D-15-11
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AMERICAN NATIONAL STANDARD

General Purpose Semi-Tubular Rivets, Full Tubular Rivets, Split Rivets and Rivet Caps

ANSI B18.7 - 1972

(REVISION OF B18.7—1966)

SECRETARIAT

SOCIETY OF AUTOMOTIVE ENGINEERS
THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS

PUBLISHED BY

THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS

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FOREWORD

American National Standards Committee B18 for the standardization of bolts, screws, nuts, rivets and similar fasteners was organized in March 1922, as Sectional Committee B18 under the aegis of the American Engineering Standards Committee (later the American Standards Association, then the United States of America Standards Institute and, as of October 6, 1969, the American National Standards Institute, Inc.), with the Society of Automotive Engineers and the American Society of Mechanical Engineers as joint sponsors.

Subcommittee 11* was established in 1953 and charged with the responsibility for the development of standards for semi-tubular rivets, full tubular rivets and split rivets. In the years between 1953 and 1962 meetings of the subcommittee were held and numerous attempts were made to arrive at suitable standards. However, problems stemming from the wide variety of these products and their applications continually prevented the Subcommittee from reaching a consensus.

At a meeting held on October 2, 1962, the subcommittee agreed to limit the scope of the standard to only those products suitable for general purpose applications. Thorough cooperation between the user and manufacturing members culminated in the development of a draft proposal which was approved by letter ballot of Subcommittee 11* on August 6, 1964. The proposed standard was circulated for letter ballot approval of the B18 Committee on May 13, 1965. Following favorable action by this committee and the sponsor organizations, the proposal was approved by the United States of America Standards Institute and designated a USA Standard on September 2, 1966.

A proposed revision to the document incorporating the addition of nominal sizes to dimensional tables and standard designations for the various products as well as numerous editorial refinements was developed and approved by Subcommittee 7 in April of 1970. Subsequent to letter ballot approval by the B18 Committee and the sponsors, this proposal was submitted to the American National Standards Institute for designation as an American National Standard. This was granted on July 28, 1972.

*As of April 1, 1966 Subcommittee 11 became Subcommittee 7.

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Standardization of Bolts, Nuts, Rivets, Screws, Washers, and Similar Fasteners

(The following is the roster of the Committee at the time of approval of this standard.)

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AMERICAN NATIONAL STANDARD

GENERAL PURPOSE SEMI-TUBULAR RIVETS, FULL TUBULAR RIVETS, SPLIT RIVETS AND RIVET CAPS

1 INTRODUCTORY NOTES

1.1 Scope

1.1.1 This standard covers complete general and dimensional data for semi-tubular rivets, full tubular rivets, split rivets and rivet caps for use in general purpose applications. The products described are suitable for joining metallic and non-metallic materials or combinations thereof. It should be noted that while these products are suitable for general purpose assembly, other special purpose types are available to satisfy particular requirements and manufacturers should be consulted for special requirements.

1.1.2 The inclusion of dimensional data in this standard is not intended to imply that all of the products described are stock production sizes. Consumers are requested to consult with manufacturers concerning availability of products.

1.2 Types of Rivets

The rivets specified in this standard include the following:

1.2.1 Semi-Tubular Rivets. The semi-tubular rivets are available in the head styles listed below and shall have straight holes, Type S, normally produced by extruding or drilling; or tapered holes, Type T, normally produced by swaging.

1.2.1.1 *Oval Head Semi-Tubular Rivets* (see Table 2).

1.2.1.2 *Truss Head Semi-Tubular Rivets* (see Table 3).

1.2.1.3 *150 Deg Flat Countersunk Head Semi-Tubular Rivets* (see Table 4).

1.2.1.4 *150 Deg Large Flat Countersunk Head Semi-Tubular Rivets* (see Table 5).

1.2.1.5 *120 Deg Flat Countersunk Head Semi-Tubular Rivets* (see Table 6).

1.2.2 Full Tubular Rivets. The full tubular rivets are available in the head styles listed below and shall normally have straight holes produced by extruding or drilling.

1.2.2.1 *Oval Head Full Tubular Rivets* (see Table 7).

1.2.2.2 *Truss Head Full Tubular Rivets* (see Table 7).

1.2.2.3 *Flat Countersunk Head Full Tubular Rivets* (see Table 7).

1.2.3 Split Rivets. The split rivets covered herein consist of the following head styles:

1.2.3.1 *Oval Head Split Rivets* (see Table 8).

1.2.3.2 *Flat Countersunk Head Split Rivets* (see Table 9).

1.3 Rivet Caps

1.3.1 The rivet caps for use with split and full tubular rivets are given in Table 10.

1.4 Options

Options, where specified, shall be at the discretion of the manufacturer unless otherwise agreed upon by the manufacturer and the purchaser.

1.5 Dimensions

All dimensions in this standard are given in inches, unless otherwise stated.

1.6 Terminology

For definitions of terms relating to fasteners or component features thereof used in this standard refer to American National Standard, Glossary of Terms for Mechanical Fasteners, ANSI B18.12.

1.7 Related Standards

It should be noted that standards for small solid rivets, large rivets, and other related products are published under separate cover as listed on the back sheet of this standard.

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2 GENERAL DATA FOR SEMI-TUBULAR AND FULL TUBULAR RIVETS

2.1 Heads

2.1.1 Because the heads of these rivets are not machined or trimmed, the circumference may be somewhat irregular and edges may be rounded or flat.

2.1.2 The bearing surface of oval and truss head rivets shall be perpendicular to the axis of the rivet shank within 2 deg.

2.1.3 The heads on rivets shall not be eccentric with the axis of the rivet shanks to such an extent that usability of the rivet is impaired.

2.2 Underhead Fillets

Oval and truss head rivets shall be furnished with a definite fillet under the head; however, the radius of fillet shall not exceed the values specified in the dimensional tables.

2.3 Length

2.3.1 Measurement. The length of oval and truss head rivets shall be measured, parallel to the axis of rivet, from the underside of the head to the extreme end. The length of flat countersunk head rivets shall be measured, parallel to the axis of rivet, from the juncture of the conical underside of head with rivet shank to the extreme end, except for the 120 deg flat countersunk head rivets in Table 6, on which the length shall be measured from the top of the head to the extreme end.

2.3.2 Length Increments. The minimum lengths and increments applicable to longer lengths shall be as specified in Table 1.

2.3.3 Tolerance on Length. The tolerance on length of rivets shall be as specified in Table 1.

2.4 Hole Depth

2.4.1 Hole depth shall be measured parallel to the axis of the rivet from the extreme end of rivet to the intersection of the diameter of the hole with the contour at bottom of hole. The hole depth to extreme point on bottom contour of hole shall not be greater than the shank length of rivet.

2.4.2 The tolerance on hole depth shall be the same as the tolerance on length of rivet.

2.5 Material

Semi-tubular and full tubular rivets shall be made from low carbon steel (0.1 per cent carbon or less), commercial yellow brass, copper, aluminum or other materials as agreed upon between the manufacturer and the purchaser.

2.6 Finish

Unless otherwise specified, rivets shall be supplied with a natural (as processed) finish, unplated or uncoated.

2.7 Workmanship

The rivets shall be free from all burrs, seams or other imperfections that might impair their usability.

2.8 Designation

Semi-tubular and full tubular rivets shall be designated by the following data in the sequence shown. Nominal size; length (fraction or decimal equivalent); product name; material; and protective finish, if required. See examples below:

.146 x .500 Semi-tubular Rivet, Oval Head, Steel, Cadmium Plated

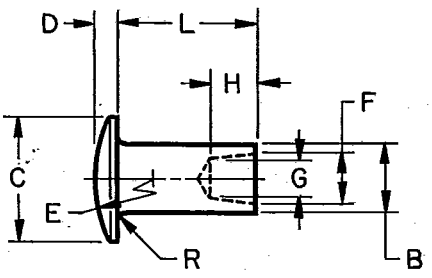
.188 x 3/4 Full Tubular Rivet, Flat Countersunk Head, Steel

Table 1 Length Increments and Length Tolerances For Semi-Tubular and Full Tubular Rivets

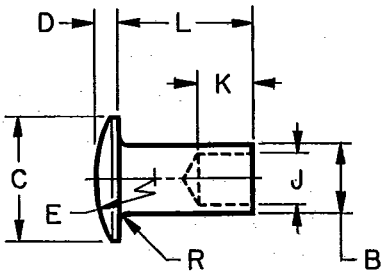
Nominal Size	Length Increment	Minimum Nominal Rivet Length	Tolerance on Length		
			For Nominal Lengths		
			Up to and including 4 times shank dia	Over 4 times shank dia and up to and including 8 times shank dia	Over 8 times shank dia
0.061	1/64 0.016	1/16 0.062	±0.007	±0.008	±0.010
0.089	1/64 0.016	5/64 0.078	±0.007	±0.008	±0.010
0.099	1/64 0.016	5/64 0.078	±0.007	±0.008	±0.010
0.123	1/64 0.016	3/32 0.094	±0.007	±0.010	±0.015
0.146	1/32 0.031	1/8 0.125	±0.010	±0.012	±0.015
0.188	1/32 0.031	5/32 0.156	±0.010	±0.012	±0.015
0.217	1/16 0.062	3/16 0.188	±0.010	±0.015	±0.020
0.252	1/16 0.062	7/32 0.219	±0.010	±0.015	±0.020
0.310	1/16 0.062	1/4 0.250	±0.010	±0.015	±0.020

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TYPE T



TYPE S

Table 2 Dimensions of Oval Head Semi-Tubular Rivets

Nominal Size[1]	B		C		D		E	F		G	H	J		K[2]	R
	Shank Diameter		Head Diameter		Head Thickness		Head Radius	Type T Taper Hole Rivets				Type S Straight Hole Rivets			Fillet Radius
								Hole Dia at End of Rivet		Hole Dia at Bottom of Hole	Hole Depth to Start of Apex	Hole Dia at End of Rivet		Hole Depth to Start of Apex	
	Max	Min	Max	Min	Max	Min	Approx	Max	Min	Min	Min	Max	Min	Nom	Max
0.061	0.061	0.058	0.114	0.104	0.019	0.015	0.16	0.046	0.042	0.032	0.042	0.044	0.039	0.046	0.008
0.089	0.089	0.085	0.152	0.142	0.026	0.020	0.22	0.068	0.064	0.050	0.057	0.068	0.062	0.064	0.012
0.099	0.099	0.095	0.192	0.182	0.032	0.026	0.27	0.076	0.072	0.057	0.065	0.076	0.070	0.077	0.012
0.123	0.123	0.118	0.223	0.213	0.038	0.030	0.31	0.095	0.091	0.079	0.082	0.090	0.084	0.094	0.016
0.146	0.146	0.141	0.239	0.229	0.045	0.035	0.27	0.112	0.106	0.085	0.104	0.107	0.100	0.126	0.020
0.188	0.188	0.182	0.318	0.306	0.065	0.055	0.25	0.145	0.139	0.110	0.135	0.141	0.134	0.155	0.025
0.217	0.217	0.210	0.444	0.430	0.075	0.061	0.63	0.166	0.158	0.136	0.151	0.163	0.155	0.189	0.025
0.252	0.252	0.244	0.507	0.493	0.085	0.071	0.72	0.191	0.181	0.150	0.183	0.184	0.176	0.219	0.030
0.310	0.310	0.302	0.570	0.554	0.100	0.086	0.69	0.235	0.225	0.190	0.214	0.219	0.211	0.243	0.030

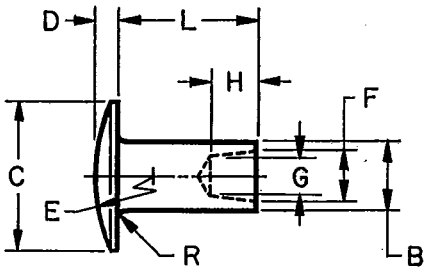
1 Where specifying nominal size, zeros preceding decimal shall be omitted.

2 For rivets having a length tolerance equal to or greater than ±0.015 in., the straight hole nominal depth shall be increased 0.010 in. beyond the depth specified in the table.

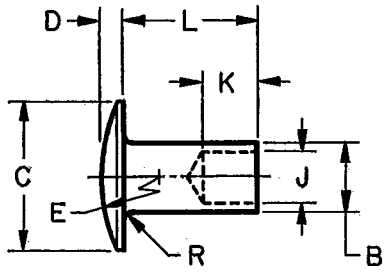
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TYPE T



TYPE S

Table 3 Dimensions of Truss Head Semi-Tubular Rivets

Nominal Size[1]	B		C		D		E	F		G	H	J		K[2]	R
	Shank Diameter		Head Diameter		Head Thickness		Head Radius	Type T Taper Hole Rivets				Type S Straight Hole Rivets			Fillet Radius
								Hole Dia at End of Rivet		Hole Dia at Bottom of Hole	Hole Depth to Start of Apex	Hole Dia at End of Rivet		Hole Depth to Start of Apex	
	Max	Min	Max	Min	Max	Min	Approx	Max	Min	Min	Min	Max	Min	Nom	Max
0.061	0.061	0.058	0.130	0.120	0.019	0.015	0.13	0.046	0.042	0.032	0.042	0.044	0.039	0.046	0.008
0.089	0.089	0.085	0.192	0.182	0.026	0.020	0.22	0.068	0.064	0.050	0.057	0.068	0.062	0.064	0.012
0.123	0.123	0.118	0.286	0.276	0.038	0.030	0.38	0.095	0.091	0.079	0.082	0.090	0.084	0.094	0.016
0.146	0.146	0.141	0.318	0.306	0.045	0.035	0.45	0.112	0.106	0.085	0.104	0.107	0.100	0.126	0.020
0.188	0.188	0.182	0.381	0.369	0.065	0.055	0.53	0.145	0.139	0.110	0.135	0.141	0.134	0.155	0.025

1 Where specifying nominal size, zeros preceding decimal shall be omitted.

2 For rivets having a length tolerance equal to or greater than ±0.015 in., the straight hole nominal depth shall be increased 0.010 in. beyond the depth specified in the table.

For additional requirements refer to General Data for Semi-Tubular and Full Tubular Rivets on Page 2.

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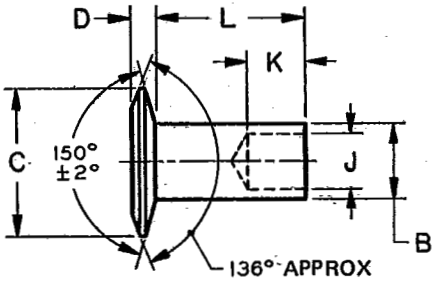


Table 4 Dimensions of 150 Deg Flat Countersunk Head Semi-Tubular Rivets (Recommended for attachment of friction material)

Nominal Size [1]	B		C		D		J		K [2]
	Shank Diameter		Head Diameter		Head Thickness		Hole Dia at End of Rivet		Hole Depth to Start of Apex
	Max	Min	Max	Min	Max	Min	Max	Min	Ref
0.146	0.146	0.141	0.303	0.289	0.045	0.035	0.105	0.099	0.141
0.188	0.188	0.182	0.367	0.351	0.051	0.041	0.139	0.133	0.188
0.252	0.252	0.244	0.478	0.458	0.067	0.053	0.183	0.173	0.250

1 Where specifying nominal size, zeros preceding decimal shall be omitted.

2 These are reference dimensions only. Hole depths will vary depending upon the purpose for which a particular rivet is designed.

For additional requirements refer to General Data for Semi-Tubular and Full Tubular Rivets on Page 2.

Table 5 Dimensions of 150 Deg Large Flat Countersunk Head Semi-Tubular Rivets (Recommended for attachment of friction material)

Nominal Size [1]	B		C		D		J		K [2]
	Shank Diameter		Head Diameter		Head Thickness		Hole Dia at End of Rivet		Hole Depth to Start of Apex
	Max	Min	Max	Min	Max	Min	Max	Min	Ref
0.146	0.146	0.141	0.367	0.351	0.051	0.041	0.105	0.099	0.141
0.188	0.188	0.182	0.478	0.458	0.067	0.053	0.139	0.133	0.188

1 Where specifying nominal size, zeros preceding decimal shall be omitted.

2 These are reference dimensions only. Hole depths will vary depending upon the purpose for which a particular rivet is designed.

For additional requirements refer to General Data for Semi-Tubular and Full Tubular Rivets on Page 2.

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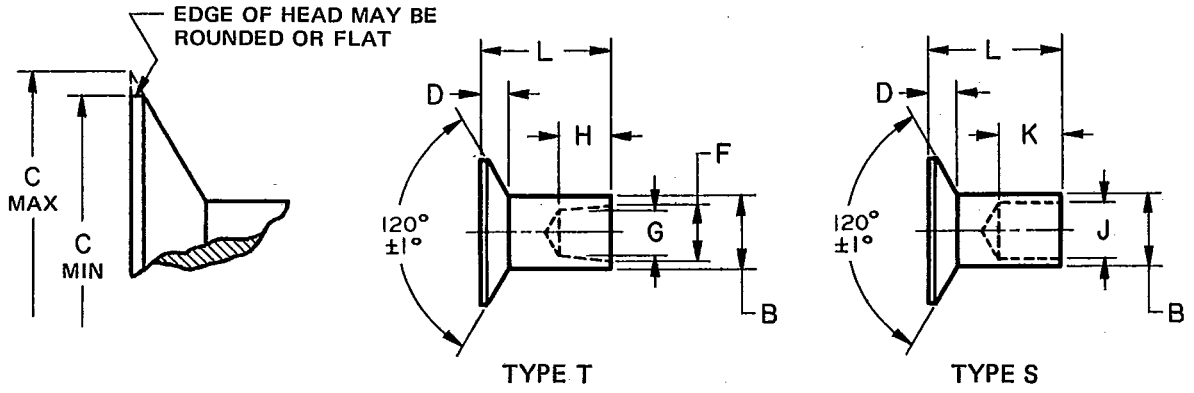


Table 6 Dimensions of 120 Deg Flat Countersunk Head Semi-Tubular Rivets (General Purpose)

Nominal Size [1]	B		C [2]		D	F		G	H	J		K [3]
	Shank Diameter		Head Diameter		Head Thickness	Type T Taper Hole Rivets				Type S Straight Hole Rivets		
			Max, Edge Sharp	Min, Edge Rounded or Flat		Hole Dia at End of Rivet		Hole Dia at Bottom of Hole	Hole Depth to Start of Apex	Hole Dia at End of Rivet		Hole Depth to Start of Apex
	Max	Min			Ref	Max	Min	Min	Min	Max	Min	Nom
0.089	0.089	0.085	0.223	0.203	0.039	0.068	0.064	0.050	0.057	0.068	0.062	0.064
0.123	0.123	0.118	0.271	0.245	0.043	0.095	0.091	0.079	0.082	0.090	0.084	0.094
0.146	0.146	0.141	0.337	0.307	0.056	0.112	0.106	0.085	0.104	0.107	0.100	0.126
0.188	0.188	0.182	0.404	0.369	0.063	0.145	0.139	0.110	0.135	0.141	0.134	0.155
0.217	0.217	0.210	0.472	0.430	0.075	0.166	0.158	0.136	0.151	0.163	0.155	0.189
0.252	0.252	0.244	0.540	0.493	0.084	0.191	0.181	0.150	0.183	0.184	0.176	0.219

1 Where specifying nominal size, zeros preceding decimal shall be omitted.

2 Head diameters tabulated under "Max, Edge Sharp" are theoretical values determined by projection.

3 For rivets having a length tolerance equal to or greater than ±0.015 in., the straight hole nominal depth shall be increased 0.010 in. beyond the depth specified in the table.

For additional requirements refer to General Data for Semi-Tubular and Full Tubular Rivets on Page 2.

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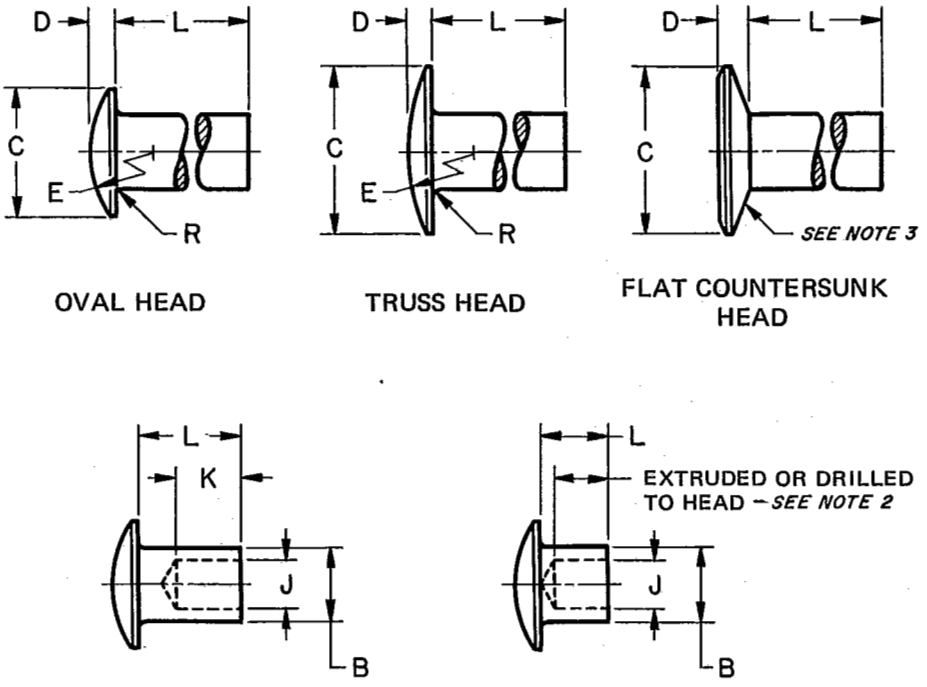


Table 7 Dimensions of Full Tubular Rivets

Head Style	Nominal Size[1]	B		C		D		E	J		K[2]		R
		Shank Diameter		Head Diameter		Head Thickness		Head Radius (Ref)	Diameter of Hole		Depth of Hole		Fillet Radius
		Max	Min	Max	Min	Max	Min	Min	Max	Min	Max	Min	Max
Oval	0.146	0.146	0.141	0.239	0.229	0.045	0.035	0.27	0.107	0.100	To Head	0.375	0.020
Truss	0.146	0.146	0.141	0.318	0.306	0.045	0.035	0.45	0.107	0.100	To Head	0.375	0.020
	0.188	0.188	0.182	0.381	0.369	0.065	0.055	0.53	0.141	0.134	To Head	0.375	0.025
Flat Countersunk	0.146	0.146	0.141	0.317	0.307	0.050	0.040	...	0.107	0.100	To Head	0.375	...
	0.188	0.188	0.182	0.364	0.352	0.060	0.048	...	0.141	0.134	To Head	0.375	...

1 Where specifying nominal size, zeros preceding decimal shall be omitted.

2 Full tubular rivets having nominal lengths of 3/8 in., or shorter, shall be extruded or drilled to head.

3 The angle of head is not specified, it being assumed flat countersunk head full tubular rivets would generally be used in soft materials and therefore form their own countersink.

For additional requirements refer to General Data for Semi-Tubular and Full Tubular Rivets on Page 2.

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3 GENERAL DATA FOR SPLIT RIVETS

3.1 Heads

3.1.1 Because the heads of these rivets are not machined or trimmed, the circumference may be somewhat irregular and edges may be rounded or flat.

3.1.2 The bearing surface of oval head rivets shall be perpendicular to the axis of the rivet shank within 2 deg.

3.1.3 The heads of rivets shall not be eccentric with the axis of the rivet shanks to such an extent that usability of the rivet is impaired.

3.2 Underhead Fillets

Oval head rivets shall be furnished with a definite fillet under the head: however, the radius of fillet shall not exceed the values specified in the dimensional tables.

3.3 Length

3.3.1 Measurement. The length of oval head split rivets shall be measured, parallel to the axis of rivet, from the underside of the head to the extreme end. The length of flat countersunk head split rivets shall be measured, parallel to the axis of rivet, from the top of the head to the extreme end.

3.3.2 Tolerance on Length. The tolerance on length of rivets shall be as tabulated below:

Nominal Size	Tolerance on Length
0.092	±0.010
0.125	±0.015
0.152	±0.015
0.190	±0.015

3.4 Slots

3.4.1 The slots in split rivets are produced by either punching or broaching the rivet blanks; the method of manufacture imparting definite characteristics to the contour of the slot and rivet performance.

3.4.1.1 Basically, the broached or sawed slot rivet is used for piercing hard materials including light gages of sheet metal.

3.4.1.2 The punched slot rivet is satisfactory for use in lighter materials.

3.4.2 In selecting or specifying a split rivet it is recommended that the manufacturer be consulted for the type best suited to the application. Accordingly the slot widths, slot depths and contour shall vary with the manufacturers' standards and recommendations.

3.5 Material

Split rivets shall be made from low carbon steel, commercial yellow brass, copper, aluminum or other materials as agreed upon between the manufacturer and the purchaser.

3.6 Finish

Unless otherwise specified, rivets shall be supplied with a natural (as processed) finish, unplated or uncoated.

3.7 Workmanship

The rivets shall be free from all burrs, seams or other imperfections that might impair their usability.

3.8 Designation

Split rivets shall be designated by the following data in the sequence shown: Nominal size; length (fraction or decimal equivalent); product name; material; and protective finish, if required. See examples below:

.125 x .750 Split Rivet, Oval Head, Steel, Nickel Plated

.152 x 7/8 Split Rivet, Large Flat Countersunk Head, Brass

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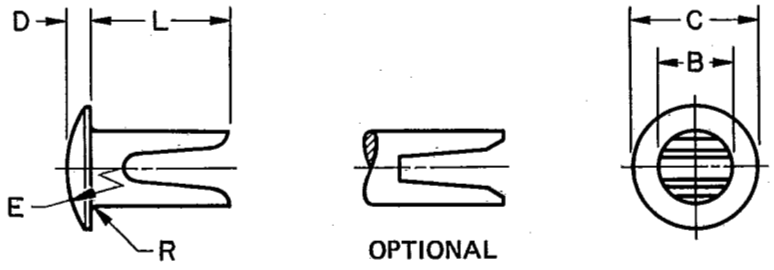


Table 8 Dimensions of Oval Head Split Rivets

Nominal Size[1]	B		C		D		E	R
	Shank Diameter		Head Diameter		Head Thickness		Radius of Head	Fillet Radius
	Max	Min	Max	Min	Max	Min	Approx	Max
0.092	0.092	0.085	0.152	0.142	0.026	0.020	0.22	0.012
0.125	0.125	0.113	0.223	0.213	0.035	0.027	0.31	0.016
0.152	0.152	0.144	0.318	0.306	0.045	0.035	0.27	0.020
0.190	0.190	0.180	0.349	0.337	0.055	0.045	0.25	0.025

1 Where specifying nominal size, zeros preceding decimal shall be omitted.

For additional requirements refer to General Data for Split Rivets on Page 8.

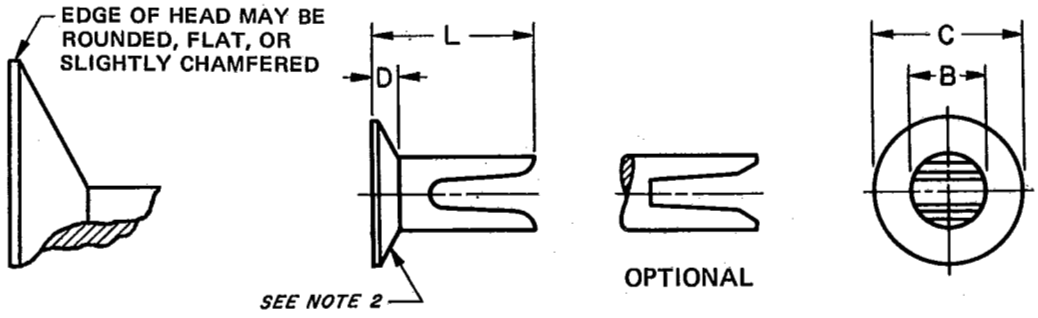


Table 9 Dimensions of Flat Countersunk Head Split Rivets

Nominal Size[1]	B		C		D	
	Shank Diameter		Head Diameter		Head Thickness	
	Max	Min	Max	Min	Max	Min
0.125	0.125	0.113	0.223	0.213	0.036	0.026
0.152	0.152	0.144	0.317	0.307	0.053	0.043
0.152	0.152	0.144	0.380*	0.370*	0.062*	0.052*
0.190	0.190	0.180	0.443	0.431	0.061	0.051

1 Where specifying nominal size, zeros preceding decimal shall be omitted.

2 The angle of head is not specified, it being assumed flat countersunk head split rivets would generally be used in soft materials and therefore form their own countersink.

* Rivets in 0.152 in. size having these head proportions shall be designated "Large Flat Countersunk Head".

For additional requirements refer to General Data for Split Rivets on Page 8.

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4 GENERAL DATA FOR RIVET CAPS

4.1 General

The rivet caps contained herein are for use with full tubular rivets and split rivets. The design and dimensional detail of the internal construction of rivet caps vary with each manufacturer depending on the tooling developed for production of the cap and the rivet setting machine requirements.

The maximum heights, internal contours and hole diameters shall be such as to permit any of the various cap diameters specified to be used with the respective rivet shank diameters to suit the requirements of particular applications.

4.2 Material

Rivet caps shall be made from steel, brass or other materials as agreed upon between the manufacturer and the purchaser.

4.3 Finish

Unless otherwise specified, rivet caps shall be supplied with a natural (as processed) finish, unplated or uncoated.

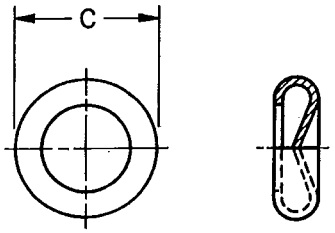
4.4 Workmanship

Rivet caps shall be free from burrs, cracks and all other defects that might affect their usability.

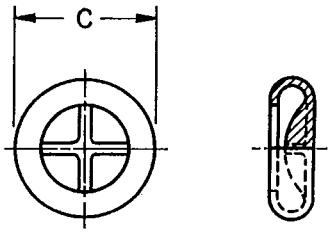
4.5 Designation

Rivet caps shall be designated by the following data in the sequence shown: Style number; cap outside diameter; product name; material; and finish, if required. See example below:

Style 1, .312 OD, Rivet Cap, Steel



STYLE 1



STYLE 2

Table 10 Dimensions of Rivet Caps

Style	Rivet Shank Diameter (Ref)		C
			Cap Outside Diameters
	Max	Min	Basic
1*	0.092	0.085	0.281
	0.125	0.113	0.281, 0.312, 0.328
	0.152	0.144	0.312, 0.328, 0.359, 0.375
	0.190	0.180	0.359, 0.375
2†	0.123	0.118	0.250
	0.146	0.141	0.328, 0.344
	0.188	0.182	0.422, 0.438

*Style 1 rivet caps are designed primarily for use with split rivets.
†Style 2 rivet caps are designed primarily for use with full tubular rivets.
For additional requirements refer to General Data for Rivet Caps above.

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AMERICAN NATIONAL STANDARDS FOR SCREW THREADS, BOLTS, NUTS, RIVETS, SCREWS, WASHERS AND SIMILAR FASTENERS

Unified Screw Threads	B1.1–1960
Unified Screw Threads-Metric Translation	B1.1a–1968
Gages and Gaging for Unified Screw Threads	B1.2–1966
Nomenclature, Definitions, and Letter Symbols for Screw Threads	B1.7–1965
Unified Miniature Screw Threads	B1.10–1958
Microscope Objective Thread	B1.11–1958
Class 5 Interference – Fit Thread	B1.12–1963
Small Solid Rivets (7/16 Inch Nominal Diameter and Smaller)	B18.1.1–1972
Large Rivets (1/2 Inch Nominal Diameter and Larger)	B18.1.2–1972
Square and Hex Bolts and Screws	B18.2.1–1972
Square and Hex Nuts	B18.2.2–1972
Socket Cap, Shoulder and Set Screws	B18.3–1969
Round Head Bolts	B18.5–1971
Wood Screws	B18.6.1–1972
Slotted Head Cap Screws, Square Head Set Screws, and Slotted Headless Set Screws	B18.6.2–1972
Machine Screws and Machine Screw Nuts	B18.6.3–1972
Slotted and Recessed Head Tapping Screws and Metallic Drive Screws	B18.6.4–1966
General Purpose Semi-Tubular Rivets, Full Tubular Rivets, Split Rivets and Rivet Caps	B18.7–1972
Clevis Pins and Cotter Pins	B18.8.1–1972
Plow Bolts	B18.9–1958 (R–1971)
Track Bolts and Nuts	B18.10–1963
Miniature Screws	B18.11–1961
Glossary of Terms for Mechanical Fasteners	B18.12–1962
Screw and Washer Assemblies – Sems	B18.13–1965
Forged Eyebolts	B18.15–1969
Wing Nuts, Thumb Screws, and Wing Screws	B18.17–1968
Lock Washers	B18.21.1–1972
Plain Washers	B27.2–1965
Beveled Washers	B27.4–1967
General Purpose Rectangular Uniform Section Retaining Rings	B27.5–1969

BINDERS FOR HOLDING STANDARDS ARE AVAILABLE.

A COMPLETE LIST OF AMERICAN NATIONAL STANDARDS PUBLISHED BY THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS IS OBTAINABLE UPON REQUEST.

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