BRITISH STANDARD

BS 3063:1965

Incorporating Amendment No. 1

Specification for

Dimensions of gaskets for pipe flanges

Confirmed December 2011

Co-operating organizations

The Mechanical Engineering Industry Standards Committee, under whose supervision this British Standard was prepared, consists of representatives from the following Government departments and scientific and industrial organizations:

Associated Offices' Technical Committee
Association of Consulting Engineers*
Association of Mining Electrical and Mechanical Engineers
Board of Trade
British Chemical Plant Manufacturers' Association
British Compressed Air Society
British Electrical and Allied Manufacturers' Association
British Gear Manufacturers' Association
British Internal Combustion Engine Manufacturers' Association
British Iron and Steel Federation
British Mechanical Engineering Federation
British Railways Board
Crown Agents for Oversea Governments and Administrations
Electricity Council, the Generating Board and the Area Boards in England and Wales*
Engineering Equipment Users' Association*
Gas Council*
High Commission of India
Institute of Marine Engineers*
Institution of Civil Engineers
Institution of Gas Engineers*
Institution of Heating and Ventilating Engineers
Institution of Mechanical Engineers
Institution of Mechanical Engineers (Automobile Division)
Institution of Production Engineers
Locomotive and Allied Manufacturers' Association of Great Britain
London Transport Board
Machine Tool Trades Association
Ministry of Defence, Army Department
Ministry of Defence, Navy Department
Ministry of Labour (H.M. Factory Inspectorate)
Ministry of Power
Ministry of Public Building and Works
Ministry of Technology — National Engineering Laboratory
Ministry of Transport
National Coal Board
National Physical Laboratory (Ministry of Technology)
Radio Industry Council
Royal Institute of British Architects

The scientific and industrial organizations marked with an asterisk in the above list, together with the following, were directly represented on the Committee entrusted with the preparation of this standard:

British Cast Iron Pressure Pipe Association
British Lead Manufacturers Association
Engineering Standards Co-ordinating Committee
Institution of Water Engineers
Liquefied Petroleum Gas Industry Technical Committee
Metropolitan Water Board
Ministry of Aviation
Parsons and Marine Engineering Turbine Research and Development Association
Post Office
Society of British Gas Industries
Society of Motor Manufacturers and Traders Ltd.
Individual manufacturers

This British Standard, having been approved by the Mechanical Engineering Industry Standards Committee and endorsed by the Chairman of the Engineering Divisional Council, was published under the authority of the General Council on 26 July 1965

First published January 1959
First revision July 1965

The following BSI references relate to the work on this standard:
Committee references MEE/91
MEE/91/4
Draft for comment D64/1102

ISBN 0 580 35583 7

Amendments issued since publication

Amd. No.	Date of issue	Comments
5920	August 1988	Indicated by a sideline in the margin

Contents

Foreword

This standard makes reference to the following British Standards:

BS 10, *Flanges and bolting for pipes, valves and fittings.*

BS 1211, *Centrifugally cast (spun) iron pressure pipes for water, gas and sewage.*

BS 1560, *Steel pipe flanges and flanged fittings (nominal sizes ½ in to 24 in) for the petroleum industry.*

BS 1575, *Cast iron pipe flanges and flanged fittings, Class 125, for the petroleum industry.*

BS 1576, *Cast iron pipe flanges and flanged fittings, Class 250, for the petroleum industry.*

BS 1770, *Pipe flanges for use on internal combustion engines and installations.*

BS 2035, *Cast iron flanged pipes and flanged fittings.*

BS 3293, *Carbon steel pipe flanges (over 24 in nominal size) for the petroleum industry.*

BS 3381, *Metallic spiral wound gaskets for the petroleum and petrochemical industry.*

This revised British Standard has been prepared under the authority of the Mechanical Engineering Industry Standards Committee, consequent upon the issue of BS 10:1962[1)]. It should be noted that wherever BS 10 is referred to in this standard, the 1962 edition is intended.

The committee have given further thoughts to the various duties of gaskets and have concluded, as before, that it is not practicable at present to specify materials and thicknesses.

The plan dimensions of gaskets to suit flanges to BS 10 and BS 2035[2)] have been revised. As regards flanges to BS 2035, these are at present being brought into line with BS 10:1962 by Committee ISE/16.

The plan dimensions of gaskets to suit flanges to BS 1770[3)] remain unaltered.

The outside dimensions of full face gaskets are the same as the outside dimensions of the flanges. The outside diameters of "inside bolt circle" gaskets to suit BS 10 flanges are now equal to the bolt pitch circle diameter less one bolt hole diameter, to agree with BS 10, Clause **1**.

The inside diameters of gaskets to suit BS 10 flanges are now equal to the outside diameters of the steel pipe appropriate to the flange size designation, except for gaskets to suit flanges to BS 10, Table K (over 6 in nominal bore) and Table R and Table S; these dimensions are also suitable for centrifugally cast ("spun") cast iron pipes made in accordance with BS 1211[4)] with screwed-on flanges.

The inside diameters of gaskets to suit BS 1770 flanges are equal to the maximum bores of the flanges.

Full face gaskets are not specified for BS 10 flanges to Table R and Table S, and inside bolt circle gaskets for these flanges have been limited to sizes up to and including 5 in and 3 in flange size designations respectively. Dimensions for Table K gaskets have been limited to sizes up to and including 15 in flange size designation. This is because above these sizes the thickness of steel pipe varies to such a wide extent as to make standardization impracticable. For the same reason, no gasket dimensions have been standardized for BS 10, Table T.

The tables in this British Standard have been lettered or numbered to conform to the corresponding tables in the appropriate flange standards.

---

1) BS 10:1962,"*Flanges and bolting for pipes, valves and fittings*".
2) BS 2035, "*Cast iron flanged pipes and flanged fittings*".
3) BS 1770, "*Pipe flanges for use on internal combustion engines and installations*".
4) BS 1211, "*Centrifugally cast (spun) iron pressure pipes for water, gas and sewage*".

NOTE 1 When metric equivalents of the pipe dimensions in this standard are required reference should be made to the corresponding values in ISO Recommendations R 64[5] and R 65[6] as appropriate. When it is required to convert the figures in this standard from British units into metric units it is recommended that the conversion factors and the table of conversions contained in BS 350, "*Conversion factors and tables*", be used.

Attention is also drawn to BS 2856, "*Precise conversion of inch and metric sizes or engineering drawings*".

NOTE 2 Attention is drawn to the Appendix which gives a conversion table for inch to metric units.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

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 iv, pages 1 to 26 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.

[5] ISO R 64, "*Steel tubes: outside diameters*".
[6] ISO R 65, "*Steel tubes suitable for screwing in accordance with ISO Recommendation R 7*".

blank

Obsolescent (by Amendment No. 1). This British Standard has been declared obsolescent and is not recommended for use in new equipment but needs to be retained to provide for the servicing of existing equipment that is expected to have a long working life.

1 Scope

This British Standard specifies the "plan" dimensions of gaskets suitable for use with flanges to BS 10[7], BS 1770[8] and BS 2035[9].

This standard does not include spiral edge-wound or other special types of gasket.

Dimensions of gaskets for use with flanges to BS 10, Table K, Table R and Table S have been limited to sizes up to and including 15 in, 5 in and 3 in flange size designations respectively and no gasket dimensions have been standardized for BS 10, Table T. This is because wide variations may occur in the actual inside diameters of steel pipes fitted with flanges of the same size designations to the higher tables of BS 10. In such cases, it is not practicable to specify the inside diameter of gaskets and there would be little advantage in specifying the outside diameters only.

NOTE Gasket dimensions for flanges for the petroleum industry are given in the British Standards for pipe flanges and gaskets for the petroleum industry, BS1560[10], BS 3293[11], BS 3381[12], BS 1575[13] and BS 1576[14].

2 Definition

For the purposes of this standard, the following definition applies:

gasket

packing which is used between flat flanges and faces

3 Dimensions

The "plan" dimensions of gaskets to suit flanges to BS 10[7] shall conform to those given in Table A to Table S.

For pipes lined with bitumen or other material, the inside diameter of gaskets may be altered by agreement between purchaser and manufacturer.

The "plan" dimensions of gaskets to suit flanges to BS 1770[8] shall conform to those given in Table 1 to Table 3.

4 Marking

By agreement between purchaser and manufacturer gaskets which conform to the dimensions specified in this standard may be marked with the BS number, table reference and flange size designation or flange reference number to which they refer.

Examples: "BS 10, Table A, 6 in"
"BS 1770, Table 1, ref. No. 1".

[7] BS 10, *"Flanges and bolting for pipes, valves and fittings"*.
[8] BS 1770, "*Pipe flanges for use on internal combustion engines and installations*".
[9] BS 2035, "*Cast iron flanged pipes and flanged fittings*".
[10] BS 1560, "*Steel pipe flanges and flanged fittings (nominal sizes ½ in to 24 in) for the petroleum industry*".
[11] BS 3293, "*Carbon steel pipe flanges (over 24 in nominal size) for the petroleum industry*".
[12] BS 3381, "*Metallic spiral wound gaskets for the petroleum and petrochemical industry*".
[13] BS 1575, "*Cast iron pipe flanges and flanged fittings, Class 125, for the petroleum industry*".
[14] BS 1576, "*Cast iron pipe flanges and flanged fittings, Class 250, for the petroleum industry*".

Table A — Gaskets to suit pipe flanges to BS 10, Table A

i) "Inside bolt circle" gaskets (all dimensions are in inches)

Flange size designation (nominal bore of pipe)	Outside diameter	Inside diameter	Gasket also suitable for Tables
1/2	2 1/16	27/32	Table D, Table E, Table F
3/4	2 5/16	1 1/16	Table D, Table E, Table F
1	2 11/16	1 11/32	Table D, Table E, Table F, Table H
1 1/4	2 7/8	1 11/16	Table D, Table E
1 1/2	3 5/16	1 29/32	Table D, Table E
2	3 3/4	2 3/8	Table D, Table E
2 1/2	4 1/4	3	Table D, Table E
3	5	3 1/2	Table D, Table E
3 1/2	5 3/4	4	Table D, Table E
4	6 1/4	4 1/2	Table D, Table E
5	7 1/2	5 1/2	Table D, Table E
6	8 1/2	6 5/8	Table D
7	9 1/2	7 5/8	Table D
8	10 3/4	8 5/8	Table D
9	12	9 5/8	Table D
10	13 1/8	10 3/4	Table D, Table E
12	15 1/8	12 3/4	Table D
13	16 3/8	14	Table D
14	17 1/2	15	Table D, Table E
15	18 1/2	16	Table D, Table E
16	19 1/2	17	Table D, Table E
17	20 3/4	18	Table D, Table E
18	22	19	Table D, Table E
19	23	20	Table D, Table E

Table A — Gaskets to suit pipe flanges to BS 10, Table A

ii) "Full face" gaskets (all dimensions are in inches)

Flange size designation (nominal bore of pipe)	Outside diameter	Inside diameter	P.C. diameter of bolt holes	No. of bolt holes	Bolt hole diameter	Gasket also suitable for Tables
1/2	3 3/4	27/32	2 5/8	4	9/16	Table D, Table E, Table F
3/4	4	1 1/16	2 7/8	4	9/16	Table D, Table E, Table F
1	4 1/2	1 11/32	3 1/4	4	9/16	Table D, Table E
1 1/4	4 3/4	1 11/16	3 7/16	4	9/16	Table D, Table E
1 1/2	5 1/4	1 29/32	3 7/8	4	9/16	Table D, Table E
2	6	2 3/8	4 1/2	4	3/4	Table D, Table E
2 1/2	6 1/2	3	5	4	3/4	Table D, Table E
3	7 1/4	3 1/2	5 3/4	4	3/4	Table D, Table E
3 1/2	8	4	6 1/2	4	3/4	Table D
4	8 1/2	4 1/2	7	4	3/4	Table D
5	10	5 1/2	8 1/4	4	3/4	—
6	11	6 5/8	9 1/4	4	3/4	—
7	12	7 5/8	10 1/4	8	3/4	Table D
8	13 1/4	8 5/8	11 1/2	8	3/4	Table D
9	14 1/2	9 5/8	12 3/4	8	3/4	Table D
10	16	10 3/4	14	8	7/8	Table D
12	18	12 3/4	16	8	7/8	—
13	19 1/4	14	17 1/4	8	7/8	—
14	20 3/4	15	18 1/2	8	1	—
15	21 3/4	16	19 1/2	8	1	—
16	22 3/4	17	20 1/2	12	1	Table D, Table E
17	24	18	21 3/4	12	1	Table D, Table E
18	25 1/4	19	23	12	1	Table D
19	26 1/2	20	24	12	1	Table D

Table A — Gaskets to suit pipe flanges to BS 10, Table A

i) "Inside bolt circle" gaskets (all dimensions are in inches)

Flange size designation (nominal bore of pipe)	Outside diameter	Inside diameter	Gasket also suitable for Tables
20	$24^{1}/_{4}$	21	Table D, Table E
21	$25^{1}/_{2}$	22	Table D
22	$26^{3}/_{8}$	23	Table D, Table E
23	$27^{3}/_{8}$	24	Table D, Table E
24	$28^{5}/_{8}$	25	Table D,
27	$30^{5}/_{8}$	28	—
29	$32^{5}/_{8}$	30	—
30	$33^{5}/_{8}$	31	—
33	$36^{7}/_{8}$	34	—
35	$38^{7}/_{8}$	36	—
36	$39^{7}/_{8}$	37	—
39	$42^{7}/_{8}$	40	—
42	$45^{7}/_{8}$	43	—
45	$49^{1}/_{8}$	46	—
48	$52^{1}/_{8}$	49	—
54	$58^{7}/_{8}$	55	Table D
60	$65^{5}/_{8}$	61	—
66	$71^{7}/_{8}$	$67^{1}/_{4}$	—
72	78	$73^{1}/_{4}$	—

Table A — Gaskets to suit pipe flanges to BS 10, Table A

ii) "Full face" gaskets (all dimensions are in inches)

Flange size designation (nominal bore of pipe)	Outside diameter	Inside diameter	P.C. diameter of bolt holes	No. of bolt holes	Bolt hole diameter	Gasket also suitable for Tables
20	$27\frac{3}{4}$	21	$25\frac{1}{4}$	12	1	—
21	29	22	$26\frac{1}{2}$	12	1	—
22	30	23	$27\frac{1}{2}$	12	$1\frac{1}{8}$	—
23	31	24	$28\frac{1}{2}$	12	$1\frac{1}{8}$	—
24	$32\frac{1}{2}$	25	$29\frac{3}{4}$	12	$1\frac{1}{8}$	—
27	$34\frac{1}{4}$	28	$31\frac{3}{4}$	16	$1\frac{1}{8}$	—
29	$36\frac{1}{4}$	30	$33\frac{3}{4}$	20	$1\frac{1}{8}$	—
30	$37\frac{1}{4}$	31	$34\frac{3}{4}$	20	$1\frac{1}{8}$	—
33	$40\frac{1}{2}$	34	38	20	$1\frac{1}{8}$	—
35	$42\frac{1}{2}$	36	40	24	$1\frac{1}{8}$	—
36	$43\frac{1}{2}$	37	41	24	$1\frac{1}{8}$	—
39	$46\frac{1}{2}$	40	44	24	$1\frac{1}{8}$	—
42	$49\frac{1}{2}$	43	47	28	$1\frac{1}{8}$	—
45	$52\frac{3}{4}$	46	$50\frac{1}{4}$	28	$1\frac{1}{8}$	—
48	$55\frac{3}{4}$	49	$53\frac{1}{4}$	28	$1\frac{1}{8}$	—
54	$63\frac{1}{4}$	55	$60\frac{1}{4}$	32	$1\frac{3}{8}$	—
60	$70\frac{1}{4}$	61	67	32	$1\frac{3}{8}$	—
66	$76\frac{1}{2}$	$67\frac{1}{4}$	$73\frac{1}{4}$	32	$1\frac{3}{8}$	—
72	83	$73\frac{1}{4}$	$79\frac{1}{2}$	36	$1\frac{1}{2}$	—

Table D — Gaskets to suit pipe flanges to BS 10, Table D

i) "Inside bolt circle" gaskets (all dimensions are in inches)

Flange size designation (nominal bore of pipe)	Outside diameter	Inside diameter	Gasket also suitable for Tables
1/2	2 1/16	27/32	Table A, Table E, Table F
3/4	2 5/16	1 1/16	Table A, Table E, Table F
1	2 11/16	1 11/32	Table A, Table E, Table F, Table H
1 1/4	2 7/8	1 11/16	Table A, Table E
1 1/2	3 5/16	1 29/32	Table A, Table E
2	3 3/4	2 3/8	Table A, Table E
2 1/2	4 1/4	3	Table A, Table E
3	5	3 1/2	Table A, Table E
3 1/2	5 3/4	4	Table A, Table E
4	6 1/4	4 1/2	Table A, Table E
5	7 1/2	5 1/2	Table A, Table E
6	8 1/2	6 5/8	Table A
7	9 1/2	7 5/8	Table A
8	10 3/4	8 5/8	Table A
9	12	9 5/8	Table A
10	13 1/8	10 3/4	Table A, Table E
12	15 1/8	12 3/4	Table A
13	16 3/8	14	Table A
14	17 1/2	15	Table A, Table E
15	18 1/2	16	Table A, Table E
16	19 1/2	17	Table A, Table E
17	20 3/4	18	Table A, Table E
18	22	19	Table A, Table E
19	23	20	Table A, Table E

Table D — Gaskets to suit pipe flanges to BS 10, Table D

ii) "Full face" gaskets (all dimensions are in inches)

Flange size designation (nominal bore of pipe)	Outside diameter	Inside diameter	P.C. diameter of bolt holes	No. of bolt holes	Bolt hole diameter	Gasket also suitable for Tables
1/2	3 3/4	27/32	2 5/8	4	9/16	Table A, Table E, Table F
3/4	4	1 1/16	2 7/8	4	9/16	Table A, Table E, Table F
1	4 1/2	1 11/32	3 1/4	4	9/16	Table A, Table E
1 1/4	4 3/4	1 11/16	3 7/16	4	9/16	Table A, Table E
1 1/2	5 1/4	1 29/32	3 7/8	4	9/16	Table A, Table E
2	6	2 3/8	4 1/2	4	3/4	Table A, Table E
2 1/2	6 1/2	3	5	4	3/4	Table A, Table E
3	7 1/4	3 1/2	5 3/4	4	3/4	Table A, Table E
3 1/2	8	4	6 1/2	4	3/4	Table A,
4	8 1/2	4 1/2	7	4	3/4	Table A,
5	10	5 1/2	8 1/4	8	3/4	Table E
6	11	6 5/8	9 1/4	8	3/4	—
7	12	7 5/8	10 1/4	8	3/4	Table A
8	13 1/4	8 5/8	11 1/2	8	3/4	Table A
9	14 1/2	9 5/8	12 3/4	8	3/4	Table A
10	16	10 3/4	14	8	7/8	Table A
12	18	12 3/4	16	12	7/8	—
13	19 1/4	14	17 1/4	12	7/8	—
14	20 3/4	15	18 1/2	12	1	Table E
15	21 3/4	16	19 1/2	12	1	Table E
16	22 3/4	17	20 1/2	12	1	Table A, Table E
17	24	18	21 3/4	12	1	Table A, Table E
18	25 1/4	19	23	12	1	Table A
19	26 1/2	20	24	12	1	Table A

Table D — Gaskets to suit pipe flanges to BS 10, Table D

i) "Inside bolt circle" gaskets (all dimensions are in inches)

Flange size designation (nominal bore of pipe)	Outside diameter	Inside diameter	Gasket also suitable for Tables
20	$24^{1}/_{4}$	21	Table A, Table E
21	$25^{1}/_{2}$	22	Table A
22	$26^{3}/_{8}$	23	Table A, Table E
23	$27^{3}/_{8}$	24	Table A, Table E
24	$28^{5}/_{8}$	25	Table A
27	$32^{1}/_{8}$	28	—
29	$34^{1}/_{4}$	30	—
30	$35^{1}/_{4}$	31	—
33	$38^{5}/_{8}$	34	Table E
35	$40^{5}/_{8}$	36	Table E
36	$41^{5}/_{8}$	37	Table E
39	$44^{7}/_{8}$	40	—
42	$47^{7}/_{8}$	43	—
45	$51^{1}/_{8}$	46	—
48	$54^{1}/_{8}$	49	—
54	$58^{7}/_{8}$	55	Table A
60	$65^{1}/_{2}$	61	—
66	$71^{3}/_{4}$	$67^{1}/_{4}$	—
72	$77^{7}/_{8}$	$73^{1}/_{4}$	—

Table D — Gaskets to suit pipe flanges to BS 10, Table D

ii) "Full face" gaskets (all dimensions are in inches)

Flange size designation (nominal bore of pipe)	Outside diameter	Inside diameter	P.C. diameter of bolt holes	No. of bolt holes	Bolt hole diameter	Gasket also suitable for Tables
20	$27\frac{3}{4}$	21	$25\frac{1}{4}$	16	1	Table E
21	29	22	$26\frac{1}{2}$	16	1	—
22	30	23	$27\frac{1}{2}$	16	$1\frac{1}{8}$	Table E
23	31	24	$28\frac{1}{2}$	16	$1\frac{1}{8}$	Table E
24	$32\frac{1}{2}$	25	$29\frac{3}{4}$	16	$1\frac{1}{8}$	—
27	$35\frac{3}{4}$	28	$33\frac{1}{4}$	20	$1\frac{1}{8}$	—
29	$38\frac{1}{4}$	30	$35\frac{1}{2}$	20	$1\frac{1}{4}$	—
30	$39\frac{1}{4}$	31	$36\frac{1}{2}$	20	$1\frac{1}{4}$	—
33	43	34	40	20	$1\frac{3}{8}$	Table E
35	45	36	42	24	$1\frac{3}{8}$	Table E
36	$46\frac{1}{4}$	37	43	24	$1\frac{3}{8}$	Table E
39	$49\frac{1}{2}$	40	$46\frac{1}{4}$	24	$1\frac{3}{8}$	—
42	$52\frac{1}{2}$	43	$49\frac{1}{4}$	28	$1\frac{3}{8}$	—
45	$55\frac{3}{4}$	46	$52\frac{1}{2}$	28	$1\frac{3}{8}$	—
48	$58\frac{3}{4}$	49	$55\frac{1}{2}$	32	$1\frac{3}{8}$	—
54	$63\frac{1}{4}$	55	$60\frac{1}{4}$	36	$1\frac{3}{8}$	—
60	$70\frac{1}{4}$	61	67	40	$1\frac{1}{2}$	—
66	$76\frac{1}{2}$	$67\frac{1}{4}$	$73\frac{1}{4}$	40	$1\frac{1}{2}$	—
72	83	$73\frac{1}{4}$	$79\frac{1}{2}$	44	$1\frac{5}{8}$	—

Table E — Gaskets to suit pipe flanges to BS 10, Table E

i) "Inside bolt circle" gaskets (all dimensions are in inches)

Flange size designation (nominal bore of pipe)	Outside diameter	Inside diameter	Gasket also suitable for Tables
1/2	2 1/16	27/32	Table A, Table D, Table F
3/4	2 5/16	1 1/16	Table A, Table D, Table F
1	2 11/16	1 11/32	Table A, Table D, Table F, Table H
1 1/4	2 7/8	1 11/16	Table A, Table D
1 1/2	3 5/16	1 29/32	Table A, Table D
2	3 3/4	2 3/8	Table A, Table D
2 1/2	4 1/4	3	Table A, Table D
3	5	3 1/2	Table A, Table D
3 1/2	5 3/4	4	Table A, Table D
4	6 1/4	4 1/2	Table A, Table D
5	7 1/2	5 1/2	Table A, Table D
6	8 3/8	6 5/8	—
7	9 3/8	7 5/8	—
8	10 5/8	8 5/8	—
9	11 7/8	9 5/8	—
10	13 1/8	10 3/4	Table A, Table D
12	15	12 3/4	—
13	16 1/4	14	—
14	17 1/2	15	Table A, Table D
15	18 1/2	16	Table A, Table D
16	19 1/2	17	Table A, Table D
17	20 3/4	18	Table A, Table D
18	22	19	Table A, Table D
19	23	20	Table A, Table D

Table E — Gaskets to suit pipe flanges to BS 10, Table E

ii) "Full face" gaskets (all dimensions are in inches)

Flange size designation (nominal bore of pipe)	Outside diameter	Inside diameter	P.C. diameter of bolt holes	No. of bolt holes	Bolt hole diameter	Gasket also suitable for Tables
1/2	3 3/4	27/32	2 5/8	4	9/16	Table A, Table D, Table F
3/4	4	1 1/16	2 7/8	4	9/16	Table A, Table D, Table F
1	4 1/2	1 11/32	3 1/4	4	9/16	Table A, Table D,
1 1/4	4 3/4	1 11/16	3 7/16	4	9/16	Table A, Table D
1 1/2	5 1/4	1 29/32	3 7/8	4	9/16	Table A, Table D
2	6	2 3/8	4 1/2	4	3/4	Table A, Table D
2 1/2	6 1/2	3	5	4	3/4	Table A, Table D
3	7 1/4	3 1/2	5 3/4	4	3/4	Table A, Table D
3 1/2	8	4	6 1/2	8	3/4	—
4	8 1/2	4 1/2	7	8	3/4	—
5	10	5 1/2	8 1/4	8	3/4	Table D
6	11	6 5/8	9 1/4	8	7/8	—
7	12	7 5/8	10 1/4	8	7/8	—
8	13 1/4	8 5/8	11 1/2	8	7/8	—
9	14 1/2	9 5/8	12 3/4	12	7/8	—
10	16	10 3/4	14	12	7/8	—
12	18	12 3/4	16	12	1	—
13	19 1/4	14	17 1/4	12	1	—
14	20 3/4	15	18 1/2	12	1	Table D
15	21 3/4	16	19 1/2	12	1	Table D
16	22 3/4	17	20 1/2	12	1	Table A, Table D
17	24	18	21 3/4	12	1	Table A, Table D
18	25 1/4	19	23	16	1	—
19	26 1/2	20	24	16	1	—

Table E — Gaskets to suit pipe flanges to BS 10, Table E

i) "Inside bolt circle" gaskets (all dimensions are in inches)

Flange size designation (nominal bore of pipe)	Outside diameter	Inside diameter	Gasket also suitable for Tables
20	$24^{1}/_{4}$	21	Table A, Table D
21	$25^{3}/_{8}$	22	—
22	$26^{3}/_{8}$	23	Table A, Table D
23	$27^{3}/_{8}$	24	Table A, Table D
24	$28^{1}/_{2}$	25	—
27	32	28	—
29	$34^{1}/_{8}$	30	—
30	$35^{1}/_{8}$	31	—
33	$38^{5}/_{8}$	34	Table D
35	$40^{5}/_{8}$	36	Table D
36	$41^{5}/_{8}$	37	Table D
39	$44^{3}/_{4}$	40	—
42	$47^{3}/_{4}$	43	—
45	51	46	—
48	54	49	—

Table E — Gaskets to suit pipe flanges to BS 10, Table E

ii) "Full face" gaskets (all dimensions are in inches)

Flange size designation (nominal bore of pipe)	Outside diameter	Inside diameter	P.C. diameter of bolt holes	No. of bolt holes	Bolt hole diameter	Gasket also suitable for Tables
20	$27\frac{3}{4}$	21	$25\frac{1}{4}$	16	1	Table D
21	29	22	$26\frac{1}{2}$	16	$1\frac{1}{8}$	—
22	30	23	$27\frac{1}{2}$	16	$1\frac{1}{8}$	Table D
23	31	24	$28\frac{1}{2}$	16	$1\frac{1}{8}$	Table D
24	$32\frac{1}{2}$	25	$29\frac{3}{4}$	16	$1\frac{1}{4}$	—
27	$35\frac{3}{4}$	28	$33\frac{1}{4}$	20	$1\frac{1}{4}$	—
29	$38\frac{1}{4}$	30	$35\frac{1}{2}$	20	$1\frac{3}{8}$	—
30	$39\frac{1}{4}$	31	$36\frac{1}{2}$	20	$1\frac{3}{8}$	—
33	43	34	40	20	$1\frac{3}{8}$	Table D
35	45	36	42	24	$1\frac{3}{8}$	Table D
36	$46\frac{1}{4}$	37	43	24	$1\frac{3}{8}$	Table D
39	$49\frac{1}{2}$	40	$46\frac{1}{4}$	24	$1\frac{1}{2}$	—
42	$52\frac{1}{2}$	43	$49\frac{1}{4}$	28	$1\frac{1}{2}$	—
45	$55\frac{3}{4}$	46	$52\frac{1}{2}$	28	$1\frac{1}{2}$	—
48	$58\frac{3}{4}$	49	$55\frac{1}{2}$	32	$1\frac{1}{2}$	—

Table F — Gaskets to suit pipe flanges to BS 10, Table F

i) "Inside bolt circle" gaskets (all dimensions are in inches)

Flange size designation (nominal bore of pipe)	Outside diameter	Inside diameter	Gasket also suitable for Tables
1/2	2 1/16	27/32	Table A, Table D, Table E
3/4	2 5/16	1 1/16	Table A, Table D, Table E
1	2 11/16	1 11/32	Table A, Table D, Table E, Table H
1 1/4	3 1/8	1 11/16	Table H
1 1/2	3 3/8	1 29/32	Table H
2	4 1/4	2 3/8	Table H
2 1/2	5	3	Table H
3	5 3/4	3 1/2	Table H
3 1/2	6 1/4	4	Table H, Table K
4	6 3/4	4 1/2	Table H, Table K
5	8 3/8	5 1/2	Table H
6	9 3/8	6 5/8	Table H
7	10 5/8	7 5/8	Table H
8	11 7/8	8 5/8	Table H
9	13	9 5/8	Table H
10	14	10 3/4	Table H
12	16 1/4	12 3/4	Table H
13	17 3/8	14	Table H
14	18 3/8	15	Table H
15	19 3/8	16	Table H
16	20 5/8	17	Table H
17	21 7/8	18	Table H
18	22 3/4	19	Table H
19	24	20	Table H
20	25 1/4	21	Table H
21	26 1/4	22	Table H
22	27 1/4	23	Table H
23	28 3/8	24	Table H
24	29 3/8	25	Table H

Table F — Gaskets to suit pipe flanges to BS 10, Table F

ii) "Full face" gaskets (all dimensions are in inches)

Flange size designation (nominal bore of pipe)	Outside diameter	Inside diameter	P.C. diameter of bolt holes	No. of bolt holes	Blot hole diameter	Gasket also suitable for Tables
1/2	3 3/4	27/32	2 5/8	4	9/16	Table A, Table D, Table E
3/4	4	1 1/16	2 7/8	4	9/16	Table A, Table D, Table E
1	4 3/4	1 11/32	3 7/16	4	3/4	Table H
1 1/4	5 1/4	1 11/16	3 7/8	4	3/4	Table H
1 1/2	5 1/2	1 29/32	4 1/8	4	3/4	Table H
2	6 1/2	2 3/8	5	4	3/4	Table H
2 1/2	7 1/4	3	5 3/4	8	3/4	Table H
3	8	3 1/2	6 1/2	8	3/4	Table H
3 1/2	8 1/2	4	7	8	3/4	Table H
4	9	4 1/2	7 1/2	8	3/4	Table H
5	11	5 1/2	9 1/4	8	7/8	Table H
6	12	6 5/8	10 1/4	12	7/8	Table H
7	13 1/4	7 5/8	11 1/2	12	7/8	Table H
8	14 1/2	8 5/8	12 3/4	12	7/8	Table H
9	16	9 5/8	14	12	1	Table H
10	17	10 3/4	15	12	1	Table H
12	19 1/4	12 3/4	17 1/4	16	1	Table H
13	20 3/4	14	18 1/2	16	1 1/8	Table H
14	21 3/4	15	19 1/2	16	1 1/8	Table H
15	22 3/4	16	20 1/2	16	1 1/8	Table H
16	24	17	21 3/4	20	1 1/8	Table H
17	25 1/4	18	23	20	1 1/8	Table H
18	26 1/2	19	24	20	1 1/4	Table H
19	27 3/4	20	25 1/4	20	1 1/4	Table H
20	29	21	26 1/2	24	1 1/4	Table H
21	30	22	27 1/2	24	1 1/4	Table H
22	31	23	28 1/2	24	1 1/4	Table H
23	32 1/2	24	29 3/4	24	1 3/8	Table H
24	33 1/2	25	30 3/4	24	1 3/8	Table H

Table H — Gaskets to suit pipe flanges to BS 10, Table H

i) "Inside bolt circle" gaskets (all dimensions are in inches)

Flange size designation (nominal bore of pipe)	Outside diameter	Inside diameter	Gasket also suitable for Tables
1/2	2 1/2	27/32	—
3/4	2 1/2	1 1/16	—
1	2 11/16	1 11/32	Table A, Table D, Table E, Table F
1 1/4	3 1/8	1 11/16	Table F
1 1/2	3 3/8	1 29/32	Table F
2	4 1/4	2 3/8	Table F
2 1/2	5	3	Table F
3	5 3/4	3 1/2	Table F
3 1/2	6 1/4	4	Table F, Table K
4	6 3/4	4 1/2	Table F, Table K
5	8 3/8	5 1/2	Table F
6	9 3/8	6 5/8	Table F
7	10 5/8	7 5/8	Table F
8	11 7/8	8 5/8	Table F
9	13	9 5/8	Table F
10	14	10 3/4	Table F
12	16 1/4	12 3/4	Table F
13	17 3/8	14	Table F
14	18 3/8	15	Table F
15	19 3/8	16	Table F
16	20 5/8	17	Table F
17	21 7/8	18	Table F
18	22 3/4	19	Table F
19	24	20	Table F
20	25 1/4	21	Table F
21	26 1/4	22	Table F
22	27 1/4	23	Table F
23	28 3/8	24	Table F
24	29 3/8	25	Table F

Table H — Gaskets to suit pipe flanges to BS 10, Table H

ii) "Full face" gaskets (all dimensions are in inches)

Flange size designation (nominal bore of pipe)	Outside diameter	Inside diameter	P.C. diameter of bolt holes	No. of bolt holes	Blot hole diameter	Gasket also suitable for Tables
1/2	4 1/2	27/32	3 1/4	4	3/4	—
3/4	4 1/2	1 1/16	3 1/4	4	3/4	—
1	4 3/4	1 11/32	3 7/16	4	3/4	Table F
1 1/4	5 1/4	1 11/16	3 7/8	4	3/4	Table F
1 1/2	5 1/2	1 29/32	4 1/8	4	3/4	Table F
2	6 1/2	2 3/8	5	4	3/4	Table F
2 1/2	7 1/4	3	5 3/4	8	3/4	Table F
3	8	3 1/2	6 1/2	8	3/4	Table F
3 1/2	8 1/2	4	7	8	3/4	Table F
4	9	4 1/2	7 1/2	8	3/4	Table F
5	11	5 1/2	9 1/4	8	7/8	Table F
6	12	6 5/8	10 1/4	12	7/8	Table F
7	13 1/4	7 5/8	11 1/2	12	7/8	Table F
8	14 1/2	8 5/8	12 3/4	12	7/8	Table F
9	16	9 5/8	14	12	1	Table F
10	17	10 3/4	15	12	1	Table F
12	19 1/4	12 3/4	17 1/4	16	1	Table F
13	20 3/4	14	18 1/4	16	1 1/8	Table F
14	21 3/4	15	19 1/2	16	1 1/8	Table F
15	22 3/4	16	20 1/2	16	1 1/8	Table F
16	24	17	21 3/4	20	1 1/8	Table F
17	25 1/4	18	23	20	1 1/8	Table F
18	26 1/2	19	24	20	1 1/4	Table F
19	27 3/4	20	25 1/4	20	1 1/4	Table F
20	29	21	26 1/2	24	1 1/4	Table F
21	30	22	27 1/2	24	1 1/4	Table F
22	31	23	28 1/2	24	1 1/4	Table F
23	32 1/2	24	29 3/4	24	1 3/8	Table F
24	33 1/2	25	30 3/4	24	1 3/8	Table F

Table J — Gaskets to suit pipe flanges to BS 10, Table J

i) "Inside bolt circle" gaskets (all dimensions are in inches)

Flange size designation (nominal bore of pipe)	Outside diameter	Inside diameter	Gasket also suitable for Tables
1/2	2 9/16	27/32	Table K
3/4	2 9/16	1 1/16	Table K
1	2 3/4	1 11/32	—
1 1/4	3 3/16	1 11/16	Table K
1 1/2	3 7/16	1 29/32	—
2	4 1/8	2 3/8	—
2 1/2	4 7/8	3	Table K
3	5 5/8	3 1/2	Table K
3 1/2	6 1/8	4	—
4	6 5/8	4 1/2	—
5	8 1/4	5 1/2	Table K
6	9 1/4	6 5/8	Table K
7	10 1/2	7 5/8	—
8	11 3/4	8 5/8	—
9	12 7/8	9 5/8	—
10	13 7/8	10 3/4	—
12	16 1/8	12 3/4	—
13	17 1/4	14	—
14	18 1/4	15	—
15	19 1/4	16	—
16	20 1/2	17	—
17	21 3/4	18	—
18	22 5/8	19	—
19	23 7/8	20	—
20	25 1/8	21	—
21	26 1/8	22	—
22	27 1/8	23	—
23	28 1/4	24	—
24	29 1/4	25	—

Table J — Gaskets to suit pipe flanges to BS 10, Table J

ii) "Full face" gaskets (all dimensions are in inches)

Flange size designation (nominal bore of pipe)	Outside diameter	Inside diameter	P.C. diameter of bolt holes	No. of bolt holes	Bolt hole diameter	Gasket also suitable for Tables
1/2	4 1/2	27/32	3 1/4	4	11/16	Table K
3/4	4 1/2	1 1/16	3 1/4	4	11/16	Table K
1	4 3/4	1 11/32	3 7/16	4	11/16	—
1 1/4	5 1/4	1 11/16	3 7/8	4	11/16	Table K
1 1/2	5 1/2	1 29/32	4 1/8	4	11/16	—
2	6 1/2	2 3/8	5	4	7/8	—
2 1/2	7 1/4	3	5 3/4	8	7/8	Table K
3	8	3 1/2	6 1/2	8	7/8	Table K
3 1/2	8 1/2	4	7	8	7/8	—
4	9	4 1/2	7 1/2	8	7/8	—
5	11	5 1/2	9 1/4	8	1	—
6	12	6 5/8	10 1/4	12	1	Table K
7	13 1/4	7 5/8	11 1/2	12	1	—
8	14 1/2	8 5/8	12 3/4	12	1	—
9	16	9 5/8	14	12	1 1/8	—
10	17	10 3/4	15	12	1 1/8	—
12	19 1/4	12 3/4	17 1/4	16	1 1/8	—
13	20 3/4	14	18 1/2	16	1 1/4	—
14	21 3/4	15	19 1/2	16	1 1/4	—
15	22 3/4	16	20 1/2	16	1 1/4	—
16	24	17	21 3/4	20	1 1/4	—
17	25 1/4	18	23	20	1 1/4	—
18	26 1/2	19	24	20	1 3/8	—
19	27 3/4	20	25 1/4	20	1 3/8	—
20	29	21	26 1/2	24	1 3/8	—
21	30	22	27 1/2	24	1 3/8	—
22	31	23	28 1/2	24	1 3/8	—
23	32 1/2	24	29 3/4	24	1 1/2	—
24	33 1/2	25	30 3/4	24	1 1/2	—

Table K — Gaskets to suit pipe flanges to BS 10, Table K

i) "Inside bolt circle" gaskets (all dimensions are in inches)

Flange size designation (nominal bore of pipe)	Outside diameter	Inside diameter	Gasket also suitable for Tables
1/2	2 9/16	27/32	Table J
3/4	2 9/16	1 1/16	Table J
1	3 1/16	1 11/32	—
1 1/4	3 3/16	1 11/16	Table J
1 1/2	3 5/8	1 29/32	—
2	4 5/16	2 3/8	—
2 1/2	4 7/8	3	Table J
3	5 5/8	3 1/2	Table J
3 1/2	6 1/4	4	Table F, Table H
4	6 3/4	4 1/2	Table F, Table H
5	8 1/4	5 1/2	Table J
6	9 1/4	6 5/8	Table J
7	10 3/4	7 1/2	—
8	11 3/8	8 1/2	—
9	12 7/8	9 1/2	—
10	13 7/8	10 5/8	—
12	15 3/4	12 5/8	—
13	17 5/8	13 5/8	—
14	18 5/8	14 5/8	—
15	19 7/8	15 5/8	—

Table K — Gaskets to suit pipe flanges to BS 10, Table K

ii) "Full face" gaskets (all dimensions are in inches)

Flange size designation (nominal bore of pipe)	Outside diameter	Inside diameter	P.C. diameter of bolt holes	No. of bolt holes	Bolt hole diameter	Gasket also suitable for Tables
1/2	4 1/2	27/32	3 1/4	4	11/16	Table J
3/4	4 1/2	1 1/16	3 1/4	4	11/16	Table J
1	5	1 11/32	3 3/4	4	11/16	—
1 1/4	5 1/4	1 11/16	3 7/8	4	11/16	Table J
1 1/2	6	1 29/32	4 1/2	4	7/8	—
2	6 1/2	2 3/8	5	8	11/16	—
2 1/2	7 1/4	3	5 3/4	8	7/8	Table J
3	8	3 1/2	6 1/2	8	7/8	Table J
3 1/2	9	4	7 1/4	8	1	—
4	9 1/2	4 1/2	7 3/4	8	1	—
5	11	5 1/2	9 1/4	12	1	—
6	12	6 5/8	10 1/4	12	1	Table J
7	13 1/2	7 1/2	11 1/2	12	1 1/8	—
8	14 1/2	8 1/2	12 1/2	12	1 1/8	—
9	16	9 1/2	14	16	1 1/8	—
10	17	10 5/8	15	16	1 1/8	—
12	19 1/4	12 5/8	17	16	1 1/4	—
13	21 1/2	13 5/8	19	16	1 3/8	—
14	22 1/2	14 5/8	20	16	1 3/8	—
15	23 3/4	15 5/8	21 1/4	20	1 3/8	—

Table R — Gaskets to suit pipe flanges to BS 10, Table R

"Inside bolt circle" gaskets (all dimensions are in inches)
(See also Clause **1**)

Flange size designation (nominal bore of pipe)	Outside diameter	Inside diameter	Gasket also suitable for Tables
1/2	2 9/16	3/4	—
3/4	2 9/16	7/8	—
1	3 1/16	1 1/4	—
1 1/4	3 3/16	1 5/8	—
1 1/2	3 5/8	1 13/16	—
2	4 5/16	2 1/4	—
2 1/2	4 7/8	2 7/8	Table S
3	5 5/8	3 3/8	—
3 1/2	6 1/4	3 7/8	—
4	6 3/4	4 3/8	—
5	8 1/4	5 3/8	—

Table S — Gaskets to suit pipe flanges to BS 10, Table S

"Inside bolt circle" gaskets (all dimensions are in inches)
(See also Clause **1**)

Flange size designation (nominal bore of pipe)	Outside diameter	Inside diameter	Gasket also suitable for Tables
1/2	2 5/8	13/16	—
3/4	2 5/8	1	—
1	3 1/8	1 1/4	—
1 1/4	3 3/8	1 5/8	—
1 1/2	3 7/8	1 13/16	—
2	4 3/8	2 1/4	—
2 1/2	4 7/8	2 7/8	Table R
3	5 1/2	3 3/8	—

Gaskets to suit pipe flanges for use on internal combustion engines and installations to BS 1770

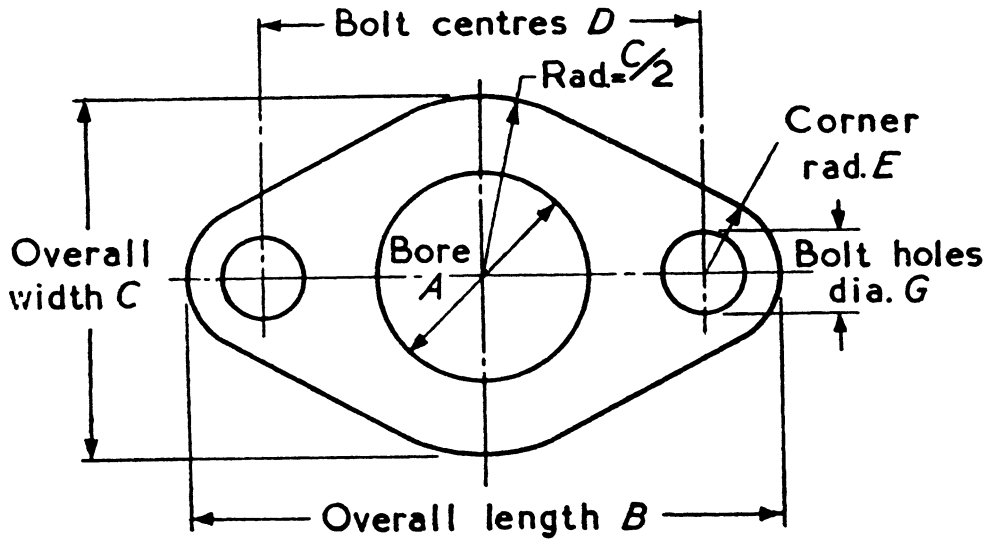

Figure 1 — Oval flanges

Table 1 — "Full face" gaskets to suit the screwed-on, brazed-on and welded-on oval flanges shown in Figure 1

(all dimensions are in inches)

Reference No. of flange (see BS 1770)	Bore *A*	Overall length *B*	Overall width *C*	Bolt centres *D*	Corner radius *E*	Bolt hole diameter *G*
0[a]	3/4	2 1/4	1 1/2	1 1/2	3/8	3/8
1	7/8	2 5/8	1 3/4	1 7/8	3/8	3/8
2	1 1/8	3	1 7/8	2 1/8	7/16	7/16
3	1 1/2	3 3/8	2 1/8	2 1/2	7/16	7/16
4	2	4 3/8	2 5/8	3 1/4	9/16	9/16
5	2 1/4	4 5/8	2 7/8	3 1/2	9/16	9/16
6	2 3/4	5 5/8	3 1/2	4 1/4	11/16	11/16
7	3 1/4	6 5/8	4 1/4	5	13/16	13/16
8	3 7/8	7 1/4	4 3/4	5 5/8	13/16	13/16
9	4 3/8	8 1/8	5 1/2	6 3/8	7/8	15/16
10	5 1/4	9	6	7 1/4	7/8	15/16

[a] This reference applies only to welded-on flanges.

Gaskets to suit pipe flanges for use on internal combustion engines and installations to BS 1770

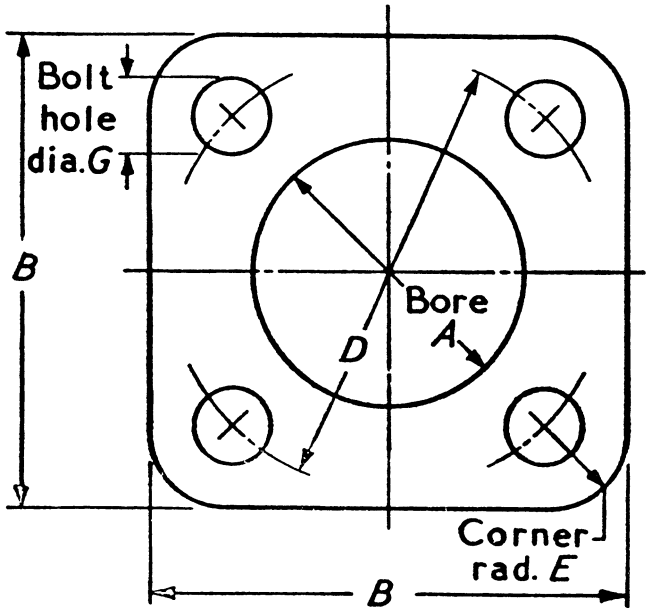

Figure 2 — Square flanges

Table 2 — "Full face" gaskets to suit the screwed-on, brazed-on and welded-on square flanges shown in Figure 2

(all dimensions are in inches)

Reference No. of flange (see BS 1770)	Bore *A*	Length and width *B*	Bolt centres *D*	Corner radius *E*	Bolt hole diameter *G*
1	$^{7}/_{8}$	$2^{1}/_{4}$	$1^{7}/_{8}$	$^{3}/_{8}$	$^{3}/_{8}$
2	$1^{1}/_{2}$	$2^{3}/_{8}$	$2^{1}/_{8}$	$^{7}/_{16}$	$^{7}/_{16}$
3	$1^{1}/_{2}$	$2^{3}/_{4}$	$2^{1}/_{2}$	$^{7}/_{16}$	$^{7}/_{16}$
4	2	$3^{1}/_{2}$	$3^{1}/_{4}$	$^{9}/_{16}$	$^{9}/_{16}$
5	$2^{1}/_{4}$	$3^{3}/_{4}$	$3^{1}/_{2}$	$^{9}/_{16}$	$^{9}/_{16}$
6	$2^{3}/_{4}$	$4^{1}/_{2}$	$4^{1}/_{4}$	$^{11}/_{16}$	$^{11}/_{16}$
7	$3^{1}/_{4}$	$5^{1}/_{4}$		$^{13}/_{16}$	$^{13}/_{16}$
8	$3^{7}/_{8}$	$5^{3}/_{4}$	$5^{5}/_{8}$	$^{13}/_{16}$	$^{13}/_{16}$
9	$4^{3}/_{8}$	$6^{1}/_{4}$	$6^{3}/_{8}$	$^{7}/_{8}$	$^{15}/_{16}$
10	$5^{1}/_{4}$	7	$7^{1}/_{4}$	$^{7}/_{8}$	$^{15}/_{16}$

Gaskets to suit pipe flanges for use on internal combustion engines and installations to BS 1770

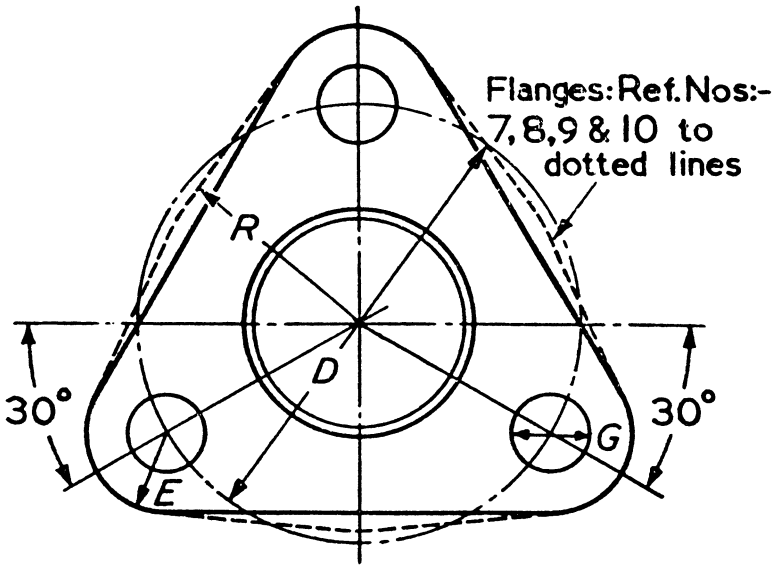

Figure 3 — Triangular flanges

Table 3 — "Full face" gaskets to suit the screwed-on, brazed-on and welded-on triangular flanges shown in Figure 3

(all dimensions are in inches)

Reference No. of flange (see BS 1770)	Bore *A*	Bolt centres *D*	Corner radius *E*	Bolt hole diameter *G*	Radius *R*
1	$^{7}/_{8}$	$1^{7}/_{8}$	$^{3}/_{8}$	$^{3}/_{8}$	—
2	$1^{1}/_{8}$	$2^{1}/_{8}$	$^{7}/_{16}$	$^{7}/_{16}$	—
3	$1^{1}/_{2}$	$2^{1}/_{2}$	$^{7}/_{16}$	$^{7}/_{16}$	—
4	2	$3^{1}/_{4}$	$^{9}/_{16}$	$^{9}/_{16}$	—
5	$2^{1}/_{4}$	$3^{1}/_{2}$	$^{9}/_{16}$	$^{9}/_{16}$	—
6	$2^{3}/_{4}$	$4^{1}/_{4}$	$^{11}/_{16}$	$^{11}/_{16}$	—
7	$3^{1}/_{4}$	5	$^{13}/_{16}$	$^{13}/_{16}$	$2^{1}/_{8}$
8	$3^{7}/_{8}$	$5^{5}/_{8}$	$^{13}/_{16}$	$^{13}/_{16}$	$2^{3}/_{8}$
9	$4^{3}/_{8}$	$6^{3}/_{8}$	$^{7}/_{8}$	$^{15}/_{16}$	$2^{3}/_{4}$
10	$5^{1}/_{4}$	$7^{1}/_{4}$	$^{7}/_{8}$	$^{15}/_{16}$	3

Appendix A Conversion table from inch to metric units

in	mm
1/16	1.588
1/8	3.175
1/4	6.35
3/8	9.525
1/2	12.7
5/8	15.875
3/4	19.05
7/8	22.225
1	25.4
2	50.8
3	76.2
4	101.6
5	127.0
6	152.4
7	177.8
8	203.2
9	228.6
10	254
20	508

These conversions are derived from BS 350, "*Conversion factors and tables*".

blank

BSI — British Standards Institution

BSI is the independent national body responsible for preparing British Standards. It presents the UK view on standards in Europe and at the international level. It is incorporated by Royal Charter.

Revisions

British Standards are updated by amendment or revision. Users of British Standards should make sure that they possess the latest amendments or editions.

It is the constant aim of BSI to improve the quality of our products and services. We would be grateful if anyone finding an inaccuracy or ambiguity while using this British Standard would inform the Secretary of the technical committee responsible, the identity of which can be found on the inside front cover. Tel: 020 8996 9000. Fax: 020 8996 7400.

BSI offers members an individual updating service called PLUS which ensures that subscribers automatically receive the latest editions of standards.

Buying standards

Orders for all BSI, international and foreign standards publications should be addressed to Customer Services. Tel: 020 8996 9001. Fax: 020 8996 7001.

In response to orders for international standards, it is BSI policy to supply the BSI implementation of those that have been published as British Standards, unless otherwise requested.

Information on standards

BSI provides a wide range of information on national, European and international standards through its Library and its Technical Help to Exporters Service. Various BSI electronic information services are also available which give details on all its products and services. Contact the Information Centre. Tel: 020 8996 7111. Fax: 020 8996 7048.

Subscribing members of BSI are kept up to date with standards developments and receive substantial discounts on the purchase price of standards. For details of these and other benefits contact Membership Administration. Tel: 020 8996 7002. Fax: 020 8996 7001.

Copyright

BSI
389 Chiswick High Road
London
W4 4AL