

FLANGE TABLES

DN

DN originates from the term 'Diameter Nominale'.

It is a rough translation of mm for imperial sizes. It assumes that an inch is 25mm (which it is not, it is 25.4mm!!).

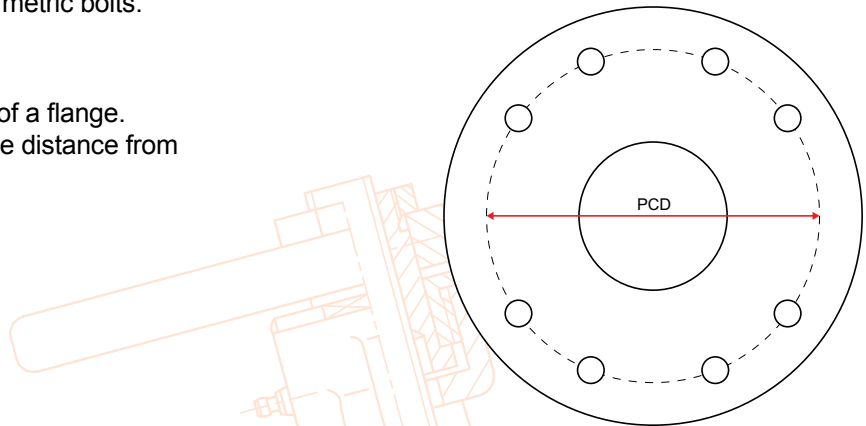
For example a 10" flange is referred to as 250mm in lieu of 254mm.

Even the ANSI imperial system is itself not exact in terms of bore size, hence it is termed 'nominal bore' as each class has a different bore. Note: metric ANSI equivalents are not different. However metric AS equivalents of BS can differ very slightly in bolt hole sizes to accommodate metric bolts.

PCD

One of the critical dimensions is the PCD of a flange.

PCD (Pitch Circle Diameter) represents the distance from the centre of two opposite bolt holes.



COMMON STANDARDS FOR FLANGES

British Standard - **BS10**

Table D
Table E
Table F
Table G
Table H
Table J
Table K

Table is the most popular for light industrial and water applications. All dimensions are specified in inches.

Australian Standard - **AS2129**

Table C
Table D
Table E
Table G
Table H

These flanges are equivalent to the BS10 flanges, except that all dimensions are specified in mm. In a few sizes, bolt holes are slightly larger due to metric bolting. AS2129 still in use but now only covers Table D to H (Table C now obsolete, Table J to T now replaced by AS4331 which is a replication of ISO7500-1 which in turn is equivalent to ASME 150-2500 class ANSI B16.5). AS4087 is the new standard covering Table D to H. In AS4087 the same drilling as AS2129 is specified but the PN rating system is used (PN16 to PN35).

Australian Standard - **AS4087**

PN16
PN21
PN35

AS4087 is an update of AS2129, however AS2129 is still widely used so it has not been deleted as a standard, however, it now only covers AS Table D to H. AS4087 is the latest standard for BS Table D to H, the same drilling is used but the new PN pressure rating system has been adopted. As the new pressure ratings are slightly higher the flange thicknesses have slightly increased. Also the raised face dimensions (although rarely specified, flat face is mostly used) are slightly larger. Table C, J or R, no longer exist, PN 16 is the same drilling as Table D, PN21 is the same as Table E, PN35 is the same as Table H.

American National Standards (**ANSI**), (and **AS4331, ISO7500-1**)

ANSI 125
ANSI 150
ANSI 600
ANSI 900
ANSI 1500
ANSI 2500

Higher numbers denote higher pressure classes. The word 'Class' or Institute 'LB' or even '#' is frequently used. All dimensions are specified in inches. AS4331 covers class PN2.5 to PN420 and the sizing and drilling used is a replication of ISO 7500-1 which in turn is a metricated equivalent of ASME B16.5 class 150 to 2500.

EN1092-1 (Replaces British Standard - **BS4505**)

PN2.5
PN6
PN10
PN16
PN25
PN40
PN64
PN100

The prefix PN (Pressure Nominale) is commonly used, example 'PN25'. A PN20 flange is designed to withstand pressures up to 20 bar. All dimensions are specified in mm. BS4504 has been superseded by EN1092-1 which also incorporates DIN flanges. Flange drillings of EN1092-1 are generally the same as BS4504 but BS4504 covers a wider range. For dimensions on EN1092-1/BS4504 go to: <http://globalsupplyline.com.au/wp-content/uploads/2014/10/Flange-Dim-EN1092-1-BS4504.pdf>

FLANGE TABLE 1

DN10 (3/8") - DN20 (3/4")

SIZE MM (INCH)	RATING	FLANGE OD DIAMETER	PCD	# BOLTS	BOLT SIZE	HOLE SIZE	THICKNESS IRON	THICKNESS BRONZE	THICKNESS CARBON STEEL
DN10 (3/8")	BS4504-6	75mm	50mm	4	M10	11mm			
DN10 (3/8")	BS4504-10	90mm	60mm	4	M10	14mm			
DN10 (3/8")	BS4504-16	90mm	60mm	4	M10	14mm			
DN10 (3/8")	BS4504-25	90mm	60mm	4	M10	14mm			
DN10 (3/8")	BS4504-40	90mm	60mm	4	M10	14mm			
DN10 (3/8")	BS4504-64	100mm	70mm	4	M10	14mm			
DN10 (3/8")	BS4504-100	100mm	70mm	4	M10	14mm			
DN10 (3/8")	JIS 5K	75mm	55mm	4	M10	12mm			
DN10 (3/8")	JIS 10K	90mm	65mm	4	M14	15mm			
DN10 (3/8")	JIS 16K	90mm	65mm	4	M14	15mm			
DN10 (3/8")	JIS 20K	90mm	65mm	4	M14	15mm			
DN10 (3/8")	JIS 30K	110mm	75mm	4	M16	19mm			
DN10 (3/8")	JIS 40K	110mm	75mm	4	M16	19mm			
DN15 (1/2")	ANSI 125/150	89mm	60mm	4	1/2"	16mm		8mm	11mm
DN15 (1/2")	ANSI 300	95mm	67mm	4	1/2"	16mm			14mm
DN15 (1/2")	ANSI 600	95mm	67mm	4	1/2"	16mm			14mm
DN15 (1/2")	ANSI 900	121mm	83mm	4	3/4"	22mm			22mm
DN15 (1/2")	ANSI 1500	121mm	83mm	4	3/4"	22mm			22mm
DN15 (1/2")	ANSI 2500	133mm	89mm	4	3/4"	22mm			30mm
DN15 (1/2")	AS2129/BS10 Table D	95mm	67mm	4	M12	14mm	13mm	6mm	10mm
DN15 (1/2")	AS2129/BS10 Table E	95mm	67mm	4	M12	14mm	13mm	6mm	10mm
DN15 (1/2")	AS2129/BS10 Table F	95mm	67mm	4	M12	14mm	13mm	8mm	10mm
DN15 (1/2")	AS2129/BS10 Table H	114mm	83mm	4	M16	17mm	16mm	10mm	13mm
DN15 (1/2")	AS2129/BS10 Table J	114mm	83mm	4	M16	17mm		16mm	16mm
DN15 (1/2")	AS2129/BS10 Table K	114mm	83mm	4	M16	17mm		19mm	19mm
DN15 (1/2")	AS2129/BS10 Table R	115mm	83mm	4	M16	18mm			19mm
DN15 (1/2")	AS2129/BS10 Table S	125mm	89mm	4	M20	22mm			22mm
DN15 (1/2")	AS2129/BS10 Table T	140mm	102mm	4	M20	22mm			25mm
DN15 (1/2")	BS4504-6	80mm	55mm	4	M10	11mm	12mm		12mm
DN15 (1/2")	BS4504-10	95mm	65mm	4	M12	14mm	14mm		14mm
DN15 (1/2")	BS4504-16	95mm	65mm	4	M12	14mm	14mm		14mm
DN15 (1/2")	BS4504-25	95mm	65mm	4	M12	14mm	16mm	8mm	16mm
DN15 (1/2")	BS4504-40	95mm	65mm	4	M12	14mm		9mm	16mm
DN15 (1/2")	BS4504-64	105mm	75mm	4	M12	14mm			20mm
DN15 (1/2")	BS4504-100	105mm	75mm	4	M12	14mm			20mm
DN15 (1/2")	JIS 5K	80mm	60mm	4	M10	12mm	12mm		9mm
DN15 (1/2")	JIS 10K	95mm	70mm	4	M14	15mm	16mm		12mm
DN15 (1/2")	JIS 16K	95mm	70mm	4	M14	15mm			12mm
DN15 (1/2")	JIS 20K	95mm	70mm	4	M14	15mm	16mm		14mm
DN15 (1/2")	JIS 30K	115mm	80mm	4	M16	19mm			18mm
DN15 (1/2")	JIS 40K	115mm	80mm	4	M16	19mm			20mm
DN15 (1/2")	JIS 63K	120mm	85mm	4	M16	19mm			23mm
DN20 (3/4")	ANSI 125/150	98mm	70mm	4	1/2"	16mm		9mm	14mm
DN20 (3/4")	ANSI 300	117mm	83mm	4	5/8"	19mm		13mm	16mm
DN20 (3/4")	ANSI 600	117mm	83mm	4	5/8"	19mm			16mm
DN20 (3/4")	ANSI 900	130mm	89mm	4	3/4"	22mm			25mm
DN20 (3/4")	ANSI 1500	130mm	89mm	4	3/4"	22mm			25mm
DN20 (3/4")	ANSI 2500	140mm	95mm	4	3/4"	22mm			32mm
DN20 (3/4")	AS2129/BS10 Table D	102mm	73mm	4	M12	14mm	13mm	6mm	10mm
DN20 (3/4")	AS2129/BS10 Table E	102mm	73mm	4	M12	14mm	13mm	6mm	10mm
DN20 (3/4")	AS2129/BS10 Table F	102mm	73mm	4	M12	14mm	13mm	8mm	10mm
DN20 (3/4")	AS2129/BS10 Table H	114mm	83mm	4	M16	17mm	16mm	10mm	13mm
DN20 (3/4")	AS2129/BS10 Table J	114mm	83mm	4	M16	17mm		16mm	16mm
DN20 (3/4")	AS2129/BS10 Table K	114mm	83mm	4	M16	17mm		19mm	19mm
DN20 (3/4")	AS2129/BS10 Table R	114mm	83mm	4	M16	17mm			19mm
DN20 (3/4")	AS2129/BS10 Table S	127mm	89mm	4	M20	22mm			22mm
DN20 (3/4")	AS2129/BS10 Table T	140mm	102mm	4	M20	22mm			25mm
DN20 (3/4")	BS4504-6	90mm	65mm	4	M10	11mm	14mm		14mm
DN20 (3/4")	BS4504-10	105mm	75mm	4	M12	14mm	16mm		16mm
DN20 (3/4")	BS4504-16	105mm	75mm	4	M12	14mm	16mm	6mm	16mm
DN20 (3/4")	BS4504-25	105mm	75mm	4	M12	14mm	18mm	8mm	18mm
DN20 (3/4")	BS4504-40	105mm	75mm	4	M12	14mm	18mm	9mm	18mm
DN20 (3/4")	BS4504-64	130mm	90mm	4	M16	18mm			22mm
DN20 (3/4")	BS4504-100	130mm	90mm	4	M16	18mm			22mm
DN20 (3/4")	JIS 5K	85mm	65mm	4	M10	12mm	14mm		10mm
DN20 (3/4")	JIS 10K	100mm	75mm	4	M14	15mm	18mm		14mm
DN20 (3/4")	JIS 16K	100mm	75mm	4	M14	15mm			14mm
DN20 (3/4")	JIS 20K	100mm	75mm	4	M14	15mm	18mm		16mm
DN20 (3/4")	JIS 30K	120mm	85mm	4	M16	19mm			18mm
DN20 (3/4")	JIS 40K	120mm	85mm	4	M16	19mm			20mm
DN20 (3/4")	JIS 63K	135mm	95mm	4	M20	23mm			25mm

• BS4504 now incorporated into EN1092-1 but flange drilling dimensions are generally the same.
 • BS10 and AS2129 are generally the same except some bolt hole sizes are larger in AS2129 due to metrication. AS2129 is now updated by AS4087 but drillings are the same, refer page 1.

FLANGE TABLE 2

DN25 (1") - DN32 (1 1/4")

SIZE MM (INCH)	RATING	FLANGE OD DIAMETER	PCD	# BOLTS	BOLT SIZE	HOLE SIZE	THICKNESS IRON	THICKNESS BRONZE	THICKNESS CARBON STEEL
DN25 (1")	ANSI 125/150	108mm	79mm	4	1/2"	16mm	11mm	10mm	11mm
DN25 (1")	ANSI 300	124mm	89mm	4	5/8"	19mm		15mm	17mm
DN25 (1")	ANSI 600	124mm	89mm	4	5/8"	19mm			17mm
DN25 (1")	ANSI 900	149mm	102mm	4	7/8"	25mm			29mm
DN25 (1")	ANSI 1500	149mm	102mm	4	7/8"	25mm			29mm
DN25 (1")	ANSI 2500	159mm	108mm	4	7/8"	25mm			41mm
DN25 (1")	AS2129/BS10 Table D	114mm	83mm	4	M12	14mm	13mm	8mm	10mm
DN25 (1")	AS2129/BS10 Table E	114mm	83mm	4	M12	14mm	13mm	8mm	10mm
DN25 (1")	AS2129/BS10 Table F	121mm	87mm	4	M12	14mm	13mm	10mm	10mm
DN25 (1")	AS2129/BS10 Table H	121mm	87mm	4	M16	17mm	19mm	11mm	14mm
DN25 (1")	AS2129/BS10 Table J	121mm	87mm	4	M16	17mm		19mm	19mm
DN25 (1")	AS2129/BS10 Table K	127mm	95mm	4	M16	17mm		22mm	22mm
DN25 (1")	AS2129/BS10 Table R	127mm	95mm	4	M16	17mm			22mm
DN25 (1")	AS2129/BS10 Table S	140mm	102mm	4	M20	22mm			25mm
DN25 (1")	AS2129/BS10 Table T	145mm	108mm	4	M20	22mm			29mm
DN25 (1")	BS4504-6	100mm	75mm	4	M10	11mm	14mm		14mm
DN25 (1")	BS4504-10	115mm	85mm	4	M12	14mm	16mm		14mm
DN25 (1")	BS4504-16	115mm	85mm	4	M12	14mm	16mm	8mm	18mm
DN25 (1")	BS4504-25	115mm	85mm	4	M12	14mm	18mm	9mm	18mm
DN25 (1")	BS4504-40	115mm	85mm	4	M12	14mm		11mm	18mm
DN25 (1")	BS4504-64	140mm	100mm	4	M16	18mm			24mm
DN25 (1")	BS4504-100	140mm	100mm	4	M16	18mm			24mm
DN25 (1")	JIS 5K	95mm	75mm	4	M10	12mm	14mm		10mm
DN25 (1")	JIS 10K	125mm	90mm	4	M16	19mm	18mm		14mm
DN25 (1")	JIS 16K	125mm	90mm	4	M16	19mm			14mm
DN25 (1")	JIS 20K	125mm	90mm	4	M16	19mm	20mm		16mm
DN25 (1")	JIS 30K	130mm	95mm	4	M16	19mm			20mm
DN25 (1")	JIS 40K	130mm	95mm	4	M16	19mm			22mm
DN25 (1")	JIS 63K	140mm	100mm	4	M20	23mm			27mm
DN32 (1 1/4")	ANSI 125/150	117mm	89mm	4	1/2"	16mm	13mm	10mm	13mm
DN32 (1 1/4")	ANSI 300	133mm	98mm	4	5/8"	19mm		16mm	19mm
DN32 (1 1/4")	ANSI 600	133mm	98mm	4	5/8"	19mm			21mm
DN32 (1 1/4")	ANSI 900	159mm	111mm	4	7/8"	25mm			29mm
DN32 (1 1/4")	ANSI 1500	159mm	111mm	4	7/8"	25mm			29mm
DN32 (1 1/4")	ANSI 2500	184mm	130mm	4	1"	29mm			44mm
DN32 (1 1/4")	AS2129/BS10 Table D	121mm	87mm	4	M12	14mm	16mm	8mm	13mm
DN32 (1 1/4")	AS2129/BS10 Table E	121mm	87mm	4	M12	14mm	16mm	8mm	13mm
DN32 (1 1/4")	AS2129/BS10 Table F	133mm	98mm	4	M16	17mm	16mm	10mm	13mm
DN32 (1 1/4")	AS2129/BS10 Table H	133mm	98mm	4	M16	17mm	22mm	11mm	17mm
DN32 (1 1/4")	AS2129/BS10 Table J	133mm	98mm	4	M16	17mm		19mm	19mm
DN32 (1 1/4")	AS2129/BS10 Table K	133mm	98mm	4	M16	17mm		22mm	22mm
DN32 (1 1/4")	AS2129/BS10 Table R	133mm	98mm	4	M16	17mm			22mm
DN32 (1 1/4")	AS2129/BS10 Table S	146mm	108mm	4	M20	22mm			29mm
DN32 (1 1/4")	AS2129/BS10 Table T	160mm	121mm	4	M24	26mm			32mm
DN32 (1 1/4")	BS4504-6	120mm	90mm	4	M12	14mm	16mm		16mm
DN32 (1 1/4")	BS4504-10	140mm	100mm	4	M16	18mm	18mm		16mm
DN32 (1 1/4")	BS4504-16	140mm	100mm	4	M16	18mm	18mm	8mm	18mm
DN32 (1 1/4")	BS4504-25	140mm	100mm	4	M16	18mm	20mm	9mm	18mm
DN32 (1 1/4")	BS4504-40	140mm	100mm	4	M16	18mm		11mm	18mm
DN32 (1 1/4")	BS4504-64	155mm	110mm	4	M20	22mm			26mm
DN32 (1 1/4")	BS4504-100	155mm	110mm	4	M20	22mm			26mm
DN32 (1 1/4")	JIS 5K	115mm	90mm	4	M12	15mm	16mm		12mm
DN32 (1 1/4")	JIS 10K	135mm	100mm	4	M16	19mm	20mm		16mm
DN32 (1 1/4")	JIS 16K	135mm	100mm	4	M16	19mm			16mm
DN32 (1 1/4")	JIS 20K	135mm	100mm	4	M16	19mm	20mm		18mm
DN32 (1 1/4")	JIS 30K	140mm	105mm	4	M16	19mm			22mm
DN32 (1 1/4")	JIS 40K	140mm	105mm	4	M16	19mm			24mm
DN32 (1 1/4")	JIS 63K	150mm	110mm	4	M20	23mm			30mm

• BS4504 now incorporated into EN1092-1 but flange drilling dimensions are generally the same.

• BS10 and AS2129 are generally the same except some bolt hole sizes are larger in AS2129 due to metrication. AS2129 is now updated by AS4087 but drillings are the same, refer page 1.

FLANGE TABLE 3

DN40 (1 1/2") - DN65 (2 1/2")

SIZE MM (INCH)	RATING	FLANGE OD DIAMETER	PCD	# BOLTS	BOLT SIZE	HOLE SIZE	THICKNESS IRON	THICKNESS BRONZE	THICKNESS CARBON STEEL
DN40 (1 1/2")	ANSI 125/150	127mm	98mm	4	1/2"	16mm	14mm	11mm	14mm
DN40 (1 1/2")	ANSI 300	156mm	114mm	4	3/4"	22mm		17mm	21mm
DN40 (1 1/2")	ANSI 600	156mm	114mm	4	3/4"	22mm			22mm
DN40 (1 1/2")	ANSI 900	178mm	124mm	4	1"	29mm			32mm
DN40 (1 1/2")	ANSI 1500	178mm	124mm	4	1"	29mm			32mm
DN40 (1 1/2")	ANSI 2500	203mm	146mm	4	1"	32mm			51mm
DN40 (1 1/2")	AS2129/BS10 Table D	133mm	98mm	4	M12	14mm	16mm	10mm	13mm
DN40 (1 1/2")	AS2129/BS10 Table E	133mm	98mm	4	M12	14mm	16mm	10mm	13mm
DN40 (1 1/2")	AS2129/BS10 Table F	140mm	105mm	4	M16	17mm	16mm	11mm	13mm
DN40 (1 1/2")	AS2129/BS10 Table H	140mm	105mm	4	M16	17mm	22mm	13mm	17mm
DN40 (1 1/2")	AS2129/BS10 Table J	140mm	105mm	4	M16	17mm		22mm	22mm
DN40 (1 1/2")	AS2129/BS10 Table K	152mm	114mm	4	M20	22mm		25mm	25mm
DN40 (1 1/2")	AS2129/BS10 Table R	152mm	114mm	4	M20	22mm			25mm
DN40 (1 1/2")	AS2129/BS10 Table S	159mm	121mm	4	M20	22mm			29mm
DN40 (1 1/2")	AS2129/BS10 Table T	170mm	133mm	8	M20	22mm			35mm
DN40 (1 1/2")	BS4504-6	130mm	100mm	4	M12	14mm	16mm		16mm
DN40 (1 1/2")	BS4504-10	150mm	110mm	4	M16	18mm	18mm		16mm
DN40 (1 1/2")	BS4504-16	150mm	110mm	4	M16	18mm	18mm	9mm	18mm
DN40 (1 1/2")	BS4504-25	150mm	110mm	4	M16	18mm	20mm	11mm	18mm
DN40 (1 1/2")	BS4504-40	150mm	110mm	4	M16	18mm		13mm	18mm
DN40 (1 1/2")	BS4504-64	170mm	125mm	4	M20	22mm			28mm
DN40 (1 1/2")	BS4504-100	170mm	125mm	4	M20	22mm			28mm
DN40 (1 1/2")	JIS 5K	120mm	95mm	4	M12	15mm	16mm		12mm
DN40 (1 1/2")	JIS 10K	140mm	105mm	4	M16	19mm	20mm		16mm
DN40 (1 1/2")	JIS 16K	140mm	105mm	4	M16	19mm			16mm
DN40 (1 1/2")	JIS 20K	140mm	105mm	4	M16	19mm	22mm		18mm
DN40 (1 1/2")	JIS 30K	160mm	120mm	4	M20	23mm			22mm
DN40 (1 1/2")	JIS 40K	160mm	120mm	4	M20	23mm			24mm
DN40 (1 1/2")	JIS 63K	175mm	130mm	4	M22	25mm			32mm
DN50 (2")	ANSI 125/150	152mm	121mm	4	5/8"	19mm	16mm	13mm	16mm
DN50 (2")	ANSI 300	165mm	127mm	8	5/8"	19mm		19mm	22mm
DN50 (2")	ANSI 600	165mm	127mm	8	5/8"	19mm			25mm
DN50 (2")	ANSI 900	216mm	165mm	8	7/8"	25mm			38mm
DN50 (2")	ANSI 1500	216mm	165mm	8	7/8"	25mm			38mm
DN50 (2")	ANSI 2500	235mm	171mm	8	1"	29mm			57mm
DN50 (2")	AS2129/BS10 Table D	152mm	114mm	4	M16	17mm	17mm	10mm	14mm
DN50 (2")	AS2129/BS10 Table E	152mm	114mm	4	M16	17mm	19mm	10mm	14mm
DN50 (2")	AS2129/BS10 Table F	165mm	127mm	4	M16	17mm	19mm	11mm	16mm
DN50 (2")	AS2129/BS10 Table H	165mm	127mm	4	M16	17mm	25mm	13mm	19mm
DN50 (2")	AS2129/BS10 Table J	165mm	127mm	4	M20	22mm		25mm	25mm
DN50 (2")	AS2129/BS10 Table K	165mm	127mm	8	M16	17mm		25mm	25mm
DN50 (2")	AS2129/BS10 Table R	165mm	127mm	8	M16	17mm			25mm
DN50 (2")	AS2129/BS10 Table S	172mm	133mm	8	M20	22mm			25mm
DN50 (2")	AS2129/BS10 Table T	185mm	146mm	8	M20	22mm			25mm
DN50 (2")	BS4504-6	140mm	110mm	4	M12	14mm	16mm		32mm
DN50 (2")	BS4504-10	165mm	125mm	4	M16	18mm	20mm		35mm
DN50 (2")	BS4504-16	165mm	125mm	4	M16	18mm	20mm	11mm	20mm
DN50 (2")	BS4504-25	165mm	125mm	4	M16	18mm	22mm	11mm	20mm
DN50 (2")	BS4504-40	165mm	125mm	4	M16	18mm		13mm	20mm
DN50 (2")	BS4504-64	180mm	135mm	4	M20	22mm			26mm
DN50 (2")	BS4504-100	195mm	145mm	4	M24	26mm			30mm
DN50 (2")	JIS 5K	130mm	105mm	4	M14	15mm	16mm		14mm
DN50 (2")	JIS 10K	155mm	120mm	4	M16	19mm	20mm		16mm
DN50 (2")	JIS 16K	155mm	120mm	8	M16	19mm	20mm		16mm
DN50 (2")	JIS 20K	155mm	120mm	8	M16	19mm	22mm		18mm
DN50 (2")	JIS 30K	165mm	130mm	8	M16	19mm			22mm
DN50 (2")	JIS 40K	165mm	130mm	8	M16	19mm			26mm
DN50 (2")	JIS 63K	185mm	145mm	8	M20	23mm			34mm

• BS4504 now incorporated into EN1092-1 but flange drilling dimensions are generally the same.

• BS10 and AS2129 are generally the same except some bolt hole sizes are larger in AS2129 due to metrication. AS2129 is now updated by AS4087 but drillings are the same, refer page 1.

FLANGE TABLE 4

DN65 (2 1/2") - DN90 (3 1/2")

SIZE MM (INCH)	RATING	FLANGE OD DIAMETER	PCD	# BOLTS	BOLT SIZE	HOLE SIZE	THICKNESS IRON	THICKNESS BRONZE	THICKNESS CARBON STEEL
DN65 (2 1/2")	ANSI 125/150	178mm	140mm	4	5/8"	19mm	17mm	14mm	17mm
DN65 (2 1/2")	ANSI 125/150	178mm	140mm	4	5/8"	19mm	17mm	14mm	17mm
DN65 (2 1/2")	ANSI 300	191mm	149mm	8	3/4"	22mm		21mm	25mm
DN65 (2 1/2")	ANSI 600	191mm	149mm	8	3/4"	22mm			29mm
DN65 (2 1/2")	ANSI 900	244mm	191mm	8	1"	29mm			41mm
DN65 (2 1/2")	ANSI 1500	244mm	191mm	8	1"	29mm			41mm
DN65 (2 1/2")	ANSI 2500	267mm	197mm	8	1"	32mm			64mm
DN65 (2 1/2")	AS2129/BS10 Table D	165mm	127mm	4	M16	17mm	17mm	11mm	14mm
DN65 (2 1/2")	AS2129/BS10 Table E	165mm	127mm	4	M16	17mm	19mm	11mm	14mm
DN65 (2 1/2")	AS2129/BS10 Table F	184mm	146mm	8	M16	17mm	19mm	13mm	16mm
DN65 (2 1/2")	AS2129/BS10 Table H	184mm	146mm	8	M16	17mm	25mm	14mm	19mm
DN65 (2 1/2")	AS2129/BS10 Table J	184mm	146mm	8	M20	22mm		25mm	25mm
DN65 (2 1/2")	AS2129/BS10 Table K	184mm	146mm	8	M20	22mm		29mm	29mm
DN65 (2 1/2")	AS2129/BS10 Table R	184mm	146mm	8	M20	22mm			29mm
DN65 (2 1/2")	AS2129/BS10 Table S	184mm	146mm	8	M20	22mm			32mm
DN65 (2 1/2")	AS2129/BS10 Table T	205mm	165mm	8	M24	26mm			41mm
DN65 (2 1/2")	BS4504-6	160mm	130mm	4	M12	14mm	16mm		16mm
DN65 (2 1/2")	BS4504-10	185mm	145mm	4	M16	18mm	20mm		20mm
DN65 (2 1/2")	BS4504-16	185mm	145mm	4	M16	18mm	20mm	13mm	18mm
DN65 (2 1/2")	BS4504-25	185mm	145mm	8	M16	18mm	24mm	13mm	22mm
DN65 (2 1/2")	BS4504-40	185mm	145mm	8	M16	18mm		14mm	22mm
DN65 (2 1/2")	BS4504-64	205mm	160mm	8	M20	22mm			26mm
DN65 (2 1/2")	BS4504-100	220mm	170mm	8	M24	26mm			34mm
DN65 (2 1/2")	JIS 5K	155mm	130mm	4	M14	15mm	18mm		14mm
DN65 (2 1/2")	JIS 10K	175mm	140mm	4	M16	19mm	22mm		18mm
DN65 (2 1/2")	JIS 16K	175mm	140mm	8	M16	19mm	22mm		18mm
DN65 (2 1/2")	JIS 20K	175mm	140mm	8	M16	19mm	24mm		20mm
DN65 (2 1/2")	JIS 30K	200mm	160mm	8	M20	23mm			26mm
DN65 (2 1/2")	JIS 40K	200mm	160mm	8	M20	23mm			30mm
DN65 (2 1/2")	JIS 63K	220mm	175mm	8	M22	25mm			38mm
DN80 (3")	ANSI 125/150	191mm	152mm	4	5/8"	19mm	19mm	16mm	19mm
DN80 (3")	ANSI 300	210mm	168mm	8	3/4"	22mm		23mm	29mm
DN80 (3")	ANSI 600	210mm	168mm	8	3/4"	22mm			32mm
DN80 (3")	ANSI 900	241mm	191mm	8	7/8"	25mm			38mm
DN80 (3")	ANSI 1500	267mm	203mm	8	1 1/8"	32mm			48mm
DN80 (3")	ANSI 2500	305mm	229mm	8	1 1/4"	35mm			73mm
DN80 (3")	AS2129/BS10 Table D	184mm	146mm	4	M16	17mm	19mm	13mm	14mm
DN80 (3")	AS2129/BS10 Table E	184mm	146mm	4	M16	17mm	19mm	13mm	14mm
DN80 (3")	AS2129/BS10 Table F	203mm	165mm	8	M16	17mm	19mm	14mm	16mm
DN80 (3")	AS2129/BS10 Table H	203mm	165mm	8	M16	17mm	29mm	16mm	22mm
DN80 (3")	AS2129/BS10 Table J	203mm	165mm	8	M20	22mm		32mm	32mm
DN80 (3")	AS2129/BS10 Table K	203mm	165mm	8	M20	22mm		32mm	32mm
DN80 (3")	AS2129/BS10 Table R	203mm	165mm	8	M20	22mm			32mm
DN80 (3")	AS2129/BS10 Table S	203mm	165mm	8	M24	26mm			35mm
DN80 (3")	AS2129/BS10 Table T	235mm	191mm	8	M27	30mm			48mm
DN80 (3")	BS4504-6	190mm	150mm	4	M16	18mm	18mm		18mm
DN80 (3")	BS4504-10	200mm	160mm	8	M16	18mm	22mm		20mm
DN80 (3")	BS4504-16	200mm	160mm	8	M16	18mm	22mm	13mm	20mm
DN80 (3")	BS4504-25	200mm	160mm	8	M16	18mm	26mm	14mm	24mm
DN80 (3")	BS4504-40	200mm	160mm	8	M16	18mm		16mm	24mm
DN80 (3")	BS4504-64	215mm	170mm	8	M20	22mm			28mm
DN80 (3")	BS4504-100	230mm	180mm	8	M24	26mm			36mm
DN80 (3")	JIS 5K	180mm	145mm	4	M16	19mm	18mm		14mm
DN80 (3")	JIS 10K	185mm	150mm	8	M16	19mm	22mm		18mm
DN80 (3")	JIS 16K	200mm	160mm	8	M20	23mm	24mm		20mm
DN80 (3")	JIS 20K	200mm	160mm	8	M20	23mm	26mm		22mm
DN80 (3")	JIS 30K	210mm	170mm	8	M20	23mm			28mm
DN80 (3")	JIS 40K	210mm	170mm	8	M20	23mm			32mm
DN80 (3")	JIS 63K	230mm	185mm	8	M22	25mm			40mm
DN90 (3 1/2")	ANSI 125/150	216mm	178mm	8	5/8"	19mm			24mm
DN90 (3 1/2")	ANSI 300	229mm	184mm	8	3/4"	22mm			30mm
DN90 (3 1/2")	ANSI 600	229mm	184mm	8	7/8"	25mm			35mm
DN90 (3 1/2")	AS2129/BS10 Table D	205mm	165mm	4	M16	18mm	19mm		10mm
DN90 (3 1/2")	AS2129/BS10 Table E	205mm	165mm	4	M16	18mm	19mm		12mm
DN90 (3 1/2")	AS2129/BS10 Table F	215mm	178mm	8	M16	18mm	22mm		19mm
DN90 (3 1/2")	AS2129/BS10 Table H	215mm	178mm	8	M16	18mm	29mm		22mm
DN90 (3 1/2")	AS2129/BS10 Table J	215mm	178mm	8	M20	22mm			32mm
DN90 (3 1/2")	AS2129/BS10 Table K	230mm	184mm	8	M24	26mm			32mm
DN90 (3 1/2")	AS2129/BS10 Table R	230mm	184mm	8	M24	26mm			32mm
DN90 (3 1/2")	AS2129/BS10 Table S	230mm	191mm	8	M24	26mm			38mm
DN90 (3 1/2")	AS2129/BS10 Table T	265mm	216mm	8	M30	33mm			54mm
DN90 (3 1/2")	JIS 5K	190mm	155mm	4	M16	19mm	18mm		14mm
DN90 (3 1/2")	JIS 10K	195mm	160mm	8	M16	19mm	22mm		18mm
DN90 (3 1/2")	JIS 16K	210mm	170mm	8	M20	23mm	24mm		20mm
DN90 (3 1/2")	JIS 20K	210mm	170mm	8	M20	23mm	28mm		24mm
DN90 (3 1/2")	JIS 30K	230mm	185mm	8	M22	25mm			30mm
DN90 (3 1/2")	JIS 40K	230mm	185mm	8	M22	25mm			34mm
DN90 (3 1/2")	JIS 63K	255mm	205mm	8	M24	27mm			42mm

• BS4504 now incorporated into EN1092-1 but flange drilling dimensions are generally the same.

• BS10 and AS2129 are generally the same except some bolt hole sizes are larger in AS2129 due to metrication. AS2129 is now updated by AS4087 but drillings are the same, refer page 1.

FLANGE TABLE 5

DN100 (4") - DN150 (6")

SIZE MM (INCH)	RATING	FLANGE OD DIAMETER	PCD	# BOLTS	BOLT SIZE	HOLE SIZE	THICKNESS IRON	THICKNESS BRONZE	THICKNESS CARBON STEEL
DN100 (4")	ANSI 125/150	229mm	191mm	8	5/8"	19mm	24mm	17mm	24mm
DN100 (4")	ANSI 300	254mm	200mm	8	3/4"	22mm		27mm	32mm
DN100 (4")	ANSI 600	273mm	216mm	8	7/8"	25mm			38mm
DN100 (4")	ANSI 900	292mm	235mm	8	1 1/8"	32mm			44mm
DN100 (4")	ANSI 1500	311mm	241mm	8	1 1/4"	35mm			54mm
DN100 (4")	ANSI 2500	356mm	273mm	8	1 1/2"	41mm			83mm
DN100 (4")	AS2129/BS10 Table D	216mm	178mm	4	M16	17mm	19mm	16mm	17mm
DN100 (4")	AS2129/BS10 Table E	216mm	178mm	8	M16	17mm	22mm	16mm	17mm
DN100 (4")	AS2129/BS10 Table F	229mm	191mm	8	M16	17mm	22mm	17mm	19mm
DN100 (4")	AS2129/BS10 Table H	229mm	191mm	8	M16	17mm	32mm	19mm	25mm
DN100 (4")	AS2129/BS10 Table J	229mm	191mm	8	M20	22mm		35mm	35mm
DN100 (4")	AS2129/BS10 Table K	241mm	197mm	8	M22	25mm		35mm	35mm
DN100 (4")	AS2129/BS10 Table R	241mm	197mm	8	M22	25mm			35mm
DN100 (4")	AS2129/BS10 Table S	250mm	203mm	8	M27	29mm			41mm
DN100 (4")	AS2129/BS10 Table T	285mm	235mm	8	M30	33mm			57mm
DN100 (4")	BS4504-6	210mm	170mm	4	M16	18mm	18mm		18mm
DN100 (4")	BS4504-10	220mm	180mm	8	M16	18mm	24mm		20mm
DN100 (4")	BS4504-16	220mm	180mm	8	M16	18mm	24mm	16mm	20mm
DN100 (4")	BS4504-25	235mm	190mm	8	M20	22mm	28mm	17mm	24mm
DN100 (4")	BS4504-40	235mm	190mm	8	M20	22mm		19mm	24mm
DN100 (4")	BS4504-64	250mm	200mm	8	M24	26mm			30mm
DN100 (4")	BS4504-100	265mm	210mm	8	M27	30mm			40mm
DN100 (4")	JIS 5K	200mm	165mm	8	M16	19mm	20mm		16mm
DN100 (4")	JIS 10K	210mm	175mm	8	M16	19mm	24mm		18mm
DN100 (4")	JIS 16K	225mm	185mm	8	M20	23mm			22mm
DN100 (4")	JIS 20K	225mm	185mm	8	M20	23mm	28mm		24mm
DN100 (4")	JIS 30K	240mm	195mm	8	M22	25mm			32mm
DN100 (4")	JIS 40K	250mm	205mm	8	M22	25mm			36mm
DN100 (4")	JIS 63K	270mm	220mm	8	M24	27mm			44mm
DN125 (5")	ANSI 125/150	254mm	216mm	8	3/4"	22mm	24mm	19mm	24mm
DN125 (5")	ANSI 300	279mm	235mm	8	3/4"	22mm		29mm	35mm
DN125 (5")	ANSI 600	330mm	267mm	8	1"	29mm			44mm
DN125 (5")	ANSI 900	349mm	279mm	8	1 1/4"	35mm			51mm
DN125 (5")	ANSI 1500	375mm	292mm	8	1 1/2"	41mm			73mm
DN125 (5")	ANSI 2500	419mm	324mm	8	1 3/4"	48mm			98mm
DN125 (5")	AS2129/BS10 Table D	254mm	210mm	8	M16	17mm	21mm	17mm	17mm
DN125 (5")	AS2129/BS10 Table E	254mm	210mm	8	M16	17mm	22mm	17mm	17mm
DN125 (5")	AS2129/BS10 Table F	279mm	235mm	8	M20	22mm	25mm	19mm	22mm
DN125 (5")	AS2129/BS10 Table H	279mm	235mm	8	M20	22mm	35mm	22mm	29mm
DN125 (5")	AS2129/BS10 Table J	279mm	235mm	8	M24	25mm		38mm	38mm
DN125 (5")	AS2129/BS10 Table K	279mm	235mm	12	M24	25mm		41mm	41mm
DN125 (5")	AS2129/BS10 Table R	279mm	235mm	12	M24	25mm			41mm
DN125 (5")	AS2129/BS10 Table S	286mm	235mm	12	M24	25mm			44mm
DN125 (5")	AS2129/BS10 Table T	325mm	273mm	12	M30	33mm			67mm
DN125 (5")	BS4504-6	240mm	200mm	8	M16	18mm	20mm		20mm
DN125 (5")	BS4504-10	250mm	210mm	8	M16	18mm	26mm		22mm
DN125 (5")	BS4504-16	250mm	210mm	8	M16	18mm	26mm		22mm
DN125 (5")	BS4504-25	270mm	220mm	8	M24	26mm	30mm		26mm
DN125 (5")	BS4504-40	270mm	220mm	8	M24	26mm			26mm
DN125 (5")	BS4504-64	295mm	240mm	8	M27	30mm			34mm
DN125 (5")	BS4504-100	315mm	250mm	8	M30	33mm			40mm
DN125 (5")	JIS 5K	235mm	200mm	8	M16	19mm	20mm		16mm
DN125 (5")	JIS 10K	250mm	210mm	8	M20	23mm	24mm		20mm
DN125 (5")	JIS 16K	270mm	225mm	8	M24	25mm	26mm		22mm
DN125 (5")	JIS 20K	270mm	225mm	8	M24	25mm	30mm		26mm
DN125 (5")	JIS 30K	275mm	230mm	8	M24	25mm			36mm
DN125 (5")	JIS 40K	300mm	250mm	8	M24	27mm			40mm
DN125 (5")	JIS 63K	325mm	265mm	8	M30	33mm			50mm

• BS4504 now incorporated into EN1092-1 but flange drilling dimensions are generally the same.

• BS10 and AS2129 are generally the same except some bolt hole sizes are larger in AS2129 due to metrication. AS2129 is now updated by AS4087 but drillings are the same, refer page 1.

FLANGE TABLE 6

DN150 (6") - DN200 (8")

SIZE MM (INCH)	RATING	FLANGE OD DIAMETER	PCD	# BOLTS	BOLT SIZE	HOLE SIZE	THICKNESS IRON	THICKNESS BRONZE	THICKNESS CARBON STEEL
DN150 (6")	ANSI 125/150	279mm	241mm	8	3/4"	22mm	25mm	21mm	25mm
DN150 (6")	ANSI 125/150	279mm	241mm	8	3/4"	22mm	25mm	21mm	25mm
DN150 (6")	ANSI 300	318mm	270mm	12	3/4"	22mm		30mm	37mm
DN150 (6")	ANSI 600	356mm	292mm	12	1"	29mm			48mm
DN150 (6")	ANSI 900	381mm	318mm	12	1 1/8"	32mm			56mm
DN150 (6")	ANSI 1500	394mm	318mm	12	1 3/8"	38mm			83mm
DN150 (6")	ANSI 2500	483mm	368mm	8	2"	54mm			114mm
DN150 (6")	AS2129/BS10 Table D	279mm	235mm	8	M16	17mm	21mm	17mm	17mm
DN150 (6")	AS2129/BS10 Table E	279mm	235mm	8	M20	22mm	22mm	17mm	17mm
DN150 (6")	AS2129/BS10 Table F	305mm	260mm	12	M20	22mm	25mm	22mm	22mm
DN150 (6")	AS2129/BS10 Table H	305mm	260mm	12	M20	22mm	35mm	25mm	29mm
DN150 (6")	AS2129/BS10 Table J	305mm	260mm	12	M22	25mm		38mm	38mm
DN150 (6")	AS2129/BS10 Table K	305mm	260mm	12	M22	25mm		41mm	41mm
DN150 (6")	AS2129/BS10 Table R	305mm	260mm	12	M22	25mm			44mm
DN150 (6")	AS2129/BS10 Table S	324mm	273mm	12	M24	27mm			51mm
DN150 (6")	AS2129/BS10 Table T	375mm	318mm	12	M33	36mm			73mm
DN150 (6")	BS4504-6	265mm	225mm	8	M16	18mm	20mm		20mm
DN150 (6")	BS4504-10	285mm	240mm	8	M20	22mm	26mm		22mm
DN150 (6")	BS4504-16	285mm	240mm	8	M20	22mm	26mm		22mm
DN150 (6")	BS4504-25	300mm	250mm	8	M24	26mm	34mm		28mm
DN150 (6")	BS4504-40	300mm	250mm	8	M24	26mm			28mm
DN150 (6")	BS4504-64	345mm	280mm	8	M30	33mm			36mm
DN150 (6")	BS4504-100	355mm	290mm	12	M30	33mm			44mm
DN150 (6")	JIS 5K	265mm	230mm	8	M16	19mm	22mm		18mm
DN150 (6")	JIS 10K	280mm	240mm	8	M20	23mm	26mm		22mm
DN150 (6")	JIS 16K	305mm	260mm	12	M24	25mm	28mm		24mm
DN150 (6")	JIS 20K	305mm	260mm	12	M24	25mm	32mm		28mm
DN150 (6")	JIS 30K	325mm	275mm	12	M25	27mm			38mm
DN150 (6")	JIS 40K	355mm	295mm	12	M30	33mm			44mm
DN150 (6")	JIS 63K	365mm	305mm	12	M30	33mm			54mm
DN200 (8")	ANSI 125/150	343mm	298mm	8	3/4"	22mm	29mm	24mm	29mm
DN200 (8")	ANSI 300	381mm	330mm	12	7/8"	25mm		35mm	41mm
DN200 (8")	ANSI 600	419mm	349mm	12	1 1/8"	32mm			56mm
DN200 (8")	ANSI 900	470mm	394mm	12	1 3/8"	38mm			64mm
DN200 (8")	ANSI 1500	483mm	394mm	12	1 5/8"	44mm			92mm
DN200 (8")	ANSI 2500	552mm	438mm	12	2"	54mm			132mm
DN200 (8")	AS2129/BS10 Table D	337mm	292mm	8	M16	17mm	22mm	19mm	19mm
DN200 (8")	AS2129/BS10 Table E	337mm	292mm	8	M20	22mm	25mm	19mm	19mm
DN200 (8")	AS2129/BS10 Table F	368mm	324mm	12	M20	22mm	29mm	25mm	25mm
DN200 (8")	AS2129/BS10 Table H	368mm	324mm	12	M20	22mm	38mm	32mm	32mm
DN200 (8")	AS2129/BS10 Table J	368mm	324mm	12	M22	25mm		41mm	41mm
DN200 (8")	AS2129/BS10 Table K	368mm	324mm	12	M27	29mm		48mm	48mm
DN200 (8")	AS2129/BS10 Table R	368mm	324mm	12	M27	29mm			51mm
DN200 (8")	AS2129/BS10 Table S	413mm	356mm	12	M33	35mm			64mm
DN200 (8")	AS2129/BS10 Table T	475mm	406mm	12	M39	42mm			89mm
DN200 (8")	BS4504-6	320mm	280mm	8	M16	18mm	22mm		22mm
DN200 (8")	BS4504-10	340mm	295mm	8	M20	22mm	26mm		24mm
DN200 (8")	BS4504-16	340mm	295mm	12	M20	22mm	30mm		24mm
DN200 (8")	BS4504-25	360mm	310mm	12	M24	26mm	34mm		30mm
DN200 (8")	BS4504-40	375mm	320mm	12	M27	30mm			34mm
DN200 (8")	BS4504-64	415mm	345mm	12	M33	36mm			42mm
DN200 (8")	BS4504-100	430mm	360mm	12	M33	36mm			52mm
DN200 (8")	JIS 5K	320mm	280mm	8	M20	23mm	24mm		20mm
DN200 (8")	JIS 10K	330mm	290mm	12	M20	23mm	26mm		22mm
DN200 (8")	JIS 16K	350mm	305mm	12	M24	25mm	30mm		26mm
DN200 (8")	JIS 20K	350mm	305mm	12	M24	25mm	34mm		30mm
DN200 (8")	JIS 30K	370mm	320mm	12	M24	27mm			42mm
DN200 (8")	JIS 40K	405mm	345mm	12	M30	33mm			50mm
DN200 (8")	JIS 63K	425mm	360mm	12	M30	33mm			60mm

• BS4504 now incorporated into EN1092-1 but flange drilling dimensions are generally the same.

• BS10 and AS2129 are generally the same except some bolt hole sizes are larger in AS2129 due to metrication. AS2129 is now updated by AS4087 but drillings are the same, refer page 1.

FLANGE TABLE 7

DN250 (10") - DN350 (14")

SIZE MM (INCH)	RATING	FLANGE OD DIAMETER	PCD	# BOLTS	BOLT SIZE	HOLE SIZE	THICKNESS IRON	THICKNESS BRONZE	THICKNESS CARBON STEEL
DN250 (10")	ANSI 125/150	406mm	362mm	12	7/8"	25mm			30mm
DN250 (10")	ANSI 300	445mm	387mm	16	1"	29mm			48mm
DN250 (10")	ANSI 600	508mm	432mm	16	1 1/4"	35mm			64mm
DN250 (10")	ANSI 900	546mm	470mm	16	1 3/8"	38mm			70mm
DN250 (10")	ANSI 1500	584mm	483mm	12	1 7/8"	51mm			114mm
DN250 (10")	ANSI 2500	673mm	540mm	12	2 1/2"	67mm			171mm
DN250 (10")	AS2129/BS10 Table D	406mm	356mm	8	M20	22mm	25mm	19mm	19mm
DN250 (10")	AS2129/BS10 Table E	406mm	356mm	12	M20	22mm	25mm	22mm	22mm
DN250 (10")	AS2129/BS10 Table F	432mm	381mm	12	M22	25mm	29mm	25mm	25mm
DN250 (10")	AS2129/BS10 Table H	432mm	381mm	12	M22	25mm	41mm	35mm	35mm
DN250 (10")	AS2129/BS10 Table J	432mm	381mm	12	M27	29mm			48mm
DN250 (10")	AS2129/BS10 Table K	432mm	381mm	16	M27	29mm			51mm
DN250 (10")	AS2129/BS10 Table R	432mm	381mm	16	M27	29mm			60mm
DN250 (10")	AS2129/BS10 Table S	483mm	387mm	16	M30	33mm			79mm
DN250 (10")	AS2129/BS10 Table T	560mm	489mm	16	M39	42mm			108mm
DN250 (10")	BS4504-6	375mm	335mm	12	M16	18mm	24mm		24mm
DN250 (10")	BS4504-10	395mm	350mm	12	M20	22mm	28mm		26mm
DN250 (10")	BS4504-16	405mm	355mm	12	M24	26mm	32mm		26mm
DN250 (10")	BS4504-25	425mm	370mm	12	M27	30mm	36mm		32mm
DN250 (10")	BS4504-40	450mm	385mm	12	M30	33mm	46mm		38mm
DN250 (10")	BS4504-64	470mm	400mm	12	M33	36mm			46mm
DN250 (10")	BS4504-100	505mm	430mm	12	M36	39mm			60mm
DN250 (10")	JIS 5K	385mm	345mm	12	M20	23mm	26mm		22mm
DN250 (10")	JIS 10K	400mm	355mm	12	M24	25mm	30mm		24mm
DN250 (10")	JIS 16K	430mm	380mm	12	M24	27mm	34mm		28mm
DN250 (10")	JIS 20K	430mm	380mm	12	M24	27mm	38mm		34mm
DN250 (10")	JIS 30K	450mm	390mm	12	M30	33mm			48mm
DN250 (10")	JIS 40K	475mm	410mm	12	M30	33mm			56mm
DN250 (10")	JIS 63K	500mm	430mm	12	M36	39mm			68mm
DN300 (12")	ANSI 125/150	483mm	432mm	12	7/8"	25mm	32mm	27mm	32mm
DN300 (12")	ANSI 300	521mm	451mm	16	1 1/8"	32mm			51mm
DN300 (12")	ANSI 600	559mm	489mm	20	1 1/4"	35mm			67mm
DN300 (12")	ANSI 900	610mm	533mm	20	1 3/8"	38mm			79mm
DN300 (12")	ANSI 1500	673mm	572mm	16	2"	54mm			124mm
DN300 (12")	ANSI 2500	762mm	619mm	12	2 7/8"	73mm			190mm
DN300 (12")	AS2129/BS10 Table D	457mm	406mm	12	M20	22mm	25mm	22mm	22mm
DN300 (12")	AS2129/BS10 Table E	457mm	406mm	12	M22	25mm	29mm	25mm	25mm
DN300 (12")	AS2129/BS10 Table F	489mm	438mm	16	M22	25mm	32mm	29mm	29mm
DN300 (12")	AS2129/BS10 Table H	489mm	438mm	16	M22	25mm	44mm	38mm	38mm
DN300 (12")	AS2129/BS10 Table J	489mm	438mm	16	M27	29mm			51mm
DN300 (12")	AS2129/BS10 Table K	489mm	432mm	16	M30	32mm			32mm
DN300 (12")	AS2129/BS10 Table R	508mm	457mm	16	M30	32mm			70mm
DN300 (12")	AS2129/BS10 Table S	578mm	508mm	16	M30	32mm			92mm
DN300 (12")	AS2129/BS10 Table T	655mm	572mm	16	M45	48mm			121mm
DN300 (12")	BS4504-6	440mm	395mm	12	M20	22mm	24mm		24mm
DN300 (12")	BS4504-10	445mm	400mm	12	M20	22mm	28mm		26mm
DN300 (12")	BS4504-16	460mm	410mm	12	M24	26mm	32mm		28mm
DN300 (12")	BS4504-25	485mm	430mm	16	M27	30mm	40mm		34mm
DN300 (12")	BS4504-40	515mm	450mm	16	M30	33mm			42mm
DN300 (12")	BS4504-64	530mm	460mm	16	M33	36mm			52mm
DN300 (12")	BS4504-100	585mm	500mm	16	M39	42mm			68mm
DN300 (12")	JIS 5K	430mm	390mm	12	M20	23mm	28mm		22mm
DN300 (12")	JIS 10K	445mm	400mm	16	M24	25mm	32mm		24mm
DN300 (12")	JIS 16K	480mm	430mm	16	M24	27mm	36mm		30mm
DN300 (12")	JIS 20K	480mm	430mm	16	M24	27mm	40mm		36mm
DN300 (12")	JIS 30K	515mm	450mm	16	M30	33mm			52mm
DN300 (12")	JIS 40K	540mm	470mm	16	M36	39mm			60mm
DN300 (12")	JIS 63K	560mm	485mm	16	M36	39mm			77mm
DN350 (14")	ANSI 125/150	533mm	476mm	12	1"	29mm	35mm		35mm
DN350 (14")	ANSI 300	584mm	514mm	20	1 1/8"	32mm			54mm
DN350 (14")	ANSI 600	603mm	527mm	20	1 3/8"	38mm			70mm
DN350 (14")	ANSI 900	641mm	559mm	20	1 1/2"	41mm			86mm
DN350 (14")	ANSI 1500	749mm	635mm	16	2 1/4"	60mm			133mm
DN350 (14")	AS2129/BS10 Table D	527mm	470mm	12	M22	25mm	29mm	25mm	25mm
DN350 (14")	AS2129/BS10 Table E	527mm	470mm	12	M22	25mm	32mm	25mm	25mm
DN350 (14")	AS2129/BS10 Table F	552mm	495mm	16	M27	29mm	35mm	32mm	32mm
DN350 (14")	AS2129/BS10 Table H	552mm	495mm	16	M27	29mm	48mm	41mm	41mm
DN350 (14")	AS2129/BS10 Table J	552mm	495mm	16	M30	33mm			54mm
DN350 (14")	AS2129/BS10 Table K	572mm	508mm	16	M30	36mm			60mm
DN350 (14")	AS2129/BS10 Table R	584mm	527mm	16	M30	36mm			79mm
DN350 (14")	AS2129/BS10 Table S	648mm	578mm	20	M39	42mm			105mm
DN350 (14")	BS4504-6	490mm	445mm	12	M20	22mm	26mm		26mm
DN350 (14")	BS4504-10	505mm	460mm	16	M20	22mm	30mm		28mm
DN350 (14")	BS4504-16	520mm	470mm	16	M24	26mm	36mm		30mm
DN350 (14")	BS4504-25	555mm	490mm	16	M30	33mm	44mm		38mm
DN350 (14")	BS4504-40	580mm	510mm	16	M33	36mm			46mm
DN350 (14")	BS4504-64	600mm	525mm	16	M36	39mm			56mm
DN350 (14")	BS4504-100	655mm	560mm	16	M45	48mm			74mm
DN350 (14")	JIS 5K	480mm	435mm	12	M22	25mm	30mm		24mm
DN350 (14")	JIS 10K	490mm	445mm	16	M22	25mm	34mm		26mm
DN350 (14")	JIS 16K	540mm	480mm	16	M30	33mm	38mm		34mm
DN350 (14")	JIS 20K	540mm	480mm	16	M30	33mm	44mm		40mm
DN350 (14")	JIS 30K	560mm	495mm	16	M30	33mm			54mm
DN350 (14")	JIS 40K	585mm	515mm	16	M36	39mm			64mm
DN350 (14")	JIS 63K	615mm	530mm	16	M42	46mm			81mm

• BS4504 now incorporated into EN1092-1 but flange drilling dimensions are generally the same.

• BS10 and AS2129 are generally the same except some bolt hole sizes are larger in AS2129 due to metrication. AS2129 is now updated by AS4087 but drillings are the same, refer page 1.

FLANGE TABLE 8

DN375 (15") - DN500 (20")

SIZE MM (INCH)	RATING	FLANGE OD DIAMETER	PCD	# BOLTS	BOLT SIZE	HOLE SIZE	THICKNESS IRON	THICKNESS BRONZE	THICKNESS CARBON STEEL
DN375 (15")	AS2129/BS10 Table D	552mm	552mm	12	M22	25mm	29mm	25mm	
DN375 (15")	AS2129/BS10 Table E	552mm	552mm	12	M22	25mm	32mm	25mm	
DN375 (15")	AS2129/BS10 Table F	578mm	578mm	16	M27	29mm	35mm	32mm	
DN375 (15")	AS2129/BS10 Table H	578mm	578mm	16	M27	29mm	51mm	44mm	
DN375 (15")	AS2129/BS10 Table J	578mm	578mm	16	M30	32mm			
DN375 (15")	AS2129/BS10 Table K	857mm	603mm	20	M33	35mm			
DN400 (16")	ANSI 125/150	597mm	540mm	16	1"	29mm	37mm		37mm
DN400 (16")	ANSI 300	648mm	572mm	20	1 1/4"	35mm			57mm
DN400 (16")	ANSI 600	699mm	603mm	20	1 1/2"	41mm			76mm
DN400 (16")	ANSI 900	705mm	616mm	20	1 5/8"	44mm			89mm
DN400 (16")	ANSI 1500	826mm	705mm	16	2 1/2"	67mm			146mm
DN400 (16")	AS2129/BS10 Table D	578mm	521mm	12	M22	25mm	29mm	25mm	25mm
DN400 (16")	AS2129/BS10 Table E	578mm	521mm	12	M22	25mm	32mm	25mm	25mm
DN400 (16")	AS2129/BS10 Table F	610mm	552mm	20	M27	29mm	35mm	32mm	32mm
DN400 (16")	AS2129/BS10 Table H	610mm	552mm	20	M27	29mm	51mm	44mm	44mm
DN400 (16")	AS2129/BS10 Table J	610mm	552mm	20	M30	32mm			57mm
DN400 (16")	AS2129/BS10 Table K	629mm	565mm	20	M30	33mm			67mm
DN400 (16")	AS2129/BS10 Table R	641mm	584mm	20	M30	33mm			89mm
DN400 (16")	AS2129/BS10 Table S	743mm	660mm	20	M45	48mm			117mm
DN400 (16")	BS4504-6	540mm	495mm	16	M20	22mm	28mm		28mm
DN400 (16")	BS4504-10	565mm	515mm	16	M24	26mm	32mm		32mm
DN400 (16")	BS4504-16	580mm	525mm	16	M27	30mm	38mm		32mm
DN400 (16")	BS4504-25	620mm	550mm	16	M33	36mm	48mm		40mm
DN400 (16")	BS4504-40	660mm	585mm	16	M36	39mm			50mm
DN400 (16")	BS4504-64	670mm	585mm	16	M39	42mm			60mm
DN400 (16")	BS4504-100	715mm	620mm	16	M45	48mm			78mm
DN400 (16")	JIS 5K	540mm	495mm	16	M22	25mm	30mm		24mm
DN400 (16")	JIS 10K	560mm	510mm	16	M24	27mm	36mm		28mm
DN400 (16")	JIS 16K	605mm	540mm	16	M30	33mm	42mm		38mm
DN400 (16")	JIS 20K	605mm	540mm	16	M30	33mm	50mm		46mm
DN400 (16")	JIS 30K	630mm	560mm	16	M36	39mm			60mm
DN400 (16")	JIS 40K	645mm	570mm	16	M36	39mm			70mm
DN400 (16")	JIS 63K	680mm	590mm	16	M42	46mm			89mm
DN450 (18")	ANSI 125/150	635mm	578mm	16	1 1/8"	32mm	40mm		40mm
DN450 (18")	ANSI 300	711mm	629mm	24	1 1/4"	35mm			60mm
DN450 (18")	ANSI 600	743mm	654mm	20	1 5/8"	44mm			83mm
DN450 (18")	ANSI 900	787mm	686mm	20	1 7/8"	51mm			102mm
DN450 (18")	ANSI 1500	914mm	775mm	16	2 3/4"	73mm			162mm
DN450 (18")	AS2129/BS10 Table D	641mm	584mm	12	M24	26mm	32mm	29mm	32mm
DN450 (18")	AS2129/BS10 Table E	641mm	584mm	16	M24	26mm	35mm	29mm	35mm
DN450 (18")	AS2129/BS10 Table F	673mm	610mm	20	M30	33mm	38mm	35mm	44mm
DN450 (18")	AS2129/BS10 Table H	673mm	610mm	20	M30	33mm	54mm	48mm	60mm
DN450 (18")	AS2129/BS10 Table J	673mm	610mm	20	M33	36mm			70mm
DN450 (18")	AS2129/BS10 Table K	718mm	654mm	20	M36	39mm			89mm
DN450 (18")	AS2129/BS10 Table R	735mm	673mm	20	M36	39mm			98mm
DN450 (18")	BS4504-6	595mm	550mm	16	M20	22mm	30mm		30mm
DN450 (18")	BS4504-10	615mm	565mm	20	M24	26mm	32mm		36mm
DN450 (18")	BS4504-16	640mm	585mm	20	M27	30mm	40mm		40mm
DN450 (18")	BS4504-25	670mm	600mm	20	M33	35mm	52mm		52mm
DN450 (18")	BS4504-40	685mm	610mm	20	M36	39mm			68mm
DN450 (18")	JIS 5K	605mm	555mm	16	M22	25mm	30mm		24mm
DN450 (18")	JIS 10K	620mm	565mm	20	M24	27mm	38mm		30mm
DN450 (18")	JIS 16K	675mm	605mm	20	M30	33mm	46mm		40mm
DN450 (18")	JIS 20K	675mm	605mm	20	M30	33mm	54mm		48mm
DN500 (20")	ANSI 125/150	699mm	635mm	20	1 1/8"	32mm	43mm		43mm
DN500 (20")	ANSI 300	775mm	686mm	24	1 1/4"	35mm			64mm
DN500 (20")	ANSI 600	813mm	724mm	24	1 5/8"	44mm			89mm
DN500 (20")	ANSI 900	845mm	749mm	20	2"	54mm			108mm
DN500 (20")	ANSI 1500	984mm	832mm	16	3"	79mm			178mm
DN500 (20")	AS2129/BS10 Table D	705mm	641mm	16	M22	25mm	32mm	32mm	32mm
DN500 (20")	AS2129/BS10 Table E	705mm	641mm	16	M22	25mm	38mm	32mm	32mm
DN500 (20")	AS2129/BS10 Table F	737mm	673mm	20	M30	32mm	41mm	38mm	38mm
DN500 (20")	AS2129/BS10 Table H	737mm	673mm	20	M30	32mm	57mm	51mm	51mm
DN500 (20")	AS2129/BS10 Table J	737mm	673mm	20	M33	35mm			64mm
DN500 (20")	AS2129/BS10 Table K	787mm	711mm	20	M39	41mm			83mm
DN500 (20")	AS2129/BS10 Table R	807mm	730mm	20	M39	41mm			105mm
DN500 (20")	BS4504-6	645mm	600mm	20	M20	22mm	30mm		30mm
DN500 (20")	BS4504-10	670mm	620mm	20	M24	26mm	34mm		38mm
DN500 (20")	BS4504-16	715mm	650mm	20	M30	33mm	42mm		36mm
DN500 (20")	BS4504-25	730mm	660mm	20	M33	36mm	52mm		44mm
DN500 (20")	BS4504-40	755mm	670mm	20	M39	42mm			52mm
DN500 (20")	BS4504-64	800mm	705mm	20	M45	58mm			67mm
DN500 (20")	BS4504-100	870mm	760mm	20	M52	56mm			94mm
DN500 (20")	JIS 5K	655mm	605mm	20	M22	25mm	32mm		24mm
DN500 (20")	JIS 10K	675mm	620mm	20	M24	27mm	40mm		30mm
DN500 (20")	JIS 16K	730mm	660mm	20	M30	33mm	50mm		42mm
DN500 (20")	JIS 20K	730mm	660mm	20	M30	33mm	58mm		50mm

• BS4504 now incorporated into EN1092-1 but flange drilling dimensions are generally the same.

• BS10 and AS2129 are generally the same except some bolt hole sizes are larger in AS2129 due to metrication. AS2129 is now updated by AS4087 but drillings are the same, refer page 1.

FLANGE TABLE 9

DN550 (22") - DN800 (32")

SIZE MM (INCH)	RATING	FLANGE OD DIAMETER	PCD	# BOLTS	BOLT SIZE	HOLE SIZE	THICKNESS IRON	THICKNESS BRONZE	THICKNESS CARBON STEEL
DN550 (22")	ANSI 125/150	749mm	692mm	20	1 1/4"	35mm			
DN550 (22")	ANSI 300	838mm	743mm	24	1 1/2"	41mm			
DN550 (22")	AS2129/BS10 Table D	760mm	699mm	16	M27	30mm	35mm		29mm
DN550 (22")	AS2129/BS10 Table E	760mm	699mm	16	M27	30mm	38mm		44mm
DN550 (22")	AS2129/BS10 Table F	785mm	724mm	24	M30	33mm	41mm		54mm
DN550 (22")	AS2129/BS10 Table H	785mm	724mm	24	M30	33mm	60mm		70mm
DN550 (22")	AS2129/BS10 Table J	785mm	724mm	24	M33	36mm			86mm
DN550 (22")	AS2129/BS10 Table K	870mm	781mm	20	M52	55mm			105mm
DN550 (22")	AS2129/BS10 Table R	895mm	806mm	20	M52	55mm			114mm
DN550 (22")	JIS 5K	720mm	665mm	20	M24	27mm	32mm		26mm
DN550 (22")	JIS 10K	745mm	680mm	20	M30	33mm	42mm		32mm
DN550 (22")	JIS 16K	795mm	720mm	20	M36	39mm	54mm		44mm
DN550 (22")	JIS 20K	795mm	720mm	20	M36	39mm	62mm		52mm
DN600 (24")	ANSI 125/150	813mm	749mm	20	1 1/4"	35mm	48mm		48mm
DN600 (24")	ANSI 300	914mm	813mm	24	1 1/2"	41mm			70mm
DN600 (24")	ANSI 600	940mm	838mm	24	1 7/8"	51mm			102mm
DN600 (24")	ANSI 900	1041mm	864mm	20	2 1/2"	67mm			140mm
DN600 (24")	ANSI 1500	1168mm	991mm	16	3 1/2"	92mm			203mm
DN600 (24")	AS2129/BS10 Table D	826mm	756mm	16	M27	29mm	35mm	35mm	35mm
DN600 (24")	AS2129/BS10 Table E	826mm	756mm	16	M30	32mm	41mm	38mm	38mm
DN600 (24")	AS2129/BS10 Table F	851mm	781mm	24	M33	35mm	44mm	41mm	41mm
DN600 (24")	AS2129/BS10 Table H	851mm	781mm	24	M33	35mm	64mm	57mm	57mm
DN600 (24")	AS2129/BS10 Table J	851mm	781mm	24	M36	38mm			70mm
DN600 (24")	BS4504-6	755mm	705mm	20	M24	26mm	30mm		32mm
DN600 (24")	BS4504-10	780mm	725mm	20	M27	30mm	36mm		42mm
DN600 (24")	BS4504-16	840mm	770mm	20	M33	36mm	48mm		40mm
DN600 (24")	BS4504-25	845mm	770mm	20	M36	39mm			46mm
DN600 (24")	BS4504-40	890mm	795mm	20	M45	48mm			60mm
DN600 (24")	BS4504-64	930mm	820mm	20	M52	56mm			76mm
DN600 (24")	BS4504-100	990mm	875mm	20	M56	62mm			104mm
DN600 (24")	JIS 5K	770mm	715mm	20	M24	27mm	32mm		26mm
DN600 (24")	JIS 10K	765mm	730mm	24	M30	33mm	44mm		32mm
DN600 (24")	JIS 16K	845mm	770mm	24	M36	39mm	58mm		46mm
DN600 (24")	JIS 20K	845mm	770mm	24	M36	39mm	66mm		54mm
DN650 (26")	ANSI 125/150	870mm	806mm	24	1 1/4"	35mm			
DN650 (26")	ANSI 300	971mm	876mm	28	1 5/8"	41mm			
DN650 (26")	JIS 5K	825mm	770mm	24	M24	27mm	34mm		26mm
DN650 (26")	JIS 10K	845mm	780mm	24	M30	33mm	43mm		34mm
DN650 (26")	JIS 16K	895mm	820mm	24	M36	39mm			48mm
DN650 (26")	JIS 20K	945mm	850mm	24	M45	48mm			60mm
DN700 (28")	ANSI 125/150	927mm	864mm	28	1 1/4"	35mm			
DN700 (28")	ANSI 300	1035mm	940mm	28	1 5/8"	70mm			
DN700 (28")	AS2129/BS10 Table D	910mm	845mm	20	M27	30mm	44mm		
DN700 (28")	AS2129/BS10 Table E	910mm	845mm	20	M30	33mm	38mm		35mm
DN700 (28")	AS2129/BS10 Table F	935mm	857mm	24	M33	36mm	44mm		51mm
DN700 (28")	BS4504-6	860mm	810mm	24	M24	26mm	32mm		34mm
DN700 (28")	BS4504-10	895mm	940mm	24	M27	30mm	40mm		46mm
DN700 (28")	BS4504-16	910mm	840mm	24	M33	36mm	54mm		58mm
DN700 (28")	BS4504-25	960mm	875mm	24	M39	42mm			
DN700 (28")	BS4504-40	995mm	900mm	24	M45	48mm			
DN700 (28")	BS4504-64	1045mm	935mm	24	M52	56mm			
DN700 (28")	BS4504-100	1145mm	1020mm	24	M64	70mm			
DN700 (28")	JIS 5K	875mm	820mm	24	M24	27mm	34mm		26mm
DN700 (28")	JIS 10K	905mm	840mm	24	M30	33mm	48mm		34mm
DN700 (28")	JIS 16K	960mm	875mm	24	M39	42mm			50mm
DN700 (28")	JIS 20K	995mm	900mm	24	M45	48mm			64mm
DN750 (30")	ANSI 125/150	984mm	914mm	28	1 1/4"	35mm	54mm		
DN750 (30")	ANSI 300	1092mm	997mm	28	1 3/4"	48mm			
DN750 (30")	AS2129/BS10 Table D	995mm	927mm	20	M30	33mm	48mm		
DN750 (30")	AS2129/BS10 Table E	995mm	927mm	20	M33	36mm	41mm		41mm
DN750 (30")	AS2129/BS10 Table F	1015mm	940mm	28	M33	36mm	48mm		54mm
DN750 (30")	JIS 5K	945mm	880mm	24	M30	33mm	36mm		28mm
DN750 (30")	JIS 10K	970mm	900mm	24	M30	33mm	50mm		36mm
DN750 (30")	JIS 16K	1020mm	935mm	24	M39	42mm			52mm
DN750 (30")	JIS 20K	1080mm	970mm	24	M52	56mm			68mm
DN800 (32")	ANSI 125/150	1060mm	978mm	28	1 1/2"	41mm			
DN800 (32")	ANSI 300	1149mm	1054mm	28	1 7/8"	50mm			
DN800 (32")	AS2129/BS10 Table D	1060mm	984mm	20	M33	36mm	41mm		41mm
DN800 (32")	AS2129/BS10 Table E	1060mm	984mm	20	M33	36mm	48mm		54mm
DN800 (32")	AS2129/BS10 Table F	1060mm	984mm	28	M33	36mm	52mm		68mm
DN800 (32")	BS4504-6	975mm	920mm	24	M27	30mm	34mm		38mm
DN800 (32")	BS4504-10	1015mm	950mm	24	M30	33mm	44mm		52mm
DN800 (32")	BS4504-16	1025mm	950mm	24	M36	39mm	58mm		64mm
DN800 (32")	BS4504-25	1085mm	990mm	24	M45	48mm			
DN800 (32")	BS4504-40	1140mm	1030mm	24	M52	56mm			
DN800 (32")	BS4504-64	1165mm	1050mm	24	M56	62mm			
DN800 (32")	JIS 5K	995mm	930mm	24	M30	33mm	36mm		28mm
DN800 (32")	JIS 10K	1020mm	950mm	28	M30	33mm	52mm		36mm
DN800 (32")	JIS 16K	1085mm	990mm	24	M45	48mm			54mm
DN800 (32")	JIS 20K	1140mm	1030mm	24	M52	56mm			72mm

• BS4504 now incorporated into EN1092-1 but flange drilling dimensions are generally the same.

• BS10 and AS2129 are generally the same except some bolt hole sizes are larger in AS2129 due to metrification. AS2129 is now updated by AS4087 but drillings are the same, refer page 1.

FLANGE TABLE 10

DN850 (34") - DN550 (62")

SIZE MM (INCH)	RATING	FLANGE OD DIAMETER	PCD	# BOLTS	BOLT SIZE	HOLE SIZE	THICKNESS IRON	THICKNESS BRONZE	THICKNESS CARBON STEEL
DN850 (34")	ANSI 125/150	1111mm	1029mm	32	1 1/2"	41mm			
DN850 (34")	ANSI 300	1206mm	1105mm	28	1 7/8"	50mm			
DN850 (34")	AS2129/BS10 Table D	1090mm	1016mm	20	M33	36mm	41mm		44mm
DN850 (34")	AS2129/BS10 Table E	1090mm	1016mm	20	M33	36mm	51mm		57mm
DN850 (34")	AS2129/BS10 Table F	1090mm	1016mm	32	M33	36mm	54mm		54mm
DN850 (34")	JIS 5K	1045mm	980mm	24	M30	33mm	38mm		28mm
DN850 (34")	JIS 10K	1070mm	1000mm	28	M30	33mm	52mm		36mm
DN850 (34")	JIS 16K	1135mm	1040mm	24	M45	48mm			56mm
DN850 (34")	JIS 20K	1200mm	1090mm	24	M52	56mm			74mm
DN900 (36")	ANSI 125/150	1168mm	1086mm	32	1 1/2"	41mm	60mm		
DN900 (36")	ANSI 300	1270mm	1168mm	32	2"	54mm			
DN900 (36")	AS2129/BS10 Table D	1175mm	1092mm	24	M33	36mm	44mm		48mm
DN900 (36")	AS2129/BS10 Table E	1175mm	1092mm	24	M33	36mm	51mm		64mm
DN900 (36")	AS2129/BS10 Table F	1185mm	1105mm	32	M36	39mm	57mm		76mm
DN900 (36")	BS4504-6	1075mm	1020mm	24	M27	30mm	36mm		42mm
DN900 (36")	BS4504-10	1115mm	1050mm	28	M30	33mm	46mm		56mm
DN900 (36")	BS4504-16	1125mm	1050mm	28	M36	39mm	62mm		72mm
DN900 (36")	BS4504-25	1185mm	1090mm	28	M45	48mm	55mm		58mm
DN900 (36")	BS4504-40	1285mm	1170mm	28	M52	56mm			
DN900 (36")	BS4504-64	1285mm	1170mm	28	M56	62mm			
DN900 (36")	JIS 5K	1095mm	1030mm	24	M30	33mm	38mm		30mm
DN900 (36")	JIS 10K	1120mm	1050mm	28	M30	33mm	54mm		38mm
DN900 (36")	JIS 16K	1185mm	1090mm	28	M45	48mm			58mm
DN900 (36")	JIS 20K	1250mm	1140mm	28	M52	56mm			76mm
DN950 (38")	ANSI 125/150	1238mm	1149mm	32	1 1/2"	41mm			
DN950 (38")	ANSI 300	1327mm	1219mm	32	2"	54mm			
DN1000 (40")	ANSI 125/150	1289mm	1200mm	36	1 1/2"	41mm			
DN1000 (40")	ANSI 300	1384mm	1276mm	36	2"	54mm			
DN1000 (40")	AS2129/BS10 Table D	1255mm	1175mm	24	M33	36mm	44mm		51mm
DN1000 (40")	AS2129/BS10 Table E	1255mm	1175mm	24	M36	39mm	54mm		67mm
DN1000 (40")	AS2129/BS10 Table F	1275mm	1194mm	36	M36	39mm	60mm		83mm
DN1000 (40")	BS4504-6	1175mm	1120mm	28	M27	30mm	36mm		46mm
DN1000 (40")	BS4504-10	1230mm	1160mm	28	M33	36mm	50mm		62mm
DN1000 (40")	BS4504-16	1255mm	1170mm	28	M39	42mm	66mm		78mm
DN1000 (40")	BS4504-25	1320mm	1210mm	28	M52	56mm	60mm		
DN1000 (40")	BS4504-40	1360mm	1250mm	28	M52	56mm			
DN1000 (40")	BS4504-64	1415mm	1290mm	28	M64	70mm			
DN1000 (40")	JIS 5K	1195mm	1130mm	28	M30	33mm	40mm		32mm
DN1000 (40")	JIS 10K	1235mm	1160mm	28	M36	39mm	58mm		40mm
DN1000 (40")	JIS 16K	1320mm	1210mm	28	M52	56mm			62mm
DN1050 (42")	ANSI 125/150	1346mm	1257mm	36	1 1/2"	41mm	66mm		
DN1050 (42")	ANSI 300	1448mm	1340mm	36	2"	54mm			
DN1100 (44")	ANSI 125/150	1346mm	1257mm	36	1 1/2"	41mm	66mm		
DN1100 (44")	ANSI 300	1505mm	1397mm	36	2"	50mm			
DN1100 (44")	JIS 5K	1305mm	1240mm	28	M30	33mm	42mm		32mm
DN1100 (44")	JIS 10K	1345mm	1270mm	28	M36	39mm	62mm		42mm
DN1100 (44")	JIS 16K	1420mm	1310mm	32	M52	56mm			66mm
DN1150 (46")	ANSI 125/150	1454mm	1365mm	40	1 1/2"	41mm			
DN1150 (46")	ANSI 300	1562mm	1454mm	40	2 1/8"	50mm			
DN1200 (48")	ANSI 125/150	1511mm	1422mm	44	1 1/2"	41mm	70mm		
DN1200 (48")	ANSI 300	1651mm	1543mm	40	2"	57mm	102mm		
DN1200 (48")	AS2129/BS10 Table D	1490mm	1410mm	32	M33	36mm	51mm		60mm
DN1200 (48")	AS2129/BS10 Table E	1490mm	1410mm	32	M36	39mm	60mm		79mm
DN1200 (48")	AS2129/BS10 Table F	1530mm	1441mm	40	M39	42mm	67mm		95mm
DN1200 (48")	BS4504-6	1405mm	1340mm	32	M30	33mm	40mm		56mm
DN1200 (48")	BS4504-10	1455mm	1380mm	32	M36	39mm	56mm		74mm
DN1200 (48")	BS4504-16	1485mm	1390mm	32	M45	48mm			94mm
DN1200 (48")	BS4504-25	1530mm	1420mm	32	M52	56mm			
DN1200 (48")	BS4504-40	1575mm	1460mm	32	M56	62mm			
DN1200 (48")	BS4504-64	1665mm	1530mm	32	M72	78mm			
DN1200 (48")	JIS 5K	1420mm	1350mm	32	M30	33mm	46mm		34mm
DN1200 (48")	JIS 10K	1465mm	1380mm	32	M36	39mm	66mm		44mm
DN1200 (48")	JIS 16K	1530mm	1420mm	32	M52	56mm			70mm
DN1250 (50")	ANSI 125/150	1568mm	1479mm	44	1 3/4"	48mm			
DN1300 (52")	ANSI 125/150	1626mm	1537mm	44	1 3/4"	48mm			
DN1350 (54")	ANSI 125/150	1683mm	1594mm	44	1 3/4"	51mm	76mm		
DN1350 (54")	JIS 5K	1575mm	1505mm	32	M30	33mm	48mm		34mm
DN1350 (54")	JIS 10K	1630mm	1540mm	36	M42	45mm	70mm		45mm
DN1350 (54")	JIS 16K	1700mm	1590mm	32	M56	62mm			62mm
DN1400 (56")	ANSI 125/150	1746mm	1651mm	48	1 3/4"	48mm			
DN1400 (56")	AS2129/BS10 Table D	1700mm	1615mm	36	M33	36mm	57mm		60mm
DN1400 (56")	BS4504-6	1630mm	1560mm	36	M33	36mm			
DN1400 (56")	BS4504-10	1675mm	1590mm	36	M39	42mm			
DN1400 (56")	BS4504-16	1685mm	1590mm	36	M45	48mm			
DN1400 (56")	BS4504-25	1755mm	1640mm	36	M56	60mm			
DN1400 (56")	BS4504-40	1795mm	1680mm	36	M56	62mm			
DN1400 (56")	JIS 16K	1755mm	1640mm	36	M56	62mm			78mm
DN1450 (58")	ANSI 125/150	1803mm	1708mm	48	1 3/4"	48mm			
DN1500 (60")	ANSI 125/150	1854mm	1759mm	52	1 3/4"	51mm	79mm		
DN1500 (60")	JIS 5K	1730mm	1660mm	36	M30	33mm	52mm		36mm
DN1500 (60")	JIS 10K	1795mm	1700mm	40	M42	45mm	74mm		50mm
DN1500 (60")	JIS 16K	1865mm	1750mm	36	M36	62mm			80mm
DN1550 (62")	ANSI 125/150	1911mm	1822mm	52	1 7/8"	51mm			

* BS4504 now incorporated into EN1092-1 but flange drilling dimensions are generally the same.

* BS10 and AS2129 are generally the same except some bolt hole sizes are larger in AS2129 due to metrication. AS2129 is now updated by AS4087 but drillings are the same, refer page 1.

FLANGE TABLE 11

DN1600 (64") - DN3600 (144")

SIZE MM (INCH)	RATING	FLANGE OD DIAMETER	PCD	# BOLTS	BOLT SIZE	HOLE SIZE	THICKNESS IRON	THICKNESS BRONZE	THICKNESS CARBON STEEL
DN1600 (64")	ANSI 125/150	1981mm	1880mm	52	1 7/8"	51mm			
DN1600 (64")	BS10 Table D	1910mm	1825mm	40	M36	39mm	60mm		64mm
DN1600 (64")	BS4504-6	1830mm	1760mm	40	M33	36mm			
DN1600 (64")	BS4504-10	1915mm	1820mm	40	M45	48mm			
DN1600 (64")	BS4504-16	1930mm	1820mm	40	M52	56mm			
DN1600 (64")	BS4504-25	1975mm	1860mm	40	M56	60mm			
DN1600 (64")	BS4504-40	2025mm	1900mm	40	M64	70mm			
DN1650 (66")	ANSI 125/150	2032mm	1930mm	52	1 7/8"	51mm			
DN1700 (68")	ANSI 125/150	2089mm	1988mm	56	1 7/8"	51mm			
DN1750 (70")	ANSI 125/150	2140mm	2045mm	56	1 7/8"	51mm			
DN1800 (72")	ANSI 125/150	2197mm	2095mm	60	1 3/4"	51mm	89mm		
DN1800 (72")	BS10 Table D	2110mm	2019mm	44	M39	42mm	67mm		73mm
DN1800 (72")	BS4504-6	2045mm	1970mm	44	M36	39mm			
DN1800 (72")	BS4504-10	2115mm	2020mm	44	M45	48mm			
DN1800 (72")	BS4504-16	2130mm	2020mm	44	M52	56mm			
DN1800 (72")	BS4504-25	2195mm	2070mm	44	M64	69mm			
DN1850 (74")	ANSI 125/150	2248mm	2146mm	60	1 3/4"	51mm			
DN1900 (76")	ANSI 125/150	2305mm	2197mm	60	1 3/4"	51mm			
DN1950 (78")	ANSI 125/150	2362mm	2254mm	60	2 1/8"	51mm			
DN2000 (80")	ANSI 125/150	2419mm	2311mm	60	2 1/8"	51mm			
DN2000 (80")	BS4504-6	2265mm	2180mm	48	M39	42mm			
DN2000 (80")	BS4504-10	2325mm	2230mm	48	M45	48mm			
DN2000 (80")	BS4504-16	2345mm	2230mm	48	M56	61mm			
DN2000 (80")	BS4504-25	2425mm	2300mm	48	M64	69mm			
DN2050 (82")	ANSI 125/150	2476mm	2369mm	60	2 1/8"	51mm			
DN2100 (84")	ANSI 125/150	2534mm	2426mm	64	2 1/8"	51mm			
DN2150 (86")	ANSI 125/150	2534mm	2425mm	64	2"	57mm	99mm		
DN2200 (88")	BS10 Table D	2560mm	2460mm	44	M45	48mm	73mm		83mm
DN2200 (88")	BS4504-6	2475mm	2390mm	52	M39	42mm			
DN2200 (88")	BS4504-10	2550mm	2440mm	52	M52	55mm			
DN2200 (88")	BS4504-16	2555mm	2440mm	52	M56	62mm			
DN2250 (90")	ANSI 125/150	2705mm	2597mm	68	2 1/4"	54mm			
DN2300 (92")	ANSI 125/150	2762mm	2654mm	68	2 1/4"	54mm			
DN2350 (94")	ANSI 125/150	2819mm	2699mm	68	2 1/4"	54mm			
DN2400 (96")	ANSI 125/150	2877mm	2756mm	68	2 1/4"	63mm	108mm		
DN2400 (96")	BS10 Table D	2775mm	2673mm	52	M45	48mm	83mm		92mm
DN2400 (96")	BS4504-6	2685mm	2545mm	56	M39	42mm			
DN2400 (96")	BS4504-10	2760mm	2570mm	56	M52	55mm			
DN2450 (98")	ANSI 125/150	2934mm	2813mm	68	2 1/4"	63mm			
DN2500 (100")	ANSI 125/150	2991mm	2870mm	68	2 1/4"	63mm			
DN2550 (102")	ANSI 125/150	3048mm	2908mm	72	2 1/4"	63mm			
DN2600 (104")	BS4504-6	2905mm	2810mm	60	M45	48mm			
DN2600 (104")	BS4504-10	2960mm	2850mm	60	M52	55mm			
DN2700 (108")	ANSI 125/150	3219mm	3067mm	72	2 1/4"	63mm			
DN2800 (112")	BS10 Table D	3200mm	3090mm	56	M45	48mm	89mm		102mm
DN2800 (112")	BS4504-6	3115mm	3020mm	64	M45	48mm			
DN2800 (112")	BS4504-10	3180mm	3070mm	64	M52	55mm			
DN3000 (120")	ANSI 125/150	3562mm	3372mm	76	2 1/4"	63mm			
DN3000 (120")	BS4504-6	3315mm	3220mm	68	M45	48mm			
DN3000 (120")	BS4504-10	3405mm	3290mm	68	M56	62mm			
DN3200 (128")	BS4504-6	3525mm	3430mm	72	M45	48mm			
DN3300 (132")	ANSI 125/150	3905mm	3702mm	80	2 1/4"	48mm			
DN3400 (136")	BS4504-6	3735mm	3640mm	76	M45	48mm			
DN3600 (144")	ANSI 125/150	4248mm	4020mm	84	2 1/4"	63mm			
DN3600 (144")	BS4504-6	3970mm	3860mm	80	M52	56mm			

- BS4504 now incorporated into EN1092-1 but flange drilling dimensions are generally the same.
- BS10 and AS2129 are generally the same except some bolt hole sizes are larger in AS2129 due to metrication. AS2129 is now updated by AS4087 but drillings are the same, refer page 1.

Temperature - Pressure Ratings for Carbon Steel Plate Flanges													
Pressure - kPa, Temperature - °C													
"Flange table"	-18°	-50°	250	275	300	325	350	375	400	425	450	475	Maximum hydrostatic test pressure kPa
	to 120	to 232											
D		700	650	600	570	550	500	450	400	350			1 050
C	1 200												1 800
E		1 400	1 300	1 200	1 100	1 000	950	900	800	700			2 100
F		2 100	2 000	1 800	1 700	1 600	1 400	1 300	1 200	1 100			3 150
H		3 500	3 300	3 100	2 900	2 600	2 400	2 000	2 000	1 700	1 300	900	5 250
J		4 800	4 600	4 300	4 000	3 700	3 400	3 100	2 700	2 400	1 900	1 300	7 200
K		6 200	5 900	5 500	5 100	4 700	4 300	3 900	3 500	3 100	2 400	1 600	9 300
R		8 300	7 900	7 400	6 800	6 300	5 800	5 200	4 700	4 200	3 200	2 200	12 450
S		12 400	11 800	11 100	10 300	9 500	8 700	7 900	7 100	6 300	4 800	3 300	18 600
T		19 300	18 400	17 200	16 000	14 700	13 500	12 200	11 000	9 800	7 500	5 100	28 950

AS2129 still in use but now only covers Table D to H (Table C now obsolete), Table J to T now replaced by AS4331 which is a replication of ISO7500-1 which in turn is equivalent to ASME 150-2500 class ANSI B16.5). AS4087 is the new standard covering Table D to H. The same drilling is specified but the PN rating system is used (PN16 to PN35).

For ANSI 150 to 2500 class flange pressure/temperature ratings refer to the forged pressure/temperature ratings shown in the following [link](#).

