

INTERNATIONAL STANDARD

ISO
3161

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

*Aéronautique et espace — Filetage UNJ, avec rayon à fond de filet
contrôlé, pour applications aérospatiales — Série en inches*



Reference number
ISO 3161:1996(E)

Foreword

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International Standard ISO 3161 was prepared by Technical Committee ISO/TC 20, *Aircraft and space vehicles*, Subcommittee SC 4, *Aerospace fastener systems*.

This second edition cancels and replaces the first edition (ISO 3161:1977), of which it constitutes a technical revision.

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Aerospace — 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.

It determines the basic triangular profile for this type of thread and gives a system for designating the diameter/pitch combinations. For all diameters 0,060 in to 6,000 in, it offers in the form of tables the basic dimensions and tolerances for a selection of diameter/pitch combinations. It also provides the method of calculation for the dimensions and tolerances for any diameter/pitch combination not given in the tables, including threads with a diameter in excess of 6,000 in.

NOTE 1 Pending publication of the International Standard relating to limit gauges referred to in the footnote in clause 7, special care must be taken to ensure that the dimensions and tolerances specified in this International Standard are confirmed by alternative means.

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

2 Definition

For the purposes of this International Standard, the following definition applies.

2.1 basic profile: The theoretical profile corresponding to the basic dimensions, i.e. the major diameter, the pitch diameter and the minor diameter. See figure 1 and clause 3.

The tolerances are applied to the basic profile.

3 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

n = number of threads per inch

4 Basic profile of thread

4.1 Basic profile dimensions

Values given in table 1 have been calculated according to the following formulae:

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

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

$$H = \frac{\sqrt{3}}{2} \times P = 0,866\,025\,P = \frac{0,866\,025}{n}$$

$$\frac{9}{16} H = 0,487\,14\,P = \frac{0,487\,14}{n}$$

$$\frac{3}{8} H = 0,324\,759\,P = \frac{0,324\,759}{n}$$

$$\frac{5}{16} H = 0,270\,63\,P = \frac{0,270\,63}{n}$$

$$\frac{H}{8} = 0,108\,25\,P = \frac{0,108\,25}{n}$$

4.2 Basic dimensions of thread

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

$$D_2 = D - \left(2 \times \frac{3}{8} H \right) = D - 0,649\,519 P = D - \frac{0,649\,519}{n}$$

$$d_2 = d - \left(2 \times \frac{3}{8} H \right) = d - 0,649\,519 P = d - \frac{0,649\,519}{n}$$

$$D_1 = D - \left(2 \times \frac{9}{16} H \right) = D - 0,974\,28 P = D - \frac{0,974\,28}{n}$$

$$d_1 = d - \left(2 \times \frac{9}{16} H \right) = d - 0,974\,28 P = d - \frac{0,974\,28}{n}$$

5 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.

5.1 Diameters

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

5.2 Number of threads per inch

Columns 3 to 9 (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, 8 and 9.

5.2.1 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.

5.2.2 Constant (uniform) pitch series

In addition to these three series of increasing pitches, table 3 includes details of constant pitch series which have been selected from the range of 8 to 20 threads per inch. Each of these series is limited to an appropriate range of diameters.

5.3 Special diameter/pitch combinations

The screw threads specified in 5.2.1 and 5.2.2 meet most requirements. If other diameter/pitch combinations or threads larger than 6,000 in in diameter are required, then these shall be calculated using the formulae in 6.3.1.

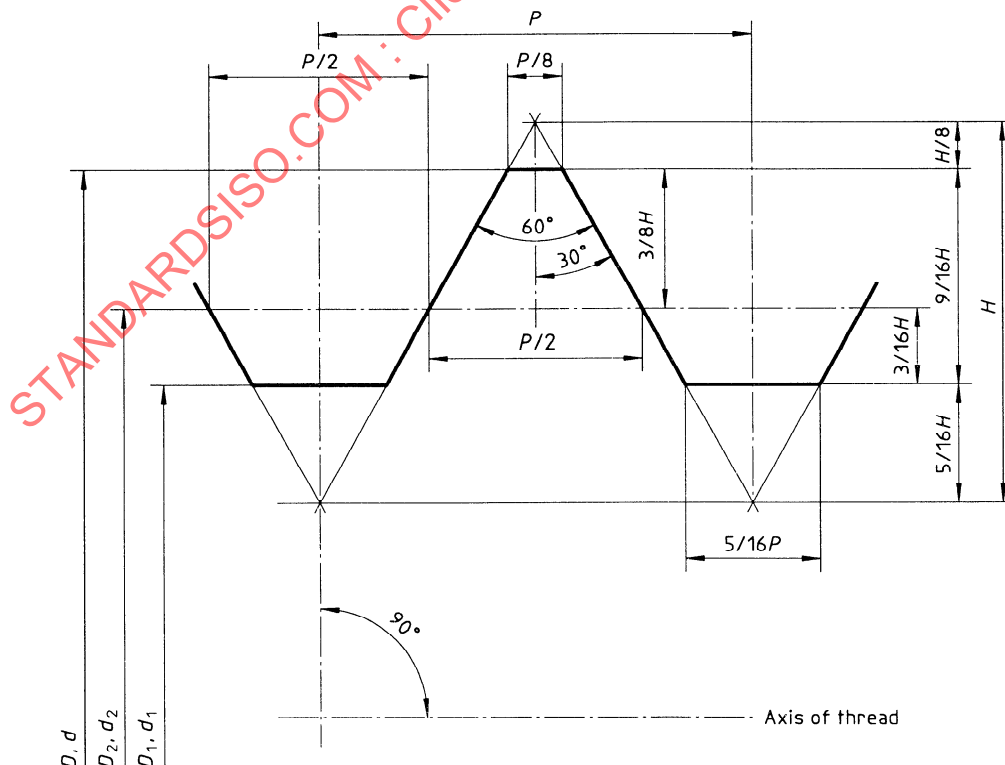


Figure 1 — Basic profile

6 Tolerances

6.1 Length of thread engagement used for calculating the pitch diameter tolerances

The length of thread engagement (L_e) (see figure 2) used in this International Standard is equal to

- the basic external diameter for the series UNJC, UNJF and 8 UNJ. This is applicable for actual lengths of engagement between $5P$ and $1,5D$.
- $9P$ for the series UNJEF, 12 UNJ, 16 UNJ, 20 UNJ and all UNJS. This is applicable for actual lengths of engagement between $5P$ and $15P$.

For applications with lengths of engagement not within the above limits, the tolerances on the pitch diameter shall be calculated according to the calculation formulae for T_{d2} and T_{D2} , using the design length of engagement as L_e . The GO gauge and GO contacts length shall also be equal to this length L_e .

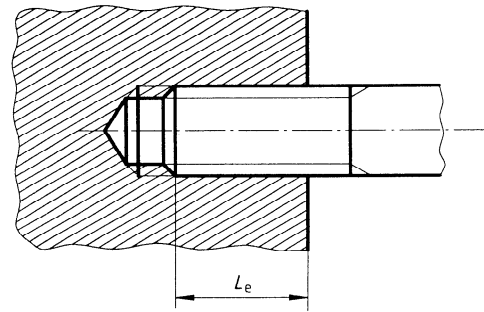


Figure 2 — Length of engagement

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

See figure 3.

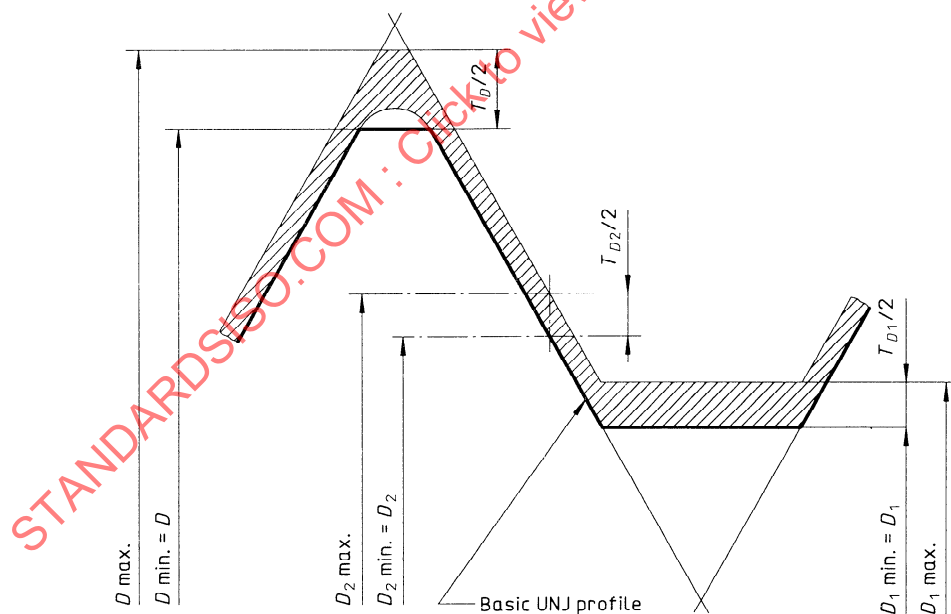


Figure 3 — Internal thread tolerances

6.2.2 External thread

See figure 4.

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

Values indicated in tables 4, 5 and 6 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 6.1, where

α is the basic half-angle at the base of the thread side, i.e. 30° ;

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

T_{D1} is the internal thread minor diameter tolerance;

T_{D2} and T_{d2} are the pitch diameter tolerances;

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

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

$\delta D'_2$ is the pitch diameter increment due to variations in the half-angles for the internal threads;

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

$\delta d'_2$ is the pitch diameter increment due to variations in the half-angles for the external threads.

6.3.1 Calculation formulae

Limits of size for untabulated (UNJS) screw threads shall also be calculated using the formulae given in 6.3.1.1 and 6.3.1.2.

6.3.1.1 External threads

The formulae are as follows:

$$d_{\max.} = d$$

$$d_{\min.} = d_{\max.} - \text{tolerance } 0,060 \sqrt[3]{P^2} \text{ (listed in table 7, column 3)}$$

$$d_2_{\max.} = d_2 = d_{\max.} - \text{value } 0,649\,519P \text{ (listed in table 7, column 4)}$$

$$d_2_{\min.} = d_2_{\max.} - T_{d2}$$

$$T_{d2} = 0,750 \left(0,001\,5 \sqrt[3]{d} + 0,001\,5 \sqrt{L_e} + 0,015 \sqrt[3]{P^2} \right) \text{ (listed in table 8)}$$

$$d_3_{\max.} = d_3 = d_2_{\max.} - \text{value } 0,505\,18P \text{ (listed in table 7, column 5)}$$

$$d_3_{\min.} = d_2_{\min.} - \text{value } 0,565\,80P \text{ (listed in table 7, column 6)}$$

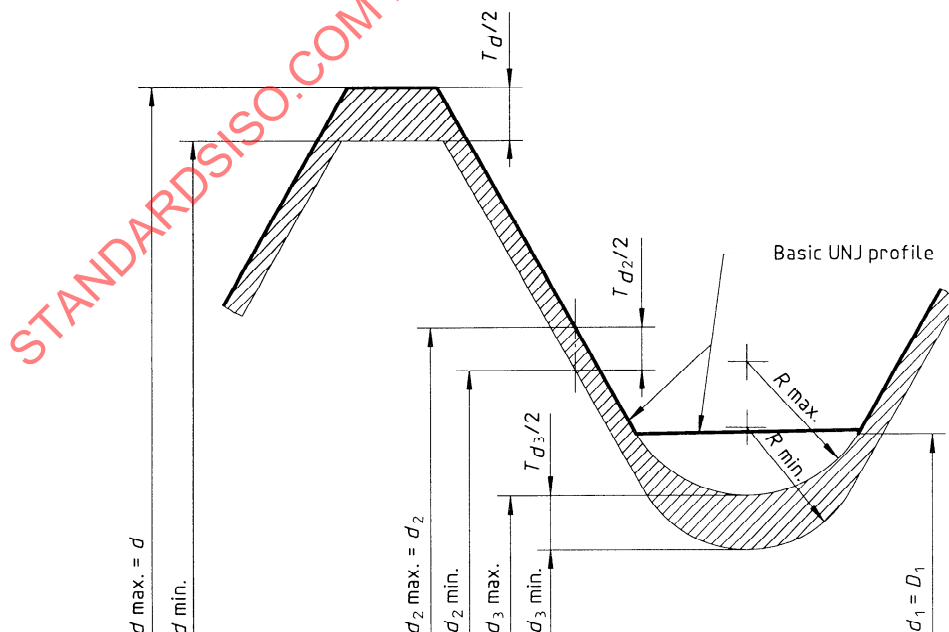


Figure 4 — External thread tolerances

$R \text{ max.} = 0,180\,42P$ (listed in table 7, column 7)

$R \text{ min.} = 0,150\,11P$ (listed in table 7, column 8)

6.3.1.2 Internal threads

The formulae are as follows:

$D \text{ max.} = D_2 \text{ max.} + \text{value } 0,793\,86P$ (listed in table 7, column 9)

$D \text{ min.} = D$

$D_2 \text{ max.} = D_2 \text{ min.} + T_{D2}$

$T_{D2} = 0,975 \left(0,001\,5 \sqrt[3]{d} + 0,001\,5 \sqrt{L_e} + 0,015 \sqrt[3]{P^2} \right)$ (listed in table 9)

$D_2 \text{ min.} = D \text{ min.} - \text{value } 0,649\,519P$ (listed in table 7, column 4)

$D_1 \text{ max.} = D_1 \text{ min.} + T_{D1}$

T_{D1} for threads with more than 12 threads per inch = $(0,05 \sqrt[3]{P^2} + 0,03P/d) - 0,002$ (listed in table 10)

T_{D1} for threads with 12 threads per inch or less = $0,120P$ (listed in table 10)

$D_1 \text{ min.} = D \text{ min.} - \text{value } 0,974\,28P$ (listed in table 7, column 10)

$$\delta P = \frac{\delta D_2}{\cot \alpha} = \frac{\delta D_2}{1,732\,1} = \frac{0,4T_{D2}}{1,732\,1} \text{ for internal threads}$$

$$\delta P = \frac{\delta d_2}{\cot \alpha} = \frac{\delta d_2}{1,732\,1} = \frac{0,4T_{d2}}{1,732\,1} \text{ for external threads}$$

$$\tan \delta \alpha = \frac{\delta D'_2}{1,5P} = \frac{0,4T_{D2}}{1,5P} \text{ for internal threads}^{1)}$$

$$\tan \delta \alpha = \frac{\delta d'_2}{1,5P} = \frac{0,4T_{d2}}{1,5P} \text{ for external threads}^{1)}$$

NOTE 2 On completion of the calculations, round off to four decimal points. Round up if the fifth decimal is ≥ 5 . Keep the fourth decimal if the fifth decimal is < 5 .

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 $0,150\,11P$ and which is tangential to the thread flanks at not less than $0,562\,5H$ thread depth. The profile may comprise tangent flank radii that are joined by a tangential flat at the root.

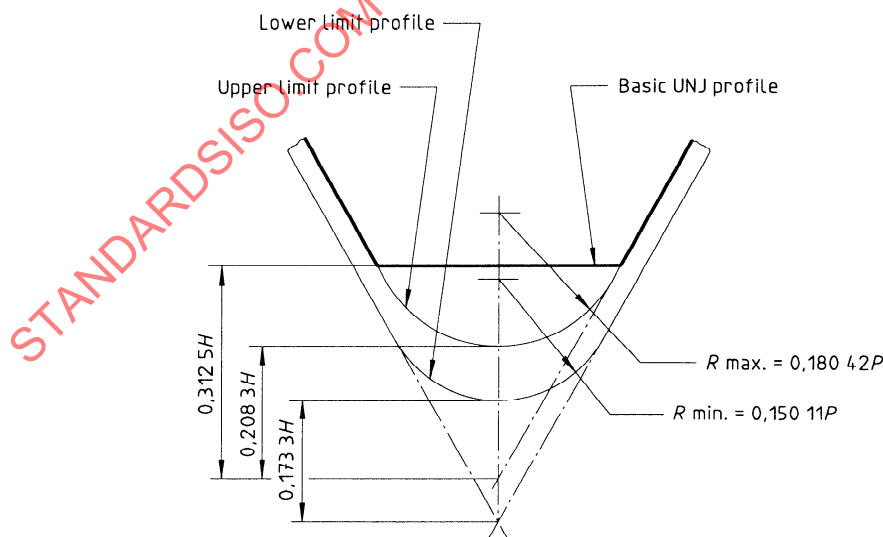


Figure 5 — Radius at the root of the screw thread

1) The calculation formulae for the tangent of the variations of the half-angle of the thread pitch are approximations of the maximum effects when the two half-angles are equal.

6.4 Special case for coated threads

When required, the thread shall be 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 max. 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.

7 Gauging by limit gauges²⁾

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 or a functional dial gauge (properly calibrated) shall be used.

A thread dial gauge or reference gauge with a limited pitch diameter and single ridge contact (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 measured difference between simple and virtual (functional) pitch diameter, form variation caused by lead, flank angle and helix variations. This difference, form verification,

shall not be greater than 0,5 times the pitch diameter tolerance.

Snap gauges, indicating gauges or measuring instruments 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 Designation of threads

Threads shall be designated as shown in 8.1, 8.2 and 8.3 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).

8.1 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

An external thread of the fine pitch series (UNJF), of basic diameter 0,250 0 in, 28 threads per inch and of thread class 3A is designated as follows:

0,250 0 - 28 UNJF - 3A

8.2 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).

2) The gauges to be used will be the subject of a future International Standard.

EXAMPLES

An internal thread of the constant pitch series (UNJ), of basic diameter 3,500 in, 12 threads per inch and of thread class 3B is designated as follows:

3,500 - 12 UNJ - 3B

A left-hand thread (LH) of the constant pitch series (UNJ), of basic diameter 3,500 in, 12 threads per inch and of thread class 3B is designated as follows:

3,500 - 12 UNJ - 3B - LH

8.3 Special diameter/pitch combinations

Threads derived using the formulae in 6.3.1 are designated UNJS threads, and have the basic form of designation set out in 8.1, but always supplemented by the limits of size.

EXAMPLES

0,250 0 - 24 UNJS - 3A
MAJOR DIA 0,250 0 - 0,242 8
PITCH DIA 0,222 9 - 0,220 1
MINOR DIA 0,201 9 - 0,196 5
ROOT RAD 0,007 5 - 0,006 3
ISO 3161

0,437 5 - 24 UNJS - 3B
MINOR DIA 0,396 9 - 0,403 8
PITCH DIA 0,410 4 - 0,414 1
MAJOR DIA 0,437 5 - 0,447 2
ISO 3161

8.4 Designation of threads having modified crests

Occasionally it is necessary to modify the major diameter of external threads or the minor diameter of internal threads in order to fit a specific purpose, but without changing the pitch diameter limits (it should be noted that existing gauges may be used to accept such threads). Such threads shall be specified with the established thread designation followed by the modified crest diameter limits and the designation "MOD".

EXAMPLES

0,375 0 - 24 UNJF - 3A MOD
MAJOR DIA 0,372 0 - 0,364 8 MOD

0,500 0 - 20 UNJF - 3B MOD
MINOR DIA 0,454 3 - 0,462 1 MOD

9 Tables

Tables are provided which specify inch dimensions and thread designations in inch units. The conversion procedure for obtaining metric values is to multiply the inch values by 25,4. The resultant values shall be rounded to be within the inch product limits.

Table 1 gives the dimensions of basic profile.

Table 2 specifies the basic dimensions.

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.

Table 5 specifies the values of tolerances for profile dimensions.

Table 6 specifies the maximum permissible variations in the half-angle and the lead variation.

Table 7 gives the basic profile values required for calculating special diameter/pitch combinations.

Table 8 gives the values of pitch diameter tolerances for external threads of special diameter/pitch combinations.

Table 9 gives the values of pitch diameter tolerances for internal threads of special diameter/pitch combinations.

Table 10 gives the values of minor diameter tolerances for internal threads of special diameter/pitch combinations.

Table 1 — Basic profile

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Number of threads per inch	Pitch $P = \frac{1}{n}$	$\frac{P}{2}$ 0,5P	$\frac{5}{16} P$	$\frac{P}{8}$	H	$\frac{9}{16} H$	$\frac{3}{8} H$	$\frac{5}{16} H$	$\frac{H}{8}$
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

Table 2 — Basic dimensions

(1)	(2)	(3)	(4)	(5)
Nominal sizes	Number of threads per inch <i>n</i>	Major diameter <i>D, d</i>	Pitch diameter <i>D₂, d₂</i>	Minor diameter <i>D₁, d₁</i>
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 20 18	0,312 5	0,292 2 0,285 4 0,280 0 0,276 4	0,282 1 0,271 9 0,263 8 0,258 4
0,375 0	32 24 20 16	0,375 0	0,354 7 0,347 9 0,342 5 0,334 4	0,344 6 0,334 4 0,326 3 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 20 18 16 12	0,562 5	0,535 4 0,530 0 0,526 4 0,521 9 0,508 4	0,521 9 0,513 8 0,508 4 0,501 7 0,481 4
0,625 0	24 20 18 16 12 11	0,625 0	0,597 9 0,592 5 0,588 9 0,584 4 0,570 9 0,566 0	0,584 4 0,576 3 0,570 9 0,564 2 0,543 9 0,536 5
0,687 5	24 20 16 12	0,687 5	0,660 4 0,655 0 0,646 9 0,633 4	0,646 9 0,638 8 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	20 18 16 12 8	1,062 5	1,030 0 1,026 4 1,021 9 1,008 4 0,981 3	1,013 8 1,008 4 1,001 7 0,981 4 0,940 8
1,125 0	20 18 16 12 8 7	1,125 0	1,092 5 1,088 9 1,084 4 1,070 9 1,043 8 1,032 2	1,076 3 1,070 9 1,064 2 1,043 9 1,003 3 0,985 9
1,187 5	20 18 16 12 8	1,187 5	1,155 0 1,151 4 1,146 9 1,133 4 1,106 3	1,138 8 1,133 4 1,126 7 1,106 4 1,065 8

Table 2 (continued)

(1)	(2)	(3)	(4)	(5)
Nominal sizes	Number of threads per inch <i>n</i>	Major diameter <i>D, d</i>	Pitch diameter <i>D₂, d₂</i>	Minor diameter <i>D₁, d₁</i>
1,250 0	20	1,250 0	1,217 5	1,201 3
	18		1,213 9	1,195 9
	16		1,209 4	1,189 2
	12		1,195 9	1,168 9
	8		1,168 8	1,128 3
	7		1,157 2	1,110 9
1,312 5	20	1,312 5	1,280 0	1,263 8
	18		1,276 4	1,258 4
	16		1,271 9	1,251 7
	12		1,258 4	1,231 4
	8		1,231 3	1,190 8
1,375 0	20	1,375 0	1,342 5	1,326 3
	18		1,338 9	1,320 9
	16		1,334 4	1,314 2
	12		1,320 9	1,293 9
	8		1,293 8	1,253 3
	6		1,266 7	1,212 7
1,437 5	20	1,437 5	1,405 0	1,388 8
	18		1,401 4	1,383 4
	16		1,396 9	1,376 7
	12		1,383 4	1,356 4
	8		1,356 3	1,315 8
1,500 0	20	1,500 0	1,467 5	1,451 3
	18		1,463 9	1,445 9
	16		1,459 4	1,439 2
	12		1,445 9	1,418 9
	8		1,418 8	1,378 3
	6		1,391 7	1,337 7
1,562 5	20	1,562 5	1,530 0	1,513 8
	18		1,526 4	1,508 4
	16		1,521 9	1,501 7
	12		1,508 4	1,481 4
	8		1,481 3	1,440 8
1,625 0	20	1,625 0	1,592 5	1,576 3
	18		1,588 9	1,570 9
	16		1,584 4	1,564 2
	12		1,570 9	1,543 9
	8		1,543 8	1,503 3
1,687 5	20	1,687 5	1,655 0	1,638 8
	18		1,651 4	1,633 4
	16		1,646 9	1,626 7
	12		1,633 4	1,606 4
	8		1,606 3	1,565 8
1,750 0	20	1,750 0	1,717 5	1,701 3
	16		1,709 4	1,689 2
	12		1,695 9	1,668 9
	8		1,668 8	1,628 3
	5		1,620 1	1,555 2

(1)	(2)	(3)	(4)	(5)
Nominal sizes	Number of threads per inch <i>n</i>	Major diameter <i>D, d</i>	Pitch diameter <i>D₂, d₂</i>	Minor diameter <i>D₁, d₁</i>
1,812 5	20	1,812 5	1,780 0	1,763 8
	16		1,771 9	1,751 7
	12		1,758 4	1,731 4
	8		1,731 3	1,690 8
1,875 0	20	1,875 0	1,842 5	1,826 3
	16		1,834 4	1,814 2
	12		1,820 9	1,793 9
1,937 5	8		1,793 8	1,753 3
	20	1,937 5	1,905 0	1,888 8
	16		1,896 9	1,876 7
	12		1,883 4	1,856 4
2,000 0	8		1,856 3	1,815 8
	20	2,000 0	1,967 5	1,951 3
	16		1,959 4	1,939 2
	12		1,945 9	1,918 9
	8		1,918 8	1,878 3
	4,5		1,855 7	1,783 5
2,125 0	20	2,125 0	2,092 5	2,076 3
	16		2,084 4	2,064 2
	12		2,070 9	2,043 9
	8		2,043 8	2,003 3
2,250 0	20	2,250 0	2,217 5	2,201 3
	16		2,209 4	2,189 2
	12		2,195 9	2,168 9
	8		2,168 8	2,128 3
	4,5		2,105 7	2,033 5
2,375 0	20	2,375 0	2,342 5	2,326 3
	16		2,334 4	2,314 2
	12		2,320 9	2,293 9
2,500 0	8		2,293 8	2,253 3
	20	2,500 0	2,467 5	2,451 3
	16		2,459 4	2,439 2
	12		2,445 9	2,418 9
	8		2,418 8	2,378 3
	4		2,337 6	2,256 5
2,625 0	20	2,625 0	2,592 5	2,576 3
	16		2,584 4	2,564 2
	12		2,570 9	2,543 9
	8		2,543 8	2,503 3
2,750 0	20	2,750 0	2,717 5	2,701 3
	16		2,709 4	2,689 2
	12		2,695 9	2,668 9
	8		2,668 8	2,628 3
	4		2,587 6	2,506 5
2,875 0	20	2,875 0	2,842 5	2,826 3
	16		2,834 4	2,814 2
	12		2,820 9	2,793 9
	8		2,793 8	2,753 3

Table 2 (concluded)

(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
3,000 0	20	3,000 0	2,967 5	2,951 3
	16		2,959 4	2,939 2
	12		2,945 9	2,918 9
	8		2,918 8	2,878 3
	4		2,837 6	2,756 5
3,125 0	16	3,125 0	3,084 4	3,064 2
	12		3,070 9	3,043 9
	8		3,043 8	3,003 3
3,250 0	16	3,250 0	3,209 4	3,189 2
	12		3,195 9	3,168 9
	8		3,168 8	3,128 3
	4		3,087 6	3,006 5
3,375 0	16	3,375 0	3,334 4	3,314 2
	12		3,320 9	3,293 9
	8		3,293 8	3,253 3
3,500 0	16	3,500 0	3,459 4	3,439 2
	12		3,445 9	3,418 9
	8		3,418 8	3,378 3
	4		3,337 6	3,256 5
3,625 0	16	3,625 0	3,584 4	3,564 2
	12		3,570 9	3,543 9
	8		3,543 8	3,503 3
3,750 0	16	3,750 0	3,709 4	3,689 2
	12		3,695 9	3,668 9
	8		3,668 8	3,628 3
	4		3,587 6	3,506 5
3,875 0	16	3,875 0	3,834 4	3,814 2
	12		3,820 9	3,793 9
	8		3,793 8	3,753 3
4,000 0	16	4,000 0	3,959 4	3,939 2
	12		3,945 9	3,918 9
	8		3,918 8	3,878 3
	4		3,837 6	3,756 5
4,125 0	16	4,125 0	4,084 4	4,064 2
	12		4,070 9	4,043 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
4,250 0	16	4,250 0	4,209 4	4,189 2
	12		4,195 9	4,168 9
4,375 0	16	4,375 0	4,334 4	4,314 2
	12		4,320 9	4,293 9
4,500 0	16	4,500 0	4,459 4	4,439 2
	12		4,445 9	4,418 9
4,625 0	16	4,625 0	4,584 4	4,564 2
	12		4,570 9	4,543 9
4,750 0	16	4,750 0	4,709 4	4,689 2
	12		4,695 9	4,668 9
4,875 0	16	4,875 0	4,834 4	4,814 2
	12		4,820 9	4,793 9
5,000 0	16	5,000 0	4,959 4	4,939 2
	12		4,945 9	4,918 9
5,125 0	16	5,125 0	5,084 4	5,064 2
	12		5,070 9	5,043 9
5,250 0	16	5,250 0	5,209 4	5,189 2
	12		5,195 9	5,168 9
5,375 0	16	5,375 0	5,334 4	5,314 2
	12		5,320 9	5,293 9
5,500 0	16	5,500 0	5,459 4	5,439 2
	12		5,445 9	5,418 9
5,625 0	16	5,625 0	5,584 4	5,564 2
	12		5,570 9	5,543 9
5,750 0	16	5,750 0	5,709 4	5,689 2
	12		5,695 9	5,668 9
5,875 0	16	5,875 0	5,834 4	5,814 2
	12		5,820 9	5,793 9
6,000 0	16	6,000 0	5,959 4	5,939 2
	12		5,945 9	5,918 9

Table 3 — Thread series

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Nominal sizes		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	20 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	—	—	—	UNJC
0,312 5		18	24	32	—	—	—	20
0,375 0		16	24	32	—	—	UNJC	20
0,437 5		14	20	28	—	—	16	UNJF
0,500 0		13	20	28	—	—	16	UNJF
0,562 5		12	18	24	—	UNJC	16	20
0,625 0		11	18	24	—	12	16	20
	0,687 5	—	—	24	—	12	16	20
0,750 0		10	16	20	—	12	UNJF	UNJEF
	0,812 5	—	—	20	—	12	16	UNJEF
0,875 0		9	14	20	—	12	16	UNJEF
	0,937 5	—	—	20	—	12	16	UNJEF
1,000 0		8	12	20	UNJC	UNJF	16	UNJEF
	1,062 5	—	—	18	8	12	16	20
1,125 0		7	12	18	8	UNJF	16	20
	1,187 5	—	—	18	8	12	16	20
1,250 0		7	12	18	8	UNJF	16	20
	1,312 5	—	—	18	8	12	16	20
1,375 0		6	12	18	8	UNJF	16	20
	1,437 5	—	—	18	8	12	16	20
1,500 0		6	12	18	8	UNJF	16	20
	1,562 5	—	—	18	8	12	16	20
1,625 0		—	—	18	8	12	16	20
	1,687 5	—	—	18	8	12	16	20
1,750 0		5	—	—	8	12	16	20
	1,812 5	—	—	—	8	12	16	20
1,875 0		—	—	—	8	12	16	20
	1,937 5	—	—	—	8	12	16	20
2,000 0		4,5	—	—	8	12	16	20
	2,125 0	—	—	—	8	12	16	20
2,250 0		4,5	—	—	8	12	16	20
	2,375 0	—	—	—	8	12	16	20
2,500 0		4	—	—	8	12	16	20
	2,625 0	—	—	—	8	12	16	20
2,750 0		4	—	—	8	12	16	20
	2,875 0	—	—	—	8	12	16	20
3,000 0		4	—	—	8	12	16	20
	3,125 0	—	—	—	8	12	16	—
3,250 0		4	—	—	8	12	16	—

Table 3 (concluded)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Nominal sizes		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	20 UNJ
	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

(1)	(2)	(3)	(4)
Number of threads per inch	Pitch P	R	
		min.	max.
80	0,012 500	0,001 9	0,002 3
72	0,013 889	0,002 1	0,002 5
64	0,015 625	0,002 3	0,002 8
56	0,017 857	0,002 7	0,003 2
48	0,020 833	0,003 1	0,003 8
44	0,022 727	0,003 4	0,004 1
40	0,025 000	0,003 8	0,004 5
36	0,027 778	0,004 2	0,005 0
32	0,031 250	0,004 7	0,005 6
28	0,035 714	0,005 4	0,006 4
24	0,041 667	0,006 3	0,007 5
20	0,050 000	0,007 5	0,009 0
18	0,055 556	0,008 3	0,010 0
16	0,062 500	0,009 4	0,011 3
14	0,071 429	0,010 7	0,012 9
13	0,076 923	0,011 5	0,013 9
12	0,083 333	0,012 5	0,015 0
11	0,090 909	0,013 6	0,016 4
10	0,100 000	0,015 0	0,018 0
9	0,111 111	0,016 7	0,020 0
8	0,125 000	0,018 8	0,022 6
7	0,142 857	0,021 4	0,025 8
6	0,166 667	0,025 0	0,030 1
5	0,200 000	0,030 0	0,035 1
4,5	0,222 222	0,033 4	0,040 1
4	0,250 000	0,037 5	0,045 1

Table 5 — Values of tolerances for profile dimensions

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
Nominal sizes	n	Series sym-bol	External thread															
			Major diameter, d		Pitch diameter, d_2		Minor diameter, d_3		Minor diameter, D_1		Pitch diameter, D_2		Major diameter, D		Internal thread			
			max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.
0,060 0	80	UNJF	0,060 0	0,003 2	0,056 8	0,001 3	0,050 6	0,002 1	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	UNJC	0,073 0	0,003 8	0,069 2	0,001 5	0,061 4	0,002 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	UNJF	0,073 0	0,003 5	0,069 5	0,001 4	0,062 6	0,002 3	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	UNJC	0,086 0	0,004 1	0,081 9	0,001 6	0,072 8	0,002 7	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	UNJF	0,086 0	0,004 8	0,082 2	0,001 5	0,074 4	0,002 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	UNJC	0,099 0	0,004 5	0,094 5	0,001 7	0,083 8	0,003 0	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	UNJF	0,099 0	0,004 1	0,094 9	0,001 6	0,085 8	0,002 7	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	UNJC	0,112 0	0,005 1	0,106 9	0,001 9	0,093 9	0,003 4	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	UNJF	0,112 0	0,004 5	0,107 5	0,001 8	0,096 7	0,003 1	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	UNJC	0,125 0	0,005 1	0,119 9	0,001 9	0,106 9	0,003 4	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	UNJF	0,125 0	0,004 8	0,120 2	0,001 5	0,108 3	0,003 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	UNJC	0,138 0	0,006 0	0,132 0	0,002 1	0,115 6	0,004 0	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	UNJF	0,138 0	0,005 1	0,132 9	0,002 0	0,119 8	0,003 5	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	UNJC	0,164 0	0,006 0	0,158 0	0,002 2	0,141 5	0,004 1	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	UNJF	0,164 0	0,005 5	0,158 5	0,002 1	0,143 9	0,003 8	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	UNJC	0,190 0	0,007 2	0,182 8	0,002 5	0,160 4	0,005 0	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	UNJF	0,190 0	0,006 0	0,184 0	0,002 3	0,167 4	0,004 2	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	UNJC	0,216 0	0,007 2	0,208 8	0,002 6	0,186 3	0,005 1	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 5	0,216 0
0,216 0	28	UNJF	0,216 0	0,006 5	0,209 5	0,002 4	0,190 4	0,004 6	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	UNJEF	0,216 0	0,006 0	0,210 0	0,002 4	0,193 3	0,004 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	UNJC	0,250 0	0,008 1	0,241 9	0,002 8	0,214 7	0,005 8	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	UNJF	0,250 0	0,006 5	0,243 5	0,002 5	0,224 3	0,004 7	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	UNJEF	0,250 0	0,006 0	0,244 0	0,002 4	0,227 3	0,004 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	UNJC	0,312 5	0,008 7	0,303 8	0,003 0	0,273 4	0,006 3	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

Table 5 (continued)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
Nominal sizes	n	Series sym-bol	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_{d2}	min.	max.	T_{D1}	min.	max.		T_{D2}				
0,312 5	20	UNJ	0,312 5	0,008 1	0,304 4	0,280 0	0,003 0	0,277 0	0,254 7	0,006 0	0,248 7	0,273 4	0,009 6	0,263 8	0,283 9	0,003 9	0,280 0	0,312 5
0,312 5	24	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	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	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	20	UNJ	0,375 0	0,008 1	0,366 9	0,342 5	0,003 1	0,339 4	0,317 2	0,006 1	0,311 1	0,414 3	0,008 8	0,326 3	0,346 5	0,004 0	0,342 5	0,375 0
0,375 0	24	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
0,375 0	32	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	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	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	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	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	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	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	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	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	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	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	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	20	UNJ	0,562 5	0,008 1	0,554 4	0,530 0	0,003 2	0,526 8	0,504 7	0,006 2	0,498 5	0,521 3	0,007 5	0,513 8	0,534 1	0,004 1	0,530 0	0,562 5
0,562 5	24	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	UNJC	0,625 0	0,012 5	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	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	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	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

Table 5 (continued)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	
Nominal sizes	n	Series sym-bol	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 _{d2}	min.	max.	T _{d3}	min.	max.	T _{D1}	min.	max.	T _{D2}	min.	max.	
0,625 0	20	UNJ	0,625 0	0,008 1	0,616 9	0,592 5	0,003 2	0,589 3	0,567 2	0,006 2	0,561 0	0,583 5	0,007 2	0,576 3	0,596 7	0,004 2	0,592 5	0,625 0	
0,625 0	24	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	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	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	20	UNJ	0,687 5	0,008 1	0,679 4	0,655 0	0,003 2	0,651 8	0,629 7	0,006 2	0,623 5	0,645 8	0,007 0	0,638 8	0,659 2	0,004 2	0,655 0	0,687 5	
0,687 5	24	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	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	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	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	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	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	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	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	
0,875 0	9	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	UNJ	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	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	UNJ	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	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	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	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	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	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	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	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	

Table 5 (continued)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
Nominal sizes	n	Series sym-bol	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 _{d2}	min.	max.	T _{d3}	max.	min.	max.	T _{D2}		min.		
1,000 0	20	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	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	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	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	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
1,062 5	20	UNJ	1,062 5	0,008 1	1,054 4	1,030 0	0,003 4	1,026 6	1,004 7	0,006 4	0,998 3	1,020 6	0,006 8	1,013 8	1,034 4	0,004 4	1,030 0	1,062 5
1,125 0	7	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	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	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	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	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
1,125 0	20	UNJ	1,125 0	0,008 1	1,116 9	1,092 5	0,003 4	1,089 1	1,067 2	0,006 4	1,060 8	1,083 1	0,006 8	1,076 3	1,096 9	0,004 4	1,092 5	1,125 0
1,187 5	8	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	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	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	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
1,187 5	20	UNJ	1,187 5	0,008 1	1,179 4	1,155 0	0,003 5	1,151 5	1,129 7	0,006 5	1,123 2	1,145 6	0,006 8	1,138 8	1,159 5	0,004 5	1,155 0	1,187 5
1,250 0	7	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	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	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
1,250 0	16	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	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
1,250 0	20	UNJ	1,250 0	0,008 1	1,241 9	1,217 5	0,003 5	1,214 0	1,192 2	0,006 5	1,185 7	1,208 1	0,006 8	1,201 3	1,222 0	0,004 5	1,217 5	1,250 0
1,312 5	8	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

Table 5 (continued)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
Nominal sizes	n	Series sym-bol	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 _{d2}	min.	max.	T _{D1}	min.	max.		T _{D2}	min.			
1,312 5	12	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	UNJ	1,312 5	0,009 4	1,303 1	1,271 9	0,003 7	1,268 1	1,240 3	1,007 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	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
1,312 5	20	UNJ	1,312 5	0,008 1	1,304 4	1,280 0	0,003 5	1,276 5	1,254 7	0,006 5	1,248 2	1,270 6	0,006 8	1,263 8	1,284 5	0,004 5	1,280 0	1,312 5
1,375 0	6	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	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	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	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	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
1,375 0	20	UNJ	1,375 0	0,008 1	1,366 9	1,342 5	0,003 5	1,339 0	1,317 2	0,006 5	1,310 7	1,333 1	0,006 8	1,326 3	1,347 0	0,004 5	1,342 5	1,375 0
1,437 5	8	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	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	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	1,396 9	1,437 5
1,437 5	18	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
1,437 5	20	UNJ	1,437 5	0,008 1	1,429 4	1,405 0	0,003 6	1,401 4	1,379 7	0,006 6	1,373 1	1,395 6	0,006 8	1,388 8	1,409 6	0,004 6	1,405 0	1,437 5
1,500 0	6	UNJC	1,500 0	0,008 2	1,481 8	1,391 7	0,006 1	1,385 6	1,307 5	0,016 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	UNJ	1,500 0	0,015 0	1,485 0	1,418 8	0,005 5	1,413 3	1,355 6	0,013 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	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	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	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
1,500 0	20	UNJ	1,500 0	0,008 1	1,491 9	1,467 5	0,003 6	1,463 9	1,442 0	0,006 6	1,435 6	1,458 1	0,006 8	1,451 3	1,472 1	0,004 6	1,467 5	1,500 0
1,562 5	8	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	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	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

Table 5 (continued)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	External thread						Internal thread						(18)	(19)
Nominal sizes	n	Series sym-bol	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_{d2}	min.	max.	T_{d3}	min.	max.	T_{D1}	min.	max.	T_{D2}	min.	max.	T_{D2}	min.					
1,562 5	18	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							
1,562 5	20	UNJ	1,562 5	0,008 1	1,554 4	1,530 0	0,003 6	1,526 4	1,504 7	0,006 6	1,498 1	1,520 6	0,006 8	1,513 8	1,534 6	0,004 6	1,530 0	1,562 5							
1,625 0	8	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	UNJ	1,625 0	0,011 4	1,613 6	1,570 9	1,003 4	1,566 5	1,528 8	0,009 4	1,519 4	1,563 9	0,010 0	1,543 9	1,576 6	0,005 7	1,570 9	1,625 0							
1,625 0	16	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	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							
1,625 0	20	UNJ	1,625 0	0,008 1	1,616 9	1,592 5	0,003 6	1,588 9	1,567 2	0,006 6	1,560 6	1,583 1	0,006 8	1,576 3	1,597 1	0,004 6	1,592 5	1,625 0							
1,687 5	8	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	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	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	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							
1,687 5	20	UNJ	1,687 5	0,008 1	1,679 4	1,655 0	0,003 6	1,651 4	1,629 7	0,006 6	1,623 1	1,645 6	0,006 8	1,638 8	1,659 7	0,004 7	1,655 0	1,687 5							
1,750 0	5	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	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	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	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							
1,750 0	20	UNJ	1,750 0	0,008 1	1,741 9	1,717 5	0,003 6	1,713 9	1,692 2	0,006 6	1,685 6	1,708 1	0,006 8	1,701 3	1,722 2	0,004 7	1,717 5	1,750 0							
1,812 5	8	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	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	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							
1,812 5	20	UNJ	1,812 5	0,008 1	1,804 4	1,780 0	0,003 6	1,776 4	1,754 7	0,006 6	1,748 1	1,770 6	0,006 8	1,763 8	1,784 7	0,004 7	1,780 0	1,812 5							
1,875 0	8	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	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	UNJ	1,875 0	0,009 4	1,865 6	1,834 4	0,004 0	1,830 4	1,802 8	1,007 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							

Table 5 (continued)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	External thread				Internal thread				(17)	(18)	(19)
Nominal sizes	n	Series sym-bol	Major diameter, d		Pitch diameter, d_2		Minor diameter, d_3		Pitch diameter, D_2		Minor diameter, D_1		Pitch diameter, D_2		Major diameter, D							
			max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.				
1,875 0	20	UNJ	1,875 0	0,008 1	1,866 9	1,842 5	0,003 6	1,838 9	1,817 2	0,006 6	1,810 6	1,833 1	0,006 8	1,826 3	1,847 2	0,004 7	1,842 5	1,875 0				
1,937 5	8	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 9	1,863 8	0,005 5	1,856 3	1,937 5				
1,937 5	12	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	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				
1,937 5	20	UNJ	1,937 5	0,008 1	1,929 4	1,905 0	0,003 7	1,901 3	1,879 7	0,006 7	1,873 0	1,895 6	0,006 8	1,888 8	1,909 8	0,004 8	1,905 0	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	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	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	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				
2,000 0	20	UNJ	2,000 0	0,008 1	1,991 9	1,967 5	0,003 7	1,963 8	1,942 2	0,006 7	1,935 5	1,958 1	0,006 8	1,951 3	1,972 3	0,004 8	1,967 5	2,000 0				
2,125 0	8	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	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	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				
2,125 0	20	UNJ	2,125 0	0,008 1	2,116 9	2,092 5	0,003 7	2,088 8	2,067 2	0,006 7	2,060 5	2,083 1	0,006 8	2,076 3	2,097 3	0,004 8	2,092 5	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	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	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	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				
2,250 0	20	UNJ	2,250 0	0,008 1	2,241 9	2,217 5	0,003 7	2,213 8	2,192 2	0,006 7	2,185 5	2,208 1	0,006 8	2,201 3	2,222 3	0,004 8	2,217 5	2,250 0				
2,375 0	8	UNJ	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	UNJ	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	UNJ	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				
2,375 0	20	UNJ	2,375 0	0,008 1	2,366 9	2,342 5	0,003 8	2,338 7	2,317 2	0,006 8	2,310 4	2,333 1	0,006 8	2,326 3	2,342 5	0,005 0	2,342 5	2,375 0				
2,500 0	4	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				

Table 5 (continued)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
Nominal sizes	n	Series sym-bol	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_{d2}	min.	max.	T_{d3}	min.	max.	T_{D1}	min.	max.	T_{D2}	min.	max.
2,500 0	8	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	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	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
2,500 0	20	UNJ	2,500 0	0,008 1	2,491 9	2,467 5	0,003 8	2,463 7	2,442 2	0,006 8	2,435 4	2,458 1	0,006 8	2,451 3	2,472 5	0,005 0	2,467 5	2,500 0
2,625 0	8	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	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	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
2,625 0	20	UNJ	2,625 0	0,008 1	2,616 9	2,592 5	0,003 8	2,588 7	2,567 2	0,006 8	2,560 4	2,583 1	0,006 8	2,576 3	2,597 5	0,005 0	2,592 5	2,625 0
2,750 0	4	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	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	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	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
2,750 0	20	UNJ	2,750 0	0,008 1	2,741 9	2,717 5	0,003 8	2,713 7	2,692 2	0,006 8	2,685 4	2,708 1	0,006 8	2,701 3	2,722 5	0,005 0	2,717 5	2,750 0
2,875 0	8	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	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	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
2,875 0	20	UNJ	2,875 0	0,008 1	2,866 9	2,842 5	0,003 9	2,838 6	2,817 2	0,006 9	2,810 3	2,833 1	0,006 8	2,826 3	2,847 6	0,005 1	2,842 5	2,875 0
3,000 0	4	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	2,765 5	2,848 0	0,010 4	2,837 6	3,000 0
3,000 0	8	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	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	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
3,000 0	20	UNJ	3,000 0	0,008 1	2,991 9	2,967 5	0,003 9	2,963 6	2,942 2	0,006 9	2,935 3	2,958 1	0,006 8	2,951 3	2,972 6	0,005 1	2,967 5	3,000 0
3,125 0	8	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	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

Table 5 (continued)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	Internal thread						(18)	(19)
Nominal sizes	n	Series sym-bol	External thread						Internal thread						Pitch diameter, D ₂	Major diameter, D			
			Major diameter, d		Pitch diameter, d ₂		Minor diameter, d ₃		Minor diameter, D ₁		Pitch diameter, D ₂								
			max.	T _d	min.	max.	T _{d2}	min.	max.	T _{d3}	min.	max.	T _{D1}	min.			max.	T _{D2}	min.
3,125 0	16	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	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	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	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	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 8	3,209 4	3,250 0	
3,375 0	8	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	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	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	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	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	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	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	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	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	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	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	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	UNJ	3,750 0	0,011 4	3,738 6	3,696 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	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	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	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	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	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	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	

Table 5 (continued)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	Internal thread						(18)	(19)
Nominal sizes	n	Series sym-bol	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 _{d2}	min.	max.	T _{d3}	min.	max.	T _{D1}	min.	max.	T _{D2}	min.		
4,000 0	12	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	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	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	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	UNJ	4,250 0	0,011 4	4,238 5	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	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	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	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	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	
4,500 0	16	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	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	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	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	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	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	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	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	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	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	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	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	UNJ	5,250 0	0,009 4	5,240 6	5,209 4	0,004 5	5,204 9	5,177 8	0,008 3	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	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	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	

Table 5 (concluded)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
Nominal sizes	n	Series sym-bol	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 _{d2}	min.	max.	T _{d3}	min.	max.	T _{D1}	min.	max.	T _{D2}	min.	
5,500 0	12	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	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	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	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	UNJ	5,750 0	0,011 4	5,738 6	5,695 9	0,005 2	5,690 7	5,633 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	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	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	5,803 9	0,010 0	5,793 9	5,827 6	0,006 7	5,820 9	5,875 0
5,875 0	16	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	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	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 — Maximum permissible variation in the lead variation and half-angle

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Nominal sizes	n	Series symbol	External thread				Internal thread			
			$0,4T_{d2}$	δP	$\delta\alpha$		$0,4T_{D2}$	δP	$\delta\alpha$	
					$^{\circ}$	$'$			$^{\circ}$	$'$
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	20	UNJ	0,001 20	0,000 69	0	55	0,001 56	0,000 90	1	11
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	20	UNJ	0,001 24	0,000 72	0	57	0,001 60	0,000 92	1	13
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

Table 6 (continued)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Nominal sizes	n	Series symbol	External thread				Internal thread			
			$0,4T_{d2}$	δP	$\delta\alpha$		$0,4T_{D2}$	δP	$\delta\alpha$	
					$^\circ$	$'$			$^\circ$	$'$
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
0,562 5	20	UNJ	0,001 28	0,000 74	0	59	0,001 64	0,000 95	1	15
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	20	UNJ	0,001 28	0,000 74	0	59	0,001 68	0,000 97	1	17
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
0,687 5	20	UNJ	0,001 28	0,000 74	0	59	0,001 68	0,000 97	1	17
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
1,062 5	20	UNJ	0,001 36	0,000 79	1	2	0,001 76	0,001 02	1	21
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

Table 6 (continued)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Nominal sizes	<i>n</i>	Series symbol	External thread				Internal thread			
			$0,4T_{d2}$	δP	$\delta\alpha$		$0,4T_{D2}$	δP	$\delta\alpha$	
					°	'			°	'
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
1,125 0	20	UNJ	0,001 36	0,000 79	1	2	0,001 76	0,001 02	1	21
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
1,187 5	18	UNJEF	0,001 44	0,000 83	0	59	0,001 88	0,001 09	1	18
1,187 5	20	UNJ	0,001 40	0,000 81	1	4	0,001 80	0,001 04	1	22
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
1,250 0	20	UNJ	0,001 40	0,000 81	1	4	0,001 80	0,001 04	1	22
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
1,312 5	20	UNJ	0,001 40	0,000 81	1	4	0,001 80	0,001 04	1	22
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
1,375 0	20	UNJ	0,001 40	0,000 81	1	4	0,001 80	0,001 04	1	22
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
1,437 5	20	UNJ	0,001 44	0,000 83	1	6	0,001 84	0,001 06	1	24
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
1,500 0	20	UNJ	0,001 44	0,000 83	1	6	0,001 84	0,001 06	1	24
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

Table 6 (continued)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Nominal sizes	n	Series symbol	External thread				Internal thread			
			$0,4T_{d2}$	δP	$\delta\alpha$		$0,4T_{D2}$	δP	$\delta\alpha$	
					$^\circ$	$'$			$^\circ$	$'$
1,562 5	18	UNJEF	0,001 48	0,000 85	1	1	0,001 96	0,001 13	1	21
1,562 5	20	UNJ	0,001 44	0,000 83	1	6	0,001 84	0,001 06	1	24
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
1,625 0	20	UNJ	0,001 44	0,000 83	1	6	0,001 84	0,001 06	1	24
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
1,687 5	20	UNJ	0,001 44	0,000 83	1	6	0,001 88	0,001 09	1	26
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
1,750 0	20	UNJ	0,001 44	0,000 83	1	6	0,001 88	0,001 09	1	26
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
1,812 5	20	UNJ	0,001 44	0,000 83	1	6	0,001 88	0,001 09	1	26
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
1,875 5	20	UNJ	0,001 44	0,000 83	1	6	0,001 88	0,001 09	1	26
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
1,937 5	20	UNJ	0,001 48	0,000 85	1	8	0,001 92	0,001 11	1	28
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
2,000 0	20	UNJ	0,001 48	0,000 85	1	8	0,001 92	0,001 11	1	28
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
2,125 0	20	UNJ	0,001 48	0,000 85	1	8	0,001 92	0,001 11	1	28
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

Table 6 (continued)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Nominal sizes	<i>n</i>	Series symbol	External thread				Internal thread			
			$0,4T_{d2}$	δP	$\delta\alpha$		$0,4T_{D2}$	δP	$\delta\alpha$	
					°	'			°	'
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
2,250 0	20	UNJ	0,001 48	0,000 85	1	8	0,001 92	0,001 11	1	28
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
2,375 0	20	UNJ	0,001 52	0,000 88	1	10	0,002 00	0,001 15	1	32
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
2,500 0	20	UNJ	0,001 52	0,000 88	1	10	0,002 00	0,001 15	1	32
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
2,625 0	20	UNJ	0,001 52	0,000 88	1	10	0,002 00	0,001 15	1	32
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
2,750 0	20	UNJ	0,001 52	0,000 88	1	10	0,002 00	0,001 15	1	32
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
2,875 0	20	UNJ	0,001 56	0,000 90	1	11	0,002 04	0,001 18	1	33
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
3,000 0	16	UNJ	0,001 68	0,000 97	1	2	0,002 20	0,001 27	1	21
3,000 0	20	UNJ	0,001 56	0,000 90	1	11	0,002 04	0,001 18	1	33
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