

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	108	79	4	M16	11	14
		300	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	152	121	4	M16	18	19
		300	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			

nom pipe size	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	118	89	4	M16	13	16
		300	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		

nom pipe size	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	178	140	4	M16	18	22
		300	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			

nom pipe size	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	127	98	4	M16	14	18
		300	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		

nom pipe size	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	191	152	4	M16	19	24
		300	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			



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nom pipe size	flange standards		flange dimensions (mm)							
	name	rating	outside dia.	PCD	bolt no. off	dia.	thickness			
							cast iron	steel		
90 3 1/2 in	JIS	not listed								
	ANSI	125/150 300	216	178	8	M16	—	24		
			229	184	8	M20	—	30		
			AS2129	A D E F H	205	165	4	M16	—	12
					205	165	4	M16	—	12
	205	165			8	M16	—	12		
	215	178			8	M16	—	19		
				215	178	8	M16	—	22	
	DIN	not listed								
	100 4 in	JIS	5 10 16 20	200 210 225 225	165 175 185 185	8 8 8 8	M16 M16 M20 M20	20 24 26 28	16 18 22 24	
ANSI		125/150 300	229	191	8	M16	24	24		
			254	200	8	M20	—	32		
AS2129		A D E F H	215	178	4	M16	19	12		
			215	178	4	M16	19	12		
			215	178	8	M16	22	13		
			230	191	8	M16	22	19		
			230	191	8	M16	32	25		
DIN		6 10 16 25 40	210	170	4	M16	18	18		
			220	180	8	M16	24	20		
			220	180	8	M16	24	20		
			235	190	8	M20				
			235	190	8	M20				
125 5 in		JIS	5 10 16 20	235 250 270 270	200 210 225 225	8 8 8 8	M16 M20 M22 M22	20 24 36 30	16 20 22 26	
		ANSI	125/150 300	254	216	8	M20	24	24	
				279	235	8	M20	—	35	
	AS2129	A D E F H	225	210	4	M16	19	13		
			255	210	8	M16	21	13		
			225	210	8	M16	22	14		
			280	235	8	M20	25	22		
			280	235	8	M20	35	29		
	DIN	6 10 16 25 40	240	200	8	M16	20	20		
			250	210	8	M16	26	22		
			250	210	8	M16	26	22		
			270	220	8	M24				
			270	220	8	M24				
	150 6 in	JIS	5 10 16 20	265 280 305 305	230 240 260 260	8 8 12 12	M16 M20 M22 M22	22 26 28 32	18 22 24 28	
		ANSI	125/150 300	279	241	8	M20	25	25	
				318	270	12	M20	—	37	
AS2129		A D E F H	280	235	4	M16	21	13		
			280	235	8	M16	21	13		
			280	235	8	M20	22	17		
			305	260	12	M20	25	22		
			305	260	12	M20	35	29		
DIN		6 10 16 25 40	265	225	8	M16	20	20		
			285	240	8	M20	26	22		
			285	240	8	M20	26	22		
			300	250	8	M24				
			300	250	8	M24				
200 8 in		JIS	5 10 16 20	320 330 350 350	280 290 305 305	8 12 12 12	M20 M20 M22 M22	24 26 30 34	20 22 26 30	
		ANSI	125/150 300	343	299	8	M20	29	29	
				381	330	12	M22	—	41	
	AS2129	A D E F H	335	292	8	M16	22	13		
			335	292	8	M16	22	13		
			335	292	8	M20	25	19		
			370	324	12	M20	29	25		
			370	324	12	M20	28	32		
	DIN	6 10 16 25 40	320	280	8	M16	22	22		
			340	295	8	M20	26	24		
			340	295	12	M20	30	24		
			360	310	12	M24				
			375	320	12	M27				

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



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nom pipe size	flange standards		flange dimensions (mm)					
	name	rating	outside dia.	PCD	bolt no. off	dia.	thickness	
							cast iron	steel
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

nom pipe size	flange standards		flange dimensions (mm)					
	name	rating	outside dia.	PCD	bolt no. off	dia.	thickness	
							cast iron	steel
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						

nom pipe size	flange standards		flange dimensions (mm)					
	name	rating	outside dia.	PCD	bolt no. off	dia.	thickness	
							cast iron	steel
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

nom pipe size	flange standards		flange dimensions (mm)						
	name	rating	outside dia.	PCD	bolt no. off	dia.	thickness		
							cast iron	steel	
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	not listed					
		E	not listed	not listed					
	DIN	not listed							

nom pipe size	flange standards		flange dimensions (mm)						
	name	rating	outside dia.	PCD	bolt no. off	dia.	thickness		
							cast iron	steel	
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		
							cast iron	steel	
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							

nom pipe size	flange standards		flange dimensions (mm)						
	name	rating	outside dia.	PCD	bolt no. off	dia.	thickness		
							cast iron	steel	
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	

nom pipe size	flange standards		flange dimensions (mm)						
	name	rating	outside dia.	PCD	bolt no. off	dia.	thickness		
							cast iron	steel	
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							

nom pipe size	flange standards		flange dimensions (mm)						
	name	rating	outside dia.	PCD	bolt no. off	dia.	thickness		
							cast iron	steel	
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	

nom pipe size	flange standards		flange dimensions (mm)						
	name	rating	outside dia.	PCD	bolt no. off	dia.	thickness		
							cast iron	steel	
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	

nom pipe size	flange standards		flange dimensions (mm)						
	name	rating	outside dia.	PCD	bolt no. off	dia.	thickness		
							cast iron	steel	
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	

