*)
24	(600)	609.6	24 to 23	(610 to 584)	21	(533)
30	(750)	762.0	31 to 28	(787 to 711)	24	(610)
36	(900)	914.4	37 to 34	(940 to 864)	30	(762)
40	(1000)	1016.0	41 to 37	(1041 to 940)	32	(813)
48	(1200)	1219.2	49 to 44	(1245 to 1118)	38	(965)
60	(1500)	1524.0	63 to 56	(1600 to 1422)	49	(1245)
72	(1800)	1828.8	75 to 67	(1702 to 1600)	62	(1575)
84	(2100)	2133.6	87 to 78	(2210 to 1981)	72	(1829)
96	(2400)	2438.4	99 to 90	(2515 to 2286)	84	(2134)
110	(2700)	2794.0	114 to 100	(2895 to 2540)	95	(2413)

*Due to manufacturing variables, a small percentage of electrodes may have the minimum lengths given in this column.

2.2 DIAMETERS

Lengths shall be identified on the basis of the nearest inch, -0.4, +0.5 (-10.2 mm, +10.7 mm). For example, an electrode measuring 67.5 inches shall be called a 68-inch electrode; an electrode measuring 67.4 inches shall be called a 67-inch electrode.

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Table 2-2
DIAMETER OF ELECTRODES

Nominal Inches	(mm)	Maximum Inches	(mm)	Minimum* Inches	(mm)	Nominal Length Inches	(mm)
1-1/4	(30)	1.28	(32.5)	1.22	(31.0)	24	(600)
1-1/2	(40)	1.53	(38.9)	1.47	(37.3)	24	(600)
2	(50)	2.03	(51.6)	1.94	(49.3)	24	(600)
						30	(750)
						48	(1200)
2-1/2	(60)	2.53	(64.3)	2.44	(62.0)	30	(750)
3	(75)	3.07	(78.8)	2.88	(73.2)	40	(1000)
4	(100)	4.07	(103.4)	3.88	(98.6)	40	(1000)
						48	(1200)
5-1/8	(130)	5.20	(132.1)	5.00	(127.0)	40	(1000)
6	(150)	6.07	(154.2)	5.88	(149.4)	48	(1200)
						60	(1500)
						72	(1800)
7	(175)	7.07	(179.6)	6.88	(174.8)	48	(1200)
						60	(1500)
						72	(1800)
8	(200)	8.07	(205.0)	7.88	(200.2)	48	(1200)
						60	(1500)
						72	(1800)
9	(225)	9.07	(230.4)	8.88	(225.6)	60	(1500)
						72	(1800)
10	(250)	10.07	(255.8)	9.88	(251.0)	48	(1200)
						60	(1500)
						72	(1800)
12	(300)	12.07	(306.6)	11.88	(301.8)	60	(1500)
						72	(1800)
14	(350)	14.12	(358.6)	13.88	(352.6)	60	(1500)
						72	(1800)
16	(400)	16.12	(409.4)	15.88	(403.4)	72	(1800)
17	(425)	17.12	(434.9)	16.88	(428.8)	60	(1500)
						72	(1800)

(Table 2-2 continued on next page)

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Table 2-2
DIAMETER OF ELECTRODES (Continued)

Nominal Inches (mm)	Maximum Inches (mm)	Minimum* Inches (mm)	Nominal Length Inches (mm)
18 (450)	18.12 (460.3)	17.88 (454.2)	60 (1500) 72 (1800) 96 (2400)
20 (500)	20.12 (511.1)	19.88 (505.0)	60 (1500) 72 (1800) 84 (2100) 96 (2400)
22 (550)	22.12 (561.9)	21.88 (555.8)	72 (1800) 84 (2100) 96 (2400) 110 (2700)
24 (600)	24.12 (612.7)	23.88 (606.6)	72 (1800) 84 (2100) 96 (2400) 110 (2700)
26 (650)	26.12 (663.6)	25.88 (657.2)	96 (2400) 110 (2700)
28 (700)	28.12 (714.3)	27.88 (708.2)	96 (2400) 110 (2700)
30 (750)	30.12 (765.1)	29.88 (759.0)	110 (2700)
35 (875)	35.12 (892.1)	34.88 (886.0)	110 (2700)
40 (1000)	40.12 (1019.1)	39.88 (1013.0)	110 (2700)
45 (1150)	45.12 (1146.1)	44.88 (1140.0)	110 (2700)
50 (1270)	50.08 (1272)	49.92 (1268)	110 (2700)
55 (1400)	55.08 (1399)	54.5 (1395)	110 (2700)

Table 2-3
LOW SPOT* LIMITS FOR ELECTRODE DIAMETER

Nominal Diameter			At Low Spot
1-1/4 in.	to	3 in.	0.030 in.
4 in.	to	5-1/8 in.	0.040 in
6 in.	to	30 in.	0.130 in.
35 in.	to	45 in.	0.380 in

*A low spot is a flat spot in a localized area untouched by the tool when the electrode is turned. Table 1-3 indicates the maximum allowable under diameter.

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Section 3
JOINING SYSTEMS

3.1 JOINING SYSTEMS

NOTE—Tables and figures for Section 2 are displayed on the following pages.

3.1.1 Taper thread

a) 0.250 pitch taper thread (see Table 3-1 and Figure 3-1).
b) 0.333 pitch taper thread (see Table 3-2 and Figure 3-2).
c) For dimensional tolerances on items a) and b), see Table 3-3.

3.1.2 Male-female thread

a) 0.125 pitch male-female thread (see Figure 3-4).
b) 0.250 pitch male-female thread (see Figure 3-4).

3.1.3 60-degree flat

60-degree flat thread (known in the industry as "National Coarse") (see Figure 3-5).

3.1.4 2.000 pitch

2.000 pitch flat thread (see Figure 3-6).

3.2 CONNECTING PIN SIZES

The nominal connecting pin size, socket size, thread design, and detail of the joining systems shall be in accordance with the applicable tables and figures in this section.

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Table 3-1
JOINING SYSTEM – 0.250 PITCH TAPER THREAD
FOUR THREADS PER INCH

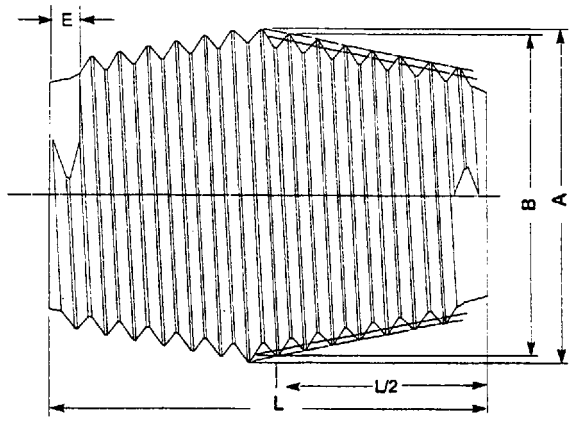
Nominal Electrode Diameter		Nominal Connecting Pin Major Dia. x Length A x L		Pitch Diameter B		Electrode Socket Minor Dia. x Min. Depth D x S	
inch	(mm)	inch	(mm)	inch	(mm)	inch	(mm)
3	(75)	1.8125 x 3.00	(46.04 x 76.2)	1.6880	(42.88)	1.5635 x 1.6875	(39.71 x 42.86)
4	(100)	2.7500 x 4.00	(69.85 x 101.6)	2.6255	(66.69)	2.5010 x 2.1875	(63.53 x 55.56)
5.125	(130)	3.1250 x 5.00	(79.38 x 127.0)	3.0005	(76.21)	2.8760 x 2.6875	(73.05 x 68.26)
6	(150)	3.6250 x 5.50	(92.08 x 139.7)	3.5005	(88.91)	3.3760 x 2.9375	(85.75 x 74.61)
7	(150)	4.2500 x 6.50	(107.95 x 165.1)	4.1255	(104.79)	4.0010 x 3.4375	(101.63 x 87.31)
8	(200)	4.8125 x 7.00	(122.24 x 177.8)	4.6880	(119.08)	4.5635 x 3.6875	(115.91 x 93.66)
14	(350)	8.7500 x 14.00	(222.25 x 355.6)	8.6255	(219.09)	8.5010 x 7.1875	(215.93 x 182.56)
16	(400)	8.7500 x 14.00	(222.25 x 355.6)	8.6255	(219.09)	8.5010 x 7.1875	(215.93 x 182.56)
18	(500)	10.6250 x 14.00	(269.88 x 355.6)	10.5005	(266.71)	10.3760 x 7.1875	(263.55 x 182.56)
18	(500)	10.6250 x 18.00	(269.88 x 457.2)	10.5005	(266.71)	10.3760 x 9.1875	(263.55 x 233.36)
20	(500)	10.6250 x 14.00	(269.88 x 355.6)	10.5005	(266.71)	10.3760 x 7.1875	(263.55 x 182.56)
20	(500)	10.6250 x 18.00	(269.88 x 457.2)	10.5005	(266.71)	10.3760 x 9.1875	(263.55 x 233.36)
20	(500)	11.7500 x 18.00	(298.45 x 457.2)	11.6255	(295.29)	11.5010 x 9.1875	(292.13 x 233.36)
22	(550)	11.7500 x 18.00	(298.45 x 457.2)	11.6255	(295.29)	11.5010 x 9.1875	(292.13 x 233.36)
24	(550)	12.5000 x 14.00	(317.50 x 355.6)	12.3755	(314.34)	12.2510 x 7.1875	(311.18 x 182.56)
24	(550)	12.5000 x 18.00	(317.50 x 457.2)	12.3755	(314.34)	12.2510 x 9.1875	(311.18 x 233.36)
26	(650)	14.7500 x 22.00	(374.65 x 558.8)	14.6255	(371.49)	14.5010 x 11.1875	(368.33 x 284.16)
28	(700)	14.7500 x 18.00	(374.65 x 457.20)	14.6255	(371.49)	14.5010 x 9.1875	(368.33 x 233.36)
28	(700)	14.7500 x 22.00	(374.65 x 558.8)	14.6255	(371.49)	14.5010 x 11.1875	(368.33 x 284.16)

Recess E dimension for pin and F for socket to be 0.50 (12.7) max.

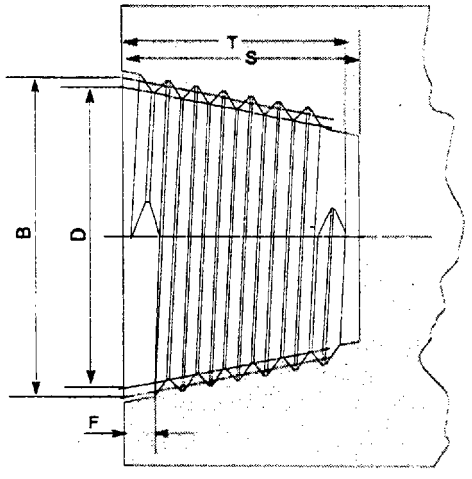
Threaded length (T) for electrode socket to be at least L/2.

See Figure 3-1.

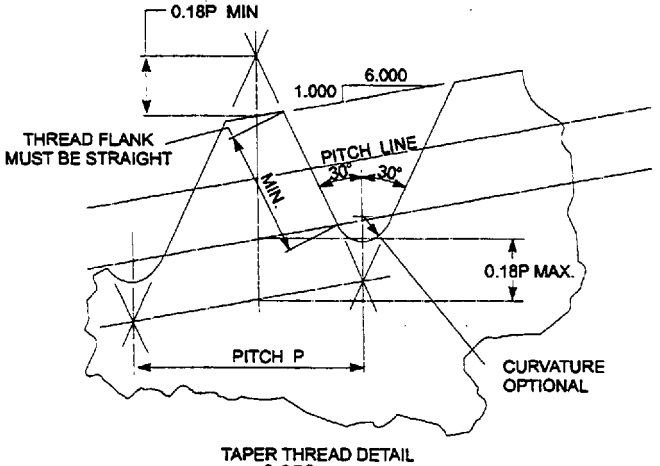
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CONNECTING PIN DETAIL



SOCKET DETAIL



TAPER THREAD DETAIL
0.250 PITCH

Figure 3-1
JOINING SYSTEM – 0.250 PITCH TAPER THREAD

NOTE—See Table 3-1.

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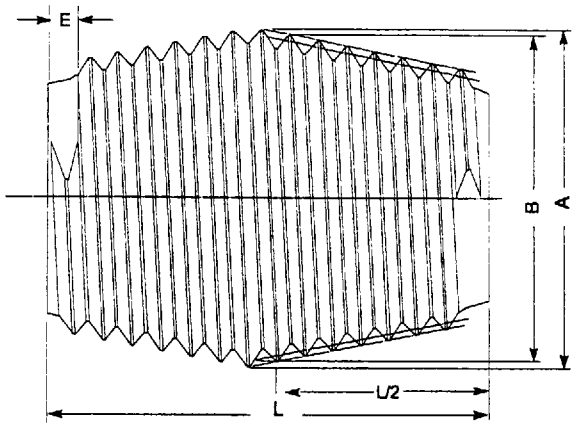
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Table 3-2
JOINING SYSTEM – 0.333 PITCH TAPER THREAD
THREE THREADS PER INCH

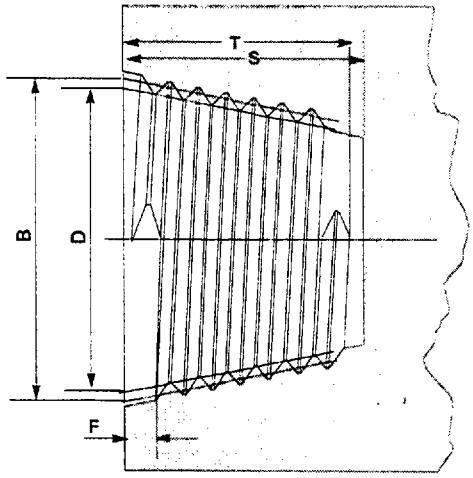
Electrode Diameter (Nominal)	Connecting Pin Major Dia. x Length A x L (Nominal)		Pitch Diameter B		Electrode Socket Minor Dia. x Min. Depth D x S	
inch (mm)	inch (mm)		inch (mm)		inch (mm)	
9 (225)	5.5000 x 8.00	(139.7 x 203.2)	5.3340	(135.48)	5.1680 x 4.1875	(131.27 x 106.36)
10 (250)	5.5000 x 8.00	(139.7 x 203.2)	5.3340	(135.48)	5.1680 x 4.1875	(131.27 x 106.36)
10 (250)	6.1250 x 8.67	(155.58 x 220.1)	5.9590	(151.36)	5.7930 x 4.5209	(147.14 x 114.83)
12 (300)	6.1250 x 8.67	(155.58 x 220.1)	5.9590	(151.36)	5.7930 x 4.5209	(147.14 x 114.83)
12 (300)	6.9750 x 10.67	(177.17 x 270.9)	6.8090	(172.95)	6.6430 x 4.5209	(168.73 x 140.23)
14 (350)	6.9750 x 10.67	(177.17 x 270.9)	6.8090	(172.95)	6.6430 x 5.5209	(168.73 x 140.23)
14 (350)	8.5000 x 12.00	(215.90 x 304.8)	8.3340	(211.68)	8.1680 x 6.1875	(207.47 x 157.16)
16 (400)	8.5000 x 12.00	(215.90 x 304.8)	8.3340	(211.68)	8.1680 x 6.1875	(207.47 x 157.16)
16 (400)	9.5000 x 14.00	(241.30 x 355.6)	9.3340	(237.08)	9.1680 x 7.1875	(232.87 x 182.56)
17 (425)	9.5000 x 12.00	(241.30 x 304.8)	9.3340	(237.08)	9.1680 x 6.1875	(232.87 x 157.16)
17 (425)	9.5000 x 14.00	(241.30 x 355.6)	9.3340	(237.08)	9.1680 x 7.1875	(232.87 x 182.56)
18 (450)	9.5000 x 12.00	(241.30 x 304.8)	9.3340	(237.08)	9.1680 x 6.1875	(232.87 x 157.16)
18 (450)	9.5000 x 14.00	(241.30 x 355.6)	9.3340	(237.08)	9.1680 x 7.1875	(232.87 x 182.56)
18 (450)	10.7500 x 14.00	(273.05 x 355.6)	10.5840	(268.83)	10.4180 x 7.1875	(264.62 x 182.56)
20 (500)	10.7500 x 14.00	(273.05 x 355.6)	10.5840	(268.83)	10.4180 x 7.1875	(264.62 x 182.56)
20 (500)	10.7500 x 18.00	(273.05 x 457.2)	10.5840	(268.83)	10.4180 x 9.1875	(264.62 x 233.36)

Recess E dimension for pin and F for socket to be 0.50 (12.7) max.
Threaded length (T) for electrode socket to be at least L/2.
See Figure 3-2.

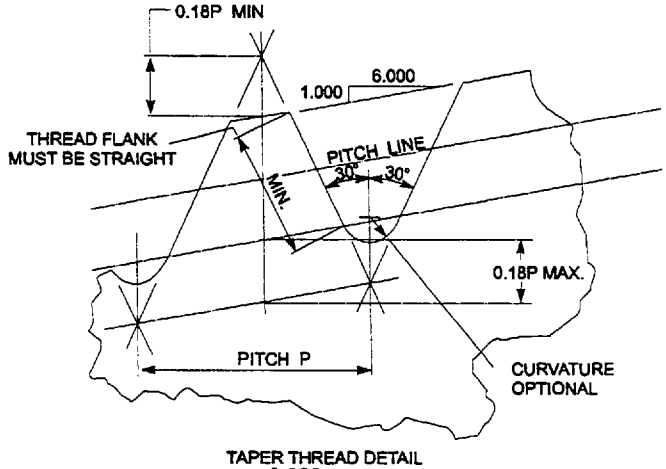
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CONNECTING PIN DETAIL



SOCKET DETAIL



TAPER THREAD DETAIL
0.333 PITCH

Figure 3-2
JOINING SYSTEM – 0.333 PITCH TAPER THREAD

NOTE—See Table 3-2.

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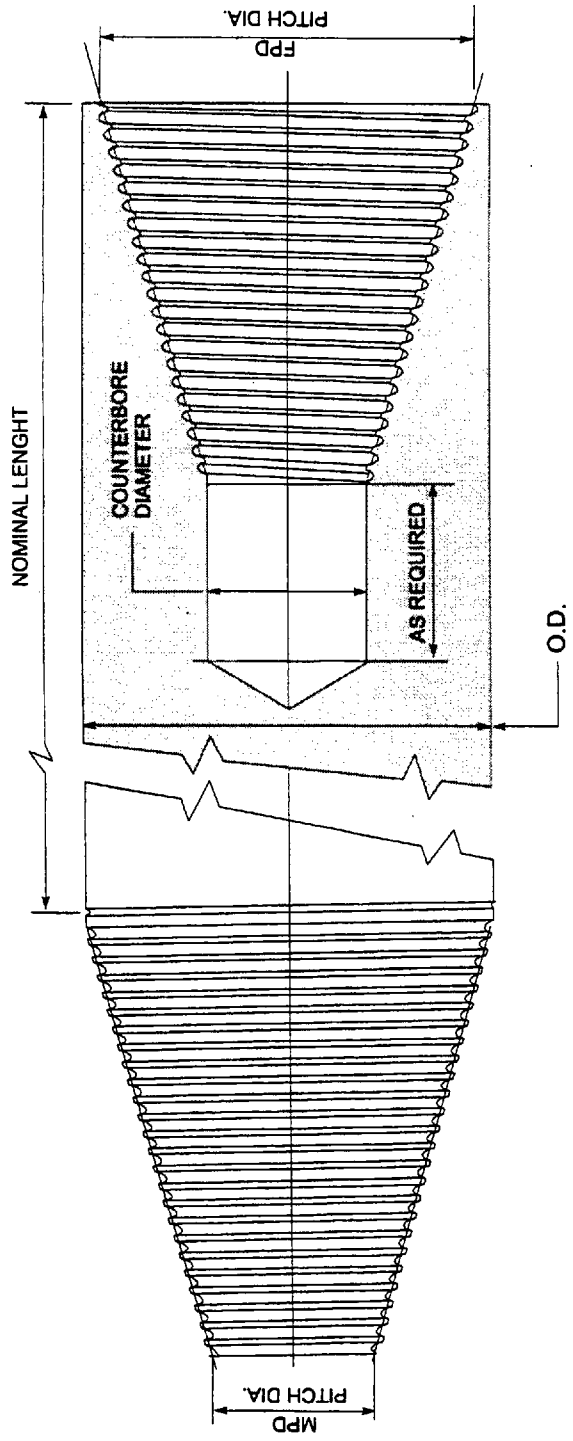
Table 3-3
DIMENSIONAL TOLERANCES OF TAPER THREADS

	Connecting Pin			Electrode Socket		
Nominal Electrode Diameter	Taper Angle (Minutes)	Length L	Pitch Diameter B	Taper Angle (Minutes)	Depth S	Thread Length T
Inches 3–28	+ 1.5' - 6.0'	+ 0.000 - 0.120	+ 0.020 - 0.000	+ 2.0' - 2.0'	+ 0.400 - 0.000	+ 0.400 - 0.000
mm 75–700	+ 1.5' - 6.0'	+ 0.0 - 3.0	+ 0.5 - 0.0	+ 2.0' - 2.0'	+ 10.0 - 0.0	+ 10.0 - 0.0

NOTE—Applies to Tables 3-1 and 3-2 and Figures 3-1 and 3-2.

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Nominal Diameter (O.D.)	Male-end Pitch Diameter (MPD)	Female-end Pitch Diameter (FPD)	Counterbore Diameter
3 inches 75 mm	1.1728 29.789	2.6678 67.762	1.125 28.57
4 inches 100 mm	1.1728 29.789	3.4803 88.400	1.125 28.57
5 1/8 inches 130 mm	2.1454 54.493	4.6054 116.978	2.098 53.29
6 inches 150 mm	2.6482 67.264	5.4804 139.202	2.098 53.10

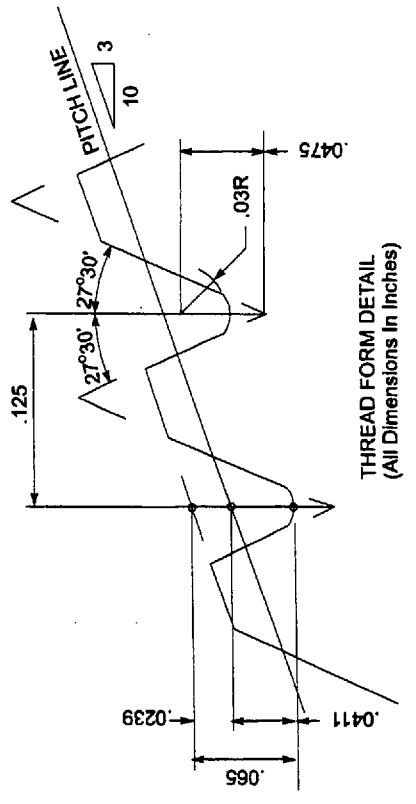
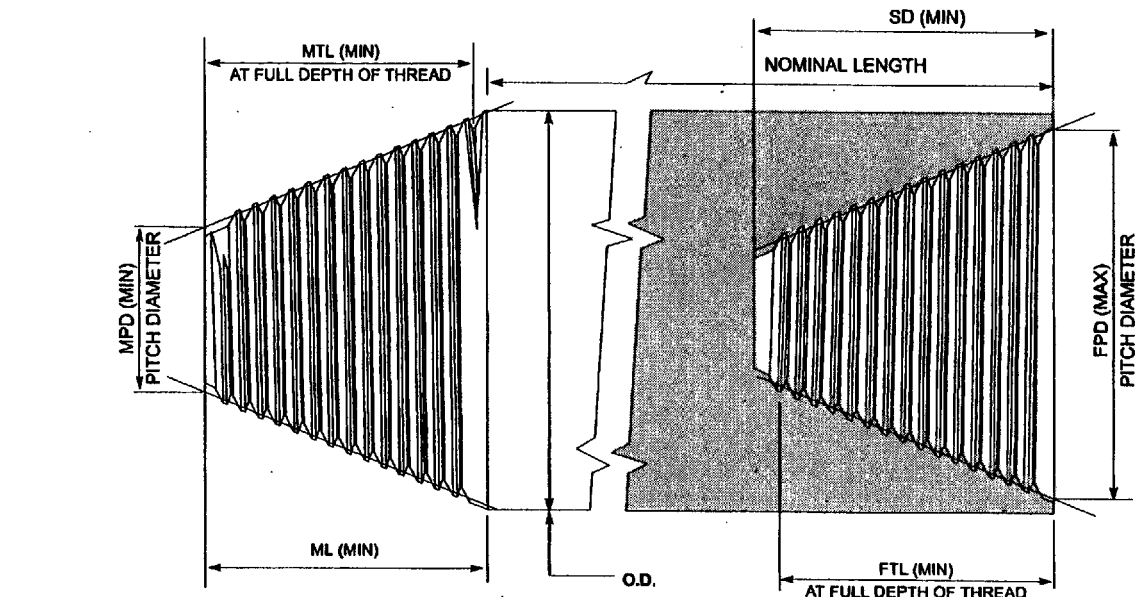


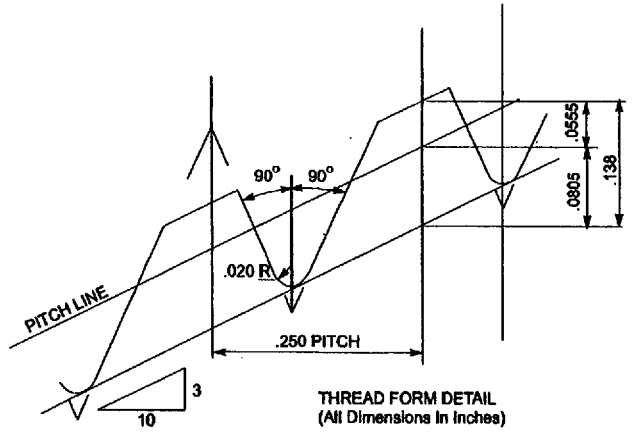
Figure 3-3
JOINING SYSTEM – 0.125 PITCH MALE-FEMALE THREAD

NOTE—Lengths shall be defined as the unthreaded full-turned diameter as shown in Table 2-1.

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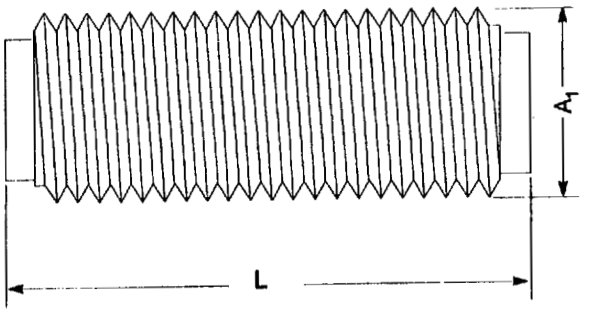
Nominal Diameter (O.D.)	Male Length (ML)	Male Thread Length (MTL)	Male-end Pitch Diameter (MPD)	Socket Depth (SD)	Female Thread Length (FTL)	Female-end Pitch Diameter (FPD)
7 inches 175 mm	4.813 122.24	3.915 99.44	2.931 74.45	4.313 109.54	4.010 101.85	6.300 160.02
8 inches 200 mm	4.688 119.06	4.415 112.14	3.329 84.55	4.813 122.24	4.510 114.55	7.167 182.04
9 inches 225 mm	5.188 131.76	4.915 124.81	3.779 95.99	5.313 134.94	5.010 127.25	8.080 205.23
10 inches 250 mm	5.688 144.46	5.415 137.54	4.112 104.44	5.813 147.64	5.510 139.95	8.880 225.55

Figure 3-4
JOINING SYSTEM – 0.250 PITCH MALE-FEMALE THREAD

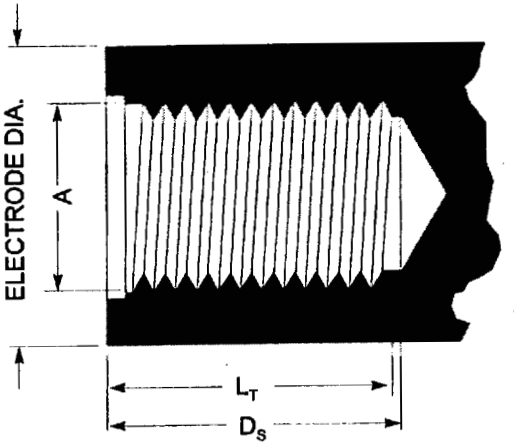
NOTE—Lengths shall be defined as the unthreaded full-turned diameter as shown in Table 2-1.

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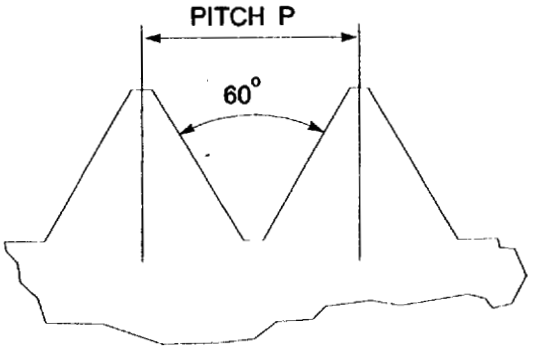
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CONNECTING PIN DETAIL



SOCKET DETAIL

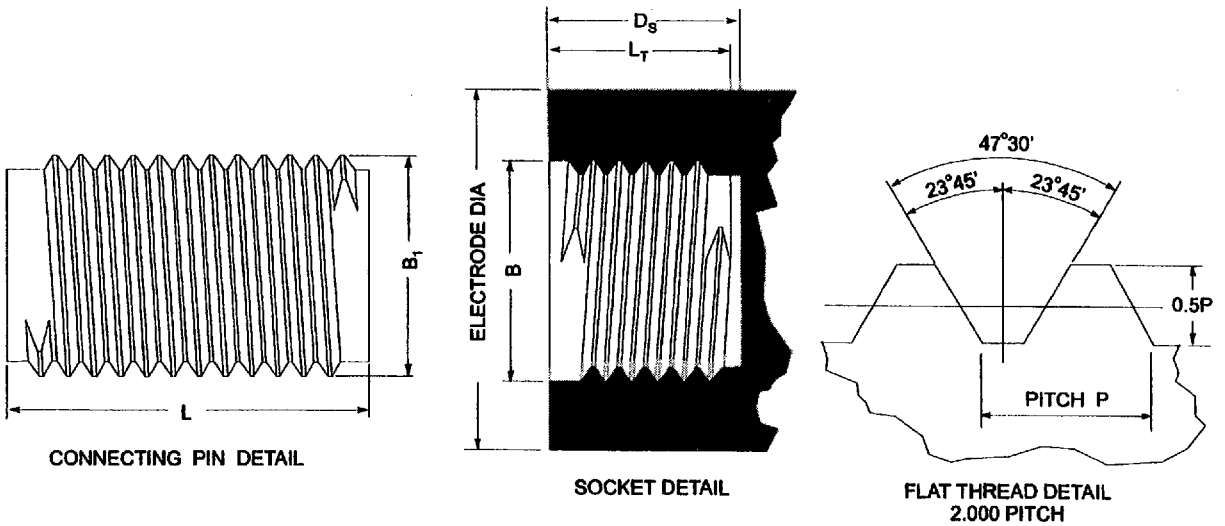


60° FLAT THREAD DETAIL

	Nominal Electrode Diameter	Connecting Pin: Nominal Pin Size "A_1" x "L"	Connecting Pin: Overall Length "L" Maximum	Connecting Pin: Overall Length "L" Minimum	Electrode Socket: Depth "D_S" Maximum	Electrode Socket: Depth "D_S" Minimum	Electrode Socket: Length of Thread "L_T" Maximum	Electrode Socket: Length of Thread "L_T" Minimum	Nominal Diameter "A"	Thread Detail: Pitch of Thread "F"	Thread Detail: Threads per Inch
Inches	1-1/4	0.750 x 2.00	2.000	1.969	1.187	1.062	1.157	1.000	0.750	0.100	10
mm	30	19.05 x 50.80	50.80	50.01	30.16	26.99	29.39	25.40	19.05	2.540	
Inches	1-1/2	0.750 x 2.00	2.000	1.969	1.187	1.062	1.157	1.000	0.750	0.100	10
mm	40	19.05 x 50.80	50.80	50.01	30.16	26.99	29.39	25.40	19.05	2.540	
Inches	2	1.250 x 3.00	3.000	2.969	1.687	1.562	1.657	1.500	1.250	0.1428	7
mm	50	31.75 x 76.20	76.20	75.41	42.86	39.69	42.09	38.10	31.75	3.627	
Inches	2-1/2	1.500 x 4.00	4.000	3.969	2.187	2.062	2.157	2.000	1.500	0.1667	6
mm	60	38.10 x 101.60	101.60	100.61	55.56	52.39	54.79	50.80	38.10	4.234	

Figure 3-5
JOINING SYSTEM – 60-DEGREE FLAT THREAD (NATIONAL COARSE)

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CONNECTING PIN DETAIL

SOCKET DETAIL

FLAT THREAD DETAIL
2.000 PITCH

	Nominal Electrode Diameter	Connecting Pin			Electrode Socket				Nominal Diameter "B"	Thread Detail
		Nominal Pin Size†	Overall Length "L"		Depth "D_S"		Length of Thread "L_T"			Pitch of
		"B_1" x "L"	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum		Thread "F"
Inches	30	15.320 x 22.5	22.563	22.250	11.563	11.375	10.250	10.000	15.320	2.000
mm	750	389.13 x 571.5	573.09	565.15	293.70	288.92	260.35	254.00	389.13	50.8
Inches	35	18.500 x 26.5	26.563	26.250	13.563	13.375	12.250	12.000	18.500	2.000
mm	875	469.90 x 673.1	674.69	666.75	344.50	339.72	322.15	304.80	469.90	50.8
Inches	40	21.000 x 28.0	28.063	27.750	14.313	14.125	13.000	12.750	21.000	2.000
mm	1000	533.40 x 711.2	712.79	704.85	363.55	358.78	330.20	323.85	533.40	50.8
Inches	45	23.000 x 30.0	30.063	29.750	15.313	15.125	14.000	13.750	23.000	2.000
mm	1150	584.20 x 762.0	763.59	755.65	388.95	384.18	355.60	349.25	584.20	50.8
Inches	50	23.000 x 38.0	38.063	37.75	19.313	15.125	18.00	17.750	23.000	2.000
mm	1270	584.20 x 965.2	966.80	958.85	490.55	485.77	457.20	450.35	584.20	50.8
Inches	55	25.500 x 42.0	42.063	41.75	21.313	21.1255	20.00	19.750	25.500	2.000
mm	1400	6447.7 x 1066.8	1068.40	1060.45	531.45	536.57	508.00	501.65	747.70	50.8

† Diameter of connecting pin expressed as pitch diameter.

* Maximum thread length on connecting pin is twice the minimum L_T.

Figure 3-6
JOINING SYSTEM – 2.000 PITCH FLAT THREAD (MODIFIED ACME)

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APPENDIX

A comparison of taper thread types currently included in NEMA, International Electrotechnical Commission (IEC), and Japanese Industrial Standard (JIS) is shown below for information purposes.

Table A-1
STANDARD COMPARISON

Nominal Joint Size	Designations	Nominal Electrode Diameter			
Diameter x Length (Inches / mm)	Threads per Inch	NEMA CG-1 (inches)	JIS R7201 (mm / designation)		IEC 239 (mm / designation)
5.5 x 8	(139.70 x 203.20)	3	9, 10	225 / 9T3	225 / 139 T3N
6.125 x 8.667	(155.58 x 220.13)	3	10, 12	250 / 10T3	250 / 155 T3N
6.9750 x 10.667	(177.17 x 270.94)	3	12, 14	300 / 12T3	300 / 177 T3N
8.5 x 12	(215.90 x 304.80)	3	14, 16	350 / 14T3 400 / 16T3Z	350 / 215 T3N 400 / 215 T3N
9.5 x 12	(241.30 x 304.80)	3	17, 18		
9.5 x 13.331	(241.30 x 338.70)	3	18	400 / 16T3 450 / 18T3Z	400 / 241 T3N 450 / 241 T3N
9.5 x 14	(241.30 x 355.60)	3	16, 17, 18		
10.75 x 14	(273.05 x 355.60)	3	18, 20	450 / 18T3Z 500 / 20T3 550 / 22T3	450 / 273 T3N 500 / 273 T3N
10.75 x 18	(273.05 x 457.20)	3	20		
11.75 x 14.667	(298.45 x 372.50)	3		550 / 22T3Z	550 / 298 T3N
1.8125 x 3	(46.08 x 76.20)	4	3	75 / 3T4	75 / 45 T4N
2.750 x 4.000	(69.85 x 101.60)	4	4	100 / 4T4	100 / 69 T4N
3.125 x 5	(79.38 x 127.00)	4	5-1/8	130 / 5-1/8T4	130 / 79 T4N
3.625 x 5.550	(92.08 x 139.70)	4	6	150 / 6T4	150 / 92 T4N
4.25 x 6-1/2	(107.95 x 165.10)	4	7	175 / 7T4	175 / 107 T4N
4.8125 x 7	(122.24 x 177.80)	4	8	200 / 8T4	200 / 122 T4N
5.5 x 7	(139.70 x 177.80)	4			225 / 139 T4N
5.5 x 7	(139.70 x 203.20)	4		225 / 9T4	
6 x 7.5	(152.40 x 190.50)	4		250 / 10T4	250 / 152 T4N
7 x 8.5	(177.80 x 215.90)	4		300 / 12T4	300 / 177 T4N
8 x 10	(203.20 x 254.00)	4		350 / 14T4	350 / 203 T4N
8.75 x 12	(222.25 x 304.80)	4		400 / 16T4	400 / 222 T4N
8.75 x 14	(222.25 x 355.60)	4	14		400 / 222 T4L
9.5 x 12	(241.30 x 304.80)	4		450 / 18T4	450 / 241 T4N
9.5 x 14	(241.30 x 355.60)	4			450 / 241 T4L
10.625 x 14	(269.88 x 355.60)	4	20	500 / 20T4	500 / 269 T4N
10.625 x 18	(269.88 x 457.20)	4	18, 20		500 / 269 T4L
11.75 x 14	(298.45 x 355.60)	4	22	550 / 22T4	550 / 298 T4N
11.75 x 18	(298.45 x 457.20)	4	20, 22		550 / 298 T4L
12.5 x 14	(317.50 x 355.60)	4	24	600 / 24T4	600 / 317 T4N
12.5 x 18	(317.50 x 457.20)	4	24		600 / 317 T4L
14.75 x 22	(355.60 x 457.20)	4		650 / 26T4	650 / 355 T4N
14.75 x 22	(355.60 x 558.80)	4	26		650 / 355 T4L
14.75 x 18	(374.65 x 457.20)	4	26, 28	700 / 28T4	700 / 347 T4N
14.75 x 22	(374.65 x 558.80)	4	28		700 / 347 T4L

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