

Specification for

Gauge blanks —

Part 1: Plug, ring and calliper gauges

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Screw Thread Tool Manufacturers' Association
Society of British Aircraft Constructors
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Foreword

This standard makes reference to the following British Standard:
BS 122, *Milling cutters and reamers*.

This standard was first issued in 1942, at a request by the Institution of Production Engineers, to assist war emergency production and it was hoped that circumstances would later permit more work to be done on the subject of recommended blanks for all the common types of gauges for plain and threaded parts. In revising the standard, the Technical Committee concerned have kept in mind this intention to provide a comprehensive set of recommendations for as many as possible of the types of gauges in common use.

Part 1 of this standard therefore now includes details of types such as collet plug gauges and adjustable screw ring gauges which are of comparatively recent development. In this it follows the American Standard A.S.A. B47.1, also known as Commercial Standard CS8; this publication has also been considerably extended since its earlier appearance as "*Plain and thread plug and ring gauge blanks*" referred to in the previous edition of BS 1044. Much of the information contained in the following pages is in accordance with the recommendations of the revised American Standard and the Institution wishes to make full acknowledgment of this source of information.

It is hoped to issue later further parts covering blanks for spline gauges and for other commonly used types of gauges such as those employed in checking geometrical features of bolts and nuts.

Among gauge blanks which appeared in the earlier edition of the British Standard and have since become very well established here is the trilock plug gauge. It should be mentioned that when this gauge was first being considered for inclusion in the American Standard, the Pratt & Whitney Company and the Taft-Peirce Manufacturing Company waived their proprietary rights in the trilock plug gauge design for the general benefit of industry and the Institution desires to make formal recognition of its appreciation of the action of these companies in offering no objection to the adoption of any features of their designs in the British Standard.

Other features of this revision which may be noted include provision for larger ring gauges and for an improved range of segmental gauges and spherical ended rod gauges to supplement the solid cylindrical plug gauges.

Attention is also drawn to the fact that the title has been changed to "Gauge blanks". Although this change has been made in recognition of the fact that the standard is primarily concerned with blanks, the explanatory text has been expanded and some details have been given which it is hoped will afford general guidance and encourage the production and use of standard designs of gauges. It should be noted, however, that figures which include threaded members are not intended to illustrate details of design; this convention is used to distinguish them from plain gauge blanks.

Tolerances for the plain and threaded members will be found in BS 969, "*Tolerances for plain plug and ring gauges*", and BS 919, "*Screw gauge limits and tolerances*", respectively.

Regarding the methods of manufacturing gauges and their measurement to verify their accuracy, attention may be drawn to the publications "Notes on Gauge Making and Measuring" and "Notes on Screw Gauges", prepared by the National Physical Laboratory and issued under the authority of the Department of Scientific and Industrial Research by Her Majesty's Stationery Office.

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Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i to vi, pages 1 to 54 and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

1 Scope

This British Standard relates to the blanks for commonly used types of gauges.

Various forms of each type of gauge are described and illustrated, and recommended blank sizes are given in the tables. Those features of design necessary to ensure inter-changeability are specified in some detail and general information on other features is included for guidance in the manufacture of these gauges.

Section 1 gives general notes on the gauges covered by this Part.

Section 2 relates to plain and screw plug gauges and setting plugs.

Section 3 deals with solid plain and screw ring gauges and solid plain gap gauges.

Section 4 deals with adjustable screw ring gauges and adjustable plain and screw calliper gauges.

Details of check gauges for taper lock gauging members and handles are given in the Appendix.

Section 1. General notes

2 Types of gauges

a) *Gauges for holes and internal screw threads.* Gauges for cylindrical holes and internal screw threads are customarily in the form of a cylindrical plain or screwed plug, with a convenient handle.

The previous edition of the standard included gauges in which the gauging portion was integral with the handle, the whole gauge being machined from one piece of metal. Such gauges are now becoming obsolete and they have accordingly been omitted from this revision.

By contrast, the renewable end type of gauge is now widely used and possesses a number of advantages. In this type of gauge, the gauging portion and the handle are manufactured separately, and for use, are engaged together to form a rigid assembly by means of a suitable locking device.

As its name implies, the design of this type of gauge enables either of the gauging members to be replaced when worn or damaged instead of discarding the whole gauge and also allows a new member to be inserted if modification of either of the product limits requires it. A further advantage lies in the fact that the handle need not be made of metal but may be of a suitable plastics material, thus reducing both the weight and cost of the gauge and the risk of heat transference.

The GO and NOT GO gauges may be in the form of separate “single-ended” gauges, or may be combined on one handle to form a “double-ended” gauge. (See Figure 16 and Figure 18.) In the case of plain plug gauges a form of combined GO and NOT GO gauge which is convenient is the “progressive” gauge, which is a single-ended gauge with one gauging member having two diameters to the GO and NOT GO limits respectively. (See Figure 17.)

A convenient and economical means of gauging small diameters is provided by the collet type gauge which consists of a wire type member or members held firmly in a collet type handle of suitable proportions. (See Figure 2 to Figure 7.)

At the other end of the scale, provision is made for plug gauges suitable for large diameters. These may be of annular design and provided with two ball handles see Figure 34 or they may be the bar type of gauge with segmental cylindrical or spherical ends. The latter type of gauge may also be found in adjustable form.

b) *Gauges for shafts and external screw threads.* Gauges for shafts and external screw threads are customarily in the form of either a ring gauge or a gap gauge.

Ring gauges may be either plain or screwed. Screw ring gauges are available in adjustable as well as in non-adjustable form, although the latter is at present more generally used in this country. Separate gauges are used for GO and NOT GO gauging.

Gap gauges for plain work may be of the solid, non-adjustable type or of the adjustable type, gap gauges for screw threads are invariably of the adjustable type. Separate gap gauges may be used for GO and NOT GO gauging or, alternatively, a combined GO and NOT GO gauge may be used; adjustable gap gauges are almost invariably of this latter type.

Adjustable gap gauges are commercially available in a number of patterns a few typical examples of which are illustrated in this standard.

3 Removal of sharp edges

All non-gauging sharp edges should be removed.

4 Centres

The importance of good centres, internal or external, cannot be overstressed. Large internal centres should be avoided and the length of the cone should be kept short.

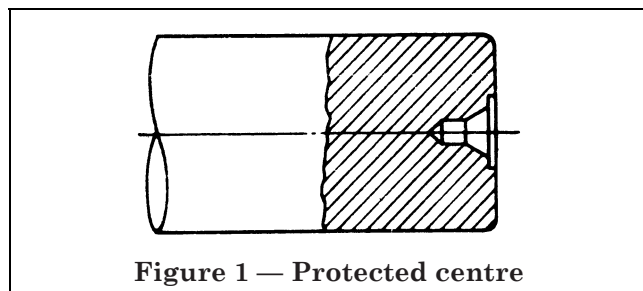


Figure 1 — Protected centre

The mouth of the internal centre, wherever practicable, should be protected by a small recess $\frac{1}{32}$ in or $\frac{1}{16}$ in deep as shown in Figure 1.

5 Stabilization

Blanks may be supplied in the soft or hard condition. Hardened steel blanks, more particularly those of the larger sizes, should be stabilized before they are completed.

NOTE 1 When blanks are required hardened throughout, e.g. for threading, this should be specified by the purchaser.

NOTE 2 A recommended stabilizing treatment is to heat the gauges to 150 °C and maintain them at this temperature for approximately 10 hours followed by slow cooling.

Section 2. Plain and screw plug gauges renewable end types

6 Notes on gauging members and handles

a) *General.* Section 2 relates to plug gauges comprising interchangeable handles and plug gauging members for the gauging of plain and threaded holes of nominal diameters up to 12 in.

This design of plug gauge is based upon the Standard of the American Gauge Design Committee and whilst some departures have been made from this American Standard, they are not such as to affect the interchange ability of handles and gauging members made to this British Standard or to the American Standard.

b) *Types of gauges.* Four separate designs have been adopted for cylindrical plug gauges; the collet type design for diameters from 0.015 in up to and including 0.760 in, the taper lock design for diameters from 0.059 in up to and including 2.510 in, the trilock design with reversible GO gauging members for diameters above 1.510 in up to and including 8.010 in, and the annular design for the range over 8.010 in up to and including 12.010 in. For sizes above 0.240 in up to and including 2.510 in provision is made for both separate and progressive gauging members.

i) *Collet type design, diameters above 0.015 in up to and including 0.760 in.* Considerations of convenience and economy have led to the introduction of a collet type design of plug gauge in the small diameters. It consists of a wire type member or members held firmly in a collet type handle of suitable proportions. A useful feature of this gauge is the facility for extending the gauging member from the handle and for reversing it to increase the useful life of the gauge.

Dimensions and tolerances have been established for handles and collets to accommodate any diameters of plug within the range together with lengths for given ranges of diameters of wire type plugs. The general details of construction are illustrated in Figure 2 to Figure 7 and dimensions are given in Table 1 to Table 6.

ii) *Taper lock design. Diameters up to and including 2.510 in.* The taper lock design is particularly well suited for the smaller sizes of plain and screw plug gauges. This type of gauge is simple and is economical to produce and maintain. The general details of construction are illustrated in Figure 16 to Figure 18.

The gauging member has a taper shank which is pushed into a taper hole in the handle. When properly made and assembled, the taper lock gauge has been proved to possess the rigidity of a solid gauge and is entirely free of shake. A drift slot or hole is provided near one end of each handle to enable the gauging members to be removed when replacement is necessary; in the case of double-ended gauges, the second member is removed by running a rod through the hollow handle.

In sizes up to and including 0.240 in a groove is provided near one end of the handle to designate the NOT GO end, as the length of the GO member in this range is often insufficient to distinguish it clearly from the NOT GO member. The groove is omitted as being unnecessary in sizes above 0.240 in.

Complete dimensions have been established for the mating parts of gauging members and handles, thus ensuring absolute interchangeability of gauging members and handles wherever manufactured.

Details of check gauges for testing taper lock gauges and handles by means of blueing are given in Appendix A.

iii) *Trilock design. Diameters above 1.510 in up to and including 8 in.* Considerations of rigidity of construction and long life make the choice of the trilock design with reversible to gauging members especially suitable for the larger sizes up to 8 in.

The general details of construction are illustrated in Figure 21 to Figure 28.

With this construction there is no chance for shake to interfere with the sensitive feel so necessary in gauges of this type. Three wedge-shaped locking prongs on the handle are engaged into corresponding grooves in the gauging member by a single through-screw, thus providing a self-centring support with a positive lock, and resulting in a degree of rigidity equivalent to that of a solid gauge. The useful life of the Go plugs is furthermore materially increased, as when the entering end is worn, the plug can be reversed.

The construction is protected by carefully worked out limits of size and interchangeability is ensured between gauging members and handles wherever manufactured. Dimensions are given in Table 8.

iv) *Annular design, diameters above 8.010 in up to and including 12.010 in.* Since large plug gauges are heavy and difficult to handle a design has been adopted for the range above 8.010 in which is intended to give the lightest possible section consistent with strength and permanence. This is the annular design which has a rim and web of properly proportioned section with the centre bored out for purposes of weight reduction. The web is provided with four tapped holes for convenience in bolting to a face plate during manufacture; two of these are also used for fixing ball handle to the gauging member.

Details of construction are shown in Figure 34 and Figure 35.

An alternative design is the bar handled annular gauge. Bar handled gauges in sizes up to 10.010 in are made without webs and those above 10.010 in are provided with webs. All sizes may have one or two bar handles.

Details of construction are shown in Figure 36 to Figure 39.

Dimensions of both types of annular gauges are given in Table 12 and Table 20.

7 Handles and collets

a) *General.* Handles for collet type gauges are hexagonal with clamping nuts and are provided in both single end and double end types. Handles for both taper lock and trilock gauges are also of the hexagonal type. They may be of unhardened steel, light alloy or plastics, but plastics handles should be provided with steel sleeves.

The lengths recommended for the handles of plug gauges are those suitable for gauges for normal applications. Where gauges have to be used in confined situations, longer or shorter handles may be desirable.

It is recommended that collets for collet type gauges in sizes 1W and 2W be made of brass and those for the larger sizes of aluminium.

Ball or bar handles are employed for the annular plug gauges.

When gauging members are worn out or discarded for any other reason, new gauging members may be fitted to the handles. This is an economical feature since, with reasonable care, the handles will last indefinitely.

b) *Collet type plug gauge handles*

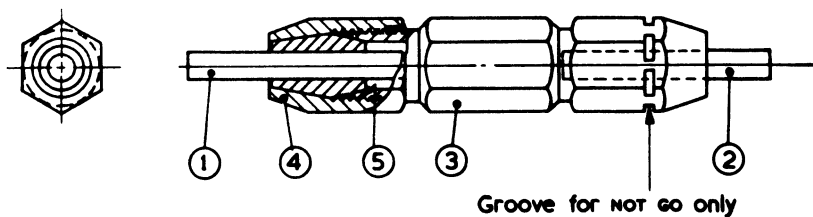


Figure 2

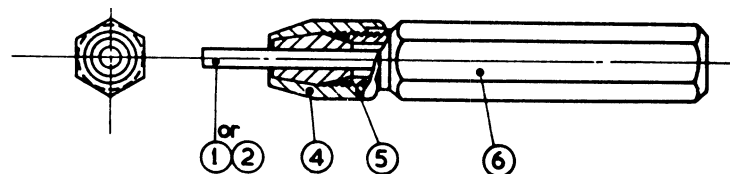
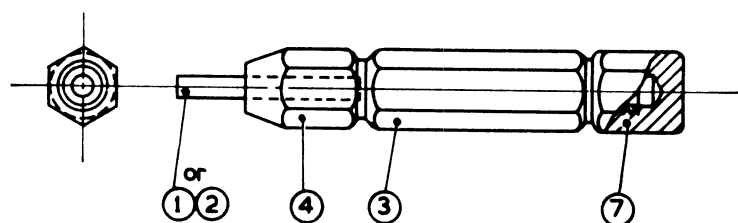


Figure 3



Range: Above 0.015 in up to and including 0.760 in

Figure 4

Figure 2, Figure 3 and Figure 4 — Collet type plain plug gauges

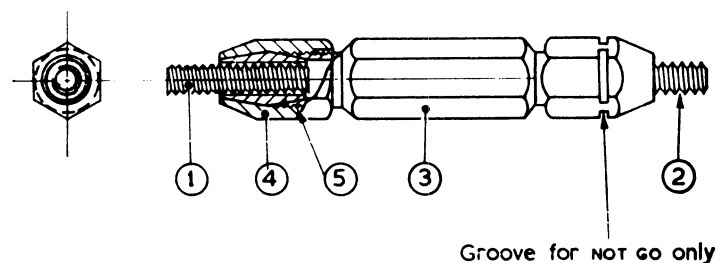


Figure 5

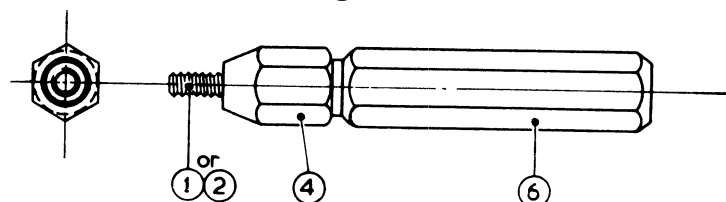
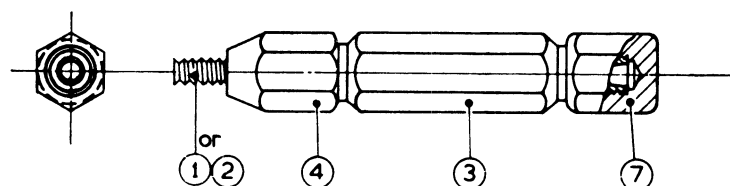


Figure 6



Range: Above 0.030 in up to and including 0.760 in

Figure 7

Figure 5, Figure 6 and Figure 7 — Collet type screw plug gauges

- | | |
|----------------------------------|----------------------------------|
| 1. GO gauging member | 4. Clamping nut |
| 2. NOT GO gauging member | 5. Collet bushing |
| 3. Double end collet type handle | 6. Single end collet type handle |
| | 7. Capping nut |

Table 1 — Collet type plug gauge handles

Range: Above 0.015 in up to and including 0.760 in

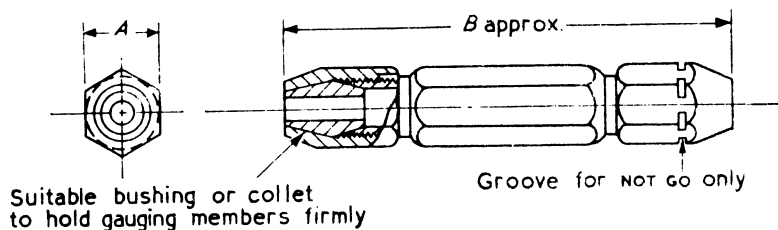


Figure 8 — Double end type

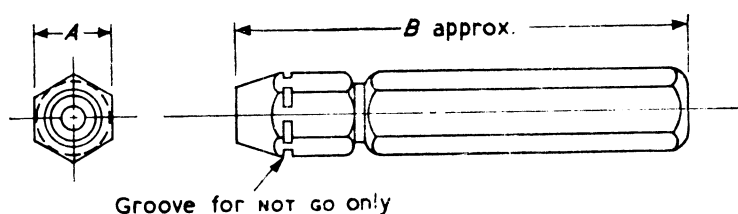


Figure 9 — Single end type (preferred)

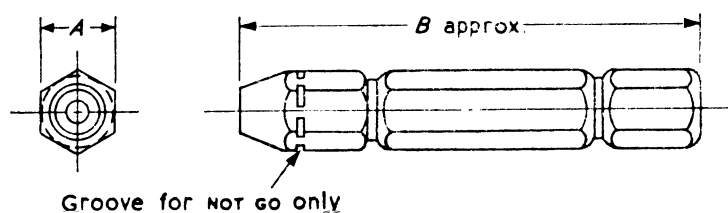


Figure 10 — Single end type (alternative)

NOTE The alternative single-end type is a double-end type converted to suit single-end applications.

1	2	3	4	5	6	7
Handle size No.			Size range, nominal		A	B
Double end	Single end	Single end (alt.)	Above	To and including		
			in	in		
1 W	1 W-S	1 W-A	0.015	0.075	$\frac{1}{4}$	$1\frac{29}{32}$
2 W	2 W-S	2 W-A	0.075	0.180	$\frac{3}{4}$	$2\frac{15}{32}$
3 W	3 W-S	3 W-A	0.180	0.281	$\frac{9}{16}$	$3\frac{1}{8}$
4 W	4 W-S	4 W-A	0.281	0.406	$\frac{11}{16}$	$3\frac{19}{32}$
5 W	5 W-S	5 W-A	0.406	0.510	$\frac{13}{16}$	$4\frac{3}{16}$
6 W	6 W-S	6 W-A	0.510	0.635	$\frac{15}{16}$	$4\frac{17}{32}$
7 W	7 W-S	7 W-A	0.635	0.760	$1\frac{1}{16}$	$4\frac{21}{32}$

Table 2 — Double end collet type plug gauge handles. Details of Body

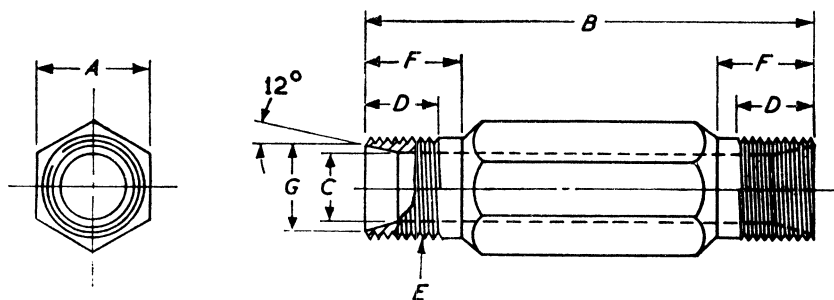


Figure 11

1	2	3	4	5	6	7	8	9	10
Handle size No.	Size range, nominal		A	B	C	D	E	F	G
	above	Up to and including							
1 W	in	in	in	in	in	in	12-32 UNEF-2A	in	in
2 W	0.015	0.075	$\frac{1}{4}$	$\frac{15}{16}$	$\frac{3}{32}$	$\frac{9}{32}$	$\frac{5}{16}$ -32 UNEF-2A	$\frac{21}{64}$	0.151
3 W	0.075	0.180	$\frac{3}{8}$	$1\frac{27}{32}$	$\frac{3}{16}$	$\frac{5}{16}$	$\frac{1}{2}$ -28 UNEF-2A	$\frac{7}{16}$	0.235
4 W	0.180	0.281	$\frac{9}{16}$	$2\frac{1}{8}$	$\frac{19}{64}$	$\frac{13}{32}$	$\frac{5}{8}$ -28 UN-2A	$\frac{1}{2}$	0.348
5 W	0.281	0.406	$\frac{11}{16}$	$2\frac{19}{32}$	$\frac{27}{64}$	$\frac{7}{16}$	$\frac{3}{4}$ -28 UN-2A	$\frac{5}{8}$	0.473
6 W	0.406	0.510	$\frac{13}{16}$	$3\frac{1}{16}$	$\frac{33}{64}$	$\frac{5}{8}$	$\frac{7}{8}$ -28 UN-2A	$\frac{3}{4}$	0.588
7 W	0.510	0.635	$\frac{15}{16}$	$3\frac{1}{4}$	$\frac{41}{64}$	$\frac{5}{8}$	1-28 UN-2A	$\frac{3}{4}$	0.740
7 W	0.635	0.760	$1\frac{1}{16}$	$3\frac{3}{8}$	$\frac{49}{64}$	$\frac{5}{8}$			0.865

Table 3 — Collet type plug gauge handles. Details of capping nut

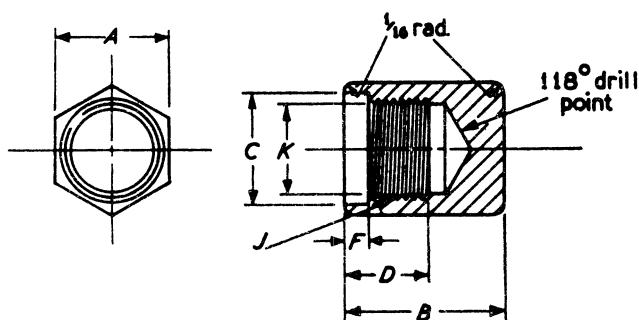


Figure 12

1	2	3	4	5	6	7	8	9	10
Handle size No.	Size range, nominal		A	B	C	D	F	J	K (minor diameter)
	above	Up to and including							
	in	in	in	in	in	in			in
1 W-A	0.015	0.075	$\frac{1}{4}$	$\frac{5}{8}$	0.220 0.230	$\frac{5}{16}$	$\frac{3}{32}$	12-32 UNEF-2B	0.182 2 0.189 5
2 W-A	0.075	0.180	$\frac{3}{8}$	$\frac{11}{16}$	0.316 0.326	$\frac{3}{8}$	$\frac{1}{8}$	$\frac{5}{16}$ -32 UNEF-2B	0.278 7 0.286 1
3 W-A	0.180	0.281	$\frac{9}{16}$	$\frac{15}{16}$	0.504 0.514	$\frac{7}{16}$	$\frac{1}{8}$	$\frac{1}{2}$ -28 UNEF-2B	0.461 3 0.469 7
4 W-A	0.281	0.406	$\frac{11}{16}$	$1\frac{1}{16}$	0.630 0.640	$\frac{9}{16}$	$\frac{1}{4}$	$\frac{5}{8}$ -28 UN-2B	0.586 3 0.594 7
5 W-A	0.406	0.510	$\frac{13}{16}$	$1\frac{1}{4}$	0.755 0.765	$\frac{11}{16}$	$\frac{3}{16}$	$\frac{3}{4}$ -28 UN-2B	0.711 3 0.719 7
6 W-A	0.510	0.635	$\frac{15}{16}$	$1\frac{9}{32}$	0.880 0.890	$\frac{11}{16}$	$\frac{3}{16}$	$\frac{7}{8}$ -28 UN-2B	0.836 3 0.844 7
7 W-A	0.635	0.760	$1\frac{1}{16}$	$1\frac{9}{32}$	1.005 1.015	$\frac{11}{16}$	$\frac{3}{16}$	1-28 UN-2B	0.961 3 0.969 7

Table 4 — Single-end collet type plug gauge handles. Details of body

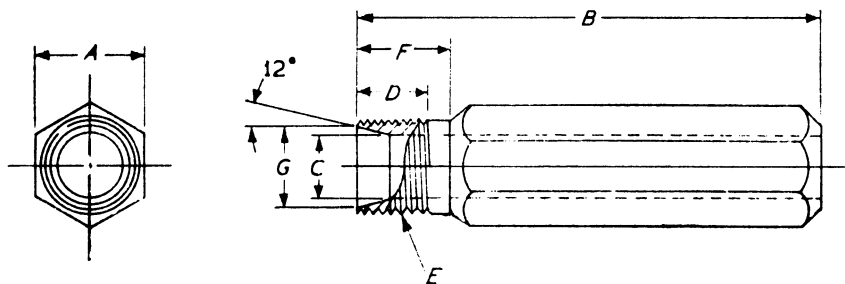


Figure 13

1	2	3	4	5	6	7	8	9	10
Handle size No.	Size range, nominal		A	B	C	D	E	F	G
	above	Up to and including							
	in	in	in	in	in	in		in	in
1 W-S	0.015	0.075	$\frac{1}{4}$	$1\frac{5}{8}$	$\frac{3}{32}$	$\frac{9}{32}$	12-32 UNEF-2A	$\frac{21}{64}$	0.151
2 W-S	0.075	0.180	$\frac{3}{8}$	$2\frac{5}{32}$	$\frac{3}{16}$	$\frac{5}{16}$	$\frac{5}{16}$ -32 UNEF-2A	$\frac{7}{16}$	0.235
3 W-S	0.180	0.281	$\frac{9}{16}$	$2\frac{5}{8}$	$\frac{19}{64}$	$\frac{13}{32}$	$\frac{1}{2}$ -28 UNEF-2A	$\frac{1}{2}$	0.348
4 W-S	0.281	0.406	$\frac{11}{16}$	$3\frac{3}{32}$	$\frac{27}{64}$	$\frac{7}{16}$	$\frac{5}{8}$ -28 UN-2A	$\frac{5}{8}$	0.473
5 W-S	0.406	0.510	$\frac{13}{16}$	$3\frac{5}{8}$	$\frac{33}{64}$	$\frac{5}{8}$	$\frac{3}{4}$ -28 UN-2A	$\frac{3}{4}$	0.588
6 W-S	0.510	0.635	$\frac{15}{16}$	$3\frac{7}{8}$	$\frac{41}{64}$	$\frac{5}{8}$	$\frac{7}{8}$ -28 UN-2A	$\frac{3}{4}$	0.740
7 W-S	0.635	0.760	$1\frac{1}{6}$	4	$\frac{49}{64}$	$\frac{5}{8}$	1-28 UN-2A	$\frac{3}{4}$	0.865

Table 5 — Collet type plug gauge nuts

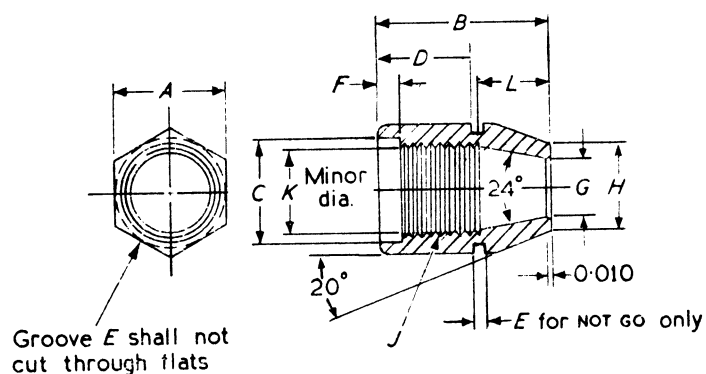


Figure 14

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Handle size No.	Size range, nominal		A	B	C	D	E	F	G	H	J	K	L
	above	To and including											
1 W	in 0.015	in 0.075	in $\frac{1}{4}$	in $\frac{9}{16}$	in 0.220 0.230	in $\frac{11}{32}$	in $\frac{1}{32}$	in $\frac{3}{32}$	in 0.083 0.078	in $\frac{7}{32}$	12-32 UNEF-2B	in 0.182 2 0.189 5	in $\frac{5}{32}$
2 W	0.075	0.180	$\frac{3}{8}$	$\frac{11}{16}$	0.316 0.326	$\frac{7}{16}$	$\frac{1}{32}$	$\frac{1}{8}$	0.190 0.185	$\frac{5}{16}$	$\frac{5}{16}$ -32 UNEF-2B	0.278 7 0.286 1	$\frac{7}{32}$
3 W	0.180	0.281	$\frac{9}{16}$	$\frac{15}{16}$	0.504 0.514	$\frac{1}{2}$	$\frac{1}{16}$	$\frac{1}{8}$	0.290 0.285	$\frac{7}{16}$	$\frac{1}{2}$ -28 UNEF-2B	0.461 3 0.469 7	$\frac{13}{32}$
4 W	0.281	0.406	$\frac{11}{16}$	$1\frac{1}{16}$	0.630 0.640	$\frac{5}{8}$	$\frac{1}{16}$	$\frac{1}{4}$	0.417 0.412	$\frac{9}{16}$	$\frac{5}{8}$ -28 UN-2B	0.586 3 0.594 7	$\frac{7}{16}$
5 W	0.406	0.510	$\frac{13}{16}$	$1\frac{1}{4}$	0.755 0.765	$\frac{3}{4}$	$\frac{1}{16}$	$\frac{3}{16}$	0.520 0.515	$\frac{21}{32}$	$\frac{3}{4}$ -28 UN-2B	0.711 3 0.719 7	$\frac{1}{2}$
6 W	0.510	0.635	$\frac{15}{16}$	$1\frac{9}{32}$	0.880 0.890	$\frac{13}{16}$	$\frac{1}{16}$	$\frac{3}{16}$	0.645 0.640	$\frac{3}{4}$	$\frac{7}{8}$ -28 UN-2B	0.836 3 0.844 7	$\frac{1}{2}$
7 W	0.635	0.760	$1\frac{1}{16}$	$1\frac{9}{32}$	1.005 1.015	$\frac{13}{16}$	$\frac{1}{16}$	$\frac{3}{16}$	0.770 0.765	$\frac{7}{8}$	1-28 UN-2B	0.961 3 0.969 7	$\frac{1}{2}$

Table 6 — Collect type plug gauge collets

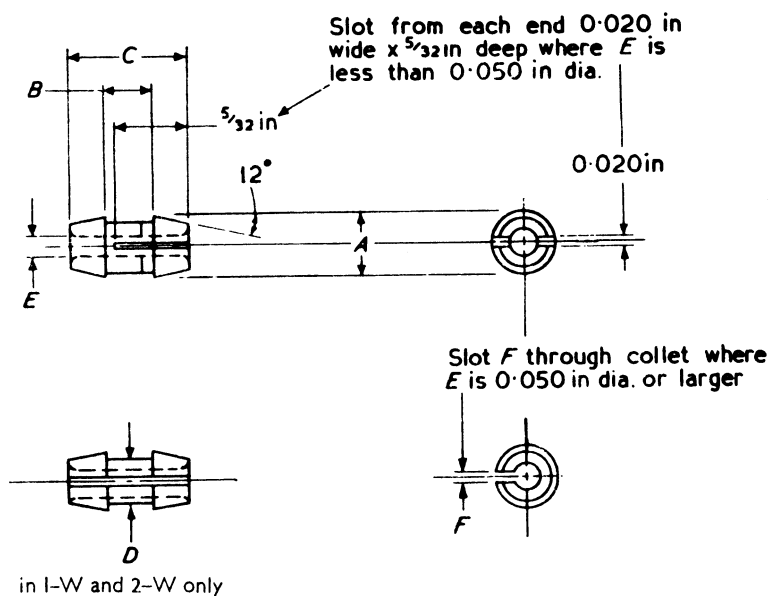


Figure 15

1	2	3	4	5	6	7	8	9	10
Collet No. (E dia.)	Size range, nominal in	A		B		C	D	F	
		max. in	min. in	max. in	min. in			max. in	min. in
1-W-.020 1-W-.025 1-W-.030	0.015–0.020 0.020–0.025 0.025–0.030	0.168	0.162	0.065	0.059	$\frac{17}{64}$	$\frac{3}{32}$	—	—
1-W-.035 1-W-.040 1-W-.045	0.030–0.035 0.035–0.040 0.040–0.045							—	—
1-W-.050 1-W-.055 1-W-.060	0.045–0.050 0.050–0.055 0.055–0.060							0.035	0.015
1-W-.065 1-W-.070 1-W-.075	0.060–0.065 0.065–0.070 0.070–0.075								
2-W-.082 2-W-.089 2-W-.096	0.075–0.082 0.082–0.089 0.089–0.096					$\frac{13}{32}$	$\frac{5}{32}$	0.045	0.025
2-W-.103 2-W-.110	0.096–0.103 0.103–0.110								
2-W-.117 2-W-.124 2-W-.131	0.110–0.117 0.117–0.124 0.124–0.131	0.243	0.237	0.190	0.184	$\frac{13}{32}$	$\frac{7}{32}$	0.045	0.025
2-W-.138 2-W-.145 2-W-.152	0.131–0.138 0.138–0.145 0.145–0.152								
2-W-.159 2-W-.166 2-W-.173	0.152–0.159 0.159–0.166 0.166–0.173								
2-W-.180	0.173–0.180								

NOTE Collets to be adjustable for any plug within the respective size ranges tabulated.

Table 6 — Collet type plug gauge collets

1	2	3	4	5	6	7	8	9	10
Collet No. (E dia.)	Size range, nominal	A		B		C	D	F	
		max.	min.	max.	min.			max.	min.
	in	in	in	in	in	in	in	in	in
3-W-.188	0.180–0.188	0.398	0.392	0.159	0.153	$\frac{9}{16}$	—	0.058	0.038
3-W-.196	0.188–0.196								
3-W-.204	0.196–0.204								
3-W-.212	0.204–0.212								
3-W-.220	0.212–0.220								
3-W-.228	0.220–0.228								
3-W-.236	0.228–0.236								
3-W-.244	0.236–0.244								
3-W-.252	0.244–0.252								
3-W-.261	0.252–0.261								
3-W-.271	0.261–0.271								
3-W-.281	0.271–0.281								
4-W-.291	0.281–0.291	0.518	0.512	0.159	0.153	$\frac{17}{32}$	—	0.058	0.038
4-W-.301	0.291–0.301								
4-W-.311	0.301–0.311								
4-W-.321	0.311–0.321								
4-W-.331	0.321–0.331								
4-W-.341	0.331–0.341								
4-W-.351	0.341–0.351								
4-W-.361	0.351–0.361								
4-W-.371	0.361–0.371								
4-W-.382	0.371–0.382								
4-W-.394	0.382–0.394								
4-W-.406	0.394–0.406								
5-W-.420	0.406–0.420	0.643	0.637	0.159	0.153	$\frac{19}{32}$	—	0.072	0.052
5-W-.436	0.420–0.436								
5-W-.450	0.436–0.450								
5-W-.465	0.450–0.465								
5-W-.480	0.465–0.480								
5-W-.495	0.480–0.495								
5-W-.510	0.495–0.510								
6-W-.532	0.510–0.532	0.788	0.782	0.174	0.168	$\frac{11}{16}$	—	0.072	0.052
6-W-.547	0.532–0.547								
6-W-.563	0.547–0.563								
6-W-.579	0.563–0.579								
6-W-.594	0.579–0.594								
6-W-.610	0.594–0.610								
6-W-.625	0.610–0.625								
6-W-.640	0.625–0.640								
7-W-.656	0.640–0.656	0.909	0.903	0.174	0.168	$\frac{11}{16}$	—	0.135	0.115
7-W-.672	0.656–0.672								
7-W-.688	0.672–0.688								
7-W-.704	0.688–0.704								
7-W-.719	0.704–0.719								
7-W-.735	0.719–0.735								
7-W-.750	0.735–0.750								
7-W-.760	0.750–0.765								

NOTE Collets to be adjustable for any plug within the respective size ranges tabulated.



Documents

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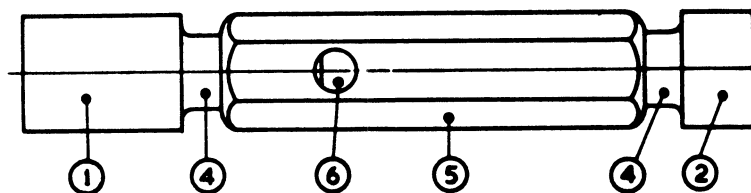
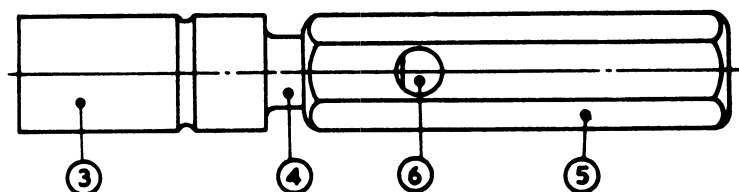
c) *Taper lock handles*

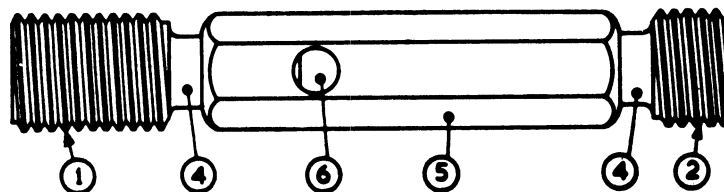
Figure 16



Range: Above 0.059 in up to and including 2.510 in

Figure 17

Figure 16 and Figure 17 — Taper lock plain cylindrical plug gauges



Range: Above 0.059 in up to and including 1.510 in

Figure 18 — Taper lock screw plug gauge

- | | |
|-------------------------------|-----------------------|
| 1. GO gauging member | 4. Shank |
| 2. NOT GO gauging member | 5. Taper lock handle |
| 3. Progressive gauging member | 6. Drift slot or hole |