

FLANGE COMPARISON TABLE

1 Standards generally compatible

AS2129	=	AS B52	=	BS10
ANSI	=	ASA		
DIN 2501	=	BS4504		

DIN 2501 covers bolting and general matching dimensions only.
Flange types with dimensions such as thickness are covered by various other DIN standards.

2 Bolt diameters - imperial equivalents

Bolt diameters M22, M27, M33 and M39 are non preferred sizes in Australia and are not readily available. The following imperial equivalents may be used:

M22	=	7/8" UNC
M27	=	1" UNC
M33	=	1 1/4" UNC
M39	=	1 1/2" UNC

Alternatively the next bigger metric size should be used.

3 Bolt hole diameters

Up to M24	=	bolt dia. + 2mm
M27 and over	=	bolt dia. + 3mm

4 High temperature applications

For high temperature applications the applicable codes should be consulted for material selection and other design criteria.

5 Ratings

JIS and DIN flanges	—	rated in kg/cm ² .
ANSI flanges	—	rated in lb (pounds).
AS	—	refer to rating tables.

nom pipe size	flange standards		flange dimensions (mm)					
	name	rating	outside dia.	PCD	bolt no. off	dia.	thickness	
							cast iron	steel
25 1 in	JIS	10	125	90	4	M16	18	14
		16	125	90	4	M16	18	14
		20	125	90	4	M16	20	16
	ANSI	125/150 300	108	79	4	M16	11	14
			124	89	4	M16	-	17
	AS2129	A	115	83	4	M12	13	12
		D	115	83	4	M12	13	12
		E	115	83	4	M12	13	12
		F	120	87	4	M16	13	12
		H	120	87	4	M16	19	
	DIN	6	100	75	4	M10	14	14
		10	115	85	4	M12	16	16
		16	115	85	4	M12	16	16
		25	115	85	4	M12		
		40	115	85	4	M12		

nom pipe size	flange standards		flange dimensions (mm)					
	name	rating	outside dia.	PCD	bolt no. off	dia.	thickness	
							cast iron	steel
50 2 in	JIS	5	130	105	4	M12	16	14
		10	155	120	4	M16	20	16
		16	155	120	8	M16	20	16
		20	155	120	8	M16	22	18
	ANSI	125/150 300	152	121	4	M16	18	19
			165	127	8	M16	—	22
	AS2129	A	150	114	4	M16	16	12
		D	150	114	4	M16	17	12
		E	150	114	4	M16	19	12
		F	165	127	4	M16	19	16
		H	165	127	4	M16	25	19
	DIN	6	140	110	4	M12	16	16
		10	165	125	4	M16	20	18
		16	165	125	4	M16	20	18
		25	165	125	4	M16		
		40	165	125	4	M16		

mm	flange standards		flange dimensions (mm)					
	name	rating	outside dia.	PCD	bolt no. off	dia.	thickness	
							cast iron	steel
32 1 1/4 in	JIS	10	135	100	4	M16	20	16
		16	135	100	4	M16	20	16
		20	135	100	4	M16	20	18
	ANSI	125/150 300	118	89	4	M16	13	16
			133	98	4	M16	—	20
	AS2129	A	120	87	4	M12	16	12
		D	120	87	4	M12	16	12
		E	120	87	4	M12	16	12
		F	135	98	4	M16	16	13
		H	135	98	4	M16	22	17
	DIN	6	120	90	4	M12	16	16
		10	140	100	4	M16	18	16
		16	140	100	4	M16	18	16
		25	140	100	4	M16		
		40	140	100	4	M16		

mm	flange standards		flange dimensions (mm)					
	name	rating	outside dia.	PCD	bolt no. off	dia.	thickness	
							cast iron	steel
65 2 1/2 in	JIS	5	155	130	4	M12	18	14
		10	175	140	4	M16	22	18
		16	175	140	8	M16	22	18
		20	175	140	8	M16	24	20
	ANSI	125/150 300	178	140	4	M16	18	22
			191	149	8	M20	—	25
	AS2129	A	165	127	4	M16	17	12
		D	165	127	4	M16	17	12
		E	165	127	4	M16	19	12
		F	185	146	4	M16	19	16
		H	185	146	8	M16	25	19
	DIN	6	160	130	4	M12	16	16
		10	185	145	4	M16	20	18
		16	185	145	4	M16	20	18
		25	185	145	8	M16		
		40	185	145	8	M16		

mm	flange standards		flange dimensions (mm)					
	name	rating	outside dia.	PCD	bolt no. off	dia.	thickness	
							cast iron	steel
40 1 1/2 in	JIS	10	140	105	4	M16	20	16
		16	140	105	4	M16	20	16
		20	140	105	4	M16	22	18
	ANSI	125/150 300	127	98	4	M16	14	18
			156	114	4	M20	—	21
	AS2129	A	135	98	4	M12	16	12
		D	135	98	4	M12	16	12
		E	135	98	4	M12	16	12
		F	140	105	4	M16	16	13
		H	140	105	4	M16	22	17
	DIN	6	130	100	4	M12	16	16
		10	150	110	4	M16	18	16
		16	150	110	4	M16	18	16
		25	150	110	4	M16		
		40	150	110	4	M16		

mm	flange standards		flange dimensions (mm)					
	name	rating	outside dia.	PCD	bolt no. off	dia.	thickness	
							cast iron	steel
80 3 in	JIS	5	180	145	4	M16	18	14
		10	185	150	4	M16	22	18
		16	200	165	8	M20	24	20
		20	200	160	8	M20	26	22
	ANSI	25/150 300	191	152	4	M16	19	24
			210	168	8	M20	—	29
	AS2129	A	185	146	4	M16	17	12
		D	185	146	4	M16	19	12
		E	185	146	4	M16	19	12
		F	205	165	8	M16	19	16
		H	205	165	8	M16	29	2
	DIN	6	190	150	4	M16	18	18
		10	200	160	8	M16	22	20
		16	200	160	8	M16	22	20
		25	200	160	8	M16		
		40	200	160	8	M16		

FLANGE COMPARISON TABLE

nom pipe size	flange standards		flange dimensions (mm)					
	name	rating	outside dia.	PCD	bolt no. off	dia.	thickness cast ironsteel	
90 mm 3 7/8 in	JIS	not listed						
	ANSI	125/150 300	216 229	178 184	8 8	M16 M20	— —	24 30
	AS2129	A	205	165	4	M16	—	12
		D	205	165	4	M16	—	12
		E	205	165	8	M16	—	12
F		215	178	8	M16	—	19	
H	215	178	8	M16	—	22		
DIN	not listed							
100 mm 4 in	JIS	5	200	165	8	M16	20	16
		10	210	175	8	M16	24	18
		16	225	185	8	M20	26	22
		20	225	185	8	M20	28	24
	ANSI	125/150 300	229 254	191 200	8 8	M16 M20	24 —	24 32
	AS2129	A	215	178	4	M16	19	12
		D	215	178	4	M16	19	12
		E	215	178	8	M16	22	13
		F	230	191	8	M16	22	19
	H	230	191	8	M16	32	25	
	DIN	6	210	170	4	M16	18	18
		10	220	180	8	M16	24	20
		16	220	180	8	M16	24	20
		25	235	190	8	M20		
	40	235	190	8	M20			
125 mm 5 in	JIS	5	235	200	8	M16	20	16
		10	250	210	8	M20	24	20
		16	270	225	8	M22	36	22
		20	270	225	8	M22	30	26
	ANSI	125/150 300	254 279	216 235	8 8	M20 M20	24 —	24 35
	AS2129	A	225	210	4	M16	19	13
		D	255	210	8	M16	21	13
		E	225	210	8	M16	22	14
		F	280	235	8	M20	25	22
	H	280	235	8	M20	35	29	
	DIN	6	240	200	8	M16	20	20
		10	250	210	8	M16	26	22
		16	250	210	8	M16	26	22
		25	270	220	8	M24		
	40	270	220	8	M24			
150 mm 6 in	JIS	5	265	230	8	M16	22	18
		10	280	240	8	M20	26	22
		16	305	260	12	M22	28	24
		20	305	260	12	M22	32	28
	ANSI	125/150 300	279 318	241 270	8 12	M20 M20	25 —	25 37
	AS2129	A	280	235	4	M16	21	13
		D	280	235	8	M16	21	13
		E	280	235	8	M20	22	17
		F	305	260	12	M20	25	22
	H	305	260	12	M20	35	29	
	DIN	6	265	225	8	M16	20	20
		10	285	240	8	M20	26	22
		16	285	240	8	M20	26	22
		25	300	250	8	M24		
	40	300	250	8	M24			
200 mm 8 in	JIS	5	320	280	8	M20	24	20
		10	330	290	12	M20	26	22
		16	350	305	12	M22	30	26
		20	350	305	12	M22	34	30
	ANSI	125/150 300	343 381	299 330	8 12	M20 M22	29 —	29 41
	AS2129	A	335	292	8	M16	22	13
		D	335	292	8	M16	22	13
		E	335	292	8	M20	25	19
		F	370	324	12	M20	29	25
	H	370	324	12	M20	28	32	
	DIN	6	320	280	8	M16	22	22
		10	340	295	8	M20	26	24
		16	340	295	12	M20	30	24
		25	360	310	12	M24		
	40	375	320	12	M27			

nom pipe size	flange standards		flange dimensions (mm)						
	name	rating	out- side dia.	PCD	bolt no. off	dia.	thickness		
250 10 in	JIS	5	385	345	12	M20	26	22	
		10	400	355	12	M22	30	24	
		16	430	380	12	M24	34	28	
		20	430	380	12	M24	38	34	
	ANSI	125/150	406	362	12	M22	30	30	
		300	445	387	16	M27	—	48	
	AS2129	A	405	356	8	M20	24	16	
		D	405	356	8	M20	25	16	
		E	405	356	12	M20	25	22	
		F	430	381	12	M24	29	29	
	DIN	H	430	381	12	M24	41	35	
		6	375	335	12	M16	24	24	
		10	395	350	12	M20	28	26	
		16	405	355	12	M24	32	26	
	25	425	370	12	M27				
	40	450	385	12	M30				
300 12 in	JIS	5	430	390	12	M20	28	22	
		10	445	400	16	M22	32	24	
		16	480	430	16	M24	36	30	
		20	480	430	16	M24	40	36	
	ANSI	125/150	483	432	12	M22	32	32	
		300	521	451	16	M27	—	51	
	AS2129	A	455	406	8	M20	24	19	
		D	455	406	12	M20	25	19	
		E	455	406	12	M24	29	25	
		F	490	438	16	M24	32	32	
	DIN	H	490	438	16	M24	44	41	
		6	440	395	12	M20	24	24	
		10	445	400	12	M20	28	26	
		16	460	410	12	M24	32	28	
	350 14 in	JIS	5	480	435	12	M22	30	24
			10	490	445	16	M22	34	26
16			540	480	16	M30	34	34	
20			540	480	16	M30	38	40	
ANSI		125/150	533	476	12	M27	35	35	
		300	584	514	20	M27	—	54	
AS2129		A	525	470	8	M24	25	22	
		D	525	470	12	M24	29	22	
		E	525	470	12	M24	32	29	
		F	550	495	16	M27	35	35	
DIN		H	550	495	16	M27	48	48	
		6	490	445	12	M20	26	26	
		10	505	460	16	M20	30	28	
		16	520	470	16	M24	36	32	
400 16 in		JIS	5	540	495	16	M22	30	24
			10	560	510	16	M24	36	28
	16		605	540	16	M30	42	28	
	20		605	540	16	M30	50	46	
	ANSI	125/150	597	540	16	M27	37	37	
		300	648	572	20	M33	—	57	
	AS2129	A	580	521	12	M24	27	22	
		D	580	521	12	M24	29	22	
		E	580	521	12	M24	32	32	
		F	610	552	20	M27	35	41	
	DIN	H	610	552	20	M27	51	54	
		6	540	495	16	M20	28	28	
		10	565	515	16	M24	32	32	
		16	580	525	16	M27	38	36	
	450 18 in	JIS	2	605	555	16	M20	28	22
			5	605	555	16	M22	30	24
10			620	565	20	M24	38	30	
16			675	605	20	M30	46	40	
ANSI		20	675	605	20	M30	—	48	
		125/150	635	578	16	M27	40	40	
		300	711	629	24	M33	—	60	
		AS2129	A	640	584	12	M24	27	22
D			640	584	12	M24	32	25	
E			640	584	16	M24	35	35	
F			675	610	20	M30	38	44	
DIN		H	675	610	20	M30	54	60	
		6	595	550	16	M20	—	—	
		10	615	565	20	M24	32	36	
		16	640	585	20	M27	—	—	

FLANGE COMPARISON TABLE

nom pipe size	flange standards		flange dimensions (mm)					
	name	rating	outside dia.	PCD	bolt no. off	dia.	thickness	
500 20 in	JIS	2	655	605	20	M20	28	22
		5	655	605	20	M22	32	24
		10	675	620	20	M24	40	30
		16	730	660	20	M30	50	42
		20	730	660	20	M30	—	50
	ANSI	125-150	699	635	20	M27	43	43
		300	775	686	24	M33	—	64
	AS2129	A	705	641	12	M24	29	25
		D	705	641	16	M24	32	29
		E	705	641	16	M24	38	38
		F	735	673	24	M30	41	51
		H	735	673	24	M30	57	67
	DIN	6	645	600	20	M20	30	30
		10	670	620	20	M24	34	38
		16	715	650	20	M30	42	44

550 22 in	JIS	2	720	665	20	M22	30	24
		5	720	665	20	M24	32	26
		10	745	680	20	M30	42	32
		16	795	720	20	M36	54	44
	ANSI	not listed						
	AS2129	A	760	699	12	M27	30	25
		D	760	699	16	M27	35	29
		E	760	699	16	M27	38	44
		F	785	724	24	M30	41	54
		H	785	724	24	M30	60	70
	DIN	not listed						

600 24 in	JIS	2	770	715	20	M22	30	24
		5	770	715	20	M24	32	26
		10	795	730	24	M30	44	32
		16	845	770	24	M36	58	46
		20	845	770	24	M36	—	54
	ANSI	125/150	813	749	20	M33	48	48
		300	914	813	24	M39	—	70
	AS2129	A	825	756	12	M27	30	25
		D	825	756	16	M27	35	32
		E	825	756	16	M30	41	48
		F	850	781	24	M33	44	57
		H	850	781	24	M33	64	76
	DIN	6	755	705	20	M24	30	32
		10	780	725	20	M27	36	42
		16	840	770	20	M33	48	52

650 26 in	JIS	2	825	770	24	M22	30	24
		5	825	770	24	M24	34	26
		10	845	780	24	M30	46	34
	ANSI	not listed						
	AS2129	A	845	781	16	M27	32	25
		D	not listed	listed				
		E	not listed	listed				
	DIN	not listed						

700 28 in	JIS	2	875	820	24	M22	30	24
		5	875	820	24	M24	34	26
		10	905	840	24	M30	48	34
	ANSI	not listed						
	AS2129	A	870	806	16	M27	32	25
		D	910	845	20	M27	38	35
		E	910	845	20	M30	44	51
	DIN	6	860	810	24	M24	32	34
		10	895	840	24	M27	40	46
		16	910	840	24	M33	54	58

nom pipe size	flange standards		flange dimensions (mm)					
	name	rating	outside dia.	PCD	bolt no. off	dia.	thickness	
750 30 in	JIS	2	945	880	20	M24	33	24
		5	945	880	20	M30	36	28
		10	970	900	20	M30	50	35
	ANSI	125/150	984	915	28	M33	—	—
		300	—	997	28	M45	—	—
	AS2129	A	945	883	20	M27	32	25
		D	995	927	20	M30	41	41
		E	995	927	20	M33	48	54
	DIN	not listed						

800 32 in	JIS	2	995	930	24	M24	32	24
		5	995	930	24	M30	36	28
		10	1020	950	28	M30	52	36
	ANSI	not listed						
	AS2129	A	1005	940	20	M27	32	25
		D	1060	984	20	M33	41	41
		E	1060	984	20	M33	48	54
	DIN	6	975	920	24	M27	34	38
		10	1015	950	24	M30	44	52
		16	1025	950	24	M36	58	64

850 34 in	JIS	2	1045	980	24	M24	32	24
		5	1045	980	24	M30	38	28
		10	1070	1000	28	M30	52	36
	ANSI	not listed						
	AS2129	A	1030	965	20	M27	32	29
		D	1090	1016	20	M33	41	44
		E	1090	1016	20	M33	51	57
	DIN	not listed						

900 36 in	JIS	2	1095	1030	24	M24	32	24
		5	1095	1030	24	M30	38	30
		10	1120	1050	28	M30	54	38
	ANSI	125/150	1168	1086	32	M39	—	—
	AS2129	A	1105	1041	24	M27	35	29
		D	1175	1092	24	M33	44	48
		E	1175	1092	24	M33	51	64
	DIN	6	1075	1020	24	M27	36	42
		10	1115	1050	28	M30	46	56
		16	1125	1050	28	M36	62	72

1000 40 in	JIS	2	1195	1130	28	M24	34	26
		5	1195	1130	28	M30	40	34
		10	1235	1160	28	M36	58	40
	ANSI	not listed						
	AS2129	A	1180	1118	24	M27	35	29
		D	1255	1175	24	M33	44	51
		E	1255	1175	24	M36	54	67
	DIN	6	1175	1120	28	M27	35	46
		10	1230	1160	28	M33	50	62
		16	1255	1170	28	M39	66	78

1200 48 in	JIS	2	1420	1350	32	M24	36	26
		5	1420	1350	32	M30	46	34
		10	1465	1380	32	M36	66	46
	ANSI	125/150	1511	1422	44	M39	—	—
	AS2129	A	1415	1353	28	M27	38	32
		D	1490	1410	32	M33	51	60
		E	1490	1410	32	M36	60	79
	DIN	2.5	1375	1320	32	M27	30	36
		6	1405	1340	32	M30	40	56
		10	1455	1380	32	M36	56	74