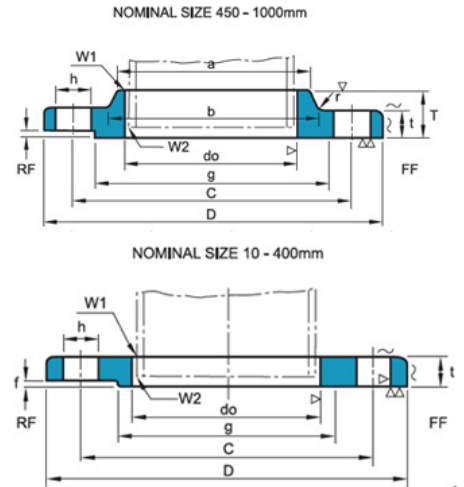


JIS B2220 - 5K Flanges

Nominal Dia. of Flange	Outside Dia. of Flange D	Sectional Dimensions of flange										Welding			
		Dia. of Bolt Circle C	Dia. of Raised Face g	Outside Dia. of Appli- Cable pipe	t	T	Dia. of Hub		Radi- us r	Raised Face	Hole Dia. H	Number of Bolt Holes	Nominal Bolt Size	W1	W2
							a	b							
10	75	55	39	17.3	9	-	-	-	-	1	12	4	M10	5	2.50
15	80	60	44	21.7	9	-	-	-	-	1	12	4	M10	5	3.00
20	85	65	49	27.2	10	-	-	-	-	1	12	4	M10	5	3.00
25	95	75	59	34	10	-	-	-	-	1	12	4	M10	5	3.00
32	115	90	70	42.7	12	-	-	-	-	2	15	4	M12	6	3.00
40	120	95	75	48.6	12	-	-	-	-	2	15	4	M12	6	3.00
50	130	105	85	60.5	14	-	-	-	-	2	15	4	M12	6	3.00
65	155	130	110	76.3	14	-	-	-	-	2	15	4	M12	6	4.00
80	180	145	121	89.1	14	-	-	-	-	2	19	4	M16	6	4.00
90	190	155	131	101.6	14	-	-	-	-	2	19	4	M16	6	4.00
100	200	165	141	114.3	16	-	-	-	-	2	19	8	M16	7	4.00
125	235	200	176	139.8	16	-	-	-	-	2	19	8	M16	7	4.00
150	265	230	206	165.2	18	-	-	-	-	2	19	8	M16	7	5.00
175	300	260	232	190.7	18	-	-	-	-	2	23	8	M20	7.5	5.00
200	320	280	252	216.3	20	-	-	-	-	2	23	8	M20	8.5	6.00
225	345	305	277	241.8	20	-	-	-	-	2	23	12	M20	9	6.00
250	385	345	317	267.4	22	-	-	-	-	2	23	12	M20	10	6.00
300	430	390	360	318.5	22	-	-	-	-	3	23	12	M20	10	6.00
350	480	435	403	355.6	24	-	-	-	-	3	25	12	M22	12	7.00
400	540	495	463	406.4	24	-	-	-	-	3	25	16	M22	12	7.00
450	605	555	523	457.2	24	40	495	500	5	3	25	16	M22	12	7.00
500	655	605	573	508	24	40	546	552	5	3	25	20	M22	12	7.00
550	720	665	630	558.8	26	42	597	603	5	3	27	20	M24	12	7.00
600	770	715	680	609.6	26	44	648	654	5	3	27	20	M24	12	7.00
650	825	770	735	660.4	26	48	702	708	5	3	27	24	M24	12	7.00
700	875	820	785	711.2	26	48	751	758	5	3	27	24	M24	12	7.00
750	945	880	840	762	28	52	802	810	5	3	33	24	M30	12	7.00
800	995	930	890	812.8	28	52	854	862	5	3	33	24	M30	13	8.00
850	1045	980	940	863.6	28	54	904	912	5	3	33	24	M30	13	8.00
900	1095	1030	990	914.4	30	56	956	964	5	3	33	24	M30	13	8.00
1000	1195	1130	1090	1016	32	60	1058	1066	5	3	33	28	M30	14	9.00
*(1100)	1305	1240	1200	1117.6	32	-	-	-	-	3	33	28	M30		
*1200	1420	1350	1305	1219.2	34	-	-	-	-	3	33	32	M30		
*1350	1575	1505	1460	1371.6	34	-	-	-	-	3	33	32	M30		
*1500	1730	1660	1615	1524	36	-	-	-	-	3	33	36	M30		

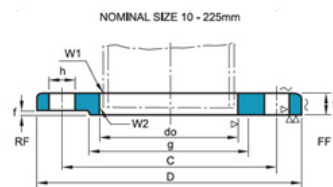
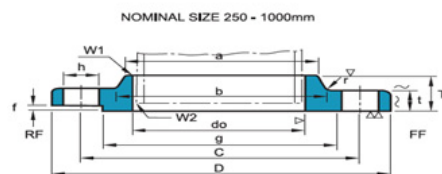


- NOTE:
1. Flanges of parenthesized nominal diameter () , not to be used unless otherwise noted by purchaser.
 2. The facing of flanges shall conform to KS B1519 (JIS B2202)
 3. Nominal diameter over 1000 is manufacturer s standard (*)
 4. All dimensions are in mm

JIS B2220 - 10K Flanges

Nominal Dia. of Flange	Outside Dia. of Flange D	Sectional Dimensions of flange										Welding			
		Dia. Of Bolt Circle C	Dia. of Raised Face g	Outside Dia. of Appil-Cable pipe	t	T	Dia. of Hub		Radi-us r	Raised Face f	Hole Dia. H	Number of Bolt Holes	Nominal Bolt Size	W1	W2
							a	b							
10	90	65	46	17.3	12	-	-	-	-	1	15	4	M12	5	2.5
15	95	70	51	21.7	12	-	-	-	-	1	15	4	M12	5	3
20	100	75	56	27.2	14	-	-	-	-	1	15	4	M12	5	3
25	125	90	67	34	14	-	-	-	-	1	19	4	M16	5	3
32	135	100	76	42.7	16	-	-	-	-	2	19	4	M16	6	3
40	140	105	81	48.6	16	-	-	-	-	2	19	4	M16	6	3
50	155	120	96	60.5	16	-	-	-	-	2	19	4	M16	6	3
65	175	140	116	76.3	18	-	-	-	-	2	19	4	M16	6.5	4
80	185	150	126	89.1	18	-	-	-	-	2	19	8	M16	6.5	4
90	195	160	136	101.6	18	-	-	-	-	2	19	8	M16	6.5	4
100	210	175	151	114.3	18	-	-	-	-	2	19	8	M16	7	4
125	250	210	182	139.8	20	-	-	-	-	2	23	8	M20	7.5	4
150	280	240	212	165.2	22	-	-	-	-	2	23	8	M20	8	5
175	305	265	237	190.7	22	-	-	-	-	2	23	12	M20	9	5
200	330	290	262	216.3	22	-	-	-	-	2	23	12	M20	9	6
225	350	310	282	241.8	22	-	-	-	-	2	23	12	M20	9	6
250	400	355	324	267.4	24	36	288	292	6	2	25	12	M22	10	6
300	445	400	368	318.5	24	38	340	346	6	3	25	16	M22	10	6
350	490	445	413	355.6	26	42	380	386	6	3	25	16	M22	12	7
400	560	510	475	406.4	28	44	436	442	6	3	27	16	M24	12	7
450	620	565	530	457.2	30	48	496	502	6	3	27	20	M24	14	8
500	675	620	585	508	30	48	548	554	6	3	27	20	M24	14	8
550	745	680	640	558.8	32	52	604	610	6	3	33	20	M30	15	9
600	795	730	690	609.6	32	52	656	662	6	3	33	24	M30	16	10
650	845	780	740	660.4	34	56	706	712	6	3	33	24	M30	16	10
700	905	840	800	711.2	34	58	762	770	6	3	33	24	M30	17	10
750	970	900	855	762	36	62	816	824	6	3	33	24	M30	18	11
800	1020	950	905	812.8	36	64	868	876	6	3	33	28	M30	19	12
850	1070	1000	955	863.6	36	66	920	928	6	3	33	28	M30	19	12
900	1120	1050	1005	914.4	38	70	971	979	6	3	33	28	M30	22	14
1000	1235	1160	1110	1016	40	74	1073	1081	6	3	39	28	M36	22	14
*(1100)	1345	1270	1220	1117.6	42	-	-	-	-	3	39	28	M36		
*1200	1465	1380	1325	1219.2	44	-	-	-	-	3	39	32	M36		
*1350	1630	1540	1480	1371.6	48	-	-	-	-	3	45	36	M42		
*1500	1795	1700	1635	1524	50	-	-	-	-	3	45	40	M42		

- NOTE:
- Flanges of parenthesized nominal diameter () , not to be used unless otherwise noted by purchaser
 - The facing of flanges shall conform to KS B1519 (JIS B2202)
 - Nominal diameter over 1000 is manufacturer s standard (*)
 - All dimensions are in mm

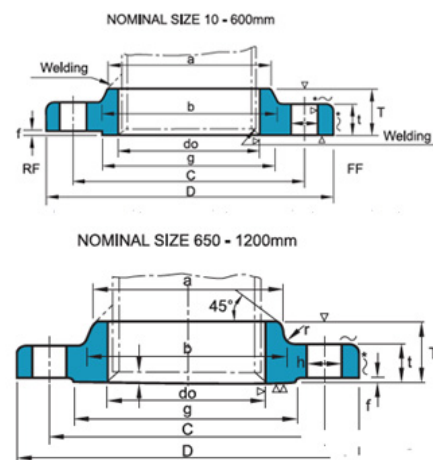


JIS B2220 - 16K Flanges

Nominal Dia. of Flange	Outside Dia. of Flange D	Sectional Dimensions of flange										Number of Bolt Holes	Nominal Bolt Size
		Dia. Of Bolt Circle C	Dia. of Raised Face g	Outside Dia. of Applicable pipe	t	T	Dia. of Hub		Radius r	Raised Face f	Hole Dia. H		
							a	b					
10	90	65	46	17.3	12	16	26	28	4	1	15	4	M12
15	95	70	51	21.7	12	16	30	32	4	1	15	4	M12
20	100	75	56	27..2	14	20	38	42	4	1	15	4	M12
25	125	90	67	34	14	20	46	50	4	1	19	4	M16
32	135	100	76	42.7	16	22	56	60	5	2	19	4	M16
40	140	105	81	48.6	16	24	62	66	5	2	19	4	M16
50	155	120	96	60.5	16	24	76	80	5	2	19	8	M16
65	175	140	116	76.3	18	26	94	98	5	2	19	8	M16
80	200	160	132	89.1	20	28	108	112	6	2	23	8	M20
90	210	170	145	101.6	20	30	120	124	6	2	23	8	M20
100	225	185	160	114.3	22	34	134	138	6	2	23	8	M20
125	270	225	195	139.8	22	34	164	170	6	2	25	8	M22
150	305	260	230	165.2	24	38	196	202	6	2	25	12	M22
200	350	305	275	216.3	26	40	244	252	6	2	25	12	M22
250	430	380	345	267.4	28	44	304	312	6	2	27	12	M24
300	480	430	395	318.5	30	48	354	364	8	3	27	16	M24
350	540	480	440	355.6	34	52	398	408	8	3	33	16	M30X3
400	605	540	495	406.4	38	60	446	456	10	3	33	16	M30X3
450	675	605	560	457.2	40	64	504	514	10	3	33	20	M30X3
500	730	660	615	508	42	68	558	568	10	3	33	20	M30X3
550	795	720	670	558.8	44	70	612	622	10	3	39	20	M36X3
600	845	770	720	609.6	46	74	666	676	10	3	39	24	M36X3
650	895	820	770	660.4	48	77	704	726	10	5	39	24	M36X3
700	960	875	820	711.2	50	80	754	776	10	5	42	24	M39X3
750	1020	935	880	762	52	83	806	832	10	5	42	24	M39X3
800	1085	990	930	812.8	54	86	865	885	10	5	48	24	M45X3
850	1135	1040	980	863.6	56	89	916	936	10	5	48	24	M45X3
900	1185	1090	1030	914.4	58	93	968	986	10	5	48	28	M45X3
1000	1320	1210	1140	1016	62	99	1070	1098	12	5	56	28	M52X3
1100	1420	1310	1240	1117.6	66	105	1180	1200	12	5	56	32	M52X3
1200	1530	1420	1350	1219.2	70	112	1282	1302	12	5	56	32	M52X3

NOTE:

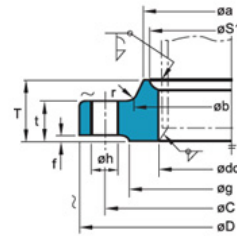
- Flanges of parenthesized nominal diameter () , not to be used unless otherwise noted by purchaser
- The facing of flanges shall conform to KS B1519 (JIS B2202)
- The dimension of flange of 650A and larger in nominal sizes excluding 850A, are in accordance with the nominal pressure 25 BAR specified in ISO 2084.
- All dimension are in mm



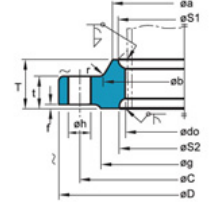
JIS B2220 - 20K Flanges

Nominal Dia. of Flange	Outside Dia. of Flange D	Sectional Dimensions of flange											Number of Bolt Holes	Nominal Bolt Size	Reference				
		Dia. Of Bolt Circle C	Dia. of Raised Face g	Outside Dia. of Appil-Cable pipe	t	T	Dia. of Hub		Radi-us r	Raised Face f	d	S1			m	S2	n	l	
							a	b											
10	90	65	46	17.3	14	20	30	32	4	1	-	4	M12	27	4	27	4	-	
15	95	70	51	21.7	14	20	34	36	4	1	-	4	M12	31	4	31	4	-	
20	100	75	56	27.2	16	22	40	42	4	1	-	4	M12	37	4	37	4	-	
25	125	90	67	34	16	24	48	50	4	1	-	4	M16	44	4	44	4.5	-	
32	135	100	76	42.7	18	26	56	60	5	2	-	4	M16	52	4	53	5	-	
40	140	105	81	48.6	18	26	62	66	5	2	-	4	M16	58	4	59	5.5	-	
50	155	120	96	60.5	18	26	76	80	5	2	65.9	8	M16	70	4	72	5.5	-	
65	175	140	116	76.3	20	30	100	104	5	2	78.1	8	M16	94	6	-	-	6	
80	200	160	132	89.1	22	34	113	117	6	2	90.2	8	M20	107	6	-	-	6	
90	210	170	145	101.6	24	36	126	130	6	2	102.3	8	M20	120	6	-	-	6	
100	225	185	160	114.3	24	36	138	142	6	2	126.6	8	M20	132	6	-	-	6	
125	270	225	195	139.8	26	40	166	172	6	2	151	8	M22	160	7	-	-	6	
150	305	260	230	165.2	28	42	196	202	6	2	199.9	12	M22	186	8	-	-	6	
200	350	305	275	216.3	30	46	244	252	6	2	248.8	12	M22	237	9	-	-	6	
250	430	380	345	267.4	34	52	304	312	6	2	297.9	12	M24	290	10	-	-	6	
300	480	430	395	318.5	36	56	354	364	8	3	333.4	16	M24	345	11	-	-	6	
350	540	480	440	355.6	40	62	398	408	8	3	381	16	M30X3	384	12	-	-	6	
400	605	540	495	406.4	46	70	446	456	10	3	431.8	16	M30X3	437	13	-	-	7	
450	675	605	560	457.2	48	78	504	514	10	3	482.6	20	M30X3	490	15	-	-	7	
500	730	660	615	508	50	84	558	568	10	3	533.4	20	M30X3	544	16	-	-	7	
550	795	720	670	558.8	52	90	612	622	10	3	584.2	20	M36X3	595	16	-	-	7	
600	845	770	720	609.6	54	96	666	676	10	3		24	M36X3	646	18	-	-	7	
*650	945	850	790	660.4	60							24	M45X3						
*700	995	900	840	711.2	64					5		24	M45X3						
*750	1080	970	900	762	68					5		24	M52X3						
*800	1140	1030	960	812.8	72					5		24	M52X3						
*850	1200	1090	1020	863.6	74					5		24	M52X3						
*900	1250	1140	1070	914.4	76					5		28	M52X3						

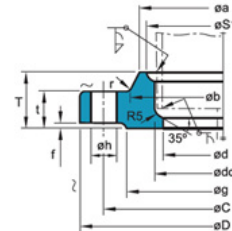
TYPE A
NOMINAL SIZE 10 - 50mm



TYPE B
NOMINAL SIZE 10 - 50mm



TYPE C
NOMINAL SIZE 65 - 600mm



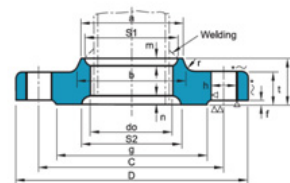
- NOTE:
- Flanges of parenthesized nominal diameter (), not to be used unless otherwise noted by purchaser.
 - "d" is an example of pipe thickness for schedule 40 for nominal diameter 400 and under, and for schedule 12.7 mm for 450 through 600 of KS B3562 and KS D3507 (JIS G3454, JIS G3456)
 - All dimensions are in mm

JIS B2220 - 30K Slip on Flanges

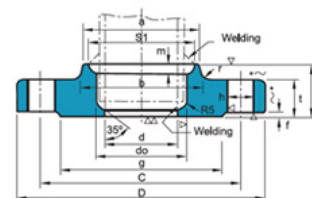
Nominal Dia. of Flange	Outside Dia. of Flange D	Sectional Dimensions of flange											Reference					
		Dia. Of Bolt Circle C	Dia. of Raised Face g	Outside Dia. of Steel pipe	t	T	Dia. of Hub		Radi-us r	Raised Face f	d	Number of Bolt Holes	Nominal Bolt Size	S1	m	S2	n	l
							a	b										
10	110	75	52	17.3	16	24	30	34	4	1	-	4	M16	-	-	-	-	-
15	115	80	55	21.7	18	26	36	40	5	1	-	4	M16	31	4	40	5	-
20	120	85	60	27.2	18	28	42	46	5	1	-	4	M16	37	5	44	5	-
25	130	95	70	34	20	30	50	54	5	1	-	4	M16	55	6	52	5	-
32	140	105	80	42.7	22	32	60	64	6	2	-	4	M16	52	6	60	5	-
40	160	120	90	48.6	22	34	66	70	6	2	-	4	M20	58	6	66	5	-
50	165	130	105	60.5	22	36	82	86	6	2	-	8	M16	70	6.5	78	5	-
65	200	160	130	76.3	26	40	102	106	8	2	65.9	8	M20	96	9.5	94	5	6
80	210	170	140	89.1	28	44	115	121	8	2	78.1	8	M20	109	9.5	-	-	6
-90	230	185	150	101.6	30	46	128	134	8	2	90.2	8	M22	122	9.5	-	-	6
100	240	195	160	114.3	32	48	141	147	8	2	102.3	8	M22	135	9.5	-	-	6
125	275	230	195	139.8	36	54	166	172	8	2	126.6	8	M22	160	9.5	-	-	6
150	325	275	235	165.2	38	58	196	204	8	2	151	12	M24	186	9.5	-	-	6
200	370	320	280	216.3	42	64	248	256	8	2	199.9	12	M24	237	9.5	-	-	6
250	450	390	345	267.4	48	72	306	314	10	2	248.8	12	M30	290	10	-	-	6
300	515	450	405	318.5	52	78	360	370	10	3	297.9	16	M30	345	12	-	-	6
350	560	495	450	355.6	54	84	402	412	12	3	333.4	16	M30	383	13	-	-	6
400	630	560	510	406.4	60	92	456	468	15	3	381	16	M36	435	14	-	-	7

All dimensions are in mm

NOMINAL SIZE 10 - 50mm (TYPE B)

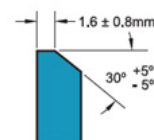
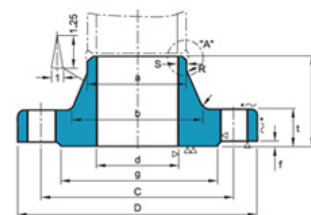


NOMINAL SIZE 65 - 400mm (TYPE C)



JIS B2220 - 30K Weld Neck Flanges

Nominal Dia. of Flange	Outside Dia. of Flange D	Sectional Dimensions of flange											Number of Bolt Holes	Dia. of Hole h	Nominal Bolt Size	
		Dia. Of Bolt Circle C	Dia. of Raised Face g	Outside Dia. of Steel pipe	T	b	a	R	t	d	Radius r	s				f
15	115	80	55	21.7	45	40	22	20	18	15.8	6	3.1	1	4	19	M16
20	120	85	60	27.2	45	44	27.5	20	18	21.1	6	3.2	1	4	19	M16
25	130	95	70	34	48	52	34.4	20	20	26.8	6	3.8	1	4	19	M16
32	140	105	80	42.7	52	62	43.1	30	22	35.1	6	4	2	4	19	M16
40	160	120	90	48.6	54	70	49.1	30	22	40.7	6	4.2	2	4	23	M20
50	165	130	105	60.5	57	84	61	30	22	52.2	8	4.4	2	8	19	M16
65	200	160	130	76.3	69	105	76.9	30	26	65.3	8	5.8	2	8	23	M20
80	210	170	140	89.1	73	118	89.7	30	28	76.4	8	6.1	2	8	23	M20
90	230	185	150	101.6	74	130	102.3	30	30	89.5	8	6.4	2	8	25	M22
100	240	195	160	114.3	76	142	115.1	30	32	101.5	8	6.8	2	8	25	M22
125	275	230	195	139.8	86	172	140.7	50	36	125.7	10	7.5	2	8	25	M22
150	325	275	235	165.2	95	202	166.2	50	38	150	10	8.1	2	12	27	M24
200	370	320	280	216.3	102	254	217.5	50	42	198.7	10	9.4	2	12	27	M24
250	450	390	345	267.4	118	312	268.7	50	48	247.5	12	10.6	2	12	33	M30 3
300	515	450	405	318.5	127	366	320	50	52	296.4	15	11.8	3	16	33	M30 3
350	560	495	450	355.6	134	406	357.2	80	54	331.8	15	12.7	3	16	33	M30 3
400	630	560	510	406.4	149	462	408.3	80	60	379.1	20	14.6	3	16	39	M36 3



When particularly necessary, customers can order another beveling form the above.

1. Flanges of parenthesized nominal diameter (), not to be used unless otherwise noted by purchaser.
2. "d" is an example of pipe thickness for schedule 40 for nominal diameter 400 and under, and for schedule 12.7

mm for 450 through 600 of KS B3562

and KS D3507 (JIS G3454, JIS G3456)

All dimensions are in mm

* There will may be typical error