HANDBOOK 28 (1957)

1963 SUPPLEMENT

U.S. DEPARTMENT OF COMMERCE
NATIONAL BUREAU OF STANDARDS

1963 SUPPLEMENT TO SCREW-THREAD STANDARDS FOR FEDERAL SERVICES

1963 SUPPLEMENT TO HANDBOOK H28 (1957)

THE NATIONAL BUREAU OF STANDARDS

Functions and Activities

The functions of the National Bureau of Standards are set forth in the Act of Congress, March 3, 1901, as amended by Congress in Public Law 619, 1950. These include the development and maintenance of the national standards of measurement and the provision of means and methods for making measurements consistent with these standards; the determination of physical constants and properties of materials; the development of methods and instruments for testing materials, devices, and structures; advisory services to government agencies on scientific and technical problems; invention and development of devices to serve special needs of the Government; and the development of standard practices, codes, and specifications. The work includes basic and applied research, development, engineering, instrumentation, testing, evaluation, calibration services, and various consultation and information services. Research projects are also performed for other government agencies when the work relates to and supplements the basic program of the Bureau or when the Bureau's unique competence is required. The scope of activities is suggested by the listing of divisions and sections on the inside of the back cover.

Publications

The results of the Bureau's research are published either in the Bureau's own series of publications or in the journals of professional and scientific societies. The Bureau itself publishes three periodicals available from the Government Printing Office: The Journal of Research, published in four separate sections, presents complete scientific and technical papers; the Technical News Bulletin presents summary and preliminary reports on work in progress; and Central Radio Propagation Laboratory Ionospheric Predictions provides data for determining the best frequencies to use for radio communications throughout the world. There are also five series of nonperiodical publications: Monographs, Applied Mathematics Series, Handbooks, Miscellaneous Publications, and Technical Notes.

A complete listing of the Bureau's publications can be found in National Bureau of Standards Circular 460, Publications of the National Bureau of Standards, 1901 to June 1947 ($1.25), and the Supplement to National Bureau of Standards Circular 460, July 1947 to June 1957 ($1.50), and Miscellaneous Publication 240, July 1957 to June 1960 (Includes Titles of Papers Published in Outside Journals 1950 to 1959) ($2.25); available from the Superintendent of Documents, Government Printing Office, Washington, D.C., 20402.

UNITED STATES DEPARTMENT OF COMMERCE • LUTHER H. HODGES, *Secretary*
NATIONAL BUREAU OF STANDARDS • A. V. ASTIN, *Director*

1963 SUPPLEMENT TO NATIONAL BUREAU OF STANDARDS HANDBOOK H28(1957)
PARTS I, II, & III

1963 SUPPLEMENT TO SCREW-THREAD STANDARDS FOR FEDERAL SERVICES 1957

(PARTS I, II, & III)

Prepared by direction of the
Interdepartmental Screw Thread Committee

[Issued October 15, 1963]

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Reprint Information

This Supplement specifies changes to the November 1960 Reprint of Handbook H28(1957), Part I (which is identified by a block on the cover which reads "Reprinted November 1960 with corrections") and the original issues of Parts II and III. The April 1962 reprints of Parts II and III (which are identified by a block on the cover which reads "Reprinted April 1962 with corrections") include the changes shown in this Supplement except for the corrections shown for table VIII.2 of Part II and changes shown for paragraph on p. 33 of Part III. For the information of those having the original printing of Part I or the March 1958 reprint, the information relative to corrections included in the 1960 Reprint of Part I is as follows:

Reprinted with Corrections

November 1960

Pages 9, 12, 18, 20, 29, 30, 35, 51, 61, 69, 80 to 91, 99, 107, 109, 112, 117 to 119, 129, 163, 182 to 185, 187, 190, and 191 of this reprint contain corrections to the previous (March 1958) reprint. These corrections are shown by a double dagger. Single asterisks indicate corrections to the original printing as shown in the 1958 reprint. These corrections are shown on pages 39, 49, 105, 157, 183, 187, 190, and 193. On page 114, table VI.2, column 13; also the first paragraph of text, and the footnote 16 have been corrected.

The corrections on page 99 occur within the two blocks in which the daggers are placed. The corrections on pages 80 through 91 occur in the line when the daggers occur in the "number of pitches column," otherwise, the correction only pertains to the daggered value. The correction on page 107 is in the daggered line. The correction on page 109 is in the daggered paragraph. On page 112, the formula in the upper right-hand corner of figure VI.2 has been revised to read:

$$\text{“}\frac{3}{8}H-(0.060\sqrt[3]{p^2}+0.017p)2\text{”};$$

the “$\rightarrow\left|\frac{p}{8}\right|\leftarrow$”

has been deleted from the upper part of the right-hand view in figure VI.3.

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Foreword

Formerly, only those threads were identified as "Unified" which (1) had the basic Unified thread form with limits of size and tolerances based on Unified formulations, and (2) had been agreed upon as Unified by the standards bodies of Canada, the United Kingdom, and the United States. Part I of Handbook H28(1957) is based on this.

At present, all threads are identified as "Unified" if they have the basic Unified thread form with limits of size and tolerances based on Unified formulations. The essential purpose of this Supplement is to revise the screw thread designations to conform with present practice and to include thread data for additional threads which have been added to the standard screw thread series. The revision of Handbook H28(1957), Part I, in its entirety will follow later.

This Supplement also lists changes to be made in Parts II and III.

ARCHIBALD T. MCPHERSON, *Chairman,*
Interdepartmental Screw Thread Committee.

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HEADQUARTERS
DEFENSE SUPPLY AGENCY
CAMERON STATION
ALEXANDRIA, VIRGINIA

IN REPLY
REFER TO DSAH-SSD

2 AUG 1963

Mr. I. H. Fullmer, Secretary
Interdepartmental Screw Thread Committee
National Bureau of Standards
U. S. Department of Commerce
Washington 25, D. C.

Dear Mr. Fullmer:

This is in reference to your letter of 21 February 1963, File 2.05, which forwarded, for Department of Defense signature, the approval sheet for the 1963 supplement to NBS Handbook H28 (1957), Parts I, II, and III.

For your information the Defense Supply Agency, as administrator of the Defense Standardization Program, has been designated to act on behalf of the Department of Defense in approving the Handbook.

Such approval is indicated by signature on the authentication page which is returned herewith.

Sincerely yours,

E. M. Tolliver

E. M. TOLLIVER
Colonel, USA
Chief, Standardization Division

2 Incl
1. Approval Sheet
2. Draft 1963 Revision

APPROVAL BY

THE DEPARTMENTS OF DEFENSE AND COMMERCE

The accompanying 1963 Supplement to Handbook H28(1957), Parts I, II, & III, on Screw-Thread Standards for Federal Services, submitted by the Interdepartmental Screw Thread Committee, is hereby approved for use by the Departments of Defense and Commerce.

FOR THE DEPARTMENT OF DEFENSE:

EDWARD TOLLIVER
Colonel, USA
Defense Supply Agency

FOR THE DEPARTMENT OF COMMERCE:

A. V. ASTIN
Director
National Bureau of Standards

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1963 SUPPLEMENT TO SCREW-THREAD STANDARDS FOR FEDERAL SERVICES

HANDBOOK H28 (1957)

PARTS I, II, & III

PART I CHANGES

(See Reprint Information on p. II of this Supplement)

The following changes should be made in Part I:

p. 1, SECTION II. NOMENCLATURE, DEFINITIONS, AND LETTER SYMBOLS:

(Note: This section is in process of extensive revision. With reference to pars. 22 and 23, p. 5, see footnote 24, p. 102 of this Supplement.)

p. 10, 1. INTRODUCTION: Revise first sentence of first paragraph of introduction to read:

"The Unified thread standards [2] constitute the basic American standards for fastening screw threads."

p. 10, 1. INTRODUCTION: Substitute the following for the last two sentences (last eight lines) of the third paragraph:

"At present, all threads are classed as Unified if they have the basic Unified thread form and have limits of size and tolerances based on the Unified formulations."

p. 12, 2. THE UNIFIED FORM OF THREAD: Revise to read:

"2. THE UNIFIED FORM OF THREAD

"1. BASIC FORM OF THREAD.—The Unified thread form is the basis of all thread dimensions given in the standard. The formulas for its proportions are given in table III.1 in this Supplement, together with figure III.1a in this Supplement, showing the basic profile from which the design forms are derived. Both the ISO basic profile and the American (U.S.) concept of the basic Unified thread form are shown. These are essentially alike except that in the second illustration the position of the basic minor diameter provides for the long established practice in the U.S. of considering 100 percent thread height as being equal to $3H/4$, measured from the basic major diameter.

(*a*) *Angle of thread.*—The basic angle of thread between the flanks of the thread, measured in an axial plane, is 60°. The line bisecting this 60° angle is perpendicular to the axis of the screw thread.

(*b*) *Form of crest.*—The form of the crest of external threads is flat. The crest of the basic thread form of the external thread shall be truncated from the sharp crest an amount equal to $H/8$, where H is the depth of the fundamental triangle. The form of the crest of internal threads is flat and the crest shall be truncated from the sharp crest an amount equal to $H/4$.

(*c*) *Rounded root forms.*—The crest clearances allowed are such as to permit rounded root forms in both the external and internal threads. Rounded roots are required in some applications and are made by tools that are purposely rounded. Otherwise, rounded roots may be the result of tool wear.

(*d*) *Clearance at minor diameter.*—A clearance is provided at the minor diameter of the internal thread by truncating from the sharp crest an amount equal to $H/4$.

(*e*) *Clearance at major diameter.*—A clearance is provided at the major diameter of the internal thread by making the thread form at the root such that its width is less than $p/8$.

"2. DESIGN FORM OF EXTERNAL THREAD.—The design form for an external Unified thread, i.e., the form of an external thread in its maximum material condition, shown in figure III.1 in this Supplement, is derived from the fundamental triangle. It is truncated at the major diameter to $H/8$. In practice, due to providing for tool crest wear at the thread roots, i.e., the minor diameter, the roots are shown as a rounded contour and cleared beyond the flat width of $p/4$ for the minimum minor diameter of the internal thread. Also, in practice, the crests of the external threads may be rounded within the confines established by the major diameter tolerance.

"3. DESIGN FORM OF INTERNAL THREAD.—The design form for an internal Unified thread, i.e., the form of an internal thread in its maximum material condition, shown in figure III.1 in this Supplement, is derived from the fundamental triangle. It is similar to the basic form except that the truncation at the minor diameter is an

p. 11, figure III. 1: Substitute the following figure for the one now shown:

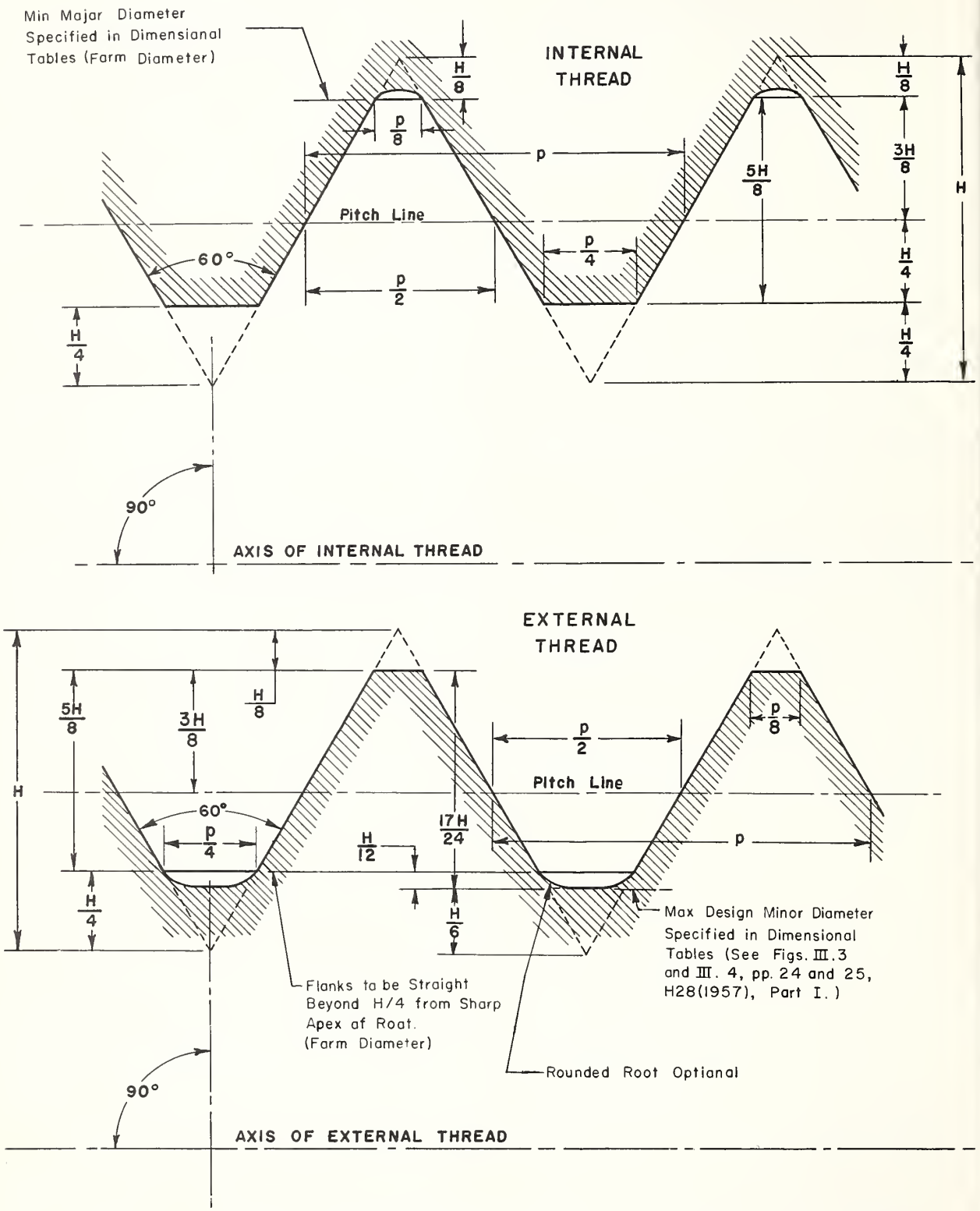
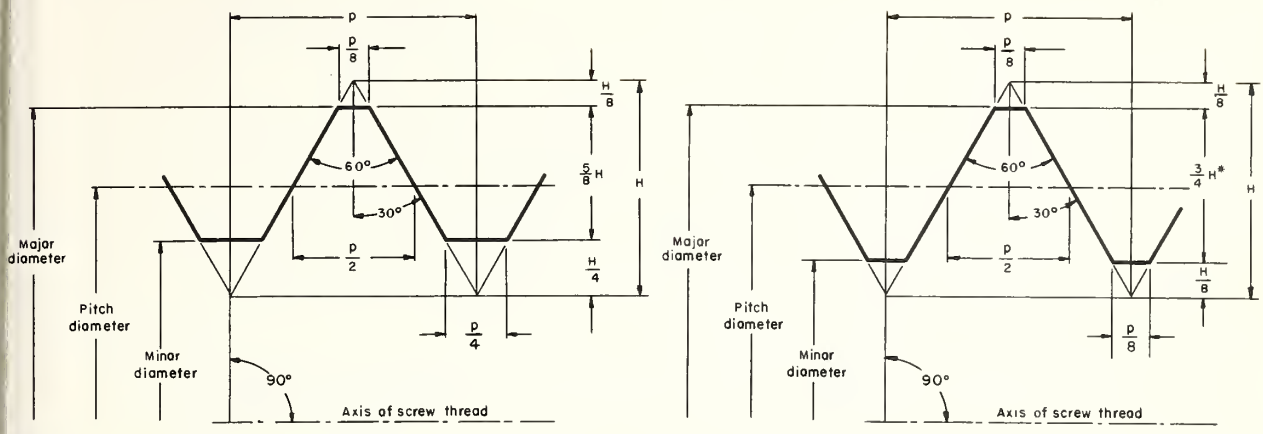


FIGURE III.1.—*Unified internal and external screw thread design forms (maximum material condition).*

NOTE.—See table III.1 in this supplement for numerical values. In practice the crests of external threads may be rounded.

p. 11: Add figure III.1a, following:



ISO basic profile for inch and metric threads.

* 3H/4 = 100 percent thread height

American (U.S.) symmetrical thread form from which percentages of thread height are calculated.

FIGURE III.1a.—*Basic Unified thread form; ISO basic profile and American (U.S.) symmetrical thread form*

amount equal to one-quarter of the fundamental triangle height ($H/4$). In practice, due to providing for tool crest wear at the thread roots, i.e., the major diameter, the roots are shown as a rounded contour and cleared beyond the flat width of $p/8$ for the maximum major diameter of the internal thread.

"4. ILLUSTRATIONS.—Figure III.1 in this Supplement shows the design forms (maximum material condition) of the external and internal threads of the Unified form of thread.

"5. BASIC THREAD DATA.—The basic thread data for all standard pitches of the Unified form of thread are given in table III.1 in this Supplement."

pp. 13, 14, and 18; 3. THREAD SERIES, SYMBOLS, AND SUGGESTED APPLICATIONS: Revise to read:

3. THREAD SERIES, ORDER OF SELECTION, AND SUGGESTED APPLICATIONS

"1. THREAD SERIES DEFINITION—Thread series are groups of diameter-pitch combinations distinguished from each other by the number of threads per inch applied to series of specific diameters. The various diameter-pitch combinations of three series with graded pitches and 8 series with constant pitches are given in table III.2 in this Supplement. The symbols for designating the various thread series are shown in table III.2 in this Supplement and succeeding tables. In table III.10 in this Supplement are given the limits of size of series in table III.2 in this Supplement, but the full range is not covered in the case of the 4UN, 6UN, and 8UN series. Omissions are the secondary sizes over 2½ in. in the 4UN series, all sizes over 5 in. in the 6UN series, and all sizes over 4 in. in the 8UN series. However, the basic dimensions for these omitted sizes are given in tables III.8a, III.8b, and III.6 in this Supplement.

"2. ORDER OF SELECTION—Whenever possible, selection should be made from table III.10, Standard series limits of size—Unified screw threads, in this Supplement, preference being given to the coarse- and fine-thread series. If threads in the standard series do not meet the requirements of design, reference should be made to the selected combinations in table IV.12 in this Supplement. The third expedient is to compute the limits of size for a special diameter-pitch combination in accordance with table IV. 13, p. 99, Part I. The fourth and last resort is calculation by formula. See section IV, Part I, for formulas.

"3. UNC, COARSE-THREAD SERIES—This series is generally utilized for the bulk production of bolts, screws, nuts, and other general engineering applications. It is used in general applications for threading into lower tensile strength materials such as cast iron, mild steel, and softer materials to obtain the optimum resistance to stripping of the internal thread. It is applicable for rapid assembly or disassembly, or if corrosion or slight damage is possible. The basic dimensions and limits of size for this series are shown in this Supplement in tables III.3 and III.10.

"4. UNF, FINE-THREAD SERIES—This series is suitable for the production of bolts, screws, nuts, and other applications where the coarse series is not applicable. External threads of this series

TABLE III.1.—*Thread data, Unified thread form (see fig. III.2)*

Threads per inch,	Pitch,	Flat at internal thread crest,	Flat at internal thread root and external thread crest,	Height of sharp v-thread,	Twice min truncation of internal thread root,	Max truncation of internal thread root and external thread crest,	Truncation of external thread rounded root,	Half addendum of external thread,	Addendum of internal thread and truncation of internal thread crest,	Dedendum of internal thread and addendum of external thread,	Height of internal thread and depth of thread engagement,	Height of external thread and max height of internal thread,	[a] Twice the external thread addendum,	Thread height from basic flat crest to sharp root,	Difference between max. major and pitch diameters of internal thread,	Double height of internal thread,	Double height of external thread,
n	$p=1/n$	$F_{cn}=$ $p/4=$ $0.25/n$	$F_{rn}=$ $F_{cs}=$ $p/8=$ $0.125/n$	$H=$ $0.8660254/n$	$2f_{rn}=$ $H/12=$ $0.0721688/n$	$f_{rn}=$ $f_{cs}=$ $H/8=$ $0.108253/n$	$s_{rn}=$ $H/6=$ $0.144338/n$	$3H/16=$ $0.162380/n$	$h_{an}=$ $f_{cn}=$ $H/4=$ $0.216506/n$	$h_{dn}=$ $h_{as}=$ $3H/8=$ $0.324759/n$	$h_n=$ $h_e=$ $5H/8=$ $0.541266/n$	$h_s=$ $17H/24=$ $0.613435/n$	$h_b=$ $2h_{as}=$ $3H/4=$ $0.649519/n$	$7H/8=$ $0.757772/n$	$11H/12=$ $0.793857/n$	$2h_n=$ $5H/4=$ $1.082532/n$	$17H/12=$ $1.226868/n$
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
80	0.012500	0.00312	0.00156	0.010825+	0.00090	0.00135+	0.00180	0.00203	0.00271	0.00406	0.00677	0.00767	0.008119	0.00947	0.00992	0.01353	0.01534
72	.013889	.00347	.00174	.012028	.00100	.00150	.00200	.00226	.00301	.00451	.00752	.00852	.009021	.01052	.01103	.01504	.01704
64	.0156250	.00391	.00195+	.013532	.00113	.00169	.00226	.00254	.00338	.00507	.00846	.00958	.010149	.01184	.01240	.01691	.01917
56	.017857	.00446	.00223	.015465−	.00129	.00193	.00258	.00290	.00387	.00580	.00967	.01095+	.011599	.01353	.01418	.01933	.02191
48	.020833	.00521	.00260	.018042	.00150	.00226	.00301	.00338	.00451	.00677	.01128	.01278	.013532	.01579	.01654	.02255+	.02556
44	.022727	.00568	.00284	.019682	.00164	.00246	.00328	.00369	.00492	.00738	.01230	.01394	.014762	.01722	.01804	.02460	.02788
40	.025000	.006250	.00312	.021651	.00180	.00271	.00361	.00406	.00541	.00812	.01353	.01534	.016238	.01894	.01985−	.02706	.03067
36	.027778	.00694	.00347	.024056	.00200	.00301	.00401	.00451	.00601	.00902	.01504	.01704	.018042	.02105−	.02205+	.03007	.03408
32	.031250	.00781	.00391	.027063	.00226	.00338	.00451	.00507	.00677	.01015−	.01691	.01917	.020297	.02368	.02481	.03383	.03834
28	.035714	.00893	.00446	.030929	.00258	.00387	.00515+	.00580	.00773	.01160	.01933	.02191	.023197	.02706	.02835+	.03866	.04382
27	.037037	.00926	.00463	.032075+	.00267	.00401	.00535−	.00601	.00802	.01203	.02005−	.02272	.024056	.02807	.02940	.04009	.04544
24	.041667	.01042	.00521	.036084	.00301	.00451	.00601	.00677	.00902	.01353	.02255+	.02556	.027063	.03157	.03308	.04511	.05112
20	.050000	.01250	.006250	.043301	.00361	.00541	.00722	.00812	.01083	.01624	.02706	.03067	.032476	.03789	.03969	.05413	.06134
18	.055556	.01389	.00694	.048113	.00401	.00601	.00802	.00902	.01203	.01804	.03007	.03408	.036084	.04210	.04410	.06014	.06816
16	.062500	.01562	.00781	.054127	.00451	.00677	.00902	.01015−	.01353	.02030	.03383	.03834	.040595−	.04736	.04962	.06766	.07668
14	.071429	.01786	.00893	.061859	.00515+	.00773	.01031	.01160	.01546	.02320	.03866	.04382	.046394	.05413	.05670	.07732	.08763
13	.076923	.01923	.00962	.066617	.00555+	.00833	.01110	.01249	.01665+	.02498	.04164	.04719	.049963	.05829	.06107	.08327	.09437
12	.083333	.02083	.01042	.072169	.00601	.00902	.01203	.01353	.01804	.02706	.04511	.05112	.054127	.06315−	.06615+	.09021	.10224
11½	.086957	.02174	.01087	.075307	.00628	.00941	.01255+	.01412	.01883	.02824	.04707	.05334	.056480	.06589	.06903	.09413	.10668
11	.090909	.02273	.01136	.078730	.00656	.00984	.01312	.01476	.01968	.02952	.04921	.05577	.059047	.06889	.07217	.09841	.11153
10	.100000	.02500	.01250	.086603	.00722	.01083	.01443	.01624	.02165+	.03248	.05413	.06134	.064952	.07578	.07939	.10825+	.12269
9	.111111	.02778	.01389	.096225+	.00802	.01203	.01604	.01804	.02406	.03608	.06014	.06816	.072169	.08420	.08821	.12028	.13632
8	.125000	.031250	.01562	.108253	.00902	.01353	.01804	.02030	.02706	.04059	.06766	.07668	.081190	.09472	.09923	.13532	.15336
7	.142857	.03571	.01786	.123718	.01031	.01546	.02062	.02320	.03093	.04639	.07732	.08763	.092788	.10825+	.11341	.15465−	.17527
6	.166667	.04167	.02083	.144338	.01203	.01804	.02406	.02706	.03608	.05413	.09021	.10224	.108253	.12630	.13231	.18042	.20448
5	.200000	.05000	.02500	.173205+	.01443	.02165+	.02887	.03248	.04330	.06495+	.10825+	.12269	.129904	.15155+	.15877	.21651	.24537
4½	.222222	.05556	.02778	.192450	.01604	.02406	.03208	.03608	.04811	.07217	.12028	.13632	.144338	.16839	.17641	.24056	.27264
4	.250000	.06250	.031250	.216506	.01804	.02706	.03608	.04059	.05413	.08119	.13532	.15336	.162380	.18944	.19846	.27063	.30672

[a] This is taken as 100 percent thread height. It is equivalent to the "basic height" h of the original American National form.

p. 12, table III.1: Revise table to read:

have greater tensile stress area than comparable sizes of the coarse series. The fine series is suitable when the resistance to stripping of both external and mating internal threads equals or exceeds the tensile load carrying capacity of the externally threaded member. It is also used where the length of engagement is short, where a smaller lead angle is desired, or where the wall thickness demands a fine pitch. It may also be used for threading into lower strength materials where maximum strength of the external thread is not required; otherwise the length of engagement must be selected to meet the above required strength conditions.

Fine threads up to and including 1 inch size are suitable for screw, bolt, and nut, and other threaded fastener applications. Sizes over 1 inch may not be suitable unless the mating materials are compatible as outlined above. The basic dimensions and limits of size for this series are shown in this Supplement in tables III.4 and III.10.

"5. UNEF, Extra-Fine Thread Series—This series is applicable where even finer pitches of threads are desirable for short lengths of engagement and for thin-walled tubes, nuts, ferrules, or couplings. It is also generally applicable under the conditions stated above for the fine threads. The basic dimensions and limits of size for this series are shown in this Supplement in tables III.5 and III.10.

"6. UN, Constant Pitch Series—The various constant-pitch series with 4, 6, 8, 12, 16, 20, 28, and 32 threads per inch, given in this Supplement in table III.2, offer a comprehensive range of diameter-pitch combinations for those purposes where the threads in the UNC, UNF, and UNEF series do not meet the particular requirements of the design. The constant pitch series have application on parts that are repeatedly assembled and disassembled or where it might be advantageous to rethread oversize to recondition the threaded portions of the parts. Whenever a thread in a constant-pitch series also appears in the UNC, UNF, or UNEF series the symbols, tolerances, and limits of size of those standard series are applicable. When selecting threads from these constant-pitch series, preference should be given whenever possible to those tabulated in the 8-, 12-, or 16-thread series. The basic dimensions for the 4-, 6-, 20-, 28-, and 32-thread series are shown in this Supplement in tables III.8a to III.8e.

(*a*) *8UN, 8-thread series*—The 8UN series is a uniform-pitch series for large diameters or for use as a compromise between the coarse- and fine-thread series. Although originally intended for high-pressure-joint bolts and nuts, it is now widely used as a substitute for the coarse-thread series for diameters larger than 1 in. The basic dimensions for this series are shown in table III.6 in this Supplement.

(*b*) *12UN, 12-thread series*—The 12UN series is a uniform pitch series for large diameters requiring threads of medium-fine pitch. Although originally intended for boiler practice, it is now used as a continuation of the fine-thread series for diameters larger than 1½ in. The basic dimensions for this series are shown in table III.7 in this Supplement.

(*c*) *16UN, 16-thread series*—The 16UN series is a uniform pitch series for large diameters requiring fine-pitch threads. It is suitable for adjusting collars and retaining nuts, and also serves as a continuation of the extra-fine-thread series for diameters larger than $1\frac{11}{16}$ (1.6875) in. The basic dimensions for this series are shown in table III.8 in this Supplement.

"7. High-temperature, High-strength Applications—For these applications the coarse-thread series is recommended in sizes from ¼ to 1 in. and the 8-thread series in sizes over 1 in. Limits of size are given in table III.10 in this Supplement. Some high-temperature applications involving special physical characteristics or conditions may require modification of thread dimensions. See first full paragraph in second column of p. 23, Part I and (e) Method of designating threads having modified crests, p. 19 in this Supplement.

"8. Selected Combinations of UNS Threads—Thread data are tabulated in table IV.12, p. 92 in this Supplement for some selected combinations of diameter and pitch of Unified special screw threads, designated UNS, with pitch diameter tolerances based on a length of thread engagement of 9 times the pitch. The pitch diameter limits are applicable to a length of engagement of from 5 to 15 times the pitch. (This should not be confused with the length of thread on mating parts, as it may exceed the length of engagement by a considerable amount.)

"9. Fine Threads for Thin-Wall Tubing—The limits of size for a 27-thread series, ranging from ¼ to 1 in. nominal size, are included in table IV.12, p. 92 in this Supplement. These threads are recommended for general use on thin-wall tubing. For more detailed information see part II of Handbook H28 (par. 7, page 11 of the 1957 issue).

"10. Threads of Special Diameters, Pitches, and Lengths of Engagement.—For information on special threads, see section IV, page 74, Part I of H28 (1957). (For changes made in section IV by this Supplement, see pp. 91–96.)"

pp. 15–20: Delete tables III.2 to III.9, inclusive. Add tables III.2, III.3, III.4, III.5, III.6, III.7, III.8, III.8a, III.8b, III.8c, III.8d, III.8e, and III.9, which follow.

(Next text on p. 16.)

TABLE III.2.—*Unified standard screw thread series*

Nominal size [a]		Nominal size and basic major diameter	Threads per inch											Nominal size
			Series with graded pitches			Series with constant pitches								
Primary	Secondary		Coarse UNC	Fine UNF	Extra fine UNEF	4UN	6UN	8UN	12UN	16UN	20UN	28UN	32UN	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
No. *in.*	*No.* *in.*	*in.*												*No.* *in.*
0		.060		80										0
	1	.073	64	72										1
2		.086	56	64										2
	3	.099	48	56										3
4		.112	40	48										4
5		.125	40	44										5
6		.138	32	40									UNC	6
8		.164	32	36									UNC	8
10		.190	24	32									UNF	10
	12	.216	24	28	32							UNF	UNEF	12
1/4		.250	20	28	32						UNC	UNF	UNEF	1/4
5/16		.3125	18	24	32						20	28	UNEF	5/16
3/8		.375	16	24	32					UNC	20	28	UNEF	3/8
7/16		.4375	14	20	28					16	UNF	UNEF	32	7/16
1/2		.500	13	20	28					16	UNF	UNEF	32	1/2
9/16		.5625	12	18	24				UNC	16	20	28	32	9/16
5/8		.625	11	18	24				12	16	20	28	32	5/8
	11/16	.6875			24				12	16	20	28	32	11/16
3/4		.750	10	16	20				12	UNF	UNEF	28	32	3/4
	13/16	.8125			20				12	16	UNEF	28	32	13/16
7/8		.875	9	14	20				12	16	UNEF	28	32	7/8
	15/16	.9375			20				12	16	UNEF	28	32	15/16
1		1.000	8	12	20			UNC	UNF	16	UNEF	28	32	1
	1 1/16	1.0625			18			8	12	16	20	28		1 1/16
1 1/8		1.125	7	12	18			8	UNF	16	20	28		1 1/8
	1 3/16	1.1875			18			8	12	16	20	28		1 3/16
1 1/4		1.250	7	12	18			8	UNF	16	20	28		1 1/4
	1 5/16	1.3125			18			8	12	16	20	28		1 5/16
1 3/8		1.375	6	12	18		UNC	8	UNF	16	20	28		1 3/8
	1 7/16	1.4375			18		6	8	12	16	20	28		1 7/16
1 1/2		1.500	6	12	18		UNC	8	UNF	16	20	28		1 1/2
	1 9/16	1.5625			18		6	8	12	16	20			1 9/16
1 5/8		1.625			18		6	8	12	16	20			1 5/8
	1 11/16	1.6875			18		6	8	12	16	20			1 11/16
1 3/4		1.750	5				6	8	12	16	20			1 3/4
	1 13/16	1.8125					6	8	12	16	20			1 13/16
1 7/8		1.875					6	8	12	16	20			1 7/8
	1 15/16	1.9375					6	8	12	16	20			1 15/16
2		2.000	4 1/2				6	8	12	16	20			2
	2 1/8	2.125					6	8	12	16	20			2 1/8
2 1/4		2.250	4 1/2				6	8	12	16	20			2 1/4
	2 3/8	2.375					6	8	12	16	20			2 3/8
2 1/2		2.500	4			UNC	6	8	12	16	20			2 1/2
	2 5/8	2.625				4	6	8	12	16	20			2 5/8
2 3/4		2.750	4			UNC	6	8	12	16	20			2 3/4
	2 7/8	2.875				4	6	8	12	16	20			2 7/8
3		3.000	4			UNC	6	8	12	16	20			3
	3 1/8	3.125				4	6	8	12	16				3 1/8
3 1/4		3.250	4			UNC	6	8	12	16				3 1/4
	3 3/8	3.375				4	6	8	12	16				3 3/8
3 1/2		3.500	4			UNC	6	8	12	16				3 1/2
	3 5/8	3.625				4	6	8	12	16				3 5/8
3 3/4		3.750	4			UNC	6	8	12	16				3 3/4
	3 7/8	3.875				4	6	8	12	16				3 7/8
4		4.000	4			UNC	6	8	12	16				4
	4 1/8	4.125				4	6	8	12	16				4 1/8
4 1/4		4.250				4	6	8	12	16				4 1/4
	4 3/8	4.375				4	6	8	12	16				4 3/8
4 1/2		4.500				4	6	8	12	16				4 1/2
	4 5/8	4.625				4	6	8	12	16				4 5/8
4 3/4		4.750				4	6	8	12	16				4 3/4
	4 7/8	4.875				4	6	8	12	16				4 7/8
5		5.000				4	6	8	12	16				5
	5 1/8	5.125				4	6	8	12	16				5 1/8
5 1/4		5.250				4	6	8	12	16				5 1/4
	5 3/8	5.375				4	6	8	12	16				5 3/8
5 1/2		5.500				4	6	8	12	16				5 1/2
	5 5/8	5.625				4	6	8	12	16				5 5/8
5 3/4		5.750				4	6	8	12	16				5 3/4
	5 7/8	5.875				4	6	8	12	16				5 7/8
6		6.000				4	6	8	12	16				6

[a] Number or fractional nominal sizes are given in cols. 1, 2, and 15. Decimal nominal sizes are given in col. 3.

TABLE III.3.—*Coarse thread series, basic dimensions,* UNC

Nominal size		Nominal size and basic major diameter, D	Threads per inch, n	Basic pitch diameter, E	Minor diameter, external threads, K_s [a]	Minor diameter, internal threads, K_n [a]	Lead angle at basic pitch diameter, λ		Sectional area at minor diameter at $D-2h_b$	Tensile stress area, [b] $\pi\left(\frac{E}{2}-\frac{3H}{16}\right)^2$
Primary	Secondary									
1	2	3	4	5	6	7	8		9	10
No. *in.*	*No.*	*in.*		*in.*	*in.*	*in.*	*deg*	*min*	*in.*^{2}	*in.*^{2}
	1	.073	64	0.0629	0.0538	0.0561	4	31	0.00218	0.00263
2		.086	56	.0744	.0641	.0667	4	22	.00310	.00370
	3	.099	48	.0855	.0734	.0764	4	26	.00406	.00487
4		.112	40	.0958	.0813	.0849	4	45	.00496	.00604
5		.125	40	.1088	.0943	.0979	4	11	.00672	.00796
6		.138	32	.1177	.0997	.1042	4	50	.00745	.00909
8		.164	32	.1437	.1257	.1302	3	58	.01196	.0140
10		.190	24	.1629	.1389	.1449	4	39	.01450	.0175
	12	.216	24	.1889	.1649	.1709	4	1	.0206	.0242
¼		.250	20	.2175	.1887	.1959	4	11	.0269	.0318
5/16		.3125	18	.2764	.2443	.2524	3	40	.0454	.0524
⅜		.375	16	.3344	.2983	.3073	3	24	.0678	.0775
7/16		.4375	14	.3911	.3499	.3602	3	20	.0933	.1063
½		.500	13	.4500	.4056	.4167	3	7	.1257	.1419
9/16		.5625	12	.5084	.4603	.4723	2	59	.162	.182
⅝		.625	11	.5660	.5135	.5266	2	56	.202	.226
¾		.750	10	.6850	.6273	.6417	2	40	.302	.334
⅞		.875	9	.8028	.7387	.7547	2	31	.419	.462
1		1.000	8	.9188	.8466	.8647	2	29	.551	.606
1⅛		1.125	7	1.0322	.9497	.9704	2	31	.693	.763
1¼		1.250	7	1.1572	1.0747	1.0954	2	15	.890	.969
1⅜		1.375	6	1.2667	1.1705	1.1946	2	24	1.054	1.155
1½		1.500	6	1.3917	1.2955	1.3196	2	11	1.294	1.405
1¾		1.750	5	1.6201	1.5046	1.5335	2	15	1.74	1.90
2		2.000	4½	1.8557	1.7274	1.7594	2	11	2.30	2.50
2¼		2.250	4½	2.1057	1.9774	2.0094	1	55	3.02	3.25
2½		2.500	4	2.3376	2.1933	2.2294	1	57	3.72	4.00
2¾		2.750	4	2.5876	2.4433	2.4794	1	46	4.62	4.93
3		3.000	4	2.8376	2.6933	2.7294	1	36	5.62	5.97
3¼		3.250	4	3.0876	2.9433	2.9794	1	29	6.72	7.10
3½		3.500	4	3.3376	3.1933	3.2294	1	22	7.92	8.33
3¾		3.750	4	3.5876	3.4433	3.4794	1	16	9.21	9.66
4		4.000	4	3.8376	3.6933	3.7284	1	11	10.61	11.08

[a] Design form. See fig. III.1, p. 2 in this Supplement.
[b] See formula under definition of tensile stress area on p. 102 in this Supplement.

TABLE III.4.—*Fine thread series, basic dimensions,* UNF

Nominal size [a]		Nominal size and basic major diameter, D	Threads per inch, n	Basic pitch diameter, E	Minor diameter, external threads, K_s [b]	Minor diameter, internal threads, K_n [b]	Lead angle at basic pitch diameter, λ		Sectional area at minor diameter at $D-2h_b$	Tensile stress area, [c] $\pi\left(\frac{E}{2}-\frac{3H}{16}\right)^2$
Primary	Secondary									
1	2	3	4	5	6	7	8		9	10
No. *in.*	*No.*	*in.*		*in.*	*in.*	*in.*	*deg*	*min*	*in.*^{2}	*in.*^{2}
0		.060	80	0.0519	0.0447	0.0465	4	23	0.00151	0.00180
	1	.073	72	.0640	.0560	.0580	3	57	.00237	.00278
2		.086	64	.0759	.0668	.0691	3	45	.00339	.00394
	3	.099	56	.0874	.0771	.0797	3	43	.00451	.00523
4		.112	48	.0985	.0864	.0894	3	51	.00566	.00661
5		.125	44	.1102	.0971	.1004	3	45	.00716	.00830
6		.138	40	.1218	.1073	.1109	3	44	.00874	.01015
8		.164	36	.1460	.1299	.1339	3	28	.01285	.01474
10		.190	32	.1697	.1517	.1562	3	21	.0175	.0200
	12	.216	28	.1928	.1722	.1773	3	22	.0226	.0258
¼		.250	28	.2268	.2062	.2113	2	52	.0326	.0364
5/16		.3125	24	.2854	.2614	.2674	2	40	.0524	.0580
⅜		.375	24	.3479	.3239	.3299	2	11	.0809	.0878
7/16		.4375	20	.4050	.3762	.3834	2	15	.1090	.1187
½		.500	20	.4675	.4387	.4459	1	57	.1486	.1599
9/16		.5625	18	.5264	.4943	.5024	1	55	.189	.203
⅝		.625	18	.5889	.5568	.5649	1	43	.240	.256
¾		.750	16	.7094	.6733	.6823	1	36	.351	.373
⅞		.875	14	.8286	.7874	.7977	1	34	.480	.509
1		1.000	12	.9459	.8978	.9098	1	36	.625	.663
1⅛		1.125	12	1.0709	1.0228	1.0348	1	25	.812	.856
1¼		1.250	12	1.1959	1.1478	1.1598	1	16	1.024	1.073
1⅜		1.375	12	1.3209	1.2728	1.2848	1	9	1.260	1.315
1½		1.500	12	1.4459	1.3978	1.4098	1	3	1.521	1.581

[a] For sizes larger than 1½ in., use the 12-thread series. See table III.7 in this Supplement.
[b] Design form. See fig. III.1, p. 2 in this Supplement.
[c] See formula under definition of tensile stress area on p. 102 in this Supplement.

TABLE III.5.—*Extra-fine thread series, basic dimensions,* UNEF

Nominal size [a]		Nominal size and basic major diameter, D	Threads per inch, n	Basic pitch diameter, E	Minor diameter, external threads, K_s [b]	Minor diameter, internal threads, K_n [b]	Lead angle at basic pitch diameter, λ		Sectional area at minor diameter at $D-2h_b$	Tensile stress area, $\pi\left(\frac{E}{2}-\frac{3H}{16}\right)^2$ [c]
Primary	Secondary									
1	2	3	4	5	6	7	8		9	10
in.	*No.* *in.*	*in.*		*in.*	*in.*	*in.*	*deg*	*min*	*in.*²	*in.*²
	12	.216	32	0.1657	0.1777	0.1822	2	55	0.0242	0.0270
1/4		.250	32	.2297	.2117	.2162	2	29	.0344	.0379
5/16		.3125	32	.2922	.2742	.2787	1	57	.0581	.0625
3/8		.375	32	.3547	.3367	.3412	1	36	.0878	.0932
7/16		.4375	28	.4143	.3937	.3988	1	34	.1201	.1274
1/2		.500	28	.4768	.4562	.4613	1	22	.162	.170
9/16		.5625	24	.5354	.5114	.5174	1	25	.203	.214
5/8		.625	24	.5979	.5739	.5799	1	16	.256	.268
	11/16	.6875	24	.6604	.6364	.6424	1	9	.315	.329
3/4		.750	20	.7175	.6887	.6959	1	16	.369	.386
	13/16	.8125	20	.7800	.7512	.7584	1	10	.439	.458
7/8		.875	20	.8425	.8137	.8209	1	5	.515	.536
	15/16	.9375	20	.9050	.8762	.8834	1	0	.598	.620
1		1.000	20	.9675	.9387	.9459	0	57	.687	.711
	1 1/16	1.0625	18	1.0264	.9943	1.0024	0	59	.770	.799
1 1/8		1.125	18	1.0889	1.0568	1.0649	0	56	.871	.901
	1 3/16	1.1875	18	1.1514	1.1193	1.1274	0	53	.977	1.009
1 1/4		1.250	18	1.2139	1.1818	1.1899	0	50	1.090	1.123
	1 5/16	1.3125	18	1.2764	1.2443	1.2524	0	48	1.208	1.244
1 3/8		1.375	18	1.3389	1.3068	1.3149	0	45	1.333	1.370
	1 7/16	1.4375	18	1.4014	1.3693	1.3774	0	43	1.464	1.503
1 1/2		1.500	18	1.4639	1.4318	1.4399	0	42	1.60	1.64
	1 9/16	1.5625	18	1.5264	1.4943	1.5024	0	40	1.74	1.79
1 5/8		1.625	18	1.5889	1.5568	1.5649	0	38	1.89	1.94
	1 11/16	1.6875	18	1.6514	1.6193	1.6274	0	37	2.05	2.10

[a] For sizes larger than 1 11/16, 1.6875, inch use 16-thread series. See table III.8 in this Supplement.
[b] Design form. See fig. III.1, p. 2 in this Supplement.
[c] See formula under definition of tensile stress area on p. 102 in this Supplement.

TABLE III.6.—*8-thread series, basic dimensions,* 8UN

Nominal size		Nominal size and basic major diameter, D	Basic pitch diameter, E	Minor diameter, external threads, K_s [b]	Minor diameter, internal threads, K_n [b]	Lead angle at basic pitch diameter, λ		Sectional area at minor diameter at $D-2h_b$	Tensile stress area, $\pi\left(\frac{E}{2}-\frac{3H}{16}\right)^2$ [c]
Primary	Secondary								
1	2	3	4	5	6	7		8	9
in.	*in.*	*in.*	*in.*	*in.*	*in.*	*deg*	*min*	*in.*²	*in.*²
[a] 1		1.000	0.9188	0.8466	0.8647	2	29	0.551	0.606
	1 1/16	1.0625	.9813	.9091	.9272	2	19	.636	.695
1 1/8		1.125	1.0438	.9716	.9897	2	11	.728	.790
	1 3/16	1.1875	1.1063	1.0341	1.0522	2	4	.825	.892
1 1/4		1.250	1.1688	1.0966	1.1147	1	57	.929	1.000
	1 5/16	1.3125	1.2313	1.1591	1.1772	1	51	1.039	1.114
1 3/8		1.375	1.2938	1.2216	1.2397	1	46	1.155	1.233
	1 7/16	1.4375	1.3563	1.2841	1.3022	1	41	1.277	1.360
1 1/2		1.500	1.4188	1.3466	1.3647	1	36	1.405	1.492
	1 9/16	1.5625	1.4813	1.4091	1.4272	1	32	1.54	1.63
1 5/8		1.625	1.5438	1.4716	1.4897	1	29	1.68	1.78
	1 11/16	1.6875	1.6063	1.5341	1.5522	1	25	1.83	1.93
1 3/4		1.750	1.6688	1.5966	1.6147	1	22	1.98	2.08
	1 13/16	1.8125	1.7313	1.6591	1.6772	1	19	2.14	2.25
1 7/8		1.875	1.7938	1.7216	1.7397	1	16	2.30	2.41
	1 15/16	1.9375	1.8563	1.7841	1.8022	1	14	2.47	2.59
2		2.000	1.9188	1.8466	1.8647	1	11	2.65	2.77
	2 1/8	2.125	2.0438	1.9716	1.9897	1	7	3.03	3.15
2 1/4		2.250	2.1688	2.0966	2.1147	1	3	3.42	3.56
	2 3/8	2.375	2.2938	2.2216	2.2397	1	0	3.85	3.99
2 1/2		2.500	2.4188	2.3466	2.3647	0	57	4.29	4.44
	2 5/8	2.625	2.5438	2.4716	2.4897	0	54	4.76	4.92
2 3/4		2.750	2.6688	2.5966	2.6147	0	51	5.26	5.43
	2 7/8	2.875	2.7938	2.7216	2.7397	0	49	5.78	5.95
3		3.000	2.9188	2.8466	2.8647	0	47	6.32	6.51
	3 1/8	3.125	3.0438	2.9716	2.9897	0	45	6.89	7.08
3 1/4		3.250	3.1688	3.0966	3.1147	0	43	7.49	7.69
	3 3/8	3.375	3.2938	3.2216	3.2397	0	42	8.11	8.31

See footnotes at end of table.

TABLE III.6.—*8-thread series, basic dimensions,* 8UN—Continued

Nominal size		Nominal size and basic major diameter, D	Basic pitch diameter, E	Minor diameter, external threads, K_s [b]	Minor diameter, internal threads, K_n [b]	Lead angle at basic pitch diameter, λ [b]		Sectional area at minor diameter at $D-2h_b$	Tensile stress area, $\pi\left(\frac{E}{2}-\frac{3H}{16}\right)^2$ [c]
Primary	Secondary								
1	2	3	4	5	6	7		8	9
in.	*in.*	*in.*	*in.*	*in.*	*in.*	*deg*	*min*	*in.*²	*in.*²
3½		3.500	3.4188	3.3466	3.3647	0	40	8.75	8.96
	3⅝	3.625	3.5438	3.4716	3.4897	0	39	9.42	9.64
3¾		3.750	3.6688	3.5966	3.6147	0	37	10.11	10.34
	3⅞	3.875	3.7938	3.7216	3.7397	0	36	10.83	11.06
4		4.000	3.9188	3.8466	3.8647	0	35	11.57	11.81
	4⅛	4.125	4.0438	3.9716	3.9897	0	34	12.34	12.59
4¼		4.250	4.1688	4.0966	4.1147	0	33	13.12	13.38
	4⅜	4.375	4.2938	4.2216	4.2397	0	32	13.94	14.21
4½		4.500	4.4188	4.3466	4.3647	0	31	14.78	15.1
	4⅝	4.625	4.5438	4.4716	4.4897	0	30	15.6	15.9
4¾		4.750	4.6688	4.5966	4.6147	0	29	16.5	16.8
	4⅞	4.875	4.7938	4.7216	4.7397	0	29	17.4	17.7
5		5.000	4.9188	4.8466	4.8647	0	28	18.4	18.7
	5⅛	5.125	5.0438	4.9716	4.9897	0	27	19.3	19.7
5¼		5.250	5.1688	5.0966	5.1147	0	26	20.3	20.7
	5⅜	5.375	5.2938	5.2216	5.2397	0	26	21.3	21.7
5½		5.500	5.4188	5.3466	5.3647	0	25	22.4	22.7
	5⅝	5.625	5.5438	5.4716	5.4897	0	25	23.4	23.8
5¾		5.750	5.6688	5.5966	5.6147	0	24	24.5	24.9
	5⅞	5.875	5.7938	5.7216	5.7397	0	24	25.6	26.0
6		6.000	5.9188	5.8466	5.8647	0	23	26.8	27.1

[a] This is a standard size of the UNC series.
[b] Design form. See fig. III.1, p. 2 in this Supplement.
[c] See formula under definition of tensile stress area on p. 102 in this Supplement.

TABLE III.7.—*12-thread series, basic dimensions,* 12UN

Nominal size		Nominal size and basic major diameter, D	Basic pitch diameter, E	Minor diameter, external threads, K_s [b]	Minor diameter, internal threads, K_n [b]	Lead angle at basic pitch diameter, λ		Sectional area at minor diameter at $D-2h_b$	Tensile stress area, $\pi\left(\frac{E}{2}-\frac{3H}{16}\right)^2$ [c]
Primary	Secondary								
1	2	3	4	5	6	7		8	9
in.	*in.*	*in.*	*in.*	*in.*	*in.*	*deg*	*min*	*in.*²	*in.*²
[a] 9/16		.5625	0.5084	0.4603	0.4723	2	59	0.162	0.182
5/8		.625	.5709	.5228	.5348	2	40	.210	.232
	11/16	.6875	.6334	.5853	.5973	2	24	.264	.289
3/4		.750	.6959	.6478	.6598	2	11	.323	.351
	13/16	.8125	.7584	.7103	.7223	2	0	.390	.420
7/8		.875	.8209	.7728	.7848	1	51	.462	.495
	15/16	.9375	.8834	8353	.8473	1	43	.540	.576
[a] 1		1.000	.9459	.8978	.9098	1	36	.625	.663
	1 1/16	1.0625	1.0084	.9603	.9723	1	30	.715	.756
[a] 1 1/8		1.125	1.0709	1.0228	1.0348	1	25	.812	.856
	1 3/16	1.1875	1.1334	1.0853	1.0973	1	20	.915	.961
[a] 1 1/4		1.250	1.1959	1.1478	1.1598	1	16	1.024	1.073
	1 5/16	1.3125	1.2584	1.2103	1.2223	1	12	1.139	1.191
[a] 1 3/8		1.375	1.3209	1.2728	1.2848	1	9	1.260	1.315
	1 7/16	1.4375	1.3834	1.3353	1.3473	1	6	1.388	1.445
[a] 1 1/2		1.500	1.4459	1.3978	1.4098	1	3	1.52	1.58
	1 9/16	1.5625	1.5084	1.4603	1.4723	1	0	1.66	1.72
1 5/8		1.625	1.5709	1.5228	1.5348	0	58	1.81	1.87
	1 11/16	1.6875	1.6334	1.5853	1.5973	0	56	1.96	2.03
1 3/4		1.750	1.6959	1.6478	1.6598	0	54	2.12	2.19
	1 13/16	1.8125	1.7584	1.7103	1.7223	0	52	2.28	2.35
1 7/8		1.875	1.8209	1.7728	1.7848	0	50	2.45	2.53
	1 15/16	1.9375	1.8834	1.8353	1.8473	0	48	2.63	2.71
2		2.000	1.9459	1.8978	1 9098	0	47	2.81	2.89
	2 1/8	2.125	2.0709	2.0228	2.0348	0	44	3.19	3.28
2 1/4		2.250	2.1959	2.1478	2.1598	0	42	3.60	3.69
	2 3/8	2.375	2.3209	2.2728	2.2848	0	39	4.04	4.13
2 1/2		2.500	2.4459	2.3978	2.4098	0	37	4.49	4.60
	2 5/8	2.625	2.5709	2.5228	2.5348	0	35	4.97	5.08
2 3/4		2.750	2.6959	2.6478	2.6598	0	34	5.48	5.59
	2 7/8	2.875	2.8209	2.7728	2.7848	0	32	6.01	6.13
3		3.000	2.9459	2.8978	2.9098	0	31	6.57	6.69
	3 1/8	3.125	3.0709	3.0228	3.0348	0	30	7.15	7.28
3 1/4		3.250	3.1959	3.1478	3.1598	0	29	7.75	7.89
	3 3/8	3.375	3.3209	3.2728	3.2848	0	27	8.38	8.52

See footnotes at end of table.

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TABLE III. 7.—*12-thread series, basic dimensions,* 12UN—Continued

Nominal size		Nominal size and basic major diameter, D	Basic pitch diameter, E	Minor diameter, external threads, K_s [b]	Minor diameter, internal threads, K_n [b]	Lead angle at basic pitch diameter, λ		Sectional area at minor diameter at $D-2h_b$	Tensile stress area, $\pi\left(\frac{E}{2}-\frac{3H}{16}\right)^2$ [c]
Primary	Secondary								
1	2	3	4	5	6	7		8	9
in.	*in.*	*in.*	*in.*	*in.*	*in.*	*deg*	*min*	*in.*^{2}	*in.*^{2}
3½		3.500	3.4459	3.3978	3.4098	0	26	9.03	9.18
	3⅝	3.625	3.5709	3.5228	3.5348	0	26	9.71	9.86
3¾		3.750	3.6959	3.6478	3.6598	0	25	10.42	10.57
	3⅞	3.875	3.8209	3.7728	3.7848	0	24	11.14	11.30
4		4.000	3.9459	3.8978	3.9098	0	23	11.90	12.06
	4⅛	4.125	4.0709	4.0228	4.0348	0	22	12.67	12.84
4¼		4.250	4.1959	4.1478	4.1598	0	22	13.47	13.65
	4⅜	4.375	4.3209	4.2728	4.2848	0	21	14.30	14.48
4½		4.500	4.4459	4.3978	4.4098	0	21	15.1	15.3
	4⅝	4.625	4.5709	4.5228	4.5348	0	20	16.0	16.2
		4.750	4.6959	4.6478	4.6598	0	19	16.9	17.1
4¾	4⅞	4.875	4.8209	4.7728	4.7848	0	19	17.8	18.0
5		5.000	4.9459	4.8978	4.9098	0	18	18.8	19.0
	5⅛	5.125	5.0709	5.0228	5.0348	0	18	19.8	20.0
5¼		5.250	5.1959	5.1478	5.1598	0	18	20.8	21.0
	5⅜	5.375	5.3209	5.2728	5.2848	0	17	21.8	22.0
5½		5.500	5.4459	5.3978	5.4098	0	17	22.8	23.1
	5⅝	5.625	5.5709	5.5228	5.5348	0	16	23.9	24.1
5¾		5.750	5.6959	5.6478	5.6598	0	16	25.0	25.2
	5⅞	5.875	5.8209	5.7728	5.7848	0	16	26.1	26.4
6		6.000	5.9459	5.8978	5.9098	0	15	27.3	27.5

[a] These are standard sizes of the UNC or UNF series.
[b] Design form. See fig. III.1, p. 2 in this Supplement.
[c] See formula under definition of tensile stress area on p. 102 in this Supplement.

TABLE III.8.—*16-thread series, basic dimensions,* 16UN

Nominal size		Nominal size and basic major diameter, D	Basic pitch diameter, E	Minor diameter, external threads, K_s [b]	Minor diameter, internal threads, K_n [b]	Lead angle at basic pitch diameter, λ		Sectional area at minor diameter at $D-2h_b$	Tensile stress area, $\pi\left(\frac{E}{2}-\frac{3H}{16}\right)^2$ [c]
Primary	Secondary								
1	2	3	4	5	6	7		8	9
in.	*in.*	*in.*	*in.*	*in.*	*in.*	*deg*	*min*	*in.*^{2}	*in.*^{2}
[a] 3/8		.375	0.3344	0.2983	0.3073	3	24	0.0678	0.0775
7/16		.4375	.3969	.3608	.3698	2	52	.0997	.1114
½		.500	.4594	.4233	.4323	2	29	.1378	.151
9/16		.5625	.5219	.4858	.4948	2	11	.182	.198
5/8		.625	.5844	.5483	.5573	1	57	.232	.250
	1 1/16	.6875	.6469	.6108	.6198	1	46	.289	.308
[a] ¾		.750	.7094	.6733	.6823	1	36	.351	.373
	1 3/16	.8125	.7719	.7358	.7448	1	29	.420	.444
⅞		.875	.8344	.7983	.8073	1	22	.495	.521
	1 5/16	.9375	.8969	.8608	.8698	1	16	.576	.604
1		1.000	.9594	.9233	.9323	1	11	.663	.693
	1 1/16	1.0625	1.0219	.9858	.9948	1	7	.756	.788
1⅛		1.125	1.0844	1.0483	1.0573	1	3	.856	.889
	1 3/16	1.1875	1.1469	1.1108	1.1198	1	0	.961	.997
1¼		1.250	1.2094	1.1733	1.1823	0	57	1.073	1.111
	1 5/16	1.3125	1.2719	1.2358	1.2448	0	54	1.191	1.230
1⅜		1.375	1.3344	1.2983	1.3073	0	51	1.315	1.356
	1 7/16	1.4375	1.3969	1.3608	1.3698	0	49	1.445	1.488
1½		1.500	1.4594	1.4233	1.4323	0	47	1.58	1.63
	1 9/16	1.5625	1.5219	1.4858	1.4948	0	45	1.72	1.77
1⅝		1.625	1.5844	1.5483	1.5573	0	43	1.87	1.92
	1 11/16	1.6875	1.6469	1.6108	1.6198	0	42	2.03	2.08
1¾		1.750	1.7094	1.6733	1.6823	0	40	2.19	2.24
	1 13/16	1.8125	1.7719	1.7358	1.7448	0	39	2.35	2.41
1⅞		1.875	1.8344	1.7983	1.8073	0	37	2.53	2.58
	1 15/16	1.9375	1.8969	1.8608	1.8698	0	36	2.71	2.77
2		2.000	1.9594	1.9233	1.9323	0	35	2.89	2.95
	2⅛	2.125	2.0844	2.0483	2.0573	0	33	3.28	3.35
2¼		2.250	2.2094	2.1733	2.1823	0	31	3.69	3.76
	2⅜	2.375	2.3344	2.2983	2.3073	0	29	4.13	4.21
2½		2.500	2.4594	2.4233	2.4323	0	28	4.60	4.67
	2⅝	2.625	2.5844	2.5483	2.5573	0	26	5.08	5.16
2¾		2.750	2.7094	2.6733	2.6823	0	25	5.59	5.68
	2⅞	2.875	2.8344	2.7983	2.8073	0	24	6.13	6.22

See footnotes at end of table.

TABLE III. 8.—*16-thread series, basic dimensions,* 16UN—Continued

Nominal size		Nominal size and basic major diameter, D	Basic pitch diameter, E	Minor diameter, external threads, K_s [b]	Minor diameter, internal threads, K_n [b]	Lead angle at basic pitch diameter, λ		Sectional area at minor diameter at $D-2h_b$	Tensile stress area, $\pi\left(\frac{E}{2}-\frac{3H}{16}\right)^2$ [c]
Primary	Secondary								
1	2	3	4	5	6	7		8	9
in.	*in.*	*in.*	*in.*	*in.*	*in.*	*deg*	*min*	*in.²*	*in.²*
3		3.000	2.9594	2.9233	2.9323	0	23	6.69	6.78
	3⅛	3.125	3.0844	3.0483	3.0573	0	22	7.28	7.37
3¼		3.250	3.2094	3.1733	3.1823	0	21	7.89	7.99
	3⅜	3.375	3.3344	3.2983	3.3073	0	21	8.52	8.63
3½		3.500	3.4594	3.4233	3.4323	0	20	9.18	9.29
	3⅝	3.625	3.5844	3.5483	3.5573	0	19	9.86	9.98
3¾		3.750	3.7094	3.6733	3.6823	0	18	10.57	10.69
	3⅞	3.875	3.8344	3.7983	3.8073	0	18	11.30	11.43
4		4.000	3.9594	3.9233	3.9323	0	17	12.06	12.19
	4⅛	4.125	4.0844	4.0483	4.0573	0	17	12.84	12.97
4¼		4.250	4.2094	4.1733	4.1823	0	16	13.65	13.78
	4⅜	4.375	4.3344	4.2983	4.3073	0	16	14.48	14.62
4½		4.500	4.4594	4.4233	4.4323	0	15	15.34	15.5
	4⅝	4.625	4.5844	4.5483	4.5573	0	15	16.2	16.4
4¾		4.750	4.7094	4.6733	4.6823	0	15	17.1	17.3
	4⅞	4.875	4.8344	4.7983	4.8073	0	14	18.0	18.2
5		5.000	4.9594	4.9233	4.9323	0	14	19.0	19.2
	5⅛	5.125	5.0844	5.0483	5.0573	0	13	20.0	20.1
5¼		5.250	5.2094	5.1733	5.1823	0	13	21.0	21.1
	5⅜	5.375	5.3344	5.2983	5.3073	0	13	22.0	22.2
5½		5.500	5.4594	5.4233	5.4323	0	13	23.1	23.2
	5⅝	5.625	5.5844	5.5483	5.5573	0	12	24.1	24.3
5¾		5.750	5.7094	5.6733	5.6823	0	12	25.2	25.4
	5⅞	5.875	5.8344	5.7983	5.8073	0	12	26.4	26.5
6		6.000	5.9594	5.9233	5.9323	0	11	27.5	27.7

[a] These are standard sizes of the UNC or UNF Series.
[b] Design form. See fig. III.1, p. 2 in this Supplement.
[c] See formula under definition of tensile stress area on p. 102 in this Supplement.

TABLE III.8a.—*4-thread series, basic dimensions,* 4UN

Nominal size		Nominal size and basic major diameter, D	Basic pitch diameter, E	Minor diameter, external threads, K_s [b]	Minor diameter, internal threads, K_n [b]	Lead angle at basic pitch diameter, λ		Sectional area at minor diameter at $D-2h_b$	Tensile stress area, $\pi\left(\frac{E}{2}-\frac{3H}{16}\right)^2$ [c]
Primary	Secondary								
1	2	3	4	5	6	7		8	9
in.	*in.*	*in.*	*in.*	*in.*	*in.*	*deg*	*min*	*in.²*	*in.²*
[a] 2½		2.500	2.3376	2.1933	2.2294	1	57	3.72	4.00
	2⅝	2.625	2.4626	2.3183	2.3544	1	51	4.16	4.45
[a] 2¾		2.750	2.5876	2.4433	2.4794	1	46	4.62	4.93
	2⅞	2.875	2.7126	2.5683	2.6044	1	41	5.11	5.44
[a] 3		3.000	2.8376	2.6933	2.7294	1	36	5.62	5.97
	3⅛	3.125	2.9626	2.8183	2.8544	1	32	6.16	6.52
[a] 3¼		3.250	3.0876	2.9433	2.9794	1	29	6.72	7.10
	3⅜	3.375	3.2126	3.0683	3.1044	1	25	7.31	7.70
[a] 3½		3.500	3.3376	3.1933	3.2294	1	22	7.92	8.33
	3⅝	3.625	3.4626	3.3183	3.3544	1	19	8.55	9.00
[a] 3¾		3.750	3.5876	3.4433	3.4794	1	16	9.21	9.66
	3⅞	3.875	3.7126	3.5683	3.6044	1	14	9.90	10.36
[a] 4		4.000	3.8376	3.6933	3.7294	1	11	10.61	11.08
	4⅛	4.125	3.9626	3.8183	3.8544	1	9	11.34	11.83
4¼		4.250	4.0876	3.9433	3.9794	1	7	12.10	12.61
	4⅜	4.375	4.2126	4.0683	4.1044	1	5	12.88	13.41
4½		4.500	4.3376	4.1933	4.2294	1	3	13.69	14.23
	4⅝	4.625	4.4626	4.3183	4.3544	1	1	14.52	15.1
4¾		4.750	4.5876	4.4433	4.4794	1	0	15.4	15.9
	4⅞	4.875	4.7126	4.5683	4.6044	0	58	16.3	16.8
5		5.000	4.8376	4.6933	4.7294	0	57	17.2	17.8
	5⅛	5.125	4.9626	4.8183	4.8544	0	55	18.1	18.7
5¼		5.250	5.0876	4.9433	4.9794	0	54	19.1	19.7
	5⅜	5.375	5.2126	5.0683	5.1044	0	52	20.0	20.7
5½		5.500	5.3376	5.1933	5.2294	0	51	21.0	21.7
	5⅝	5.625	5.4626	5.3183	5.3544	0	50	22.1	22.7
5¾		5.750	5.5876	5.4433	5.4794	0	49	23.1	23.8
	5⅞	5.875	5.7126	5.5683	5.6044	0	48	24.2	24.9
6		6.000	5.8376	5.6933	5.7294	0	47	25.3	26.0

[a] These are standard sizes of the UNC series.
[b] Design form. See fig. III.1, p. 2 in this Supplement.
[c] See formula under definition of tensile stress area on p. 102 in this Supplement.

TABLE III.Sb.—*6-thread series, basic dimensions,* 6UN

Nominal size		Nominal size and basic major diameter, D	Basic pitch diameter, E	Minor diameter, external threads, K_s [b]	Minor diameter, internal threads, K_n [b]	Lead angle at basic pitch diameter, λ		Sectional area at minor diameter at $D-2h_b$	Tensile stress area, $\pi\left(\frac{E}{2}-\frac{3H}{16}\right)^2$ [c]
Primary	Secondary								
1	2	3	4	5	6	7		8	9
in.	*in.*	*in.*	*in.*	*in.*	*in.*	*deg*	*min*	*in.*^{2}	*in.*^{2}
[a] 1⅜		1.375	1.2667	1.1705	1.1946	2	24	1.054	1.155
	1 7/16	1.4375	1.3292	1.2330	1.2571	2	17	1.171	1.277
[a] 1½		1.500	1.3917	1.2955	1.3196	2	11	1.294	1.405
	1 9/16	1.5625	1.4542	1.3580	1.3821	2	5	1.423	1.54
1⅝		1.625	1.5167	1.4205	1.4446	2	0	1.56	1.68
	1 11/16	1.6875	1.5792	1.4830	1.5071	1	55	1.70	1.83
1¾		1.750	1.6417	1.5455	1.5696	1	51	1.85	1.98
	1 13/16	1.8125	1.7042	1.6080	1.6321	1	47	2.00	2.14
1⅞		1.875	1.7667	1.6705	1.6946	1	43	2.16	2.30
	1 15/16	1.9375	1.8292	1.7330	1.7571	1	40	2.33	2.47
2		2.000	1.8917	1.7955	1.8196	1	36	2.50	2.65
	2⅛	2.125	2.0167	1.9205	1.9446	1	30	2.86	3.03
2¼		2.250	2.1417	2.0455	2.0696	1	25	3.25	3.42
	2⅜	2.375	2.2667	2.1705	2.1946	1	20	3.66	3.85
2½		2.500	2.3917	2.2955	2.3196	1	16	4.10	4.29
	2⅝	2.625	2.5167	2.4205	2.4446	1	12	4.56	4.76
2¾		2.750	2.6417	2.5455	2.5696	1	9	5.04	5.26
	2⅞	2.875	2.7667	2.6705	2.6946	1	6	5.55	5.78
3		3.000	2.8917	2.7955	2.8196	1	3	6.09	6.33
	3⅛	3.125	3.0167	2.9205	2.9446	1	0	6.64	6.89
3¼		3.250	3.1417	3.0455	3.0696	0	58	7.23	7.49
	3⅜	3.375	3.2667	3.1705	3.1946	0	56	7.84	8.11
3½		3.500	3.3917	3.2955	3.3196	0	54	8.47	8.75
	3⅝	3.625	3.5167	3.4205	3.4446	0	52	9.12	9.42
3¾		3.750	3.6417	3.5455	3.5696	0	50	9.81	10.11
	3⅞	3.875	3.7667	3.6705	3.6946	0	48	10.51	10.83
4		4.000	3.8917	3.7955	3.8196	0	47	11.24	11.57
	4⅛	4.125	4.0167	3.9205	3.9446	0	45	12.00	12.33
4¼		4.250	4.1417	4.0455	4.0696	0	44	12.78	13.12
	4⅜	4.375	4.2667	4.1705	4.1946	0	43	13.58	13.94
4½		4.500	4.3917	4.2955	4.3196	0	42	14.41	14.78
	4⅝	4.625	4.5167	4.4205	4.4446	0	40	15.3	15.6
4¾		4.750	4.6417	4.5455	4.5696	0	39	16.1	16.5
	4⅞	4.875	4.7667	4.6705	4.6946	0	38	17.0	17.5
5		5.000	4.8917	4.7955	4.8196	0	37	18.0	18.4
	5⅛	5.125	5.0167	4.9205	4.9446	0	36	18.9	19.3
5¼		5.250	5.1417	5.0455	5.0696	0	35	19.9	20.3
	5⅜	5.375	5.2667	5.1705	5.1946	0	35	20.9	21.3
5½		5.500	5.3917	5.2955	5.3196	0	34	21.9	22.4
	5⅝	5.625	5.5167	5.4205	5.4446	0	33	23.0	23.4
5¾		5.750	5.6417	5.5455	5.5696	0	32	24.0	24.5
	5⅞	5.875	5.7667	5.6705	5.6946	0	32	25.1	25.6
6		6.000	5.8917	5.7955	5.8196	0	31	26.3	26.8

[a] These are standard sizes of the UNC series.
[b] Design form. See fig. III.1, p. 2 in this Supplement.
[c] See formula under definition of tensile stress area on p. 102 in this Supplement.

TABLE III.8c.—*20-thread series, basic dimensions,* 20UN

Nominal size		Nominal size and basic major diameter, D	Basic pitch diameter, E	Minor diameter, external threads, K_s [b]	Minor diameter, internal threads, K_n [b]	Lead angle at basic pitch diameter, λ		Sectional area at minor diameter at $D-2h_b$	Tensile stress area, $\pi\left(\frac{E}{2}-\frac{3H}{16}\right)^2$ [c]
Primary	Secondary								
1	2	3	4	5	6	7		8	9
in.	*in.*	*in.*	*in.*	*in.*	*in.*	*deg*	*min*	*in.*²	*in.*²
[a] 1/4		.250	0.2175	0.1887	0.1959	4	11	0.0269	0.0318
5/16		.3125	.2800	.2512	.2584	3	15	.0481	.0547
3/8		.375	.3425	.3137	.3209	2	40	.0755	.0836
[a] 7/16		.4375	.4050	.3762	.3834	2	15	.1090	.1187
[a] 1/2		.500	.4675	.4387	.4459	1	57	.1486	.160
9/16		.5625	.5300	.5012	.5084	1	43	.194	.207
5/8		.625	.5925	.5637	.5709	1	32	.246	.261
	1 1/16	.6875	.6550	.6262	.6334	1	24	.304	.320
[a] 3/4		.750	.7175	.6887	.6959	1	16	.369	.386
	[a] 13/16	.8125	.7800	.7512	.7584	1	10	.439	.458
[a] 7/8		.875	.8425	.8137	.8209	1	5	.515	.536
	[a] 15/16	.9375	.9050	.8762	.8834	1	0	.598	.620
[a] 1		1.000	.9675	.9387	.9459	0	57	.687	.711
	1 1/16	1.0625	1.0300	1.0012	1.0084	0	53	.782	.807
1 1/8		1.125	1.0925	1.0637	1.0709	0	50	.882	.910
	1 3/16	1.1875	1.1550	1.1262	1.1334	0	47	.990	1.018
1 1/4		1.250	1.2175	1.1887	1.1959	0	45	1.103	1.133
	1 5/16	1.3125	1.2800	1.2512	1.2584	0	43	1.222	1.254
1 3/8		1.375	1.3425	1.3137	1.3209	0	41	1.348	1.382
	1 7/16	1.4375	1.4050	1.3762	1.3834	0	39	1.479	1.51
1 1/2		1.500	1.4675	1.4387	1.4459	0	37	1.62	1.65
	1 9/16	1.5625	1.5300	1.5012	1.5084	0	36	1.76	1.80
1 5/8		1.625	1.5925	1.5637	1.5709	0	34	1.91	1.95
	1 11/16	1.6875	1.6550	1.6262	1.6334	0	33	2.07	2.11
1 3/4		1.750	1.7175	1.6887	1.6959	0	32	2.23	2.27
	1 13/16	1.8125	1.7800	1.7512	1.7584	0	31	2.40	2.44
1 7/8		1.875	1.8425	1.8137	1.8209	0	30	2.57	2.62
	1 15/16	1.9375	1.9050	1.8762	1.8834	0	29	2.75	2.80
2		2.000	1.9675	1.9387	1.9459	0	28	2.94	2.99
	2 1/8	2.125	2.0925	2.0637	2.0709	0	26	3.33	3.39
2 1/4		2.250	2.2175	2.1887	2.1959	0	25	3.75	3.81
	2 3/8	2.375	2.3425	2.3137	2.3209	0	23	4.19	4.25
2 1/2		2.500	2.4675	2.4387	2.4459	0	22	4.66	4.72
	2 5/8	2.625	2.5925	2.5637	2.5709	0	21	5.15	5.21
2 3/4		2.750	2.7175	2.6887	2.6959	0	20	5.66	5.73
	2 7/8	2.875	2.8425	2.8137	2.8209	0	19	6.20	6.27
3		3.000	2.9675	2.9387	2.9459	0	18	6.77	6.84

[a] These are standard sizes of the UNC, UNF, or UNEF series.
[b] Design form. See fig. III.1, p. 2 in this Supplement.
[c] See formula under definition of tensile stress area on p. 102 in this Supplement.

TABLE III.8d.—*28-thread series, basic dimensions,* 28UN

Nominal size		Nominal size and basic major diameter, D	Basic pitch diameter, E	Minor diameter, external threads, K_s [b]	Minor diameter, internal threads, K_n [b]	Lead angle at basic pitch diameter, λ		Sectional area at minor diameter at $D-2h_b$	Tensile stress area, $\pi\left(\frac{E}{2}-\frac{3H}{16}\right)^2$ [c]
Primary	Secondary								
1	2	3	4	5	6	7		8	9
in.	*No. in.*	*in.*	*in.*	*in.*	*in.*	*deg*	*min*	*in.²*	*in.²*
	[a] 12	.216	0.1928	0.1722	0.1773	3	22	0.0226	0.0258
[a] ¼		.250	.2268	.2062	.2113	2	52	.0326	.0364
5/16		.3125	.2893	.2687	.2738	2	15	.0556	.0606
3/8		.375	.3518	.3312	.3363	1	51	.0848	.0909
[a] 7/16		.4375	.4143	.3937	.3988	1	34	.1201	.1274
[a] ½		.500	.4768	.4562	.4613	1	22	.162	.170
9/16		.5625	.5393	.5187	.5238	1	12	.209	.219
5/8		.625	.6018	.5812	.5863	1	5	.263	.274
	11/16	.6875	.6643	.6437	.6488	0	59	.323	.335
3/4		.750	.7268	.7062	.7113	0	54	.389	.402
	13/16	.8125	.7893	.7687	.7738	0	50	.461	.475
7/8		.875	.8518	.8312	.8363	0	46	.539	.554
	15/16	.9375	.9143	.8937	.8988	0	43	.624	.640
1		1.000	.9768	.9562	.9613	0	40	.714	.732
	1 1/16	1.0625	1.0393	1.0187	1.0238	0	38	.811	.830
1 1/8		1.125	1.1018	1.0812	1.0863	0	35	.914	.933
	1 3/16	1.1875	1.1643	1.1437	1.1488	0	34	1.023	1.044
1 1/4		1.250	1.2268	1.2062	1.2113	0	32	1.138	1.160
	1 5/16	1.3125	1.2893	1.2687	1.2738	0	30	1.259	1.282
1 3/8		1.375	1.3518	1.3312	1.3363	0	29	1.386	1.411
	1 7/16	1.4375	1.4143	1.3937	1.3988	0	28	1.52	1.55
1 ½		1.500	1.4768	1.4562	1.4613	0	26	1.66	1.69

[a] These are standard sizes of the UNF or UNEF series.
[b] Design form. See fig. III.1, p. 2 in this Supplement.
[c] See formula under definition of tensile stress area on p. 102 in this Supplement.

TABLE III.8e.—*32-thread series, basic dimensions,* 32UN

Nominal size		Nominal size and basic major diameter, D	Basic pitch diameter, E	Minor diameter, external threads, K_s [b]	Minor diameter, internal threads, K_n [b]	Lead angle at basic pitch diameter, λ		Sectional area at minor diameter at $D-2h_b$	Tensile stress area, $\pi\left(\frac{E}{2}-\frac{3H}{16}\right)^2$ [c]
Primary	Secondary								
1	2	3	4	5	6	7		8	9
No. in.	*No. in.*	*in.*	*in.*	*in.*	*in.*	*deg*	*min*	*in.²*	*in.²*
[a] 6		.138	0.1177	0.0997	0.1042	4	50	0.00745	0.00909
[a] 8		.164	.1437	.1257	.1302	3	58	.01196	.0140
[a] 10		.190	.1697	.1517	.1562	3	21	.01750	.0200
	[a] 12	.216	.1957	.1777	.1822	2	55	.0242	.0270
[a] ¼		.250	.2297	.2117	.2162	2	29	.0344	.0379
[a] 5/16		.3125	.2922	.2742	.2787	1	57	.0581	.0625
[a] 3/8		.375	.3547	.3367	.3412	1	36	.0878	.0932
7/16		.4375	.4172	.3992	.4037	1	22	.1237	.1301
½		.500	.4797	.4617	.4662	1	11	.166	.173
9/16		.5625	.5422	.5242	.5287	1	3	.214	.222
5/8		.625	.6047	.5867	.5912	0	57	.268	.278
	11/16	.6875	.6672	.6492	.6537	0	51	.329	.339
3/4		.750	.7297	.7117	.7162	0	47	.395	.407
	13/16	.8125	.7922	.7742	.7787	0	43	.468	.480
7/8		.875	.8547	.8367	.8412	0	40	.547	.560
	15/16	.9375	.9172	.8992	.9037	0	37	.632	.646
1		1.000	.9797	.9617	.9662	0	35	.723	.738

[a] These are standard sizes of the UNC, UNF, or UNEF series.
[b] Design form. See fig. III.1, p. 2 in this Supplement.
[c] See formula under definition of tensile stress area on p. 102 in this Supplement.

TABLE III.9.—*Increments in pitch diameter tolerance formula* [a]

$$[\text{PD tolerance} = C(0.0015\sqrt[3]{D} + 0.0015\sqrt{L_e} + 0.015\sqrt[3]{p^2})]$$

Diameter increments				Length of engagement increments													
				Based on [b]					Based on [b]					Based on [b]			
D	$0.0015\sqrt[3]{D}$	D	$0.0015\sqrt[3]{D}$	$1D$ for sizes	$9p$ for tpi	$20p$ for tpi	L_e	$0.0015\times\sqrt{L_e}$	$1D$ for sizes	$9p$ for tpi	$20p$ for tpi	L_e	$0.0015\times\sqrt{L_e}$	$1D$ for sizes	$20p$ for tpi	L_e	$0.0015\times\sqrt{L_e}$
1	2	1	2	3	4	5	6	7	3	4	5	6	7	3	5	6	7
in.	*in.*	*in.*	*in.*	*No. in.*			*in.*	*in.*	*in.*			*in.*	*in.*	*in.*		*in.*	*in.*
0.0600	0.000587	1.9375	0.001870	0	------	------	0.0600	0.000367	½	18	40	0.5000	0.001061	2⅜	------	2.3750	0.002312
.0625	.000595	2.0000	.001890	1/16	------	------	.0625	.000375	------	------	36	.5556	.001118	2½	8	2.5000	.002372
.0730	.000627	2.1250	.001928	1	------	------	.0730	.000405	9/16	16	------	.5625	.001125	2⅝	------	2.6250	.002430
.0860	.000662	2.2500	.001966	5/64	------	------	.0781	.000419	⅝	------	32	.6250	.001186	2¾	------	2.7500	.002487
.0938	.000682	2.3750	.002001	2	------	------	.0860	.000440	------	14	------	.6429	.001203	------	7	2.8571	.002535
.0990	.000694	2.5000	.002036	3/32	------	------	.0938	.000459	11/16	------	------	.6875	.001244	2⅞	------	2.8750	.002543
.1120	.000723	2.6250	.002069	3	------	------	.0990	.000472	------	13	------	.6923	.001248	3	------	3.0000	.002598
.1250	.000750	2.7500	.002102	7/64	------	------	.1094	.000496	------	------	28	.7143	.001268	3⅛	------	3.1250	.002652
.1380	.000775	2.8750	.002133	4	------	------	.1120	.000502	------	------	27	.7407	.001291	3¼	------	3.2500	.002704
.1640	.000821	3.0000	.002163	------	80	------	.1125	.000503	¾	12	------	.7500	.001299	------	6	3.3333	.002739
.1875	.000859	3.1250	.002193	5	72	------	.1250	.000530	------	11½	------	.7826	.001327	3⅜	------	3.3750	.002756
.1900	.000862	3.2500	.002222	6	------	------	.1380	.000557	13/16	------	------	.8125	.001352	3½	------	3.5000	.002806
.2160	.000900	3.3750	.002250	------	64	------	.1406	.000562	------	11	------	.8182	.001357	3⅝	------	3.6250	.002856
.2500	.000945	3.5000	.002277	9/32	------	------	.1562	.000593	------	------	24	.8333	.001369	3¾	------	3.7500	.002905
.3125	.001018	3.6250	.002304	------	56	------	.1607	.000601	⅞	------	------	.8750	.001403	3⅞	------	3.8750	.002953
.3750	.001082	3.7500	.002330	8	------	------	.1640	.000607	------	10	------	.9000	.001423	4	5	4.0000	.003000
.4375	.001139	3.8750	.002356	11/64	------	------	.1719	.000622	15/16	------	------	.9375	.001452	4⅛	------	4.1250	.003047
.5000	.001191	4.0000	.002381	3/16	48	------	.1875	.000650	1	9	20	1.0000	.001500	4¼	------	4.2500	.003092
.5625	.001238	4.1250	.002406	10	------	------	.1900	.000654	1 1/16	------	------	1.0625	.001546	4⅜	------	4.3750	.003137
.6250	.001282	4.2500	.002430	13/64	------	------	.2031	.000676	------	------	18	1.1111	.001581	------	4½	4.4444	.003162
.6875	.001324	4.3750	.002453	------	44	------	.2045	.000678	1⅛	8	------	1.1250	.001591	4½	------	4.5000	.003182
.7500	.001363	4.5000	.002476	12	------	------	.2160	.000697	1 3/16	------	------	1.1875	.001635	4⅝	------	4.6250	.003226
.8125	.001400	4.6250	.002499	7/32	------	------	.2188	.000702	1¼	------	16	1.2500	.001677	4¾	------	4.7500	.003269
.8750	.001435	4.7500	.002521	------	40	------	.2250	.000712	------	7	------	1.2857	.001701	4⅞	------	4.8750	.003312
.9375	.001468	4.8750	.002543	15/64	------	------	.2344	.000726	1 5/16	------	------	1.3125	.001718	5	4	5.0000	.003354
1.0000	.001500	5.0000	.002565	¼	36	80	.2500	.000750	1⅜	------	------	1.3750	.001759	5⅛	------	5.1250	.003396
1.0625	.001531	5.1250	.002586	17/64	------	------	.2656	.000773	------	------	14	1.4286	.001793	5¼	------	5.2500	.003437
1.1250	.001560	5.2500	.002607	------	------	72	.2778	.000791	1 7/16	------	------	1.4375	.001798	5⅜	------	5.3750	.003478
1.1875	.001588	5.3750	.002628	------	32	------	.2812	.000795	1½	6	------	1.5000	.001837	5½	------	5.5000	.003518
1.2500	.001616	5.5000	.002648	19/64	------	------	.2969	.000817	------	------	13	1.5385	.001861	5⅝	------	5.6250	.003558
1.3125	.001642	5.6250	.002668	5/16	------	64	.3125	.000839	1 9/16	------	------	1.5625	.001875	5¾	------	5.7500	.003597
1.3750	.001668	5.7500	.002687	------	28	------	.3214	.000850	1⅝	------	------	1.6250	.001912	5⅞	------	5.8750	.003636
1.4375	.001693	5.8750	.002707	21/64	------	------	.3281	.000859	------	------	12	1.6667	.001936	6	------	6.0000	.003674
1.5000	.001717	6.0000	.002726	------	27	60	.3333	.000866	1 11/16	------	------	1.6875	.001949	6½	------	6.5000	.003824
1.5625	.001741	7.0000	.002869	11/32	------	------	.3438	.000880	------	------	11½	1.7391	.001978	7	------	7.0000	.003969
1.6250	.001764	8.0000	.003000	------	------	56	.3571	.000896	1¾	------	------	1.7500	.001984	7½	------	7.5000	.004108
1.6875	.001786	9.0000	.003120	23/64	------	------	.3594	.000899	------	5	------	1.8000	.002012	8	------	8.0000	.004243
1.7500	.001808	10.0000	.003232	⅜	24	------	.3750	.000919	1 13/16	------	------	1.8125	.002019	8½	------	8.5000	.004373
1.8125	.001829	12.0000	.003434	25/64	------	------	.3906	.000937	------	------	11	1.8182	.002023	9	------	9.0000	.004500
1.8750	.001850	14.0000	.003615	13/32	------	------	.4062	.000956	1⅞	------	------	1.8750	.002054	9½	------	9.5000	.004623
		16.0000	.003780	------	------	48	.4167	.000968	1 15/16	------	------	1.9375	.002088	10	------	10.0000	.004743
		18.0000	.003931	27/64	------	------	.4219	.000974	2	4½	10	2.0000	.002121	10½	------	10.5000	.004861
		20.0000	.004072	7/16	------	------	.4375	.000992	2⅛	------	------	2.1250	.002187	11	------	11.0000	.004975
		24.0000	.004327	------	20	------	.4500	.001006	------	------	9	2.2222	.002236	11½	------	11.5000	.005087
				------	------	44	.4545	.001011	2¼	4	------	2.2500	.002250	12	------	12.0000	.005196

Pitch increments

Threads per inch	$0.015\sqrt[3]{p^2}$	Threads per inch	$0.015\sqrt[3]{p^2}$	Threads per inch	$0.015\sqrt[3]{p^2}$	Threads per inch	$0.015\sqrt[3]{p^2}$	Threads per inch	$0.015\sqrt[3]{p^2}$	Threads per inch	$0.015\sqrt[3]{p^2}$	Threads per inch	$0.015\sqrt[3]{p^2}$
	in.		*in.*		*in.*		*in.*		*in.*		*in.*		*in.*
80	0.000808	50	0.001105	36	0.001376	27	0.001667	18	0.002184	11½	0.002944	7	0.004099
72	.000867	48	.001136	34	.001429	26	.001709	16	.002362	11	.003033	6	.004543
64	.000938	44	.001204	32	.001488	24	.001803	14	.002582	10	.003232	5½	.004814
60	.000979	42	.001241	30	.001554	22	.001910	13	.002713	9	.003467	5	.005130
56	.001025	40	.001282	28	.001627	20	.002036	12	.002862	8	.003750	4½	.005503
												4	.005953

[a] For class 2A, $C=1$. For other classes, values of C are given in the text, pp. 21 and 22, Part I.

[b] For example: $L_e=0.5000$ is equivalent to one diameter for the ½-in. size, 9 pitches for 18 threads per inch, and 20 pitches for 40 threads per inch.

p. 22, (*b*) *Length of engagement:* Revise to read:

"(*b*) *Length of engagement.*—The pitch diameter tolerances specified in table III.10 in this Supplement for the UNC, UNF, 4UN, 6UN, and 8UN series are based on a length of engagement equal to the basic major (nominal) diameter and are applicable for lengths of engagement up to 1½ diameters.

Where the length of engagement exceeds that for which these tolerances are applicable, the pitch diameter tolerances should be computed from the formula (table III.10) values for the standard lengths of engagement of one diameter, as follows: for lengths of engagement over 1½ to 3 diameters, the pitch diameter tolerances are 125 percent of the formula values; and for lengths of engagement over 3 diameters, the tolerances are 150 percent of the formula values.

The pitch diameter tolerances specified in table III.10 in this Supplement for the UNEF, 12UN, 16UN, 20UN, 28UN, and 32UN series are based on a length of engagement of 9 pitches and are applicable for lengths of engagement up to 15 pitches.

Where the length of engagement exceeds that for which these tolerances are applicable, the pitch diameter tolerances should be computed from the formula (table III.10) values for the standard lengths of engagement of 9 pitches, as follows: for lengths of engagement over 15 to 30 pitches, the pitch diameter tolerances are 125 percent of the formula values; and for lengths of engagement over 30 pitches, the tolerances are 150 percent of the formula values."

p.22, (*c*) *Limits of size:* Revise to read:

"(*c*) *Limits of size.*[5a]—With respect to the pitch diameter limits of size, it is intended, except as hereinafter qualified, that no portion of the complete thread be permitted to project beyond the envelope defined by the maximum-material limits on the one hand, or beyond that defined by the minimum-material limits on the other, and thus be outside of the tolerance zone as illustrated in figures III.3 and III.4, Part I.[5b]

"Diameter equivalents of variations in lead, uniformity of helix, and flank angles are in the direction toward maximum material. Also included in pitch-diameter limits are other variations from size and profile, such as taper, out-of-round, and surface defects. Thus the maximum-material pitch diameter limits are a limitation of the virtual diameter (effective size) *and are so specified herein for all thread classes.* It is intended that diameter equivalents of deviations in any given element except pitch diameter should not exceed one-half of the pitch-diameter tolerance. Values are given in table III.11, p. 33 in this Supplement, for deviations in lead and half-angle equivalent to one-half of pitch diameter tolerances. Flank angle equivalents should be based on a depth of thread engagement of $5H/8$.

"Variations in taper and roundness of the pitch diameter, together with variations of the pitch diameter as a whole, may be in the direction of minimum material and thus the minimum-material pitch diameter limit may be specified as a limitation of the pitch diameter as a single element. However, in view of the interrelation of the pitch diameter, variations in lead and flank angle, etc., together with practical considerations relating to established production processes, product application and inspection procedures, except for class 3A it is customary to base acceptance at the minimum-material condition (minimum pitch diameter of the external thread and maximum pitch diameter of the internal thread) on threaded plug and ring gaging, with gages to the thread form and length specified in Section VI, Part I, for fasteners and some custom threaded parts where design requirements are fulfilled. See 'Dimensional acceptability of threads,' p. 99 in this Supplement."

pp. 23 and 26, 4. Coated Threads: Revise to read:

"4. Coated Threads.—It is not within the scope of this standard to make recommendations for thickness of, or to specify limits for, coatings. However, it will aid mechanical interchangeability if certain principles are followed whenever conditions permit.

"It is desirable that the finished threads be within the limits of size established herein. To that end, external threads should not exceed the basic size after coating and internal threads should not be below the basic size after coating. However, it is recognized that there are some commonly used processes, such as hot-dip galvanizing, which are firmly established, and threads coated by such processes do not fall within the scope of this recommendation.

"(*a*) *Guide for relieving external threads.*—Class 2A provides both a tolerance and an allowance. Many requirements are such as those for coatings deposited by electroplating processes. In general the 2A allowance provides adequate relief for coatings up to a minimum thickness [5c] of one-sixth of the 2A allowance, inasmuch as there are variables in thickness of coating and symmetry of coating resulting from commercial processes. See paragraph 2 (bottom col. 1, p. 23, Part I). It should be stressed that threads after coating should be accepted by a basic size GO thread ring gage or equivalent functional gage.

"Class 1A provides an allowance, but in this case the allowance is maintained for both coated and uncoated product. Special provisions before

[5c] The maximum allowance at the maximum material condition of six times the minimum coating thickness is derived from dividing the deposit on the flank of the thread by the sine of the 30 degree half angle and multiplying the result by two for the diameter equivalent, then adding 50 percent for the plater's tolerance. The minimum allowance at the minimum material condition of four times the minimum coating thickness is two-thirds the maximum allowance, inasmuch as the thickness of coating will bring the limits of size within standard limits with the additional allowance for the plater's tolerance omitted.

coating are necessary where (1) the design requires that the class 2A allowance be available after coating, or (2) the design requires that an allowance be provided for class 3A threads, or (3) the thickness of coating is too great to be accomodated by the class 2A allowance. In these cases it is recommended that the limits of size before coating be reduced by the amount of the 2A allowance whenever that allowance is adequate, or that the maximum limits of the major and pitch diameters be decreased by an amount equal to six times the minimum coating thickness and the minimum limits be decreased by an amount equal to four times the minimum coating thickness.

"(*b*) *Internal threads.*—No provision is made for relieving internal threads as coatings on such threads are not generally required. Further, it is very difficult to deposit a significant thickness of coating on the flanks of internal threads. However, where a specific thickness of coating is required in an internal thread, it is suggested that the thread be relieved so that the thread after coating will be accepted by a GO thread plug gage of basic size. It is recommended that (1) the limits of size before coating be increased by the amount of the 2A allowance whenever that allowance is adequate, or (2) the minimum limits of the minor and pitch diameters be increased by an amount equal to six times the minimum coating thickness and the maximum limits be increased by an amount equal to four times the minimum coating thickness."

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p. 26, Subsection 5. METHOD OF DESIGNATING A SCREW THREAD: Revise to read as follows:

"5. METHOD OF DESIGNATING A SCREW THREAD

"1. Basic Method of Designating.—The basic method of designating a screw thread is used where the standard tolerances or limits of size based on the standard length of engagement are applicable as indicated in par. (*b*) Length of engagement, p. 16 in this Supplement. The designation specifies in sequence the nominal size, number of threads per inch, thread series symbol, and thread class symbol. *The nominal size* is the basic major diameter and is specified as the fractional diameter, screw number, or their decimal equivalent. Where decimal equivalents are used for size call-out they shall be shown in four place decimals, omitting the cipher in the fourth place, for fractional sizes and three place decimals for numbered sizes. They shall be interpreted as being nominal size designations only and shall have no dimensional significance beyond the fractional size or number designation.

The thread series symbol is UNC, UNF, UNEF, or UN for any of the series shown in table III.2 in this Supplement and UNS for any other diameter-pitch combination having tolerances to Unified formulation.

The thread class symbol is 1A, 1B, 2A, 2AG, 2B, 3A, or 3B where the suffixes A and B relate to external and internal threads respectively. Suffix G in the 2AG symbol indicates that the 2A dimensions are to be met after coating. See designation on p. 18 of this Supplement.

Examples:

—*Nominal size* (*fractional diameter or screw number with decimal equivalent of either being optional*)
——*Number of threads per inch*
———*Thread series symbol* (*see dimensional tables*)
————*Thread class symbol* (*see* (*b*) *Screw-thread classes, p. 23, Part I*)

¼–20 UNC–2A or .250–20 UNC–2A
10–32 UNF–2A or .190–32 UNF–2A
7/16–20 UNF–2A or .4375–20 UNF–2A
7/16–20 UNF–3A or .4375–20 UNF–3A

For uncoated standard series threads (table III.2 in this Supplement) these designations may optionally be supplemented by the addition of the pitch diameter limits of size.

Example:

¼–20 UNC–2A
PD .2164–.2127 (*Optional for uncoated threads*)

Note. PD limits are those in table III.10 in this Supplement for class 2A.

UNS threads and threads having special length of engagement require certain additional information as shown on pp. 19 and 20 in this Supplement.

"(*a*) *Designations for coated (or plated) threads.*—Specification on drawings of the before and after coating dimensions for screw threads is sometimes dictated by an engineering or production consideration that the size before and after coating be controlled. This results from coated screw threads having two stages of design; the before coating stage and the after coating stage. The threaded product may be produced by a supplier and coated by a user. In this case, it is necessary that a clear understanding of the coating requirements and the allowance for coating buildup be agreed upon by both supplier and user.

The before coating dimensions have a definite bearing on the strength of the screw threads. The after coating dimensions must allow the threads to assemble with their mating threads, as intended.

Recommended methods for designating coated threads under various conditions are described in the following:

For coated (or plated) class 1A external threads the max major and max pitch diameters may optionally be given followed by the words "AFTER COATING", thereby indicating that the thread before coating must have special provisions to allow for coating thickness. The major and pitch diameter limits of size before coating (calculated in accordance with paragraph 4, coated threads, p. 16 in this Supplement) shall be given followed by the words "BEFORE COATING".

Example: ¼–20 UNC–1A
MAJOR DIA .2489 MAX
PD .2164 MAX
} AFTER COATING (*Optional*)

NOTE. Major and PD limits are those in table III.10 in this Supplement for class 1A.

MAJOR DIA .2478–.2356 SPL
PD .2153–.2097 SPL
} BEFORE COATING

NOTE. Major and PD limits correspond to those in table III.10 in this Supplement for class 1A minus the allowance.

For coated (or plated) class 2A external threads the basic (max) major and basic (max) pitch diameters shall be given followed by the words "AFTER COATING". The major and pitch diameter limits of size before coating shall also be given followed by the words "BEFORE COATING".

Example: [5d] ¾–10 UNC–2A
MAJOR DIA .7500 MAX
PD .6850 MAX
} AFTER COATING

NOTE. Major and PD limits are equal to basic and correspond to those in table III.10 in this Supplement for class 3A.

MAJOR DIA .7482–.7353
PD .6832–.6773
} BEFORE COATING

NOTE. Major and PD limits are those in table III.10 in this Supplement for class 2A.

Certain applications require an allowance for rapid assembly to permit application of the proper lubricant or for residual growth due to high temperature expansion. In these applications, when the thread is coated and the 2A allowance is not permitted to be consumed by such coating, the thread class symbol is qualified by the addition of the letter G (symbol for allowance) following the class symbol and the max major and max pitch diameters are reduced below basic size by the amount of the 2A allowance and followed by the words "AFTER COATING", thereby ensuring that the allowance is maintained. The thread before coating must have special provisions to allow for coating thickness. The major and pitch diameter limits of size before coating (calculated in accordance with paragraph 4, p. 16 in this Supplement) shall also be given followed by the words "BEFORE COATING".

Example: ¾–10 UNC–2AG
MAJOR DIA .7482 MAX
PD .6832 MAX
} AFTER COATING

NOTE. Major and PD limits are those in table III.10 in this Supplement for class 2A.

MAJOR DIA .7464–.7335 SPL
PD .6814–.6755 SPL
} BEFORE COATING

NOTE. Major and PD limits correspond to those in table III.10 in this Supplement for class 2A minus the allowance.

For coated (or plated) class 3A external threads, the max major and max pitch diameters may optionally be given followed by the words "AFTER COATING", thereby indicating that the thread before coating must have special provisions to allow for coating thickness. The major and pitch diameter limits of size before coating (calculated in accordance with paragraph 4, p. 16 in this Supplement) shall be given followed by the words "BEFORE COATING".

[5d] Threads accepted to class 2A limits before coating are accepted after coating by basic size thread gages. The allowance given in the dimensional tables for class 2A threads is sufficient to allow for a limited amount of coating as described in paragraph 4, Coated threads, p. 16 in this Supplement, but if a greater coating thickness is required it will be necessary to calculate the before coating limits in accordance with paragraph 4, p. 16 in this Supplement.

Example: ¼–28 UNF–3A
MAJOR DIA .2500 MAX } AFTER COATING (*Optional*)
PD .2268 MAX }
NOTE. Major and PD limits are those in table III.10 in this Supplement for class 3A.
MAJOR DIA .2488–.2427 SPL } BEFORE COATING
PD .2256–.2235 SPL }

For coated (or plated) class 1B, 2B, or 3B internal threads the min minor diameter and min pitch diameter may optionally be given followed by the words "AFTER COATING". The minor and pitch diameter limits of size before coating (calculated in accordance with paragraph 4, p. 16 in this Supplement) shall be given followed by the words "BEFORE COATING".

Examples:[5e] ¼–20 UNC–1B
MINOR DIA .196 MIN } AFTER COATING (*Optional*)
PD .2175 MIN }
MINOR DIA .197–.208 SPL } BEFORE COATING
PD .2186–.2259 SPL }

¾–10 UNC–2B
MINOR DIA .642 MIN } AFTER COATING (*Optional*)
PD .6850 MIN }
MINOR DIA .644–.665 SPL } BEFORE COATING
PD .6868–.6945 SPL }

¼–28 UNF–3B
MINOR DIA .2110 MIN } AFTER COATING (*Optional*)
PD .2268 MIN }
MINOR DIA .2122–.2198 SPL } BEFORE COATING
PD .2280–.2308 SPL }

"(*b*) *Method of designating left hand threads.*—Unless otherwise specified, threads are right-hand; a left-hand thread shall be designated LH as follows:

¼–20 UNC–3A–LH

"(*c*) *Method of designating UNS threads* (*Unified tolerance formulations*).—UNS threads have the basic form of designation set out above, supplemented always by the limits of size.

Examples: ¼-24 UNS–3A
MAJOR DIA .2500–.2428
PD .2229–.2201

.495–20 UNS–3A
MAJOR DIA .4950–.4869
PD .4625–.4593

1.200–10 UNS–2B
MINOR DIA 1.092–1.113
PD 1.1350–1.1432

"(*d*) *Method of designating threads having special length of engagemen'*. Where a standard series thread has a special length of engagement differing from that for which the standard pitch diameter tolerances are applicable, as indicated in paragraph (b), Length of engagement, p. 16 in this Supplement, the thread class symbol is qualified by the addition of the letters SE (special engagement) preceding the class symbol. The specification of the special pitch diameter limits of size and the length of engagement (LE) rounded to a two-place decimal are a requirement.

Examples: ½–13 UNC–SE2A
PD .4485–.4431
LE 1.00

¼–24 UNS–SE3A
MAJOR DIA .2500–.2428
PD .2229–.2198
LE .88

"(*e*) *Method of designating threads having modified crests.*—It is occasionally necessary to modify the limits of size of the major diameter of an external thread or the minor diameter of an internal thread within the maximum material limits established for standard series and special threads in order to fit a specific purpose but without change in class of thread or pitch diameter limits. (It should be noted that standard p'tch diameter gages may be used to accept such threads). Such threads shall be specified with the established thread designation followed by a statement of the modified diameter limits and the designation 'MOD'.

[5e] The after coating limits for all of the examples given are the minor and PD limits in table III.10 in this Supplement for the respective class of thread. The before coating limits for all of the examples above are calculated using the 2A allowance where it is suitable for a minimum coating (or plating) thickness of 0.0002 in. on the thread flanks.

Examples: ⅜–24 UNF–3A MOD
MAJOR DIA .3720–.3648 MOD

1½–10 UNS–3B MOD
MINOR DIA 1.398–1.409 MOD
PD 1.4350–1.4412

2. Designations for Acceptance of Threads by Other Than General Practice.—Threads to be accepted by gaging practices deviating from those outlined in Part I, Section VI, p. 118, require additional notes in the thread designation. The recommended methods of designating these threads are described in the following:

(*a*) *Method of designating class 3A for LO functional (virtual) diameters.*—Where it is desired to gage the minimum pitch diameter limits of class 3A external threads as functional (virtual) diameter, instead of as specified in Section VI, the words "LO FUNCTIONAL DIAMETER" following the pitch diameter limits should be included in addition to the information normally given, as follows:

⅜–24 UNF–3A
PD .3468–.3430
LO FUNCTIONAL DIAMETER

(*b*) *Method of designating class 2A for LO pitch diameters.*—Where it is desired to gage the minimum pitch diameter limits of class 2A external threads as a single element instead of as specified in Section VI, the words "LO PITCH DIAMETER" following the pitch diameter limits should be included in addition to the information normally given, as follows:

⅜–16 UNC–2A
PD .3331–.3287
LO PITCH DIAMETER

3. Designations of Other Threads.—Threads having tolerances that do not conform to Unified formulation, and threads having multiple starts or special form, also require additional data in the thread designation. The recommended methods of designating these threads are described in the following:

"(*a*) *Method of designating threads having tolerances not to Unified formulation.*—If a standard series thread is altered in any respect other than revised pitch diameter limits for a special length of engagement, the modification of crests or the adjustment of the limits of size to accommodate coating, as shown above, it is designated in accordance with the following examples:

7/16–24 UNIFIED FORM SPECIAL-EXT[5f]
MAJOR DIA .4340–.4280 SPL
PD .4065–.4025 SPL
LE .38

½–13 UNIFIED FORM SPECIAL-INT[5f]
MINOR DIA .424–.434 SPL
PD .4500–.4580 SPL
LE .50

"(*b*) *Method of designating multiple-start threads.*—If a thread is required with a multiple start, it is designated by specifying in sequence the nominal size, pitch (in decimals or threads per inch), and lead (in decimals or fractions) as follows:

Example:
¾–.0625P–.1875L-UNIFIED FORM SPECIAL-EXT[5f]
MAJOR DIA .7485–.7391
PD .7079–.7003 SPL
LE .75
Optional for first line of above designation:
¾–16–3/16L-UNIFIED FORM SPECIAL-EXT or
¾–16–UNIFIED FORM SPECIAL–3 START-EXT

"(*c*) *Method of designating special form threads.*—If a thread for design consideration requires a deviation from Unified standard thread contour and is not covered by another recognized standard, such as when the detail of the root differs from that for the standard thread form, the designation shall neither include the letters 'UN' nor the word 'UNIFIED' but shall be as follows:

Example: ⅞–18 SPECIAL FORM-EXT[5f]
THREAD ANGLE 60°
MAJOR DIA .8750–.8668
PD .8384–.8343
MAX MINOR DIA .8068 (as gaged)
LE .69

Note. The 'as gaged' diameter describes the diameter of the GO thread ring gage."

(*d*) *Designations for long length of engagement.*—In the assembly of threads in mating parts, the length of engagement varies according to the design requirements. It should be noted that the length of engagement is not necessarily the same as the full thread length provided on the part, but is the length of assembled thread in the mating parts.

In some instances, the length of engagement may be longer than that which is applicable to the tolerances for the standard length of engagement and additional precautions are necessary to assure proper assembly. In the case of custom parts, this may be taken into consideration when designing the parts. The proper pitch diameter tolerance may be obtained from the step tables, Section IV, or computed from the formulas, and the length of engagement shall be included in the designation as specified above.

pp. 27 to 68, tables III.10, III.11, III.12, and III.13: Revise to read as follows:

(Next text on p. 91.)

[5f] Where the thread designation is used in text or is shown on a drawing, and a leader line does not indicate the specific position, then add EXT or INT to the designation.

TABLE III.10.—*Standard series limits of size—Unified screw threads*

Nominal size and threads per inch	Series designation	External [a]									Internal [a]						
		Class	Allowance	Major diameter limits			Pitch diameter limits			Minor diameter [d]	Class	Minor diameter limits [e]		Pitch diameter limits			Major diameter
				Max [b]	Min	Min [c]	Max [b]	Min	Tolerance			Min	Max	Min	Max	Tolerance	Min
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*		*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
0-80 or .060-80	UNF	2A	0.0005	0.0595	0.0563	-------	0.0514	0.0496	0.0018	0.0442	2B	0.0465	0.0514	0.0519	0.0542	0.0023	0.0600
		3A	.0000	.0600	.0568	-------	.0519	.0506	.0013	.0447	3B	.0465	.0514	.0519	.0536	.0017	.0600
1-64 or .073-64	UNC	2A	.0006	.0724	.0686	-------	.0623	.0603	.0020	.0532	2B	.0561	.0623	.0629	.0655	.0026	.0730
		3A	.0000	.0730	.0692	-------	.0629	.0614	.0015	.0538	3B	.0561	.0623	.0629	.0648	.0019	.0730
1-72 or .073-72	UNF	2A	.0006	.0724	.0689	-------	.0634	.0615	.0019	.0554	2B	.0580	.0635	.0640	.0665	.0025	.0730
		3A	.0000	.0730	.0695	-------	.0640	.0626	.0014	.0560	3B	.0580	.0635	.0640	.0659	.0019	.0730
2-56 or .086-56	UNC	2A	.0006	.0854	.0813	-------	.0738	.0717	.0021	.0635	2B	.0667	.0737	.0744	.0772	.0028	.0860
		3A	.0000	.0860	.0819	-------	.0744	.0728	.0016	.0641	3B	.0667	.0737	.0744	.0765	.0021	.0860
2-64 or .086-64	UNF	2A	.0006	.0854	.0816	-------	.0753	.0733	.0020	.0662	2B	.0691	.0753	.0759	.0786	.0027	.0860
		3A	.0000	.0860	.0822	-------	.0759	.0744	.0015	.0668	3B	.0691	.0753	.0759	.0779	.0020	.0860
3-48 or .099-48	UNC	2A	.0007	.0983	.0938	-------	.0848	.0825	.0023	.0727	2B	.0764	.0845	.0855	.0885	.0030	.0990
		3A	.0000	.0990	.0945	-------	.0855	.0838	.0017	.0734	3B	.0764	.0845	.0855	.0877	.0022	.0990
3-56 or .099-56	UNF	2A	.0007	.0983	.0942	-------	.0867	.0845	.0022	.0764	2B	.0797	.0865	.0874	.0902	.0028	.0990
		3A	.0000	.0990	.0949	-------	.0874	.0858	.0016	.0771	3B	.0797	.0865	.0874	.0895	.0021	.0990
4-40 or .112-40	UNC	2A	.0008	.1112	.1061	-------	.0950	.0925	.0025	.0805	2B	.0849	.0939	.0958	.0991	.0033	.1120
		3A	.0000	.1120	.1069	-------	.0958	.0939	.0019	.0813	3B	.0849	.0939	.0958	.0982	.0024	.1120
4-48 or .112-48	UNF	2A	.0007	.1113	.1068	-------	.0978	.0954	.0024	.0857	2B	.0894	.0968	.0985	.1016	.0031	.1120
		3A	.0000	.1120	.1075	-------	.0985	.0967	.0018	.0864	3B	.0894	.0968	.0985	.1008	.0023	.1120
5-40 or .125-40	UNC	2A	.0008	.1242	.1191	-------	.1080	.1054	.0026	.0935	2B	.0979	.1062	.1088	.1121	.0033	.1250
		3A	.0000	.1250	.1199	-------	.1088	.1069	.0019	.0943	3B	.0979	.1062	.1088	.1113	.0025	.1250
5-44 or .125-44	UNF	2A	.0007	.1243	.1195	-------	.1095	.1070	.0025	.0964	2B	.1004	.1079	.1102	.1134	.0032	.1250
		3A	.0000	.1250	.1202	-------	.1102	.1083	.0019	.0971	3B	.1004	.1079	.1102	.1126	.0024	.1250
6-32 or .138-32	UNC	2A	.0008	.1372	.1312	-------	.1169	.1141	.0028	.0989	2B	.104	.114	.1177	.1214	.0037	.1380
		3A	.0000	.1380	.1320	-------	.1177	.1156	.0021	.0997	3B	.1040	.1140	.1177	.1204	.0027	.1380
6-40 or .138-40	UNF	2A	.0008	.1372	.1321	-------	.1210	.1184	.0026	.1065	2B	.111	.119	.1218	.1252	.0034	.1380
		3A	.0000	.1380	.1329	-------	.1218	.1198	.0020	.1073	3B	.1110	.1186	.1218	.1243	.0025	.1380
8-32 or .164-32	UNC	2A	.0009	.1631	.1571	-------	.1428	.1399	.0029	.1248	2B	.130	.139	.1437	.1475	.0038	.1640
		3A	.0000	.1640	.1580	-------	.1437	.1415	.0022	.1257	3B	.1300	.1389	.1437	.1465	.0028	.1640
8-36 or .164-36	UNF	2A	.0008	.1632	.1577	-------	.1452	.1424	.0028	.1291	2B	.134	.142	.1460	.1496	.0036	.1640
		3A	.0000	.1640	.1585	-------	.1460	.1439	.0021	.1299	3B	.1340	.1416	.1460	.1487	.0027	.1640
10-24 or .190-24	UNC	2A	.0010	.1890	.1818	-------	.1619	.1586	.0033	.1379	2B	.145	.156	.1629	.1672	.0043	.1900
		3A	.0000	.1900	.1828	-------	.1629	.1604	.0025	.1389	3B	.1450	.1555	.1629	.1661	.0032	.1900
10-32 or .190-32	UNF	2A	.0009	.1891	.1831	-------	.1688	.1658	.0030	.1508	2B	.156	.164	.1697	.1736	.0039	.1900
		3A	.0000	.1900	.1840	-------	.1697	.1674	.0023	.1517	3B	.1560	.1641	.1697	.1726	.0029	.1900
12-24 or .216-24	UNC	2A	.0010	.2150	.2078	-------	.1879	.1845	.0034	.1639	2B	.171	.181	.1889	.1933	.0044	.2160
		3A	.0000	.2160	.2088	-------	.1889	.1863	.0026	.1649	3B	.1710	.1807	.1889	.1922	.0033	.2160
12-28 or .216-28	UNF	2A	.0010	.2150	.2085	-------	.1918	.1886	.0032	.1712	2B	.177	.186	.1928	.1970	.0042	.2160
		3A	.0000	.2160	.2095	-------	.1928	.1904	.0024	.1722	3B	.1770	.1857	.1928	.1959	.0031	.2160
12-32 or .216-32	UNEF	2A	.0009	.2151	.2091	-------	.1948	.1917	.0031	.1768	2B	.182	.190	.1957	.1998	.0041	.2160
		3A	.0000	.2160	.2100	-------	.1957	.1933	.0024	.1777	3B	.1820	.1895	.1957	.1988	.0031	.2160
¼-20 or .250-20	UNC	1A	.0011	.2489	.2367	-------	.2164	.2108	.0056	.1876	1B	.196	.207	.2175	.2248	.0073	.2500
		2A	.0011	.2489	.2408	.2367	.2164	.2127	.0037	.1876	2B	.196	.207	.2175	.2224	.0049	.2500
		3A	.0000	.2500	.2419	-------	.2175	.2147	.0028	.1887	3B	.1960	.2067	.2175	.2211	.0036	.2500
¼-28 or .250-28	UNF	1A	.0010	.2490	.2392	-------	.2258	.2208	.0050	.2052	1B	.211	.220	.2268	.2333	.0065	.2500
		2A	.0010	.2490	.2425	-------	.2258	.2225	.0033	.2052	2B	.211	.220	.2268	.2311	.0043	.2500
		3A	.0000	.2500	.2435	-------	.2268	.2243	.0025	.2062	3B	.2110	.2190	.2268	.2300	.0032	.2500
¼-32 or .250-32	UNEF	2A	.0010	.2490	.2430	-------	.2287	.2255	.0032	.2107	2B	.216	.224	.2297	.2339	.0042	.2500
		3A	.0000	.2500	.2440	-------	.2297	.2273	.0024	.2117	3B	.2160	.2229	.2297	.2328	.0031	.2500
5/16-18 or .3125-18	UNC	1A	.0012	.3113	.2982	-------	.2752	.2691	.0061	.2431	1B	.252	.265	.2764	.2843	.0079	.3125
		2A	.0012	.3113	.3026	.2982	.2752	.2712	.0040	.2431	2B	.252	.265	.2764	.2817	.0053	.3125
		3A	.0000	.3125	.3038	-------	.2764	.2734	.0030	.2443	3B	.2520	.2630	.2764	.2803	.0039	.3125
5/16-20 or .3125-20	UN	2A	.0012	.3113	.3032	-------	.2788	.2748	.0040	.2500	2B	.258	.270	.2800	.2852	.0052	.3125
		3A	.0000	.3125	.3044	-------	.2800	.2770	.0030	.2512	3B	.2580	.2680	.2800	.2839	.0039	.3125
5/16-24 or .3125-24	UNF	1A	.0011	.3114	.3006	-------	.2843	.2788	.0055	.2603	1B	.267	.277	.2854	.2925	.0071	.3125
		2A	.0011	.3114	.3042	-------	.2843	.2806	.0037	.2603	2B	.267	.277	.2854	.2902	.0048	.3125
		3A	.0000	.3125	.3053	-------	.2854	.2827	.0027	.2614	3B	.2670	.2754	.2854	.2890	.0036	.3125
5/16-28 or .3125-28	UN	2A	.0010	.3115	.3050	-------	.2883	.2849	.0034	.2677	2B	.274	.282	.2893	.2937	.0044	.3125
		3A	.0000	.3125	.3060	-------	.2893	.2867	.0026	.2687	3B	.2740	.2807	.2893	.2926	.0033	.3125

See footnotes at end of table.

TABLE III.10.—*Standard series limits of size—Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	External [a]									Internal [a]						
		Class	Allowance	Major diameter limits			Pitch diameter limits			Minor diameter [d]	Class	Minor diameter limits		Pitch diameter limits			Major diameter
				Max [b]	Min	Min [c]	Max [b]	Min	Tolerance			Min	Max	Min	Max	Tolerance	Min
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*		*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
5/16–32 or .3125–32	UNEF	2A	.0010	.3115	.3055	-------	.2912	.2880	.0032	.2732	2B	.279	.286	.2922	.2964	.0042	.3125
		3A	.0000	.3125	.3065	-------	.2922	.2898	.0024	.2742	3B	.2790	.2847	.2922	.2953	.0031	.3125
3/8–16 or .375–16	UNC	1A	.0013	.3737	.3595	-------	.3331	.3266	.0065	.2970	1B	.307	.321	.3344	.3429	.0085	.3750
		2A	.0013	.3737	.3643	.3595	.3331	.3287	.0044	.2970	2B	.307	.321	.3344	.3401	.0057	.3750
		3A	.0000	.3750	.3656	-------	.3344	.3311	.0033	.2983	3B	.3070	.3182	.3344	.3387	.0043	.3750
3/8–20 or .375–20	UN	2A	.0012	.3738	.3657	-------	.3413	.3372	.0041	.3125	2B	.321	.332	.3425	.3479	.0054	.3750
		3A	.0000	.3750	.3669	-------	.3425	.3394	.0031	.3137	3B	.3210	.3297	.3425	.3465	.0040	.3750
3/8–24 or .375–24	UNF	1A	.0011	.3739	.3631	-------	.3468	.3411	.0057	.3228	1B	.330	.340	.3479	.3553	.0074	.3750
		2A	.0011	.3739	.3667	-------	.3468	.3430	.0038	.3228	2B	.330	.340	.3479	.3528	.0049	.3750
		3A	.0000	.3750	.3678	-------	.3479	.3450	.0029	.3239	3B	.3300	.3372	.3479	.3516	.0037	.3750
3/8–28 or .375–28	UN	2A	.0011	.3739	.3674	-------	.3507	.3471	.0036	.3301	2B	.336	.345	.3518	.3564	.0046	.3750
		3A	.0000	.3750	.3685	-------	.3518	.3491	.0027	.3312	3B	.3360	.3426	.3518	.3553	.0035	.3750
3/8–32 or .375–32	UNEF	2A	.0010	.3740	.3680	-------	.3537	.3503	.0034	.3357	2B	.341	.349	.3547	.3591	.0044	.3750
		3A	.0000	.3750	.3690	-------	.3547	.3522	.0025	.3367	3B	.3410	.3469	.3547	.3580	.0033	.3750
7/16–14 or .4375–14	UNC	1A	.0014	.4361	.4206	-------	.3897	.3826	.0071	.3485	1B	.360	.376	.3911	.4003	.0092	.4375
		2A	.0014	.4361	.4258	.4206	.3897	.3850	.0047	.3485	2B	.360	.376	.3911	.3972	.0061	.4375
		3A	.0000	.4375	.4272	-------	.3911	.3876	.0035	.3499	3B	.3600	.3717	.3911	.3957	.0046	.4375
7/16–16 or .4375–16	UN	2A	.0014	.4361	.4267	-------	.3955	.3909	.0046	.3594	2B	.370	.384	.3969	.4028	.0059	.4375
		3A	.0000	.4375	.4281	-------	.3969	.3935	.0034	.3608	3B	.3700	.3800	.3969	.4014	.0045	.4375
7/16–20 or .4375–20	UNF	1A	.0013	.4362	.4240	-------	.4037	.3974	.0063	.3749	1B	.383	.395	.4050	.4131	.0081	.4375
		2A	.0013	.4362	.4281	-------	.4037	.3995	.0042	.3749	2B	.383	.395	.4050	.4104	.0054	.4375
		3A	.0000	.4375	.4294	-------	.4050	.4019	.0031	.3762	3B	.3830	.3916	.4050	.4091	.0041	.4375
7/16–28 or .4375–28	UNEF	2A	.0011	.4364	.4299	-------	.4132	.4096	.0036	.3926	2B	.399	.407	.4143	.4189	.0046	.4375
		3A	.0000	.4375	.4310	-------	.4143	.4116	.0027	.3937	3B	.3990	.4051	.4143	.4178	.0035	.4375
7/16–32 or .4375–32	UN	2A	.0010	.4365	.4305	-------	.4162	.4128	.0034	.3982	2B	.404	.411	.4172	.4216	.0044	.4375
		3A	.0000	.4375	.4315	-------	.4172	.4147	.0025	.3992	3B	.4040	.4094	.4172	.4205	.0033	.4375
1/2–13 or .500–13	UNC	1A	.0015	.4985	.4822	-------	.4485	.4411	.0074	.4041	1B	.417	.434	.4500	.4597	.0097	.5000
		2A	.0015	.4985	.4876	.4822	.4485	.4435	.0050	.4041	2B	.417	.434	.4500	.4565	.0065	.5000
		3A	.0000	.5000	.4891	-------	.4500	.4463	.0037	.4056	3B	.4170	.4284	.4500	.4548	.0048	.5000
1/2–16 or .500–16	UN	2A	.0014	.4986	.4892	-------	.4580	.4533	.0047	.4219	2B	.432	.446	.4594	.4655	.0061	.5000
		3A	.0000	.5000	.4906	-------	.4594	.4559	.0035	.4233	3B	.4320	.4419	.4594	.4640	.0046	.5000
1/2–20 or .500–20	UNF	1A	.0013	.4987	.4865	-------	.4662	.4598	.0064	.4374	1B	.446	.457	.4675	.4759	.0084	.5000
		2A	.0013	.4987	.4906	-------	.4662	.4619	.0043	.4374	2B	.446	.457	.4675	.4731	.0056	.5000
		3A	.0000	.5000	.4919	-------	.4675	.4643	.0032	.4387	3B	.4460	.4537	.4675	.4717	.0042	.5000
1/2–28 or .500–28	UNEF	2A	.0011	.4989	.4924	-------	.4757	.4720	.0037	.4551	2B	.461	.470	.4768	.4816	.0048	.5000
		3A	.0000	.5000	.4935	-------	.4768	.4740	.0028	.4562	3B	.4610	.4676	.4768	.4804	.0036	.5000
1/2–32 or .500–32	UN	2A	.0010	.4990	.4930	-------	.4787	.4752	.0035	.4607	2B	.466	.474	.4797	.4842	.0045	.5000
		3A	.0000	.5000	.4940	-------	.4797	.4771	.0026	.4617	3B	.4660	.4719	.4797	.4831	.0034	.5000
9/16–12 or .5625–12	UNC	1A	.0016	.5609	.5437	-------	.5068	.4990	.0078	.4587	1B	.472	.490	.5084	.5186	.0102	.5625
		2A	.0016	.5609	.5495	.5437	.5068	.5016	.0052	.4587	2B	.472	.490	.5084	.5152	.0068	.5625
		3A	.0000	.5625	.5511	-------	.5084	.5045	.0039	.4603	3B	.4720	.4843	.5084	.5135	.0051	.5625
9/16–16 or .5625–16	UN	2A	.0014	.5611	.5517	-------	.5205	.5158	.0047	.4844	2B	.495	.509	.5219	.5280	.0061	.5625
		3A	.0000	.5625	.5531	-------	.5219	.5184	.0035	.4858	3B	.4950	.5040	.5219	.5265	.0046	.5625
9/16–18 or .5625–18	UNF	1A	.0014	.5611	.5480	-------	.5250	.5182	.0068	.4929	1B	.502	.515	.5264	.5353	.0089	.5625
		2A	.0014	.5611	.5524	-------	.5250	.5205	.0045	.4929	2B	.502	.515	.5264	.5323	.0059	.5625
		3A	.0000	.5625	.5538	-------	.5264	.5230	.0034	.4943	3B	.5020	.5106	.5264	.5308	.0044	.5625
9/16–20 or .5625–20	UN	2A	.0013	.5612	.5531	-------	.5287	.5245	.0042	.4999	2B	.508	.520	.5300	.5355	.0055	.5625
		3A	.0000	.5625	.5544	-------	.5300	.5268	.0032	.5012	3B	.5080	.5162	.5300	.5341	.0041	.5625
9/16–24 or .5625–24	UNEF	2A	.0012	.5613	.5541	-------	.5342	.5303	.0039	.5102	2B	.517	.527	.5354	.5405	.0051	.5625
		3A	.0000	.5625	.5553	-------	.5354	.5325	.0029	.5114	3B	.5170	.5244	.5354	.5392	.0038	.5625
9/16–28 or .5625–28	UN	2A	.0011	.5614	.5549	-------	.5382	.5345	.0037	.5176	2B	.524	.532	.5393	.5441	.0048	.5625
		3A	.0000	.5625	.5560	-------	.5393	.5365	.0028	.5187	3B	.5240	.5301	.5393	.5429	.0036	.5625
9/16–32 or .5625–32	UN	2A	.0010	.5615	.5555	-------	.5412	.5377	.0035	.5232	2B	.529	.536	.5422	.5467	.0045	.5625
		3A	.0000	.5625	.5565	-------	.5422	.5396	.0026	.5242	3B	.5290	.5344	.5422	.5456	.0034	.5625
5/8–11 or .625–11	UNC	1A	.0016	.6234	.6052	-------	.5644	.5561	.0083	.5119	1B	.527	.546	.5660	.5767	.0107	.6250
		2A	.0016	.6234	.6113	.6052	.5644	.5589	.0055	.5119	2B	.527	.546	.5660	.5732	.0072	.6250
		3A	.0000	.6250	.6129	-------	.5660	.5619	.0041	.5135	3B	.5270	.5391	.5660	.5714	.0054	.6250
5/8–12 or .625–12	UN	2A	.0016	.6234	.6120	-------	.5693	.5639	.0054	.5212	2B	.535	.553	.5709	.5780	.0071	.6250
		3A	.0000	.6250	.6136	-------	.5709	.5668	.0041	.5228	3B	.5350	.5463	.5709	.5762	.0053	.6250

See footnotes at end of table.

TABLE III.10.—*Standard series limits of size—Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	External [a]								Internal [a]						
		Class	Allowance	Major diameter limits			Pitch diameter limits			Minor diameter [d]	Class	Minor diameter limits [e]		Pitch diameter limits			Major diameter
				Max [b]	Min	Min [c]	Max [b]	Min	Tolerance			Min	Max	Min	Max	Tolerance	Min
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*		*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
5/8–16 or .625–16	UN	2A	.0014	.6236	.6142	-------	.5830	.5782	.0048	.5469	2B	.557	.571	.5844	.5906	.0062	.6250
		3A	.0000	.6250	.6156	-------	.5844	.5808	.0036	.5483	3B	.5570	.5662	.5844	.5890	.0046	.6250
5/8–18 or .625–18	UNF	1A	.0014	.6236	.6105	-------	.5875	.5805	.0070	.5554	1B	.565	.578	.5889	.5980	.0091	.6250
		2A	.0014	.6236	.6149	-------	.5875	.5828	.0047	.5554	2B	.565	.578	.5889	.5949	.0060	.6250
		3A	.0000	.6250	.6163	-------	.5889	.5854	.0035	.5568	3B	.5650	.5730	.5889	.5934	.0045	.6250
5/8–20 or .625–20	UN	2A	.0013	.6237	.6156	-------	.5912	.5869	.0043	.5624	2B	.571	.582	.5925	.5981	.0056	.6250
		3A	.0000	.6250	.6169	-------	.5925	.5893	.0032	.5637	3B	.5710	.5787	.5925	.5967	.0042	.6250
5/8–24 or .625–24	UNEF	2A	.0012	.6238	.6166	-------	.5967	.5927	.0040	.5727	2B	.580	.590	.5979	.6031	.0052	.6250
		3A	.0000	.6250	.6178	-------	.5979	.5949	.0030	.5739	3B	.5800	.5869	.5979	.6018	.0039	.6250
5/8–28 or .625–28	UN	2A	.0011	.6239	.6174	-------	.6007	.5969	.0038	.5801	2B	.586	.595	.6018	.6067	.0049	.6250
		3A	.0000	.6250	.6185	-------	.6018	.5990	.0028	.5812	3B	.5860	.5926	.6018	.6055	.0037	.6250
5/8–32 or .625–32	UN	2A	.0011	.6239	.6179	-------	.6036	.6000	.0036	.5856	2B	.591	.599	.6047	.6093	.0046	.6250
		3A	.0000	.6250	.6190	-------	.6047	.6020	.0027	.5867	3B	.5910	.5969	.6047	.6082	.0035	.6250
11/16–12 or .6875–12	UN	2A	.0016	.6859	.6745	-------	.6318	.6264	.0054	.5837	2B	.597	.615	.6334	.6405	.0071	.6875
		3A	.0000	.6875	.6761	-------	.6334	.6293	.0041	.5853	3B	.5970	.6085	.6334	.6387	.0053	.6875
11/16–16 or .6875–16	UN	2A	.0014	.6861	.6767	-------	.6455	.6407	.0048	.6094	2B	.620	.634	.6469	.6531	.0062	.6875
		3A	.0000	.6875	.6781	-------	.6469	.6433	.0036	.6108	3B	.6200	.6284	.6469	.6515	.0046	.6875
11/16–20 or .6875–20	UN	2A	.0013	.6862	.6781	-------	.6537	.6494	.0043	.6249	2B	.633	.645	.6550	.6606	.0056	.6875
		3A	.0000	.6875	.6794	-------	.6550	.6518	.0032	.6262	3B	.6330	.6412	.6550	.6592	.0042	.6875
11/16–24 or .6875–24	UNEF	2A	.0012	.6863	.6791	-------	.6592	.6552	.0040	.6352	2B	.642	.652	.6604	.6656	.0052	.6875
		3A	.0000	.6875	.6803	-------	.6604	.6574	.0030	.6364	3B	.6420	.6494	.6604	.6643	.0039	.6875
11/16–28 or .6875–28	UN	2A	.0011	.6864	.6799	-------	.6632	.6594	.0038	.6426	2B	.649	.657	.6643	.6692	.0049	.6875
		3A	.0000	.6875	.6810	-------	.6643	.6615	.0028	.6437	3B	.6490	.6551	.6643	.6680	.0037	.6875
11/16–32 or .6875–32	UN	2A	.0011	.6864	.6804	-------	.6661	.6625	.0036	.6481	2B	.654	.661	.6672	.6718	.0046	.6875
		3A	.0000	.6875	.6815	-------	.6672	.6645	.0027	.6492	3B	.6540	.6594	.6672	.6707	.0035	.6875
3/4–10 or .750–10	UNC	1A	.0018	.7482	.7288	-------	.6832	.6744	.0088	.6255	1B	.642	.663	.6850	.6965	.0115	.7500
		2A	.0018	.7482	.7353	.7288	.6832	.6773	.0059	.6255	2B	.642	.663	.6850	.6927	.0077	.7500
		3A	.0000	.7500	.7371	-------	.6850	.6806	.0044	.6273	3B	.6420	.6545	.6850	.6907	.0057	.7500
3/4–12 or .750–12	UN	2A	.0017	.7483	.7369	-------	.6942	.6887	.0055	.6461	2B	.660	.678	.6959	.7031	.0072	.7500
		3A	.0000	.7500	.7386	-------	.6959	.6918	.0041	.6478	3B	.6600	.6707	.6959	.7013	.0054	.7500
3/4–16 or .750–16	UNF	1A	.0015	.7485	.7343	-------	.7079	.7004	.0075	.6718	1B	.682	.696	.7094	.7192	.0098	.7500
		2A	.0015	.7485	.7391	-------	.7079	.7029	.0050	.6718	2B	.682	.696	.7094	.7159	.0065	.7500
		3A	.0000	.7500	.7406	-------	.7094	.7056	.0038	.6733	3B	.6820	.6908	.7094	.7143	.0049	.7500
3/4–20 or .750–20	UNEF	2A	.0013	.7487	.7406	-------	.7162	.7118	.0044	.6874	2B	.696	.707	.7175	.7232	.0057	.7500
		3A	.0000	.7500	.7419	-------	.7175	.7142	.0033	.6887	3B	.6960	.7037	.7175	.7218	.0043	.7500
3/4–28 or .750–28	UN	2A	.0012	.7488	.7423	-------	.7256	.7218	.0038	.7050	2B	.711	.720	.7268	.7318	.0050	.7500
		3A	.0000	.7500	.7435	-------	.7268	.7239	.0029	.7062	3B	.7110	.7176	.7268	.7305	.0037	.7500
3/4–32 or .750–32	UN	2A	.0011	.7489	.7429	-------	.7286	.7250	.0036	.7106	2B	.716	.724	.7297	.7344	.0047	.7500
		3A	.0000	.7500	.7440	-------	.7297	.7270	.0027	.7117	3B	.7160	.7219	.7297	.7333	.0036	.7500
13/16–12 or .8125–12	UN	2A	.0017	.8108	.7994	-------	.7567	.7512	.0055	.7086	2B	.722	.740	.7584	.7656	.0072	.8125
		3A	.0000	.8125	.8011	-------	.7584	.7543	.0041	.7103	3B	.7220	.7329	.7584	.7638	.0054	.8125
13/16–16 or .8125–16	UN	2A	.0015	.8110	.8016	-------	.7704	.7655	.0049	.7343	2B	.745	.759	.7719	.7782	.0063	.8125
		3A	.0000	.8125	.8031	-------	.7719	.7683	.0036	.7358	3B	.7450	.7533	.7719	.7766	.0047	.8125
13/16–20 or .8125–20	UNEF	2A	.0013	.8112	.8031	-------	.7787	.7743	.0044	.7499	2B	.758	.770	.7800	.7857	.0057	.8125
		3A	.0000	.8125	.8044	-------	.7800	.7767	.0033	.7512	3B	.7580	.7662	.7800	.7843	.0043	.8125
13/16–28 or .8125–28	UN	2A	.0012	.8113	.8048	-------	.7881	.7843	.0038	.7675	2B	.774	.782	.7893	.7943	.0050	.8125
		3A	.0000	.8125	.8060	-------	.7893	.7864	.0029	.7687	3B	.7740	.7801	.7893	.7930	.0037	.8125
13/16–32 or .8125–32	UN	2A	.0011	.8114	.8054	-------	.7911	.7875	.0036	.7731	2B	.779	.786	.7922	.7969	.0047	.8125
		3A	.0000	.8125	.8065	-------	.7922	.7895	.0027	.7742	3B	.7790	.7844	.7922	.7958	.0036	.8125
7/8–9 or .875–9	UNC	1A	.0019	.8731	.8523	-------	.8009	.7914	.0095	.7368	1B	.755	.778	.8028	.8151	.0123	.8750
		2A	.0019	.8731	.8592	.8523	.8009	.7946	.0063	.7368	2B	.755	.778	.8028	.8110	.0082	.8750
		3A	.0000	.8750	.8611	-------	.8028	.7981	.0047	.7387	3B	.7550	.7681	.8028	.8089	.0061	.8750
7/8–12 or .875–12	UN	2A	.0017	.8733	.8619	-------	.8192	.8137	.0055	.7711	2B	.785	.803	.8209	.8281	.0072	.8750
		3A	.0000	.8750	.8636	-------	.8209	.8168	.0041	.7728	3B	.7850	.7952	.8209	.8263	.0054	.8750
7/8–14 or .875–14	UNF	1A	.0016	.8734	.8579	-------	.8270	.8189	.0081	.7858	1B	.798	.814	.8286	.8392	.0106	.8750
		2A	.0016	.8734	.8631	-------	.8270	.8216	.0054	.7858	2B	.798	.814	.8286	.8356	.0070	.8750
		3A	.0000	.8750	.8647	-------	.8286	.8245	.0041	.7874	3B	.7980	.8068	.8286	.8339	.0053	.8750

See footnotes at end of table.

TABLE III.10.—*Standard series limits of size—Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	External [a]								Internal [a]						
		Class	Allowance	Major diameter limits			Pitch diameter limits			Minor diameter [d]	Class	Minor diameter limits [e]		Pitch diameter limits			Major diameter
				Max [b]	Min	Min [c]	Max [b]	Min	Tolerance			Min	Max	Min	Max	Tolerance	Min
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*		*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
7/8–16 or .875–16	UN	2A	.0015	.8735	.8641	-------	.8329	.8280	.0049	.7968	2B	.807	.821	.8344	.8407	.0063	.8750
		3A	.0000	.8750	.8656	-------	.8344	.8308	.0036	.7983	3B	.8070	.8158	.8344	.8391	.0047	.8750
7/8–20 or .875–20	UNEF	2A	.0013	.8737	.8656	-------	.8412	.8368	.0044	.8124	2B	.821	.832	.8425	.8482	.0057	.8750
		3A	.0000	.8750	.8669	-------	.8425	.8392	.0033	.8137	3B	.8210	.8287	.8425	.8468	.0043	.8750
7/8–28 or .875–28	UN	2A	.0012	.8738	.8673	-------	.8506	.8468	.0038	.8300	2B	.836	.845	.8518	.8568	.0050	.8750
		3A	.0000	.8750	.8685	-------	.8518	.8489	.0029	.8312	3B	.8360	.8426	.8518	.8555	.0037	.8750
7/8–32 or .875–32	UN	2A	.0011	.8739	.8679	-------	.8536	.8500	.0036	.8356	2B	.841	.849	.8547	.8594	.0047	.8750
		3A	.0000	.8750	.8690	-------	.8547	.8520	.0027	.8367	3B	.8410	.8469	.8547	.8583	.0036	.8750
15/16–12 or .9375–12	UN	2A	.0017	.9358	.9244	-------	.8817	.8760	.0057	.8336	2B	.847	.865	.8834	.8908	.0074	.9375
		3A	.0000	.9375	.9261	-------	.8834	.8792	.0042	.8353	3B	.8470	.8575	.8834	.8889	.0055	.9375
15/16–16 or .9375–16	UN	2A	.0015	.9360	.9266	-------	.8954	.8904	.0050	.8593	2B	.870	.884	.8969	.9034	.0065	.9375
		3A	.0000	.9375	.9281	-------	.8969	.8932	.0037	.8608	3B	.8700	.8783	.8969	.9018	.0049	.9375
15/16–20 or .9375–20	UNEF	2A	.0014	.9361	.9280	-------	.9036	.8991	.0045	.8748	2B	.883	.895	.9050	.9109	.0059	.9375
		3A	.0000	.9375	.9294	-------	.9050	.9016	.0034	.8762	3B	.8830	.8912	.9050	.9094	.0044	.9375
15/16–28 or .9375–28	UN	2A	.0012	.9363	.9298	-------	.9131	.9091	.0040	.8925	2B	.899	.907	.9143	.9195	.0052	.9375
		3A	.0000	.9375	.9310	-------	.9143	.9113	.0030	.8937	3B	.8990	.9051	.9143	.9182	.0039	.9375
15/16–32 or .9375–32	UN	2A	.0011	.9364	.9304	-------	.9161	.9123	.0038	.8981	2B	.904	.911	.9172	.9221	.0049	.9375
		3A	.0000	.9375	.9315	-------	.9172	.9144	.0028	.8992	3B	.9040	.9094	.9172	.9209	.0037	.9375
1–8 or 1.000–8	UNC	1A	.0020	.9980	.9755	-------	.9168	.9067	.0101	.8446	1B	.865	.890	.9188	.9320	.0132	1.0000
		2A	.0020	.9980	.9830	.9755	.9168	.9100	.0068	.8446	2B	.865	.890	.9188	.9276	.0088	1.0000
		3A	.0000	1.0000	.9850	-------	.9188	.9137	.0051	.8466	3B	.8650	.8797	.9188	.9254	.0066	1.0000
1–12 or 1.000–12	UNF	1A	.0018	.9982	.9810	-------	.9441	.9353	.0088	.8960	1B	.910	.928	.9459	.9573	.0114	1.0000
		2A	.0018	.9982	.9868	-------	.9441	.9382	.0059	.8960	2B	.910	.928	.9459	.9535	.0076	1.0000
		3A	.0000	1.0000	.9886	-------	.9459	.9415	.0044	.8978	3B	.9100	.9198	.9459	.9516	.0057	1.0000
1–16 or 1.000–16	UN	2A	.0015	.9985	.9891	-------	.9579	.9529	.0050	.9218	2B	.932	.946	.9594	.9659	.0065	1.0000
		3A	.0000	1.0000	.9906	-------	.9594	.9557	.0037	.9233	3B	.9320	.9408	.9594	.9643	.0049	1.0000
1–20 or 1.000–20	UNEF	2A	.0014	.9986	.9905	-------	.9661	.9616	.0045	.9373	2B	.946	.957	.9675	.9734	.0059	1.0000
		3A	.0000	1.0000	.9919	-------	.9675	.9641	.0034	.9387	3B	.9460	.9537	.9675	.9719	.0044	1.0000
1–28 or 1.000–28	UN	2A	.0012	.9988	.9923	-------	.9756	.9716	.0040	.9550	2B	.961	.970	.9768	.9820	.0052	1.0000
		3A	.0000	1.0000	.9935	-------	.9768	.9738	.0030	.9562	3B	.9610	.9676	.9768	.9807	.0039	1.0000
1–32 or 1.000–32	UN	2A	.0011	.9989	.9929	-------	.9786	.9748	.0038	.9606	2B	.966	.974	.9797	.9846	.0049	1.0000
		3A	.0000	1.0000	.9940	-------	.9797	.9769	.0028	.9617	3B	.9660	.9719	.9797	.9834	.0037	1.0000
1 1/16–8 or 1.0625–8	UN	2A	.0020	1.0605	1.0455	-------	.9793	.9725	.0068	.9071	2B	.927	.952	.9813	.9902	.0089	1.0625
		3A	.0000	1.0625	1.0475	-------	.9813	.9762	.0051	.9091	3B	.9270	.9422	.9813	.9880	.0067	1.0625
1 1/16–12 or 1.0625–12	UN	2A	.0017	1.0608	1.0494	-------	1.0067	1.0010	.0057	.9586	2B	.972	.990	1.0084	1.0158	.0074	1.0625
		3A	.0000	1.0625	1.0511	-------	1.0084	1.0042	.0042	.9603	3B	.9720	.9823	1.0084	1.0139	.0055	1.0625
1 1/16–16 or 1.0625–16	UN	2A	.0015	1.0610	1.0516	-------	1.0204	1.0154	.0050	.9843	2B	.995	1.009	1.0219	1.0284	.0065	1.0625
		3A	.0000	1.0625	1.0531	-------	1.0219	1.0182	.0037	.9858	3B	.9950	1.0033	1.0219	1.0268	.0049	1.0625
1 1/16–18 or 1.0625–18	UNEF	2A	.0014	1.0611	1.0524	-------	1.0250	1.0203	.0047	.9929	2B	1.002	1.015	1.0264	1.0326	.0062	1.0625
		3A	.0000	1.0625	1.0538	-------	1.0264	1.0228	.0036	.9943	3B	1.0020	1.0105	1.0264	1.0310	.0046	1.0625
1 1/16–20 or 1.0625–20	UN	2A	.0014	1.0611	1.0530	-------	1.0286	1.0241	.0045	.9998	2B	1.008	1.020	1.0300	1.0359	.0059	1.0625
		3A	.0000	1.0625	1.0544	-------	1.0300	1.0266	.0034	1.0012	3B	1.0080	1.0162	1.0300	1.0344	.0044	1.0625
1 1/16–28 or 1.0625–28	UN	2A	.0012	1.0613	1.0548	-------	1.0381	1.0341	.0040	1.0175	2B	1.024	1.032	1.0393	1.0445	.0052	1.0625
		3A	.0000	1.0625	1.0560	-------	1.0393	1.0363	.0030	1.0187	3B	1.0240	1.0301	1.0393	1.0432	.0039	1.0625
1 1/8–7 or 1.125–7	UNC	1A	.0022	1.1228	1.0982	-------	1.0300	1.0191	.0109	.9475	1B	.970	.998	1.0322	1.0463	.0141	1.1250
		2A	.0022	1.1228	1.1064	1.0982	1.0300	1.0228	.0072	.9475	2B	.970	.998	1.0322	1.0416	.0094	1.1250
		3A	.0000	1.1250	1.1086	-------	1.0322	1.0268	.0054	.9497	3B	.9700	.9875	1.0322	1.0393	.0071	1.1250
1 1/8–8 or 1.125–8	UN	2A	.0021	1.1229	1.1079	1.1004	1.0417	1.0348	.0069	.9695	2B	.990	1.015	1.0438	1.0528	.0090	1.1250
		3A	.0000	1.1250	1.1100	-------	1.0438	1.0386	.0052	.9716	3B	.9900	1.0047	1.0438	1.0505	.0067	1.1250
1 1/8–12 or 1.125–12	UNF	1A	.0018	1.1232	1.1060	-------	1.0691	1.0601	.0090	1.0210	1B	1.035	1.053	1.0709	1.0826	.0117	1.1250
		2A	.0018	1.1232	1.1118	-------	1.0691	1.0631	.0060	1.0210	2B	1.035	1.053	1.0709	1.0787	.0078	1.1250
		3A	.0000	1.1250	1.1136	-------	1.0709	1.0664	.0045	1.0228	3B	1.0350	1.0448	1.0709	1.0768	.0059	1.1250
1 1/8–16 or 1.125–16	UN	2A	.0015	1.1235	1.1141	-------	1.0829	1.0779	.0050	1.0468	2B	1.057	1.071	1.0844	1.0909	.0065	1.1250
		3A	.0000	1.1250	1.1156	-------	1.0844	1.0807	.0037	1.0483	3B	1.0570	1.0658	1.0844	1.0893	.0049	1.1250
1 1/8–18 or 1.125–18	UNEF	2A	.0014	1.1236	1.1149	-------	1.0875	1.0828	.0047	1.0554	2B	1.065	1.078	1.0889	1.0951	.0062	1.1250
		3A	.0000	1.1250	1.1163	-------	1.0889	1.0853	.0036	1.0568	3B	1.0650	1.0730	1.0889	1.0935	.0046	1.1250
1 1/8–20 or 1.125–20	UN	2A	.0014	1.1236	1.1155	-------	1.0911	1.0866	.0045	1.0623	2B	1.071	1.082	1.0925	1.0984	.0059	1.1250
		3A	.0000	1.1250	1.1169	-------	1.0925	1.0891	.0034	1.0637	3B	1.0710	1.0787	1.0925	1.0969	.0044	1.1250

See footnotes at end of table.

TABLE III.10.—*Standard series limits of size—Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	External [a]								Internal [a]						
		Class	Allowance	Major diameter limits			Pitch diameter limits			Minor diameter [d]	Class	Minor diameter limits [e]		Pitch diameter limits			Major diameter
				Max [b]	Min	Min [c]	Max [b]	Min	Tolerance			Min	Max	Min	Max	Tolerance	Min
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*		*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
1⅛–28 or 1.125–28	UN	2A	.0012	1.1238	1.1173	-------	1.1006	1.0966	.0040	1.0800	2B	1.086	1.095	1.1018	1.1070	.0052	1.1250
		3A	.0000	1.1250	1.1185	-------	1.1018	1.0988	.0030	1.0812	3B	1.0860	1.0926	1.1018	1.1057	.0039	1.1250
1 3/16–8 or 1.1875–8	UN	2A	.0021	1.1854	1.1704	-------	1.1042	1.0972	.0070	1.0320	2B	1.052	1.077	1.1063	1.1154	.0091	1.1875
		3A	.0000	1.1875	1.1725	-------	1.1063	1.1011	.0052	1.0341	3B	1.0520	1.0672	1.1063	1.1131	.0068	1.1875
1 3/16–12 or 1.1875–12	UN	2A	.0017	1.1858	1.1744	-------	1.1317	1.1259	.0058	1.0836	2B	1.097	1.115	1.1334	1.1409	.0075	1.1875
		3A	.0000	1.1875	1.1761	-------	1.1334	1.1291	.0043	1.0853	3B	1.0970	1.1073	1.1334	1.1390	.0056	1.1875
1 3/16–16 or 1.1875–16	UN	2A	.0015	1.1860	1.1766	-------	1.1454	1.1403	.0051	1.1093	2B	1.120	1.134	1.1469	1.1535	.0066	1.1875
		3A	.0000	1.1875	1.1781	-------	1.1469	1.1431	.0038	1.1108	3B	1.1200	1.1283	1.1469	1.1519	.0050	1.1875
1 3/16–18 or 1.1875–18	UNEF	2A	.0015	1.1860	1.1773	-------	1.1499	1.1450	.0049	1.1178	2B	1.127	1.140	1.1514	1.1577	.0063	1.1875
		3A	.0000	1.1875	1.1788	-------	1.1514	1.1478	.0036	1.1193	3B	1.1270	1.1355	1.1514	1.1561	.0047	1.1875
1 3/16–20 or 1.1875–20	UN	2A	.0014	1.1861	1.1780	-------	1.1536	1.1489	.0047	1.1248	2B	1.133	1.145	1.1550	1.1611	.0061	1.1875
		3A	.0000	1.1875	1.1794	-------	1.1550	1.1515	.0035	1.1262	3B	1.1330	1.1412	1.1550	1.1595	.0045	1.1875
1 3/16–28 or 1.1875–28	UN	2A	.0012	1.1863	1.1798	-------	1.1631	1.1590	.0041	1.1425	2B	1.149	1.157	1.1643	1.1696	.0053	1.1875
		3A	.0000	1.1875	1.1810	-------	1.1643	1.1612	.0031	1.1437	3B	1.1490	1.1551	1.1643	1.1683	.0040	1.1875
1¼–7 or 1.250–7	UNC	1A	.0022	1.2478	1.2232	-------	1.1550	1.1439	.0111	1.0725	1B	1.095	1.123	1.1572	1.1716	.0144	1.2500
		2A	.0022	1.2478	1.2314	1.2232	1.1550	1.1476	.0074	1.0725	2B	1.095	1.123	1.1572	1.1668	.0096	1.2500
		3A	.0000	1.2500	1.2336	-------	1.1572	1.1517	.0055	1.0747	3B	1.0950	1.1125	1.1572	1.1644	.0072	1.2500
1¼–8 or 1.250–8	UN	2A	.0021	1.2479	1.2329	1.2254	1.1667	1.1597	.0070	1.0945	2B	1.115	1.140	1.1688	1.1780	.0092	1.2500
		3A	.0000	1.2500	1.2350	-------	1.1688	1.1635	.0053	1.0966	3B	1.1150	1.1297	1.1688	1.1757	.0069	1.2500
1¼–12 or 1.250–12	UNF	1A	.0018	1.2482	1.2310	-------	1.1941	1.1849	.0092	1.1460	1B	1.160	1.178	1.1959	1.2079	.0120	1.2500
		2A	.0018	1.2482	1.2368	-------	1.1941	1.1879	.0062	1.1460	2B	1.160	1.178	1.1959	1.2039	.0080	1.2500
		3A	.0000	1.2500	1.2386	-------	1.1959	1.1913	.0046	1.1478	3B	1.1600	1.1698	1.1959	1.2019	.0060	1.2500
1¼–16 or 1.250–16	UN	2A	.0015	1.2485	1.2391	-------	1.2079	1.2028	.0051	1.1718	2B	1.182	1.196	1.2094	1.2160	.0066	1.2500
		3A	.0000	1.2500	1.2406	-------	1.2094	1.2056	.0038	1.1733	3B	1.1820	1.1908	1.2094	1.2144	.0050	1.2500
1¼–18 or 1.250–18	UNEF	2A	.0015	1.2485	1.2398	-------	1.2124	1.2075	.0049	1.1803	2B	1.190	1.203	1.2139	1.2202	.0063	1.2500
		3A	.0000	1.2500	1.2413	-------	1.2139	1.2103	.0036	1.1818	3B	1.1900	1.1980	1.2139	1.2186	.0047	1.2500
1¼–20 or 1.250–20	UN	2A	.0014	1.2486	1.2405	-------	1.2161	1.2114	.0047	1.1873	2B	1.196	1.207	1.2175	1.2236	.0061	1.2500
		3A	.0000	1.2500	1.2419	-------	1.2175	1.2140	.0035	1.1887	3B	1.1960	1.2037	1.2175	1.2220	.0045	1.2500
1¼–28 or 1.250–28	UN	2A	.0012	1.2488	1.2423	-------	1.2256	1.2215	.0041	1.2050	2B	1.211	1.220	1.2268	1.2321	.0053	1.2500
		3A	.0000	1.2500	1.2435	-------	1.2268	1.2237	.0031	1.2062	3B	1.2110	1.2176	1.2268	1.2308	.0040	1.2500
1 5/16–8 or 1.3125–8	UN	2A	.0021	1.3104	1.2954	-------	1.2292	1.2221	.0071	1.1570	2B	1.177	1.202	1.2313	1.2405	.0092	1.3125
		3A	.0000	1.3125	1.2975	-------	1.2313	1.2260	.0053	1.1591	3B	1.1770	1.1922	1.2313	1.2382	.0069	1.3125
1 5/16–12 or 1.3125–12	UN	2A	.0017	1.3108	1.2994	-------	1.2567	1.2509	.0058	1.2086	2B	1.222	1.240	1.2584	1.2659	.0075	1.3125
		3A	.0000	1.3125	1.3011	-------	1.2584	1.2541	.0043	1.2103	3B	1.2220	1.2323	1.2584	1.2640	.0056	1.3125
1 5/16–16 or 1.3125–16	UN	2A	.0015	1.3110	1.3016	-------	1.2704	1.2653	.0051	1.2343	2B	1.245	1.259	1.2719	1.2785	.0066	1.3125
		3A	.0000	1.3125	1.3031	-------	1.2719	1.2681	.0038	1.2358	3B	1.2450	1.2533	1.2719	1.2769	.0050	1.3125
1 5/16–18 or 1.3125–18	UNEF	2A	.0015	1.3110	1.3023	-------	1.2749	1.2700	.0049	1.2428	2B	1.252	1.265	1.2764	1.2827	.0063	1.3125
		3A	.0000	1.3125	1.3038	-------	1.2764	1.2728	.0036	1.2443	3B	1.2520	1.2605	1.2764	1.2811	.0047	1.3125
1 5/16–20 or 1.3125–20	UN	2A	.9014	1.3111	1.3030	-------	1.2786	1.2739	.0047	1.2498	2B	1.258	1.270	1.2800	1.2861	.0061	1.3125
		3A	.0000	1.3125	1.3044	-------	1.2800	1.2765	.0035	1.2512	3B	1.2580	1.2662	1.2800	1.2845	.0045	1.3125
1 5/16–28 or 1.3125–28	UN	2A	.0012	1.3113	1.3048	-------	1.2881	1.2840	.0041	1.2675	2B	1.274	1.282	1.2893	1.2946	.0053	1.3125
		3A	.0000	1.3125	1.3060	-------	1.2893	1.2862	.0031	1.2687	3B	1.2740	1.2801	1.2893	1.2933	.0040	1.3125
1⅜–6 or 1.375–6	UNC	1A	.0024	1.3726	1.3453	-------	1.2643	1.2523	.0120	1.1681	1B	1.195	1.225	1.2667	1.2822	.0155	1.3750
		2A	.0024	1.3726	1.3544	1.3453	1.2643	1.2563	.0080	1.1681	2B	1.195	1.225	1.2667	1.2771	.0104	1.3750
		3A	.0000	1.3750	1.3568	-------	1.2667	1.2607	.0060	1.1705	3B	1.1950	1.2146	1.2667	1.2745	.0078	1.3750
1⅜–8 or 1.375–8	UN	2A	.0022	1.3728	1.3578	1.3503	1.2916	1.2844	.0072	1.2194	2B	1.240	1.265	1.2938	1.3031	.0093	1.3750
		3A	.0000	1.3750	1.3600	-------	1.2938	1.2884	.0054	1.2216	3B	1.2400	1.2547	1.2938	1.3008	.0070	1.3750
1⅜–12 or 1.375–12	UNF	1A	.0019	1.3731	1.3559	-------	1.3190	1.3096	.0094	1.2709	1B	1.285	1.303	1.3209	1.3332	.0123	1.3750
		2A	.0019	1.3731	1.3617	-------	1.3190	1.3127	.0063	1.2709	2B	1.285	1.303	1.3209	1.3291	.0082	1.3750
		3A	.0000	1.3750	1.3636	-------	1.3209	1.3162	.0047	1.2728	3B	1.2850	1.2948	1.3209	1.3270	.0061	1.3750
1⅜–16 or 1.375–16	UN	2A	.0015	1.3735	1.3641	-------	1.3329	1.3278	.0051	1.2968	2B	1.307	1.321	1.3344	1.3410	.0066	1.3750
		3A	.0000	1.3750	1.3656	-------	1.3344	1.3306	.0038	1.2983	3B	1.3070	1.3158	1.3344	1.3394	.0050	1.3750
1⅜–18 or 1.375–18	UNEF	2A	.0015	1.3735	1.3648	-------	1.3374	1.3325	.0049	1.3053	2B	1.315	1.328	1.3389	1.3452	.0063	1.3750
		3A	.000	1.3750	1.3663	-------	1.3389	1.3353	.0036	1.3068	3B	1.3150	1.3230	1.3389	1.3436	.0047	1.3750
1⅜–20 or 1.375–20	UN	2A	.0014	1.3736	1.3655	-------	1.3411	1.3364	.0047	1.3123	2B	1.321	1.332	1.3425	1.3486	.0061	1.3750
		3A	.0000	1.3750	1.3669	-------	1.3425	1.3390	.0035	1.3137	3B	1.3210	1.3287	1.3425	1.3470	.0045	1.3750

See footnotes at end of table.

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TABLE III.10.—*Standard series limits of size—Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	External [a]									Internal [a]						
		Class	Allowance	Major diameter limits			Pitch diameter limits			Minor diameter [d]	Class	Minor diameter limits [e]		Pitch diameter limits			Major diameter
				Max [b]	Min	Min [c]	Max [b]	Min	Tolerance			Min	Max	Min	Max	Tolerance	Min
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*		*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
1⅜–28 or 1.375–28	UN	2A	.0012	1.3738	1.3673	-------	1.3506	1.3465	.0041	1.3300	2B	1.336	1.345	1.3518	1.3571	.0053	1.3750
		3A	.0000	1.3750	1.3685	-------	1.3518	1.3487	.0031	1.3312	3B	1.3360	1.3426	1.3518	1.3558	.0040	1.3750
1 7/16–6 or 1.4375–6	UN	2A	.0024	1.4351	1.4169	-------	1.3268	1.3188	.0080	1.2306	2B	1.257	1.288	1.3292	1.3396	.0104	1.4375
		3A	.0000	1.4375	1.4193	-------	1.3292	1.3232	.0060	1.2330	3B	1.2570	1.2771	1.3292	1.3370	.0078	1.4375
1 7/16–8 1.4375–8	UN	2A	.0022	1.4353	1.4203	-------	1.3541	1.3469	.0072	1.2819	2B	1.302	1.327	1.3563	1.3657	.0094	1.4375
		3A	.0000	1.4375	1.4225	-------	1.3563	1.3509	.0054	1.2841	3B	1.3020	1.3172	1.3563	1.3634	.0071	1.4375
1 7/16–12 or 1.4375–12	UN	2A	.0018	1.4357	1.4243	-------	1.3816	1.3757	.0059	1.3335	2B	1.347	1.365	1.3834	1.3910	.0076	1.4375
		3A	.0000	1.4375	1.4261	-------	1.3834	1.3790	.0044	1.3353	3B	1.3470	1.3573	1.3834	1.3891	.0057	1.4375
1 7/16–16 or 1.4375–16	UN	2A	.0016	1.4359	1.4265	-------	1.3953	1.3901	.0052	1.3592	2B	1.370	1.384	1.3969	1.4037	.0068	1.4375
		3A	.0000	1.4375	1.4281	-------	1.3969	1.3930	.0039	1.3608	3B	1.3700	1.3783	1.3969	1.4020	.0051	1.4375
1 7/16–18 or 1.4375–18	UNEF	2A	.0015	1.4360	1.4273	-------	1.3999	1.3949	.0050	1.3678	2B	1.377	1.390	1.4014	1.4079	.0065	1.4375
		3A	.0000	1.4375	1.4288	-------	1.4014	1.3977	.0037	1.3693	3B	1.3770	1.3855	1.4014	1.4062	.0048	1.4375
1 7/16–20 or 1.4375–20	UN	2A	.0014	1.4361	1.4280	-------	1.4036	1.3988	.0048	1.3748	2B	1.383	1.395	1.4050	1.4112	.0062	1.4375
		3A	.0000	1.4375	1.4294	-------	1.4050	1.4014	.0036	1.3762	3B	1.3830	1.3912	1.4050	1.4096	.0046	1.4375
1 7/16–28 or 1.4375–28	UN	2A	.0013	1.4362	1.4297	-------	1.4130	1.4088	.0042	1.3924	2B	1.399	1.407	1.4143	1.4198	.0055	1.4375
		3A	.0000	1.4375	1.4310	-------	1.4143	1.4112	.0031	1.3937	3B	1.3990	1.4051	1.4143	1.4184	.0041	1.4375
1½–6 or 1.500–6	UNC	1A	.0024	1.4976	1.4703	-------	1.3893	1.3772	.0121	1.2931	1B	1.320	1.350	1.3917	1.4075	.0158	1.5000
		2A	.0024	1.4976	1.4794	1.4703	1.3893	1.3812	.0081	1.2931	2B	1.320	1.350	1.3917	1.4022	.0105	1.5000
		3A	.0000	1.5000	1.4818	-------	1.3917	1.3856	.0061	1.2955	3B	1.3200	1.3396	1.3917	1.3996	.0079	1.5000
1½–8 or 1.500–8	UN	2A	.0022	1.4978	1.4828	1.4753	1.4166	1.4093	.0073	1.3444	2B	1.365	1.390	1.4188	1.4283	.0095	1.5000
		3A	.0000	1.5000	1.4850	-------	1.4188	1.4133	.0055	1.3466	3B	1.3650	1.3797	1.4188	1.4259	.0071	1.5000
1½–12 or 1.500–12	UNF	1A	.0019	1.4981	1.4809	-------	1.4440	1.4344	.0096	1.3959	1B	1.410	1.428	1.4459	1.4584	.0125	1.5000
		2A	.0019	1.4981	1.4867	-------	1.4440	1.4376	.0064	1.3959	2B	1.410	1.428	1.4459	1.4542	.0083	1.5000
		3A	.0000	1.5000	1.4886	-------	1.4459	1.4411	.0048	1.3978	3B	1.4100	1.4198	1.4459	1.4522	.0063	1.5000
1½–16 or 1.500–16	UN	2A	.0016	1.4984	1.4890	-------	1.4578	1.4526	.0052	1.4217	2B	1.432	1.446	1.4594	1.4662	.0068	1.5000
		3A	.0000	1.5000	1.4906	-------	1.4594	1.4555	.0039	1.4233	3B	1.4320	1.4408	1.4594	1.4645	.0051	1.5000
1½–18 or 1.500–18	UNEF	2A	.0015	1.4985	1.4898	-------	1.4624	1.4574	.0050	1.4303	2B	1.440	1.452	1.4639	1.4704	.0065	1.5000
		3A	.0000	1.5000	1.4913	-------	1.4639	1.4602	.0037	1.4318	3B	1.4400	1.4480	1.4639	1.4687	.0048	1.5000
1½–20 or 1.500–20	UN	2A	.0014	1.4986	1.4905	-------	1.4661	1.4613	.0048	1.4373	2B	1.446	1.457	1.4675	1.4737	.0062	1.5000
		3A	.0000	1.5000	1.4919	-------	1.4675	1.4639	.0036	1.4387	3B	1.4460	1.4537	1.4675	1.4721	.0046	1.5000
1½–28 or 1.500–28	UN	2A	.0013	1.4987	1.4922	-------	1.4755	1.4713	.0042	1.4549	2B	1.461	1.470	1.4768	1.4823	.0055	1.5000
		3A	.0000	1.5000	1.4935	-------	1.4768	1.4737	.0031	1.4562	3B	1.4610	1.4676	1.4768	1.4809	.0041	1.5000
1 9/16–6 or 1.5625–6	UN	2A	.0024	1.5601	1.5419	-------	1.4518	1.4436	.0082	1.3556	2B	1.382	1.413	1.4542	1.4648	.0106	1.5625
		3A	.0000	1.5625	1.5443	-------	1.4542	1.4481	.0061	1.3580	3B	1.3820	1.4021	1.4542	1.4622	.0080	1.5625
1 9/16–8 or 1.5625–8	UN	2A	.0022	1.5603	1.5453	-------	1.4791	1.4717	.0074	1.4069	2B	1.427	1.452	1.4813	1.4909	.0096	1.5625
		3A	.0000	1.5625	1.5475	-------	1.4813	1.4758	.0055	1.4091	3B	1.4270	1.4422	1.4813	1.4885	.0072	1.5625
1 9/16–12 or 1.5625–12	UN	2A	.0018	1.5607	1.5493	-------	1.5066	1.5007	.0059	1.4585	2B	1.472	1.490	1.5084	1.5160	.0076	1.5625
		3A	.0000	1.5625	1.5511	-------	1.5084	1.5040	.0044	1.4603	3B	1.4720	1.4823	1.5084	1.5141	.0057	1.5625
1 9/16–16 or 1.5625–16	UN	2A	.0016	1.5609	1.5515	-------	1.5203	1.5151	.0052	1.4842	2B	1.495	1.509	1.5219	1.5287	.0068	1.5625
		3A	.0000	1.5625	1.5531	-------	1.5219	1.5180	.0039	1.4858	3B	1.4950	1.5033	1.5219	1.5270	.0051	1.5625
1 9/16–18 or 1.5625–18	UNEF	2A	.0015	1.5610	1.5523	-------	1.5249	1.5199	.0050	1.4928	2B	1.502	1.515	1.5264	1.5329	.0065	1.5625
		3A	.0000	1.5625	1.5538	-------	1.5264	1.5227	.0037	1.4943	3B	1.5020	1.5105	1.5264	1.5312	.0048	1.5625
1 9/16–20 or 1.5625–20	UN	2A	.0014	1.5611	1.5530	-------	1.5286	1.5238	.0048	1.4998	2B	1.508	1.520	1.5300	1.5362	.0062	1.5625
		3A	.0000	1.5625	1.5544	-------	1.5300	1.5264	.0036	1.5012	3B	1.5080	1.5162	1.5300	1.5346	.0046	1.5625
1⅝–6 or 1.625–6	UN	2A	.0025	1.6225	1.6043	-------	1.5142	1.5060	.0082	1.4180	2B	1.445	1.475	1.5167	1.5274	.0107	1.6250
		3A	.0000	1.6250	1.6068	-------	1.5167	1.5105	.0062	1.4205	3B	1.4450	1.4646	1.5167	1.5247	.0080	1.6250
1⅝–8 or 1.625–8	UN	2A	.0022	1.6228	1.6078	1.6003	1.5416	1.5342	.0074	1.4694	2B	1.490	1.515	1.5438	1.5535	.0097	1.6250
		3A	.0000	1.6250	1.6100	-------	1.5438	1.5382	.0056	1.4716	3B	1.4900	1.5047	1.5438	1.5510	.0072	1.6250
1⅝–12 or 1.625–12	UN	2A	.0018	1.6232	1.6118	-------	1.5691	1.5632	.0059	1.5210	2B	1.535	1.553	1.5709	1.5785	.0076	1.6250
		3A	.0000	1.6250	1.6136	-------	1.5709	1.5665	.0044	1.5228	3B	1.5350	1.5448	1.5709	1.5766	.0057	1.6250
1⅝–16 or 1.625–16	UN	2A	.0016	1.6234	1.6140	-------	1.5828	1.5776	.0052	1.5467	2B	1.557	1.571	1.5844	1.5912	.0068	1.6250
		3A	.0000	1.6250	1.6156	-------	1.5844	1.5805	.0039	1.5483	3B	1.5570	1.5658	1.5844	1.5895	.0051	1.6250
1⅝–18 or 1.625–18	UNEF	2A	.0015	1.6235	1.6148	-------	1.5874	1.5824	.0050	1.5553	2B	1.565	1.578	1.5889	1.5954	.0065	1.6250
		3A	.0000	1.6250	1.6163	-------	1.5889	1.5852	.0037	1.5568	3B	1.5650	1.5730	1.5889	1.5937	.0048	1.6250
1⅝–20 or 1.625–20	UN	2A	.0014	1.6236	1.6155	-------	1.5911	1.5863	.0048	1.5623	2B	1.571	1.582	1.5925	1.5987	.0062	1.6250
		3A	.0000	1.6250	1.6169	-------	1.5925	1.5889	.0036	1.5637	3B	1.5710	1.5787	1.5925	1.5971	.0046	1.6250

See footnotes at end of table.

TABLE III.10.—*Standard series limits of size—Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	External [a]								Internal [a]						
		Class	Allowance	Major diameter limits			Pitch diameter limits			Minor diameter [d]	Class	Minor diameter limits [e]		Pitch diameter limits			Major diameter
				Max [b]	Min	Min [c]	Max [b]	Min	Tolerance			Min	Max	Min	Max	Tolerance	Min
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*		*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
1 1/16–6 or 1.6875–6	UN	2A	.0025	1.6850	1.6668	-------	1.5767	1.5684	.0083	1.4805	2B	1.507	1.538	1.5792	1.5900	.0108	1.6875
		3A	.0000	1.6875	1.6693	-------	1.5792	1.5730	.0062	1.4830	3B	1.5070	1.5271	1.5792	1.5873	.0081	1.6875
1 1/16–8 or 1.6875–8	UN	2A	.0022	1.6853	1.6703	-------	1.6041	1.5966	.0075	1.5319	2B	1.552	1.577	1.6063	1.6160	.0097	1.6875
		3A	.0000	1.6875	1.6725	-------	1.6063	1.6007	.0056	1.5341	3B	1.5520	1.5672	1.6063	1.6136	.0073	1.6875
1 1/16–12 or 1.6875–12	UN	2A	.0018	1.6857	1.6743	-------	1.6316	1.6256	.0060	1.5835	2B	1.597	1.615	1.6334	1.6412	.0078	1.6875
		3A	.0000	1.6875	1.6761	-------	1.6334	1.6289	.0045	1.5853	3B	1.5970	1.6073	1.6334	1.6392	.0058	1.6875
1 1/16–16 or 1.6875–16	UN	2A	.0016	1.6859	1.6765	-------	1.6453	1.6400	.0053	1.6092	2B	1.620	1.634	1.6469	1.6538	.0069	1.6875
		3A	.0000	1.6875	1.6781	-------	1.6469	1.6429	.0040	1.6108	3B	1.6200	1.6283	1.6469	1.6521	.0052	1.6875
1 1/16–18 or 1.6875–18	UNEF	2A	.0015	1.6860	1.6773	-------	1.6499	1.6448	.0051	1.6178	2B	1.627	1.640	1.6514	1.6580	.0066	1.6875
		3A	.0000	1.6875	1.6788	-------	1.6514	1.6476	.0038	1.6193	3B	1.6270	1.6355	1.6514	1.6563	.0049	1.6875
1 1/16–20 or 1.6875–20	UN	2A	.0015	1.6860	1.6779	-------	1.6535	1.6487	.0048	1.6247	2B	1.633	1.645	1.6550	1.6613	.0063	1.6875
		3A	.0000	1.6875	1.6794	-------	1.6550	1.6514	.0036	1.6262	3B	1.6330	1.6412	1.6550	1.6597	.0047	1.6875
1 3/4–5 or 1.750–5	UNC	1A	.0027	1.7473	1.7165	-------	1.6174	1.6040	.0134	1.5019	1B	1.534	1.568	1.6201	1.6375	.0174	1.7500
		2A	.0027	1.7473	1.7268	1.7165	1.6174	1.6085	.0089	1.5019	2B	1.534	1.568	1.6201	1.6317	.0116	1.7500
		3A	.0000	1.7500	1.7295	-------	1.6201	1.6134	.0067	1.5046	3B	1.5340	1.5575	1.6201	1.6288	.0087	1.7500
1 3/4–6 or 1.750–6	UN	2A	.0025	1.7475	1.7293	-------	1.6392	1.6309	.0083	1.5430	2B	1.570	1.600	1.6417	1.6525	.0108	1.7500
		3A	.0000	1.7500	1.7318	-------	1.6417	1.6354	.0063	1.5455	3B	1.5700	1.5896	1.6417	1.6498	.0081	1.7500
1 3/4–8 or 1.750–8	UN	2A	.0023	1.7477	1.7327	1.7252	1.6665	1.6590	.0075	1.5943	2B	1.615	1.640	1.6688	1.6786	.0098	1.7500
		3A	.0000	1.7500	1.7350	-------	1.6688	1.6631	.0057	1.5966	3B	1.6150	1.6297	1.6688	1.6762	.0074	1.7500
1 3/4–12 or 1.750–12	UN	2A	.0018	1.7482	1.7368	-------	1.6941	1.6881	.0060	1.6460	2B	1.660	1.678	1.6959	1.7037	.0078	1.7500
		3A	.0000	1.7500	1.7386	-------	1.6959	1.6914	.0045	1.6478	3B	1.6600	1.6698	1.6959	1.7017	.0058	1.7500
1 3/4–16 or 1.750–16	UN	2A	.0016	1.7484	1.7390	-------	1.7078	1.7025	.0053	1.6717	2B	1.682	1.696	1.7094	1.7163	.0069	1.7500
		3A	.0000	1.7500	1.7406	-------	1.7094	1.7054	.0040	1.6733	3B	1.6820	1.6908	1.7094	1.7146	.0052	1.7500
1 3/4–20 or 1.750–20	UN	2A	.0015	1.7485	1.7404	-------	1.7160	1.7112	.0048	1.6872	2B	1.696	1.707	1.7175	1.7238	.0063	1.7500
		3A	.0000	1.7500	1.7419	-------	1.7175	1.7139	.0036	1.6887	3B	1.6960	1.7037	1.7175	1.7222	.0047	1.7500
1 13/16–6 or 1.8125–6	UN	2A	.0025	1.8100	1.7918	-------	1.7017	1.6933	.0084	1.6055	2B	1.632	1.663	1.7042	1.7151	.0109	1.8125
		3A	.0000	1.8125	1.7943	-------	1.7042	1.6979	.0063	1.6080	3B	1.6320	1.6521	1.7042	1.7124	.0082	1.8125
1 13/16–8 or 1.8125–8	UN	2A	.0023	1.8102	1.7952	-------	1.7290	1.7214	.0076	1.6568	2B	1.677	1.702	1.7313	1.7412	0099	1.8125
		3A	.0000	1.8125	1.7975	-------	1.7313	1.7256	.0057	1.6591	3B	1.6770	1.6922	1.7313	1.7387	.0074	1.8125
1 13/16–12 or 1.8125–12	UN	2A	.0018	1.8107	1.7993	-------	1.7566	1.7506	.0060	1.7085	2B	1.722	1.740	1.7584	1.7662	.0078	1.8125
		3A	.0000	1.8125	1.8011	-------	1.7584	1.7539	.0045	1.7103	3B	1.7220	1.7323	1.7584	1.7642	.0058	1.8125
1 13/16–16 or 1.8125–16	UN	2A	.0016	1.8109	1.8015	-------	1.7703	1.7650	.0053	1.7342	2B	1.745	1.759	1.7719	1.7788	.0069	1.8125
		3A	.0000	1.8125	1.8031	-------	1.7719	1.7679	.0040	1.7358	3B	1.7450	1.7533	1.7719	1.7771	.0052	1.8125
1 13/16–20 or 1.8125–20	UN	2A	.0015	1.8110	1.8029	-------	1.7785	1.7737	.0048	1.7497	2B	1.758	1.770	1.7800	1.7863	.0063	1.8125
		3A	.0000	1.8125	1.8044	-------	1.7800	1.7764	.0036	1.7512	3B	1.7580	1.7662	1.7800	1.7847	.0047	1.8125
1 7/8–6 or 1.875–6	UN	2A	.0025	1.8725	1.8543	-------	1.7642	1.7558	.0084	1.6680	2B	1.695	1.725	1.7667	1.7777	.0110	1.8750
		3A	.0000	1.8750	1.8568	-------	1.7667	1.7604	.0063	1.6705	3B	1.6950	1.7146	1.7667	1.7749	.0082	1.8750
1 7/8–8 or 1.875–8	UN	2A	.0023	1.8727	1.8577	1.8502	1.7915	1.7838	.0077	1.7193	2B	1.740	1.765	1.7938	1.8038	.0100	1.8750
		3A	.0000	1.8750	1.8600	-------	1.7938	1.7881	.0057	1.7216	3B	1.7400	1.7547	1.7938	1.8013	.0075	1.8750
1 7/8–12 or 1.875–12	UN	2A	.0018	1.8732	1.8618	-------	1.8191	1.8131	.0060	1.7710	2B	1.785	1.803	1.8209	1.8287	.0078	1.8750
		3A	.0000	1.8750	1.8636	-------	1.8209	1.8164	.0045	1.7728	3B	1.7850	1.7948	1.8209	1.8267	.0058	1.8750
1 7/8–16 or 1.875–16	UN	2A	.0016	1.8734	1.8640	-------	1.8328	1.8275	.0053	1.7967	2B	1.807	1.821	1.8344	1.8413	.0069	1.8750
		3A	.0000	1.8750	1.8656	-------	1.8344	1.8304	.0040	1.7983	3B	1.8070	1.8158	1.8344	1.8396	.0052	1.8750
1 7/8–20 or 1.875–20	UN	2A	.0015	1.8735	1.8654	-------	1.8410	1.8362	.0048	1.8122	2B	1.821	1.832	1.8425	1.8488	.0063	1.8750
		3A	.0000	1.8750	1.8669	-------	1.8425	1.8389	.0036	1.8137	3B	1.8210	1.8287	1.8425	1.8472	.0047	1.8750
1 15/16–6 or 1.9375–6	UN	2A	.0026	1.9349	1.9167	-------	1.8266	1.8181	.0085	1.7304	2B	1.757	1.788	1.8292	1.8403	.0111	1.9375
		3A	.0000	1.9375	1.9193	-------	1.8292	1.8228	.0064	1.7330	3B	1.7570	1.7771	1.8292	1.8375	.0083	1.9375
1 15/16–8 or 1.9375–8	UN	2A	.0023	1.9352	1.9202	-------	1.8540	1.8463	.0077	1.7818	2B	1.802	1.827	1.8563	1.8663	.0100	1.9375
		3A	.0000	1.9375	1.9225	-------	1.8563	1.8505	.0058	1.7841	3B	1.8020	1.8172	1.8563	1.8638	.0075	1.9375
1 15/16–12 or 1.9375–12	UN	2A	.0018	1.9357	1.9243	-------	1.8816	1.8755	.0061	1.8335	2B	1.847	1.865	1.8834	1.8913	.0079	1.9375
		3A	.0000	1.9375	1.9261	-------	1.8834	1.8789	.0045	1.8353	3B	1.8470	1.8573	1.8834	1.8893	.0059	1.9375
1 15/16–16 or 1.9375–16	UN	2A	.0016	1.9359	1.9265	-------	1.8953	1.8899	.0054	1.8592	2B	1.870	1.884	1.8969	1.9039	.0070	1.9375
		3A	.0000	1.9375	1.9281	-------	1.8969	1.8929	.0040	1.8608	3B	1.8700	1.8783	1.8969	1.9021	.0052	1.9375
1 15/16–20 or 1.9375–20	UN	2A	.0015	1.9360	1.9279	-------	1.9035	1.8986	.0049	1.8747	2B	1.883	1.895	1.9050	1.9114	.0064	1.9375
		3A	.0000	1.9375	1.9294	-------	1.9050	1.9013	.0037	1.8762	3B	1.8830	1.8912	1.9050	1.9098	.0048	1.9375

See footnotes at end of table.

TABLE III.10.—*Standard series limits of size—Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	External [a]									Internal [a]						
		Class	Allowance	Major diameter limits			Pitch diameter limits			Minor diameter [d]	Class	Minor diameter limits [e]		Pitch diameter limits			Major diameter
				Max [b]	Min	Min [c]	Max [b]	Min	Tolerance			Min	Max	Min	Max	Tolerance	Min
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*		*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
2–4½ or 2.000–4.5	UNC	1A	.0029	1.9971	1.9641	———	1.8528	1.8385	.0143	1.7245	1B	1.759	1.795	1.8557	1.8743	.0186	2.0000
		2A	.0029	1.9971	1.9751	1.9641	1.8528	1.8433	.0095	1.7245	2B	1.759	1.795	1.8557	1.8681	.0124	2.0000
		3A	.0000	2.0000	1.9780	———	1.8557	1.8486	.0071	1.7274	3B	1.7590	1.7861	1.8557	1.8650	.0093	2.0000
2–6 or 2.000–6	UN	2A	.0026	1.9974	1.9792	———	1.8891	1.8805	.0086	1.7929	2B	1.820	1.850	1.8917	1.9028	.0111	2.0000
		3A	.0000	2.0000	1.9818	———	1.8917	1.8853	.0064	1.7955	3B	1.8200	1.8396	1.8917	1.9000	.0083	2.0000
2–8 or 2.000–8	UN	2A	.0023	1.9977	1.9827	1.9752	1.9165	1.9087	.0078	1.8443	2B	1.865	1.890	1.9188	1.9289	.0101	2.0000
		3A	.0000	2.0000	1.9850	———	1.9188	1.9130	.0058	1.8466	3B	1.8650	1.8797	1.9188	1.9264	.0076	2.0000
2–12 or 2.000–12	UN	2A	.0018	1.9982	1.9868	———	1.9441	1.9380	.0061	1.8960	2B	1.910	1.928	1.9459	1.9538	.0079	2.0000
		3A	.0000	2.0000	1.9886	———	1.9459	1.9414	.0045	1.8978	3B	1.9100	1.9198	1.9459	1.9518	.0059	2.0000
2–16 or 2.000–16	UN	2A	.0016	1.9984	1.9890	———	1.9578	1.9524	.0054	1.9217	2B	1.932	1.946	1.9594	1.9664	.0070	2.0000
		3A	.0000	2.0000	1.9906	———	1.9594	1.9554	.0040	1.9233	3B	1.9320	1.9408	1.9594	1.9646	.0052	2.0000
2–20 or 2.000–20	UN	2A	.0015	1.9985	1.9904	———	1.9660	1.9611	.0049	1.9372	2B	1.946	1.957	1.9675	1.9739	.0064	2.0000
		3A	.0000	2.0000	1.9919	———	1.9675	1.9638	.0037	1.9387	3B	1.9460	1.9537	1.9675	1.9723	.0048	2.0000
2⅛–6 or 2.125–6	UN	2A	.0026	2.1224	2.1042	———	2.0141	2.0054	.0087	1.9179	2B	1.945	1.975	2.0167	2.0280	.0113	2.1250
		3A	.0000	2.1250	2.1068	———	2.0167	2.0102	.0065	1.9205	3B	1.9450	1.9646	2.0167	2.0251	.0084	2.1250
2⅛–8 or 2.125–8	UN	2A	.0024	2.1226	2.1076	2.1001	2.0414	2.0335	.0079	1.9692	2B	1.990	2.015	2.0438	2.0540	.0102	2.1250
		3A	.0000	2.1250	2.1100	———	2.0438	2.0379	.0059	1.9716	3B	1.9900	2.0047	2.0438	2.0515	.0077	2.1250
2⅛–12 or 2.125–12	UN	2A	.0018	2.1232	2.1118	———	2.0691	2.0630	.0061	2.0210	2B	2.035	2.053	2.0709	2.0788	.0079	2.1250
		3A	.0000	2.1250	2.1136	———	2.0709	2.0664	.0045	2.0228	3B	2.0350	2.0448	2.0709	2.0768	.0059	2.1250
2⅛–16 or 2.125–16	UN	2A	.0016	2.1234	2.1140	———	2.0828	2.0774	.0054	2.0467	2B	2.057	2.071	2.0844	2.0914	.0070	2,1250
		3A	.0000	2.1250	2.1156	———	2.0844	2.0804	.0040	2.0483	3B	2.0570	2.0658	2.0844	2.0896	.0052	2.1250
2⅛–20 or 2.125–20	UN	2A	.0015	2.1235	2.1154	———	2.0910	2.0861	.0049	2.0622	2B	2.071	2.082	2.0925	2.0989	.0064	2.1250
		3A	.0000	2.1250	2.1169	———	2.0925	2.0888	.0037	2.0637	3B	2.0710	2.0787	2.0925	2.0973	.0048	2.1250
2¼–4½ or 2.250–4.5	UNC	1A	.0029	2.2471	2.2141	———	2.1028	2.0882	.0146	1.9745	1B	2.009	2.045	2.1057	2.1247	.0190	2.2500
		2A	.0029	2.2471	2.2251	2.2141	2.1028	2.0931	.0097	1.9745	2B	2.009	2.045	2.1057	2.1183	.0126	2.2500
		3A	.0000	2.2500	2.2280	———	2.1057	2.0984	.0073	1.9774	3B	2.0090	2.0361	2.1057	2.1152	.0095	2.2500
2¼–6 or 2.250–6	UN	2A	.0026	2.2474	2.2292	———	2.1391	2.1303	.0088	2.0429	2B	2.070	2.100	2.1417	2.1531	.0114	2.2500
		3A	.0000	2.2500	2.2318	———	2.1417	2.1351	.0066	2.0455	3B	2.0700	2.0896	2.1417	2.1502	.0085	2.2500
2¼–8 or 2.250–8	UN	2A	.0024	2.2476	2.2326	2.2251	2.1664	2.1584	.0080	2.0942	2B	2.115	2.140	2.1688	2.1792	.0104	2.2500
		3A	.0000	2.2500	2.2350	———	2.1688	2.1628	.0060	2.0966	3B	2.1150	2.1297	2.1688	2.1766	.0078	2.2500
2¼–12 or 2.250–12	UN	2A	.0018	2.2482	2.2368	———	2.1941	2.1880	.0061	2.1460	2B	2.160	2.178	2.1959	2.2038	.0079	2.2500
		3A	.0000	2.2500	2.2386	———	2.1959	2.1914	.0045	2.1478	3B	2.1600	2.1698	2.1959	2.2018	.0059	2.2500
2¼–16 or 2.250–16	UN	2A	.0016	2.2484	2.2390	———	2.2078	2.2024	.0054	2.1717	2B	2.182	2.196	2.2094	2.2164	.0070	2.2500
		3A	.0000	2.2500	2.2406	———	2.2094	2.2054	.0040	2.1733	3B	2.1820	2.1908	2.2094	2.2146	.0052	2.2500
2¼–20 or 2.250–20	UN	2A	.0015	2.2485	2.2404	———	2.2160	2.2111	.0049	2.1872	2B	2.196	2.207	2.2175	2.2239	.0064	2.2500
		3A	.0000	2.2500	2.2419	———	2.2175	2.2138	.0037	2.1887	3B	2.1960	2.2037	2.2175	2.2223	.0048	2.2500
2⅜–6 or 2.375–6	UN	2A	.0027	2.3723	2.3541	———	2.2640	2.2551	.0089	2.1678	2B	2.195	2.226	2.2667	2.2782	.0115	2.3750
		3A	.0000	2.3750	2.3568	———	2.2667	2.2601	.0066	2.1705	3B	2.1950	2.2146	2.2667	2.2753	.0086	2.3750
2⅜–8 or 2.375–8	UN	2A	.0024	2.3726	2.3576	———	2.2914	2.2833	.0081	2.2192	2B	2.240	2.265	2.2938	2.3043	.0105	2.3750
		3A	.0000	2.3750	2.3600	———	2.2938	2.2878	.0060	2.2216	3B	2.2400	2.2547	2.2938	2.3017	.0079	2.3750
2⅜–12 or 2.375–12	UN	2A	.0019	2.3731	2.3617	———	2.3190	2.3128	.0062	2.2709	2B	2.285	2.303	2.3209	2.3290	.0081	2.3750
		3A	.0000	2.3750	2.3636	———	2.3209	2.3163	.0046	2.2728	3B	2.2850	2.2948	2.3209	2.3269	.0060	2.3750
2⅜–16 or 2.375–16	UN	2A	.0017	2.3733	2.3639	———	2.3327	2.3272	.0055	2.2966	2B	2.307	2.321	2.3344	2.3416	.0072	2.3750
		3A	.0000	2.3750	2.3656	———	2.3344	2.3303	.0041	2.2983	3B	2.3070	2.3158	2.3344	2.3398	.0054	2.3750
2⅜–20 or 2.375–20	UN	2A	.0015	2.3735	2.3654	———	2.3410	2.3359	.0051	2.3122	2B	2.321	2.332	2.3425	2.3491	.0066	2.3750
		3A	.0000	2.3750	2.3669	———	2.3425	2.3387	.0038	2.3137	3B	2.3210	2.3287	2.3425	2.3475	.0050	2.3750
2½–4 or 2.500–4	UNC	1A	.0031	2.4969	2.4612	———	2.3345	2.3190	.0155	2.1902	1B	2.229	2.267	2.3376	2.3578	.0202	2.5000
		2A	.0031	2.4969	2.4731	2.4612	2.3345	2.3241	.0104	2.1902	2B	2.229	2.267	2.3376	2.3511	.0135	2.5000
		3A	.0000	2.5000	2.4762	———	2.3376	2.3298	.0078	2.1933	3B	2.2290	2.2594	2.3376	2.3477	.0101	2.5000
2½–6 or 2.500–6	UN	2A	.0027	2.4973	2.4791	———	2.3890	2.3800	.0090	2.2928	2B	2.320	2.350	2.3917	2.4033	.0116	2.5000
		3A	.0000	2.5000	2.4818	———	2.3917	2.3850	.0067	2.2955	3B	2.3200	2.3396	2.3917	2.4004	.0087	2.5000
2½–8 or 2.500–8	UN	2A	.0024	2.4976	2.4826	2.4751	2.4164	2.4082	.0082	2.3442	2B	2.365	2.390	2.4188	2.4294	.0106	2.5000
		3A	.0000	2.5000	2.4850	———	2.4188	2.4127	.0061	2.3466	3B	2.3650	2.3797	2.4188	2.4268	.0080	2.5000
2½–12 or 2.500–12	UN	2A	.0019	2.4981	2.4867	———	2.4440	2.4378	.0062	2.3959	2B	2.410	2.428	2.4459	2.4540	.0081	2.5000
		3A	.0000	2.5000	2.4886	———	2.4459	2.4413	.0046	2.3978	3B	2.4100	2.4198	2.4459	2.4519	.0060	2.5000
2½–16 or 2.500–16	UN	2A	.0017	2.4983	2.4889	———	2.4577	2.4522	.0055	2.4216	2B	2.432	2.446	2.4594	2.4666	.0072	2.5000
		3A	.0000	2.5000	2.4906	———	2.4594	2.4553	.0041	2.4233	3B	2.4320	2.4408	2.4594	2.4648	.0054	2.5000

See footnotes at end of table.

TABLE III.10.—*Standard series limits of size—Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	External [a]									Internal [a]						
		Class	Allowance	Major diameter limits			Pitch diameter limits			Minor diameter [d]	Class	Minor diameter limits [c]		Pitch diameter limits			Major diameter
				Max [b]	Min	Min [c]	Max [b]	Min	Tolerance			Min	Max	Min	Max	Tolerance	Min
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*		*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
2½-20 or 2.500-20	UN	2A	.0015	2.4985	2.4904	-------	2.4660	2.4609	.0051	2.4372	2B	2.446	2.457	2.4675	2.4741	.0066	2.5000
		3A	.0000	2.5000	2.4919	-------	2.4675	2.4637	.0038	2.4387	3B	2.4460	2.4537	2.4675	2.4725	.0050	2.5000
2⅝-6 or 2.625-6	UN	2A	.0027	2.6223	2.6041	-------	2.5140	2.5050	.0090	2.4178	2B	2.445	2.475	2.5167	2.5285	.0118	2.6250
		3A	.0000	2.6250	2.6068	-------	2.5167	2.5099	.0068	2.4295	3B	2.4450	2.4646	2.5167	2.5255	.0088	2.6250
2⅝-8 or 2.625-8	UN	2A	.0025	2.6225	2.6075	-------	2.5413	2.5331	.0082	2.4691	2B	2.490	2.515	2.5438	2.5545	.0107	2.6250
		3A	.0000	2.6250	2.6100	-------	2.5438	2.5376	.0062	2.4716	3B	2.4900	2.5047	2.5438	2.5518	.0080	2.6250
2⅝-12 or 2.625-12	UN	2A	.0019	2.6231	2.6117	-------	2.5690	2.5628	.0062	2.5209	2B	2.535	2.553	2.5709	2.5790	.0081	2.6250
		3A	.0000	2.6250	2.6136	-------	2.5709	2.5663	.0046	2.5228	3B	2.5350	2.5448	2.5709	2.5769	.0060	2.6250
2⅝-16 or 2.625-16	UN	2A	.0017	2.6233	2.6139	-------	2.5827	2.5772	.0055	2.5466	2B	2.557	2.571	2.5844	2.5916	.0072	2.6250
		3A	.0000	2.6250	2.6156	-------	2.5844	2.5803	.0041	2.5483	3B	2.5570	2.5658	2.5844	2.5898	.0054	2.6250
2⅝-20 or 2.625-20	UN	2A	.0015	2.6235	2.6154	-------	2.5910	2.5859	.0051	2.5622	2B	2.571	2.582	2.5925	2.5991	.0066	2.6250
		3A	.0000	2.6250	2.6169	-------	2.5925	2.5887	.0038	2.5637	3B	2.5710	2.5787	2.5925	2.5975	.0050	2.6250
2¾-4 or 2.750-4	UNC	1A	.0032	2.7468	2.7111	-------	2.5844	2.5686	.0158	2.4401	1B	2.479	2.517	2.5876	2.6082	.0206	2.7500
		2A	.0032	2.7468	2.7230	2.7111	2.5844	2.5739	.0105	2.4401	2B	2.479	2.517	2.5876	2.6013	.0137	2.7500
		3A	.0000	2.7500	2.7262	-------	2.5876	2.5797	.0079	2.4433	3B	2.4790	2.5094	2.5876	2.5979	.0103	2.7500
2¾-6 or 2.750-6	UN	2A	.0027	2.7473	2.7291	-------	2.6390	2.6299	.0091	2.5428	2B	2.570	2.600	2.6417	2.6536	.0119	2.7500
		3A	.0000	2.7500	2.7318	-------	2.6417	2.6349	.0068	2.5455	3B	2.5700	2.5896	2.6417	2.6506	.0089	2.7500
2¾-8 or 2.750-8	UN	2A	.0025	2.7475	2.7325	2.7250	2.6663	2.6580	.0083	2.5941	2B	2.615	2.640	2.6688	2.6796	.0108	2.7500
		3A	.0000	2.7500	2.7350	-------	2.6688	2.6625	.0063	2.5966	3B	2.6150	2.6297	2.6688	2.6769	.0081	2.7500
2¾-12 or 2.750-12	UN	2A	.0019	2.7481	2.7367	-------	2.6940	2.6878	.0062	2.6459	2B	2.660	2.678	2.6959	2.7040	.0081	2.7500
		3A	.0000	2.7500	2.7386	-------	2.6959	2.6913	.0046	2.6478	3B	2.6600	2.6698	2.6959	2.7019	.0060	2.7500
2¾-16 or 2.750-16	UN	2A	.0017	2.7483	2.7389	-------	2.7077	2.7022	.0055	2.6716	2B	2.682	2.696	2.7094	2.7166	.0072	2.7500
		3A	.0000	2.7500	2.7406	-------	2.7094	2.7053	.0041	2.6733	3B	2.6820	2.6908	2.7094	2.7148	.0054	2.7500
2¾-20 or 2.750-20	UN	2A	.0015	2.7485	2.7404	-------	2.7160	2.7109	.0051	2.6872	2B	2.696	2.707	2.7175	2.7241	.0066	2.7500
		3A	.0000	2.7500	2.7419	-------	2.7175	2.7137	.0038	2.6887	3B	2.6960	2.7037	2.7175	2.7225	.0050	2.7500
2⅞-6 or 2.875-6	UN	2A	.0028	2.8722	2.8540	-------	2.7639	2.7547	.0092	2.6677	2B	2.695	2.725	2.7667	2.7787	.0120	2.8750
		3A	.0000	2.8750	2.8568	-------	2.7667	2.7598	.0069	2.6705	3B	2.6950	2.7146	2.7667	2.7757	.0090	2.8750
2⅞-8 or 2.875-8	UN	2A	.0025	2.8725	2.8575	-------	2.7913	2.7829	.0084	2.7191	2B	2.740	2.765	2.7938	2.8048	.0110	2.8750
		3A	.0000	2.8750	2.8600	-------	2.7938	2.7875	.0063	2.7216	3B	2.7400	2.7547	2.7938	2.8020	.0082	2.8750
2⅞-12 or 2.875-12	UN	2A	.0019	2.8731	2.8617	-------	2.8190	2.8127	.0063	2.7709	2B	2.785	2.803	2.8209	2.8291	.0082	2.8750
		3A	.0000	2.8750	2.8636	-------	2.8209	2.8162	.0047	2.7728	3B	2.7850	2.7948	2.8209	2.8271	.0062	2.8750
2⅞-16 or 2.875-16	UN	2A	.0017	2.8733	2.8639	-------	2.8327	2.8271	.0056	2.7966	2B	2.807	2.821	2.8344	2.8417	.0073	2.8750
		3A	.0000	2.8750	2.8656	-------	2.8344	2.8302	.0042	2.7983	3B	2.8070	2.8158	2.8344	2.8399	.0055	2.8750
2⅞-20 or 2.875-20	UN	2A	.0016	2.8734	2.8653	-------	2.8409	2.8357	.0052	2.8121	2B	2.821	2.832	2.8425	2.8493	.0068	2.8750
		3A	.0000	2.8750	2.8669	-------	2.8425	2.8386	.0039	2.8137	3B	2.8210	2.8287	2.8425	2.8476	.0051	2.8750
3-4 or 3.000-4	UNC	1A	.0032	2.9968	2.9611	-------	2.8344	2.8183	.0161	2.6901	1B	2.729	2.767	2.8376	2.8585	.0209	3.0000
		2A	.0032	2.9968	2.9730	2.9611	2.8344	2.8237	.0107	2.6901	2B	2.729	2.767	2.8376	2.8515	.0139	3.0000
		3A	.0000	3.0000	2.9762	-------	2.8376	2.8296	.0080	2.6933	3B	2.7290	2.7594	2.8376	2.8480	.0104	3.0000
3-6 or 3.000-6	UN	2A	.0028	2.9972	2.9790	-------	2.8889	2.8796	.0093	2.7927	2B	2.820	2.850	2.8917	2.9038	.0121	3.0000
		3A	.0000	3.0000	2.9818	-------	2.8917	2.8847	.0070	2.7955	3B	2.8200	2.8396	2.8917	2.9008	.0091	3.0000
3-8 or 3.000-8	UN	2A	.0026	2.9974	2.9824	2.9749	2.9162	2.9077	.0085	2.8440	2B	2.865	2.890	2.9188	2.9299	.0111	3.0000
		3A	.0000	3.0000	2.9850	-------	2.9188	2.9124	.0064	2.8466	3B	2.8650	2.8797	2.9188	2.9271	.0083	3.0000
3-12 or 3.000-12	UN	2A	.0019	2.9981	2.9867	-------	2.9440	2.9377	.0063	2.8959	2B	2.910	2.928	2.9459	2.9541	.0082	3.0000
		3A	.0000	3.0000	2.9886	-------	2.9459	2.9412	.0047	2.8978	3B	2.9100	2.9198	2.9459	2.9521	.0062	3.0000
3-16 or 3.000-16	UN	2A	.0017	2.9983	2.9889	-------	2.9577	2.9521	.0056	2.9216	2B	2.932	2.946	2.9594	2.9667	.0073	3.0000
		3A	.0000	3.0000	2.9906	-------	2.9594	2.9552	.0042	2.9233	3B	2.9320	2.9408	2.9594	2.9649	.0055	3.0000
3-20 or 3.000-20	UN	2A	.0016	2.9984	2.9903	-------	2.9659	2.9607	.0052	2.9371	2B	2.946	2.957	2.9675	2.9743	.0068	3.0000
		3A	.0000	3.0000	2.9919	-------	2.9675	2.9636	.0039	2.9387	3B	2.9460	2.9537	2.9675	2.9726	.0051	3.0000
3⅛-6 or 3.125-6	UN	2A	.0028	3.1222	3.1040	-------	3.0139	3.0045	.0094	2.9177	2B	2.945	2.975	3.0167	3.0289	.0122	3.1250
		3A	.0000	3.1250	3.1068	-------	3.0167	3.0097	.0070	2.9205	3B	2.9450	2.9646	3.0167	3.0259	.0092	3.1250
3⅛-8 or 3.125-8	UN	2A	.0026	3.1224	3.1074	-------	3.0412	3.0326	.0086	2.9690	2B	2.990	3.015	3.0438	3.0550	.0112	3.1250
		3A	.0000	3.1250	3.1100	-------	3.0438	3.0374	.0064	2.9716	3B	2.9900	3.0047	3.0438	3.0522	.0084	3.1250
3⅛-12 or 3.125-12	UN	2A	.0019	3.1231	3.1117	-------	3.0690	3.0627	.0063	3.0209	2B	3.035	3.053	3.0709	3.0791	.0082	3.1250
		3A	.0000	3.1250	3.1136	-------	3.0709	3.0662	.0047	3.0228	3B	3.0350	3.0448	3.0709	3.0771	.0062	3.1250
3⅛-16 or 3.125-16	UN	2A	.0017	3.1233	3.1139	-------	3.0827	3.0771	.0056	3.0466	2B	3.057	3.071	3.0844	3.0917	.0073	3.1250
		3A	.0000	3.1250	3.1156	-------	3.0844	3.0802	.0042	3.0483	3B	3.0570	3.0658	3.0844	3.0899	.0055	3.1250

See footnotes at end of table.

TABLE III.10.—*Standard series limits of size—Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	External [a]									Internal [a]						
		Class	Allowance	Major diameter limits			Pitch diameter limits			Minor diameter [d]	Class	Minor diameter limits [e]		Pitch diameter limits			Major diameter
				Max [b]	Min	Min [c]	Max [b]	Min	Tolerance			Min	Max	Min	Max	Tolerance	Min
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*		*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
3¼–4 or 3.250–4	UNC	1A	.0033	3.2467	3.2110	-------	3.0843	3.0680	.0163	2.9400	1B	2.979	3.017	3.0876	3.1088	.0212	3.2500
		2A	.0033	3.2467	3.2229	3.2110	3.0843	3.0734	.0109	2.9400	2B	2.979	3.017	3.0876	3.1017	.0141	3.2500
		3A	.0000	3.2500	3.2262	-------	3.0876	3.0794	.0082	2.9433	3B	2.9790	3.0094	3.0876	3.0982	.0106	3.2500
3¼–6 or 3.250–6	UN	2A	.0028	3.2472	3.2290	-------	3.1389	3.1294	.0095	3.0427	2B	3.070	3.100	3.1417	3.1540	.0123	3.2500
		3A	.0000	3.2500	3.2318	-------	3.1417	3.1346	.0071	3.0455	3B	3.0700	3.0896	3.1417	3.1509	.0092	3.2500
3¼–8 or 3.250–8	UN	2A	.0026	3.2474	3.2324	3.2249	3.1662	3.1575	.0087	3.0940	2B	3.115	3.140	3.1688	3.1801	.0113	3.2500
		3A	.0000	3.2500	3.2350	-------	3.1688	3.1623	.0065	3.0966	3B	3.1150	3.1297	3.1688	3.1773	.0085	3.2500
3¼–12 or 3.250–12	UN	2A	.0019	3.2481	3.2367	-------	3.1940	3.1877	.0063	3.1459	2B	3.160	3.178	3.1959	3.2041	.0082	3.2500
		3A	.0000	3.2500	3.2386	-------	3.1959	3.1912	.0047	3.1478	3B	3.1600	3.1698	3.1959	3.2021	.0062	3.2500
3¼–16 or 3.250–16	UN	2A	.0017	3.2483	3.2389	-------	3.2077	3.2021	.0056	3.1716	2B	3.182	3.196	3.2094	3.2167	.0073	3.2500
		3A	.0000	3.2500	3.2406	-------	3.2094	3.2052	.0042	3.1733	3B	3.1820	3.1908	3.2094	3.2149	.0055	3.2500
3⅜–6 or 3.375–6	UN	2A	.0029	3.3721	3.3539	-------	3.2638	3.2543	.0095	3.1676	2B	3.195	3.225	3.2667	3.2791	.0124	3.3750
		3A	.0000	3.3750	3.3568	-------	3.2667	3.2595	.0072	3.1705	3B	3.1950	3.2146	3.2667	3.2760	.0093	3.3750
3⅜–8 or 3.375–8	UN	2A	.0026	3.3724	3.3574	-------	3.2912	3.2824	.0088	3.2190	2B	3.240	3.265	3.2938	3.3052	.0114	3.3750
		3A	.0000	3.3750	3.3600	-------	3.2938	3.2872	.0066	3.2216	3B	3.2400	3.2547	3.2938	3.3023	.0085	3.3750
3⅜–12 or 3.375–12	UN	2A	.0019	3.3731	3.3617	-------	3.3190	3.3126	.0064	3.2709	2B	3.285	3.303	3.3209	3.3293	.0084	3.3750
		3A	.0000	3.3750	3.3636	-------	3.3209	3.3161	.0048	3.2728	3B	3.2850	3.2948	3.3209	3.3272	.0063	3.3750
3⅜–16 or 3.375–16	UN	2A	.0017	3.3733	3.3639	-------	3.3327	3.3269	.0058	3.2966	2B	3.307	3.321	3.3344	3.3419	.0075	3.3750
		3A	.0000	3.3750	3.3656	-------	3.3344	3.3301	.0043	3.2983	3B	3.3070	3.3158	3.3344	3.3400	.0056	3.3750
3½–4 or 3.500–4	UNC	1A	.0033	3.4967	3.4610	-------	3.3343	3.3177	.0166	3.1900	1B	3.229	3.267	3.3376	3.3591	.0215	3.5000
		2A	.0033	3.4967	3.4729	3.4610	3.3343	3.3233	.0110	3.1900	2B	3.229	3.267	3.3376	3.3519	.0143	3.5000
		3A	.0000	3.5000	3.4762	-------	3.3376	3.3293	.0083	3.1933	3B	3.2290	3.2594	3.3376	3.3484	.0108	3.5000
3½–6 or 3.500–6	UN	2A	.0029	3.4971	3.4789	-------	3.3888	3.3792	.0096	3.2926	2B	3.320	3.350	3.3917	3.4042	.0125	3.5000
		3A	.0000	3.5000	3.4818	-------	3.3917	3.3845	.0072	3.2955	3B	3.3200	3.3396	3.3917	3.4011	.0094	3.5000
3½–8 or 3.500–8	UN	2A	.0026	3.4974	3.4824	3.4749	3.4162	3.4074	.0088	3.3440	2B	3.365	3.390	3.4188	3.4303	.0115	3.5000
		3A	.0000	3.5000	3.4850	-------	3.4188	3.4122	.0066	3.3466	3B	3.3650	3.3797	3.4188	3.4274	.0086	3.5000
3½–12 or 2.500–12	UN	2A	.0019	3.4981	3.4867	-------	3.4440	3.4376	.0064	3.3959	2B	3.410	3.428	4.4459	3.4543	.0084	3.5000
		3A	.0000	3.5000	3.4886	-------	3.4459	3.4411	.0048	3.3978	3B	3.4100	3.4198	3.4459	3.4522	.0063	3.5000
3½–16 or 3.500–16	UN	2A	.0017	3.4983	3.4889	-------	3.4577	3.4519	.0058	3.4216	2B	3.432	3.446	3.4594	3.4669	.0075	3.5000
		3A	.0000	3.5000	3.4906	-------	3.4594	3.4551	.0043	3.4233	3B	3.4320	3.4408	3.4594	3.4650	.0056	3.5000
3⅝–6 or 3.625–6	UN	2A	.0029	3.6221	3.6039	-------	3.5138	3.5041	.0097	3.4176	2B	3.445	3.475	3.5167	3.5293	.0126	3.6250
		3A	.0000	3.6250	3.6068	-------	3.5167	3.5094	.0073	3.4205	3B	3.4450	3.4646	3.5167	3.5262	.0095	3.6250
3⅝–8 or 3.625–8	UN	2A	.0027	3.6223	3.6073	-------	3.5411	3.5322	.0089	3.4689	2B	3.490	3.515	3.5438	3.5554	.0116	3.6250
		3A	.0000	3.6250	3.6100	-------	3.5438	3.5371	.0067	3.4716	3B	3.4900	3.5047	3.5438	3.5525	.0087	3.6250
3⅝–12 or 3.625–12	UN	2A	.0019	3.6231	3.6117	-------	3.5690	3.5626	.0064	3.5209	2B	3.535	3.553	3.5709	3.5793	.0084	3.6250
		3A	.0000	3.6250	3.6136	-------	3.5709	3.5661	.0048	3.5228	3B	3.5350	3.5448	3.5709	3.5772	.0063	3.6250
3⅝–16 or 3.625–16	UN	2A	.0017	3.6233	3.6139	-------	3.5827	3.5769	.0058	3.5466	2B	3.557	3.571	3.5844	3.5919	.0075	3.6250
		3A	.0000	3.6250	3.6156	-------	3.5844	3.5801	.0043	3.5483	3B	3.5570	3.5658	3.5844	3.5900	.0056	3.6250
3¾–4 or 3.750–4	UNC	1A	.0034	3.7466	3.7109	-------	3.5842	3.5674	.0168	3.4399	1B	3.479	3.517	3.5876	3.6094	.0218	3.7500
		2A	.0034	3.7466	3.7228	3.7109	3.5842	3.5730	.0112	3.4399	2B	3.479	3.517	3.5876	3.6021	.0145	3.7500
		3A	.0000	3.7500	3.7262	-------	3.5876	3.5792	.0084	3.4433	3B	3.4790	3.5094	3.5876	3.5985	.0109	3.7500
3¾–6 or 3.750–6	UN	2A	.0029	3.7471	3.7289	-------	3.6388	3.6290	.0098	3.5426	2B	3.570	3.600	3.6417	3.6544	.0127	3.7500
		3A	.0000	3.7500	3.7318	-------	3.6417	3.6344	.0073	3.5455	3B	3.5700	3.5896	3.6417	3.6512	.0095	3.7500
3¾–8 or 3.750–8	UN	2A	.0027	3.7473	3.7323	3.7248	3.6661	3.6571	.0090	3.5939	2B	3.615	3.640	3.6688	3.6805	.0117	3.7500
		3A	.0000	3.7500	3.7350	-------	3.6688	3.6621	.0067	3.5966	3B	3.6150	3.6297	3.6688	3.6776	.0088	3.7500
3¾–12 or 3.750–12	UN	2A	.0019	3.7481	3.7367	-------	3.6940	3.6876	.0064	3.6459	2B	3.660	3.678	3.6959	3.7043	.0084	3.7500
		3A	.0000	3.7500	3.7386	-------	3.6959	3.6911	.0048	3.6478	3B	3.6600	3.6698	3.6959	3.7022	.0063	3.7500
3¾–16 or 3.750–16	UN	2A	.0017	3.7483	3.7389	-------	3.7077	3.7019	.0058	3.6716	2B	3.682	3.696	3.7094	3.7169	.0075	3.7500
		3A	.0000	3.7500	3.7406	-------	3.7094	3.7051	.0043	3.6733	3B	3.6820	3.6908	3.7094	3.7150	.0056	3.7500
3⅞–6 or 3.875–6	UN	2A	.0030	3.8720	3.8538	-------	3.7637	3.7538	.0099	3.6675	2B	3.695	3.725	3.7667	3.7795	.0128	3.8750
		3A	.0000	3.8750	3.8568	-------	3.7667	3.7593	.0074	3.6705	3B	3.6950	3.7146	3.7667	3.7763	.0096	3.8750
3⅞–8 or 3.875–8	UN	2A	.0027	3.8723	3.8573	-------	3.7911	3.7820	.0091	3.7189	2B	3.740	3.765	3.7938	3.8056	.0118	3.8750
		3A	.0000	3.8750	3.8600	-------	3.7938	3.7870	.0068	3.7216	3B	3.7400	3.7547	3.7938	3.8026	.0088	3.8750
3⅞–12 or 3.875–12	UN	2A	.0020	3.8730	3.8616	-------	3.8189	3.8124	.0065	3.7708	2B	3.785	3.803	3.8209	3.8294	.0085	3.8750
		3A	.0000	3.8750	3.8636	-------	3.8209	3.8160	.0049	3.7728	3B	3.7850	3.7948	3.8209	3.8273	.0064	3.8750
3⅞–16 or 3.875–16	UN	2A	.0018	3.8732	3.8638	-------	3.8326	3.8267	.0059	3.7965	2B	3.807	3.821	3.8344	3.8420	.0076	3.8750
		3A	.0000	3.8750	3.8656	-------	3.8344	3.8300	.0044	3.7983	3B	3.8070	3.8158	3.8344	3.8401	.0057	3.8750

See footnotes at end of table.

TABLE III.10.—*Standard series limits of size—Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	External [a]									Internal [a]						
		Class	Allowance	Major diameter limits			Pitch diameter limits			Minor diameter [d]	Class	Minor diameter limits [e]		Pitch diameter limits			Major diameter
				Max [b]	Min	Min [c]	Max [b]	Min	Tolerance			Min	Max	Min	Max	Tolerance	Min
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*		*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
4-4 or 4.000-4	UNC	1A	.0034	3.9966	3.9609	-------	3.8342	3.8172	.0170	3.6899	1B	3.729	3.767	3.8376	3.8597	.0221	4.0000
		2A	.0034	3.9966	3.9728	3.9609	3.8342	3.8229	.0113	3.6899	2B	3.729	3.767	3.8376	3.8523	.0147	4.0000
		3A	.0000	4.0000	3.9762	-------	3.8376	3.8291	.0085	3.6933	3B	3.7290	3.7594	3.8376	3.8487	.0111	4.0000
4-6 or 4.000-6	UN	2A	.0030	3.9970	3.9788	-------	3.8887	3.8788	.0099	3.7925	2B	3.820	3.850	3.8917	3.9046	.0129	4.0000
		3A	.0000	4.0000	3.9818	-------	3.8917	3.8843	.0074	3.7955	3B	3.8200	3.8396	3.8917	3.9014	.0097	4.0000
4-8 or 4.000-8	UN	2A	.0027	3.9973	3.9823	3.9748	3.9161	3.9070	.0091	3.8439	2B	3.865	3.890	3.9188	3.9307	.0119	4.0000
		3A	.0000	4.0000	3.9850	-------	3.9188	3.9120	.0068	3.8466	3B	3.8650	3.8797	3.9188	3.9277	.0089	4.0000
4-12 or 4.000-12	UN	2A	.0020	3.9980	3.9866	-------	3.9439	3.9374	.0065	3.8958	2B	3.910	3.928	3.9459	3.9544	.0085	4.0000
		3A	.0000	4.0000	3.9886	-------	3.9459	3.9410	.0049	3.8978	3B	3.9100	3.9198	3.9459	3.9523	.0064	4.0000
4-16 or 4.000-16	UN	2A	.0018	3.9982	3.9888	-------	3.9576	3.9517	.0059	3.9215	2B	3.932	3.946	3.9594	3.9670	.0076	4.0000
		3A	.0000	4.0000	3.9906	-------	3.9594	3.9550	.0044	3.9233	3B	3.9320	3.9408	3.9594	3.9651	.0057	4.0000
4⅛-6 or 4.125-6	UN	2A	.0030	4.1220	4.1038	-------	4.0137	4.0037	.0100	3.9175	2B	3.945	3.975	4.0167	4.0297	.0130	4.1250
		3A	.0000	4.1250	4.1068	-------	4.0167	4.0092	.0075	3.9205	3B	3.9450	3.9646	4.0167	4.0264	.0097	4.1250
4⅛-12 or 4.125-12	UN	2A	.0020	4.1230	4.1116	-------	4.0689	4.0624	.0065	4.0208	2B	4.035	4.053	4.0709	4.0794	.0085	4.1250
		3A	.0000	4.1250	4.1136	-------	4.0709	4.0660	.0049	4.0228	3B	4.0350	4.0448	4.0709	4.0773	.0064	4.1250
4⅛-16 or 4.125-16	UN	2A	.0018	4.1232	4.1138	-------	4.0826	4.0767	.0059	4.0465	2B	4.057	4.071	4.0844	4.0920	.0076	4.1250
		3A	.0000	4.1250	4.1156	-------	4.0844	4.0800	.0044	4.0483	3B	4.0570	4.0658	4.0844	4.0901	.0057	4.1250
4¼-4 or 4.250-4	UN	2A	.0034	4.2466	4.2228	-------	4.0842	4.0727	.0115	3.9399	2B	3.979	4.017	4.0876	4.1025	.0149	4.2500
		3A	.0000	4.2500	4.2262	-------	4.0876	4.0790	.0086	3.9433	3B	3.9790	4.0094	4.0876	4.0988	.0112	4.2500
4¼-6 or 4.250-6	UN	2A	.0030	4.2470	4.2288	-------	4.1387	4.1286	.0101	4.0425	2B	4.070	4.100	4.1417	4.1548	.0131	4.2500
		3A	.0000	4.2500	4.2318	-------	4.1417	4.1342	.0075	4.0455	3B	4.0700	4.0896	4.1417	4.1515	.0098	4.2500
4¼-12 or 4.250-12	UN	2A	.0020	4.2480	4.2366	-------	4.1939	4.1874	.0065	4.1458	2B	4.160	4.178	4.1959	4.2044	.0085	4.2500
		3A	.0000	4.2500	4.2386	-------	4.1959	4.1910	.0049	4.1478	3B	4.1600	4.1698	4.1959	4.2023	.0064	4.2500
4¼-16 or 4.250-16	UN	2A	.0018	4.2482	4.2388	-------	4.2076	4.2017	.0059	4.1715	2B	4.182	4.196	4.2094	4.2170	.0076	4.2500
		3A	.0000	4.2500	4.2406	-------	4.2094	4.2050	.0044	4.1733	3B	4.1820	4.1908	4.2094	4.2151	.0057	4.2500
4⅜-6 or 4.375-6	UN	2A	.0030	4.3720	4.3538	-------	4.2637	4.2536	.0101	4.1675	2B	4.195	4.225	4.2667	4.2799	.0132	4.3750
		3A	.0000	4.3750	4.3568	-------	4.2667	4.2591	.0076	4.1705	3B	4.1950	4.2146	4.2667	4.2766	.0099	4.3750
4⅜-12 or 4.375-12	UN	2A	.0020	4.3730	4.3616	-------	4.3189	4.3124	.0065	4.2708	2B	4.285	4.303	4.3209	4.3294	.0085	4.3750
		3A	.0000	4.3750	4.3636	-------	4.3209	4.3160	.0049	4.2728	3B	4.2850	4.2948	4.3209	4.3273	.0064	4.3750
4⅜-16 or 4.375-16	UN	2A	.0018	4.3732	4.3638	-------	4.3326	4.3267	.0059	4.2965	2B	4.307	4.321	4.3344	4.3420	.0076	4.3750
		3A	.0000	4.3750	4.3656	-------	4.3344	4.3300	.0044	4.2983	3B	4.3070	4.3158	4.3344	4.3401	.0057	4.3750
4½-4 or 4.500-4	UN	2A	.0035	4.4965	4.4727	-------	4.3341	4.3225	.0116	4.1898	2B	4.229	4.267	4.3376	4.3527	.0151	4.5000
		3A	.0000	4.5000	4.4762	-------	4.3376	4.3289	.0087	4.1933	3B	4.2290	4.2594	4.3376	4.3489	.0113	4.5000
4½-6 or 4.500-6	UN	2A	.0031	4.4969	4.4787	-------	4.3886	4.3784	.0102	4.2924	2B	4.320	4.350	4.3917	4.4050	.0133	4.5000
		3A	.0000	4.5000	4.4818	-------	4.3917	4.3840	.0077	4.2955	3B	4.3200	4.3396	4.3917	4.4016	.0099	4.5000
4½-12 or 4.500-12	UN	2A	.0020	4.4980	4.4866	-------	4.4439	4.4374	.0065	4.3958	2B	4.410	4.428	4.4459	4.4544	.0085	4.5000
		3A	.0000	4.5000	4.4886	-------	4.4459	4.4410	.0049	4.3978	3B	4.4100	4.4198	4.4459	4.4523	.0064	4.5000
4½-16 or 4.500-16	UN	2A	.0018	4.4982	4.4888	-------	4.4576	4.4517	.0059	4.4215	2B	4.432	4.446	4.4594	4.4670	.0076	4.5000
		3A	.0000	4.5000	4.4906	-------	4.4594	4.4550	.0044	4.4233	3B	4.4320	4.4408	4.4594	4.4651	.0057	4.5000
4⅝-6 or 4.625-6	UN	2A	.0031	4.6219	4.6037	-------	4.5136	4.5033	.0103	4.4174	2B	4.445	4.475	4.5167	4.5300	.0133	4.6250
		3A	.0000	4.6250	4.6068	-------	4.5167	4.5090	.0077	4.4205	3B	4.4450	4.4646	4.5167	4.5267	.0100	4.6250
4⅝-12 or 4.625-12	UN	2A	.0020	4.6230	4.6116	-------	4.5689	4.5622	.0067	4.5208	2B	4.535	4.553	4.5709	4.5796	.0087	4.6250
		3A	.0000	4.6250	4.6136	-------	4.5709	4.5659	.0050	4.5228	3B	4.5350	4.5448	4.5709	4.5775	.0066	4.6250
4⅝-16 or 4.625-16	UN	2A	.0018	4.6232	4.6138	-------	4.5826	4.5765	.0061	4.5465	2B	4.557	4.571	4.5844	4.5923	.0079	4.6250
		3A	.0000	4.6250	4.6156	-------	4.5844	4.5799	.0045	4.5483	3B	4.5570	4.5658	4.5844	4.5903	.0059	4.6250
4¾-4 or 4.750-4	UN	2A	.0035	4.7465	4.7227	-------	4.5841	4.5724	.0117	4.4398	2B	4.479	4.517	4.5876	4.6029	.0153	4.7500
		3A	.0000	4.7500	4.7262	-------	4.5876	4.5788	.0088	4.4433	3B	4.4790	4.5094	4.5876	4.5990	.0114	4.7500
4¾-6 or 4.750-6	UN	2A	.0031	4.7469	4.7287	-------	4.6386	4.6283	.0103	4.5424	2B	4.570	4.600	4.6417	4.6551	.0134	4.7500
		3A	.0000	4.7500	4.7318	-------	4.6417	4.6340	.0077	4.5455	3B	4.5700	4.5896	4.6417	4.6518	.0101	4.7500
4¾-12 or 4.750-12	UN	2A	.0020	4.7480	4.7366	-------	4.6939	4.6872	.0067	4.6458	2B	4.660	4.678	4.6959	4.7046	.0087	4.7500
		3A	.0000	4.7500	4.7386	-------	4.6959	4.6909	.0050	4.6478	3B	4.6600	4.6698	4.6959	4.7025	.0066	4.7500
4¾-16 or 4.750-16	UN	2A	.0018	4.7482	4.7388	-------	4.7076	4.7015	.0061	4.6715	2B	4.682	4.696	4.7094	4.7173	.0079	4.7500
		3A	.0000	4.7500	4.7406	-------	4.7094	4.7049	.0045	4.6733	3B	4.6820	4.6908	4.7094	4.7153	.0059	4.7500
4⅞-6 or 4.875-6	UN	2A	.0031	4.8719	4.8537	-------	4.7636	4.7532	.0104	4.6674	2B	4.695	4.725	4.7667	4.7802	.0135	4.8750
		3A	.0000	4.8750	4.8568	-------	4.7667	4.7589	.0078	4.6705	3B	4.6950	4.7146	4.7667	4.7768	.0101	4.8750
4⅞-12 or 4.875-12	UN	2A	.0020	4.8730	4.8616	-------	4.8189	4.8122	.0067	4.7708	2B	4.785	4.803	4.8209	4.8296	.0087	4.8750
		3A	.0000	4.8750	4.8636	-------	4.8209	4.8159	.0050	4.7728	3B	4.7850	4.7948	4.8209	4.8275	.0066	4.8750

See footnotes at end of table.

TABLE III.10.—*Standard series limits of size—Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	External [a]								Internal [a]						
		Class	Allowance	Major diameter limits			Pitch diameter limits			Minor diameter [d]	Class	Minor diameter limits [e]		Pitch diameter limits			Major diameter
				Max [b]	Min	Min [c]	Max [b]	Min	Tolerance			Min	Max	Min	Max	Tolerance	Min
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*		*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
4⅞–16 or 4.875–16	UN	2A	.0018	4.8732	4.8638	-------	4.8326	4.8265	.0061	4.7965	2B	4.807	4.821	4.8344	4.8423	.0079	4.8750
		3A	.0000	4.8750	4.8656	-------	4.8344	4.8299	.0045	4.7983	3B	4.8070	4.8158	4.8344	4.8403	.0059	4.8750
5–4 or 5.000–4	UN	2A	.0036	4.9964	4.9726	-------	4.8340	4.8221	.0119	4.6897	2B	4.729	4.767	4.8376	4.8530	.0154	5.0000
		3A	.0000	5.0000	4.9762	-------	4.8376	4.8287	.0089	4.6933	3B	4.7290	4.759 4	4.8376	4.8492	.0116	5.0000
5–6 or 5.000–6	UN	2A	.0031	4.9969	4.9787	-------	4.8886	4.8781	.0105	4.7924	2B	4.820	4.850	4.8917	4.9053	.0136	5.0000
		3A	.0000	5.0000	4.9818	-------	4.8917	4.8839	.0078	4.7955	3B	4.8200	4.8396	4.8917	4.9019	.0102	5.0000
5–12 or 5.000–12	UN	2A	.0020	4.9980	4.9866	-------	4.9439	4.9372	.0067	4.8958	2B	4.910	4.928	4.9459	4.9546	.0087	5.0000
		3A	.0000	5.0000	4.9886	-------	4.9459	4.9409	.0050	4.8978	3B	4.9100	4.9198	4.9459	4.9525	.0066	5.0000
5–16 or 5.000–16	UN	2A	.0018	4.9982	4.9888	-------	4.9576	4.9515	.0061	4.9215	2B	4.932	4.946	4.9594	4.9673	.0079	5.0000
		3A	.0000	5.0000	4.9906	-------	4.9594	4.9549	.0045	4.9233	3B	4.9320	4.9408	4.9594	4.9653	.0059	5.0000
5⅛–12 or 5.125–12	UN	2A	.0020	5.1230	5.1116	-------	5.0689	5.0622	.0067	5.0208	2B	5.035	5.053	5.0709	5.0796	.0087	5.1250
		3A	.0000	5.1250	5.1136	-------	5.0709	5.0659	.0050	5.0228	3B	5.0350	5.0448	5.0709	5.0775	.0066	5.1250
5⅛–16 or 5.125–16	UN	2A	.0018	5.1232	5.1138	-------	5.0826	5.0765	.0061	5.0465	2B	5.057	5.071	5.0844	5.0923	.0079	5.1250
		3A	.0000	5.1250	5.1156	-------	5.0844	5.0799	.0045	5.0483	3B	5.0570	5.0658	5.0844	5.0903	.0059	5.1250
5¼–4 or 5.250–4	UN	2A	.0036	5.2464	5.2226	-------	5.0840	5.0720	.0120	4.9397	2B	4.979	5.017	5.0876	5.1032	.0156	5.2500
		3A	.0000	5.2500	5.2262	-------	5.0876	5.0786	.0090	4.9433	3B	4.9790	5.0094	5.0876	5.0993	.0117	5.2500
5¼–12 or 5.250–12	UN	2A	.0020	5.2480	5.2366	-------	5.1939	5.1872	.0067	5.1458	2B	5.160	5.178	5.1959	5.2046	.0087	5.2500
		3A	.0000	5.2500	5.2386	-------	5.1959	5.1909	.0050	5.1478	3B	5.1600	5.1698	5.1959	5.2025	.0066	5.2500
5¼–16 or 5.250–16	UN	2A	.0018	5.2482	5.2388	-------	5.2076	5.2015	.0061	5.1715	2B	5.182	5.196	5.2094	5.2173	.0079	5.2500
		3A	.0000	5.2500	5.2406	-------	5.2094	5.2049	.0045	5.1733	3B	5.1820	5.1908	5.2094	5.2153	.0059	5.2500
5⅜–12 or 5.375–12	UN	2A	.0020	5.3730	5.3616	-------	5.3189	5.3122	.0067	5.2708	2B	5.285	5.303	5.3209	5.3296	.0087	5.3750
		3A	.0000	5.3750	5.3636	-------	5.3209	5.3159	.0050	5.2728	3B	5.2850	5.2948	5.3209	5.3275	.0066	5.3750
5⅜–16 or 5.375–16	UN	2A	.0018	5.3732	5.3638	-------	5.3326	5.3265	.0061	5.2965	2B	5.307	5.321	5.3344	5.3423	.0079	5.3750
		3A	.0000	5.3750	5.3656	-------	5.3344	5.3299	.0045	5.2983	3B	5.3070	5.3158	5.3344	5.3403	.0059	5.3750
5½–4 or 5.500–4	UN	2A	.0036	5.4964	5.4726	-------	5.3340	5.3219	.0121	5.1897	2B	5.229	5.267	5.3376	5.3534	.0158	5.5000
		3A	.0000	5.5000	5.4762	-------	5.3376	5.3285	.0091	5.1933	3B	5.2290	5.2594	5.3376	5.3494	.0118	5.5000
5½–12 or 5.500–12	UN	2A	.0020	5.4980	5.4866	-------	5.4139	5.4372	.0067	5.3958	2B	5.410	5.428	5.4459	5.4546	.0087	5.5000
		3A	.0000	5.5000	5.4886	-------	5.4459	5.4409	.0050	5.3978	3B	5.4100	5.4198	5.4459	5.4525	.0066	5.5000
5½–16 or 5.500–16	UN	2A	.0018	5.4982	5.4888	-------	5.4576	5.4515	.0061	5.4215	2B	5.432	5.446	5.4594	5.4673	.0079	5.5000
		3A	.0000	5.5000	5.4906	-------	5.4594	5.4549	.0045	5.4233	3B	5.4320	5.4408	5.4594	5.4653	.0059	5.5000
5⅝–12 or 5.625–12	UN	2A	.0021	5.6229	5.6115	-------	5.5688	5.5619	.0069	5.5207	2B	5.535	5.553	5.5709	5.5799	.0090	5.6250
		3A	.0000	5.6250	5.6136	-------	5.5709	5.5657	.0052	5.5228	3B	5.5350	5.5448	5.5709	5.5776	.0067	5.6250
5⅝–16 or 5.625–16	UN	2A	.0019	5.6231	5.6137	-------	5.5825	5.5763	.0062	5.5464	2B	5.557	5.571	5.5844	5.5925	.0081	5.6250
		3A	.0000	5.6250	5.6156	-------	5.5844	5.5797	.0047	5.5483	3B	5.5570	5.5658	5.5844	5.5905	.0061	5.6250
5¾–4 or 5.750–4	UN	2A	.0037	5.7463	5.7225	-------	5.5839	5.5717	.0122	5.4396	2B	5.479	5.517	5.5876	5.6035	.0159	5.7500
		3A	.0000	5.7500	5.7262	-------	5.5876	5.5784	.0092	5.4433	3B	5.4790	5.5094	5.5876	5.5995	.0119	5.7500
5¾–12 or 5.750–12	UN	2A	.0021	5.7479	5.7365	-------	5.6938	5.6869	.0069	5.6457	2B	5.660	5.678	5.6959	5.7049	.0090	5.7500
		3A	.0000	5.7500	5.7386	-------	5.6959	5.6907	.0052	5.6478	3B	5.6600	5.6698	5.6959	5.7026	.0067	5.7500
5¾–16 or 5.750–16	UN	2A	.0019	5.7481	5.7387	-------	5.7075	5.7013	.0062	5.6714	2B	5.682	5.696	5.7094	5.7175	.0081	5.7500
		3A	.0000	5.7500	5.7406	-------	5.7094	5.7047	.0047	5.6733	3B	5.6820	5.6908	5.7094	5.7155	.0061	5.7500
5⅞–12 or 5.875–12	UN	2A	.0021	5.8729	5.8615	-------	5.8188	5.8119	.0069	5.7707	2B	5.785	5.803	5.8209	5.8299	.0090	5.8750
		3A	.0000	5.8750	5.8636	-------	5.8209	5.8157	.0052	5.7728	3B	5.7850	5.7948	5.8209	5.8276	.0067	5.8750
5⅞–16 or 5.875–16	UN	2A	.0019	5.8731	5.8637	-------	5.8325	5.8263	.0062	5.7964	2B	5.807	5.821	5.8344	5.8425	.0081	5.8750
		3A	.0000	5.8750	5.8656	-------	5.8344	5.8297	.0047	5.7983	3B	5.8070	5.8158	5.8344	5.8405	.0061	5.8750
6–4 or 6.000–4	UN	2A	.0037	5.9963	5.9725	-------	5.8339	5.8215	.0124	5.6896	2B	5.729	5.767	5.8376	5.8537	.0161	6.0000
		3A	.0000	6.0000	5.9762	-------	5.8376	5.8283	.0093	5.6933	3B	5.7290	5.7594	5.8376	5.8496	.0120	6.0000
6–12 or 6.000–12	UN	2A	.0021	5.9979	5.9865	-------	5.9438	5.9369	.0069	5.8957	2B	5.910	5.928	5.9459	5.9549	.0090	6.0000
		3A	.0000	6.0000	5.9886	-------	5.9459	5.9407	.0052	5.8978	3B	5.9100	5.9198	5.9459	5.9526	.0067	6.0000
6–16 or 6.000–16	UN	2A	.0019	5.9981	5.9887	-------	5.9575	5.9513	.0062	5.9214	2B	5.932	5.946	5.9594	5.9675	.0081	6.0000
		3A	.0000	6.0000	5.9906	-------	5.9594	5.9547	.0047	5.9233	3B	5.9320	5.9408	5.9594	5.9655	.0061	6.0000

[a] Regarding combinations of thread classes, see par. 1, p. 18, Part I.
[b] For class 2A threads having an additive finish the maximum is increased to the basic size, the value being the same as for class 3A shown in this column. See par. 2, p. 23, Part I and par. 4, p. 16 in this Supplement.
[c] For unfinished hot-rolled material.
[d] See fig; III.1, p. 2 in this Supplement; figs. III.3 and III.4, pp. 24 and 25, Part I.
[e] Revised minor diameter limits of classes 1B and 2B are in process of ratification as Unified Standard.

TABLE III.11.—*Deviations in lead and half-angle equivalent to one-half of pitch diameter tolerances, Unified screw threads*

Nominal size and threads per inch	Series designation	External					Internal				
		Class	Half of pitch diameter tolerance	Equivalent deviation in lead	Equivalent deviation in half-angle		Class	Half of pitch diameter tolerance	Equivalent deviation in lead	Equivalent deviation in half-angle	
1	2	3	4	5	6		7	8	9	10	
			in.	*in.*	*deg*	*min*		*in.*	*in*	*deg*	*min*
0-80 or .060-80	UNF	2A	0.00090	0.00052	3	18	2B	0.00115	0.00066	4	13
		3A	.00065	.00038	2	23	3B	.00085	.00049	3	7
1-64 or .073-64	UNC	2A	.00100	.00058	2	56	2B	.00130	.00075	3	48
		3A	.00075	.00043	2	12	3B	.00095	.00055	2	47
1-72 or .073-72	UNF	2A	.00095	.00055	3	8	2B	.00125	.00072	4	7
		3A	.00070	.00040	2	19	3B	.00095	.00055	3	8
2-56 or .086-56	UNC	2A	.00105	.00061	2	42	2B	.00140	.00081	3	35
		3A	.00080	.00046	2	3	3B	.00105	.00061	2	42
2-64 or .086-64	UNF	2A	.00100	.00058	2	56	2B	.00135	.00078	3	57
		3A	.00075	.00043	2	12	3B	.00100	.00058	2	56
3-48 or .099-48	UNC	2A	.00115	.00066	2	32	2B	.00150	.00087	3	18
		3A	.00085	.00049	1	52	3B	.00110	.00064	2	25
3-56 or .099-56	UNF	2A	.00110	.00064	2	49	2B	.00140	.00081	3	35
		3A	00080	.00046	2	3	3B	.00105	.00061	2	42
4-40 or .112-40	UNC	2A	.00125	.00072	2	17	2B	.00165	.00095	3	1
		3A	.00095	.00055	1	44	3B	.00120	.00069	2	12
4-48 or .112-48	UNF	2A	.00120	.00069	2	38	2B	.00155	.00089	3	24
		3A	.00090	.00052	1	59	3B	.00115	.00066	2	32
5-40 or .125-40	UNC	2A	.00130	.00075	2	23	2B	.00165	.00095	3	1
		3A	.00095	.00055	1	44	3B	.00125	.00072	2	17
5-44 or .125-44	UNF	2A	.00125	.00072	2	31	2B	.00160	.00092	3	13
		3A	.00095	.00055	1	55	3B	.00120	.00069	2	25
6-32 or .138-32	UNC	2A	.00140	.00081	2	3	2B	.00185	.00107	2	43
		3A	.00105	.00061	1	32	3B	.00135	.00078	1	59
6-40 or .138-40	UNF	2A	.00130	.00075	2	23	2B	.00170	.00098	3	7
		3A	.00100	.00058	1	50	3B	.00125	.00072	2	17
8-32 or .164-32	UNC	2A	.00145	.00084	2	8	2B	.00190	.00110	2	47
		3A	.00110	.00064	1	37	3B	.00140	.00081	2	3
8-36 or .164-36	UNF	2A	.00140	.00081	2	19	2B	.00180	.00104	2	58
		3A	.00105	.00061	1	44	3B	.00135	.00078	2	14
10-24 or .190-24	UNC	2A	.00165	.00095	1	49	2B	.00215	.00124	2	22
		3A	.00125	.00072	1	22	3B	.00160	.00092	1	46
10-32 or .190-32	UNF	2A	.00150	.00087	2	12	2B	.00195	.00113	2	51
		3A	.00115	.00066	1	41	3B	.00145	.00084	2	8
12-24 or .216-24	UNC	2A	.00170	.00098	1	52	2B	.00220	.00127	2	25
		3A	.00130	.00075	1	26	3B	.00165	.00095	1	49
12-28 or .216-28	UNF	2A	.00160	.00092	2	3	2B	00210	.00121	2	42
		3A	.00120	.00069	1	32	3B	.00155	.00089	1	59
12-32 or .216-32	UNEF	2A	.00155	.00089	2	16	2B	.00205	.00118	3	0
		3A	.00120	.00069	1	46	3B	.00155	.00089	2	16
1/4-20 or .250-20	UNC	1A	.00280	.00162	2	34	1B	.00365	.00211	3	21
		2A	.00185	.00107	1	42	2B	.00245	.00141	2	15
		3A	.00140	.00081	1	17	3B	.00180	.00104	1	39
1/4-28 or .250-28	UNF	1A	.00250	.00144	3	12	1B	.00325	.00188	4	10
		2A	.00165	.00095	2	7	2B	.00215	.00124	2	45
		3A	.00125	.00072	1	36	3B	.00160	.00092	2	3
1/4-32 or .250-32	UNEF	2A	.00160	.00092	2	21	2B	.00210	.00121	3	5
		3A	.00120	.00069	1	46	3B	.00155	.00089	2	16
5/16-18 or .3125-18	UNC	1A	.00305	.00176	2	31	1B	.00395	.00228	3	15
		2A	.00200	.00115	1	39	2B	.00265	.00153	2	11
		3A	.00150	.00087	1	14	3B	.00195	.00113	1	37
5/16-20 or .3125-20	UN	2A	.00200	.00115	1	50	2B	.00260	.00150	2	23
		3A	.00150	.00087	1	22	3B	.00195	.00113	1	47
5/16-24 or .3125-24	UNF	1A	.00275	.00159	3	1	1B	.00355	.00205	3	54
		2A	.00185	.00107	2	2	2B	.00240	.00139	2	38
		3A	.00135	.00078	1	29	3B	.00180	.00104	1	59
5/16-28 or .3125-28	UN	2A	.00170	.00098	2	11	2B	.00220	.00127	2	49
		3A	.00130	.00075	1	40	3B	00165	.00095	2	7
5/16-32 or .3125-32	UNEF	2A	.00160	.00092	2	21	2B	.00210	.00121	3	5
		3A	.00120	.00069	1	46	3B	.00155	.00089	2	16
3/8-16 or .375-16	UNC	1A	.00325	.00188	2	23	1B	.00425	.00245	3	7
		2A	.00220	.00127	1	37	2B	.00285	.00165	2	5
		3A	.00165	.00095	1	13	3B	.00215	.00124	1	35

TABLE III.11.—*Deviations in lead and half-angle equivalent to one-half of pitch diameter tolerances, Unified screw threads*—Con.

Nominal size and threads per inch	Series designation	External					Internal				
		Class	Half of pitch diameter tolerance	Equivalent deviation in lead	Equivalent deviation in half-angle		Class	Half of pitch diameter tolerance	Equivalent deviation in lead	Equivalent deviation in half-angle	
1	2	3	4	5	6		7	8	9	10	
			in.	*in.*	*deg*	*min*		*in.*	*in.*	*deg*	*min*
3/8–20 or .375–20	UN	2A	.00205	.00118	1	53	2B	.00270	.00156	2	28
		3A	.00155	.00089	1	25	3B	.00200	.00115	1	50
3/8–24 or .375–24	UNF	1A	.00285	.00165	3	8	1B	.00370	.00214	4	4
		2A	.00190	.00110	2	5	2B	.00245	.00141	2	42
		3A	.00145	.00084	1	36	3B	.00185	.00107	2	2
3/8–28 or .375–28	UN	2A	.00180	.00104	2	19	2B	.00230	.00133	2	57
		3A	.00135	.00078	1	44	3B	.00175	.00101	2	15
3/8–32 or .375–32	UNEF	2A	.00170	.00098	2	30	2B	.00220	.00127	3	13
		3A	.00125	.00072	1	50	3B	.00165	.00095	2	25
7/16–14 or .4375–14	UNC	1A	.00355	.00205	2	17	1B	.00460	.00266	2	57
		2A	.00235	.00136	1	30	2B	.00305	.00176	1	57
		3A	.00175	.00101	1	7	3B	.00230	.00133	1	29
7/16–16 or .4375–16	UN	2A	.00230	.00133	1	41	2B	.00295	.00170	2	10
		3A	.00170	.00098	1	15	3B	.00225	.00130	1	39
7/16–20 or .4375–20	UNF	1A	.00315	.00182	2	53	1B	.00405	.00234	3	42
		2A	.00210	.00121	1	55	2B	.00270	.00156	2	28
		3A	.00155	.00089	1	25	3B	.00205	.00118	1	53
7/16–28 or .4375–28	UNEF	2A	.00180	.00104	2	19	2B	.00230	.00133	2	57
		3A	.00135	.00078	1	44	3B	.00175	.00101	2	15
7/16–32 or .4375–32	UN	2A	.00170	.00098	2	30	2B	.00220	.00127	3	13
		3A	.00125	.00072	1	50	3B	.00165	.00095	2	25
1/2–13 or .500–13	UNC	1A	.00370	.00214	2	12	1B	.00485	.00280	2	53
		2A	.00250	.00144	1	29	2B	.00325	.00188	1	56
		3A	.00185	.00107	1	6	3B	.00240	.00139	1	26
1/2–16 or .500–16	UN	2A	.00235	.00136	1	43	2B	.00305	.00176	2	14
		3A	.00175	.00101	1	17	3B	.00230	.00133	1	41
1/2–20 or .500–20	UNF	1A	.00320	.00185	2	56	1B	.00420	.00242	3	51
		2A	.00215	.00124	1	58	2B	.00280	.00162	2	34
		3A	.00160	.00092	1	28	3B	.00210	.00121	1	55
1/2–28 or .500–28	UNEF	2A	.00185	.00107	2	22	2B	.00240	.00139	3	5
		3A	.00140	.00081	1	48	3B	.00180	.00104	2	19
1/2–32 or .500–32	UN	2A	.00175	.00101	2	34	2B	.00225	.00130	3	18
		3A	.00130	.00075	1	54	3B	.00170	.00098	2	30
9/16–12 or .5625–12	UNC	1A	.00390	.00225	2	9	1B	.00510	.00294	2	48
		2A	.00260	.00150	1	26	2B	.00340	.00196	1	52
		3A	.00195	.00113	1	4	3B	.00255	.00147	1	24
9/16–16 or .5625–16	UN	2A	.00235	.00136	1	43	2B	.00305	.00176	2	14
		3A	.00175	.00101	1	17	3B	.00230	.00133	1	41
9/16–18 or .5625–18	UNF	1A	.00340	.00196	2	48	1B	.00445	.00257	3	40
		2A	.00225	.00130	1	51	2B	.00295	.00170	2	26
		3A	.00170	.00098	1	24	3B	.00220	.00127	1	49
9/16–20 or .5625–20	UN	2A	.00210	.00121	1	55	2B	.00275	.00159	2	31
		3A	.00160	.00092	1	28	3B	.00205	.00118	1	53
9/16–24 or .5625–24	UNEF	2A	.00195	.00113	2	9	2B	.00255	.00147	2	48
		3A	.00145	.00084	1	36	3B	.00190	.00110	2	5
9/16–28 or .5625–28	UN	2A	.00185	.00107	2	22	2B	.00240	.00139	3	5
		3A	.00140	.00081	1	48	3B	.00180	.00104	2	19
9/16–32 or .5625–32	UN	2A	.00175	.00101	2	34	2B	.00225	.00130	3	18
		3A	.00130	.00075	1	54	3B	.00170	.00098	2	30
5/8–11 or .625–11	UNC	1A	.00415	.00240	2	5	1B	.00535	.00309	2	42
		2A	.00275	.00159	1	23	2B	.00360	.00208	1	49
		3A	.00205	.00118	1	2	3B	.00270	.00156	1	22
5/8–12 or .625–12	UN	2A	.00270	.00156	1	29	2B	.00355	.00205	1	57
		3A	.00205	.00118	1	8	3B	.00265	.00153	1	27
5/8–16 or .625–16	UN	2A	.00240	.00139	1	46	2B	.00310	.00179	2	16
		3A	.00180	.00104	1	19	3B	.00230	.00133	1	41
5/8–18 or .625–18	UNF	1A	.00350	.00202	2	53	1B	.00455	.00263	3	45
		2A	.00235	.00136	1	56	2B	.00300	.00173	2	28
		3A	.00175	.00101	1	27	3B	.00225	.00130	1	51
5/8–20 or .625–20	UN	2A	.00215	.00124	1	58	2B	.00280	.00162	2	34
		3A	.00160	.00092	1	28	3B	.00210	.00121	1	55
5/8–24 or .625–24	UNEF	2A	.00200	.00115	2	12	2B	.00260	.00150	2	51
		3A	.00150	.00087	1	39	3B	.00195	.00113	2	9

TABLE III.11.—*Deviations in lead and half-angle equivalent to one-half of pitch diameter tolerances, Unified screw threads*—Con.

Nominal size and threads per inch	Series designation	External					Internal				
		Class	Half of pitch diameter tolerance	Equivalent deviation in lead	Equivalent deviation in half-angle		Class	Half of pitch diameter tolerance	Equivalent deviation in lead	Equivalent deviation in half-angle	
1	2	3	4	5	6		7	8	9	10	
			in.	*in.*	*deg*	*min*		*in.*	*in.*	*deg*	*min*
5/8–28 or .625–28	UN	2A	.00190	.00110	2	26	2B	.00245	.00141	3	8
		3A	.00140	.00081	1	48	3B	.00185	.00107	2	22
5/8–32 or .625–32	UN	2A	.00180	.00104	2	38	2B	.00230	.00133	3	22
		3A	.00135	.00078	1	59	3B	.00175	.00101	2	34
11/16–12 or .6875–12	UN	2A	.00270	.00156	1	29	2B	.00355	.00205	1	57
		3A	.00205	.00118	1	8	3B	.00265	.00153	1	27
11/16–16 or .6875–16	UN	2A	.00240	.00139	1	46	2B	.00310	.00179	2	16
		3A	.00180	.00104	1	19	3B	.00230	.00133	1	41
11/16–20 or .6875–20	UN	2A	.00215	.00124	1	58	2B	.00280	.00162	2	34
		3A	.00160	.00092	1	28	3B	.00210	.00121	1	55
11/16–24 or .6875–24	UNEF	2A	.00200	.00115	2	12	2B	.00260	.00150	2	51
		3A	.00150	.00087	1	39	3B	.00195	.00113	2	9
11/16–28 or .6875–28	UN	2A	.00190	.00110	2	26	2B	.00245	.00141	3	8
		3A	.00140	.00081	1	48	3B	.00185	.00107	2	22
11/16–32 or .6875–32	UN	2A	.00180	.00104	2	38	2B	.00230	.00133	3	22
		3A	.00135	.00078	1	59	3B	.00175	.00101	2	34
3/4–10 or .750–10	UNC	1A	.00440	.00254	2	1	1B	.00575	.00332	2	38
		2A	.00295	.00170	1	21	2B	.00385	.00222	1	46
		3A	.00220	.00127	1	0	3B	.00285	.00165	1	18
3/4–12 or .750–12	UN	2A	.00275	.00159	1	31	2B	.00360	.00208	1	59
		3A	.00205	.00118	1	8	3B	.00270	.00156	1	29
3/4–16 or .750–16	UNF	1A	.00375	.00217	2	45	1B	.00490	.00283	3	35
		2A	.00250	.00144	1	50	2B	.00325	.00188	2	23
		3A	.00190	.00110	1	24	3B	.00245	.00141	1	48
3/4–20 or .750–20	UNEF	2A	.00220	.00127	2	1	2B	.00285	.00165	2	37
		3A	.00165	.00095	1	31	3B	.00215	.00124	1	58
3/4–28 or .750–28	UN	2A	.00190	.00110	2	26	2B	.00250	.00144	3	12
		3A	.00145	.00084	1	52	3B	.00185	.00107	2	22
3/4–32 or .750–32	UN	2A	.00180	.00104	2	38	2B	.00235	.00136	3	27
		3A	.00135	.00078	1	59	3B	.00180	.00104	2	38
13/16–12 or .8125–12	UN	2A	.00275	.00159	1	31	2B	.00360	.00208	1	59
		3A	.00205	.00118	1	8	3B	.00270	.00156	1	29
13/16–16 or .8125–16	UN	2A	.00245	.00141	1	48	2B	.00315	.00182	2	19
		3A	.00180	.00104	1	19	3B	.00235	.00136	1	43
13/16–20 or .8125–20	UNEF	2A	.00220	.00127	2	1	2B	.00285	.00165	2	37
		3A	.00165	.00095	1	31	3B	.00215	.00124	1	58
13/16–28 or .8125–28	UN	2A	.00190	.00110	2	26	2B	.00250	.00144	3	12
		3A	.00145	.00084	1	52	3B	.00185	.00107	2	22
13/16–32 or .8125–32	UN	2A	.00180	.00104	2	38	2B	.00235	.00136	3	27
		3A	.00135	.00078	1	59	3B	.00180	.00104	2	38
7/8–9 or .875–9	UNC	1A	.00475	.00274	1	58	1B	.00615	.00355	2	32
		2A	.00315	.00182	1	18	2B	.00410	.00237	1	41
		3A	.00235	.00136	0	58	3B	.00305	.00176	1	15
7/8–12 or .875–12	UN	2A	.00275	.00159	1	31	2B	.00360	.00208	1	59
		3A	.00205	.00118	1	8	3B	.00270	.00156	1	29
7/8–14 or .875–14	UNF	1A	.00405	.00234	2	36	1B	.00530	.00306	3	24
		2A	.00270	.00156	1	44	2B	.00350	.00202	2	15
		3A	.00205	.00118	1	19	3B	.00265	.00153	1	42
7/8–16 or .875–16	UN	2A	.00245	.00141	1	48	2B	.00315	.00182	2	19
		3A	.00180	.00104	1	19	3B	.00235	.00136	1	43
7/8–20 or .875–20	UNEF	2A	.00220	.00127	2	1	2B	.00285	.00165	2	37
		3A	.00165	.00095	1	31	3B	.00215	.00124	1	58
7/8–28 or .875–28	UN	2A	.00190	.00110	2	26	2B	.00250	.00144	3	12
		3A	.00145	.00084	1	52	3B	.00185	.00107	2	22
7/8–32 or .875–32	UN	2A	.00180	.00104	2	38	2B	.00235	.00136	3	27
		3A	.00135	.00078	1	59	3B	.00180	.00104	2	38
15/16–12 or .9375–12	UN	2A	.00285	.00165	1	34	2B	.00370	.00214	2	2
		3A	.00210	.00121	1	9	3B	.00275	.00159	1	31
15/16–16 or .9375–16	UN	2A	.00250	.00144	1	50	2B	.00325	.00188	2	23
		3A	.00185	.00107	1	21	3B	.00245	.00141	1	48
15/16–20 or .9375–20	UNEF	2A	.00225	.00130	2	4	2B	.00295	.00170	2	42
		3A	.00170	.00098	1	33	3B	.00220	.00127	2	1

TABLE III.11.—*Deviations in lead and half-angle equivalent to one-half of pitch diameter tolerances, Unified screw threads*—Con.

Nominal size and threads per inch	Series designation	External					Internal				
		Class	Half of pitch diameter tolerance	Equivalent deviation in lead	Equivalent deviation in half-angle		Class	Half of pitch diameter tolerance	Equivalent deviation in lead	Equivalent deviation in half-angle	
1	2	3	4	5	6		7	8	9	10	
			in.	*in.*	*deg*	*min*		*in.*	*in.*	*deg*	*min*
15/16–28 or .9375–28	UN	2A	.00200	.00115	2	34	2B	.00260	.00150	3	20
		3A	.00150	.00087	1	55	3B	.00195	.00113	2	30
15/16–32 or .9375–32	UN	2A	.00190	.00110	2	47	2B	.00245	.00141	3	35
		3A	.00140	.00081	2	3	3B	.00185	.00107	2	43
1–8 or 1.000–8	UNC	1A	.00505	.00292	1	51	1B	.00660	.00381	2	25
		2A	.00340	.00196	1	15	2B	.00440	.00254	1	37
		3A	.00255	.00147	0	56	3B	.00330	.00191	1	13
1–12 or 1.000–12	UNF	1A	.00440	.00254	2	25	1B	.00570	.00329	3	8
		2A	.00295	.00170	1	37	2B	.00380	.00219	2	5
		3A	.00220	.00127	1	13	3B	.00285	.00165	1	34
1–16 or 1.000–16	UN	2A	.00250	.00144	1	50	2B	.00325	.00188	2	23
		3A	.00185	.00107	1	21	3B	.00245	.00141	1	48
1–20 or 1.000–20	UNEF	2A	.00225	.00130	2	4	2B	.00295	.00170	2	42
		3A	.00170	.00098	1	33	3B	.00220	.00127	2	1
1–28 or 1.000–28	UN	2A	.00200	.00115	2	34	2B	.00260	.00150	3	20
		3A	.00150	.00087	1	55	3B	.00195	.00113	2	30
1–32 or 1.000–32	UN	2A	.00190	.00110	2	47	2B	.00245	.00141	3	35
		3A	.00140	.00081	2	3	3B	.00185	.00107	2	43
1 1/16–8 or 1.0625–8	UN	2A	.00340	.00196	1	15	2B	.00445	.00257	1	38
		3A	.00255	.00147	0	56	3B	.00335	.00193	1	14
1 1/16–12 or 1.0625–12	UN	2A	.00285	.00165	1	34	2B	.00370	.00214	2	2
		3A	.00210	.00121	1	9	3B	.00275	.00159	1	31
1 1/16–16 or 1.0625–16	UN	2A	.00250	.00144	1	50	2B	.00325	.00188	2	23
		3A	.00185	.00107	1	21	3B	.00245	.00141	1	48
1 1/16–18 or 1.0625–18	UNEF	2A	.00235	.00136	1	56	2B	.00310	.00179	2	33
		3A	.00180	.00104	1	29	3B	.00230	.00133	1	54
1 1/16–20 or 1.0625–20	UN	2A	.00225	.00130	2	4	2B	.00295	.00170	2	42
		3A	.00170	.00098	1	33	3B	.00220	.00127	2	1
1 1/16–28 or 1.0625–28	UN	2A	.00200	.00115	2	34	2B	.00260	.00150	3	20
		3A	.00150	.00087	1	55	3B	.00195	.00113	2	30
1 1/8–7 or 1.125–7	UNC	1A	.00545	.00315	1	45	1B	.00705	.00407	2	16
		2A	.00360	.00208	1	9	2B	.00470	.00271	1	30
		3A	.00270	.00156	0	52	3B	.00355	.00205	1	8
1 1/8–8 or 1.125–8	UN	2A	.00345	.00199	1	16	2B	.00450	.00260	1	39
		3A	.00260	.00150	0	57	3B	.00335	.00193	1	14
1 1/8–12 or 1.125–12	UNF	1A	.00450	.00260	2	28	1B	.00585	.00338	3	13
		2A	.00300	.00173	1	39	2B	.00390	.00225	2	9
		3A	.00225	.00130	1	14	3B	.00295	.00170	1	37
1 1/8–16 or 1.125–16	UN	2A	.00250	.00144	1	50	2B	.00325	.00188	2	23
		3A	.00185	.00107	1	21	3B	.00245	.00141	1	48
1 1/8–18 or 1.125–18	UNEF	2A	.00235	.00136	1	56	2B	.00310	.00179	2	33
		3A	.00180	.00104	1	29	3B	.00230	.00133	1	54
1 1/8–20 or 1.125–20	UN	2A	.00225	.00130	2	4	2B	.00295	.00170	2	42
		3A	.00170	.00098	1	33	3B	.00220	.00127	2	1
1 1/8–28 or 1.125–28	UN	2A	.00200	.00115	2	34	2B	.00260	.00150	3	20
		3A	.00150	.00087	1	55	3B	.00195	.00113	2	30
1 3/16–8 or 1.1875–8	UN	2A	.00350	.00202	1	17	2B	.00455	.00263	1	40
		3A	.00260	.00150	0	57	3B	.00340	.00196	1	15
1 3/16–12 or 1.1875–12	UN	2A	.00290	.00167	1	36	2B	.00375	.00217	2	4
		3A	.00215	.00124	1	11	3B	.00280	.00162	1	32
1 3/16–16 or 1.1875–16	UN	2A	.00255	.00147	1	52	2B	.00330	.00191	2	25
		3A	.00190	.00110	1	24	3B	.00250	.00144	1	50
1 3/16–18 or 1.1875–18	UNEF	2A	.00245	.00141	2	1	2B	.00315	.00182	2	36
		3A	.00180	.00104	1	29	3B	.00235	.00136	1	56
1 3/16–20 or 1.1875–20	UN	2A	.00235	.00136	2	9	2B	.00305	.00176	2	48
		3A	.00175	.00101	1	36	3B	.00225	.00130	2	4
1 3/16–28 or 1.1875–28	UN	2A	.00205	.00118	2	38	2B	.00265	.00153	3	24
		3A	.00155	.00089	1	59	3B	.00200	.00115	2	34
1 1/4–7 or 1.250–7	UNC	1A	.00555	.00320	1	47	1B	.00720	.00416	2	19
		2A	.00370	.00214	1	11	2B	.00480	.00277	1	32
		3A	.00275	.00159	0	53	3B	.00360	.00208	1	9
1 1/4–8 or 1.250–8	UN	2A	.00350	.00202	1	17	2B	.00460	.00266	1	41
		3A	.00265	.00153	0	58	3B	.00345	.00199	1	16

TABLE III.11.—*Deviations in lead and half-angle equivalent to one-half of pitch diameter tolerances, Unified screw threads*—Con.

Nominal size and threads per inch	Series designation	External					Internal				
		Class	Half of pitch diameter tolerance	Equivalent deviation in lead	Equivalent deviation in half-angle		Class	Half of pitch diameter tolerance	Equivalent deviation in lead	Equivalent deviation in half-angle	
1	2	3	4	5	6		7	8	9	10	
			in.	*in.*	*deg*	*min*		*in.*	*in.*	*deg*	*min*
1¼–12 or 1.250–12	UNF	1A	.00460	.00266	2	32	1B	.00600	.00346	3	18
		2A	.00310	.00179	1	42	2B	.00400	.00231	2	12
		3A	.00230	.00133	1	16	3B	.00300	.00173	1	39
1¼–16 or 1.250–16	UN	2A	.00255	.00147	1	52	2B	.00330	.00191	2	25
		3A	.00190	.00110	1	24	3B	.00250	.00144	1	50
1¼–18 or 1.250–18	UNEF	2A	.00245	.00141	2	1	2B	.00315	.00182	2	36
		3A	.00180	.00104	1	29	3B	.00235	.00136	1	56
1¼–20 or 1.250–20	UN	2A	.00235	.00136	2	9	2B	.00305	.00176	2	48
		3A	.00175	.00101	1	36	3B	.00225	.00130	2	4
1¼–28 or 1.250–28	UN	2A	.00205	.00118	2	38	2B	.00265	.00153	3	24
		3A	.00155	.00089	1	59	3B	.00200	.00115	2	34
1 5/16–8 or 1.3125–8	UN	2A	.00355	.00205	1	18	2B	.00460	.00266	1	41
		3A	.00265	.00153	0	58	3B	.00345	.00199	1	16
1 5/16–12 or 1.3125–12	UN	2A	.00290	.00167	1	36	2B	.00375	.00217	2	4
		3A	.00215	.00124	1	11	3B	.00280	.00162	1	32
1 5/16–16 or 1.3125–16	UN	2A	.00255	.00147	1	52	2B	.00330	.00191	2	25
		3A	.00190	.00110	1	24	3B	.00250	.00144	1	50
1 5/16–18 or 1.3125–18	UNEF	2A	.00245	.00141	2	1	2B	.00315	.00182	2	36
		3A	.00180	.00104	1	29	3B	.00235	.00136	1	56
1 5/16–20 or 1.3125–20	UN	2A	.00235	.00136	2	9	2B	.00305	.00176	2	48
		3A	.00175	.00101	1	36	3B	.00225	.00130	2	4
1 5/16–28 or 1.3125–28	UN	2A	.00205	.00118	2	38	2B	.00265	.00153	3	24
		3A	.00155	.00089	1	59	3B	.00200	.00115	2	34
1⅜–6 or 1.375–6	UNC	1A	.00600	.00346	1	39	1B	.00775	.00447	2	8
		2A	.00400	.00231	1	6	2B	.00520	.00300	1	26
		3A	.00300	.00173	0	50	3B	.00390	.00225	1	4
1⅜–8 or 1.375–8	UN	2A	.00360	.00208	1	19	2B	.00465	.00268	1	42
		3A	.00270	.00156	0	59	3B	.00350	.00202	1	17
1⅜–12 or 1.375–12	UNF	1A	.00470	.00271	2	35	1B	.00615	.00355	3	23
		2A	.00315	.00182	1	44	2B	.00410	.00237	2	15
		3A	.00235	.00136	1	18	3B	.00305	.00176	1	41
1⅜–16 or 1.375–16	UN	2A	.00255	.00147	1	52	2B	.00330	.00191	2	25
		3A	.00190	.00110	1	24	3B	.00250	.00144	1	50
1⅜–18 or 1.375–18	UNEF	2A	.00245	.00141	2	1	2B	.00315	.00182	2	36
		3A	.00180	.00104	1	29	3B	.00235	.00136	1	56
1⅜–20 or 1.375–20	UN	2A	.00235	.00136	2	9	2B	.00305	.00176	2	48
		3A	.00175	.00101	1	36	3B	.00225	.00130	2	4
1⅜–28 or 1.375–28	UN	2A	.00205	.00118	2	38	2B	.00265	.00153	3	24
		3A	.00155	.00089	1	59	3B	.00200	.00115	2	34
1 7/16–6 or 1.4375–6	UN	2A	.00400	.00231	1	6	2B	.00520	.00300	1	26
		3A	.00300	.00173	0	50	3B	.00390	.00225	1	4
1 7/16–8 or 1.4375–8	UN	2A	.00360	.00208	1	19	2B	.00470	.00271	1	43
		3A	.00270	.00156	0	59	3B	.00355	.00205	1	18
1 7/16–12 or 1.4375–12	UN	2A	.00295	.00170	1	37	2B	.00380	.00219	2	5
		3A	.00220	.00127	1	13	3B	.00285	.00165	1	34
1 7/16–16 or 1.4375–16	UN	2A	.00260	.00150	1	54	2B	.00340	.00196	2	30
		3A	.00195	.00113	1	26	3B	.00255	.00147	1	52
1 7/16–18 or 1.4375–18	UNEF	2A	.00250	.00144	2	4	2B	.00325	.00188	2	41
		3A	.00185	.00107	1	32	3B	.00240	.00139	1	59
1 7/16–20 or 1.4375–20	UN	2A	.00240	.00139	2	12	2B	.00310	.00179	2	50
		3A	.00180	.00104	1	39	3B	.00230	.00133	2	6
1 7/16–28 or 1.4375–28	UN	2A	.00210	.00121	2	42	2B	.00275	.00159	3	31
		3A	.00155	.00089	1	59	3B	.00205	.00118	2	38
1½–6 or 1.500–6	UNC	1A	.00605	.00349	1	40	1B	.00790	.00456	2	10
		2A	.00405	.00234	1	7	2B	.00525	.00303	1	27
		3A	.00305	.00176	0	50	3B	.00395	.00228	1	5
1½–8 or 1.500–8	UN	2A	.00365	.00211	1	20	2B	.00475	.00274	1	44
		3A	.00275	.00159	1	0	3B	.00355	.00205	1	18
1½–12 or 1.500–12	UNF	1A	.00480	.00277	2	38	1B	.00625	.00361	3	26
		2A	.00320	.00185	1	46	2B	.00415	.00240	2	17
		3A	.00240	.00139	1	19	3B	.00315	.00182	1	44
1½–16 or 1.500–16	UN	2A	.00260	.00150	1	54	2B	.00340	.00196	2	30
		3A	.00195	.00113	1	26	3B	.00255	.00147	1	52

TABLE III.11.—*Deviations in lead and half-angle equivalent to one-half of pitch diameter tolerances, Unified screw threads*—CON.

Nominal size and threads per inch	Series designation	External					Internal				
		Class	Half of pitch diameter tolerance	Equivalent deviation in lead	Equivalent deviation in half-angle		Class	Half of pitch diameter tolerance	Equivalent deviation in lead	Equivalent deviation in half-angle	
1	2	3	4	5	6		7	8	9	10	
			in.	*in.*	*deg*	*min*		*in.*	*in.*	*deg*	*min*
1½-18 or 1.500-18	UNEF	2A 3A	.00250 .00185	.00144 .00107	2 1	4 32	2B 3B	.00325 .00240	.00188 .00139	2 1	41 59
1½-20 or 1.500-20	UN	2A 3A	.00240 .00180	.00139 .00104	2 1	12 39	2B 3B	.00310 .00230	.00179 .00133	2 2	50 6
1½-28 or 1.500-28	UN	2A 3A	.00210 .00155	.00121 .00089	2 1	42 59	2B 3B	.00275 .00205	.00159 .00118	3 2	31 38
1 9/16-6 or 1.5625-6	UN	2A 3A	.00410 .00305	.00237 .00176	1 0	8 50	2B 3B	.00530 .00400	.00306 .00231	1 1	27 6
1 9/16-8 or 1.5625-8	UN	2A 3A	.00370 .00275	.00214 .00159	1 1	21 0	2B 3B	.00480 .00360	.00277 .00208	1 1	46 19
1 9/16-12 or 1.5625-12	UN	2A 3A	.00295 .00220	.00170 .00127	1 1	37 13	2B 3B	.00380 .00285	.00219 .00165	2 1	5 34
1 9/16-16 or 1.5625-16	UN	2A 3A	.00260 .00195	.00150 .00113	1 1	54 26	2B 3B	.00340 .00255	.00196 .00147	2 1	30 52
1 9/16-18 or 1.5625-18	UNEF	2A 3A	.00250 .00185	.00144 .00107	2 1	4 32	2B 3B	.00325 .00240	.00188 .00139	2 1	41 59
1 9/16-20 or 1.5625-20	UN	2A 3A	.00240 .00180	.00139 .00104	2 1	12 39	2B 3B	.00310 .00230	.00179 .00133	2 2	50 6
1⅝-6 or 1.625-6	UN	2A 3A	.00410 .00310	.00237 .00179	1 0	8 51	2B 3B	.00535 .00400	.00309 .00231	1 1	28 6
1⅝-8 or 1.625-8	UN	2A 3A	.00370 .00280	.00214 .00162	1 1	21 2	2B 3B	.00485 .00360	.00280 .00208	1 1	47 19
1⅝-12 or 1.625-12	UN	2A 3A	.00295 .00220	.00170 .00127	1 1	37 13	2B 3B	.00380 .00285	.00219 .00165	2 1	5 34
1⅝-16 or 1.625-16	UN	2A 3A	.00260 .00195	.00150 .00113	1 1	54 26	2B 3B	.00340 .00255	.00196 .00147	2 1	30 52
1⅝-18 or 1.625-18	UNEF	2A 3A	.00250 .00185	.00144 .00107	2 1	4 32	2B 3B	.00325 .00240	.00188 .00139	2 1	41 59
1⅝-20 or 1.625-20	UN	2A 3A	.00240 .00180	.00139 .00104	2 1	12 39	2B 3B	.00310 .00230	.00179 .00133	2 2	50 6
1 11/16-6 or 1.6875-6	UN	2A 3A	.00415 .00310	.00240 .00179	1 0	8 51	2B 3B	.00540 .00405	.00312 .00234	1 1	29 7
1 11/16-8 or 1.6875-8	UN	2A 3A	.00375 .00280	.00217 .00162	1 1	22 2	2B 3B	.00485 .00365	.00280 .00211	1 1	47 20
1 11/16-12 or 1.6875-12	UN	2A 3A	.00300 .00225	.00173 .00130	1 1	39 14	2B 3B	.00390 .00290	.00225 .00167	2 1	9 36
1 11/16-16 or 1.6875-16	UN	2A 3A	.00265 .00200	.00153 .00115	1 1	57 28	2B 3B	.00345 .00260	.00199 .00150	2 1	32 54
1 11/16-18 or 1.6875-18	UNEF	2A 3A	.00255 .00190	.00147 .00110	2 1	6 34	2B 3B	.00330 .00245	.00191 .00141	2 2	43 1
1 11/16-20 or 1.6875-20	UN	2A 3A	.00240 .00180	.00139 .00104	2 1	12 39	2B 3B	.00315 .00235	.00182 .00136	2 2	53 9
1¾-5 or 1.750-5	UNC	1A 2A 3A	.00670 .00445 .00335	.00387 .00257 .00193	1 1 0	32 1 46	1B 2B 3B	.00870 .00580 .00435	.00502 .00335 .00251	2 1 1	0 20 0
1¾-6 or 1.750-6	UN	2A 3A	.00415 .00315	.00240 .00182	1 0	8 52	2B 3B	.00540 .00405	.00312 .00234	1 1	29 7
1¾-8 or 1.750-8	UN	2A 3A	.00375 .00285	.00217 .00165	1 1	22 3	2B 3B	.00490 .00370	.00283 .00214	1 1	48 21
1¾-12 or 1.750-12	UN	2A 3A	.00300 .00225	.00173 .00130	1 1	39 14	2B 3B	.00390 .00290	.00225 .00167	2 1	9 36
1¾-16 or 1.750-16	UN	2A 3A	.00265 .00200	.00153 .00115	1 1	57 28	2B 3B	.00345 .00260	.00199 .00150	2 1	32 54
1¾-20 or 1.750-20	UN	2A 3A	.00240 .00180	.00139 .00104	2 1	12 39	2B 3B	.00315 .00235	.00182 .00136	2 2	53 9
1 13/16-6 or 1.8125-6	UN	2A 3A	.00420 .00315	.00242 .00182	1 0	9 52	2B 3B	.00545 .00410	.00315 .00237	1 1	30 8
1 13/16-8 or 1.8125-8	UN	2A 3A	.00380 .00285	.00219 .00165	1 1	24 3	2B 3B	.00495 .00370	.00286 .00214	1 1	49 21
1 13/16-12 or 1.8125-12	UN	2A 3A	.00300 .00225	.00173 .00130	1 1	39 14	2B 3B	.00390 .00290	.00225 .00167	2 1	9 36

TABLE III.11.—*Deviations in lead and half-angle equivalent to one-half of pitch diameter tolerances, Unified screw threads*—Con.

Nominal size and threads per inch	Series designation	External					Internal				
		Class	Half of pitch diameter tolerance	Equivalent deviation in lead	Equivalent deviation in half-angle		Class	Half of pitch diameter tolerance	Equivalent deviation in lead	Equivalent deviation in half-angle	
1	2	3	4	5	6		7	8	9	10	
			in.	*in.*	*deg*	*min*		*in.*	*in.*	*deg*	*min*
1 13/16–16 or 1.8125–16	UN	2A	.00265	.00153	1	57	2B	.00345	.00199	2	32
		3A	.00200	.00115	1	28	3B	.00260	.00150	1	54
1 13/16–20 or 1.8125–20	UN	2A	.00240	.00139	2	12	2B	.00315	.00182	2	53
		3A	.00180	.00104	1	39	3B	.00235	.00136	2	9
1 7/8–6 or 1.875–6	UN	2A	.00420	.00242	1	9	2B	.00550	.00318	1	31
		3A	.00315	.00182	0	52	3B	.00410	.00237	1	8
1 7/8–8 or 1.875–8	UN	2A	.00385	.00222	1	25	2B	.00500	.00289	1	50
		3A	.00285	.00165	1	3	3B	.00375	.00217	1	22
1 7/8–12 or 1.875–12	UN	2A	.00300	.00173	1	39	2B	.00390	.00225	2	9
		3A	.00225	.00130	1	14	3B	.00290	.00167	1	36
1 7/8–16 or 1.875–16	UN	2A	.00265	.00153	1	57	2B	.00345	.00199	2	32
		3A	.00200	.00115	1	28	3B	.00260	.00150	1	54
1 7/8–20 or 1.875–20	UN	2A	.00240	.00139	2	12	2B	.00315	.00182	2	53
		3A	.00180	.00104	1	39	3B	.00235	.00136	2	9
1 15/16–6 or 1.9375–6	UN	2A	.00425	.00245	1	10	2B	.00555	.00320	1	32
		3A	.00320	.00185	0	53	3B	.00415	.00240	1	8
1 15/16–8 or 1.9375–8	UN	2A	.00385	.00222	1	25	2B	.00500	.00289	1	50
		3A	.00290	.00167	1	4	3B	.00375	.00217	1	22
1 15/16–12 or 1.9375–12	UN	2A	.00305	.00176	1	41	2B	.00395	.00228	2	10
		3A	.00225	.00130	1	14	3B	.00295	.00170	1	37
1 15/16–16 or 1.9375–16	UN	2A	.00270	.00156	1	59	2B	.00350	.00202	2	34
		3A	.00200	.00115	1	28	3B	.00260	.00150	1	54
1 15/16–20 or 1.9375–20	UN	2A	.00245	.00141	2	15	2B	.00320	.00185	2	56
		3A	.00185	.00107	1	42	3B	.00240	.00139	2	12
2–4 1/2 or 2.000–4.5	UNC	1A	.00715	.00413	1	28	1B	.00930	.00537	1	55
		2A	.00475	.00274	0	59	2B	.00620	.00358	1	17
		3A	.00355	.00205	0	44	3B	.00465	.00268	0	58
2–6 or 2.000–6	UN	2A	.00430	.00248	1	11	2B	.00555	.00320	1	32
		3A	.00320	.00185	0	53	3B	.00415	.00240	1	8
2–8 or 2.000–8	UN	2A	.00390	.00225	1	26	2B	.00505	.00292	1	51
		3A	.00290	.00167	1	4	3B	.00380	.00219	1	24
2–12 or 2.000–12	UN	2A	.00305	.00176	1	41	2B	.00395	.00228	2	10
		3A	.00225	.00130	1	14	3B	.00295	.00170	1	37
2–16 or 2.000–16	UN	2A	.00270	.00156	1	59	2B	.00350	.00202	2	34
		3A	.00200	.00115	1	28	3B	.00260	.00150	1	54
2–20 or 2.000–20	UN	2A	.00245	.00141	2	15	2B	.00320	.00185	2	56
		3A	.00185	.00107	1	42	3B	.00240	.00139	2	12
2 1/8–6 or 2.125–6	UN	2A	.00435	.00251	1	12	2B	.00565	.00326	1	33
		3A	.00325	.00188	0	54	3B	.00420	.00242	1	9
2 1/8–8 or 2.125–8	UN	2A	.00395	.00228	1	27	2B	.00510	.00294	1	52
		3A	.00295	.00170	1	5	3B	.00385	.00222	1	25
2 1/8–12 or 2.125–12	UN	2A	.00305	.00176	1	41	2B	.00395	.00228	2	10
		3A	.00225	.00130	1	14	3B	.00295	.00170	1	37
2 1/8–16 or 2.125–16	UN	2A	.00270	.00156	1	59	2B	.00350	.00202	2	34
		3A	.00200	.00115	1	28	3B	.00260	.00150	1	54
2 1/8–20 or 2.125–20	UN	2A	.00245	.00141	2	15	2B	.00320	.00185	2	56
		3A	.00185	.00107	1	42	3B	.00240	.00139	2	12
2 1/4–4 1/2 or 2.250–4.5	UNC	1A	.00730	.00421	1	30	1B	.00950	.00548	1	58
		2A	.00485	.00280	1	0	2B	.00630	.00364	1	18
		3A	.00365	.00211	0	45	3B	.00475	.00274	0	59
2 1/4–6 or 2.250–6	UN	2A	.00440	.00254	1	13	2B	.00570	.00329	1	34
		3A	.00330	.00191	0	54	3B	.00425	.00245	1	10
2 1/4–8 or 2.250–8	UN	2A	.00400	.00231	1	28	2B	.00520	.00300	1	54
		3A	.00300	.00173	1	6	3B	.00390	.00225	1	26
2 1/4–12 or 2.250–12	UN	2A	.00305	.00176	1	41	2B	.00395	.00228	2	10
		3A	.00225	.00130	1	14	3B	.00295	.00170	1	37
2 1/4–16 or 2.250–16	UN	2A	.00270	.00156	1	59	2B	.00350	.00202	2	34
		3A	.00200	.00115	1	28	3B	.00260	.00150	1	54
2 1/4–20 or 2.250–20	UN	2A	.00245	.00141	2	15	2B	.00320	.00185	2	56
		3A	.00185	.00107	1	42	3B	.00240	.00139	2	12

TABLE III.11.—*Deviations in lead and half-angle equivalent to one-half of pitch diameter tolerances, Unified screw threads*—Con.

Nominal size and threads per inch	Series designation	External					Internal				
		Class	Half of pitch diameter tolerance	Equivalent deviation in lead	Equivalent deviation in half-angle		Class	Half of pitch diameter tolerance	Equivalent deviation in lead	Equivalent deviation in half-angle	
1	2	3	4	5	6		7	8	9	10	
			in.	*in.*	*deg*	*min*		*in.*	*in.*	*deg*	*min*
2⅜–6 or 2.375–6	UN	2A	.00445	.00257	1	13	2B	.00575	.00332	1	35
		3A	.00330	.00191	0	54	3B	.00430	.00248	1	11
2⅜–8 or 2.375–8	UN	2A	.00405	.00234	1	29	2B	.00525	.00303	1	55
		3A	.00300	.00173	1	6	3B	.00395	.00228	1	27
2⅜–12 or 2.375–12	UN	2A	.00310	.00179	1	42	2B	.00405	.00234	2	14
		3A	.00230	.00133	1	16	3B	.00300	.00173	1	39
2⅜–16 or 2.375–16	UN	2A	.00275	.00159	2	1	2B	.00360	.00208	2	38
		3A	.00205	.00118	1	30	3B	.00270	.00156	1	59
2⅜–20 or 2.375–20	UN	2A	.00255	.00147	2	20	2B	.00330	.00191	3	1
		3A	.00190	.00110	1	44	3B	.00250	.00144	2	17
2½–4 or 2.500–4	UNC	1A	.00775	.00447	1	25	1B	.01010	.00583	1	51
		2A	.00520	.00300	0	57	2B	.00675	.00390	1	14
		3A	.00390	.00225	0	43	3B	.00505	.00292	0	56
2½–6 or 2.500–6	UN	2A	.00450	.00260	1	14	2B	.00580	.00335	1	36
		3A	.00335	.00193	0	55	3B	.00435	.00251	1	12
2½–8 or 2.500–8	UN	2A	.00410	.00237	1	30	2B	.00530	.00306	1	57
		3A	.00305	.00176	1	7	3B	.00400	.00231	1	28
2½–12 or 2.500–12	UN	2A	.00310	.00179	1	42	2B	.00405	.00234	2	14
		3A	.00230	.00133	1	16	3B	.00300	.00173	1	39
2½–16 or 2.500–16	UN	2A	.00275	.00159	2	1	2B	.00360	.00208	2	38
		3A	.00205	.00118	1	30	3B	.00270	.00156	1	59
2½–20 or 2.500–20	UN	2A	.00255	.00147	2	20	2B	.00330	.00191	3	1
		3A	.00190	.00110	1	44	3B	.00250	.00144	2	17
2⅝–6 or 2.625–6	UN	2A	.00450	.00260	1	14	2B	.00590	.00341	1	37
		3A	.00340	.00196	0	56	3B	.00440	.00254	1	13
2⅝–8 or 2.625–8	UN	2A	.00410	.00237	1	30	2B	.00535	.00309	1	58
		3A	.00310	.00179	1	8	3B	.00400	.00231	1	28
2⅝–12 or 2.625–12	UN	2A	.00310	.00179	1	42	2B	.00405	.00234	2	14
		3A	.00230	.00133	1	16	3B	.00300	.00173	1	39
2⅝–16 or 2.625–16	UN	2A	.00275	.00159	2	1	2B	.00360	.00208	2	38
		3A	.00205	.00118	1	30	3B	.00270	.00156	1	59
2⅝–20 or 2.625–20	UN	2A	.00255	.00147	2	20	2B	.00330	.00191	3	1
		3A	.00190	.00110	1	44	3B	.00250	.00144	2	17
2¾–4 or 2.750–4	UNC	1A	.00790	.00456	1	27	1B	.01030	.00595	1	53
		2A	.00525	.00303	0	58	2B	.00685	.00395	1	15
		3A	.00395	.00228	0	43	3B	.00515	.00297	0	57
2¾–6 or 2.750–6	UN	2A	.00455	.00263	1	15	2B	.00595	.00344	1	38
		3A	.00340	.00196	0	56	3B	.00445	.00257	1	13
2¾–8 or 2.750–8	UN	2A	.00415	.00240	1	31	2B	.00540	.00312	1	59
		3A	.00315	.00182	1	9	3B	.00405	.00234	1	29
2¾–12 or 2.750–12	UN	2A	.00310	.00179	1	42	2B	.00405	.00234	2	14
		3A	.00230	.00133	1	16	3B	.00300	.00173	1	39
2¾–16 or 2.750–16	UN	2A	.00275	.00159	2	1	2B	.00360	.00208	2	38
		3A	.00205	.00118	1	30	3B	.00270	.00156	1	59
2¾–20 or 2.750–20	UN	2A	.00255	.00147	2	20	2B	.00330	.00191	3	1
		3A	.00190	.00110	1	44	3B	.00250	.00144	2	17
2⅞–6 or 2.875–6	UN	2A	.00460	.00266	1	16	2B	.00600	.00346	1	39
		3A	.00345	.00199	0	57	3B	.00450	.00260	1	14
2⅞–8 or 2.875–8	UN	2A	.00420	.00242	1	32	2B	.00550	.00318	2	1
		3A	.00315	.00182	1	9	3B	.00410	.00237	1	30
2⅞–12 or 2.875–12	UN	2A	.00315	.00182	1	44	2B	.00410	.00237	2	15
		3A	.00235	.00136	1	18	3B	.00310	.00179	1	42
2⅞–16 or 2.875–16	UN	2A	.00280	.00162	2	3	2B	.00365	.00211	2	40
		3A	.00210	.00121	1	32	3B	.00275	.00159	2	1
2⅞–20 or 2.875–20	UN	2A	.00260	.00150	2	23	2B	.00340	.00196	3	7
		3A	.00195	.00113	1	47	3B	.00255	.00147	2	20
3–4 or 3.000–4	UNC	1A	.00805	.00465	1	29	1B	.01045	.00603	1	55
		2A	.00535	.00309	0	59	2B	.00695	.00401	1	16
		3A	.00400	.00231	0	44	3B	.00520	.00300	0	57
3–6 or 3.000–6	UN	2A	.00465	.00268	1	17	2B	.00605	.00349	1	40
		3A	.00350	.00202	0	58	3B	.00455	.00263	1	15

TABLE III.11.—*Deviations in lead and half-angle equivalent to one-half of pitch diameter tolerances, Unified screw threads*—Con.

Nominal size and threads per inch	Series designation	External					Internal				
		Class	Half of pitch diameter tolerance	Equivalent deviation in lead	Equivalent deviation in half-angle		Class	Half of pitch diameter tolerance	Equivalent deviation in lead	Equivalent deviation in half-angle	
1	2	3	4	5	6		7	8	9	10	
			in.	*in.*	*deg*	*min*		*in.*	*in.*	*deg*	*min*
3–8 or 3.000–8	UN	2A	.00425	.00245	1	33	2B	.00555	.00320	2	2
		3A	.00320	.00185	1	10	3B	.00415	.00240	1	31
3–12 or 3.000–12	UN	2A	.00315	.00182	1	44	2B	.00410	.00237	2	15
		3A	.00235	.00136	1	18	3B	.00310	.00179	1	42
3–16 or 3.000–16	UN	2A	.00280	.00162	2	3	2B	.00365	.00211	2	40
		3A	.00210	.00121	1	32	3B	.00275	.00159	2	1
3–20 or 3.000–20	UN	2A	.00260	.00150	2	23	2B	.00340	.00196	3	7
		3A	.00195	.00113	1	47	3B	.00255	.00147	2	20
3⅛–6 or 3.125–6	UN	2A	.00470	.00271	1	18	2B	.00610	.00352	1	41
		3A	.00350	.00202	0	58	3B	.00460	.00266	1	16
3⅛–8 or 3.125–8	UN	2A	.00430	.00248	1	35	2B	.00560	.00323	2	3
		3A	.00320	.00185	1	10	3B	.00420	.00242	1	32
3⅛–12 or 3.125–12	UN	2A	.00315	.00182	1	44	2B	.00410	.00237	2	15
		3A	.00235	.00136	1	18	3B	.00310	.00179	1	42
3⅛–16 or 3.125–16	UN	2A	.00280	.00162	2	3	2B	.00365	.00211	2	40
		3A	.00210	.00121	1	32	3B	.00275	.00159	2	1
3¼–4 or 3.250–4	UNC	1A	.00815	.00471	1	30	1B	.01060	.00612	1	57
		2A	.00545	.00315	1	0	2B	.00705	.00407	1	18
		3A	.00410	.00237	0	45	3B	.00530	.00306	0	58
3¼–6 or 3.250–6	UN	2A	.00475	.00274	1	18	2B	.00615	.00355	1	41
		3A	.00355	.00205	0	59	3B	.00460	.00266	1	16
3¼–8 or 3.250–8	UN	2A	.00435	.00251	1	36	2B	.00565	.00326	2	4
		3A	.00325	.00188	1	11	3B	.00425	.00245	1	33
3¼–12 or 3.250–12	UN	2A	.00315	.00182	1	44	2B	.00410	.00237	2	15
		3A	.00235	.00136	1	18	3B	.00310	.00179	1	42
3¼–16 or 3.250–16	UN	2A	.00280	.00162	2	3	2B	.00365	.00211	2	40
		3A	.00210	.00121	1	32	3B	.00275	.00159	2	1
3⅜–6 or 3.375–6	UN	2A	.00475	.00274	1	18	2B	.00620	.00358	1	42
		3A	.00360	.00208	0	59	3B	.00465	.00268	1	17
3⅜–8 or 3.375–8	UN	2A	.00440	.00254	1	37	2B	.00570	.00329	2	5
		3A	.00330	.00191	1	13	3B	.00425	.00245	1	33
3⅜–12 or 3.375–12	UN	2A	.00320	.00185	1	46	2B	.00420	.00242	2	19
		3A	.00242	.00139	1	19	3B	.00315	.00182	1	44
3⅜–16 or 3.375–16	UN	2A	.00290	.00167	2	8	2B	.00375	.00217	2	45
		3A	.00215	.00124	1	35	3B	.00280	.00162	2	3
3½–4 or 3.500–4	UNC	1A	.00830	.00479	1	31	1B	.01075	.00621	1	58
		2A	.00550	.00318	1	0	2B	.00715	.00413	1	19
		3A	.00415	.00240	0	46	3B	.00540	.00312	0	59
3½–6 or 3.500–6	UN	2A	.00480	.00277	1	19	2B	.00625	.00361	1	43
		3A	.00360	.00208	0	59	3B	.00470	.00271	1	18
3½–8 or 3.500–8	UN	2A	.00440	.00254	1	37	2B	.00575	.00332	2	6
		3A	.00330	.00191	1	13	3B	.00430	.00248	1	35
3½–12 or 3.500–12	UN	2A	.00320	.00185	1	46	2B	.00420	.00242	2	19
		3A	.00240	.00139	1	19	3B	.00315	.00182	1	44
3½–16 or 3.500–16	UN	2A	.00290	.00167	2	8	2B	.00375	.00217	2	45
		3A	.00215	.00124	1	35	3B	.00280	.00162	2	3
3⅝–6 or 3.625–6	UN	2A	.00485	.00280	1	20	2B	.00630	.00364	1	44
		3A	.00365	.00211	1	0	3B	.00475	.00274	1	18
3⅝–8 or 3.625–8	UN	2A	.00445	.00257	1	38	2B	.00580	.00335	2	8
		3A	.00335	.00193	1	14	3B	.00435	.00251	1	36
3⅝–12 or 3.625–12	UN	2A	.00320	.00185	1	46	2B	.00420	.00242	2	19
		3A	.00240	.00139	1	19	3B	.00315	.00182	1	44
3⅝–16 or 3.625–16	UN	2A	.00290	.00167	2	8	2B	.00375	.00217	2	45
		3A	.00215	.00124	1	35	3B	.00280	.00162	2	3
3¾–4 or 3.750–4	UNC	1A	.00840	.00485	1	32	1B	.01090	.00629	2	0
		2A	.00560	.00323	1	2	2B	.00725	.00419	1	20
		3A	.00420	.00242	0	46	3B	.00545	.00315	1	0
3¾–6 or 3.750–6	UN	2A	.00490	.00283	1	21	2B	.00635	.00367	1	45
		3A	.00365	.00211	1	0	3B	.00475	.00274	1	18
3¾–8 or 3.750–8	UN	2A	.00450	.00260	1	39	2B	.00585	.00338	2	9
		3A	.00335	.00193	1	14	3B	.00440	.00254	1	37

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TABLE III.11.—*Deviations in lead and half-angle equivalent to one-half of pitch diameter tolerances, Unified screw threads*—Con.

Nominal size and threads per inch	Series designation	External					Internal				
		Class	Half of pitch diameter tolerance	Equivalent deviation in lead	Equivalent deviation in half-angle		Class	Half of pitch diameter tolerance	Equivalent deviation in lead	Equivalent deviation in half-angle	
1	2	3	4	5	6		7	8	9	10	
			in.	*in.*	*deg*	*min*		*in.*	*in.*	*deg*	*min*
3¾–12 or 3.750–12	UN	2A	.00320	.00185	1	46	2B	.00420	.00242	2	19
		3A	.00240	.00139	1	19	3B	.00315	.00182	1	44
3¾–16 or 3.750–16	UN	2A	.00290	.00167	2	8	2B	.00375	.00217	2	45
		3A	.00215	.00124	1	35	3B	.00280	.00162	2	3
3⅞–6 or 3.875–6	UN	2A	.00495	.00286	1	22	2B	.00640	.00369	1	46
		3A	.00370	.00214	1	1	3B	.00480	.00277	1	19
3⅞–8 or 3.875–8	UN	2A	.00455	.00263	1	40	2B	.00590	.00341	2	10
		3A	.00340	.00196	1	15	3B	.00440	.00254	1	37
3⅞–12 or 3.875–12	UN	2A	.00325	.00188	1	47	2B	.00425	.00245	2	20
		3A	.00245	.00141	1	21	3B	.00320	.00185	1	46
3⅞–16 or 3.875–16	UN	2A	.00295	.00170	2	10	2B	.00380	.00219	2	47
		3A	.00220	.00127	1	37	3B	.00285	.00165	2	5
4–4 or 4.000–4	UNC	1A	.00850	.00491	1	33	1B	.01105	.00638	2	2
		2A	.00565	.00326	1	2	2B	.00735	.00424	1	21
		3A	.00425	.00245	0	47	3B	.00555	.00320	1	1
4–6 or 4.000–6	UN	2A	.00495	.00286	1	22	2B	.00645	.00372	1	46
		3A	.00370	.00214	1	1	3B	.00485	.00280	1	20
4–8 or 4.000–8	UN	2A	.00455	.00263	1	40	2B	.00595	.00344	2	11
		3A	.00340	.00196	1	15	3B	.00445	.00257	1	38
4–12 or 4.000–12	UN	2A	.00325	.00188	1	47	2B	.00425	.00245	2	20
		3A	.00245	.00141	1	21	3B	.00320	.00185	1	46
4–16 or 4.000–16	UN	2A	.00295	.00170	2	10	2B	.00380	.00219	2	47
		3A	.00220	.00127	1	37	3B	.00285	.00165	2	5
4⅛–6 or 4.125–6	UN	2A	.00500	.00289	1	22	2B	.00650	.00375	1	47
		3A	.00375	.00217	1	2	3B	.00485	.00280	1	20
4⅛–12 or 4.125–12	UN	2A	.00325	.00188	1	47	2B	.00425	.00245	2	20
		3A	.00245	.00141	1	21	3B	.00320	.00185	1	46
4⅛–16 or 4.125–16	UN	2A	.00295	.00170	2	10	2B	.00380	.00219	2	47
		3A	.00220	.00127	1	37	3B	.00285	.00165	2	5
4¼–4 or 4.250–4	UN	2A	.00575	.00332	1	3	2B	.00745	.00430	1	22
		3A	.00430	.00248	0	47	3B	.00560	.00323	1	2
4¼–6 or 4.250–6	UN	2A	.00505	.00292	1	23	2B	.00655	.00378	1	48
		3A	.00375	.00217	1	2	3B	.00490	.00283	1	21
4¼–12 or 4.250–12	UN	2A	.00325	.00188	1	47	2B	.00425	.00245	2	20
		3A	.00245	.00141	1	21	3B	.00320	.00185	1	46
4¼–16 or 4.250–16	UN	2A	.00295	.00170	2	10	2B	.00380	.00219	2	47
		3A	.00220	.00127	1	37	3B	.00285	.00165	2	5
4⅜–6 or 4.375–6	UN	2A	.00505	.00292	1	23	2B	.00660	.00381	1	49
		3A	.00380	.00219	1	3	3B	.00495	.00286	1	22
4⅜–12 or 4.375–12	UN	2A	.00325	.00188	1	47	2B	.00425	.00245	2	20
		3A	.00245	.00141	1	21	3B	.00320	.00185	1	46
4⅜–16 or 4.375–16	UN	2A	.00295	.00170	2	10	2B	.00380	.00219	2	47
		3A	.00220	.00127	1	37	3B	.00285	.00165	2	5
4½–4 or 4.500–4	UN	2A	.00580	.00335	1	4	2B	.00755	.00436	1	23
		3A	.00435	.00251	0	48	3B	.00565	.00326	1	2
4½–6 or 4.500–6	UN	2A	.00510	.00294	1	24	2B	.00665	.00384	1	50
		3A	.00385	.00222	1	4	3B	.00495	.00286	1	22
4½–12 or 4.500–12	UN	2A	.00325	.00188	1	47	2B	.00425	.00245	2	20
		3A	.00245	.00141	1	21	3B	.00320	.00185	1	46
4½–16 or 4.500–16	UN	2A	.00295	.00170	2	10	2B	.00380	.00219	2	47
		3A	.00220	.00127	1	37	3B	.00285	.00165	2	5
4⅝–6 or 4.636–6	UN	2A	.00515	.00297	1	25	2B	.00665	.00384	1	50
		3A	.00385	.00222	1	4	3B	.00500	.00289	1	22
4⅝–12 or 4.625–12	UN	2A	.00335	.00193	1	51	2B	.00435	.00251	2	23
		3A	.00250	.00144	1	22	3B	.00330	.00191	1	49
4⅝–16 or 4.625–16	UN	2A	.00305	.00176	2	14	2B	.00395	.00228	2	54
		3A	.00225	.00130	1	39	3B	.00295	.00170	2	10
4¾–4 or 4.750–4	UN	2A	.00585	.00338	1	4	2B	.00765	.00442	1	24
		3A	.00440	.00254	0	48	3B	.00570	.00329	1	3
4¾–6 or 4.750–6	UN	2A	.00515	.00297	1	25	2B	.00670	.00387	1	51
		3A	.00385	.00222	1	4	3B	.00505	.00292	1	23

TABLE III.11.—*Deviations in lead and half-angle equivalent to one-half of pitch diameter tolerances, Unified screw threads*—Con.

Nominal size and threads per inch	Series designation	External					Internal				
		Class	Half of pitch diameter tolerance	Equivalent deviation in lead	Equivalent deviation in half-angle		Class	Half of pitch diameter tolerance	Equivalent deviation in lead	Equivalent deviation in half-angle	
1	2	3	4	5	6		7	8	9	10	
			in.	*in.*	*deg*	*min*		*in.*	*in.*	*deg*	*min*
4¾–12 or 4.750–12	UN	2A 3A	.00335 .00250	.00193 .00144	1 1	51 22	2B 3B	.00435 .00330	.00251 .00191	2 1	23 49
4¾–16 or 4.750–16	UN	2A 3A	.00305 .00225	.00176 .00130	2 1	14 29	2B 3B	.00395 .00295	.00228 .00170	2 2	54 10
4⅞–6 or 4.875–6	UN	2A 3A	.00520 .00390	.00300 .00225	1 1	26 4	2B 3B	.00675 .00505	.00390 .00292	1 1	51 23
4⅞–12 or 4.875–12	UN	2A 3A	.00335 .00250	.00193 .00144	1 1	51 22	2B 3B	.00435 .00330	.00251 .00101	1 1	23 49
4⅞–16 or 4.875–16	UN	2A 3A	.00305 .00225	.00176 .00130	2 1	14 39	2B 3B	.00395 .00295	.00228 .00170	2 2	54 10
5–4 or 5.000–4	UN	2A 3A	.00595 .00445	.00344 .00257	1 0	5 49	2B 3B	.00770 .00580	.00445 .00335	1 1	25 4
5–6 or 5.000–6	UN	2A 3A	.00525 .00390	.00303 .00225	1 1	27 4	2B 3B	.00680 .00510	.00393 .00294	1 1	52 24
5–12 or 5.000–12	UN	2A 3A	.00335 .00250	.00193 .00144	1 1	51 22	2B 3B	.00435 .00330	.00251 .00191	2 1	23 49
5–16 or 5.000–16	UN	2A 3A	.00305 .00225	.00176 .00130	2 1	14 39	2B 3B	.00395 .00295	.00228 .00170	2 2	54 10
5⅛–12 or 5.125–12	UN	2A 3A	.00335 .00250	.00193 .00144	1 1	51 22	2B 3B	.00435 .00330	.00251 .00191	2 1	23 49
5⅛–16 or 5.125–16	UN	2A 3A	.00305 .00225	.00176 .00130	2 1	14 39	2B 3B	.00395 .00295	.00228 .00170	2 2	54 10
5¼–4 or 5.250–4	UN	2A 3A	.00600 .00450	.00346 .00260	1 0	6 50	2B 3B	.00780 .00585	.00450 .00338	1 1	26 4
5¼–12 or 5.250–12	UN	2A 3A	.00335 .00250	.00193 .00144	1 1	51 22	2B 3B	.00435 .00330	.00251 .00191	2 1	23 49
5¼–16 or 5.250–16	UN	2A 3A	.00305 .00225	.00176 .00130	2 1	14 39	2B 3B	.00395 .00295	.00228 .00170	2 2	54 10
5⅜–12 or 5.375–12	UN	2A 3A	.00335 .00250	.00193 .00144	1 1	51 22	2B 3B	.00435 .00330	.00251 .00191	2 1	23 49
5⅜–16 or 5.375–16	UN	2A 3A	.00305 .00225	.00176 .00130	2 1	14 39	2B 3B	.00395 .00295	.00228 .00170	2 2	54 10
5½–4 or 5.500–4	UN	2A 3A	.00605 .00455	.00349 .00263	1 0	7 50	2B 3B	.00790 .00590	.00456 .00341	1 1	27 5
5½–12 or 5.500–12	UN	2A 3A	.00335 .00250	.00193 .00144	1 1	51 22	2B 3B	.00435 .00330	.00251 .00191	2 1	23 49
5½–16 or 5.500–16	UN	2A 3A	.00305 .00225	.00176 .00130	2 1	14 39	2B 3B	.00395 .00295	.00228 .00170	2 2	54 10
5⅝–12 or 5.625–12	UN	2A 3A	.00345 .00260	.00199 .00150	1 1	54 26	2B 3B	.00450 .00335	.00260 .00193	2 1	28 51
5⅝–16 or 5.625–16	UN	2A 3A	.00310 .00235	.00179 .00136	2 1	16 43	2B 3B	.00405 .00305	.00234 .00176	2 2	58 14
5¾–4 or 5.750–4	UN	2A 3A	.00610 .00460	.00352 .00266	1 0	7 51	2B 3B	.00795 .00595	.00459 .00344	1 1	27 5
5¾–12 or 5.750–12	UN	2A 3A	.00345 .00260	.00199 .00150	1 1	54 26	2B 3B	.00450 .00335	.00260 .00193	2 1	28 51
5¾–16 or 5.750–16	UN	2A 3A	.00310 .00235	.00179 .00136	2 1	16 43	2B 3B	.00405 .00305	.00234 .00176	2 2	58 14
5⅞–12 or 5.875–12	UN	2A 3A	.00345 .00260	.00199 .00150	1 1	54 26	2B 3B	.00450 .00335	.00260 .00193	2 1	28 51
5⅞–16 or 5.875–16	UN	2A 3A	.00310 .00235	.00179 .00136	2 1	16 43	2B 3B	.00405 .00305	.00234 .00176	2 2	58 14
6–4 or 6.000–4	UN	2A 3A	.00620 .00465	.00358 .00268	1 0	8 51	2B 3B	.00805 .00600	.00465 .00346	1 1	29 6
6–12 or 6.000–12	UN	2A 3A	.00345 .00260	.00199 .00150	1 1	54 26	2B 3B	.00450 .00335	.00260 .00193	2 1	28 51
6–16 or 6.000–16	UN	2A 3A	.00310 .00235	.00179 .00136	2 1	16 43	2B 3B	.00405 .00305	.00234 .00176	2 2	58 14

TABLE III.12.—*Gages for standard thread series, Unified screw threads*

Nominal size and threads per inch	Series designation	Class	Gages for external threads: X thread ring gages: GO: Pitch diameter	GO: Minor diameter	LO, classes 1A and 2A NOT GO, class 3A: Pitch diameter: Plus tolerance gage	Minus tolerance gage	Minor diameter	Z plain ring gages for major diameter: GO	NOT GO: Semi-finished	Unfinished hot-rolled material	Gages for internal threads: X thread plug gages: GO: Major diameter	Pitch diameter	HI: Major diameter	Pitch diameter: Minus tolerance gage	Plus tolerance gage	Z plain plug gages for minor diameter: GO	NOT GO	Class	Series designation	Nominal size and threads per inch
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*			
0–80 or .060–80	UNF	2A	0.0514	0.0460	0.0496	0.0496	0.0469	0.0595	0.0563	———	0.0600	0.0519	0.0596	0.0542	0.0542	0.0465	0.0514	2B	UNF	0–80 or .060–80
		3A	.0512	.0457	.0498	.0494	.0472	.0594	.0564	———	.0603	.0521	.0593	.0540	.0544	.0466	.0513			
			.0519	.0465	.0506	.0506	.0479	.0600	.0568	———	.0600	.0519	.0590	.0536	.0536	.0465	.0514	3B		
			.0517	.0462	.0508	.0504	.0482	.0599	.0569	———	.0603	.0521	.0587	.0534	.0538	.0466	.0513			
1–64 or .073–64	UNC	2A	.0623	.0555	.0603	.0603	.0569	.0724	.0686	———	.0730	.0629	.0723	.0655	.0655	.0561	.0623	2B	UNC	1–64 or .073–64
		3A	.0621	.0551	.0605	.0601	.0573	.0723	.0687	———	.0734	.0631	.0719	.0653	.0657	.0562	.0622			
			.0629	.0561	.0614	.0614	.0580	.0730	.0692	———	.0730	.0629	.0716	.0648	.0648	.0561	.0623	3B		
			.0627	.0557	.0616	.0612	.0584	.0729	.0693	———	.0734	.0631	.0712	.0646	.0650	.0562	.0622			
1–72 or .073–72	UNF	2A	.0634	.0574	.0615	.0615	.0585	.0724	.0689	———	.0730	.0640	.0725	.0665	.0665	.0580	.0635	2B	UNF	1–72 or .073–72
		3A	.0632	.0571	.0617	.0613	.0588	.0723	.0690	———	.0733	.0642	.0722	.0663	.0667	.0581	.0634			
			.0640	.0580	.0626	.0626	.0596	.0730	.0695	———	.0730	.0640	.0719	.0659	.0659	.0580	.0635	3B		
			.0638	.0577	.0628	.0624	.0599	.0729	.0696	———	.0733	.0642	.0716	.0657	.0661	.0581	.0634			
2–56 or .086–56	UNC	2A	.0738	.0661	.0717	.0717	.0678	.0854	.0813	———	.0860	.0744	.0849	.0772	.0772	.0667	.0737	2B	UNC	2–56 or .086–56
		3A	.0736	.0657	.0719	.0715	.0682	.0853	.0814	———	.0864	.0746	.0845	.0770	.0774	.0668	.0736			
			.0744	.0667	.0728	.0728	.0689	.0860	.0819	———	.0860	.0744	.0842	.0765	.0765	.0667	.0737	3B		
			.0742	.0663	.0730	.0726	.0693	.0859	.0820	———	.0864	.0746	.0838	.0763	.0767	.0668	.0736			
2–64 or .086–64	UNF	2A	.0753	.0685	.0733	.0733	.0699	.0854	.0816	———	.0860	.0759	.0854	.0786	.0786	.0691	.0753	2B	UNF	2–64 or .086–64
		3A	.0751	.0681	.0735	.0731	.0703	.0853	.0817	———	.0864	.0761	.0850	.0784	.0788	.0692	.0752			
			.0759	.0691	.0744	.0744	.0710	.0860	.0822	———	.0860	.0759	.0847	.0779	.0779	.0691	.0753	3B		
			.0757	.0687	.0746	.0742	.0714	.0859	.0823	———	.0864	.0761	.0843	.0777	.0781	.0692	.0752			
3–48 or .099–48	UNC	2A	.0848	.0758	.0825	.0825	.0780	.0983	.0938	———	.0990	.0855	.0975	.0885	.0885	.0764	.0845	2B	UNC	3–48 or .099–48
		3A	.0846	.0754	.0827	.0823	.0784	.0982	.0939	———	.0994	.0857	.0971	.0883	.0887	.0765	.0844			
			.0855	.0765	.0838	.0838	.0793	.0990	.0945	———	.0990	.0855	.0967	.0877	.0877	.0764	.0845	3B		
			.0853	.0761	.0840	.0836	.0797	.0989	.0946	———	.0994	.0857	.0963	.0875	.0879	.0765	.0844			
3–56 or .099–56	UNF	2A	.0867	.0790	.0845	.0845	.0806	.0983	.0942	———	.0990	.0874	.0979	.0902	.0902	.0797	.0865	2B	UNF	3–56 or .099–56
		3A	.0865	.0786	.0847	.0843	.0810	.0982	.0943	———	.0994	.0876	.0975	.0900	.0904	.0798	.0864			
			.0874	.0797	.0858	.0858	.0819	.0990	.0949	———	.0990	.0874	.0972	.0895	.0895	.0797	.0865	3B		
			.0872	.0793	.0860	.0856	.0823	.0989	.0950	———	.0994	.0876	.0968	.0893	.0897	.0798	.0864			
4–40 or .112–40	UNC	2A	.0950	.0842	.0925	.0925	.0871	.1112	.1061	———	.1120	.0958	.1099	.0991	.0991	.0849	.0939	2B	UNC	4–40 or .112–40
		3A	.0948	.0838	.0927	.0923	.0875	.1111	.1062	———	.1124	.0960	.1095	.0989	.0993	.0850	.0938			
			.0958	.0850	.0939	.0939	.0885	.1120	.1069	———	.1120	.0958	.1090	.0982	.0982	.0849	.0939	3B		
			.0956	.0846	.0941	.0937	.0889	.1119	.1070	———	.1124	.0960	.1086	.0980	.0984	.0850	.0938			
4–48 or .112–48	UNF	2A	.0978	.0888	.0954	.0954	.0909	.1113	.1068	———	.1120	.0985	.1106	.1016	.1016	.0894	.0968	2B	UNF	4–48 or .112–48
		3A	.0976	.0884	.0956	.0952	.0913	.1112	.1069	———	.1124	.0987	.1102	.1014	.1018	.0895	.0967			
			.0985	.0895	.0967	.0967	.0922	.1120	.1075	———	.1120	.0985	.1098	.1008	.1008	.0894	.0968	3B		
			.0983	.0891	.0969	.0965	.0926	.1119	.1076	———	.1124	.0987	.1094	.1006	.1010	.0895	.0967			
5–40 or .125–40	UNC	2A	.1080	.0972	.1054	.1054	.1000	.1242	.1191	———	.1250	.1088	.1229	.1121	.1121	.0979	.1062	2B	UNC	5–40 or .125–40
		3A	.1078	.0968	.1056	.1052	.1004	.1241	.1192	———	.1254	.1090	.1225	.1119	.1123	.0980	.1061			
			.1088	.0980	.1069	.1069	.1015	.1250	.1199	———	.1250	.1088	.1221	.1113	.1113	.0979	.1062	3B		
			.1086	.0976	.1071	.1067	.1019	.1249	.1200	———	.1254	.1090	.1217	.1111	.1115	.0980	.1061			

5–44 or .125–44	UNF	2A	.1095	.0997	.1070	.1070	.1021	.1243	.1195		.1250	.1102	.1232	.1134	.1134	.1004	.1079	2B	UNF	5–44 or .125–44
			.1093	.0993	.1072	.1068	.1025	.1242	.1196		.1254	.1104	.1228	.1132	.1136	.1005	.1078			
		3A	.1102	.1004	.1083	.1083	.1034	.1250	.1202		.1250	.1102	.1224	.1126	.1126	.1004	.1079	3B		
			.1100	.1000	.1085	.1081	.1038	.1249	.1203		.1254	.1104	.1220	.1124	.1128	.1005	.1078			
6–32 or .138–32	UNC	2A	.1169	.1034	.1141	.1141	.1073	.1372	.1312		.1380	.1177	.1349	.1214	.1214	.1040	.1140	2B	UNC	6–32 or .138–32
			.1166	.1029	.1144	.1138	.1078	.1371	.1313		.1385	.1180	.1344	.1211	.1217	.1041	.1139			
		3A	.1177	.1042	.1156	.1156	.1088	.1380	.1320		.1380	.1177	.1339	.1204	.1204	.1040	.1140	3B		
			.1174	.1037	.1159	.1153	.1093	.1379	.1321		.1385	.1180	.1334	.1201	.1207	.1041	.1139			
6–40 or .138–40	UNF	2A	.1210	.1102	.1184	.1184	.1130	.1372	.1321		.1380	.1218	.1360	.1252	.1252	.1110	.1190	2B	UNF	6–40 or .138–40
			.1208	.1098	.1186	.1182	.1134	.1371	.1322		.1384	.1220	.1356	.1250	.1254	.1111	.1189			
		3A	.1218	.1110	.1198	.1198	.1144	.1380	.1329		.1380	.1218	.1351	.1243	.1243	.1110	.1186	3B		
			.1216	.1106	.1200	.1196	.1148	.1379	.1330		.1384	.1220	.1347	.1241	.1245	.1111	.1185			
8–32 or .164–32	UNC	2A	.1428	.1293	.1399	.1399	.1331	.1631	.1571		.1640	.1437	.1610	.1475	.1475	.1300	.1390	2B	UNC	8–32 or .164–32
			.1425	.1288	.1402	.1396	.1336	.1630	.1572		.1645	.1440	.1605	.1472	.1478	.1301	.1389			
		3A	.1437	.1302	.1415	.1415	.1347	.1640	.1580		.1640	.1437	.1600	.1465	.1465	.1300	.1389	3B		
			.1434	.1297	.1418	.1412	.1352	.1639	.1581		.1645	.1440	.1595	.1462	.1468	.1301	.1388			
8–36 or .164–36	UNF	2A	.1452	.1332	.1424	.1424	.1364	.1632	.1577		.1640	.1460	.1616	.1496	.1496	.1340	.1420	2B	UNF	8–36 or .164–36
			.1450	.1328	.1426	.1422	.1368	.1631	.1578		.1644	.1462	.1612	.1494	.1498	.1341	.1419			
		3A	.1460	.1340	.1439	.1439	.1379	.1640	.1585		.1640	.1460	.1607	.1487	.1487	.1340	.1416	3B		
			.1458	.1336	.1441	.1437	.1383	.1639	.1586		.1644	.1462	.1603	.1485	.1489	.1341	.1415			
10–24 or .190–24	UNC	2A	.1619	.1439	.1586	.1586	.1496	.1890	.1818		.1900	.1629	.1852	.1672	.1672	.1450	.1560	2B	UNC	10–24 or .190–24
			.1616	.1434	.1589	.1583	.1501	.1889	.1819		.1905	.1632	.1847	.1669	.1675	.1451	.1559			
		3A	.1629	.1449	.1604	.1604	.1514	.1900	.1828		.1900	.1629	.1841	.1661	.1661	.1450	.1555	3B		
			.1626	.1444	.1607	.1601	.1519	.1899	.1829		.1905	.1632	.1836	.1658	.1664	.1451	.1554			
10–32 or .190–32	UNF	2A	.1688	.1553	.1658	.1658	.1590	.1891	.1831		.1900	.1697	.1871	.1736	.1736	.1560	.1640	2B	UNF	10–32 or .190–32
			.1685	.1548	.1661	.1655	.1595	.1890	.1832		.1905	.1700	.1866	.1733	.1739	.1561	.1639			
		3A	.1697	.1562	.1674	.1674	.1606	.1900	.1840		.1900	.1697	.1861	.1726	.1726	.1560	.1641	3B		
			.1694	.1557	.1677	.1671	.1611	.1899	.1841		.1905	.1700	.1856	.1723	.1729	.1561	.1640			
12–24 or .216–24	UNC	2A	.1879	.1699	.1845	.1845	.1755	.2150	.2078		.2160	.1889	.2113	.1933	.1933	.1710	.1810	2B	UNC	12–24 or .216–24
			.1876	.1694	.1848	.1842	.1760	.2149	.2079		.2165	.1892	.2108	.1930	.1936	.1711	.1809			
		3A	.1889	.1709	.1863	.1863	.1773	.2160	.2088		.2160	.1889	.2102	.1922	.1922	.1710	.1807	3B		
			.1886	.1704	.1866	.1860	.1778	.2159	.2089		.2165	.1892	.2097	.1919	.1925	.1711	.1806			
12–28 or .216–28	UNF	2A	.1918	.1763	.1886	.1886	.1809	.2150	.2085		.2160	.1928	.2125	.1970	.1970	.1770	.1860	2B	UNF	12–28 or .216–28
			.1915	.1758	.1889	.1883	.1814	.2149	.2086		.2165	.1931	.2120	.1967	.1973	.1771	.1859			
		3A	.1928	.1773	.1904	.1904	.1827	.2160	.2095		.2160	.1928	.2114	.1959	.1959	.1770	.1857	3B		
			.1925	.1768	.1907	.1901	.1832	.2159	.2096		.2165	.1931	.2109	.1956	.1962	.1771	.1856			
12–32 or .216–32	UNEF	2A	.1948	.1813	.1917	.1917	.1849	.2151	.2091		.2160	.1957	.2133	.1998	.1998	.1820	.1900	2B	UNEF	12–32 or .216–32
			.1945	.1808	.1920	.1914	.1854	.2150	.2092		.2165	.1960	.2128	.1995	.2001	.1821	.1899			
		3A	.1957	.1822	.1933	.1933	.1865	.2160	.2100		.2160	.1957	.2123	.1988	.1988	.1820	.1895	3B		
			.1954	.1817	.1936	.1930	.1870	.2159	.2101		.2165	.1960	.2118	.1985	.1991	.1821	.1894			
¼–20 or .250–20	UNC	1A	.2164	.1947	.2108	.2108	.2000	.2489	.2367		.2500	.2175	.2465	.2248	.2248	.1960	.2070	1B	UNC	¼–20 or .250–20
			.2161	.1942	.2111	.2105	.2005	.2488	.2368		.2505	.2178	.2460	.2245	.2251	.1961	.2069			
		2A	.2164	.1947	.2127	.2127	.2019	.2489	.2408	0. 2367	.2500	.2175	.2441	.2224	.2224	.1960	.2070	2B		
			.2161	.1942	.2130	.2124	.2024	.2488	.2409	.2368	.2505	.2178	.2436	.2221	.2227	.1961	.2069			
		3A	.2175	.1958	.2147	.2147	.2039	.2500	.2419		.2500	.2175	.2428	.2211	.2211	.1960	.2067	3B		
			.2172	.1953	.2150	.2144	.2044	.2499	.2420		.2505	.2178	.2423	.2208	.2214	.1961	.2066			
¼–28 or .250–28	UNF	1A	.2258	.2103	.2208	.2208	.2131	.2490	.2392		.2500	.2268	.2488	.2333	.2333	.2110	.2200	1B	UNF	¼–28 or .250–28
			.2255	.2098	.2211	.2205	.2136	.2489	.2393		.2505	.2271	.2483	.2330	.2336	.2111	.2199			
		2A	.2258	.2103	.2225	.2225	.2148	.2490	.2425		.2500	.2268	.2466	.2311	.2311	.2110	.2200	2B		
			.2255	.2098	.2228	.2222	.2153	.2489	.2426		.2505	.2271	.2461	.2308	.2314	.2111	.2199			
		3A	.2268	.2113	.2243	.2243	.2166	.2500	.2435		.2500	.2268	.2455	.2300	.2300	.2110	.2190	3B		
			.2265	.2108	.2246	.2240	.2171	.2499	.2436		.2505	.2271	.2450	.2297	.2303	.2111	.2189			
¼–32 or .250–32	UNEF	2A	.2287	.2152	.2255	.2255	.2187	.2490	.2430		.2500	.2297	.2474	.2339	.2339	.2160	.2240	2B	UNEF	¼–32 or .250–32
			.2284	.2147	.2258	.2252	.2192	.2489	.2431		.2505	.2300	.2469	.2336	.2342	.2161	.2239			
		3A	.2297	.2162	.2273	.2273	.2205	.2500	.2440		.2500	.2297	.2463	.2328	.2328	.2160	.2229	3B		
			.2294	.2157	.2276	.2270	.2210	.2499	.2441		.2505	.2300	.2458	.2325	.2331	.2161	.2228			
5/16–18 or .3125–18	UNC	1A	.2752	.2511	.2691	.2691	.2571	.3113	.2982		.3125	.2764	.3084	.2843	.2843	.2520	.2650	1B	UNC	5/16–18 or .3125–18
			.2749	.2506	.2694	.2688	.2576	.3112	.2983		.3130	.2767	.3079	.2840	.2846	.2521	.2649			
		2A	.2752	.2511	.2712	.2712	.2592	.3113	.3026	.2982	.3125	.2764	.3058	.2817	.2817	.2520	.2650	2B		
			.2749	.2506	.2715	.2709	.2597	.3112	.3027	.2983	.3130	.2767	.3053	.2814	.2820	.2521	.2649			
		3A	.2764	.2523	.2734	.2734	.2614	.3125	.3038		.3125	.2764	.3044	.2803	.2803	.2520	.2630	3B		
			.2761	.2518	.2737	.2731	.2619	.3124	.3039		.3130	.2767	.3039	.2800	.2806	.2521	.2629			

TABLE III.12.—*Gages for standard thread series, Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	Class	Gages for external threads								Gages for internal threads							Class	Series designation	Nominal size and threads per inch
			X thread ring gages					Z plain ring gages for major diameter			X thread plug gages					Z plain plug gages for minor diameter				
			GO		LO, classes 1A and 2A NOT GO, class 3A			NOT GO			GO		HI							
					Pitch diameter									Pitch diameter						
			Pitch diameter	Minor diameter	Plus tolerance gage	Minus tolerance gage	Minor diameter	GO	Semi-finished	Unfinished hot-rolled material	Major diameter	Pitch diameter	Major diameter	Minus tolerance gage	Plus tolerance gage	GO	NOT GO			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*			
		2A	.2788	.2571	.2748	.2748	.2640	.3113	.3032	-------	.3125	.2800	.3069	.2852	.2852	.2580	.2700	2B		
5/16–20 or .3125–20	UN		.2785	.2566	.2751	.2745	.2645	.3112	.3033	-------	.3130	.2803	.3064	.2849	.2855	.2581	.2699		UN	5/16–20 or .3125–20
		3A	.2800	.2583	.2770	.2770	.2662	.3125	.3044	-------	.3125	.2800	.3056	.2839	.2839	.2580	.2680	3B		
			.2797	.2578	.2773	.2767	.2667	.3124	.3045	-------	.3130	.2803	.3051	.2836	.2842	.2581	.2679			
		1A	.2843	.2663	.2788	.2788	.2698	.3114	.3006	-------	.3125	.2854	.3105	.2925	.2925	.2670	.2770	1B		
			.2840	.2658	.2791	.2785	.2703	.3113	.3007	-------	.3130	.2857	.3100	.2922	.2928	.2671	.2769			
5/16–24 or .3125–24	UNF	2A	.2843	.2663	.2806	.2806	.2716	.3114	.3042	-------	.3125	.2854	.3082	.2902	.2902	.2670	.2770	2B	UNF	5/16–24 or .3125–24
			.2840	.2658	.2809	.2803	.2721	.3113	.3043	-------	.3130	.2857	.3077	.2899	.2905	.2671	.2769			
		3A	.2854	.2674	.2827	.2827	.2737	.3125	.3053	-------	.3125	.2854	.3070	.2890	.2890	.2670	.2754	3B		
			.2851	.2669	.2830	.2824	.2742	.3124	.3054	-------	.3130	.2857	.3065	.2887	.2893	.2671	.2753			
		2A	.2283	.2728	.2849	.2849	.2772	.3115	.3050	-------	.3125	.2893	.3092	.2937	.2937	.2740	.2820	2B		
5/16–28 or .3125–28	UN		.2880	.2723	.2852	.2846	.2777	.3114	.3051	-------	.3130	.2896	.3087	.2934	.2940	.2741	.2819		UN	5/16–28 or .3125–28
		3A	.2893	.2738	.2867	.2867	.2790	.3125	.3060	-------	.3125	.2893	.3081	.2926	.2926	.2740	.2807	3B		
			.2890	.2733	.2870	.2864	.2795	.3124	.3061	-------	.3130	.2896	.3076	.2923	.2929	.2741	.2806			
		2A	.2912	.2777	.2880	.2880	.2812	.3115	.3055	-------	.3125	.2922	.3099	.2964	.2964	.2790	.2860	2B		
5/16–32 or .3125–32	UNEF		.2909	.2772	.2883	.2877	.2817	.3114	.3056	-------	.3130	.2925	.3094	.2961	.2967	.2791	.2859		UNEF	5/16–32 or .3125–32
		3A	.2922	.2787	.2898	.2898	.2830	.3125	.3065	-------	.3125	.2922	.3088	.2953	.2953	.2790	.2847	3B		
			.2919	.2782	.2901	.2895	.2835	.3124	.3066	-------	.3130	.2925	.3083	.2950	.2956	.2791	.2846			
		1A	.3331	.3060	.3266	.3266	.3131	.3737	.3595	-------	.3750	.3344	.3700	.3429	.3429	.3070	.3210	1B		
			.3328	.3054	.3269	.3263	.3137	.3736	.3596	-------	.3756	.3347	.3694	.3426	.3432	.3071	.3209			
3/8–16 or .375–16	UNC	2A	.3331	.3060	.3287	.3287	.3152	.3737	.3643	.3595	.3750	.3344	.3672	.3401	.3401	.3070	.3210	2B	UNC	3/8–16 or .375–16
			.3328	.3054	.3290	.3284	.3158	.3736	.3644	.3596	.3756	.3347	.3666	.3398	.3404	.3071	.3209			
		3A	.3344	.3073	.3311	.3311	.3176	.3750	.3656	-------	.3750	.3344	.3658	.3387	.3387	.3070	.3182	3B		
			.3341	.3067	.3314	.3308	.3182	.3749	.3657	-------	.3756	.3347	.3652	.3384	.3390	.3071	.3181			
		2A	.3413	.3196	.3372	.3372	.3264	.3738	.3657	-------	.3750	.3425	.3696	.3479	.3479	.3210	.3320	2B		
3/8–20 or .375–20	UN		.3410	.3191	.3375	.3369	.3269	.3737	.3658	-------	.3755	.3428	.3691	.3476	.3482	.3211	.3319		UN	3/8–20 or .375–20
		3A	.3425	.3208	.3394	.3394	.3286	.3750	.3669	-------	.3750	.3425	.3682	.3465	.3465	.3210	.3297	3B		
			.3422	.3203	.3397	.3391	.3291	.3749	.3670	-------	.3755	.3428	.3677	.3462	.3468	.3211	.3296			
		1A	.3468	.3288	.3411	.3411	.3321	.3739	.3631	-------	.3750	.3479	.3733	.3553	.3553	.3300	.3400	1B		
			.3465	.3283	.3414	.3408	.3326	.3738	.3632	-------	.3755	.3482	.3728	.3550	.3556	.3301	.3399			
3/8–24 or .375–24	UNF	2A	.3468	.3288	.3430	.3430	.3340	.3739	.3667	-------	.3750	.3479	.3708	.3528	.3528	.3300	.3400	2B	UNF	3/8–24 or .375–24
			.3465	.3283	.3433	.3427	.3345	.3738	.3668	-------	.3755	.3482	.3703	.3525	.3531	.3301	.3399			
		3A	.3479	.3299	.3450	.3450	.3360	.3750	.3678	-------	.3750	.3479	.3696	.3516	.3516	.3300	.3372	3B		
			.3476	.3294	.3453	.3447	.3365	.3749	.3679	-------	.3755	.3482	.3691	.3513	.3519	.3301	.3371			
		2A	.3507	.3352	.3471	.3471	.3394	.3739	.3674	-------	.3750	.3518	.3719	.3564	.3564	.3360	.3450	2B		
3/8–28 or .375–28	UN		.3504	.3347	.3474	.3468	.3399	.3738	.3675	-------	.3755	.3521	.3714	.3561	.3567	.3361	.3449		UN	3/8–28 or .375–28
		3A	.3518	.3363	.3491	.3491	.3414	.3750	.3685	-------	.3750	.3518	.3708	.3553	.3553	.3360	.3426	3B		
			.3515	.3358	.3494	.3488	.3419	.3749	.3686	-------	.3755	.3521	.3703	.3550	.3556	.3361	.3425			
		2A	.3537	.3402	.3503	.3503	.3435	.3740	.3680	-------	.3750	.3547	.3726	.3591	.3591	.3410	.3490	2B		
3/8–32 or .375–32	UNEF		.3534	.3397	.3506	.3500	.3440	.3739	.3681	-------	.3755	.3550	.3721	.3588	.3594	.3411	.3489		UNEF	3/8–32 or .375–32
		3A	.3547	.3412	.3522	.3522	.3454	.3750	.3690	-------	.3750	.3547	.3715	.3580	.3580	.3410	.3469	3B		
			.3544	.3407	.3525	.3519	.3459	.3749	.3691	-------	.3755	.3550	.3710	.3577	.3583	.3411	.3468			

		1A	.3897	.3588	.3826	.3826	.3671	.4361	.4206		.4375	.3911	.4312	.4003	.4003	.3600	.3760	1B		
			.3894	.3582	.3829	.3823	.3677	.4360	.4207		.4381	.3914	.4306	.4000	.4006	.3601	.3759			
7/16-14 or .4375-14	UNC	2A	.3897	.3588	.3850	.3850	.3695	.4361	.4258	.4206	.4375	.3911	.4281	.3972	.3972	.3600	.3760	2B	UNC	7/16-14 or .4375-14
			.3894	.3582	.3853	.3847	.3701	.4360	.4259	.4207	.4381	.3914	.4275	.3969	.3975	.3601	.3759			
		3A	.3911	.3602	.3876	.3876	.3721	.4375	.4272		.4375	.3911	.4266	.3957	.3957	.3600	.3717	3B		
			.3908	.3596	.3879	.3873	.3727	.4374	.4273		.4381	.3914	.4260	.3954	.3960	.3601	.3716			
		2A	.3955	.3684	.3909	.3909	.3774	.4361	.4267		.4375	.3969	.4299	.4028	.4028	.3700	.3840	2B		
7/16-16 or .4375-16	UN		.3952	.3678	.3912	.3906	.3780	.4360	.4268		.4381	.3972	.4293	.4025	.4031	.3701	.3839		UN	7/16-16 or .4375-16
		3A	.3969	.3698	.3935	.3935	.3800	.4375	.4281		.4375	.3969	.4285	.4014	.4014	.3700	.3800	3B		
			.3966	.3692	.3938	.3932	.3806	.4374	.4282		.4381	.3972	.4279	.4011	.4017	.3701	.3799			
		1A	.4037	.3820	.3974	.3974	.3866	.4362	.4240		.4375	.4050	.4348	.4131	.4131	.3830	.3950	1B		
			.4034	.3815	.3977	.3971	.3871	.4361	.4241		.4380	.4053	.4343	.4128	.4134	.3831	.3949			
7/16-20 or .4375-20	UNF	2A	.4037	.3820	.3995	.3995	.3887	.4362	.4281		.4375	.4050	.4321	.4104	.4104	.3830	.3950	2B	UNF	.47/16-20 or 375-20
			.4034	.3815	.3998	.3992	.3892	.4361	.4282		.4380	.4053	.4316	.4101	.4107	.3831	.3949			
		3A	.4050	.3833	.4019	.4019	.3911	.4375	.4294		.4375	.4050	.4308	.4091	.4091	.3830	.3916	3B		
			.4047	.3828	.4022	.4016	.3916	.4374	.4295		.4380	.4053	.4303	.4088	.4094	.3831	.3915			
		2A	.4132	.3977	.4096	.4096	.4019	.4364	.4299		.4375	.4143	.4344	.4189	.4189	.3990	.4070	2B		
7/16-28 or .4375-28	UNEF		.4129	.3972	.4099	.4093	.4024	.4363	.4300		.4380	.4146	.4339	.4186	.4192	.3991	.4069		UNEF	.47/16-28 or 375-28
		3A	.4143	.3988	.4116	.4116	.4039	.4375	.4310		.4375	.4143	.4333	.4178	.4178	.3990	.4051	3B		
			.4140	.3983	.4119	.4113	.4044	.4374	.4311		.4380	.4146	.4328	.4175	.4181	.3991	.4050			
		2A	.4162	.4027	.4128	.4128	.4060	.4365	.4305		.4375	.4172	.4351	.4216	.4216	.4040	.4110	2B		
7/16-32 or .4375-32	UN		.4159	.4022	.4131	.4125	.4065	.4364	.4306		.4380	.4175	.4346	.4213	.4219	.4041	.4109		UN	7/16-32 or .4375-32
		3A	.4172	.4037	.4147	.4147	.4079	.4375	.4315		.4375	.4172	.4340	.4205	.4205	.4040	.4094	3B		
			.4169	.4032	.4150	.4144	.4084	.4374	.4316		.4380	.4175	.4335	.4202	.4208	.4041	.4093			
		1A	.4485	.4152	.4411	.4411	.4245	.4985	.4822		.5000	.4500	.4930	.4597	.4597	.4170	.4340	1B		
			.4482	.4146	.4414	.4408	.4251	.4984	.4823		.5006	.4503	.4924	.4594	.4600	.4171	.4339			
1/2-13 or .500-13	UNC	2A	.4485	.4152	.4435	.4435	.4269	.4985	.4876	.4822	.5000	.4500	.4898	.4565	.4565	.4170	.4340	2B	UNC	1/2-13 or .500-13
			.4482	.4146	.4438	.4432	.4275	.4984	.4877	.4823	.5006	.4503	.4892	.4562	.4568	.4171	.4339			
		3A	.4500	.4167	.4463	.4463	.4297	.5000	.4891		.5000	.4500	.4881	.4548	.4548	.4170	.4284	3B		
			.4497	.4161	.4466	.4460	.4303	.4999	.4892		.5006	.4503	.4875	.4545	.4551	.4171	.4283			
		2A	.4580	.4309	.4533	.4533	.4398	.4986	.4892		.5000	.4594	.4926	.4655	.4655	.4320	.4460	2B		
1/2-16 or .500-16	UN		.4577	.4303	.4536	.4530	.4404	.4985	.4893		.5006	.4597	.4920	.4652	.4658	.4321	.4459		UN	1/2-16 or .500-16
		3A	.4594	.4323	.4559	.4559	.4424	.5000	.4906		.5000	.4594	.4911	.4640	.4640	.4320	.4419	3B		
			.4591	.4317	.4562	.4556	.4430	.4999	.4907		.5006	.4597	.4905	.4637	.4643	.4321	.4418			
		1A	.4662	.4445	.4598	.4598	.4490	.4987	.4865		.5000	.4675	.4976	.4759	.4759	.4460	.4570	1B		
			.4659	.4440	.4601	.4595	.4495	.4986	.4866		.5005	.4678	.4971	.4756	.4762	.4461	.4569			
1/2-20 or .500-20	UNF	2A	.4662	.4445	.4619	.4619	.4511	.4987	.4906		.5000	.4675	.4948	.4731	.4731	.4460	.4570	2B	UNF	1/2-20 or .500-20
			.4659	.4440	.4622	.4616	.4516	.4986	.4907		.5005	.4678	.4943	.4728	.4734	.4461	.4569			
		3A	.4675	.4458	.4643	.4643	.4535	.5000	.4919		.5000	.4675	.4934	.4717	.4717	.4460	.4537	3B		
			.4672	.4453	.4646	.4640	.4540	.4999	.4920		.5005	.4678	.4929	.4714	.4720	.4461	.4536			
		2A	.4757	.4602	.4720	.4720	.4643	.4989	.4924		.5000	.4768	.4971	.4816	.4816	.4610	.4700	2B		
1/2-28 or .500-28	UNEF		.4754	.4597	.4723	.4717	.4648	.4988	.4925		.5005	.4771	.4966	.4813	.4819	.4611	.4699		UNEF	1/2-28 or .500-28
		3A	.4768	.4613	.4740	.4740	.4663	.5000	.4935		.5000	.4768	.4959	.4804	.4804	.4610	.4676	3B		
			.4765	.4608	.4743	.4737	.4668	.4999	.4936		.5005	.4771	.4954	.4801	.4807	.4611	.4675			
		2A	.4787	.4652	.4752	.4752	.4684	.4990	.4930		.5000	.4797	.4977	.4842	.4842	.4660	.4740	2B		
1/2-32 or .500-32	UN		.4784	.4647	.4755	.4749	.4689	.4989	.4931		.5005	.4800	.4972	.4839	.4845	.4661	.4739		UN	1/2-32 or .500-32
		3A	.4797	.4662	.4771	.4771	.4703	.5000	.4940		.5000	.4797	.4966	.4831	.4831	.4660	.4719	3B		
			.4794	.4657	.4774	.4768	.4708	.4999	.4941		.5005	.4800	.4961	.4828	.4834	.4661	.4718			
		1A	.5068	.4707	.4990	.4990	.4810	.5609	.5437		.5625	.5084	.5547	.5186	.5186	.4720	.4900	1B		
			.5065	.4701	.4993	.4987	.4816	.5608	.5438		.5631	.5087	.5541	.5183	.5189	.4721	.4899			
9/16-12 or .5625-12	UNC	2A	.5068	.4707	.5016	.5016	.4836	.5609	.5495	.5437	.5625	.5084	.5513	.5152	.5152	.4720	.4900	2B	UNC	9/16-12 or .5625-12
			.5065	.4701	.5019	.5013	.4842	.5608	.5496	.5438	.5631	.5087	.5507	.5149	.5155	.4721	.4899			
		3A	.5084	.4723	.5045	.5045	.4865	.5625	.5511		.5625	.5084	.5496	.5135	.5135	.4720	.4843	3B		
			.5081	.4717	.5048	.5042	.4871	.5624	.5512		.5631	.5087	.5490	.5132	.5138	.4721	.4842			
		2A	.5205	.4934	.5158	.5158	.5023	.5611	.5517		.5625	.5219	.5551	.5280	.5280	.4950	.5090	2B		
9/16-16 or .5625-16	UN		.5202	.4928	.5161	.5155	.5029	.5610	.5518		.5631	.5222	.5545	.5277	.5283	.4951	.5089		UN	9/16-16 or .5625-16
		3A	.5219	.4948	.5184	.5184	.5049	.5625	.5531		.5625	.5219	.5536	.5265	.5265	.4950	.5040	3B		
			.5216	.4942	.5187	.5181	.5055	.5624	.5532		.5631	.5222	.5530	.5262	.5268	.4951	.5039			
		1A	.5250	.5009	.5182	.5182	.5062	.5611	.5480		.5625	.5264	.5594	.5353	.5353	.5020	.5150	1B		
			.5247	.5004	.5185	.5179	.5067	.5610	.5481		.5630	.5267	.5589	.5350	.5356	.5021	.5149			
9/16-18 or .5625-18	UNF	2A	.5250	.5009	.5205	.5205	.5085	.5611	.5524		.5625	.5264	.5564	.5323	.5323	.5020	.5150	2B	UNF	9/16-18 or .5625-18
			.5247	.5004	.5208	.5202	.5090	.5610	.5525		.5630	.5267	.5559	.5320	.5326	.5021	.5149			
		3A	.5264	.5023	.5230	.5230	.5110	.5625	.5538		.5625	.5264	.5549	.5308	.5308	.5020	.5106	3B		
			.5261	.5018	.5233	.5227	.5115	.5624	.5539		.5630	.5267	.5544	.5305	.5311	.5021	.5105			

TABLE III.12.—*Gages for standard thread series, Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	Class	Gages for external threads								Gages for internal threads							Class	Series designation	Nominal size and threads per inch
			X thread ring gages					Z plain ring gages for major diameter			X thread plug gages					Z plain plug gages for minor diameter				
			GO		LO, classes 1A and 2A NOT GO, class 3A			GO	NOT GO		GO		HI			GO	NOT GO			
			Piteh diameter	Minor diameter	Pitch diameter		Minor diameter		Semi-finished	Unfinished hot-rolled material	Major diameter	Pitch diameter	Major diameter	Pitch diameter						
					Plus tolerance gage	Minus tolerance gage								Minus tolerance gage	Plus tolerance gage					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*			
		2A	.5287	.5070	.5245	.5245	.5137	.5612	.5531	———	.5625	.5300	.5572	.5355	.5355	.5080	.5200	2B		
9/16–20 or .5625–20	UN		.5284	.5065	.5248	.5242	.5142	.5611	.5532	———	.5630	.5303	.5567	.5352	.5358	.5081	.5199		UN	9/16–20 or .5625–20
		3A	.5300	.5083	.5268	.5268	.5160	.5625	.5544	———	.5625	.5300	.5558	.5341	.5341	.5080	.5162	3B		
			.5297	.5078	.5271	.5265	.5165	.5624	.5545	———	.5630	.5303	.5553	.5338	.5344	.5081	.5161			
		2A	.5342	.5162	.5303	.5303	.5213	.5613	.5541	———	.5625	.5354	.5585	.5405	.5405	.5170	.5270	2B		
9/16–24 or .5625–24	UNEF		.5339	.5157	.5306	.5300	.5218	.5612	.5542	———	.5630	.5357	.5580	.5402	.5408	.5171	.5269		UNEF	9/16–24 or .5625–24
		3A	.5354	.5174	.5325	.5325	.5235	.5625	.5553	———	.5625	.5354	.5572	.5392	.5392	.5170	.5244	3B		
			.5351	.5169	.5328	.5322	.5240	.5624	.5554	———	.5630	.5357	.5567	.5389	.5395	.5171	.5243			
		2A	.5382	.5227	.5345	.5345	.5268	.5614	.5549	———	.5625	.5393	.5596	.5441	.5441	.5240	.5320	2B		
9/16–28 or .5625–28	UN		.5379	.5222	.5348	.5342	.5273	.5613	.5550	———	.5630	.5396	.5591	.5438	.5444	.5241	.5319		UN	9/16–28 or .5625–28
		3A	.5393	.5238	.5365	.5365	.5288	.5625	.5560	———	.5625	.5393	.5584	.5429	.5429	.5240	.5301	3B		
			.5390	.5233	.5368	.5362	.5293	.5624	.5561	———	.5630	.5396	.5579	.5426	.5432	.5241	.5300			
		2A	.5412	.5277	.5377	.5377	.5309	.5615	.5555	———	.5625	.5422	.5602	.5467	.5467	.5290	.5360	2B		
9/16–32 or .5625–32	UN		.5409	.5272	.5380	.5374	.5314	.5614	.5556	———	.5630	.5425	.5597	.5464	.5470	.5291	.5359		UN	9/16–32 or .5625–32
		3A	.5422	.5287	.5396	.5396	.5328	.5625	.5565	———	.5625	.5422	.5591	.5456	.5456	.5290	.5344	3B		
			.5419	.5282	.5399	.5393	.5333	.5624	.5566	———	.5630	.5425	.5586	.5453	.5459	.5291	.5343			
		1A	.5644	.5250	.5561	.5561	.5364	.6234	.6052	———	.6250	.5660	.6161	.5767	.5767	.5270	.5460	1B		
			.5641	.5244	.5564	.5558	.5370	.6233	.6053	———	.6256	.5663	.6155	.5764	.5770	.5271	.5459			
5/8–11 or .625–11	UNC	2A	.5644	.5250	.5589	.5589	.5392	.6234	.6113	.6052	.6250	.5660	.6126	.5732	.5732	.5270	.5460	2B	UNC	5/8–11 or .625–11
			.5641	.5244	.5592	.5586	.5398	.6233	.6114	.6053	.6256	.5663	.6120	.5729	.5735	.5271	.5459			
		3A	.5660	.5266	.5619	.5619	.5422	.6250	.6129	———	.6250	.5660	.6108	.5714	.5714	.5270	.5391	3B		
			.5657	.5260	.5622	.5616	.5428	.6249	.6130	———	.6256	.5663	.6102	.5711	.5717	.5271	.5390			
		2A	.5693	.5332	.5639	.5639	.5459	.6234	.6120	———	.6250	.5709	.6141	.5780	.5780	.5350	.5530	2B		
5/8–12 or .625–12	UN		.5690	.5326	.5642	.5636	.5465	.6233	.6121	———	.6256	.5712	.6135	.5777	.5783	.5351	.5529		UN	5/8–12 or .625–12
		3A	.5709	.5348	.5668	.5668	.5488	.6250	.6136	———	.6250	.5709	.6123	.5762	.5762	.5350	.5463	3B		
			.5706	.5342	.5671	.5665	.5494	.6249	.6137	———	.6256	.5712	.6117	.5759	.5765	.5351	.5462			
		2A	.5830	.5559	.5782	.5782	.5647	.6236	.6142	———	.6250	.5844	.6177	.5906	.5906	.5650	.5710	2B		
5/8–16 or .625–16	UN		.5827	.5553	.5785	.5779	.5653	.6235	.6143	———	.6256	.5847	.6171	.5903	.5909	.5571	.5709		UN	5/8–16 or .625–16
		3A	.5844	.5573	.5808	.5808	.5673	.6250	.6156	———	.6250	.5844	.6161	.5890	.5890	.5570	.5662	3B		
			.5841	.5567	.5811	.5805	.5679	.6249	.6157	———	.6256	.5847	.6155	.5887	.5893	.5571	.5661			
		1A	.5875	.5634	.5805	.5805	.5685	.6236	.6105	———	.6250	.5889	.6221	.5980	.5980	.5570	.5780	1B		
			.5872	.5629	.5808	.5802	.5690	.6235	.6106	———	.6255	.5892	.6216	.5977	.5983	.5651	.5779			
5/8–18 or .625–18	UNF	2A	.5875	.5634	.5828	.5828	.5708	.6236	.6149	———	.6250	.5889	.6190	.5949	.5949	.5650	.5780	2B	UNF	5/8–18 or .625–18
			.5872	.5629	.5831	.5825	.5713	.6235	.6150	———	.6255	.5892	.6185	.5946	.5952	.5651	.5779			
		3A	.5889	.5648	.5854	.5854	.5734	.6250	.6163	———	.6250	.5889	.6175	.5934	.5934	.5650	.5730	3B		
			.5886	.5643	.5857	.5851	.5739	.6249	.6164	———	.6255	.5892	.6170	.5931	.5937	.5651	.5729			
		2A	.5912	.5695	.5869	.5869	.5761	.6237	.6156	———	.6250	.5925	.6198	.5981	.5981	.5710	.5820	2B		
5/8–20 or .625–20	UN		.5909	.5690	.5872	.5866	.5766	.6236	.6157	———	.6255	.5928	.6193	.5978	.5984	.5711	.5819		UN	5/8–20 or .625–20
		3A	.5925	.5708	.5893	.5893	.5785	.6250	.6169	———	.6250	.5925	.6184	.5967	.5967	.5710	.5787	3B		
			.5922	.5703	.5896	.5890	.5790	.6249	.6170	———	.6255	.5928	.6179	.5964	.5970	.5711	.5786			

5⁄8–24 or .625–24	UNEF	2A	.5967	.5787	.5927	.5927	.5837	.6238	.6166		.6250	.5979	.6211	.6031	.6031	.5800	.5900	2B	UNEF	5⁄8–24 or .625–24
			.5964	.5782	.5930	.5924	.5842	.6237	.6167		.6255	.5982	.6206	.6028	.6034	.5801	.5899			
		3A	.5979	.5799	.5949	.5949	.5859	.6250	.6178		.6250	.5979	.6198	.6018	.6018	.5800	.5869	3B		
			.5976	.5794	.5952	.5946	.5864	.6249	.6179		.6255	.5982	.6193	.6015	.6021	.5801	.5868			
5⁄8–28 or .625–28	UN	2A	.6007	.5852	.5969	.5969	.5892	.6239	.6174		.6250	.6018	.6222	.6067	.6067	.5860	.5950	2B	UN	5⁄8–28 or .625–28
			.6004	.5847	.5972	.5966	.5897	.6238	.6175		.6255	.6021	.6217	.6064	.6070	.5861	.5949			
		3A	.6018	.5863	.5990	.5990	.5913	.6250	.6185		.6250	.6018	.6210	.6055	.6055	.5860	.5926	3B		
			.6015	.5858	.5993	.5987	.5918	.6249	.6186		.6255	.6021	.6205	.6052	.6058	.5861	.5925			
5⁄8–32 or .625–32	UN	2A	.6036	.5901	.6000	.6000	.5932	.6239	.6179		.6250	.6047	.6228	.6093	.6093	.5910	.5990	2B	UN	5⁄8–32 or .625–32
			.6033	.5896	.6003	.5997	.5937	.6238	.6180		.6255	.6050	.6223	.6090	.6096	.5911	.5989			
		3A	.6047	.5912	.6020	.6020	.5952	.6250	.6190		.6250	.6047	.6217	.6082	.6082	.5910	.5969	3B		
			.6044	.5907	.6023	.6017	.5957	.6249	.6191		.6255	.6050	.6212	.6079	.6085	.5911	.5968			
11⁄16–12 or .6875–12	UN	2A	.6318	.5957	.6264	.6264	.6084	.6859	.6745		.6875	.6334	.6766	.6405	.6405	.5970	.6150	2B	UN	11⁄16–12 or .6875–12
			.6315	.5951	.6267	.6261	.6090	.6858	.6746		.6881	.6337	.6760	.6402	.6408	.5971	.6149			
		3A	.6334	.5973	.6293	.6293	.6113	.6875	.6761		.6875	.6334	.6748	.6387	.6387	.5970	.6085	3B		
			.6331	.5967	.6296	.6290	.6119	.6874	.6762		.6881	.6337	.6742	.6384	.6390	.5971	.6084			
11⁄16–16 or .6875–16	UN	2A	.6455	.6184	.6407	.6407	.6272	.6861	.6767		.6875	.6469	.6802	.6531	.6531	.6200	.6340	2B	UN	11⁄16–16 or .6875–16
			.6452	.6178	.6410	.6404	.6278	.6860	.6768		.6881	.6472	.6796	.6528	.6534	.6201	.6339			
		3A	.6469	.6198	.6433	.6433	.6298	.6875	.6781		.6875	.6469	.6786	.6515	.6515	.6200	.6284	3B		
			.6466	.6192	.6436	.6430	.6304	.6874	.6782		.6881	.6472	.6780	.6512	.6518	.6201	.6283			
11⁄16–20 or .6875–20	UN	2A	.6537	.6320	.6494	.6494	.6386	.6862	.6781		.6875	.6550	.6823	.6606	.6606	.6330	.6450	2B	UN	11⁄16–20 or .6875–20
			.6534	.6315	.6497	.6491	.6391	.6861	.6782		.6880	.6553	.6818	.6603	.6609	.6331	.6449			
		3A	.6550	.6333	.6518	.6518	.6410	.6875	.6794		.6875	.6550	.6809	.6592	.6592	.6330	.6412	3B		
			.6547	.6328	.6521	.6515	.6415	.6874	.6795		.6880	.6553	.6804	.6589	.6595	.6331	.6411			
11⁄16–24 or .6875–24	UNEF	2A	.6592	.6412	.6552	.6552	.6462	.6863	.6791		.6875	.6604	.6836	.6656	.6656	.6420	.6520	2B	UNEF	11⁄16–24 or .6875–24
			.6589	.6407	.6555	.6549	.6467	.6862	.6792		.6880	.6607	.6831	.6653	.6659	.6421	.6519			
		3A	.6604	.6424	.6574	.6574	.6484	.6875	.6803		.6875	.6604	.6823	.6643	.6643	.6420	.6494	3B		
			.6601	.6419	.6577	.6571	.6489	.6874	.6804		.6880	.6607	.6818	.6640	.6646	.6421	.6493			
11⁄16–28 or .6875–28	UN	2A	.6632	.6477	.6594	.6594	.6517	.6864	.6799		.6875	.6643	.6847	.6692	.6692	.6490	.6570	2B	UN	11⁄16–28 or .6875–28
			.6629	.6472	.6597	.6591	.6522	.6863	.6800		.6880	.6646	.6842	.6689	.6695	.6491	.6569			
		3A	.6643	.6488	.6615	.6615	.6538	.6875	.6810		.6875	.6643	.6835	.6680	.6680	.6490	.6551	3B		
			.6640	.6483	.6618	.6612	.6543	.6874	.6811		.6880	.6646	.6830	.6677	.6683	.6491	.6550			
11⁄16–32 or .6875–32	UN	2A	.6661	.6526	.6625	.6625	.6557	.6864	.6804		.6875	.6672	.6853	.6718	.6718	.6540	.6610	2B	UN	11⁄16–32 or .6875–32
			.6658	.6521	.6628	.6622	.6562	.6863	.6805		.6880	.6675	.6848	.6715	.6721	.6541	.6609			
		3A	.6672	.6537	.6645	.6645	.6577	.6875	.6815		.6875	.6672	.6842	.6707	.6707	.6540	.6594	3B		
			.6669	.6532	.6648	.6642	.6582	.6874	.6816		.6880	.6675	.6837	.6704	.6710	.6541	.6593			
3⁄4–10 or .750–10	UNC	1A	.6832	.6399	.6744	.6744	.6528	.7482	.7288		.7500	.6850	.7398	.6965	.6965	.6420	.6630	1B	UNC	3⁄4–10 or .750–10
			.6829	.6393	.6747	.6741	.6534	.7481	.7289		.7506	.6853	.7392	.6962	.6968	.6421	.6629			
		2A	.6832	.6399	.6773	.6773	.6557	.7482	.7353	.7288	.7500	.6850	.7360	.6927	.6927	.6420	.6630	2B		
			.6829	.6393	.6776	.6770	.6563	.7481	.7354	.7289	.7506	.6853	.7354	.6924	.6930	.6421	.6629			
		3A	.6850	.6417	.6806	.6806	.6590	.7500	.7371		.7500	.6850	.7340	.6907	.6907	.6420	.6545	3B		
			.6847	.6411	.6809	.6803	.6596	.7499	.7372		.7506	.6853	.7334	.6904	.6910	.6421	.6544			
3⁄4–12 or .750–12	UN	2A	.6942	.6581	.6887	.6887	.6707	.7483	.7369		.7500	.6959	.7392	.7031	.7031	.6600	.6780	2B	UN	3⁄4–12 or .750–12
			.6939	.6575	.6890	.6884	.6713	.7482	.7370		.7506	.6962	.7386	.7028	.7034	.6601	.6779			
		3A	.6959	.6598	.6918	.6918	.6738	.7500	.7386		.7500	.6959	.7374	.7013	.7013	.6600	.6707	3B		
			.6956	.6592	.6921	.6915	.6744	.7499	.7387		.7506	.6962	.7368	.7010	.7016	.6601	.6706			
3⁄4–16 or .750–16	UNF	1A	.7079	.6808	.7004	.7004	.6869	.7485	.7343		.7500	.7094	.7463	.7192	.7192	.6820	.6960	1B	UNF	3⁄4–16 or .750–16
			.7076	.6802	.7007	.7001	.6875	.7484	.7344		.7506	.7097	.7457	.7189	.7195	.6821	.6959			
		2A	.7079	.6808	.7029	.7029	.6894	.7485	.7391		.7500	.7094	.7430	.7159	.7159	.6820	.6960	2B		
			.7076	.6802	.7032	.7026	.6900	.7484	.7392		.7506	.7097	.7424	.7156	.7162	.6821	.6959			
		3A	.7094	.6823	.7056	.7056	.6921	.7500	.7406		.7500	.7094	.7414	.7143	.7143	.6820	.6908	3B		
			.7091	.6817	.7059	.7053	.6927	.7499	.7407		.7506	.7097	.7408	.7140	.7146	.6821	.6907			
3⁄4–20 or .750–20	UNEF	2A	.7162	.6945	.7118	.7118	.7010	.7487	.7406		.7500	.7175	.7449	.7232	.7232	.6960	.7070	2B	UNEF	3⁄4–20 or .750–20
			.7159	.6940	.7121	.7115	.7015	.7486	.7407		.7505	.7178	.7444	.7229	.7235	.6961	.7069			
		3A	.7175	.6958	.7142	.7142	.7034	.7500	.7419		.7500	.7175	.7435	.7218	.7218	.6960	.7037	3B		
			.7172	.6953	.7145	.7039	.7139	.7499	.7420		.7505	.7178	.7430	.7215	.7221	.6961	.7036			
3⁄4–28 or .750–28	UN	2A	.7256	.7101	.7218	.7218	.7141	.7488	.7423		.7500	.7268	.7473	.7318	.7318	.7110	.7200	2B	UN	3⁄4–28 or .750–28
			.7253	.7096	.7221	.7215	.7146	.7487	.7424		.7505	.7271	.7468	.7315	.7321	.7111	.7199			
		3A	.7268	.7113	.7239	.7239	.7162	.7500	.7435		.7500	.7268	.7460	.7305	.7305	.7110	.7176	3B		
			.7265	.7108	.7242	.7236	.7167	.7499	.7436		.7505	.7271	.7455	.7302	.7308	.7111	.7175			
3⁄4–32 or .750–32	UN	2A	.7286	.7151	.7250	.7250	.7182	.7489	.7429		.7500	.7297	.7479	.7344	.7344	.7160	.7240	2B	UN	3⁄4–32 or .750–32
			.7283	.7146	.7253	.7247	.7187	.7488	.7430		.7505	.7300	.7474	.7341	.7347	.7161	.7239			
		3A	.7297	.7162	.7270	.7270	.7202	.7500	.7440		.7500	.7297	.7468	.7333	.7333	.7160	.7219	3B		
			.7294	.7157	.7273	.7267	.7207	.7499	.7441		.7505	.7300	.7463	.7330	.7336	.7161	.7218			

TABLE III.12.—*Gages for standard thread series, Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	Class	Gages for external threads								Gages for internal threads							Class	Series designation	Nominal size and threads per inch
			X thread ring gages					Z plain ring gages for major diameter			X thread plug gages					Z plain plug gages for minor diameter				
			GO		LO, classes 1A and 2A NOT GO, class 3A			GO	NOT GO		GO		NOT GO			GO	NOT GO			
			Pitch diameter	Minor diameter	Pitch diameter		Minor diameter		Semi-finished	Unfinished hot-rolled material	Major diameter	Pitch diameter	Major diameter	Pitch diameter						
					Plus tolerance gage	Minus tolerance gage								Minus tolerance gage	Plus tolerance gage					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*			
13/16–12 or .8125–12	UN	2A	.7567	.7206	.7512	.7512	.7332	.8108	.7994	----------	.8125	.7584	.8017	.7656	.7656	.7220	.7400	2B	UN	13/16–12 or .8125–12
		3A	.7564	.7200	.7515	.7509	.7338	.8107	.7995	----------	.8131	.7587	.8011	.7653	.7659	.7221	.7399			
			.7584	.7223	.7543	.7543	.7363	.8125	.8011	----------	.8125	.7584	.7999	.7638	.7638	.7220	.7329	3B		
			.7581	.7217	.7546	.7540	.7369	.8124	.8012	----------	.8131	.7587	.7993	.7635	.7641	.7221	.7328			
13/16–16 or .8125–16	UN	2A	.7704	.7433	.7655	.7655	.7520	.8110	.8016	----------	.8125	.7719	.8053	.7782	.7782	.7450	.7590	2B	UN	13/16–16 or .8125–16
		3A	.7701	.7427	.7658	.7652	.7526	.8109	.8017	----------	.8131	.7722	.8047	.7779	.7785	.7451	.7589			
			.7719	.7448	.7683	.7683	.7548	.8125	.8031	----------	.8125	.7719	.8037	.7766	.7766	.7450	.7533	3B		
			.7716	.7442	.7686	.7680	.7554	.8124	.8032	----------	.8131	.7722	.8031	.7763	.7769	.7451	.7532			
13/16–20 or .8125–20	UNEF	2A	.7787	.7570	.7743	.7743	.7635	.8112	.8031	----------	.8125	.7800	.8074	.7857	.7857	.7580	.7700	2B	UNEF	13/16–20 or .8125–20
		3A	.7784	.7565	.7746	.7740	.7640	.8111	.8032	----------	.8130	.7803	.8069	.7854	.7860	.7581	.7699			
			.7800	.7583	.7767	.7767	.7659	.8125	.8044	----------	.8125	.7800	.8060	.7843	.7843	.7580	.7662	3B		
			.7797	.7578	.7770	.7764	.7664	.8124	.8045	----------	.8130	.7803	.8055	.7840	.7846	.7581	.7661			
13/16–28 or .8125–28	UN	2A	.7881	.7726	.7843	.7843	.7766	.8113	.8048	----------	.8125	.7893	.8098	.7943	.7943	.7740	.7820	2B	UN	13/16–28 or .8125–28
		3A	.7878	.7721	.7846	.7840	.7771	.8112	.8049	----------	.8130	.7896	.8093	.7940	.7946	.7741	.7819			
			.7893	.7738	.7864	.7864	.7787	.8125	.8060	----------	.8125	.7893	.8085	.7930	.7930	.7740	.7801	3B		
			.7890	.7733	.7867	.7861	.7792	.8124	.8061	----------	.8130	.7896	.8080	.7927	.7933	.7741	.7800			
13/16–32 or .8125–32	UN	2A	.7911	.7776	.7875	.7875	.7807	.8114	.8054	----------	.8125	.7922	.8104	.7969	.7969	.7790	.7860	2B	UN	13/16–32 or .8125–32
		3A	.7908	.7771	.7878	.7872	.7812	.8113	.8055	----------	.8130	.7925	.8099	.7966	.7972	.7791	.7859			
			.7922	.7787	.7895	.7895	.7827	.8125	.8065	----------	.8125	.7922	.8093	.7958	.7958	.7790	.7844	3B		
			.7919	.7782	.7898	.7892	.7832	.8124	.8066	----------	.8130	.7925	.8088	.7955	.7961	.7791	.7843			
7/8–9 or .875–9	UNC	1A	.8009	.7528	.7914	.7914	.7673	.87310	.85230	----------	.8750	.8028	.8632	.8151	.8151	.75500	.77800	1B	UNC	7/8–9 or .875–9
		2A	.8006	.7521	.7917	.7911	.7680	.87298	.85242	----------	.8757	.8031	.8625	.8148	.8154	.75512	.77788			
		3A	.8009	.7528	.7946	.7946	.7705	.87310	.85920	.85230	.8750	.8028	.8591	.8110	.8110	.75500	.77800	2B		
			.8006	.7521	.7949	.7943	.7712	.87298	.85932	.85242	.8757	.8031	.8584	.8107	.8113	.75512	.77788			
			.8028	.7547	.7981	.7981	.7740	.87500	.86110	----------	.8750	.8028	.8570	.8089	.8089	.75500	.76810	3B		
			.8025	.7540	.7984	.7978	.7747	.87488	.86122	----------	.8757	.8031	.8563	.8086	.8092	.75512	.76798			
7/8–12 or .875–12	UN	2A	.8192	.7831	.8137	.8137	.7957	.87330	.86190	----------	.8750	.8209	.8642	.8281	.8281	.78500	.80300	2B	UN	7/8–12 or .875–12
		3A	.8189	.7825	.8140	.8134	.7963	.87318	.86202	----------	.8756	.8212	.8636	.8278	.8284	.78512	.80288			
			.8209	.7848	.8168	.8168	.7988	.87500	.86360	----------	.8750	.8209	.8624	.8263	.8263	.78500	.79520	3B		
			.8206	.7842	.8171	.8165	.7994	.87488	.86372	----------	.8756	.8212	.8618	.8260	.8266	.78512	.79508			
7/8–14 or .875–14	UNF	1A	.8270	.7961	.8189	.8189	.8034	.87340	.85790	----------	.8750	.8286	.8701	.8392	.8392	.79800	.81400	1B	UNF	7/8–14 or .875–14
		2A	.8267	.7955	.8192	.8186	.8040	.87328	.85802	----------	.8756	.8289	.8695	.8389	.8395	.79812	.81388			
		3A	.8270	.7961	.8216	.8216	.8061	.87340	.86310	----------	.8750	.8286	.8665	.8356	.8356	.79800	.81400	2B		
			.8267	.7955	.8219	.8213	.8067	.87328	.86322	----------	.8756	.8289	.8659	.8353	.8359	.79812	.81388			
			.8286	.7977	.8245	.8245	.8090	.87500	.86470	----------	.8750	.8286	.8648	.8339	.8339	.79800	.80680	3B		
			.8283	.7971	.8248	.8242	.8096	.87488	.86482	----------	.8756	.8289	.8642	.8336	.8342	.79812	.80668			
7/8–16 or .875–16	UN	2A	.8329	.8058	.8280	.8280	.8145	.87350	.86410	----------	.8750	.8344	.8678	.8407	.8407	.80700	.82100	2B	UN	7/8–16 or .875–16
		3A	.8326	.8052	.8283	.8277	.8151	.87338	.86422	----------	.8756	.8347	.8672	.8404	.8410	.80712	.82088			
			.8344	.8073	.8308	.8308	.8173	.87500	.86560	----------	.8750	.8344	.8662	.8391	.8391	.80700	.81580	3B		
			.8341	.8067	.8311	.8305	.8179	.87488	.86572	----------	.8756	.8374	.8656	.8388	.8394	.80712	.81568			
7/8–20 or .875–20	UNEF	2A	.8412	.8195	.8368	.8368	.8260	.87370	.86560	----------	.8750	.8425	.8699	.8482	.8482	.82100	.83200	2B	UNEF	7/8–20 or .875–20
		3A	.8409	.8190	.8371	.8365	.8265	.87358	.86572	----------	.8755	.8428	.8694	.8479	.8485	.82112	.83188			
			.8425	.8208	.8392	.8392	.8284	.87500	.86690	----------	.8750	.8425	.8685	.8468	.8468	.82100	.82870	3B		
			.8422	.8203	.8395	.8389	.8289	.87488	.86702	----------	.8755	.8428	.8680	.8465	.8471	.82112	.82858			

7⁄8–28 or .875–28	UN	2A	.8506	.8351	.8468	.8468	.8391	.87380	.86730		.8750	.8518	.8723	.8568	.8568	.83600	.84500	2B	UN	7⁄8–28 or .875–28
		3A	.8503	.8346	.8471	.8465	.8396	.87368	.86742		.8755	.8521	.8718	.8565	.8571	.83612	.84488	3B		
			.8518	.8363	.8489	.8489	.8412	.87500	.86850		.8750	.8518	.8710	.8555	.8555	.83600	.84260			
			.8515	.8358	.8492	.8486	.8417	.87488	.86862		.8755	.8521	.8705	.8552	.8558	.83612	.84248			
7⁄8–32 or .875–32	UN	2A	.8536	.8401	.8500	.8500	.8432	.87390	.86790		.8750	.8547	.8729	.8594	.8594	.84100	.84900	2B	UN	7⁄8–32 or .875–32
		3A	.8533	.8396	.8503	.8497	.8437	.87378	.86802		.8755	.8550	.8724	.8591	.8597	.84112	.84888	3B		
			.8547	.8412	.8520	.8520	.8452	.87500	.86900		.8750	.8547	.8718	.8583	.8583	.84100	.84690			
			.8544	.8407	.8523	.8517	.8457	.87488	.86912		.8755	.8550	.8713	.8580	.8586	.84112	.84678			
15⁄16–12 or .9375–12	UN	2A	.8817	.8456	.8760	.8760	.8580	.93580	.92440		.9375	.8834	.9269	.8908	.8908	.84700	.86500	2B	UN	15⁄16–12 or .9375–12
		3A	.8814	.8450	.8763	.8757	.8586	.93568	.92452		.9381	.8837	.9263	.8905	.8911	.84712	.86488	3B		
			.8834	.8473	.8792	.8792	.8612	.93750	.92610		.9375	.8834	.9250	.8889	.8889	.84700	.85750			
			.8831	.8467	.8795	.8789	.8618	.93738	.92622		.9381	.8837	.9244	.8886	.8892	.84712	.85738			
15⁄16–16 or .9375–16	UN	2A	.8954	.8683	.8904	.8904	.8769	.93600	.92660		.9375	.8969	.9305	.9034	.9034	.87000	.88400	2B	UN	15⁄16–16 or .9375–16
		3A	.8951	.8677	.8907	.8901	.8775	.93588	.92672		.9381	.8972	.9299	.9031	.9037	.87012	.88388	3B		
			.8969	.8698	.8932	.8932	.8797	.93750	.92810		.9375	.8969	.9289	.9018	.9018	.87000	.87830			
			.8966	.8692	.8935	.8929	.8803	.93738	.92822		.9381	.8972	.9283	.9015	.9021	.87012	.87818			
15⁄16–20 or .9375–20	UNEF	2A	.9036	.8819	.8991	.8991	.8883	.93610	.92800		.9375	.9050	.9326	.9109	.9109	.88300	.89500	2B	UNEF	15⁄16–20 or .9375–20
		3A	.9033	.8814	.8994	.8988	.8888	.93598	.92812		.9380	.9053	.9321	.9106	.9112	.88312	.89488	3B		
			.9050	.8833	.9016	.9016	.8908	.93750	.92940		.9375	.9050	.9311	.9094	.9094	.88300	.89120			
			.9047	.8828	.9019	.9013	.8913	.93738	.92952		.9380	.9053	.9306	.9091	.9097	.88312	.89108			
15⁄16–28 or .9375–28	UN	2A	.9131	.8976	.9091	.9091	.9014	.93630	.92980		.9375	.9143	.9350	.9195	.9195	.89900	.90700	2B	UN	15⁄16–28 or .9375–28
		3A	.9128	.8971	.9094	.9088	.9019	.93618	.92992		.9380	.9146	.9345	.9192	.9198	.89912	.90688	3B		
			.9143	.8988	.9113	.9113	.9036	.93750	.93100		.9375	.9143	.9337	.9182	.9182	.89900	.90510			
			.9140	.8983	.9116	.9110	.9041	.93738	.93112		.9380	.9146	.9332	.9179	.9185	.89912	.90498			
15⁄16–32 or .9375–32	UN	2A	.9161	.9026	.9123	.9123	.9055	.93640	.93040		.9375	.9172	.9356	.9221	.9221	.90400	.91100	2B	UN	15⁄16–32 or .9375–32
		3A	.9158	.9021	.9126	.9120	.9060	.93628	.93052		.9380	.9175	.9351	.9218	.9224	.90412	.91088	3B		
			.9172	.9037	.9144	.9144	.9076	.93750	.93150		.9375	.9172	.9344	.9209	.9209	.90400	.90940			
			.9169	.9032	.9147	.9141	.9081	.93738	.93162		.9380	.9175	.9339	.9206	.9212	.90412	.90928			
1–8 or 1.000–8	UNC	1A	.9168	.8627	.9067	.9067	.8796	.99800	.97550		1.0000	.9188	.9861	.9320	.9320	.86500	.89000	1B	UNC	1–8 or 1.000–8
		2A	.9164	.8620	.9071	.9063	.8803	.99788	.97562		1.0007	.9192	.9854	.9316	.9324	.86512	.88988	2B		
		3A	.9168	.8627	.9100	.9100	.8829	.99800	.98300	.97550	1.0000	.9188	.9817	.9276	.9276	.86500	.89000	3B		
			.9164	.8620	.9104	.9096	.8836	.99788	.98312	.97562	1.0007	.9192	.9810	.9272	.9280	.86512	.88988			
			.9188	.8647	.9137	.9137	.8866	1.00000	.98500		1.0000	.9188	.9795	.9254	.9254	.86500	.87970			
			.9184	.8640	.9141	.9133	.8873	.99988	.98512		1.0007	.9192	.9788	.9250	.9258	.86512	.87958			
1–12 or 1.000–12	UNF	1A	.9441	.9080	.9353	.9353	.9173	.99820	.98100		1.0000	.9459	.9934	.9573	.9573	.91000	.92800	1B	UNF	1–12 or 1.000–12
		2A	.9438	.9074	.9356	.9350	.9179	.99808	.98112		1.0006	.9462	.9928	.9570	.9576	.91012	.92788	2B		
		3A	.9441	.9080	.9382	.9382	.9202	.99820	.98680		1.0000	.9459	.9896	.9535	.9535	.91000	.92800	3B		
			.9438	.9074	.9385	.9379	.9208	.99808	.98692		1.0006	.9462	.9890	.9532	.9538	.91012	.92788			
			.9459	.9098	.9415	.9415	.9235	1.00000	.98860		1.0000	.9459	.9877	.9516	.9516	.91000	.91980			
			.9456	.9092	.9418	.9412	.9241	.99988	.98872		1.0006	.9462	.9871	.9513	.9519	.91012	.91968			
1–16 or 1.000–16	UN	2A	.9579	.9308	.9529	.9529	.9394	.99850	.98910		1.0000	.9594	.9930	.9659	.9659	.93200	.94600	2B	UN	1–16 or 1.000–16
		3A	.9576	.9302	.9532	.9526	.9400	.99838	.98922		1.0006	.9597	.9924	.9656	.9662	.93212	.94588	3B		
			.9594	.9323	.9557	.9557	.9422	1.00000	.99060		1.0000	.9594	.9914	.9643	.9643	.93200	.94080			
			.9591	.9317	.9560	.9554	.9428	.99988	.99072		1.0006	.9597	.9908	.9640	.9646	.93212	.94068			
1–20 or 1.000–20	UNEF	2A	.9661	.9444	.9616	.9616	.9508	.99860	.99050		1.0000	.9675	.9951	.9734	.9734	.94600	.95700	2B	UNEF	1–20 or 1.000–20
		3A	.9658	.9439	.9619	.9613	.9513	.99848	.99062		1.0005	.9678	.9946	.9731	.9737	.94612	.95688	3B		
			.9675	.9458	.9641	.9641	.9533	1.00000	.99190		1.0000	.9675	.9936	.9719	.9719	.94600	.95370			
			.9672	.9453	.9644	.9638	.9538	.99988	.99202		1.0005	.9678	.9931	.9716	.9722	.94612	.95358			
1–28 or 1.000–28	UN	2A	.9756	.9601	.9716	.9716	.9639	.99880	.99230		1.0000	.9768	.9975	.9820	.9820	.96100	.97000	2B	UN	1–28 o 1.000–28
		3A	.9753	.9596	.9719	.9713	.9644	.99868	.99242		1.0005	.9771	.9970	.9817	.9823	.96112	.96988	3B		
			.9768	.9613	.9738	.9738	.9661	1.00000	.99350		1.0000	.9768	.9962	.9807	.9807	.96100	.96760			
			.9765	.9608	.9741	.9735	.9666	.99988	.99362		1.0005	.9771	.9957	.9804	.9810	.96112	.96748			
1–32 or 1.000–32	UN	2A	.9786	.9651	.9748	.9748	.9680	.99890	.99290		1.0000	.9797	.9981	.9846	.9846	.96600	.97400	2B	UN	1–32 or 1.000–32
		3A	.9783	.9646	.9751	.9745	.9685	.99878	.99302		1.0005	.9800	.9976	.9843	.9849	.96612	.97388	3B		
			.9797	.9662	.9769	.9769	.9701	1.00000	.99400		1.0000	.9797	.9969	.9834	.9834	.96600	.97190			
			.9794	.9657	.9772	.9766	.9706	.99988	.99412		1.0005	.9800	.9964	.9831	.9837	.96612	.97178			
1 1⁄16–8 or 1.0625–8	UN	2A	.9793	.9252	.9725	.9725	.9454	1.06050	1.04550		1.0625	.9813	1.0443	.9902	.9902	.92700	.95200	2B	UN	1 1⁄16–8 or 1.0625–8
		3A	.9789	.9245	.9729	.9721	.9461	1.06038	1.04562		1.0632	.9817	1.0436	.9898	.9906	.92712	.95188	3B		
			.9813	.9272	.9762	.9762	.9491	1.06250	1.04750		1.0625	.9813	1.0421	.9880	.9880	.92700	.94220			
			.9809	.9265	.9766	.9758	.9498	1.06238	1.04762		1.0632	.9817	1.0414	.9876	.9884	.92712	.94208			
1 1⁄16–12 or 1.0625–12	UN	2A	1.0067	.9706	1.0010	1.0010	.9830	1.06080	1.04940		1.0625	1.0084	1.0519	1.0158	1.0158	.97200	.99000	2B	UN	1 1⁄16–12 or 1.0625–12
		3A	1.0064	.9700	1.0013	1.0007	.9836	1.06068	1.04952		1.0631	1.0087	1.0513	1.0155	1.0161	.97212	.98988	3B		
			1.0084	.9723	1.0042	1.0042	.9862	1.06250	1.05110		1.0625	1.0084	1.0500	1.0139	1.0139	.97200	.98230			
			1.0081	.9717	1.0045	1.0039	.9868	1.06238	1.05122		1.0631	1.0087	1.0494	1.0136	1.0142	.97212	.98218			

TABLE III.12.—*Gages for standard thread series, Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	Class	Gages for external threads								Gages for internal threads							Class	Series designation	Nominal size and threads per inch
			X thread ring gages					Z plain ring gages for major diameter			X thread plug gages					Z plain plug gates for minor diameter				
			GO		LO, classes 1A and 2A not GO, class 3A			NOT GO			GO		III							
			Pitch diameter	Minor diameter	Pitch diameter		Minor diameter	GO	Semi-finished	Unfinished hot-rolled material	Major diameter	Pitch diameter	Major diameter	Pitch diameter		GO	NOT GO			
					Plus tolerance gage	Minus tolerance gage								Minus tolerance gage	Plus tolerance gage					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1 1/16-16 or 1.0625-16	UN	2A	*in.* 1.0204	*in.* .9933	*in.* 1.0154	*in.* 1.0154	*in.* 1.0019	*in.* 1.06100	*in.* 1.05160	*in.* ----------	*in.* 1.0625	*in.* 1.0219	*in.* 1.0555	*in.* 1.0284	*in.* 1.0284	*in.* .99500	*in.* 1.00900	2B	UN	1 1/16-16 or 1.0625-16
		3A	1.0201	.9927	1.0157	1.0151	1.0025	1.06088	1.05172	----------	1.0631	1.0222	1.0549	1.0281	1.0287	.99512	1.00888	3B		
			1.0219	.9948	1.0182	1.0182	1.0047	1.06250	1.05310	----------	1.0625	1.0219	1.0539	1.0268	1.0268	.99500	1.00330			
			1.0216	.9942	1.0185	1.0179	1.0053	1.06238	1.05322	----------	1.0631	1.0222	1.0533	1.0265	1.0271	.99512	1.00318			
1 1/16-18 or 1.0625-18	UNEF	2A	1.0250	1.0009	1.0203	1.0203	1.0083	1.06110	1.05240	----------	1.0625	1.0264	1.0567	1.0326	1.0326	1.00200	1.01500	2B	UNEF	1 1/16-18 or 1.0625-18
		3A	1.0247	1.0004	1.0206	1.0200	1.0088	1.06098	1.05252	----------	1.0630	1.0267	1.0562	1.0323	1.0329	1.00212	1.01488	3B		
			1.0264	1.0023	1.0228	1.0228	1.0108	1.06250	1.05380	----------	1.0625	1.0264	1.0551	1.0310	1.0310	1.00200	1.01050			
			1.0261	1.0018	1.0231	1.0225	1.0113	1.06238	1.05392	----------	1.0630	1.0267	1.0546	1.0307	1.0313	1.00212	1.01038			
1 1/16-20 or 1.0625-20	UN	2A	1.0286	1.0069	1.0241	1.0241	1.0133	1.06110	1.05300	----------	1.0625	1.0300	1.0576	1.0359	1.0359	1.00800	1.02000	2B	UN	1 1/16-20 or 1.0625-20
		3A	1.0283	1.0064	1.0244	1.0238	1.0138	1.06098	1.05312	----------	1.0630	1.0303	1.0571	1.0356	1.0362	1.00812	1.01988	3B		
			1.0300	1.0083	1.0266	1.0266	1.0158	1.06250	1.05440	----------	1.0625	1.0300	1.0561	1.0344	1.0344	1.00800	1.01620			
			1.0297	1.0078	1.0269	1.0263	1.0163	1.06238	1.05452	----------	1.0630	1.0303	1.0556	1.0341	1.0347	1.00812	1.01608			
1 1/16-28 or 1.0625-28	UN	2A	1.0381	1.0226	1.0341	1.0341	1.0264	1.06130	1.05480	----------	1.0625	1.0393	1.0690	1.0445	1.0445	1.02400	1.03200	2B	UN	1 1/16-28 or 1.0625-28
		3A	1.0378	1.0221	1.0344	1.0338	1.0269	1.06118	1.05492	----------	1.0630	1.0396	1.0595	1.0442	1.0448	1.02412	1.03188	3B		
			1.0393	1.0238	1.0363	1.0363	1.0286	1.06250	1.05600	----------	1.0625	1.0393	1.0587	1.0432	1.0432	1.02400	1.03010			
			1.0390	1.0233	1.0366	1.0360	1.0291	1.06238	1.05612	----------	1.0630	1.0396	1.0582	1.0429	1.0435	1.02412	1.02998			
1 1/8-7 or 1.125-7	UNC	1A	1.0300	.9681	1.0191	1.0191	.9882	1.12280	1.09820	----------	1.1250	1.0322	1.1082	1.0463	1.0463	.97000	.99800	1B	UNC	1 1/8-7 or 1.125-7
			1.0296	.9674	1.0195	1.0187	.9889	1.12268	1.09832	----------	1.1257	1.0326	1.1075	1.0459	1.0467	.97012	.99788			
		2A	1.0300	.9681	1.0228	1.0228	.9919	1.12280	1.10640	1.09820	1.1250	1.0322	1.1035	1.0416	1.0416	.97000	.99800	2B		
			1.0296	.9674	1.0232	1.0224	.9926	1.12268	1.10652	1.09832	1.1257	1.0326	1.1028	1.0412	1.0420	.97012	.99788			
		3A	1.0322	.9703	1.0268	1.0268	.9959	1.12500	1.10860	----------	1.1250	1.0322	1.1012	1.0393	1.0393	.97000	.98750	3B		
			1.0318	.9696	1.0272	1.0264	.9966	1.12488	1.10872	----------	1.1257	1.0326	1.1005	1.0389	1.0397	.97012	.98738			
1 1/8-8 or 1.125-8	UN	2A	1.0417	.9876	1.0348	1.0348	1.0077	1.12290	1.10790	1.10040	1.1250	1.0438	1.1069	1.0528	1.0528	.99000	1.01500	2B	UN	1 1/8-8 or 1.125-8
			1.0413	.9869	1.0352	1.0344	1.0084	1.12278	1.10802	1.10052	1.1257	1.0442	1.1062	1.0524	1.0532	.99012	1.01488			
		3A	1.0438	.9897	1.0386	1.0386	1.0115	1.12500	1.11000	----------	1.1250	1.0438	1.1046	1.0505	1.0505	.99000	1.00470	3B		
			1.0434	.9890	1.0390	1.0382	1.0122	1.12488	1.11012	----------	1.1257	1.0442	1.1039	1.0501	1.0509	.99012	1.00458			
1 1/8-12 or 1.125-12	UNF	1A	1.0691	1.0330	1.0601	1.0601	1.0421	1.12320	1.10600	----------	1.1259	1.0709	1.1187	1.0826	1.0826	1.03500	1.05300	1B	UNF	1 1/8-12 or 1.125-12
			1.0688	1.0324	1.0604	1.0598	1.0427	1.12308	1.10612	----------	1.1256	1.0712	1.1181	1.0823	1.0829	1.03512	1.05288			
		2A	1.0691	1.0330	1.0631	1.0631	1.0451	1.12320	1.11180	----------	1.1250	1.0709	1.1148	1.0787	1.0787	1.03500	1.05300	2B		
			1.0688	1.0324	1.0634	1.0628	1.0457	1.12308	1.11192	----------	1.1256	1.0712	1.1142	1.0784	1.0790	1.03512	1.05288			
		3A	1.0709	1.0348	1.0664	1.0664	1.0484	1.12500	1.11360	----------	1.1250	1.0709	1.1129	1.0768	1.0768	1.03500	1.04480	3B		
			1.0706	1.0342	1.0667	1.0661	1.0490	1.12488	1.11372	----------	1.1256	1.0712	1.1123	1.0765	1.0771	1.03512	1.04468			
1 1/8-16 or 1.125-16	UN	2A	1.0829	1.0558	1.0779	1.0779	1.0644	1.12350	1.11410	----------	1.1250	1.0844	1.1180	1.0909	1.0909	1.05700	1.07100	2B	UN	1 1/8-16 or 1.125-16
			1.0826	1.0552	1.0782	1.0776	1.0650	1.12338	1.11422	----------	1.1256	1.0847	1.1174	1.0906	1.0912	1.05712	1.07088			
		3A	1.0844	1.0573	1.0807	1.0807	1.0672	1.12500	1.11560	----------	1.1250	1.0844	1.1164	1.0893	1.0893	1.05700	1.06580	3B		
			1.0841	1.0567	1.0810	1.0804	1.0678	1.12488	1.11572	----------	1.1256	1.0847	1.1158	1.0890	1.0896	1.05712	1.06568			
1 1/8-18 or 1.125-18	UNEF	2A	1.0875	1.0634	1.0828	1.0828	1.0708	1.12360	1.11490	----------	1.1250	1.0889	1.1192	1.0951	1.0951	1.06500	1.07800	2B	UNEF	1 1/8-18 or 1.125-18
			1.0872	1.0629	1.0831	1.0825	1.0713	1.12348	1.11592	----------	1.1255	1.0892	1.1187	1.0948	1.0954	1.06512	1.07788			
		3A	1.0889	1.0648	1.0853	1.0853	1.0733	1.12500	1.11630	----------	1.1250	1.0889	1.1176	1.0935	1.0935	1.06500	1.07300	3B		
			1.0886	1.0643	1.0856	1.0850	1.0738	1.12488	1.11642	----------	1.1255	1.0892	1.1171	1.0932	1.0938	1.06512	1.07288			
1 1/8-20 or 1.125-20	UN	2A	1.0911	1.0694	1.0866	1.0866	1.0758	1.12369	1.11550	----------	1.1250	1.0925	1.1201	1.0984	1.0984	1.07100	1.08200	2B	UN	1 1/8-20 or 1.125-20
			1.0908	1.0689	1.0869	1.0863	1.0763	1.12348	1.11562	----------	1.1255	1.0928	1.1196	1.0981	1.0987	1.07112	1.08188			
		3A	1.0925	1.0708	1.0891	1.0891	1.0783	1.12500	1.11690	----------	1.1250	1.0925	1.1186	1.0969	1.0969	1.07100	1.07870	3B		
			1.0922	1.0703	1.0894	1.0888	1.0788	1.12488	1.11702	----------	1.1255	1.0928	1.1181	1.0966	1.0972	1.07112	1.07858			

1⅛–28 or 1.125–28	UN	2A	1.1006	1.0851	1.0966	1.0966	1.0889	1.12389	1.11730		1.1250	1.1018	1.1225	1.1070	1.1070	1.08690	1.09500	2B	UN	1⅛–28 or 1.125–28
			1.1003	1.0846	1.0969	1.0963	1.0894	1.12368	1.11742		1.1255	1.1021	1.1220	1.1067	1.1073	1.08612	1.09488			
		3A	1.1018	1.0863	1.0988	1.0988	1.0911	1.12590	1.11850		1.1259	1.1018	1.1212	1.1057	1.1057	1.08690	1.09260	3B		
			1.1015	1.0858	1.0991	1.0985	1.0916	1.12488	1.11862		1.1255	1.1021	1.1207	1.1054	1.1060	1.08612	1.09248			
1¾16–8 or 1.1875–8	UN	2A	1.1042	1.0591	1.0972	1.0972	1.0701	1.18540	1.17040		1.1875	1.1063	1.1695	1.1154	1.1154	1.05200	1.07700	2B	UN	1¾16–8 or 1.1875–8
			1.1038	1.0494	1.0976	1.0968	1.0708	1.18528	1.17052		1.1882	1.1067	1.1688	1.1159	1.1158	1.05212	1.07688			
		3A	1.1063	1.0522	1.1011	1.1011	1.0740	1.18750	1.17250		1.1875	1.1063	1.1672	1.1131	1.1131	1.05200	1.06720	3B		
			1.1059	1.0515	1.1015	1.1007	1.0747	1.18738	1.17262		1.1882	1.1067	1.1665	1.1127	1.1135	1.05212	1.06708			
1¾16–12 or 1.1875–12	UN	2A	1.1317	1.0956	1.1259	1.1259	1.1079	1.18580	1.17440		1.1875	1.1334	1.1770	1.1409	1.1409	1.09700	1.11500	2B	UN	1¾16–12 or 1.1875–12
			1.1314	1.0950	1.1262	1.1256	1.1085	1.18568	1.17452		1.1881	1.1337	1.1764	1.1406	1.1412	1.09712	1.11488			
		3A	1.1334	1.0973	1.1291	1.1291	1.1111	1.18750	1.17610		1.1875	1.1334	1.1751	1.1390	1.1390	1.09700	1.10730	3B		
			1.1331	1.0967	1.1294	1.1288	1.1117	1.18738	1.17622		1.1881	1.1337	1.1745	1.1387	1.1393	1.09712	1.10718			
1¾16–16 or 1.1875–16	UN	2A	1.1454	1.1183	1.1403	1.1403	1.1268	1.18600	1.17660		1.1875	1.1469	1.1806	1.1535	1.1535	1.12000	1.13400	2B	UN	1¾16–16 or 1.1875–16
			1.1451	1.1177	1.1406	1.1400	1.1274	1.18588	1.17672		1.1881	1.1472	1.1800	1.1532	1.1538	1.12012	1.13388			
		3A	1.1469	1.1198	1.1431	1.1431	1.1296	1.18750	1.17810		1.1875	1.1469	1.1790	1.1519	1.1519	1.12000	1.12830	3B		
			1.1466	1.1192	1.1434	1.1428	1.1302	1.18738	1.17822		1.1881	1.1472	1.1784	1.1516	1.1522	1.12012	1.12818			
1¾16–18 or 1.1875–18	UNEF	2A	1.1499	1.1258	1.1450	1.1450	1.1330	1.18600	1.17730		1.1875	1.1514	1.1818	1.1577	1.1577	1.12700	1.14000	2B	UNEF	1¾16–18 or 1.1875–18
			1.1496	1.1253	1.1453	1.1447	1.1335	1.18588	1.17742		1.1880	1.1517	1.1813	1.1574	1.1580	1.12712	1.13988			
		3A	1.1514	1.1273	1.1478	1.1478	1.1358	1.18750	1.17880		1.1875	1.1514	1.1802	1.1561	1.1561	1.12700	1.13550	3B		
			1.1511	1.1268	1.1481	1.1475	1.1363	1.18738	1.17892		1.1880	1.1517	1.1797	1.1558	1.1564	1.12712	1.13538			
1¾16–20 or 1.1875–20	UN	2A	1.1536	1.1319	1.1489	1.1489	1.1381	1.18610	1.17800		1.1875	1.1550	1.1828	1.1611	1.1611	1.13300	1.14500	2B	UN	1¾16–20 or 1.1875–20
			1.1533	1.1314	1.1492	1.1486	1.1386	1.18598	1.17812		1.1880	1.1553	1.1823	1.1608	1.1614	1.13312	1.14488			
		3A	1.1550	1.1333	1.1515	1.1515	1.1407	1.18750	1.17940		1.1875	1.1550	1.1812	1.1595	1.1595	1.13300	1.14120	3B		
			1.1547	1.1328	1.1518	1.1512	1.1412	1.18738	1.17952		1.1880	1.1553	1.1807	1.1592	1.1598	1.13312	1.14108			
1¾16–28 or 1.1875–28	UN	2A	1.1631	1.1476	1.1590	1.1590	1.1513	1.18630	1.17980		1.1875	1.1643	1.1851	1.1696	1.1696	1.14900	1.15700	2B	UN	1¾16–28 or 1.1875–28
			1.1628	1.1471	1.1593	1.1587	1.1518	1.18618	1.17992		1.1880	1.1646	1.1846	1.1693	1.1699	1.14912	1.15688			
		3A	1.1643	1.1488	1.1612	1.1612	1.1535	1.18750	1.18100		1.1875	1.1643	1.1838	1.1683	1.1683	1.14900	1.15510	3B		
			1.1640	1.1483	1.1615	1.1609	1.1540	1.18738	1.18112		1.1880	1.1646	1.1833	1.1680	1.1686	1.14912	1.15498			
1¼–7 or 1.250–7	UNC	1A	1.1550	1.0931	1.1439	1.1439	1.1130	1.24780	1.22320		1.2500	1.1572	1.2335	1.1716	1.1716	1.09500	1.12300	1B	UNC	1¼–7 or 1.250–7
			1.1546	1.0924	1.1443	1.1435	1.1137	1.24768	1.22332		1.2507	1.1576	1.2328	1.1720	1.1720	1.09512	1.12288			
		2A	1.1550	1.0931	1.1476	1.1476	1.1167	1.24780	1.23140	1.22320	1.2500	1.1572	1.2287	1.1668	1.1668	1.09500	1.12300	2B		
			1.1546	1.0924	1.1480	1.1472	1.1174	1.24768	1.23152	1.22332	1.2507	1.1576	1.2280	1.1664	1.1672	1.09512	1.12288			
		3A	1.1572	1.0953	1.1517	1.1517	1.1208	1.25000	1.23360		1.2500	1.1572	1.2263	1.1644	1.1644	1.09500	1.11250	3B		
			1.1568	1.0946	1.1521	1.1513	1.1215	1.24988	1.23372		1.2507	1.1576	1.2256	1.1640	1.1648	1.09512	1.11238			
1¼–8 or 1.250–8	UN	2A	1.1667	1.1126	1.1597	1.1597	1.1326	1.24790	1.23290	1.22540	1.2500	1.1688	1.2321	1.1780	1.1780	1.11500	1.14000	2B	UN	1¼–8 or 1.250–8
			1.1663	1.1119	1.1601	1.1593	1.1333	1.24778	1.23302	1.22552	1.2507	1.1692	1.2314	1.1776	1.1784	1.11512	1.13988			
		3A	1.1688	1.1147	1.1635	1.1635	1.1364	1.25000	1.23500		1.2500	1.1688	1.2298	1.1757	1.1757	1.11500	1.12970	3B		
			1.1684	1.1140	1.1639	1.1631	1.1371	1.24988	1.23512		1.2507	1.1692	1.2291	1.1753	1.1761	1.11512	1.12958			
1¼–12 or 1.250–12	UNF	1A	1.1941	1.1580	1.1849	1.1849	1.1669	1.24820	1.23100		1.2500	1.1959	1.2440	1.2079	1.2079	1.16000	1.17800	1B	UNF	1¼–12 or 1.250–12
			1.1938	1.1574	1.1852	1.1846	1.1675	1.24808	1.23112		1.2506	1.1962	1.2434	1.2076	1.2082	1.16012	1.17788			
		2A	1.1941	1.1580	1.1879	1.1879	1.1699	1.24820	1.23680		1.2500	1.1959	1.2400	1.2039	1.2039	1.16000	1.17800	2B		
			1.1938	1.1574	1.1882	1.1876	1.1705	1.24808	1.23692		1.2506	1.1962	1.2394	1.2036	1.2042	1.16012	1.17788			
		3A	1.1959	1.1598	1.1913	1.1913	1.1733	1.25000	1.23860		1.2500	1.1959	1.2380	1.2019	1.2019	1.16000	1.16980	3B		
			1.1956	1.1592	1.1916	1.1910	1.1739	1.24988	1.23872		1.2506	1.1962	1.2374	1.2016	1.2022	1.16012	1.16968			
1¼–16 or 1.250–16	UN	2A	1.2079	1.1808	1.2028	1.2028	1.1893	1.24850	1.23910		1.2500	1.2094	1.2431	1.2160	1.2160	1.18200	1.19600	2B	UN	1¼–16 or 1.250–16
			1.2076	1.1802	1.2031	1.2025	1.1899	1.24838	1.23922		1.2506	1.2097	1.2425	1.2157	1.2163	1.18212	1.19588			
		3A	1.2094	1.1823	1.2056	1.2056	1.1921	1.25000	1.24060		1.2500	1.2094	1.2415	1.2144	1.2144	1.18200	1.19080	3B		
			1.2091	1.1817	1.2059	1.2053	1.1927	1.24988	1.24072		1.2506	1.2097	1.2409	1.2141	1.2147	1.18212	1.19068			
1¼–18 or 1.250–18	UNEF	2A	1.2124	1.1883	1.2075	1.2075	1.1955	1.24850	1.23980		1.2500	1.2139	1.2443	1.2202	1.2202	1.19000	1.20300	2B	UNEF	1¼–18 or 1.250–18
			1.2121	1.1878	1.2078	1.2072	1.1960	1.24838	1.23992		1.2505	1.2142	1.2438	1.2199	1.2205	1.19012	1.20288			
		3A	1.2139	1.1898	1.2103	1.2103	1.1983	1.25000	1.24130		1.2500	1.2139	1.2427	1.2186	1.2186	1.19000	1.19800	3B		
			1.2136	1.1893	1.2106	1.2100	1.1988	1.24988	1.24142		1.2505	1.2142	1.2422	1.2183	1.2189	1.19012	1.19788			
1¼–20 or 1.250–20	UN	2A	1.2161	1.1944	1.2114	1.2114	1.2006	1.24860	1.24050		1.2500	1.2175	1.2453	1.2236	1.2236	1.19600	1.20700	2B	UN	1¼–20 or 1.250–20
			1.2158	1.1939	1.2117	1.2111	1.2011	1.24848	1.24062		1.2505	1.2178	1.2448	1.2233	1.2239	1.19612	1.20688			
		3A	1.2175	1.1958	1.2140	1.2140	1.2032	1.25000	1.24190		1.2500	1.2175	1.2437	1.2220	1.2220	1.19600	1.20370	3B		
			1.2172	1.1953	1.2143	1.2137	1.2037	1.24988	1.24202		1.2505	1.2178	1.2432	1.2217	1.2223	1.19612	1.20358			
1¼–28 or 1.250–28	UN	2A	1.2256	1.2101	1.2215	1.2215	1.2138	1.24880	1.24230		1.2590	1.2268	1.2476	1.2321	1.2321	1.21100	1.22000	2B	UN	1¼–28 or 1.250–28
			1.2253	1.2096	1.2218	1.2212	1.2143	1.24868	1.24242		1.2505	1.2271	1.2471	1.2318	1.2324	1.21112	1.21988			
		3A	1.2268	1.2113	1.2237	1.2237	1.2160	1.25000	1.24350		1.2500	1.2268	1.2463	1.2308	1.2308	1.21100	1.21760	3B		
			1.2265	1.2108	1.2240	1.2234	1.2165	1.24988	1.24362		1.2505	1.2271	1.2458	1.2305	1.2311	1.21112	1.21748			
1⅝16–8 or 1.3125–8	UN	2A	1.2292	1.1751	1.2221	1.2221	1.1950	1.31040	1.29540		1.3125	1.2313	1.2946	1.2405	1.2405	1.17700	1.20200	2B	UN	1⅝16–8 or 1.3125–8
			1.2288	1.1744	1.2225	1.2217	1.1957	1.31028	1.29552		1.3132	1.2317	1.2939	1.2401	1.2409	1.17712	1.20188			
		3A	1.2313	1.1772	1.2260	1.2260	1.1989	1.31250	1.29750		1.3125	1.2313	1.2923	1.2382	1.2382	1.17700	1.19220	3B		
			1.2309	1.1765	1.2264	1.2256	1.1996	1.31238	1.29762		1.3132	1.2317	1.2916	1.2378	1.2386	1.17712	1.19208			

TABLE III.12.—*Gages for standard thread series, Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	Class	Gages for external threads								Gages for internal threads							Class	Series designation	Nominal size and threads per inch
			X thread ring gages					Z plain ring gages for major diameter			X thread plug gages					Z plain plug gates for minor diameter				
			GO		LO, classes 1A and 2A NOT GO, class 3A			GO	NOT GO		GO		HI			GO	NOT GO			
			Pitch diameter	Minor diameter	Pitch diameter		Minor diameter		Semi-finished	Unfinished hot-rolled material	Major diameter	Pitch diameter	Major diameter	Pitch diameter						
					Plus tolerance gage	Minus tolerance gage								Minus tolerance gage	Plus tolerance gage					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*			
1 5/16–12 or 1.3125–12	UN	2A	1.2567	1.2206	1.2509	1.2509	1.2329	1.31080	1.29940	----------	1.3125	1.2584	1.3020	1.2659	1.2659	1.22200	1.24000	2B	UN	1 5/16–12 or 1.3125–12
		3A	1.2564	1.2200	1.2512	1.2506	1.2335	1.31068	1.29952	----------	1.3131	1.2587	1.3014	1.2656	1.2662	1.22212	1.23988			
			1.2584	1.2223	1.2541	1.2541	1.2361	1.31250	1.30110	----------	1.3125	1.2584	1.3001	1.2640	1.2640	1.22200	1.23230	3B		
			1.2581	1.2217	1.2544	1.2538	1.2367	1.31238	1.30122	----------	1.3131	1.2587	1.2995	1.2637	1.2643	1.22212	1.23218			
1 5/16–16 or 1.3125–16	UN	2A	1.2704	1.2433	1.2653	1.2653	1.2518	1.31100	1.30160	----------	1.3125	1.2719	1.3056	1.2785	1.2785	1.24500	1.25900	2B	UN	1 5/16–16 or 1.3125–16
		3A	1.2701	1.2427	1.2656	1.2650	1.2524	1.31088	1.30172	----------	1.3131	1.2722	1.3050	1.2782	1.2788	1.24512	1.25888			
			1.2719	1.2448	1.2681	1.2681	1.2546	1.31250	1.30310	----------	1.3125	1.2719	1.3040	1.2769	1.2769	1.24500	1.25330	3B		
			1.2716	1.2442	1.2684	1.2678	1.2552	1.31238	1.30322	----------	1.3131	1.2722	1.3034	1.2766	1.2772	1.24512	1.25318			
1 5/16–18 or 1.3125–18	UNEF	2A	1.2749	1.2508	1.2700	1.2700	1.2580	1.31100	1.30230	----------	1.3125	1.2764	1.3068	1.2827	1.2827	1.25200	1.26500	2B	UNEF	1 5/16–18 or 1.3125–18
		3A	1.2746	1.2503	1.2703	1.2697	1.2585	1.31088	1.30242	----------	1.3130	1.2767	1.3063	1.2824	1.2830	1.25212	1.26488			
			1.2764	1.2523	1.2728	1.2728	1.2608	1.31250	1.30380	----------	1.3125	1.2764	1.3052	1.2811	1.2811	1.25200	1.26050	3B		
			1.2761	1.2518	1.2731	1.2725	1.2613	1.31238	1.30392	----------	1.3130	1.2767	1.3047	1.2898	1.2814	1.25212	1.26038			
1 5/16–20 or 1.3125–20	UN	2A	1.2786	1.2569	1.2739	1.2739	1.2631	1.31110	1.30300	----------	1.3125	1.2830	1.3078	1.2861	1.2861	1.25800	1.27000	2B	UN	1 5/16–20 or 1.3125–20
		3A	1.2783	1.2564	1.2742	1.2736	1.2636	1.31098	1.30312	----------	1.3130	1.2833	1.3073	1.2858	1.2864	1.25812	1.26988			
			1.2800	1.2583	1.2765	1.2765	1.2657	1.31250	1.30440	----------	1.3125	1.2830	1.3062	1.2845	1.2845	1.25800	1.26620	3B		
			1.2797	1.2578	1.2768	1.2762	1.2662	1.31238	1.30452	----------	1.3130	1.2833	1.3057	1.2842	1.2848	1.25812	1.26608			
1 5/16–28 or 1.3125–28	UN	2A	1.2881	1.2726	1.2840	1.2840	1.2763	1.31130	1.30480	----------	1.3125	1.2893	1.3101	1.2946	1.2946	1.27400	1.28200	2B	UN	1 5/16–28 or 1.3125–28
		3A	1.2878	1.2721	1.2843	1.2837	1.2768	1.31118	1.30492	----------	1.3130	1.2896	1.3096	1.2943	1.2949	1.27412	1.28188			
			1.2893	1.2738	1.2862	1.2862	1.2785	1.31250	1.30600	----------	1.3125	1.2893	1.3088	1.2933	1.2933	1.27400	1.28010	3B		
			1.2890	1.2733	1.2865	1.2859	1.2790	1.31238	1.30612	----------	1.3130	1.2896	1.3083	1.2930	1.2936	1.27412	1.27998			
1 3/8–6 or 1.375–6	UNC	1A	1.2643	1.1921	1.2523	1.2523	1.2162	1.37260	1.34530	----------	1.3759	1.2667	1.3544	1.2822	1.2822	1.19500	1.22500	1B	UNC	1 3/8–6 or 1.375–6
			1.2639	1.1913	1.2527	1.2519	1.2170	1.37248	1.34542	----------	1.3758	1.2671	1.3536	1.2818	1.2826	1.19512	1.22488			
		2A	1.2643	1.1921	1.2563	1.2563	1.2202	1.37260	1.35440	1.34530	1.3750	1.2667	1.3493	1.2771	1.2771	1.19500	1.22500	2B		
			1.2639	1.1913	1.2567	1.2559	1.2210	1.37248	1.35452	1.34542	1.3758	1.2671	1.3485	1.2767	1.2775	1.19512	1.22488			
		3A	1.2667	1.1945	1.2607	1.2607	1.2246	1.37500	1.35689	----------	1.3750	1.2667	1.3467	1.2745	1.2745	1.19500	1.21460	3B		
			1.2663	1.1937	1.2611	1.2603	1.2254	1.37488	1.35692	----------	1.3758	1.2671	1.3459	1.2741	1.2749	1.19512	1.21448			
1 3/8–8 or 1.375–8	UN	2A	1.2916	1.2375	1.2844	1.2844	1.2573	1.37280	1.35780	1.35030	1.3750	1.2938	1.3572	1.3031	1.3031	1.24000	1.26500	2B	UN	1 3/8–8 or 1.375–8
			1.2912	1.2368	1.2848	1.2840	1.2580	1.37268	1.35792	1.35042	1.3757	1.2942	1.3565	1.3027	1.3035	1.24012	1.26488			
		3A	1.2938	1.2397	1.2884	1.2884	1.2613	1.37500	1.36000	----------	1.3750	1.2938	1.3549	1.3008	1.3008	1.24000	1.25470	3B		
			1.2934	1.2390	1.2888	1.2880	1.2620	1.37488	1.36012	----------	1.3757	1.2942	1.3542	1.3004	1.3012	1.24012	1.25458			
1 3/8–12 or 1.375–12	UNF	1A	1.3190	1.2829	1.3096	1.3096	1.2916	1.37310	1.35590	----------	1.3750	1.3209	1.3693	1.3332	1.3332	1.28500	1.30300	1B	UNF	1 3/8–12 or 1.375–12
			1.3187	1.2823	1.3099	1.3093	1.2922	1.37298	1.35602	----------	1.3756	1.3212	1.3687	1.3329	1.3335	1.28512	1.30288			
		2A	1.3190	1.2829	1.3127	1.3127	1.2947	1.37310	1.36170	----------	1.3750	1.3209	1.3652	1.3291	1.3291	1.28500	1.30300	2B		
			1.3187	1.2823	1.3130	1.3124	1.2953	1.37298	1.36182	----------	1.3756	1.3212	1.3646	1.3288	1.3294	1.28512	1.30288			
		3A	1.3209	1.2848	1.3162	1.3162	1.2982	1.37500	1.36360	----------	1.3750	1.3209	1.3631	1.3270	1.3270	1.28500	1.29480	3B		
			1.3206	1.2842	1.3165	1.3159	1.2988	1.37488	1.36372	----------	1.3756	1.3212	1.3625	1.3267	1.3273	1.28512	1.29468			
1 3/8–16 or 1.375–16	UN	2A	1.3329	1.3058	1.3278	1.3278	1.3143	1.37350	1.36410	----------	1.3750	1.3344	1.3681	1.3410	1.3410	1.30700	1.32100	2B	UN	1 3/8–16 or 1.375–16
			1.3326	1.3052	1.3281	1.3275	1.3149	1.37338	1.36422	----------	1.3756	1.3347	1.3675	1.3407	1.3413	1.30712	1.32088			
		3A	1.3344	1.3073	1.3306	1.3306	1.3171	1.37500	1.36560	----------	1.3750	1.3344	1.3665	1.3394	1.3394	1.30700	1.31580	3B		
			1.3341	1.3067	1.3309	1.3303	1.3177	1.37488	1.36572	----------	1.3756	1.3347	1.3659	1.3391	1.3397	1.30712	1.31568			

1⅜–18 or 1.375–18	UNEF	2A	1.3374	1.3133	1.3325	1.3325	1.3205	1.37350	1.36480	.....	1.3750	1.3389	1.3693	1.3452	1.3452	1.31500	1.32800	2B	UNEF	1⅜–18 or 1.375–18
			1.3371	1.3128	1.3328	1.3322	1.3210	1.37338	1.36492	.....	1.3755	1.3392	1.3688	1.3449	1.3455	1.31512	1.32788			
		3A	1.3389	1.3148	1.3353	1.3353	1.3233	1.37500	1.36630	.....	1.3750	1.3389	1.3677	1.3436	1.3436	1.31500	1.32300	3B		
			1.3386	1.3143	1.3356	1.3350	1.3238	1.37488	1.36642	.....	1.3755	1.3392	1.3672	1.3433	1.3439	1.31512	1.32288			
1⅜–20 or 1.375–20	UN	2A	1.3411	1.3194	1.3364	1.3364	1.3256	1.37360	1.36550	.....	1.3750	1.3425	1.3703	1.3486	1.3486	1.32100	1.33200	2B	UN	1⅜–20 or 1.375–20
			1.3408	1.3189	1.3367	1.3361	1.3261	1.37348	1.36562	.....	1.3755	1.3428	1.3698	1.3483	1.3489	1.32112	1.33188			
		3A	1.3425	1.3208	1.3390	1.3390	1.3282	1.37500	1.36690	.....	1.3750	1.3425	1.3687	1.3470	1.3470	1.32100	1.32870	3B		
			1.3422	1.3203	1.3393	1.3387	1.3287	1.37488	1.36702	.....	1.3755	1.3428	1.3682	1.3467	1.3473	1.32112	1.32858			
1⅜–28 or 1.375–28	UN	2A	1.3506	1.3351	1.3465	1.3465	1.3388	1.37380	1.36730	.....	1.3750	1.3518	1.3726	1.3571	1.3571	1.33600	1.34500	2B	UN	1⅜–28 or 1.375–28
			1.3503	1.3346	1.3468	1.3462	1.3393	1.37368	1.36742	.....	1.3755	1.3521	1.3721	1.3568	1.3574	1.33612	1.34488			
		3A	1.3518	1.3363	1.3487	1.3487	1.3410	1.37500	1.36850	.....	1.3750	1.3518	1.3713	1.3558	1.3558	1.33600	1.34260	3B		
			1.3515	1.3358	1.3490	1.3484	1.3415	1.37488	1.36862	.....	1.3755	1.3521	1.3708	1.3555	1.3561	1.33612	1.34248			
1⁷⁄₁₆–6 or 1.4375–6	UN	2A	1.3268	1.2546	1.3188	1.3188	1.2827	1.43510	1.41690	.....	1.4375	1.3292	1.4118	1.3396	1.3396	1.25700	1.28800	2B	UN	1⁷⁄₁₆–6 or 1.4375–6
			1.3264	1.2538	1.3192	1.3184	1.2835	1.43498	1.41702	.....	1.4383	1.3296	1.4110	1.3392	1.3400	1.25712	1.28788			
		3A	1.3292	1.2570	1.3232	1.3232	1.2871	1.43750	1.41930	.....	1.4375	1.3292	1.4092	1.3370	1.3370	1.25700	1.27710	3B		
			1.3288	1.2562	1.3236	1.3228	1.2879	1.43738	1.41942	.....	1.4383	1.3296	1.4084	1.3366	1.3374	1.25712	1.27698			
1⁷⁄₁₆–8 or 1.4375–8	UN	2A	1.3541	1.3000	1.3469	1.3469	1.3198	1.43530	1.42030	.....	1.4375	1.3563	1.4198	1.3657	1.3657	1.30200	1.32700	2B	UN	1⁷⁄₁₆–8 or 1.4375–8
			1.3537	1.2993	1.3473	1.3465	1.3205	1.43518	1.42042	.....	1.4382	1.3567	1.4191	1.3653	1.3661	1.30212	1.32688			
		3A	1.3563	1.3022	1.3509	1.3509	1.3238	1.43750	1.42250	.....	1.4375	1.3563	1.4175	1.3634	1.3634	1.30200	1.31720	3B		
			1.3559	1.3015	1.3513	1.3505	1.3245	1.43738	1.42262	.....	1.4382	1.3567	1.4168	1.3630	1.3638	1.30212	1.31708			
1⁷⁄₁₆–12 or 1.4375–12	UN	2A	1.3816	1.3455	1.3757	1.3757	1.3577	1.43570	1.42430	.....	1.4375	1.3834	1.4271	1.3910	1.3910	1.34700	1.36500	2B	UN	1⁷⁄₁₆–12 or 1.4375–12
			1.3813	1.3449	1.3760	1.3754	1.3583	1.43558	1.42442	.....	1.4381	1.3837	1.4265	1.3907	1.3918	1.34712	1.36488			
		3A	1.3834	1.3473	1.3790	1.3790	1.3610	1.43750	1.42610	.....	1.4375	1.3834	1.4252	1.3891	1.3891	1.34700	1.35730	3B		
			1.3831	1.3467	1.3793	1.3787	1.3616	1.43738	1.42622	.....	1.4381	1.3837	1.4246	1.3888	1.3894	1.34712	1.35718			
1⁷⁄₁₆–16 or 1.4375–16	UN	2A	1.3953	1.3682	1.3901	1.3901	1.3766	1.43590	1.42650	.....	1.4375	1.3969	1.4308	1.4037	1.4037	1.37000	1.38400	2B	UN	1⁷⁄₁₆–16 or 1.4375–16
			1.3950	1.3676	1.3904	1.3898	1.3772	1.43578	1.42662	.....	1.4381	1.3972	1.4302	1.4034	1.4040	1.37012	1.38388			
		3A	1.3969	1.3698	1.3930	1.3930	1.3795	1.43750	1.42810	.....	1.4375	1.3969	1.4291	1.4020	1.4020	1.37000	1.37830	3B		
			1.3966	1.3692	1.3933	1.3927	1.3801	1.43738	1.42822	.....	1.4381	1.3972	1.4285	1.4017	1.4023	1.37012	1.37818			
1⁷⁄₁₆–18 or 1.4375–18	UNEF	2A	1.3999	1.3758	1.3949	1.3949	1.3829	1.43600	1.42730	.....	1.4375	1.4014	1.4320	1.4079	1.4079	1.37700	1.39000	2B	UNEF	1⁷⁄₁₆–18 or 1.4375–18
			1.3996	1.3753	1.3952	1.3946	1.3834	1.43588	1.42742	.....	1.4380	1.4017	1.4315	1.4076	1.4082	1.37712	1.38988			
		3A	1.4014	1.3773	1.3977	1.3977	1.3857	1.43750	1.42880	.....	1.4375	1.4014	1.4303	1.4062	1.4062	1.37700	1.38550	3B		
			1.4011	1.3768	1.3980	1.3974	1.3862	1.43738	1.42892	.....	1.4380	1.4017	1.4298	1.4059	1.4065	1.37712	1.38538			
1⁷⁄₁₆–20 or 1.4375–20	UN	2A	1.4036	1.3819	1.3988	1.3988	1.3880	1.43610	1.42800	.....	1.4375	1.4050	1.4329	1.4112	1.4112	1.38300	1.39500	2B	UN	1⁷⁄₁₆–20 or 1.4375–20
			1.4033	1.3814	1.3991	1.3985	1.3885	1.43598	1.42812	.....	1.4380	1.4053	1.4324	1.4109	1.4115	1.38312	1.39488			
		3A	1.4050	1.3833	1.4014	1.4014	1.3906	1.43750	1.42940	.....	1.4375	1.4050	1.4313	1.4096	1.4096	1.38300	1.39120	3B		
			1.4047	1.3828	1.4017	1.4011	1.3911	1.43738	1.42952	.....	1.4380	1.4053	1.4308	1.4093	1.4099	1.38312	1.39108			
1⁷⁄₁₆–28 or 1.4375–28	UN	2A	1.4130	1.3975	1.4088	1.4088	1.4011	1.43620	1.42970	.....	1.4375	1.4143	1.4353	1.4198	1.4198	1.39900	1.40700	2B	UN	1⁷⁄₁₆–28 or 1.4375–28
			1.4127	1.3970	1.4091	1.4085	1.4016	1.43608	1.42982	.....	1.4380	1.4146	1.4348	1.4195	1.4201	1.39912	1.40688			
		3A	1.4143	1.3988	1.4112	1.4112	1.4035	1.43750	1.43100	.....	1.4375	1.4143	1.4339	1.4184	1.4184	1.39900	1.40510	3B		
			1.4140	1.3983	1.4115	1.4109	1.4040	1.43738	1.43112	.....	1.4380	1.4146	1.4334	1.4181	1.4187	1.39912	1.40498			
1½–6 or 1.500–6	UNC	1A	1.3893	1.3171	1.3772	1.3772	1.3411	1.49760	1.47030	.....	1.5000	1.3917	1.4797	1.4075	1.4075	1.32000	1.35000	1B	UNC	1½–6 or 1.500–6
			1.3889	1.3163	1.3776	1.3768	1.3419	1.49748	1.47042	.....	1.5008	1.3921	1.4789	1.4071	1.4079	1.32012	1.34988			
		2A	1.3893	1.3171	1.3812	1.3812	1.3451	1.49760	1.47940	1.47030	1.5000	1.3917	1.4744	1.4022	1.4022	1.32000	1.35000	2B		
			1.3889	1.3163	1.3816	1.3808	1.3459	1.49748	1.47952	1.47042	1.5008	1.3921	1.4736	1.4018	1.4026	1.32012	1.34988			
		3A	1.3917	1.3195	1.3856	1.3856	1.3495	1.50000	1.48180	.....	1.5000	1.3917	1.4718	1.3996	1.3996	1.32000	1.33960	3B		
			1.3913	1.3187	1.3860	1.3852	1.3503	1.49988	1.48192	.....	1.5008	1.3921	1.4710	1.3992	1.4000	1.32012	1.33948			
1½–8 or 1.500–8	UN	2A	1.4166	1.3625	1.4093	1.4093	1.3822	1.49780	1.48280	1.47530	1.5000	1.4188	1.4824	1.4283	1.4283	1.36500	1.39000	2B	UN	1½–8 or 1.500–8
			1.4162	1.3618	1.4097	1.4089	1.3829	1.49768	1.48292	1.47542	1.5007	1.4192	1.4817	1.4279	1.4287	1.36512	1.38988			
		3A	1.4188	1.3647	1.4133	1.4133	1.3862	1.50000	1.48500	.....	1.5000	1.4188	1.4800	1.4259	1.4259	1.36500	1.37970	3B		
			1.4184	1.3640	1.4137	1.4129	1.3869	1.49988	1.48512	.....	1.5007	1.4192	1.4793	1.4255	1.4263	1.36512	1.37958			
1½–12 or 1.500–12	UNF	1A	1.4440	1.4079	1.4344	1.4344	1.4164	1.49810	1.48090	.....	1.5000	1.4459	1.4945	1.4584	1.4584	1.41000	1.42800	1B	UNF	1½–12 or 1.500–12
			1.4437	1.4073	1.4347	1.4341	1.4170	1.49798	1.48102	.....	1.5006	1.4462	1.4939	1.4581	1.4587	1.41012	1.42788			
		2A	1.4440	1.4079	1.4376	1.4376	1.4196	1.49810	1.48670	.....	1.5000	1.4459	1.4903	1.4542	1.4542	1.41000	1.42800	2B		
			1.4437	1.4073	1.4379	1.4373	1.4202	1.49798	1.48682	.....	1.5006	1.4462	1.4897	1.4539	1.4545	1.41012	1.42788			
		3A	1.4459	1.4098	1.4411	1.4411	1.4231	1.50000	1.48860	.....	1.5000	1.4459	1.4883	1.4522	1.4522	1.41000	1.41980	3B		
			1.4456	1.4092	1.4414	1.4408	1.4237	1.49988	1.48872	.....	1.5006	1.4462	1.4877	1.4519	1.4525	1.41012	1.41968			
1½–16 or 1.500–16	UN	2A	1.4578	1.4307	1.4526	1.4526	1.4391	1.49840	1.48900	.....	1.5000	1.4594	1.4933	1.4662	1.4662	1.43200	1.44600	2B	UN	1½–16 or 1.500–16
			1.4575	1.4301	1.4529	1.4523	1.4397	1.49828	1.48912	.....	1.5006	1.4597	1.4927	1.4659	1.4665	1.43212	1.44588			
		3A	1.4594	1.4323	1.4555	1.4555	1.4420	1.50000	1.49060	.....	1.5000	1.4594	1.4916	1.4645	1.4645	1.43200	1.44080	3B		
			1.4591	1.4317	1.4558	1.4552	1.4426	1.49988	1.49072	.....	1.5006	1.4597	1.4910	1.4642	1.4648	1.43212	1.44068			
1½–18 or 1.500–18	UNEF	2A	1.4624	1.4383	1.4574	1.4574	1.4454	1.49850	1.48980	.....	1.5000	1.4639	1.4945	1.4704	1.4704	1.44000	1.45200	2B	UNEF	1½–18 or 1.500–18
			1.4621	1.4378	1.4577	1.4571	1.4459	1.49838	1.48992	.....	1.5005	1.4642	1.4940	1.4701	1.4707	1.44012	1.45188			
		3A	1.4639	1.4398	1.4602	1.4602	1.4482	1.50000	1.49130	.....	1.5000	1.4639	1.4928	1.4687	1.4687	1.44000	1.44800	3B		
			1.4636	1.4393	1.4605	1.4599	1.4487	1.49988	1.49142	.....	1.5005	1.4642	1.4923	1.4684	1.4690	1.44012	1.44788			

TABLE III.12.—*Gages for standard thread series, Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	Class	Gages for external threads								Gages for internal threads							Class	Series designation	Nominal size and threads per inch
			X thread ring gages					Z plain ring gages for major diameter			X thread plug gages					Z plain plug gates for minor diameter				
			GO		LO, classes 1A and 2A NOT GO, class 3A			GO	NOT GO		GO		III			GO	NOT GO			
			Pitch diameter	Minor diameter	Pitch diameter		Minor diameter		Semi-finished	Unfinished hot-rolled material	Major diameter	Pitch diameter	Major diameter	Pitch diameter						
					Plus tolerance gage	Minus tolerance gage								Minus tolerance gage	Plus tolerance gage					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*			
1½–20 or 1.500–20	UN	2A	1.4661	1.4444	1.4613	1.4613	1.4505	1.49860	1.49050	----------	1.5000	1.4675	1.4954	1.4737	1.4737	1.44600	1.45700	2B	UN	1½–20 or 1.500–20
			1.4658	1.4439	1.4616	1.4610	1.4510	1.49848	1.49062	----------	1.5005	1.4678	1.4949	1.4734	1.4740	1.44612	1.45688			
		3A	1.4675	1.4458	1.4639	1.4639	1.4551	1.50000	1.49190	----------	1.5000	1.4675	1.4938	1.4721	1.4721	1.44600	1.45370	3B		
			1.4672	1.4453	1.4642	1.4636	1.4536	1.49988	1.49202	----------	1.5005	1.4678	1.4933	1.4718	1.4724	1.44612	1.45358			
1½–28 or 1.500–28	UN	2A	1.4755	1.4600	1.4713	1.4713	1.4636	1.49870	1.49220	----------	1.5000	1.4768	1.4978	1.4823	1.4823	1.46100	1.47000	2B	UN	1½–28 or 1.500–28
			1.4752	1.4595	1.4716	1.4710	1.4641	1.49858	1.49232	----------	1.5005	1.4771	1.4973	1.4820	1.4826	1.46112	1.46988			
		3A	1.4768	1.4613	1.4737	1.4737	1.4660	1.50000	1.49350	----------	1.5000	1.4768	1.4964	1.4809	1.4809	1.46100	1.46760	3B		
			1.4765	1.4608	1.4740	1.4734	1.4665	1.49988	1.49362	----------	1.5005	1.4771	1.4959	1.4806	1.4812	1.46112	1.46748			
1 9/16–6 or 1.5625–6	UN	2A	1.4518	1.3796	1.4436	1.4436	1.4075	1.56010	1.54190	----------	1.5625	1.4542	1.5370	1.4648	1.4648	1.38200	1.41300	2B	UN	1 9/16–6 or 1.5625–6
			1.4513	1.3788	1.4441	1.4431	1.4083	1.55994	1.54206	----------	1.5633	1.4547	1.5362	1.4643	1.4653	1.38216	1.41284			
		3A	1.4542	1.3820	1.4481	1.4481	1.4120	1.56250	1.54430	----------	1.5625	1.4542	1.5344	1.4622	1.4622	1.38200	1.40210	3B		
			1.4537	1.3812	1.4486	1.4476	1.4128	1.56234	1.54446	----------	1.5633	1.4547	1.5336	1.4617	1.4627	1.38216	1.40194			
1 9/16–8 or 1.5625–8	UN	2A	1.4791	1.4250	1.4717	1.4717	1.4446	1.56030	1.54530	----------	1.5625	1.4813	1.5450	1.4909	1.4909	1.42700	1.45200	2B	UN	1 9/16–8 or 1.5625–8
			1.4786	1.4243	1.4722	1.4712	1.4453	1.56014	1.54546	----------	1.5632	1.4818	1.5443	1.4904	1.4914	1.42716	1.45184			
		3A	1.4813	1.4272	1.4758	1.4758	1.4487	1.56250	1.54750	----------	1.5625	1.4813	1.5426	1.4885	1.4885	1.42700	1.44220	3B		
			1.4808	1.4265	1.4763	1.4753	1.4494	1.56234	1.54766	----------	1.5632	1.4818	1.5419	1.4880	1.4890	1.42716	1.44204			
1 9/16–12 or 1.5625–12	UN	2A	1.5066	1.4705	1.5007	1.5007	1.4827	1.56070	1.54930	----------	1.5625	1.5084	1.5521	1.5160	1.5160	1.47200	1.49000	2B	UN	1 9/16–12 or 1.5625–12
			1.5062	1.4699	1.5011	1.5003	1.4833	1.56054	1.54946	----------	1.5631	1.5088	1.5515	1.5156	1.5164	1.47216	1.48984			
		3A	1.5084	1.4723	1.5040	1.5040	1.4860	1.56250	1.55110	----------	1.5625	1.5084	1.5502	1.5141	1.5141	1.47200	1.48230	3B		
			1.5080	1.4717	1.5044	1.5036	1.4866	1.56234	1.55126	----------	1.5631	1.5088	1.5496	1.5137	1.5145	1.47216	1.48214			
1 9/16–16 or 1.5625–16	UN	2A	1.5203	1.4932	1.5151	1.5151	1.5016	1.56090	1.55150	----------	1.5625	1.5219	1.5558	1.5287	1.5287	1.49500	1.50900	2B	UN	1 9/16–16 or 1.5625–16
			1.5199	1.4926	1.5155	1.5147	1.5022	1.56074	1.55166	----------	1.5631	1.5223	1.5552	1.5283	1.5291	1.49516	1.50884			
		3A	1.5219	1.4948	1.5180	1.5180	1.5045	1.56250	1.55310	----------	1.5625	1.5219	1.5541	1.5270	1.5270	1.49500	1.50330	3B		
			1.5215	1.4942	1.5184	1.5176	1.5051	1.56234	1.55326	----------	1.5631	1.5223	1.5535	1.5266	1.5274	1.49516	1.50314			
1 9/16–18 or 1.5625–18	UNEF	2A	1.5249	1.5008	1.5199	1.5199	1.5079	1.56100	1.55230	----------	1.5625	1.5264	1.5570	1.5329	1.5329	1.50200	1.51500	2B	UNEF	1 9/16–18 or 1.5625–18
			1.5245	1.5003	1.5203	1.5195	1.5084	1.56084	1.55246	----------	1.5630	1.5268	1.5565	1.5325	1.5333	1.50216	1.51484			
		3A	1.5264	1.5023	1.5227	1.5227	1.5107	1.56250	1.55380	----------	1.5625	1.5264	1.5553	1.5312	1.5312	1.50200	1.51050	3B		
			1.5260	1.5018	1.5231	1.5223	1.5112	1.56234	1.55396	----------	1.5630	1.5268	1.5548	1.5308	1.5316	1.50216	1.51034			
1 9/16–20 or 1.5625–20	UN	2A	1.5286	1.5069	1.5238	1.5238	1.5130	1.56110	1.55300	----------	1.5625	1.5300	1.5579	1.5362	1.5362	1.50800	1.52000	2B	UN	1 9/16–20 or 1.5625–20
			1.5282	1.5064	1.5242	1.5234	1.5135	1.56094	1.55316	----------	1.5630	1.5304	1.5574	1.5358	1.5366	1.50816	1.51984			
		3A	1.5300	1.5083	1.5264	1.5264	1.5156	1.56250	1.55440	----------	1.5625	1.5300	1.5563	1.5346	1.5346	1.50800	1.51620	3B		
			1.5296	1.5078	1.5268	1.5260	1.5161	1.56234	1.55456	----------	1.5630	1.5304	1.5558	1.5342	1.5350	1.50816	1.51604			
1 5/8–6 or 1.625–6	UN	2A	1.5142	1.4420	1.5060	1.5060	1.4699	1.62250	1.60430	----------	1.6250	1.5167	1.5996	1.5274	1.5274	1.44500	1.47500	2B	UN	1 5/8–6 or 1.625–6
			1.5137	1.4412	1.5065	1.5055	1.4707	1.62234	1.60446	----------	1.6258	1.5172	1.5988	1.5269	1.5279	1.44516	1.47484			
		3A	1.5167	1.4445	1.5105	1.5105	1.4744	1.62500	1.60680	----------	1.6250	1.5167	1.5969	1.5247	1.5247	1.44500	1.46460	3B		
			1.5162	1.4437	1.5110	1.5100	1.4752	1.62484	1.60696	----------	1.6258	1.5172	1.5961	1.5242	1.5252	1.44516	1.46444			
1 5/8–8 or 1.625–8	UN	2A	1.5416	1.4875	1.5342	1.5342	1.5071	1.62280	1.60780	1.60030	1.6250	1.5438	1.6076	1.5535	1.5535	1.49000	1.51500	2B	UN	1 5/8–8 or 1.625–8
			1.5411	1.4868	1.5347	1.5337	1.5078	1.62264	1.60796	1.60046	1.6257	1.5443	1.6069	1.5530	1.5540	1.49016	1.51484			
		3A	1.5438	1.4897	1.5382	1.5382	1.5111	1.62500	1.61000	----------	1.6250	1.5438	1.6051	1.5510	1.5510	1.49000	1.50470	3B		
			1.5433	1.4890	1.5387	1.5377	1.5118	1.62484	1.61016	----------	1.6257	1.5443	1.6044	1.5505	1.5515	1.49016	1.50454			

1⅝–12 or 1.625–12	UN	2A	1.5691	1.5330	1.5632	1.5632	1.5452	1.62320	1.61180	.....	1.6250	1.5709	1.6146	1.5785	1.5785	1.53590	1.55300	2B	UN	1⅝–12 or 1.625–12
			1.5687	1.5324	1.5636	1.5628	1.5458	1.62304	1.61196	.....	1.6256	1.5713	1.6140	1.5781	1.5789	1.53516	1.55284			
		3A	1.5709	1.5348	1.5665	1.5665	1.5485	1.62500	1.61360	.....	1.6250	1.5709	1.6127	1.5766	1.5766	1.53500	1.54480	3B		
			1.5705	1.5342	1.5669	1.5661	1.5491	1.62484	1.61376	.....	1.6256	1.5713	1.6121	1.5762	1.5770	1.53516	1.54464			
1⅝–16 or 1.625–16	UN	2A	1.5828	1.5557	1.5776	1.5776	1.5641	1.62340	1.61400	.....	1.6250	1.5844	1.6183	1.5912	1.5912	1.55700	1.57100	2B	UN	1⅝–16 or 1.625–16
			1.5824	1.5551	1.5789	1.5772	1.5647	1.62324	1.61416	.....	1.6256	1.5848	1.6177	1.5908	1.5916	1.55716	1.57084			
		3A	1.5844	1.5573	1.5805	1.5805	1.5670	1.62500	1.61560	.....	1.6250	1.5844	1.6166	1.5895	1.5895	1.55700	1.56580	3B		
			1.5840	1.5567	1.5809	1.5801	1.5676	1.62484	1.61576	.....	1.6256	1.5848	1.6160	1.5891	1.5899	1.55716	1.56564			
1⅝–18 or 1.625–18	UNEF	2A	1.5874	1.5633	1.5824	1.5824	1.5704	1.62350	1.61480	.....	1.6250	1.5889	1.6195	1.5954	1.5954	1.56500	1.57800	2B	UNEF	1⅝–18 or 1.625–18
			1.5870	1.5628	1.5828	1.5820	1.5709	1.62334	1.61496	.....	1.6255	1.5893	1.6190	1.5950	1.5958	1.56516	1.57784			
		3A	1.5889	1.5648	1.5852	1.5852	1.5732	1.62500	1.61630	.....	1.6250	1.5889	1.6178	1.5937	1.5937	1.56500	1.57300	3B		
			1.5885	1.5643	1.5856	1.5848	1.5737	1.62484	1.61646	.....	1.6255	1.5893	1.6173	1.5933	1.5941	1.56516	1.57284			
1¾–20 or 1.625–20	UN	2A	1.5911	1.5694	1.5863	1.5863	1.5755	1.62360	1.61550	.....	1.6250	1.5925	1.6204	1.5987	1.5987	1.57100	1.58200	2B	UN	1⅝–20 or 1.625–20
			1.5907	1.5689	1.5867	1.5859	1.5760	1.62344	1.61566	.....	1.6255	1.5929	1.6199	1.5983	1.5991	1.57116	1.58184			
		3A	1.5925	1.5708	1.5889	1.5889	1.5781	1.62500	1.61690	.....	1.6250	1.5925	1.6188	1.5971	1.5971	1.57100	1.57870	3B		
			1.5921	1.5703	1.5893	1.5885	1.5786	1.62484	1.61706	.....	1.6255	1.5929	1.6183	1.5967	1.5975	1.57116	1.57854			
1 1/16–6 or 1.6875–6	UN	2A	1.5767	1.5045	1.5684	1.5684	1.5323	1.68500	1.66680	.....	1.6875	1.5792	1.6622	1.5900	1.5900	1.59700	1.53800	2B	UN	1 1/16–6 or 1.6875–6
			1.5762	1.5037	1.5689	1.5679	1.5331	1.68484	1.66696	.....	1.6883	1.5797	1.6614	1.5895	1.5905	1.59716	1.53784			
		3A	1.5792	1.5070	1.5730	1.5730	1.5369	1.68750	1.66930	.....	1.6875	1.5792	1.6595	1.5873	1.5873	1.59700	1.52710	3B		
			1.5787	1.5062	1.5735	1.5725	1.5377	1.68734	1.66946	.....	1.6883	1.5797	1.6587	1.5868	1.5878	1.59716	1.52694			
1 1/16–8 or 1.6875–8	UN	2A	1.6041	1.5500	1.5966	1.5966	1.5695	1.68530	1.67030	.....	1.6875	1.6063	1.6701	1.6169	1.6169	1.55200	1.57700	2B	UN	1 1/16–8 or 1.6875–8
			1.6036	1.5493	1.5971	1.5961	1.5702	1.68514	1.67046	.....	1.6882	1.6068	1.6694	1.6155	1.6165	1.55216	1.57684			
		3A	1.6063	1.5522	1.6007	1.6007	1.5736	1.68750	1.67250	.....	1.6875	1.6063	1.6677	1.6136	1.6136	1.55200	1.56720	3B		
			1.6058	1.5515	1.6012	1.6002	1.5743	1.68734	1.67266	.....	1.6882	1.6068	1.6670	1.6131	1.6141	1.55216	1.56704			
1 1/16–12 or 1.6875–12	UN	2A	1.6316	1.5955	1.6256	1.6256	1.6076	1.68570	1.67430	.....	1.6875	1.6334	1.6773	1.6412	1.6412	1.59700	1.61500	2B	UN	1 1/16–12 or 1.6875–12
			1.6312	1.5949	1.6260	1.6252	1.6082	1.68554	1.67446	.....	1.6881	1.6338	1.6767	1.6408	1.6416	1.59716	1.61484			
		3A	1.6334	1.5973	1.6289	1.6289	1.6109	1.68750	1.67610	.....	1.6875	1.6334	1.6753	1.6392	1.6392	1.59700	1.60730	3B		
			1.6330	1.5967	1.6293	1.6285	1.6115	1.68734	1.67626	.....	1.6881	1.6338	1.6747	1.6388	1.6396	1.59716	1.60714			
1 1/16–16 or 1.6875–16	UN	2A	1.6453	1.6182	1.6400	1.6400	1.6265	1.68590	1.67650	.....	1.6875	1.6469	1.6809	1.6538	1.6538	1.62000	1.63400	2B	UN	1 1/16–16 or 1.6875–16
			1.6449	1.6176	1.6404	1.6396	1.6271	1.68574	1.67666	.....	1.6881	1.6473	1.6803	1.6534	1.6542	1.62016	1.63384			
		3A	1.6469	1.6198	1.6429	1.6429	1.6294	1.68750	1.67810	.....	1.6875	1.6469	1.6792	1.6521	1.6521	1.62000	1.62830	3B		
			1.6465	1.6192	1.6433	1.6425	1.6300	1.68734	1.67826	.....	1.6881	1.6473	1.6786	1.6517	1.6525	1.62016	1.62814			
1 1/16–18 or 1.6875–18	UNEF	2A	1.6499	1.6258	1.6448	1.6448	1.6328	1.68600	1.67730	.....	1.6875	1.6514	1.6821	1.6580	1.6580	1.62700	1.64000	2B	UNEF	1 1/16–18 or 1.6875–18
			1.6495	1.6253	1.6452	1.6444	1.6333	1.68584	1.67746	.....	1.6880	1.6518	1.6816	1.6576	1.6584	1.62716	1.63984			
		3A	1.6514	1.6273	1.6476	1.6476	1.6356	1.68750	1.67880	.....	1.6875	1.6514	1.6804	1.6563	1.6563	1.62700	1.63550	3B		
			1.6510	1.6268	1.6480	1.6472	1.6361	1.68734	1.67896	.....	1.6880	1.6518	1.6799	1.6559	1.6567	1.62716	1.63534			
1 1/16–20 or 1 6875–20	UN	2A	1.6535	1.6318	1.6487	1.6487	1.6379	1.68600	1.67790	.....	1.6875	1.6559	1.6830	1.6613	1.6613	1.63300	1.64590	2B	UN	1 1/16–20 or 1.6875–20
			1.6531	1.6313	1.6491	1.6483	1.6384	1.68584	1.67806	.....	1.6889	1.6554	1.6825	1.6609	1.6617	1.63316	1.64484			
		3A	1.6550	1.6333	1.6514	1.6514	1.6406	1.68750	1.67940	.....	1.6875	1.6550	1.6814	1.6597	1.6597	1.63300	1.64120	3B		
			1.6546	1.6328	1.6518	1.6510	1.6411	1.68734	1.67956	.....	1.6880	1.6554	1.6809	1.6593	1.6601	1.63316	1.64104			
1¾–5 or 1.750–5	UNC	1A	1.6174	1.5308	1.6040	1.6040	1.5607	1.74730	1.71650	.....	1.7500	1.6201	1.7241	1.6375	1.6375	1.53400	1.56800	1B	UNC	1¾–5 or 1.750–5
			1.6169	1.5300	1.6045	1.6035	1.5615	1.74714	1.71666	.....	1.7508	1.6206	1.7233	1.6370	1.6380	1.53416	1.56784			
		2A	1.6174	1.5308	1.6085	1.6085	1.5652	1.74730	1.72680	1.71650	1.7500	1.6201	1.7183	1.6317	1.6317	1.53400	1.56800	2B		
			1.6169	1.5300	1.6090	1.6080	1.5660	1.74714	1.72696	1.71666	1.7508	1.6206	1.7175	1.6312	1.6322	1.53416	1.56784			
		3A	1.6201	1.5335	1.6134	1.6134	1.5701	1.75000	1.72950	.....	1.7500	1.6201	1.7154	1.6288	1.6288	1.53400	1.55750	3B		
			1.6196	1.5327	1.6139	1.6129	1.5709	1.74984	1.72966	.....	1.7508	1.6206	1.7146	1.6283	1.6293	1.53416	1.55734			
1¾–6 or 1.750–6	UN	2A	1.6392	1.5670	1.6309	1.6309	1.5948	1.74750	1.72930	.....	1.7500	1.6417	1.7247	1.6525	1.6525	1.57000	1.60000	2B	UN	1¾–6 or 1.750–6
			1.6387	1.5662	1.6314	1.6304	1.5956	1.74734	1.72946	.....	1.7508	1.6422	1.7239	1.6520	1.6530	1.57016	1.59984			
		3A	1.6417	1.5695	1.6354	1.6354	1.5993	1.75000	1.73180	.....	1.7500	1.6417	1.7220	1.6498	1.6498	1.57000	1.58960	3B		
			1.6412	1.5687	1.6359	1.6349	1.6001	1.74984	1.73196	.....	1.7508	1.6422	1.7212	1.6493	1.6503	1.57016	1.58944			
1¾–8 or 1.750–8	UN	2A	1.6665	1.6124	1.6590	1.6590	1.6319	1.74770	1.73270	1.72520	1.7500	1.6688	1.7327	1.6786	1.6786	1.61500	1.64000	2B	UN	1¾–8 or 1.750–8
			1.6660	1.6117	1.6595	1.6585	1.6326	1.74754	1.73286	1.72536	1.7507	1.6693	1.7320	1.6781	1.6791	1.61516	1.63984			
		3A	1.6688	1.6147	1.6631	1.6631	1.6360	1.75000	1.73500	.....	1.7500	1.6688	1.7303	1.6762	1.6762	1.61500	1.62970	3B		
			1.6683	1.6140	1.6636	1.6626	1.6367	1.74984	1.73516	.....	1.7507	1.6693	1.7296	1.6757	1.6767	1.61516	1.62954			
1¾–12 or 1.750–12	UN	2A	1.6941	1.6580	1.6881	1.6881	1.6701	1.74820	1.73680	.....	1.7500	1.6959	1.7398	1.7037	1.7037	1.66000	1.67800	2B	UN	1¾–12 or 1.750–12
			1.6937	1.6574	1.6885	1.6877	1.6707	1.74804	1.73696	.....	1.7506	1.6963	1.7392	1.7033	1.7041	1.66016	1.67784			
		3A	1.6959	1.6598	1.6914	1.6914	1.6734	1.75000	1.73860	.....	1.7500	1.6959	1.7378	1.7017	1.7017	1.66000	1.66980	3B		
			1.6955	1.6592	1.6918	1.6910	1.6740	1.74984	1.73876	.....	1.7506	1.6963	1.7372	1.7013	1.7021	1.66016	1.66964			
1¾–16 or 1.750–16	UN	2A	1.7078	1.6807	1.7025	1.7025	1.6890	1.74840	1.73900	.....	1.7500	1.7094	1.7434	1.7163	1.7163	1.68200	1.69600	2B	UN	1¾–16 or 1.750–16
			1.7074	1.6801	1.7029	1.7021	1.6896	1.74824	1.73916	.....	1.7506	1.7098	1.7428	1.7159	1.7167	1.68216	1.69584			
		3A	1.7094	1.6823	1.7054	1.7054	1.6919	1.75000	1.74060	.....	1.7500	1.7094	1.7417	1.7146	1.7146	1.68200	1.69080	3B		
			1.7090	1.6817	1.7058	1.7050	1.6925	1.74984	1.74076	.....	1.7506	1.7098	1.7411	1.7142	1.7150	1.68216	1.69064			

TABLE III.12.—*Gages for standard thread series, Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	Class	Gages for external threads								Gages for internal threads							Class	Series designation	Nominal size and threads per inch
			X thread ring gages					Z plain ring gages for major diameter			X thread plug gages					Z plain plug gages for minor diameter				
			GO		LO, classes 1A and 2A NOT GO, class 3A			GO	NOT GO		GO		III			GO	NOT GO			
			Pitch diameter	Minor diameter	Pitch diameter		Minor diameter		Semi-finished	Unfinished hot-rolled material	Major diameter	Pitch diameter	Major diameter	Pitch diameter						
					Plus tolerance gage	Minus tolerance gage								Minus tolerance gage	Plus tolerance gage					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*			
1¾–20 or 1.750–20	UN	2A	1.7160	1.6943	1.7112	1.7112	1.7004	1.74850	1.74040	----	1.7500	1.7175	1.7455	1.7238	1.7238	1.69600	1.70700	2B	UN	1¾–20 or 1.750–20
			1.7156	1.6938	1.7116	1.7108	1.7009	1.74834	1.74056	----	1.7505	1.7179	1.7450	1.7234	1.7242	1.69616	1.70684			
		3A	1.7175	1.6958	1.7139	1.7139	1.7031	1.75000	1.74190	----	1.7500	1.7175	1.7439	1.7222	1.7222	1.69600	1.70370	3B		
			1.7171	1.6953	1.7143	1.7135	1.7036	1.74984	1.74206	----	1.7505	1.7179	1.7434	1.7218	1.7226	1.69616	1.70354			
1 13/16–6 or 1.8125–6	UN	2A	1.7017	1.6295	1.6933	1.6933	1.6572	1.81000	1.79180	----	1.8125	1.7042	1.7873	1 7151	1.7151	1.63200	1.66300	2B	UN	1 13/16–6 or 1.8125–6
			1.7012	1.6287	1.6938	1.6928	1.6580	1.80984	1.79196	----	1.8133	1.7047	1.7865	1.7146	1.7156	1.63216	1.66284			
		3A	1.7042	1.6320	1.6979	1.6979	1.6618	1.81250	1.79430	----	1.8125	1.7042	1.7846	1.7124	1.7124	1.63200	1.65210	3B		
			1.7037	1.6312	1.6984	1.6974	1.6626	1.81234	1.79446	----	1.8133	1.7047	1.7838	1.7119	1.7129	1.63216	1.65194			
1 13/16–8 or 1.8125–8	UN	2A	1.7290	1.6749	1.7214	1.7214	1.6943	1.81020	1.79520	----	1.8125	1.7313	1.7953	1.7412	1.7412	1.67700	1.70200	2B	UN	1 13/16–8 or 1.8125–8
			1.7285	1.6742	1.7219	1.7209	1.6950	1.81004	1.79536	----	1.8132	1.7318	1.7946	1.7407	1.7417	1.67716	1.70184			
		3A	1.7313	1.6772	1.7256	1.7256	1.6985	1.81250	1.79750	----	1.8125	1.7313	1.7928	1.7387	1.7387	1.67700	1.69220	3B		
			1.7308	1.6765	1.7261	1.7251	1.6992	1.81234	1.79766	----	1.8132	1.7318	1.7921	1.7382	1.7392	1.67716	1.69204			
1 13/16–12 or 1.8125–12	UN	2A	1.7566	1.7205	1.7506	1.7506	1.7326	1.81070	1.79930	----	1.8125	1.7584	1.8023	1.7662	1.7662	1.72200	1.74000	2B	UN	1 13/16–12 or 1.8125–12
			1.7562	1.7199	1.7510	1.7502	1.7332	1.81054	1.79946	----	1.8131	1.7588	1.8017	1.7658	1.7666	1.72216	1.73984			
		3A	1.7584	1.7223	1.7539	1.7539	1.7359	1.81250	1.80110	----	1.8125	1.7584	1.8003	1.7642	1.7642	1.72200	1.73230	3B		
			1.7580	1.7217	1.7543	1.7535	1.7365	1.81234	1.80126	----	1.8131	1.7588	1.7997	1.7638	1.7646	1.72216	1.73214			
1 13/16–16 or 1.8125–16	UN	2A	1.7703	1.7432	1.7650	1.7650	1.7515	1.81090	1.80150	----	1.8125	1.7719	1.8059	1.7788	1.7788	1.74500	1.75900	2B	UN	1 13/16–16 or 1.8125–16
			1.7699	1.7426	1.7654	1.7646	1.7521	1.81074	1.80166	----	1.8131	1.7723	1.8053	1.7784	1.7792	1.74516	1.75884			
		3A	1.7719	1.7448	1.7679	1.7679	1.7544	1.81250	1.80310	----	1.8125	1.7719	1.8042	1.7771	1.7771	1.74500	1.75330	3B		
			1.7715	1.7442	1.7683	1.7675	1.7550	1.81234	1.80326	----	1.8131	1.7723	1.8036	1.7767	1.7775	1.74516	1.75314			
1 13/16–20 or 1.8125–20	UN	2A	1.7785	1.7568	1.7737	1.7737	1.7629	1.81100	1.80290	----	1.8125	1.7800	1.8080	1.7863	1.7863	1.75800	1.77000	2B	UN	1 13/16–20 or 1.8125–20
			1.7781	1.7563	1.7741	1.7733	1.7634	1.81084	1.80306	----	1.8130	1.7804	1.8075	1.7859	1.7867	1.75816	1.76984			
		3A	1.7800	1.7583	1.7764	1.7764	1.7656	1.81250	1.80440	----	1.8125	1.7800	1.8064	1.7847	1.7847	1.75800	1.76620	3B		
			1.7796	1.7578	1.7768	1.7760	1.7661	1.81234	1.80456	----	1.8130	1.7804	1.8059	1.7843	1.7851	1.75816	1.76604			
1⅞–6 or 1.875–6	UN	2A	1.7642	1.6920	1.7558	1.7558	1.7197	1.87259	1.85430	----	1.8750	1.7667	1.8499	1.7777	1.7777	1.69500	1.72500	2B	UN	1⅞–6 or 1.875–6
			1.7637	1.6912	1.7563	1.7553	1.7205	1.87234	1.85446	----	1.8758	1.7672	1.8491	1.7772	1.7782	1.69516	1.72484			
		3A	1.7667	1.6945	1.7604	1.7604	1.7243	1.87500	1.85680	----	1.8750	1.7667	1.8471	1.7749	1.7749	1.69500	1.71460	3B		
			1.7662	1.6937	1.7609	1.7599	1.7251	1.87484	1.85696	----	1.8758	1.7672	1.8463	1.7744	1.7754	1.69516	1.71444			
1⅞–8 or 1.875–8	UN	2A	1.7915	1.7374	1.7838	1.7838	1.7567	1.87270	1.85770	1.85020	1.8750	1.7938	1.8579	1.8038	1.8038	1.74000	1.76500	2B	UN	1⅞–8 or 1.875–8
			1.7910	1.7367	1.7843	1.7833	1.7574	1.87254	1.85786	1.85036	1.8757	1.7943	1.8572	1.8033	1.8043	1.74016	1.76484			
		3A	1.7938	1.7397	1.7881	1.7881	1.7610	1.87500	1.86000	----	1.8750	1.7938	1.8554	1.8013	1.8013	1.74000	1.75470	3B		
			1.7933	1.7390	1.7886	1.7876	1.7617	1.87484	1.86016	----	1.8757	1.7943	1.8547	1.8008	1.8018	1.74016	1.75454			
1⅞–12 or 1.875–12	UN	2A	1.8191	1.7830	1.8131	1.8131	1.7951	1.87320	1.86180	----	1.8750	1.8209	1.8648	1.8287	1.8287	1.78500	1.80300	2B	UN	1⅞–12 or 1.875–12
			1.8187	1.7824	1.8135	1.8127	1.7957	1.87304	1.86196	----	1.8756	1.8213	1.8642	1.8283	1.8291	1.78516	1.80284			
		3A	1.8209	1.7848	1.8164	1.8164	1.7984	1.87500	1.86360	----	1.8750	1.8209	1.8628	1.8267	1.8267	1.78500	1.79480	3B		
			1.8205	1.7842	1.8168	1.8160	1.7990	1.87484	1.86376	----	1.8756	1.8213	1.8622	1.8263	1.8271	1.78516	1.79464			
1⅞–16 or 1.875–16	UN	2A	1.8328	1.8057	1.8275	1.8275	1.8140	1.87340	1.86400	----	1.8750	1.8344	1.8684	1.8413	1.8413	1.80700	1.82100	2B	UN	1⅞–16 or 1.875–16
			1.8324	1.8051	1.8279	1.8271	1.8146	1.87324	1.86416	----	1.8756	1.8348	1.8678	1.8409	1.8417	1.80716	1.82084			
		3A	1.8344	1.8073	1.8304	1.8304	1.8169	1.87500	1.86560	----	1.8750	1.8344	1.8667	1.8396	1.8396	1.80700	1.81580	3B		
			1.8340	1.8067	1.8308	1.8300	1.8175	1.87484	1.86576	----	1.8756	1.8348	1.8661	1.8392	1.8400	1.80716	1.81564			

1⅞–20 or 1.875–20	UN	2A	1.8410	1.8193	1.8362	1.8362	1.8254	1.87350	1.86540		1.8750	1.8425	1.8705	1.8488	1.8488	1.82100	1.83200	2B	UN	1⅞–20 or 1.875–20
			1.8406	1.8188	1.8366	1.8358	1.8259	1.87334	1.86556		1.8755	1.8429	1.8700	1.8484	1.8492	1.82116	1.83184			
		3A	1.8425	1.8208	1.8389	1.8389	1.8281	1.87500	1.86690		1.8750	1.8425	1.8689	1.8472	1.8472	1.82100	1.82870	3B		
			1.8421	1.8203	1.8393	1.8385	1.8286	1.87484	1.86706		1.8755	1.8429	1.8684	1.8468	1.8476	1.82116	1.82854			
1 15/16–6 or 1.9375–6	UN	2A	1.8266	1.7544	1.8181	1.8181	1.7820	1.93490	1.91670		1.9375	1.8292	1.9125	1.8403	1.8403	1.75700	1.78800	2B	UN	1 15/16–6 or 1.9375–6
			1.8261	1.7536	1.8186	1.8176	1.7828	1.93474	1.91686		1.9383	1.8297	1.9117	1.8398	1.8408	1.75716	1.78784			
		3A	1.8292	1.7570	1.8228	1.8228	1.7867	1.93750	1.91930		1.9375	1.8292	1.9097	1.8375	1.8375	1.75700	1.77710	3B		
			1.8287	1.7562	1.8233	1.8223	1.7875	1.93734	1.91946		1.9383	1.8297	1.9089	1.8370	1.8380	1.75716	1.77694			
1 15/16–8 or 1.9375–8	UN	2A	1.8540	1.7999	1.8463	1.8463	1.8192	1.93520	1.92020		1.9375	1.8563	1.9204	1.8663	1.8663	1.80200	1.82700	2B	UN	1 15/16–8 or 1.9375–8
			1.8535	1.7992	1.8468	1.8458	1.8199	1.93504	1.92036		1.9382	1.8568	1.9197	1.8658	1.8668	1.80216	1.82684			
		3A	1.8563	1.8922	1.8505	1.8505	1.8234	1.93750	1.92250		1.9375	1.8563	1.9179	1.8638	1.8638	1.80200	1.81720	3B		
			1.8558	1.8015	1.8510	1.8500	1.8241	1.93734	1.92266		1.9382	1.8568	1.9172	1.8633	1.8643	1.80216	1.81704			
1 15/16–12 or 1.9375–12	UN	2A	1.8816	1.8455	1.8755	1.8755	1.8575	1.93570	1.92430		1.9375	1.8834	1.9274	1.8913	1.8913	1.84700	1.86590	2B	UN	1 15/16–12 or 1.9375–12
			1.8812	1.8449	1.8759	1.8751	1.8581	1.93554	1.92446		1.9381	1.8838	1.9268	1.8909	1.8917	1.84716	1.86484			
		3A	1.8834	1.8473	1.8789	1.8789	1.8609	1.93750	1.92610		1.9375	1.8834	1.9254	1.8893	1.8893	1.84700	1.85730	3B		
			1.8830	1.8467	1.8793	1.8785	1.8615	1.93734	1.92626		1.9381	1.8838	1.9248	1.8889	1.8897	1.84716	1.85714			
1 15/16–16 or 1.9375–16	UN	2A	1.8953	1.8682	1.8899	1.8899	1.8764	1.93590	1.92650		1.9375	1.8969	1.9310	1.9039	1.9039	1.87000	1.88400	2B	UN	1 15/16–16 or 1.9375–16
			1.8949	1.8676	1.8903	1.8895	1.8770	1.93574	1.92666		1.9381	1.8973	1.9304	1.9035	1.9043	1.87016	1.88384			
		3A	1.8969	1.8698	1.8929	1.8929	1.8794	1.93750	1.92810		1.9375	1.8969	1.9292	1.9021	1.9021	1.87000	1.87830	3B		
			1.8965	1.8692	1.8933	1.8925	1.8800	1.93734	1.92826		1.9381	1.8973	1.9286	1.9017	1.9025	1.87016	1.87814			
1 15/16–20 or 1.9375–20	UN	2A	1.9035	1.8818	1.8986	1.8986	1.8878	1.93600	1.92790		1.9375	1.9050	1.9331	1.9114	1.9114	1.88300	1.89500	2B	UN	1 15/16–20 or 1.9375–20
			1.9031	1.8813	1.8990	1.8982	1.8883	1.93584	1.92806		1.9380	1.9054	1.9326	1.9110	1.9118	1.88316	1.89484			
		3A	1.9050	1.8833	1.9013	1.9013	1.8905	1.93750	1.92940		1.9375	1.9050	1.9315	1.9098	1.9098	1.88300	1.89120	3B		
			1.9046	1.8828	1.9017	1.9009	1.8910	1.93734	1.92956		1.9380	1.9054	1.9310	1.9094	1.9102	1.88316	1.89104			
2–4½ or 2.000–4.5	UNC	1A	1.8528	1.7566	1.8385	1.8385	1.7904	1.99710	1.96410		2.0000	1.8557	1.9705	1.8743	1.8743	1.75900	1.79500	1B	UNC	2–4½ or 2.000–4.5
			1.8523	1.7558	1.8390	1.8380	1.7912	1.99694	1.96426		2.0008	1.8562	1.9697	1.8738	1.8748	1.75916	1.79484			
		2A	1.8528	1.7566	1.8433	1.8433	1.7952	1.99710	1.97510	1.96410	2.0000	1.8557	1.9643	1.8681	1.8681	1.75900	1.79500	2B		
			1.8523	1.7558	1.8438	1.8428	1.7960	1.99694	1.97526	1.96426	2.0008	1.8562	1.9635	1.8676	1.8686	1.75916	1.79484			
		3A	1.8557	1.7595	1.8486	1.8486	1.8005	2.00000	1.97800		2.0000	1.8557	1.9612	1.8650	1.8650	1.75900	1.78610	3B		
			1.8552	1.7587	1.8491	1.8481	1.8013	1.99984	1.97816		2.0008	1.8562	1.9604	1.8645	1.8655	1.75916	1.78594			
2–6 or 2.000–6	UN	2A	1.8891	1.8169	1.8805	1.8805	1.8444	1.99740	1.97920		2.0000	1.8917	1.9750	1.9028	1.9028	1.82000	1.85000	2B	UN	2–6 or 2.000–6
			1.8886	1.8161	1.8810	1.8800	1.8452	1.99724	1.97936		2.0008	1.8922	1.9742	1.9023	1.9033	1.82016	1.84984			
		3A	1.8917	1.8195	1.8853	1.8853	1.8492	2.00000	1.98180		2.0000	1.8917	1.9722	1.9000	1.9000	1.82000	1.83960	3B		
			1.8912	1.8187	1.8858	1.8848	1.8500	1.99984	1.98196		2.0008	1.8922	1.9714	1.8995	1.9005	1.82016	1.83944			
2–8 or 2.000–8	UN	2A	1.9165	1.8624	1.9087	1.9087	1.8816	1.99770	1.98270	1.97520	2.0000	1.9188	1.9830	1.9289	1.9289	1.86500	1.89000	2B	UN	2–8 or 2.000–8
			1.9160	1.8617	1.9092	1.9082	1.8823	1.99754	1.98286	1.97536	2.0007	1.9193	1.9823	1.9284	1.9294	1.86516	1.88984			
		3A	1.9188	1.8647	1.9130	1.9130	1.8859	2.00000	1.98500		2.0000	1.9188	1.9805	1.9264	1.9264	1.86500	1.87970	3B		
			1.9183	1.8640	1.9135	1.9125	1.8866	1.99984	1.98516		2.0007	1.9193	1.9798	1.9259	1.9269	1.86516	1.87954			
2–12 or 2.000–12	UN	2A	1.9441	1.9080	1.9380	1.9380	1.9200	1.99820	1.98680		2.0000	1.9459	1.9899	1.9538	1.9538	1.91000	1.92800	2B	UN	2–12 or 2.000–12
			1.9437	1.9074	1.9384	1.9376	1.9206	1.99804	1.98696		2.0006	1.9463	1.9893	1.9534	1.9542	1.91016	1.92784			
		3A	1.9459	1.9098	1.9414	1.9414	1.9234	2.00000	1.98860		2.0000	1.9459	1.9879	1.9518	1.9518	1.91000	1.91980	3B		
			1.9455	1.9092	1.9418	1.9410	1.9240	1.99984	1.98876		2.0006	1.9463	1.9873	1.9514	1.9522	1.91016	1.91964			
2–16 or 2.000–16	UN	2A	1.9578	1.9307	1.9524	1.9524	1.9389	1.99840	1.98900		2.0000	1.9594	1.9935	1.9664	1.9664	1.93200	1.94600	2B	UN	2–16 or 2.000–16
			1.9574	1.9301	1.9528	1.9520	1.9395	1.99824	1.98916		2.0006	1.9598	1.9929	1.9660	1.9668	1.93216	1.94584			
		3A	1.9594	1.9323	1.9554	1.9554	1.9419	2.00000	1.99060		2.0000	1.9594	1.9917	1.9646	1.9646	1.93200	1.94080	3B		
			1.9590	1.9317	1.9558	1.9550	1.9425	1.99984	1.99076		2.0006	1.9598	1.9911	1.9642	1.9650	1.93216	1.94064			
2–20 or 2.000–20	UN	2A	1.9660	1.9443	1.9611	1.9611	1.9503	1.99850	1.99040		2.0000	1.9675	1.9956	1.9739	1.9739	1.94600	1.95700	2B	UN	2–20 or 2.000–20
			1.9656	1.9438	1.9615	1.9607	1.9508	1.99834	1.99056		2.0005	1.9679	1.9951	1.9735	1.9743	1.94616	1.95684			
		3A	1.9675	1.9458	1.9638	1.9638	1.9530	2.00000	1.99190		2.0000	1.9675	1.9940	1.9723	1.9723	1.94600	1.95370	3B		
			1.9671	1.9453	1.9642	1.9634	1.9535	1.99984	1.99206		2.0005	1.9679	1.9935	1.9719	1.9727	1.94616	1.95354			
2⅛–6 or 2.125–6	UN	2A	2.0141	1.9419	2.0054	2.0054	1.9693	2.12240	2.10420		2.1250	2.0167	2.1002	2.0280	2.0280	1.94500	1.97500	2B	UN	2⅛–6 or 2.125–6
			2.0136	1.9411	2.0059	2.0049	1.9701	2.12224	2.10436		2.1258	2.0172	2.0994	2.0275	2.0285	1.94516	1.97484			
		3A	2.0167	1.9445	2.0102	2.0102	1.9741	2.12500	2.10680		2.1250	2.0167	2.0973	2.0251	2.0251	1.94500	1.96460	3B		
			2.0162	1.9437	2.0107	2.0097	1.9749	2.12484	2.10696		2.1258	2.0172	2.0965	2.0246	2.0256	1.94516	1.96444			
2⅛–8 or 2.125–8	UN	2A	2.0414	1.9873	2.0335	2.0335	2.0064	2.12260	2.10760	2.10010	2.1250	2.0438	2.1081	2.0540	2.0540	1.99000	2.01500	2B	UN	2⅛–8 or 2.125–8
			2.0409	1.9866	2.0340	2.0330	2.0071	2.12244	2.10776	2.10026	2.1257	2.0443	2.1074	2.0535	2.0545	1.99016	2.01484			
		3A	2.0438	1.9897	2.0379	2.0379	2.0108	2.12500	2.11000		2.1250	2.0438	2.1056	2.0515	2.0515	1.99000	2.00470	3B		
			2.0433	1.9890	2.0384	2.0374	2.0115	2.12484	2.11016		2.1257	2.0443	2.1049	2.0510	2.0520	1.99016	2.00454			
2⅛–12 or 2.125–12	UN	2A	2.0691	2.0330	2.0630	2.0630	2.0450	2.12320	2.11180		2.1250	2.0709	2.1149	2.0788	2.0788	2.03500	2.05300	2B	UN	2⅛–12 or 2.125–12
			2.0687	2.0324	2.0634	2.0626	2.0456	2.12304	2.11196		2.1256	2.0713	2.1143	2.0784	2.0792	2.03516	2.05284			
		3A	2.0709	2.0348	2.0664	2.0664	2.0484	2.12500	2.11360		2.1250	2.0709	2.1129	2.0768	2.0768	2.03500	2.04480	3B		
			2.0705	2.0342	2.0668	2.0660	2.0490	2.12484	2.11376		2.1256	2.0713	2.1123	2.0764	2.0772	2.03516	2.04464			

TABLE III.12.—*Gages for standard thread series, Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	Class	Gages for external threads								Gages for internal threads							Class	Series designation	Nominal size and threads per inch
			X thread ring gages					Z plain ring gages for major diameter			X thread plug gages					Z plain plug gages for minor diameter				
			GO		LO, classes 1A and 2A NOT GO, class 3A			GO	NOT GO		GO		HI			GO	NOT GO			
			Pitch diameter	Minor diameter	Pitch diameter		Minor diameter		Semi-finished	Unfinished hot-rolled material	Major diameter	Pitch diameter	Major diameter	Pitch diameter						
					Plus tolerance gage	Minus tolerance gage								Minus tolerance gage	Plus tolerance gage					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*			
2⅛–16 or 2.125–16	UN	2A	2.0828	2.0557	2.0774	2.0774	2.0639	2.12340	2.11400	----------	2.1250	2.0844	2.1185	2.0914	2.0914	2.05700	2.07100	2B	UN	2⅛–16 or 2.125–16
		3A	2.0824	2.0551	2.0778	2.0770	2.0645	2.12324	2.11416	----------	2.1256	2.0848	2.1179	2.0910	2.0918	2.05716	2.07084	3B		
			2.0841	2.0573	2.0804	2.0804	2.0669	2.12500	2.11560	----------	2.1250	2.0844	2.1167	2.0896	2.0896	2.05709	2.06580			
			2.0840	2.0567	2.0808	2.0800	2.0675	2.12484	2.11576	----------	2.1256	2.0848	2.1161	2.0892	2.0900	2.05716	2.06564			
2⅛–20 or 2.125–20	UN	2A	2.0910	2.0693	2.0861	2.0861	2.0753	2.12350	2.11540	----------	2.1250	2.0925	2.1206	2.0989	2.0989	2.07100	2.08200	2B	UN	2⅛–20 or 2.125–20
		3A	2.0906	2.0688	2.0865	2.0857	2.0758	2.12334	2.11556	----------	2.1255	2.0929	2.1201	2.0985	2.0993	2.07116	2.08184	3B		
			2.0925	2.0708	2.0888	2.0888	2.0780	2.12500	2.11690	----------	2.1250	2.0925	2.1190	2.0973	2.0973	2.07100	2.07870			
			2.0921	2.0703	2.0892	2.0884	2.0785	2.12484	2.11706	----------	2.1255	2.0929	2.1185	2.0969	2.0977	2.07116	2.07854			
2¼–4½ or 2.250–4.5	UNC	1A	2.1028	2.0066	2.0882	2.0882	2.0401	2.24710	2.21410	----------	2.2500	2.1057	2.2209	2.1247	2.1247	2.00900	2.04500	1B	UNC	2¼–4½ or 2.250–4.5
		2A	2.1023	2.0058	2.0887	2.0877	2.0409	2.24694	2.21426	----------	2.2508	2.1062	2.2201	2.1242	2.1252	2.00916	2.04484	2B		
			2.1028	2.0066	2.0931	2.0931	2.0450	2.24700	2.22510	2.21410	2.2500	2.1057	2.2145	2.1183	2.1183	2.00900	2.04500			
		3A	2.1023	2.0058	2.0936	2.0926	2.0458	2.24694	2.22526	2.21426	2.2508	2.1062	2.2137	2.1178	2.1188	2.00916	2.04484	3B		
			2.1057	2.0095	2.0984	2.0984	2.0503	2.25040	2.22800	----------	2.2500	2.1057	2.2114	2.1152	2.1152	2.00900	2.03610			
			2.1052	2.0087	2.0989	2.0979	2.0511	2.24984	2.22816	----------	2.2508	2.1062	2.2106	2.1147	2.1157	2.00916	2.03594			
2¼–6 or 2.250–6	UN	2A	2.1391	2.0669	2.1303	2.1303	2.0942	2.24740	2.22920	----------	2.2500	2.1417	2.2253	2.1531	2.1531	2.07000	2.10000	2B	UN	2¼–6 or 2.250–6
		3A	2.1386	2.0661	2.1308	2.1298	2.0950	2.24724	2.22936	----------	2.2508	2.1422	2.2245	2.1526	2.1536	2.07016	2.09984	3B		
			2.1417	2.0695	2.1351	2.1351	2.0990	2.25000	2.23180	----------	2.2500	2.1417	2.2224	2.1502	2.1502	2.07000	2.08960			
			2.1412	2.0687	2.1356	2.1346	2.0998	2.24984	2.23196	----------	2.2508	2.1422	2.2216	2.1497	2.1507	2.07016	2.08944			
2¼–8 or 2.250–8	UN	2A	2.1664	2.1123	2.1584	2.1584	2.1313	2.24760	2.23260	2.22510	2.2500	2.1688	2.2333	2.1792	2.1792	2.11500	2.14000	2B	UN	2¼–8 or 2.250–8
		3A	2.1659	2.1116	2.1589	2.1579	2.1320	2.24744	2.23276	2.22526	2.2507	2.1693	2.2326	2.1787	2.1797	2.11516	2.13984	3B		
			2.1688	2.1147	2.1628	2.1628	2.1357	2.25000	2.23500	----------	2.2500	2.1688	2.2307	2.1766	2.1766	2.11500	2.12970			
			2.1683	2.1140	2.1633	2.1623	2.1364	2.24984	2.23516	----------	2.2507	2.1693	2.2300	2.1761	2.1771	2.11516	2.12954			
2¼–12 or 2.250–12	UN	2A	2.1941	2.1580	2.1880	2.1880	2.1700	2.24820	2.23680	----------	2.2500	2.1959	2.2399	2.2038	2.2038	2.16000	2.17800	2B	UN	2¼–12 or 2.250–12
		3A	2.1937	2.1574	2.1884	2.1876	2.1706	2.24804	2.23696	----------	2.2506	2.1963	2.2393	2.2034	2.2042	2.16016	2.17784	3B		
			2.1959	2.1598	2.1914	2.1914	2.1734	2.25000	2.23860	----------	2.2500	2.1959	2.2379	2.2018	2.2018	2.16000	2.16980			
			2.1955	2.1592	2.1918	2.1910	2.1740	2.24984	2.23876	----------	2.2506	2.1963	2.2373	2.2014	2.2022	2.16016	2.16964			
2¼–16 or 2.250–16	UN	2A	2.2078	2.1807	2.2024	2.2021	2.1889	2.24840	2.23900	----------	2.2500	2.2094	2.2435	2.2164	2.2164	2.18200	2.19600	2B	UN	2¼–16 or 2.250–16
		3A	2.2074	2.1801	2.2028	2.2020	2.1895	2.24824	2.23916	----------	2.2506	2.2098	2.2429	2.2160	2.2168	2.18216	2.19584	3B		
			2.2094	2.1823	2.2054	2.2054	2.1919	2.25000	2.24060	----------	2.2500	2.2094	2.2417	2.2146	2.2146	2.18200	2.19680			
			2.2090	2.1817	2.2058	2.2050	2.1925	2.24984	2.24076	----------	2.2506	2.2098	2.2411	2.2142	2.2150	2.18216	2.19064			
2¼–20 or 2.250–20	UN	2A	2.2160	2.1943	2.2111	2.2111	2.2003	2.24850	2.24040	----------	2.2500	2.2175	2.2456	2.2239	2.2239	2.19600	2.20700	2B	UN	2¼–20 or 2.250–20
		3A	2.2156	2.1938	2.2115	2.2107	2.2008	2.24834	2.24056	----------	2.2505	2.2179	2.2451	2.2235	2.2243	2.19616	2.20684	3B		
			2.2175	2.1958	2.2138	2.2138	2.2030	2.25000	2.24190	----------	2.2500	2.2175	2.2440	2.2223	2.2223	2.19600	2.20370			
			2.2171	2.1953	2.2142	2.2134	2.2035	2.24984	2.24206	----------	2.2505	2.2179	2.2435	2.2219	2.2227	2.19616	2.20354			
2⅜–6 or 2.375–6	UN	2A	2.2640	2.1918	2.2551	2.2551	2.2190	2.37230	2.35410	----------	2.3750	2.2667	2.3504	2.2782	2.2782	2.19500	2.22600	2B	UN	2⅜–6 or 2.375–6
		3A	2.2635	2.1910	2.2556	2.2546	2.2198	2.37214	2.35426	----------	2.3758	2.2672	2.3496	2.2777	2.2787	2.19516	2.22584	3B		
			2.2667	2.1945	2.2601	2.2601	2.2240	2.37500	2.35680	----------	2.3750	2.2667	2.3475	2.2753	2.2753	2.19500	2.21460			
			2.2662	2.1937	2.2606	2.2596	2.2248	2.37484	2.35696	----------	2.3758	2.2672	2.3467	2.2748	2.2758	2.19516	2.21444			
2⅜–8 or 2.375–8	UN	2A	2.2914	2.2373	2.2833	2.2833	2.2562	2.37260	2.35760	----------	2.3750	2.2938	2.3584	2.3043	2.3043	2.24000	2.26500	2B	UN	2⅜–8 or 2.375–8
		3A	2.2909	2.2366	2.2838	2.2828	2.2569	2.37244	2.35776	----------	2.3757	2.2943	2.3577	2.3038	2.3048	2.24016	2.26484	3B		
			2.2938	2.2397	2.2878	2.2878	2.2607	2.37500	2.36000	----------	2.3750	2.2938	2.3558	2.3017	2.3017	2.24000	2.25470			
			2.2933	2.2390	2.2883	2.2873	2.2614	2.37484	2.36016	----------	2.3757	2.2943	2.3551	2.3012	2.3022	2.24016	2.25454			

2⅜–12 or 2.375–12	UN	2A	2.3190	2.2829	2.3128	2.3128	2.2948	2.37310	2.36170		2.3750	2.3209	2.3651	2.3290	2.3290	2.28500	2.30300	2B	UN	2⅜–12 or 2.375–12
			2.3186	2.2823	2.3132	2.3124	2.2954	2.37294	2.36186		2.3756	2.3213	2.3645	2.3286	2.3294	2.28516	2.30284			
		3A	2.3209	2.2848	2.3163	2.3163	2.2983	2.37500	2.36360		2.3750	2.3209	2.3630	2.3269	2.3269	2.28500	2.29480	3B		
			2.3205	2.2842	2.3167	2.3159	2.2989	2.37484	2.36376		2.3756	2.3213	2.3624	2.3265	2.3273	2.28516	2.29464			
2⅜–16 or 2.375–16	UN	2A	2.3327	2.3056	2.3272	2.3272	2.3137	2.37330	2.36390		2.3750	2.3344	2.3687	2.3416	2.3416	2.30700	2.32100	2B	UN	2⅜–16 or 2.375–16
			2.3323	2.3050	2.3276	2.3268	2.3143	2.37314	2.36406		2.3756	2.3348	2.3681	2.3412	2.3420	2.30716	2.32084			
		3A	2.3344	2.3073	2.3303	2.3303	2.3168	2.37500	2.36560		2.3750	2.3344	2.3669	2.3398	2.3398	2.30700	2.31580	3B		
			2.3340	2.3067	2.3307	2.3299	2.3174	2.37484	2.36576		2.3756	2.3348	2.3663	2.3394	2.3402	2.30716	2.31564			
2⅜–20 or 2.375–20	UN	2A	2.3410	2.3193	2.3359	2.3359	2.3251	2.37350	2.36540		2.3750	2.3425	2.3708	2.3491	2.3491	2.32100	2.33200	2B	UN	2⅜–20 o 2.375–20
			2.3406	2.3188	2.3363	2.3355	2.3256	2.37334	2.36556		2.3755	2.3429	2.3703	2.3487	2.3495	2.32116	2.33184			
		3A	2.3425	2.3208	2.3387	2.3387	2.3279	2.37500	2.36690		2.3750	2.3425	2.3692	2.3475	2.3475	2.32100	2.32870	3B		
			2.3421	2.3203	2.3391	2.3383	2.3284	2.37484	2.36706		2.3755	2.3429	2.3687	2.3471	2.3479	2.32116	2.32854			
2½–4 or 2.500–4	UNC	1A	2.3345	2.2262	2.3190	2.3190	2.2649	2.49690	2.46120		2.5000	2.3376	2.4661	2.3578	2.3578	2.22900	2.26700	1B	UNC	2½–4 or 2.500–4
			2.3340	2.2253	2.3195	2.3185	2.2658	2.49674	2.46136		2.5009	2.3381	2.4652	2.3573	2.3583	2.22916	2.26684			
		2A	2.3345	2.2262	2.3241	2.3241	2.2700	2.49690	2.47310	2.46120	2.5000	2.3376	2.4594	2.3511	2.3511	2.22900	2.26700	2B		
			2.3340	2.2253	2.3246	2.3236	2.2709	2.49674	2.47326	2.46136	2.5009	2.3381	2.4585	2.3506	2.3516	2.22916	2.26684			
		3A	2.3376	2.2293	2.3298	2.3298	2.2757	2.50000	2.47620		2.5000	2.3376	2.4560	2.3477	2.3477	2.22900	2.25940	3B		
			2.3371	2.2284	2.3303	2.3293	2.2766	2.49984	2.47636		2.5009	2.3381	2.4551	2.3472	2.3482	2.22916	2.25924			
2½–6 or 2.500–6	UN	2A	2.3890	2.3168	2.3800	2.3800	2.3439	2.49730	2.47910		2.5000	2.3917	2.4755	2.4033	2.4033	2.32000	2.35000	2B	UN	2½–6 or 2.500–6
			2.3885	2.3160	2.3805	2.3795	2.3447	2.49714	2.47926		2.5008	2.3922	2.4747	2.4028	2.4138	2.32016	2.34984			
		3A	2.3917	2.3195	2.3850	2.3850	2.3489	2.50000	2.48180		2.5000	2.3917	2.4726	2.4004	2.4004	2.32000	2.33960	3B		
			2.3912	2.3187	2.3855	2.3845	2.3497	2.49984	2.48196		2.5008	2.3922	2.4718	2.3999	2.4009	2.32016	2.33944			
2½–8 or 2.500–8	UN	2A	2.4164	2.3623	2.4082	2.4082	2.3811	2.49760	2.48260	2.47510	2.5000	2.4188	2.4835	2.4294	2.4294	2.36500	2.39000	2B	UN	2½–8 or 2.500–8
			2.4159	2.3616	2.4087	2.4077	2.3818	2.49744	2.48276	2.47526	2.5007	2.4193	2.4828	2.4289	2.4299	2.36516	2.38984			
		3A	2.4188	2.3647	2.4127	2.4127	2.3856	2.50000	2.48500		2.5000	2.4188	2.4809	2.4268	2.4268	2.36500	2.37970	3B		
			2.4183	2.3640	2.4132	2.4122	2.3863	2.49984	2.48516		2.5007	2.4193	2.4802	2.4263	2.4273	2.36516	2.37954			
2½–12 or 2.500–12	UN	2A	2.4440	2.4079	2.4378	2.4378	2.4198	2.49810	2.48670		2.5000	2.4459	2.4901	2.4540	2.4540	2.41000	2.42800	2B	UN	2½–12 or 2.500–12
			2.4436	2.4073	2.4382	2.4374	2.4204	2.49794	2.48686		2.5006	2.4463	2.4895	2.4536	2.4544	2.41016	2.42784			
		3A	2.4459	2.4098	2.4413	2.4413	2.4233	2.50000	2.48860		2.5000	2.4459	2.4880	2.4519	2.4519	2.41000	2.41980	3B		
			2.4455	2.4092	2.4417	2.4409	2.4239	2.49984	2.48876		2.5006	2.4463	2.4874	2.4515	2.4523	2.41016	2.41964			
2½–16 or 2.500–16	UN	2A	2.4577	2.4306	2.4522	2.4522	2.4387	2.49830	2.48890		2.5000	2.4594	2.4937	2.4666	2.4666	2.43200	2.44600	2B	UN	2½–16 or 2.500–16
			2.4573	2.4300	2.4526	2.4518	2.4393	2.49814	2.48906		2.5006	2.4598	2.4931	2.4662	2.4670	2.43216	2.44584			
		3A	2.4594	2.4323	2.4553	2.4553	2.4418	2.50000	2.49060		2.5000	2.4594	2.4919	2.4648	2.4648	2.43200	2.44080	3B		
			2.4590	2.4317	2.4557	2.4549	2.4424	2.49984	2.49076		2.5006	2.4598	2.4913	2.4644	2.4652	2.43216	2.44064			
2½–20 or 2.500–20	UN	2A	2.4660	2.4443	2.4609	2.4609	2.4501	2.49850	2.49040		2.5000	2.4675	2.4958	2.4741	2.4741	2.44600	2.45700	2B	UN	2½–20 or 2.500–20
			2.4656	2.4438	2.4613	2.4605	2.4506	2.49834	2.49056		2.5005	2.4679	2.4953	2.4737	2.4745	2.44616	2.45684			
		3A	2.4675	2.4458	2.4637	2.4637	2.4529	2.50000	2.49190		2.5000	2.4675	2.4942	2.4725	2.4725	2.44600	2.45370	3B		
			2.4671	2.4453	2.4641	2.4633	2.4534	2.49984	2.49206		2.5005	2.4679	2.4937	2.4721	2.4729	2.44616	2.45354			
2⅝–6 or 2.625–6	UN	2A	2.5140	2.4418	2.5050	2.5050	2.4689	2.6223	2.6041		2.6250	2.5167	2.6007	2.5285	2.5285	2.4450	2.4750	2B	UN	2⅝–6 or 2.625–6
			2.5135	2.4410	2.5055	2.5045	2.4697	2.6221	2.6043		2.6258	2.5172	2.5999	2.5280	2.5290	2.4452	2.4748			
		3A	2.5167	2.4445	2.5099	2.5099	2.4738	2.6250	2.6068		2.6250	2.5167	2.5977	2.5255	2.5255	2.4450	2.4646	3B		
			2.5162	2.4437	2.5104	2.5094	2.4746	2.6248	2.6070		2.6258	2.5172	2.5969	2.5250	2.5260	2.4452	2.4644			
2⅝–8 or 2.625–8	UN	2A	2.5413	2.4872	2.5331	2.5331	2.5060	2.6225	2.6075		2.6250	2.5438	2.6086	2.5545	2.5545	2.4900	2.5150	2B	UN	2⅝–8 or 2.625–8
			2.5408	2.4865	2.5336	2.5326	2.5067	2.6223	2.6077		2.6257	2.5443	2.6079	2.5540	2.5550	2.4902	2.5148			
		3A	2.5438	2.4897	2.5376	2.5376	2.5105	2.6250	2.6100		2.6250	2.5438	2.6059	2.5518	2.5518	2.4900	2.5047	3B		
			2.5433	2.4890	2.5381	2.5371	2.5112	2.6248	2.6102		2.6257	2.5443	2.6052	2.5513	2.5523	2.4902	2.5045			
2⅝–12 or 2.625–12	UN	2A	2.5690	2.5329	2.5628	2.5628	2.5448	2.6231	2.6117		2.6250	2.5709	2.6151	2.5790	2.5790	2.5350	2.5530	2B	UN	2⅝–12 or 2.625–12
			2.5686	2.5323	2.5632	2.5624	2.5454	2.6229	2.6119		2.6256	2.5713	2.6145	2.5786	2.5794	2.5352	2.5528			
		3A	2.5709	2.5348	2.5663	2.5663	2.5483	2.6250	2.6136		2.6250	2.5709	2.6130	2.5769	2.5769	2.5350	2.5448	3B		
			2.5705	2.5342	2.5667	2.5659	2.5489	2.6248	2.6138		2.6256	2.5713	2.6124	2.5765	2.5773	2.5352	2.5446			
2⅝–16 or 2.625–16	UN	2A	2.5827	2.5556	2.5772	2.5772	2.5637	2.6233	2.6139		2.6250	2.5844	2.6187	2.5916	2.5916	2.5570	2.5710	2B	UN	2⅝–16 or 2.625–16
			2.5823	2.5550	2.5776	2.5768	2.5643	2.6231	2.6141		2.6256	2.5848	2.6181	2.5912	2.5920	2.5572	2.5708			
		3A	2.5844	2.5573	2.5803	2.5803	2.5668	2.6250	2.6156		2.6250	2.5844	2.6169	2.5898	2.5898	2.5570	2.5658	3B		
			2.5840	2.5567	2.5807	2.5799	2.5674	2.6248	2.6158		2.6256	2.5848	2.6163	2.5894	2.5902	2.5572	2.5656			
2⅝–20 or 2.625–20	UN	2A	2.5910	2.5693	2.5859	2.5859	2.5751	2.6235	2.6154		2.6250	2.5925	2.6208	2.5991	2.5991	2.5710	2.5820	2B	UN	2⅝–20 or 2.625–20
			2.5906	2.5688	2.5863	2.5855	2.5756	2.6233	2.6156		2.6255	2.5929	2.6203	2.5987	2.5995	2.5712	2.5818			
		3A	2.5925	2.5708	2.5887	2.5887	2.5779	2.6250	2.6169		2.6250	2.5925	2.6192	2.5975	2.5975	2.5710	2.5787	3B		
			2 5921	2.5703	2.5891	2.5883	2.5784	2.6248	2.6171		2.6255	2.5929	2.6187	2.5971	2.5979	2.5712	2.5785			
2¾–4 or 2.750–4	UNC	1A	2.5844	2.4761	2.5686	2.5686	2.5145	2.7468	2.7111		2.7500	2.5876	2.7165	2.6082	2.6082	2.4790	2.5170	1B	UNC	2¾–4 or 2.750–4
			2.5839	2.4752	2.5691	2.5681	2.5154	2.7466	2.7113		2.7509	2.5881	2.7156	2.6077	2.6087	2.4792	2.5168			
		2A	2.5844	2.4761	2.5739	2.5739	2.5198	2.7468	2.7230	2.7111	2.7500	2.5876	2.7096	2.6013	2.6013	2.4790	2.5170	2B		
			2.5839	2.4752	2.5744	2.5734	2.5207	2.7466	2.7232	2.7113	2.7509	2.5881	2.7087	2.6008	2.6018	2.4792	2.5168			
		3A	2.5876	2.4793	2.5797	2.5797	2.5256	2.7500	2.7262		2.7500	2.5876	2.7062	2.5979	2.5879	2.4790	2.5094	3B		
			2.5871	2.4784	2.5802	2.5792	2.5265	2.7498	2.7264		2.7509	2.5881	2.7053	2.5974	2.5984	2.4792	2.5092			

TABLE III.12.—*Gages for standard thread series, Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	Class	Gages for external threads								Gages for internal threads							Class	Series designation	Nominal size and threads per inch
			X thread ring gages					Z plain ring gages for major diameter			X thread plug gages					Z plain plug gages for minor diameter				
			GO		LO, classes 1A and 2A NOT GO, class 3A			GO	NOT GO		GO		HI			GO	NOT GO			
			Pitch diameter	Minor diameter	Pitch diameter		Minor diameter		Semi-finished	Unfinished hot-rolled material	Major diameter	Pitch diameter	Major diameter	Pitch diameter						
					Plus tolerance gage	Minus tolerance gage								Minus tolerance gage	Plus tolerance gage					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*			
2¾–6 or 2.750-6	UN	2A	2.6390	2.5668	2.6299	2.6299	2.5938	2.7473	2.7291	----------	2.7500	2.6417	2.7258	2.6536	2.6536	2.5700	2.6000	2B	UN	2¾–6 or 2.750–6
			2.6385	2.5660	2.6304	2.6294	2.5946	2.7471	2.7293	----------	2.7508	2.6422	2.7250	2.6531	2.6541	2.5702	2.5998			
		3A	2.6417	2.5695	2.6349	2.6349	2.5988	2.7500	2.7318	----------	2.7500	2.6417	2.7228	2.6506	2.6506	2.5700	2.5896	3B		
			2.6412	2.5687	2.6354	2.6344	2.5996	2.7498	2.7320	----------	2.7508	2.6422	2.7220	2.6501	2.6511	2.5702	2.5894			
2¾–8 or 2.750–8	UN	2A	2.6663	2.6122	2.6580	2.6580	2.6309	2.7475	2.7325	2.7250	2.7500	2.6688	2.7337	2.6796	2.6796	2.6150	2.6400	2B	UN	2¾–8 or 2.750–8
			2.6658	2.6115	2.6585	2.6575	2.6316	2.7473	2.7327	2.7252	2.7507	2.6693	2.7330	2.6791	2.6801	2.6152	2.6398			
		3A	2.6688	2.6147	2.6625	2.6625	2.6354	2.7500	2.7350	----------	2.7500	2.6688	2.7310	2.6769	2.6769	2.6150	2.6297	3B		
			2.6683	2.6140	2.6630	2.6620	2.6361	2.7498	2.7352	----------	2.7507	2.6693	2.7303	2.6764	2.6774	2.6152	2.6295			
2¾–12 or 2.750–12	UN	2A	2.6940	2.6579	2.6878	2.6878	2.6698	2.7481	2.7367	----------	2.7500	2.6959	2.7401	2.7040	2.7040	2.6600	2.6780	2B	UN	2¾–12 or 2.750–12
			2.6936	2.6573	2.6882	2.6874	2.6704	2.7479	2.7369	----------	2.7506	2.6963	2.7395	2.7036	2.7044	2.6602	2.6778			
		3A	2.6959	2.6598	2.6913	2.6913	2.6733	2.7500	2.7386	----------	2.7500	2.6959	2.7380	2.7019	2.7019	2.6600	2.6698	3B		
			2.6955	2.6592	2.6917	2.6909	2.6739	2.7498	2.7388	----------	2.7506	2.6963	2.7374	2.7015	2.7023	2.6602	2.6696			
2¾–16 or 2.750–16	UN	2A	2.7077	2.6806	2.7022	2.7022	2.6887	2.7483	2.7389	----------	2.7500	2.7094	2.7137	2.7166	2.7166	2.6820	2.6960	2B	UN	2¾–16 or 2.750–16
			2.7073	2.6800	2.7026	2.7018	2.6893	2.7481	2.7391	----------	2.7506	2.7098	2.7431	2.7162	2.7170	2.6822	2.6958			
		3A	2.7094	2.6823	2.7053	2.7053	2.6918	2.7500	2.7406	----------	2.7500	2.7094	2.7419	2.7148	2.7148	2.6820	2.6908	3B		
			2.7090	2.6817	2.7057	2.7049	2.6924	2.7498	2.7408	----------	2.7506	2.7098	2.7413	2.7144	2.7152	2.6822	2.6906			
2¾–20 or 2.750–20	UN	2A	2.7160	2.6943	2.7109	2.7109	2.7001	2.7485	2.7401	----------	2.7500	2.7175	2.7458	2.7241	2.7241	2.6960	2.7070	2B	UN	2¾–20 or 2.750–20
			2.7156	2.6938	2.7113	2.7105	2.7006	2.7483	2.7406	----------	2.7505	2.7179	2.7453	2.7237	2.7245	2.6962	2.7068			
		3A	2.7175	2.6958	2.7137	2.7137	2.7029	2.7500	2.7419	----------	2.7500	2.7175	2.7442	2.7225	2.7225	2.6960	2.7037	3B		
			2.7171	2.6953	2.7141	2.7133	2.7034	2.7498	2.7421	----------	2.7505	2.7179	2.7437	2.7221	2.7229	2.6962	2.7035			
2⅞–6 or 2.875–6	UN	2A	2.7639	2.6917	2.7547	2.7547	2.7186	2.8722	2.8540	----------	2.8750	2.7667	2.8509	2.7787	2.7787	2.6950	2.7250	2B	UN	2⅞–6 or 2.875–6
			2.7634	2.6909	2.7552	2.7542	2.7194	2.8720	2.8542	----------	2.8758	2.7672	2.8501	2.7782	2.7792	2.6952	2.7248			
		3A	2.7667	2.6945	2.7598	2.7598	2.7237	2.8750	2.8568	----------	2.8750	2.7667	2.8479	2.7757	2.7757	2.6950	2.7146	3B		
			2.7662	2.6937	2.7603	2.7593	2.7245	2.8748	2.8570	----------	2.8758	2.7672	2.8471	2.7752	2.7762	2.6952	2.7144			
2⅞–8 or 2.875–8	UN	2A	2.7913	2.7372	2.7829	2.7829	2.7558	2.8725	2.8575	----------	2.8750	2.7938	2.8589	2.8048	2.8048	2.7400	2.7650	2B	UN	2⅞–8 or 2.875–8
			2.7908	2.7365	2.7834	2.7824	2.7565	2.8723	2.8577	----------	2.8757	2.7943	2.8582	2.8043	2.8053	2.7402	2.7648			
		3A	2.7938	2.7397	2.7875	2.7875	2.7604	2.8750	2.8600	----------	2.8750	2.7938	2.8561	2.8020	2.8020	2.7400	2.7547	3B		
			2.7933	2.7390	2.7880	2.7870	2.7611	2.8748	2.8602	----------	2.8757	2.7943	2.8554	2.8015	2.8025	2.7402	2.7545			
2⅞–12 or 2.875–12	UN	2A	2.8190	2.7829	2.8127	2.8127	2.7947	2.8731	2.8617	----------	2.8750	2.8209	2.8652	2.8291	2.8291	2.7850	2.8030	2B	UN	2⅞–12 or 2.875–12
			2.8186	2.7823	2.8131	2.8123	2.7953	2.8729	2.8619	----------	2.8756	2.8213	2.8646	2.8287	2.8295	2.7852	2.8028			
		3A	2.8209	2.7848	2.8162	2.8162	2.7982	2.8750	2.8636	----------	2.8750	2.8209	2.8632	2.8271	2.8271	2.7850	2.7948	3B		
			2.8205	2.7842	2.8166	2.8158	2.7988	2.8748	2.8638	----------	2.8756	2.8213	2.8626	2.8267	2.8275	2.7852	2.7946			
2⅞–16 or 2.875–16	UN	2A	2.8327	2.8056	2.8271	2.8271	2.8136	2.8733	2.8639	----------	2.8750	2.8344	2.8688	2.8417	2.8417	2.8070	2.8210	2B	UN	2⅞–16 2.875–16
			2.8323	2.8050	2.8275	2.8267	2.8142	2.8731	2.8641	----------	2.8756	2.8348	2.8682	2.8413	2.8421	2.8072	2.8208			
		3A	2.8344	2.8073	2.8302	2.8302	2.8167	2.8750	2.8656	----------	2.8750	2.8344	2.8670	2.8399	2.8399	2.8070	2.8158	3B		
			2.8340	2.8067	2.8306	2.8298	2.8173	2.8748	2.8658	----------	2.8756	2.8348	2.8664	2.8395	2.8403	2.8072	2.8156			
2⅞–20 or 2.875–20	UN	2A	2.8409	2.8192	2.8357	2.8357	2.8249	2.8734	2.8653	----------	2.8750	2.8425	2.8710	2.8493	2.8493	2.8210	2.8320	2B	UN	2⅞–20 2.875–20
			2.8405	2.8187	2.8361	2.8353	2.8254	2.8732	2.8655	----------	2.8755	2.8429	2.8705	2.8489	2.8497	2.8212	2.8318			
		3A	2.8425	2.8208	2.8386	2.8386	2.8278	2.8750	2.8669	----------	2.8750	2.8425	2.8693	2.8476	2.8476	2.8210	2.8287	3B		
			2.8421	2.8203	2.8390	2.8382	2.8283	2.8748	2.8671	----------	2.8755	2.8429	2.8688	2.8472	2.8480	2.8212	2.8285			

3–4 or 3.000–4	UNC	1A	2.8344	2.7261	2.8183	2.8183	2.7642	2.9968	2.9611	----------	3.0000	2.8376	2.9668	2.8585	2.8585	2.7290	2.7670	1B	UNC	3–4 or 3.000–4
		2A	2.8339	2.7252	2.8188	2.8178	2.7651	2.9966	2.9613	----------	3.0009	2.8381	2.9659	2.8580	2.8590	2.7292	2.7668	2B		
			2.8344	2.7261	2.8237	2.8237	2.7696	2.9968	2.9730	2.9611	3.0000	2.8376	2.9598	2.8515	2.8515	2.7290	2.7670			
		3A	2.8339	2.7252	2.8242	2.8232	2.7705	2.9966	2.9732	2.9613	3.0009	2.8381	2.9589	2.8510	2.8520	2.7292	2.7668	3B		
			2.8376	2.7293	2.8296	2.8296	2.7755	3.0000	2.9762	----------	3.0000	2.8376	2.9563	2.8480	2.8480	2.7290	2.7594			
			2.8371	2.7284	2.8301	2.8291	2.7764	2.9998	2.9764	----------	3.0009	2.8381	2.9554	2.8475	2.8485	2.7292	2.7592			
3–6 or 3.000–6	UN	2A	2.8889	2.8167	2.8796	2.8796	2.8435	2.9972	2.9790	----------	3.0000	2.8917	2.9760	2.9038	2.9038	2.8200	2.8500	2B	UN	3–6 or 3.000–6
			2.8884	2.8159	2.8801	2.8791	2.8443	2.9970	2.9792	----------	3.0008	2.8922	2.9752	2.9033	2.9043	2.8202	2.8498			
		3A	2.8917	2.8195	2.8847	2.8847	2.8486	3.0000	2.9818	----------	3.0000	2.8917	2.9730	2.9008	2.9008	2.8200	2.8396	3B		
			2.8912	2.8187	2.8852	2.8842	2.8494	2.9998	2.9820	----------	3.0008	2.8922	2.9722	2.9003	2.9013	2.8202	2.8394			
3–8 or 3.000–8	UN	2A	2.9162	2.8621	2.9077	2.9077	2.8806	2.9974	2.9824	2.9749	3.0000	2.9188	2.9840	2.9299	2.9299	2.8650	2.8900	2B	UN	3–8 or 3.000–8
			2.9157	2.8614	2.9082	2.9072	2.8813	2.9972	2.9826	2.9751	3.0007	2.9193	2.9833	2.9294	2.9304	2.8652	2.8898			
		3A	2.9188	2.8647	2.9124	2.9124	2.8853	3.0000	2.9850	----------	3.0000	2.9188	2.9812	2.9271	2.9271	2.8650	2.8797	3B		
			2.9183	2.8640	2.9129	2.9119	2.8860	2.9998	2.9852	----------	3.0007	2.9193	2.9805	2.9266	2.9276	2.8652	2.8795			
3–12 or 3.000–12	UN	2A	2.9440	2.9079	2.9377	2.9377	2.9197	2.9981	2.9867	----------	3.0000	2.9459	2.9902	2.9541	2.9541	2.9100	2.9280	2B	UN	3–12 or 3.000–12
			2.9436	2.9073	2.9381	2.9373	2.9203	2.9979	2.9869	----------	3.0006	2.9463	2.9896	2.9537	2.9545	2.9102	2.9278			
		3A	2.9459	2.9098	2.9412	2.9412	2.9232	3.0000	2.9886	----------	3.0000	2.9459	2.9882	2.9521	2.9521	2.9100	2.9198	3B		
			2.9455	2.9092	2.9416	2.9408	2.9238	2.9998	2.9888	----------	3.0006	2.9463	2.9876	2.9517	2.9525	2.9102	2.9196			
3–16 or 3.000–16	UN	2A	2.9577	2.9306	2.9521	2.9521	2.9386	2.9983	2.9889	----------	3.0000	2.9594	2.9938	2.9667	2.9667	2.9320	2.9460	2B	UN	3–16 or 3.000–16
			2.9573	2.9300	2.9525	2.9517	2.9392	2.9981	2.9891	----------	3.0006	2.9598	2.9932	2.9663	2.9671	2.9322	2.9458			
		3A	2.9594	2.9323	2.9552	2.9552	2.9417	3.0000	2.9906	----------	3.0000	2.9594	2.9920	2.9649	2.9649	2.9320	2.9408	3B		
			2.9590	2.9317	2.9556	2.9548	2.9423	2.9998	2.9908	----------	3.0006	2.9598	2.9914	2.9645	2.9653	2.9322	2.9466			
3–20 or 3.000–20	UN	2A	2.9659	2.9442	2.9607	2.9607	2.9499	2.9984	2.9903	----------	3.0000	2.9675	2.9960	2.9743	2.9743	2.9460	2.9570	2B	UN	3–20 or 3.000–20
			2.9655	2.9437	2.9611	2.9603	2.9504	2.9982	2.9905	----------	3.0005	2.9679	2.9955	2.9739	2.9747	2.9462	2.9568			
		3A	2.9675	2.9458	2.9636	2.9636	2.9528	3.0000	2.9919	----------	3.0000	2.9675	2.9943	2.9726	2.9726	2.9460	2.9537	3B		
			2.9671	2.9453	2.9640	2.9632	2.9533	2.9998	2.9921	----------	3.0005	2.9679	2.9938	2.9722	2.9730	2.9462	2.9535			
3⅛–6 or 3.125–6	UN	2A	3.0139	2.9417	3.0045	3.0045	2.9684	3.1222	3.1040	----------	3.1250	3.0167	3.1011	3.0289	3.0289	2.9450	2.9750	2B	UN	3⅛–6 or 3.125–6
			3.0134	2.9409	3.0050	3.0040	2.9692	3.1220	3.1042	----------	3.1258	3.0172	3.1003	3.0284	3.0294	2.9452	2.9748			
		3A	3.0167	2.9445	3.0097	3.0097	2.9736	3.1250	3.1068	----------	3.1250	3.0167	3.0981	3.0259	3.0259	2.9450	2.9646	3B		
			3.0162	2.9437	3.0102	3.0092	2.9744	3.1248	3.1070	----------	3.1258	3.0172	3.0973	3.0254	3.0264	2.9452	2.9644			
3⅛–8 or 3.125–8	UN	2A	3.0412	2.9871	3.0326	3.0326	3.0055	3.1224	3.1074	----------	3.1250	3.0438	3.1091	3.0550	3.0550	2.9900	3.0150	2B	UN	3⅛–8 or 3.125–8
			3.0407	2.9864	3.0331	3.0321	3.0062	3.1222	3.1076	----------	3.1257	3.0443	3.1084	3.0545	3.0555	2.9902	3.0148			
		3A	3.0438	2.9897	3.0374	3.0374	3.0103	3.1250	3.1100	----------	3.1250	3.0438	3.1063	3.0522	3.0522	2.9900	3.0047	3B		
			3.0433	2.9890	3.0379	3.0369	3.0110	3.1248	3.1102	----------	3.1257	3.0443	3.1056	3.0517	3.0527	2.9902	3.0045			
3⅛–12 or 3.125–12	UN	2A	3.0690	3.0329	3.0627	3.0627	3.0447	3.1231	3.1117	----------	3.1250	3.0709	3.1152	3.0791	3.0791	3.0350	3.0530	2B	UN	3⅛–12 or 3.125–12
			3.0686	3.0323	3.0631	3.0623	3.0453	3.1229	3.1119	----------	3.1256	3.0713	3.1146	3.0787	3.0795	3.0352	3.0528			
		3A	3.0709	3.0348	3.0662	3.0662	3.0482	3.1250	3.1136	----------	3.1250	3.0709	3.1132	3.0771	3.0771	3.0350	3.0448	3B		
			3.0705	3.0342	3.0666	3.0658	3.0488	3.1248	3.1138	----------	3.1256	3.0713	3.1126	3.0767	3.0775	3.0352	3.0446			
3⅛–16 or 3.125–16	UN	2A	3.0827	3.0556	3.0771	3.0771	3.0636	3.1233	3.1139	----------	3.1250	3.0844	3.1188	3.0917	3.0917	3.0570	3.0710	2B	UN	3⅛–16 or 3.125–16
			3.0823	3.0550	3.0775	3.0767	3.0642	3.1231	3.1141	----------	3.1256	3.0848	3.1182	3.0913	3.0921	3.0572	3.0708			
		3A	3.0844	3.0573	3.0802	3.0802	3.0667	3.1250	3.1156	----------	3.1250	3.0844	3.1170	3.0899	3.0899	3.0570	3.0658	3B		
			3.0840	3.0567	3.0806	3.0798	3.0673	3.1248	3.1158	----------	3.1256	3.0848	3.1164	3.0895	3.0903	3.0572	3.0656			
3¼–4 or 3.250–4	UNC	1A	3.0843	2.9760	3.0680	3.0680	3.0139	3.2467	3.2110	----------	3.2500	3.0876	3.2171	3.1088	3.1088	2.9790	3.0170	1B	UNC	3¼–4 or 3.250–4
			3.0838	2.9751	3.0685	3.0675	3.0148	3.2465	3.2112	----------	3.2509	3.0881	3.2162	3.1083	3.1093	2.9792	3.0168			
		2A	3.0843	2.9760	3.0734	3.0734	3.0193	3.2467	3.2229	3.2110	3.2500	3.0876	3.2100	3.1017	3.1017	2.9790	3.0170	2B		
			3.0838	2.9751	3.0739	3.0729	3.0202	3.2465	3.2231	3.2112	3.2509	3.0881	3.2091	3.1012	3.1022	2.9792	3.0168			
		3A	3.0876	2.9793	3.0794	3.0794	3.0253	3.2500	3.2262	----------	3.2500	3.0876	3.2065	3.0982	3.0982	2.9790	3.0094	3B		
			3.0871	2.9784	3.0799	3.0789	3.0262	3.2498	3.2264	----------	3.2509	3.0881	3.2056	3.0977	3.0987	2.9792	3.0092			
3¼–6 or 3.250–6	UN	2A	3.1389	3.0667	3.1294	3.1294	3.0933	3.2472	3.2290	----------	3.2500	3.1417	3.2262	3.1540	3.1540	3.0700	3.1000	2B	UN	3¼–6 or 3.250–6
			3.1384	3.0659	3.1299	3.1289	3.0941	3.2470	3.2292	----------	3.2508	3.1422	3.2254	3.1535	3.1545	3.0702	3.0998			
		3A	3.1417	3.0695	3.1346	3.1346	3.0985	3.2500	3.2318	----------	3.2500	3.1417	3.2231	3.1509	3.1509	3.0700	3.0896	3B		
			3.1412	3.0687	3.1351	3.1341	3.0993	3.2498	3.2320	----------	3.2508	3.1422	3.2223	3.1504	3.1514	3.0702	3.0894			
3¼–8 or 3.250–8	UN	2A	3.1662	3.1121	3.1575	3.1575	3.1304	3.2474	3.2324	3.2249	3.2500	3.1688	3.2342	3.1801	3.1801	3.1150	3.1400	2B	UN	3¼–8 or 3.250–8
			3.1657	3.1114	3.1580	3.1570	3.1311	3.2472	3.2326	3.2251	3.2507	3.1693	3.2335	3.1796	3.1806	3.1152	3.1398			
		3A	3.1688	3.1147	3.1623	3.1623	3.1352	3.2500	3.2350	----------	3.2500	3.1688	3.2314	3.1773	3.1773	3.1150	3.1297	3B		
			3.1683	3.1140	3.1628	3.1618	3.1359	3.2498	3.2352	----------	3.2507	3.1693	3.2307	3.1768	3.1778	3.1152	3.1295			
3¼–12 or 3.250–12	UN	2A	3.1940	3.1579	3.1877	3.1877	3.1697	3.2481	3.2367	----------	3.2500	3.1959	3.2402	3.2041	3.2041	3.1600	3.1780	2B	UN	3¼–12 or 3.250–12
			3.1936	3.1573	3.1881	3.1873	3.1703	3.2479	3.2369	----------	3.2506	3.1963	3.2396	3.2037	3.2045	3.1602	3.1778			
		3A	3.1959	3.1598	3.1912	3.1912	3.1732	3.2500	3.2386	----------	3.2500	3.1959	3.2382	3.2021	3.2021	3.1600	3.1698	3B		
			3.1955	3.1592	3.1916	3.1908	3.1738	3.2498	3.2388	----------	3.2506	3.1963	3.2376	3.2017	3.2025	3.1602	3.1696			
3¼–16 or 3.250–16	UN	2A	3.2077	3.1806	3.2021	3.2021	3.1886	3.2483	3.2389	----------	3.2500	3.2094	3.2438	3.2167	3.2167	3.1820	3.1960	2B	UN	3¼–16 or 3.250–16
			3.2073	3.1800	3.2025	3.2017	3.1892	3.2481	3.2391	----------	3.2506	3.2098	3.2432	3.2163	3.2171	3.1822	3.1958			
		3A	3.2094	3.1823	3.2052	3.2052	3.1917	3.2500	3.2406	----------	3.2500	3.2094	3.2420	3.2149	3.2149	3.1820	3.1908	3B		
			3.2090	3.1817	3.2056	3.2048	3.1923	3.2498	3.2408	----------	3.2506	3.2098	3.2414	3.2145	3.2153	3.1822	3.1906			

TABLE III.12.—*Gages for standard thread series, Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	Class	Gages for external threads								Gages for internal threads							Class	Series designation	Nominal size and threads per inch
			X thread ring gages					Z plain ring gages for major diameter			X thread plug gages					Z plain plug gages for minor diameter				
			GO		LO, classes 1A and 2A NOT GO, class 3A			GO	NOT GO		GO		III			GO	NOT GO			
			Pitch diameter	Minor diameter	Pitch diameter		Minor diameter		Semi-finished	Unfinished hot-rolled material	Major diameter	Pitch diameter	Major diameter	Pitch diameter						
					Plus tolerance gage	Minus tolerance gage								Minus tolerance gage	Plus tolerance gage					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in*			
3⅜–6 or 3.375–6	UN	2A	3.2638	3.1916	3.2543	3.2543	3.2182	3.3721	3.3539	----------	3.3750	3.2667	3.3513	3.2791	3.2791	3.1950	3.2250	2B	UN	3⅜–6 or 3.375–6
			3.2633	3.1908	3.2548	3.2538	3.2190	3.3719	3.3541	----------	3.3758	3.2672	3.3505	3.2786	3.2796	3.1952	3.2248			
		3A	3.2667	3.1945	3.2595	3.2595	3.2234	3.3750	3.3568	----------	3.3750	3.2667	3.3482	3.2760	3.2760	3.1950	3.2146	3B		
			3.2662	3.1937	3.2600	3.2590	3.2242	3.3748	3.3570	----------	3.3758	3.2672	3.3474	3.2755	3.2765	3.1952	3.2144			
3⅜–8 or 3.375–8	UN	2A	3.2912	3.2371	3.2824	3.2824	3.2553	3.3724	3.3574	----------	3.3750	3.2938	3.3593	3.3052	3.3052	3.2400	3.2650	2B	UN	3⅜–8 or 3.375–8
			3.2907	3.2364	3.2829	3.2819	3.2560	3.3722	3.3576	----------	3.3757	3.2943	3.3586	3.3047	3.3057	3.2402	3.2648			
		3A	3.2938	3.2397	3.2872	3.2872	3.2601	3.3750	3.3600	----------	3.3750	3.2938	3.3564	3.3023	3.3023	3.2400	3.2547	3B		
			3.2933	3.2390	3.2877	3.2867	3.2608	3.3748	3.3602	----------	3.3757	3.2943	3.3557	3.3018	3.3028	3.2402	3.2545			
3⅜–12 or 3.375–12	UN	2A	3.3190	3.2829	3.3126	3.3126	3.2946	3.3731	3.3617	----------	3.3750	3.3209	3.3654	3.3293	3.3293	3.2850	3.3030	2B	UN	3⅜–12 or 3.375–12
			3.3186	3.2823	3.3130	3.3122	3.2952	3.3729	3.3619	----------	3.3756	3.3213	3.3648	3.3289	3.3297	3.2852	3.3028			
		3A	3.3209	3.2848	3.3161	3.3161	3.2981	3.3750	3.3636	----------	3.3750	3.3209	3.3633	3.3272	3.3272	3.2850	3.2948	3B		
			3.3205	3.2842	3.3165	3.3157	3.2987	3.3748	3.3638	----------	3.3756	3.3213	3.3627	3.3268	3.3276	3.2852	3.2946			
3⅜–16 or 3.375–16	UN	2A	3.3327	3.3056	3.3269	3.3269	3.3134	3.3733	3.3639	----------	3.3750	3.3344	3.3690	3.3419	3.3419	3.3070	3.3210	2B	UN	3⅜–16 or 3.375–16
			3.3323	3.3050	3.3273	3.3265	3.3140	3.3731	3.3641	----------	3.3756	3.3348	3.3684	3.3415	3.3423	3.3072	3.3208			
		3A	3.3344	3.3073	3.3301	3.3301	3.3166	3.3750	3.3656	----------	3.3750	3.3344	3.3671	3.3400	3.3400	3.3070	3.3158	3B		
			3.3340	3.3067	3.3305	3.3297	3.3172	3.3748	3.3658	----------	3.3756	3.3348	3.3665	3.3396	3.3404	3.3072	3.3156			
3½–4 or 3.500–4	UNC	1A	3.3343	3.2260	3.3177	3.3177	3.2636	3.4967	3.4610	----------	3.5000	3.3376	3.4674	3.3591	3.3591	3.2290	3.2670	1B	UNC	3½–4 or 3.500–4
			3.3338	3.2251	3.3182	3.3172	3.2645	3.4965	3.4612	----------	3.5009	3.3381	3.4665	3.3586	3.3596	3.2292	3.2668			
		2A	3.3343	3.2260	3.3233	3.3233	3.2692	3.4967	3.4729	3.4610	3.5000	3.3376	3.4602	3.3519	3.3519	3.2290	3.2670	2B		
			3.3338	3.2251	3.3238	3.3228	3.2701	3.4965	3.4731	3.4612	3.5009	3.3381	3.4593	3.3514	3.3524	3.2292	3.2668			
		3A	3.3376	3.2293	3.3293	3.3293	3.2752	3.5000	3.4762	----------	3.5000	3.3376	3.4567	3.3484	3.3484	3.2290	3.2594	3B		
			3.3371	3.2284	3.3298	3.3288	3.2761	3.4998	3.4764	----------	3.5009	3.3381	3.4558	3.3479	3.3489	3.2292	3.2592			
3½–6 or 3.500–6	UN	2A	3.3888	3.3166	3.3792	3.3792	3.3431	3.4971	3.4789	----------	3.5000	3.3917	3.4764	3.4042	3.4042	3.3200	3.3500	2B	UN	3½–6 or 3.500–6
			3.3883	3.3158	3.3797	3.3787	3.3439	3.4969	3.4791	----------	3.5008	3.3922	3.4756	3.4037	3.4047	3.3202	3.3498			
		3A	3.3917	3.3195	3.3845	3.3845	3.3484	3.5000	3.4818	----------	3.5000	3.3917	3.4733	3.4011	3.4011	3.3200	3.3396	3B		
			3.3912	3.3187	3.3850	3.3840	3.3492	3.4998	3.4820	----------	3.5008	3.3922	3.4725	3.4006	3.4016	3.3202	3.3394			
3½–8 or 3.500–8	UN	2A	3.4162	3.3621	3.4074	3.4074	3.3803	3.4974	3.4824	3.4749	3.5000	3.4188	3.4844	3.4303	3.4303	3.3650	3.3900	2B	UN	3½–8 or 3.500–8
			3.4157	3.3614	3.4079	3.4069	3.3810	3.4972	3.4826	3.4751	3.5007	3.4193	3.4837	3.4298	3.4308	3.3652	3.3898			
		3A	3.4188	3.3647	3.4122	3.4122	3.3851	3.5000	3.4850	----------	3.5000	3.4188	3.4815	3.4274	3.4274	3.3650	3.3797	3B		
			3.4183	3.3640	3.4127	3.4117	3.3858	3.4998	3.4852	----------	3.5007	3.4193	3.4808	3.4269	3.4279	3.3652	3.3795			
3½–12 or 3.500–12	UN	2A	3.4440	3.4079	3.4376	3.4376	3.4196	3.4981	3.4867	----------	3.5000	3.4459	3.4904	3.4543	3.4543	3.4100	3.4280	2B	UN	3½–12 or 3.500–12
			3.4436	3.4073	3.4380	3.4372	3.4202	3.4979	3.4869	----------	3.5006	3.4463	3.4898	3.4539	3.4547	3.4102	3.4278			
		3A	3.4459	3.4098	3.4411	3.4411	3.4231	3.5000	3.4886	----------	3.5000	3.4459	3.4883	3.4522	3.4522	3.4100	3.4198	3B		
			3.4455	3.4092	3.4415	3.4407	3.4237	3.4998	3.4888	----------	3.5006	3.4463	3.4877	3.4518	3.4526	3.4102	3.4196			
3½–16 or 3.500–16	UN	2A	3.4577	3.4306	3.4519	3.4519	3.4384	3.4983	3.4889	----------	3.5000	3.4594	3.4940	3.4669	3.4669	3.4320	3.4460	2B	UN	3½–16 or 3.500–16
			3.4573	3.4300	3.4523	3.4515	3.4390	3.4981	3.4891	----------	3.5006	3.4598	3.4934	3.4665	3.4673	3.4322	3.4458			
		3A	3.4594	3.4323	3.4551	3.4551	3.4416	3.5000	3.4906	----------	3.5000	3.4594	3.4921	3.4650	3.4650	3.4320	3.4408	3B		
			3.4590	3.4317	3.4555	3.4547	3.4422	3.4998	3.4908	----------	3.5006	3.4598	3.4915	3.4646	3.4654	3.4322	3.4406			
3⅝–6 or 3.625–6	UN	2A	3.5138	3.4416	3.5041	3.5041	3.4680	3.6221	3.6039	----------	3.6250	3.5167	3.6015	3.5293	3.5293	3.4450	3.4750	2B	UN	3⅝–6 or 3.625–6
			3.5133	3.4408	3.5046	3.5036	3.4688	3.6219	3.6041	----------	3.6258	3.5172	3.6007	3.5288	3.5298	3.4452	3.4748			
		3A	3.5167	3.4445	3.5094	3.5094	3.4733	3.6250	3.6068	----------	3.6250	3.5167	3.5984	3.5262	3.5262	3.4450	3.4646	3B		
			3.5162	3.4437	3.5099	3.5089	3.4741	3.6248	3.6070	----------	3.6258	3.5172	3.5976	3.5257	3.5267	3.4452	3.4644			

3⅝–8 or 3.625–8	UN	2A	3.5411	3.4870	3.5322	3.5322	3.5051	3.6223	3.6073		3.6250	3.5438	3.6095	3.5554	3.5554	3.4900	3.5150	2B	UN	3⅝–8 or 3.625–8
			3.5406	3.4863	3.5327	3.5317	3.5058	3.6221	3.6075		3.6257	3.5443	3.6088	3.5549	3.5559	3.4902	3.5148			
		3A	3.5438	3.4897	3.5371	3.5371	3.5100	3.6250	3.6100		3.6250	3.5438	3.6066	3.5525	3.5525	3.4900	3.5047	3B		
			3.5433	3.4890	3.5376	3.5366	3.5107	3.6248	3.6102		3.6257	3.5443	3.6059	3.5520	3.5530	3.4902	3.5045			
3⅝–12 or 3.625–12	UN	2A	3.5690	3.5329	3.5626	3.5626	3.5446	3.6231	3.6117		3.6250	3.5709	3.6154	3.5793	3.5793	3.5350	3.5530	2B	UN	3⅝–12 or 3.625–12
			3.5686	3.5323	3.5630	3.5622	3.5452	3.6229	3.6119		3.6256	3.5713	3.6148	3.5789	3.5797	3.5352	3.5528			
		3A	3.5709	3.5348	3.5661	3.5661	3.5481	3.6250	3.6136		3.6250	3.5709	3.6133	3.5772	3.5772	3.5350	3.5448	3B		
			3.5705	3.5342	3.5665	3.5657	3.5487	3.6248	3.6138		3.6256	3.5713	3.6127	3.5768	3.5776	3.5352	3.5446			
3⅝–16 or 3.625–16	UN	2A	3.5827	3.5556	3.5769	3.5769	3.5634	3.6233	3.6139		3.6250	3.5844	3.6190	3.5919	3.5919	3.5570	3.5710	2B	UN	3⅝–16 or 3.625–16
			3.5823	3.5550	3.5773	3.5765	3.5640	3.6231	3.6141		3.6256	3.5848	3.6184	3.5915	3.5923	3.5572	3.5708			
		3A	3.5844	3.5573	3.5801	3.5801	3.5666	3.6250	3.6156		3.6250	3.5844	3.6171	3.5900	3.5900	3.5570	3.5658	3B		
			3.5840	3.5567	3.5805	3.5797	3.5672	3.6248	3.6158		3.6256	3.5848	3.6165	3.5896	3.5904	3.5572	3.5656			
3¾–4 or 3.750–4	UNC	1A	3.5842	3.4759	3.5674	3.5674	3.5133	3.7466	3.7109		3.7500	3.5876	3.7177	3.6094	3.6094	3.4790	3.5170	1B	UNC	3¾–4 or 3.750–4
			3.5837	3.4750	3.5679	3.5669	3.5142	3.7464	3.7111		3.7509	3.5881	3.7168	3.6089	3.6099	3.4792	3.5168			
		2A	3.5842	3.4759	3.5730	3.5730	3.5189	3.7466	3.7228	3.7109	3.7500	3.5876	3.7104	3.6021	3.6021	3.4790	3.5170	2B		
			3.5837	3.4750	3.5735	3.5725	3.5198	3.7464	3.7230	3.7111	3.7509	3.5881	3.7095	3.6016	3.6026	3.4792	3.5168			
		3A	3.5876	3.4793	3.5792	3.5792	3.5251	3.7500	3.7262		3.7500	3.5876	3.7068	3.5985	3.5985	3.4790	3.5094	3B		
			3.5871	3.4784	3.5797	3.5787	3.5260	3.7498	3.7264		3.7509	3.5881	3.7059	3.5980	3.5990	3.4792	3.5092			
3¾–6 or 3.750–6	UN	2A	3.6388	3.5666	3.6290	3.6290	3.5929	3.7471	3.7289		3.7500	3.6417	3.7266	3.6544	3.6544	3.5700	3.6000	2B	UN	3¾–6 or 3.750–6
			3.6383	3.5658	3.6295	3.6285	3.5937	3.7469	3.7291		3.7508	3.6422	3.7258	3.6539	3.6549	3.5702	3.5998			
		3A	3.6417	3.5695	3.6344	3.6344	3.5983	3.7500	3.7318		3.7500	3.6417	3.7234	3.6512	3.6512	3.5700	3.5896	3B		
			3.6412	3.5687	3.6349	3.6339	3.5991	3.7498	3.7320		3.7508	3.6422	3.7226	3.6507	3.6517	3.5702	3.5894			
3¾–8 or 3.750–8	UN	2A	3.6661	3.6120	3.6571	3.6571	3.6300	3.7473	3.7323	3.7248	3.7500	3.6688	3.7346	3.6805	3.6805	3.6150	3.6400	2B	UN	3¾–8 or 3.750–8
			3.6656	3.6113	3.6576	3.6566	3.6307	3.7471	3.7325	3.7250	3.7507	3.6693	3.7339	3.6800	3.6810	3.6152	3.6398			
		3A	3.6688	3.6147	3.6621	3.6621	3.6350	3.7500	3.7350		3.7500	3.6688	3.7317	3.6776	3.6776	3.6150	3.6297	3B		
			3.6683	3.6140	3.6626	3.6616	3.6357	3.7498	3.7352		3.7507	3.6693	3.7310	3.6771	3.6781	3.6152	3.6295			
3¾–12 or 3.750–12	UN	2A	3.6940	3.6579	3.6876	3.6876	3.6696	3.7481	3.7367		3.7500	3.6959	3.7404	3.7043	3.7043	3.6600	3.6780	2B	UN	3¾–12 or 3.750–12
			3.6936	3.6573	3.6880	3.6872	3.6702	3.7479	3.7369		3.7506	3.6963	3.7398	3.7039	3.7047	3.6602	3.6778			
		3A	3.6959	3.6598	3.6911	3.6911	3.6731	3.7500	3.7386		3.7500	3.6959	3.7383	3.7022	3.7022	3.6600	3.6698	3B		
			3.6955	3.6592	3.6915	3.6907	3.6737	3.7498	3.7388		3.7506	3.6963	3.7377	3.7018	3.7026	3.6602	3.6696			
3¾–16 or 3.750–16	UN	2A	3.7077	3.6806	3.7019	3.7019	3.6884	3.7483	3.7389		3.7500	3.7094	3.7440	3.7169	3.7169	3.6820	3.6960	2B	UN	3¾–16 or 3.750–16
			3.7073	3.6800	3.7023	3.7015	3.6890	3.7481	3.7391		3.7506	3.7098	3.7434	3.7165	3.7173	3.6822	3.6958			
		3A	3.7094	3.6823	3.7051	3.7051	3.6916	3.7500	3.7406		3.7500	3.7094	3.7421	3.7150	3.7150	3.6820	3.6968	3B		
			3.7090	3.6817	3.7055	3.7047	3.6922	3.7498	3.7408		3.7506	3.7098	3.7415	3.7146	3.7154	3.6822	3.6966			
3⅞–6 or 3.875–6	UN	2A	3.7637	3.6915	3.7538	3.7538	3.7177	3.8720	3.8538		3.8750	3.7667	3.8517	3.7795	3.7795	3.6950	3.7250	2B	UN	3⅞–6 or 3.875–6
			3.7632	3.6907	3.7543	3.7533	3.7185	3.8718	3.8540		3.8758	3.7672	3.8509	3.7790	3.7800	3.6952	3.7248			
		3A	3.7667	3.6945	3.7593	3.7593	3.7232	3.8750	3.8568		3.8750	3.7667	3.8485	3.7763	3.7763	3.6950	3.7146	3B		
			3.7662	3.6937	3.7598	3.7588	3.7240	3.8748	3.8570		3.8758	3.7672	3.8477	3.7758	3.7768	3.6952	3.7144			
3⅞–8 or 3.875–8	UN	2A	3.7911	3.7370	3.7820	3.7820	3.7549	3.8723	3.8573		3.8750	3.7938	3.8597	3.8056	3.8056	3.7400	3.7650	2B	UN	3⅞–8 or 3.875–8
			3.7906	3.7363	3.7825	3.7815	3.7556	3.8721	3.8575		3.8757	3.7943	3.8590	3.8051	3.8061	3.7402	3.7648			
		3A	3.7938	3.7397	3.7870	3.7870	3.7599	3.8750	3.8600		3.8750	3.7938	3.8567	3.8026	3.8026	3.7400	3.7547	3B		
			3.7933	3.7390	3.7875	3.7865	3.7606	3.8748	3.8602		3.8757	3.7943	3.8560	3.8021	3.8031	3.7402	3.7545			
3⅞–12 or 3.875–12	UN	2A	3.8189	3.7828	3.8124	3.8124	3.7944	3.8730	3.8616		3.8750	3.8209	3.8655	3.8294	3.8294	3.7850	3.8030	2B	UN	3⅞–12 or 3.875–12
			3.8185	3.7822	3.8128	3.8120	3.7950	3.8728	3.8618		3.8756	3.8213	3.8649	3.8290	3.8298	3.7852	3.8028			
		3A	3.8209	3.7848	3.8160	3.8160	3.7980	3.8750	3.8636		3.8750	3.8209	3.8634	3.8273	3.8273	3.7850	3.7948	3B		
			3.8205	3.7842	3.8164	3.8156	3.7986	3.8748	3.8638		3.8756	3.8213	3.8628	3.8269	3.8277	3.7852	3.7946			
3⅞–16 or 3.875–16	UN	2A	3.8326	3.8055	3.8267	3.8267	3.8132	3.8732	3.8638		3.8750	3.8344	3.8691	3.8420	3.8420	3.8070	3.8210	2B	UN	3⅞–16 or 3.875–16
			3.8322	3.8049	3.8271	3.8263	3.8138	3.8730	3.8640		3.8756	3.8348	3.8685	3.8416	3.8424	3.8072	3.8208			
		3A	3.8344	3.8073	3.8300	3.8300	3.8165	3.8750	3.8656		3.8750	3.8344	3.8672	3.8401	3.8401	3.8070	3.8158	3B		
			3.8340	3.8067	3.8304	3.8296	3.8171	3.8748	3.8658		3.8756	3.8348	3.8666	3.8397	3.8405	3.8072	3.8156			
4–4 or 4.000–4	UNC	1A	3.8342	3.7259	3.8172	3.8172	3.7631	3.9966	3.9609		4.0000	3.8376	3.9680	3.8597	3.8597	3.7290	3.7670	1B	UNC	4–4 or 4.000–4
			3.8337	3.7250	3.8177	3.8167	3.7640	3.9964	3.9611		4.0009	3.8381	3.9671	3.8592	3.8602	3.7292	3.7668			
		2A	3.8342	3.7259	3.8229	3.8229	3.7688	3.9966	3.9728	3.9609	4.0000	3.8376	3.9606	3.8523	3.8523	3.7290	3.7670	2B		
			3.8337	3.7250	3.8234	3.8224	3.7697	3.9964	3.9730	3.9611	4.0009	3.8381	3.9597	3.8518	3.8528	3.7292	3.7668			
		3A	3.8376	3.7293	3.8291	3.8291	3.7750	4.0000	3.9762		4.0000	3.8376	3.9570	3.8487	3.8487	3.7290	3.7594	3B		
			3.8371	3.7284	3.8296	3.8286	3.7759	3.9998	3.9764		4.0009	3.8381	3.9561	3.8482	3.8492	3.7292	3.7592			
4–6 or 4.000–6	UN	2A	3.8887	3.8165	3.8788	3.8788	3.8427	3.9970	3.9788		4.0000	3.8917	3.9768	3.9046	3.9046	3.8200	3.8500	2B	UN	4–6 or 4.000–6
			3.8882	3.8157	3.8793	3.8783	3.8435	3.9968	3.9790		4.0008	3.8922	3.9760	3.9041	3.9051	3.8202	3.8498			
		3A	3.8917	3.8195	3.8843	3.8843	3.8482	4.0000	3.9818		4.0000	3.8917	3.9736	3.9014	3.9014	3.8200	3.8396	3B		
			3.8912	3.8187	3.8848	3.8838	3.8490	3.9998	3.9820		4.0008	3.8922	3.9728	3.9009	3.9019	3.8202	3.8394			
4–8 or 4.000–8	UN	2A	3.9161	3.8620	3.9070	3.9070	3.8799	3.9973	3.9823	3.9748	4.0000	3.9188	3.9848	3.9307	3.9307	3.8650	3.8900	2B	UN	4–8 or 4.000–8
			3.9156	3.8613	3.9075	3.9065	3.8806	3.9971	3.9825	3.9750	4.0007	3.9193	3.9841	3.9302	3.9312	3.8652	3.8898			
		3A	3.9188	3.8647	3.9120	3.9120	3.8849	4.0000	3.9850		4.0000	3.9188	3.9818	3.9277	3.9277	3.8650	3.8797	3B		
			3.9183	3.8640	3.9125	3.9115	3.8856	3.9998	3.9852		4.0007	3.9193	3.9811	3.9272	3.9282	3.8652	3.8795			

TABLE III.12.—*Gages for standard thread series, Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	Class	Gages for external threads								Gages for internal threads							Class	Series designation	Nominal size and threads per inch
			X thread ring gages					Z plain ring gages for major diameter			X thread plug gages					Z plain plug gages for minor diameter				
			GO		LO, classes 1A and 2A NOT GO, class 3A			GO	NOT GO		GO		III			GO	NOT GO			
			Pitch diameter	Minor diameter	Pitch diameter		Minor diameter		Semi-finished	Unfinished hot-rolled material	Major diameter	Pitch diameter	Major diameter	Pitch diameter						
					Plus tolerance gage	Minus tolerance gage								Minus tolerance gage	Plus tolerance gage					
1	2	3	4	5	6	7	8	9	10.	11	12	13	14	15	16	17	18	19	20	21
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*			
4–12 or 4.000–12	UN	2A	3.9439	3.9078	3.9374	3.9374	3.9194	3.9980	3.9866	.....	4.0000	3.9459	3.9905	3.9544	3.9544	3.9100	3.9280	2B	UN	4–12 or 4.000–12
			3.9435	3.9072	3.9378	3.9370	3.9200	3.9978	3.9868	.....	4.0006	3.9463	3.9899	3.9549	3.9548	3.9102	3.9278			
		3A	3.9459	3.9098	3.9410	3.9410	3.9239	4.0000	3.9886	.....	4.0000	3.9459	3.9884	3.9523	3.9523	3.9100	3.9198	3B		
			3.9455	3.9092	3.9414	3.9406	3.9236	3.9998	3.9888	.....	4.0006	3.9463	3.9878	3.9519	3.9527	3.9102	3.9196			
4–16 or 4.000–16	UN	2A	3.9576	3.9305	3.9517	3.9517	3.9382	3.9982	3.9888	.....	4.0000	3.9594	3.9941	3.9670	3.9670	3.9320	3.9460	2B	UN	4–16 or 4.000–16
			3.9572	3.9299	3.9521	3.9513	3.9388	3.9980	3.9890	.....	4.0006	3.9598	3.9935	3.9666	3.9674	3.9322	3.9458			
		3A	3.9594	3.9323	3.9550	3.9550	3.9415	4.0000	3.9906	.....	4.0000	3.9594	3.9922	3.9651	3.9651	3.9320	3.9408	3B		
			3.9590	3.9317	3.9554	3.9546	3.9421	3.9998	3.9908	.....	4.0006	3.9598	3.9916	3.9647	3.9655	3.9322	3.9406			
4⅛–6 or 4.125–6	UN	2A	4.0137	3.9415	4.0037	4.0037	3.9676	4.1220	4.1038	.....	4.1250	4.0167	4.1019	4.0297	4.0297	3.9450	3.9750	2B	UN	4⅛–6 or 4.125–6
			4.0131	3.9402	4.0043	4.0031	3.9689	4.1218	4.1040	.....	4.1263	4.0173	4.1006	4.0291	4.0303	3.9452	3.9748			
		3A	4.0167	3.9445	4.0092	4.0092	3.9731	4.1250	4.1068	.....	4.1250	4.0167	4.0986	4.0264	4.0264	3.9450	3.9646	3B		
			4.0161	3.9432	4.0098	4.0086	3.9744	4.1248	4.1070	.....	4.1263	4.0173	4.0973	4.0258	4.0270	3.9452	3.9644			
4⅛–12 or 4.125–12	UN	2A	4.0689	4.0328	4.0624	4.0624	4.0444	4.1230	4.1116	.....	4.1250	4.0709	4.1155	4.0794	4.0794	4.0350	4.0530	2B	UN	4⅛–12 or 4.125–12
			4.0683	4.0319	4.0630	4.0618	4.0453	4.1228	4.1118	.....	4.1259	4.0715	4.1146	4.0788	4.0800	4.0352	4.0528			
		3A	4.0709	4.0348	4.0660	4.0660	4.0480	4.1250	4.1136	.....	4.1250	4.0709	4.1134	4.0773	4.0773	4.0350	4.0448	3B		
			4.0703	4.0339	4.0666	4.0654	4.0489	4.1248	4.1138	.....	4.1259	4.0715	4.1125	4.0767	4.0779	4.0352	4.0446			
4⅛–16 or 4.125–16	UN	2A	4.0826	4.0555	4.0767	4.0767	4.0632	4.1232	4.1138	.....	4.1250	4.0844	4.1191	4.0920	4.0920	4.0570	4.0710	2B	UN	4⅛–16 or 4.125–16
			4.0820	4.0546	4.0773	4.0761	4.0641	4.1230	4.1140	.....	4.1259	4.0850	4.1182	4.0914	4.0926	4.0572	4.0708			
		3A	4.0844	4.0573	4.0800	4.0800	4.0665	4.1250	4.1156	.....	4.1250	4.0844	4.1172	4.0901	4.0901	4.0570	4.0658	3B		
			4.0838	4.0564	4.0806	4.0794	4.0674	4.1248	4.1158	.....	4.1259	4.0850	4.1163	4.0895	4.0907	4.0572	4.0656			
4¼–4 or 4.250–4	UN	2A	4.0842	3.9759	4.0727	4.0727	4.0186	4.2466	4.2228	.....	4.2500	4.0876	4.2108	4.1025	4.1025	3.9790	4.0170	2B	UN	4¼–4 or 4.250–4
			4.0836	3.9744	4.0733	4.0721	4.0201	4.2464	4.2230	.....	4.2515	4.0882	4.2093	4.1019	4.1031	3.9792	4.0168			
		3A	4.0876	3.9793	4.0790	4.0790	4.0249	4.2500	4.2262	.....	4.2500	4.0876	4.2071	4.0988	4.0988	3.9790	4.0094	3B		
			4.0870	3.9778	4.0796	4.0784	4.0264	4.2498	4.2264	.....	4.2515	4.0882	4.2056	4.0982	4.0994	3.9792	4.0092			
4¼–6 or 4.250–6	UN	2A	4.1387	4.0665	4.1286	4.1286	4.0925	4.2470	4.2288	.....	4.2500	4.1417	4.2270	4.1548	4.1548	4.0700	4.1000	2B	UN	4¼–6 or 4.250–6
			4.1381	4.0652	4.1292	4.1280	4.0938	4.2468	4.2290	.....	4.2513	4.1423	4.2257	4.1542	4.1554	4.0702	4.0998			
		3A	4.1417	4.0695	4.1342	4.1342	4.0981	4.2500	4.2318	.....	4.2500	4.1417	4.2237	4.1515	4.1515	4.0700	4.0896	3B		
			4.1411	4.0682	4.1348	4.1336	4.0994	4.2498	4.2320	.....	4.2513	4.1423	4.2224	4.1509	4.1521	4.0702	4.0894			
4¼–12 or 4.250–12	UN	2A	4.1939	4.1578	4.1874	4.1874	4.1694	4.2480	4.2366	.....	4.2500	4.1959	4.2405	4.2044	4.2044	4.1600	4.1780	2B	UN	4¼–12 or 4.250–12
			4.1933	4.1569	4.1880	4.1868	4.1703	4.2478	4.2368	.....	4.2509	4.1965	4.2396	4.2038	4.2050	4.1602	4.1778			
		3A	4.1959	4.1598	4.1910	4.1910	4.1730	4.2500	4.2386	.....	4.2500	4.1959	4.2384	4.2023	4.2023	4.1600	4.1698	3B		
			4.1953	4.1589	4.1916	4.1904	4.1739	4.2498	4.2388	.....	4.2509	4.1965	4.2375	4.2017	4.2029	4.1602	4.1696			
4¼–16 or 4.250–16	UN	2A	4.2076	4.1805	4.2017	4.2017	4.1882	4.2482	4.2388	.....	4.2500	4.2094	4.2441	4.2170	4.2170	4.1820	4.1960	2B	UN	4¼–16 or 4.250–16
			4.2070	4.1796	4.2023	4.2011	4.1891	4.2480	4.2390	.....	4.2509	4.2100	4.2432	4.2164	4.2176	4.1822	4.1958			
		3A	4.2094	4.1823	4.2050	4.2050	4.1915	4.2500	4.2406	.....	4.2500	4.2094	4.2422	4.2151	4.2151	4.1820	4.1908	3B		
			4.2088	4.1814	4.2056	4.2044	4.1924	4.2498	4.2408	.....	4.2509	4.2100	4.2413	4.2145	4.2157	4.1822	4.1906			
4⅜–6 or 4.375–6	UN	2A	4.2637	4.1915	4.2536	4.2536	4.2175	4.3720	4.3538	.....	4.3750	4.2667	4.3521	4.2799	4.2799	4.1950	4.2250	2B	UN	4⅜–6 or 4.375–6
			4.2631	4.1902	4.2542	4.2530	4.2188	4.3718	4.3540	.....	4.3763	4.2673	4.3508	4.2793	4.2805	4.1952	4.2248			
		3A	4.2667	4.1945	4.2591	4.2591	4.2230	4.3750	4.3568	.....	4.3750	4.2667	4.3488	4.2766	4.2766	4.1950	4.2146	3B		
			4.2661	4.1932	4.2597	4.2585	4.2243	4.3748	4.3570	.....	4.3763	4.2673	4.3475	4.2760	4.2772	4.1952	4.2144			

4⅜–12 or 4.375–12	UN	2A	4.3189	4.2828	4.3124	4.3124	4.2944	4.3730	4.3616		4.3750	4.3209	4.3655	4.3294	4.3294	4.2850	4.3030	2B	UN	4⅜–12 or 4.375–12
		3A	4.3183	4.2819	4.3130	4.3118	4.2953	4.3728	4.3618		4.3759	4.3215	4.3646	4.3288	4.3300	4.2852	4.3028	3B		
			4.3209	4.2848	4.3160	4.3160	4.2980	4.3750	4.3636		4.3750	4.3209	4.3634	4.3273	4.3273	4.2850	4.2948			
			4.3203	4.2839	4.3166	4.3154	4.2989	4.3748	4.3638		4.3759	4.3215	4.3625	4.3267	4.3279	4.2852	4.2946			
4⅜–16 or 4.375–16	UN	2A	4.3326	4.3055	4.3267	4.3267	4.3132	4.3732	4.3638		4.3750	4.3344	4.3691	4.3420	4.3420	4.3070	4.3210	2B	UN	4⅜–16 or 4.375–16
		3A	4.3320	4.3046	4.3273	4.3261	4.3141	4.3730	4.3640		4.3759	4.3350	4.3682	4.3414	4.3426	4.3072	4.3208	3B		
			4.3344	4.3073	4.3300	4.3300	4.3165	4.3750	4.3656		4.3750	4.3344	4.3672	4.3401	4.3401	4.3070	4.3158			
			4.3338	4.3064	4.3306	4.3294	4.3174	4.3748	4.3658		4.3759	4.3350	4.3663	4.3395	4.3407	4.3072	4.3156			
4½–4 or 4.500–4	UN	2A	4.3341	4.2258	4.3225	4.3225	4.2684	4.4965	4.4727		4.5000	4.3376	4.4610	4.3527	4.3527	4.2290	4.2670	2B	UN	4½–4 or 4.500–4
		3A	4.3335	4.2243	4.3231	4.3219	4.2699	4.4963	4.4729		4.5015	4.3382	4.4595	4.3521	4.3533	4.2292	4.2668	3B		
			4.3376	4.2293	4.3289	4.3289	4.2748	4.5000	4.4762		4.5000	4.3376	4.4572	4.3489	4.3489	4.2290	4.2594			
			4.3370	4.2278	4.3295	4.3283	4.2763	4.4998	4.4764		4.5015	4.3382	4.4557	4.3483	4.3495	4.2292	4.2592			
4½–6 or 4.500–6	UN	2A	4.3886	4.3164	4.3784	4.3784	4.3423	4.4969	4.4787		4.5000	4.3917	4.4772	4.4050	4.4050	4.3200	4.3500	2B	UN	4½–6 or 4.500–6
		3A	4.3880	4.3151	4.3790	4.3778	4.3436	4.4967	4.4789		4.5013	4.3923	4.4759	4.4044	4.4056	4.3202	4.3498	3B		
			4.3917	4.3195	4.3840	4.3840	4.3479	4.5000	4.4818		4.5000	4.3917	4.4738	4.4016	4.4016	4.3200	4.3396			
			4.3911	4.3182	4.3846	4.3834	4.3492	4.4998	4.4820		4.5013	4.3923	4.4725	4.4010	4.4022	4.3202	4.3394			
4½–12 or 4.500–12	UN	2A	4.4439	4.4078	4.4374	4.4374	4.4194	4.4980	4.4866		4.5000	4.4459	4.4905	4.4544	4.4544	4.4100	4.4280	2B	UN	4½–12 or 4.500–12
		3A	4.4433	4.4069	4.4380	4.4368	4.4203	4.4978	4.4868		4.5009	4.4465	4.4896	4.4538	4.4550	4.4102	4.4278	3B		
			4.4459	4.4098	4.4410	4.4410	4.4230	4.5000	4.4886		4.5000	4.4459	4.4884	4.4523	4.4523	4.4100	4.4198			
			4.4453	4.4089	4.4416	4.4404	4.4239	4.4998	4.4888		4.5009	4.4465	4.4875	4.4517	4.4529	4.4102	4.4196			
4½–16 or 4.500–16	UN	2A	4.4576	4.4305	4.4517	4.4517	4.4382	4.4982	4.4888		4.5000	4.4594	4.4941	4.4670	4.4670	4.4320	4.4460	2B	UN	4½–16 or 4.500–16
		3A	4.4570	4.4296	4.4523	4.4511	4.4391	4.4980	4.4890		4.5009	4.4600	4.4932	4.4664	4.4676	4.4322	4.4458	3B		
			4.4594	4.4323	4.4550	4.4550	4.4415	4.5000	4.4906		4.5000	4.4594	4.4922	4.4651	4.4651	4.4320	4.4408			
			4.4588	4.4314	4.4556	4.4544	4.4424	4.4998	4.4908		4.5009	4.4600	4.4913	4.4645	4.4657	4.4322	4.4406			
4⅝–6 or 4.625–6	UN	2A	4.5136	4.4414	4.5033	4.5033	4.4672	4.62190	4.60370		4.6250	4.5167	4.6022	4.5300	4.5300	4.44500	4.47500	2B	UN	4⅝–6 or 4.625–6
		3A	4.5130	4.4401	4.5039	4.5027	4.4685	4.62165	4.60395		4.6263	4.5173	4.6009	4.5294	4.5306	4.44525	4.47475	3B		
			4.5167	4.4445	4.5090	4.5090	4.4729	4.62500	4.60680		4.6250	4.5167	4.5989	4.5267	4.5267	4.44500	4.46460			
			4.5161	4.4432	4.5096	4.5084	4.4742	4.62475	4.60705		4.6263	4.5173	4.5976	4.5261	4.5273	4.44525	4.46435			
4⅝–12 or 4.625–12	UN	2A	4.5689	4.5328	4.5622	4.5622	4.5442	4.62300	4.61160		4.6250	4.5709	4.6157	4.5796	4.5796	4.53500	4.55300	2B	UN	4⅝–12 or 4.625–12
		3A	4.5683	4.5319	4.5628	4.5616	4.5451	4.62275	4.61185		4.6259	4.5715	4.6148	4.5790	4.5802	4.53525	4.55275	3B		
			4.5709	4.5348	4.5659	4.5659	4.5479	4.62500	4.61360		4.6250	4.5709	4.6136	4.5775	4.5775	4.53500	4.54480			
			4.5703	4.5339	4.5665	4.5653	4.5488	4.62475	4.61385		4.6269	4.5715	4.6127	4.5769	4.5781	4.53525	4.54455			
4⅝–16 or 4.625–16	UN	2A	4.5826	4.5555	4.5765	4.5765	4.5630	4.62320	4.61380		4.6250	4.5844	4.6194	4.5923	4.5923	4.55700	4.57100	2B	UN	4⅝–16 or 4.625–16
		3A	4.5820	4.5546	4.5771	4.5759	4.5639	4.62295	4.61405		4.6259	4.5850	4.6185	4.5917	4.5929	4.55725	4.57075	3B		
			4.5844	4.5573	4.5799	4.5799	4.5664	4.62500	4.61560		4.6250	4.5844	4.6174	4.5903	4.5903	4.55700	4.56580			
			4.5838	4.5564	4.5805	4.5793	4.5673	4.62475	4.61585		4.6259	4.5850	4.6165	4.5897	4.5909	4.55725	4.56555			
4¾–4 or 4.750–4	UN	2A	4.5841	4.4758	4.5724	4.5724	4.5183	4.74650	4.72270		4.7500	4.5876	4.7112	4.6029	4.6029	4.47900	4.51700	2B	UN	4¾–4 or 4.750–4
		3A	4.5835	4.4743	4.5730	4.5718	4.5198	4.74625	4.72295		4.7515	4.5882	4.7097	4.6023	4.6035	4.47925	4.51675	3B		
			4.5876	4.4793	4.5788	4.5788	4.5247	4.75000	4.72620		4.7500	4.5876	4.7073	4.5990	4.5990	4.47900	4.50940			
			4.5870	4.4778	4.5794	4.5782	4.5262	4.74775	4.72645		4.7515	4.5882	4.7058	4.5984	4.5996	4.47925	4.50915			
4¾–6 or 4.750–6	UN	2A	4.6386	4.5664	4.6283	4.6283	4.5922	4.74690	4.72870		4.7500	4.6417	4.7273	4.6551	4.6551	4.57000	4.60000	2B	UN	4¾–6 or 4.750–6
		3A	4.6380	4.5651	4.6289	4.6277	4.5935	4.74665	4.72895		4.7513	4.6423	4.7260	4.6545	4.6557	4.57025	4.59975	3B		
			4.6417	4.5695	4.6340	4.6340	4.5979	4.75000	4.73180		4.7500	4.6417	4.7240	4.6518	4.6518	4.57000	4.58960			
			4.6411	4.5682	4.6346	4.6334	4.5992	4.74975	4.73205		4.7513	4.6423	4.7227	4.6512	4.6524	4.57025	4.58935			
4¾–12 or 4.750–12	UN	2A	4.6939	4.6578	4.6872	4.6872	4.6692	4.74800	4.73660		4.7500	4.6959	4.7407	4.7046	4.7046	4.66000	4.67800	2B	UN	4¾–12or 4.750–12
		3A	4.6933	4.6569	4.6878	4.6866	4.6701	4.74775	4.73685		4.7509	4.6965	4.7398	4.7040	4.7052	4.66025	4.67775	3B		
			4.6959	4.6598	4.6909	4.6909	4.6729	4.75000	4.73860		4.7500	4.6959	4.7386	4.7025	4.7025	4.66000	4.66980			
			4.6953	4.6589	4.6915	4.6903	4.6738	4.74975	4.73885		4.7509	4.6965	4.7377	4.7019	4.7031	4.66025	4.66955			
4¾–16 or 4.750–16	UN	2A	4.7076	4.6805	4.7015	4.7015	4.6880	4.74820	4.73880		4.7500	4.7094	4.7444	4.7173	4.7173	4.68200	4.69600	2B	UN	4¾–16 or 4.750–16
		3A	4.7070	4.6796	4.7021	4.7009	4.6889	4.74795	4.73905		4.7509	4.7100	4.7435	4.7167	4.7179	4.68225	4.69575	3B		
			4.7094	4.6823	4.7049	4.7049	4.6914	4.75000	4.74060		4.7500	4.7094	4.7424	4.7153	4.7153	4.68200	4.69080			
			4.7088	4.6814	4.7055	4.7043	4.6923	4.74975	4.74085		4.7509	4.7100	4.7415	4.7147	4.7159	4.68225	4.69055			
4⅞–6 or 4.875–6	UN	2A	4.7636	4.6914	4.7532	4.7532	4.7171	4.87190	4.85370		4.8750	4.7667	4.8524	4.7802	4.7802	4.69500	4.72500	2B	UN	4⅞–6 or 4.875–6
		3A	4.7630	4.6901	4.7538	4.7526	4.7184	4.87165	4.85395		4.8763	4.7673	4.8511	4.7796	4.7808	4.69525	4.72475	3B		
			4.7667	4.6945	4.7589	4.7589	4.7228	4.87500	4.85680		4.8750	4.7667	4.8490	4.7768	4.7768	4.69500	4.71460			
			4.7661	4.6932	4.7595	4.7583	4.7241	4.87475	4.85705		4.8763	4.7673	4.8477	4.7762	4.7774	4.69525	4.71435			
4⅞–12 or 4.875–12	UN	2A	4.8189	4.7828	4.8122	4.8122	4.7942	4.87300	4.86160		4.8750	4.8209	4.8657	4.8296	4.8296	4.78500	4.80300	2B	UN	4⅞–12 or 4.875–12
		3A	4.8183	4.7819	4.8128	4.8116	4.7951	4.87275	4.86185		4.8759	4.8215	4.8648	4.8290	4.8302	4.78525	4.80275	3B		
			4.8209	4.7848	4.8159	4.8159	4.7979	4.87500	4.86360		4.8750	4.8209	4.8636	4.8275	4.8275	4.78500	4.79480			
			4.8203	4.7839	4.8165	4.8153	4.7988	4.87475	4.86385		4.8759	4.8215	4.8627	4.8269	4.8281	4.78525	4.79455			
4⅞–16 or 4.875–16	UN	2A	4.8326	4.8055	4.8265	4.8265	4.8130	4.87320	4.86380		4.8750	4.8344	4.8694	4.8423	4.8423	4.80700	4.82100	2B	UN	4⅞–16 or 4.875–16
		3A	4.8320	4.8046	4.8271	4.8259	4.8139	4.87295	4.86405		4.8759	4.8350	4.8685	4.8417	4.8429	4.80725	4.82075	3B		
			4.8344	4.8073	4.8299	4.8299	4.8164	4.87500	4.86560		4.8750	4.8344	4.8674	4.8403	4.8403	4.80700	4.81580			
			4.8338	4.8064	4.8305	4.8293	4.8173	4.87475	4.86585		4.8759	4.8350	4.8665	4.8397	4.8409	4.80725	4.81555			

TABLE III.12.—*Gages for standard thread series, Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	Class	Gages for external threads								Gages for internal threads							Class	Series designation	Nominal size and threads per inch
			X thread ring gages					Z plain ring gages for major diameter			X thread plug gages					Z plain plug gages for minor diameter				
			GO		LO, classes 1A and 2A NOT GO, class 3A			GO	NOT GO		GO		III			GO	NOT GO			
					Pitch diameter									Pitch diameter						
			Pitch diameter	Minor diameter	Plus tolerance gage	Minus tolerance gage	Minor diameter		Semi-finished	Unfinished hot-rolled material	Major diameter	Pitch diameter	Major diameter	Minus tolerance gage	Plus tolerance gage					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*			
5–4 or 5.000–4	UN	2A	4.8340	4.7257	4.8221	4.8221	4.7680	4.99640	4.97260		5.0000	4.8376	4.9613	4.8530	4.8530	4.72900	4.76700	2B	UN	5–4 or 5.000–4
			4.8334	4.7242	4.8227	4.8215	4.7695	4.99615	4.97285		5.0015	4.8382	4.9598	4.8524	4.8536	4.72925	4.76675			
		3A	4.8376	4.7293	4.8287	4.8287	4.7746	5.00000	4.97620		5.0000	4.8376	4.9575	4.8492	4.8492	4.72900	4.75940	3B		
			4.8370	4.7278	4.8293	4.8281	4.7761	4.99975	4.97645		5.0015	4.8382	4.9560	4.8486	4.8498	4.72925	4.75915			
5–6 or 5.000–6	UN	2A	4.8886	4.8164	4.8781	4.8781	4.8420	4.99690	4.97870		5.0000	4.8917	4.9775	4.9053	4.9053	4.82000	4.85000	2B	UN	5–6 or 5.000–6
			4.8880	4.8151	4.8787	4.8775	4.8433	4.99665	4.97895		5.0013	4.8923	4.9762	4.9047	4.9059	4.82025	4.84975			
		3A	4.8917	4.8195	4.8839	4.8839	4.8478	5.00000	4.98180		5.0000	4.8917	4.9741	4.9019	4.9019	4.82000	4.83960	3B		
			4.8911	4.8182	4.8845	4.8833	4.8491	4.99975	4.98205		5.0013	4.8923	4.9728	4.9013	4.9025	4.82025	4.83935			
5–12 or 5.000–12	UN	2A	4.9439	4.9078	4.9372	4.9372	4.9192	4.99800	4.98660		5.0000	4.9459	4.9907	4.9546	4.9546	4.91000	4.92800	2B	UN	5–12 or 5.000–12
			4.9433	4.9069	4.9378	4.9366	4.9201	4.99775	4.98685		5.0009	4.9465	4.9898	4.9540	4.9552	4.91025	4.92775			
		3A	4.9459	4.9098	4.9409	4.9409	4.9229	5.00000	4.98860		5.0000	4.9459	4.9886	4.9525	4.9525	4.91000	4.91980	3B		
			4.9453	4.9089	4.9415	4.9403	4.9238	4.99975	4.98885		5.0009	4.9465	4.9877	4.9519	4.9531	4.91025	4.91955			
5–16 or 5.000–16	UN	2A	4.9576	4.9305	4.9515	4.9515	4.9380	4.99820	4.98880		5.0000	4.9594	4.9944	4.9673	4.9673	4.93200	4.94600	2B	UN	5–16 or 5.000–16
			4.9570	4.9296	4.9521	4.9509	4.9389	4.99795	4.98905		5.0009	4.9600	4.9935	4.9667	4.9679	4.93225	4.94575			
		3A	4.9594	4.9323	4.9549	4.9549	4.9414	5.00000	4.99060		5.0000	4.9594	4.9924	4.9653	4.9653	4.93200	4.94080	3B		
			4.9588	4.9314	4.9555	4.9543	4.9423	4.99975	4.99085		5.0009	4.9600	4.9915	4.9647	4.9659	4.93225	4.94055			
5⅛–12 or 5.125–12	UN	2A	5.0689	5.0328	5.0622	5.0622	5.0442	5.12300	5.11160		5.1250	5.0709	5.1157	5.0796	5.0796	5.03500	5.05300	2B	UN	5⅛–12 or 5.125–12
			5.0683	5.0319	5.0628	5.0616	5.0451	5.12275	5.11185		5.1259	5.0715	5.1148	5.0790	5.0802	5.03525	5.05275			
		3A	5.0709	5.0348	5.0659	5.0659	5.0479	5.12500	5.11360		5.1250	5.0709	5.1136	5.0775	5.0775	5.03500	5.04480	3B		
			5.0703	5.0339	5.0665	5.0653	5.0488	5.12475	5.11385		5.1259	5.0715	5.1127	5.0769	5.0781	5.03525	5.04455			
5⅛–16 or 5.125–16	UN	2A	5.0826	5.0555	5.0765	5.0765	5.0630	5.12320	5.11380		5.1250	5.0844	5.1194	5.0923	5.0923	5.05700	5.07100	2B	UN	5⅛–16 or 5.125–16
			5.0820	5.0546	5.0771	5.0759	5.0639	5.12295	5.11405		5.1259	5.0850	5.1185	5.0917	5.0929	5.05725	5.07075			
		3A	5.0844	5.0573	5.0799	5.0799	5.0664	5.12500	5.11560		5.1250	5.0844	5.1174	5.0903	5.0903	5.05700	5.06580	3B		
			5.0838	5.0564	5.0805	5.0793	5.0673	5.12475	5.11585		5.1259	5.0850	5.1165	5.0897	5.0909	5.05725	5.06555			
5¼–4 or 5.250–4	UN	2A	5.0840	4.9757	5.0720	5.0720	5.0179	5.24640	5.22260		5.2500	5.0876	5.2115	5.1032	5.1032	4.97900	5.01700	2B	UN	5¼–4 or 5.250–4
			5.0834	4.9742	5.0726	5.0714	5.0194	5.24615	5.22285		5.2515	5.0882	5.2100	5.1026	5.1038	4.97925	5.01675			
		3A	5.0876	4.9793	5.0786	5.0786	5.0245	5.25000	5.22620		5.2500	5.0876	5.2076	5.0993	5.0993	4.97900	5.00940	3B		
			5.0870	4.9778	5.0792	5.0780	5.0260	5.24975	5.22645		5.2515	5.0882	5.2061	5.0987	5.0999	4.97925	5.00915			
5¼–12 or 5.250–12	UN	2A	5.1939	5.1578	5.1872	5.1872	5.1692	5.24800	5.23660		5.2500	5.1959	5.2407	5.2046	5.2046	5.16000	5.17800	2B	UN	5¼–12 or 5.250–12
			5.1933	5.1569	5.1878	5.1866	5.1701	5.24775	5.23685		5.2509	5.1965	5.2398	5.2040	5.2052	5.16025	5.17775			
		3A	5.1959	5.1598	5.1909	5.1909	5.1729	5.25000	5.23860		5.2500	5.1959	5.2386	5.2025	5.2025	5.16000	5.16980	3B		
			5.1953	5.1589	5.1915	5.1903	5.1738	5.24975	5.23885		5.2509	5.1965	5.2377	5.2019	5.2031	5.16025	5.16955			
5¼–16 or 5.250–16	UN	2A	5.2076	5.1805	5.2015	5.2015	5.1880	5.24820	5.23880		5.2500	5.2094	5.2444	5.2173	5.2173	5.18200	5.19600	2B	UN	5¼–16 or 5.250–16
			5.2070	5.1796	5.2021	5.2009	5.1889	5.24795	5.23905		5.2509	5.2100	5.2435	5.2167	5.2179	5.18225	5.19575			
		3A	5.2094	5.1823	5.2049	5.2049	5.1914	5.25000	5.24060		5.2500	5.2094	5.2424	5.2153	5.2153	5.18200	5.19080	3B		
			5.2088	5.1814	5.2055	5.2043	5.1923	5.24975	5.24085		5.2509	5.2100	5.2415	5.2147	5.2159	5.18225	5.19055			
5⅜–12 or 5.375–12	UN	2A	5.3189	5.2828	5.3122	5.3122	5.2942	5.37300	5.36160		5.3750	5.3209	5.3657	5.3296	5.3296	5.28500	5.30300	2B	UN	5⅜–12 or 5.375–12
			5.3183	5.2819	5.3128	5.3116	5.2951	5.37275	5.36185		5.3759	5.3215	5.3648	5.3290	5.3302	5.28525	5.30275			
		3A	5.3209	5.2848	5.3159	5.3159	5.2979	5.37500	5.36360		5.3750	5.3209	5.3636	5.3275	5.3275	5.28500	5.29480	3B		
			5.3203	5.2839	5.3165	5.3153	5.2988	5.37475	5.36385		5.3759	5.3215	5.3627	5.3269	5.3281	5.28525	5.29455			

5⅜–16 or 5. 375–16	UN	2A	5. 3326	5. 3055	5. 3265	5. 3265	5. 3130	5. 37320	5. 36380	.....	5. 3750	5. 3344	5. 3694	5. 3423	5. 3423	5. 30700	5. 32100	2B	UN	5⅜–16 or 5. 375–16
		3A	5. 3320	5. 3046	5. 3271	5. 3259	5. 3139	5. 37295	5. 36405	.....	5. 3759	5. 3350	5. 3685	5. 3417	5. 3429	5. 30725	5. 32075			
			5. 3344	5. 3073	5. 3299	5. 3299	5. 3164	5. 37500	5. 36560	.....	5. 3750	5. 3344	5. 3674	5. 3403	5. 3403	5. 30700	5. 31580	3B		
			5. 3338	5. 3064	5. 3305	5. 3293	5. 3173	5. 37475	5. 36585	.....	5. 3759	5. 3350	5. 3665	5. 3397	5. 3409	5. 30725	5. 31555			
5½–4 or 5. 500–4	UN	2A	5. 3340	5. 2257	5. 3219	5. 3219	5. 2678	5. 49640	5. 47260	.....	5. 5000	5. 3376	5. 4617	5. 3534	5. 3534	5. 22900	5. 26700	2B	UN	5½–4 or 5. 500–4
		3A	5. 3334	5. 2242	5. 3225	5. 3213	5. 2693	5. 49615	5. 47285	.....	5. 5015	5. 3382	5. 4602	5. 3528	5. 3540	5. 22925	5. 26675			
			5. 3376	5. 2293	5. 3285	5. 3285	5. 2744	5. 50000	5. 47620	.....	5. 5000	5. 3376	5. 4577	5. 3494	5. 3494	5. 22900	5. 25940	3B		
			5. 3370	5. 2278	5. 3291	5. 3279	5. 2759	5. 49975	5. 47645	.....	5. 5015	5. 3382	5. 4562	5. 3488	5. 3500	5. 22925	5. 25915			
5½–12 or 5. 500–12	UN	2A	5. 4439	5. 4078	5. 4372	5. 4372	5. 4192	5. 49800	5. 48660	.....	5. 5000	5. 4459	5. 4907	5. 4546	5. 4546	5. 41000	5. 42800	2B	UN	5½–12 or 5. 500–12
		3A	5. 4433	5. 4069	5. 4378	5. 4366	5. 4201	5. 49775	5. 48685	.....	5. 5009	5. 4465	5. 4898	5. 4540	5. 4552	5. 41025	5. 42775			
			5. 4459	5. 4098	5. 4409	5. 4409	5. 4229	5. 50000	5. 48860	.....	5. 5000	5. 4459	5. 4886	5. 4525	5. 4525	5. 41000	5. 41980	3B		
			5. 4453	5. 4089	5. 4415	5. 4403	5. 4238	5. 49975	5. 48885	.....	5. 5009	5. 4465	5. 4877	5. 4519	5. 4531	5. 41025	5. 41955			
5½–16 or 5. 500–16	UN	2A	5. 4576	5. 4305	5. 4515	5. 4515	5. 4380	5. 49820	5. 48880	.....	5. 5000	5. 4594	5. 4944	5. 4673	5. 4673	5. 43200	5. 44600	2B	UN	5½–16 or 5. 500–16
		3A	5. 4570	5. 4296	5. 4521	5. 4509	5. 4389	5. 49795	5. 48905	.....	5. 5009	5. 4600	5. 4935	5. 4667	5. 4679	5. 43225	5. 44575			
			5. 4594	5. 4323	5. 4549	5. 4549	5. 4414	5. 50000	5. 49060	.....	5. 5000	5. 4594	5. 4924	5. 4653	5. 4653	5. 43200	5. 44080	3B		
			5. 4588	5. 4314	5. 4555	5. 4543	5. 4423	5. 49975	5. 49085	.....	5. 5009	5. 4600	5. 4915	5. 4647	5. 4659	5. 43225	5. 44055			
5⅝–12 or 5. 625–12	UN	2A	5. 5688	5. 5327	5. 5619	5. 5619	5. 5439	5. 62290	5. 61150	.....	5. 6250	5. 5709	5. 6160	5. 5799	5. 5799	5. 53500	5. 55300	2B	UN	5⅝–12 or 5. 625–12
		3A	5. 5682	5. 5318	5. 5625	5. 5613	5. 5448	5. 62265	5. 61175	.....	5. 6259	5. 5715	5. 6151	5. 5793	5. 5805	5. 53525	5. 55275			
			5. 5709	5. 5348	5. 5657	5. 5657	5. 5477	5. 62500	5. 61360	.....	5. 6250	5. 5709	5. 6137	5. 5776	5. 5776	5. 53500	5. 54480	3B		
			5. 5703	5. 5339	5. 5663	5. 5651	5. 5486	5. 62475	5. 61385	.....	5. 6259	5. 5715	5. 6128	5. 5770	5. 5782	5. 53525	5. 54455			
5⅝–16 or 5. 625–16	UN	2A	5. 5825	5. 5554	5. 5763	5. 5763	5. 5628	5. 62310	5. 61370	.....	5. 6250	5. 5844	5. 6196	5. 5925	5. 5925	5. 55700	5. 57100	2B	UN	5⅝–16 or 5. 625–16
		3A	5. 5819	5. 5545	5. 5769	5. 5757	5. 5637	5. 62285	5. 61395	.....	5. 6259	5. 5850	5. 6187	5. 5919	5. 5931	5. 55725	5. 57075			
			5. 5844	5. 5573	5. 5797	5. 5797	5. 5662	5. 62500	5. 61560	.....	5. 6250	5. 5844	5. 6176	5. 5905	5. 5905	5. 55700	5. 56580	3B		
			5 5838	5. 5564	5. 5803	5. 5791	5. 5671	5. 62475	5. 61585	.....	5. 6259	5. 5850	5. 6167	5. 5899	5. 5911	5. 55725	5. 56555			
5¾–4 or 5. 750–4	UN	2A	5. 5839	5. 4756	5. 5717	5. 5717	5. 5176	5. 74630	5. 72250	.....	5. 7500	5. 5876	5. 7118	5. 6035	5. 6035	5. 47900	5. 51700	2B	UN	5¾–4 or 5. 750–4
		3A	5. 5833	5. 4741	5. 5723	5. 5711	5. 5191	5. 74605	5. 72275	.....	5. 7515	5. 5882	5. 7103	5. 6029	5. 6041	5. 47925	5. 51675			
			5. 5876	5. 4793	5. 5784	5. 5784	5. 5243	5. 75000	5. 72620	.....	5. 7500	5. 5876	5. 7078	5. 5995	5. 5995	5. 47900	5. 50940	3B		
			5. 5870	5. 4778	5. 5790	5. 5778	5. 5258	5. 74975	5. 72645	.....	5. 7515	5. 5882	5. 7063	5. 5989	5. 6001	5. 47925	5. 50915			
5¾–12 or 5. 750–12	UN	2A	5. 6938	5. 6577	5. 6869	5. 6869	5. 6689	5. 74790	5. 73650	.....	5. 7500	5. 6959	5. 7410	5. 7049	5. 7049	5. 66000	5. 67800	2B	UN	5¾–12 or 5. 750–12
		3A	5. 6932	5. 6568	5. 6875	5. 6863	5. 6698	5. 74765	5. 73675	.....	5. 7509	5. 6965	5. 7401	5. 7043	5. 7055	5. 66025	5. 67775			
			5. 6959	5. 6598	5. 6907	5. 6907	5. 6727	5. 75000	5. 73860	.....	5. 7500	5. 6959	5. 7387	5. 7026	5. 7026	5. 66000	5. 66980	3B		
			5. 6953	5. 6589	5. 6913	5. 6901	5. 6736	5. 74975	5. 73885	.....	5. 7509	5. 6965	5. 7378	5. 7020	5. 7032	5. 66025	5. 66955			
5¾–16 or 5. 750–16	UN	2A	5. 7075	5. 6804	5. 7013	5. 7013	5. 6878	5. 74810	5. 73870	.....	5. 7500	5. 7094	5. 7446	5. 7175	5. 7175	5. 68200	5. 69600	2B	UN	5¾–16 or 5. 750–16
		3A	5. 7069	5. 6795	5. 7019	5. 7007	5. 6887	5. 74785	5. 73895	.....	5. 7509	5. 7100	5. 7437	5. 7169	5. 7181	5. 68225	5. 69575			
			5. 7094	5. 6823	5. 7047	5. 7047	5. 6912	5. 75000	5. 74060	.....	5. 7500	5. 7094	5. 7426	5. 7155	5. 7155	5. 68200	5. 69080	3B		
			5. 7088	5. 6814	5. 7053	5. 7041	5. 6921	5. 74975	5. 74085	.....	5. 7509	5. 7100	5. 7417	5. 7149	5. 7161	5. 68225	5. 69055			
5⅞–12 or 5. 875–12	UN	2A	5. 8188	5. 7827	5. 8119	5. 8119	5. 7939	5. 87290	5. 86150	.....	5. 8750	5. 8209	5. 8660	5. 8299	5. 8299	5. 78500	5. 80300	2B	UN	5⅞–12 or 5. 875–12
		3A	5. 8182	5. 7818	5. 8125	5. 8113	5. 7948	5. 87265	5. 86175	.....	5. 8759	5. 8215	5. 8651	5. 8293	5. 8305	5. 78525	5. 80275			
			5. 8209	5. 7848	5. 8157	5. 8157	5. 7977	5. 87500	5. 86360	.....	5. 8750	5. 8209	5. 8637	5. 8276	5. 8276	5. 78500	5. 79480	3B		
			5. 8203	5. 7839	5. 8163	5. 8151	5. 7986	5. 87475	5. 86385	.....	5. 8759	5. 8215	5. 8628	5. 8270	5. 8282	5. 78525	5. 79455			
5⅞–16 or 5. 875–16	UN	2A	5. 8325	5. 8054	5. 8263	5. 8263	5. 8128	5. 87310	5. 86370	.....	5. 8750	5. 8344	5. 8696	5. 8425	5. 8425	5. 80700	5. 82100	2B	UN	5⅞–16 or 5. 875–16
		3A	5. 8319	5. 8045	5. 8269	5. 8257	5. 8137	5. 87285	5. 86395	.....	5. 8759	5. 8350	5. 8687	5. 8419	5. 8431	5. 80725	5. 82075			
			5. 8344	5. 8073	5. 8297	5. 8297	5. 8162	5. 87500	5. 86560	.....	5. 8750	5. 8344	5. 8676	5. 8405	5. 8405	5. 80700	5. 81580	3B		
			5. 8338	5. 8064	5. 8303	5. 8291	5. 8171	5. 87475	5. 86585	.....	5. 8759	5. 8350	5. 8667	5. 8399	5. 8411	5. 80725	5. 81555			
6–4 or 6. 000–4	UN	2A	5. 8339	5. 7256	5. 8215	5. 8215	5. 7674	5. 99630	5. 97250	.....	6. 0000	5. 8376	5. 9620	5. 8537	5. 8537	5. 72900	5. 76700	2B	UN	6–4 or 6. 000–4
		3A	5. 8333	5. 7241	5. 8221	5. 8209	5. 7689	5. 99605	5. 97275	.....	6. 0015	5. 8382	5. 9605	5. 8531	5. 8543	5. 72925	5. 76675			
			5. 8376	5. 7293	5. 8283	5. 8283	5. 7742	6. 00000	5. 97620	.....	6. 0000	5. 8376	5. 9579	5. 8496	5. 8496	5. 72900	5. 75940	3B		
			5. 8370	5. 7278	5. 8289	5. 8277	5. 7757	5. 99975	5. 97645	.....	6. 0015	5. 8382	5. 9564	5. 8490	5. 8502	5. 72925	5. 75915			
6–12 or 6. 000–12	UN	2A	5. 9438	5. 9077	5. 9369	5. 9369	5. 9189	5. 99790	5. 98650	.....	6. 0000	5. 9459	5. 9910	5. 9549	5. 9549	5. 91000	5. 92800	2B	UN	6–12 or 6. 000–12
		3A	5. 9432	5. 9068	5. 9375	5. 9363	5. 9198	5. 99765	5. 98675	.....	6. 0009	5. 9465	5. 9901	5. 9543	5. 9555	5. 91025	5. 92775			
			5. 9459	5. 9098	5. 9407	5. 9407	5. 9227	6. 00000	5. 98860	.....	6. 0000	5. 9459	5. 9887	5. 9526	5. 9526	5. 91000	5. 91980	3B		
			5. 9453	5. 9089	5. 9413	5. 9401	5. 9236	5. 99975	5. 98885	.....	6. 0009	5. 9465	5. 9878	5. 9520	5. 9532	5. 91025	5. 91955			
6–16 or 6. 000–16	UN	2A	5. 9575	5. 9304	5. 9513	5. 9513	5. 9378	5. 99810	5. 98870	.....	6. 0000	5. 9594	5. 9946	5. 9675	5. 9675	5. 93200	5. 94600	2B	UN	6–16 or 6. 000–16
		3A	5. 9569	5. 9295	5. 9519	5. 9507	5. 9387	5. 99785	5. 98895	.....	6. 0009	5. 9600	5. 9937	5. 9669	5. 9681	5. 93225	5. 94575			
			5. 9594	5. 9323	5. 9547	5. 9547	5. 9412	6. 00000	5. 99060	.....	6. 0000	5. 9594	5. 9926	5. 9655	5. 9655	5. 93200	5. 94080	3B		
			5. 9588	5. 9314	5. 9553	5. 9541	5. 9421	5. 99975	5. 99085	.....	6. 0009	5. 9600	5. 9917	5. 9649	5. 9661	5. 93225	5. 94055			

TABLE III.13.—*Setting plug gages, Unified screw threads*

Nominal size and threads per inch	Series designation	Class	W truncated setting plugs							Basic-crest setting plugs			
			Plug for GO thread gage[a]			Plug for LO or NOT GO thread gage[a]				Major diameter			
			Major diameter		Pitch diameter	Major diameter		Pitch diameter		Plug for GO[a,b] thread gage		Plug for LO or [a,c] NOT GO thread gage	
			Truncated	Full		Truncated	Full	Plus tolerance gage	Minus tolerance gage	W tolerance	X tolerance	W tolerance	X tolerance
1	2	3	4	5	6	7	8	9	10	11A	11B	12A	12B
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
0–80 or .060–80	UNF	2A	0.0561	0.0595	0.0514	0.0550	0.0584	0.0496	0.0496	0.0595	0.0595	0.0584	0.0584
		3A	.0558	.0598	.0513	.0547	.0587	.0497	.0495	.0598	.0598	.0587	.0587
			.0566	.0600	.0519	.0560	.0594	.0506	.0506	.0600	.0600	.0594	.0594
			.0563	.0603	.0518	.0557	.0597	.0507	.0505	.0603	.0603	.0597	.0597
1–64 or .073–64	UNC	2A	.0684	.0724	.0623	.0671	.0717	.0603	.0603	.0724	.0724	.0717	.0717
		3A	.0681	.0727	.0622	.0668	.0720	.0604	.0602	.0727	.0728	.0720	.0721
			.0690	.0730	.0629	.0682	.0728	.0614	.0614	.0730	.0730	.0728	.0728
			.0687	.0733	.0628	.0679	.0731	.0615	.0613	.0733	.0734	.0731	.0732
1–72 or .073–72	UNF	2A	.0687	.0724	.0634	.0675	.0715	.0615	.0615	.0724	.0724	.0715	.0718
		3A	.0684	.0727	.0633	.0672	.0718	.0616	.0614	.0727	.0727	.0718	.0718
			.0693	.0730	.0640	.0686	.0726	.0626	.0626	.0730	.0730	.0726	.0726
			.0690	.0733	.0639	.0683	.0729	.0627	.0625	.0733	.0733	.0729	.0728
2–56 or .086–56	UNC	2A	.0810	.0854	.0738	.0794	.0850	.0717	.0717	.0854	.0854	.0850	.0850
		3A	.0807	.0857	.0737	.0791	.0853	.0718	.0716	.0857	.0858	.0853	.0854
			.0816	.0860	.0744	.0805	.0860	.0728	.0728	.0860	.0860	.0860	.0860
			.0813	.0863	.0743	.0802	.0863	.0729	.0727	.0863	.0864	.0863	.0864
2–64 or .086–64	UNF	2A	.0814	.0854	.0753	.0801	.0847	.0733	.0733	.0854	.0854	.0847	.0847
		3A	.0811	.0857	.0752	.0798	.0850	.0734	.0732	.0857	.0858	.0850	.0851
			.0820	.0860	.0759	.0812	.0858	.0744	.0744	.0860	.0860	.0858	.0858
			.0817	.0863	.0758	.0809	.0861	.0745	.0743	.0863	.0864	.0861	.0862
3–48 or .099–48	UNC	2A	.0934	.0983	.0848	.0915	.0981	.0825	.0825	.0983	.0983	.0981	.0981
		3A	.0931	.0986	.0847	.0912	.0984	.0826	.0824	.0986	.0987	.0984	.0985
			.0941	.0990	.0855	.0928	.0990	.0838	.0838	.0990	.0990	.0990	.0990
			.0938	.0993	.0854	.0925	.0993	.0839	.0837	.0993	.0994	.0993	.0994
3–56 or .099–56	UNF	2A	.0939	.0983	.0867	.0922	.0978	.0845	.0845	.0983	.0983	.0978	.0978
		3A	.0936	.0986	.0866	.0919	.0981	.0846	.0844	.0986	.0987	.0981	.0982
			.0946	.0990	.0874	.0935	.0990	.0858	.0858	.0990	.0990	.0990	.0990
			.0943	.0993	.0873	.0932	.0993	.0859	.0857	.0993	.0994	.0993	.0994
4–40 or .112–40	UNC	2A	.1056	.1112	.0950	.1033	.1112	.0925	.0925	.1112	.1112	.1112	.1112
		3A	.1053	.1115	.0949	.1030	.1115	.0926	.0924	.1115	.1116	.1115	.1116
			.1064	.1120	.0958	.1047	.1120	.0939	.0939	.1120	.1120	.1120	.1120
			.1061	.1123	.0957	.1044	.1123	.0940	.0938	.1123	.1124	.1123	.1124
4–48 or .112–48	UNF	2A	.1064	.1113	.0978	.1044	.1110	.0954	.0954	.1113	.1113	.1110	.1110
		3A	.1061	.1116	.0977	.1041	.1113	.0955	.0953	.1116	.1117	.1113	.1114
			.1071	.1120	.0985	.1057	.1120	.0967	.0967	.1120	.1120	.1120	.1120
			.1068	.1123	.0984	.1054	.1123	.0968	.0966	.1123	.1124	.1123	.1124
5–40 or .125–40	UNC	2A	.1186	.1242	.1080	.1162	.1242	.1054	.1054	.1242	.1242	.1242	.1242
		3A	.1183	.1245	.1079	.1159	.1245	.1055	.1053	.1245	.1246	.1245	.1246
			.1194	.1250	.1088	.1177	.1250	.1069	.1069	.1250	.1250	.1250	.1250
			.1191	.1253	.1087	.1174	.1253	.1070	.1068	.1253	.1254	.1253	.1254
5–44 or .125–44	UNF	2A	.1191	.1243	.1095	.1168	.1240	.1070	.1070	.1243	.1243	.1240	.1240
		3A	.1188	.1246	.1094	.1165	.1243	.1071	.1069	.1246	.1247	.1243	.1244
			.1198	.1250	.1102	.1181	.1250	.1083	.1083	.1250	.1250	.1250	.1250
			.1195	.1253	.1101	.1178	.1253	.1084	.1082	.1253	.1254	.1253	.1254
6–32 or .138–32	UNC	2A	.1307	.1372	.1169	.1276	.1372	.1141	.1141	.1372	.1372	.1372	.1372
		3A	.1304	.1375	.1168	.1273	.1375	.1142	.1140	.1375	.1377	.1375	.1377
			.1315	.1380	.1177	.1291	.1380	.1156	.1156	.1380	.1380	.1380	.1380
			.1312	.1383	.1176	.1288	.1383	.1157	.1155	.1383	.1385	.1383	.1385
6–40 or .138–40	UNF	2A	.1316	.1372	.1210	.1292	.1372	.1184	.1184	.1372	.1372	.1372	.1372
		3A	.1313	.1375	.1209	.1289	.1375	.1185	.1183	.1375	.1376	.1375	.1376
			.1324	.1380	.1218	.1306	.1380	.1198	.1198	.1380	.1380	.1380	.1380
			.1321	.1383	.1217	.1303	.1383	.1199	.1197	.1383	.1384	.1383	.1384
8–32 or .164–32	UNC	2A	.1566	.1631	.1428	.1534	.1631	.1399	.1399	.1631	.1631	.1631	.1631
		3A	.1563	.1634	.1427	.1531	.1634	.1400	.1398	.1634	.1636	.1634	.1636
			.1575	.1640	.1437	.1550	.1640	.1415	.1415	.1640	.1640	.1640	.1640
			.1572	.1643	.1436	.1547	.1643	.1416	.1414	.1643	.1645	.1643	.1645
8–36 or .164–36	UNF	2A	.1572	.1632	.1452	.1544	.1632	.1424	.1424	.1632	.1632	.1632	.1632
		3A	.1569	.1635	.1451	.1541	.1635	.1425	.1423	.1635	.1636	.1635	.1636
			.1580	.1640	.1460	.1559	.1640	.1439	.1439	.1640	.1640	.1640	.1640
			.1577	.1643	.1459	.1556	.1643	.1440	.1438	.1643	.1644	.1643	.1644
10–24 or .190–24	UNC	2A	.1811	.1890	.1619	.1766	.1890	.1586	.1586	.1890	.1890	.1890	.1890
		3A	.1806	.1895	.1618	.1761	.1895	.1587	.1585	.1895	.1895	.1895	.1895
			.1821	.1900	.1629	.1784	.1900	.1604	.1604	.1900	.1900	.1900	.1900
			.1816	.1905	.1628	.1779	.1905	.1605	.1603	.1905	.1905	.1905	.1905

See footnotes at end of table.

TABLE III.13.—*Setting plug gages, Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	Class	W truncated setting plugs							Basic-crest setting plugs			
			Plug for GO thread gage[a]			Plug for LO or NOT GO thread gage[a]				Major diameter			
			Major diameter		Pitch diameter	Major diameter		Pitch diameter		Plug for GO[a,b] thread gage		Plug for LO or[a,c] NOT GO thread gage	
			Truncated	Full		Truncated	Full	Plus tolerance gage	Minus tolerance gage	W tolerance	X tolerance	W tolerance	X tolerance
1	2	3	4	5	6	7	8	9	10	11A	11B	12A	12B
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
10-32 or .190-32	UNF	2A	.1826	.1891	.1688	.1793	.1891	.1658	.1658	.1891	.1891	.1891	.1891
		3A	.1823	.1894	.1687	.1790	.1894	.1659	.1657	.1894	.1896	.1894	.1896
			.1835	.1900	.1697	.1809	.1900	.1674	.1674	.1900	.1900	.1900	.1900
			.1832	.1903	.1696	.1806	.1903	.1675	.1673	.1903	.1905	.1903	.1905
12-24 or .216-24	UNC	2A	.2071	.2150	.1879	.2025	.2150	.1845	.1845	.2150	.2150	.2150	.2150
		3A	.2066	.2155	.1878	.2020	.2155	.1846	.1844	.2155	.2155	.2155	.2155
			.2081	.2160	.1889	.2043	.2160	.1863	.1863	.2160	.2160	.2160	.2160
			.2076	.2165	.1888	.2038	.2165	.1864	.1862	.2165	.2165	.2165	.2165
12-28 or .216-28	UNF	2A	.2079	.2150	.1918	.2041	.2150	.1886	.1886	.2150	.2150	.2150	.2150
		3A	.2074	.2155	.1917	.2036	.2155	.1887	.1885	.2155	.2155	.2155	.2155
			.2089	.2160	.1928	.2059	.2160	.1904	.1904	.2160	.2160	.2160	.2160
			.2084	.2165	.1927	.2054	.2165	.1905	.1903	.2165	.2165	.2165	.2165
12-32 or .216-32	UNEF	2A	.2086	.2151	.1948	.2052	.2151	.1917	.1917	.2151	.2151	.2151	.2151
		3A	.2083	.2154	.1947	.2049	.2154	.1918	.1916	.2154	.2156	.2154	.2156
			.2095	.2160	.1957	.2068	.2160	.1933	.1933	.2160	.2160	.2160	.2160
			.2092	.2163	.1956	.2065	.2163	.1934	.1932	.2163	.2165	.2163	.2165
¼-20 or .250-20	UNC	1A	.2399	.2489	.2164	.2325	.2483	.2108	.2108	.2489	.2489	.2483	.2483
		2A	.2394	.2494	.2163	.2320	.2488	.2109	.2107	.2494	.2494	.2488	.2488
			.2399	.2489	.2164	.2344	.2489	.2127	.2127	.2489	.2489	.2489	.2489
		3A	.2394	.2494	.2163	.2339	.2494	.2128	.2126	.2494	.2494	.2494	.2494
			.2410	.2500	.2175	.2364	.2500	.2147	.2147	.2500	.2500	.2500	.2500
			.2405	.2505	.2174	.2359	.2505	.2148	.2146	.2505	.2505	.2505	.2505
¼-28 or .250-28	UNF	1A	.2419	.2490	.2258	.2363	.2476	.2208	.2208	.2490	.2490	.2476	.2476
		2A	.2414	.2495	.2257	.2358	.2481	.2209	.2207	.2495	.2495	.2481	.2481
			.2419	.2490	.2258	.2380	.2490	.2225	.2225	.2490	.2490	.2490	.2490
		3A	.2414	.2495	.2257	.2375	.2495	.2226	.2224	.2495	.2495	.2495	.2495
			.2429	.2500	.2268	.2398	.2500	.2243	.2243	.2500	.2500	.2500	.2500
			.2424	.2505	.2267	.2393	.2505	.2244	.2242	.2505	.2505	.2505	.2505
¼-32 .250-32	UNEF	2A	.2425	.2490	.2287	.2390	.2489	.2255	.2255	.2490	.2490	.2489	.2489
		3A	.2422	.2493	.2286	.2387	.2492	.2256	.2254	.2493	.2495	.2492	.2494
			.2435	.2500	.2297	.2408	.2500	.2273	.2273	.2500	.2500	.2500	.2500
			.2432	.2503	.2296	.2405	.2503	.2274	.2272	.2503	.2505	.2503	.2505
5/16-18 or .3125-18	UNC	1A	.3016	.3113	.2752	.2932	.3108	.2691	.2691	.3113	.3113	.3108	.3108
		2A	.3011	.3118	.2751	.2927	.3113	.2692	.2690	.3118	.3118	.3113	.3113
			.3016	.3113	.2752	.2953	.3113	.2712	.2712	.3113	.3113	.3113	.3113
		3A	.3011	.3118	.2751	.2948	.3118	.2713	.2711	.3118	.3118	.3118	.3118
			.3028	.3125	.2764	.2975	.3125	.2734	.2734	.3125	.3125	.3125	.3125
			.3023	.3130	.2763	.2970	.3130	.2735	.2733	.3130	.3130	.3130	.3130
5/16-20 or .3125-20	UN	2A	.3023	.3113	.2788	.2965	.3113	.2748	.2748	.3113	.3113	.3113	.3113
		3A	.3018	.3118	.2787	.2960	.3118	.2749	.2747	.3118	.3118	.3118	.3118
			.3035	.3125	.2800	.2987	.3125	.2770	.2770	.3125	.3125	.3125	.3125
			.3030	.3130	.2799	.2982	.3130	.2771	.2769	.3130	.3130	.3130	.3130
5/16-24 or .3125-24	UNF	1A	.3035	.3114	.2843	.2968	.3100	.2788	.2788	.3114	.3114	.3100	.3100
		2A	.3030	.3119	.2842	.2963	.3105	.2789	.2787	.3119	.3119	.3105	.3105
			.3035	.3114	.2843	.2986	.3114	.2806	.2806	.3114	.3114	.3114	.3114
		3A	.3030	.3119	.2842	.2981	.3119	.2807	.2805	.3119	.3119	.3119	.3119
			.3046	.3125	.2854	.3007	.3125	.2827	.2827	.3125	.3125	.3125	.3125
			.3041	.3130	.2853	.3002	.3130	.2828	.2826	.3130	.3130	.3130	.3130
5/16-28 or .3125-28	UN	2A	.3044	.3115	.2883	.3004	.3115	.2849	.2849	.3115	.3115	.3115	.3115
		3A	.3039	.3120	.2882	.2999	.3120	.2850	.2848	.3120	.3120	.3120	.3120
			.3054	.3125	.2893	.3022	.3125	.2867	.2867	.3125	.3125	.3125	.3125
			.3049	.3130	.2892	.3017	.3130	.2868	.2866	.3130	.3130	.3130	.3130
5/16-32 or .3125-32	UNEF	2A	.3050	.3115	.2912	.3015	.3114	.2880	.2880	.3115	.3115	.3114	.3114
		3A	.3047	.3118	.2911	.3012	.3117	.2881	.2879	.3118	.3120	.3117	.3119
			.3060	.3125	.2922	.3033	.3125	.2898	.2898	.3125	.3125	.3125	.3125
			.3057	.3128	.2921	.3030	.3128	.2899	.2897	.3128	.3130	.3128	.3130
3/8-16 or .375-16	UNC	1A	.3632	.3737	.3331	.3537	.3735	.3266	.3266	.3737	.3737	.3735	.3735
		2A	.3626	.3743	.3330	.3531	.3741	.3267	.3265	.3743	.3743	.3741	.3741
			.3632	.3737	.3331	.3558	.3737	.3287	.3287	.3737	.3737	.3737	.3737
		3A	.3626	.3743	.3330	.3552	.3743	.3288	.3286	.3743	.3743	.3743	.3743
			.3645	.3750	.3344	.3582	.3750	.3311	.3311	.3750	.3750	.3750	.3750
			.3639	.3756	.3343	.3576	.3756	.3312	.3310	.3756	.3756	.3756	.3756
3/8-20 or .375-20	UN	2A	.3648	.3738	.3413	.3589	.3738	.3372	.3372	.3738	.3738	.3738	.3738
		3A	.3643	.3743	.3412	.3584	.3743	.3373	.3371	.3743	.3743	.3743	.3743
			.3660	.3750	.3425	.3611	.3750	.3394	.3394	.3750	.3750	.3750	.3750
			.3655	.3755	.3424	.3606	.3755	.3395	.3393	.3755	.3755	.3755	.3755

See footnotes at end of table.

TABLE III.13.—*Setting plug gages, Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	Class	W truncated setting plugs							Basic-crest setting plugs			
			Plug for GO thread gage [a]			Plug for LO or NOT GO thread gage [a]				Major diameter			
			Major diameter		Pitch diameter	Major diameter		Pitch diameter		Plug for GO [a,b] thread gage		Plug for LO or [a,c] NOT GO thread gage	
			Truncated	Full		Truncated	Full	Plus tolerance gage	Minus tolerance gage	W tolerance	X tolerance	W tolerance	X tolerance
1	2	3	4	5	6	7	8	9	10	11A	11B	12A	12B
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
		1A	.3660	.3739	.3468	.3591	.3724	.3411	.3411	.3739	.3739	.3724	.3724
3/8–24 or .375–24	UNF	2A	.3655	.3744	.3467	.3586	.3729	.3412	.3410	.3744	.3744	.3729	.3729
			.3660	.3739	.3468	.3610	.3739	.3430	.3430	.3739	.3739	.3739	.3739
		3A	.3655	.3744	.3467	.3605	.3744	.3431	.3429	.3744	.3744	.3744	.3744
			.3671	.3750	.3479	.3630	.3750	.3450	.3450	.3750	.3750	.3750	.3750
			.3666	.3755	.3478	.3625	.3755	.3451	.3449	.3755	.3755	.3755	.3755
		2A	.3668	.3739	.3507	.3626	.3739	.3471	.3471	.3739	.3739	.3739	.3739
3/8–28 or .375–28	UN		.3663	.3744	.3506	.3621	.3744	.3472	.3470	.3744	.3744	.3744	.3744
		3A	.3679	.3750	.3518	.3646	.3750	.3491	.3491	.3750	.3750	.3750	.3750
			.3674	.3755	.3517	.3641	.3755	.3492	.3490	.3755	.3755	.3755	.3755
		2A	.3675	.3740	.3537	.3638	.3737	.3503	.3503	.3740	.3740	.3737	.3737
3/8–32 or .375–32	UNEF		.3672	.3743	.3536	.3635	.3740	.3504	.3502	.3743	.3745	.3740	.3742
		3A	.3685	.3750	.3547	.3657	.3750	.3522	.3522	.3750	.3750	.3750	.3750
			.3682	.3753	.3546	.3654	.3753	.3523	.3521	.3753	.3755	.3753	.3755
										W and X tolerances		W and X tolerances	
		1A	.4246	.4361	.38970	.4135	.4361	.38260	.38260	0.4361		0.4361	
7/16–14 or .4375–14	UNC	2A	.4240	.4367	.38955	.4129	.4367	.38275	.38245	.4367		.4367	
			.4246	.4361	.38970	.4159	.4361	.38500	.38500	.4361		.4361	
		3A	.4240	.4367	.38955	.4153	.4367	.38515	.38485	.4367		.4367	
			.4260	.4375	.39110	.4185	.4375	.38760	.38760	.4375		.4375	
			.4254	.4381	.39095	.4179	.4381	.38775	.38745	.4381		.4381	
		2A	.4256	.4361	.3955	.4180	.4361	.3909	.3909	.4361		.4361	
7/16–16 or .4375–16	UN		.4250	.4367	.3954	.4174	.4367	.3910	.3908	.4367		.4367	
		3A	.4270	.4375	.3969	.4206	.4375	.3935	.3935	.4375		.4375	
			.4264	.4381	.3968	.4200	.4381	.3936	.3934	.4381		.4381	
		1A	.4272	.4362	.4037	.4191	.4350	.3974	.3974	.4362		.4350	
7/16–20 or .4375–20	UNF		.4267	.4367	.4036	.4186	.4355	.3975	.3973	.4367		.4355	
		2A	.4272	.4362	.4037	.4212	.4362	.3995	.3995	.4362		.4362	
			.4267	.4367	.4036	.4207	.4367	.3996	.3994	.4367		.4367	
		3A	.4285	.4375	.4050	.4236	.4375	.4019	.4019	.4375		.4375	
			.4280	.4380	.4049	.4231	.4380	.4020	.4018	.4380		.4380	
		2A	.4293	.4364	.4132	.4251	.4364	.4096	.4096	.4364		.4364	
7/16–28 or .4375–28	UNEF		.4288	.4369	.4131	.4246	.4369	.4097	.4095	.4369		.4369	
		3A	.4304	.4375	.4143	.4271	.4375	.4116	.4116	.4375		.4375	
			.4299	.4380	.4142	.4266	.4380	.4117	.4115	.4380		.4380	
		2A	.4300	.4365	.4162	.4263	.4362	.4128	.4128	.4365		.4362	
7/16–32 or .4375–32	UN		.4297	.4368	.4161	.4260	.4367	.4129	.4127	.4368		.4367	
		3A	.4310	.4375	.4172	.4282	.4375	.4147	.4147	.4375		.4375	
			.4307	.4378	.4171	.4279	.4380	.4148	.4146	.4378		.4380	
		1A	.4863	.4985	.44850	.4744	.4985	.44110	.44110	.4985		.4985	
			.4857	.4991	.44835	.4738	.4991	.44125	.44095	.4991		.4991	
1/2–13 or .500–13	UNC	2A	.4863	.4985	.44850	.4768	.4985	.44350	.44350	.4985		.4985	
			.4857	.4991	.44835	.4762	.4991	.44365	.44335	.4991		.4991	
		3A	.4878	.5000	.45000	.4796	.5000	.44630	.44630	.5000		.5000	
			.4872	.5006	.44985	.4790	.5006	.44645	.44615	.5006		.5006	
		2A	.4881	.4986	.4580	.4804	.4986	.4533	.4533	.4986		.4986	
1/2–16 or .500–16	UN		.4875	.4992	.4579	.4798	.4992	.4534	.4532	.4992		.4992	
		3A	.4895	.5000	.4594	.4830	.5000	.4559	.4559	.5000		.5000	
			.4889	.5006	.4593	.4824	.5006	.4560	.4558	.5006		.5006	

See footnotes at end of table.

TABLE III.13.—*Setting plug gages, Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	Class	W truncated setting plugs							Basic-crest setting plugs	
			Plug for GO thread gage [a]			Plug for LO or NOT GO thread gage [a]				Major diameter	
			Major diameter		Pitch diameter	Major diameter		Pitch diameter		[a] [b] Plug for GO thread gage	[a] [c] Plug for LO or NOT GO thread gage
			Truncated	Full		Truncated	Full	Plus tolerance gage	Minus tolerance gage	W and X tolerances	W and X tolerances
1	2	3	4	5	6	7	8	9	10	11	12
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
		1A	.4897	.4987	.4662	.4815	.4973	.4598	.4598	.4987	.4973
			.4892	.4992	.4661	.4810	.4978	.4599	.4597	.4992	.4978
½–20 or	UNF	2A	.4897	.4987	.4662	.4836	.4987	.4619	.4619	.4987	.4987
.500–20			.4892	.4992	.4661	.4831	.4992	.4620	.4618	.4992	.4992
		3A	.4910	.5000	.4675	.4860	.5000	.4643	.4643	.5000	.5000
			.4905	.5005	.4674	.4855	.5005	.4644	.4642	.5005	.5005
½–28 or	UNEF	2A	.4918	.4989	.4757	.4875	.4988	.4720	.4720	.4989	.4988
.500–28		3A	.4913	.4994	.4756	.4870	.4993	.4721	.4719	.4994	.4993
			.4929	.5000	.4768	.4895	.5000	.4740	.4740	.5000	.5000
			.4924	.5005	.4767	.4890	.5005	.4741	.4739	.5005	.5005
½–32 or	UN	2A	.4925	.4990	.4787	.4887	.4986	.4752	.4752	.4990	.4986
.500–32		3A	.4922	.4993	.4786	.4884	.4991	.4753	.4751	.4993	.4991
			.4935	.5000	.4797	.4906	.5000	.4771	.4771	.5000	.5000
			.4932	.5003	.4796	.4903	.5005	.4772	.4770	.5003	.5005
		1A	.5480	.5609	.5068	.5351	.5609	.4990	.4990	.5609	.5609
			.5474	.5615	.5066	.5345	.5615	.4992	.4988	.5615	.5615
9/16–12 or	UNC	2A	.5480	.5609	.5068	.5377	.5609	.5016	.5016	.5609	.5609
.5625–12			.5474	.5615	.5066	.5371	.5615	.5018	.5014	.5615	.5615
		3A	.5496	.5625	.5084	.5406	.5625	.5045	.5045	.5625	.5625
			.5490	.5631	.5082	.5400	.5631	.5047	.5043	.5631	.5631
		2A	.5506	.5611	.5205	.5429	.5611	.5158	.5158	.5611	.5611
9/16–16 or	UN		.5500	.5617	.5203	.5423	.5617	.5160	.5156	.5617	.5617
.5625–16		3A	.5520	.5625	.5219	.5455	.5625	.5184	.5184	.5625	.5625
			.5514	.5631	.5217	.5449	.5631	.5186	.5182	.5631	.5631
		1A	.5514	.5611	.52500	.5423	.5599	.51820	.51820	.5611	.5599
			.5509	.5616	.52485	.5418	.5604	.51835	.51805	.5616	.5604
9/16–18 or	UNF	2A	.5514	.5611	.52500	.5446	.5611	.52050	.52050	.5611	.5611
.5625–18			.5509	.5616	.52485	.5441	.5616	.52065	.52035	.5616	.5616
		3A	.5528	.5625	.52640	.5471	.5625	.52300	.52300	.5625	.5625
			.5523	.5630	.52625	.5466	.5630	.52315	.52285	.5630	.5630
		2A	.5522	.5612	.52870	.5462	.5612	.52450	.52450	.5612	.5612
9/16–20 or	UN		.5517	.5617	.52855	.5457	.5617	.52465	.52435	.5617	.5617
.5625–20		3A	.5535	.5625	.53000	.5485	.5625	.52680	.52680	.5625	.5625
			.5530	.5630	.52985	.5480	.5630	.52695	.52665	.5630	.5630
		2A	.5534	.5613	.53420	.5483	.5613	.53030	.53030	.5613	.5613
9/16–24 or	UNEF		.5529	.5618	.53405	.5478	.5618	.53045	.53015	.5618	.5618
.5625–24		3A	.5546	.5625	.53540	.5505	.5625	.53250	.53250	.5625	.5625
			.5541	.5630	.53525	.5500	.5630	.53265	.53235	.5630	.5630
		2A	.5543	.5614	.53820	.5500	.5613	.53450	.53450	.5614	.5613
9/16–28 or	UN		.5538	.5619	.53805	.5495	.5618	.53465	.53435	.5619	.5618
.5625–28		3A	.5554	.5625	.53930	.5520	.5625	.53650	.53650	.5625	.5625
			.5549	.5630	.53915	.5515	.5630	.53665	.53635	.5630	.5630
		2A	.5550	.5615	.54120	.5512	.5611	.53770	.53770	.5615	.5611
9/16–32 or	UN		.5545	.5620	.54105	.5507	.5616	.53785	.53755	.5620	.5616
.5625–32		3A	.5560	.5625	.54220	.5531	.5625	.53960	.53960	.5625	.5625
			.5555	.5630	.54205	.5526	.5630	.53975	.53945	.5630	.5630
		1A	.6097	.6234	.5644	.5955	.6234	.5561	.5561	.6234	.6234
			.6091	.6240	.5642	.5949	.6240	.5563	.5559	.6240	.6240
5/8–11 or	UNC	2A	.6097	.6234	.5644	.5983	.6234	.5589	.5589	.6234	.6234
.625–11			.6091	.6240	.5642	.5977	.6240	.5591	.5587	.6240	.6240
		3A	.6113	.6250	.5660	.6013	.6250	.5619	.5619	.6250	.6250
			.6107	.6256	.5658	.6007	.6256	.5621	.5617	.6256	.6256
		2A	.6105	.6234	.5693	.6000	.6234	.5639	.5639	.6234	.6234
5/8–12 or	UN		.6099	.6240	.5691	.5994	.6240	.5641	.5637	.6240	.6240
.625–12		3A	.6121	.6250	.5709	.6029	.6250	.5668	.5668	.6250	.6250
			.6115	.6256	.5707	.6023	.6256	.5670	.5666	.6256	.6256

See footnotes at end of table.

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TABLE III.13.—*Setting plug gages, Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	Class	W truncated setting plugs							Basic-crest setting plugs	
			Plug for GO thread gage [a]			Plug for LO or NOT GO thread gage [a]				Major diameter	
			Major diameter		Pitch diameter	Major diameter		Pitch diameter		[b] [a] Plug for GO thread gage	[a] [c] Plug for LO or NOT GO thread gage
			Truncated	Full		Truncated	Full	Plus tolerance gage	Minus tolerance gage	W and X tolerances	W and X tolerances
1	2	3	4	5	6	7	8	9	10	11	12
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
		2A	.6131	.6236	.5830	.6053	.6236	.5782	.5782	.6236	.6236
5/8–16 or .625–16	UN		.6125	.6242	.5828	.6047	.6242	.5784	.5780	.6242	.6242
		3A	.6145	.6250	.5844	.6079	.6250	.5808	.5808	.6250	.6250
			.6139	.6256	.5842	.6073	.6256	.5810	.5806	.6256	.6256
		1A	.6139	.6236	.58750	.6046	.6222	.58050	.58050	.6236	.6222
			.6134	.6241	.58735	.6041	.6227	.58065	.58035	.6241	.6227
5/8–18 or .625–18	UNF	2A	.6139	.6236	.58750	.6069	.6236	.58280	.58280	.6236	.6236
			.6134	.6241	.58735	.6064	.6241	.58295	.58265	.6241	.6241
		3A	.6153	.6250	.58890	.6095	.6250	.58540	.58540	.6250	.6250
			.6148	.6255	.58875	.6090	.6255	.58555	.58525	.6255	.6255
		2A	.6147	.6237	.59120	.6086	.6237	.58690	.58690	.6237	.6237
5/8–20 or .625–20	UN		.6142	.6242	.59105	.6081	.6242	.58705	.58675	.6242	.6242
		3A	.6160	.6250	.59250	.6110	.6250	.58930	.58930	.6250	.6250
			.6155	.6255	.59235	.6105	.6255	.58945	.58915	.6255	.6255
		2A	.6159	.6238	.59670	.6107	.6238	.59270	.59270	.6238	.6238
5/8–24 or .625–24	UNEF		.6154	.6243	.59655	.6102	.6243	.59285	.59255	.6243	.6243
		3A	.6171	.6250	.59790	.6129	.6250	.59490	.59490	.6250	.6250
			.6166	.6255	.59775	.6124	.6255	.59505	.59475	.6255	.6255
		2A	.6168	.6239	.60070	.6124	.6237	.59690	.59690	.6239	.6237
5/8–28 or .625–28	UN		.6163	.6244	.60055	.6119	.6242	.59705	.59675	.6244	.6242
		3A	.6179	.6250	.60180	.6145	.6250	.59900	.59900	.6250	.6250
			.6174	.6255	.60165	.6140	.6255	.59915	.59885	.6255	.6255
		2A	.6174	.6239	.60360	.6135	.6234	.60000	.60000	.6239	.6234
5/8–32 or .625–32	UN		.6169	.6244	.60345	.6130	.6239	.60015	.59985	.6244	.6239
		3A	.6185	.6250	.60470	.6155	.6250	.60200	.60200	.6250	.6250
			.6180	.6255	.60455	.6150	.6255	.60215	.60185	.6255	.6255
		2A	.6730	.6859	.6318	.6625	.6859	.6264	.6264	.6859	.6859
11/16–12 or .6875–12	UN		.6724	.6865	.6316	.6619	.6865	.6266	.6262	.6865	.6865
		3A	.6746	.6875	.6334	.6654	.6875	.6293	.6293	.6875	.6875
			.6740	.6881	.6332	.6648	.6881	.6295	.6291	.6881	.6881
		2A	.6756	.6861	.6455	.6678	.6861	.6407	.6407	.6861	.6861
11/16–16 or .6875–16	UN		.6750	.6867	.6453	.6672	.6867	.6409	.6405	.6867	.6867
		3A	.6770	.6875	.6469	.6704	.6875	.6433	.6433	.6875	.6875
			.6764	.6881	.6467	.6698	.6881	.6435	.6431	.6881	.6881
		2A	.6772	.6862	.65370	.6711	.6862	.64940	.64940	.6862	.6862
11/16–20 or .6875–20	UN		.6767	.6867	.65355	.6706	.6867	.64955	.64925	.6867	.6867
		3A	.6785	.6875	.65500	.6735	.6875	.65180	.65180	.6875	.6875
			.6780	.6880	.65485	.6730	.6880	.65195	.65165	.6880	.6880
		2A	.6784	.6863	.65920	.6732	.6863	.65520	.65520	.6863	.6863
11/16–24 or .6875–24	UNEF		.6779	.6868	.65905	.6727	.6868	.65535	.65505	.6868	.6868
		3A	.6796	.6875	.66040	.6754	.6875	.65740	.65740	.6875	.6875
			.6791	.6880	.66025	.6749	.6880	.65755	.65725	.6880	.6880
		2A	.6793	.6864	.66320	.6749	.6862	.65940	.65940	.6864	.6862
11/16–28 or .6875–28	UN		.6788	.6869	.66305	.6744	.6867	.65955	.65925	.6869	.6865
		3A	.6804	.6875	.66430	.6770	.6875	.66150	.66150	.6875	.6877
			.6799	.6880	.66415	.6765	.6880	.66165	.66135	.6880	.6880
		2A	.6799	.6864	.66610	.6760	.6859	.66250	.66250	.6864	.6859
11/16–32 or .6875–32	UN		.6794	.6869	.66595	.6755	.6864	.66265	.66235	.6869	.6864
		3A	.6810	.6875	.66720	.6780	.6875	.66450	.66450	.6875	.6875
			.6805	.6880	.66705	.6775	.6880	.66465	.66435	.6880	.6880
		1A	.7336	.7482	.6832	.7177	.7482	.6744	.6744	.7482	.7482
			.7330	.7488	.6830	.7171	.7488	.6746	.6742	.7488	.7488
3/4–10 or .750–10	UNC	2A	.7336	.7482	.6832	.7206	.7482	.6773	.6773	.7482	.7482
			.7330	.7488	.6830	.7200	.7488	.6775	.6771	.7488	.7488
		3A	.7354	.7500	.6850	.7239	.7500	.6806	.6806	.7500	.7500
			.7348	.7506	.6848	.7233	.7506	.6808	.6804	.7506	.7506
		2A	.7354	.7483	.6942	.7248	.7483	.6887	.6887	.7483	.7483
3/4–12 or .750–12	UN		.7348	.7489	.6940	.7242	.7489	.6889	.6885	.7489	.7489
		3A	.7371	.7500	.6959	.7279	.7500	.6918	.6918	.7500	.7500
			.7365	.7506	.6957	.7273	.7506	.6920	.6916	.7506	.7506
		1A	.7380	.7485	.7079	.7275	.7473	.7004	.7004	.7485	.7473
			.7374	.7491	.7077	.7269	.7479	.7006	.7002	.7491	.7479
3/4–16 or .750–16	UNF	2A	.7380	.7485	.7079	.7300	.7485	.7029	.7029	.7485	.7485
			.7374	.7491	.7077	.7294	.7491	.7031	.7027	.7491	.7491
		3A	.7395	.7500	.7094	.7327	.7500	.7056	.7056	.7500	.7500
			.7389	.7506	.7092	.7321	.7506	.7058	.7054	.7506	.7506

See footnotes at end of table.

TABLE III.13.—*Setting plug gages, Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	Class	W truncated setting plugs							Basic-crest setting plugs	
			Plug for GO thread gage [a]			Plug for LO or NOT GO thread gage [a]				Major diameter	
			Major diameter		Pitch diameter	Major diameter		Pitch diameter		[a] [b] Plug for GO thread gage	[a] [c] Plug for LO or NOT GO thread gage
			Truncated	Full		Truncated	Full	Plus tolerance gage	Minus tolerance gage	W and X tolerances	W and X tolerances
1	2	3	4	5	6	7	8	9	10	11	12
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
¾-20 or .750-20	UNEF	2A	.7397	.7487	.71620	.7335	.7487	.71180	.71180	.7487	.7487
		3A	.7392	.7492	.71605	.7330	.7492	.71195	.71165	.7492	.7492
			.7410	.7500	.71750	.7359	.7500	.71420	.71420	.7500	.7500
			.7405	.7505	.71735	.7354	.7505	.71435	.71405	.7505	.7505
¾-28 or .750-28	UN	2A	.7417	.7488	.72560	.7373	.7486	.72180	.72180	.7488	.7486
		3A	.7412	.7493	.72545	.7368	.7491	.72195	.72165	.7493	.7491
			.7429	.7500	.72680	.7394	.7500	.72390	.72390	.7500	.7500
			.7424	.7505	.72665	.7389	.7505	.72405	.72375	.7505	.7505
¾-32 or .750-32	UN	2A	.7424	.7489	.72860	.7385	.7484	.72500	.72500	.7489	.7484
		3A	.7419	.7494	.72845	.7380	.7489	.72515	.72485	.7494	.7489
			.7435	.7500	.72970	.7405	.7500	.72700	.72700	.7500	.7500
			.7430	.7505	.72955	.7400	.7505	.72715	.72685	.7505	.7505
13/16-12 or .8125-12	UN	2A	.7979	.8108	.7567	.7873	.8108	.7512	.7512	.8108	.8108
		3A	.7973	.8114	.7565	.7867	.8114	.7514	.7510	.8114	.8114
			.7996	.8125	.7584	.7904	.8125	.7543	.7543	.8125	.8125
			.7990	.8131	.7582	.7898	.8131	.7545	.7541	.8131	.8131
13/16-16 or .8125-16	UN	2A	.8005	.8110	.7704	.7926	.8110	.7655	.7655	.8110	.8110
		3A	.7999	.8116	.7702	.7920	.8116	.7657	.7653	.8116	.8116
			.8020	.8125	.7719	.7954	.8125	.7683	.7683	.8125	.8125
			.8014	.8131	.7717	.7948	.8131	.7685	.7681	.8131	.8131
13/16-20 or .8125-20	UNEF	2A	.8022	.8112	.77870	.7960	.8112	.77430	.77430	.8112	.8112
		3A	.8017	.8117	.77855	.7955	.8117	.77445	.77415	.8117	.8117
			.8035	.8125	.78000	.7984	.8125	.77670	.77670	.8125	.8125
			.8030	.8130	.77985	.7979	.8130	.77685	.77655	.8130	.8130
13/16-28 or .8125-28	UN	2A	.8042	.8113	.78810	.7998	.8111	.78430	.78430	.8113	.8111
		3A	.8037	.8118	.78795	.7993	.8116	.78445	.78415	.8118	.8116
			.8054	.8125	.78930	.8019	.8125	.78640	.78640	.8125	.8125
			.8049	.8130	.78915	.8014	.8130	.78655	.78625	.8130	.8130
13/16-32 or .8125-32	UN	2A	.8049	.8114	.79110	.8010	.8109	.78750	.78750	.8114	.8109
		3A	.8044	.8119	.79095	.8005	.8114	.78765	.78735	.8119	.8114
			.8060	.8125	.79220	.8030	.8125	.78950	.78950	.8125	.8125
			.8055	.8130	.79205	.8025	.8130	.78965	.78935	.8130	.8130
⅞-9 or .875-9	UNC	1A	.8573	.8731	.8009	.8395	.8731	.7914	.7914	.8731	.8731
			.8566	.8738	.8007	.8388	.8738	.7916	.7912	.8738	.8738
		2A	.8573	.8731	.8009	.8427	.8731	.7946	.7946	.8731	.8731
			.8566	.8738	.8007	.8420	.8738	.7948	.7944	.8738	.8738
		3A	.8592	.8750	.8028	.8462	.8750	.7981	.7981	.8750	.8750
			.8585	.8757	.8026	.8455	.8757	.7983	.7979	.8757	.8757
⅞-12 or .875-12	UN	2A	.8604	.8733	.8192	.8498	.8733	.8137	.8137	.8733	.8733
		3A	.8598	.8739	.8190	.8492	.8739	.8139	.8135	.8739	.8739
			.8621	.8750	.8209	.8529	.8750	.8168	.8168	.8750	.8750
			.8615	.8756	.8207	.8523	.8756	.8170	.8166	.8756	.8756
⅞-14 or .875-14	UNF	1A	.8619	.8734	.8270	.8498	.8725	.8189	.8189	.8734	.8725
			.8613	.8740	.8268	.8492	.8731	.8191	.8187	.8740	.8731
		2A	.8619	.8734	.8270	.8525	.8734	.8216	.8216	.8734	.8734
			.8613	.8740	.8268	.8519	.8740	.8218	.8214	.8740	.8740
		3A	.8635	.8750	.8286	.8554	.8750	.8245	.8245	.8750	.8750
			.8629	.8756	.8284	.8548	.8756	.8247	.8243	.8756	.8756
⅞-16 or .875-16	UN	2A	.8630	.8735	.8329	.8551	.8735	.8280	.8280	.8735	.8735
		3A	.8624	.8741	.8327	.8545	.8741	.8282	.8278	.8741	.8741
			.8645	.8750	.8344	.8579	.8750	.8308	.8308	.8750	.8750
			.8639	.8756	.8342	.8573	.8756	.8310	.8306	.8756	.8756
⅞-20 or .875-20	UNEF	2A	.8647	.8737	.84120	.8585	.8737	.83680	.83680	.8737	.8737
		3A	.8642	.8742	.84105	.8580	.8742	.83695	.83665	.8742	.8742
			.8660	.8750	.84250	.8609	.8750	.83920	.83920	.8750	.8750
			.8655	.8755	.84235	.8604	.8755	.83935	.83905	.8755	.8755
⅞-28 or .875-28	UN	2A	.8667	.8738	.85060	.8623	.8736	.84680	.84680	.8738	.8736
		3A	.8662	.8743	.85045	.8618	.8741	.84695	.84665	.8743	.8741
			.8679	.8750	.85180	.8644	.8750	.84890	.84890	.8750	.8750
			.8674	.8755	.85165	.8639	.8755	.84905	.84875	.8755	.8755
⅞-32 or .875-32	UN	2A	.8674	.8739	.85360	.8635	.8734	.85000	.85000	.8739	.8734
		3A	.8669	.8744	.85345	.8630	.8739	.85015	.84985	.8744	.8739
			.8685	.8750	.85470	.8655	.8750	.85200	.85200	.8750	.8750
			.8680	.8755	.85455	.8650	.8755	.85215	.85185	.8755	.8755

See footnotes at end of table.

TABLE III.13.—*Setting plug gages, Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	Class	W truncated setting plugs							Basic-crest setting plugs	
			Plug for GO thread gage [a]			Plug for LO or NOT GO thread gage [a]				Major diameter	
			Major diameter		Pitch diameter	Major diameter		Pitch diameter		[a] [b] Plug for GO thread gage	[a] [c] Plug for LO or NOT GO thread gage
			Truncated	Full		Truncated	Full	Plus tolerance gage	Minus tolerance gage	W and X tolerances	W and X tolerances
1	2	3	4	5	6	7	8	9	10	11	12
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
15/16–12 or .9375–12	UN	2A	.9229	.9358	.8817	.9121	.9358	.8760	.8760	.9358	.9358
			.9223	.9364	.8815	.9115	.9364	.8762	.8758	.9364	.9364
		3A	.9246	.9375	.8834	.9153	.9375	.8792	.8792	.9375	.9375
			.9240	.9381	.8832	.9147	.9381	.8794	.8790	.9381	.9381
15/16–16 or .9375–16	UN	2A	.9255	.9360	.8954	.9175	.9360	.8904	.8904	.9360	.9360
			.9249	.9366	.8952	.9169	.9366	.8906	.8902	.9366	.9366
		3A	.9270	.9375	.8969	.9203	.9375	.8932	.8932	.9375	.9375
			.9264	.9381	.8967	.9197	.9381	.8934	.8930	.9381	.9381
15/16–20 or .9375–20	UNEF	2A	.9271	.9361	.90360	.9208	.9361	.89910	.89910	.9361	.9361
			.9266	.9366	.90345	.9203	.9366	.89925	.89895	.9366	.9366
		3A	.9285	.9375	.90500	.9233	.9375	.90160	.90160	.9375	.9375
			.9280	.9380	.90485	.9228	.9380	.90175	.90145	.9380	.9380
15/16–28 or .9375–28	UN	2A	.9292	.9363	.91310	.9246	.9359	.90910	.90910	.9363	.9359
			.9287	.9368	.91295	.9241	.9364	.90925	.90895	.9368	.9364
		3A	.9304	.9375	.91430	.9268	.9375	.91130	.91130	.9375	.9375
			.9299	.9380	.91415	.9263	.9380	.91145	.91115	.9380	.9380
15/16–32 or .9375–32	UN	2A	.9299	.9364	.91610	.9258	.9357	.91230	.91230	.9364	.9357
			.9294	.9369	.91595	.9253	.9362	.91245	.91215	.9369	.9362
		3A	.9310	.9375	.91720	.9279	.9375	.91440	.91440	.9375	.9375
			.9305	.9380	.91705	.9274	.9380	.91455	.91425	.9380	.9380
1–8 or 1.000–8	UNC	1A	.9809	.9980	.9168	.9608	.9980	.9067	.9067	.9980	.9980
			.9802	.9987	.9166	.9601	.9987	.9069	.9065	.9987	.9987
		2A	.9809	.9980	.9168	.9641	.9980	.9100	.9100	.9980	.9980
			.9802	.9987	.9166	.9634	.9987	.9102	.9098	.9987	.9987
		3A	.9829	1.0000	.9188	.9678	1.0000	.9137	.9137	1.0000	1.0000
			.9822	1.0007	.9186	.9671	1.0007	.9139	.9135	1.0007	1.0007
1–12 or 1.000–12	UNF	1A	.9853	.9982	.9441	.9714	.9978	.9353	.9353	.9982	.9978
			.9847	.9988	.9439	.9708	.9984	.9355	.9351	.9988	.9984
		2A	.9853	.9982	.9441	.9743	.9982	.9382	.9382	.9982	.9982
			.9847	.9988	.9439	.9737	.9988	.9384	.9380	.9988	.9988
		3A	.9871	1.0000	.9459	.9776	1.0000	.9415	.9415	1.0000	1.0000
			.9865	1.0006	.9457	.9770	1.0006	.9417	.9413	1.0006	1.0006
1–16 or 1.000–16	UN	2A	.9880	.9985	.9579	.9800	.9985	.9529	.9529	.9985	.9985
			.9874	.9991	.9577	.9794	.9991	.9531	.9527	.9991	.9991
		3A	.9895	1.0000	.9594	.9828	1.0000	.9557	.9557	1.0000	1.0000
			.9889	1.0006	.9592	.9822	1.0006	.9559	.9555	1.0006	1.0006
1–20 or 1.000–20	UNEF	2A	.9896	.9986	.96610	.9833	.9986	.96160	.96160	.9986	.9986
			.9891	.9991	.96595	.9828	.9991	.96175	.96145	.9991	.9991
		3A	.9910	1.0000	.96750	.9858	1.0000	.96410	.96410	1.0000	1.0000
			.9905	1.0005	.96735	.9853	1.0005	.96425	.96395	1.0005	1.0005
1–28 or 1.000–28	UN	2A	.9917	.9988	.97560	.9871	.9984	.97160	.97160	.9988	.9984
			.9912	.9993	.97545	.9866	.9989	.97175	.97145	.9993	.9989
		3A	.9929	1.0000	.97680	.9893	1.0000	.97380	.97380	1.0000	1.0000
			.9924	1.0005	.97665	.9888	1.0005	.97395	.97365	1.0005	1.0005
1–32 or 1.000–32	UN	2A	.9924	.9989	.97860	.9883	.9982	.97480	.97480	.9989	.9982
			.9919	.9994	.97845	.9878	.9987	.97495	.97465	.9994	.9987
		3A	.9935	1.0000	.97970	.9904	1.0000	.97690	.97690	1.0000	1.0000
			.9930	1.0005	.97955	.9899	1.0005	.97705	.97675	1.0005	1.0005
1 1/16–8 or 1.0625–8	UN	2A	1.0434	1.0605	.9793	1.0266	1.0605	.9725	.9725	1.0605	1.0605
			1.0427	1.0612	.9791	1.0259	1.0612	.9727	.9723	1.0612	1.0612
		3A	1.0454	1.0625	.9813	1.0303	1.0625	.9762	.9762	1.0625	1.0625
			1.0447	1.0632	.9811	1.0296	1.0632	.9764	.9760	1.0632	1.0632
1 1/16–12 or 1.0625–12	UN	2A	1.0479	1.0608	1.0067	1.0371	1.0608	1.0010	1.0010	1.0608	1.0608
			1.0473	1.0614	1.0065	1.0365	1.0614	1.0012	1.0008	1.0614	1.0614
		3A	1.0496	1.0625	1.0084	1.0403	1.0625	1.0042	1.0042	1.0625	1.0625
			1.0490	1.0631	1.0082	1.0397	1.0631	1.0044	1.0040	1.0631	1.0631
1 1/16–16 or 1.0625–16	UN	2A	1.0505	1.0610	1.0204	1.0425	1.0610	1.0154	1.0154	1.0610	1.0610
			1.0499	1.0616	1.0202	1.0419	1.0616	1.0156	1.0152	1.0616	1.0616
		3A	1.0520	1.0625	1.0219	1.0453	1.0625	1.0182	1.0182	1.0625	1.0625
			1.0514	1.0631	1.0217	1.0447	1.0631	1.0184	1.0180	1.0631	1.0631
1 1/16–18 or 1.0625–18	UNEF	2A	1.0514	1.0611	1.02500	1.0444	1.0611	1.02030	1.02030	1.0611	1.0611
			1.0509	1.0616	1.02485	1.0439	1.0616	1.02045	1.02015	1.0616	1.0616
		3A	1.0528	1.0625	1.02640	1.0469	1.0625	1.02280	1.02280	1.0625	1.0625
			1.0523	1.0630	1.02625	1.0464	1.0630	1.02295	1.02265	1.0630	1.0630

See footnotes at end of table.

TABLE III.13.—*Setting plug gages, Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	Class	W truncated setting plugs							Basic-crest setting plugs	
			Plug for GO thread gage [a]			Plug for LO or NOT GO thread gage [a]				Major diameter	
			Major diameter		Pitch diameter	Major diameter		Pitch diameter		[a] [b] Plug for GO thread gage	[a] [c] Plug for LO or NOT GO thread gage
			Truncated	Full		Truncated	Full	Plus tolerance gage	Minus tolerance gage	W and X tolerances	W and X tolerances
1	2	3	4	5	6	7	8	9	10	11	12
			in	*in*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
1 1/16–20 or 1.0625–20	UN	2A	1.0521	1.0611	1.02860	1.0458	1.0611	1.02410	1.02410	1.0611	1.0611
		3A	1.0516	1.0616	1.02845	1.0453	1.0616	1.02425	1.02395	1.0616	1.0616
			1.0535	1.0625	1.03000	1.0483	1.0625	1.02660	1.02660	1.0625	1.0625
			1.0530	1.0630	1.02985	1.0478	1.0630	1.02675	1.02645	1.0630	1.0630
1 1/16–28 or 1.0625–28	UN	2A	1.0542	1.0613	1.03810	1.0496	1.0609	1.03410	1.03410	1.0613	1.0609
		3A	1.0537	1.0618	1.03795	1.0491	1.0614	1.03425	1.03395	1.0618	1.0614
			1.0554	1.0625	1.03930	1.0518	1.0625	1.03630	1.03630	1.0625	1.0625
			1.0549	1.0630	1.03915	1.0513	1.0630	1.03645	1.03615	1.0630	1.0630
1 1/8–7 or 1.125–7	UNC	1A	1.1040	1.1228	1.0300	1.0810	1.1228	1.0191	1.0191	1.1228	1.1228
			1.1033	1.1235	1.0298	1.0803	1.1235	1.0193	1.0189	1.1235	1.1235
		2A	1.1040	1.1228	1.0300	1.0847	1.1228	1.0228	1.0228	1.1228	1.1228
			1.1033	1.1235	1.0298	1.0846	1.1235	1.0230	1.0226	1.1235	1.1235
		3A	1.1062	1.1250	1.0322	1.0887	1.1250	1.0268	1.0268	1.1250	1.1250
			1.1055	1.1257	1.0320	1.0880	1.1257	1.0270	1.0266	1.1257	1.1257
1 1/8–8 or 1.125–8	UN	2A	1.1058	1.1229	1.0417	1.0889	1.1229	1.0348	1.0348	1.1229	1.1229
			1.1051	1.1236	1.0415	1.0882	1.1236	1.0350	1.0346	1.1236	1.1236
		3A	1.1079	1.1250	1.0438	1.0927	1.1250	1.0386	1.0386	1.1250	1.1250
			1.1072	1.1257	1.0436	1.0920	1.1257	1.0388	1.0384	1.1257	1.1257
1 1/8–12 or 1.125–12	UNF	1A	1.1103	1.1232	1.0691	1.0962	1.1226	1.0601	1.0601	1.1232	1.1226
			1.1097	1.1238	1.0689	1.0956	1.1232	1.0603	1.0599	1.1238	1.1232
		2A	1.1103	1.1232	1.0691	1.0992	1.1232	1.0631	1.0631	1.1232	1.1232
			1.1097	1.1238	1.0689	1.0986	1.1238	1.0633	1.0629	1.1238	1.1238
		3A	1.1121	1.1250	1.0709	1.1025	1.1250	1.0664	1.0664	1.1250	1.1250
			1.1115	1.1256	1.0707	1.1019	1.1256	1.0666	1.0662	1.1256	1.1256
1 1/8–16 or 1.125–16	UN	2A	1.1130	1.1235	1.0829	1.1050	1.1235	1.0779	1.0779	1.1235	1.1235
			1.1124	1.1241	1.0827	1.1044	1.1241	1.0781	1.0777	1.1241	1.1241
		3A	1.1145	1.1250	1.0844	1.1078	1.1250	1.0807	1.0807	1.1250	1.1250
			1.1139	1.1256	1.0842	1.1072	1.1256	1.0809	1.0805	1.1256	1.1256
1 1/8–18 or 1.125–18	UNEF	2A	1.1139	1.1236	1.08750	1.1069	1.1236	1.08280	1.08280	1.1236	1.1236
			1.1134	1.1241	1.08735	1.1064	1.1241	1.08295	1.08265	1.1241	1.1241
		3A	1.1153	1.1250	1.08890	1.1094	1.1250	1.08530	1.08530	1.1250	1.1250
			1.1148	1.1255	1.08875	1.1089	1.1255	1.08545	1.08515	1.1255	1.1255
1 1/8–20 or 1.125–20	UN	2A	1.1146	1.1236	1.09110	1.1083	1.1236	1.08660	1.08660	1.1236	1.1236
			1.1141	1.1241	1.09095	1.1078	1.1241	1.08675	1.08645	1.1241	1.1241
		3A	1.1160	1.1250	1.09250	1.1108	1.1250	1.08910	1.08910	1.1250	1.1250
			1.1155	1.1255	1.09235	1.1103	1.1255	1.08925	1.08895	1.1255	1.1255
1 1/8–28 or 1.125–28	UN	2A	1.1167	1.1238	1.10060	1.1121	1.1234	1.09660	1.09660	1.1238	1.1234
			1.1162	1.1243	1.10045	1.1116	1.1239	1.09675	1.09645	1.1243	1.1239
		3A	1.1179	1.1250	1.10180	1.1143	1.1250	1.09880	1.09880	1.1250	1.1250
			1.1174	1.1255	1.10165	1.1138	1.1255	1.09895	1.09865	1.1255	1.1255
1 3/16–8 or 1.1875–8	UN	2A	1.1683	1.1854	1.1042	1.1513	1.1854	1.0972	1.0972	1.1854	1.1854
			1.1676	1.1861	1.1040	1.1506	1.1861	1.0974	1.0970	1.1861	1.1861
		3A	1.1704	1.1875	1.1063	1.1552	1.1875	1.1011	1.1011	1.1875	1.1875
			1.1697	1.1882	1.1061	1.1545	1.1882	1.1013	1.1009	1.1882	1.1882
1 3/16–12 or 1.1875–12	UN	2A	1.1729	1.1858	1.1317	1.1620	1.1858	1.1259	1.1259	1.1858	1.1858
			1.1723	1.1864	1.1315	1.1614	1.1864	1.1261	1.1257	1.1864	1.1864
		3A	1.1746	1.1875	1.1334	1.1652	1.1875	1.1291	1.1291	1.1875	1.1875
			1.1740	1.1881	1.1332	1.1646	1.1881	1.1293	1.1289	1.1881	1.1881
1 3/16–16 or 1.1875–16	UN	2A	1.1755	1.1860	1.1454	1.1674	1.1860	1.1403	1.1403	1.1860	1.1860
			1.1749	1.1866	1.1452	1.1668	1.1866	1.1405	1.1401	1.1866	1.1866
		3A	1.1770	1.1875	1.1469	1.1702	1.1875	1.1431	1.1431	1.1875	1.1875
			1.1764	1.1881	1.1467	1.1696	1.1881	1.1433	1.1429	1.1881	1.1881
1 3/16–18 or 1.1875–18	UNEF	2A	1.1763	1.1860	1.14990	1.1691	1.1860	1.14500	1.14500	1.1860	1.1860
			1.1758	1.1865	1.14975	1.1686	1.1865	1.14515	1.14485	1.1865	1.1865
		3A	1.1778	1.1875	1.15140	1.1719	1.1875	1.14780	1.14780	1.1875	1.1875
			1.1773	1.1880	1.15125	1.1714	1.1880	1.14795	1.14765	1.1880	1.1880
1 3/16–20 or 1.1875–20	UN	2A	1.1771	1.1861	1.15360	1.1706	1.1861	1.14890	1.14890	1.1861	1.1861
			1.1766	1.1866	1.15345	1.1701	1.1866	1.14905	1.14875	1.1866	1.1866
		3A	1.1785	1.1875	1.15500	1.1732	1.1875	1.15150	1.15150	1.1875	1.1875
			1.1780	1.1880	1.15485	1.1727	1.1880	1.15165	1.15135	1.1880	1.1880
1 3/16–28 or 1.1875–28	UN	2A	1.1792	1.1863	1.16310	1.1745	1.1858	1.15900	1.15900	1.1863	1.1858
			1.1787	1.1868	1.16295	1.1740	1.1863	1.15915	1.15885	1.1868	1.1863
		3A	1.1804	1.1875	1.16430	1.1767	1.1875	1.16120	1.16120	1.1875	1.1875
			1.1799	1.1880	1.16415	1.1762	1.1880	1.16135	1.16105	1.1880	1.1880

See footnotes at end of table.

TABLE III.13.—*Setting plug gages, Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	Class	W truncated setting plugs							Basic-crest setting plugs	
			Plug for GO thread gage [a]			Plug for LO or NOT GO thread gage [a]				Major diameter	
			Major diameter		Pitch diameter	Major diameter		Pitch diameter		[a] [b] Plug for GO thread gage	[a] [c] Plug for LO or NOT GO thread gage
			Truncated	Full		Truncated	Full	Plus tolerance gage	Minus tolerance gage	W and X tolerances	W and X tolerances
1	2	3	4	5	6	7	8	9	10	11	12
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
		1A	1.2290	1.2478	1.1550	1.2058	1.2478	1.1439	1.1439	1.2478	1.2478
			1.2283	1.2485	1.1548	1.2051	1.2485	1.1441	1.1437	1.2485	1.2485
1¼–7 or 1.250–7	UNC	2A	1.2290	1.2478	1.1550	1.2095	1.2478	1.1476	1.1476	1.2478	1.2478
			1.2283	1.2485	1.1548	1.2088	1.2485	1.1478	1.1474	1.2485	1.2485
		3A	1.2312	1.2500	1.1572	1.2136	1.2500	1.1517	1.1517	1.2500	1.2500
			1.2305	1.2507	1.1570	1.2129	1.2507	1.1519	1.1515	1.2507	1.2507
		2A	1.2308	1.2479	1.1667	1.2138	1.2479	1.1597	1.1597	1.2479	1.2479
1¼–8 or 1.250–8	UN		1.2301	1.2486	1.1665	1.2131	1.2486	1.1599	1.1595	1.2486	1.2486
		3A	1.2329	1.2500	1.1688	1.2176	1.2500	1.1635	1.1635	1.2500	1.2500
			1.2322	1.2507	1.1686	1.2169	1.2507	1.1637	1.1633	1.2507	1.2507
		1A	1.2353	1.2482	1.1941	1.2210	1.2474	1.1849	1.1849	1.2482	1.2474
			1.2347	1.2488	1.1939	1.2204	1.2480	1.1851	1.1847	1.2488	1.2480
1¼–12 or 1.250–12	UNF	2A	1.2353	1.2482	1.1941	1.2240	1.2482	1.1879	1.1879	1.2482	1.2482
			1.2347	1.2488	1.1939	1.2234	1.2488	1.1881	1.1877	1.2488	1.2488
		3A	1.2371	1.2500	1.1959	1.2274	1.2500	1.1913	1.1913	1.2500	1.2500
			1.2365	1.2506	1.1957	1.2268	1.2506	1.1915	1.1911	1.2506	1.2506
		2A	1.2380	1.2485	1.2079	1.2299	1.2485	1.2028	1.2028	1.2485	1.248_
1¼–16 or 1.250–16	UN		1.2374	1.2491	1.2077	1.2293	1.2491	1.2030	1.2026	1.2491	1.2491
		3A	1.2395	1.2500	1.2094	1.2327	1.2500	1.2056	1.2056	1.2500	1.2500
			1.2389	1.2506	1.2092	1.2321	1.2506	1.2058	1.2054	1.2506	1.2506
		2A	1.2388	1.2485	1.21240	1.2316	1.2485	1.20750	1.20750	1.2485	1.2485
1¼–18 or 1.250–18	UNEF		1.2383	1.2490	1.21225	1.2311	1.2490	1.20765	1.20735	1.2490	1.2490
		3A	1.2403	1.2500	1.21390	1.2344	1.2500	1.21030	1.21030	1.2500	1.2500
			1.2398	1.2505	1.21375	1.2339	1.2505	1.21045	1.21015	1.2505	1.2505
		2A	1.2396	1.2486	1.21610	1.2331	1.2486	1.21140	1.21140	1.2486	1.2486
1¼–20 or 1.250–20	UN		1.2391	1.2491	1.21595	1.2326	1.2491	1.21155	1.21125	1.2491	1.2491
		3A	1.2410	1.2500	1.21750	1.2357	1.2500	1.21400	1.21400	1.2500	1.2500
			1.2405	1.2505	1.21735	1.2352	1.2505	1.21415	1.21385	1.2505	1.2505
		2A	1.2417	1.2488	1.22560	1.2370	1.2483	1.22150	1.22150	1.2488	1.2483
1¼–28 or 1.250–28	UN		1.2412	1.2493	1.22545	1.2365	1.2488	1.22165	1.22135	1.2493	1.2488
		3A	1.2429	1.2500	1.22680	1.2392	1.2500	1.22370	1.22370	1.2500	1.2500
			1.2424	1.2505	1.22665	1.2387	1.2505	1.22385	1.22355	1.2505	1.2505
		2A	1.2933	1.3104	1.2292	1.2762	1.3104	1.2221	1.2221	1.3104	1.3104
1⁵⁄₁₆–8 or 1.3125–8	UN		1.2926	1.3111	1.2290	1.2755	1.3111	1.2223	1.2219	1.3111	1.3111
		3A	1.2954	1.3125	1.2313	1.2801	1.3125	1.2260	1.2260	1.3125	1.3125
			1.2947	1.3132	1.2311	1.2794	1.3132	1.2262	1.2258	1.3132	1.3132
		2A	1.2979	1.3108	1.2567	1.2870	1.3108	1.2509	1.2509	1.3108	1.3108
1⁵⁄₁₆–12 or 1.3125–12	UN		1.2973	1.3114	1.2565	1.2864	1.3114	1.2511	1.2507	1.3114	1.3114
		3A	1.2996	1.3125	1.2584	1.2902	1.3125	1.2541	1.2541	1.3125	1.3125
			1.2990	1.3131	1.2582	1.2896	1.3131	1.2543	1.2539	1.3131	1 3131
		2A	1.3005	1.3110	1.2704	1.2924	1.3110	1.2653	1.2653	1.3110	1.3110
1⁵⁄₁₆–16 or 1.3125–16	UN		1.2999	1.3116	1.2702	1.2918	1.3116	1.2655	1.2651	1.3116	1.3116
		3A	1.3020	1.3125	1.2719	1.2952	1.3125	1.2681	1.2681	1.3125	1.3125
			1.3014	1.3131	1.2717	1.2946	1.3131	1.2683	1.2679	1.3131	1.3131
		2A	1.3013	1.3110	1.27490	1.2941	1.3110	1.27000	1.27000	1.3110	1.3110
1⁵⁄₁₆–18 or 1.3125–18	UNEF		1.3008	1.3115	1.27475	1.2936	1.3115	1.27015	1.26985	1.3115	1.3115
		3A	1.3028	1.3125	1.27640	1.2969	1.3125	1.27280	1.27280	1.3125	1.3125
			1.3023	1.3130	1.27625	1.2964	1.3130	1.27295	1.27265	1.3130	1.3130
		2A	1.3021	1.3111	1.27860	1.2956	1.3111	1.27390	1.27390	1.3111	1.3111
1⁵⁄₁₆–20 or 1.3125–20	UN		1.3016	1.3116	1.27845	1.2951	1.3116	1.27405	1.27375	1.3116	1.3116
		3A	1.3035	1.3125	1.28000	1.2982	1.3125	1.27650	1.27650	1.3125	1.3125
			1.3030	1.3130	1.27985	1.2977	1.3130	1.27665	1.27635	1.3130	1.3130
		2A	1.3042	1.3113	1.28810	1.2995	1.3108	1.28400	1.28400	1.3113	1.3108
1⁵⁄₁₆–28 or 1.3125–28	UN		1.3037	1.3118	1.28795	1.2990	1.3113	1.28415	1.28385	1.3118	1.3113
		3A	1.3054	1.3125	1.28930	1.3017	1.3125	1.28620	1.28620	1.3125	1.3125
			1.3049	1.3130	1.28915	1.3012	1.3130	1.28635	1.28605	1.3130	1.3130
		1A	1.3516	1.3726	1.2643	1.3245	1.3726	1.2523	1.2523	1.3726	1.3726
			1.3508	1.3734	1.2641	1.3237	1.3734	1.2525	1.2521	1.3734	1.3734
1⅜–6 or 1.375–6	UNC	2A	1.3516	1.3726	1.2643	1.3285	1.3726	1.2563	1.2563	1.3726	1.3726
			1.3508	1.3734	1.2641	1.3277	1.3734	1.2565	1.2561	1.3734	1.3734
		3A	1.3540	1.3750	1.2667	1.3329	1.3750	1.2607	1.2607	1.3750	1.3750
			1.3532	1.3758	1.2665	1.3321	1.3758	1.2609	1.2605	1.3758	1.3758
		2A	1.3557	1.3728	1.2916	1.3385	1.3728	1.2844	1.2844	1.3728	1.3728
1⅜–8 or 1.375–8	UN		1.3550	1.3735	1.2914	1.3378	1.3735	1.2846	1.2842	1.3735	1.3735
		3A	1.3579	1.3750	1.2938	1.3425	1.3750	1.2884	1.2884	1.3750	1.3750
			1.3572	1.3757	1.2936	1.3418	1.3757	1.2886	1.2882	1.3757	1.3757

See footnotes at end of table.

TABLE III.13.—*Setting plug gages, Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	Class	W truncated setting plugs							Basic-crest setting plugs	
			Plug for GO thread gage [a]			Plug for LO or NOT GO thread gage [a]				Major diameter	
			Major diameter		Pitch diameter	Major diameter		Pitch diameter		[a] [b] Plug for GO thread gage	[a] [c] Plug for LO or NOT GO thread gage
			Truncated	Full		Truncated	Full	Plus tolerance gage	Minus tolerance gage	W and X tolerances	W and X tolerances
1	2	3	4	5	6	7	8	9	10	11	12
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
1⅜–12 or 1.375–12	UNF	1A	1.3602	1.3731	1.3190	1.3457	1.3721	1.3096	1.3096	1.3731	1.3721
			1.3596	1.3737	1.3188	1.3451	1.3727	1.3098	1.3094	1.3737	1.3727
		2A	1.3602	1.3731	1.3190	1.3488	1.3731	1.3127	1.3127	1.3731	1.3731
			1.3596	1.3737	1.3188	1.3482	1.3737	1.3129	1.3125	1.3737	1.3737
		3A	1.3621	1.3750	1.3209	1.3523	1.3750	1.3162	1.3162	1.3750	1.3750
			1.3615	1.3756	1.3207	1.3517	1.3756	1.3164	1.3160	1.3756	1.3756
1⅜–16 or 1.375–16	UN	2A	1.3630	1.3735	1.3329	1.3549	1.3735	1.3278	1.3278	1.3735	1.3735
			1.3624	1.3741	1.3327	1.3543	1.3741	1.3280	1.3276	1.3741	1.3741
		3A	1.3645	1.3750	1.3344	1.3577	1.3750	1.3306	1.3306	1.3750	1.3750
			1.3639	1.3756	1.3342	1.3571	1.3756	1.3308	1.3304	1.3756	1.3756
1⅜–18 or 1.375–18	UNEF	2A	1.3638	1.3735	1.33740	1.3566	1.3735	1.33250	1.33250	1.3735	1.3735
			1.3633	1.3740	1.33725	1.3561	1.3740	1.33265	1.33235	1.3740	1.3740
		3A	1.3653	1.3750	1.33890	1.3594	1.3750	1.33530	1.33530	1.3750	1.3750
			1.3648	1.3755	1.33875	1.3589	1.3755	1.33545	1.33515	1.3755	1.3755
1⅜–20 or 1.375–20	UN	2A	1.3646	1.3736	1.34110	1.3581	1.3736	1.33640	1.33640	1.3736	1.3736
			1.3641	1.3741	1.34095	1.3576	1.3741	1.33655	1.33625	1.3741	1.3741
		3A	1.3660	1.3750	1.34250	1.3607	1.3750	1.33900	1.33900	1.3750	1.3750
			1.3655	1.3755	1.34235	1.3602	1.3755	1.33915	1.33885	1.3755	1.3755
1⅜–28 or 1.375–28	UN	2A	1.3667	1.3738	1.35060	1.3620	1.3733	1.34650	1.34650	1.3738	1.3733
			1.3662	1.3743	1.35045	1.3615	1.3738	1.34665	1.34635	1.3743	1.3738
		3A	1.3679	1.3750	1.35180	1.3642	1.3750	1.34870	1.34870	1.3750	1.3750
			1.3674	1.3755	1.35165	1.3637	1.3755	1.34885	1.34855	1.3755	1.3755
1⁷⁄₁₆–6 or 1.4375–6	UN	2A	1.4141	1.4351	1.3268	1.3910	1.4351	1 3188	1.3188	1.4351	1.4351
			1.4133	1.4359	1.3266	1.3902	1.4359	1.3190	1.3186	1.4359	1.4359
		3A	1.4165	1.4375	1.3292	1.3954	1.4375	1.3232	1.3232	1.4375	1.4375
			1.4157	1.4383	1.3290	1.3946	1.4383	1.3234	1.3230	1.4383	1.4383
1⁷⁄₁₆–8 or 1.4375–8	UN	2A	1.4182	1.4353	1.3541	1.4010	1.4353	1.3469	1.3469	1.4353	1.4353
			1.4175	1.4360	1.3539	1.4003	1.4360	1.3471	1.3467	1.4360	1.4360
		3A	1.4204	1.4375	1.3563	1.4050	1.4375	1.3509	1.3509	1.4375	1.4375
			1.4197	1.4382	1.3561	1.4043	1.4382	1.3511	1.3507	1.4382	1.4382
1⁷⁄₁₆–12 or 1.4375–12	UN	2A	1.4228	1.4357	1.3816	1.4118	1.4357	1.3757	1.3757	1.4357	1.4357
			1.4222	1.4363	1.3814	1.4112	1.4363	1.3759	1.3755	1.4363	1.4363
		3A	1.4246	1.4375	1.3834	1.4151	1.4375	1.3790	1.3790	1.4375	1.4375
			1.4240	1.4381	1.3832	1.4145	1.4381	1.3792	1.3788	1.4381	1.4381
1⁷⁄₁₆–16 or 1.4375–16	UN	2A	1.4254	1.4359	1.3953	1.4172	1.4359	1 3901	1.3901	1.4359	1.4359
			1.4248	1.4365	1.3951	1.4166	1.4365	1.3903	1.3899	1.4365	1.4365
		3A	1.4270	1.4375	1.3969	1.4201	1.4375	1.3930	1.3930	1.4375	1.4375
			1.4264	1.4381	1.3967	1.4195	1.4381	1.3932	1.3928	1.4381	1.4381
1⁷⁄₁₆–18 or 1.4375–18	UNEF	2A	1.4263	1.4360	1.39990	1.4190	1.4360	1.39490	1.39490	1.4360	1.4360
			1.4258	1.4365	1.39975	1.4185	1.4365	1.39505	1.39475	1.4365	1.4365
		3A	1.4278	1.4375	1.40140	1.4218	1.4375	1.39770	1.39770	1.4375	1.4375
			1.4273	1.4380	1.40125	1.4213	1.4380	1.39785	1.39755	1.4380	1.4380
1⁷⁄₁₆–20 or 1.4375–20	UN	2A	1.4271	1.4361	1.40360	1.4205	1.4361	1.39880	1.39880	1.4361	1.4361
			1.4266	1.4366	1.40345	1.4200	1.4366	1.39895	1.39865	1.4366	1.4366
		3A	1.4285	1.4375	1.40500	1.4231	1.4375	1.40140	1.40140	1.4375	1.4375
			1.4280	1.4380	1.40485	1.4226	1.4380	1.40155	1.40125	1.4380	1.4380
1⁷⁄₁₆–28 or 1.4375–28	UN	2A	1.4291	1.4362	1.41300	1.4243	1.4356	1.40880	1.40880	1.4362	1.4356
			1.4286	1.4367	1.41285	1.4238	1.4361	1.40895	1.40865	1.4367	1.4361
		3A	1.4304	1.4375	1.41430	1.4267	1.4375	1.41120	1.41120	1.4375	1.4375
			1.4299	1.4380	1.41415	1.4262	1.4380	1.41135	1.41105	1.4380	1.4380
1½–6 or 1.500–6	UNC	1A	1.4766	1.4976	1.3893	1.4494	1.4976	1.3772	1.3772	1.4976	1.4976
			1.4758	1.4984	1.3891	1.4486	1.4984	1.3774	1.3770	1.4984	1.4984
		2A	1.4766	1.4976	1.3893	1.4534	1.4976	1.3812	1.3812	1.4976	1.4976
			1.4758	1.4984	1.3891	1.4526	1.4984	1.3814	1.3810	1.4984	1.4984
		3A	1.4790	1.5000	1.3917	1.4578	1.5000	1.3856	1.3856	1.5000	1.5000
			1.4782	1.5008	1.3915	1.4570	1.5008	1.3858	1.3854	1.5008	1.5008
1½–8 or 1.500–8	UN	2A	1.4807	1.4978	1.4166	1.4634	1.4978	1.4093	1.4093	1.4978	1.4978
			1.4800	1.4985	1.4164	1.4627	1.4985	1.4095	1.4091	1.4985	1.4985
		3A	1.4829	1.5000	1.4188	1.4674	1.5000	1.4133	1.4133	1.5000	1.5000
			1.4822	1.5007	1.4186	1.4667	1.5007	1.4135	1.4131	1.5007	1.5007
1½–12 or 1.500–12	UNF	1A	1.4852	1.4981	1.4440	1.4705	1.4969	1.4344	1.4344	1.4981	1.4969
			1.4846	1.4987	1.4438	1.4699	1.4975	1.4346	1.4342	1.4987	1.4975
		2A	1.4852	1.4981	1.4440	1.4737	1.4981	1.4376	1.4376	1.4981	1.4981
			1.4846	1.4987	1.4438	1.4731	1.4987	1.4378	1.4374	1.4987	1.4987
		3A	1.4871	1.5000	1.4459	1.4772	1.5000	1.4411	1.4411	1.5000	1.5000
			1.4865	1.5006	1.4457	1.4766	1.5006	1.4413	1.4409	1.5006	1.5006

See footnotes at end of table.

TABLE III.13.—*Setting plug gages, Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	Class	W truncated setting plugs							Basic-crest setting plugs	
			Plug for GO thread gage [a]			Plug for LO or NOT GO thread gage [a]				Major diameter	
			Major diameter		Pitch diameter	Major diameter		Pitch diameter		[a] [b] Plug for GO thread gage	[a] [c] Plug for LO or NOT GO thread gage
			Truncated	Full		Truncated	Full	Plus tolerance gage	Minus tolerance gage	W and X tolerances	W and X tolerances
1	2	3	4	5	6	7	8	9	10	11	12
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
1½-16 or 1.500-16	UN	2A	1.4879	1.4984	1.4578	1.4797	1.4984	1.4526	1.4526	1.4984	1.4984
		3A	1.4873	1.4990	1.4576	1.4791	1.4990	1.4528	1.4524	1.4990	1.4990
			1.4895	1.5000	1.4594	1.4826	1.5000	1.4555	1.4555	1.5000	1.5000
			1.4889	1.5006	1.4592	1.4820	1.5006	1.4557	1.4553	1.5006	1.5006
1½-18 or 1.500-18	UNEF	2A	1.4888	1.4985	1.46240	1.4815	1.4984	1.45740	1.45740	1.4985	1.4985
		3A	1.4883	1.4990	1.46225	1.4810	1.4990	1.45755	1.45725	1.4990	1.4990
			1.4903	1.5000	1.46390	1.4843	1.5000	1.46020	1.46020	1.5000	1.5000
			1.4898	1.5005	1.46375	1.4838	1.5005	1.46035	1.46005	1.5005	1.5005
1½-20 or 1.500-20	UN	2A	1.4896	1.4986	1.46610	1.4830	1.4986	1.46130	1.46130	1.4986	1.4986
		3A	1.4891	1.4991	1.46595	1.4825	1.4991	1.46145	1.46115	1.4991	1.4991
			1.4910	1.5000	1.46750	1.4856	1.5000	1.46390	1.46390	1.5000	1.5000
			1.4905	1.5005	1.46735	1.4851	1.5005	1.46405	1.46375	1.5005	1.5005
1½-28 or 1.500-28	UN	2A	1.4916	1.4987	1.47550	1.4868	1.4981	1.47130	1.47130	1.4987	1.4981
		3A	1.4911	1.4992	1.47535	1.4863	1.4986	1.47145	1.47115	1.4992	1.4986
			1.4929	1.5000	1.47680	1.4892	1.5000	1.47370	1.47370	1.5000	1.5000
			1.4924	1.5005	1.47665	1.4887	1.5005	1.47385	1.47355	1.5005	1.5005
1 9/16-6 or 1.5625-6	UN	2A	1.5391	1.5601	1.45180	1.5158	1.5601	1.44360	1.44360	1.5601	1.5601
		3A	1.5383	1.5609	1.45155	1.5150	1.5609	1.44385	1.44335	1.5609	1.5609
			1.5415	1.5625	1.45420	1.5203	1.5625	1.44810	1.44810	1.5625	1.5625
			1.5407	1.5633	1.45395	1.5195	1.5633	1.44835	1.44785	1.5633	1.5633
1 9/16-8 or 1.5625-8	UN	2A	1.5432	1.5603	1.47910	1.5258	1.5603	1.47170	1.47170	1.5603	1.5603
		3A	1.5425	1.5610	1.47885	1.5251	1.5610	1.47195	1.47145	1.5610	1.5610
			1.5454	1.5625	1.48130	1.5299	1.5625	1.47580	1.47580	1.5625	1.5625
			1.5447	1.5632	1.48105	1.5292	1.5632	1.47605	1.47555	1.5632	1.5632
1 9/16-12 or 1.5625-12	UN	2A	1.5478	1.5607	1.50660	1.5368	1.5607	1.50070	1.50070	1.5607	1.5607
		3A	1.5472	1.5613	1.50635	1.5362	1.5613	1.50095	1.50045	1.5613	1.5613
			1.5496	1.5625	1.50840	1.5401	1.5625	1.50400	1.50400	1.5625	1.5625
			1.5490	1.5631	1.50815	1.5395	1.5631	1.50425	1.50375	1.5631	1.5631
1 9/16-16 or 1.5625-16	UN	2A	1.5504	1.5609	1.52030	1.5422	1.5609	1.51510	1.51510	1.5609	1.5609
		3A	1.5498	1.5615	1.52005	1.5416	1.5615	1.51535	1.51485	1.5615	1.5619
			1.5520	1.5625	1.52190	1.5451	1.5625	1.51800	1.51800	1.5625	1.5625
			1.5514	1.5631	1.52165	1.5445	1.5631	1.51825	1.51775	1.5631	1.5631
1 9/16-18 or 1.5625-18	UNEF	2A	1.5513	1.5610	1.5249	1.5440	1.5610	1.5199	1.5199	1.5610	1.5610
		3A	1.5508	1.5615	1.5247	1.5435	1.5615	1.5201	1.5197	1.5615	1.5615
			1.5528	1.5625	1.5264	1.5468	1.5625	1.5227	1.5227	1.5625	1.5625
			1.5523	1.5630	1.5262	1.5463	1.5630	1.5229	1.5225	1.5630	1.5630
1 9/16-20 or 1.5625-20	UN	2A	1.5521	1.5611	1.5286	1.5455	1.5611	1.5238	1.5238	1.5611	1.5611
		3A	1.5516	1.5616	1.5284	1.5450	1.5616	1.5240	1.5236	1.5616	1.5616
			1.5535	1.5625	1.5300	1.5481	1.5625	1.5264	1.5264	1.5625	1.5625
			1.5530	1.5630	1.5298	1.5476	1.5630	1.5266	1.5262	1.5630	1.5630
1 5/8-6 or 1.625-6	UN	2A	1.6015	1.6225	1.51420	1.5782	1.6225	1.50600	1.50600	1.6225	1.6225
		3A	1.6007	1.6233	1.51395	1.5774	1.6233	1.50625	1.50575	1.6233	1.6233
			1.6040	1.6250	1.51670	1.5827	1.6250	1.51050	1.51050	1.6250	1.6250
			1.6032	1.6258	1.51645	1.5819	1.6258	1.51075	1.51025	1.6258	1.6258
1 5/8-8 or 1.625-8	UN	2A	1.6057	1.6228	1.54160	1.5883	1.6228	1.53420	1.53420	1.6228	1.6228
		3A	1.6050	1.6235	1.54135	1.5876	1.6235	1.53445	1.53395	1.6235	1.6235
			1.6079	1.6250	1.54380	1.5923	1.6250	1.53820	1.53820	1.6250	1.6250
			1.6072	1.6257	1.54355	1.5916	1.6257	1.53845	1.53795	1.6257	1.6257
1 5/8-12 or 1.625-12	UN	2A	1.6103	1.6232	1.56910	1.5993	1.6232	1.56320	1.56320	1.6232	1.6232
		3A	1.6097	1.6238	1.56885	1.5987	1.6238	1.56345	1.56295	1.6238	1.6238
			1.6121	1.6250	1.57090	1.6026	1.6250	1.56650	1.56650	1.6250	1.6250
			1.6115	1.6256	1.57065	1.6020	1.6256	1.56675	1.56625	1.6256	1.6256
1 5/8-16 or 1.625-16	UN	2A	1.6129	1.6234	1.58280	1.6047	1.6234	1.57760	1.57760	1.6234	1.6234
		3A	1.6123	1.6240	1.58255	1.6041	1.6240	1.57785	1.57735	1.6240	1.6240
			1.6145	1.6250	1.58440	1.6076	1.6250	1.58050	1.58050	1.6250	1.6250
			1.6139	1.6256	1.58415	1.6070	1.6256	1.58075	1.58025	1.6256	1.6256
1 5/8-18 or 1.625-18	UNEF	2A	1.6138	1.6235	1.5874	1.6065	1.6235	1.5824	1.5824	1.6235	1.6235
		3A	1.6133	1.6240	1.5872	1.6060	1.6240	1.5826	1.5822	1.6240	1.6240
			1.6153	1.6250	1.5889	1.6093	1.6250	1.5852	1.5852	1.6250	1.6250
			1.6148	1.6255	1.5887	1.6088	1.6255	1.5854	1.5850	1.6255	1.6255
1 5/8-20 or 1.625-20	UN	2A	1.6146	1.6236	1.5911	1.6080	1.6236	1.5863	1.5863	1.6236	1.6236
		3A	1.6141	1.6241	1.5909	1.6075	1.6241	1.5865	1.5861	1.6241	1.6241
			1.6160	1.6250	1.5925	1.6106	1.6250	1.5889	1.5889	1.6250	1.6250
			1.6155	1.6255	1.5923	1.6101	1.6255	1.5891	1.5887	1.6255	1.6255

See footnotes at end of table.

TABLE III.13.—*Setting plug gages, Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	Class	W truncated setting plugs							Basic-crest setting plugs	
			Plug for GO thread gage [a]			Plug for LO or NOT GO thread gage [a]				Major diameter	
			Major diameter		Pitch diameter	Major diameter		Pitch diameter		[a] [b] Plug for GO thread gage	[a] [c] Plug for LO or NOT GO thread gage
			Truncated	Full		Truncated	Full	Plus tolerance gage	Minus tolerance gage	W and X tolerances	W and X tolerances
1	2	3	4	5	6	7	8	9	10	11	12
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
1 1/16-6 or 1.6875-6	UN	2A	1.6640	1.6850	1.57670	1.6406	1.6850	1.56840	1.56840	1.6850	1.6850
			1.6632	1.6858	1.57645	1.6398	1.6858	1.56865	1.56815	1.6858	1.6858
		3A	1.6665	1.6875	1.57920	1.6452	1.6875	1.57300	1.57300	1.6875	1.6875
			1.6657	1.6883	1.57895	1.6444	1.6883	1.57325	1.57275	1.6883	1.6883
1 1/16-8 or 1.6875-8	UN	2A	1.6682	1.6853	1.60410	1.6507	1.6853	1.59660	1.59660	1.6853	1.6853
			1.6675	1.6860	1.60385	1.6500	1.6860	1.59685	1.59635	1.6860	1.6860
		3A	1.6704	1.6875	1.60630	1.6548	1.6875	1.60070	1.60070	1.6875	1.6875
			1.6697	1.6882	1.60605	1.6541	1.6882	1.60095	1.60045	1.6882	1.6882
1 1/16-12 or 1.6875-12	UN	2A	1.6728	1.6857	1.63160	1.6617	1.6857	1.62560	1.62560	1.6857	1.6857
			1.6722	1.6863	1.63135	1.6611	1.6863	1.62585	1.62535	1.6863	1.6863
		3A	1.6746	1.6875	1.63340	1.6650	1.6875	1.62890	1.62890	1.6875	1.6875
			1.6740	1.6881	1.63315	1.6644	1.6881	1.62915	1.62865	1.6881	1.6881
1 1/16-16 or 1.6875-16	UN	2A	1.6754	1.6859	1.64530	1.6671	1.6859	1.64000	1.64000	1.6859	1.6859
			1.6748	1.6865	1.64505	1.6665	1.6865	1.64025	1.63975	1.6865	1.6865
		3A	1.6770	1.6875	1.64690	1.6700	1.6875	1.64290	1.64290	1.6875	1.6875
			1.6764	1.6881	1.64665	1.6694	1.6881	1.64315	1.64265	1.6881	1.6881
1 1/16-18 or 1.6875-18	UNEF	2A	1.6763	1.6860	1.6499	1.6689	1.6860	1.6448	1.6448	1.6860	1.6860
			1.6758	1.6865	1.6497	1.6684	1.6865	1.6450	1.6446	1.6865	1.6865
		3A	1.6778	1.6875	1.6514	1.6717	1.6875	1.6476	1.6476	1.6875	1.6875
			1.6773	1.6880	1.6512	1.6712	1.6880	1.6478	1.6474	1.6880	1.6880
1 1/16-20 or 1.6875-20	UN	2A	1.6770	1.6860	1.6535	1.6704	1.6860	1.6487	1.6487	1.6860	1.6860
			1.6765	1.6865	1.6533	1.6699	1.6865	1.6489	1.6485	1.6865	1.6865
		3A	1.6785	1.6875	1.6550	1.6731	1.6875	1.6514	1.6514	1.6875	1.6875
			1.6780	1.6880	1.6548	1.6726	1.6880	1.6516	1.6512	1.6880	1.6880
1 3/4-5 or 1.750-5	UNC	1A	1.7234	1.7473	1.61740	1.6906	1.7473	1.60400	1.60400	1.7473	1.7473
			1.7226	1.7481	1.61715	1.6898	1.7481	1.60425	1.60375	1.7481	1.7481
		2A	1.7234	1.7473	1.61740	1.6951	1.7473	1.60850	1.60850	1.7473	1.7473
			1.7226	1.7481	1.61715	1.6943	1.7481	1.60875	1.60825	1.7481	1.7481
		3A	1.7261	1.7500	1.62010	1.7000	1.7500	1.61340	1.61340	1.7500	1.7500
			1.7253	1.7508	1.61985	1.6992	1.7508	1.61365	1.61315	1.7508	1.7508
1 3/4-6 or 1.750-6	UN	2A	1.7265	1.7475	1.63920	1.7031	1.7475	1.63090	1.63090	1.7475	1.7475
			1.7257	1.7483	1.63895	1.7023	1.7483	1.63115	1.63065	1.7483	1.7483
		3A	1.7290	1.7500	1.64170	1.7076	1.7500	1.63540	1.63540	1.7500	1.7500
			1.7282	1.7508	1.64145	1.7068	1.7508	1.63565	1.63515	1.7508	1.7508
1 3/4-8 or 1.750-8	UN	2A	1.7306	1.7477	1.66650	1.7131	1.7477	1.65900	1.65900	1.7477	1.7477
			1.7299	1.7484	1.66625	1.7124	1.7484	1.65925	1.65875	1.7484	1.7484
		3A	1.7329	1.7500	1.66880	1.7172	1.7500	1.66310	1.66310	1.7500	1.7500
			1.7322	1.7507	1.66855	1.7165	1.7507	1.66335	1.66285	1.7507	1.7507
1 3/4-12 or 1.750-12	UN	2A	1.7353	1.7482	1.69410	1.7242	1.7482	1.68810	1.68810	1.7482	1.7482
			1.7347	1.7488	1.69385	1.7236	1.7488	1.68835	1.68785	1.7488	1.7488
		3A	1.7371	1.7500	1.69590	1.7275	1.7500	1.69140	1.69140	1.7500	1.7509
			1.7365	1.7506	1.69565	1.7269	1.7506	1.69165	1.69115	1.7506	1.7500
1 3/4-16 or 1.750-16	UN	2A	1.7379	1.7484	1.70780	1.7296	1.7484	1.70250	1.70250	1.7484	1.7484
			1.7373	1.7490	1.70755	1.7290	1.7490	1.70275	1.70225	1.7490	1.7490
		3A	1.7395	1.7500	1.70940	1.7325	1.7500	1.70540	1.70540	1.7500	1.7500
			1.7389	1.7506	1.70915	1.7319	1.7506	1.70565	1.70515	1.7506	1.7506
1 3/4-20 or 1.750-20	UN	2A	1.7395	1.7485	1.7160	1.7329	1.7485	1.7112	1.7112	1.7485	1.7485
			1.7390	1.7490	1.7158	1.7324	1.7490	1.7114	1.7110	1.7490	1.7490
		3A	1.7410	1.7500	1.7175	1.7356	1.7500	1.7139	1.7139	1.7500	1.7500
			1.7405	1.7505	1.7173	1.7351	1.7505	1.7141	1.7137	1.7505	1.7505
1 13/16-6 or 1.8125-6	UN	2A	1.7890	1.8100	1.70170	1.7655	1.8100	1.69330	1.69330	1.8100	1.8100
			1.7882	1.8108	1.70145	1.7647	1.8108	1.69355	1.69305	1.8108	1.8108
		3A	1.7915	1.8125	1.70420	1.7701	1.8125	1.69790	1.69790	1.8125	1.8125
			1.7907	1.8133	1.70395	1.7693	1.8133	1.69815	1.69765	1.8133	1.8133
1 13/16-8 or 1.8125-8	UN	2A	1.7931	1.8102	1.72900	1.7755	1.8102	1.72140	1.72140	1.8102	1.8102
			1.7924	1.8109	1.72875	1.7748	1.8109	1.72165	1.72115	1.8109	1.8109
		3A	1.7954	1.8125	1.73130	1.7797	1.8125	1.72560	1.72560	1.8125	1.8125
			1.7947	1.8132	1.73105	1.7790	1.8132	1.72585	1.72535	1.8132	1.8132
1 13/16-12 or 1.8125-12	UN	2A	1.7978	1.8107	1.75660	1.7867	1.8107	1.75060	1.75060	1.8107	1.8107
			1.7972	1.8113	1.75635	1.7861	1.8113	1.75085	1.75035	1.8113	1.8113
		3A	1.7996	1.8125	1.75840	1.7900	1.8125	1.75390	1.75390	1.8125	1.8125
			1.7990	1.8131	1.75815	1.7894	1.8131	1.75415	1.75365	1.8131	1.8131

See footnotes at end of table.

TABLE III.13.—*Setting plug gages, Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	Class	W truncated setting plugs							Basic-crest setting plugs	
			Plug for GO thread gage [a]			Plug for LO or NOT GO thread gage [a]				Major diameter	
			Major diameter		Pitch diameter	Major diameter		Pitch diameter		[a] [b] Plug ford GO thread gage	[a] [c] Plug for LO or NOT GO thread gage
			Truncated	Full		Truncated	Full	Plus tolerance gage	Minus tolerance gage	W and X tolerances	W and X tolerances
1	2	3	4	5	6	7	8	9	10	11	12
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
1 13/16–16 or 1.8125–16	UN	2A	1.8004	1.8109	1.77030	1.7921	1.8109	1.76500	1.76500	1.8109	1.8109
			1.7998	1.8115	1.77005	1.7915	1.8115	1.76525	1.76475	1.8115	1.8115
		3A	1.8020	1.8125	1.77190	1.7950	1.8125	1.76790	1.76790	1.8125	1.8125
			1.8014	1.8131	1.77165	1.7944	1.8131	1.76815	1.76765	1.8131	1.8131
1 13/16–20 or 1.8125–20	UN	2A	1.8020	1.8110	1.7785	1.7954	1.8110	1.7737	1.7737	1.8110	1.8110
			1.8015	1.8115	1.7783	1.7949	1.8115	1.7739	1.7735	1.8115	1.8115
		3A	1.8035	1.8125	1.7800	1.7981	1.8125	1.7764	1.7764	1.8125	1.8125
			1.8030	1.8130	1.7798	1.7976	1.8130	1.7766	1.7762	1.8130	1.8130
1 7/8–6 or 1.875–6	UN	2A	1.8515	1.8725	1.76420	1.8280	1.8725	1.75580	1.75580	1.8725	1.8725
			1.8507	1.8733	1.76395	1.8272	1.8733	1.75605	1.75555	1.8733	1.8733
		3A	1.8540	1.8750	1.76670	1.8326	1.8750	1.76040	1.76040	1.8750	1.8750
			1.8532	1.8758	1.76645	1.8318	1.8758	1.76065	1.76015	1.8758	1.875
1 7/8–8 or 1.875–8	UN	2A	1.8556	1.8727	1.79150	1.8379	1.8727	1.78380	1.78380	1.8727	1.8727
			1.8549	1.8734	1.79125	1.8372	1.8734	1.78405	1.78355	1.8734	1.8734
		3A	1.8579	1.8750	1.79380	1.8422	1.8750	1.78810	1.78810	1.8750	1.8750
			1.8572	1.8757	1.79355	1.8415	1.8757	1.78835	1.78785	1.8757	1.8757
1 7/8–12 or 1.875–12	UN	2A	1.8603	1.8732	1.81910	1.8492	1.8732	1.81310	1.81310	1.8732	1.8732
			1.8597	1.8738	1.81885	1.8486	1.8738	1.81335	1.81285	1.8738	1.8738
		3A	1.8621	1.8750	1.82090	1.8525	1.8750	1.81640	1.81640	1.8750	1.8750
			1.8615	1.8756	1.82065	1.8519	1.8756	1.81665	1.81615	1.8756	1.8756
1 7/8–16 or 1.875–16	UN	2A	1.8629	1.8734	1.83280	1.8546	1.8734	1.82750	1.82750	1.8734	1.8734
			1.8623	1.8740	1.83255	1.8540	1.8740	1.82775	1.82725	1.8740	1.8740
		3A	1.8645	1.8750	1.83440	1.8575	1.8750	1.83040	1.83040	1.8750	1.8750
			1.8639	1.8756	1.83415	1.8569	1.8756	1.83065	1.83015	1.8756	1.8756
1 7/8–20 or 1.875–20	UN	2A	1.8645	1.8735	1.8410	1.8579	1.8735	1.8362	1.8362	1.8735	1.8735
			1.8640	1.8740	1.8408	1.8574	1.8740	1.8364	1.8360	1.8740	1.8740
		3A	1.8660	1.8750	1.8425	1.8606	1.8750	1.8389	1.8389	1.8750	1.8750
			1.8655	1.8755	1.8423	1.8601	1.8755	1.8391	1.8387	1.8755	1.8755
1 15/16–6 or 1.9375–6	UN	2A	1.9139	1.9349	1.82660	1.8903	1.9349	1.81810	1.81810	1.9349	1.9349
			1.9131	1.9357	1.82635	1.8895	1.9357	1.81835	1.81785	1.9357	1.9357
		3A	1.9165	1.9375	1.82920	1.8950	1.9375	1.82280	1.82280	1.9375	1.9375
			1.9157	1.9383	1.82895	1.8942	1.9383	1.82305	1.82255	1.9383	1.9383
1 15/16–8 or 1.9375–8	UN	2A	1.9181	1.9352	1.85400	1.9004	1.9352	1.84630	1.84630	1.9352	1.9352
			1.9174	1.9359	1.85375	1.8997	1.9359	1.84655	1.84605	1.9359	1.9359
		3A	1.9204	1.9375	1.85630	1.9046	1.9375	1.85050	1.85050	1.9375	1.9375
			1.9197	1.9382	1.85605	1.9039	1.9382	1.85075	1.85025	1.9382	1.9382
1 15/16–12 or 1.9375–12	UN	2A	1.9228	1.9357	1.88160	1.9116	1.9357	1.87550	1.87550	1.9357	1.9357
			1.9222	1.9363	1.88135	1.9110	1.9363	1.87575	1.87525	1.9363	1.9363
		3A	1.9246	1.9375	1.88340	1.9150	1.9375	1.87890	1.87890	1.9375	1.9375
			1.9240	1.9381	1.88315	1.9144	1.9381	1.87915	1.87865	1.9381	1.9381
1 15/16–16 or 1.9375–16	UN	2A	1.9254	1.9359	1.89530	1.9170	1.9359	1.88990	1.88990	1.9359	1.9359
			1.9248	1.9365	1.89505	1.9164	1.9365	1.89015	1.88965	1.9365	1.9365
		3A	1.9270	1.9375	1.89690	1.9200	1.9375	1.89290	1.89290	1.9375	1.9375
			1.9264	1.9381	1.89665	1.9194	1.9381	1.89315	1.89265	1.9381	1.9381
1 15/16–20 or 1.9375–20	UN	2A	1.9270	1.9360	1.9035	1.9203	1.9360	1.8986	1.8986	1.9360	1.9360
			1.9265	1.9365	1.9033	1.9198	1.9365	1.8988	1.8984	1.9365	1.9365
		3A	1.9285	1.9375	1.9050	1.9230	1.9375	1.9013	1.9013	1.9375	1.9375
			1.9280	1.9380	1.9048	1.9225	1.9380	1.9015	1.9011	1.9380	1.9380
2–4½ or 2.000–4.5	UNC	1A	1.9713	1.9971	1.85280	1.9347	1.9971	1.83850	1.83850	1.9971	1.9971
			1.9705	1.9979	1.85255	1.9339	1.9979	1.83875	1.83825	1.9979	1.9979
		2A	1.9713	1.9971	1.85280	1.9395	1.9971	1.84330	1.84330	1.9971	1.9971
			1.9705	1.9979	1.85255	1.9387	1.9979	1.84355	1.84305	1.9979	1.9979
		3A	1.9742	2.0000	1.85570	1.9448	2.0000	1.84860	1.84860	2.0000	2.0000
			1.9734	2.0008	1.85545	1.9440	2.0008	1.84885	1.84835	2.0008	2.0008
2–6 or 2.000–6	UN	2A	1.9764	1.9974	1.88910	1.9527	1.9974	1.88050	1.88050	1.9974	1.9974
			1.9756	1.9982	1.88885	1.9519	1.9982	1.88075	1.88025	1.9982	1.9982
		3A	1.9790	2.0000	1.89170	1.9575	2.0000	1.88530	1.88530	2.0000	2.0000
			1.9782	2.0008	1.89145	1.9567	2.0008	1.88555	1.88505	2.0008	2.0008
2–8 or 2.000–8	UN	2A	1.9806	1.9977	1.91650	1.9628	1.9977	1.90870	1.90870	1.9977	1.9977
			1.9799	1.9984	1.91625	1.9621	1.9984	1.90895	1.90845	1.9984	1.9984
		3A	1.9829	2.0000	1.91880	1.9671	2.0000	1.91300	1.91300	2.0000	2.0000
			1.9822	2.0007	1.91855	1.9664	2.0007	1.91325	1.91275	2.0007	2.0007

See footnotes at end of table.

TABLE III.13.—*Setting plug gages, Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	Class	W truncated setting plugs							Basic-crest setting plugs	
			Plug for GO thread gage [a]			Plug for LO or NOT GO thread gage [a]				Major diameter	
			Major diameter		Pitch diameter	Major diameter		Pitch diameter		[a] [b] Plug for GO thread gage	[a] [c] Plug for LO or NOT GO thread gage
			Truncated	Full		Truncated	Full	Plus tolerance gage	Minus tolerance gage	W and X tolerances	W and X tolerances
1	2	3	4	5	6	7	8	9	10	11	12
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
2-12 or 2.000-12	UN	2A	1.9853	1.9982	1.94410	1.9741	1.9982	1.93800	1.93800	1.9982	1.9982
		3A	1.9847	1.9988	1.94385	1.9735	1.9988	1.93825	1.93775	1.9988	1.9988
			1.9871	2.0000	1.94590	1.9775	2.0000	1.94140	1.94140	2.0000	2.0000
			1.9865	2.0006	1.94565	1.9769	2.0006	1.94165	1.94115	2.0006	2.0006
2-16 or 2.000-16	UN	2A	1.9879	1.9984	1.95780	1.9795	1.9984	1.95240	1.95240	1.9984	1.9984
		3A	1.9873	1.9990	1.95755	1.9789	1.9990	1.95265	1.95215	1.9990	1.9990
			1.9895	2.0000	1.95940	1.9825	2.0000	1.95540	1.95540	2.0000	2.0000
			1.9889	2.0006	1.95915	1.9819	2.0006	1.95565	1.95515	2.0006	2.0006
2-20 or 2.000-20	UN	2A	1.9895	1.9985	1.9660	1.9828	1.9985	1.9611	1.9611	1.9985	1.9985
		3A	1.9890	1.9990	1.9658	1.9823	1.9990	1.9613	1.9609	1.9990	1.9990
			1.9910	2.0000	1.9675	1.9855	2.0000	1.9638	1.9638	2.0000	2.0000
			1.9905	2.0005	1.9673	1.9850	2.0005	1.9640	1.9636	2.0005	2.0005
2⅛-6 or 2.125-6	UN	2A	2.1014	2.1224	2.01410	2.0776	2.1224	2.00540	2.00540	2.1224	2.1224
		3A	2.1006	2.1232	2.01385	2.0768	2.1232	2.00565	2.00515	2.1232	2.1232
			2.1040	2.1250	2.01670	2.0824	2.1250	2.01020	2.01020	2.1250	2.1250
			2.1032	2.1258	2.01645	2.0816	2.1258	2.01045	2.00995	2.1258	2.1258
2⅛-8 or 2.125-8	UN	2A	2.1055	2.1226	2.04140	2.0876	2.1226	2.03350	2.03350	2.1226	2.1226
		3A	2.1048	2.1233	2.04115	2.0869	2.1233	2.03375	2.03325	2.1233	2.1233
			2.1079	2.1250	2.04380	2.0920	2.1250	2.03790	2.03790	2.1250	2.1250
			2.1072	2.1257	2.04355	2.0913	2.1257	2.03815	2.03765	2.1257	2.1257
2⅛-12 or 2.125-12	UN	2A	2.1103	2.1232	2.06910	2.0991	2.1232	2.06300	2.06300	2.1232	2.1232
		3A	2.1097	2.1238	2.06885	2.0985	2.1238	2.06325	2.06275	2.1238	2.1238
			2.1121	2.1250	2.07090	2.1025	2.1250	2.06640	2.06640	2.1250	2.1250
			2.1115	2.1256	2.07065	2.1019	2.1256	2.06665	2.06615	2.1256	2.1256
2⅛-16 or 2.125-16	UN	2A	2.1129	2.1234	2.08280	2.1045	2.1234	2.07740	2.07740	2.1234	2.1234
		3A	2.1123	2.1240	2.08255	2.1039	2.1240	2.07765	2.07715	2.1240	2.1240
			2.1145	2.1250	2.08440	2.1075	2.1250	2.08040	2.08040	2.1250	2.1250
			2.1139	2.1256	2.08415	2.1069	2.1256	2.08065	2.08015	2.1256	2.1256
2⅛-20 or 2.125-20	UN	2A	2.1145	2.1235	2.0910	2.1078	2.1235	2.0861	2.0861	2.1235	2.1235
		3A	2.1140	2.1240	2.0908	2.1073	2.1240	2.0863	2.0859	2.1240	2.1240
			2.1160	2.1250	2.0925	2.1105	2.1250	2.0888	2.0888	2.1250	2.1250
			2.1155	2.1255	2.0923	2.1100	2.1255	2.0890	2.0886	2.1255	2.1255
2¼-4½ or 2.250-4.5	UNC	1A	2.2213	2.2471	2.10280	2.1844	2.2471	2.08820	2.08820	2.2471	2.2471
		2A	2.2205	2.2479	2.10255	2.1836	2.2479	2.08845	2.08795	2.2479	2.2479
		3A	2.2213	2.2471	2.10280	2.1893	2.2471	2.09310	2.09310	2.2471	2.2471
			2.2205	2.2479	2.10255	2.1885	2.2479	2.09335	2.09285	2.2479	2.2479
			2.2242	2.2500	2.10570	2.1946	2.2500	2.09840	2.09840	2.2500	2.2500
			2.2234	2.2508	2.10545	2.1938	2.2508	2.09865	2.09815	2.2508	2.2508
2¼-6 or 2.250-6	UN	2A	2.2264	2.2474	2.13910	2.2025	2.2474	2.13030	2.13030	2.2474	2.2474
		3A	2.2256	2.2482	2.13885	2.2017	2.2482	2.13055	2.13005	2.2482	2.2482
			2.2290	2.2500	2.14170	2.2073	2.2500	2.13510	2.13510	2.2500	2.2500
			2.2282	2.2508	2.14145	2.2065	2.2508	2.13535	2.13485	2.2508	2.2508
2¼-8 or 2.250-8	UN	2A	2.2305	2.2476	2.16640	2.2125	2.2476	2.15840	2.15840	2.2476	2.2476
		3A	2.2298	2.2483	2.16615	2.2118	2.2483	2.15865	2.15815	2.2483	2.2483
			2.2329	2.2500	2.16880	2.2169	2.2500	2.16280	2.16280	2.2500	2.2500
			2.2322	2.2507	2.16855	2.2162	2.2507	2.16305	2.16255	2.2507	2.2507
2¼-12 or 2.250-12	UN	2A	2.2353	2.2482	2.19410	2.2241	2.2482	2.18800	2.18800	2.2482	2.2482
		3A	2.2347	2.2488	2.19385	2.2235	2.2488	2.18825	2.18775	2.2488	2.2488
			2.2371	2.2500	2.19590	2.2275	2.2500	2.19140	2.19140	2.2500	2.2500
			2.2365	2.2506	2.19565	2.2269	2.2506	2.19165	2.19115	2.2506	2.2506
2¼-16 or 2.250-16	UN	2A	2.2379	2.2484	2.20780	2.2295	2.2484	2.20240	2.20240	2.2484	2.2484
		3A	2.2373	2.2490	2.20755	2.2289	2.2490	2.20265	2.20215	2.2490	2.2490
			2.2395	2.2500	2.20940	2.2325	2.2500	2.20540	2.20540	2.2500	2.2500
			2.2389	2.2506	2.20915	2.2319	2.2506	2.20565	2.20515	2.2506	2.2506
2¼-20 or 2.250-20	UN	2A	2.2395	2.2485	2.2160	2.2328	2.2485	2.2111	2.2111	2.2485	2.2485
		3A	2.2390	2.2490	2.2158	2.2323	2.2490	2.2113	2.2109	2.2490	2.2490
			2.2410	2.2500	2.2175	2.2355	2.2500	2.2138	2.2138	2.2500	2.2500
			2.2405	2.2505	2.2173	2.2350	2.2505	2.2140	2.2136	2.2505	2.2505
2⅜-6 or 2.375-6	UN	2A	2.3513	2.3723	2.26400	2.3273	2.3723	2.25510	2.25510	2.3723	2.3723
		3A	2.3505	2.3731	2.26375	2.3265	2.3731	2.25535	2.25485	2.3731	2.3731
			2.3540	2.3750	2.26670	2.3323	2.3750	2.26010	2.26010	2.3750	2.3750
			2.3532	2.3758	2.26645	2.3315	2.3758	2.26035	2.25985	2.3758	2.3758

See footnotes at end of table.

TABLE III.13.—*Setting plug gages, Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	Class	W truncated setting plugs							Basic-crest setting plugs	
			Plug for GO thread gage [a]			Plug for LO or NOT GO thread gage [a]				Major diameter	
			Major diameter		Pitch diameter	Major diameter		Pitch diameter		[a] [b] Plug for GO thread gage	[a] [c] Plug for LO or NOT GO thread gage
			Truncated	Full		Truncated	Full	Plus tolerance gage	Minus tolerance gage	W and X tolerances	W and X tolerances
1	2	3	4	5	6	7	8	9	10	11	12
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
2⅜–8 or 2.375–8	UN	2A	2.3555	2.3726	2.29140	2.3374	2.3726	2.28330	2.28330	2.3726	2.3726
			2.3548	2.3733	2.29115	2.3367	2.3733	2.28355	2.28305	2.3733	2.3733
		3A	2.3579	2.3750	2.29380	2.3419	2.3750	2.28780	2.28780	2.3750	2.3750
			2.3572	2.3757	2.29355	2.3412	2.3757	2.28805	2.28755	2.3757	2.3757
2⅜–12 or 2.375–12	UN	2A	2.3602	2.3731	2.31900	2.3489	2.3731	2.31280	2.31280	2.3731	2.3731
			2.3596	2.3737	2.31875	2.3483	2.3737	2.31305	2.31255	2.3737	2.3737
		3A	2.3621	2.3750	2.32090	2.3524	2.3750	2.31630	2.31630	2.3750	2.3750
			2.3615	2.3756	2.32065	2.3518	2.3756	2.31655	2.31605	2.3756	2.3756
2⅜–16 or 2.375–16	UN	2A	2.3628	2.3733	2.33270	2.3543	2.3733	2.32720	2.32720	2.3733	2.3733
			2.3622	2.3739	2.33245	2.3537	2.3739	2.32745	2.32695	2.3739	2.3739
		3A	2.3645	2.3750	2.33440	2.3574	2.3750	2.33030	2.33030	2.3750	2.3750
			2.3639	2.3756	2.33415	2.3568	2.3756	2.33055	2.33005	2.3756	2.3756
2⅜–20 or 2.375–20	UN	2A	2.3645	2.3735	2.3410	2.3576	2.3734	2.3359	2.3359	2.3735	2.3734
			2.3640	2.3740	2.3408	2.3571	2.3739	2.3361	2.3357	2.3740	2.3739
		3A	2.3660	2.3750	2.3425	2.3604	2.3750	2.3387	2.3387	2.3750	2.3750
			2.3655	2.3755	2.3423	2.3599	2.3755	2.3389	2.3385	2.3755	2.3755
2½–4 or 2.500–4	UNC	1A	2.4688	2.4969	2.33450	2.4273	2.4969	2.31900	2.31900	2.4969	2.4969
			2.4679	2.4978	2.33425	2.4264	2.4978	2.31925	2.31875	2.4978	2.4978
		2A	2.4688	2.4969	2.33450	2.4324	2.4969	2.32410	2.32410	2.4969	2.4969
			2.4679	2.4978	2.33425	2.4315	2.4978	2.32435	2.32385	2.4978	2.4978
		3A	2.4719	2.5000	2.33760	2.4381	2.5000	2.32980	2.32980	2.5000	2.5000
			2.4710	2.5009	2.33735	2.4372	2.5009	2.33005	2.32955	2.5009	2.5009
2½–6 or 2.500–6	UN	2A	2.4763	2.4973	2.38900	2.4522	2.4973	2.38000	2.38000	2.4973	2.4973
			2.4755	2.4981	2.38875	2.4514	2.4981	2.38025	2.37975	2.4981	2.4981
		3A	2.4790	2.5000	2.39170	2.4572	2.5000	2.38500	2.38500	2.5000	2.5000
			2.4782	2.5008	2.39145	2.4564	2.5008	2.38525	2.38475	2.5008	2.5008
2½–8 or 2.500–8	UN	2A	2.4805	2.4976	2.41640	2.4623	2.4976	2.40820	2.40820	2.4976	2.4976
			2.4798	2.4983	2.41615	2.4616	2.4983	2.40845	2.40795	2.4983	2.4983
		3A	2.4829	2.5000	2.41880	2.4668	2.5000	2.41270	2.41270	2.5000	2.5000
			2.4822	2.5007	2.41855	2.4661	2.5007	2.41295	2.41245	2.5007	2.5007
2½–12 or 2.500–12	UN	2A	2.4852	2.4981	2.44400	2.4739	2.4981	2.43780	2.43780	2.4981	2.4981
			2.4846	2.4987	2.44375	2.4733	2.4987	2.43805	2.43755	2.4987	2.4987
		3A	2.4871	2.5000	2.44590	2.4774	2.5000	2.44130	2.44130	2.5000	2.5000
			2.4865	2.5006	2.44565	2.4768	2.5006	2.44155	2.44105	2.5006	2.5006
2½–16 or 2.500–16	UN	2A	2.4878	2.4983	2.45770	2.4793	2.4983	2.45220	2.45220	2.4983	2.4983
			2.4872	2.4989	2.45745	2.4787	2.4989	2.45245	2.45195	2.4989	2.4989
		3A	2.4895	2.5000	2.45940	2.4824	2.5000	2.45530	2.45530	2.5000	2.5000
			2.4889	2.5006	2.45915	2.4818	2.5006	2.45555	2.45505	2.5006	2.5006
2½–20 or 2.500–20	UN	2A	2.4895	2.4985	2.4660	2.4826	2.4984	2.4609	2.4609	2.4985	2.4984
			2.4890	2.4990	2.4658	2.4821	2.4989	2.4611	2.4607	2.4990	2.4989
		3A	2.4910	2.5000	2.4675	2.4854	2.5000	2.4637	2.4637	2.5000	2.5000
			2.4905	2.5005	2.4673	2.4849	2.5005	2.4639	2.4635	2.5005	2.5005
2⅝–6 or 2.625–6	UN	2A	2.6013	2.6223	2.51400	2.5772	2.6223	2.50500	2.50500	2.6223	2.6223
			2.6005	2.6231	2.51375	2.5764	2.6231	2.50525	2.50475	2.6231	2.6231
		3A	2.6040	2.6250	2.51670	2.5821	2.6250	2.50990	2.50990	2.6250	2.6250
			2.6032	2.6258	2.51645	2.5813	2.6258	2.51015	2.50965	2.6258	2.6258
2⅝–8 or 2.625–8	UN	2A	2.6054	2.6225	2.54130	2.5872	2.6225	2.53310	2.53310	2.6225	2.6225
			2.6047	2.6232	2.54105	2.5865	2.6232	2.53335	2.53285	2.6232	2.6232
		3A	2.6079	2.6250	2.54380	2.5917	2.6250	2.53760	2.53760	2.6250	2.6250
			2.6072	2.6257	2.54355	2.5910	2.6257	2.53785	2.53735	2.6257	2.6257
2⅝–12 or 2.625–12	UN	2A	2.6102	2.6231	2.56900	2.5989	2.6231	2.56280	2.56280	2.6231	2.6231
			2.6096	2.6237	2.56875	2.5983	2.6237	2.56305	2.56255	2.6237	2.6237
		3A	2.6121	2.6250	2.57090	2.6024	2.6250	2.56630	2.56630	2.6250	2.6250
			2.6115	2.6256	2.57065	2.6018	2.6256	2.56655	2.56605	2.6256	2.6256
2⅝–16 or 2.625–16	UN	2A	2.6128	2.6233	2.58270	2.6043	2.6233	2.57720	2.57720	2.6233	2.6233
			2.6122	2.6239	2.58245	2.6037	2.6239	2.57745	2.57695	2.6239	2.6239
		3A	2.6145	2.6250	2.58440	2.6074	2.6250	2.58030	2.58030	2.6250	2.6250
			2.6139	2.6256	2.58415	2.6068	2.6256	2.58055	2.58005	2.6256	2.6256
2⅝–20 or 2.625–20	UN	2A	2.6145	2.6235	2.5910	2.6076	2.6234	2.5859	2.5859	2.6235	2.6234
			2.6140	2.6240	2.5908	2.6071	2.6239	2.5861	2.5857	2.6240	2.6239
		3A	2.6160	2.6250	2.5925	2.6104	2.6250	2.5887	2.5887	2.6250	2.6250
			2.6155	2.6255	2.5923	2.6099	2.6255	2.5889	2.5885	2.6255	2.6255

See footnotes at end of table.

TABLE III.13.—*Setting plug gages, Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	Class	W truncated setting plugs							Basic-crest setting plugs	
			Plug for GO thread gage [a]			Plug for LO or NOT GO thread gage [a]				Major diameter	
			Major diameter		Pitch diameter	Major diameter		Pitch diameter		[a] [b] Plug for GO thread gage	[a] [c] Plug for LO or NOT GO thread gage
			Truncated	Full		Truncated	Full	Plus tolerance gage	Minus tolerance gage	W and X tolerances	W and X tolerances
1	2	3	4	5	6	7	8	9	10	11	12
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
		1A	2.7187	2.7468	2.58440	2.6769	2.7468	2.56860	2.56860	2.7468	2.7468
			2.7178	2.7477	2.58415	2.6760	2.7477	2.56885	2.56835	2.7477	2.7477
2¾–4 or	UNC	2A	2.7187	2.7468	2.58440	2.6822	2.7468	2.57390	2.57390	2.7468	2.7468
2.750–4			2.7178	2.7477	2.58415	2.6813	2.7477	2.57415	2.57365	2.7477	2.7477
		3A	2.7219	2.7500	2.58760	2.6880	2.7500	2.57970	2.57970	2.7500	2.7500
			2.7210	2.7509	2.58735	2.6871	2.7509	2.57995	2.57945	2.7509	2.7509
		2A	2.7263	2.7473	2.63900	2.7021	2.7473	2.62990	2.62990	2.7473	2.7473
2¾–6 or	UN		2.7255	2.7481	2.63875	2.7013	2.7481	2.63015	2.62965	2.7481	2.7481
2.750–6		3A	2.7290	2.7500	2.64170	2.7071	2.7500	2.63490	2.63490	2.7500	2.7500
			2.7282	2.7508	2.64145	2.7063	2.7508	2.63515	2.63465	2.7508	2.7508
		2A	2.7304	2.7475	2.66630	2.7121	2.7475	2.65800	2.65800	2.7475	2.7475
2¾–8 or	UN		2.7297	2.7482	2.66605	2.7114	2.7482	2.65825	2.65775	2.7482	2.7482
2.750–8		3A	2.7329	2.7500	2.66880	2.7167	2.7500	2.66250	2.66250	2.7500	2.7500
			2.7322	2.7507	2.66855	2.7160	2.7507	2.66275	2.66225	2.7507	2.7507
		2A	2.7352	2.7481	2.69400	2.7239	2.7481	2.68780	2.68780	2.7481	2.7481
2¾–12 or	UN		2.7346	2.7487	2.69375	2.7233	2.7487	2.68805	2.68755	2.7487	2.7487
2.750–12		3A	2.7371	2.7500	2.69590	2.7274	2.7500	2.69130	2.69130	2.7500	2.7500
			2.7365	2.7506	2.69565	2.7268	2.7506	2.69155	2.69105	2.7506	2.7506
		2A	2.7378	2.7483	2.70770	2.7293	2.7483	2.70220	2.70220	2.7483	2.7483
2¾–16 or	UN		2.7372	2.7489	2.70745	2.7287	2.7489	2.70245	2.70195	2.7489	2.7489
2.750–16		3A	2.7395	2.7500	2.70940	2.7324	2.7500	2.70530	2.70530	2.7500	2.7500
			2.7389	2.7506	2.70915	2.7318	2.7506	2.70555	2.70505	2.7506	2.7506
		2A	2.7395	2.7485	2.7160	2.7326	2.7484	2.7109	2.7109	2.7485	2.7484
2¾–20 or	UN		2.7390	2.7490	2.7158	2.7321	2.7489	2.7111	2.7107	2.7490	2.7489
2.750–20		3A	2.7410	2.7500	2.7175	2.7354	2.7500	2.7137	2.7137	2.7500	2.7500
			2.7405	2.7505	2.7173	2.7349	2.7505	2.7139	2.7135	2.7505	2.7505
		2A	2.8512	2.8722	2.76390	2.8269	2.8722	2.75470	2.75470	2.8722	2.8722
2⅞–6 or	UN		2.8504	2.8730	2.76365	2.8261	2.8730	2.75495	2.75445	2.8730	2.8730
2.875–6		3A	2.8540	2.8750	2.76670	2.8320	2.8750	2.75980	2.75980	2.8750	2.8750
			2.8532	2.8758	2.76645	2.8312	2.8758	2.76005	2.75955	2.8758	2.8758
		2A	2.8554	2.8725	2.79130	2.8370	2.8725	2.78290	2.78290	2.8725	2.8725
2⅞–8 or	UN		2.8547	2.8732	2.79105	2.8363	2.8732	2.78315	2.78265	2.8732	2.8732
2.875–8		3A	2.8579	2.8750	2.79380	2.8416	2.8750	2.78750	2.78750	2.8750	2.8750
			2.8572	2.8757	2.79355	2.8409	2.8757	2.78775	2.78725	2.8757	2.8757
		2A	2.8602	2.8731	2.81900	2.8488	2.8731	2.81270	2.81270	2.8731	2.8731
2⅞–12 or	UN		2.8596	2.8737	2.81875	2.8482	2.8737	2.81295	2.81245	2.8737	2.8737
2.875–12		3A	2.8621	2.8750	2.82090	2.8523	2.8750	2.81620	2.81620	2.8750	2.8750
			2.8615	2.8756	2.82065	2.8517	2.8756	2.81645	2.81595	2.8756	2.8756
		2A	2.8628	2.8733	2.83270	2.8542	2.8733	2.82710	2.82710	2.8733	2.8733
2⅞–16 or	UN		2.8622	2.8739	2.83245	2.8536	2.8739	2.82735	2.82685	2.8739	2.8739
2.875–16		3A	2.8645	2.8750	2.83440	2.8573	2.8750	2.83020	2.83020	2.8750	2.8750
			2.8639	2.8756	2.83415	2.8567	2.8756	2.83045	2.82995	2.8756	2.8756
		2A	2.8644	2.8734	2.8409	2.8574	2.8732	2.8357	2.8357	2.8734	2.8732
2⅞–20 or	UN		2.8639	2.8739	2.8407	2.8569	2.8737	2.8359	2.8355	2.8739	2.8737
2.875–20		3A	2.8660	2.8750	2.8425	2.8603	2.8750	2.8386	2.8386	2.8750	2.8750
			2.8655	2.8755	2.8423	2.8598	2.8755	2.8388	2.8384	2.8755	2.8755
		1A	2.9687	2.9968	2.83440	2.9266	2.9968	2.81830	2.81830	2.9968	2.9968
			2.9678	2.9977	2.83415	2.9257	2.9977	2.81855	2.81805	2.9977	2.9977
3–4 or	UNC	2A	2.9687	2.9968	2.83440	2.9320	2.9968	2.82370	2.82370	2.9968	2.9968
3.000–4			2.9678	2.9977	2.83415	2.9311	2.9977	2.82395	2.82345	2.9977	2.9977
		3A	2.9719	3.0000	2.83760	2.9379	3.0000	2.82960	2.82960	3.0000	3.0000
			2.9710	3.0009	2.83735	2.9370	3.0009	2.82985	2.82935	3.0009	3.0009
		2A	2.9762	2.9972	2.88890	2.9518	2.9972	2.87960	2.87960	2.9972	2.9972
3–6 or	UN		2.9754	2.9980	2.88865	2.9510	2.9980	2.87985	2.87935	2.9980	2.9980
3.000–6		3A	2.9790	3.0000	2.89170	2.9569	3.0000	2.88470	2.88470	3.0000	3.0000
			2.9782	3.0008	2.89145	2.9561	3.0008	2.88495	2.88445	3.0008	3.0008
		2A	2.9803	2.9974	2.91620	2.9618	2.9974	2.90770	2.90770	2.9974	2.9974
3–8 or	UN		2.9796	2.9981	2.91595	2.9611	2.9981	2.90795	2.90745	2.9981	2.9981
3.000–8		3A	2.9829	3.0000	2.91880	2.9665	3.0000	2.91240	2.91240	3.0000	3.0000
			2.9822	3.0007	2.91855	2.9658	3.0007	2.91265	2.91215	3.0007	3.0007
		2A	2.9852	2.9981	2.94400	2.9738	2.9981	2.93770	2.93770	2.9981	2.9981
3–12 or	UN		2.9846	2.9987	2.94375	2.9732	2.9987	2.93795	2.93745	2.9987	2.9987
3.000–12		3A	2.9871	3.0000	2.94590	2.9773	3.0000	2.94120	2.94120	3.0000	3.0000
			2.9865	3.0006	2.94565	2.9767	3.0006	2.94145	2.94095	3.0006	3.0006

See footnotes at end of table.

TABLE III.13.—*Setting plug gages, Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	Class	W truncated setting plugs							Basic-crest setting plugs	
			Plug for GO thread gage [a]			Plug for LO or NOT GO thread gage [a]				Major diameter	
			Major diameter		Pitch diameter	Major diameter		Pitch diameter		[a] [b] Plug for GO thread gage	[a] [c] Plug for LO or NOT GO thread gage
			Truncated	Full		Truncated	Full	Plus tolerance gage	Minus tolerance gage	W and X tolerances	W and X tolerances
1	2	3	4	5	6	7	8	9	10	11	12
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
3-16 or 3.000-16	UN	2A	2.9878	2.9983	2.95770	2.9792	2.9983	2.95210	2.95210	2.9983	2.9983
			2.9872	2.9989	2.95745	2.9786	2.9989	2.95235	2.95185	2.9989	2.9989
		3A	2.9895	3.0000	2.95940	2.9823	3.0000	2.95520	2.95520	3.0000	3.0000
			2.9889	3.0006	2.95915	2.9817	3.0006	2.95545	2.95495	3.0006	3.0006
3-20 or 3.000-20	UN	2A	2.9894	2.9984	2.9659	2.9824	2.9982	2.9607	2.9607	2.9984	2.9982
			2.9889	2.9989	2.9657	2.9819	2.9987	2.9609	2.9605	2.9989	2.9987
		3A	2.9910	3.0000	2.9675	2.9853	3.0000	2.9636	2.9636	3.0000	3.0000
			2.9905	3.0005	2.9673	2.9848	3.0005	2.9638	2.9634	3.0005	3.0005
3⅛-6 or 3.125-6	UN	2A	3.1012	3.1222	3.01390	3.0767	3.1222	3.00450	3.00450	3.1222	3.1222
			3.1004	3.1230	3.01365	3.0759	3.1230	3.00475	3.00425	3.1230	3.1230
		3A	3.1040	3.1250	3.01670	3.0819	3.1250	3.00970	3.00970	3.1250	3.1250
			3.1032	3.1258	3.01645	3.0811	3.1258	3.00995	3.00945	3.1258	3.1258
3⅛-8 or 3.125-8	UN	2A	3.1053	3.1224	3.04120	3.0867	3.1224	3.03260	3.03260	3.1224	3.1224
			3.1046	3.1231	3.04095	3.0860	3.1231	3.03285	3.03235	3.1231	3.1231
		3A	3.1079	3.1250	3.04380	3.0915	3.1250	3.03740	3.03740	3.1250	3.1250
			3.1072	3.1257	3.04355	3.0908	3.1257	3.03765	3.03715	3.1257	3.1257
3⅛-12 or 3.125-12	UN	2A	3.1102	3.1231	3.06900	3.0988	3.1231	3.06270	3.06270	3.1231	3.1231
			3.1096	3.1237	3.06875	3.0982	3.1237	3.06295	3.06245	3.1237	3.1237
		3A	3.1121	3.1250	3.07090	3.1023	3.1250	3.06620	3.06620	3.1250	3.1250
			3.1115	3.1256	3.07065	3.1017	3.1256	3.06645	3.06595	3.1256	3.1256
3⅛-16 or 3.125-16	UN	2A	3.1128	3.1233	3.08270	3.1042	3.1233	3.07710	3.07710	3.1233	3.1233
			3.1122	3.1239	3.08245	3.1036	3.1239	3.07735	3.07685	3.1239	3.1239
		3A	3.1145	3.1250	3.08440	3.1073	3.1250	3.08020	3.08020	3.1250	3.1250
			3.1139	3.1256	3.08415	3.1067	3.1256	3.08045	3.07995	3.1256	3.1256
3¼-4 or 3.250-4	UNC	1A	3.2186	3.2467	3.08430	3.1763	3.2467	3.06800	3.06800	3.2467	3.2467
			3.2177	3.2476	3.08405	3.1754	3.2476	3.06825	3.06775	3.2476	3.2476
		2A	3.2186	3.2467	3.08430	3.1817	3.2467	3.07340	3.07340	3.2467	3.2467
			3.2177	3.2476	3.08405	3.1808	3.2476	3.07365	3.07315	3.2476	3.2476
		3A	3.2219	3.2500	3.08760	3.1877	3.2500	3.07940	3.07940	3.2500	3.2500
			3.2210	3.2509	3.08735	3.1868	3.2509	3.07965	3.07915	3.2509	3.2509
3¼-6 or 3.250-6	UN	2A	3.2262	3.2472	3.13890	3.2016	3.2472	3.12940	3.12940	3.2472	3.2472
			3.2254	3.2480	3.13865	3.2008	3.2480	3.12965	3.12915	3.2480	3.2480
		3A	3.2290	3.2500	3.14170	3.2068	3.2500	3.13460	3.13460	3.2500	3.2500
			3.2282	3.2508	3.14145	3.2060	3.2508	3.13485	3.13435	3.2508	3.2508
3¼-8 or 3.250-8	UN	2A	3.2303	3.2474	3.16620	3.2116	3.2474	3.15750	3.15750	3.2474	3.2474
			3.2296	3.2481	3.16595	3.2109	3.2481	3.15775	3.15725	3.2481	3.2481
		3A	3.2329	3.2500	3.16880	3.2164	3.2500	3.16230	3.16230	3.2500	3.2500
			3.2322	3.2507	3.16855	3.2157	3.2507	3.16255	3.16205	3.2507	3.2507
3¼-12 or 3.250-12	UN	2A	3.2352	3.2481	3.19400	3.2238	3.2481	3.18770	3.18770	3.2481	3.2481
			3.2346	3.2487	3.19375	3.2232	3.2487	3.18795	3.18745	3.2487	3.2487
		3A	3.2371	3.2500	3.19590	3.2273	3.2500	3.19120	3.19120	3.2500	3.2500
			3.2365	3.2506	3.19565	3.2267	3.2506	3.19145	3.19095	3.2506	3.2506
3¼-16 or 3.250-16	UN	2A	3.2378	3.2483	3.20770	3.2292	3.2483	3.20210	3.20210	3.2483	3.2483
			3.2372	3.2489	3.20745	3.2286	3.2489	3.20235	3.20185	3.2489	3.2489
		3A	3.2395	3.2500	3.20940	3.2323	3.2500	3.20520	3.20520	3.2500	3.2500
			3.2389	3.2506	3.20915	3.2317	3.2506	3.20545	3.20495	3.2506	3.2506
3⅜-6 or 3.375-6	UN	2A	3.3511	3.3721	3.26380	3.3265	3.3721	3.25430	3.25430	3.3721	3.3721
			3.3503	3.3729	3.26355	3.3257	3.3729	3.25455	3.25405	3.3729	3.3729
		3A	3.3540	3.3750	3.26670	3.3317	3.3750	3.25950	3.25950	3.3750	3.3750
			3.3532	3.3758	3.26645	3.3309	3.3758	3.25975	3.25925	3.3758	3.3758
3⅜-8 or 3.375-8	UN	2A	3.3553	3.3724	3.29120	3.3365	3.3724	3.28240	3.28240	3.3724	3.3724
			3.3546	3.3731	3.29095	3.3358	3.3731	3.28265	3.28215	3.3731	3.3731
		3A	3.3579	3.3750	3.29380	3.3413	3.3750	3.28720	3.28720	3.3750	3.3750
			3.3572	3.3757	3.29355	3.3406	3.3757	3.28745	3.28695	3.3757	3.3757
3⅜-12 or 3.375-12	UN	2A	3.3602	3.3731	3.31900	3.3487	3.3731	3.31260	3.31260	3.3731	3.3731
			3.3596	3.3737	3.31875	3.3481	3.3737	3.31285	3.31235	3.3737	3.3737
		3A	3.3621	3.3750	3.32090	3.3522	3.3750	3.31610	3.31610	3.3750	3.3750
			3.3615	3.3756	3.32065	3.3516	3.3756	3.31635	3.31585	3.3756	3.3756
3⅜-16 or 3.375-16	UN	2A	3.3628	3.3733	3.33270	3.3540	3.3733	3.32690	3.32690	3.3733	3.3733
			3.3622	3.3739	3.33245	3.3534	3.3739	3.32715	3.32665	3.3739	3.3739
		3A	3.3645	3.3750	3.33440	3.3572	3.3750	3.33010	3.33010	3.3750	3.3750
			3.3639	3.3756	3.33415	3.3566	3.3756	3.33035	3.32985	3.3756	3.3756

See footnotes at end of table.

TABLE III.13.—*Setting plug gages, Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	Class	W truncated setting plugs							Basic-crest setting plugs	
			Plug for GO thread gage [a]			Plug for LO or NOT GO thread gage [a]				Major diameter	
			Major diameter		Pitch diameter	Major diameter		Pitch diameter		[a] [b] Plug for GO thread gage	[a] [c] Plug for LO or NOT GO thread gage
			Truncated	Full		Truncated	Full	Plus tolerance gage	Minus tolerance gage	W and X tolerances	W and X tolerances
1	2	3	4	5	6	7	8	9	10	11	12
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
		1A	3.4686	3.4967	3.33430	3.4260	3.4967	3.31770	3.31770	3.4967	3.4967
			3.4677	3.4976	3.33405	3.4251	3.4976	3.31795	3.31745	3.4976	3.4976
3½–4 or 3.500–4	UNC	2A	3.4686	3.4967	3.33430	3.4316	3.4967	3.32330	3.32330	3.4967	3.4967
			3.4677	3.4976	3.33405	3.4307	3.4976	3.32355	3.32305	3.4976	3.4976
		3A	3.4719	3.5000	3.33760	3.4376	3.5000	3.32930	3.32930	3.5000	3.5000
			3.4710	3.5009	3.33735	3.4367	3.5009	3.32955	3.32905	3.5009	3.5009
		2A	3.4761	3.4971	3.38880	3.4514	3.4971	3.37920	3.37920	3.4971	3.4971
3½–6 or 3.500–6	UN		3.4753	3.4979	3.38855	3.4506	3.4979	3.37945	3.37895	3.4979	3.4979
		3A	3.4790	3.5000	3.39170	3.4567	3.5000	3.38450	3.38450	3.5000	3.5000
			3.4782	3.5008	3.39145	3.4559	3.5008	3.38475	3.38425	3.5008	3.5008
		2A	3.4803	3.4974	3.41620	3.4615	3.4974	3.40740	3.40740	3.4974	3.4974
3½–8 or 3.500–8	UN		3.4796	3.4981	3.41595	3.4608	3.4981	3.40765	3.40715	3.4981	3.4981
		3A	3.4829	3.5000	3.41880	3.4663	3.5000	3.41220	3.41220	3.5000	3.5000
			3.4822	3.5007	3.41855	3.4656	3.5007	3.41245	3.41195	3.5007	3.5007
		2A	3.4852	3.4981	3.44400	3.4737	3.4981	3.43760	3.43760	3.4981	3.4981
3½–12 or 3.500–12	UN		3.4846	3.4987	3.44375	3.4731	3.4987	3.43785	3.43735	3.4987	3.4987
		3A	3.4871	3.5000	3.44590	3.4772	3.5000	3.44110	3.44110	3.5000	3.5000
			3.4865	3.5006	3.44565	3.4766	3.5006	3.44135	3.44085	3.5006	3.5006
		2A	3.4878	3.4983	3.45770	3.4790	3.4983	3.45190	3.45190	3.4983	3.4983
3½–16 or 3.500–16	UN		3.4872	3.4989	3.45745	3.4784	3.4989	3.45215	3.45165	3.4989	3.4989
		3A	3.4895	3.5000	3.45940	3.4822	3.5000	3.45510	3.45510	3.5000	3.5000
			3.4889	3.5006	3.45915	3.4816	3.5006	3.45535	3.45485	3.5006	3.5006
		2A	3.6011	3.6221	3.51380	3.5763	3.6221	3.50410	3.50410	3.6221	3.6221
3⅝–6 or 3.625–6	UN		3.6003	3.6229	3.51355	3.5755	3.6229	3.50435	3.50385	3.6229	3.6229
		3A	3.6040	3.6250	3.51670	3.5816	3.6250	3.50940	3.50940	3.6250	3.6250
			3.6032	3.6258	3.51645	3.5808	3.6258	3.50965	3.50915	3.6258	3.6258
		2A	3.6052	3.6223	3.54110	3.5863	3.6223	3.53220	3.53220	3.6223	3.6223
3⅝–8 or 3.625–8	UN		3.6045	3.6230	3.54085	3.5856	3.6230	3.53245	3.53195	3.6230	3.6230
		3A	3.6079	3.6250	3.54380	3.5912	3.6250	3.53710	3.53710	3.6250	3.6250
			3.6072	3.6257	3.54355	3.5905	3.6257	3.53735	3.53685	3.6257	3.6257
		2A	3.6102	3.6231	3.56900	3.5987	3.6231	3.56260	3.56260	3.6231	3.6231
3⅝–12 or 3.625–12	UN		3.6096	3.6237	3.56875	3.5981	3.6237	3.56285	3.56235	3.6237	3.6237
		3A	3.6121	3.6250	3.57090	3.6022	3.6250	3.56610	3.56610	3.6250	3.6250
			3.6115	3.6256	3.57065	3.6016	3.6256	3.56635	3.56585	3.6256	3.6256
		2A	3.6128	3.6233	3.58270	3.6040	3.6233	3.57690	3.57690	3.6233	3.6233
3⅝–16 or 3.625–16	UN		3.6122	3.6239	3.58245	3.6034	3.6239	3.57715	3.57665	3.6239	3.6239
		3A	3.6145	3.6250	3.58440	3.6072	3.6250	3.58010	3.58010	3.6250	3.6250
			3.6139	3.6256	3.58415	3.6066	3.6256	3.58035	3.57985	3.6256	3.6256
		1A	3.7185	3.7466	3.58420	3.6757	3.7466	3.56740	3.56740	3.7466	3.7466
			3.7176	3.7475	3.58395	3.6748	3.7475	3.56765	3.56715	3.7475	3.7475
3¾–4 or 3.750–4	UNC	2A	3.7185	3.7466	3.58420	3.6813	3.7466	3.57300	3.57300	3.7466	3.7466
			3.7176	3.7475	3.58395	3.6804	3.7475	3.57325	3.57275	3.7475	3.7475
		3A	3.7219	3.7500	3.58760	3.6875	3.7500	3.57920	3.57920	3.7500	3.7500
			3.7210	3.7509	3.58735	3.6866	3.7509	3.57945	3.57895	3.7509	3.7509
		2A	3.7261	3.7471	3.63880	3.7012	3.7471	3.62900	3.62900	3.7471	3.7471
3¾–6 or 3.750–6	UN		3.7253	3.7479	3.63855	3.7004	3.7479	3.62925	3.62875	3.7479	3.7479
		3A	3.7290	3.7500	3.64170	3.7066	3.7500	3.63440	3.63440	3.7500	3.7500
			3.7282	3.7508	3.64145	3.7058	3.7508	3.63465	3.63415	3.7508	3.7508
		2A	3.7302	3.7473	3.66610	3.7112	3.7473	3.65710	3.65710	3.7473	3.7473
3¾–8 or 3.750–8	UN		3.7295	3.7480	3.66585	3.7105	3.7480	3.65735	3.65685	3.7480	3.7480
		3A	3.7329	3.7500	3.66880	3.7162	3.7500	3.66210	3.66210	3.7500	3.7500
			3.7322	3.7507	3.66855	3.7155	3.7507	3.66235	3.66185	3.7507	3.7507
		2A	3.7352	3.7481	3.69400	3.7237	3.7481	3.68760	3.68760	3.7481	3.7481
3¾–12 or 3.750–12	UN		3.7346	3.7487	3.69375	3.7231	3.7487	3.68785	3.68735	3.7487	3.7487
		3A	3.7371	3.7500	3.69590	3.7272	3.7500	3.69110	3.69110	3.7500	3.7500
			3.7365	3.7506	3.69565	3.7266	3.7506	3.69135	3.69085	3.7506	3.7506
		2A	3.7378	3.7483	3.70770	3.7290	3.7483	3.70190	3.70190	3.7483	3.7483
3¾–16 or 3.750–16	UN		3.7372	3.7489	3.70745	3.7284	3.7489	3.70215	3.70165	3.7489	3.7489
		3A	3.7395	3.7500	3.70940	3.7322	3.7500	3.70510	3.70510	3.7500	3.7500
			3.7389	3.7506	3.70915	3.7316	3.7506	3.70535	3.70485	3.7506	3.7506
		2A	3.8510	3.8720	3.76370	3.8260	3.8720	3.75380	3.75380	3.8720	3.8720
3⅞–6 or 3.875–6	UN		3.8502	3.8728	3.76345	3.8252	3.8728	3.75405	3.75355	3.8728	3.8728
		3A	3.8540	3.8750	3.76670	3.8315	3.8750	3.75930	3.75930	3.8750	3.8750
			3.8532	3.8758	3.76645	3.8307	3.8758	3.75955	3.75905	3.8758	3.8758

See footnotes at end of table.

TABLE III.13.—*Setting plug gages, Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	Class	W truncated setting plugs							Basic-crest setting plugs	
			Plug for GO thread gage [a]			Plug for LO or NOT GO thread gage [a]				Major diameter	
			Major diameter		Pitch diameter	Major diameter		Pitch diameter		[a] [b] Plug for GO thread gage	[a] [c] Plug for LO or NOT GO thread gage
			Truncated	Full		Truncated	Full	Plus tolerance gage	Minus tolerance gage	W and X tolerances	W and X tolerances
1	2	3	4	5	6	7	8	9	10	11	12
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
3⅞–8 or 3.875–8	UN	2A	3.8552	3.8723	3.79110	3.8361	3.8723	3.78200	3.78200	3.8723	3.8723
		3A	3.8545	3.8730	3.79085	3.8354	3.8730	3.78225	3.78175	3.8730	3.8730
			3.8579	3.8750	3.79380	3.8411	3.8756	3.78700	3.78700	3.8750	3.8750
			3.8572	3.8757	3.79355	3.8404	3.8757	3.78725	3.78675	3.8757	3.8757
3⅞–12 or 3.875–12	UN	2A	3.8601	3.8730	3.81890	3.8485	3.8730	3.81240	3.81240	3.8730	3.8730
		3A	3.8595	3.8736	3.81865	3.8479	3.8736	3.81265	3.81215	3.8736	3.8736
			3.8621	3.8750	3.82090	3.8521	3.8750	3.81600	3.81600	3.8750	3.8750
			3.8615	3.8756	3.82065	3.8515	3.8756	3.81625	3.81575	3.8756	3.8756
3⅞–16 or 3.875–16	UN	2A	3.8627	3.8732	3.83260	3.8538	3.8732	3.82670	3.82670	3.8732	3.8732
		3A	3.8621	3.8738	3.83235	3.8532	3.8738	3.82695	3.82645	3.8738	3.8738
			3.8645	3.8750	3.83440	3.8571	3.8750	3.83000	3.83000	3.8750	3.8750
			3.8639	3.8756	3.83415	3.8565	3.8756	3.83025	3.82975	3.8756	3.8756
4–4 or 4.000–4	UNC	1A	3.9685	3.9966	3.83420	3.9255	3.9966	3.81720	3.81720	3.9966	3.9966
		2A	3.9676	3.9975	3.83395	3.9246	3.9975	3.81745	3.81695	3.9975	3.9975
		3A	3.9685	3.9966	3.83420	3.9312	3.9966	3.82290	3.82290	3.9966	3.9966
			3.9676	3.9975	3.83395	3.9303	3.9975	3.82315	3.82265	3.9975	3.9975
			3.9719	4.0000	3.83760	3.9374	4.0000	3.82910	3.82910	4.0000	4.0000
			3.9710	4.0009	3.83735	3.9365	4.0009	3.82935	3.82885	4.0009	4.0009
4–6 or 4.000–6	UN	2A	3.9760	3.9970	3.88870	3.9510	3.9970	3.87880	3.87880	3.9970	3.9970
		3A	3.9752	3.9978	3.88845	3.9502	3.9978	3.87905	3.87855	3.9978	3.9978
			3.9790	4.0000	3.89170	3.9565	4.0000	3.88430	3.88430	4.0000	4.0000
			3.9782	4.0008	3.89145	3.9557	4.0008	3.88455	3.88405	4.0008	4 0008
4–8 or 4.000–8	UN	2A	3.9802	3.9973	3.91610	3.9611	3.9973	3.90700	3.90700	3.9973	3.9973
		3A	3.9795	3.9980	3.91585	3.9604	3.9980	3.90725	3.90675	3.9980	3.9980
			3.9829	4.0000	3.91880	3.9661	4.0000	3.91200	3.91200	4.0000	4.0000
			3.9822	4.0007	3.91855	3.9654	4.0007	3.91225	3.91175	4.0007	4.0007
4–12 or 4.000–12	UN	2A	3.9851	3.9980	3.94390	3.9735	3.9980	3.93740	3.93740	3.9980	3.9980
		3A	3.9845	3.9986	3.94365	3.9729	3.9986	3.93765	3.93715	3.9986	3.9986
			3.9871	4.0000	3.94590	3.9771	4.0000	3.94100	3.94106	4.0000	4.0600
			3.9865	4.0006	3.94565	3.9765	4.0006	3.94125	3.94075	4.0006	4.0006
4–16 or 4.000–16	UN	2A	3.9877	3.9982	3.95760	3.9788	3.9982	3.95170	3.95170	3.9982	3.9982
		3A	3.9871	3.9988	3.95735	3.9782	3.9988	3.95195	3.95145	3.9988	3.9988
			3.9895	4.0000	3.95940	3.9821	4.0000	3.95500	3.95500	4.0000	4.0000
			3.9889	4.0006	3.95915	3.9815	4.0006	3.95525	3.95475	4.0006	4.0006
4⅛–6 or 4.125–6	UN	2A	4.1010	4.1220	4.0137	4.0759	4.1220	4.0037	4.0037	4.1220	4.1220
		3A	4.0997	4.1233	4.0134	4.0746	4.1233	4.0040	4.0034	4.1233	4.1233
			4.1040	4.1250	4.0167	4.0814	4.1250	4.0092	4.0092	4.1250	4.1250
			4.1027	4.1263	4.0164	4.0801	4.1263	4.0095	4.0089	4.1263	4.1263
4⅛–12 or 4.125–12	UN	2A	4.1101	4.1230	4.0689	4.0985	4.1230	4.0624	4.0624	4.1230	4.1230
		3A	4.1092	4.1239	4.0686	4.0976	4.1239	4.0627	4.0621	4.1239	4.1239
			4.1121	4.1250	4.0709	4.1021	4.1250	4.0660	4.0660	4.1250	4.1250
			4.1112	4.1259	4.0706	4.1012	4.1259	4.0663	4.0657	4.1259	4.1259
4⅛–16 or 4.125–16	UN	2A	4.1127	4.1232	4.0826	4.1038	4.1232	4.0767	4.0767	4.1232	4.1232
		3A	4.1118	4.1241	4.0823	4.1029	4.1241	4.0770	4.0764	4.1241	4.1241
			4.1145	4.1250	4.0844	4.1071	4.1250	4.0800	4.0800	4.1250	4.1250
			4.1136	4.1259	4.0841	4.1062	4.1259	4.0803	4.0797	4.1259	4.1259
4¼–4 or 4.250–4	UN	2A	4.2185	4.2466	4.0842	4.1810	4.2466	4.0727	4.0727	4.2466	4.2466
		3A	4.2170	4.2481	4.0839	4.1795	4.2481	4.0730	4.0724	4.2481	4.2481
			4.2219	4.2500	4.0876	4.1873	4.2500	4.0790	4.0790	4.2500	4.2500
			4.2204	4.2515	4.0873	4.1858	4.2515	4.0793	4.0787	4.2515	4.2515
4¼–6 or 4.250–6	UN	2A	4.2260	4.2470	4.1387	4.2008	4.2470	4.1286	4.1286	4.2470	4.2470
		3A	4.2247	4.2483	4.1384	4.1995	4.2483	4.1289	4.1283	4.2483	4.2483
			4.2290	4.2500	4.1417	4.2064	4.2500	4.1342	4.1342	4.2500	4.2500
			4.2277	4.2513	4.1414	4.2051	4.2513	4.1345	4.1339	4.2513	4.2513
4¼–12 or 4.250–12	UN	2A	4.2351	4.2480	4.1939	4.2235	4.2480	4.1874	4.1874	4.2480	4.2480
		3A	4.2342	4.2489	4.1936	4.2226	4.2489	4.1877	4.1871	4.2489	4.2489
			4.2371	4.2500	4.1959	4.2271	4.2500	4.1910	4.1910	4.2500	4.2500
			4.2362	4.2509	4.1956	4.2262	4.2509	4.1913	4.1907	4.2509	4.2509
4¼–16 or 4.250–16	UN	2A	4.2377	4.2482	4.2076	4.2288	4.2482	4.2017	4.2017	4.2482	4.2482
		3A	4.2368	4.2491	4.2073	4.2279	4.2491	4.2020	4.2014	4.2491	4.2491
			4.2395	4.2500	4.2094	4.2321	4.2500	4.2050	4.2050	4.2500	4.2500
			4.2386	4.2509	4.2091	4.2312	4.2509	4.2053	4.2047	4.2509	4.2509

See footnotes at end of table.

TABLE III.13.—*Setting plug gages, Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	Class	W truncated setting plugs							Basic-crest setting plugs	
			Plug for GO thread gage [a]			Plug for LO or NOT GO thread gage [a]				Major diameter	
			Major diameter		Pitch diameter	Major diameter		Pitch diameter		[a] [b] Plug for GO thread gage	[a] [c] Plug for LO or NOT GO thread gage
			Truncated	Full		Truncated	Full	Plus tolerance gage	Minus tolerance gage	W and X tolerances	W and X tolerances
1	2	3	4	5	6	7	8	9	10	11	12
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
4⅜–6 or 4.375–6	UN	2A	4.3510	4.3720	4.2637	4.3258	4.3720	4.2536	4.2536	4.3720	4.3720
		3A	4.3497	4.3733	4.2634	4.3245	4.3733	4.2539	4.2533	4.3733	4.3733
			4.3540	4.3750	4.2667	4.3313	4.3750	4.2591	4.2591	4.3750	4.3750
			4.3527	4.3763	4.2664	4.3300	4.3763	4.2594	4.2588	4.3763	4.3763
4⅜–12 or 4.375–12	UN	2A	4.3601	4.3730	4.3189	4.3485	4.3730	4.3124	4.3124	4.3730	4.3730
		3A	4.3592	4.3739	4.3186	4.3476	4.3739	4.3127	4.3121	4.3739	4.3739
			4.3621	4.3750	4.3209	4.3521	4.3750	4.3160	4.3160	4.3750	4.3750
			4.3612	4.3759	4.3206	4.3512	4.3759	4.3163	4.3157	4.3759	4.3759
4⅜–16 or 4.375–16	UN	2A	4.3627	4.3732	4.3326	4.3538	4.3732	4.3267	4.3267	4.3732	4.3732
		3A	4.3618	4.3741	4.3323	4.3529	4.3741	4.3270	4.3264	4.3741	4.3741
			4.3645	4.3750	4.3344	4.3571	4.3750	4.3300	4.3300	4.3750	4.3750
			4.3636	4.3759	4.3341	4.3562	4.3759	4.3303	4.3297	4.3759	4.3759
4½–4 or 4.500–4	UN	2A	4.4684	4.4965	4.3341	4.4308	4.4965	4.3225	4.3225	4.4965	4.4965
		3A	4.4669	4.4980	4.3338	4.4293	4.4980	4.3228	4.3222	4.4980	4.4980
			4.4719	4.5000	4.3376	4.4372	4.5000	4.3289	4.3289	4.5000	4.5000
			4.4704	4.5015	4.3373	4.4357	4.5015	4.3292	4.3286	4.5015	4.5015
4½–6 or 4.500–6	UN	2A	4.4759	4.4969	4.3886	4.4506	4.4969	4.3784	4.3784	4.4969	4.4969
		3A	4.4746	4.4982	4.3883	4.4493	4.4982	4.3787	4.3781	4.4982	4.4982
			4.4790	4.5000	4.3917	4.4562	4.5000	4.3840	4.3840	4.5000	4.5000
			4.4777	4.5013	4.3914	4.4549	4.5013	4.3843	4.3837	4.5013	4.5013
4½–12 or 4.500–12	UN	2A	4.4851	4.4980	4.4439	4.4735	4.4980	4.4374	4.4374	4.4980	4.4980
		3A	4.4842	4.4989	4.4436	4.4726	4.4989	4.4377	4.4371	4.4989	4.4989
			4.4871	4.5000	4.4459	4.4771	4.5000	4.4410	4.4410	4.5000	4.5000
			4.4862	4.5009	4.4456	4.4762	4.5009	4.4413	4.4407	4.5009	4.5009
4½–16 or 4.500–16	UN	2A	4.4877	4.4982	4.4576	4.4788	4.4982	4.4517	4.4517	4.4982	4.4982
		3A	4.4868	4.4991	4.4573	4.4779	4.4991	4.4520	4.4514	4.4991	4.4991
			4.4895	4.5000	4.4594	4.4821	4.5000	4.4550	4.4550	4.5000	4.5000
			4.4886	4.5009	4.4591	4.4812	4.5009	4.4553	4.4547	4.5009	4.5009
4⅝–6 or 4.625–6	UN	2A	4.6009	4.6219	4.5136	4.5755	4.6219	4.5033	4.5033	4.6219	4.6219
		3A	4.5996	4.6232	4.5133	4.5742	4.6232	4.5036	4.5030	4.6232	4.6232
			4.6040	4.6250	4.5167	4.5812	4.6250	4.5090	4.5090	4.6250	4.6250
			4.6027	4.6263	4.5164	4.5799	4.6263	4.5093	4.5087	4.6263	4.6263
4⅝–12 or 4.625–12	UN	2A	4.6101	4.6230	4.5689	4.5983	4.6230	4.5622	4.5622	4.6230	4.6230
		3A	4.6092	4.6239	4.5686	4.5974	4.6239	4.5625	4.5619	4.6239	4.6239
			4.6121	4.6250	4.5709	4.6020	4.6250	4.5659	4.5659	4.6250	4.6250
			4.6112	4.6259	4.5706	4.6011	4.6259	4.5662	4.5656	4.6259	4.6259
4⅝–16 or 4.625–16	UN	2A	4.6127	4.6232	4.5826	4.6036	4.6232	4.5765	4.5765	4.6232	4.6232
		3A	4.6118	4.6241	4.5823	4.6027	4.6241	4.5768	4.5762	4.6241	4.6241
			4.6145	4.6250	4.5844	4.6070	4.6250	4.5799	4.5799	4.6250	4.6250
			4.6136	4.6259	4.5841	4.6061	4.6259	4.5802	4.5796	4.6259	4.6259
4¾–4 or 4.750–4	UN	2A	4.7184	4.7465	4.5841	4.6807	4.7465	4.5724	4.5724	4.7465	4.7465
		3A	4.7169	4.7480	4.5838	4.6792	4.7480	4.5727	4.5721	4.7480	4.7480
			4.7219	4.7500	4.5876	4.6871	4.7500	4.5788	4.5788	4.7500	4.7500
			4.7204	4.7515	4.5873	4.6856	4.7515	4.5791	4.5785	4.7515	4.7515
4¾–6 or 4.750–6	UN	2A	4.7259	4.7469	4.6386	4.7005	4.7469	4.6283	4.6283	4.7469	4.7469
		3A	4.7246	4.7482	4.6383	4.6992	4.7482	4.6286	4.6280	4.7482	4.7482
			4.7290	4.7500	4.6417	4.7062	4.7500	4.6340	4.6340	4.7500	4.7500
			4.7277	4.7513	4.6414	4.7049	4.7513	4.6343	4.6337	4.7513	4.7513
4¾–12 or 4.750–12	UN	2A	4.7351	4.7480	4.6939	4.7233	4.7480	4.6872	4.6872	4.7480	4.7480
		3A	4.7342	4.7489	4.6936	4.7224	4.7489	4.6875	4.6869	4.7489	4.7489
			4.7371	4.7500	4.6959	4.7270	4.7500	4.6909	4.6909	4.7500	4.7500
			4.7362	4.7509	4.6956	4.7261	4.7509	4.6912	4.6906	4.7509	4.7509
4¾–16 or 4.750–16	UN	2A	4.7377	4.7482	4.7076	4.7286	4.7482	4.7015	4.7015	4.7482	4.7482
		3A	4.7368	4.7491	4.7073	4.7277	4.7491	4.7018	4.7012	4.7491	4.7491
			4.7395	4.7500	4.7094	4.7320	4.7500	4.7049	4.7049	4.7500	4.7500
			4.7386	4.7509	4.7091	4.7311	4.7509	4.7052	4.7046	4.7509	4.7509
4⅞–6 or 4.875–6	UN	2A	4.8509	4.8719	4.7636	4.8254	4.8719	4.7532	4.7532	4.8719	4.8719
		3A	4.8496	4.8732	4.7633	4.8241	4.8732	4.7535	4.7529	4.8732	4.8732
			4.8540	4.8750	4.7667	4.8311	4.8750	4.7589	4.7589	4.8750	4.8750
			4.8527	4.8763	4.7664	4.8298	4.8763	4.7592	4.7586	4.8763	4.8763
4⅞–12 or 4.875–12	UN	2A	4.8601	4.8730	4.8189	4.8483	4.8730	4.8122	4.8122	4.8730	4.8730
		3A	4.8592	4.8739	4.8186	4.8474	4.8739	4.8125	4.8119	4.8739	4.8739
			4.8621	4.8750	4.8209	4.8520	4.8750	4.8159	4.8159	4.8750	4.8750
			4.8612	4.8759	4.8206	4.8511	4.8759	4.8162	4.8156	4.8759	4.8759

See footnotes at end of table.

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TABLE III.13.—*Setting plug gages, Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	Class	W truncated setting plugs							Basic-crest setting plugs	
			Plug for GO thread gage [a]			Plug for LO or NOT GO thread gage [a]				Major diameter	
			Major diameter		Pitch diameter	Major diameter		Pitch diameter		[a] [b] Plug for GO thread gage	[a] [c] Plug for LO or NOT GO thread gage
			Truncated	Full		Truncated	Full	Plus tolerance gage	Minus tolerance gage	W and X tolerances	W and X tolerances
1	2	3	4	5	6	7	8	9	10	11	12
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
4⅞–16 or 4.875–16	UN	2A	4.8627	4.8732	4.8326	4.8536	4.8732	4.8265	4.8265	4.8732	4.8732
		3A	4.8618	4.8741	4.8323	4.8527	4.8741	4.8268	4.8262	4.8741	4.8741
			4.8645	4.8750	4.8344	4.8570	4.8750	4.8299	4.8299	4.8750	4.8750
			4.8636	4.8759	4.8341	4.8561	4.8759	4.8302	4.8296	4.8759	4.8759
5–4 or 5.000–4	UN	2A	4.9683	4.9964	4.8340	4.9304	4.9964	4.8221	4.8221	4.9964	4.9964
		3A	4.9668	4.9979	4.8337	4.9289	4.9979	4.8224	4.8218	4.9979	4.9979
			4.9719	5.0000	4.8376	4.9370	5.0000	4.8287	4.8287	5.0000	5.0000
			4.9704	5.0015	4.8373	4.9355	5.0015	4.8290	4.8284	5.0015	5.0015
5–6 or 5.000–6	UN	2A	4.9759	4.9969	4.8886	4.9503	4.9969	4.8781	4.8781	4.9969	4.9969
		3A	4.9746	4.9982	4.8883	4.9490	4.9982	4.8784	4.8778	4.9982	4.9982
			4.9790	5.0000	4.8917	4.9561	5.0000	4.8839	4.8839	5.0000	5.0000
			4.9777	5.0013	4.8914	4.9548	5.0013	4.8842	4.8836	5.0013	5.0013
5–12 or 5.000–12	UN	2A	4.9851	4.9980	4.9439	4.9733	4.9980	4.9372	4.9372	4.9980	4.9980
		3A	4.9842	4.9989	4.9436	4.9724	4.9989	4.9375	4.9369	4.9989	4.9989
			4.9871	5.0000	4.9459	4.9770	5.0000	4.9409	4.9409	5.0000	5.0000
			4.9862	5.0009	4.9456	4.9761	5.0009	4.9412	4.9406	5.0009	5.0009
5–16 or 5.000–16	UN	2A	4.9877	4.9982	4.9576	4.9786	4.9982	4.9515	4.9515	4.9982	4.9982
		3A	4.9868	4.9991	4.9573	4.9777	4.9991	4.9518	4.9512	4.9991	4.9991
			4.9895	5.0000	4.9594	4.9820	5.0000	4.9549	4.9549	5.0000	5.0000
			4.9886	5.0009	4.9591	4.9811	5.0009	4.9552	4.9546	5.0009	5.0009
5⅛–12 or 5.125–12	UN	2A	5.1101	5.1230	5.0689	5.0983	5.1230	5.0622	5.0622	5.1230	5.1230
		3A	5.1092	5.1239	5.0686	5.0974	5.1239	5.0625	5.0619	5.1239	5.1239
			5.1121	5.1250	5.0709	5.1020	5.1250	5.0659	5.0659	5.1250	5.1250
			5.1112	5.1259	5.0706	5.1011	5.1259	5.0662	5.0656	5.1259	5.1259
5⅛–16 or 5.125–16	UN	2A	5.1127	5.1232	5.0826	5.1036	5.1232	5.0765	5.0765	5.1232	5.1232
		3A	5.1118	5.1241	5.0823	5.1027	5.1241	5.0768	5.0762	5.1241	5.1241
			5.1145	5.1250	5.0844	5.1070	5.1250	5.0799	5.0799	5.1250	5.1250
			5.1136	5.1259	5.0841	5.1061	5.1259	5.0802	5.0796	5.1259	5.1259
5¼–4 or 5.250–4	UN	2A	5.2183	5.2464	5.0840	5.1803	5.2464	5.0720	5.0720	5.2464	5.2464
		3A	5.2168	5.2479	5.0837	5.1788	5.2479	5.0723	5.0717	5.2479	5.2479
			5.2219	5.2500	5.0876	5.1869	5.2500	5.0786	5.0786	5.2500	5.2500
			5.2204	5.2515	5.0873	5.1854	5.2515	5.0789	5.0783	5.2515	5.2515
5¼–12 or 5.250–12	UN	2A	5.2351	5.2480	5.1939	5.2233	5.2480	5.1872	5.1872	5.2480	5.2480
		3A	5.2342	5.2489	5.1936	5.2224	5.2489	5.1875	5.1869	5.2489	5.2489
			5.2371	5.2500	5.1959	5.2270	5.2500	5.1909	5.1909	5.2500	5.2500
			5.2362	5.2509	5.1956	5.2261	5.2509	5.1912	5.1906	5.2509	5.2509
5¼–16 or 5.250–16	UN	2A	5.2377	5.2482	5.2076	5.2286	5.2482	5.2015	5.2015	5.2482	5.2482
		3A	5.2368	5.2491	5.2073	5.2277	5.2491	5.2018	5.2012	5.2491	5.2491
			5.2395	5.2500	5.2094	5.2320	5.2500	5.2049	5.2049	5.2500	5.2500
			5.2386	5.2509	5.2091	5.2311	5.2509	5.2052	5.2046	5.2509	5.2509
5⅜–12 or 5.375–12	UN	2A	5.3601	5.3730	5.3189	5.3483	5.3730	5.3122	5.3122	5.3730	5.3730
		3A	5.3592	5.3739	5.3186	5.3474	5.3739	5.3125	5.3119	5.3739	5.3739
			5.3621	5.3750	5.3209	5.3520	5.3750	5.3159	5.3159	5.3750	5.3750
			5.3612	5.3759	5.3266	5.3511	5.3759	5.3162	5.3156	5.3759	5.3759
5⅜–16 or 5.375–16	UN	2A	5.3627	5.3732	5.3326	5.3536	5.3732	5.3265	5.3265	5.3732	5.3732
		3A	5.3618	5.3741	5.3323	5.3527	5.3741	5.3268	5.3262	5.3741	5.3741
			5.3645	5.3750	5.3344	5.3570	5.3750	5.3299	5.3299	5.3750	5.3750
			5.3636	5.3759	5.3341	5.3561	5.3759	5.3302	5.3296	5.3759	5.3759
5½–4 or 5.500–4	UN	2A	5.4683	5.4964	5.3340	5.4302	5.4964	5.3219	5.3219	5.4964	5.4964
		3A	5.4668	5.4979	5.3337	5.4287	5.4979	5.3222	5.3216	5.4979	5.4979
			5.4719	5.5000	5.3376	5.4368	5.5000	5.3285	5.3285	5.5000	5.5000
			5.4704	5.5015	5.3373	5.4353	5.5015	5.3288	5.3282	5.5015	5.5009
5½–12 or 5.500–12	UN	2A	5.4851	5.4980	5.4439	5.4733	5.4980	5.4372	5.4372	5.4980	5.4980
		3A	5.4842	5.4989	5.4436	5.4724	5.4989	5.4375	5.4369	5.4989	5.4989
			5.4871	5.5000	5.4459	5.4770	5.5000	5.4409	5.4409	5.5000	5.5000
			5.4862	5.5009	5.4456	5.4761	5.5009	5.4412	5.4406	5.5009	5.5009
5½–16 or 5.500–16	UN	2A	5.4877	5.4982	5.4576	5.4786	5.4982	5.4515	5.4515	5.4982	5.4982
		3A	5.4868	5.4991	5.4573	5.4777	5.4991	5.4518	5.4512	5.4991	5.4991
			5.4895	5.5000	5.4594	5.4820	5.5000	5.4549	5.4549	5.5000	5.5000
			5.4886	5.5009	5.4591	5.4811	5.5009	5.4552	5.4546	5.5009	5.5009
5⅝–12 or 5.625–12	UN	2A	5.6100	5.6229	5.5688	5.5980	5.6229	5.5619	5.5619	5.6229	5.6229
		3A	5.6091	5.6238	5.5685	5.5971	5.6238	5.5622	5.5616	5.6238	5.6238
			5.6121	5.6250	5.5709	5.6018	5.6250	5.5657	5.5657	5.6250	5.6250
			5.6112	5.6259	5.5706	5.6009	5.6259	5.5660	5.5654	5.6259	5.6259

See footnotes at end of table.

TABLE III.13.—*Setting plug gages, Unified screw threads*—Continued

Nominal size and threads per inch	Series designation	Class	W truncated setting plugs							Basic-crest setting plugs	
			Plug for GO thread gage [a]			Plug for LO or NOT GO thread gage [a]				Major diameter	
			Major diameter		Pitch diameter	Major diameter		Pitch diameter		[a] [b] Plug for GO thread gage	[a] [c] Plug for LO or NOT GO thread gage
			Truncated	Full		Truncated	Full	Plus tolerance gage	Minus tolerance gage	W and X tolerances	W and X tolerances
1	2	3	4	5	6	7	8	9	10	11	12
			in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
5⅝–16 or 5.625–16	UN	2A	5.6126	5.6231	5.5825	5.6034	5.6231	5.5763	5.5763	5.6231	5.6231
			5.6117	5.6240	5.5822	5.6025	5.6240	5.5766	5.5760	5.6240	5.6240
		3A	5.6145	5.6250	5.5844	5.6068	5.6250	5.5797	5.5797	5.6250	5.6250
			5.6136	5.6259	5.5841	5.6059	5.6259	5.5800	5.5794	5.6259	5.6259
5¾–4 or 5.750–4	UN	2A	5.7182	5.7463	5.5839	5.6800	5.7463	5.5717	5.5717	5.7463	5.7463
			5.7167	5.7478	5.5836	5.6785	5.7478	5.5720	5.5714	5.7478	5.7478
		3A	5.7219	5.7500	5.5876	5.6867	5.7500	5.5784	5.5784	5.7500	5.7500
			5.7204	5.7515	5.5873	5.6852	5.7515	5.5787	5.5781	5.7515	5.7515
5¾–12 or 5.750–12	UN	2A	5.7350	5.7479	5.6938	5.7230	5.7479	5.6869	5.6869	5.7479	5.7479
			5.7341	5.7488	5.6935	5.7221	5.7488	5.6872	5.6866	5.7488	5.7488
		3A	5.7371	5.7500	5.6959	5.7268	5.7500	5.6907	5.6907	5.7500	5.7500
			5.7362	5.7509	5.6956	5.7259	5.7509	5.6910	5.6904	5.7509	5.7509
5¾–16 or 5.750–16	UN	2A	5.7376	5.7481	5.7075	5.7284	5.7481	5.7013	5.7013	5.7481	5.7481
			5.7367	5.7490	5.7072	5.7275	5.7490	5.7016	5.7010	5.7490	5.7490
		3A	5.7395	5.7500	5.7094	5.7318	5.7500	5.7047	5.7047	5.7500	5.7500
			5.7386	5.7509	5.7091	5.7309	5.7509	5.7050	5.7044	5.7509	5.7509
5⅞–12 or 5.875–12	UN	2A	5.8600	5.8729	5.8188	5.8480	5.8729	5.8119	5.8119	5.8729	5.8729
			5.8591	5.8738	5.8185	5.8471	5.8738	5.8122	5.8116	5.8738	5.8738
		3A	5.8621	5.8750	5.8209	5.8518	5.8750	5.8157	5.8157	5.8750	5.8750
			5.8612	5.8759	5.8206	5.8509	5.8759	5.8160	5.8154	5.8759	5.8759
5⅞–16 or 5.875–16	UN	2A	5.8626	5.8731	5.8325	5.8534	5.8731	5.8263	5.8263	5.8731	5.8731
			5.8617	5.8740	5.8322	5.8525	5.8740	5.8266	5.8260	5.8740	5.8740
		3A	5.8645	5.8750	5.8344	5.8568	5.8750	5.8297	5.8297	5.8750	5.8750
			5.8636	5.8759	5.8341	5.8559	5.8759	5.8300	5.8294	5.8759	5.8759
6–4 or 6.000–4	UN	2A	5.9682	5.9963	5.8339	5.9298	5.9963	5.8215	5.8215	5.9963	5.9963
			5.9667	5.9978	5.8336	5.9283	5.9978	5.8218	5.8212	5.9978	5.9978
		3A	5.9719	6.0000	5.8376	5.9366	6.0000	5.8283	5.8283	6.0000	6.0000
			5.9704	6.0015	5.8373	5.9351	6.0015	5.8286	5.8280	6.0015	6.0015
6–12 or 6.000–12	UN	2A	5.9850	5.9979	5.9438	5.9730	5.9979	5.9369	5.9369	5.9979	5.9979
			5.9841	5.9988	5.9435	5.9721	5.9988	5.9372	5.9366	5.9988	5.9988
		3A	5.9871	6.0000	5.9459	5.9768	6.0000	5.9407	5.9407	6.0000	6.0000
			5.9862	6.0009	5.9456	5.9759	6.0009	5.9410	5.9404	6.0009	6.0009
6–16 or 6.000–16	UN	2A	5.9876	5.9981	5.9575	5.9784	5.9981	5.9513	5.9513	5.9981	5.9981
			5.9867	5.9990	5.9572	5.9775	5.9990	5.9516	5.9510	5.9990	5.9990
		3A	5.9895	6.0000	5.9594	5.9818	6.0000	5.9547	5.9547	6.0000	6.0000
			5.9886	6.0009	5.9591	5.9809	6.0009	5.9550	5.9544	6.0009	6.0009

[a] These setting plugs are applicable to thread snap and indicating gages as well as to thread ring gages.
[b] Pitch diameter limits of W basic-crest setting plug gages are given in column 6 of this table. Pitch diameter limits of X basic-crest setting plug gages are given in column 4 of table III.12 in this supplement.
[c] Pitch diameter limits of W basic-crest setting plug gages are given in columns 9 and 10 of this table. Pitch diameter limits of X basic-crest setting plug gages are given in columns 6 and 7 of table III.12 in this supplement.

pp. 69–74, tables III.14 and III.15: These tables have not been revised to include all the sizes shown in table III.2 in this Supplement. The designations in the third column of these tables should be revised as follows:

All designations, not so shown, should be preceded by a "U."

Designations for following sizes should be "UN": 9/16–28, 5/8–28, 3/4–28, 1–28, 1 1/8–20, 1 1/8–28, 1 1/4–20, 1 1/2–20, 1 3/4–16, 1 3/4–20, 2–16, 2–20, and 2 1/4–20.

Designations for following sizes should be "UNS": 1/2–12, 2 1/16–16, 2 3/16–16, 2 5/16–16, and 2 7/16–16.

p. 74, 1. INTRODUCTION: Add the following sentence at end of the first paragraph: "In table IV.12, p. 92 of this Supplement, are listed selected combinations of Unified special screw threads. Pitch diameter tolerances in this table are based on a length of thread engagement of 9 times the pitch. The pitch diameter limits are applicable to a length of engagement of from 5 to 15 times the pitch. (This should not be confused with the length of thread on mating parts, as it may exceed the length of engagement by a considerable amount.)"

p. 74: Designations in second column on this page should read: 1–10 UNS, 1–15 UNS, .895–26 UNS.

p. 75, 3. PREFERRED DIAMETERS AND PITCHES. Revise the first paragraph to read:

"The use, whenever possible, of the sizes of the standard thread series listed in table III.2, p. 6 of this Supplement is recommended for all applications. Whenever sizes and pitches in table III.2 are not suitable, the designer should, if possible, choose a thread from table IV.12, p. 92 of this Supplement, which lists selected combinations of Unified special screw threads. If a selection cannot be made from either table III.2 or IV.12, consideration should be given to the following paragraphs in a choice of thread."

p. 77: In the last line of the second column, change "NC and NF" to "UNC and UNF."

p. 98, 5. METHOD OF DESIGNATING: In the first paragraph change "UNS or NS" to "UNS" (line 3), "with or without" to "with" (line 7), "p. 26" to "p. 19 in this Supplement" (last line). Revise second paragraph to read:

"The symbol "UNS" is applicable to any thread, (1) having the basic Unified thread form, (2) with limits based on Unified formulations, and (3) which is not listed in table III.2, p. 6 in this Supplement. Selected combinations of UNS threads are listed in table IV.12, p. 92 of this Supplement."

Delete remainder of 5. METHOD OF DESIGNATING. (Rest of column 2 on p. 98, first column on p. 100 to 6. DIRECTIONS FOR DETERMINING LIMITS OF SIZE OF SPECIAL THREADS.)

p. 99, table IV.12: Substitute the following table for the present table:

TABLE IV.12.—*Selected combinations, Unified special screw threads, UNS*

Nominal size and threads per inch	External [a]								Internal [a]						
	Class	Allowance	Major diameter		Pitch diameter			Minor diameter [c]	Class	Minor diameter		Pitch diameter			Major diameter
			Max [b]	Min	Max [b]	Min	Tolerance			Min	Max	Min	Max	Tolerance	Min
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
10–28 or .190–28	2A	*in.* 0.0010	*in.* 0.1890	*in.* 0.1825	*in.* 0.1658	*in.* 0.1625	*in.* 0.0033	*in.* 0.1452	2B	*in.* 0.151	*in.* 0.160	*in.* 0.1668	*in.* 0.1711	*in.* 0.0043	*in.* 0.1900
10–36 or .190–36	2A	.0009	.1891	.1836	.1711	.1681	.0030	.1550	2B	.160	.166	.1720	.1759	.0039	.1900
10–40 or .190–40	2A	.0009	.1891	.1840	.1729	.1700	.0029	.1584	2B	.163	.169	.1738	.1775	.0037	.1900
10–48 or .190–48	2A	.0008	.1892	.1847	.1757	.1731	.0026	.1636	2B	.167	.172	.1765	.1799	.0034	.1900
10–56 or .190–56	2A	.0007	.1893	.1852	.1777	.1752	.0025	.1674	2B	.171	.175	.1784	.1816	.0032	.1900
12–36 or .216–36	2A	.0009	.2151	.2096	.1971	.1941	.0030	.1810	2B	.186	.192	.1980	.2019	.0039	.2160
12–40 or .216–40	2A	.0009	.2151	.2100	.1989	.1960	.0029	.1844	2B	.189	.195	.1998	.2035	.0037	.2160
12–48 or .216–48	2A	.0008	.2152	.2107	.2017	.1991	.0026	.1896	2B	.193	.198	.2025	.2059	.0034	.2160
12–56 or .216–56	2A	.0007	.2153	.2112	.2037	.2012	.0025	.1934	2B	.197	.201	.2044	.2076	.0032	.2160
¼–24 or .250–24	2A	.0011	.2489	.2417	.2218	.2181	.0037	.1978	2B	.205	.215	.2229	.2277	.0048	.2500
¼–27 or .250–27	2A	.0010	.2490	.2423	.2249	.2214	.0035	.2036	2B	.210	.219	.2259	.2304	.0045	.2500
¼–36 or .250–36	2A	.0009	.2491	.2436	.2311	.2280	.0031	.2150	2B	.220	.226	.2320	.2360	.0040	.2500
¼–40 or .250–40	2A	.0009	.2491	.2440	.2329	.2300	.0029	.2184	2B	.223	.229	.2338	.2376	.0038	.2500
¼–48 or .250–48	2A	.0008	.2492	.2447	.2357	.2330	.0027	.2236	2B	.227	.232	.2365	.2401	.0036	.2500
¼–56 or .250–56	2A	.0008	.2492	.2451	.2376	.2350	.0026	.2273	2B	.231	.235	.2384	.2417	.0033	.2500
5/16–27 or .3125–27	2A	.0010	.3115	.3048	.2874	.2839	.0035	.2661	2B	.272	.281	.2884	.2929	.0045	.3125
5/16–36 or .3125–36	2A	.0009	.3116	.3061	.2936	.2905	.0031	.2775	2B	.282	.289	.2945	.2985	.0040	.3125
5/16–40 or .3125–40	2A	.0009	.3116	.3065	.2954	.2925	.0029	.2809	2B	.285	.291	.2963	.3001	0038	.3125

See footnotes at end of table.

TABLE IV.12.—*Selected combinations, Unified special screw threads, UNS*—Continued

Nominal size and threads per inch	External [a]								Internal [a]						
	Class	Allowance	Major diameter		Pitch diameter			Minor diameter [c]	Class	Minor diameter		Pitch diameter			Major diameter
			Max [b]	Min	Max [b]	Min	Tolerance			Min	Max	Min	Max	Tolerance	Min
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
5/16-48 or .3125-48	2A	*in.* .0008	*in.* .3117	*in.* .3072	*in.* .2982	*in.* .2955	*in.* .0027	*in.* .2861	2B	*in.* .290	*in.* .295	*in.* .2990	*in.* .3026	*in.* .0036	*in.* .3125
3/8-18 or .375-18	2A	.0013	.3737	.3650	.3376	.3333	.0043	.3055	2B	.315	.328	.3389	.3445	.0056	.3750
3/8-27 or .375-27	2A	.0011	.3739	.3672	.3498	.3462	.0036	.3285	2B	.335	.344	.3509	.3556	.0047	.3750
3/8-36 or .375-36	2A	.0010	.3740	.3685	.3560	.3528	.0032	.3399	2B	.345	.352	.3570	.3612	.0042	.3750
3/8-40 or .375-40	2A	.0009	.3741	.3690	.3579	.3548	.0031	.3434	2B	.348	.354	.3588	.3628	.0040	.3750
.390-27	2A	.0011	.3889	.3822	.3648	.3612	.0036	.3435	2B	.350	.359	.3659	.3706	.0047	.3900
7/16-18 or .4375-18	2A	.0013	.4362	.4275	.4001	.3958	.0043	.3680	2B	.377	.390	.4014	.4070	.0056	.4375
7/16-24 or .4375-24	2A	.0011	.4364	.4292	.4093	.4055	.0038	.3853	2B	.392	.402	.4104	.4153	.0049	.4375
7/16-27 or .4375-27	2A	.0011	.4364	.4297	.4123	.4087	.0036	.3910	2B	.397	.406	.4134	.4181	.0047	.4375
7/16-36 or .4375-36	2A	.0011	.4365	.4310	.4185	.4153	.0032	.4024	2B	.407	.414	.4195	.4237	.0042	.4375
7/16-40 or .4375-40	2A	.0009	.4366	.4315	.4204	.4173	.0031	.4059	2B	.410	.416	.4213	.4253	.0040	.4375
1/2-12 or .500-12	2A 3A	.0016 .0000	.4984 .5000	.4870 .4886	.4443 .4459	.4389 .4419	.0054 .0040	.3962 .3978	2B 3B	.410 .4100	.428 .4223	.4459 .4459	.4529 .4511	.0070 .0052	.5000 .5000
1/2-14 or .500-14	2A	.0015	.4985	.4882	.4521	.4471	.0050	.4109	2B	.423	.438	.4536	.4601	.0065	.5000
1/2-18 or .500-18	2A	.0013	.4987	.4900	.4626	.4582	.0044	.4305	2B	.440	.453	.4639	.4697	.0058	.5000
1/2-24 or .500-24	2A	.0012	.4988	.4916	.4717	.4678	.0039	.4477	2B	.455	.465	.4729	.4780	.0051	.5000
1/2-27 or .500-27	2A	.0011	.4989	.4922	.4748	.4711	.0037	.4535	2B	.460	.469	.4759	.4807	.0048	.5000
1/2-36 or .500-36	2A	.0010	.4990	.4935	.4810	.4777	.0033	.4649	2B	.470	.476	.4820	.4863	.0043	.5000
1/2-40 or .500-40	2A	.0010	.4990	.4939	.4828	.4796	.0032	.4683	2B	.473	.479	.4838	.4879	.0041	.5000
9/16-14 or .5625-14	2A	.0015	.5610	.5507	.5146	.5096	.0050	.4734	2B	.485	.501	.5161	.5226	.0065	.5625
9/16-27 or .5625-27	2A	.0011	.5614	.5547	.5373	.5336	.0037	.5160	2B	.522	.531	.5384	.5432	.0048	.5625
9/16-36 or .5625-36	2A	.0010	.5615	.5560	.5435	.5402	.0033	.5274	2B	.532	.539	.5445	.5488	.0043	.5625
9/16-40 or .5625-40	2A	.0010	.5615	.5564	.5453	.5421	.0032	.5308	2B	.535	.541	.5463	.5504	.0041	.5625
5/8-14 or .625-14	2A	.0015	.6235	.6132	.5771	.5720	.0051	.5359	2B	.548	.564	.5786	.5852	.0066	.6250
5/8-27 or .625-27	2A	.0011	.6239	.6172	.5998	.5960	.0038	.5785	2B	.585	.594	.6009	.6059	.0050	.6250
5/8-36 or .625-36	2A	.0010	.6240	.6185	.6060	.6026	.0034	.5899	2B	.595	.602	.6070	.6114	.0044	.6250
5/8-40 or .625-40	2A	.0010	.6240	.6189	.6078	.6045	.0033	.5933	2B	.598	.604	.6088	.6131	.0043	.6250
3/4-14 or .750-14	2A	.0015	.7485	.7382	.7021	.6970	.0051	.6609	2B	.673	.688	.7036	.7103	.0067	.7500
3/4-18 or .750-18	2A	.0014	.7486	.7399	.7125	.7079	.0046	.6804	2B	.690	.703	.7139	.7199	.0060	.7500
3/4-24 or .750-24	2A	.0012	.7488	.7416	.7217	.7176	.0041	.6977	2B	.705	.715	.7229	.7282	.0053	.7500

See footnotes at end of table.

TABLE IV.12.—*Selected combinations, Unified special screw threads, UNS*—Continued

Nominal size and threads per inch	External [a]								Internal [a]						
	Class	Allowance	Major diameter		Pitch diameter			Minor diameter [c]	Class	Minor diameter		Pitch diameter			Major diameter
			Max [b]	Min	Max [b]	Min	Tolerance			Min	Max	Min	Max	Tolerance	Min
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
		in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*		*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
¾–27 or .750–27	2A	.0012	.7488	.7421	.7247	.7208	.0039	.7034	2B	.710	.719	.7259	.7310	.0051	.7500
¾–36 or .750–36	2A	.0010	.7490	.7435	.7310	.7275	.0035	.7149	2B	.720	.726	.7320	.7365	.0045	.7500
¾–40 or .750–40	2A	.0010	.7490	.7439	.7328	.7294	.0034	.7183	2B	.723	.729	.7338	.7382	.0044	.7500
⅞–10 or .875–10	2A	.0018	.8732	.8603	.8082	.8022	.0060	.7505	2B	.767	.788	.8100	.8178	.0078	.8750
⅞–18 or .875–18	2A	.0014	.8736	.8649	.8375	.8329	.0046	.8054	2B	.815	.828	.8389	.8449	.0060	.8750
⅞–24 or .875–24	2A	.0012	.8738	.8666	.8467	.8426	.0041	.8227	2B	.830	.840	.8479	.8532	.0053	.8750
⅞–27 or .875–27	2A	.0012	.8738	.8671	.8497	.8458	.0039	.8284	2B	.835	.844	.8509	.8560	.0051	.8750
⅞–36 or .875–36	2A	.0010	.8740	.8685	.8560	.8525	.0035	.8399	2B	.845	.852	.8570	.8615	.0045	.8750
⅞–40 or .875–40	2A	.0010	.8740	.8689	.8578	.8544	.0034	.8433	2B	.848	.854	.8588	.8632	.0044	.8750
1–10 or 1.000–10	2A	.0018	.9982	.9853	.9332	.9270	.0062	.8755	2B	.892	.913	.9350	.9430	.0080	1.0000
[d]	1A	.0017	.9983	.9828	.9519	.9435	.0084	.9107	1B	.923	.938	.9536	.9645	.0109	1.0000
1–14 or	2A	.0017	.9983	.9880	.9519	.9463	.0056	.9107	2B	.923	.938	.9536	.9609	.0073	1.0000
1.000–14	3A	.0000	1.0000	.9897	.9536	.9494	.0042	.9124	3B	.9230	.9315	.9536	.9590	.0054	1.0000
1–18 or 1.000–18	2A	.0014	.9986	.9899	.9625	.9578	.0047	.9304	2B	.940	.953	.9639	.9701	.0062	1.0000
1–24 or 1.000–24	2A	.0013	.9987	.9915	.9716	.9674	.0042	.9476	2B	.955	.965	.9729	.9784	.0055	1.0000
1–27 or 1.000–27	2A	.0012	.9988	.9921	.9747	.9707	.0040	.9534	2B	.960	.969	.9759	.9811	.0052	1.0000
1–36 or 1.000–36	2A	.0011	.9989	.9934	.9809	.9773	.0036	.9648	2B	.970	.976	.9820	.9867	.0047	1.0000
1–40 or 1.000–40	2A	.0010	.9990	.9939	.9828	.9793	.0035	.9683	2B	.973	.979	.9838	.9883	.0045	1.0000
1⅛–10 or 1.125–10	2A	.0018	1.1232	1.1103	1.0582	1.0520	.0062	1.0005	2B	1.017	1.038	1.0600	1.0680	.0080	1.1250
1⅛–14 or 1.125–14	2A	.0016	1.1234	1.1131	1.0770	1.0717	.0053	1.0358	2B	1.048	1.064	1.0786	1.0855	.0069	1.1250
1⅛–24 or 1.125–24	2A	.0013	1.1237	1.1165	1.0966	1.0924	.0042	1.0726	2B	1.080	1.090	1.0979	1.1034	.0055	1.1250
1¼–10 or 1.250–10	2A	.0019	1.2481	1.2352	1.1831	1.1768	.0063	1.1254	2B	1.142	1.163	1.1850	1.1932	.0082	1.2500
1¼–14 or 1.250–14	2A	.0016	1.2484	1.2381	1.2020	1.1966	.0054	1.1608	2B	1.173	1.188	1.2036	1.2106	.0070	1.2500
1¼–24 or 1.250–24	2A	.0013	1.2487	1.2415	1.2216	1.2173	.0043	1.1976	2B	1.205	1.215	1.2229	1.2285	.0056	1.2500
1⅜–10 or 1.375–10	2A	.0019	1.3731	1.3602	1.3081	1.3018	.0063	1.2504	2B	1.267	1.288	1.3100	1.3182	.0082	1.3750
1⅜–14 or 1.375–14	2A	.0016	1.3734	1.3631	1.3270	1.3216	.0054	1.2858	2B	1.298	1.314	1.3286	1.3356	.0070	1.3750
1⅜–24 or 1.375–24	2A	.0013	1.3737	1.3665	1.3466	1.3423	.0043	1.3226	2B	1.330	1.340	1.3479	1.3535	.0056	1.3750
1½–10 or 1.500–10	2A	.0019	1.4981	1.4852	1.4331	1.4267	.0064	1.3754	2B	1.392	1.413	1.4350	1.4433	.0083	1.5000
1½–14 or 1.500–14	2A	.0017	1.4983	1.4880	1.4519	1.4464	.0055	1.4107	2B	1.423	1.438	1.4536	1.4608	.0072	1.5000
1½–24 or 1.500–24	2A	.0013	1.4987	1.4915	1.4716	1.4672	.0044	1.4476	2B	1.455	1.465	1.4729	1.4787	.0058	1.5000

See footnotes at end of table.

TABLE IV.12.—*Selected combinations, Unified special screw threads, UNS*—Continued

Nominal size and threads per inch	External [a]								Internal [a]						
	Class	Allowance	Major diameter		Pitch diameter			Minor diameter [c]	Class	Minor diameter		Pitch diameter			Major diameter
			Max [b]	Min	Max [b]	Min	Tolerance			Min	Max	Min	Max	Tolerance	Min
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
		in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*		*in.*	*in.*	*in.*	*in.*	*in.*	*in.*
1⅝–10 or 1.625–10	2A	.0019	1.6231	1.6102	1.5581	1.5517	.0064	1.5004	2B	1.517	1.538	1.5600	1.5683	.0083	1.6250
1⅝–14 or 1.625–14	2A	.0017	1.6233	1.6130	1.5769	1.5714	.0055	1.5357	2B	1.548	1.564	1.5786	1.5858	.0072	1.6250
1⅝–24 or 1.625–24	2A	.0013	1.6237	1.6165	1.5966	1.5922	.0044	1.5726	2B	1.580	1.590	1.5979	1.6037	.0058	1.6250
1¾–10 or 1.750–10	2A	.0019	1.7481	1.7352	1.6831	1.6766	.0065	1.6254	2B	1.642	1.663	1.6850	1.6934	.0084	1.7500
1¾–14 or 1.750–14	2A	.0017	1.7483	1.7380	1.7019	1.6963	.0056	1.6607	2B	1.673	1.688	1.7036	1.7109	.0073	1.7500
1¾–18 or 1.750–18	2A	.0015	1.7485	1.7398	1.7124	1.7073	.0051	1.6803	2B	1.690	1.703	1.7139	1.7205	.0066	1.7500
1⅞–10 or 1.875–10	2A	.0019	1.8731	1.8602	1.8081	1.8016	.0065	1.7504	2B	1.767	1.788	1.8100	1.8184	.0084	1.8750
1⅞–14 or 1.875–14	2A	.0017	1.8733	1.8630	1.8269	1.8213	.0056	1.7857	2B	1.798	1.814	1.8286	1.8359	.0073	1.8750
1⅞–18 or 1.875–18	2A	.0015	1.8735	1.8648	1.8374	1.8323	.0051	1.8053	2B	1.815	1.828	1.8389	1.8455	.0066	1.8750
2–10 or 2.000–10	2A	.0020	1.9980	1.9851	1.9330	1.9265	.0065	1.8753	2B	1.892	1.913	1.9350	1.9435	.0085	2.0000
2–14 or 2.000–14	2A	.0017	1.9983	1.9880	1.9519	1.9462	.0057	1.9107	2B	1.923	1.938	1.9536	1.9610	.0074	2.0000
2–18 or 2.000–18	2A	.0015	1.9985	1.9898	1.9624	1.9573	.0051	1.9303	2B	1.940	1.953	1.9639	1.9706	.0067	2.0000
2⅛–16 or 2.0625–16	2A	.0016	2.0609	2.0515	2.0203	2.0149	.0054	1.9842	2B	1.995	2.009	2.0219	2.0289	.0070	2.0625
	3A	.0000	2.0625	2.0531	2.0219	2.0179	.0040	1.9858	3B	1.9950	2.0033	2.0219	2.0271	.0052	2.0625
2⅜–16 or 2.1875–16	2A	.0016	2.1859	2.1765	2.1453	2.1399	.0054	2.1092	2B	2.120	2.134	2.1469	2.1539	.0070	2.1875
	3A	.0000	2.1875	2.1781	2.1469	2.1428	.0041	2.1108	3B	2.1200	2.1283	2.1469	2.1521	.0052	2.1875
2¼–10 or 2.250–10	2A	.0020	2.2480	2.2351	2.1830	2.1765	.0065	2.1253	2B	2.142	2.163	2.1850	2.1935	.0085	2.2500
2¼–14 or 2.250–14	2A	.0017	2.2483	2.2380	2.2019	2.1962	.0057	2.1607	2B	2.173	2.188	2.2036	2.2110	.0074	2.2500
2¼–18 or 2.250–18	2A	.0015	2.2485	2.2398	2.2124	2.2073	.0051	2.1803	2B	2.190	2.203	2.2139	2.2206	.0067	2.2500
2⅜–16 or 2.3125–16	2A	.0017	2.3108	2.3014	2.2702	2.2647	.0055	2.2341	2B	2.245	2.259	2.2719	2.2791	.0072	2.3125
	3A	.0000	2.3125	2.3031	2.2719	2.2678	.0041	2.2358	3B	2.2450	2.2533	2.2719	2.2773	.0054	2.3125
2⅞–16 or 2.4375–16	2A	.0017	2.4358	2.4264	2.3952	2.3897	.0055	2.3591	2B	2.370	2.384	2.3969	2.4041	.0072	2.4375
	3A	.0000	2.4375	2.4281	2.3969	2.3928	.0041	2.3608	3B	2.3700	2.3783	2.3969	2.4023	.0054	2.4375
2½–10 or 2.500–10	2A	.0020	2.4980	2.4851	2.4330	2.4263	.0067	2.3753	2B	2.392	2.413	2.4350	2.4437	.0087	2.5000
2½–14 or 2.500–14	2A	.0017	2.4983	2.4880	2.4519	2.4461	.0058	2.4107	2B	2.423	2.438	2.4536	2.4612	.0076	2.5000
2½–18 or 2.500–18	2A	.0016	2.4984	2.4897	2.4623	2.4570	.0053	2.4302	2B	2.440	2.453	2.4639	2.4708	.0069	2.5000
2¾–10 or 2.750–10	2A	.0020	2.7480	2.7351	2.6830	2.6763	.0067	2.6253	2B	2.642	2.663	2.6850	2.6937	.0087	2.7500
2¾–14 or 2.750–14	2A	.0017	2.7483	2.7380	2.7019	2.6961	.0058	2.6607	2B	2.673	2.688	2.7036	2.7112	.0076	2.7500
2¾–18 or 2.750–18	2A	.0016	2.7484	2.7397	2.7123	2.7070	.0053	2.6802	2B	2.690	2.703	2.7139	2.7208	.0069	2.7500
3–10 or 3.000–10	2A	.0020	2.9980	2.9851	2.9330	2.9262	.0068	2.8753	2B	2.892	2.913	2.9350	2.9439	.0089	3.0000
3–14 or 3.000–14	2A	.0018	2.9982	2.9879	2.9518	2.9459	.0059	2.9106	2B	2.923	2.938	2.9536	2.9613	.0077	3.0000
3–18 or 3.000–18	2A	.0016	2.9984	2.9897	2.9623	2.9569	.0054	2.9302	2B	2.940	2.953	2.9639	2.9709	.0070	3.0000

See footnotes at end of table.

TABLE IV.12.—*Selected combinations, Unified special screw threads, UNS*—Continued

Nominal size and threads per inch	External [a]								Internal [a]						
	Class	Allowance	Major diameter		Pitch diameter			Minor diameter [c]	Class	Minor diameter		Pitch diameter			Major diameter
			Max [b]	Min	Max [b]	Min	Tolerance			Min	Max	Min	Max	Tolerance	Min
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
		in.	*in.*	*in.*	*in.*	*in.*	*in.*	*in.*		*in.*	*in.*	*in.*	*in*	*in.*	*in.*
3¼–10 or 3.250–10	2A	.0020	3.2480	3.2351	3.1830	3.1762	.0068	3.1253	2B	3.142	3.163	3.1850	3.1939	.0089	3.2500
3¼–14 or 3.250–14	2A	.0018	3.2482	3.2379	3.2018	3.1959	.0059	3.1606	2B	3.173	3.188	3.2036	3.2113	.0077	3.2500
3¼–18 or 3.250–18	2A	.0016	3.2484	3.2397	3.2123	3.2069	.0054	3.1802	2B	3.190	3.203	3.2139	3.2209	.0070	3.2500
3½–10 or 3.500–10	2A	.0021	3.4979	3.4850	3.4329	3.4260	.0069	3.3752	2B	3.392	3.413	3.4350	3.4440	.0090	3.5000
3½–14 or 3.500–14	2A	.0018	3.4982	3.4879	3.4518	3.4457	.0061	3.4106	2B	3.423	3.438	3.4536	3.4615	.0079	3.5000
3½–18 or 3.500–18	2A	.0017	3.4983	3.4896	3.4622	3.4567	.0055	3.4301	2B	3.440	3.453	3.4639	3.4711	.0072	3.5000
3¾–10 or 3.750–10	2A	.0021	3.7479	3.7350	3.6829	3.6760	.0069	3.6252	2B	3.642	3.663	3.6850	3.6940	.0090	3.7500
3¾–14 or 3.750–14	2A	.0018	3.7482	3.7379	3.7018	3.6957	.0061	3.6606	2B	3.673	3.688	3.7036	3.7115	.0079	3.7500
3¾–18 or 3.750–18	2A	.0017	3.7483	3.7396	3.7122	3.7067	.0055	3.6801	2B	3.690	3.703	3.7139	3.7211	.0072	3.7500
4–10 or 4.000–10	2A	.0021	3.9979	3.9850	3.9329	3.9259	.0070	3.8752	2B	3.892	3.913	3.9350	3.9441	.0091	4.0000
4–14 or 4.000–14	2A	.0018	3.9982	3.9879	3.9518	3.9456	.0062	3.9106	2B	3.923	3.938	3.9536	3.9616	.0080	4.0000
4¼–10 or 4.250–10	2A	.0021	4.2479	4.2350	4.1829	4.1759	.0070	4.1252	2B	4.142	4.163	4.1850	4.1941	.0091	4.2500
4¼–14 or 4.250–14	2A	.0018	4.2482	4.2379	4.2018	4.1956	.0062	4.1606	2B	4.173	4.188	4.2036	4.2116	.0080	4.2500
4½–10 or 4.500–10	2A	.0021	4.4979	4.4850	4.4329	4.4259	.0070	4.3752	2B	4.392	4.413	4.4350	4.4441	.0091	4.5000
4½–14 or 4.500–14	2A	.0018	4.4982	4.4879	4.4518	4.4456	.0062	4.4106	2B	4.423	4.438	4.4536	4.4616	.0080	4.5000
4¾–10 or 4.750–10	2A	.0022	4.7478	4.7349	4.6828	4.6756	.0072	4.6251	2B	4.642	4.663	4.6850	4.6944	.0094	4.7500
4¾–14 or 4.750–14	2A	.0019	4.7481	4.7378	4.7017	4.6953	.0064	4.6605	2B	4.673	4.688	4.7036	4.7119	.0083	4.7500
5–10 or 5.000–10	2A	.0022	4.9978	4.9849	4.9328	4.9256	.0072	4.8751	2B	4.892	4.913	4.9350	4.9444	.0094	5.0000
5–14 or 5.000–14	2A	.0019	4.9981	4.9878	4.9517	4.9453	.0064	4.9105	2B	4.923	4.938	4.9536	4.9619	.0083	5.0000
5¼–10 or 5.250–10	2A	.0022	5.2478	5.2349	5.1828	5.1756	.0072	5.1251	2B	5.142	5.163	5.1850	5.1944	.0094	5.2500
5¼–14 or 5.250–14	2A	.0019	5.2481	5.2378	5.2017	5.1953	.0064	5.1605	2B	5.173	5.188	5.2036	5.2119	.0083	5.2500
5½–10 or 5.500–10	2A	.0022	5.4978	5.4849	5.4328	5.4256	.0072	5.3751	2B	5.392	5.413	5.4350	5.4444	.0094	5.5000
5½–14 or 5.500–14	2A	.0019	5.4981	5.4878	5.4517	5.4453	.0064	5.4105	2B	5.423	5.438	5.4536	5.4619	.0083	5.5000
5¾–10 or 5.750–10	2A	.0022	5.7478	5.7349	5.6828	5.6754	.0074	5.6251	2B	5.642	5.663	5.6850	5.6946	.0096	5.7500
5¾–14 or 5.750–14	2A	.0020	5.7480	5.7377	5.7016	5.6951	.0065	5.6604	2B	5.673	5.688	5.7036	5.7121	.0085	5.7500
6–10 or 6.000–10	2A	.0022	5.9978	5.9849	5.9328	5.9254	.0074	5.8751	2B	5.892	5.913	5.9350	5.9446	.0096	6.0000
6–14 or 6.000–14	2A	.0020	5.9980	5.9877	5.9516	5.9451	.0065	5.9104	2B	5.923	5.938	5.9536	5.9621	.0085	6.0000

[a] Regarding combinations of thread classes, see par. 1, p. 18, Part I.
[b] For class 2A threads having an additive finish the maximum is increased to the basic size. See par. 2, p. 23, Part I and par. 4, p. 16 in this Supplement.
[c] See fig. III.1, p. 2 in this Supplement; figs. III.3 and III.4, pp. 24 and 25, Part I.
[d] The 1–14 or 1.000–14 size was formerly NF. The tolerances and allowances for this size are based on one diameter length of engagement.

p. 100, footnote 9: Substitute the following for the first sentence in the footnote:

"This section is in substantial agreement with American Standards Association publication ASA B1.10, "Unified Miniature Screw Threads," which is published by the ASME, 345 East 47th Street, New York 17, N.Y. The latest revision should be consulted when referring to this ASA document."

pp. 100–107, section V: Wherever appearing, change "National Miniature" to "Unified Miniature".

pp. 104 and 105, tables V.2 and V.3: Revise size designations in column 1 by changing "NM" to "UNM" and by specifying the size in millimeters. The designations will then read:

.30 UNM	.55 UNM	1.00 UNM
.35 UNM	.60 UNM	1.10 UNM
.40 UNM	.70 UNM	1.20 UNM
.45 UNM	.80 UNM	1.40 UNM
.50 UNM	.90 UNM	

p. 105, 5. Thread Designations: Change "NM" to "UNM" in line 5; "80 NM" to ".80 UNM" (two places).

p. 107, figure V.4: Delete and insert the following:

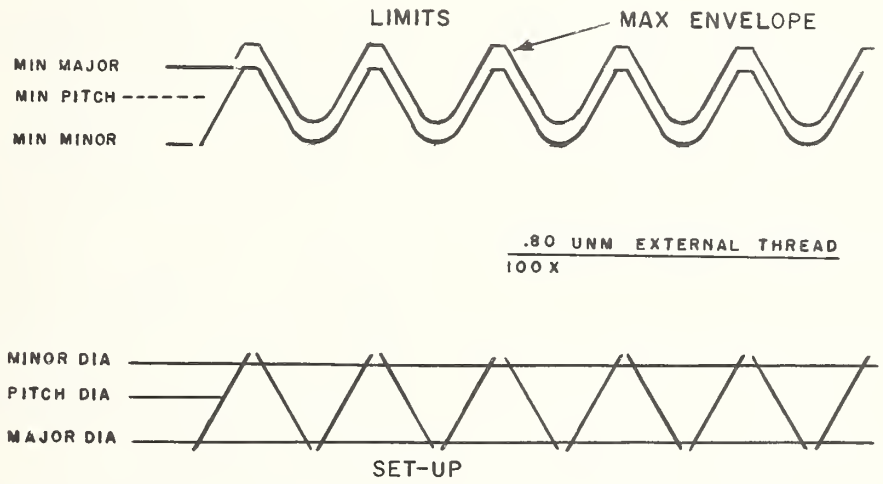


Figure V.4.–*Suggested chart for projection inspection of external Unified Miniature threads.*

p. 108, (2) *Plain cylindrical plug acceptance check gages:* Revise to read:

"(2) *Plain cylindrical plug acceptance check gages.*–GO and NOT GO plain cylindrical plug acceptance check gages are required to check the minor diameter limits of thread ring gages of the smaller sizes, after the gage has been properly set to the thread setting plug gage. Standard measuring equipment is usually employed in lieu of plain cylindrical plug gages for minor diameters larger than ⅜ in."

p. 108, 3. Limit Gages: Revise to read:

"3. Limit Gages.–Limit gages are of two categories, namely (1) maximum-material-limit gages, designated "GO" gages and (2) minimum-material-limit gages, designated low limit, "LO", gages for functional diameter of external threads and high limit, "HI", gages for internal threads.[12a] Single element gages for class 3A external threads continue to be designated "NOT GO"."

p. 109, 2. Removal of Sharp End Threads: Revise third sentence, starting in line 8, to read:

"On thread ring gages of ½ in. in nominal size or smaller, or of 20 threads per inch and finer, and on all thread plug gages and setting plug gages of 28 threads per inch and finer, a 60° chamfer from the axis of the gage is permitted in lieu of removal of the partial thread."

p. 109, 3. Chip Grooves in "GO" Thread Plug Gages: Revise next to last sentence in col. 2 to read:

"The widths recommended for chip grooves are as follows:

[12a] "HI" and "LO" gages were previously shown in H28 as "Not go" gages. By this supplement, "Not go" is not being changed to "HI" and "LO" every place in Handbook H28 where it should be changed. However, in paragraphs pertaining to gage marking, changes to "HI" and "LO", where applicable, are being specified."

Nominal diameter	Chip groove width	
	Max	Min
in.	*in.*	*in.*
No. 8 (.164) and smaller	No chip groove	
Over No. 8 (.164) to No. 12 (.216), inclusive	0.036	0.026
Over No. 12 (.216) to 3/8(.375), inclusive	.052	.042
Over 3/8(.375) to 1/2(.500), inclusive	.067	.057
Over 1/2(.500) to 1(1.000), inclusive	.083	.073
Over 1(1.000) to 1 3/4(1.750), inclusive	.130	.120
Over 1 3/4(1.750)	.193	.183"

p. 110, figure VI.I: In upper right hand portion, change "NOT GO PLUG GAGE" to "HI PLUG GAGE". In lower right hand portion, change "NOT GO RING GAGE" to "LO RING GAGE".

p. 112, figures VI.2 and VI.3: Change "NOT GO" to "LO".

p. 113, table VI.1: Change column headings as follows:

Column numbers	Heading now reads:	Heading should read:
6, 7, and 8	Not go	LO, classes 1A and 2A NOT GO, class 3A
14, 15, and 16	Not go	HI

p. 113, table VI.1: Add the following designation in col. 11: "8UN–2A."

p. 114, table VI.2: Change column headings as follows:

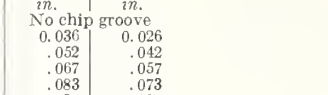
Column numbers	Heading now reads:	Heading should read:
4, 5, and 6	Plug for Go	Plug for GO thread gage
7, 8, 9, and 10	Plug for Not go	Plug for LO or NOT GO thread gage
11 and 12	Plug for Go	Plug for GO thread gage
13, 14, and 15	Plug for Not go	Plug for LO or NOT GO thread gage

p. 116, (d) MARKING OF GAGES (*to* 4. GAGE TOLERANCES AND WEAR ALLOWANCES): Revise to read:

"(d) MARKING OF GAGES

"Each gage shall be plainly and permanently marked with the minimum marking essential for positive identification. In the cases of thread plug and thread setting plug gages it may be desirable to identify both, the gaging element and the handle. Recommended marking practices are as follows: (The nominal size is to be specified in accordance with paragraph 1, Basic method of designating, on p. 17 of this Supplement.)

"1. Thread Plug Gages—The GO thread plug gage members are common to all classes of threads, both standard and special, and are to be identified as shown in the following example:



The HI thread plug gage members are to be identified as follows:

.250–20UNC–2B HI PD .2223

"2. Plain Plug Gages for Minor Diameter—The GO plain plug gage members for Unified and American National threads are common to the Unified and American National classes of threads, respectively, and are to be identified by GO and the minor diameters as follows:

GO .1960

The NOT GO plain plug gage members are to be identified by NOT GO and the minor diameter as follows:

NOT GO .2067

"3. Thread Ring or Snap Gages and Setting Plug Gages Therefor—The GO thread ring gages or snap gages and applicable setting plug gage members are to be identified as follows:

Class 1: .250–20NC–1 GO PD .2160
Classes 1A, 2A: .250–20UNC–1A, 2A GO PD .21
Classes 2, 3, 3A: .250–20UNC GO PD .2175

Gages for classes 2, 3, and 3A are basic.

The LO thread ring gages or snap gages and applicable setting plug gage members are to be identified as follows:

.250–20UNC–2A LO PD .2127

"4. Plain Ring Gages for Major Diameter—The GO plain ring gage members are to be identified by GO and the major diameter as follows:

GO .1960

The NOT GO plain ring gage members are to be identified by NOT GO and the major diameter as follows:

NOT GO .2408

"5. Plain Plug Acceptance Check Gages—The plain plug acceptance check gages for GO thread ring gages are to be identified as follows:

GO ACCEPT CHK FOR GO THD RING MINOR DIA___
NG ACCEPT CHK FOR GO THD RING MINOR DIA___

The plain plug acceptance check gages for LO thread ring gages are to be identified as follows:

GO ACCEPT CHK FOR LO THD RING MINOR DIA___
NG ACCEPT CHK FOR LO THD RING MINOR DIA___"

p. 117, 1. Standard Tolerance Classes: Revise to read:

"1. Standard Tolerance Classes.–Standard tolerances for thread plug and ring gages and thread setting plugs are of two classes:

(1) W tolerances, shown in table VI.6, Part I, which represent the highest commercial grade of accuracy or workmanship and which are required especially for truncated setting plugs and

(2) X tolerances, shown in table VI.7, Part I, which are larger than W tolerances and are an economical compromise among such factors as gage cost, amount of product tolerance consumed by gage tolerances, and possible observational errors in the measurement of gages with generally available measuring equipment.[18]"

p. 117, (*b*) *Tolerances on lead:* Revise to read:

"(*b*) *Tolerances on lead.*–Tolerances on lead (pitch and helix) are specified as an allowable variation between any two threads not farther apart than the length of the standard gage, shown in CS8, Gage Blanks (see footnote 12, p. 108, Part I), except that in the case of setting plugs, the length shall be that of the thread in the mating ring gage or 9 pitches, whichever is smaller.

"The tolerance on lead establishes the width of a zone, measured parallel to the axis of the thread, within which the actual helical path must lie for the entire length of the thread.

"All thread gage members will be inspected for total lead deviation (cumulative effect of progressive and erratic deviations). Measurements will be taken from a fixed reference point located at the start of the first full thread to a sufficient number of positions along the entire helix to detect all types of lead deviations which may be present. The amount that these positions deviate from their basic (theoretical) positions will be recorded with due respect to sign. The greatest deviation in each direction (+ and −) will be selected and the sum of their values, *disregarding sign*, shall not exceed the specified tolerance on lead value. The greatest lead deviation is the maximum deviation from nominal lead only when the lead of every portion of the screw thread is either long or short. When the lead of some portions of a thread is long and that of others is short the maximum deviation in lead is the sum of the maximum positive and maximum negative deviations without regard to sign. Since the lead tolerance may apply to the sum of a positive and a negative lead deviation the specification of lead tolerance as a ± value may be very confusing. Therefore it is recommended that the ± sign be removed from all lead tolerances.[19a]

"On truncated setting plugs, the sign of any lead deviation present shall be the same on the full-form portion and the truncated portion, and such deviation shall be uniform within 0.0001 in. over any portion equivalent to the length of the thread ring gage."

[19a] It has been customary in the past to specify tolerances on lead as plus or minus (±) values. It should be noted that the omission of the plus and minus does not change the total tolerance."

p. 118, (*d*) *Tolerances not cumulative:* Revise to read:

"(*d*) *Interpretation of tolerances.*—Tolerances on lead, flank angle, and pitch diameter are deviations which may be taken independently for each of these elements and may be taken to the full extent allowed by the respective tabulated tolerances. The tabulated tolerance on any one element must not be exceeded even though deviations in the other two elements are smaller than the respective tabulated tolerances."

p. 118, 1. Acceptability of threads: Revise to read:

"1. Dimensional Acceptability of Threads. —General practice as to the dimensional acceptability of threads shall be based on the interpretations of pitch diameter limits of size in paragraph (c), p. 16 in this Supplement and the following specifications of gages and gaging practices:

"(*a*) *At maximum-material limits* [19b]—For referee purposes, the dimensional acceptability of threads at the maximum-material limits shall be based on gaging with "go" thread plug and ring gages conforming as closely as practicable to the limits of size of the thread and to the thread form and length specified for such gages. (See par. 3(a), *Maximum-metal or "go" gages*, p. 108, Part I.)

"(*b*) *At minimum-material limits* [19b]—Unless otherwise specified on the drawing or procurement document, dimensional acceptability at the minimum-material pitch-diameter limits shall be based on the following accepted practices:

"(1) *Functional (virtual) diameter gaging practice.*—Functional (virtual) diameter gaging practice, involving the use of thread plug gages and thread ring gages, conforming as closely as practicable to the limits of size of the thread and to the thread form and lengths specified in section VI for such gages, is specified for the minimum-material limits of classes 1A and 2A external threads, and classes 1B, 2B, and 3B internal threads.

"(2) *Single element gaging practice.*—Single element gaging practice, involving the use of thread snap gages or indicating type gages having thread form in accordance with section VI, or its equivalent, engaging the thread over a length of two pitches, is specified for the minimum-material limits of class 3A external threads."

p. 118, (*a*) *"Go" and "not go" thread gages:* Revise to read:

"(*a*) *GO, HI, and LO thread gages.*—It is recommended that W tolerances be applied to

[19b] External and internal threads larger than 6 in. nominal diameter present additional problems for technical and economical reasons. It is recommended that acceptance of these be alternatively based on measurement of the thread elements. A clear understanding of requirements and method of gaging should be reached between supplier and consumer."

GO, HI, and LO inspection and working thread gages for class 4. X tolerances are recommended as applicable to all inspection and working thread gages for classes 1, 1A, 1AR, 1B, 2, 2A, 2B, 3, 3A, and 3B."

p. 119: Add the following sentence before "After" in fourth line from bottom of column one:

"Care should be taken to assure that there is no lateral displacement of the sectors comprising the ring gage that would produce a lead deviation beyond the prescribed tolerance zone."

p. 117, table VI.6: Delete the following from footnote 1:

"omitting one full thread at each end of the gage."

p. 118, table VI.7: Delete the following from footnote 1:

"omitting one full thread at each end of the gage."

Delete the following footnote:

"NOTE.—When a wear allowance is wanted on "go" gages, it is recommended that the X pitch diameter tolerance be divided, one-half for wear and one-half for tolerance."

p. 119, table VI.8: Delete this table.

p. 127, table 1.1: In col. 9 for 6, 5, 4½ tpi revise values to read .07217, .08660, and .09623.

p. 144, table 1.13: For 2 7/16 size, change external thread max class 2 pitch diameter from 3.3969 to 2.3969.

pp. 186, 193; appendix 3: Whenever appearing, change "National Miniature" to "Unified Miniature".

p. 188, table 3.1: For 1⅝ in. thread size, 8 threads per inch, change values in columns 8 and 11 from 1.498 to 1.503, change value in column 9 from 1.494 to 1.496.

p. 195, table 4.1: For 30 threads per inch, change value in col. 5 from .01924 to .01925; for 16 threads per inch, change value in col. 4 from .054129 to .054127.

p. 195: Revise 12th line from bottom of second column by adding "permanent" before "deformation".

p. 196, table 4.2: In col. 1, change "0.01924" to "0.01925".

p. 197: Add the following at the end of section 5:

"When the value of the term

$$\left(\frac{w \tan^2 \lambda' \cos \alpha \cot \alpha}{2}\right)$$

exceeds 0.00015 in., the following pitch diameter formula should be used:

$$E = M_w - (C + c)$$

Tabular values for $(C+c)_1$ for a 1-in. axial pitch screw for 60° threads are given in table 4.3 in this Supplement which values should be divided by the threads per inch for a given case. (See Appendix 13, Part III, for further details.)"

Add the following table:

TABLE 4.3—*Best wire diameters and constants for large lead angles, 1-in. axial pitch 60° threads*

Lead angle, λ	1-start threads		2-start threads		Lead angle, λ	2-start threads		3-start threads	
	w_1	$(C+c)_1$	w_1	$(C+c)_1$		w_1	$(C+c)_1$	w_1	$(C+c)_1$
1	2	3	4	5	1	4	5	6	7
deg	*in.*	*in.*	*in.*	*in.*	*deg*	*in.*	*in.*	*in.*	*in.*
5.0	0.57493	0.86181	0.57477	0.86145	10.0	0.56767	0.84918	0.56728	0.84830
5.1	.57483	.86165	.57467	.86127	10.1	.56749	.84887	.56709	.84797
5.2	.57474	.86149	.57456	.86109	10.2	.56730	.84856	.56689	.84763
5.3	.57465	.86133	.57446	.86091	10.3	.56711	.84824	.56669	.84729
5.4	.57456	.86117	.57435	.86072	10.4	.56693	.84793	.56649	.84695
5.5	.57446	.86100	.57425	.86053	10.5	.56674	.84761	.56629	.84660
5.6	.57436	.86083	.57414	.86034	10.6	.56656	.84729	.56609	.84625
5.7	.57426	.86066	.57403	.86015	10.7	.56637	.84697	.56589	.84589
5.8	.57416	.86049	.57392	.85995	10.8	.56617	.84664	.56568	.84553
5.9	.57406	.86032	.57381	.85976	10.9	.56598	.84631	.56547	.84517
6.0	.57395	.86014	.57369	.85956	11.0	.56578	.84598	.56526	.84481
6.1	.57385	.85996	.57358	.85936	11.1	.56558	.84564	.56506	.84445
6.2	.57374	.85978	.57346	.85915	11.2	.56538	.84530	.56485	.84409
6.3	.57363	.85960	.57333	.85893	11.3	.56518	.84497	.56463	.84372
6.4	.57352	.85942	.57320	.85871	11.4	.56498	.84463	.56441	.84335
6.5	.57341	.85923	.57308	.85850	11.5	.56478	.84429	.56420	.84298
6.6	.57330	.85904	.57295	.85828	11.6	.56457	.84394	.56398	.84260
6.7	.57318	.85885	.57282	.85805	11.7	.56437	.84360	.56375	.84221
6.8	.57307	.85866	.57269	.85782	11.8	.56416	.84325	.56353	.84183
6.9	.57295	.85847	.57256	.85760	11.9	.56396	.84290	.56331	.84145
7.0	.57284	.85828	.57242	.85737	12.0	.56375	.84255	.56308	.84106
7.1	.57272	.85808	.57228	.85713	12.1	.56353	.84219	.56285	.84067
7.2	.57260	.85788	.57215	.85689	12.2	.56332	.84183	.56263	.84028
7.3	.57248	.85768	.57201	.85664	12.3	.56311	.84147	.56240	.83989
7.4	.57236	.85747	.57187	.85640	12.4	.56289	.84111	.56217	.83949
7.5	.57223	.85727	.57173	.85616	12.5	.56267	.84075	.56193	.83908
7.6	.57211	.85706	.57159	.85591	12.6	.56245	.84038	.56170	.83868
7.7	.57198	.85685	.57144	.85566	12.7	.56223	.84001	.56147	.83828
7.8	.57185	.85664	.57129	.85540	12.8	.56201	.83964	.56123	.83787
7.9	.57171	.85642	.57114	.85515	12.9	.56179	.83927	.56099	.83746
8.0	.57158	.85620	.57100	.85490	13.0	.56157	.83890	.56075	.83705
8.1	.57144	.85598	.57085	.85464	13.1	.56135	.83853	.56051	.83664
8.2	.57131	.85576	.57070	.85438	13.2	.56113	.83815	.56027	.83622
8.3	.57117	.85554	.57054	.85411	13.3	.56090	.83777	.56002	.83579
8.4	.57104	.85533	.57038	.85383	13.4	.56067	.83739	.55977	.83537
8.5	.57090	.85511	.57022	.85356	13.5	.56044	.83701	.55952	.83495
8.6	.57076	.85489	.57007	.85329	13.6	.56021	.83662	.55927	.83452
8.7	.57063	.85466	.56991	.85301	13.7	.55997	.83623	55902	.83409
8.8	.57049	.85444	.56974	.85273	13.8	.55974	.83584	.55877	.83366
8.9	.57035	.85421	.56958	.85245	13.9	.55950	.83545	.55852	.83323
9.0	.57021	.85398	.56941	.85217	14.0	.55926	.83506	.55827	.83280
9.1	.57007	.85375	.56924	.85188	14.1	.55903	.83467	.55802	.83237
9.2	.56993	.85352	.56907	.85159	14.2	.55880	.83428	.55776	.83193
9.3	.56978	.85329	.56890	85130	14.3	.55856	.83388	.55750	.83149
9.4	.56964	.85305	.56873	.85100	14.4	.55831	.83347	.55724	.83105
9.5	.56949	.85282	.56856	.85070	14.5	.55807	.83307	.55698	.83060
9.6	.56935	.85258	.56838	.85040	14.6	.55782	.83266	.55671	.83014
9.7	.56920	.85235	.56820	.85010	14.7	.55757	.83225	.55645	.82969
9.8	.56905	.85211	.56803	.84980	14.8	.55733	.83185	.55618	.82923
9.9	.56890	.85187	.56785	84949	14.9	.55709	.83145	.55590	.82877
10.0	.56875	.85163	.56767	.84918	15.0	.55684	.83104	.55563	.82831

TABLE 4.3—*Best wire diameters and constants for large lead angles, 1-in. axial pitch 60° threads*—Continued

Lead angle, λ	3-start threads		4-start threads		Lead angle, λ	3-start threads		4-start threads	
	w_1	$(C+c)_1$	w_1	$(C+c)_1$		w_1	$(C+c)_1$	w_1	$(C+c)_1$
1	6	7	8	9	1	6	7	8	9
deg	*in.*	*in.*	*in.*	*in.*	*deg*	*in.*	*in.*	*in.*	*in.*
13.0	.56075	.83705	.56033	.83609	18.0	.54682	.81344	.54579	.81109
13.1	.56051	.83664	.56008	.83566	18.1	.54651	.81291	.54546	.81053
13.2	.56027	.83622	.55982	.83522	18.2	.54619	.81238	.54513	.80997
13.3	.56002	.83579	.55956	.83477	18.3	.54588	.81185	.54480	.80940
13.4	.55977	.83537	.55931	.83433	18.4	.54556	.81132	.54447	.80883
13.5	.55952	.83495	.55905	.83388	18.5	.54524	.81078	.54414	.80826
13.6	.55927	.83452	.55879	.83342	18.6	.54492	.81024	.54380	.80768
13.7	.55902	.83409	.55853	.83297	18.7	.54459	.80970	.54345	.80710
13.8	.55877	.83366	.55827	.83252	18.8	.54427	.80916	.54311	.80652
13.9	.55852	.83323	.55800	.83207	18.9	.54394	.80861	.54277	.80594
14.0	.55827	.83280	.55774	.83161	19.0	.54361	.80805	.54242	.80535
14.1	.55802	.83237	.55747	.83115	19.1	.54328	.80749	.54208	.80477
14.2	.55776	.83193	.55720	.83068	19.2	.54295	.80694	.54173	.80418
14.3	.55750	.83149	.55693	.83022	19.3	.54261	.80638	.54138	.80358
14.4	.55724	.83105	.55666	.82975	19.4	.54227	.80582	.54103	.80298
14.5	.55698	.83060	.55639	.82928	19.5	.54193	.80526	.54067	.80238
14.6	.55671	.83014	.55611	.82880	19.6	.54160	.80470	.54032	.80178
14.7	.55645	.82969	.55583	.82831	19.7	.54126	.80414	.53997	.80118
14.8	.55618	.82923	.55555	.82783	19.8	.54092	.80358	.53961	.80057
14.9	.55590	.82877	.55527	.82735	19.9	.54058	.80301	.53925	.79997
15.0	.55563	.82831	.55499	.82687	20.0	.54025	.80245	.53889	.79936
15.1	.55536	.82784	.55471	.82638	20.1	----------	----------	.53852	.79874
15.2	.55509	.82737	.55442	.82589	20.2	----------	----------	.53816	.79812
15.3	.55481	.82690	.55414	.82540	20.3	----------	----------	.53779	.79750
15.4	.55453	.82643	.55385	.82490	20.4	----------	----------	.53743	.79689
15.5	.55425	.82596	.55356	.82440	20.5	----------	----------	.53706	.79627
15.6	.55397	.82549	.55327	.82390	20.6	----------	----------	.53669	.79564
15.7	.55369	.82501	.55297	.82339	20.7	----------	----------	.53632	.79502
15.8	.55340	.82453	.55268	.82289	20.8	----------	----------	.53595	.79440
15.9	.55312	.82405	.55239	.82238	20.9	----------	----------	.53558	.79377
16.0	.55283	.82356	.55209	.82187	21.0	----------	----------	.53521	.79314
16.1	.55254	.82307	.55179	.82135	21.1	----------	----------	.53484	.79251
16.2	.55225	.82258	.55148	.82083	21.2	----------	----------	.53446	.79187
16.3	.55196	.82209	.55117	.82031	21.3	----------	----------	.53408	.79123
16.4	.55167	.82160	.55087	.81979	21.4	----------	----------	.53370	.79059
16.5	.55138	.82110	.55057	.81926	21.5	----------	----------	.53332	.78994
16.6	.55109	.82061	.55026	.81873	21.6	----------	----------	.53294	.78930
16.7	.55079	.82011	.54995	.81821	21.7	----------	----------	.53255	.78865
16.8	.55050	.81962	.54964	.81768	21.8	----------	----------	.53217	.78801
16.9	.55020	.81912	.54933	.81715	21.9	----------	----------	.53178	.78736
17.0	.54990	.81862	.54902	.81661	22.0	----------	----------	.53139	.78670
17.1	.54960	.81811	.54870	.81607	22.1	----------	----------	.53100	.78604
17.2	.54929	.81759	.54839	.81552	22.2	----------	----------	.53061	.78539
17.3	.54898	.81707	.54807	.81497	22.3	----------	----------	.53022	.78473
17.4	.54867	.81655	.54774	.81442	22.4	----------	----------	.52983	.78406
17.5	.54837	.81604	.54742	.81387	22.5	----------	----------	.52943	.78339
17.6	.54806	.81552	.54710	.81333	22.6	----------	----------	.52903	.78272
17.7	.54775	.81500	.54677	.81277	22.7	----------	----------	.52863	.78205
17.8	.54744	.81448	.54645	.81222	22.8	----------	----------	.52823	.78138
17.9	.54713	.81396	.54612	.81166	22.9	----------	----------	.52783	.78071
18.0	.54682	.81344	.54579	.81109	23.0	----------	----------	.52743	.78004

NOTE.—This table courtesy of the Van Keuren Co.

p. 201: Revise last two lines of second column to read: "stress area and thread shear area are shown below. These areas are indicated in figure 5.1."

p. 202: Add the following at the top of page 202: [24]

"Tensile stress area.—The tensile stress area is the assumed area of an external threaded part that is used for the purpose of computing the tensile strength.

Direct tensile stress.—When parts are subjected only to a direct tensile stress the assumed area applicable to steel parts *up to 180,000 psi* used in calculating the ultimate strength is computed from the following formula:

$$A_s=3.1416\left(\frac{E}{2}-\frac{3H}{16}\right)^2$$

or

$$A_s=0.7854(D-0.9743/n)^2,$$

where

E=basic pitch diameter
D=basic major diameter
n=threads per inch

for $3H/16$, see table III.1, p. 4 of this Supplement.

Tabulated stress areas are listed in the tables on pp. 7-14 of this Supplement and pp. 128–132 of Part I.

[24] Column 1 of p. 202 of Part I and the material added to p. 202 by this Supplement, supersede paragraphs 22 and 23 on p. 5 of Part I.

Combined tensile stress.—When parts are subject to a direct tensile stress plus a torsional stress due to tightening the nut or bolt head, it is necessary to consider the combined shear and tensile stresses when calculating the strength of the externally threaded part. It is recommended that the combined stresses be computed on the basis of the section at the minimum minor diameter of the external thread. The direct tensile stress is given by the formulas:

$$S_t = F/A$$

$$A_r = 0.7854[(K_s \text{ min})^2 - d^2]$$

where

A_r = area in sq in. at the minimum minor diameter.

F = axial load on externally threaded parts in lb.

The direct torsional stress is given by the formulas:

$$S_s = T_1/Z_p$$

$$Z_p = 0.1963 \frac{[(K_s \text{ min})^4 - d^4]}{K_s \text{ min}}$$

where

T_1 = wrench torque transmitted through the threaded section, approximately equal to half of the total wrench torque in lb-in.

Z_p = polar section modulus in in.^{3}

$K_s$min = minimum minor diameter of external thread in in.

d = inside diameter of externally threaded part in in.; if part is solid, d = zero.

The combined shear stress in psi is given by the formula:

$$S'_s = \sqrt{\left(\frac{S_t}{2}\right)^2 + (S_s)^2}.$$

The combined tensile stress in psi is given by the formula:

$$S'_t = S'_s + S_t/2.$$

Having once determined the combined stresses due to a given set of conditions for wrench torque and coefficient of friction, other combined stresses will be directly proportional to the wrench torque.

Thread shear area.—The diameter corresponding to the effective thread shear area will vary with the relative unit tensile strengths of the materials of the internal and external threads.

When the external and internal threads are manufactured from materials of equal unit tensile strength, failure will usually take place simultaneously in both threads at or near a diameter equal to the basic pitch diameter. The shear area (AS) for external and internal threads made of such materials can be computed from the following formula:

$$AS = 3.1416E \frac{L_e}{2}$$

where

E = basic pitch diameter

L_e = length of engagement at basic pitch diameter.

When the unit tensile strength of the external thread material greatly exceeds that of the internal thread material, as in the case of a threaded hole in a cast aluminum block mated with a 100,000 psi ultimate strength material bolt, the shear area of the internal thread (AS_n) can be computed from the following formulas:

(1) For simplified calculations that will provide shear areas within about 5 percent of those given by the precise formula shown below, the shear area of the internal thread may be computed as follows:

$$AS_n = 3.1416E \frac{3L_e}{4}$$

where L_e = length of engagement at the basic pitch diameter.

(2) The precise equation for shear area of the internal thread at a diameter equal to the minimum major diameter of the external thread is as follows:

$$AS_n = 3.1416nL_eD_s \text{ min} \left[\frac{1}{2n} + 0.57735(D_s \text{ min} - E_n \text{ max})\right]$$

where

n = number of threads per inch

D_s min = minimum major diameter of external thread

E_n max = maximum pitch diameter of internal thread

L_e = length of engagement at minimum major diameter of external thread. (Use L_e at basic pitch diameter for simplicity; this is conservative.)

When the unit tensile strength of the internal thread material greatly exceeds that of the external thread material, the shear area of the external thread (AS_s) can be computed from the following formulas:

(1) For simplified calculations for diameters 0.250 in. and larger, that will provide shear areas within about 5 percent of those given by the precise formula shown below, the shear area of the external thread may be computed as follows:

$$AS_s = 3.1416E \frac{5L_e}{8}$$

where L_e = length of engagement at the basic pitch diameter.

(2) The precise equation for shear area of the external thread at a diameter equal to the maximum minor diameter of the internal thread is as follows:

$$AS_s = 3.1416nL_eK_n \text{ max} \left[\frac{1}{2n} + 0.57735(E_s \text{ min} - K_n \text{ max})\right]$$

where

K_n max=maximum minor diameter of internal thread.

E_s min=minimum pitch diameter of external thread.

p. 202: Substitute the following for the first 5 lines of the second paragraph:

"2. Length of Thread Engagement.—The length of engagement of a threaded unit that will develop maximum strength of an assembly threaded with external and internal threads manufactured from materials of near or equal unit tensile strength may be computed from the following formula, which incorporates the factor "half" relation of unit shearing strength to unit tensile strength:

$$L_e=4A_s/3.1416E$$

where

$$A_s=3.1416\left(\frac{E}{2}-\frac{3H}{16}\right)^2.$$

When the unit tensile strength of the external thread materially exceeds that of the internal thread, the required length of engagement to develop maximum strength may be computed from the following formula, which is also based on the shear area being twice the tensile stress area:

$$L_e=\frac{2A_s}{3.1416nD_s\ \text{min}\left[\frac{1}{2n}+0.57735(D_s\ \text{min}-E_n\ \text{max})\right]}.$$

Likewise, when the unit tensile strength of the internal thread materially exceeds that of the external thread, the following formula should be used:"

p. 202: Substitute the following for the numerator in the formula on this page:

"$2A_s$".

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PARTS I, II, & III

PART II CHANGES

(See Reprint Information on p. II of this Supplement)

The following changes should be made in Part II:

p. 7, Substitute the following for lines 5, 6, and 7 of col. 2:

"The major and minor diameters vary with the pitch diameter, as the American Standard pipe thread form is maintained within the truncation tolerances shown in table VII.1, p. 4, Part II."

p. 7, table VII.4: Change min minor dia for ⅛ in. size from 0.342 to 0.340, for ¼ in. size from 0.440 to 0.442.

p. 19, col. 1, line 11: Delete "minimum."

p. 19, col. 2, par. 1: Revise to read:

"1. Manufacturing Tolerance on Product.—The maximum allowable variation in the Dryseal Standard (NPTF) commercial product is 1 turn large or 1 turn small from the gaging notch on the plug and the gaging face of the ring when gages are screwed up firmly by hand on or in the product. For other types of Dryseal threads smaller tolerances are specified as indicated in tables VIII.14, VIII.20, and VIII.21. Proper allowance shall be made for any variation of the gage from basic dimensions."

p. 19, table VIII.1: After "thread" in column 5 insert reference to footnote "b." Insert footnote "b" to read:

"[b] Length of effective thread is L_2, L_2 Short, L_1+L_3, or L_1 Short+L_3, as the case may be."

Also, in column 5 delete ".0040," leaving the reference to footnote "a."

p. 20, table VIII.2: Revise the minimum heights of thread in column 4 to read:

0.02341
.03772
.05150
.06226
.09188

p. 21, table VIII.3: Revise body of table to read:

Table VIII.3.—*Recommended limitation of assembly among the various types of standard Dryseal threads* [a,g]

(Note: This revision does not change the table technically.)

External Dryseal thread:			For assembly with internal Dryseal thread:		
Type	Table	Description	Type	Table	Description
1	2	3	4	5	6
1	VIII.4	NPTF (tapered), ext. thd	1	VIII. 4	NPTF (tapered), int. thd.
			2 [b,d]	VIII. 6	PTF-SAE SHORT (tapered), int. thd.
			3 [e]	VIII. 7	NPSF (straight), int. thd.
			4 [e,f]	VIII. 8	NPSI (straight), int. thd.
2 [b,c]	VIII.5	PTF-SAE SHORT (tapered), ext. thd.	4	VIII. 8	NPSI (straight), int. thd.
			1	VIII. 4	NPTF (tapered), int. thd.

Add the following footnote to Table VIII. 3:

"[g] See table 7.9, p. 109, Part II, for limitation of assembly with other series Dryseal threads."

p. 21: Revise first paragraph in column 2 to read:

"Dimensional data for these threads are given in table VIII.4, Part II. Limitation of assembly among the various types of Dryseal standard and SAE SHORT threads shown in this section is given in table VIII.3 in this Supplement."

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p. 22, table VIII.4: In footnote "b" change "not exceeding one pitch (thread) length." to read "not exceeding one and one-half pitches (threads) length."

p. 22, table VIII.4: Add footnote reference "d" to columns 3, 4, 7–8, and add footnote "d" as follows:

"$^{d}E_0 = D-(0.05D+1.1)p$
$E_1 = E_0+0.0625L_1$
$L_2 = (0.8D+6.8)p$"

p. 23, table VIII.5: In footnote "b" change "not exceeding one pitch (thread) length." to read "not exceeding one and one-half pitches (threads) length."

p. 23, table VIII.5: Add footnote reference "d" to columns 3, 8–9, and add footnote "d" as follows:

"^{d} E_0 short $= D-(0.05D+1.037)p$
L_2 short $= (0.8D+5.8)p$"

p. 24, table VIII.6: Add footnote reference "c" to column 3 and add footnote "c" as follows:

"^{c} E_1 short $= E_0$ short $+ 0.0625L_1$ short."

p. 26: In last paragraph of column 1, line 2, add "deviation" between "diameter" and "multiplied".

p. 27, table VIII.10: Revise columns 10 and 11 to read:

Nominal pipe size	Tolerance on major diameter[f]	Tolerance on minor diameter[g]
	Plugs	Rings
1	10	11
in.	*in.* −	*in.* +
1/16	0.0019	0.0019
1/8	.0019	.0019
1/4	.0028	.0028
3/8	.0028	.0028
1/2	.0036	.0036
3/4	.0036	.0036
1	.0043	.0043
1 1/4	.0043	.0043
1 1/2	.0043	.0043
2	.0043	.0043
2 1/2	.0062	.0062
3	.0062	.0062

p. 27: In sentence preceding paragraph (a), change "checked with plain plug gages." to read "checked with plain cylindrical plug gages."

p. 29: In first paragraph of column 1, revise last three lines to read:

"chamfer cone, i.e., approximately ½ pitch measured axially, from the point of last scratch on chamfer cone toward the opposite end of the fitting."

p. 33, table VIII.17: Change heading in column 6 to read:
"L_1+3 threads, (L_1+L_3)"

Change values in tables as follows:

Page	Table	Size	Column	From	To
31	VIII. 15	3/8–18	13	.58712	.58612
34	VIII. 18	3/8–18	8	.58712	.58612
36	VIII. 20	1 1/2–11 1/2	9	1.82778	1.82777

p. 76, table IX.5: Omit values in columns 10 to 16, inclusive, for ¾–14NGT(C1)–2, –3, and –4 sizes.

p. 78, 4. SAFETY DEVICE THREADS: Revise to read:

"4. SAFETY DEVICE THREADS

The safety devices on high pressure gas cylinder valves shall be provided with right hand threads of the Unified form, 19 threads per inch. The minimum length of engagement shall be ½ in. The thread dimensions shall be as follows:

	Boss (external thread)		Cap (internal thread)	
	Max	Min	Min	Max
	in.	*in.*	*in.*	*in.*
Major diameter	0.6500	0.6416	0.6500	
Pitch diameter	.6157	.6124	.6157	0.6200
Minor diameter	.5852		.5929	.6008

The safety device threads shall be designated as follows:

Boss (external thread):
.650–19 UNS–3A
MAJOR DIA .6500–.6416
PD .6157–.6124

Cap (internal thread):
.650–19 UNS–3B
MINOR DIA .5929–.6008
PD .6157–.6200"

p. 79, table IX.6: Add "(external threads)" to table title.
Change values as follows:

Value	Column	From	To
$D_{(8-p)}$	11	1.1417	1.1260
K_0	2	.3315	.3339
K_0	11	.8824	.9234
$K_{(8-p)}$	2	.3544	.3567
$K_{(8-p)}$	11	.9771	1.0024
H	2	.2912	.2544
H	11	.5208	.3184
M	2	.6564	.6196
M	11	1.1524	.9500

In column 1, change "P" to "p, pitch", "H" to "H, ref", and "M" to "M, ref".
Change values for p, pitch (formerly P) as follows:
.0370 values to .03704, .0556 values to .05556, .0714 values to .07143, and .0870 values to .08696.

p. 79, table IX. 7:

Add "(internal threads)" to table title.

Change value for $D_{(8-p)}$ in column 11 from 1.1417 to 1.1260,

Change value for K_3 in column 11 from .8556 to .8856.

Change value for L_1+L_3 in column 11 from .5714 to .7030.

In col. 1, change "P" to "p, pitch", "A" to "A, ref", and "B" to "B, ref".

Change values for p, pitch (formerly P) as follows:

.0370 value to .03704, .0556 values to .05556, .0714 values to .07143, and .0870 values to .08696.

Values in columns 8, 9, and 10 are to be deleted since these values are not applicable to internal threads. (Table headings for these columns are to remain.)

p. 93, table X.1: Revise note *a* to read:

"Data on the 4-6NH(SPL) thread are included since this thread is used extensively aboard ship by the Navy Department."

p. 103, figure 7.1: Replace present figure with the following:

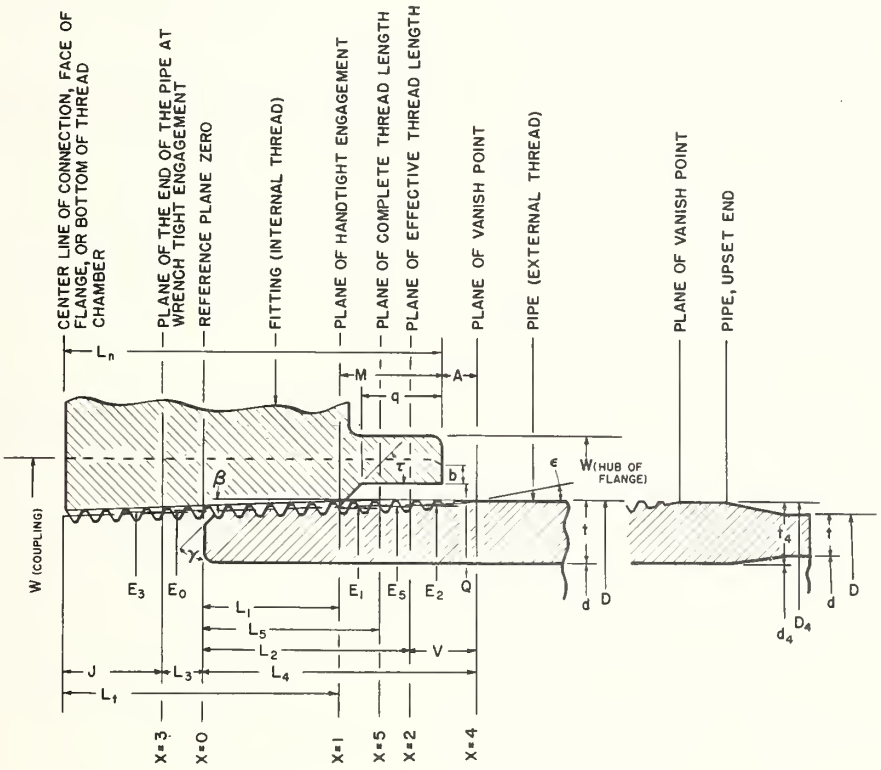

FIGURE 7.1—*Pipe thread symbols.*

p. 104, table 7.3: In column 4, change $^{11}\frac{3}{2}$ to $^{1}\frac{1}{32}$. For ¾ in. nominal pipe size, in column 4, show values as "$^{59}\frac{}{64}$—^{a}.922."

p. 105: Add the following sentence after the sentence ending in line 11 of the second column:

"They are also published in American Standards ASA C80.1–1959 Rigid Steel Conduit, Zinc Coated and C80.2–1959 Rigid Steel Conduit, Enameled."

p. 107, table 7.8: In column 7 (4 turns small) add .47774 for ¼ size. In columns 12 and 13 for ¾ size change .99887 to .98887.

p. 109, table 7.9: In table title, change "Interchangeability between" to "Recommended limitation of assembly among".

p. 109, table 7.10: In footnote "a" change

"not exceeding one pitch (thread) length." to "not exceeding one and one-half pitches (threads) length."

p. 109: In line 4 of second column, change "D–0.8625p" to "D–0.0625p".

p. 110, table 7.11: In footnote "b" change

"not exceeding one pitch (thread) length." to "not exceeding one and one-half pitches (threads) length."

p. 110: Revise subsection 9 to read as follows:

"9. SUPERSEDED GAGE DIMENSIONS AND GAGING PRACTICE FOR ⅛ AND ¼ SIZE DRYSEAL PIPE THREADS

"In this standard, the L_1 dimensions for the ⅛–27 and ¼–18 sizes were revised to correct for a disproportionate number of threads for hand engagement. The L_1 hand engagement dimensions affecting gages in tables VII.2, VII.9, VIII.15, VIII.16, and VIII.17 were revised to agree with the product dimensions for future gage procurement.

"Therefore, it should be noted that where basic-notch thread gages having superseded dimensions (see table 7.12) are being used for gaging the ⅛–27 and ¼–18 sizes, the formerly observed deviations from specified gaging practice should be applied as follows:

"Internal threads gaged by the Position Method should be ½ turn smaller for the ⅛–27 size and ½ turn larger for the ¼–18 size than the specified PD gaging steps.

"External threads gaged by the Turns Engagement Method should be ½ turn greater for the ⅛–27 size and ½ turn less for the ¼–18 size than the basic turns specified.

"Table 7.12 lists the dimensions related to the superseded L_1 dimensions of 0.1800 for the ⅛–27 size and 0.2000 for the ¼–18 size."

p. 110: Delete footnote 13.

p. 111, table 7.12: In title, change "Dryseal dimensions derived from" to "Dimensions related to".

p. 116: Revise first part of last paragraph to read:

"In some instances it may appear to be feasible to make cross connections with the American National standard thread.[14] However, where there are differences . . . ."

p. 116: Add following footnote at bottom of col. 1:

"[14] See footnote 10, p. 91, part II."

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PARTS I, II, & III

PART III CHANGES

(See Reprint Information on p. II of this Supplement)

The following changes should be made in Part III.

p. 14, table XII.12: In last column (5″D, 2 tpi) make following changes:

Internal threads:

Classes 5C and 6C, major dia, min	Change 4.4963 to 4.9463
Class 5C, major dia, max	Change 4.5041 to 4.9541
Class 6C, major dia, max	Change 4.5008 to 4.9508

p. 15, SNAP GAGE. (c) Minor diameter: Revise to read:

"(c) *Minor diameter.*—The minor diameter of the gage shall be computed by using the formula: basic minor diameter plus $p/4$, with the tolerance (table XII.13, col. 4) applied plus. If the value for minimum gage minor diameter thus determined is greater than the minimum pitch diameter of the external thread, the minimum minor diameter of the gage shall be taken as equal to the minimum pitch diameter of the external thread."

p. 20: In NOTATION under figure XIII.1, in each of last two lines, change second "=" to "—".

p. 44, paragraph 2. THREAD FORM: Revise to read:

"2. THREAD FORM.—The thread form shall be the Unified form of thread profile as specified in section III, part I."

p. 33: Revise first paragraph on page by transferring to end of first paragraph part of paragraph beginning with "However", line 11, and ending with "used.", line 21.

p. 44, paragraph 4. THREAD SIZE: Revise to read:

"4. THREAD SIZE AND DESIGNATION.—The basic major diameters for these threads are shown in tables XVIII.2 and XVIII.3.

These threads are designated as shown in the following example:

.5906–36 UNS–2A
MAJOR DIA .5896–.5841
PD .5716–.5682

Limits of size are calculated from the basic major dia, .5906, and threads per inch, 36, as shown in section IV of part I. The limits of size shown are for threads with no additive finish. If an additive finish is applied to the threads, the maximum major and maximum pitch diameters may be increased by the class 2A allowance. Such threads shall be gaged with basic-size GO gages to insure that the threads do not exceed the maximum limits for class 3A."

p. 45, paragraph 2. THREAD (lines 6 to 11 of column 1): Revise to read:

"2. THREAD.—The thread shall have 50 threads per inch. The thread dimensions are shown on figures XVIII.8 and XVIII.9."

p. 45, paragraph 2. THREAD (lines 7 to 10 from bottom of col. 1): Revise to read:

"2. THREAD.—The thread shall be 5–44 UNF–2A/2B in accordance with part I. The thread lengths are shown in figures XVIII.10 and XVIII.11."

p. 52, column 2: Revise lines 8 and 9 from bottom of column to read: "of effective length, L_e (see fig. 12.1)."

p. 59: Revise formula (20) to read:

$$E=M_w+\frac{p}{\tan\alpha_1+\tan\alpha_2}-w\left(1+\operatorname{cosec}\frac{\alpha_1+\alpha_2}{2}\cos\frac{\alpha_1-\alpha_2}{2}\right)-c.$$

p. 60, column 1: In line 15 from bottom of column change "on error" to "an error".

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U.S. DEPARTMENT OF COMMERCE
Luther H. Hodges, *Secretary*

NATIONAL BUREAU OF STANDARDS
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