INTERNATIONAL STANDARD

ISO 3161

Third edition
1999-12-01

Aerospace — UNJ threads — General requirements and limit dimensions

Aéronautique et espace — Filetage UNJ — Exigences générales et dimensions limites

Reference number
ISO 3161:1999(E)

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 734 10 79
E-mail copyright@iso.ch
Web www.iso.ch

Printed in Switzerland

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

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

This third edition cancels and replaces the second edition (ISO 3161:1996), which has been technically revised.

Aerospace — UNJ threads — General requirements and limit dimensions

1 Scope

This International Standard specifies the general requirements and limit dimensions of inch series UNJ threads with controlled root radius for aerospace construction.

It determines the basic triangular profile for this type of thread and gives a system for designating the diameter and number of threads per inch combinations. For all diameters 0,060 in (1,524 mm) to 6,000 in (152,4 mm), it offers in the form of tables the basic dimensions and tolerances for a selection of diameter and number of threads per inch combinations. It also provides the method of calculation for the dimensions and tolerances for any diameter and number of threads per inch combination not given in the tables, including threads with a diameter in excess of 6,000 in.

2 Normative reference

The following normative document contains provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the normative document indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 15872:—[1)], *Aerospace — UNJ threads — Gauging.*

3 Term and definition

For the purposes of this International Standard, the following term and definition apply.

3.1
basic profile
in an axial plan, the theoretical profile corresponding to the basic dimensions

See Figure 1.

4 Basic profile

4.1 Symbols

See Figure 1.

1) To be published.

4.2 Basic profile dimensions

See Figure 1 and Table 1.

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

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

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

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

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

$$\frac{3}{8}H = 0{,}324\,76P = \frac{0{,}324\,76}{n}$$

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

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

4.3 Basic dimensions of thread

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

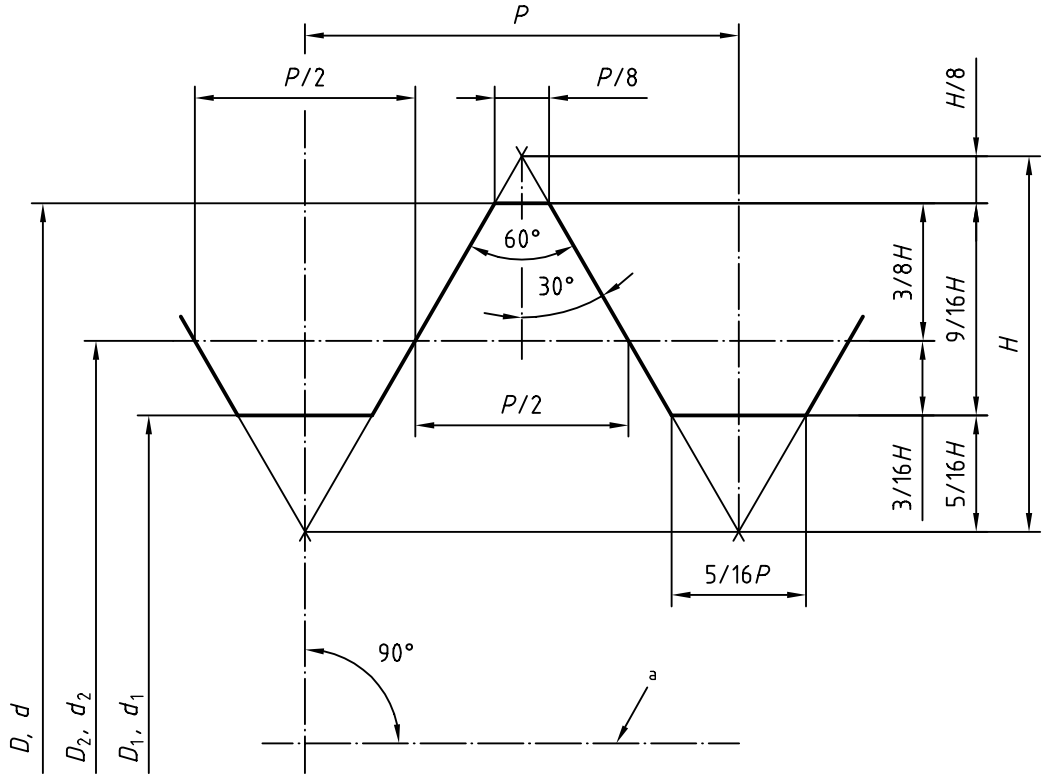
$$D_2 = D - \left(2 \times \frac{3}{8}H\right) = D - 0{,}649\,519P = D - \frac{0{,}649\,519}{n}$$

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

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

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

The tolerances shall be applied to the basic profile.



where

D is the basic major diameter of internal thread

D_2 is the basic pitch diameter of internal thread

D_1 is the basic minor diameter of internal thread

d is the basic major diameter of external thread

d_2 is the basic pitch diameter of external thread

d_1 is the basic minor diameter of external thread

H is the height of fundamental triangle

P is the pitch

n is the number of threads per inch

a Axis of thread

Figure 1 — Basic profile

5 Series of threads

5.1 General

This International Standard includes various series of threads, i.e. groups of diameter and number of threads per inch 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.

5.2 Diameters

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

5.3 Number of threads per inch (n)

5.3.1 General

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 (progressive) pitches: columns 3, 4 and 5;

— constant (uniform) pitch series: columns 6, 7, 8 and 9.

5.3.2 Series with increasing (progressive) 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.

5.3.3 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 threads per inch to 20 threads per inch. Each of these series is limited to an appropriate range of diameters.

5.4 Threads outside selection

The threads specified in 5.3.2 and 5.3.3 and indicated in Table 3 meet most requirements. If other diameter and number of threads per inch combinations or threads larger than 6,000 in in diameter are required, then these shall be calculated using the formulae in 6.3.2.

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 major diameter for the series UNJC, UNJF and 8 UNJ. This is applicable for actual lengths of engagement between 1,0D 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.

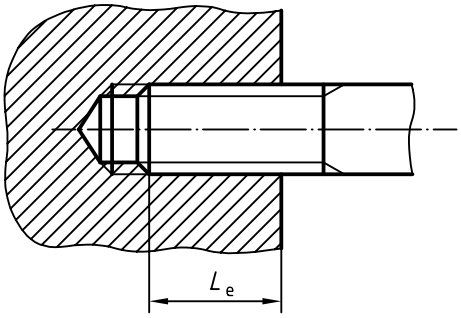


Figure 2 — Length of engagement

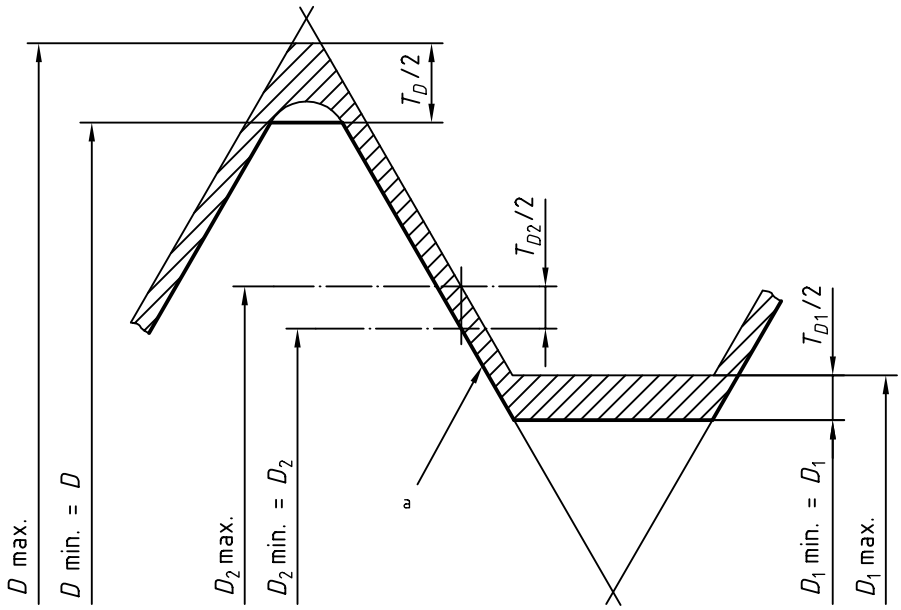
6.2 Position of tolerances

6.2.1 General

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).

6.2.2 Internal thread

See Figure 3.

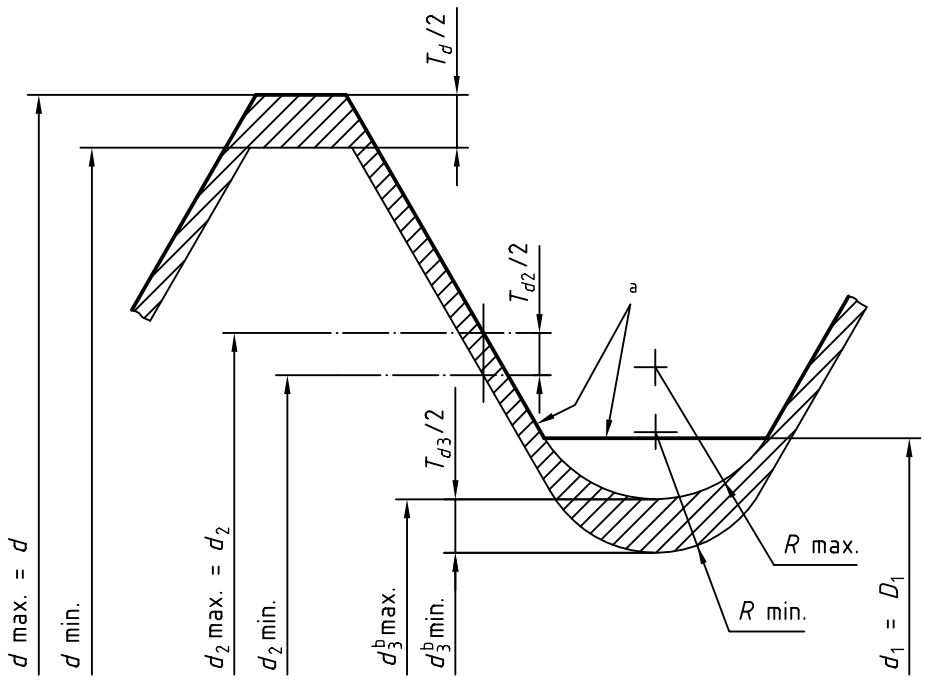


a Basic UNJ profile

Figure 3 — Internal thread tolerances

6.2.3 External thread

See Figure 4.



a Basic UNJ profile

b d_3 is the external thread profile minor diameter.

Figure 4 — External thread tolerances

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

6.3.1 General

Values indicated in Tables 4, 5 and 6 have been calculated according to the formulae given in 6.3.2 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_D	is the internal thread basic major diameter tolerance;
T_{D1}	is the internal thread basic minor diameter tolerance;
T_{D2} and T_{d2}	are the basic pitch diameter tolerances;
T_d	is the external thread basic major diameter tolerance;
T_{d1}	is the external thread basic minor diameter tolerance;
T_{d3}	is the external thread profile minor diameter tolerance;
ΔP	is the maximum permissible pitch variation of external or internal threads;

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.

6.3.2 Calculation formulae

Limits of size for untabulated (UNJS) threads shall also be calculated using the formulae given in 6.3.2.1 and 6.3.2.2.

6.3.2.1 External threads

The formulae are as follows:

d max. = d

d min. = d max. – tolerance $0{,}060\ \sqrt[3]{P^2}$

$0{,}060\ \sqrt[3]{P^2}$: see Table 7, column 3.

d_2 max. = d_2 = d max. – value $0{,}649\,519P$

$0{,}649\,519P$: see Table 7, column 4.

d_2 min. = d_2 max. – T_{d2}

$T_{d2} = 0{,}750 \left(0{,}0015 \sqrt[3]{d} + 0{,}0015 \sqrt{L_e} + 0{,}015 \sqrt[3]{P^2} \right)$ (listed in Table 8)

d_3 max. = d_3 = d_2 max. – value $0{,}505\,18P$

$0{,}505\,18P$: see Table 7, column 5.

d_3 min. = d_2 min. – value $0{,}565\,80P$

$0{,}565\,80P$: see Table 7, column 6.

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

$0{,}180\,42P$: see Table 7, column 7.

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

$0{,}150\,11P$: see Table 7, column 8.

$$\Delta P = \frac{\Delta d_2}{\cot \alpha} = \frac{\Delta d_2}{1{,}732\,1} = \frac{0{,}4 T_{d2}}{1{,}732\,1}$$

$$\tan \Delta\alpha = \frac{\Delta d'_2}{1{,}5P} = \frac{0{,}4 T_{d2}}{1{,}5P}$$ 2)

2) 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.

6.3.2.2 Internal threads

The formulae are as follows:

D max. = D_2 max. + value 0,793 86P

0,793 86P: see Table 7, column 9.

D min. = D

D_2 max. = D_2 min. + T_{D2}

T_{D2} = 0,975 $\left(0{,}0015\sqrt[3]{d} + 0{,}0015\sqrt{L_e} + 0{,}015\sqrt[3]{P^2}\right)$ (listed in Table 9)

D_2 min. = D min. − value 0,649 519P

0,649 519P: see Table 7, column 4.

D_1 max. = D_1 min. + T_{D1}

T_{D1} for threads with more than 12 threads per inch = $\left(0{,}05\sqrt[3]{P^2} + 0{,}03P/d\right)$ –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 min. = D min. − value 0,974 28P

0,974 28P: see Table 7, column 10.

$$\Delta P = \frac{\Delta D_2}{\cot\alpha} = \frac{\Delta D_2}{1{,}732\,1} = \frac{0{,}4T_{D2}}{1{,}732\,1}$$

$$\tan\Delta\alpha = \frac{\Delta D_2'}{1{,}5P} = \frac{0{,}4T_{D2}}{1{,}5P}$$ [3)]

NOTE On completion of the calculations, round off to four decimal points, except values in Table 6 which shall be rounded to five decimal points. Round up if the fifth, or sixth decimal, as applicable, is $\geqslant$ 5. Keep the fourth, or fifth decimal, as applicable, if the next one is < 5.

6.3.3 Root radius of the thread

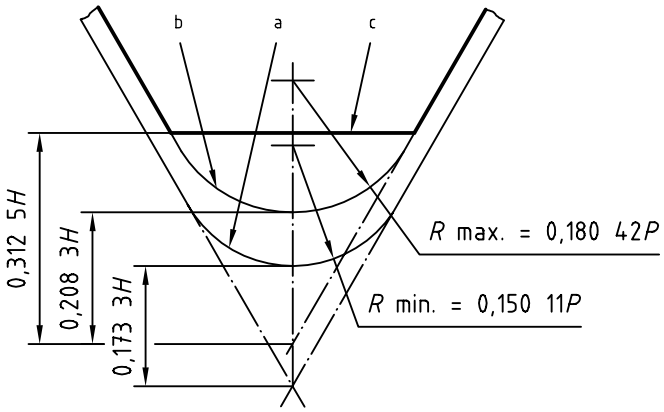
6.3.3.1 Internal threads

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.

3) 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.

6.3.3.2 External threads

For external threads, the profile of the actual root of the thread shall lie within the 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 only joined by a tangential flat at the root.



a Lower limit profile

b Upper limit profile

c Basic UNJ profile

Figure 5 — Radius at the root of the screw thread

6.4 Provisions for coated threads

Before coating, the dimensions of the threads shall be compatible with the thickness of the coating selected and with the limit dimensions for finished parts specified in Tables 5 and 6.

7 Gauging

See ISO 15872.

The radius of the thread root shall be checked by an appropriate method. In case of dispute, optical method shall be used as a referee method.

8 Designation of threads

8.1 General

Threads shall be designated as shown in 8.2, 8.3, 8.4 and 8.5 by indicating, in sequence, the nominal size in inch decimals, the number of threads per inch, the thread series symbol, the tolerance class[4)], the thread type (A external or B internal) and, if necessary, symbol LH put at the designation end for left-hand threads, followed by reference to this International Standard.

4) For this International Standard, there is only one tolerance class: 3.

8.2 Thread symbols with increasing (progressive) pitches

	Thread series symbol
Coarse pitch series	UNJC
Fine pitch series	UNJF
Extra fine pitch series	UNJEF

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

0,250 0 - 28UNJF - 3A External threads

0,250 0 - 28UNJF - 3B Internal threads

8.3 Thread symbols with constant (uniform) pitches

The thread series symbol of the constant pitch series is designated by the three letters UNJ.

EXAMPLE 1 A class 3 thread of the constant pitch series (UNJ), of basic major diameter 3,500 in, 12 threads per inch, is designated as follows:

3,500 0 - 12UNJ - 3A External threads

3,500 0 - 12UNJ - 3B Internal threads

EXAMPLE 2 A class 3 left-hand thread (LH) of the constant pitch series (UNJ), of basic major diameter 3,500 in, 12 threads per inch, is designated as follows:

3,500 0 - 12UNJ - 3A - LH External threads

3,500 0 - 12UNJ - 3B - LH Internal threads

8.4 Special threads

Threads derived using the formulae in 6.3.2 and not specified in this International Standard are designated with series symbol UNJS and their designation is always followed with limit dimensions.

EXAMPLE 1 **0,250 0 - 24UNJS - 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

EXAMPLE 2 **0,437 5 - 24UNJS - 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

8.5 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".

EXAMPLE 1 **0,375 0 - 24UNJF - 3A MOD**

MAJOR DIA 0,372 0 - 0,364 8 MOD

ISO 3161

EXAMPLE 2 **0,500 0 - 20UNJF - 3B MOD**

MINOR DIA 0,454 3 - 0,462 1 MOD

ISO 3161

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 and number of threads per inch 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 deviations on half flank angle and pitch (lead).

Table 7 gives the basic profile values required for calculating special threads.

Table 8 gives the values of pitch diameter tolerances for external threads of special diameter and number of threads per inch combinations.

Table 9 gives the values of pitch diameter tolerances for internal threads of special diameter and number of threads per inch combinations.

Table 10 gives the values of minor diameter tolerances for internal threads of special diameter and number of threads per inch combinations.

Table 1 — Basic profile

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Number of threads per inch	**Pitch** $P=\frac{1}{n}$	$\frac{P}{2}$ $0{,}5P$	$\frac{5}{16}P$ $0{,}312\,5P$	$\frac{P}{8}$ $0{,}125P$	H $0{,}866\,025P$	$\frac{9}{16}H$ $0{,}487\,14P$	$\frac{3}{8}H$ $0{,}324\,76P$	$\frac{5}{16}H$ $0{,}270\,63P$	$\frac{H}{8}$ $0{,}108\,25P$
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 size	**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	0,073 0	0,064 0	0,059 5
	64		0,06+2 9	0,057 8
0,086 0	64	0,086 0	0,075 9	0,070 8
	56		0,074 4	0,068 6
0,099 0	56	0,099 0	0,087 4	0,081 6
	48		0,085 5	0,078 7
0,112 0	48	0,112 0	0,098 5	0,091 7
	40		0,095 8	0,087 7
0,125 0	44	0,125 0	0,110 2	0,102 9
	40		0,108 8	0,100 7
0,138 0	40	0,138 0	0,121 8	0,113 7
	32		0,117 7	0,107 6
0,164 0	36	0,164 0	0,146 0	0,137 0
	32		0,143 7	0,133 6
0,190 0	32	0,190 0	0,169 7	0,159 6
	24		0,162 9	0,149 4
0,216 0	32	0,216 0	0,195 7	0,185 6
	28		0,192 8	0,181 2
	24		0,188 9	0,175 4
0,250 0	32	0,250 0	0,229 7	0,219 6
	28		0,226 8	0,215 2
	20		0,217 5	0,201 3
0,312 5	32	0,312 5	0,292 2	0,282 1
	24		0,285 4	0,271 9
	20		0,280 0	0,263 8
	18		0,276 4	0,258 4
0,375 0	32	0,375 0	0,354 7	0,344 6
	24		0,347 9	0,334 4
	20		0,342 5	0,326 3
	16		0,334 4	0,314 2
0,437 5	28	0,437 5	0,414 3	0,402 7
	20		0,405 0	0,388 8
	16		0,396 9	0,376 7
	14		0,391 1	0,368 0
0,500 0	28	0,500 0	0,476 8	0,465 2
	20		0,467 5	0,451 3
	16		0,459 4	0,439 2
	13		0,450 0	0,425 1
0,562 5	24	0,562 5	0,535 4	0,521 9
	20		0,530 0	0,513 8
	18		0,526 4	0,508 4
	16		0,521 9	0,501 7
	12		0,508 4	0,481 4
0,625 0	24	0,625 0	0,597 9	0,584 4
	20		0,592 5	0,576 3
	18		0,588 9	0,570 9
	16		0,584 4	0,564 2
	12		0,570 9	0,543 9
	11		0,566 0	0,536 5
0,687 5	24	0,687 5	0,660 4	0,646 9
	20		0,655 0	0,638 8
	16		0,646 9	0,626 7
	12		0,633 4	0,606 4
0,750 0	20	0,750 0	0,717 5	0,701 3
	16		0,709 4	0,689 2
	12		0,695 9	0,668 9
	10		0,685 0	0,652 6
0,812 5	20	0,812 5	0,780 0	0,763 8
	16		0,771 9	0,751 7
	12		0,758 4	0,731 4
0,875 0	20	0,875 0	0,842 5	0,826 3
	16		0,834 4	0,814 2
	14		0,828 6	0,805 5
	12		0,820 9	0,793 9
	9		0,802 8	0,766 8
0,937 5	20	0,937 5	0,905 0	0,888 8
	16		0,896 9	0,876 7
	12		0,883 4	0,856 4
1,000 0	20	1,000 0	0,967 5	0,951 3
	16		0,959 4	0,939 2
	12		0,945 9	0,918 9
	8		0,918 8	0,878 3
1,062 5	20	1,062 5	1,030 0	1,013 8
	18		1,026 4	1,008 4
	16		1,021 9	1,001 7
	12		1,008 4	0,981 4
	8		0,981 3	0,940 8

Table 2 (*continued*)

(1)	(2)	(3)	(4)	(5)
Nominal size	**Number of threads per inch**	**Major diameter**	**Pitch diameter**	**Minor diameter**
	n	D, d	D_2, d_2	D_1, d_1
1,125 0	20	1,125 0	1,092 5	1,076 3
	18		1,088 9	1,070 9
	16		1,084 4	1,064 2
	12		1,070 9	1,043 9
	8		1,043 8	1,003 3
	7		1,032 2	0,985 9
1,187 5	20	1,187 5	1,155 0	1,138 8
	18		1,151 4	1,133 4
	16		1,146 9	1,126 7
	12		1,133 4	1,106 4
	8		1,106 3	1,065 8
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)	(2)	(3)	(4)	(5)
Nominal size	**Number of threads per inch**	**Major diameter**	**Pitch diameter**	**Minor diameter**
	n	D, d	D_2, d_2	D_1, d_1
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
1,812 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
	8		1,793 8	1,753 3
1,937 5	20	1,937 5	1,905 0	1,888 8
	16		1,896 9	1,876 7
	12		1,883 4	1,856 4
	8		1,856 3	1,815 8
2,000 0	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
	8		2,293 8	2,253 3

Table 2 (*continued*)

(1)	(2)	(3)	(4)	(5)
Nominal size	**Number of threads per inch** n	**Major diameter** D, d	**Pitch diameter** D_2, d_2	**Minor diameter** D_1, d_1
2,500 0	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
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

(1)	(2)	(3)	(4)	(5)
Nominal size	**Number of threads per inch** n	**Major diameter** D, d	**Pitch diameter** D_2, d_2	**Minor diameter** D_1, d_1
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
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 (progressive) **pitches**			**Constant** (uniform) **pitch series**			
Primary series	Secondary series	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

Table 3 (*continued*)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Nominal sizes		**Number of threads per inch**						
		Series with increasing (progressive) **pitches**			**Constant** (uniform) **pitch series**			
Primary series	Secondary series	Coarse pitch UNJC	Fine pitch UNJF	Extra fine pitch UNJEF	8 UNJ	12 UNJ	16 UNJ	20 UNJ
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	—
	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	**Root radius** R	
		max.	min.
80	0,012 500	0,002 3	0,001 9
72	0,013 889	0,002 5	0,002 1
64	0,015 625	0,002 8	0,002 3
56	0,017 857	0,003 2	0,002 7
48	0,020 833	0,003 8	0,003 1
44	0,022 727	0,004 1	0,003 4
40	0,025 000	0,004 5	0,003 8
36	0,027 778	0,005 0	0,004 2
32	0,031 250	0,005 6	0,004 7
28	0,035 714	0,006 4	0,005 4
24	0,041 667	0,007 5	0,006 3
20	0,050 000	0,009 0	0,007 5
18	0,055 556	0,010 0	0,008 3
16	0,062 500	0,011 3	0,009 4
14	0,071 429	0,012 9	0,010 7
13	0,076 923	0,013 9	0,011 5
12	0,083 333	0,015 0	0,012 5
11	0,090 909	0,016 4	0,013 6
10	0,100 000	0,018 0	0,015 0
9	0,111 111	0,020 0	0,016 7
8	0,125 000	0,022 6	0,018 8
7	0,142 857	0,025 8	0,021 4
6	0,166 667	0,030 1	0,025 0
5	0,200 000	0,035 1	0,030 0
4,5	0,222 222	0,040 1	0,033 4
4	0,250 000	0,045 1	0,037 5

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 size	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_3
			max.	T_d	min.	max.	T_{d2}	min.	max.	T_{d3}	min.	max.	T_{D1}	min.	max.	T_{D2}	min.	min.
0,060 0	80	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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

Table 5 (*continued*)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
Nominal size	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_3
			max.	T_d	min.	max.	T_{d2}	min.	max.	T_{d3}	min.	max.	T_{D1}	min.	max.	T_{D2}	min.	min.
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 0	0,010 9	0,314 1	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 8	0,010 2	0,376 6	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 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	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 size	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_3
			max.	T_d	min.	max.	T_{d2}	min.	max.	T_{d3}	min.	max.	T_{D1}	min.	max.	T_{D2}	min.	min.
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	0,005 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 size	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_3
			max.	T_d	min.	max.	T_{d2}	min.	max.	T_{d3}	min.	max.	T_{D1}	min.	max.	T_{D2}	min.	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	0,005 2	1,038 6	0,980 6	0,012 7	0,967 9	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	0,005 6	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	0,005 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 size	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_3
			max.	T_d	min.	max.	T_{d2}	min.	max.	T_{d3}	min.	max.	T_{D1}	min.	max.	T_{D2}	min.	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 8	1,268 1	1,240 3	0,007 6	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 8	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)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
Nominal size	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_3
			max.	T_d	min.	max.	T_{d2}	min.	max.	T_{d3}	min.	max.	T_{D1}	min.	max.	T_{D2}	min.	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	0,004 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	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 6	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	1,013 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)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
Nominal size	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_3
			max.	T_d	min.	max.	T_{d2}	min.	max.	T_{d3}	min.	max.	T_{D1}	min.	max.	T_{D2}	min.	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 8	1,863 8	0,007 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 size	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_3
			max.	T_d	min.	max.	T_{d2}	min.	max.	T_{d3}	min.	max.	T_{D1}	min.	max.	T_{D2}	min.	min.
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	2,756 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)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
Nominal size	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_3
			max.	T_d	min.	max.	T_{d2}	min.	max.	T_{d3}	min.	max.	T_{D1}	min.	max.	2	min.	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 5	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	0,008 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	0,006 6	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)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
Nominal size	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_3
			max.	T_d	min.	max.	T_{d2}	min.	max.	T_{d3}	min.	max.	T_{D1}	min.	max.	T_{D2}	min.	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	0,005 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 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	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 (*continued*)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
Nominal size	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_3
			max.	T_d	min.	max.	T_{d2}	min.	max.	T_{d3}	min.	max.	T_{D1}	min.	max.	T_{D2}	min.	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	0,006 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 deviations on pitch (lead) and half flank angle

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Nominal size	n	**Series symbol**	**External thread**				**Internal thread**			
			$0{,}4T_{d2}$	ΔP	$\Delta\alpha$		$0{,}4T_{D2}$	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 08	0,000 62	1	19
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 04	0,000 60	0	57	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	10	0,001 24	0,000 72	1	31
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 79	0	50	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	9	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 size	n	**Series symbol**	**External thread**				**Internal thread**			
			$0{,}4T_{d2}$	ΔP	$\Delta\alpha$		$0{,}4T_{D2}$	ΔP	$\Delta\alpha$	
					°	'			°	'
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 16	0,000 67	1	4	0,001 52	0,000 88	1	24
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 84	0,001 06	1	7
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 84	0,001 06	1	7
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 64	0,000 95	0	45	0,002 16	0,001 25	0	59
0,812 5	16	UNJ	0,001 44	0,000 83	0	53	0,001 88	0,001 09	1	9
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 64	0,000 95	0	45	0,002 16	0,001 25	0	59
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 44	0,000 83	0	53	0,001 88	0,001 09	1	9
0,875 0	20	UNJEF	0,001 32	0,000 76	1	0	0,001 72	0,000 99	1	19
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 96	0,001 13	1	12
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 68	0,000 97	0	46	0,002 20	0,001 27	1	0
1,062 5	16	UNJ	0,001 48	0,000 85	0	54	0,001 96	0,001 13	1	12
1,062 5	18	UNJEF	0,001 44	0,000 83	0	59	0,001 84	0,001 06	1	16
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 04	0,001 18	0	37	0,002 68	0,001 55	0	49

Table 6 (*continued*)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Nominal size	n	**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 48	0,000 85	0	54	0,001 96	0,001 13	1	12
1,125 0	18	UNJEF	0,001 44	0,000 83	0	59	0,001 84	0,001 06	1	16
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	0,002 00	0,001 15	1	13
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 88	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 72	0,000 99	0	47	0,002 24	0,001 29	1	2
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 44	0,000 83	0	59	0,001 88	0,001 09	1	18
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 52	0,000 88	0	56	0,002 00	0,001 15	1	13
1,375 0	18	UNJEF	0,001 44	0,000 83	0	59	0,001 88	0,001 09	1	18
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 88	0,001 09	0	52	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 28	0,001 32	1	3
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 size	n	**Series symbol**	**External thread**				**Internal thread**			
			$0{,}4T_{d2}$	ΔP	$\Delta\alpha$		$0{,}4T_{D2}$	ΔP	$\Delta\alpha$	
					°	'			°	'
1,562 5	18	UNJEF	0,001 48	0,000 85	1	1	0,001 92	0,001 11	1	19
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 28	0,001 32	1	3
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 48	0,000 85	1	1	0,001 92	0,001 11	1	19
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 08	0,001 20	1	16
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 32	0,001 34	1	4
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 80	0,001 04	0	50	0,002 36	0,001 36	1	5
2,125 0	16	UNJ	0,001 60	0,000 92	0	59	0,002 08	0,001 20	1	16
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 size	n	**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 80	0,001 04	0	50	0,002 36	0,001 36	1	5
2,250 0	16	UNJ	0,001 60	0,000 92	0	59	0,002 08	0,001 20	1	16
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 84	0,001 06	0	51	0,002 40	0,001 41	1	7
2,625 0	16	UNJ	0,001 64	0,000 95	1	0	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 84	0,001 06	0	51	0,002 40	0,001 41	1	7
2,750 0	16	UNJ	0,001 64	0,000 95	1	0	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 48	0,001 43	1	8
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 88	0,001 09	0	52	0,002 48	0,001 43	1	8
3,125 0	16	UNJ	0,001 68	0,000 97	1	2	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 88	0,001 09	0	52	0,002 48	0,001 43	1	8
3,250 0	16	UNJ	0,001 68	0,000 97	1	2	0,002 20	0,001 27	1	21
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

Table 6 (*continued*)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Nominal size	n	**Series symbol**	**External thread**				**Internal thread**			
			$0{,}4T_{d2}$	ΔP	$\Delta\alpha$		$0{,}4T_{D2}$	ΔP	$\Delta\alpha$	
					°	'			°	'
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 92	0,001 11	0	53	0,002 52	0,001 45	1	9
3,750 0	16	UNJ	0,001 72	0,000 99	1	3	0,002 24	0,001 29	1	22
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 28	0,001 32	1	24
4,375 0	12	UNJ	0,001 96	0,001 13	0	54	0,002 56	0,001 48	1	10
4,375 0	16	UNJ	0,001 76	0,001 02	1	5	0,002 28	0,001 32	1	24
4,500 0	12	UNJ	0,001 96	0,001 13	0	54	0,002 56	0,001 48	1	10
4,500 0	16	UNJ	0,001 76	0,001 02	1	5	0,002 28	0,001 32	1	24
4,625 0	12	UNJ	0,002 00	0,001 15	0	55	0,002 64	0,001 52	1	13
4,625 0	16	UNJ	0,001 80	0,001 04	1	6	0,002 36	0,001 36	1	27
4,750 0	12	UNJ	0,002 00	0,001 15	0	55	0,002 64	0,001 52	1	13
4,750 0	16	UNJ	0,001 80	0,001 04	1	6	0,002 36	0,001 36	1	27
4,875 0	12	UNJ	0,002 00	0,001 15	0	55	0,002 64	0,001 52	1	13
4,875 0	16	UNJ	0,001 80	0,001 04	1	6	0,002 36	0,001 36	1	27
5,000 0	12	UNJ	0,002 00	0,001 15	0	55	0,002 64	0,001 52	1	13
5,000 0	16	UNJ	0,001 80	0,001 04	1	6	0,002 36	0,001 36	1	27
5,125 0	12	UNJ	0,002 00	0,001 15	0	55	0,002 64	0,001 52	1	13
5,125 0	16	UNJ	0,001 80	0,001 04	1	6	0,002 36	0,001 36	1	27
5,250 0	12	UNJ	0,002 00	0,001 15	0	55	0,002 64	0,001 52	1	13
5,250 0	16	UNJ	0,001 80	0,001 04	1	6	0,002 36	0,001 36	1	27
5,375 0	12	UNJ	0,002 00	0,001 15	0	55	0,002 64	0,001 52	1	13
5,375 0	16	UNJ	0,001 80	0,001 04	1	6	0,002 36	0,001 36	1	27

Table 6 (*continued*)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Nominal size	n	**Series symbol**	**External thread**				**Internal thread**			
			$0{,}4T_{d2}$	ΔP	$\Delta\alpha$		$0{,}4T_{D2}$	ΔP	$\Delta\alpha$	
					°	'			°	'
5,500 0	12	UNJ	0,002 00	0,001 15	0	55	0,002 64	0,001 52	1	13
5,500 0	16	UNJ	0,001 80	0,001 04	1	6	0,002 36	0,001 36	1	27
5,625 0	12	UNJ	0,002 08	0,001 20	0	57	0,002 68	0,001 55	1	14
5,625 0	16	UNJ	0,001 88	0,001 09	1	9	0,002 44	0,001 41	1	29
5,750 0	12	UNJ	0,002 08	0,001 20	0	57	0,002 68	0,001 55	1	14
5,750 0	16	UNJ	0,001 88	0,001 09	1	9	0,002 44	0,001 41	1	29
5,875 0	12	UNJ	0,002 08	0,001 20	0	57	0,002 68	0,001 55	1	14
5,875 0	16	UNJ	0,001 88	0,001 09	1	9	0,002 44	0,001 41	1	29
6,000 0	12	UNJ	0,002 08	0,001 20	0	57	0,002 68	0,001 55	1	14
6,000 0	16	UNJ	0,001 88	0,001 09	1	9	0,002 44	0,001 41	1	29

Table 7 — Basic profile data for use in the calculation of special threads

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Number of threads per inch	**Pitch** $P = \frac{1}{n}$	$0{,}060\sqrt[3]{P^2}$	$\frac{3}{4}H$ 0,649 519P	$\frac{7}{12}H$ 0,505 18P	0,565 80P	$\frac{5}{24}H$ 0,180 42P	0,150 11P	$\frac{11}{12}H$ 0,793 86P	$\frac{9H}{8}$ 0,974 28P
80	0,012 500	0,003 2	0,008 119	0,006 31	0,007 07	0,002 26	0,001 9	0,009 92	0,012 18
72	0,013 889	0,003 5	0,009 021	0,007 02	0,007 86	0,002 51	0,002 1	0,011 03	0,013 53
64	0,015 625	0,003 8	0,010 149	0,007 89	0,008 84	0,002 82	0,002 3	0,012 40	0,015 22
56	0,017 857	0,004 1	0,011 599	0,009 02	0,010 10	0,003 22	0,002 7	0,014 18	0,017 40
48	0,020 833	0,004 5	0,013 532	0,010 52	0,011 79	0,003 76	0,003 1	0,016 54	0,020 30
44	0,022 727	0,004 8	0,014 762	0,011 48	0,012 86	0,004 10	0,003 4	0,018 01	0,022 14
40	0,025 000	0,005 1	0,016 238	0,012 63	0,014 14	0,004 51	0,003 8	0,019 85	0,024 36
36	0,027 778	0,005 5	0,018 042	0,014 03	0,015 72	0,005 01	0,004 2	0,022 05	0,027 06
32	0,031 250	0,006 0	0,020 297	0,015 79	0,017 68	0,005 64	0,004 7	0,024 81	0,030 45
28	0,035 714	0,006 5	0,023 197	0,018 04	0,020 21	0,006 44	0,005 4	0,028 35	0,034 80
24	0,041 667	0,007 2	0,027 063	0,021 05	0,023 58	0,007 52	0,006 3	0,033 08	0,040 60
20	0,050 000	0,008 1	0,032 476	0,025 26	0,028 29	0,009 02	0,007 5	0,039 69	0,048 71
18	0,055 556	0,008 7	0,036 084	0,028 07	0,031 43	0,010 02	0,008 3	0,044 10	0,054 13
16	0,062 500	0,009 4	0,040 595	0,031 57	0,035 36	0,011 28	0,009 4	0,049 62	0,060 89
14	0,071 429	0,010 3	0,046 391	0,036 08	0,040 41	0,012 89	0,010 7	0,056 70	0,069 59
13	0,076 923	0,010 8	0,049 963	0,038 86	0,043 52	0,013 88	0,011 5	0,061 07	0,074 94
12	0,083 333	0,011 4	0,054 127	0,042 10	0,047 45	0,015 03	0,012 5	0,066 16	0,081 19
11	0,090 909	0,012 1	0,059 047	0,045 93	0,051 44	0,016 10	0,013 6	0,072 17	0,088 57
10	0,100 000	0,012 9	0,064 952	0,050 52	0,056 58	0,018 04	0,015 0	0,079 39	0,097 43
9	0,111 111	0,013 9	0,072 169	0,056 13	0,062 87	0,020 05	0,016 7	0,088 21	0,108 25
8	0,125 000	0,015 0	0,081 190	0,063 15	0,070 72	0,022 55	0,018 8	0,099 23	0,121 78
7	0,142 857	0,016 4	0,092 788	0,072 17	0,080 83	0,025 77	0,021 4	0,113 41	0,139 18
6	0,166 667	0,018 2	0,108 253	0,084 20	0,094 30	0,030 07	0,025 0	0,132 31	0,162 38
5	0,200 000	0,020 5	0,129 904	0,101 04	0,113 16	0,036 08	0,030 0	0,158 77	0,194 85
4,5	0,222 222	0,022 0	0,144 338	0,112 26	0,125 73	0,040 09	0,033 4	0,176 41	0,216 51
4	0,250 000	0,023 8	0,162 380	0,126 30	0,141 45	0,045 10	0,037 5	0,198 46	0,243 57

Table 8 — Pitch diameter tolerances (T_{d2}) for external threads of special diameter/number of threads per inch combinations (UNJS threads)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
Number of threads per inch	Length of engagement $5P$ to $15P$	Major diameter																		
		Above																		
		0,218 7	0,312 5	0,437 5	0,562 5	0,687 5	0,875 0	1,125	1,375	1,625	1,875	2,250	2,750	3,250	3,750	4,500	5,500	7,000	9,000	11,000
		Up to and including																		
		0,312 5	0,437 5	0,562 5	0,687 5	0,875 0	1,125 0	1,375	1,625	1,875	2,250	2,750	3,250	3,750	4,500	5,500	7,000	9,000	11,000	13,000
		Tolerance on pitch diameter																		
40	0,12 to 0,38	0,002 2	0,002 3	0,002 4	0,002 5	0,002 5	0,002 6	—	—	—	—	—	—	—	—	—	—	—	—	—
36	0,14 to 0,42	0,002 3	0,002 4	0,002 5	0,002 6	0,002 6	0,002 7	0,002 8	0,002 9	—	—	—	—	—	—	—	—	—	—	—
32	0,16 to 0,47	0,002 4	0,002 5	0,002 6	0,002 7	0,002 7	0,002 8	0,002 9	0,003 0	0,003 1	0,003 1	0,003 2	0,003 3	—	—	—	—	—	—	—
28	0,18 to 0,54	0,002 6	0,002 7	0,002 8	0,002 8	0,002 9	0,003 0	0,003 1	0,003 1	0,003 2	0,003 3	0,003 4	0,003 5	0,003 6	0,003 6	—	—	—	—	—
24	0,21 to 0,62	0,002 8	0,002 9	0,002 9	0,003 0	0,003 1	0,003 2	0,003 3	0,003 3	0,003 4	0,003 5	0,003 6	0,003 7	0,003 7	0,003 8	0,004 0	0,004 1	—	—	—
20	0,25 to 0,75	0,003 0	0,003 1	0,003 2	0,003 2	0,003 3	0,003 4	0,003 5	0,003 6	0,003 6	0,003 7	0,003 8	0,003 9	0,004 0	0,004 1	0,004 2	0,004 3	—	—	—
18	0,28 to 0,83	—	0,003 2	0,003 3	0,003 4	0,003 5	0,003 6	0,003 6	0,003 7	0,003 8	0,003 9	0,004 0	0,004 1	0,004 1	0,004 2	0,004 4	0,004 5	0,004 7	—	—
16	0,31 to 0,94	—	0,003 4	0,003 5	0,003 6	0,003 6	0,003 7	0,003 8	0,003 9	0,004 0	0,004 0	0,004 1	0,004 2	0,004 3	0,004 4	0,004 5	0,004 7	0,004 9	0,005 0	—
14	0,36 to 1,07	—	—	0,003 7	0,003 8	0,003 9	0,004 0	0,004 1	0,004 1	0,004 2	0,004 3	0,004 4	0,004 5	0,004 5	0,004 6	0,004 8	0,004 9	0,005 1	0,005 3	0,005 4
12	0,42 to 1,25	—	—	0,004 0	0,004 1	0,004 1	0,004 2	0,004 3	0,004 4	0,004 5	0,004 5	0,004 6	0,004 7	0,004 8	0,004 9	0,005 0	0,005 2	0,005 4	0,005 5	0,005 7
10	0,50 to 1,50	—	—	—	—	0,004 5	0,004 6	0,004 7	0,004 8	0,004 8	0,004 9	0,005 0	0,005 1	0,005 2	0,005 3	0,005 4	0,005 5	0,005 7	0,005 9	0,006 1
8	0,62 to 1,88	—	—	—	—	—	0,005 1	0,005 2	0,005 3	0,005 4	0,005 4	0,005 5	0,005 6	0,005 7	0,005 8	0,005 9	0,006 1	0,006 3	0,006 4	0,006 6
6	0,83 to 2,50	—	—	—	—	—	—	—	0,006 1	0,006 1	0,006 2	0,006 3	0,006 4	0,006 5	0,006 6	0,006 7	0,006 8	0,007 0	0,007 2	0,007 4
4	1,25 to 3,75	—	—	—	—	—	—	—	—	—	0,007 6	0,007 7	0,007 8	0,007 9	0,007 9	0,008 1	0,008 2	0,008 4	0,008 6	0,008 7

NOTE The pitch diameter tolerances given in this table are suitable for lengths of engagement within the ranges given in column 2. For other lengths of engagement the tolerances shall be calculated using the formula in 6.3.2.

Table 9 — Pitch diameter tolerances (T_{D2}) for internal threads of special diameter/number of threads per inch combinations (UNJS) threads

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
Number of threads per inch	Length of engagement 5*P* to 15*P*	Major diameter																		
		Above																		
		0,218 7	0,312 5	0,437 5	0,562 5	0,687 5	0,875 0	1,125	1,375	1,625	1,875	2,250	2,750	3,250	3,750	4,500	5,500	7,000	9,000	11,000
		Up to and including																		
		0,312 5	0,437 5	0,562 5	0,687 5	0,875 0	1,125 0	1,375	1,625	1,875	2,250	2,750	3,250	3,750	4,500	5,500	7,000	9,000	11,000	13,000
		Tolerance on pitch diameter																		
40	0,12 to 0,38	0,002 9	0,003 0	0,003 1	0,003 2	0,003 3	0,003 4	—	—	—	—	—	—	—	—	—	—	—	—	—
36	0,14 to 0,42	0,003 0	0,003 1	0,003 2	0,003 3	0,003 4	0,003 5	0,003 6	0,003 7	—	—	—	—	—	—	—	—	—	—	—
32	0,16 to 0,47	0,003 1	0,003 3	0,003 4	0,003 5	0,003 6	0,003 7	0,003 8	0,003 9	0,004 0	0,004 1	0,004 2	0,004 3	—	—	—	—	—	—	—
28	0,18 to 0,54	0,003 3	0,003 5	0,003 6	0,003 7	0,003 7	0,003 9	0,004 0	0,004 1	0,004 2	0,004 3	0,004 4	0,004 5	0,004 6	0,004 7	—	—	—	—	—
24	0,21 to 0,62	0,003 6	0,003 7	0,003 8	0,003 9	0,004 0	0,004 1	0,004 2	0,004 3	0,004 4	0,004 5	0,004 6	0,004 8	0,004 9	0,005 0	0,005 2	0,005 3	—	—	—
20	0,25 to 0,75	0,003 9	0,004 0	0,004 1	0,004 2	0,004 3	0,004 4	0,004 5	0,004 6	0,004 7	0,004 8	0,005 0	0,005 1	0,005 2	0,005 3	0,005 5	0,005 6	—	—	—
18	0,28 to 0,83	—	0,004 2	0,004 3	0,004 4	0,004 5	0,004 6	0,004 7	0,004 8	0,004 9	0,005 0	0,005 1	0,005 3	0,005 4	0,005 5	0,005 7	0,005 8	0,006 1	—	—
16	0,31 to 0,94	—	0,004 5	0,004 6	0,004 7	0,004 7	0,004 9	0,005 0	0,005 1	0,005 2	0,005 2	0,005 4	0,005 5	0,005 6	0,005 7	0,005 9	0,006 1	0,006 3	0,006 6	—
14	0,36 to 1,07	—	—	0,004 9	0,004 9	0,005 0	0,005 2	0,005 3	0,005 4	0,005 5	0,005 5	0,005 7	0,005 8	0,005 9	0,006 0	0,006 2	0,006 3	0,006 6	0,006 8	0,007 0
12	0,42 to 1,25	—	—	0,005 2	0,005 3	0,005 4	0,005 5	0,005 6	0,005 7	0,005 8	0,005 9	0,006 0	0,006 2	0,006 3	0,006 4	0,006 6	0,006 7	0,007 0	0,007 2	0,007 4
10	0,50 to 1,50	—	—	—	—	0,005 9	0,006 0	0,006 1	0,006 2	0,006 3	0,006 4	0,006 5	0,006 6	0,006 8	0,006 9	0,007 0	0,007 2	0,007 5	0,007 7	0,007 9
8	0,62 to 1,88	—	—	—	—	—	0,006 7	0,006 8	0,006 9	0,007 0	0,007 1	0,007 2	0,007 3	0,007 4	0,007 5	0,007 7	0,007 9	0,008 1	0,008 4	0,008 6
6	0,83 to 2,50	—	—	—	—	—	—	—	0,007 9	0,008 0	0,008 1	0,008 2	0,008 3	0,008 4	0,008 5	0,008 7	0,008 9	0,009 1	0,009 4	0,009 6
4	1,25 to 3,75	—	—	—	—	—	—	—	—	—	0,009 8	0,010 0	0,010 1	0,010 2	0,010 3	0,010 5	0,010 7	0,010 9	0,011 1	0,011 3

NOTE The pitch diameter tolerances given in this table are suitable for lengths of engagement within the ranges given in column 2. For other lengths of engagement the tolerances shall be calculated using the formula in 6.3.2.

Table 10 — Minor diameter tolerances (T_{D1}) for internal threads of special diameter/number of threads per inch combinations (UNJS) threads

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Number of threads per inch	Major diameter												
	Above												
	0,218 7	0,281 2	0,343 7	0,406 2	0,468 7	0,531 2	0,593 7	0,656 2	0,718 7	0,781 2	0,843 7	0,906 2	1,000 and above
	Up to and including												
	0,281 2	0,343 7	0,406 2	0,468 7	0,531 2	0,593 7	0,656 2	0,718 7	0,781 2	0,843 7	0,906 2	0,968 7	
	Tolerance												
40	0,005 3	0,004 7	0,004 3	0,004 0	0,003 8	0,003 6	0,003 5	0,003 4	0,003 4	0,003 4	0,003 4	0,003 4	0,003 4
36	0,005 9	0,005 3	0,004 8	0,004 5	0,004 3	0,004 1	0,003 9	0,003 8	0,003 8	0,003 8	0,003 8	0,003 8	0,003 8
32	0,006 7	0,006 0	0,005 5	0,005 1	0,004 8	0,004 6	0,004 5	0,004 3	0,004 2	0,004 2	0,004 2	0,004 2	0,004 2
28	0,007 7	0,006 9	0,006 3	0,005 9	0,005 6	0,005 3	0,005 1	0,005 0	0,004 9	0,004 8	0,004 8	0,004 8	0,004 8
24	0,009 0	0,008 0	0,007 3	0,006 9	0,006 5	0,006 2	0,006 0	0,005 8	0,005 7	0,005 6	0,005 6	0,005 6	0,005 6
20	0,010 8	0,009 6	0,008 8	0,008 2	0,007 8	0,007 5	0,007 2	0,007 0	0,006 8	0,006 8	0,006 8	0,006 8	0,006 8
18	—	0,010 6	0,009 7	0,009 1	0,008 6	0,008 2	0,007 9	0,007 7	0,007 5	0,007 5	0,007 5	0,007 5	0,007 5
16	—	—	0,010 9	0,010 2	0,009 6	0,009 2	0,008 9	0,008 6	0,008 5	0,008 5	0,008 5	0,008 5	0,008 5
14	—	—	—	0,011 5	0,010 9	0,010 4	0,010 0	0,009 7	0,009 7	0,009 7	0,009 7	0,009 7	0,009 7
12	—	—	—	—	0,010 0	0,010 0	0,010 0	0,010 0	0,010 0	0,010 0	0,010 0	0,010 0	0,010 0
10	—	—	—	—	—	—	—	0,012 0	0,012 0	0,012 0	0,012 0	0,012 0	0,012 0
8	—	—	—	—	—	—	—	—	—	0,015 0	0,015 0	0,015 0	0,015 0
6	—	—	—	—	—	—	—	—	—	—	—	—	0,020 0
4	—	—	—	—	—	—	—	—	—	—	—	—	0,030 0

NOTE These values have also been used in compiling the limits for minor diameters of normal internal threads.

ICS 49.030.10

Price based on 40 pages