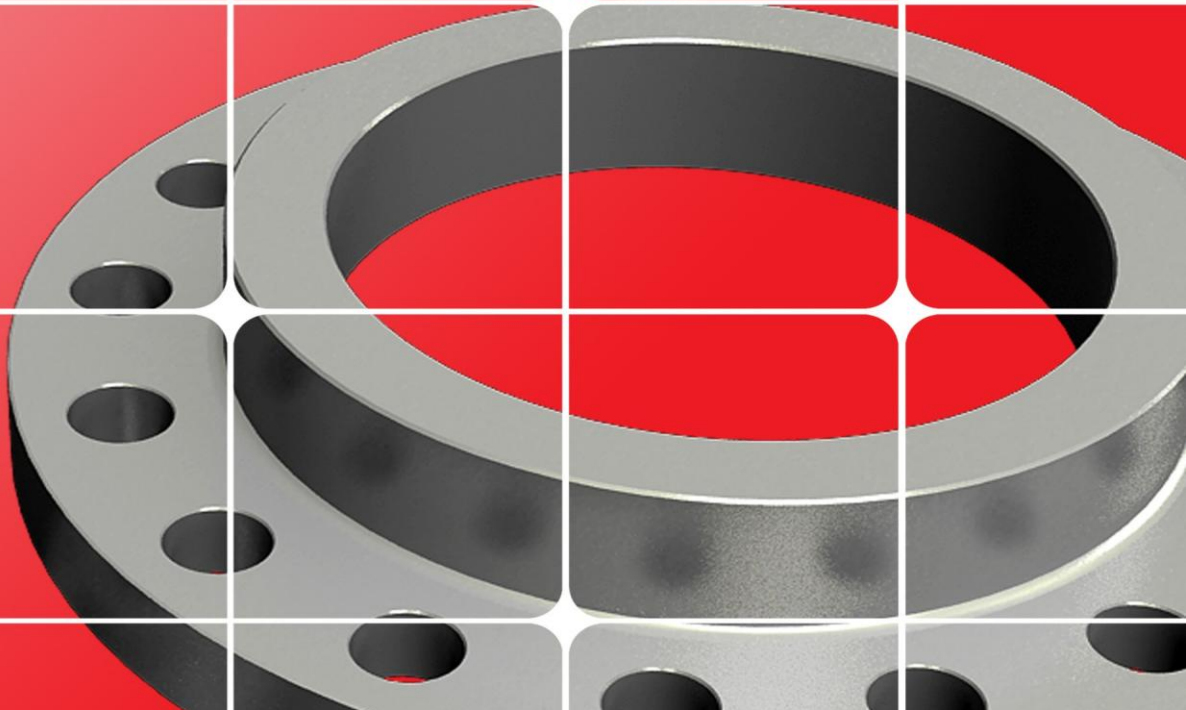
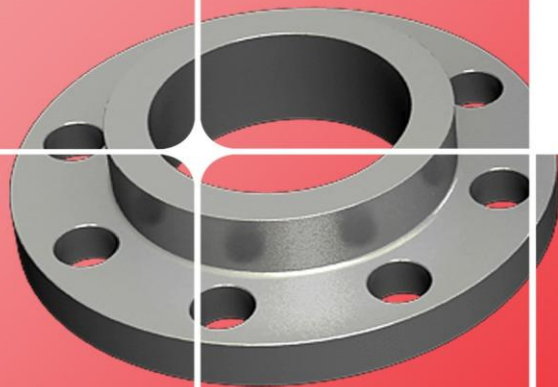
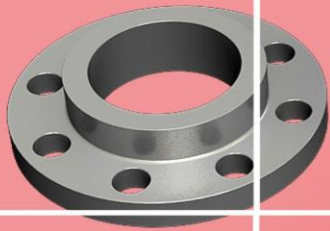


AS 2129 / 4087 FLANGES

- **B**ossed Flanges
- **W**eld Neck Flanges
- **S**lip-on Flanges
- **B**lind Flanges

- AS 2129 Table **D**
- AS 2129 Table **E**
- AS 2129 Table **F**
- AS 2129 Table **H**
- AS 4087 PN **16**
- AS 4087 PN **21**
- AS 4087 PN **135**



AS 2129, AS 4087 Flanges Specifications

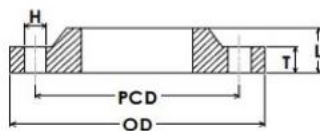
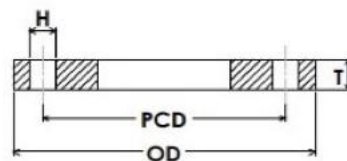
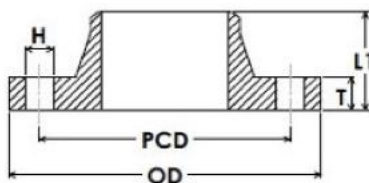
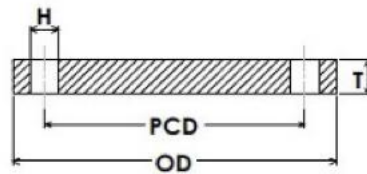
Flange Face Types:	Bossed Flange, Weld Neck Flange, Flat Flange, Slip-on Flange
Dimension Standards:	AS 2129 Table D, E, F, H, PN 16, PN 21, PN 35
Pressure Class:	Class 150, Class 300, Class 400, Class 600, Class 900, Class 1500, Class 2500 / PN6, PN10, PN16, PN25, PN40
Sizes:	1/2" NB to 48"NB
Material and Grades:	Carbon Steel, Cast Iron, Ductile Iron
Surface Treatment:	Anti-rust Paint, Oil Black Paint, Yellow Transparent, Zinc Plated, Cold and Hot Dip Galvanized

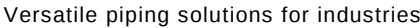
AS 2129 Flange Face Types

Bossed Flange

Slip-on Flange

Weld Neck Flange

Blind Flange

Bossed Flange

Slip-on Flange

Weld Neck Flange

Blind Flange



AS 2129 Flange Class	
AS 2129 – Table D	AS 2129 – Table E
AS 2129 – Table F	AS 2129 – Table H
As 4087 – PN 16	As 4087 – PN 21
As 4087 – PN 135	

AS 2129Table D Flange Dimensions								
Table D				Length Through Hub		Drilling Data		
Nominal Pipe Size		Flange Outside Diameter	Thickness Of Range	Bossed Sow	Weld Neck	Pitch Circle Diameter	Bolt Hole Diameter	Number Of Bolt Holes
mm	Inch	OD	T	L	L1	PCD	H	#
15	½	95	5	15	27	67	14	4
20	¾	100	5	16	27	73	14	4
25	1	115	5	16	27	83	14	4
32	1-¼	120	6	17	31	87	14	4
40	1-½	135	6	19	35	98	14	4
50	2	150	8	21	37	114	18	4
65	2-½	165	8	24	40	127	18	4
80	3	185	10	26	45	146	18	4
90	3-½	205	10	27	45	165	18	4
100	4	215	10	29	51	178	18	4
125	5	255	13	32	57	210	18	8
150	6	280	13	32	61	235	18	8
200	8	335	13	35	64	292	18	8
250	10	405	16	43	80	356	22	8
300	12	455	19	48	89	406	22	12
350	14	525	22		95	470	26	12
400	16	580	22			521	26	12
450	18	640	25			584	26	12
500	20	705	29			641	26	16
550	22	760	29			699	30	16
600	24	825	32			756	30	16
700	28	910	35			845	30	20
750	30	995	41			927	33	20
800	32	1060	41			984	36	20
850	34	1090	44			1016	36	20
900	36	1175	48			1092	36	24
1000	40	1255	51			1175	36	24
1050	42	1335	54			1251	36	28
1200	48	1490	60			1410	36	32
* Dimensions are in millimetres								

AS 2129 Table E Flange Dimensions

Table D				Length Through Hub		Drilling Data		
Nominal Pipe Size		Flange Outside Diameter	Thickness Of Range	Bossed Sow	Weld Neck	Pitch Circle Diameter	Bolt Hole Diameter	Number Of Bolt Holes
mm	Inch	OD	T	L	L1	PCD	H	#
15	½	95	6	16	28	67	14	4
20	¾	100	6	17	28	73	14	4
25	1	115	7	18	29	83	14	4
32	1-¼	120	8	19	33	87	14	4
40	1-½	135	9	22	38	98	14	4
50	2	150	10	23	39	114	18	4
65	2-½	165	10	26	42	127	18	4
80	3	185	11	27	46	146	18	4
90	3-½	205	12	29	47	165	18	8
100	4	215	13	32	54	178	18	8
125	5	255	14	33	58	210	18	8
150	6	280	17	36	65	235	22	8
200	8	335	19	41	70	292	22	8
250	10	405	22	49	86	356	22	12
300	12	455	25	54	95	406	26	12
350	14	525	29		102	470	26	12
400	16	580	32			521	26	12
450	18	640	35			584	26	16
500	20	705	38			641	26	16
550	22	760	44			699	30	16
600	24	825	48			756	33	16
700	28	910	51			845	33	20
750	30	995	54			927	36	20
800	32	1060	54			984	36	20
850	34	1090	57			1016	36	20
900	36	1175	64			1092	36	24
1000	40	1255	67			1175	39	24
1050	42	1335	70			1251	39	28
1200	48	1490	79			1410	39	32

* Dimensions are in millimetres

AS 2129 Table F Flange Dimensions

Table F				Length Through Hub		Drilling Data		
Nominal Pipe Size		Flange Outside Diameter	Thickness Of Range	Bossed Sow	Weld Neck	Pitch Circle Diameter	Bolt Hole Diameter	Number Of Bolt Holes
mm	Inch	OD	T	L	L1	PCD	H	#
15	½	95	10	20	32	67	14	4
20	¾	100	10	21	32	73	14	4
25	1	120	10	21	39	87	18	4
32	1-¼	135	13	24	48	98	18	4
40	1-½	140	13	26	48	105	18	4
50	2	165	16	29	51	127	18	4
65	2-½	185	16	32	54	146	18	8
80	3	205	16	32	60	165	18	8
90	3-½	215	19	36	63	178	18	8
100	4	230	19	38	70	191	18	8
125	5	280	22	41	79	235	22	8
150	6	305	22	41	79	260	22	12
200	8	370	25	47	92	324	22	12

250	10	430	29	56	102	381	26	12
300	12	490	32	61	111	438	26	16
350	14	550	35			495	30	16
400	16	610	41			552	30	20
450	18	675	44			610	33	20
500	20	735	51			673	33	24
550	22	785	54			724	33	24
600	24	850	57			781	36	24
700	28	935	60			857	36	24
750	30	1015	67			940	36	28
800	32	1060	68			984	36	28
850	34	1090	70			1016	36	32
900	36	1185	76			1105	39	32
1000	40	1275	83			1194	39	36
1050	42	1355	86			1270	39	36
1200	48	1530	95			1441	42	40

* Dimensions are in millimetres

AS 2129 Table H Flange Dimensions

Table D				Length Through Hub		Drilling Data		
Nominal Pipe Size		Flange Outside Diameter	Thickness Of Range	Bossed Sow	Weld Neck	Pitch Circle Diameter	Bolt Hole Diameter	Number Of Bolt Holes
mm	Inch	OD	T	L	L1	PCD	H	#
15	½	115	13	23	42	83	18	4
20	¾	115	13	24	42	83	18	4
25	1	120	14	25	43	87	18	4
32	1-¼	135	17	28	52	98	18	4
40	1-½	140	17	30	52	105	18	4
50	2	165	19	32	54	127	18	4
65	2-½	185	19	35	57	146	18	8
80	3	205	22	38	66	165	18	8
90	3-½	215	22	39	66	178	18	8
100	4	230	25	44	76	191	18	8
125	5	280	29	48	86	235	22	8
150	6	305	29	48	86	260	22	12
200	8	370	32	54	99	324	22	12
250	10	430	35	62	108	381	26	12
300	12	490	41	70	120	438	26	16
350	14	550	48			495	30	16
400	16	610	54			552	30	20
450	18	675	60			610	33	20
500	20	735	67			673	33	24
550	22	785	70			724	33	24
600	24	850	76			781	36	24

* Dimensions are in millimetres

AS 4087 PN 16 Flange Dimensions

Nominal Pipe Size	Slip on Bore	Range Outside Diameter	RF Height	RF Diameter	Thickness**	Bolt Circle Diameter	Number of Holes	Hole Diameter
mm	SB	O	RH	R	Q	P	N	HD
50	62	150	3	90	11	114	4	18
65	75	165	3	103	11	127	4	18
80	91	185	3	122	11	146	4	18
100	116	215	3	154	13	178	4	18
150	171	280	3	211	13	235	8	18

165	168	280	3	211	13	235	8	18
200	221	335	3	268	19	292	8	18
225		370	3	300	19	324	8	18
250	276	405	3	328	19	356	8	22
300	327	455	4	378	23	406	12	22
350	359	525	4	438	30	470	12	26
375		550	4	463	30	495	12	26
400	409	580	4	489	30	521	12	26
450	460	640	4	552	30	584	12	26
500	511	705	4	609	38	641	16	26
600	613	825	5	720	48	756	16	30
700	715	910	5	809	56	845	20	30
750	765	995	5	888	56	927	20	33
800	816	1060	5	942	56	984	20	36
900	918	1175	5	1050	66	1092	24	36
1000	1020	1255	5	1133	66	1175	24	36
1200	1224	1490	5	1368	76	1410	32	36

* Dimensions are in millimetres

AS 4087PN 21 Flange Dimensions

Nominal Pipe Size	Slip on Bore	Range Outside Diameter	RF Height	RF Diameter	Thickness**	Bolt Circle Diameter	Number of Holes	Hole Diameter
mm	SB	O	RH	R	Q	P	N	HD
50	62	165	3	103	15	127	4	18
65	75	185	3	122	15	146	8	18
80	91	205	3	141	15	165	8	18
100	116	230	3	167	19	191	8	18
150	171	305	3	232	24	260	12	22
165	168	305	3	232	24	260	12	22
200	221	370	3	296	24	324	12	22
225		405	3	324	30	356	12	26
250	276	430	3	349	30	381	12	26
300	327	490	4	406	30	438	16	26
350	359	550	4	459	30	495	16	30
375		580	4	485	38	521	16	30
400	409	610	4	516	38	552	20	30
450	460	675	4	571	38	610	20	33
500	511	735	4	634	48	673	24	33
600	613	850	5	739	58	781	24	36
700	715	935	5	815	58	857	24	36
750	765	1015	5	898	58	940	28	36
800	816	1060	5	942	68	984	28	36
900	918	1185	5	1060	68	1105	32	39
1000	1020	1275	5	1149	78	1194	36	39
1200	1224	1530	5	1385	88	1441	40	42

* Dimensions are in millimetres

AS 4087PN 35 Flange Dimensions

Nominal Pipe Size	Slip on Bore	Range Outside Diameter	RF Height	RF Diameter	Thickness**	Bolt Circle Diameter	Number of Holes	Hole Diameter
mm	SB	O	RH	R	Q	P	N	HD
50	62	165	3	103	19	127	4	18
65	75	185	3	122	19	146	8	18
80	91	205	3	141	24	165	8	18
100	116	230	3	167	24	191	8	18

150	171	305	3	232	31	260	12	22
165	168	305	3	232	31	260	12	22
200	221	370	3	260	31	324	12	22
225		405	3	286	38	356	12	26
250	276	430	3	311	38	381	12	26
300	327	490	4	362	38	438	16	26
350	359	550	4	419	48	495	16	30
375		580	4	445	48	521	16	30
400	409	610	4	483	48	552	20	30
450	460	675	4	533	58	610	20	33
500	511	735	4	597	58	673	24	33
600	613	850	5	699	68	781	24	36
700	715	935	5	800	78	857	24	36
750	765	1015	5	898	78	940	28	36
800	816	1060	5	935	84	984	28	36
900	918	1185	5	1030	94	1105	32	39
1000	1020	1275	5	1149	98	1194	36	39
1200	1224	1530	5	1385	108	1441	40	42

* Dimensions are in millimetres

* As a general guide, AS4087 PN14, PN16 is the same dimensions and drilling as AS2129 Table D. AS4087 PN21 is the same dimensions, drilling and pressure rating as AS2129 Table F. AS4087 PN35 is the same dimensions, drilling and pressure rating as AS2129 Table H. However very minor flange thickness increases has been made to AS4087 to provide the higher PN pressure rating. For the same reason raised face (where applicable) diameters also vary slightly although RF rarely specified (in the case of cast iron valves PN14 & PN16 is flat faced and ductile iron PN16 is raised face). The standard for AS2129 Table D, E, F H is still use. In terms of bolting compatibility between AS4087 and AS2129 flanges, table C, D, PN14 and PN16 are all the same. Table E drilling whilst not adopted as part of AS4087, is the same pressure rating as PN14 and the same drilling as PN14 and PN16 in all sizes up to 600NB except: 100NB, 250NB & 450NB. AS2129 Table F is the same drilling as AS4087 PN21. AS2129 Table H is the same drilling as AS4087 PN35.

*Flange thickness shown is for Steel.

Application

This Standard is applicable to flanges for water, steam, compressed air, chemical and petroleum plants, hydraulic piping and where other Standards require compliance with this Standard.