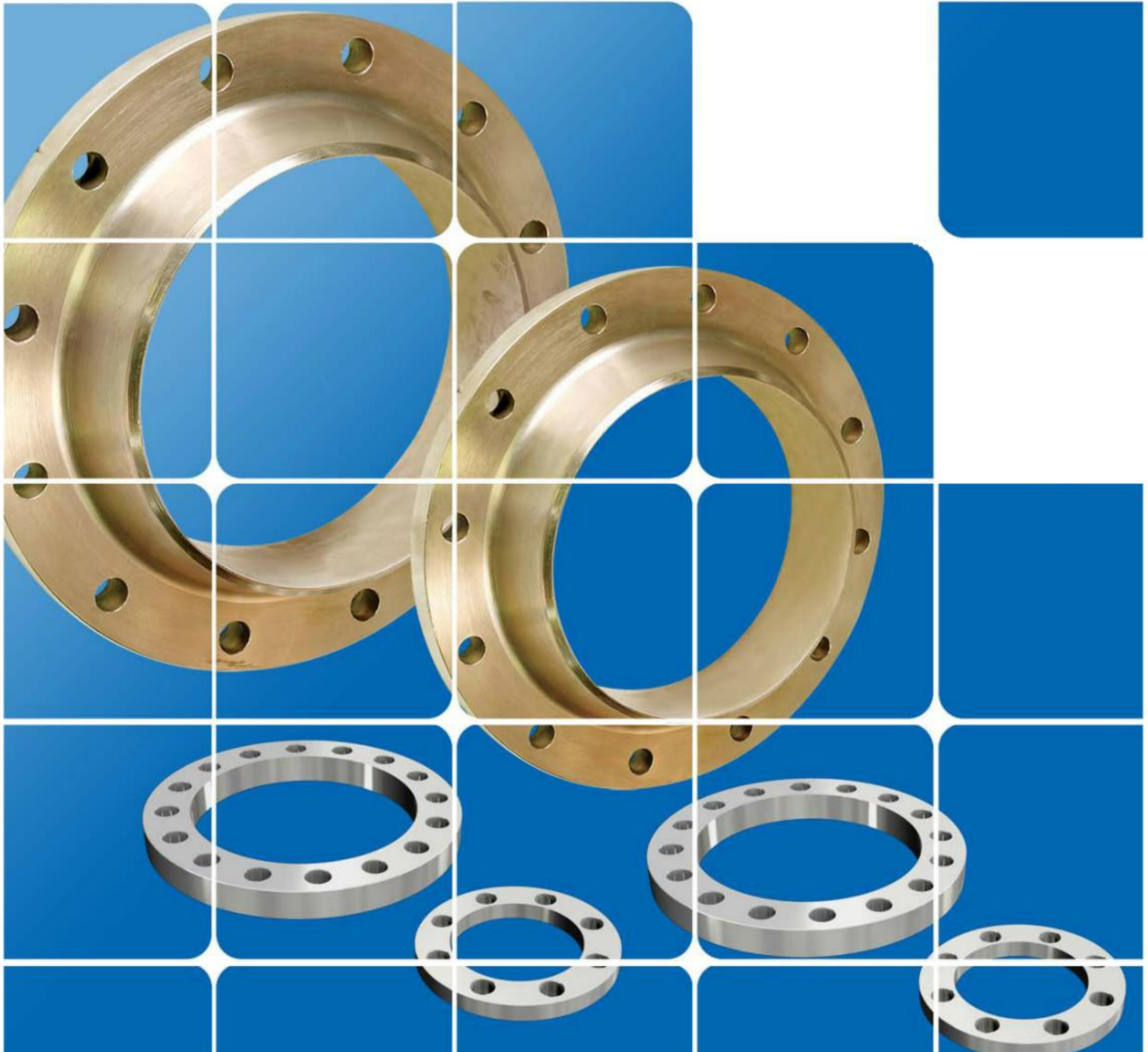


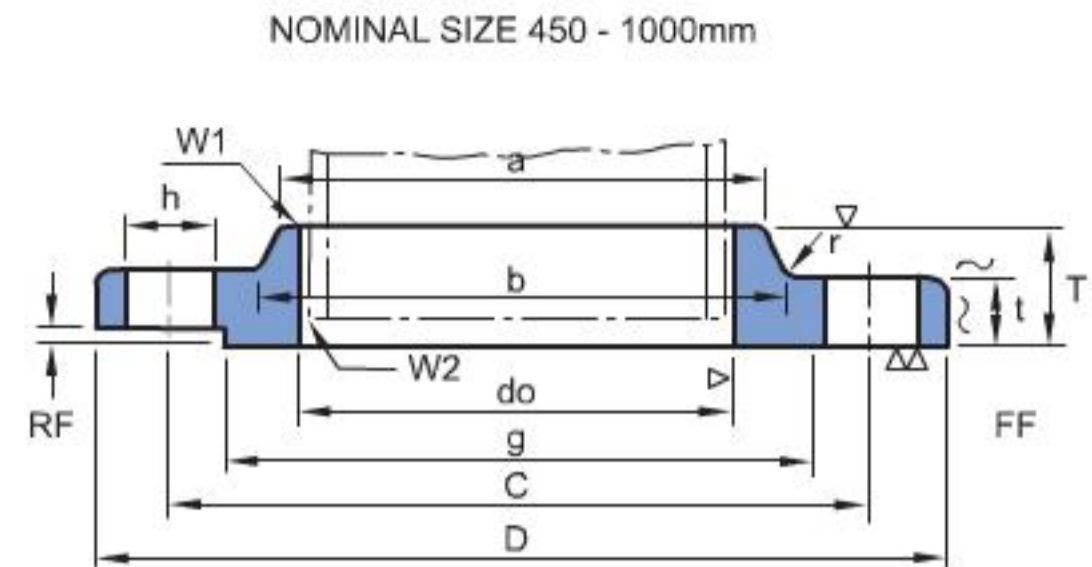
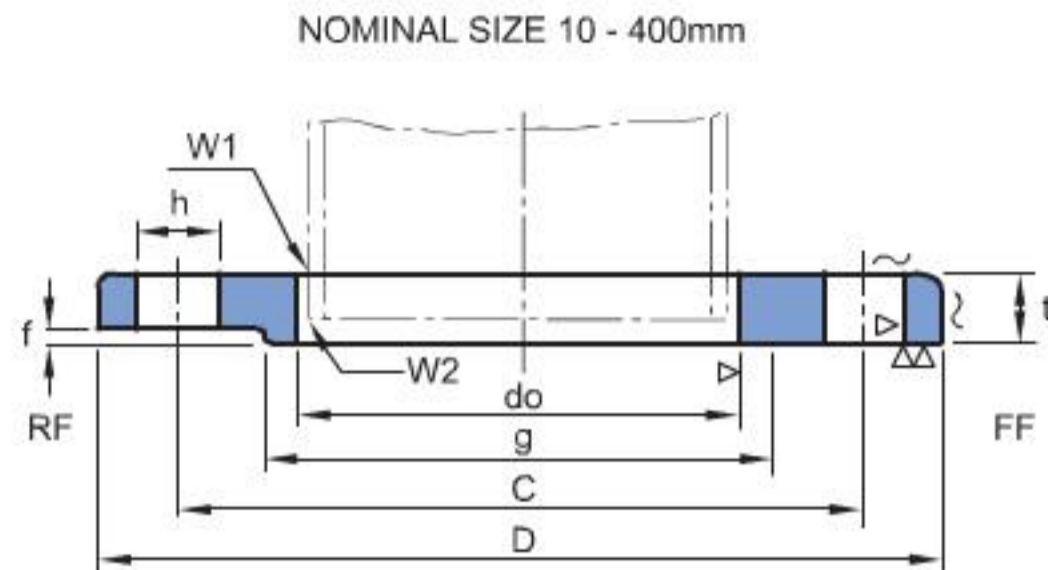
JIS / KS FLANGES



- 5K Flanges
- 10K Flanges
- 16K Flanges
- 20K Flanges
- 30K Flanges
- Facing
- Tolerance for pipe Flanges



5K (KS B1503 / JIS B2220)



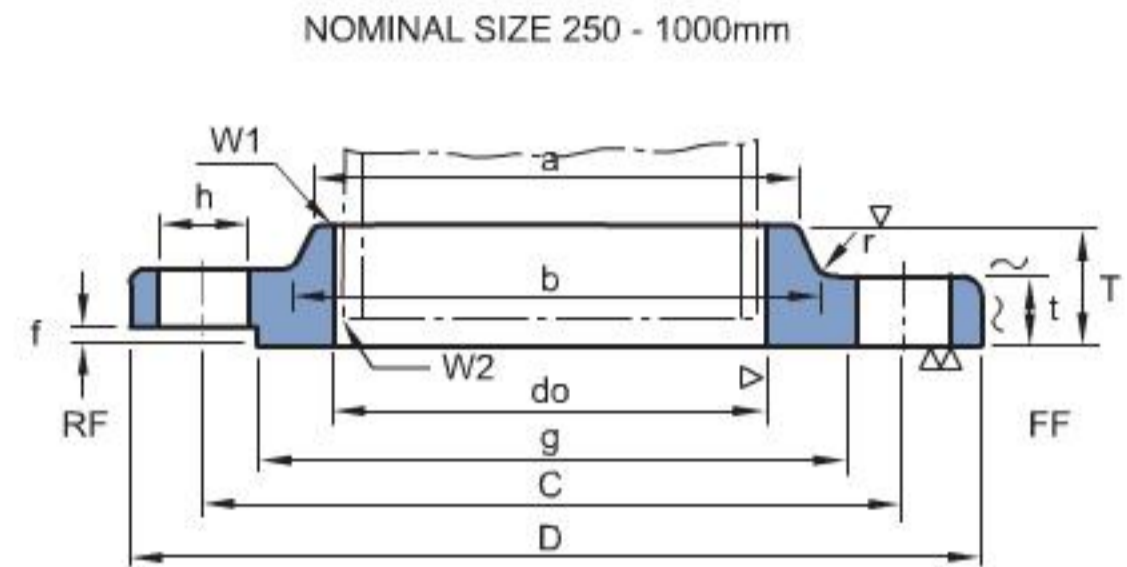
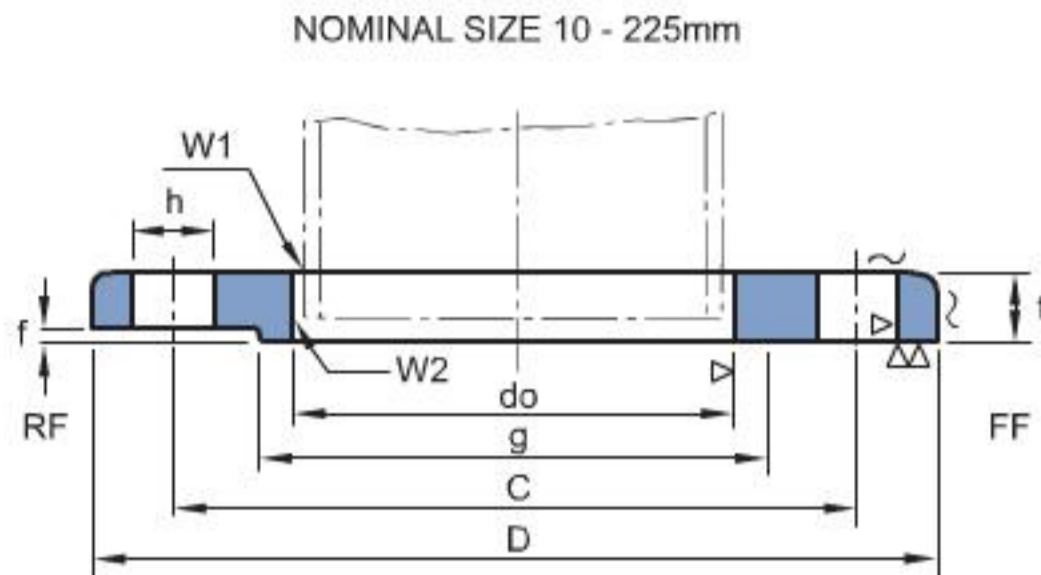
Unit : mm

Nominal Dia. of Flange	Outside Dia. of Flange D	Sectional Dimensions of flange												Nominal Bolt Size	Welding	
		Dia. of Bolt Circle C	Dia. of Raised Face g	Inside Dia. of Flange do	Outside Dia. of Appil-Cable pipe	t	T	Dia. of Hub		Radi-us r	Raised Face f	Hole Dia. h	Number of Bolt Holes		W1	W2
								a	b							
(10)	75	55	39	17.8	17.3	9	-	-	-	-	1	12	4	M10	5.0	2.5
15	80	60	44	22.2	21.7	9	-	-	-	-	1	12	4	M10	5.0	3.0
(20)	85	65	49	27.7	27.2	10	-	-	-	-	1	12	4	M10	5.0	3.0
25	95	75	59	34.5	34.0	10	-	-	-	-	1	12	4	M10	5.0	3.0
(32)	115	90	70	43.2	42.7	12	-	-	-	-	2	15	4	M12	6.0	3.0
40	120	95	75	49.1	48.6	12	-	-	-	-	2	15	4	M12	6.0	3.0
50	130	105	85	61.1	60.5	14	-	-	-	-	2	15	4	M12	6.0	3.0
65	155	130	110	77.1	76.3	14	-	-	-	-	2	15	4	M12	6.0	4.0
80	180	145	121	90.0	89.1	14	-	-	-	-	2	19	4	M16	6.0	4.0
(90)	190	155	131	102.6	101.6	14	-	-	-	-	2	19	4	M16	6.0	4.0
100	200	165	141	115.4	114.3	16	-	-	-	-	2	19	8	M16	7.0	4.0
125	235	200	176	141.2	139.8	16	-	-	-	-	2	19	8	M16	7.0	4.0
150	265	230	206	166.6	165.2	18	-	-	-	-	2	19	8	M16	7.0	5.0
(175)	300	260	232	192.1	190.7	18	-	-	-	-	2	23	8	M20	7.5	5.0
200	320	280	252	218.0	216.3	20	-	-	-	-	2	23	8	M20	8.5	6.0
(225)	345	305	277	243.7	241.8	20	-	-	-	-	2	23	12	M20	9.0	6.0
250	385	345	317	269.5	267.4	22	-	-	-	-	2	23	12	M20	10.0	6.0
300	430	390	360	321.0	318.5	22	-	-	-	-	3	23	12	M20	10.0	6.0
350	480	435	403	358.1	355.6	24	-	-	-	-	3	25	12	M22	12.0	7.0
400	540	495	463	409.0	406.4	24	-	-	-	-	3	25	16	M22	12.0	7.0
450	605	555	523	460.0	457.2	24	40	495	500	5	3	25	16	M22	12.0	7.0
500	655	605	573	511.0	508.0	24	40	546	552	5	3	25	20	M22	12.0	7.0
550	720	665	630	562.0	558.8	26	42	597	603	5	3	27	20	M24	12.0	7.0
600	770	715	680	613.0	609.6	26	44	648	654	5	3	27	20	M24	12.0	7.0
650	825	770	735	664.0	660.4	26	48	702	708	5	3	27	24	M24	12.0	7.0
700	875	820	785	715.0	711.2	26	48	751	758	5	3	27	24	M24	12.0	7.0
750	945	880	840	766.0	762.0	28	52	802	810	5	3	33	24	M30	12.0	7.0
800	995	930	890	817.0	812.8	28	52	854	862	5	3	33	24	M30	13.0	8.0
850	1045	980	940	868.0	863.6	28	54	904	912	5	3	33	24	M30	13.0	8.0
900	1095	1030	990	919.0	914.4	30	56	956	964	5	3	33	24	M30	13.0	8.0
1000	1195	1130	1090	1021.0	1016.0	32	60	1058	1066	5	3	33	28	M30	14.0	9.0
*(1100)	1305	1240	1200	1123.0	1117.6	32	-	-	-	-	3	33	28	M30		
*1200	1420	1350	1305	1225.0	1219.2	34	-	-	-	-	3	33	32	M30		
*1350	1575	1505	1460	-	1371.6	34	-	-	-	-	3	33	32	M30		
*1500	1730	1660	1615	-	1524.0	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 (*)

IOK (KS B1503 / JIS B2220)



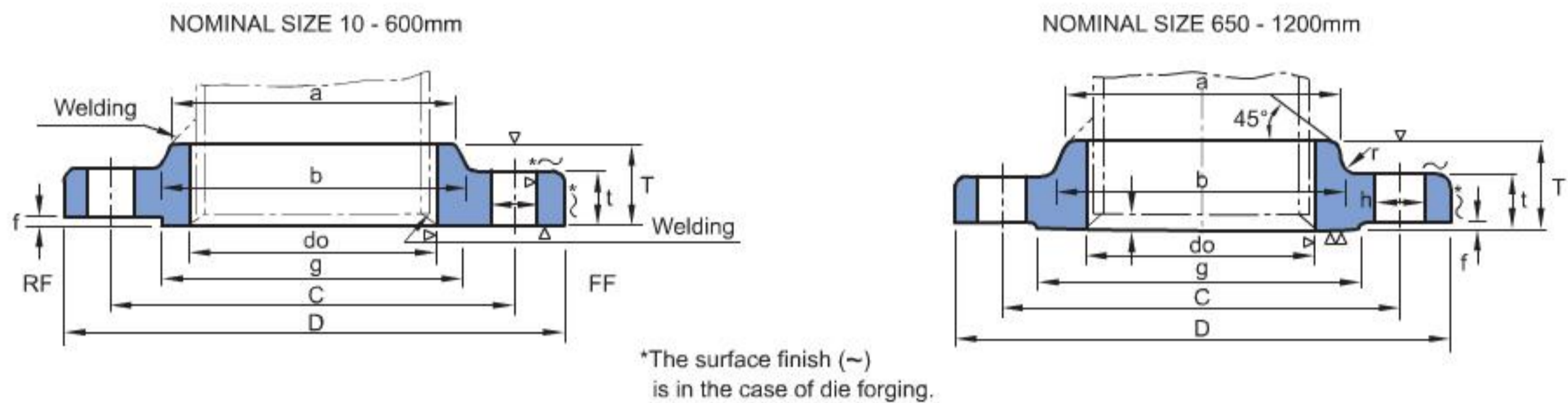
Unit : mm

Nominal Dia. of Flange	Outside Dia. of Flange D	Sectional Dimensions of flange												Nominal Bolt Size	Welding	
		Dia. of Bolt Circle C	Dia. of Raised Face g	Inside Dia. of Flange do	Outside Dia. of Appl. Cable pipe	t	T	Dia. of Hub		Radi-us r	Raised Face f	Hole Dia. h	Number of Bolt Holes		W1	W2
								a	b							
10	90	65	46	17.8	17.3	12	-	-	-	-	1	15	4	M12	5	2.5
15	95	70	51	22.2	21.7	12	-	-	-	-	1	15	4	M12	5	3
20	100	75	56	27.7	27.2	14	-	-	-	-	1	15	4	M12	5	3
25	125	90	67	34.5	34	14	-	-	-	-	1	19	4	M16	5	3
32	135	100	76	43.2	42.7	16	-	-	-	-	2	19	4	M16	6	3
40	140	105	81	49.1	48.6	16	-	-	-	-	2	19	4	M16	6	3
50	155	120	96	61.1	60.5	16	-	-	-	-	2	19	4	M16	6	3
65	175	140	116	77.1	76.3	18	-	-	-	-	2	19	4	M16	6.5	4
80	185	150	126	90	89.1	18	-	-	-	-	2	19	8	M16	6.5	4
(90)	195	160	136	102.6	101.6	18	-	-	-	-	2	19	8	M16	6.5	4
100	210	175	151	115.4	114.3	18	-	-	-	-	2	19	8	M16	7	4
125	250	210	182	141.2	139.8	20	-	-	-	-	2	23	8	M20	7.5	4
150	280	240	212	166.6	165.2	22	-	-	-	-	2	23	8	M20	8	5
(175)	305	265	237	192.1	190.7	22	-	-	-	-	2	23	12	M20	9	5
200	330	290	262	218	216.3	22	-	-	-	-	2	23	12	M20	9	6
(255)	350	310	282	243.7	241.8	22	-	-	-	-	2	23	12	M20	9	6
250	400	355	324	269.5	267.4	24	36	288	292	6	2	25	12	M22	10	6
300	445	400	368	321	318.5	24	38	340	346	6	3	25	16	M22	10	6
350	490	445	413	358.1	355.6	26	42	380	386	6	3	25	16	M22	12	7
400	560	510	475	409	406.4	28	44	436	442	6	3	27	16	M24	12	7
450	620	565	530	460	457.2	30	48	496	502	6	3	27	20	M24	14	8
500	675	620	585	511	508	30	48	548	554	6	3	27	20	M24	14	8
550	745	680	640	562	558.8	32	52	604	610	6	3	33	20	M30	15	9
600	795	730	690	613	609.6	32	52	656	662	6	3	33	24	M30	16	10
650	845	780	740	664	660.4	34	56	706	712	6	3	33	24	M30	16	10
700	905	840	800	715	711.2	34	58	762	770	6	3	33	24	M30	17	10
750	970	900	855	766	762	36	62	816	824	6	3	33	24	M30	18	11
800	1020	950	905	817	812.8	36	64	868	876	6	3	33	28	M30	19	12
(850)	1070	1000	955	868	863.6	36	66	920	928	6	3	33	28	M30	19	12
900	1120	1050	1005	919	914.4	38	70	971	979	6	3	33	28	M30	22	14
1000	1235	1160	1110	1021	1016	40	74	1073	1081	6	3	39	28	M36	22	14
*(1100)	1345	1270	1220	1123	1117.6	42	-	-	-	-	3	39	28	M36		
*1200	1465	1380	1325	1225	1219.2	44	-	-	-	-	3	39	32	M36		
*1350	1630	1540	1480	-	1371.6	48	-	-	-	-	3	45	36	M42		
*1500	1795	1700	1635	-	1524.0	50	-	-	-	-	3	45	40	M42		

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 (*)

I 6K (KS B1503 / JIS B2220)



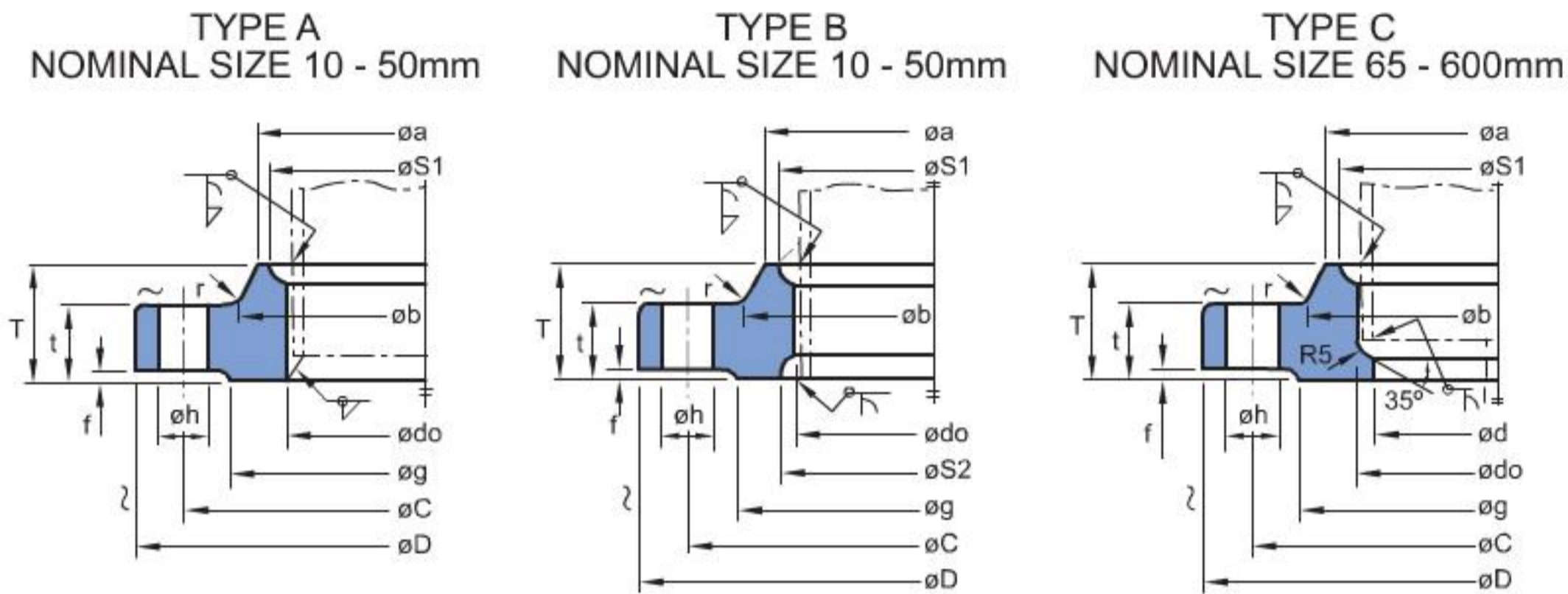
Unit : mm

Nominal Dia. of Flange	Outside Dia. of Flange D	Sectional Dimensions of flange											Nominal Bolt Size	
		Dia. of Bolt Circle C	Dia. of Raised Face g	Inside Dia. of Flange do	Outside Dia. of Appli-Cable pipe	t	T	Dia. of Hub		Radi-us r	Raised Face f	Hole Dia. h		Number of Bolt Holes
								a	b					
10	90	65	46	17.8	17.3	12	16	26	28	4	1	15	4	M12
15	95	70	51	22.2	21.7	12	16	30	32	4	1	15	4	M12
20	100	75	56	27.7	27.2	14	20	38	42	4	1	15	4	M12
25	125	90	67	34.5	34.0	14	20	46	50	4	1	19	4	M16
32	135	100	76	43.2	42.7	16	22	56	60	5	2	19	4	M16
40	140	105	81	49.1	48.6	16	24	62	66	5	2	19	4	M16
50	155	120	96	61.1	60.5	16	24	76	80	5	2	19	8	M16
65	175	140	116	77.1	76.3	18	26	94	98	5	2	19	8	M16
80	200	160	132	90.0	89.1	20	28	108	112	6	2	23	8	M20
(90)	210	170	145	102.6	101.6	20	30	120	124	6	2	23	8	M20
100	225	185	160	115.4	114.3	22	34	134	138	6	2	23	8	M20
125	270	225	195	141.2	139.8	22	34	164	170	6	2	25	8	M22
150	305	260	230	166.6	165.2	24	38	196	202	6	2	25	12	M22
200	350	305	275	218.0	216.3	26	40	244	252	6	2	25	12	M22
250	430	380	345	269.5	267.4	28	44	304	312	6	2	27	12	M24
300	480	430	395	321.0	318.5	30	48	354	364	8	3	27	16	M24
350	540	480	440	358.1	355.6	34	52	398	408	8	3	33	16	M30X3
400	605	540	495	409.0	406.4	38	60	446	456	10	3	33	16	M30X3
450	675	605	560	460.0	457.2	40	64	504	514	10	3	33	20	M30X3
500	730	660	615	511.0	508.0	42	68	558	568	10	3	33	20	M30X3
(550)	795	720	670	562.0	558.8	44	70	612	622	10	3	39	20	M36X3
600	845	770	720	613.0	609.6	46	74	666	676	10	3	39	24	M36X3
(650)	895	820	770	664	660.4	48	77	704	726	10	5	39	24	M36X3
700	960	875	820	715	711.2	50	80	754	776	10	5	42	24	M39X3
(750)	1020	935	880	766	762.0	52	83	806	832	10	5	42	24	M39X3
800	1085	990	930	817	812.8	54	86	865	885	10	5	48	24	M45X3
(850)	1135	1040	980	868	863.6	56	89	916	936	10	5	48	24	M45X3
900	1185	1090	1030	919	914.4	58	93	968	986	10	5	48	28	M45X3
1000	1320	1210	1140	1021	1016.0	62	99	1070	1098	12	5	56	28	M52X3
(1100)	1420	1310	1240	1123	1117.6	66	105	1180	1200	12	5	56	32	M52X3
1200	1530	1420	1350	1225	1219.2	70	112	1282	1302	12	5	56	32	M52X3

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. 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.

20K (KS B1503 / JIS B2220)



*The surface finish (-) is in the case of die forging.

Unit : mm

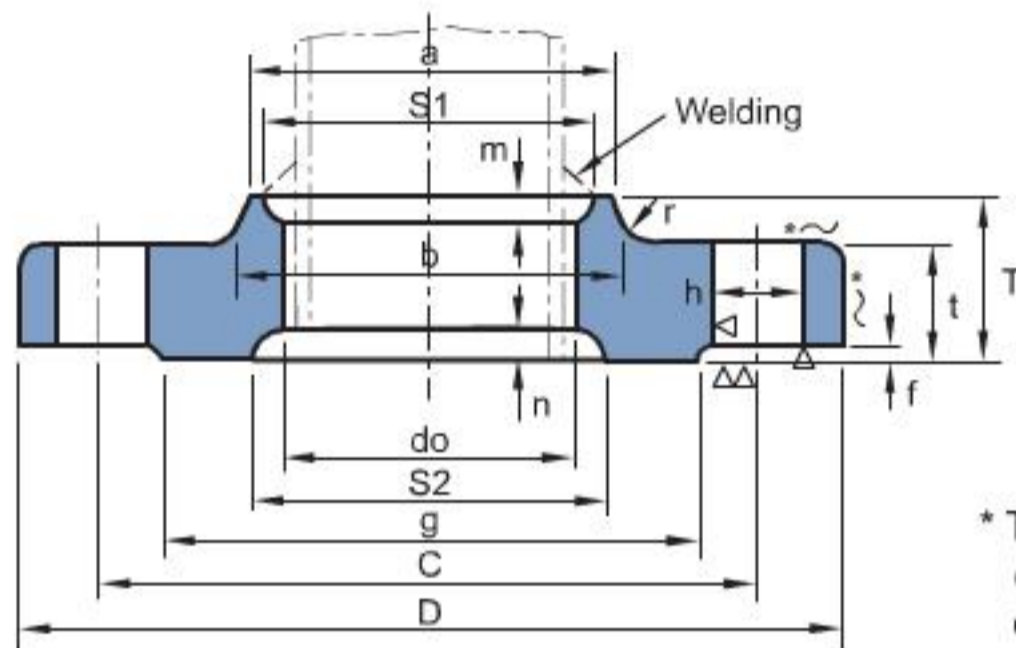
Nominal Pipe Size	Outside Diam. of Flanges D	Sectional Dimensions of Flange														Reference				
		Bolt Circle Dia. C	Dia. of Raised Face g	Inside Dia. of Steel Pipe	Outside Dia. of Steel pipe	t	T	Dia. of Hub		Radius r	f	d	Number of Bolt Holes	Holes Dia. h	Nominal Bolt Size	S1	m	S2	n	l
								a	b											
10	90	65	46	17.8	17.3	14	20	30	32	4	1	-	4	15	M12	27	4	27	4	-
15	95	70	51	22.2	21.7	14	20	34	36	4	1	-	4	15	M12	31	4	31	4	-
20	100	75	56	27.7	27.2	16	22	40	42	4	1	-	4	15	M12	37	4	37	4	-
25	125	90	67	34.5	34.0	16	24	48	50	4	1	-	4	19	M16	44	4	44	4.5	-
32	135	100	76	43.2	42.7	18	26	56	60	5	2	-	4	19	M16	52	4	53	5	-
40	140	105	81	49.1	48.6	18	26	62	66	5	2	-	4	19	M16	58	4	59	5.5	-
50	155	120	96	61.1	60.5	18	26	76	80	5	2	-	8	19	M16	70	4	72	5.5	-
65	175	140	116	77.7	76.3	20	30	100	104	5	2	65.9	8	19	M16	94	6	-	-	6
80	200	160	132	90.0	89.1	22	34	113	117	6	2	78.1	8	23	M20	107	6	-	-	6
(90)	210	170	145	102.6	101.6	24	36	126	130	6	2	90.2	8	23	M20	120	6	-	-	6
100	225	185	160	115.4	114.3	24	36	138	142	6	2	102.3	8	23	M20	132	6	-	-	6
125	270	225	195	141.2	139.8	26	40	166	172	6	2	126.6	8	25	M22	160	7	-	-	6
150	305	260	230	166.6	165.2	28	42	196	202	6	2	151.0	12	25	M22	186	8	-	-	6
200	350	305	275	218.0	216.3	30	46	244	252	6	2	199.9	12	25	M22	237	9	-	-	6
250	430	380	345	269.5	267.4	34	52	304	312	6	2	248.8	12	27	M24	290	10	-	-	6
300	480	430	395	321.0	318.5	36	56	354	364	8	3	297.9	16	27	M24	345	11	-	-	6
350	540	480	440	358.1	355.6	40	62	398	408	8	3	333.4	16	33	M30X3	384	12	-	-	6
400	605	540	495	409.0	406.4	46	70	446	456	10	3	381.0	16	33	M30X3	437	13	-	-	7
450	675	605	560	460.0	457.2	48	78	504	514	10	3	431.8	20	33	M30X3	490	15	-	-	7
500	730	660	615	511.0	508.0	50	84	558	568	10	3	482.6	20	33	M30X3	544	16	-	-	7
(550)	795	720	670	562.0	558.8	52	90	612	622	10	3	533.4	20	39	M36X3	595	16	-	-	7
600	845	770	720	613.0	609.6	54	96	666	676	10	3	584.2	24	39	M36X3	646	18	-	-	7
*650	945	850	790	664	660.4	60					5		24	48	M45X3					
*700	995	900	840	715	711.2	64					5		24	48	M45X3					
*750	1080	970	900	766	762.0	68					5		24	56	M52X3					
*800	1140	1030	960	817	812.8	72					5		24	56	M52X3					
*850	1200	1090	1020	868	863.6	74					5		24	56	M52X3					
*900	1250	1140	1070	919	914.4	76					5		28	56	M52X3					

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)

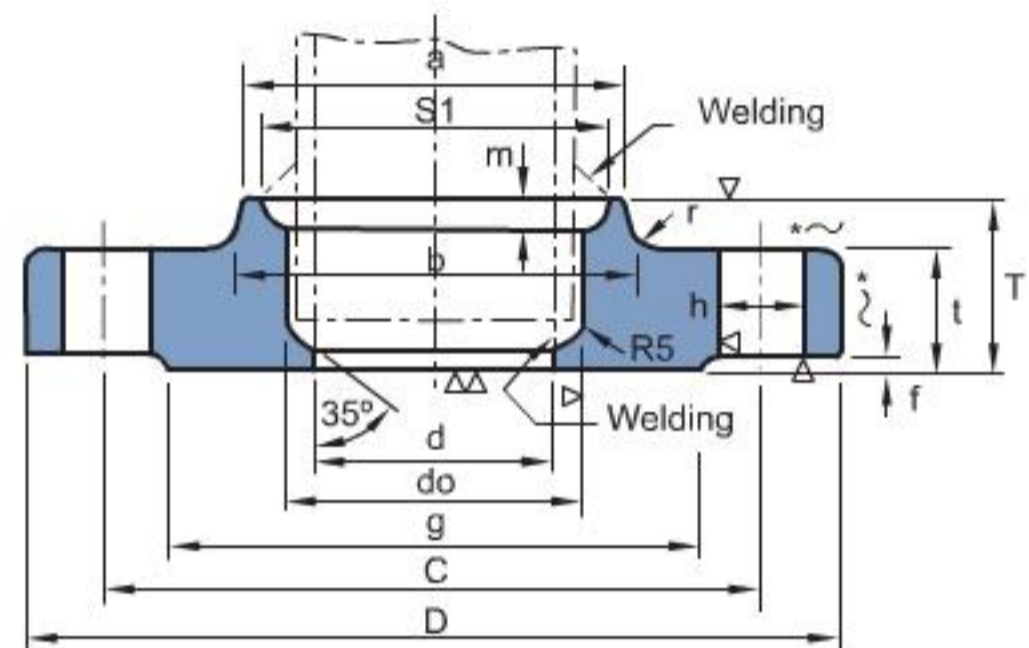
30K (KS B1503 / JIS B2220) Slip - on

NOMINAL SIZE 10 - 50mm (TYPE B)



* The surface finish (~) is in the case of die forging.

NOMINAL SIZE 65 - 400mm (TYPE C)



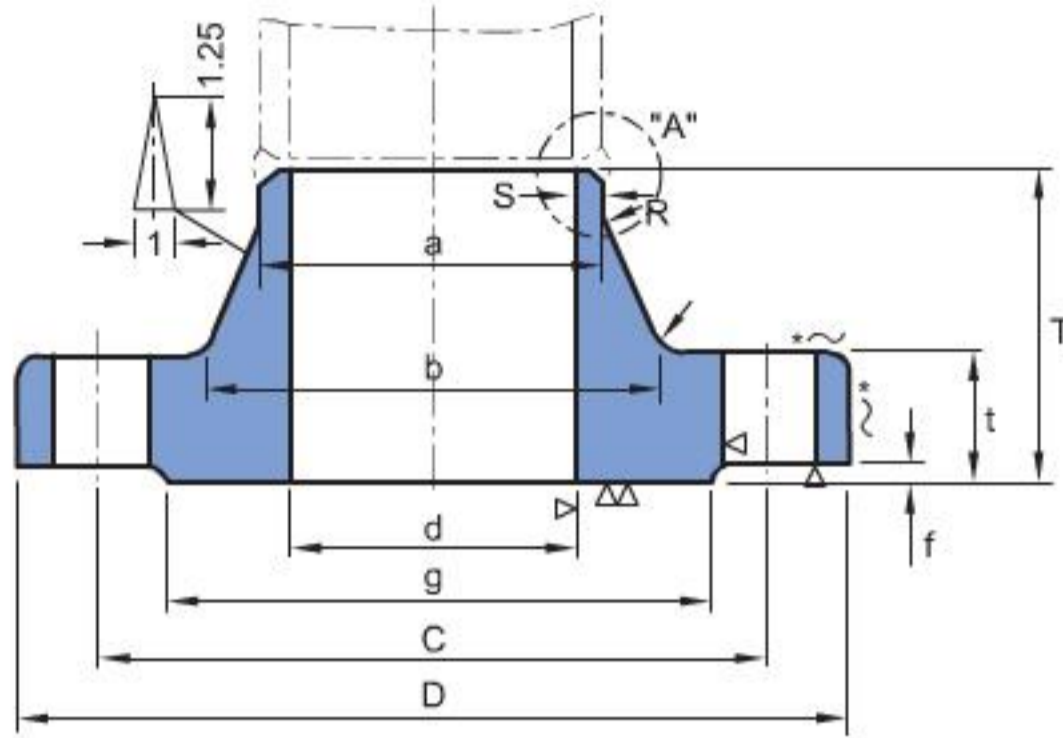
Unit : mm

Nominal Pipe Size	Outside Diam. of Flanges D	Sectional Dimensions of Flange													Reference					
		Bolt Circle Dia. C	Dia. of Raised Face g	Inside Dia. of Steel Pipe	Outside Dia. of Steel pipe	t	T	Dia. of Hub		Radius r	f	d	Number of Bolt Holes	Holes Dia. h	Nominal Bolt Size	S1	m	S2	n	l
								a	b											
10	110	75	52	17.8	17.3	16	24	30	34	4	1	-	4	19	M16	-	-	-	-	-
15	115	80	55	22.2	21.7	18	26	36	40	5	1	-	4	19	M16	31	4	40	5	-
20	120	85	60	27.7	27.2	18	28	42	46	5	1	-	4	19	M16	37	5	44	5	-
25	130	95	70	34.5	34.0	20	30	50	54	5	1	-	4	19	M16	55	6	52	5	-
32	140	105	80	43.2	42.7	22	32	60	64	6	2	-	4	19	M16	52	6	60	5	-
40	160	120	90	49.1	48.6	22	34	66	70	6	2	-	4	23	M20	58	6	66	5	-
50	165	130	105	61.1	60.5	22	36	82	86	6	2	-	8	19	M16	70	6.5	78	5	-
65	200	160	130	77.1	76.3	26	40	102	106	8	2	65.9	8	23	M20	96	9.5	94	5	6
80	210	170	140	90.0	89.1	28	44	115	121	8	2	78.1	8	23	M20	109	9.5	-	-	6
(90)	230	185	150	102.6	101.6	30	46	128	134	8	2	90.2	8	25	M22	122	9.5	-	-	6
100	240	195	160	115.4	114.3	32	48	141	147	8	2	102.3	8	25	M22	135	9.5	-	-	6
125	275	230	195	141.2	139.8	36	54	166	172	8	2	126.6	8	25	M22	160	9.5	-	-	6
150	325	275	235	166.6	165.2	38	58	196	204	8	2	151.0	12	27	M24	186	9.5	-	-	6
200	370	320	280	218.0	216.3	42	64	248	256	8	2	199.9	12	27	M24	237	9.5	-	-	6
250	450	390	345	269.5	267.4	48	72	306	314	10	2	248.8	12	22	M30	290	10	-	-	6
300	515	450	405	321.0	318.5	52	78	360	370	10	3	297.9	16	33	M30	345	12	-	-	6
350	560	495	450	358.1	355.6	54	84	402	412	12	3	333.4	16	33	M30	383	13	-	-	6
400	630	560	510	409.0	406.4	60	92	456	468	15	3	381.0	16	39	M36	435	14	-	-	7

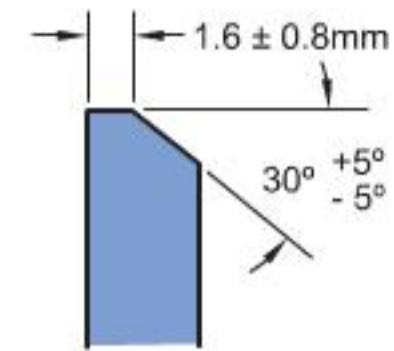
NOTE:

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)

30K (KS B1503 / JIS B2220) Welding Neck



*The surface finish (-) shown above is in the case of die forgine



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

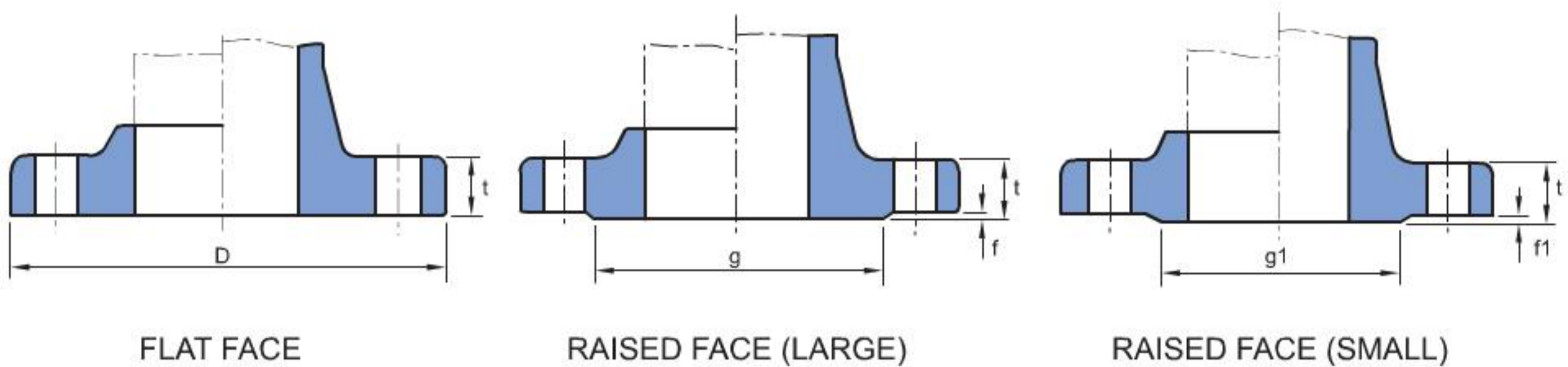
Unit : mm

Nominal Pipe Size	Outside Dia. of Flange D	Sectional Dimensions of Flange													Nominal Bolt Size	
		Bolt Circle Dia. C	Dia. of Raised Face g	Outside Dia. of Steel Pipe	T	b	a	R	t	d	Radius r	s	f	Number of Bolt Holes		Dia. of Hole h
15	115	80	55	21.7	45	40	22.0	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	34.0	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	4.0	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	61.0	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	150.0	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	320.0	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

NOTE:

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)

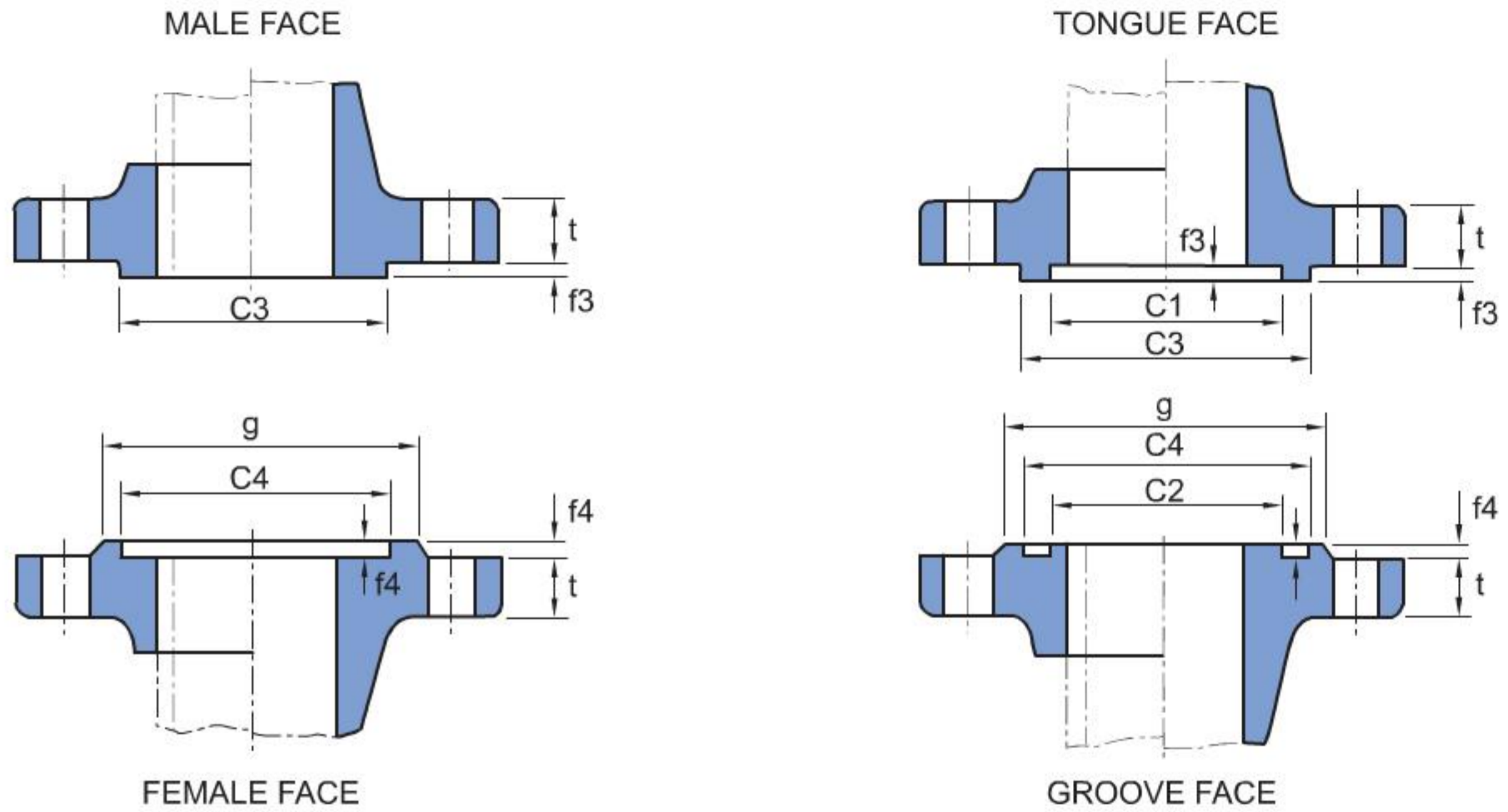
FACING (JIS B2220 / KS BI519)



Unit : mm

Nominal Dia. of Flange	Sectional Dimensions of Flange												Small Raised Facing	
	5K		10K		16K		20K		30K		40K 63K		g1	f1
	g	f	g	f	g	f	g	f	g	f	g	f		
10	39	1	46	1	46	1	46	1	52	1	52	1	35	1
15	44	1	51	1	51	1	51	1	55	1	55	1	42	1
20	49	1	56	1	56	1	56	1	60	1	60	1	50	1
25	59	1	67	1	67	1	67	1	70	1	70	1	60	1
32	70	2	76	2	76	2	76	2	80	2	80	2	68	2
40	75	2	81	2	81	2	81	2	90	2	80	2	75	2
50	85	2	96	2	96	2	96	2	105	2	105	2	90	2
65	110	2	116	2	116	2	116	2	130	2	130	2	105	2
80	121	2	126	2	132	2	132	2	140	2	140	2	120	2
90	131	2	136	2	145	2	145	2	150	2	150	2	130	2
100	141	2	151	2	160	2	160	2	160	2	165	2	145	2
125	176	2	182	2	195	2	195	2	195	2	200	2	170	2
150	206	2	212	2	230	2	230	2	235	2	240	2	205	2
175	232	2	237	2	-	-	-	-	-	-	-	-	-	-
200	252	2	262	2	275	2	275	2	280	2	290	2	260	2
225	277	2	282	2	-	-	-	-	-	-	-	-	-	-
250	317	2	324	2	345	2	345	2	345	2	355	2	315	2
300	360	3	368	3	395	3	395	3	405	3	410	3	375	3
350	403	3	413	3	440	3	440	3	450	3	455	3	415	3
400	463	3	475	3	495	3	495	3	510	3	515	3	465	3
450	523	3	530	3	560	3	560	3	-	-	-	-	-	-
500	573	3	585	3	615	3	615	3	-	-	-	-	-	-
550	630	3	640	3	670	3	670	3	-	-	-	-	-	-
600	380	3	690	3	720	3	720	3	-	-	-	-	-	-
650	735	3	740	3	770	5	790	5	-	-	-	-	-	-
700	785	3	800	3	820	5	840	5	-	-	-	-	-	-
750	840	3	855	3	880	5	900	5	-	-	-	-	-	-
800	890	3	905	3	930	5	960	5	-	-	-	-	-	-
850	940	3	955	3	980	5	1020	5	-	-	-	-	-	-
900	990	3	1005	3	1030	5	1070	5	-	-	-	-	-	-
1000	1090	3	1110	3	1140	5	-	-	-	-	-	-	-	-
1100	1200	3	1220	3	1240	5	-	-	-	-	-	-	-	-
1200	1305	3	1325	3	1350	5	-	-	-	-	-	-	-	-
1300	-	-	-	-	1450	5	-	-	-	-	-	-	-	-
1350	1460	3	1480	3	1510	5	-	-	-	-	-	-	-	-
1400	-	-	-	-	1560	5	-	-	-	-	-	-	-	-
1500	1615	3	1635	3	1670	5	-	-	-	-	-	-	-	-

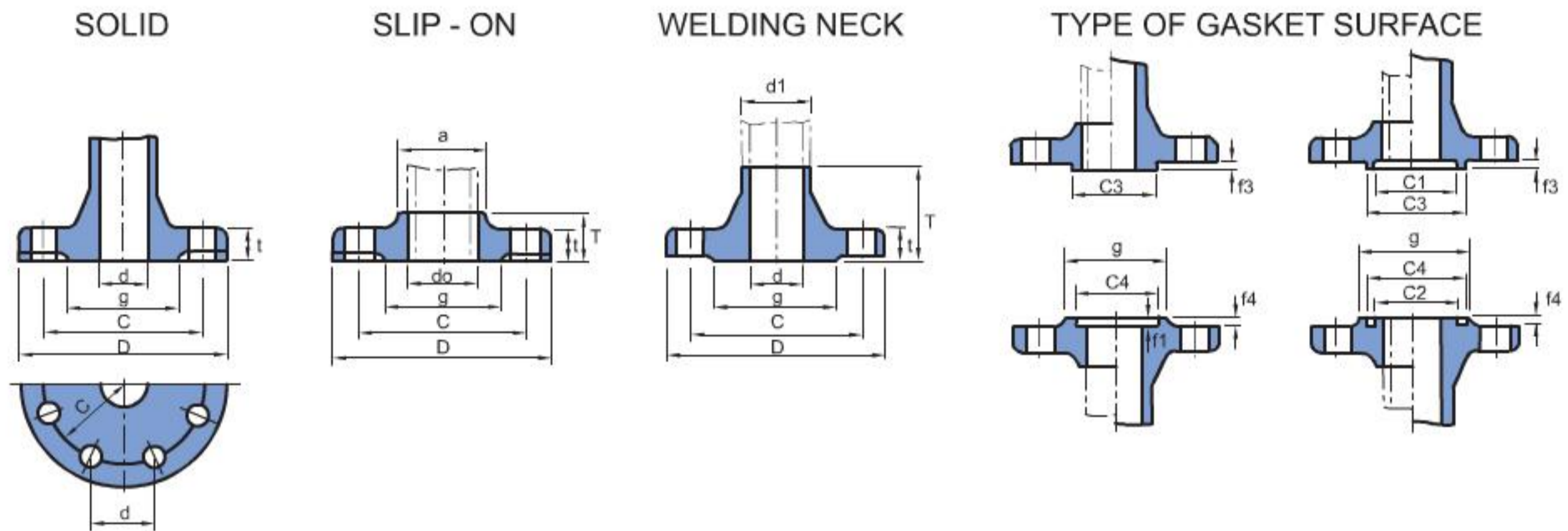
FACING (JIS B2220 / KS B1519)



Unit : mm

Nominal Dia. of Flange	Male & Female Type				Tongue & Groove Type					
	C3	C4	f3	f4	C1	C2	C3	C4	f3	f4
10	38	39	6	5	28	27	38	39	6	5
15	42	43	6	5	32	31	42	43	6	5
20	50	51	6	5	38	37	50	51	6	5
25	60	61	6	5	45	44	60	61	6	5
32	70	71	6	5	55	54	70	71	6	5
40	75	76	6	5	60	59	75	76	6	5
50	90	91	6	5	70	69	90	91	6	5
65	110	111	6	5	90	89	110	111	6	5
80	120	121	6	5	100	99	120	121	6	5
90	130	131	6	5	110	109	130	131	6	5
100	145	146	6	5	125	124	145	146	6	5
125	175	176	6	5	150	149	175	176	6	5
150	215	216	6	5	190	189	215	216	6	5
200	260	261	6	5	230	229	260	261	6	5
250	325	326	6	5	295	294	325	326	6	5
300	375	376	6	5	340	339	375	376	6	5
350	415	416	6	5	380	379	415	416	6	5
400	475	476	6	5	440	439	475	476	6	5

TOLERANCE FOR PIPE FLANGES



Unit : mm

Flange Section	Surface Condition	Basic Size	Dimensional Tolerance	
outside dia. d	as forged(1)	300&below	+not specified	
		over 300 thru 600	-2.0	
		over 600 thru 1000	+not specified	
		over 1000 thru 1500	-3.0	
		over 1500	± 1	
	finish	300&below	± 1.5	
		over 300 thru 600	+ 2	
		over 600 thru 1000	+ 2.5	
		over 1000 thru 1500	± 3	
		over 1500	± 3	
inside dia	as forged(1)	16&below	± 1	
		over 16 thru 63	± 1.5	
		over 63 thru 125	± 2	
		over 125 thru 150	± 2.5	
		over 250 thru 500	± 3	
		over 500 thru 1000	+ 4	
	slip-on flange do	finish	over 1000	= 5, 0
			100&below	+0.5, 0
			over 100 thru 400	+1, 0
			over 400 thru 600	+1.5, 0
			over 600 thru 800	+2.0, 0
			over 800 thru 1000	+2.5, 0
welding neck flange d	finish	over 1000	+3, 0	
		100&below	0, -0.5	
		over 100 thru 400	0, -1	
		over 400 thru 600	0, -1.5	
		over 600 thru 800	0, -2	
		over 800 thru 1000	0, -2.5	
bolt hole	bolt circle dia. c	over 1000	0, -3	
		250&below	+0.5	
		over 250 thru 550	+0.6	
		over 550 thru 950	± 0.8	
		over 950 thru 1350	± 1	
		over 1350	± 1.5	

Flange Section	Surface Condition	Basic Size	Dimensional Tolerance	
		-	- 0.5	
Dia. of hub	Slip-on flange (a) and welding neck flange(d 1)	As forged	220&below	+2, 0
			over 220 thru 450	+3, 0
			over 450 thru 650	+4, 0
			over 650 thru 850	+6, 0
			over 850 thru 1000	+7, 0
		Finish	over 1000	+8, 0
			220&below	+1, 0
			over 220 thru 450	+1.5, 0
			over 450 thru 650	+2, 0
			over 650 thru 850	+2.5, 0
Gasket seat	Finish	over 850 thru 1000	+3, 0	
		over 1000	+3.5, 0	
		500&below	= 0.3	
		over 500 thru 1000	± 0.35	
		over 1000 thru 1500	- 0.4	
Thickness t	One-side finish	over 1500	= 0.5	
		8&below	= 0.2	
		over 8	± 0.25	
		200&below	= 0.8	
		over 200 thru 650	= 0.9	
Hub Height T	Flange with Bolt-welded Pipe	Finish	over 650 thru 1000	± 1
			over 1000	- 1.2
			20&below	+1.5, 0
			over 20 thru 50	+2, 0
			over 50 thru 100	+3, 0
	Flange with Pipe Inserted	Finish	20&below	+1, 0
			over 20 thru 50	+1.5, 0
			over 50 thru 100	+2, 0
			50&below	+ 1
			over 50 thru 100	- 1.5
		over 100 thru 200	± 2	
		over 200&below	+2, 0	
		over 200 thru 300	+3, 0	