INTERNATIONAL STANDARD 3161

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UNJ threads, with controlled root radius, for aerospace — Inch series

Filetages UNJ, avec rayon à fond de filet contrôlé, pour applications aérospatiales — Série en inches

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FOREWORD

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Draft International Standards adopted by the Technical Committees are circulated to the Member Bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 3161 was drawn up by Technical Committee ISO/TC 20, *Aircraft and space vehicles*, and was circulated to the Member Bodies in May 1975.

It has been approved by the Member Bodies of the following countries:

Australia	Italy	Turkey
Belgium	Japan	United Kingdom
Brazil	Romania	U.S.A.
Canada	South Africa, Rep. of	
India	Spain	

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Czechoslovakia
U.S.S.R.

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CONTENTS

UNJ threads, with controlled root radius, for aerospace — Inch series

1 SCOPE

This International Standard specifies the characteristics of inch series UNJ threads with controlled root radius.[1)]

It determines the basic triangular profile for this type of thread, gives a system of designating and also, for diameters from 0.060 to 6 in, series of diameter/pitch combinations, basic dimensions and tolerances, and finally specifies the inspection procedures to be used.

2 FIELD OF APPLICATION

This International Standard applies primarily to the threads of inch series aerospace fasteners.

3 BASIC PROFILE OF THREAD

3.1 Definition of basic profile

basic profile: The theoretical profile corresponding to the basic dimensions, i.e. : the major diameter, the pitch diameter and the minor diameter. The tolerances are applied to the basic profile. See figure 1.

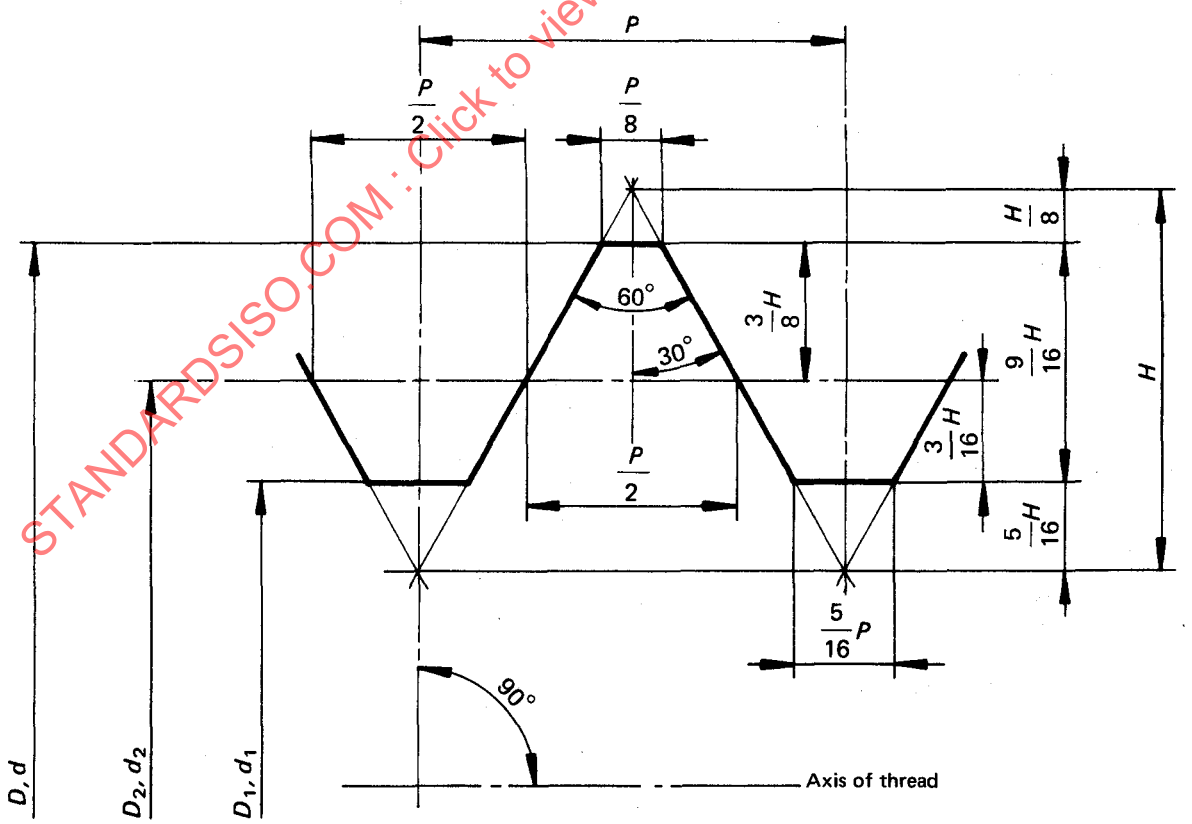

FIGURE 1 — **Basic profile**

1) Metric units shown in this International Standard are conversions of inch units.

3.2 Basic profile dimensions

In the following formulae :

P = pitch

H = height of fundamental triangle

n = number of threads per inch

$$H = \frac{\sqrt{3}}{2} \times P = 0.866\,025\,P = \frac{0.866\,025}{n}$$

$$\frac{9}{16}H = 0.487\,14\,P = \frac{0.487\,14}{n}$$

$$\frac{3}{8}H = 0.324\,759\,P = \frac{0.324\,759}{n}$$

$$\frac{5}{16}H = 0.270\,63\,P = \frac{0.270\,63}{n}$$

$$\frac{H}{8} = 0.108\,25\,P = \frac{0.108\,25}{n}$$

All these values are shown in table 1.

3.3 Basic dimensions of thread

3.3.1 *Symbols*

D = basic major diameter of internal thread

D_2 = basic pitch diameter of internal thread

D_1 = basic minor diameter of internal thread

d = basic major diameter of external thread

d_2 = basic pitch diameter of external thread

d_1 = basic minor diameter of external thread

H = height of fundamental triangle

P = pitch $= \frac{1}{n}$

n = number of threads per inch $(n = \frac{1}{P})$

3.3.2 *Values*

Values shown in table 2 have been calculated according to the following formulae :

$$D_2 = D - (2 \times \frac{3}{8}H) = D - 0.649\,519\,P = D - \frac{0.649\,519}{n}$$

$$d_2 = d - (2 \times \frac{3}{8}H) = d - 0.649\,519\,P = d - \frac{0.649\,519}{n}$$

$$D_1 = D - (2 \times \frac{9}{16}H) = D - 0.974\,28\,P = D - \frac{0.974\,28}{n}$$

$$d_1 = d - (2 \times \frac{9}{16}H) = d_2 - 0.324\,759\,P = d - \frac{0.974\,28}{n}$$

4 SERIES OF THREADS

This International Standard includes various series of threads; i.e, groups of diameter/pitch combinations distinguished from each other by the number of threads per inch associated with any given thread diameter. These series of threads are given in table 3.

4.1 Diameters

Columns 1 and 2 of table 3 give the primary and secondary series nominal sizes which satisfy current requirements.

4.2 Number of threads per inch

Columns 3 to 8 inclusive of table 3 give the numbers of threads per inch which are recommended to be associated with the diameters in columns 1 and 2. These columns of the numbers of threads per inch are divided into two groups :

- Series with increasing pitches : columns 3, 4 and 5
- Constant (uniform) pitch series : columns 6, 7 and 8

4.2.1 *Series with increasing pitches*

There are three series of increasing pitches. They are headed "Coarse pitch", "Fine pitch" and "Extra fine pitch" in accordance with current practice.

These terms indicate the relative pitches of the three series for each given thread diameter and do not imply a difference in quality between the series.

4.2.2 *Constant (uniform) pitch series*

In addition to these three series of increasing pitches, the table includes details of constant pitch series which have been selected from the range of 8 to 16 threads per inch. Each of these series is limited to an appropriate range of diameters.

5 DESIGNATION OF THREADS

Threads shall be designated as shown in 5.1 and 5.2 by indicating, in sequence, the nominal size, the number of threads per inch, the thread series symbol and the thread class symbol.

The thread designation is indicated at the head of each column in table 3, with the addition of the thread class (3A : external thread, 3B : internal thread).

5.1 Thread designation with increasing pitches

	Designation
Coarse pitch series — External thread :	**UNJC — 3A**
Fine pitch series — External thread :	**UNJF — 3A**
Extra fine pitch series — External thread :	**UNJEF — 3A**
Coarse pitch series — Internal thread :	**UNJC — 3B**
Fine pitch series — Internal thread :	**UNJF — 3B**

Extra fine pitch series – Internal thread : **UNJEF – 3B**

Example : **0.2500 – 28 UNJF – 3A** : External thread, basic diameter 0.250 0 in, 28 threads per inch, UNJF – 3A thread.

5.2 Constant pitch series

The diameter/pitch combinations of threads of the constant pitch series are all designated by the three letters UNJ followed by the class of thread (3A : external thread; 3B : internal thread).

Examples :

3.500 – 12 UNJ – 3B : Internal thread, basic diameter 3.500 in, constant series, 12 threads per inch, UNJ – 3B thread class.

3.500 – 12 UNJ – 3B – LH : Internal thread, basic diameter 3.500 in, constant series, 12 threads per inch, UNJ – 3B thread class, left-hand thread.

6 TOLERANCES

6.1 Length of thread engagement used in computing tolerances

The length of thread engagement (L_e) when engaged is equal to :

– the basic major diameter for the series UNJC, UNJF and 8 UNJ;

– 9 P for the series UNJEF, 12 UNJ and 16 UNJ.

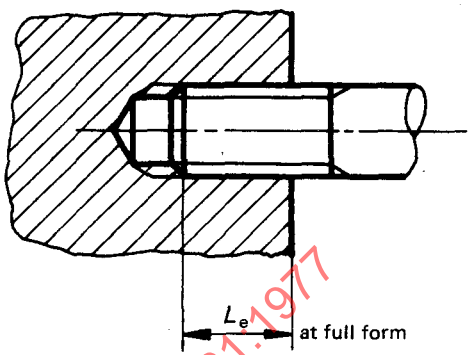

FIGURE 2 – **Length of engagement**

6.2 Position of tolerances

The tolerances are positive (+) for the internal threads and negative (–) for the external threads (that is, the tolerances are applied in the direction of minimum material).

6.2.1 *Internal thread*

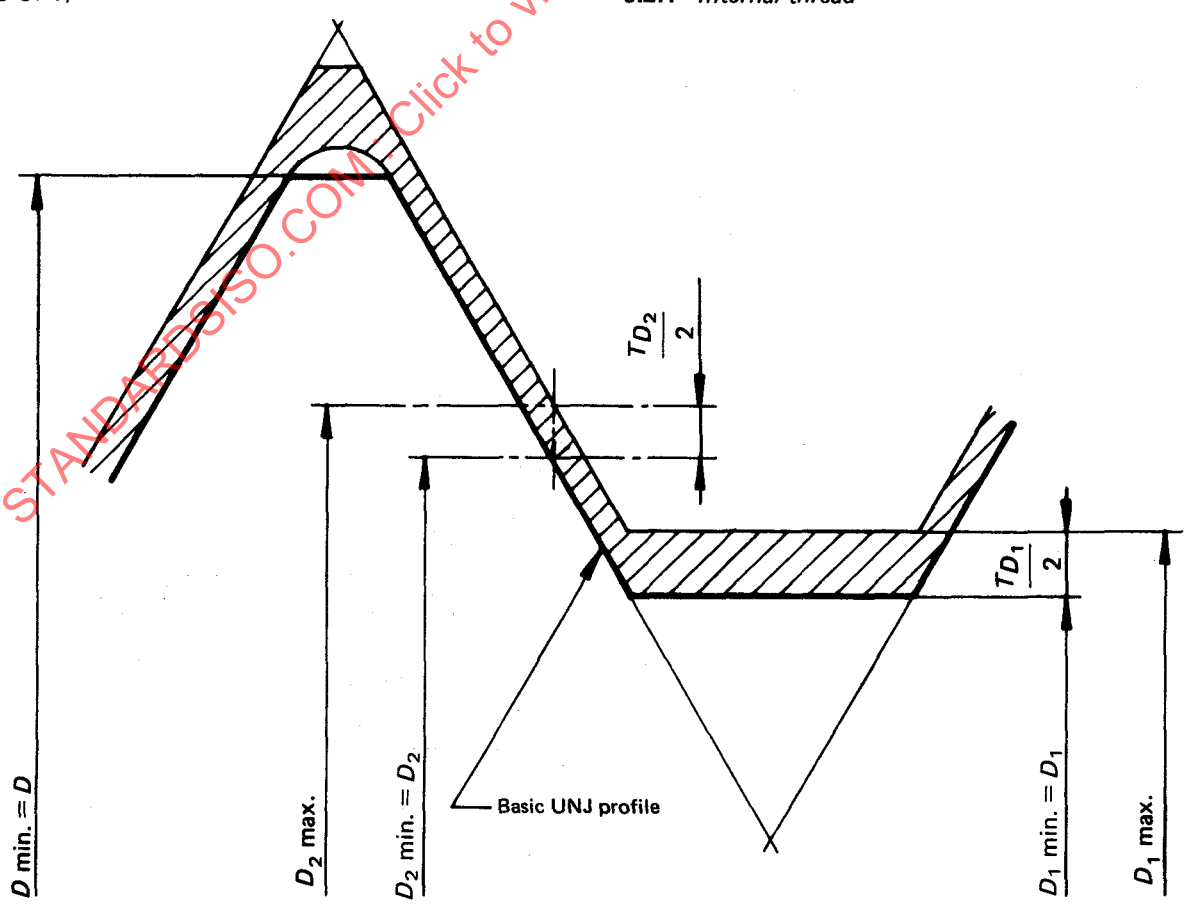

FIGURE 3 – **Internal thread tolerances**

6.2.2 *External thread*

6.3 Values of tolerances for profile dimensions and tolerances of the profile form

Values indicated in tables 4, 5, 6, 7 and 8 have been calculated according to the formulae given in 6.3.1, and are based on the length of engagement equal to that shown in clause 6, where

α is the basic half-angle of the thread;

$\delta\alpha$ is the maximum permissible deviation of the half-angle;

T_{D_2} and T_{d_2} are the pitch diameter tolerances;

δP is the maximum permissible pitch deviation between any two of the threads engaged;

δD_2 is the pitch diameter increment due to lead deviation for the internal threads;

$\delta D_2{}'$ is the pitch diameter increment due to deviations in the half-angles for the internal threads;

δd_2 is the pitch diameter increment due to lead deviation for the external threads;

$\delta d_2{}'$ is the pitch diameter increment due to deviations in the half-angles for the external threads;

6.3.1 *Calculation formulae*

d max. $= d$

d min. $= d$ max. $- 0.060 \sqrt[3]{P^2}$

d_2 max. $= d$ max. $- 0.649\,519\,P = d_2$

d_2 min. $= d_2$ max. $- 0.750\,(0.001\,5\sqrt[3]{d} + 0.001\,5\sqrt{L_e} + 0.015\sqrt[3]{P^2})$

d_3 max. $= d_2$ max. $- 0.505\,18\,P = d_3$

d_3 min. $= d_2$ min. $- 0.565\,80\,P$

R max. $= 0.180\,42\,P$

R min. $= 0.150\,11\,P$

D max. $= D_2$ max. $+ 0.793\,86\,P$

D min. $= D$

D_2 max. $= D_2$ min. $+ 0.975\,(0.001\,5\sqrt[3]{d} + 0.001\,5\sqrt{L_e} + 0.001\,5\sqrt[3]{P^2})$

D_2 min. $= D$ min. $- 0.649\,519\,P = D_2$

D_1 max. $= D_1$ min. $+ T_{D_1}$

$T_{D_1} = (0.05\sqrt[3]{P^2} + 0.03\,P/d) - 0.002$

with $0.135\,315\,P < T_{D_1} < 0.259\,809\,P$ for threads with more than 12 threads per inch

and $T_{D_1} = 0.120\,P$ for threads with 12 threads per inch or less.

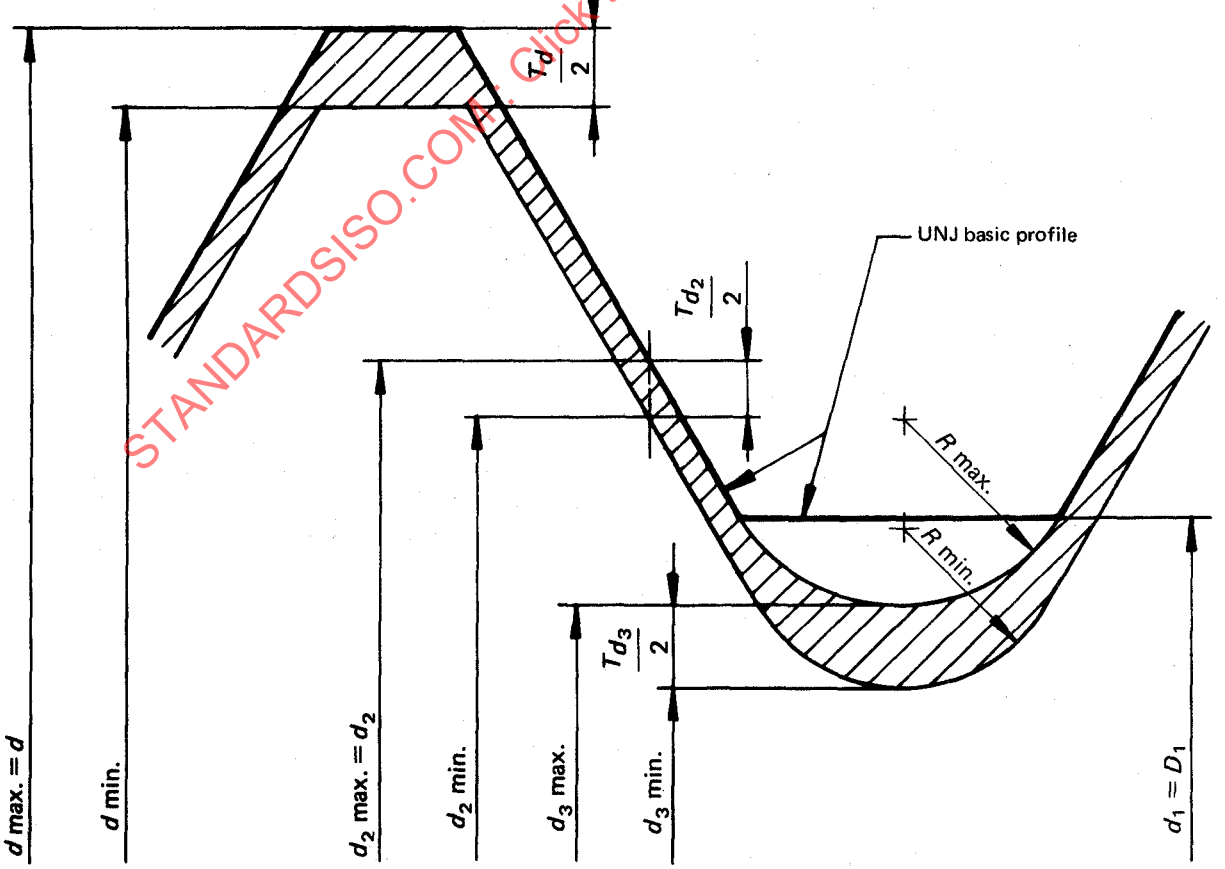

FIGURE 4 — **External thread tolerances**

D_1 min. $= D - 0.974\ 28\ P$ rounded upwards to the fourth decimal place, unless the fifth figure is zero.

$$\delta P = \frac{\delta D_2}{\cot \alpha} = \frac{\delta D_2}{1.732\ 1} = \frac{0.4\ T_{D_2}}{1.732\ 1} \text{ for internal threads}$$

$$\delta P = \frac{\delta d_2}{\cot \alpha} = \frac{\delta d_2}{1.732\ 1} = \frac{0.4\ T_{d_2}}{1.732\ 1} \text{ for external threads}$$

$$\tan \delta\alpha = \frac{\delta D_2{}'}{1.5\ P} = \frac{0.4\ T_{D_2}}{1.5\ P} \text{ for internal threads}$$

$$\tan \delta\alpha = \frac{\delta d_2{}'}{1.5\ P} = \frac{0.4\ T_{d_2}}{1.5\ P} \text{ for external threads}$$

6.3.2 *Root radius of the thread*

6.3.2.1 INTERNAL THREADS

For internal threads, the profile of the actual root of the thread shall at no point be below the basic profile given in figure 3. No particular radius is specified.

6.3.2.2 EXTERNAL THREADS

For external threads, the profile of the actual root of the thread shall lie within the root radius tolerance zone shown in figure 5. The limit values of the root radius R are specified in table 4. The profile shall be a continuous blended curve, no part of which shall have a radius of less than 0.150 11 P and which is tengential to the thread flanks at not less than 0.562 5 H thread depth. The profile may comprise tangent flank radii that are joined by a tangential flat at the root.

6.4 Special case for coated threads

The thread is, when required, protected by applying a metal coating or a layer of solid lubricant.

6.4.1 *External threads*

Where the external threads are intended to be coated, the minimum value of the pitch diameter of the thread may be reduced by 0.001 in maximum for threads with a tolerance for the pitch diameter of the thread of less than 0.003 5 in in table 5.

For threads with a tolerance for the minimum pitch diameter of the thread of more than 0.003 5 in, the value of the pitch diameter of the thread may be reduced by 0.3 times the tolerance of the pitch diameter of the thread, but this reduction shall not exceed 0.001 5 in. The maximum limits for the dimensions of the threads of coated screws shall be in accordance with the values given in this International Standard.

6.4.2 *Internal threads*

Where the internal threads are intended to be coated, the maximum value of the pitch diameter of the thread may be increased in the same way as specified in 6.4.1 for the reduction of the minimum pitch diameter of the external thread. The minimum limits of the dimensions of the coated internal threads shall be in accordance with the values given in this International Standard.

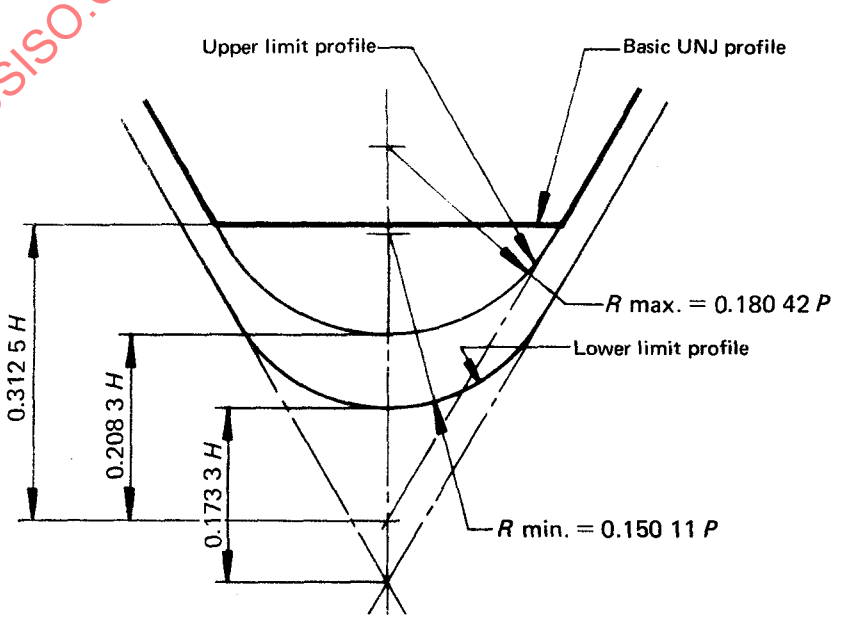

FIGURE 5 – **Radius at the root of the screw thread**

7 GAUGING BY LIMIT GAUGES[1)]

7.1 Gauging of internal threads

For checking the internal threads, threaded gauges of the GO and NOT-GO type shall be used.

To check the minor diameter of the internal threads, plug gauges of the GO and NOT-GO type shall be used.

7.2 Gauging of external threads

For checking the maximum limits of the material, a thread GO ring gauge of a properly calibrated dial gauge shall be used.

Thread dial gauges or reference gauges (with shortened flanks and properly calibrated) shall be used to check the minimum limits of the material of the pitch diameter.

Measuring instruments or reference gauges, properly calibrated, shall be used to check the deviations in the pitch diameter due both to the lead error and to errors of the half-angles, also the uniformity of the distribution of these errors, the lead errors and concentricity defects.

Snap gauges, indicating gauges, or a measuring instrument shall be used to check the major diameter.

7.3 Root radius

The radius of the thread root shall be checked by an optical method.

The minor diameter of the thread shall be checked using flange gauges or dial gauges (properly calibrated), by measuring instruments or by optical procedures.

8 TABLES

Tables are provided which specify inch dimensions and corresponding metric equivalents. All thread designations are specified in inch units. The conversion procedure adopted for obtaining the metric values in the tables was to multiply the inch values by 25,4. The resultant values were rounded to be within the inch product limits.

Table 1 gives the inch dimensions of basic profile.

Table 2 specifies the basic dimensions in inches (with metric conversions).

Table 3 gives the preferred selection of diameter/pitch combinations. It is recommended that usage be restricted to the primary sizes indicated.

Table 4 gives the limit values of the root radius in inches (with metric conversions).

Table 5 and 6 specify the values of tolerances for profile dimensions in inches (with metric conversions).

Tables 7 and 8 specify the maximum permissible deviations in the half-angle and the lead error in inches (with metric conversions).

1) The gauges used shall be in accordance with the appropriate International Standard (to be prepared).

TABLE 1 — **Basic profile**

Dimensions in inches[1)]

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Number of threads per inch	**Pitch** $P = \frac{1}{n}$	$\frac{P}{2}$ 0.5 P	$\frac{5}{16}P$ 0.312 5 P	$\frac{P}{8}$ 0.125 P	H 0.866 025 P	$\frac{9}{16}H$ 0.487 14 P	$\frac{3}{8}H$ 0.324 76 P	$\frac{5}{16}H$ 0.270 63 P	$\frac{H}{8}$ 0.108 25 P
80	0.012 500	0.006 250	0.003 91	0.001 56	0.010 825	0.006 09	0.004 06	0.003 38	0.001 35
72	0.013 889	0.006 944	0.004 34	0.001 74	0.012 028	0.006 77	0.004 51	0.003 76	0.001 50
64	0.015 625	0.007 812	0.004 88	0.001 95	0.013 532	0.007 61	0.005 07	0.004 23	0.001 69
56	0.017 857	0.008 928	0.005 58	0.002 23	0.015 465	0.008 70	0.005 80	0.004 83	0.001 93
48	0.020 833	0.010 416	0.006 51	0.002 60	0.018 042	0.010 15	0.006 77	0.005 64	0.002 26
44	0.022 727	0.011 363	0.007 10	0.002 84	0.019 682	0.011 07	0.007 38	0.006 15	0.002 46
40	0.025 000	0.012 500	0.007 81	0.003 12	0.021 651	0.012 18	0.008 12	0.006 77	0.002 71
36	0.027 778	0.013 889	0.008 68	0.003 47	0.024 056	0.013 53	0.009 02	0.007 52	0.003 01
32	0.031 250	0.015 625	0.009 77	0.003 91	0.027 063	0.015 22	0.010 15	0.008 46	0.003 38
28	0.035 714	0.017 857	0.011 16	0.004 46	0.030 929	0.017 40	0.011 60	0.009 67	0.003 87
24	0.041 667	0.020 833	0.013 02	0.005 21	0.036 084	0.020 30	0.013 53	0.011 28	0.004 51
20	0.050 000	0.025 000	0.015 62	0.006 25	0.043 301	0.024 36	0.016 24	0.013 53	0.005 41
18	0.055 556	0.027 778	0.017 36	0.006 94	0.048 113	0.027 06	0.018 04	0.015 04	0.006 01
16	0.062 500	0.031 250	0.019 53	0.007 81	0.054 127	0.030 45	0.020 30	0.016 91	0.006 77
14	0.071 429	0.035 714	0.022 32	0.008 93	0.061 859	0.034 80	0.023 20	0.019 33	0.007 73
13	0.076 923	0.038 461	0.024 04	0.009 62	0.066 617	0.037 47	0.024 98	0.020 82	0.008 33
12	0.083 333	0.041 666	0.026 04	0.010 42	0.072 169	0.040 59	0.027 06	0.022 55	0.009 02
11	0.090 909	0.045 454	0.028 41	0.011 36	0.078 730	0.044 29	0.029 52	0.024 60	0.009 84
10	0.100 000	0.050 000	0.031 25	0.012 50	0.086 603	0.048 71	0.032 48	0.027 06	0.010 83
9	0.111 111	0.055 555	0.034 72	0.013 89	0.096 225	0.054 13	0.036 08	0.030 07	0.012 03
8	0.125 000	0.062 500	0.039 06	0.015 62	0.108 253	0.060 89	0.040 59	0.033 83	0.013 53
7	0.142 857	0.071 428	0.044 64	0.017 86	0.123 718	0.069 59	0.046 39	0.038 66	0.015 46
6	0.166 667	0.083 333	0.052 08	0.020 83	0.144 338	0.081 19	0.054 13	0.045 10	0.018 04
5	0.200 000	0.100 000	0.062 50	0.025 00	0.173 205	0.097 43	0.064 95	0.054 13	0.021 65
4.5	0.222 222	0.111 111	0.069 44	0.027 78	0.192 450	0.108 25	0.072 17	0.060 14	0.024 06
4	0.250 000	0.125 000	0.078 12	0.031 25	0.216 506	0.121 78	0.081 19	0.067 66	0.027 06

1) In order to obtain the corresponding values in millimetres, multiply the values in inches by the factor 25,4.

TABLE 2 — **Basic dimensions (Inches)**

Dimensions in inches

(1)	(2)	(3)	(4)	(5)
Nominal sizes	**Number of threads per inch** n	**Major diameter** D, d	**Pitch diameter** D_2, d_2	**Minor diameter** D_1, d_1
0.060 0	80	0.060 0	0.051 9	0.047 9
0.073 0	72 64	0.073 0	0.064 0 0.062 9	0.059 5 0.057 8
0.086 0	64 56	0.086 0	0.075 9 0.074 4	0.070 8 0.068 6
0.099 0	56 48	0.099 0	0.087 4 0.085 5	0.081 6 0.078 7
0.112 0	48 40	0.112 0	0.098 5 0.095 8	0.091 7 0.087 7
0.125 0	44 40	0.125 0	0.110 2 0.108 8	0.102 9 0.100 7
0.138 0	40 32	0.138 0	0.121 8 0.117 7	0.113 7 0.107 6
0.164 0	36 32	0.164 0	0.146 0 0.143 7	0.137 0 0.133 6
0.190 0	32 24	0.190 0	0.169 7 0.162 9	0.159 6 0.149 4
0.216 0	32 28 24	0.216 0	0.195 7 0.192 8 0.188 9	0.185 6 0.181 2 0.175 4
0.250 0	32 28 20	0.250 0	0.229 7 0.226 8 0.217 5	0.219 6 0.215 2 0.201 3
0.312 5	32 24 18	0.312 5	0.292 2 0.285 4 0.276 4	0.282 1 0.271 9 0.258 4
0.375 0	32 24 16	0.375 0	0.354 7 0.347 9 0.334 4	0.344 6 0.334 4 0.314 2
0.437 5	28 20 16 14	0.437 5	0.414 3 0.405 0 0.396 9 0.391 1	0.402 7 0.388 8 0.376 7 0.368 0
0.500 0	28 20 16 13	0.500 0	0.476 8 0.467 5 0.459 4 0.450 0	0.465 2 0.451 3 0.439 2 0.425 1
0.562 5	24 18 16 12	0.562 5	0.535 4 0.526 4 0.521 9 0.508 4	0.521 9 0.508 4 0.501 7 0.481 4
0.625 0	24 18 16 12 11	0.625 0	0.597 9 0.588 9 0.584 4 0.570 9 0.566 0	0.584 4 0.570 9 0.564 2 0.543 9 0.536 5
0.687 5	24 16 12	0.687 5	0.660 4 0.646 9 0.633 4	0.646 9 0.626 7 0.606 4
0.750 0	20 16 12 10	0.750 0	0.717 5 0.709 4 0.695 9 0.685 0	0.701 3 0.689 2 0.668 9 0.652 6
0.812 5	20 16 12	0.812 5	0.780 0 0.771 9 0.758 4	0.763 8 0.751 7 0.731 4
0.875 0	20 16 14 12 9	0.875 0	0.842 5 0.834 4 0.828 6 0.820 9 0.802 8	0.826 3 0.814 2 0.805 5 0.793 9 0.766 8
0.937 5	20 16 12	0.937 5	0.905 0 0.896 9 0.883 4	0.888 8 0.876 7 0.856 4
1.000 0	20 16 12 8	1.000 0	0.967 5 0.959 4 0.945 9 0.918 8	0.951 3 0.939 2 0.918 9 0.878 3
1.062 5	18 16 12 8	1.062 5	1.026 4 1.021 9 1.008 4 0.981 3	1.008 4 1.001 7 0.981 4 0.940 8
1.125 0	18 16 12 8 7	1.125 0	1.088 9 1.084 4 1.070 9 1.043 8 1.032 2	1.070 9 1.064 2 1.043 9 1.003 3 0.985 9
1.187 5	18 16 12 8	1.187 5	1.151 4 1.146 9 1.133 4 1.106 3	1.133 4 1.126 7 1.106 4 1.065 8
1.250 0	18 16 12 8 7	1.250 0	1.213 9 1.209 4 1.195 9 1.168 8 1.157 2	1.195 9 1.189 2 1.168 9 1.128 3 1.110 9

TABLE 2 — **Basic dimensions (Metric conversions)**

(1)	(2)	(3)	(4)	(5)
Nominal sizes in	**Number of threads per inch** n	**Major diameter** D, d mm	**Pitch diameter** D_2, d_2 mm	**Minor diameter** D_1, d_1 mm
0.060 0	80	1,524	1,318	1,217
0.073 0	72	1,854	1,625	1,511
	64		1,597	1,468
0.086 0	64	2,184	1,927	1,798
	56		1,889	1,742
0.099 0	56	2,514	2,219	2,073
	48		2,171	1,999
0.112 0	48	2,844	2,501	2,329
	40		2,433	2,228
0.125 0	44	3,175	2,799	2,614
	40		2,763	2,558
0.138 0	40	3,505	3,093	2,888
	32		2,989	2,733
0.164 0	36	4,165	3,708	3,480
	32		3,649	3,393
0.190 0	32	4,826	4,310	4,054
	24		4,137	3,795
0.216 0	32	5,486	4,970	4,714
	28		4,897	4,602
	24		4,798	4,445
0.250 0	32	6,350	5,834	5,578
	28		5,760	5,466
	20		5,524	5,113
0.312 5	32	7,937	7,421	7,165
	24		7,249	6,096
	18		7,020	6,563
0.375 0	32	9,525	9,009	8,753
	24		8,836	8,494
	16		8,493	7,981
0.437 5	28	11,112	10,523	10,228
	20		10,287	9,876
	16		10,081	9,568
	14		9,933	9,347
0.500 0	28	12,700	12,111	11,816
	20		11,874	11,463
	16		11,669	11,156
	13		11,430	10,798
0.562 5	24	14,287	13,599	13,256
	18		13,370	12,913
	16		13,256	12,744
	12		12,913	12,228

(1)	(2)	(3)	(4)	(5)
Nominal sizes in	**Number of threads per inch** n	**Major diameter** D, d mm	**Pitch diameter** D_2, d_2 mm	**Minor diameter** D_1, d_1 mm
0.625 0	24	15,875	15,186	14,844
	18		14,958	14,501
	16		14,843	14,331
	12		14,500	13,816
	11		14,376	13,627
0.687 5	24	17,462	16,774	16,431
	16		16,431	15,919
	12		16,088	15,403
0.750 0	20	19,050	18,224	17,813
	16		18,018	17,506
	12		17,675	16,991
	10		17,399	16,571
0.812 5	20	20,637	19,812	19,400
	16		19,606	19,094
	12		19,263	18,578
0.875 0	20	22,225	21,399	20,998
	16		21,193	20,681
	14		21,046	20,460
	12		20,850	20,166
	9		20,391	19,477
0.937 5	20	23,812	22,987	22,576
	16		22,781	22,269
	12		22,438	21,753
1.000 0	20	25,400	24,574	24,163
	16		24,368	23,856
	12		24,025	23,340
	8		23,337	22,309
1.062 5	18	26,987	26,070	25,410
	16		25,956	25,444
	12		25,613	24,928
	8		24,925	23,896
1.125 0	18	28,575	27,658	27,191
	16		27,543	27,031
	12		27,200	26,515
	8		26,512	25,484
	7		26,217	25,042
1.187 5	18	30,162	29,245	28,788
	16		29,131	28,619
	12		28,788	28,103
	8		28,100	27,071
1.250 0	18	31,750	30,833	30,376
	16		30,718	30,206
	12		30,375	29,690
	8		29,687	28,659
	7		29,392	28,217

TABLE 2 — (*continued*)

Dimensions in inches

(1)	(2)	(3)	(4)	(5)
Nominal sizes	**Number of threads per inch** n	**Major diameter** D, d	**Pitch diameter** D_2, d_2	**Minor diameter** D_1, d_1
1.312 5	18 16 12 8	1.312 5	1.276 4 1.271 9 1.258 4 1.231 3	1.258 4 1.251 7 1.231 4 1.190 8
1.375 0	18 16 12 8 6	1.375 0	1.338 9 1.334 4 1.320 9 1.293 8 1.266 7	1.320 9 1.314 2 1.293 9 1.253 3 1.212 7
1.437 5	18 16 12 8	1.437 5	1.401 4 1.396 9 1.383 4 1.356 3	1.383 4 1.376 7 1.356 4 1.315 8
1.500 0	18 16 12 8 6	1.500 0	1.463 9 1.459 4 1.445 9 1.418 8 1.391 7	1.445 9 1.439 2 1.418 9 1.378 3 1.337 7
1.562 5	18 16 12 8	1.562 5	1.526 4 1.521 9 1.508 4 1.481 3	1.508 4 1.501 7 1.481 4 1.440 8
1.625 0	18 16 12 8	1.625 0	1.588 9 1.584 4 1.570 9 1.543 8	1.570 9 1.564 2 1.543 9 1.503 3
1.687 5	18 16 12 8	1.687 5	1.651 4 1.646 9 1.633 4 1.606 3	1.633 4 1.626 7 1.606 4 1.565 8
1.750 0	16 12 8 5	1.750 0	1.709 4 1.695 9 1.668 8 1.620 1	1.689 2 1.668 9 1.628 3 1.555 2
1.812 5	16 12 8	1.812 5	1.771 9 1.758 4 1.731 3	1.751 7 1.731 4 1.690 8
1.875 0	16 12 8	1.875 0	1.834 4 1.820 9 1.793 8	1.814 2 1.793 9 1.753 3
1.937 5	16 12 8	1.937 5	1.896 9 1.883 4 1.856 3	1.876 7 1.856 4 1.815 8
2. 000 0	16 12 8 4,5	2. 000 0	1.959 4 1.945 9 1.918 8 1.855 7	1.939 2 1.918 9 1.878 3 1.783 5
2.125 0	16 12 8	2.125 0	2.084 4 2.070 9 2.043 8	2.064 2 2.043 9 2.003 3
2.250 0	16 12 8 4,5	2.250 0	2.209 4 2.195 9 2.168 8 2.105 7	2.189 2 2.168 9 2.128 3 2.033 5
2.375 0	16 12 8	2.375 0	2.334 4 2.320 9 2.293 8	2.314 2 2.293 9 2.253 3
2.500 0	16 12 8 4	2.500 0	2.459 4 2.445 9 2.418 8 2.337 6	2.439 2 2.418 9 2.378 3 2.256 5
2.625 0	16 12 8	2.625 0	2.584 4 2.570 9 2.543 8	2.564 2 2.543 9 2.503 3
2.750 0	16 12 8 4	2.750 0	2.709 4 2.695 9 2.668 8 2.587 6	2.689 2 2.668 9 2.628 3 2.506 5
2.875 0	16 12 8	2.875 0	2.834 4 2.820 9 2.793 8	2.814 2 2.793 9 2.753 3
3.000 0	16 12 8 4	3.000 0	2.959 4 2.945 9 2.918 8 2.837 6	2.939 2 2.918 9 2.878 3 2.756 5
3.125 0	16 12 8	3.125 0	3.084 4 3.070 9 3.043 8	3.064 2 3.043 9 3.003 3
3.250 0	16 12 8 4	3.250 0	3.209 4 3.195 9 3.168 8 3.087 6	3.189 2 3.168 9 3.128 3 3.006 5
3.375 0	16 12 8	3.375 0	3.334 4 3.320 9 3.293 8	3.314 2 3.293 9 3.253 3
3.500 0	16 12 8 4	3.500 0	3.459 4 3.445 9 3.418 8 3.337 6	3.439 2 3.418 9 3.378 3 3.256 5
3.625 0	16 12 8	3.625 0	3.584 4 3.570 9 3.543 8	3.564 2 3.543 9 3.503 3

TABLE 2 — (*continued*)

(1)	(2)	(3)	(4)	(5)
Nominal sizes in	**Number of threads per inch** n	**Major diameter** D, d mm	**Pitch diameter** D_2, d_2 mm	**Minor diameter** D_1, d_1 mm
1.312 5	18	33,337	32,420	31,963
	16		32,306	31,794
	12		31,963	31,278
	8		31,275	30,246
1.375 0	18	34,925	34,008	33,551
	16		33,893	33,381
	12		33,550	32,865
	8		32,862	31,834
	6		32,174	30,802
1.437 5	18	36,512	35,595	35,138
	16		35,481	34,969
	12		35,138	34,453
	8		34,450	33,221
1.500 0	18	38,100	37,183	36,726
	16		37,068	36,556
	12		36,725	36,040
	8		36,037	35,009
	6		35,349	33,978
1.562 5	18	39,687	38,770	38,313
	16		38,656	38,144
	12		38,313	37,628
	8		37,625	36,596
1.625 0	18	41,275	40,358	39,901
	16		40,243	39,731
	12		39,900	39,216
	8		39,212	38,184
1.687 5	18	42,862	41,945	41,488
	16		41,831	41,319
	12		41,488	40,803
	8		40,800	39,771
1.750 0	16	44,450	43,418	42,906
	12		43,075	42,391
	8		42,387	41,359
	5		41,150	39,502
1.812 5	16	46,037	45,006	44,494
	12		44,663	43,978
	8		43,975	42,946
1.875 0	16	47,625	46,593	46,081
	12		46,250	45,566
	8		45,562	44,534
1.937 5	16	49,212	48,181	47,669
	12		47,838	47,153
	8		47,150	46,121
2.000 0	16	50,800	49,768	49,256
	12		49,425	48,741
	8		48,737	47,709
	4,5		47,134	45,301

(1)	(2)	(3)	(4)	(5)
Nominal sizes in	**Number of threads per inch** n	**Major diameter** D, d mm	**Pitch diameter** D_2, d_2 mm	**Minor diameter** D_1, d_1 mm
2.125 0	16	53,975	52,943	52,431
	12		52,600	51,916
	8		51,912	50,884
2.250 0	16	57,150	56,118	55,606
	12		55,775	55,091
	8		55,087	54,059
	4,5		53,484	51,651
2.375 0	16	60,325	59,293	58,781
	12		58,950	58,266
	8		58,262	57,234
2.500 0	16	63,500	56,118	55,606
	12		62,125	61,441
	8		61,437	60,409
	4		59,374	57,315
2.625 0	16	66,675	65,643	65,131
	12		65,300	64,616
	8		64,612	63,584
2.750 0	16	69,850	68,818	68,306
	12		68,475	67,791
	8		67,787	66,759
	4		65,725	63,665
2.875 0	16	73,025	71,993	71,481
	12		71,650	70,966
	8		70,962	69,934
3.000 0	16	76,200	75,168	74,656
	12		74,825	74,141
	8		74,137	73,109
	4		72,075	70,015
3.125 0	16	79,375	78,343	77,831
	12		78,000	77,316
	8		77,312	76,284
3.250 0	16	82,550	81,518	81,006
	12		81,175	80,491
	8		80,487	79,459
	4		78,425	76,365
3.375 0	16	85,725	84,693	84,181
	12		84,350	83,666
	8		83,662	82,634
3.500 0	16	88,900	87,868	87,356
	12		87,525	86,841
	8		86,837	85,809
	4		84,775	82,715
3.625 0	16	92,075	91,043	90,531
	12		90,700	90,016
	8		90,012	88,984

TABLE 2 – (*concluded*)

Dimensions in inches

(1)	(2)	(3)	(4)	(5)
Nominal sizes	**Number of threads per inch** n	**Major diameter** D, d	**Pitch diameter** D_2, d_2	**Minor diameter** D_1, d_1
3.750 0	16 12 8 4	3.750 0	3.709 4 3.695 9 3.668 8 3.587 6	3.689 2 3.668 9 3.628 3 3.506 5
3.875 0	16 12 8	3.875 0	3.834 4 3.820 9 3.793 8	3.814 2 3.793 9 3.753 3
4.000 0	16 12 8 4	4.000 0	3.959 4 3.945 9 3.918 8 3.837 6	3.939 2 3.918 9 3.878 3 3.756 5
4.125 0	16 12	4.125 0	4.084 4 4.070 9	4.064 2 4.043 9
4.250 0	16 12	4.250 0	4.209 4 4.195 9	4.189 2 4.168 9
4.375 0	16 12	4.375 0	4.334 4 4.320 9	4.314 2 4.293 9
4.500 0	16 12	4.500 0	4.459 4 4.445 9	4.439 2 4.418 9
4.625 0	16 12	4.625 0	4.584 4 4.570 9	4.564 2 4.543 9
4.750 0	16 12	4.750 0	4.709 4 4.695 9	4.689 2 4.668 9

(1)	(2)	(3)	(4)	(5)
Nominal sizes	**Number of threads per inch** n	**Major diameter** D, d	**Pitch diameter** D_2, d_2	**Minor diameter** D_1, d_1
4.875 0	16 12	4.875 0	4.834 4 4.820 9	4.814 2 4.793 9
5.000 0	16 12	5.000 0	4.959 4 4.945 9	4.939 2 4.918 9
5.125 0	16 12	5.125 0	5.084 4 5.070 9	5.064 2 5.043 9
5.250 0	16 12	5.250 0	5.209 4 5.195 9	5.189 2 5.168 9
5.375 0	16 12	5.375 0	5.334 4 5.320 9	5.314 2 5.293 9
5.500 0	16 12	5.500 0	5.459 4 5.445 9	5.439 2 5.418 9
5.625 0	16 12	5.625 0	5.584 4 5.570 9	5.564 2 5.543 9
5.750 0	16 12	5.750 0	5.709 4 5.695 9	5.689 2 5.668 9
5.875 0	16 12	5.875 0	5.834 4 5.820 9	5.814 2 5.793 9
6.000 0	16 12	6.000 0	5.959 4 5.945 9	5.939 2 5.918 9

TABLE 2 – (*concluded*)

(1)	(2)	(3)	(4)	(5)
Nominal sizes in	**Number of threads per inch** n	**Major diameter** D, d mm	**Pitch diameter** D_2, d_2 mm	**Minor diameter** D_1, d_1 mm
3.750 0	16 12 8 4	95,250	94,218 93,875 93,187 91,125	93,706 93,191 92,159 89,065
3.875 0	16 12 8	98,425	97,393 97,050 96,362	96,881 96,366 95,334
4.000 0	16 12 8 4	101,600	100,568 100,225 99,537 97,475	100,056 99,541 98,509 95,415
4.125 0	16 12	104,775	103,743 103,400	103,231 102,716
4.250 0	16 12	107,950	106,918 106,575	106,406 105,891
4.375 0	16 12	111.125	110,093 109,750	109,581 109,066
4.500 0	16 12	114.300	113,268 112,925	112,756 112,241
4.625 0	16 12	117,475	116,443 116,100	115,931 115,416
4.750 0	16 12	120,650	119,618 119,275	119,106 118,591

(1)	(2)	(3)	(4)	(5)
Nominal sizes in	**Number of threads per inch** n	**Major diameter** D, d mm	**Pitch diameter** D_2, d_2 mm	**Minor diameter** D_1, d_1 mm
4.875 0	16 12	123,825	122,793 122,450	122,281 121,766
5.000 0	16 12	127,000	125,968 125,625	125,456 124,941
5.125 0	16 12	130,175	129,143 128,800	128,631 128,116
5.250 0	16 12	133,350	132,318 131,975	131,806 131,291
5.375 0	16 12	136,525	135,493 135,150	134,981 134,466
5.500 0	16 12	139,700	138,668 133,325	138,156 137,641
5.625 0	16 12	142,875	141,843 141,500	141,331 140,816
5.750 0	16 12	146,050	145,018 144,675	144,506 143,991
5.875 0	16 12	149,225	148,193 147,850	147,681 147,166
6.000 0	16 12	152,400	151,368 151,025	150,856 150,341

TABLE 3 – **Thread series**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Nominal sizes in		**Number of threads per inch**					
		Series with increasing pitches			**Constant** (uniform) **pitch series**		
primary	secondary	Coarse pitch UNJC	Fine pitch UNJF	Extra fine pitch UNJEF	8 UNJ	12 UNJ	16 UNJ
0.060 0		–	80	–	–	–	–
	0.073 0	64	72	–	–	–	–
0.086 0		56	64	–	–	–	–
	0.099 0	48	56	–	–	–	–
0.112 0		40	48	–	–	–	–
0.125 0		40	44	–	–	–	–
0.138 0		32	40	–	–	–	–
0.164 0		32	36	–	–	–	–
0.190 0		24	32	–	–	–	–
	0.216 0	24	28	32	–	–	–
0.250 0		20	28	32	–	–	–
0.312 5		18	24	32	–	–	–
0.375 0		16	24	32	–	–	UNJC
0.437 5		14	20	28	–	–	16
0.500 0		13	20	28	–	–	16
0.562 5		12	18	24	–	UNJC	16
0.625 0		11	18	24	–	12	16
	0.687 5	–	–	24	–	12	16
0.750 0		10	16	20	–	12	UNJF
	0.812 5	–	–	20	–	12	16
0.875 0		9	14	20	–	12	16
	0.937 5	–	–	20	–	12	16
1.000 0		8	12	20	UNJC	UNJF	16
	1.062 5	–	–	18	8	12	16
1.125 0		7	12	18	8	UNJF	16
	1.187 5	–	–	18	8	12	16
1.250 0		7	12	18	8	UNJF	16
	1.312 5	–	–	18	8	12	16
1.375 0		6	12	18	8	UNJF	16
	1.437 5	–	–	18	8	12	16
1.500 0		6	12	18	8	UNJF	16
	1.562 5	–	–	18	8	12	16
1.625 0		–	–	18	8	12	16
	1.687 5	–	–	18	8	12	16
1.750 0		5	–	–	8	12	16
	1.812 5	–	–	–	8	12	16
1.875 0		–	–	–	8	12	16
	1.937 5	–	–	–	8	12	16
2.000 0		4.5	–	–	8	12	16
	2.125 0	–	–	–	8	12	16
2.250 0		4.5	–	–	8	12	16
	2.375 0	–	–	–	8	12	16
2.500 0		4	–	–	8	12	16
	2.625 0	–	–	–	8	12	16
2.750 0		4	–	–	8	12	16
	2.875 0	–	–	–	8	12	16
3.000 0		4	–	–	8	12	16
	3.125 0	–	–	–	8	12	16
3.250 0		4	–	–	8	12	16
	3.375 0	–	–	–	8	12	16
3.500 0		4	–	–	8	12	16
	3.625 0	–	–	–	8	12	16
3.750 0		4	–	–	8	12	16
	3.875 0	–	–	–	8	12	16
4.000 0		4	–	–	8	12	16
	4.125 0	–	–	–	–	12	16
4.250 0		–	–	–	–	12	16
	4.375 0	–	–	–	–	12	16
4.500 0		–	–	–	–	12	16
	4.625 0	–	–	–	–	12	16
4.750 0		–	–	–	–	12	16
	4.875 0	–	–	–	–	12	16
5.000 0		–	–	–	–	12	16
	5.125 0	–	–	–	–	12	16
5.250 0		–	–	–	–	12	16
	5.375 0	–	–	–	–	12	16
5.500 0		–	–	–	–	12	16
	5.625 0	–	–	–	–	12	16
5.750 0		–	–	–	–	12	16
	5.875 0	–	–	–	–	12	16
6.000 0		–	–	–	–	12	16

TABLE 4 — **Limit values of the root radius *R* (Dimensions in inches with metric conversions)**

(1)	(2)	(3)	(4)	(5)	(6)
Number of threads per inch	**Pitch *P* in inches**	***R* in inches** min.	max.	***R* in millimetres** min.	max.
80	0.012 500	0.001 9	0.002 3	0,049	0,058
72	0.013 889	0.002 1	0.002 5	0,054	0,063
64	0.015 625	0.002 3	0.002 8	0,059	0,071
56	0.017 857	0.002 7	0.003 2	0,069	0,081
48	0.020 833	0.003 1	0.003 8	0,079	0,096
44	0.022 727	0.003 4	0.004 1	0,087	0,104
40	0.025 000	0.003 8	0.004 5	0,097	0,114
36	0.027 778	0.004 2	0.005 0	0,107	0,127
32	0.031 250	0.004 7	0.005 6	0,120	0,142
28	0.035 714	0.005 4	0.006 4	0,138	0,162
24	0.041 667	0.006 3	0.007 5	0,161	0,190
20	0.050 000	0.007 5	0.009 0	0,191	0,228
18	0.055 556	0.008 3	0.010 0	0,211	0,254
16	0.062 500	0.009 4	0.011 3	0,239	0,287
14	0.071 429	0.010 7	0.012 9	0,272	0,327
13	0.076 923	0.011 5	0.013 9	0,293	0,353
12	0.083 333	0.012 5	0.015 0	0,318	0,381
11	0.090 909	0.013 6	0.016 4	0,346	0,416
10	0.100 000	0.015 0	0.018 0	0,381	0,457
9	0.111 111	0.016 7	0.020 0	0,425	0,508
8	0.125 000	0.018 8	0.022 6	0,478	0,574
7	0.142 857	0.021 4	0.025 8	0,644	0,755
6	0.166 667	0.025 0	0.030 1	0,635	0,764
5	0.200 000	0.030 0	0.035 1	0,762	0,916
4,5	0.222 222	0.033 4	0.040 1	0,849	1,018
4	0.250 000	0.037 5	0.045 1	0,953	1,145

TABLE 5 — **Values of tolerances for profile dimensions (Inch dimensions)**

Dimensions in inches

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
Nominal sizes	n	**Series symbol**	EXTERNAL THREAD									INTERNAL THREAD						
			Major diameter d			**Pitch diameter d_2**			**Minor diameter d_3**			**Minor diameter D_1**			**Pitch diameter D_2**			**Major diameter D**
			max.	T_d	min.	max.	T_{d_2}	min.	max.	T_{d_3}	min.	max.	T_{D_1}	min.	max.	T_{D_2}	min.	min.
0.060 0	80.0	UNJF	0.060 0	0.003 2	0.056 8	0.051 9	0.001 3	0.050 6	0.045 6	0.002 1	0.043 5	0.051 1	0.003 2	0.047 9	0.053 6	0.001 7	0.051 9	0.060 0
0.073 0	64.0	UNJC	0.073 0	0.003 8	0.069 2	0.062 9	0.001 5	0.061 4	0.055 0	0.002 4	0.052 6	0.061 9	0.003 9	0.057 8	0.064 8	0.001 9	0.062 9	0.073 0
0.073 0	72.0	UNJF	0.073 0	0.003 5	0.069 5	0.064 0	0.001 4	0.062 6	0.057 0	0.002 3	0.054 7	0.063 1	0.003 6	0.059 5	0.065 9	0.001 9	0.064 0	0.073 0
0.086 0	56.0	UNJC	0.086 0	0.004 1	0.081 9	0.074 4	0.001 6	0.072 8	0.065 4	0.002 7	0.062 7	0.073 2	0.004 6	0.068 6	0.076 5	0.002 1	0.074 4	0.086 0
0.086 0	64.0	UNJF	0.086 0	0.004 8	0.082 2	0.075 9	0.001 5	0.074 4	0.068 0	0.002 4	0.065 6	0.074 9	0.004 1	0.070 8	0.077 9	0.002 0	0.075 9	0.086 0
0.099 0	48.0	UNJC	0.099 0	0.004 5	0.094 5	0.085 5	0.001 7	0.083 8	0.075 0	0.003 0	0.072 0	0.084 1	0.005 4	0.078 7	0.087 7	0.002 2	0.085 5	0.099 0
0.099 0	56.0	UNJF	0.099 0	0.004 1	0.094 9	0.087 4	0.001 6	0.085 8	0.078 4	0.002 7	0.075 7	0.086 2	0.004 6	0.081 6	0.089 5	0.002 1	0.087 4	0.099 0
0.112 0	40.0	UNJC	0.112 0	0.005 1	0.106 9	0.095 8	0.001 9	0.093 9	0.083 2	0.003 4	0.079 8	0.094 2	0.006 5	0.087 7	0.098 2	0.002 4	0.095 8	0.112 0
0.112 0	48.0	UNJF	0.112 0	0.004 5	0.107 5	0.098 5	0.001 8	0.096 7	0.088 0	0.003 1	0.084 9	0.097 1	0.005 4	0.091 7	0.100 8	0.002 3	0.098 5	0.112 0
0.125 0	40.0	UNJC	0.125 0	0.005 1	0.119 9	0.108 8	0.001 9	0.106 9	0.096 2	0.003 4	0.092 8	0.107 2	0.006 5	0.100 7	0.111 3	0.002 5	0.108 8	0.125 0
0.125 0	44,0	UNJF	0.125 0	0.004 8	0.120 2	0.110 2	0.001 9	0.108 3	0.098 7	0.003 3	0.095 4	0.108 8	0.005 9	0.102 9	0.112 6	0.002 4	0.110 2	0.125 0
0.138 0	32.0	UNJC	0.138 0	0.006 0	0.132 0	0.117 7	0.002 1	0.115 6	0.101 9	0.004 0	0.097 9	0.115 7	0.008 1	0.107 6	0.120 4	0.002 7	0.117 7	0.138 0
0.138 0	40.0	UNJF	0.138 0	0.005 1	0.132 9	0.121 8	0.002 0	0.119 8	0.109 2	0.003 5	0.105 7	0.120 2	0.006 5	0.113 7	0.124 3	0.002 5	0.121 8	0.138 0
0.164 0	32.0	UNJC	0.164 0	0.006 0	0.158 0	0.143 7	0.002 2	0.141 5	0.127 9	0.004 1	0.123 8	0.141 7	0.008 1	0.133 6	0.146 5	0.002 8	0.143 7	0.164 0
0.164.0	36.0	UNJF	0.164 0	0.005 5	0.158 5	0.146 0	0.002 1	0.143 9	0.132 0	0.003 8	0.128 2	0.144 2	0.007 2	0.137 0	0.148 7	0.002 7	0.146 0	0.164 0
0.190 0	24.0	UNJC	0.190 0	0.007 2	0.182 8	0.162 9	0.002 5	0.160 4	0.141 8	0.005 0	0.136 8	0.160 0	0.010 6	0.149 4	0.166 1	0.003 2	0.162 9	0.190 0
0.190 0	32.0	UNJF	0.190 0	0.006 0	0.184 0	0.169 7	0.002 3	0.167 4	0.153 9	0.004 2	0.149 7	0.167 5	0.007 9	0.159 6	0.172 6	0.002 9	0.169 7	0.190 0
0.216 0	24.0	UNJC	0.216 0	0.007 2	0.208 8	0.188 9	0.002 6	0.186 3	0.167 8	0.005 1	0.162 7	0.185 2	0.009 8	0.175 4	0.192 2	0.003 3	0.188 9	0.216 0
0.216 0	28.0	UNJF	0.216 0	0.006 5	0.209 5	0.192 8	0.002 4	0.190 4	0.174 8	0.004 6	0.170 2	0.189 6	0.008 4	0.181 2	0.195 9	0.003 1	0.192 8	0.216 0
0.216 0	32.0	UNJEF	0.216 0	0.006 0	0.210 0	0.195 7	0.002 4	0.193 3	0.179 9	0.004 3	0.175 6	0.192 9	0.007 3	0.185 6	0.198 8	0.003 1	0.195 7	0.216 0
0.250 0	20.0	UNJC	0.250 0	0.008 1	0.241 9	0.217 5	0.002 8	0.214 7	0.192 2	0.005 8	0.186 4	0.212 1	0.010 8	0.201 3	0.221 1	0.003 6	0.217 5	0.250 0
0.250 0	28.0	UNJF	0.250 0	0.006 5	0.243 5	0.226 8	0.002 5	0.224 3	0.208 8	0.004 7	0.204 1	0.222 9	0.007 7	0.215 2	0.230 0	0.003 2	0.226 8	0.250 0
0.250 0	32.0	UNJEF	0.250 0	0.006 0	0.244 0	0.229 7	0.002 4	0.227 3	0.213 9	0.004 3	0.209 6	0.226 3	0.006 7	0.219 6	0.232 8	0.003 1	0.229 7	0.250 0
0.312 5	18.0	UNJC	0.312 5	0.008 7	0.303 8	0.276 4	0.003 0	0.273 4	0.248 3	0.006 3	0.242 0	0.269 0	0.010 6	0.258 4	0.280 3	0.003 9	0.276 4	0.312 5
0.312 5	24.0	UNJF	0.312 5	0.007 2	0.305 3	0.285 4	0.002 7	0.282 7	0.264 4	0.005 3	0.259 1	0.279 9	0.008 0	0.271 9	0.289 0	0.003 6	0.285 4	0.312 5
0.312 5	32.0	UNJEF	0.312 5	0.006 0	0.306 5	0.292 2	0.002 4	0.289 8	0.276 4	0.004 3	0.272 1	0.288 1	0.006 0	0.282 1	0.295 3	0.003 1	0.292 2	0.312 5
0.375 0	16,0	UNJC	0.375 0	0.009 4	0.365 6	0.334 4	0.003 3	0.331 1	0.302 8	0.007 1	0.295 7	0.325 1	0.010 9	0.314 2	0.338 7	0.004 3	0.334 4	0.375 0
0.375 0	24.0	UNJF	0.375 0	0.007 2	0.367 8	0.347 9	0.002 9	0.345 0	0.326 8	0.005 4	0.321 4	0.341 7	0.007 3	0.334 4	0.351 6	0.003 7	0.347 9	0.375 0

TABLE 5 – (*continued*)

Dimensions in inches

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
Nominal sizes	n	Series symbol	EXTERNAL THREAD									INTERNAL THREAD						
			Major diameter d			Pitch diameter d_2			Minor diameter d_3			Minor diameter D_1			Pitch diameter D_2			Major diameter D
			max.	T_d	min.	max.	T_{d_2}	min.	max.	T_{d_3}	min.	max.	T_{D_1}	min.	max.	T_{D_2}	min.	min.
0.375 0	32.0	UNJEF	0.375 0	0.006 0	0.369 0	0.354 7	0.002 5	0.352 2	0.338 9	0.004 4	0.334 5	0.350 1	0.005 5	0.344 6	0.358 0	0.003 3	0.354 7	0.375 0
0.437 5	14.0	UNJC	0.437 5	0.010 3	0.427 2	0.391 1	0.003 5	0.387 6	0.355 0	0.007 8	0.347 2	0.379 5	0.011 5	0.368 0	0.395 7	0.004 6	0.391 1	0.437 5
0.437 5	16.0	UNJ	0.437 5	0.009 4	0.428 1	0.396 9	0.003 4	0.393 5	0.365 3	0.007 2	0.358 1	0.386 9	0.010 2	0.376 7	0.401 4	0.004 5	0.396 9	0.437 5
0.437 5	20.0	UNJF	0.437 5	0.008 1	0.429 4	0.405 0	0.003 1	0.401 9	0.379 7	0.006 1	0.373 6	0.397 0	0.008 2	0.388 8	0.409 1	0.004 1	0.405 0	0.437 5
0.437 5	28.0	UNJEF	0.437 5	0.006 5	0.431 0	0.414 3	0.002 7	0.411 6	0.396 3	0.004 9	0.391 4	0.408 6	0.005 9	0.402 7	0.417 8	0.003 5	0.414 3	0.437 5
0.500 0	13.0	UNJC	0.500 0	0.010 9	0.489 1	0.450 0	0.003 7	0.446 3	0.411 1	0.008 3	0.402 8	0.436 8	0.011 7	0.425 1	0.454 8	0.004 8	0.450 0	0.500 0
0.500 0	16.0	UNJ	0.500 0	0.009 4	0.490 6	0.459 4	0.003 5	0.455 9	0.427 8	0.007 3	0.420 5	0.448 8	0.009 6	0.439 2	0.464 0	0.004 6	0.459 4	0.500 0
0.500 0	20.0	UNJF	0.500 0	0.008 1	0.491 9	0.467 5	0.003 2	0.464 3	0.442 2	0.006 2	0.436 0	0.459 1	0.007 8	0.451 3	0.471 7	0.004 2	0.467 5	0.500 0
0.500 0	28.0	UNJEF	0.500 0	0.006 5	0.493 5	0.476 8	0.002 8	0.474 0	0.458 8	0.005 0	0.453 8	0.470 8	0.005 6	0.465 2	0.480 4	0.003 6	0.476 8	0.500 0
0.562 5	12.0	UNJC	0.562 5	0.011 4	0.551 1	0.508 4	0.003 9	0.504 5	0.466 3	0.008 9	0.457 4	0.491 4	0.010 0	0.481 4	0.513 5	0.005 1	0.508 4	0.562 5
0.562 5	16.0	UNJ	0.562 5	0.009 4	0.553 1	0.521 9	0.003 5	0.518 4	0.490 3	0.007 3	0.483 0	0.510 9	0.009 2	0.501 7	0.526 5	0.004 6	0.521 9	0.562 5
0.562 5	18.0	UNJF	0.562 5	0.008 7	0.553 8	0.526 4	0.003 4	0.523 0	0.498 3	0.006 7	0.491 6	0.516 6	0.008 2	0.508 4	0.530 8	0.004 4	0.526 4	0.562 5
0.562 5	24.0	UNJEF	0.562 5	0.007 2	0.555 3	0.535 4	0.002 9	0.532 5	0.514 4	0.005 5	0.508 9	0.528 1	0.006 2	0.521 9	0.539 2	0.003 8	0.535 4	0.562 5
0.625 0	11.0	UNJC	0.625 0	0.012 1	0.612 9	0.566 0	0.004 1	0.561 9	0.520 1	0.009 6	0.510 5	0.547 4	0.010 9	0.536 5	0.571 4	0.005 4	0.566 0	0.625 0
0.625 0	12.0	UNJ	0.625 0	0.011 4	0.613 6	0.570 9	0.004 1	0.566 8	0.528 8	0.009 2	0.519 6	0.553 9	0.010 0	0.543 9	0.576 2	0.005 3	0.570 9	0.625 0
0.625 0	16.0	UNJ	0.625 0	0.009 4	0.615 6	0.584 4	0.003 6	0.580 8	0.552 8	0.007 4	0.545 4	0.573 1	0.008 9	0.564 2	0.589 0	0.004 6	0.584 4	0.625 0
0.625 0	18.0	UNJF	0.625 0	0.008 7	0.616 3	0.588 9	0.003 5	0.585 4	0.560 8	0.006 8	0.554 0	0.578 8	0.007 9	0.570 9	0.593 4	0.004 5	0.588 9	0.625 0
0.625 0	24.0	UNJEF	0.625 0	0.007 2	0.617 8	0.597 9	0.003 0	0.594 9	0.576 8	0.004 5	0.571 3	0.590 4	0.006 0	0.584 4	0.601 8	0.003 9	0.597 9	0.625 0
0.687 5	12.0	UNJ	0.687 5	0.011 4	0.676 1	0.633 4	0.004 1	0.629 3	0.591 3	0.009 1	0.582 2	0.616 4	0.010 0	0.606 4	0.638 7	0.005 3	0.633 4	0.687 5
0.687 5	16.0	UNJ	0.687 5	0.009 4	0.678 1	0.646 9	0.003 6	0.643 3	0.615 3	0.007 4	0.607 9	0.635 3	0.007 6	0.626 7	0.651 5	0.004 6	0.646 9	0.687 5
0.687 5	24.0	UNJEF	0.687 5	0.007 2	0.680 3	0.660 4	0.003 0	0.657 4	0.639 4	0.005 6	0.633 8	0.652 7	0.005 8	0.646 9	0.664 3	0.003 9	0.660 4	0.687 5
0.750 0	10.0	UNJC	0.750 0	0.012 9	0.737 1	0.685 0	0.004 4	0.680 6	0.634 5	0.010 5	0.624 0	0.664 6	0.012 0	0.652 6	0.690 7	0.005 7	0.685 0	0.750 0
0.750 0	12.0	UNJ	0.750 0	0.011 4	0.738 6	0.695 9	0.004 1	0.691 8	0.653 8	0.009 2	0.644 6	0.678 9	0.010 0	0.668 9	0.701 3	0.005 4	0.695 9	0.750 0
0.750 0	16.0	UNJF	0.750 0	0.009 4	0.740 6	0.709 4	0.003 8	0.705 6	0.677 8	0.007 6	0.670 2	0.697 7	0.008 5	0.689 2	0.714 3	0.004 9	0.709 4	0.750 0
0.750 0	20.0	UNJEF	0.750 0	0.008 1	0.741 9	0.717 5	0.003 3	0.714 2	0.692 2	0.006 3	0.685 9	0.708 1	0.006 8	0.701 3	0.721 8	0.004 3	0.717 5	0.750 0
0.812 5	12.0	UNJ	0.812 5	0.011 4	0.801 1	0.758 4	0.004 1	0.754 3	0.716 3	0.009 1	0.707 2	0.741 4	0.010 0	0.731 4	0.763 8	0.005 4	0.758 4	0.812 5
0.812 5	16.0	UNJ	0.812 5	0.009 4	0.803 1	0.771 9	0.003 6	0.768 3	0.740 3	0.007 4	0.732 9	0.760 2	0.008 5	0.751 7	0.776 6	0.004 7	0.771 9	0.812 5
0.812 5	20.0	UNJEF	0.812 5	0.008 1	0.804 4	0.780 0	0.003 3	0.776 7	0.754 7	0.006 3	0.748 4	0.770 6	0.006 8	0.763 8	0.784 3	0.004 3	0.780 0	0.812 5

TABLE 5 — (*continued*)

Dimensions in inches

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
Nominal sizes	n	Series symbol	EXTERNAL THREAD									INTERNAL THREAD						
			Major diameter d			Pitch diameter d_2			Minor diameter d_3			Minor diameter D_1			Pitch diameter D_2			Major diameter D
			max.	T_d	min.	max.	T_{d_2}	min.	max.	T_{d_3}	min.	max.	T_{D_1}	min.	max.	T_{D_2}	min.	min.
0.875 0	9.0	UNJC	0.875 0	0.013 9	0.861 1	0.802 8	0.004 7	0.798 1	0.746 7	0.011 5	0.735 2	0.780 1	0.013 3	0.766 8	0.808 9	0.006 1	0.802 8	0.875 0
0.875 0	12.0	12UNJ	0.875 0	0.011 4	0.863 6	0.820 9	0.004 1	0.816 8	0.778 8	0.009 2	0.769 6	0.803 9	0.010 0	0.793 9	0.826 3	0.005 4	0.820 9	0.875 0
0.875 0	14.0	UNJF	0.875 0	0.010 3	0.864 7	0.828 6	0.004 1	0.824 5	0.792 5	0.008 4	0.784 1	0.815 2	0.009 7	0.805 5	0.833 9	0.005 3	0.828 6	0.875 0
0.875 0	16.0	16UN	0.875 0	0.010 4	0.865 6	0.834 4	0.003 6	0.830 8	0.802 8	0.007 4	0.795 4	0.822 7	0.008 5	0.814 2	0.839 1	0.004 7	0.834 4	0.875 0
0.875 0	20.0	UNJEF	0.875 0	0.008 1	0.866 9	0.842 5	0.003 3	0.839 2	0.817 2	0.006 3	0.810 9	0.833 1	0.006 8	0.826 3	0.846 8	0.004 3	0.842 5	0.875 0
0.937 5	12.0	UNJ	0.937 5	0.011 4	0.926 1	0.883 4	0.004 2	0.879 2	0.841 3	0.009 3	0.832 0	0.866 4	0.010 0	0.856 4	0.888 9	0.005 5	0.883 4	0.937 5
0.937 5	16.0	UNJ	0.937 5	0.009 4	0.928 1	0.896 9	0.003 7	0.893 2	0.865 3	0.007 5	0.857 8	0.885 2	0.008 5	0.876 7	0.901 8	0.004 9	0.896 9	0.937 5
0.937 5	20.0	UNJEF	0.937 5	0.008 1	0.929 4	0.905 0	0.003 4	0.901 6	0.879 7	0.006 4	0.873 3	0.895 6	0.006 8	0.888 8	0.909 4	0.004 4	0.905 0	0.937 5
1.000 0	8.0	UNJC	1.000 0	0.015 0	0.985 0	0.918 8	0.005 1	0.913 7	0.855 6	0.012 6	0.843 0	0.893 3	0.015 0	0.878 3	0.925 4	0.006 6	0.918 8	1.000 0
1.000 0	12.0	UNJF	1.000 0	0.011 4	0.988 6	0.945 9	0.004 4	0.941 5	0.903 8	0.009 4	0.894 4	0.928 9	0.010 0	0.918 9	0.951 6	0.005 7	0.945 9	1.000 0
1.000 0	16.0	UNJ	1.000 0	0.009 4	0.990 6	0.959 4	0.003 7	0.955 7	0.927 8	0.007 5	0.920 3	0.947 7	0.008 5	0.939 2	0.964 3	0.004 9	0.959 4	1.000 0
1.000 0	20.0	UNJEF	1.000 0	0.008 1	0.991 9	0.967 5	0.003 4	0.964 1	0.942 2	0.006 4	0.935 8	0.958 1	0.006 8	0.951 3	0.971 9	0.004 4	0.967 5	1.000 0
1.062 5	8.0	UNJ	1.062 5	0.015 0	1.047 5	0.981 3	0.005 1	0.976 2	0.918 2	0.012 7	0.905 5	0.955 8	0.015 0	0.940 8	0.988 0	0.006 7	0.981 3	1.062 5
1.062 5	12.0	UNJ	1.062 5	0.011 4	1.051 1	1.008 4	0.004 2	1.004 2	0.966 3	0.009 3	0.957 0	0.991 4	0.010 0	0.981 4	1.013 9	0.005 5	1.008 4	1.062 5
1.062 5	16.0	UNJ	1.062 5	0.009 4	1.053 1	1.021 9	0.003 7	1.018 2	0.990 3	0.007 5	0.982 8	1.010 2	0.008 5	1.001 7	1.026 8	0.004 9	1.021 9	1.062 5
1.062 5	18.0	UNJEF	1.062 5	0.008 7	1.053 8	1.026 4	0.003 6	1.022 8	0.998 3	0.006 9	0.991 4	1.015 9	0.007 5	1.008 4	1.031 0	0.004 6	1.026 4	1.062 5
1.125 0	7.0	UNJC	1.125 0	0.016 4	1.108 6	1.032 2	0.005 4	1.026 8	0.960 0	0.014 0	0.946 0	1.003 0	0.017 1	0.985 9	1.039 3	0.007 1	1.032 2	1.125 0
1.125 0	8.0	UNJ	1.125 0	0.015 0	1.110 0	1.043 8	0.007 0	1.036 8	0.980 6	0.014 5	0.966 1	1.018 3	0.015 0	1.003 3	1.050 5	0.006 7	1.043 8	1.125 0
1.125 0	12.0	UNJF	1.125 0	0.011 4	1.113 6	1.070 9	0.004 5	1.066 4	1.028 8	0.009 6	1.019 2	1.053 9	0.010 0	1.043 9	1.076 8	0.005 9	1.070 9	1.125 0
1.125 0	16.0	UNJ	1.125 0	0.009 4	1.115 6	1.084 4	0.003 7	1.080 7	1.052 8	0.007 5	1.045 3	1.072 7	0.008 5	1.064 2	1.089 3	0.004 9	1.084 4	1.125 0
1.125 0	18.0	UNJEF	1.125 0	0.008 7	1.116 3	1.088 9	0.003 6	1.085 3	1.060 8	0.006 9	1.053 9	1.078 4	0.007 5	1.070 9	1.093 5	0.004 6	1.088 9	1.125 0
1.187 5	8.0	UNJ	1.187 5	0.015 0	1.172 5	1.106 3	0.005 2	1.101 1	1.043 2	0.012 8	1.030 4	1.080 8	0.015 0	1.065 8	1.113 1	0.006 8	1.106 3	1.187 5
1.187 5	12.0	UNJ	1.187 5	0.011 4	1.176 1	1.133 4	0.004 3	1.129 1	1.091 3	0.009 3	1.082 0	1.116 4	0.010 0	1.106 4	1.139 0	0.006 4	1.133 4	1.187 5
1.187 5	16.0	UNJ	1.187 5	0.009 4	1.178 1	1.146 9	0.003 8	1.143 1	1.115 3	0.007 6	1.107 7	1.135 2	0.008 5	1.126 7	1.151 9	0.005 0	1.146 9	1.187 5
1.187 5	18.0	UNJEF	1.187 5	0.008 7	1.178 8	1.151 4	0.003 6	1.147 8	1.123 3	0.006 9	1.116 4	1.140 9	0.007 5	1.133 4	1.156 1	0.004 7	1.151 4	1.187 5
1.250 0	7.0	UNJC	1.250 0	0.016 4	1.233 6	1.157 2	0.005 5	1.151 7	1.085 0	0.014 1	1.070 9	1.128 0	0.017 1	1.110 9	1.164 4	0.007 2	1.157 2	1.250 0
1.250 0	8.0	UNJ	1.250 0	0.015 0	1.235 0	1.168 8	0.005 3	1.163 5	1.105 6	0.012 8	1.092 8	1.143 3	0.015 0	1.128 3	1.175 7	0.006 9	1.168 8	1.250 0
1.250 0	12.0	UNJF	1.250 0	0.011 4	1.238 6	1.195 9	0.004 6	1.191 3	1.153 8	0.009 6	1.144 2	1.178 9	0.010 0	1.168 9	1.201 9	0.006 0	1.195 9	1.250 0

TABLE 5 — (*continued*)

Dimensions in inches

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
Nominal sizes	n	Series symbol	EXTERNAL THREAD									INTERNAL THREAD						
			Major diameter d			Pitch diameter d_2			Minor diameter d_3			Minor diameter D_1			Pitch diameter D_2			Major diameter D
			max.	T_d	min.	max.	T_{d_2}	min.	max.	T_{d_3}	min.	max.	T_{D_1}	min.	max.	T_{D_2}	min.	min.
1.250 0	16.0	UNJ	1.250 0	0.009 4	1.240 6	1.209 4	0.003 8	1.205 6	1.177 8	0.007 6	1.170 2	1.197 7	0.008 5	1.189 2	1.214 4	0.015 0	1.209 4	1.250 0
1.250 0	18.0	UNJEF	1.250 0	0.008 7	1.241 3	1.213 9	0.003 6	1.210 3	1.185 8	0.006 9	1.178 9	1.203 4	0.007 5	1.195 9	1.218 6	0.004 7	1.213 9	1.250 0
1.312 5	8.0	UNJ	1.312 5	0.015 0	1.297 5	1.231 3	0.005 3	1.226 0	1.168 2	0.012 9	1.155 3	1.205 8	0.015 0	1.190 8	1.238 2	0.006 9	1.231 3	1.312 5
1.312 5	12.0	UNJ	1.312 5	0.011 4	1.301 1	1.258 4	0.004 3	1.254 1	1.216 3	0.006 3	1.207 0	1.241 4	0.010 0	1.231 4	1.264 0	0.005 6	1.258 4	1.312 5
1.312 5	16.0	UNJ	1.312 5	0.009 4	1.303 1	1.271 9	0.003 7	1.268 1	1.240 3	0.007 5	1.232 7	1.260 2	0.008 5	1.251 7	1.276 9	0.005 0	1.271 9	1.312 5
1.312 5	18.0	UNJEF	1.312 5	0.008 7	1.303 8	1.276 4	0.003 6	1.272 8	1.248 3	0.006 9	1.241 4	1.265 9	0.007 5	1.258 4	1.281 1	0.004 7	1.276 4	1.312 5
1.375 0	6.0	UNJC	1.375 0	0.008 2	1.356 8	1.266 7	0.006 0	1.260 7	1.182 5	0.016 1	1.166 4	1.232 7	0.021 0	1.212 7	1.274 5	0.007 8	1.266 7	1.375 0
1.375 0	8.0	UNJ	1.375 0	0.015 0	1.360 0	1.293 8	0.005 4	1.288 4	1.230 6	0.012 9	1.217 7	1.268 3	0.015 0	1.253 3	1.300 8	0.007 0	1.293 8	1.375 0
1.375 0	12.0	UNJF	1.375 0	0.011 4	1.363 6	1.320 9	0.004 7	1.316 2	1.278 8	0.009 8	1.269 0	1.303 9	0.010 0	1.293 9	1.327 0	0.006 1	1.320 9	1.375 0
1.375 0	16.0	UNJ	1.375 0	0.009 4	1.365 6	1.334 4	0.003 8	1.330 6	1.302 8	0.007 6	1.295 2	1.322 7	0.008 5	1.314 2	1.339 4	0.005 0	1.334 4	1.375 0
1.375 0	18.0	UNJEF	1.375 0	0.008 7	1.366 3	1.338 9	0.003 6	1.335 3	1.310 8	0.006 9	1.303 9	1.328 4	0.007 5	1.320 9	1.343 6	0.004 7	1.338 9	1.375 0
1.437 5	8.0	UNJ	1.437 5	0.015 0	1.422 5	1.356 3	0.005 4	1.350 9	1.293 2	0.013 0	1.280 2	1.330 8	0.015 0	1.315 8	1.363 4	0.007 1	1.356 3	1.437 5
1.437 5	12.0	UNJ	1.437 5	0.011 4	1.426 1	1.383 4	0.004 4	1.379 0	1.341 3	0.010 5	1.331 8	1.366 4	0.010 0	1.356 4	1.389 1	0.005 7	1.383 4	1.437 5
1.437 5	16.0	UNJ	1.437 5	0.009 4	1.428 1	1.396 9	0.003 9	1.393 0	1.365 3	0.007 7	1.357 6	1.385 2	0.008 5	1.376 7	1.402 0	0.005 1	0.396 9	1.437 5
1.437 5	18.0	UNJEF	1.437 5	0.008 7	1.428 8	1.401 4	0.003 7	1.397 7	1.373 3	0.007 0	1.366 3	1.390 9	0.007 5	1.383 4	1.406 2	0.004 8	1.401 4	1.437 5
1.500 0	6.0	UNJC	1.500 0	0.008 2	1.481 8	1.391 7	0.006 1	1.385 6	1.307 5	1.016 2	1.291 3	1.357 7	0.020 0	1.337 7	1.399 6	0.007 9	1.391 7	1.500 0
1.500 0	8.0	UNJ	1.500 0	0.015 0	1.485 0	1.418 8	0.005 5	1.413 3	1.355 6	1.013 0	1.342 6	1.393 3	0.015 0	1.378 3	1.425 9	0.007 1	1.418 8	1.500 0
1.500 0	12.0	UNJF	1.500 0	0.011 4	1.488 6	1.445 9	0.004 7	1.441 1	1.403 8	0.009 8	1.394 0	1.428 9	0.010 0	1.418 9	1.452 2	0.006 3	1.445 9	1.500 0
1.500 0	16.0	UNJ	1.500 0	0.009 4	1.490 6	1.459 4	0.003 9	1.455 5	1.427 8	0.007 7	1.420 1	1.447 7	0.008 5	1.439 2	1.464 5	0.005 1	1.459 4	1.500 0
1.500 0	18.0	UNJEF	1.500 0	0.008 7	1.491 3	1.463 9	0.003 7	1.460 2	1.435 8	0.007 0	1.428 8	1.453 4	0.007 5	1.445 9	1.468 7	0.004 8	1.463 9	1.500 0
1.562 5	8.0	UNJ	1.562 5	0.015 0	1.547 5	1.481 3	0.005 5	1.475 8	1.418 2	0.013 1	1.405 1	1.455 8	0.015 0	1.440 8	1.488 5	0.007 2	1.481 3	1.562 5
1.562 5	12.0	UNJ	1.562 5	0.011 4	1.551 1	1.508 4	0.004 4	1.504 0	1.466 3	0.009 5	1.456 8	1.491 4	0.010 0	1.481 4	1.514 1	0.005 7	1.508 4	1.562 5
1.562 5	16.0	UNJ	1.562 5	0.009 4	1.553 1	1.521 9	0.003 9	1.518 0	1.490 3	0.007 7	1.482 6	1.510 2	0.008 5	1.501 7	1.527 0	0.005 1	1.521 9	1.562 5
1.562 5	18.0	UNJEF	1.562 5	0.008 7	1.553 8	1.526 4	0.003 7	1.522 7	1.498 3	0.007 0	1.491 3	1.515 9	0.007 5	1.508 4	1.531 2	0.004 8	1.526 4	1.562 5
1.625 0	8.0	UNJ	1.625 0	0.015 0	1.610 0	1.543 8	0.005 6	1.538 2	1.480 6	0.013 1	1.467 5	1.518 3	0.015 0	1.503 3	1.551 0	0.007 2	1.543 8	1.625 0
1.625 0	12.0	UNJ	1.625 0	0.011 4	1.613 6	1.570 9	0.003 4	1.566 5	1.528 8	0.009 4	1.519 4	1.553 9	0.010 0	1.543 9	1.576 6	0.005 7	1.570 9	1.625 0
1.625 0	16.0	UNJ	1.625 0	0.009 4	1.615 6	1.584 4	0.003 9	1.580 5	1.552 8	0.007 7	1.545 1	1.572 7	0.008 5	1.564 2	1.589 5	0.005 1	1.584 4	1.625 0
1.625 0	18.0	UNJEF	1.625 0	0.008 7	1.616 3	1.588 9	0.003 7	1.585 2	1.560 8	0.007 0	1.553 8	1.578 4	0.007 5	1.570 9	1.593 7	0.004 8	1.588 9	1.625 0

TABLE 5 – (*continued*)

Dimensions in inches

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
Nominal sizes	n	Series symbol	EXTERNAL THREAD									INTERNAL THREAD						
			Major diameter d			Pitch diameter d_2			Minor diameter d_3			Minor diameter D_1			Pitch diameter D_2			Major diameter D
			max.	T_d	min.	max.	T_{d_2}	min.	max.	T_{d_3}	min.	max.	T_{D_1}	min.	max.	T_{D_2}	min.	min.
1.687 5	8.0	UNJ	1.687 5	0.015 0	1.672 5	1.606 3	0.005 4	1.600 7	1.543 2	0.013 2	1.530 0	1.580 8	0.015 0	1.565 8	1.613 6	0.007 3	1.606 3	1.687 5
1.687 5	12.0	UNJ	1.687 5	0.011 4	1.676 1	1.633 4	0.004 5	1.628 9	1.591 3	0.010 5	1.581 8	1.616 4	0.010 0	1.606 4	1.639 2	0.005 8	1.633 4	1.687 5
1.687 5	16.0	UNJ	1.687 5	0.009 4	1.678 1	1.646 9	0.004 0	1.642 9	1.615 3	0.007 8	1.607 5	1.635 2	0.009 5	1.626 7	1.652 1	0.005 2	1.646 9	1.687 5
1.687 5	18.0	UNJEF	1.687 5	0.008 7	1.678 8	1.651 4	0.003 8	1.647 6	1.623 3	0.007 1	1.616 2	1.640 9	0.007 5	1.633 4	1.656 3	0.004 9	1.651 4	1.687 5
1.750 0	5.0	UNJC	1.750 0	0.020 5	1.729 5	1.620 1	0.006 7	1.613 4	1.519 1	0.018 9	1.500 2	1.579 2	0.024 0	1.555 2	1.628 8	0.008 7	1.620 1	1.750 0
1.750 0	8.0	UNJ	1.750 0	0.015 0	1.735 0	1.668 8	0.005 7	1.663 1	1.605 6	0.013 2	1.592 4	1.643 3	0.015 0	1.628 3	1.676 2	0.007 4	1.668 8	1.750 0
1.750 0	12.0	UNJ	1.750 0	0.011 4	1.738 6	1.695 9	0.004 5	1.691 4	1.653 8	0.009 6	1.644 2	1.678 9	0.010 0	1.668 9	1.701 7	0.005 8	1.695 9	1.750 0
1.750 0	16.0	UNJ	1.750 0	0.009 4	1.740 6	1.709 4	0.004 0	1.705 4	1.677 8	0.007 8	1.670 0	1.697 7	0.008 5	1.689 2	1.714 6	0.005 2	1.709 4	1.750 0
1.812 5	8.0	UNJ	1.812 5	0.010 0	1.797 5	1.731 3	0.005 7	1.725 6	1.668 2	0.013 3	1.654 9	1.705 8	0.015 0	1.690 8	1.738 7	0.007 4	1.731 3	1.812 5
1.812 5	12.0	UNJ	1.812 5	0.011 4	1.801 1	1.758 4	0.004 5	1.753 9	1.716 3	0.010 5	1.706 8	1.741 4	0.010 0	1.731 4	1.764 2	0.005 8	1.758 4	1.812 5
1.812 5	16.0	UNJ	1.812 5	0.009 4	1.803 1	1.771 9	0.004 0	1.767 9	1.740 3	0.007 8	1.732 5	1.760 2	0.008 5	1.751 7	1.777 1	0.005 2	1.771 9	1.812 5
1.875 0	8.0	UNJ	1.875 0	0.015 0	1.860 0	1.793 8	0.005 7	1.788 1	1.730 6	0.013 2	1.717 4	1.768 3	0.015 0	1.753 3	1.801 3	0.007 5	1.793 8	1.875 0
1.875 0	12.0	UNJ	1.875 0	0.011 4	1.863 6	1.820 9	0.004 5	1.816 4	1.778 8	0.009 6	1.769 2	1.803 9	0.010 0	1.793 9	1.826 7	0.005 8	1.820 9	1.875 0
1.875 0	16.0	UNJ	1.875 0	0.009 4	1.865 6	1.834 4	0.004 0	1.830 4	1.802 8	0.007 8	1.795 0	1.822 7	0.008 5	1.814 2	1.839 6	0.005 2	1.834 4	1.875 0
1.937 5	8.0	UNJ	1.937 5	0.015 0	1.922 5	1.856 3	0.005 8	1.850 5	1.793 2	0.013 4	1.779 8	1.830 8	0.015 0	1.815 8	1.863 8	0.005 5	1.856 3	1.937 5
1.937 5	12.0	UNJ	1.937 5	0.011 4	1.926 1	1.883 4	0.004 5	1.878 9	1.841 3	0.009 5	1.831 8	1.866 4	0.010 0	1.856 4	1.889 3	0.005 9	1.883 4	1.937 5
1.937 5	16.0	UNJ	1.937 5	0.009 4	1.928 1	1.896 9	0.004 0	1.892 9	1.865 3	0.007 8	1.857 5	1.885 2	0.008 5	1.876 7	1.902 1	0.005 2	1.896 9	1.937 5
2.000 0	4.5	UNJC	2.000 0	0.022 0	1.978 0	1.855 7	0.007 1	1.848 6	1.743 4	0.020 5	1.722 9	1.810 2	0.026 7	1.783 5	1.865 0	0.009 3	1.855 7	2.000 0
2.000 0	8.0	UNJ	2.000 0	0.015 0	1.985 0	1.918 8	0.005 8	1.913 0	1.855 6	0.013 3	1.842 3	1.893 3	0.015 0	1.878 3	1.926 4	0.007 6	1.918 8	2.000 0
2.000 0	12.0	UNJ	2.000 0	0.011 4	1.988 6	1.945 9	0.004 5	1.941 4	1.903 8	0.009 6	1.894 2	1.928 9	0.010 0	1.918 9	1.951 8	0.005 9	1.945 9	2.000 0
2.000 0	16.0	UNJ	2.000 0	0.009 4	1.990 6	1.959 4	0.004 0	1.955 4	1.927 8	0.007 8	1.920 0	1.947 7	0.008 5	1.939 2	1.964 6	0.005 2	1.959 4	2.000 0
2.125 0	8.0	UNJ	2.125 0	0.015 0	2.110 0	2.043 8	0.005 9	2.037 9	1.980 6	0.013 4	1.967 2	2.018 3	0.015 0	2.003 3	2.051 5	0.007 7	2.043 8	2.125 0
2.125 0	12.0	UNJ	2.125 0	0.011 4	2.113 6	2.070 9	0.004 5	2.066 4	2.028 8	0.009 6	2.019 2	2.053 9	0.010 0	2.043 9	2.076 8	0.005 9	2.070 9	2.125 0
2.125 0	16.0	UNJ	2.125 0	0.009 4	2.115 6	2.084 4	0.004 0	2.080 4	2.052 8	0.007 8	2.045 0	2.072 7	0.008 5	2.064 2	2.089 6	0.005 2	2.084 4	2.125 0
2.250 0	4.5	UNJC	2.250 0	0.022 0	2.228 0	2.105 7	0.007 3	2.098 4	1.993 4	0.020 7	1.972 7	2.060 2	0.026 7	2.033 5	2.115 2	0.009 5	2.105 7	2.250 0
2.250 0	8.0	UNJ	2.250 0	0.015 0	2.235 0	2.168 8	0.006 0	2.162 8	2.105 6	0.013 5	2.092 1	2.143 3	0.015 0	2.128 3	2.176 6	0.007 8	2.168 8	2.250 0
2.250 0	12.0	UNJ	2.250 0	0.011 4	2.238 6	2.195 9	0.004 5	2.191 4	2.153 8	0.009 6	2.144 2	2.178 9	0.010 0	2.168 9	2.201 8	0.005 9	2.195 9	2.250 0
2.250 0	16.0	UNJ	2.250 0	0.009 4	2.240 6	2.209 4	0.004 0	2.205 4	2.177 8	0.007 8	2.170 0	2.197 7	0.008 5	2.189 2	2.214 6	0.005 2	2.209 4	2.250 0

TABLE 5 — (*continued*)

Dimensions in inches

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
Nominal sizes	n	Series symbol	EXTERNAL THREAD									INTERNAL THREAD						
			Major diameter d			Pitch diameter d_2			Minor diameter d_3			Minor diameter D_1			Pitch diameter D_2			Major diameter D
			max.	T_d	min.	max.	T_{d_2}	min.	max.	T_{d_3}	min.	max.	T_{D_1}	min.	max.	T_{D_2}	min.	min.
2.375 0	8.0	8UNJ	2.375 0	0.015 0	2.360 0	2.293 8	0.006 0	2.287 8	2.230 6	0.013 5	2.217 1	2.268 3	0.015 0	2.253 3	2.301 7	0.007 9	2.293 8	2.375 0
2.375 0	12.0	12UNJ	2.375 0	0.011 4	2.363 6	2.320 9	0.004 6	2.316 3	2.278 8	0.009 6	2.269 2	2.303 9	0.010 0	2.293 9	2.326 9	0.006 0	2.320 9	2.375 0
2.375 0	16.0	16UNJ	2.375 0	0.009 4	2.365 6	2.334 4	0.004 1	2.330 3	2.302 8	0.007 9	2.294 9	2.322 7	0.008 5	2.314 2	2.339 8	0.005 4	2.334 4	2.375 0
2.500 0	4.0	UNJC	2.500 0	0.023 8	2.476 2	2.337 6	0.007 8	2.329 8	2.211 3	0.022 9	2.188 4	2.286 5	0.030 0	2.256 5	2.347 7	0.010 1	2.337 6	2.500 0
2.500 0	8.0	UNJ	2.500 0	0.015 0	2.485 0	2.418 8	0.006 1	2.412 7	2.355 6	0.013 6	2.342 0	2.393 3	0.015 0	2.378 3	2.426 8	0.008 0	2.418 8	2.500 0
2.500 0	12.0	UNJ	2.500 0	0.011 4	2.488 6	2.445 9	0.004 6	2.441 3	2.403 8	0.009 6	2.394 2	2.428 9	0.010 0	2.418 9	2.451 9	0.006 0	2.445 9	2.500 0
2.500 0	16.0	UNJ	2.500 0	0.009 4	2.490 6	2.459 4	0.004 1	2.455 3	2.427 8	0.007 9	2.419 9	2.447 7	0.008 5	2.439 2	2.464 8	0.005 4	2.459 4	2.500 0
2.625 0	8.0	UNJ	2.625 0	0.015 0	2.610 0	2.543 8	0.006 2	2.537 6	2.480 6	0.013 7	2.466 9	2.518 3	0.015 0	2.503 3	2.551 8	0.008 0	2.543 8	2.625 0
2.625 0	12.0	UNJ	2.625 0	0.011 4	2.613 6	2.570 9	0.004 6	2.566 3	2.528 8	0.009 6	2.519 2	2.553 9	0.010 0	2.543 9	2.576 9	0.006 0	2.570 9	2.625 0
2.625 0	16.0	UNJ	2.625 0	0.009 4	2.615 6	2.584 4	0.004 1	2.580 3	2.552 8	0.007 9	2.544 9	2.572 7	0.008 5	2.564 2	2.589 8	0.005 4	2.584 4	2.625 0
2.750 0	4.0	UNJC	2.750 0	0.023 8	2.726 2	2.587 6	0.007 9	2.579 7	2.461 3	0.023 1	2.438 2	2.536 5	0.030 0	2.506 5	2.597 9	0.010 3	2.587 6	2.750 0
2.750 0	8.0	UNJ	2.750 0	0.015 0	2.735 0	2.668 8	0.006 3	2.662 5	2.605 6	0.013 8	2.591 8	2.643 3	0.015 0	2.628 3	2.676 9	0.008 1	2.668 8	2.750 0
2.750 0	12.0	UNJ	2.750 0	0.011 4	2.738 6	2.695 9	0.004 6	2.691 3	2.653 8	0.009 6	2.644 2	2.678 9	0.010 0	2.668 9	2.701 9	0.006 0	2.695 9	2.750 0
2.750 0	16.0	UNJ	2.750 0	0.009 4	2.740 6	2.709 4	0.004 1	2.705 3	2.677 8	0.007 9	2.669 9	2.697 7	0.008 5	2.689 2	2.714 8	0.005 4	2.709 4	2.750 0
2.875 0	8.0	UNJ	2.875 0	0.015 0	2.860 0	2.793 8	0.006 3	2.787 5	2.730 6	0.013 8	2.716 8	2.768 3	0.015 0	2.753 3	2.802 0	0.008 2	2.793 8	2.875 0
2.875 0	12.0	UNJ	2.875 0	0.011 4	2.863 6	2.820 9	0.004 7	2.816 2	2.778 8	0.009 8	2.769 0	2.803 9	0.010 0	2.793 9	2.827 1	0.006 2	2.820 9	2.875 0
2.875 0	16.0	UNJ	2.875 0	0.009 4	2.865 6	2.834 4	0.004 2	2.830 2	2.802 8	0.008 0	2.794 8	2.822 7	0.008 5	2.814 2	2.839 9	0.005 5	2.834 4	2.875 0
3.000 0	4.0	UNJC	3.000 0	0.023 8	2.976 2	2.837 6	0.008 0	2.829 6	2.711 3	0.023 1	2.688 2	2.786 5	0.030 0	2.756 5	2.848 0	0.010 4	2.837 6	3.000 0
3.000 0	8.0	UNJ	3.000 0	0.015 0	2.985 0	2.918 8	0.006 4	2.912 4	2.855 6	0.013 9	2.841 7	2.893 3	0.015 0	2.878 3	2.927 1	0.008 3	2.918 8	3.000 0
3.000 0	12.0	UNJ	3.000 0	0.011 4	2.988 6	2.945 9	0.004 7	2.941 2	2.903 8	0.009 8	2.894 0	2.928 9	0.010 0	2.918 9	2.952 1	0.006 2	2.945 9	3.000 0
3.000 0	16.0	UNJ	3.000 0	0.009 4	2.990 6	2.959 4	0.004 2	2.955 2	2.927 8	0.008 0	2.919 8	2.947 7	0.008 5	2.939 2	2.964 9	0.005 5	2.959 4	3.000 0
3.125 0	8.0	UNJ	3.125 0	0.015 0	3.110 0	3.043 8	0.006 4	3.037 4	2.980 6	0.013 9	2.966 7	3.018 3	0.015 0	3.003 3	3.052 2	0.008 4	3.043 8	3.125 0
3.125 0	12.0	UNJ	3.125 0	0.011 4	3.113 6	3.070 9	0.004 7	3.066 2	3.028 8	0.009 8	3.019 0	3.053 9	0.010 0	3.043 9	3.077 1	0.006 2	3.070 9	3.125 0
3.125 0	16.0	UNJ	3.125 0	0.009 4	3.115 6	3.084 4	0.004 2	3.080 2	3.052 8	0.008 0	3.044 8	3.072 7	0.008 5	3.064 2	3.089 9	0.005 5	3.084 4	3.125 0
3.250 0	4.0	UNJC	3.250 0	0.023 8	3.226 2	3.087 6	0.008 2	3.079 4	2.961 3	0.023 3	2.938 0	3.036 5	0.030 0	3.006 5	3.098 2	0.010 6	3.087 6	3.250 0
3.250 0	8.0	UNJ	3.250 0	0.015 0	3.235 0	3.168 8	0.006 5	3.162 3	3.105 6	0.014 0	3.091 6	3.143 3	0.015 0	3.128 3	3.177 3	0.008 5	3.168 8	3.250 0
3.250 0	12.0	UNJ	3.250 0	0.011 4	3.238 6	3.195 9	0.004 7	3.191 2	3.153 8	0.009 8	3.144 0	3.178 9	0.010 0	3.168 9	3.202 1	0.006 2	3.195 9	3.250 0
3.250 0	16.0	UNJ	3.250 0	0.009 4	3.240 6	3.209 4	0.004 2	3.205 2	3.177 8	0.008 0	3.169 8	3.197 7	0.008 5	3.189 2	3.214 9	0.005 5	3.209 4	3.250 0

TABLE 5 — (*continued*)

Dimensions in inches

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
Nominal sizes	n	Series symbol	EXTERNAL THREAD									INTERNAL THREAD						
			Major diameter d			Pitch diameter d_2			Minor diameter d_3			Minor diameter D_1			Pitch diameter D_2			Major diameter D
			max.	T_d	min.	max.	T_{d_2}	min.	max.	T_{d_3}	min.	max.	T_{D_1}	min.	max.	T_{D_2}	min.	min.
3.375 0	8.0	UNJ	3.375 0	0.015 0	3.360 0	3.293 8	0.006 6	3.287 2	3.230 6	0.014 1	3.216 5	3.268 3	0.015 0	3.253 3	3.302 3	0.008 5	3.293 8	3.375 0
3.375 0	12.0	UNJ	3.375 0	0.011 4	3.363 6	3.320 9	0.004 8	3.316 1	3.278 8	0.009 8	3.269 0	3.303 9	0.010 0	3.293 9	3.327 2	0.006 3	3.320 9	3.375 0
3.375 0	16.0	UNJ	3.375 0	0.009 4	3.365 6	3.334 4	0.004 3	3.330 1	3.302 8	0.008 1	3.294 7	3.322 7	0.008 5	3.314 2	3.340 0	0.005 6	3.334 4	3.375 0
3.500 0	4.0	UNJC	3.500 0	0.023 8	3.476 2	3.337 6	0.007 3	3.329 3	3.211 3	0.023 5	3.187 8	3.286 5	0.030 0	3.378 3	3.348 4	0.010 8	3.337 6	3.500 0
3.500 0	8.0	UNJ	3.500 0	0.015 0	3.485 0	3.418 8	0.004 4	3.412 2	3.355 6	0.014 1	3.341 5	3.393 3	0.015 0	3.378 2	3.427 4	0.008 6	3.418 8	3.500 0
3.500 0	12.0	UNJ	3.500 0	0.011 4	3.488 6	3.445 9	0.004 8	3.441 1	3.403 8	0.009 8	3.394 0	3.428 9	0.010 0	3.418 9	3.452 2	0.006 3	3.445 9	3.500 0
3.500 0	16.0	UNJ	3.500 0	0.009 4	3.490 6	3.459 4	0.004 3	3.455 1	3.427 8	0.008 1	3.419 7	3.447 7	0.008 5	3.439 2	3.465 0	0.005 6	3.459 4	3.500 0
3.625 0	8.0	UNJ	3.625 0	0.015 0	3.610 0	3.543 8	0.006 7	3.537 1	3.480 6	0.014 2	3.466 4	3.518 3	0.015 0	3.503 3	3.552 5	0.008 7	3.543 8	3.625 0
3.625 0	12.0	UNJ	3.625 0	0.011 4	3.613 6	3.570 9	0.004 8	3.566 1	3.528 8	0.009 8	3.519 0	3.553 9	0.010 0	3.543 9	3.577 2	0.006 3	3.570 9	3.625 0
3.625 0	16.0	UNJ	3.625 0	0.009 4	3.615 6	3.584 4	0.004 3	3.580 1	3.552 8	0.008 1	3.544 7	3.572 7	0.008 5	3.564 2	3.590 0	0.005 6	3.584 4	3.625 0
3.750 0	4.0	UNJC	3.750 0	0.023 8	3.726 2	3.587 6	0.008 4	3.579 2	3.461 3	0.023 5	3.437 8	3.536 5	0.030 0	3.506 5	3.598 5	0.010 9	3.587 6	3.750 0
3.750 0	8.0	UNJ	3.750 0	0.015 0	3.735 0	3.668 8	0.006 7	3.662 1	3.605 6	0.014 2	3.591 4	3.643 3	0.015 0	3.628 3	3.677 6	0.008 8	3.668 8	3.750 0
3.750 0	12.0	UNJ	3.750 0	0.011 4	3.738 6	3.695 9	0.004 8	3.691 1	3.653 8	0.009 8	3.644 0	3.678 9	0.010 0	3.668 9	3.702 2	0.006 3	3.695 9	3.750 0
3.750 0	16.0	UNJ	3.750 0	0.009 4	3.740 6	3.709 4	0.004 3	3.705 1	3.677 8	0.008 1	3.669 7	3.697 7	0.008 5	3.689 2	3.715 0	0.005 6	3.709 4	3.750 0
3.875 0	8.0	UNJ	3.875 0	0.015 0	3.860 0	3.793 8	0.006 8	3.787 0	3.730 6	0.014 3	3.716 3	3.768 3	0.015 0	3.753 3	3.802 6	0.008 8	3.793 8	3.875 0
3.875 0	12.0	UNJ	3.875 0	0.011 4	3.863 6	3.820 9	0.004 9	3.816 0	3.778 8	0.010 0	3.768 8	3.803 9	0.010 0	3.793 9	3.827 3	0.006 4	3.820 9	3.875 0
3.875 0	16.0	UNJ	3.875 0	0.009 4	3.865 6	3.834 4	0.004 4	3.830 0	3.802 8	0.008 2	3.794 6	3.822 7	0.008 5	3.814 2	3.840 1	0.005 7	3.834 4	3.875 0
4.000 0	4.0	UNJC	4.000 0	0.023 8	3.976 2	3.837 6	0.008 5	3.829 1	3.711 3	0.023 7	3.687 6	3.786 5	0.030 0	3.756 5	3.848 7	0.011 1	3.837 6	4.000 0
4.000 0	8.0	UNJ	4.000 0	0.015 0	3.985 0	3.918 8	0.006 8	3.912 0	3.855 6	0.014 3	3.841 3	3.893 3	0.015 0	3.878 3	3.927 7	0.008 9	3.918 8	4.000 0
4.000 0	12.0	UNJ	4.000 0	0.011 4	3.988 6	3.945 9	0.004 9	3.941 0	3.903 8	0.010 0	3.893 8	3.928 9	0.010 0	3.918 9	3.952 3	0.006 4	3.945 9	4.000 0
4.000 0	16.0	UNJ	4.000 0	0.009 4	3.990 6	3.959 4	0.004 4	3.955 0	3.927 8	0.008 2	3.919 6	3.947 7	0.008 5	3.939 2	3.965 1	0.005 7	3.959 4	4.000 0
4.125 0	12.0	UNJ	4.125 0	0.011 4	4.113 6	4.070 9	0.004 9	4.066 0	4.028 8	0.010 0	4.018 8	4.053 9	0.010 0	4.043 9	4.077 3	0.006 4	4.070 9	4.125 0
4.125 0	16.0	UNJ	4.125 0	0.009 4	4.115 6	4.084 4	0.004 4	4.080 0	4.052 8	0.008 2	4.044 6	4.072 7	0.008 5	4.064 2	4.090 1	0.004 7	4.084 4	4.125 0
4.250 0	12.0	UNJ	4.250 0	0.011 4	4.238 6	4.195 9	0.004 9	4.191 0	4.153 8	0.010 0	4.143 8	4.178 9	0.010 0	4.168 9	4.202 3	0.006 4	4.195 9	4.250 0
4.250 0	16.0	UNJ	4.250 0	0.009 4	4.240 6	4.209 4	0.004 4	4.205 0	4.177 8	0.008 2	4.169 6	4.197 7	0.008 5	4.189 2	4.215 1	0.005 7	4.209 4	4.250 0
4.375 0	12.0	UNJ	4.375 0	0.011 4	4.363 6	4.320 9	0.004 9	4.316 0	4.278 8	0.010 0	4.268 8	4.303 9	0.010 0	4.293 9	4.327 3	0.006 4	4.320 9	4.375 0
4.375 0	16.0	UNJ	4.375 0	0.009 4	4.365 6	4.334 4	0.004 4	4.330 0	4.302 8	0.008 2	4.294 6	4.322 7	0.008 5	4.314 2	4.340 1	0.005 7	4.334 4	4.375 0
4.500 0	12.0	UNJ	4.500 0	0.011 4	4.488 6	4.445 9	0.004 9	4.441 0	4.403 8	0.010 0	4.393 8	4.428 9	0.010 0	4.418 9	4.452 3	0.006 4	4.445 9	4.500 0

TABLE 5 — (*concluded*)

Dimensions in inches

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
Nominal sizes	n	Series symbol	EXTERNAL THREAD									INTERNAL THREAD						
			Major diameter d			Pitch diameter d_2			Minor diameter d_3			Minor diameter D_1			Pitch diameter D_2			Major diameter D
			max.	T_d	min.	max.	T_{d_2}	min.	max.	T_{d_3}	min.	max.	T_{D_1}	min.	max.	T_{D_2}	min.	min.
4.500 0	16.0	UNJ	4.500 0	0.009 4	4.490 6	4.459 4	0.004 4	4.455 0	4.427 8	0.008 2	4.419 6	4.447 7	0.008 5	4.439 2	4.465 1	0.005 7	4.459 4	4.500 0
4.625 0	12.0	UNJ	4.625 0	0.011 4	4.613 6	4.570 9	0.005 0	4.565 9	4.528 8	0.010 0	4.518 8	4.553 9	0.010 0	4.543 9	4.577 5	0.006 6	4.570 9	4.625 0
4.625 0	16.0	UNJ	4.625 0	0.009 4	4.615 6	4.584 4	0.004 5	4.579 9	4.552 8	0.008 3	4.544 5	4.572 7	0.008 5	4.564 2	4.590 3	0.005 9	4.584 4	4.625 0
4.750 0	12.0	UNJ	4.750 0	0.011 4	4.738 6	4.695 9	0.005 0	4.690 9	4.653 8	0.010 0	4.643 8	4.678 9	0.010 0	4.668 9	4.702 5	0.006 6	4.695 9	4.750 0
4.750 0	16.0	UNJ	4.750 0	0.009 4	4.740 6	4.709 4	0.004 5	4.704 9	4.677 8	0.008 3	4.669 5	4.697 7	0.008 5	4.689 2	4.715 3	0.005 9	4.709 4	4.750 0
4.875 0	12.0	UNJ	4.875 0	0.011 4	4.863 6	4.820 9	0.005 0	4.815 9	4.778 8	0.010 0	4.768 8	4.803 9	0.010 0	4.793 9	4.827 5	0.006 6	4.820 9	4.875 0
4.875 0	16.0	UNJ	4.875 0	0.009 4	4.865 6	4.834 4	0.004 5	4.829 9	4.802 8	0.008 3	4.794 5	4.822 7	0.008 5	4.814 2	4.840 3	0.005 9	4.834 4	4.875 0
5.000 0	12.0	UNJ	5.000 0	0.011 4	4.988 6	4.945 9	0.005 0	4.940 9	4.903 8	0.010 0	4.893 8	4.928 9	0.010 0	4.918 9	4.952 5	0.006 6	4.945 9	5.000 0
5.000 0	16.0	UNJ	5.000 0	0.009 4	4.990 6	4.959 4	0.004 5	4.954 9	4.927 8	0.008 3	4.919 5	4.947 7	0.008 5	4.939 2	4.965 3	0.005 9	4.959 4	5.000 0
5.125 0	12.0	UNJ	5.125 0	0.011 4	5.113 6	5.070 9	0.005 0	5.065 9	5.028 8	0.010 0	5.018 8	5.053 9	0.010 0	5.043 9	5.077 5	0.006 6	5.070 9	5.125 0
5.125 0	16.0	UNJ	5.125 0	0.009 4	5.115 6	5.084 4	0.004 5	5.079 9	5.052 8	0.008 3	5.044 5	5.072 7	0.008 5	5.064 2	5.090 3	0.005 9	5.084 4	5.125 0
5.250 0	12.0	UNJ	5.250 0	0.011 4	5.238 6	5.195 9	0.005 0	5.190 9	5.153 8	0.010 0	5.143 8	5.178 9	0.010 0	5.168 9	5.202 5	0.006 6	5.195 9	5.250 0
5.250 0	16.0	UNJ	5.250 0	0.009 4	5.240 6	5.209 4	0.004 5	5.204 9	5.177 8	0.008 9	5.169 5	5.197 7	0.008 5	5.189 2	5.215 3	0.005 9	5.209 4	5.250 0
5.375 0	12.0	UNJ	5.375 0	0.011 4	5.363 6	5.320 9	0.005 0	5.315 9	5.278 8	0.010 0	5.268 8	5.303 9	0.010 0	5.293 9	5.327 5	0.006 6	5.320 9	5.375 0
5.375 0	16.0	UNJ	5.375 0	0.009 4	5.365 6	5.334 4	0.004 5	5.329 9	5.302 8	0.008 3	5.294 5	5.322 7	0.008 5	5.314 2	5.340 3	0.005 9	5.334 4	5.375 0
5.500 0	12.0	UNJ	5.500 0	0.011 4	5.488 6	5.445 9	0.005 0	5.440 9	5.403 8	0.010 0	5.393 8	5.428 9	0.010 0	5.418 9	5.452 5	0.006 6	5.445 9	5.500 0
5.500 0	16.0	UNJ	5.500 0	0.009 4	5.490 6	5.459 4	0.004 5	5.454 9	5.427 8	0.008 3	5.419 5	5.447 7	0.008 5	5.439 2	5.465 3	0.005 9	5.459 4	5.500 0
5.625 0	12.0	UNJ	5.625 0	0.011 4	5.613 6	5.570 9	0.005 2	5.565 7	5.528 8	0.010 2	5.518 6	5.553 8	0.010 0	5.543 9	5.577 6	0.006 7	5.570 9	5.625 0
5.625 0	16.0	UNJ	5.625 0	0.009 4	5.615 6	5.584 4	0.004 7	5.579 7	5.552 8	0.008 5	5.544 3	5.572 7	0.008 5	5.564 2	5.590 5	0.006 1	5.584 4	5.625 0
5.750 0	12.0	UNJ	5.750 0	0.011 4	5.738 6	5.695 9	0.005 2	5.690 7	5.653 8	0.010 2	5.643 6	5.678 9	0.010 0	5.668 9	5.702 6	0.006 7	5.695 9	5.750 0
5.750 0	16.0	UNJ	5.750 0	0.009 4	5.740 6	5.709 4	0.004 7	5.704 7	5.677 8	0.008 5	5.669 3	5.697 7	0.008 5	5.689 2	5.715 5	0.007 1	5.709 4	5.750 0
5.875 0	12.0	UNJ	5.875 0	0.011 4	5.863 6	5.820 9	0.005 2	5.815 7	5.778 8	0.010 2	5.768 6	0.803 9	0.010 0	5.793 9	5.827 6	0.006 7	5.820 9	5.875 0
5.875 0	16.0	UNJ	5.875 0	0.009 4	5.865 6	5.834 4	0.004 7	5.829 7	5.802 8	0.008 5	5.794 3	5.822 7	0.008 5	5.814 2	5.840 5	0.006 1	5.834 4	5.875 0
6.000 0	12.0	UNJ	6.000 0	0.011 4	5.988 6	5.945 9	0.005 2	5.940 7	5.903 8	0.010 2	5.893 6	5.928 9	0.010 0	5.918 9	5.952 6	0.006 7	5.945 9	6.000 0
6.000 0	16.0	UNJ	6.000 0	0.009 4	5.990 6	5.959 4	0.004 7	5.954 7	5.927 8	0.008 5	5.919 3	5.947 7	0.008 5	5.939 2	5.965 5	0.006 1	5.959 4	6.000 0

TABLE 6 — Values of tolerances for profile dimensions (Metric conversions)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
Nominal sizes in	n	Series symbol	EXTERNAL THREAD									INTERNAL THREAD						
			Major diameter d mm			Pitch diameter d_2 mm			Minor diameter d_3 mm			Minor diameter D_1 mm			Pitch diameter D_2 mm			Major diameter D mm
			max.	T_d	min.	max.	T_{d_2}	min.	max.	T_{d_3}	min.	max.	T_{D_1}	min.	max.	T_{D_2}	min.	min.
0.060 0	80.0	UNJF	1,524	0,081	1,443	1,318	0,032	1,286	1,158	0,053	1,105	1,297	0,080	1,217	1,361	0,043	1,318	1,524
0.073 0	64.0	UNJC	1,854	0,098	1,758	1,597	0,037	1,560	1,397	0,060	1,337	1,572	0,103	1,469	1,645	0,048	1,597	1,854
0.073 0	72.0	UNJF	1,854	0,088	1,766	1,625	0,034	1,591	1,447	0,057	1,390	1,602	0,090	1,512	1,673	0,048	1,625	1,854
0.086 0	56.0	UNJC	2,184	0,103	2,081	1,889	0,039	1,850	1,661	0,068	1,593	1,859	0,116	1,743	1,943	0,054	1,889	2,184
0.086 0	64.0	UNJF	2,184	0,096	2,088	1,927	0,037	1,890	1,727	0,060	1,667	1,902	0,103	1,799	1,978	0,051	1,927	2,184
0.099 0	48.0	UNJC	2,514	0,113	2,401	2,171	0,042	2,129	1,905	0,076	1,829	2,136	0,137	1,999	2,227	0,056	2,171	2,514
0.099 0	56.0	UNJF	2,514	0,103	2,411	2,219	0,039	2,180	1,991	0,068	1,923	2,189	0,116	2,073	2,273	0,054	2,219	2,514
0.112 0	40.0	UNJC	2,844	0,128	2,716	2,433	0,047	2,386	2,113	0,086	2,027	2,392	0,164	2,228	2,494	0,061	2,433	2,844
0.112 0	48.0	UNJF	2,844	0,113	2,731	2,501	0,044	2,457	2,235	0,078	2,157	2,466	0,136	2,330	2,560	0,059	2,501	2,844
0.125 0	40.0	UNJC	3,175	0,129	3,046	2,763	0,047	2,716	2,443	0,085	2,358	2,722	0,164	2,558	2,827	0,064	2,763	3,175
0.125 0	44.0	UNJF	3,175	0,121	3,054	2,799	0,048	2,751	2,506	0,082	2,424	2,763	0,149	2,614	2,860	0,061	2,799	3,175
0.138 0	32.0	UNJC	3,505	0,152	3,353	2,989	0,052	2,937	2,588	0,101	2,487	2,938	0,204	2,734	3,058	0,069	2,985	3,505
0.138 0	40.0	UNJF	3,505	0,129	3,376	3,093	0,050	3,043	2,773	0,088	2,685	3,053	0,165	2,888	3,157	0,064	3,093	3,505
0.164 0	32.0	UNJC	4,165	0,151	4,014	3,649	0,054	3,595	3,248	0,103	3,145	3,599	0,205	3,394	3,721	0,072	3,649	4,165
0.164 0	36.0	UNJF	4,165	0,139	4,026	3,708	0,052	3,656	3,352	0,095	3,257	3,662	0,182	3,480	3,776	0,068	3,708	4,165
0.190 0	24.0	UNJC	4,826	0,182	4,644	4,137	0,062	4,075	3,601	0,126	3,475	4,064	0,269	3,795	4,218	0,081	4,137	4,826
0.190 0	32.0	UNJF	4,826	0,152	4,674	4,310	0,058	4,252	3,909	0,106	3,803	4,254	0,200	4,054	4,384	0,074	4,310	4,826
0.216 0	24.0	UNJC	5,486	0,182	5,304	4,798	0,065	4,733	4,262	0,129	4,133	4,704	0,248	4,456	4,881	0,093	4,798	5,486
0.216 0	28.0	UNJF	5,486	0,164	5,322	4,897	0,060	4,837	4,439	0,115	4,324	4,815	0,212	4,603	4,975	0,078	4,897	5,486
0.216 0	32.0	UNJEF	5,486	0,152	5,334	4,970	0,060	4,910	4,569	0,108	4,461	4,899	0,184	4,715	5,049	0,079	4,970	5,486
0.250 0	20.0	UNJC	6,350	0,205	6,145	5,524	0,070	5,454	4,881	0,146	4,735	5,387	0,273	5,114	5,615	0,091	5,524	6,350
0.250 0	28.0	UNJF	6,350	0,165	6,185	5,760	0,062	5,698	5,303	0,118	5,185	5,661	0,194	5,467	5,842	0,082	5,760	6,350
0.250 0	32.0	UNJEF	6,350	0,152	6,198	5,834	0,060	5,774	5,433	0,109	5,324	5,748	0,170	5,578	5,913	0,079	5,834	6,350
0.312 5	18.0	UNJC	7,937	0,220	7,717	7,020	0,075	6,945	6,306	0,159	6,147	6,832	0,268	6,564	7,119	0,099	7,020	7,937
0.312 5	24.0	UNJF	7,937	0,182	7,755	7,249	0,068	7,181	6,715	0,133	6,582	7,109	0,202	6,907	7,340	0,109	7,249	7,937
0.312 5	32.0	UNJEF	7,937	0,151	7,786	7,421	0,060	7,361	7,020	0,108	6,912	7,317	0,151	7,166	7,500	0,079	7,421	7,937
0.375 0	16.0	UNJC	9,525	0,238	9,287	8,493	0,083	8,410	7,691	0,180	7,511	8,257	0,276	7,981	8,602	0,109	8,493	9,525
0.375 0	24.0	UNJF	9,525	0,182	9,343	8,836	0,073	8,763	8,300	0,136	8,164	8,679	0,175	8,494	8,930	0,094	8,836	9,525

TABLE 6 – (*continued*)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
			EXTERNAL THREAD									INTERNAL THREAD						
Nominal sizes in	n	**Series symbol**	**Major diameter d** mm			**Pitch diameter d_2** mm			**Minor diameter d_3** mm			**Minor diameter D_1** mm			**Pitch diameter D_2** mm			**Major diameter D** mm
			max.	T_d	min.	max.	T_{d_2}	min.	max.	T_{d_3}	min.	max.	T_{D_1}	min.	max.	T_{D_2}	min.	min.
0.375 0	32.0	UNJEF	9,525	0,152	9,373	9,009	0,063	8,946	8,608	0,111	8,497	8,892	0,139	8,753	9,093	0,084	9,009	9,525
0.437 5	14.0	UNJC	11,112	0,261	10,851	9,933	0,087	9,846	9,017	0,198	8,819	9,639	0,291	9,348	10,050	0,117	9,933	11,112
0.437 5	16.0	UNJ	11,112	0,238	10,874	10,081	0,086	9,995	9,278	0,182	9,096	9,827	0,258	9,569	10,195	0,114	10,081	11,112
0.437 5	20.0	UNJF	11,112	0,205	10,907	10,287	0,078	10,209	9,644	0,154	9,490	10,083	0,207	9,876	10,391	0,104	10,287	11,112
0.437 5	28.0	UNJEF	11,112	0,164	10,948	10,523	0,068	10,455	10,066	0,124	9,942	10,378	0,149	10,229	10,612	0,089	10,523	11.112
0.500 0	13.0	UNJC	12,700	0,276	12,424	11,430	0,093	11,337	10,441	0,219	10,232	11,094	0,296	10,798	11,551	0,121	11,430	12,700
0.500 0	16.0	UNJ	12,700	0,238	12,462	11,668	0,088	11,580	10,866	0,185	10,681	11,399	0,243	11,156	11,785	0,117	11,668	12,700
0.500 0	20.0	UNJF	12,700	0,205	12,495	11,874	0,080	11,794	11,231	0,156	11,075	11,661	0,197	11,464	11,981	0,107	11,874	12,700
0.500 0	28.0	UNJEF	12,700	0,165	12,535	12,110	0,070	12,040	11,653	0,125	11,527	11,958	0,141	11,817	12,202	0,092	12,110	12,700
0.562 5	12.0	UNJC	14,287	0,289	13,998	12,913	0,098	12,815	11,844	0,226	11,618	12,481	0,253	12,228	13,042	0,129	12,913	14,287
0.562 5	16.0	UNJ	14,287	0,238	14,049	13,256	0,088	13,168	12,453	0,184	12,269	12,976	0,232	12,744	13,373	0,117	13,256	14,287
0.562 5	18.0	UNJF	14,287	0,220	14,067	13,370	0,085	13,285	12,656	0,169	12,487	13,121	0,207	12,914	13,482	0,112	13,370	14,287
0.562 5	24.0	UNJEF	14,287	0,182	14,105	13,599	0,073	13,526	13,065	0,138	12,927	13,413	0,156	13,257	13,695	0,096	13,599	14,287
0.625 0	11.0	UNJC	15,875	0,307	15,568	14,376	0,103	14,273	13,210	0,243	12,967	13,903	0,275	13,628	14,513	0,137	14,376	15,875
0.625 0	12.0	UNJ	15,875	0,289	15,586	14,500	0,103	14,397	13,431	0,233	13,198	14,069	0,253	13,816	14,635	0,135	14,500	15,875
0.625 0	16.0	UNJ	15,875	0,238	15,637	14,843	0,090	14,753	14,041	0,187	13,854	14,556	0,225	14,331	14,960	0,127	14,843	15,875
0.625 0	18.0	UNJF	15,875	0,220	15,655	14,958	0,088	14,870	14,244	0,172	14,072	14,701	0,200	14,501	15,072	0,114	14,958	15,875
0.625 0	24.0	UNJEF	15,875	0,182	15,693	15,186	0,075	15,111	14,650	0,138	14,512	14,996	0,152	14,844	15,285	0,099	15,186	15,075
0.687 5	12.0	UNJ	17,462	0,289	17,173	16,088	0,103	15,985	15,019	0,231	14,788	15,656	0,253	15,403	16,222	0,134	16,088	17,462
0.687 5	16.0	UNJ	17,462	0,238	17,224	16,431	0,091	16,340	15,628	0,187	15,441	16,136	0,217	15,919	16,548	0,117	16,431	17,462
0.687 5	24.0	UNJEF	17,462	0,182	17,280	16,774	0,076	16,698	16,240	0,141	16,099	16,578	0,146	16,432	16,873	0,099	16,774	17,462
0.750 0	10.0	UNJC	19,050	0,327	18,723	17,399	0,111	17,288	16,116	0,266	15,850	16,880	0,303	16,577	17,543	0,144	17,399	19,050
0.750 0	12.0	UNJ	19,050	0,289	18,761	17,675	0,103	17,572	16,606	0,233	16,373	17,244	0,253	16,991	17,813	0,138	17,675	19,050
0.750 0	16.0	UNJF	19,050	0,238	18,812	18,018	0,095	17,923	17,216	0,192	17,024	17,721	0,215	17,506	18,143	0,124	18,018	19,050
0.750 0	20.0	UNJEF	19,050	0,205	18,845	18,224	0,083	18,141	17,581	0,159	17,422	17,985	0,171	17,814	18,333	0,109	18,224	19,050
0.812 5	12.0	UNJ	20,637	0,289	20,348	19,263	0,103	19,160	18,194	0,231	17,963	18,831	0,253	18,578	19,400	0,137	19,263	20,637
0.812 5	16.0	UNJ	20,637	0,238	20,399	19,606	0,091	19,515	18,803	0,187	18,616	19,309	0,215	19,094	19,725	0,119	19,606	20,637
0.812 5	20.0	UNJEF	20,637	0,205	20,432	19,812	0,083	19,729	19,169	0,159	19,010	19,573	0,172	19,401	19,921	0,109	19,812	20,637

TABLE 6 — (*continued*)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
Nominal sizes in	n	Series symbol	EXTERNAL THREAD									INTERNAL THREAD						
			Major diameter d mm			Pitch diameter d_2 mm			Minor diameter d_3 mm			Minor diameter D_1 mm			Pitch diameter D_2 mm			Major diameter D mm
			max.	T_d	min.	max.	T_{d_2}	min.	max.	T_{d_3}	min.	max.	T_{D_1}	min.	max.	T_{D_2}	min.	min.
0.875 0	9.0	UNJC	22,225	0,353	21,872	20,391	0,119	20,272	18,966	0,391	18,675	19,814	0,337	19,477	20,546	0,155	20,391	22,225
0.875 0	12.0	UNJ	22,225	0,289	21,936	20,850	0,103	20,747	19,781	0,233	19,548	20,419	0,253	20,166	20,988	0,138	20,850	22,225
0.875 0	14.0	UNJF	22,225	0,261	21,964	21,046	0,103	20,943	20,129	0,212	19,917	20,706	0,246	20,460	21,181	0,135	21,046	22,225
0.875 0	16.0	UNJ	22,225	0,238	21,987	21,193	0,090	21,103	20,391	0,187	20,204	20,876	0,215	20,681	21,313	0,120	21,193	22,225
0.875 0	20.0	UNJEF	22,225	0,205	22,020	21,399	0,083	21,316	20,756	0,159	20,597	21,160	0,171	20,989	21,508	0,109	21,399	22,225
0.937 5	12.0	UNJ	23,812	0,289	23,523	22,438	0,106	22,332	21,369	0,236	21,133	22,006	0,253	21,753	22,578	0,140	22,438	23,812
0.937 5	16.0	UNJ	23,812	0,238	23,574	22,781	0,093	22,688	21,978	0,189	21,789	22,484	0,215	22,269	22,905	0,124	22,781	23,812
0.937 5	20.0	UNJEF	23,812	0,205	23,607	22,987	0,086	22,901	22,344	0,162	22,182	22,748	0,172	22,576	23,098	0,111	22,987	23,812
1.000 0	8.0	UNJC	25,400	0,381	25,019	23,337	0,129	23,208	21,732	0,319	21,413	22,689	0,380	22,309	23,505	0,168	23,337	25,400
1.000 0	12.0	UNJF	25,400	0,289	25,111	24,025	0,110	23,915	22,956	0,238	22,718	23,594	0,253	23,341	24,170	0,145	24,025	25,400
1.000 0	16.0	UNJ	25,400	0,238	25,162	24,368	0,093	24,275	23,566	0,190	23,376	24,071	0,215	23,856	24,493	0,125	24,368	25,400
1.000 0	20.0	UNJEF	25,400	0,305	25,195	24,574	0,085	24,489	23,931	0,161	23,770	24,335	0,171	24,164	24,686	0,112	24,574	25,400
1.062 5	8.0	UNJ	26,987	0,380	26,607	24,925	0,129	24,796	23,322	0,322	23,000	24,277	0,380	23,897	25,095	0,170	24,925	26,987
1.062 5	12.0	UNJ	26,987	0,389	26,698	25,613	0,106	25,507	24,544	0,236	24,308	25,181	0,253	24,928	25,753	0,140	25,613	26,987
1.062 5	16.0	UNJ	26,987	0,238	26,749	25,956	0,093	25,863	25,153	0,189	24,964	25,659	0,215	25,444	26,080	0,124	25,956	26,987
1.062 5	18.0	UNJEF	26,987	0,220	26,767	26,070	0,090	25,980	25,356	0,174	25,182	25,803	0,189	25,614	26,187	0,117	26,070	26,987
1.125 0	7.0	UNJC	28,575	0,416	28,159	26,217	0,136	26,081	24,384	0,355	24,029	25,476	0,434	25,042	26,398	0,181	26,217	28,575
1.125 0	8.0	UNJ	28,575	0,381	28,194	26,512	0,177	26,335	24,907	0,368	24,539	25,864	0,380	25,484	26,682	0,170	26,512	28,575
1.125 0	12.0	UNJF	28,575	0,289	28,286	27,200	0,113	27,087	26,131	0,243	25,888	26,769	0,253	26,516	27,350	0,150	27,200	28,575
1.125 0	16.0	UNJ	28,575	0,238	28,337	27,543	0,093	27,450	26,741	0,190	26,551	27,246	0,215	27,031	27,668	0,125	27,543	28,575
1.125 0	18.0	UNJEF	28,575	0,220	28,355	27,658	0,091	27,567	26,944	0,174	26,770	27,391	0,190	27,201	27,774	0,116	27,658	28,575
1.187 5	8.0	UNJ	30,162	0,380	29,782	28,100	0,132	27,968	26,497	0,324	26,173	27,452	0,380	27,072	28,272	0,172	28,100	30,162
1.187 5	12.0	UNJ	30,162	0,289	29,873	28,788	0,108	28,680	27,719	0,236	27,483	28,456	0,253	28,103	28,930	0,142	28,788	30,162
1.187 5	16.0	UNJ	30,162	0,238	29,924	29,131	0,096	29,035	28,328	0,192	28,136	28,834	0,215	28,619	29,258	0,127	29,131	30,162
1.187 5	18.0	UNJEF	30,162	0,220	29,942	29,245	0,090	29,155	28,531	0,174	28,357	28,978	0,189	28,789	29,364	0,119	29,245	30,162
1.250 0	7.0	UNJC	31,750	0,416	31,334	29,392	0,138	29,254	27,559	0,358	27,201	28,651	0,434	28,217	29,575	0,183	29,392	31,750
1.250 0	8.0	UNJ	31,750	0,381	31,369	29,687	0,134	29,553	28,082	0,324	27,758	29,039	0,380	28,659	29,862	0,175	29,687	31,750
1.250 0	12.0	UNJF	31,750	0,289	31,461	30,375	0,115	30,260	29,306	0,243	29,063	29,944	0,253	29,691	30,528	0,153	30,375	31,750

TABLE 6 — (*continued*)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
Nominal sizes in	n	**Series symbol**	EXTERNAL THREAD									INTERNAL THREAD						
			Major diameter d mm			**Pitch diameter d_2** mm			**Minor diameter d_3** mm			**Minor diameter D_1** mm			**Pitch diameter D_2** mm			**Major diameter D** mm
			max.	T_d	min.	max.	T_{d_2}	min.	max.	T_{d_3}	min.	max.	T_{D_1}	min.	max.	T_{D_2}	min.	min.
1.250 0	16.0	UNJ	31,750	0,238	31,512	30,718	0,095	30,623	19,916	0,192	29,724	30,421	0,215	30,206	30,845	0,127	30,718	31,750
1.250 0	18.0	UNJEF	31,750	0,220	31,530	30,833	0,091	30,742	30,119	0,174	29,945	30,566	0,190	30,376	30,952	0,119	30,833	31,750
1.312 5	8.0	UNJ	33,337	0,380	32,957	31,275	0,134	31,141	29,672	0,327	29,345	30,627	0,380	30,247	31,450	0,175	31,275	33,337
1.312 5	12.0	UNJ	33,337	0,289	33,048	31,963	0,108	31,855	30,894	0,236	30,658	31,531	0,253	31,278	32,105	0,142	31,963	33,337
1.312 5	16.0	UNJ	33,337	0,238	33,099	32,306	0,096	32,210	31,503	0,192	31,311	32,009	0,215	31,794	32,433	0,127	32,306	33,337
1.312 5	18.0	UNJEF	33,337	0,220	33,117	32,420	0,090	32,330	31,706	0,174	31,532	32,153	0,189	31,964	32,539	0,119	32,420	33,337
1.375 0	6.0	UNJC	34,925	0,462	34,463	32,174	0,152	32,022	20,035	0,408	29,627	31,310	0,507	30,803	32,372	0,198	32,174	34,925
1.375 0	8.0	UNJ	34,925	0,381	34,544	32,862	0,136	32,726	31,257	0,327	30,930	32,214	0,380	31,834	33,040	0,178	32,862	34,925
1.375 0	12.0	UNJF	34,925	0,289	34,636	33,550	0,118	33,432	32,481	0,248	32,233	33,119	0,253	32,866	33,705	0,155	33,550	34,925
1.375 0	16.0	UNJ	34,925	0,338	34,687	33,893	0,095	33,798	33,091	0,192	32,899	33,596	0,215	33,381	34,020	0,127	33,893	34,925
1.375 0	18.0	UNJEF	34,925	0,220	34,705	34,008	0,091	33,917	33,294	0,174	33,120	33,741	0,190	33,551	34,127	0,119	34,008	34,925
1.437 5	8.0	UNJ	36,512	0,380	36,132	34,450	0,137	34,313	32,847	0,329	32,518	33,802	0,380	33,422	34,630	0,180	34,450	36,512
1.437 5	12.0	UNJ	36,512	0,289	36,223	35,138	0,111	35,027	34,069	0,241	33,828	34,706	0,253	34,453	35,283	0,145	35,138	36,512
1.437 5	16.0	UNJ	36,512	0,238	36,274	35,481	0,098	33,383	34,678	0,194	34,484	35,184	0,215	34,969	35,610	0,129	35,481	36,512
1.437 5	18.0	UNJEF	36,512	0,220	36,292	35,595	0,093	35,502	34,81	0,176	34,705	35,328	0,189	35,139	35,717	0,122	35,595	36,512
1.500 0	6.0	UNJC	38,100	0,462	37,638	35,349	0,154	35,195	33,210	0,410	32,800	34,485	0,507	33,978	35,549	0,200	35,349	38,100
1.500 0	8.0	UNJ	38,100	0,381	37,719	36,037	0,139	35,898	34,432	0,329	34,103	35,389	0,380	35,009	36,217	0,180	36,037	38,100
1.500 0	12.0	UNJF	38,100	0,289	37,811	36,725	0,121	36,604	35,656	0,248	35,408	36,294	0,253	36,041	36,885	0,100	36,725	38,100
1.500 0	16.0	UNJ	38,100	0,238	37,862	37,068	0,098	36,970	36,266	0,195	36,071	36,771	0,215	36,556	37,198	0,130	37,068	38,100
1.500 0	18.0	UNJEF	38,100	0,220	37,880	37,183	0,093	37,090	36,469	0,177	36,292	36,916	0,190	36,726	37,304	0,121	37,183	38,100
1.562 5	8.0	UNJ	39,687	0,380	39,307	37,625	0,139	37,486	36,022	0,332	35,690	36,977	0,380	36,597	37,807	0,182	37,625	39,687
1.562 5	12.0	UNJ	39,687	0,299	39,398	38,313	0,111	38,202	37,244	0,241	37,003	37,881	0,253	37,628	38,458	0,145	38,313	39,687
1.562 5	16.0	UNJ	39,687	0,238	39,449	38,656	0,098	38,558	37,853	0,194	37,659	38,359	0,215	38,144	38,785	0,129	38,656	39,607
1.562 5	18.0	UNJEF	39,687	0,220	39,467	38,770	0,093	38,677	38,056	0,176	37,880	38,503	0,189	38,314	38,892	0,122	38,770	39,687
1.625 0	8.0	UNJ	4,1275	0,381	40,894	39,212	0,141	39,071	37,607	0,332	37,275	38,564	0,380	38,184	39,395	0,183	39,212	41,275
1.625 0	12.0	UNJ	41,275	0,289	40,986	39,900	0,110	39,790	38,831	0,238	38,593	39,469	0,253	39,216	40,045	0,145	39,900	41,275
1.625 0	16.0	UNJ	41,275	0,238	41,037	40,243	0,098	40,145	39,441	0,195	39,246	39,946	0,215	39,731	40,373	0,130	40,243	41,275
1.625 0	18.0	UNJEF	41,275	0,220	41,055	40,358	0,093	40,265	39,644	0,177	39,467	40,091	0,190	39,901	40,479	0,121	40,358	41,275

TABLE 6 — (*continued*)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
			EXTERNAL THREAD									INTERNAL THREAD						
Nominal sizes in	n	Series symbol	Major diameter d mm			Pitch diameter d_2 mm			Minor diameter d_3 mm			Minor diameter D_1 mm			Pitch diameter D_2 mm			Major diameter D mm
			max.	T_d	min.	max.	T_{d_2}	min.	max.	T_{d_3}	min.	max.	T_{D_1}	min.	max.	T_{D_2}	min.	min.
1.687 5	8.0	UNJ	42,862	0,380	42,482	40,800	0,142	40,650	39,197	0,335	38,862	40,152	0,380	39,772	40,985	0,185	40,800	42,862
1.687 5	12.0	UNJ	42,862	0,289	42,573	41,488	0,113	41,375	40,419	0,241	40,178	41,056	0,253	40,803	41,635	0,147	41,488	42,862
1.687 5	16.0	UNJ	42,682	0,238	42,624	41,831	0,101	41,730	41,028	0,197	40,831	41,534	0,215	41,319	41,963	0,132	41,831	42,862
1.687 5	18.0	UNJEF	42,862	0,220	42,642	41,945	0,095	41,850	41,231	0,179	41,052	41,678	0,189	41,489	42,070	0,125	41,945	42,862
1.750 0	5.0	UNJC	44,450	0,520	43,930	41,150	0,169	40,981	38,585	0,479	38,106	40,111	0,608	39,503	41,371	0,221	41,150	44,450
1.750 0	8.0	UNJ	44,450	0,381	44,069	42,387	0,064	42,243	40,782	0,335	40,447	41,739	0,380	41,359	42,575	0,188	42,387	44,450
1.750 0	12.0	UNJ	44,450	0,289	44,161	43,075	0,113	42,962	42,006	0,243	41,763	42,644	0,253	42,391	43,223	0,148	43,075	44,450
1.750 0	16.0	UNJ	44,450	0,238	44,212	43,410	0,092	43,318	41,616	0,198	42,418	43,121	0,215	42,906	43,580	0,132	43,418	44,450
1.812 5	8.0	UNJ	46,037	0,280	45,657	43,975	0,144	43,831	42,372	0,337	42,035	43,327	0,380	42,947	44,162	0,187	43,975	46,037
1.812 5	12.0	UNJ	46,037	0,289	45,748	44,663	0,113	44,550	43,594	0,241	43,353	44,231	0,253	43,978	44,810	0,147	44,663	46,037
1.812 5	16.0	UNJ	46,037	0,238	45,799	45,006	0,101	44,905	44,203	0,197	44,006	44,709	0,215	44,494	45,138	0,132	45,006	46,037
1.875 0	8.0	UNJ	47,625	0,381	47,244	45,562	0,144	45,418	43,957	0,335	43,622	44,914	0,380	44,534	45,753	0,191	45,562	47,625
1.875 0	12.0	UNJ	47,625	0,289	47,336	46,250	0,113	46,137	45,181	0,243	44,938	45,819	0,253	45,566	46,398	0,148	46,250	47,625
1.875 0	16.0	UNJ	47,625	0,238	47,387	46,593	0,100	46,493	45,791	0,198	45,593	46,296	0,215	46,081	46,725	0,132	46,593	47,625
1.937 5	8.0	UNJ	49,212	0,380	48,832	47,150	0,147	47,003	45,547	0,340	45,207	46,502	0,380	46,122	47,340	0,190	47,150	49,212
1.937 5	12.0	UNJ	49,212	0,289	48,923	47,838	0,113	47,725	46,769	0,241	46,528	47,406	0,253	47,153	47,988	0,150	47,838	49,212
1.937 5	16.0	UNJ	49,212	0,238	48,974	48,181	0,101	48,080	47,378	0,197	47,181	47,884	0,215	47,669	48,313	0,132	48,181	49,212
2.000 0	4.5	UNJC	50,800	0,558	50,242	47,134	0,255	46,879	44,282	0,520	43,762	45,979	0,678	45,301	47,371	0,237	47,134	50,800
2.000 0	8.0	UNJ	50,800	0,381	50,419	48,737	0,146	48,591	47,132	0,337	46,795	48,089	0,380	47,709	48,930	0,193	48,737	50,800
2.000 0	12.0	UNJ	50,800	0,289	50,511	49,425	0,113	49,312	48,356	0,243	48,113	48,994	0,253	48,741	49,575	0,150	49,425	50,800
2.000 0	16.0	UNJ	50,800	0,238	50,562	49,768	0,100	49,668	48,966	0,198	48,768	49,471	0,215	49,256	49,900	0,132	49,768	50,800
2.125 0	8.0	UNJ	53,975	0,381	53,594	51,912	0,148	51,763	50,307	0,340	49,967	51,264	0,380	50,884	52,108	0,196	51,912	53,975
2.125 0	12.0	UNJ	53,975	0,389	53,686	52,600	0,113	52,487	51,531	0,243	51,288	52,169	0,253	51,916	52,750	0,150	52,600	53,975
2.125 0	16.0	UNJ	53,975	0,238	53,737	52,943	0,100	52,843	52,141	0,198	51,943	52,646	0,215	52,431	53,075	0,132	52,943	53,975
2.250 0	4.5	UNJC	57,150	0,558	56,592	53,484	0,184	53,300	50,632	0,525	50,107	52,329	0,678	51,651	53,726	0,242	53,484	57,150
2.250 0	8.0	UNJ	57,150	0,381	56,769	55,087	0,151	54,936	53,482	0,342	53,140	54,439	0,380	54,059	55,285	0,198	55,087	57,150
2.250 0	12.0	UNJ	57,150	0,289	56,861	55,775	0,113	55,662	54,706	0,243	54,463	55,344	0,253	55,091	55,925	0,150	55,775	57,150
2.250 0	16.0	UNJ	57,150	0,238	56,912	56,118	0,100	56,018	55,316	0,198	55,118	55,821	0,215	55,606	56,250	0,132	56,118	57,150

TABLE 6 – (*continued*)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
Nominal sizes in	n	Series symbol	EXTERNAL THREAD									INTERNAL THREAD						
			Major diameter d mm			Pitch diameter d_2 mm			Minor diameter d_3 mm			Minor diameter D_1 mm			Pitch diameter D_2 mm			Major diameter D mm
			max.	T_d	min.	max.	T_{d_2}	min.	max.	T_{d_3}	min.	max.	T_{D_1}	min.	max.	T_{D_2}	min.	min.
2.375 0	8.0	UNJ	60,325	0,381	59,944	58,262	0,151	58,111	56,657	0,342	56,315	57,614	0,380	57,234	58,463	0,201	58,262	60,325
2.375 0	12.0	UNJ	60,325	0,289	60,036	58,950	0,115	58,835	57,881	0,243	57,638	58,519	0,253	58,266	59,103	0,153	58,950	60,325
2.375 0	16.0	UNJ	60,325	0,238	60,087	59,293	0,103	59,190	58,491	0,200	58,291	58,996	0,215	58,781	59,430	0,137	59,293	60,325
2.500 0	4.0	UNJC	63,500	0,704	62,896	59,375	0,198	59,177	56,167	0,581	55,586	58,077	0,761	57,316	59,631	0,256	59,375	63,500
2.500 0	8.0	UNJ	63,500	0,381	63,119	61,437	0,154	61,283	59,832	0,345	59,487	60,789	0,380	60,409	61,640	0,203	61,437	63,500
2.500 0	12.0	UNJ	63,500	0,289	63,211	62,125	0,115	62,010	61,056	0,243	60,813	61,694	0,253	61,441	62,278	0,153	62,125	63,500
2.500 0	16.0	UNJ	63,500	0,238	63,262	62,468	0,103	62,365	61,666	0,200	61,466	62,171	0,215	61,956	62,605	0,137	62,468	63,500
2.625 0	8.0	UNJ	66,675	0,381	66,294	64,612	0,156	64,456	63,007	0,347	62,660	63,964	0,380	63,584	64,815	0,203	64,612	66,675
2.625 0	12.0	UNJ	66,675	0,289	66,386	65,300	0,115	65,185	64,231	0,243	63,988	64,869	0,253	64,616	65,453	0,153	65,300	66,675
2.625 0	16.0	UNJ	66,675	0,238	66,437	65,643	0,103	65,540	64,841	0,200	64,641	65,346	0,215	65,131	65,780	0,137	65,643	66,675
2.750 0	4.0	UNJC	69,850	0,604	69,246	65,725	0,200	65,525	62,517	0,586	61,931	64,427	0,761	63,666	65,986	0,271	65,725	69,850
2.750 0	8.0	UNJ	69,850	0,381	69,469	67,787	0,159	67,628	66,182	0,350	65,832	67,139	0,380	66,759	67,993	0,206	67,787	69,850
2.750 0	12.0	UNJ	69,850	0,289	69,561	68,475	0,115	68,360	67,406	0,243	67,163	68,044	0,253	67,791	68,628	0,153	68,475	69,850
2.750 0	16.0	UNJ	69,850	0,238	69,612	68,818	0,103	68,715	68,016	0,200	67,816	68,521	0,215	68,306	68,955	0,137	68,818	69,850
2.875 0	8.0	UNJ	73,025	0,381	72,644	70,962	0,159	70,803	69,357	0,350	69,007	70,314	0,380	69,934	71,170	0,208	70,962	73,025
2.875 0	12.0	UNJ	73,025	0,289	72,736	71,650	0,118	71,532	70,581	0,248	70,333	71,219	0,253	70,966	71,808	0,158	71,650	73,025
2.875 0	16.0	UNJ	73,025	0,238	72,787	71,993	0,105	71,888	71,191	0,203	70,988	71,696	0,215	71,481	72,133	0,140	71,993	73,025
3.000 0	4.0	UNJC	76,200	0,604	75,596	72,075	0,203	71,872	68,867	0,586	68,281	70,777	0,761	70,016	72,339	0,264	72,075	76,200
3.000 0	8.0	UNJ	76,200	0,381	75,819	74,137	0,152	73,975	72,532	0,352	72,180	73,489	0,380	73,109	74,348	0,211	74,137	76,200
3.000 0	12.0	UNJ	76,200	0,289	75,911	74,825	0,118	74,707	73,756	0,248	73,508	74,394	0,253	74,141	74,983	0,158	74,825	76,200
3.000 0	16.0	UNJ	76,200	0,238	75,962	75,168	0,105	75,063	74,366	0,203	74,163	74,871	0,215	74,656	75,308	0,140	75,168	76,200
3.125 0	8.0	UNJ	79,375	0,381	78,994	77,312	0,262	77,150	75,707	0,352	75,355	76,664	0,380	76,284	77,525	0,213	77,312	79,375
3.125 0	12.0	UNJ	79,375	0,289	79,086	78,000	0,118	77,882	76,931	0,248	76,683	77,569	0,253	77,316	78,158	0,158	78,000	79,375
3.125 0	16.0	UNJ	79,375	0,238	79,137	78,343	0,105	78,238	77,541	0,203	77,338	78,046	0,215	77,831	78,483	0,140	78,343	79,375
3.250 0	4.0	UNJC	82,550	0,604	81,946	78,425	0,208	78,217	75,217	0,591	74,626	77,127	0,761	76,366	78,694	0,269	78,425	82,550
3.250 0	8.0	UNJ	82,550	0,381	82,169	80,487	0,164	80,323	78,882	0,355	78,527	79,839	0,380	79,459	80,703	0,216	80,487	82,550
3.250 0	12.0	UNJ	82,550	0,289	82,261	81,175	0,118	81,057	80,106	0,248	79,858	80,744	0,253	80,491	81,333	0,158	81,175	82,550
3.250 0	16.0	UNJ	82,550	0,238	82,312	81,518	0,105	81,413	80,716	0,203	80,513	81,221	0,215	81,006	81,658	0,140	81,518	82,550

TABLE 6 — (*continued*)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
Nominal sizes *in*	*n*	Series symbol	EXTERNAL THREAD									INTERNAL THREAD						
			Major diameter d mm			Pitch diameter d_2 mm			Minor diameter d_3 mm			Minor diameter D_1 mm			Pitch diameter D_2 mm			Major diameter D mm
			max.	T_d	min.	max.	T_{d_2}	min.	max.	T_{d_3}	min.	max.	T_{D_1}	min.	max.	T_{D_2}	min.	min.
3.375 0	8.0	UNJ	85,725	0,381	85,344	83,662	0,167	83,495	82,057	0,693	81,700	83,014	0,420	82,634	83,878	0,218	83,662	85,725
3.375 0	12.0	UNJ	85,725	0,289	85,436	84,350	0,121	84,229	83,281	0,249	83,033	83,919	0,353	83,666	84,150	0,160	84,350	85,725
3.375 0	16.0	UNJ	85,725	0,238	85,487	84,693	0,108	84,585	83,891	0,205	83,686	84,396	0,215	84,181	84,836	0,143	84,693	85,725
3.500 0	4.0	UNJC	88,900	0,604	88,296	84,775	0,210	84,565	81,567	0,403	80,971	83,477	0,761	82,716	85,049	0,726	84,775	88,900
3.500 0	8.0	UNJ	88,900	0,381	88,519	86,837	0,187	86,670	85,232	0,653	84,875	86,189	0,620	85,809	87,055	0,782	86,837	88,900
3.500 0	12.0	UNJ	88,900	0,289	88,611	87,525	0,121	87,404	86,456	0,248	86,208	87,094	0,747	86,841	87,685	0,160	87,525	88,900
3.500 0	16.0	UNJ	88,900	0,238	88,662	87,868	0,108	87,760	87,066	0,795	86,861	87,571	0,215	87,356	88,010	0,858	87,860	88,900
3.625 0	8.0	UNJ	92,075	0,381	91,694	90,012	0,169	89,843	88,407	0,360	88,047	89,364	0,420	88,894	90,233	0,221	90,012	92,075
3.625 0	12.0	UNJ	92,075	0,289	91,786	90,700	0,111	90,579	89,631	0,249	89,383	90,269	0,253	90,016	90,860	0,160	90,700	92,075
3.625 0	16.0	UNJ	92,075	0,238	91,337	91,043	0,108	90,935	90,241	0,205	90,036	90,746	0,215	90,531	91,185	0,142	91,043	92,075
3.750 0	4.0	UNJC	95,250	0,604	94,646	91,125	0,213	90,912	87,917	0,596	87,321	89,827	0,761	89,066	91,401	0,276	91,125	95,250
3.750 0	8.0	UNJ	95,250	0,481	94,869	93,187	0,129	93,018	91,582	0,360	91,222	92,539	0,380	92,159	93,411	0,024	93,187	95,250
3.750 0	12.0	UNJ	95,250	0,289	94,961	93,875	0,121	93,754	92,806	0,258	92,558	93,444	0,253	93,191	94,035	0,850	93,875	95,250
3.750 0	16.0	UNJ	95,250	0,238	95,012	94,218	0,108	94,110	93,416	0,205	93,211	93,921	0,215	93,706	94,361	0,143	94,218	95,250
3.875 0	8.0	UNJ	98,425	0,481	95,044	96,362	0,172	96,190	94,757	0,362	94,395	95,714	0,380	95,334	96,586	0,224	96,362	98,425
3.875 0	12.0	UNJ	98,425	0,289	98,136	97,050	0,123	96,927	95,981	0,253	95,728	96,619	0,253	96,366	97,213	0,163	97,050	98,425
3.875 0	16.0	UNJ	98,425	0,238	98,187	97,393	0,111	97,282	96,591	0,208	96,383	97,096	0,215	96,881	97,538	0,145	97,393	98,425
4.000 0	4.0	UNJC	101,600	0,604	100,996	97,475	0,215	97,260	94,267	0,409	93,666	96,177	0,239	95,416	97,756	0,281	97,475	101,600
4.000 0	8.0	UNJ	101,600	0,381	101,219	99,537	0,172	99,365	97,932	0,462	97,570	98,889	0,380	98,509	99,763	0,228	99,537	101,600
4.000 0	12.0	UNJ	101,600	0,289	101,311	100,225	0,123	100,102	99,156	0,258	98,903	99,794	0,253	99,541	100,388	0,163	100,225	101,600
4.000 0	16.0	UNJ	101,600	0,238	101,362	100,568	0,111	100,457	99,766	0,208	99,558	100,271	0,215	100,056	100,713	0,145	100,568	101,600
4.125 0	12.0	UNJ	104,775	0,289	104,486	103,400	0,123	103,277	102,331	0,253	102,078	102,969	0,253	102,716	103,563	0,163	103,400	104,775
4.125 0	16.0	UNJ	104,775	0,238	104,537	103,743	0,111	103,632	102,941	0,208	102,733	103,446	0,215	103,231	103,888	0,145	103,743	104,775
4.250 0	12.0	UNJ	107,950	0,289	107,661	106,575	0,123	106,452	105,506	0,253	105,253	106,144	0,253	105,891	106,739	0,164	106,575	107,950
4.250 0	16.0	UNJ	107,950	0,238	107,712	106,918	0,111	106,807	106,116	0,208	105,908	106,621	0,215	106,406	107,063	0,855	106,918	107,950
4.375 0	12.0	UNJ	111,125	0,289	110,836	109,627	0,123	109,750	108,681	0,253	108,428	109,319	0,353	109,066	109,913	0,163	109,750	111,125
4.375 0	16.0	UNJ	111,125	0,248	110,887	110,093	0,889	109,982	109,291	0,208	109,083	109,796	0,215	109,581	110,238	0,145	110,093	111,125
4.500 0	12.0	UNJ	114,300	0,289	114,011	112,925	0,123	112,802	111,856	0,253	111,603	112,494	0,253	112,241	113,088	0,837	112,925	114,300

TABLE 6 – (*concluded*)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
Nominal sizes in	n	Series symbol	EXTERNAL THREAD									INTERNAL THREAD						
			Major diameter d mm			Pitch diameter d_2 mm			Minor diameter d_3 mm			Minor diameter D_1 mm			Pitch diameter D_2 mm			Major diameter D mm
			max.	T_d	min.	max.	T_{d_2}	min.	max.	T_{d_3}	min.	max.	T_{D_1}	min.	max.	T_{D_2}	min.	min.
4.500 0	14.0	UNJ	114,300	0,238	114,062	113,268	0,111	113,157	112,466	0,208	112,258	112,971	0,215	112,756	113,413	0,145	113,268	114,300
4.625 0	12.0	UNJ	117,475	0,287	117,186	116,100	0,226	115,974	115,031	0,253	114,778	115,669	0,253	115,416	116,268	0,168	116,100	117,475
4.625 0	16.0	UNJ	117,475	0,238	117,237	116,443	0,113	116,330	115,641	0,210	115,431	116,146	0,215	115,931	116,593	0,150	116,443	117,475
4.750 0	12.0	UNJ	120,650	0,289	120,361	119,275	0,116	119,149	119,206	0,253	117,953	118,844	0,253	118,591	119,443	0,168	119,275	120,650
4.750 0	16.0	UNJ	120,650	0,238	120,412	119,618	0,113	119,505	118,816	0,210	118,606	119,321	0,215	119,106	119,768	0,150	119,618	120,650
4.875 0	12.0	UNJ	123,825	0,299	123,536	122,450	0,126	122,324	121,881	0,253	121,128	122,019	0,253	121,766	122,618	0,168	122,450	123,825
4.875 0	16.0	UNJ	123,825	0,238	123,587	122,793	0,113	122,680	121,991	0,210	121,781	122,496	0,215	122,281	122,943	0,150	122,793	123,825
5.000 0	12.0	UNJ	127,000	0,289	126,711	125,625	0,126	125,499	124,556	0,253	124,303	125,194	0,253	124,941	125,793	0,168	125,625	127,000
5.000 0	16.0	UNJ	127,000	0,238	126,762	125,968	0,113	125,855	125,166	0,210	124,956	125,671	0,215	125,456	126,118	0,150	125,968	127,000
5.125 0	12.0	UNJ	130,174	0,388	129,886	128,800	0,226	128,674	127,731	0,253	127,478	128,369	0,253	128,116	128,968	0,168	128,800	130,174
5.125 0	16.0	UNJ	130,174	0,338	129,937	129,143	0,113	129,030	128,341	0,210	128,131	128,846	0,215	128,631	129,293	0,150	129,143	130,174
5.250 0	12.0	UNJ	133,350	0,289	133,061	131,975	0,136	131,849	130,906	0,253	130,653	131,544	0,253	131,291	132,143	0,168	131,975	133,350
5.250 0	16.0	UNJ	133,350	0,238	133,112	132,318	0,113	132,205	131,516	0,210	131,306	132,021	0,215	131,806	132,468	0,150	132,318	133,350
5.375 0	12.0	UNJ	136,524	0,286	136,236	135,150	0,126	135,024	134,081	0,253	133,828	134,719	0,253	134,466	135,318	0,168	135,150	136,524
5.375 0	16.0	UNJ	136,524	0,237	136,287	135,493	0,113	135,380	134,691	0,210	134,481	135,196	0,215	134,981	135,643	0,150	135,493	136,524
5.500 0	12.0	UNJ	139,699	0,288	139,411	138,325	0,226	138,199	137,256	0,253	137,003	137,894	0,253	137,641	138,493	0,168	138,325	139,699
5.500 0	16.0	UNJ	139,699	0,237	139,462	138,668	0,113	138,555	137,866	0,210	137,656	138,371	0,225	138,156	138,818	0,150	138,668	139,699
5.625 0	12.0	UNJ	142,875	0,299	142,586	141,500	0,131	141,369	140,431	0,258	140,173	141,069	0,253	140,816	141,671	0,171	141,500	142,875
5.625 0	16.0	UNJ	142,875	0,238	142,637	141,843	0,118	141,725	141,041	0,215	140,826	141,546	0,215	141,331	141,998	0,155	141,843	142,875
5.750 0	12.0	UNJ	146,049	0,268	145,761	144,675	0,131	144,544	143,606	0,258	143,348	144,244	0,253	143,991	144,846	0,171	144,675	146,049
5.750 0	16.0	UNJ	146,049	0,236	145,812	145,018	0,118	144,900	144,216	0,215	144,001	144,721	0,225	144,506	145,173	0,165	145,018	146,049
5.875 0	12.0	UNJ	149,225	0,289	148,936	147,850	0,131	147,719	146,781	0,258	146,523	147,419	0,253	147,166	148,021	0,271	147,850	149,225
5.875 0	16.0	UNJ	149,225	0,238	148,907	148,193	0,118	148,075	147,391	0,215	147,176	147,896	0,215	147,681	148,348	0,155	148,193	149,225
6.000 0	12.0	UNJ	152,399	0,288	152,111	151,025	0,131	150,894	149,956	0,258	149,698	150,594	0,253	150,341	151,196	0,171	151,025	152,399
6.000 0	16.0	UNJ	152,399	0,237	152,162	151,368	0,118	151,250	150,566	0,215	150,331	151,071	0,215	150,856	151,523	0,255	151,368	152,399

TABLE 7 — **Maximum permissible deviation in the lead error and half-angle (Inch dimensions)**

Dimensions in inches

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Nominal sizes	n	**Series symbol**	EXTERNAL THREAD				INTERNAL THREAD			
			$0.4\ T_{d_2}$	δP	$\delta\alpha$		$0.4\ T_{D_2}$	δP	$\delta\alpha$	
					°	′			°	′
0.060 0	80	UNJF	0.000 52	0.000 30	1	35	0.000 68	0.000 39	2	5
0.073 0	64	UNJC	0.000 60	0.000 35	1	28	0.000 76	0.000 44	1	51
0.073 0	72	UNJF	0.000 56	0.000 32	1	32	0.000 76	0.000 44	2	5
0.086 0	56	UNJC	0.000 64	0.000 37	1	22	0.000 84	0.000 48	1	48
0.086 0	64	UNJF	0.000 60	0.000 35	1	28	0.000 80	0.000 46	1	57
0.099 0	48	UNJC	0.000 68	0.000 39	1	15	0.000 88	0.000 51	1	37
0.099 0	56	UNJF	0.000 64	0.000 37	1	22	0.000 84	0.000 48	1	48
0.112 0	40	UNJC	0.000 76	0.000 44	1	10	0.000 96	0.000 55	1	28
0.112 0	48	UNJF	0.000 72	0.000 42	1	19	0.000 92	0.000 53	1	41
0.125 0	40	UNJC	0.000 76	0.000 44	1	10	0.001 00	0.000 58	1	32
0.125 0	44	UNJF	0.000 76	0.000 44	1	17	0.000 96	0.000 55	1	37
0.138 0	32	UNJC	0.000 84	0.000 48	1	2	0.001 12	0.000 65	1	22
0.138 0	40	UNJF	0.000 80	0.000 46	1	13	0.001 00	0.000 58	1	32
0.164 0	32	UNJC	0.000 88	0.000 51	1	5	0.001 12	0.000 65	1	22
0.164 0	36	UNJF	0.000 84	0.000 48	1	9	0.001 08	0.000 62	1	29
0.190 0	24	UNJC	0.001 00	0.000 58	0	55	0.001 28	0.000 74	1	10
0.190 0	32	UNJF	0.000 92	0.000 53	1	7	0.001 16	0.000 67	1	25
0.216 0	24	UNJC	0.001 00	0.000 58	0	55	0.001 32	0.000 76	1	13
0.216 0	28	UNJF	0.000 96	0.000 55	1	2	0.001 24	0.000 72	1	20
0.216 0	32	UNJEF	0.000 96	0.000 55	1	10	0.001 24	0.000 72	1	31
0.250 0	20	UNJC	0.001 12	0.000 65	0	51	0.001 44	0.000 83	1	6
0.250 0	28	UNJF	0.001 00	0.000 58	1	4	0.001 28	0.000 74	1	22
0.250 0	32	UNJEF	0.000 96	0.000 55	1	10	0.001 24	0.000 72	1	31
0.312 5	18	UNJC	0.001 20	0.000 69	0	50	0.001 56	0.000 90	1	4
0.312 5	24	UNJF	0.001 08	0.000 62	0	59	0.001 44	0.000 83	1	19
0.312 5	32	UNJEF	0.000 96	0.000 55	1	13	0.001 20	0.000 74	1	34
0.375 0	16	UNJC	0.001 32	0.000 76	0	48	0.001 72	0.000 99	1	3
0.375 0	24	UNJF	0.001 16	0.000 67	1	4	0.001 48	0.000 85	1	21
0.375 0	32	UNJEF	0.001 00	0.000 58	1	13	0.001 32	0.000 76	1	37
0.437 5	14	UNJC	0.001 40	0.000 81	0	45	0.001 84	0.001 06	0	59
0.437 5	16	UNJ	0.001 36	0.000 70	0	51	0.001 80	0.001 04	1	6
0.437 5	20	UNJF	0.001 24	0.000 72	0	57	0.001 64	0.000 95	1	15
0.437 5	28	UNJEF	0.001 08	0.000 62	1	19	0.001 40	0.000 81	1	30
0.500 0	13	UNJC	0.001 48	0.000 85	0	44	0.001 92	0.001 11	0	57
0.500 0	16	UNJ	0.001 40	0.000 81	0	51	0.001 84	0.001 06	1	7
0.500 0	20	UNJF	0.001 28	0.000 74	0	59	0.001 68	0.000 97	1	17
0.500 0	28	UNJEF	0.001 12	0.000 65	1	12	0.001 44	0.000 83	1	32
0.562 5	12	UNJC	0.001 56	0.000 90	0	43	0.002 04	0.001 18	0	56
0.562 5	16	UNJ	0.001 40	0.000 81	0	51	0.001 84	0.001 06	1	7
0.562 5	18	UNJF	0.001 36	0.000 79	0	56	0.001 76	0.001 02	1	13

TABLE 7 — (*continued*)

Dimensions in inches

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Nominal sizes	n	Series symbol	EXTERNAL THREAD				INTERNAL THREAD			
			$0.4\ T_{d_2}$	δP	$\delta\alpha$		$0.4\ T_{D_2}$	δP	$\delta\alpha$	
					°	′			°	′
0.562 5	24	UNJEF	0.001 20	0.000 69	1	6	0.001 56	0.000 90	1	26
0.625 0	11	UNJC	0.001 64	0.000 95	0	41	0.002 16	0.001 25	0	54
0.625 0	12	UNJ	0.001 64	0.000 95	0	45	0.002 12	0.001 22	0	58
0.625 0	16	UNJ	0.001 44	0.000 83	0	53	0.001 88	0.001 09	1	9
0.625 0	18	UNJF	0.001 40	0.000 81	0	58	0.001 80	0.001 04	1	14
0.625 0	24	UNJEF	0.001 20	0.000 69	1	6	0.001 56	0.000 90	1	26
0.687 5	12	UNJ	0.001 64	0.000 95	0	45	0.002 12	0.001 22	0	58
0.687 5	16	UNJ	0.001 44	0.000 83	0	53	0.001 88	0.001 09	1	9
0.687 5	24	UNJEF	0.001 20	0.000 69	1	6	0.001 56	0.000 90	1	26
0.750 0	10	UNJC	0.001 76	0.001 02	0	40	0.002 28	0.001 32	0	52
0.750 0	12	UNJ	0.001 64	0.000 95	0	45	0.002 16	0.001 25	0	59
0.750 0	16	UNJF	0.001 52	0.000 88	0	56	0.001 96	0.001 13	1	12
0.750 0	20	UNJEF	0.001 32	0.000 76	1	0	0.001 72	0.000 99	1	19
0.812 5	12	UNJ	0.001 68	0.000 97	0	46	0.002 16	0.001 25	0	59
0.812 5	16	UNJ	0.001 48	0.000 85	0	54	0.001 92	0.001 11	1	10
0.812 5	20	UNJEF	0.001 32	0.000 76	1	0	0.001 72	0.000 99	1	19
0.875 0	9	UNJC	0.001 88	0.001 09	0	39	0.002 44	0.001 41	0	50
0.875 0	12	UNJ	0.001 68	0.000 97	0	46	0.002 20	0.001 27	1	0
0.875 0	14	UNJF	0.001 64	0.000 95	0	53	0.002 12	0.001 22	1	8
0.875 0	16	UNJ	0.001 48	0.000 85	0	54	0.001 92	0.001 11	1	10
0.875 0	20	UNJEF	0.001 36	0.000 79	1	2	0.001 76	0.001 02	1	21
0.937 5	12	UNJ	0.001 68	0.000 97	0	46	0.002 20	0.001 27	1	0
0.937 5	16	UNJ	0.001 48	0.000 85	0	54	0.001 92	0.001 11	1	10
0.937 5	20	UNJEF	0.001 36	0.000 79	1	2	0.001 76	0.001 02	1	21
1.000 0	8	UNJC	0.002 04	0.001 18	0	37	0.002 64	0.001 52	0	48
1.000 0	12	UNJF	0.001 76	0.001 02	0	48	0.002 28	0.001 32	1	3
1.000 0	16	UNJ	0.001 48	0.000 85	0	54	0.001 96	0.001 13	1	12
1.000 0	20	UNJEF	0.001 36	0.000 79	1	2	0.001 76	0.001 02	1	21
1.062 5	8	UNJ	0.002 04	0.001 18	0	37	0.002 68	0.001 55	0	49
1.062 5	12	UNJ	0.001 72	0.000 99	0	47	0.002 20	0.001 27	1	0
1.062 5	16	UNJ	0.001 52	0.000 88	0	56	0.001 96	0.001 13	1	12
1.062 5	18	UNJEF	0.001 44	0.000 83	0	59	0.001 88	0.001 09	1	18
1.125 0	7	UNJC	0.002 16	0.001 25	0	35	0.002 84	0.001 64	0	46
1.125 0	8	UNJ	0.002 08	0.001 20	0	38	0.002 68	0.001 55	0	49
1.125 0	12	UNJF	0.001 80	0.001 04	0	50	0.002 36	0.001 36	1	5
1.125 0	16	UNJ	0.001 52	0.000 88	0	56	0.001 96	0.001 13	1	12
1.125 0	18	UNJEF	0.001 44	0.000 83	0	59	0.001 88	0.001 09	1	18
1.187 5	8	UNJ	0.002 08	0.001 20	0	38	0.002 72	0.001 57	0	50
1.187 5	12	UNJ	0.001 72	0.000 99	0	47	0.002 24	0.001 29	1	2
1.187 5	16	UNJ	0.001 52	0.000 88	0	56	0.001 96	0.001 13	1	12

TABLE 7 — (*continued*)

Dimensions in inches

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Nominal sizes	n	Series symbol	EXTERNAL THREAD				INTERNAL THREAD			
			$0.4\ T_{d_2}$	δP	$\delta\alpha$		$0.4\ T_{D_2}$	δP	$\delta\alpha$	
					°	′			°	′
1.187 5	18	UNJEF	0.001 44	0.000 83	0	59	0.001 88	0.001 09	1	18
1.250 0	7	UNJC	0.002 20	0.001 27	0	35	0.002 88	0.001 66	0	46
1.250 0	8	UNJ	0.002 12	0.001 22	0	39	0.002 76	0.001 59	0	51
1.250 0	12	UNJF	0.001 84	0.001 06	0	51	0.002 40	0.001 39	1	6
1.250 0	16	UNJ	0.001 52	0.000 88	0	56	0.002 00	0.001 15	1	13
1.250 0	18	UNJEF	0.001 44	0.000 83	0	59	0.001 68	0.001 09	1	18
1.312 5	8	UNJ	0.002 12	0.001 22	0	39	0.002 76	0.001 59	0	51
1.312 5	12	UNJ	0.001 76	0.001 02	0	48	0.002 28	0.001 32	1	3
1.312 5	16	UNJ	0.001 52	0.000 88	0	56	0.002 00	0.001 15	1	13
1.312 5	18	UNJEF	0.001 48	0.000 85	1	1	0.001 92	0.001 11	1	19
1.375 0	6	UNJC	0.002 40	0.001 39	0	33	0.003 12	0.001 80	0	43
1.375 0	8	UNJ	0.002 16	0.001 25	0	40	0.002 80	0.001 62	0	51
1.375 0	12	UNJF	0.001 88	0.001 09	0	52	0.002 44	0.001 41	1	7
1.375 0	16	UNJ	0.001 56	0.000 90	0	57	0.002 00	0.001 15	1	13
1.375 0	18	UNJEF	0.001 48	0.000 85	1	1	0.001 92	0.001 11	1	19
1.437 5	8	UNJ	0.002 16	0.001 25	0	40	0.002 84	0.001 64	0	52
1.437 5	12	UNJ	0.001 76	0.001 02	0	48	0.002 28	0.001 32	1	3
1.437 5	16	UNJ	0.001 56	0.000 90	0	57	0.002 04	0.001 18	1	15
1.437 5	18	UNJEF	0.001 48	0.000 85	1	1	0.001 92	0.001 11	1	19
1.500 0	6	UNJC	0.002 44	0.001 41	0	34	0.003 16	0.001 82	0	43
1.500 0	8	UNJ	0.002 20	0.001 27	0	40	0.002 84	0.001 64	0	52
1.500 0	12	UNJF	0.001 92	0.001 11	0	53	0.002 52	0.001 45	1	9
1.500 0	16	UNJ	0.001 56	0.000 90	0	57	0.002 04	0.001 18	1	15
1.500 0	18	UNJEF	0.001 48	0.000 85	1	1	0.001 92	0.001 11	1	19
1.562 5	8	UNJ	0.002 20	0.001 27	0	40	0.002 88	0.001 66	0	53
1.562 5	12	UNJ	0.001 76	0.001 02	0	48	0.002 32	0.001 34	1	4
1.562 5	16	UNJ	0.001 56	0.000 90	0	57	0.002 04	0.001 18	1	15
1.562 5	18	UNJEF	0.001 48	0.000 85	1	1	0.001 96	0.001 13	1	21
1.625 0	8	UNJ	0.002 24	0.001 29	0	41	0.002 88	0.001 66	0	53
1.625 0	12	UNJ	0.001 76	0.001 02	0	48	0.002 32	0.001 34	1	4
1.625 0	16	UNJ	0.001 56	0.000 90	0	57	0.002 04	0.001 18	1	15
1.625 0	18	UNJEF	0.001 52	0.000 88	1	3	0.001 96	0.001 13	1	21
1.687 5	8	UNJ	0.002 24	0.001 29	0	41	0.002 92	0.001 69	0	54
1.687 5	12	UNJ	0.001 80	0.001 04	0	50	0.002 32	0.001 34	1	4
1.687 5	16	UNJ	0.001 60	0.000 92	0	59	0.002 04	0.001 18	1	15
1.687 5	18	UNJEF	0.001 52	0.000 88	1	3	0.001 96	0.001 13	1	21
1.750 0	5	UNJC	0.002 68	0.001 55	0	31	0.003 48	0.002 01	0	40
1.750 0	8	UNJ	0.002 28	0.001 32	0	42	0.002 96	0.001 71	0	54
1.750 0	12	UNJ	0.001 80	0.001 04	0	50	0.002 32	0.001 34	1	4
1.750 0	16	UNJ	0.001 60	0.000 92	0	59	0.002 08	0.001 20	1	16

TABLE 7 — (*continued*)

Dimensions in inches

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Nominal sizes	n	Series symbol	EXTERNAL THREAD				INTERNAL THREAD			
			$0.4\ T_{d_2}$	δP	$\delta\alpha$		$0.4\ T_{D_2}$	δP	$\delta\alpha$	
					°	′			°	′
1.812 5	8	UNJ	0.002 28	0.001 32	0	42	0.002 96	0.001 71	0	54
1.812 5	12	UNJ	0.001 80	0.001 04	0	50	0.002 32	0.001 34	1	4
1.812 5	16	UNJ	0.001 60	0.000 92	0	59	0.002 08	0.001 20	1	16
1.875 0	8	UNJ	0.002 28	0.001 32	0	42	0.003 00	0.001 73	0	55
1.875 0	12	UNJ	0.001 80	0.001 04	0	50	0.002 36	0.001 36	1	5
1.875 0	16	UNJ	0.001 60	0.000 92	0	59	0.002 08	0.001 20	1	16
1.937 5	8	UNJ	0.002 32	0.001 34	0	43	0.003 00	0.001 73	0	55
1.937 5	12	UNJ	0.001 80	0.001 04	0	50	0.002 36	0.001 36	1	5
1.937 5	16	UNJ	0.001 60	0.000 92	0	59	0.002 08	0.001 20	1	16
2.000 0	4.5	UNJC	0.002 84	0.001 64	0	29	0.003 72	0.002 15	0	38
2.000 0	8	UNJ	0.002 32	0.001 34	0	43	0.003 04	0.001 76	0	56
2.000 0	12	UNJ	0.001 80	0.001 04	0	50	0.002 36	0.001 36	1	5
2.000 0	16	UNJ	0.001 60	0.000 92	0	59	0.002 08	0.001 20	1	16
2.125 0	8	UNJ	0.002 36	0.001 36	0	43	0.003 08	0.001 78	0	56
2.125 0	12	UNJ	0.001 84	0.001 06	0	51	0.002 36	0.001 36	1	5
2.125 0	16	UNJ	0.001 64	0.000 95	1	0	0.002 12	0.001 22	1	18
2.250 0	4.5	UNJC	0.002 92	0.001 69	0	30	0.003 80	0.002 19	0	39
2.250 0	8	UNJ	0.002 40	0.001 39	0	44	0.003 12	0.001 80	0	57
2.250 0	12	UNJ	0.001 84	0.001 06	0	51	0.002 40	0.001 39	1	6
2.250 0	16	UNJ	0.001 64	0.000 95	1	0	0.002 12	0.001 22	1	18
2.375 0	8	UNJ	0.002 40	0.001 39	0	44	0.003 16	0.001 82	0	58
2.375 0	12	UNJ	0.001 84	0.001 06	0	51	0.002 40	0.001 39	1	6
2.375 0	16	UNJ	0.001 64	0.000 95	1	0	0.002 16	0.001 25	1	19
2.500 0	4	UNJC	0.003 12	0.001 80	0	29	0.004 04	0.002 33	0	37
2.500 0	8	UNJ	0.002 44	0.001 41	0	45	0.003 20	0.001 85	0	59
2.500 0	12	UNJ	0.001 84	0.001 06	0	51	0.002 40	0.001 39	1	6
2.500 0	16	UNJ	0.001 64	0.000 95	1	0	0.002 16	0.001 25	1	19
2.625 0	8	UNJ	0.002 48	0.001 43	0	45	0.003 20	0.001 85	0	59
2.625 0	12	UNJ	0.001 88	0.001 09	0	52	0.002 44	0.001 41	1	7
2.625 0	16	UNJ	0.001 68	0.000 97	1	2	0.002 16	0.001 25	1	19
2.750 0	4	UNJC	0.003 16	0.001 82	0	29	0.004 12	0.002 38	0	38
2.750 0	8	UNJ	0.002 52	0.001 45	0	46	0.003 24	0.001 87	0	59
2.750 0	12	UNJ	0.001 88	0.001 09	0	52	0.002 44	0.001 41	1	7
2.750 0	16	UNJ	0.001 68	0.000 97	1	2	0.002 16	0.001 25	1	19
2.875 0	8	UNJ	0.002 52	0.001 45	0	46	0.003 28	0.001 89	1	0
2.875 0	12	UNJ	0.001 88	0.001 09	0	52	0.002 44	0.001 41	1	7
2.875 0	16	UNJ	0.001 68	0.000 97	1	2	0.002 20	0.001 27	1	21
3.000 0	4	UNJC	0.003 20	0.001 85	0	29	0.004 16	0.002 40	0	38
3.000 0	8	UNJ	0.002 56	0.001 48	0	47	0.003 32	0.001 92	1	1
3.000 0	12	UNJ	0.001 88	0.001 09	0	52	0.002 48	0.001 43	1	8

TABLE 7 – (*continued*)

Dimensions in inches

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Nominal sizes	n	Series symbol	EXTERNAL THREAD				INTERNAL THREAD			
			$0.4\ T_{d_2}$	δP	$\delta\alpha$		$0.4\ T_{D_2}$	δP	$\delta\alpha$	
					°	′			°	′
3.000 0	16	UNJ	0.001 68	0.000 97	1	2	0.002 20	0.001 27	1	21
3.125 0	8	UNJ	0.002 56	0.001 48	0	47	0.003 36	0.001 94	1	2
3.125 0	12	UNJ	0.001 92	0.001 11	0	53	0.002 48	0.001 43	1	8
3.125 0	16	UNJ	0.001 72	0.000 99	1	3	0.002 20	0.001 27	1	21
3.250 0	4	UNJC	0.003 28	0.001 89	0	30	0.004 24	0.002 45	0	39
3.250 0	8	UNJ	0.002 60	0.001 50	0	48	0.003 40	0.001 96	1	2
3.250 0	12	UNJ	0.001 92	0.001 11	0	53	0.002 48	0.001 43	1	8
3.250 0	16	UNJ	0.001 72	0.000 99	1	3	0.002 24	0.001 29	1	22
3.375 0	8	UNJ	0.002 64	0.001 52	0	48	0.003 40	0.001 96	1	2
3.375 0	12	UNJ	0.001 92	0.001 11	0	53	0.002 52	0.001 45	1	9
3.375 0	16	UNJ	0.001 72	0.000 99	1	3	0.002 24	0.001 29	1	22
3.500 0	4	UNJC	0.003 32	0.001 92	0	30	0.004 32	0.002 49	0	40
3.500 0	8	UNJ	0.002 64	0.001 52	0	48	0.003 44	0.001 99	1	3
3.500 0	12	UNJ	0.001 92	0.001 11	0	53	0.002 52	0.001 45	1	9
3.500 0	16	UNJ	0.001 72	0.000 99	1	3	0.002 24	0.001 29	1	22
3.625 0	8	UNJ	0.002 68	0.001 55	0	49	0.003 48	0.002 01	1	4
3.625 0	12	UNJ	0.001 92	0.001 11	0	53	0.002 52	0.001 45	1	9
3.625 0	16	UNJ	0.001 72	0.000 99	1	3	0.002 24	0.001 29	1	22
3.750 0	4	UNJC	0.003 36	0.001 94	0	31	0.004 36	0.002 52	0	40
3.750 0	8	UNJ	0.002 68	0.001 55	0	49	0.003 52	0.002 03	1	5
3.750 0	12	UNJ	0.001 96	0.001 13	0	54	0.002 52	0.001 45	1	9
3.750 0	16	UNJ	0.001 76	0.001 02	1	5	0.002 28	0.001 32	1	24
3.875 0	8	UNJ	0.002 72	0.001 57	0	50	0.003 52	0.002 03	1	5
3.875 0	12	UNJ	0.001 96	0.001 13	0	54	0.002 56	0.001 48	1	10
3.875 0	16	UNJ	0.001 76	0.001 02	1	5	0.002 28	0.001 32	1	24
4.000 0	4	UNJC	0.003 40	0.001 96	0	31	0.004 44	0.002 56	0	41
4.000 0	8	UNJ	0.002 72	0.001 57	0	50	0.003 56	0.002 06	1	5
4.000 0	12	UNJ	0.001 96	0.001 13	0	54	0.002 56	0.001 48	1	10
4.000 0	16	UNJ	0.001 76	0.001 02	1	5	0.002 28	0.001 32	1	24
4.125 0	12	UNJ	0.001 96	0.001 13	0	54	0.002 56	0.001 48	1	10
4.125 0	16	UNJ	0.001 76	0.001 02	1	5	0.002 28	0.001 32	1	24
4.250 0	12	UNJ	0.001 96	0.001 13	0	54	0.002 56	0.001 48	1	10
4.250 0	16	UNJ	0.001 76	0.001 02	1	5	0.002 32	0.001 34	1	25
4.375 0	12	UNJ	0.002 00	0.001 15	0	55	0.002 56	0.001 48	1	10
4.375 0	16	UNJ	0.001 80	0.001 04	1	6	0.002 32	0.001 34	1	25
4.500 0	12	UNJ	0.002 00	0.001 15	0	55	0.002 60	0.001 50	1	11
4.500 0	16	UNJ	0.001 80	0.001 04	1	6	0.002 32	0.001 34	1	25
4.625 0	12	UNJ	0.002 00	0.001 15	0	55	0.002 60	0.001 50	1	11
4.625 0	16	UNJ	0.001 80	0.001 04	1	6	0.002 32	0.001 34	1	25
4.750 0	12	UNJ	0.002 00	0.001 15	0	55	0.002 60	0.001 50	1	11