

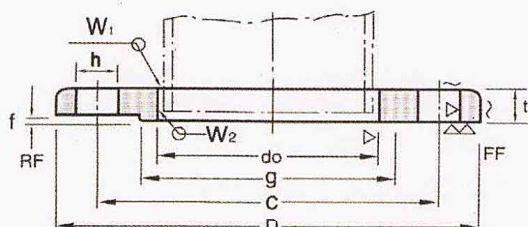
5Kg/Cm²

JIS B2220-1984(KSB 1503-1985)

5Kg/Cm² SLIP-ON WELDING STEEL PIPE FLANGES

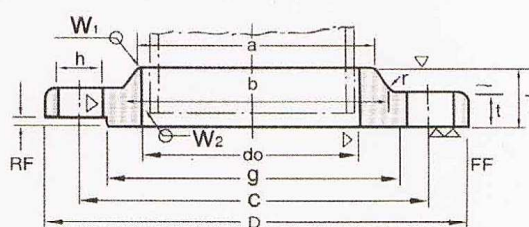
SOP TYPE

NOMINAL SIZE 10-1000mm



SOH TYPE

NOMINAL SIZE 450-1000mm



Unit: mm

Nominal Bore of Flange	Outside Diam. of AppliCable Pipe	Inside Diam. of Flange do	Outside Diam. of Flange D	Sectional Dimensions of Flange							Dia. of Bolt			Nominal Bolt Size	Weight (kg)		
				t	T	Diam. of Hub		Rad -ius r	Raised face f	Diam. of Raised Face g	Diam. of Bolt Circle C	Number of Bolt Holes	Hole Diam h		SOP	BL	SOH
						a	b										
(10)	17.3	17.8	75	9	—	—	—	—	1	39	55	4	12	M10	0.27	0.3	—
15	21.7	22.2	80	9	—	—	—	—	1	44	60	4	12	M10	0.30	0.4	—
(20)	27.2	27.7	85	10	—	—	—	—	1	49	65	4	12	M10	0.37	0.5	—
25	34.0	34.5	95	10	—	—	—	—	1	59	75	4	12	M10	0.45	0.6	—
(32)	42.7	43.2	115	12	—	—	—	—	2	70	90	4	15	M12	0.78	0.9	—
40	48.6	49.1	120	12	—	—	—	—	2	75	95	4	15	M12	0.83	1.0	—
50	60.5	61.1	130	14	—	—	—	—	2	85	105	4	15	M12	1.07	1.4	—
65	76.3	77.1	155	14	—	—	—	—	2	110	130	4	15	M12	1.49	2.0	—
80	89.1	90.0	180	14	—	—	—	—	2	121	145	4	19	M16	1.99	2.7	—
(90)	101.6	102.6	190	14	—	—	—	—	2	131	155	4	19	M16	2.09	3.0	—
100	114.3	115.4	200	16	—	—	—	—	2	141	165	8	19	M16	2.39	3.7	—
125	139.8	141.2	235	16	—	—	—	—	2	176	200	8	19	M16	3.23	5.2	—
150	165.2	166.6	265	18	—	—	—	—	2	206	230	8	19	M16	4.41	7.5	—
(175)	190.7	192.1	300	18	—	—	—	—	2	232	260	8	23	M20	5.51	9.5	—
200	216.3	218.0	320	20	—	—	—	—	2	252	280	8	23	M20	6.33	12.2	—
(225)	241.8	243.7	345	20	—	—	—	—	2	277	305	12	23	M20	6.64	14.0	—
250	267.4	269.5	385	22	—	—	—	—	2	317	345	12	23	M20	9.45	19.3	—
300	318.5	321.0	430	22	—	—	—	—	3	360	390	12	23	M20	10.3	24.3	—
350	355.6	358.1	480	24	—	—	—	—	3	403	435	12	25	M22	14.0	33.2	—
400	406.4	409.0	540	24	—	—	—	—	3	463	495	16	25	M22	16.9	41.9	—
450	457.2	460.0	605	24	40	495	500	5	3	523	555	16	25	M22	21.6	53.0	24.8
500	508.0	511.0	655	24	40	546	552	5	3	573	605	20	25	M22	23.1	61.9	26.9
550	558.8	562.0	720	26	42	597	603	5	3	630	665	20	27	M24	30.3	81.2	34.1
600	609.6	613.0	770	26	44	648	654	5	3	680	715	20	27	M24	32.7	93.2	37.5
650	660.4	664.0	825	26	48	702	708	5	3	735	770	24	27	M24	35.9	106.9	42.8
700	711.2	715.0	875	26	48	751	758	5	3	785	820	24	27	M24	38.2	120.6	45.4
750	762.0	766.0	945	28	52	802	810	5	3	840	880	24	33	M30	48.7	150.5	57.4*
800	812.8	817.0	995	28	52	854	862	5	3	890	930	24	33	M30	51.2	167.4	60.8
(850)	863.6	868.0	1045	28	54	904	912	5	3	940	980	24	33	M30	54.4	185.1	63.5
900	914.4	919.0	1095	30	56	956	964	5	3	990	1030	24	33	M30	61.1	218.1	75.3
1000	1016.0	1021.0	1195	32	60	1058	1066	5	3	1090	1130	28	33	M30	70.5	277.3	88.5
*(1100)	1117.6	1123	1305	32	—	—	—	—	3	1200	1240	28	33	M30	81.7	331.9	—
*1200	1219.2	1225	1420	34	—	—	—	—	3	1305	1350	32	33	M30	102.0	417.8	—
*1350	1371.6	—	1575	34	—	—	—	—	3	1460	1505	32	33	M30	115.9	515.6	—
*1500	1524.0	—	1730	36	—	—	—	—	3	1615	1660	36	33	M30	157.4	659.2	—

1. Flanges of parenthesized nominal diameter had letter not be used.
2. The facing of flanges shall conform to KS B1509(JIS B2202)1984.
3. Nominal diameter over 1000 is manufacturer 's standard(*) .

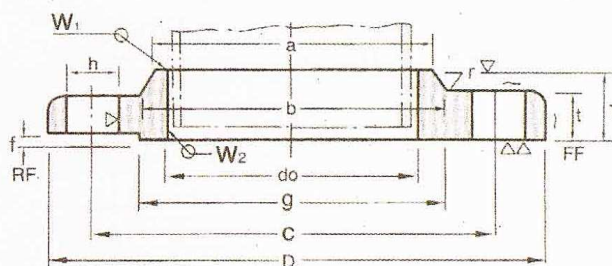
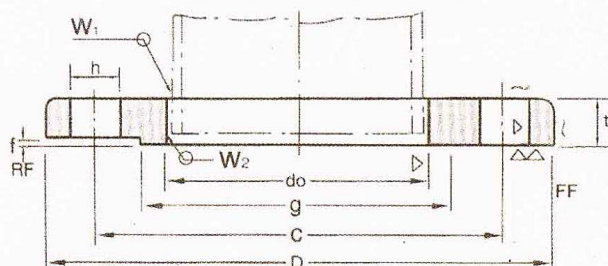
10Kg/Cm²

JIS B2220-1984(KSB 1503-1985)

10Kg/Cm² SLIP-ON WELDING STEEL PIPE FLANGES

SOP TYPE
NOMINAL SIZE 10-800mm

SOH TYPE
NOMINAL SIZE 250-1000mm



NORMAL THICKNESS FLANGE

Unit: mm

Nominal Diam of Flange	Outside Diam. of Steel Pipe	Inside Diam. of Flange do	Outside Diam. of Flange D	Sectional Dimensions of Flange							Dia. of Bolt			Nominal Bolt Size	Weight(kg)		
				t	T	Diam. of Hub		Rad —ius r	Raised Face f	Diam. of Raised Face g	Bolt Circle Diam. C	Number of Bolt Holes	Hole Diam h		SOP	BL	SOH
						a	b										
10	17.3	17.8	90	12	—	—	—	—	1	46	65	4	15	M12	0.52	0.54	—
15	21.7	22.2	95	12	—	—	—	—	1	51	70	4	15	M12	0.57	0.61	—
20	27.2	27.7	100	14	—	—	—	—	1	56	75	4	15	M12	0.73	0.79	—
25	34.0	34.5	125	14	—	—	—	—	1	67	90	4	19	M16	1.13	1.24	—
32	42.7	43.2	135	16	—	—	—	—	2	76	100	4	19	M16	1.48	1.66	—
40	48.6	49.1	140	16	—	—	—	—	2	81	105	4	19	M16	1.56	1.81	—
50	60.5	61.1	155	16	—	—	—	—	2	96	120	4	19	M16	1.88	2.23	—
65	76.3	77.1	175	18	—	—	—	—	2	116	140	4	19	M16	2.60	3.3	—
80	89.1	90	185	18	—	—	—	—	2	126	150	8	19	M16	2.61	3.5	—
(90)	101.6	102.6	195	18	—	—	—	—	2	136	160	8	19	M16	2.76	4.0	—
100	114.3	115.4	210	18	—	—	—	—	2	151	175	8	19	M16	3.14	4.6	—
125	139.8	141.2	250	20	—	—	—	—	2	182	210	8	23	M20	4.77	7.3	—
150	165.2	166.6	280	22	—	—	—	—	2	212	240	8	23	M20	6.34	10.1	—
(175)	190.7	192.1	305	22	—	—	—	—	2	237	265	12	23	M20	6.82	11.8	—
200	216.3	218	330	22	—	—	—	—	2	262	290	12	23	M20	7.53	14.0	—
(225)	241.8	243.7	350	22	—	—	—	—	2	282	310	12	23	M20	7.74	15.8	—
250	267.4	269.5	400	24	36	288	292	6	2	324	355	12	25	M22	11.8	22.7	12.7
300	318.5	321	445	24	38	340	346	6	3	368	400	16	25	M22	12.7	27.8	13.8
350	355.6	358.1	490	26	42	380	386	6	3	413	445	16	25	M22	16.4	37.1	18.2
400	406.4	409	560	28	44	436	442	6	3	475	510	16	27	M24	23.0	52.5	25.2
450	457.2	460	620	30	48	496	502	6	3	530	565	20	27	M24	29.5	68.8	33.0
500	508	511	675	30	48	548	554	6	3	585	620	20	27	M24	33.5	82.1	37.6
(550)	558.8	562	745	32	52	604	610	6	3	640	680	20	33	M30	43.1	105.8	49.7
600	609.6	613	795	32	52	656	662	6	3	690	730	24	33	M30	45.7	120.2	52.6
(650)	660.4	664	845	34	56	706	712	6	3	740	780	24	33	M30	52.1	145.0	60.6
700	711.2	715	905	34	58	762	770	6	3	800	840	24	33	M30	59.5	167.2	70.6
(750)	762	766	970	36	62	816	824	6	3	855	900	24	33	M30	73.2	204.2	85.8
800	812.8	817	1020	36	64	868	876	6	3	905	950	28	33	M30	76.4	225.4	91.2
(850)	863.6	868	1070	36	66	920	928	6	3	955	1000	28	33	M30	80.7	248.8	98.6
900	914.4	919	1120	38	70	971	979	6	3	1005	1050	28	33	M30	89.4	288.4	109.0
1000	1016	1021	1235	40	74	1073	1081	6	3	1110	1160	28	39	M36	109.2	367.7	133.0
*(1100)	1117.6	1123	1345	42	76	—	—	—	3	1220	1270	28	39	M36	131.6	460.0	—
*1200	1219.2	1225	1465	44	78	—	—	—	3	1325	1380	32	39	M36	163.5	572.2	—
1350	1371.6	—	1630	48	82	—	—	—	3	1480	1540	36	45	M42	204.7	769.0	—
*1500	1524.0	—	1795	50	90	—	—	—	3	1635	1700	40	45	M42	250.2	974.9	—

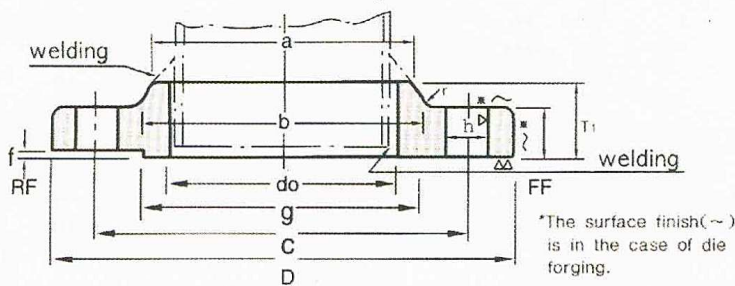
1. Flanges of parenthesized nominal diameter had letter not be used.
2. The facing of flanges shall conform to KS B1509(JIS B2202)1984.
3. Nominal diameter over 1000 is manufacturer's standard(*).

16Kg/Cm²

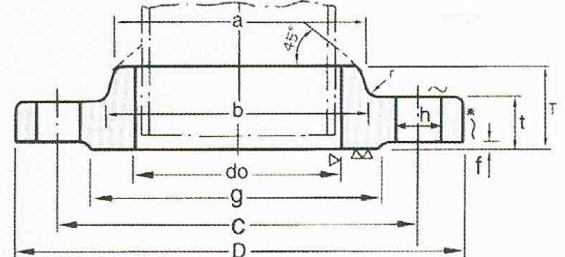
JIS B2220-1984(KSB 1503-1985)

16Kg/Cm² SLIP-ON WELDING STEEL PIPE FLANGES

NOMINAL SIZE 10-600mm



NOMINAL SIZE 650-1200mm



UNIT: mm

Nominal Diameter of Flange	Outside Diameter of Steel Pipe	Inside Diameter of Flange do	Sectional Dimensions of Flange								Bolt Hole			Nominal Bolt Size	Weight(kg)		
			Outside Diameter of Flange D	t	T	Diam.of Hub		Rad —ius r	f	g	Bolt Circle Diameter C	Number of Bolt Holes	Hole Diameter h		SOP	BL	SOH
						a	b										
10	17.3	17.8	90	12	16	26	28	4	1	46	65	4	15	M12	0.52	0.54	0.52
15	21.7	22.2	95	12	16	30	32	4	1	51	70	4	15	M12	0.57	0.61	0.58
20	27.2	27.7	100	14	20	38	42	4	1	56	75	4	15	M12	0.73	0.79	0.75
25	34.0	34.5	125	14	20	46	50	4	1	67	90	4	19	M16	1.13	1.24	1.16
32	42.7	43.2	135	16	22	56	60	5	2	76	100	4	19	M16	1.48	1.66	1.53
40	48.6	49.1	140	16	24	62	66	5	2	81	105	4	19	M16	1.56	1.81	1.64
50	60.5	61.1	155	16	24	76	80	5	2	96	120	8	19	M16	1.8	2.3	1.83
65	76.3	77.1	175	18	26	94	98	5	2	116	140	8	19	M16	2.5	3.1	2.58
80	89.1	90.0	200	20	28	108	112	6	2	132	160	8	23	M20	3.5	4.5	3.66
(90)	101.6	102.6	210	20	30	120	124	6	2	145	170	8	23	M20	3.7	5.0	3.95
100	114.3	115.4	225	22	34	134	138	6	2	160	185	8	23	M20	4.5	6.3	4.94
125	139.8	141.2	270	22	34	164	170	6	2	195	225	8	25	M22	6.5	9.2	7.0
150	165.2	166.6	305	24	38	196	202	6	2	230	260	12	25	M22	8.7	12.8	9.62
200	216.3	218.0	350	26	40	244	252	6	2	275	305	12	25	M22	10.9	18.6	12.1
250	267.4	269.5	430	28	44	304	312	6	2	345	380	12	27	M24	18.0	30.6	20.0
300	318.5	321.0	480	30	48	354	364	8	3	395	430	16	27	M24	21.5	40.7	24.4
350	355.6	358.1	540	34	52	398	408	8	3	440	480	16	33	M30 × 3	30.8	57.8	35.0
400	406.4	409.0	605	38	60	446	456	10	3	495	540	16	33	M30 × 3	42.8	82.2	46.2
450	457.2	460.0	675	40	64	504	514	10	3	560	605	20	33	M30 × 3	55.1	107.6	61.9
500	508.0	511.0	730	42	68	558	568	10	3	615	660	20	33	M30 × 3	65.1	133.1	73.25
(550)	558.8	562.0	795	44	70	612	622	10	3	670	720	20	39	M36 × 3	77.9	164.1	88.1
600	609.6	613.0	845	46	74	666	676	10	3	720	770	24	39	M36 × 3	86.0	193.2	98.8
(650)	660.4	664	895	48	77	704	726	10	5	770	820	24	39	M36 × 3	96.3	227.5	101.0
700	711.2	715	960	50	80	754	776	10	5	820	875	24	42	M39 × 3	114.1	272.6	120.0
(750)	762.0	766	1020	52	83	806	832	10	5	880	935	24	42	M39 × 3	132.7	321.9	141.0
800	812.8	817	1085	54	86	865	885	10	5	930	990	24	48	M45 × 3	152.1	375.6	161.0
(850)	863.6	868	1135	56	89	916	936	10	5	980	1040	24	48	M45 × 3	166.5	428.1	177.0
900	914.4	919	1185	58	93	968	986	10	5	1030	1090	28	48	M45 × 3	178.1	481.8	191.0
1000	1016.0	1021	1320	62	99	1070	1098	12	5	1140	1210	28	56	M52 × 3	235.3	636.0	230.0
1100	1117.6	1123	1420	66	105	1180	1200	12	5	1240	1310	32	56	M52 × 3	267.9	784.0	289.0
1200	1219.2	1225	1530	70	112	1282	1302	12	5	1350	1420	32	56	M52 × 3	321.1	972.4	348.0
1300	1320.8	1326.0	1645	74	—	—	—	—	5	1450	1530	32	62		378.6	1185.2	—
1350	1371.6	1377.0	1700	76	—	—	—	—	5	1510	1590	32	62		410.0	1303.8	—
1400	1422.4	1428.0	1755	78	—	—	—	—	5	1560	1640	36	62		436.0	1422.5	—
1500	1524.0	1529.0	1865	80	—	—	—	—	5	1670	1750	36	62		496.4	1656.6	—

1. Flanges of parenthesized nominal diameter had better not be used.

2. For dimensional tolerance, refer to JIS B2203.

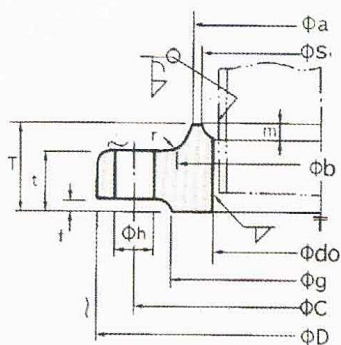
3. In principle material shall be SS400 specified in JIS G3101, SF390A(or SF440A) specified in JIS G3201, or S20C(or S25C) specified in JIS G4051, and shall be fit for welding.

20Kg/Cm²

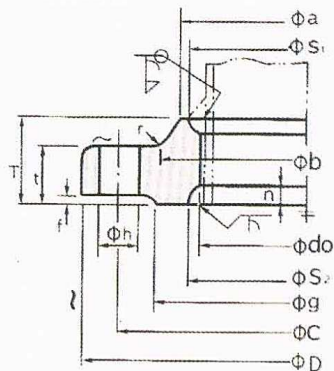
JIS B2220-1984(KSB 1503-1985)

20Kg/Cm² SLIP-ON WELDING STEEL PIPE FLANGES

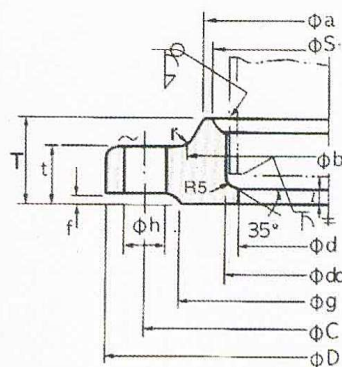
A-TYPE
NOMINAL SIZE 10~600mm



B-TYPE
NOMINAL SIZE 10~50mm



C-TYPE
NOMINAL SIZE 65~600mm



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

Nominal Diameter of Flange	Outside Diameter of Steel Pipe	Inside Diameter of Flange do	Outside Diameter of Flange D	Sectional Dimensions of Flange								Bolt Hole				Reference					Weight (kg)		
				t	T	Diameter of Hub		Rad —ius r	f	g	d	Bolt Circle Diameter C	Number of Bolt Holes	Hole Diameter h	Nominal Bolt Size	S ₁	m	S ₂	n	l	SOP	BL	SOH
						a	b																
10	17.3	17.8	90	14	20	30	32	4	1	46	—	65	4	15	M12	27	4	27	4	—	0.6	0.6	0.59
15	21.7	22.2	95	14	20	34	36	4	1	51	—	70	4	15	M12	31	4	31	4	—	0.7	0.7	0.65
20	27.2	27.7	100	16	22	40	42	4	1	56	—	75	4	15	M12	37	4	37	4	—	0.8	0.9	0.81
25	34.0	34.5	125	16	24	48	50	4	1	67	—	90	4	19	M16	44	4	44	4.5	—	1.3	1.5	1.29
32	42.7	43.2	135	18	26	56	60	5	2	76	—	100	4	19	M16	52	4	53	5	—	1.6	1.8	1.6
40	48.6	49.1	140	18	26	62	66	5	2	81	—	105	4	19	M16	58	4	59	5.5	—	1.7	2.0	1.69
50	60.5	61.1	155	18	26	76	80	5	2	96	—	120	8	19	M16	70	4	72	5.5	—	1.9	2.4	1.89
65	76.3	77.1	175	20	30	100	104	5	2	116	65.9	140	8	19	M16	94	6	85	6	6	2.6	3.4	2.6
80	89.1	90.0	200	22	34	113	117	6	2	132	78.1	160	8	23	M20	107	6	—	—	6	3.8	4.9	3.93
(90)	101.6	102.6	210	24	36	126	130	6	2	145	90.2	170	8	23	M20	120	6	—	—	6	4.4	6.0	4.56
100	114.3	115.4	225	24	36	138	142	6	2	160	102.3	185	8	23	M20	132	6	—	—	6	4.9	6.9	5.13
125	139.8	141.2	270	26	40	166	172	6	2	195	126.6	225	8	25	M22	160	7	—	—	6	7.8	11.0	8.3
150	165.2	166.6	305	28	42	196	202	6	2	230	151.0	260	12	25	M22	186	8	—	—	6	10.1	14.8	10.6
200	216.3	218.0	350	30	46	244	252	6	2	275	199.9	305	12	25	M22	237	9	—	—	6	12.6	21.4	13.3
250	267.4	269.5	430	34	52	304	312	6	2	345	248.8	380	12	27	M24	290	10	—	—	6	21.9	37.2	23.4
300	318.5	321.0	480	36	56	354	364	8	3	395	297.9	430	16	27	M24	345	11	—	—	6	25.8	48.8	27.7
350	355.6	358.1	540	40	62	398	408	8	3	440	333.4	480	16	33	M30 × 3	384	12	—	—	6	36.2	68.0	39.2
400	406.4	409.0	605	46	70	446	456	10	3	495	381.0	540	16	33	M30 × 3	437	13	—	—	7	51.7	99.4	54.2
450	457.2	460.0	675	48	78	504	514	10	3	560	431.8	605	20	33	M30 × 3	490	15	—	—	7	66.1	129.1	71.7
500	508.0	511.0	730	50	84	558	568	10	3	615	482.6	660	20	33	M30 × 3	544	16	—	—	7	77.4	158.4	86.2
(550)	558.8	562.0	795	52	90	612	622	10	3	670	533.4	720	20	39	M36 × 3	595	16	—	—	7	92.2	194.0	105
600	609.6	613.0	845	54	96	666	676	10	3	720	584.2	770	24	39	M36 × 3	646	18	—	—	7	101.1	226.9	119
(650)	660.4	664.0	945	60	—	—	—	—	5	790	—	850	24	48	M45 × 3	—	—	—	—	—	147.6	311.6	—
700	711.2	715.0	995	64	—	—	—	—	5	840	—	—	—	—	—	—	—	—	—	—	168.0	370.9	—
(750)	762.0	766.0	1080	68	—	—	—	—	5	900	—	970	24	56	M52 × 3	—	—	—	—	—	212.7	460.1	—
800	812.8	817.0	1140	72	—	—	—	—	5	960	—	1030	24	56	M52 × 3	—	—	—	—	—	248.5	546.5	—
(850)	863.6	868.0	1200	74	—	—	—	—	5	1020	—	1090	24	56	M52 × 3	—	—	—	—	—	280.5	626.2	—
900	914.6	919.0	1250	76	—	—	—	—	5	1070	—	1140	28	56	M52 × 3	—	—	—	—	—	296.9	694.9	—

1. Flanges of parenthesized nominal diameters had better not be used.

2. The Flange gasket surface is based on large raised facing specified in JIS B2202.

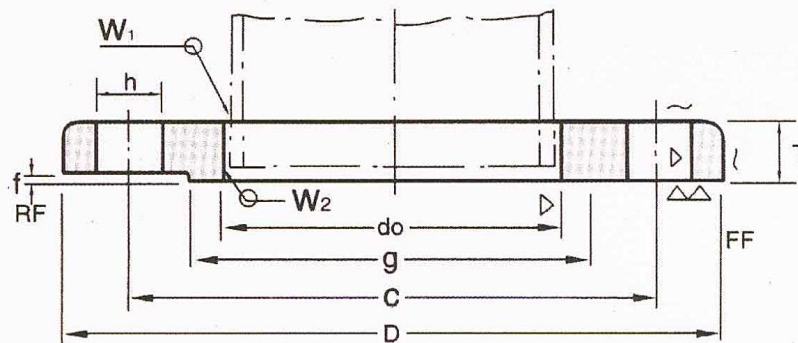
3. Size d is an example of pipe thickness for schedule 40 of JIS G3454 and JIS G3456. But customers can order for other size as occasion demand.

4. For dimensional tolerance, refer to JIS B2203.

5. In principle, material shall be S45C specified in JIS G3101, SF390A (or SF440A) specified in JIS G3201, or S20C (or S25C) specified in JIS G4051. Material shall be fit for welding.

*The surface finish is the case of forging (—) in other cases).

Fittings of Coated steel Pipes for Water Service

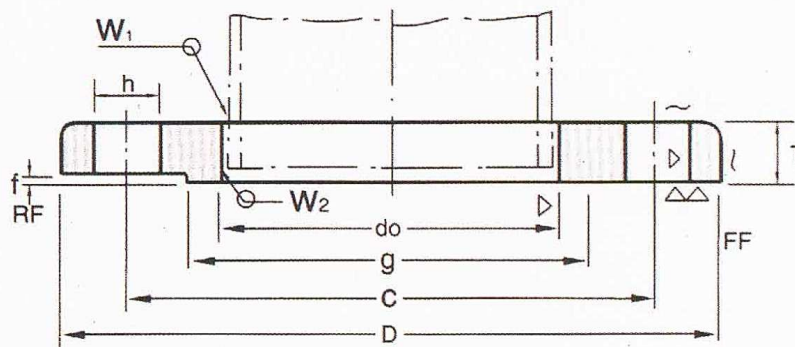


unit: mm

Nominal Bore of Flange	Inside Diam. of Flange do	F12 KS D 3578 10kgf/cm ² Sectional Dimensions of RF Flange								F15 KS D 3578 16kgf/cm ² Sectional Dimensions of RF Flange							
		T	D	C	g	f	Bolt Hole		Weight (kg)	T	D	C	g	f	Bolt Hole		Weight (kg)
							h	N							h	N	
80A	90.0	18	211	160	133	2	19	4	3.59	18	211	160	133	2	19	4	3.59
100A	115.4	18	238	180	153	2	19	8	4.14	18	238	180	153	2	19	8	4.14
125A	141.2	20	263	210	183	2	19	8	5.36	20	263	210	183	2	19	8	5.36
150A	166.6	22	290	240	209	2	23	8	6.69	22	290	240	209	2	23	8	6.69
200A	218.0	22	342	295	264	2	23	8	8.41	22	342	295	264	2	23	8	8.41
250A	269.5	24	410	350	319	3	23	12	12.2	24	410	350	319	3	23	12	12.2
300A	321.0	24	464	400	367	3	23	12	14.5	24	464	400	367	3	23	12	17.81
350A	358.1	26	530	460	427	3	23	16	21.7	26	530	460	427	3	23	16	21.7
400A	409.0	26	582	515	477	3	27	16	24.1	28	582	515	477	3	27	16	26.1
450A	460.0	28	652	565	518	3	27	20	32.2	30	652	565	518	3	27	20	34.6
500A	511.0	28	706	620	582	3	27	20	36.3	30	706	620	582	3	27	20	39.1
600A	613.0	30	810	725	682	3	30	20	46.1	34	810	725	682	3	30	20	52.7
700A	715.0	32	928	840	797	3	30	24	62.1	34	928	840	797	3	30	24	66.2
800A	817.0	34	1034	950	904	3	33	24	76.0	36	1034	950	904	3	33	24	80.7
900A	919.0	36	1156	1050	1004	3	33	28	98.8	38	1156	1050	1004	3	33	28	105
1000A	1021.0	38	1262	1160	1111	3	36	28	117	42	1262	1160	1111	3	36	28	130
1100A	1122.0	41	1366	1270	1200	3	36	32	138	43	1366	1270	1200	3	36	32	145
1200A	1224.0	43	1470	1387	1304	3	36	32	160	45	1470	1387	1304	3	36	32	168
1350A	1376.0	45	1642	1552	1462	3	40	36	201	51	1642	1552	1462	3	40	36	229
1500A	1529.0	48	1800	1710	1620	3	40	36	244	53	1800	1710	1620	3	40	36	271
1600A	1617.0	53	1915	1820	1760	3	40	40	305	58	1915	1820	1760	3	40	40	334
1650A	1682.0	53	1965	1870	1770	3	40	40	292	58	1965	1870	1770	3	40	40	321
1800A	1817.0	55	2115	2020	1960	3	49	44	337	59	2115	2020	1960	3	49	44	362
1900A	1912.0	55	2220	2126	2066	4	49	44	378	59	2220	2126	2066	3	49	44	389
2000A	2017.0	58	2325	2230	2170	4	49	48	401	62	2325	2230	2170	4	49	48	430
2100A	2121.0	59	2440	2340	2240	4	49	48	448	64	2440	2340	2240	4	49	48	487
2200A	2221.0	61	2655	2440	2370	4	56	52	487	68	2550	2440	2370	4	56	52	545
2300A	2321.0	62	2640	2540	2440	4	56	52	522	69	2650	2540	2440	4	56	52	583
2400A	2121.0	64	2760	2650	2570	4	56	56	570	70	2760	2650	2570	4	56	56	625
2500A	2521.0	68	2860	2750	2670	5	56	56	624	72	2860	2750	2670	5	56	56	662
2600A	2621.0	68	2960	2850	2780	5	56	60	643	72	2960	2850	2780	5	56	60	682
2700A	2721.0	71	3080	2960	2850	5	56	60	740								
2800A	2821.0	72	3180	3070	3000	5	56	64	779								
2900A	2946.0	74	3292	3180	3104	5	56	64	861								
3000A	3021.0	76	3405	3290	3210	5	56	64	952								

KS D 3578 -1997

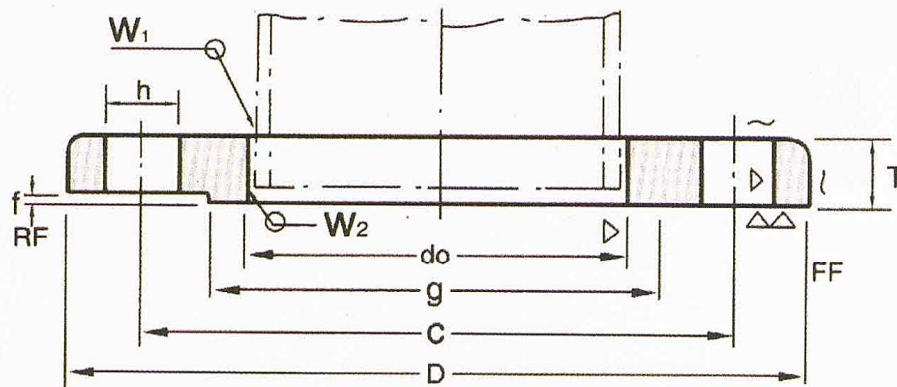
Fittings of Coated steel Pipes for Water Service



Unit: mm

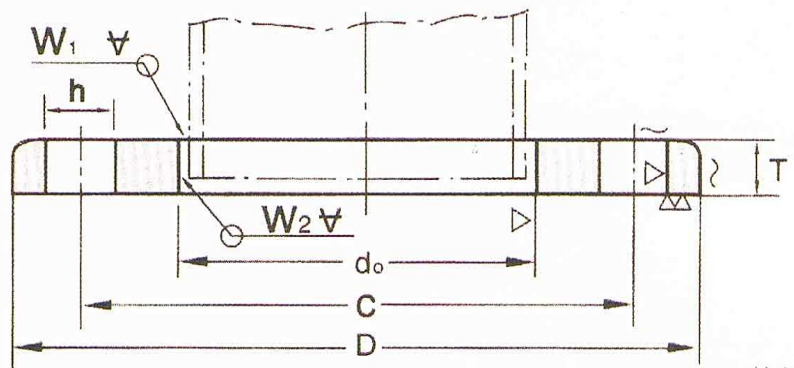
Nominal Bore of Flange	Inside Diam. of Flange do	F20 KS D 3578 20kgf/cm ² Sectional Dimensions of RF Flange								F20 KS D 3578 20kgf/cm ² Sectional Dimensions of RF Flange							
		T	D	C	g	f	Bolt Hole		Weight (kg)	T	D	C	g	f	Bolt Hole		Weight (kg)
							h	N							h	N	
80A	90.0	22	200	160	135	2	23	8	3.56	12	211	160	60	2	19	4	2.80
100A	115.4	22	225	185	160	2	23	8	4.26	12	238	180	85	2	19	8	3.50
125A	141.2	23	270	225	195	2	25	8	6.49	12	263	210	110	2	19	8	4.33
150A	166.6	27	305	260	230	2	25	12	9.27	12	290	240	135	2	23	8	5.25
200A	218.0	27	350	305	275	2	25	12	10.9	14	342	295	185	2	23	8	9.00
250A	269.5	28	430	380	345	2	27	12	17.7	16	410	350	235	2	23	12	15.0
300A	321.0	30	480	430	395	3	27	16	20.5	19	464	400	285	3	23	12	22.8
350A	358.1	34	540	480	440	3	33	16	29.5	21	530	460	325	3	23	16	32.9
400A	409.0	38	605	540	495	3	33	16	41.1	23	582	515	375	3	27	16	43.8
450A	460.0	40	675	605	560	3	33	20	53.2	26	652	565	425	3	27	20	62.8
500A	511.0	42	730	660	615	3	33	20	63.1	28	706	620	475	3	27	20	80.0
600A	613.0	46	845	770	720	3	39	24	83.8	33	810	725	580	3	30	20	126
700A	715.0	50	960	875	820	5	42	24	109	37	928	840	680	3	30	24	186
800A	817.0	54	1085	990	930	5	48	24	146	42	1034	950	780	3	33	24	264
900A	919.0	58	1185	1090	1030	5	48	28	171	47	1156	1050	880	3	33	28	370
1000A	1021.0	64	1320	1210	1140	5	56	28	235	51	1262	1160	980	3	36	28	480
1100A	1122.0	67	1420	1310	1240	5	56	32	264								
1200A	1224.0	70	1530	1420	1350	5	56	32	313								
1350A	1376.0	76	1700	1590	1510	5	62	32	400								
1500A	1529.0	80	1865	1750	1670	5	62	36	485								

Nominal Bore of Flange	Inside Diam. of Flange do	F12 KS D 3578 10kgf/cm ² Sectional Dimensions of RF Flange								F15 KS D 3578 16kgf/cm ² Sectional Dimensions of RF Flange							
		T	D	C	g	f	Bolt Hole		Weight (kg)	T	D	C	g	f	Bolt Hole		Weight (kg)
							h	N							h	N	
80A	90.0	13	185	160	60	2	19	4	2.51	18	200	160	60	2	23	8	3.81
100A	115.4	13	210	180	85	2	19	8	3.12	18	225	185	85	2	23	8	4.77
125A	141.2	14	250	210	110	2	19	8	4.80	18	270	225	110	2	25	8	6.95
150A	166.6	14	280	240	135	2	23	8	5.95	22	305	260	135	2	25	12	10.9
200A	218.0	16	330	295	185	2	23	8	9.75	22	350	305	185	2	25	12	14.8
250A	269.5	17	400	350	235	2	23	12	15.2	23	430	380	235	2	27	12	23.8
300A	321.0	19	445	400	285	3	23	12	21.3	26	480	430	285	3	27	16	33.4
350A	358.1	22	490	460	325	3	23	16	30.0	28	540	480	325	3	33	16	45.1
400A	409.0	25	560	515	375	3	27	16	44.5	32	605	540	375	3	33	16	65.8
450A	460.0	27	620	565	425	3	27	20	59.4	36	675	605	425	3	33	20	92.9
500A	511.0	30	675	620	475	3	27	20	78.9	39	730	660	475	3	33	20	119
600A	613.0	35	795	725	580	3	30	20	129	45	845	770	580	3	39	24	183
700A	715.0	40	905	840	680	3	30	24	192								
800A	817.0	45	1020	950	780	3	33	24	276								
900A	919.0	50	1120	1032	880	3	33	28	371								
1000A	1021.0	62	1235	1160	980	3	36	28	561								



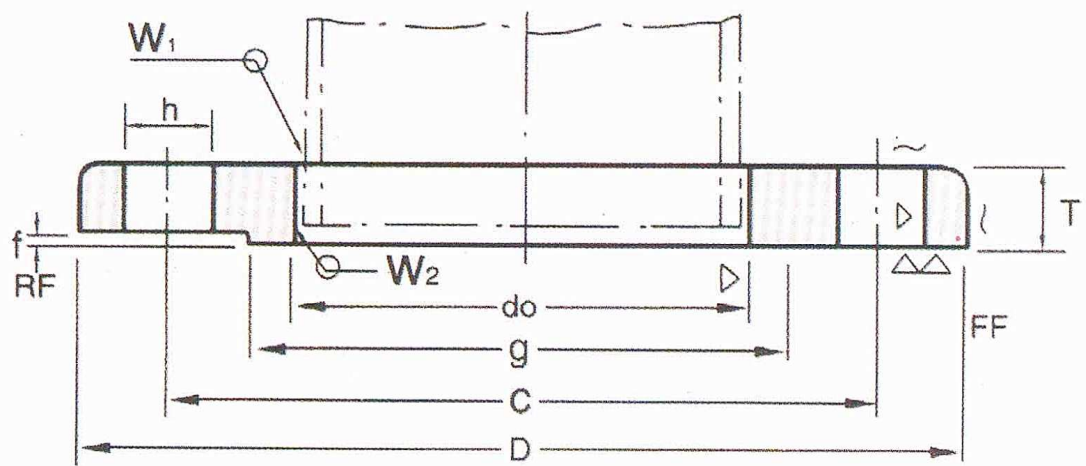
Unit: mm

Pressure kgf/cm ²	Nominal Bore of Flange	Inside Diam. of Flange	Sectional Dimensions of Flange				Bolt Hole		
			T	D	g	f	C	h	N
10K	20A	27.7	22	125	70	1	90	19	4
	25A	34.5	22	130	75	1	95	19	4
	32A	43.2	24	140	85	2	105	19	4
	40A	49.1	24	155	100	2	120	19	8
	50A	61.1	26	165	110	2	130	19	8
	60A	77.1	28	200	135	2	160	23	8
	80A	90.0	30	210	145	2	170	23	8
	100A	115.4	32	245	180	2	205	23	8
	125A	141.2	34	280	205	2	235	25	12
	150A	166.6	36	325	250	2	280	25	12
20K	20A	27.7	22	130	70	1	95	19	4
	25A	34.5	22	135	75	1	100	19	4
	32A	43.2	24	160	90	2	120	23	4
	40A	49.1	24	165	105	2	130	19	8
	50A	61.1	26	185	115	2	145	23	8
	65A	77.1	30	210	140	2	170	23	8
	80A	90.0	32	230	150	2	185	25	8
	100A	115.4	36	265	185	2	220	25	8
	125A	141.2	38	290	210	2	245	25	12
	150A	166.6	42	350	260	2	300	27	12
30K	20A	27.7	24	130	70	1	90	19	4
	25A	34.5	24	135	75	1	100	19	4
	32A	43.2	26	160	90	2	120	23	4
	40A	49.1	28	165	105	2	130	19	8
	50A	61.1	30	185	115	2	145	23	8
	65A	77.1	34	210	140	2	170	23	8
	80A	90.0	36	230	150	2	185	25	8
	100A	115.4	40	285	190	2	235	27	8
	125A	141.2	44	315	215	2	265	27	12
	150A	166.6	48	375	265	2	315	33	12
30K	200A	218.0	54	435	315	2	370	36	12



Unit: mm

N/D	PIPE	FLANGE			BOLT HOLE			BOLT (M)	WT (KG)
	O/D(d)	D	I/D(do)	T	C	N	H		
25	34.0	95	34.5	10	75	4	12	M10	0.45
(32)	42.7	115	43.2	12	90	4	15	M12	0.73
40	48.6	120	49.1	12	95	4	15	M12	0.83
50	60.5	130	61.1	14	105	4	15	M12	1.06
65	76.3	155	77.1	14	130	4	15	M12	1.48
80	89.1	180	90.0	14	145	4	19	M16	1.97
100	114.3	200	115.4	16	165	8	19	M16	2.35
125	139.8	235	141.2	16	200	8	19	M16	3.20
150	165.2	265	166.6	16	230	8	19	M16	3.90
200	216.3	320	218.0	16	280	8	23	M20	5.00
250	267.4	385	269.5	16	345	12	23	M20	6.83
300	318.5	430	321.0	16	390	12	23	M20	7.45
350	355.6	480	358.1	16	435	12	25	M22	9.45
400	406.4	540	409.0	16	495	16	25	M22	11.43
450	457.2	605	460.0	16	555	16	25	M22	14.40
500	508.0	655	511.0	16	605	16	25	M22	15.73
(550)	555.8	660	562.0	16	620	16	23	M20	12.00
600	609.6	710	613.0	16	670	16	23	M20	12.12
(650)	660.4	760	664.0	16	720	16	23	M20	12.15
700	711.2	815	715.0	16	775	16	23	M20	14.26
750	762.0	865	766.0	16	825	20	23	M20	14.88
800	812.8	915	817.0	16	875	20	23	M20	15.70
(850)	863.6	965	868.0	16	925	20	23	M20	16.50
900	914.4	1025	919.0	18	980	20	25	M22	21.48
(950)	962.0	1075	967.0	18	1030	20	25	M22	21.97
1000	1016.0	1125	1021.0	18	1080	20	25	M22	23.38
1050	1062.0	1175	1067.0	18	1130	24	25	M22	25.21
1100	1117.6	1225	1122.0	18	1180	24	25	M22	25.16
1150	1162.0	1275	1167.0	18	1230	24	25	M22	26.64
1200	1219.0	1325	1224.0	18	1280	24	25	M22	27.60
1250	1262.0	1375	1267.0	18	1330	28	25	M22	29.72
1300	1312.0	1425	1317.0	18	1380	28	25	M22	30.92
1350	1371.6	1475	1376.0	18	1430	28	25	M22	32.38
1400	1412.0	1525	1417.0	20	1480	28	25	M22	37.02
1450	1462.0	1595	1467.0	20	1540	28	27	M24	45.81
1500	1524.0	1645	1529.0	20	1590	28	27	M24	46.88
1600	1612.0	1745	1617.0	20	1690	28	27	M24	50.54
1700	1712.0	1845	1717.0	20	1790	28	27	M24	53.70
1800	1812.0	1950	1817.0	20	1895	32	27	M24	58.90
1900	1912.0	2050	1917.0	20	1995	32	27	M24	62.18
2000	2012.0	2150	2017.0	20	2095	36	27	M24	65.10
2100	2116.0	2250	2121.0	24	2195	36	27	M24	79.55
2200	2216.0	2350	2221.0	24	2295	40	27	M24	82.94
2300	2316.0	2450	2321.0	24	2395	40	27	M24	86.75
2400	2416.0	2550	2421.0	24	2495	40	27	M24	89.71
2500	2516.0	2650	2521.0	24	2595	48	27	M24	93.52
2600	2616.0	2750	2621.0	24	2695	48	27	M24	97.34



Unit: mm

Nominal Bore of Flange	Outside Diam. of Applicable Pipe	Inside Diam. of Flange do	Sectional Dimensions		Bolt Hole			Nominal Bolt Size
			t	D	C	h	N	
450A	457.2	460	22	605	555	23	16	M20
500A	508.0	511	22	655	605	23	20	M20
550A	558.8	562	24	720	665	25	20	M22
600A	609.6	613	24	770	715	25	20	M22
650A	660.4	664	24	825	770	25	24	M22
700A	711.2	715	24	875	820	25	24	M22
750A	762.0	766	24	945	880	27	24	M24
800A	812.8	817	24	995	930	27	24	M24
(850)A	863.6	868	24	1,045	980	27	24	M24
900A	914.4	919	24	1,095	1,030	27	24	M24
1000A	1016.0	1,021	26	1,195	1,130	27	28	M24
(1100)A	1117.6	1,123	26	1,305	1,240	27	28	M24
1200A	1219.2	1,224	26	1,420	1,350	27	32	M24
1350A	1371.6	1,377	26	1,575	1,505	27	32	M24
1500A	1524.0	1,529	28	1,730	1,660	27	36	M24

FLANGES WELD ON PIPES

Nominal pressure : 6kgf/cm²—ND6

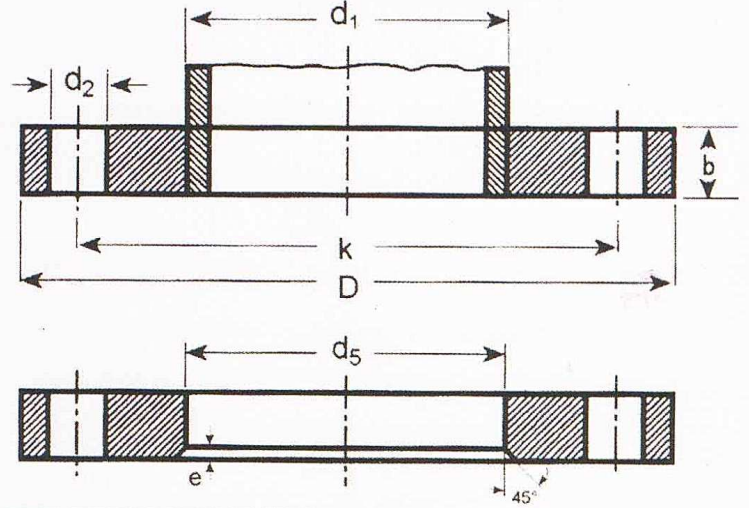
DIN 2573

FLANSLAR

DUZ, BORUYA KAYNAK EDİLEN

Anma Basıncı: 6kgf/cm²—ND6

TS 816/1 (TS ISO 7005—1)



BORU (Pipe)			FLANS (Flange)					CİVATALAR (Bolts)			AGIRLIK (Weight) (7.85 kg/dm ³) kg
DN	d ₁		d ₅	D	b	e	k	Sayısı (Each)	Vida (Screw)	d ₂	
10	1	2		75	12	5	50	4	M10	11	0.363
	17.2	14	14.5								
15		20	21	80	12	5	55	4	M10	11	0.410
	21.3		17.7								
20		25	26	90	14	5	65	4	M10	11	0.600
	26.9		22								
25		30	31	100	14	5	75	4	M10	11	0.740
	33.7		27.6								
32		38	39	120	16	5	90	4	M12	14	1.19
	42.4		43.1								
40		44.5	45.5	130	16	5	100	4	M12	14	1.39
	48.3		49								
50		57	58.1	140	16	6	110	4	M12	14	1.53
	60.3		61.1								
65	76.1		77.1	160	16	6	130	4	M12	14	1.89
80	88.9		90.3	190	18	7	150	4	M16	18	2.98
100		108	109.6	210	18	7	170	4	M16	18	3.46
	114.3		115.9								
125		133	134.8	240	20	7	200	8	M16	18	4.60
	139.7		141.6								
150		159	161.1	265	20	7	225	8	M16	18	5.22
	168.3		170.5								
200	219.1		221.8	320	22	7	280	8	M16	18	7.15
250		267	270.2	375	24	7	335	12	M16	18	9.61
	273		276.2								
300	323.9		327.6	440	24	7	395	12	M20	22	12.6
350		355.6	359.7	490	26	7	445	12	M20	22	15.6
		368	372.2								
400		406.4	411	540	28	7	495	16	M20	22	18.4
		419	423.7								
(450)	457		462.5	595	30	7	550	16	M20	22	21.4
500	508		513.6	645	30	7	600	20	M20	22	24.6

FLANGES WELD ON PIPES

Nominal pressure : 10kgf/cm²—ND10

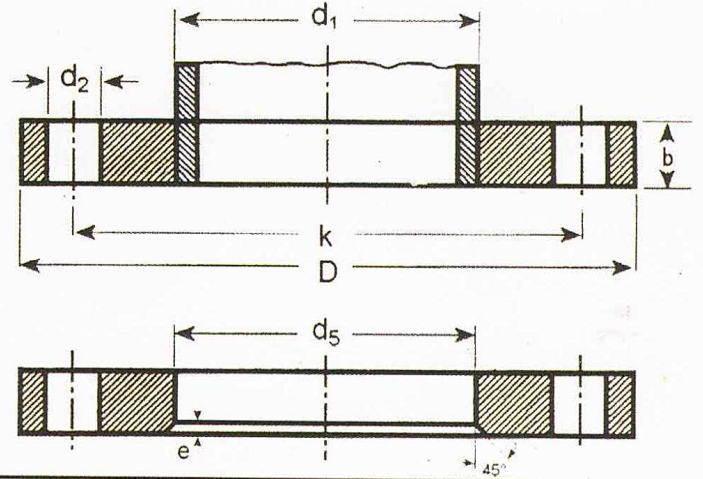
DIN 2576

FLANSLAR

DUZ, BORUYA KAYNAK EDİLEN

Anma Basıncı: 10kgf/cm²—ND6

TS 816/2 (TS ISO 7005—1)



BORU (Pipe)			FLANS (Flange)					CIVATALAR (Bolts)			AGIRLIK (Weight)
DN	d ₁ 1 2		d ₅	D	b	e	k	Sayisi (Each)	Vida (Screw)	d ₂	(7.85 kg /dm ³) kg
10		14	14.5	90	14	5	60	4	M12	14	0.613
	17.2		17.7								0.605
15		20	21	95	14	5	65	4	M12	14	0.675
	21.3		22								0.669
20		25	26	105	16	5	75	4	M12	14	0.749
	26.9		27.6								0.936
25		30	31	115	16	5	85	4	M12	14	1.14
	33.7		34.4								1.11
32		38	39	140	16	5	100	4	M16	18	1.66
	42.4		43.1								1.62
40		44.5	45.5	150	16	5	110	4	M16	18	1.89
	48.3		49								1.86
50		57	58.1	165	18	6	125	4	M16	18	2.51
	60.3		61.1								2.47
65	76.1		77.1	185	18	6	145	4	M16	18	3.00
80	88.9		90.3	200	20	7	160	8	M16	18	3.79
100		108	109.6	220	20	7	180	8	M16	18	4.20
	114.3		115.9								4.03
125		133	134.8	250	22	7	210	8	M16	18	5.71
	139.7		141.6								5.46
150		159	161.1	285	22	7	240	8	M20	22	6.72
	168.3		170.5								6.57
(175)	193.7		196.1	315	24	7	270	8	M20	22	8.45
200	219.1		221.8	340	24	7	295	8	M20	22	9.31
250		267	270.2	395	26	7	350	12	M20	22	12.5
	273		276.2								11.9
300	323.9		327.6	445	26	7	400	12	M20	22	13.8
350	355.6		359.7	505	28	7	460	16	M20	22	20.6
		368	372.2								19.0
400	406.4		411	565	32	7	515	16	M24	26	27.9
		419	423.7								25.9
(450)	457		462.5	615	38	7	565	20	M24	26	35.6
500	508		513.6	670	38	7	620	20	M24	26	41.1

*Düz boruya kaynaklı flanşların ND 16—ND 25 —ND 40 olarak imalatı yapılmaktadır.

LAPPED FLANGES WITH COLLAR

Nominal Pressure : 10kgf/cm²—ND10

DIN 2642

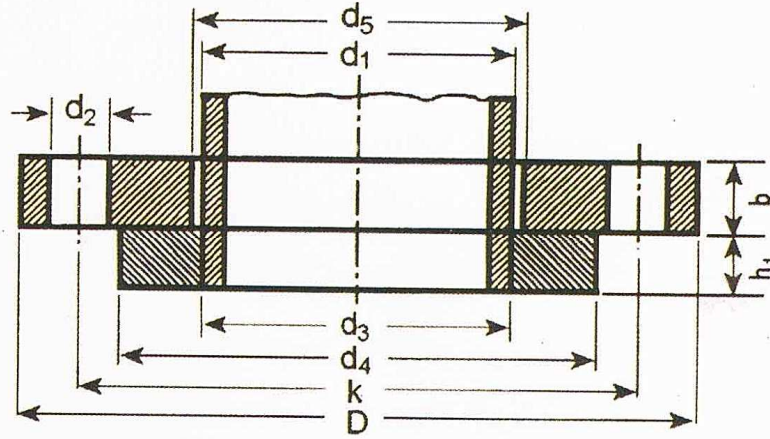
FLANSLAR

BORULARICIN, DESTEKLİGEVSEK

Anma Basıncı: 10kgf/cm²—ND10

TS 814/2

(TS ISO 7005-1)



BORU (Pipe)			FLANS (Flange)			CİVATALAR (Bolts)			DESTEK (Beam)			AGIRLIK (Weight) 7.85 kg/dm ³	
DN	d ₁	D	d ₅	b	k	Sayısı (Each)	Vida (Screw)	d ₂	d ₃	d ₄	h ₁	Flans (flange)kg	Destek (Beam)kg
10	14	90	16	14	60	4	M12	14	17.7	40	10	0.599	0.087
	17.2		19										
15	20	95	22	14	65	4	M12	14	22	45	10	0.689	0.105
	21.3		24										
20	25	105	28	14	75	4	M12	14	27.6	58	12	0.806	0.203
	26.9		30										
25	30	115	33	16	85	4	M12	14	34.4	68	12	1.11	0.276
	33.7		36										
32	38	140	42	16	100	4	M16	18	43.1	78	12	1.64	0.343
	42.4		46										
40	44.5	150	50	16	110	4	M16	18	49	88	12	1.86	0.426
	48.3		54										
50	57	165	62	16	125	4	M16	18	61.1	102	14	2.20	0.618
	60.3		65										
65	76.1	185	81	16	145	4	M16	18	77.1	122	14	2.62	0.786
80	88.9	200	94	18	160	4/8	M16	18	90.3	138	16	3.32	1.10
100	108	220	113	18	180	8	M16	18	115.9	158	16	3.67	1.31
	114.3		119										
125	133	250	138	18	210	8	M16	18	141.6	188	18	4.54	1.96
	139.7		145										
150	168.3	285	173	18	240	8	M20	22	170.5	212	18	5.60	2.18
200	219.1	340	225	20	295	8	M20	22	221.8	268	20	7.46	3.10
250	273	395	279	22	350	12	M20	22	276.2	320	22	10.3	4.22
300	323.9	445	329	26	400	12	M20	22	327.6	370	22	14.0	4.85
350	355.6	505	362	28	460	16	M20	22	372.2	430	22	18.5	6.71
400	406.4	565	413	32	515	16	M24	26	423.7	482	24	25.0	8.28
(450)	457	615	467	38	565	20	M24	26	462.5	532	24	30.6	9.3
500	508	670	517	38	620	20	M24	26	513.6	585	26	37.0	11.5
600	610	780	618	44	725	20	M27	30	616.6	685	26	56.3	15.6
700	711	895	721	50	840	24	M27	30	718.6	800	28	80.4	23.2
800	813	1015	824	56	950	24	M30	33	821.5	905	30	113.2	29.2

LAPPED FLANGES WITH COLLAR

Nominal Pressure : 25kgf/cm²—ND25

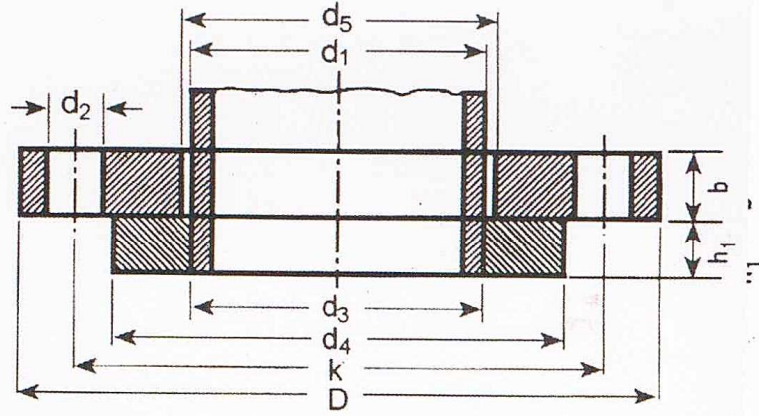
DIN 2655

FLANSLAR

BORULARICIN, DESTEKLİGEVSEK

Anma Basıncı: 25kgf/cm²—ND25

TS 814/4 (TS ISO 7005—1)



BORU (Pipe)		FLANS (Flange)				CİVATALAR (Bolts)			DESTEK (Beam)			AGIRLIK (Weight) 7.85 kg/dm ³	
DN	d ₁	D	d ₅	b	k	Sayisi (Each)	Vida (Screw)	d ₂	d ₃	d ₄	h ₁	Flans (flange) kg	Destek (Beam) kg
10 150	17.2 168.3	Degerler DIN 2656 (40 kgf/cm ²) den alınmalıdır											
200	219.1	360	225	26	310	12	M24	26	221.8	278	24	11.7	4.53
250	273	425	279	30	370	12	M27	30	276.2	335	26	17.9	6.56
300	323.9	485	329	34	430	16	M27	30	327.6	395	28	24.7	8.80
350	368	555	374	38	490	16	M30	33	372.2	450	32	35.6	13.2
400	419	620	426	42	550	16	M33	36	423.7	505	34	47.5	16.5
500	508	730	517	50	660	20	M33	36	513.6	615	38	71.1	25.3

LAPPED FLANGES WITH COLLAR

Nominal Pressure : 40kgf/cm²—ND40

DIN 2656

FLANSLAR

BORULARICIN, DESTEKLİ GEVSEK

Anma Basıncı: 40kgf/cm²—ND40

TS 814/5 (TS ISO 7005—1)

BORU (Pipe)		FLANS (Flange)				CİVATALAR (Bolts)			DESTEK (Bean)			AGIRLIK (Weight) 7.85 kg / dm ³	
DN	d ₁	D	d ₅	b	k	Sayisi (Each)	Vida (Screw)	d ₂	d ₃	d ₄	h ₁	Flans (flange)kg	Destek (Beam)kg
10	17.2	90	19	16	60	4	M12	14	17.7	40	12	0.696	0.104
15	21.3	95	24	16	65	4	M12	14	22	45	12	0.773	0.126
20	26.9	105	30	16	75	4	M12	14	27.6	58	14	0.934	0.236
25	33.7	115	36	18	85	4	M12	14	34.4	68	14	1.26	0.321
32	42.4	140	46	18	100	4	M16	18	43.1	78	14	1.85	0.401
40	48.3	150	54	18	110	4	M16	18	49	83	14	2.10	0.498
50	60.3	165	65	20	125	4	M16	18	61.1	102	16	2.75	0.706
65	76.1	185	81	20	145	8	M16	18	77.1	122	16	3.11	0.898
80	88.9	200	94	22	160	8	M16	18	90.3	138	18	3.88	1.23
100	114.3	235	119	22	190	8	M20	22	115.9	162	20	5.23	1.80
125	139.7	270	145	24	220	8	M24	26	141.6	188	22	7.23	2.40
150	168.3	300	173	24	250	8	M24	26	170.5	218	22	8.60	3.02
200	219.1	375	225	30	320	12	M27	30	221.8	285	26	15.2	5.54
250	273	450	279	36	385	12	M30	33	276.2	345	30	25.7	8.83
300	323.9	515	329	40	450	16	M30	33	327.6	410	34	33.5	14.0
350	368	580	374	46	510	16	M33	36	372.2	465	38	50.2	18.9
400	419	660	426	50	585	16	M36	39	423.7	535	42	71.2	28.4

SCREWED PIPE FLANGES

Nominal Pressure : 10 and 16kgf/cm²—ND10—ND16

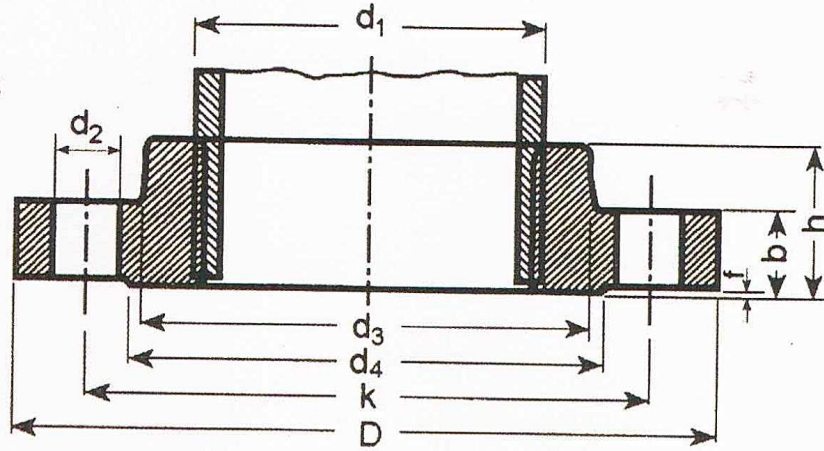
DIN 2566

FLANSLAR

BORULARICIN, VIDALI

Anma Basıncı: 10ve 16kgf/cm²—ND10—ND16

TS 813 (TS ISO 7005—1)



BORU (Pipe)		FLANS (Flange)					BOYUN (Neck)	ALIN ÇIKINTISI (Raised face)		CIVATALAR (Bolts)			FLANS AGIRLIGI (Flange weight) (7.85 kg/dm³) kg
DN	d ₁	Boru Vidası (Whitwort)	D	b	k	h	d ₃	d ₄	f	Sayısı Each	Vida Screw	d ₂	
6	10.2	R1 / 8"	75	12	50	18	20	32	2	4	M10	11	0.326
8	13.5	R1 / 14"	80	12	55	18	25	38	2	4	M10	11	0.380
10	17.2	R3 / 8"	90	14	60	20	30	40	2	4	M12	14	0.544
15	21.3	R1 / 2"	95	14	65	20	35	45	2	4	M12	14	0.613
20	26.9	R3 / 4"	105	16	75	24	45	58	2	4	M12	14	0.910
25	33.7	R1 "	115	16	85	24	52	68	2	4	M12	14	1.10
32	42.4	R1 1 / 4"	140	16	100	26	60	78	2	4	M16	18	1.60
40	48.3	R1 1 / 2"	150	16	110	26	70	88	3	4	M16	18	1.78
50	60.3	R2 "	165	18	125	28	85	102	3	4	M16	18	2.43
65	76.1	R2 1 / 2"	185	18	145	32	105	122	3	4	M16	18	3.18
80	88.9	R3 "	200	20	160	34	118	138	3	4 / 8	M16	18	4.12
100	114.3	R4 "	220	20	180	38	140	158	3	8	M16	18	4.47
125	139.7	R5 "	250	22	210	40	168	188	3	8	M16	18	6.13
150	165.1	R6 "	285	22	240	44	195	212	3	8	M20	23	7.92

*Siparse göre galvanizli olarak imal edilebilir.

BLIND FLANGES

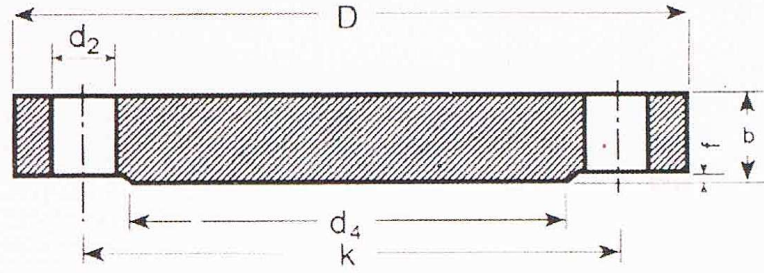
Nominal Pressure : 6kgf/cm²—ND6

DIN 2527

KOR FLANS

Anma Basincı: 6kgf/cm²—ND6

(TS ISO 7005—1)



BORU (Pipe) DN	D	b	k	ALIN CIKINTISI (Raised face)		DELIKLER (Drilling)			AGIRLIK (Weight) kg
				d ₄	f	Sayisi (Each)	Vida (Screw)	d ₂	
10	75	12	50	40	2	4	M10	11	
15	80	12	55	45	2	4	M10	11	
20	90	14	65	58	2	4	M10	11	
25	100	14	75	68	2	4	M10	11	
32	120	14	90	78	2	4	M12	14	
40	130	14	100	88	3	4	M12	14	
50	140	14	110	102	3	4	M12	14	
65	160	14	130	122	3	4	M12	14	2.48
80	190	16	150	138	3	4	M16	18	3.49
100	210	16	170	158	3	4	M16	18	4.86
125	240	18	200	188	3	8	M16	18	6.28
150	265	18	225	212	3	8	M16	18	7.75
175	295	20	255	242	3	8	M16	18	10.7
200	320	20	280	268	3	8	M16	18	12.7
250	375	22	335	320	3	12	M16	18	19.0
300	440	22	395	378	4	12	M20	22	26.3
350	490	22	445	438	4	12	M20	22	32.9
400	540	22	495	490	4	16	M20	22	40.2
500	645	24	600	610	4	20	M20	22	63.2

BLIND FLANGES

Nominal Pressure : 10kgf/cm²—ND10

KOR FLANS

Anma Basincı: 10kgf/cm²—ND10

(TS ISO 7005—1)

BORU (Pipe) DN	D	b	k	ALIN CIKINTISI (Raised face)		DELIKLER (Drilling)			AGIRLIK (Weight) kg
				d ₄	f	Sayisi (Each)	Vida (Screw)	d ₂	
10 175	10 ile 175 arasındaki degerler ND 16 'dan alınmalıdır.								
200	340	24	295	268	3	8	M20	22	16.9
250	395	26	350	320	3	12	M20	22	24.7
300	445	26	400	378	4	12	M20	22	31.9
350	505	26	460	438	4	16	M20	22	41.9
400	565	26	515	490	4	16	M24	26	51.2
500	670	28	620	610	4	20	M24	26	77.8

BLIND FLANGES

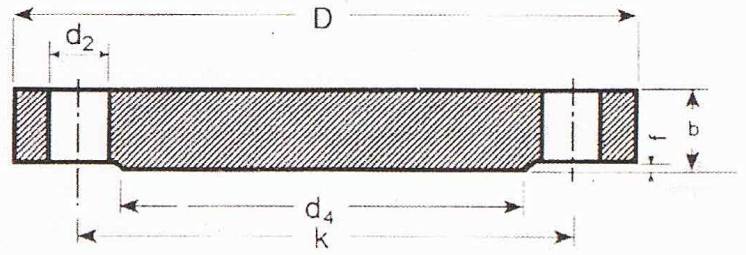
Nominal Pressure : 16kgf/cm²—ND16

DIN 2527

KOR FLANS

Anma Basinci: 16kgf/cm²—ND16

(TS ISO 7005-1)



BORU (Pipe) DN	D	b	k	ALIN ÇIKINTISI (Raised face)		DELİKLER (Drilling)			AGIRLIK (Weight) kg
				d ₄	f	Sayısı (Each)	Vida (Screw)	d ₂	
10	90	14	60	40	2	4	M12	14	0.63
15	95	14	65	45	2	4	M12	14	0.72
20	105	16	75	58	2	4	M12	14	1.01
25	115	16	85	68	2	4	M12	14	1.23
32	140	16	100	78	2	4	M16	18	1.80
40	150	16	110	88	3	4	M16	18	2.09
50	165	18	125	102	3	4	M16	18	2.88
65	185	18	145	122	3	4	M16	18	3.66
80	200	20	160	138	3	8	M16	18	4.77
100	220	20	180	158	3	8	M16	18	5.65
125	250	22	210	188	3	8	M16	18	8.42
150	285	22	240	212	3	8	M20	22	10.4
(175)	315	24	270	242	3	8	M20	22	14.0
200	340	24	295	268	3	12	M20	22	16.1
250	405	26	255	320	3	12	M24	26	24.9
300	460	28	410	378	4	12	M24	26	35.1
350	520	30	470	438	4	16	M24	26	47.8
400	580	32	525	490	4	16	M27	30	63.5
500	715	34	650	610	4	20	M30	33	102
600	840	36	770	725	5	20	M33	36	149.7
700	910	36	840	795	5	24	M33	36	173.7
800	1025	38	950	900	5	24	M36	39	235.5
900	1125	40	1050	1000	5	28	M36	39	298.8
1000	1255	42	1170	1115	5	28	M39	42	390.7
1200	1485	48	1390	1330	5	32	M45	48	624.8
1400	1685	52	1590	1530	5	36	M45	48	872.6
1600	1930	58	1820	1750	5	40	M52	56	1275.1
1800	2130	62	2020	1950	5	44	M52	56	1661.9
2000	2345	66	2230	2150	5	48	M56	62	2142.1

WELDING NECK FLANGES

Nominal Pressure : 6kgf/cm²—ND6

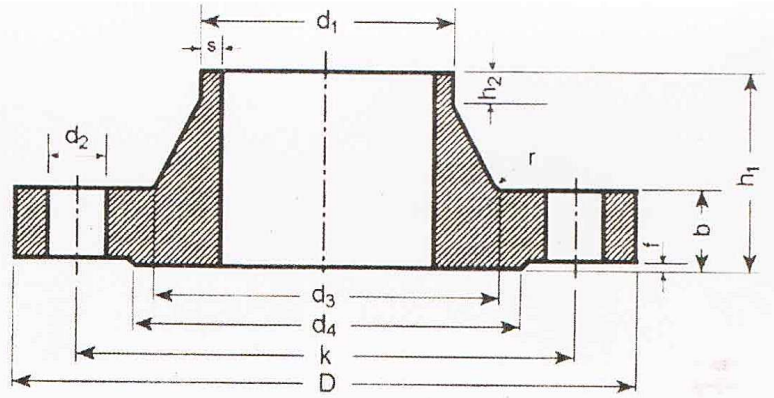
DIN 2631

FLANSLAR

BORULAR ICIN, BOYUNLARI KAYNAKLI

Anma Basinci: 6kgf/cm²—ND6

TS 811/2 (TS ISO 7005-1)



BORU (Pipe)		FLANS (Flange)				BOYUN (Neck)				ALIN CIKINTEIE (Raised face)		CIVATALAR (Bolts)			FLANS AGIRLEK (Weight) (7.85 kg/dm ³) kg
DN	d ₁ ISO/DIN	D	b	k	h ₁	d ₃	s	r	h ₂	d ₄	f	Sayisi (Each)	Vida (Screw)	d ₂	
10	17.2	75	12	50	28	26	1.8	4	6	35	2	4	M10	11	0.335
15	21.3	80	12	55	30	30	2	4	6	40	2	4	M10	11	0.392
20	26.9	90	14	65	32	38	2.3	4	6	50	2	4	M10	11	0.592
25	33.7	100	14	75	35	42	2.6	4	6	60	2	4	M10	11	0.747
32	42.4	120	14	90	35	55	2.6	6	6	70	2	4	M12	14	1.05
40	48.3	130	14	100	38	62	2.6	6	7	80	3	4	M12	14	1.18
50	60.3	140	14	110	38	74	2.9	6	8	90	3	4	M12	14	1.34
65	76.1	160	14	130	38	88	2.9	6	9	110	3	4	M12	14	1.67
80	88.9	190	16	150	42	102	3.2	8	10	128	3	4	M16	18	2.71
100	114.3	210	16	170	45	130	3.6	8	10	148	3	4	M16	18	3.24
125	139.5	240	18	200	48	155	4	8	10	178	3	8	M16	18	4.49
150	168.3	265	18	225	48	184	4.5	10	12	202	3	8	M16	18	5.15
200	219.1	320	20	280	55	236	5.9	10	15	258	3	8	M16	18	7.78
250	273	375	22	335	60	290	6.3	12	15	312	3	12	M16	18	10.8
300	323.9	440	22	395	62	342	7.1	12	15	365	4	12	M20	22	14.0
350	368	490	22	445	62	385	7.1	12	15	415	4	12	M20	22	16.7
400	419	540	22	495	65	438	7.1	12	15	465	4	16	M20	22	19.0
500	508	645	24	600	68	538	7.1	12	16	570	4	20	M20	22	28.6
600	610	755	24	705	70	640	7.1	12	16	670	5	20	M24	26	31.5
700	711	860	24	810	70	740	7.1	12	16	775	5	24	M24	26	37.4
800	813	975	24	920	70	842	7.1	12	16	880	5	24	M27	30	46.1
900	914	1075	26	1020	70	942	7.1	12	16	980	5	24	M27	30	55.6
1000	1016	1175	26	1120	70	1045	7.1	16	16	1080	5	28	M27	30	61.9
1200	1220	1405	28	1340	90	1248	8	16	20	1295	5	32	M30	33	100
1400	1420	1630	32	1560	90	1452	8	16	20	1510	5	36	M33	36	149
1600	1620	1830	34	1760	90	1655	9	16	20	1710	5	40	M33	36	180
1800	1820	2045	36	1970	100	1855	10	16	20	1920	5	44	M36	39	225
2000	2020	2265	38	2180	110	2058	11	16	25	2125	5	48	M39	42	295
2200	2220	2475	42	2390	115	2260	12	18	25	2335	6	52	M39	42	361
2400	2420	2685	44	2600	125	2462	13	18	25	2545	6	56	M39	42	415
2600	2620	2905	46	2810	130	2665	14	18	25	2750	6	60	M45	48	530
2800	2820	3115	48	3020	135	2865	15	18	30	2960	6	64	M45	48	643
3000	3020	3315	50	3220	140	3068	16	18	30	3160	6	68	M45	48	777
3200	3220	3525	54	3430	150	3272	16	20	30	3370	6	72	M45	48	851
3400	3420	3735	56	3640	160	3475	18	20	35	3580	6	76	M45	48	993
3600	3620	3970	60	3860	165	3678	18	20	35	3790	6	80	M52	56	1001

WELDING NECK FLANGES

Nominal Pressure : 10kgf/cm²—ND10

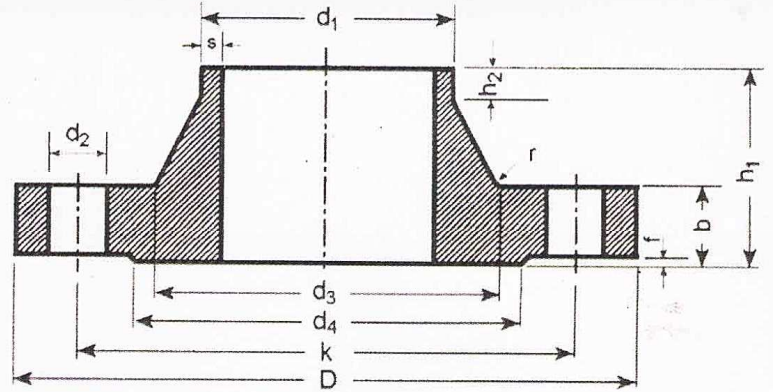
DIN 2632

FLANSLAR

BORULAR ICIN, BOYUNLARI KAYNAKLI

Anma Basinci: 10kgf/cm²—ND10

TS 811/3 (TS ISO 7005-1)



BORU (Pipe)		FLANS (Flange)				BOYUN (Neck)				ALIN ÇIKINTEİ (Raised face)		CİVATALAR (Bolts)			FLANS AĞIRLIK (Weight) (7.85 kg / dm ³) kg
DN	d ₁ ISO/DIN	D	b	k	h ₁	d ₃	s	r	h ₂	d ₄	f	Sayısı (Each)	Vida (Screw)	d ₂	
10 150	17.2 168.3	TS 811 / 4 'deki anma basıncı 16kgf / cm ² olan ölçüler alınmalıdır.													
200	216	340	24	295	62	232	5.9	10	16	268	3	8	M20	22	11.3
	219.1					235									
250	267	395	26	350	68	285	6.3	12	16	320	3	12	M20	22	14.7
	273					292									
300	318	445	26	400	68	335	7.1	12	16	370	4	12	M20	22	17.4
	323.9					344									
350	355.6	505	26	460	68	385	7.1	12	16	430	4	16	M20	22	21.6
	368														
400	406.4	565	26	515	72	440	7.1	12	16	482	4	16	M24	26	26.2
	419														
500	508	670	28	620	75	542	7.1	12	16	585	4	20	M24	26	38.1
	521														
600	610	780	28	725	80	642	7.1	12	18	685	5	20	M27	30	44.6
	622														
700	711	895	30	840	80	745	8	12	18	800	5	24	M27	30	62.4
	720														
800	812.8	1015	32	950	90	850	8	12	18	905	5	24	M30	33	84.1
	820														
900	914.4	1115	34	1050	95	950	10	12	20	1005	5	28	M30	33	98.5
	920														
1000	1016	1230	34	1160	95	1052	10	16	20	1110	5	28	M33	36	115
	1020														
1200	1220	1455	38	1380	115	1255	11	16	25	1330	5	32	M36	39	182
1400	1420	1675	42	1590	120	1460	12	16	25	1535	5	36	M39	42	248
1600	1620	1915	46	1820	130	1665	14	16	25	1760	5	40	M45	48	347
1800	1820	2115	50	2020	140	1868	15	16	30	1960	5	44	M45	48	430
2000	2020	2325	54	2230	150	2072	16	16	30	2170	5	48	M45	48	539
2200	2220	2550	58	2440	160	2275	18	18	35	2370	6	52	M52	56	658
2400	2420	2760	62	2650	170	2478	20	18	35	2570	6	56	M52	56	825
2600	2620	2960	66	2850	180	2680	22	18	40	2780	6	60	M52	56	979
2800	2820	3180	70	3070	190	2882	22	18	40	3000	6	64	M52	56	1156
3000	3020	3405	75	3290	200	3085	24	18	45	3210	6	68	M56	62	1420

WELDING NECK FLANGES

Nominal Pressure: 16kgf/cm²—ND16

DIN 2633

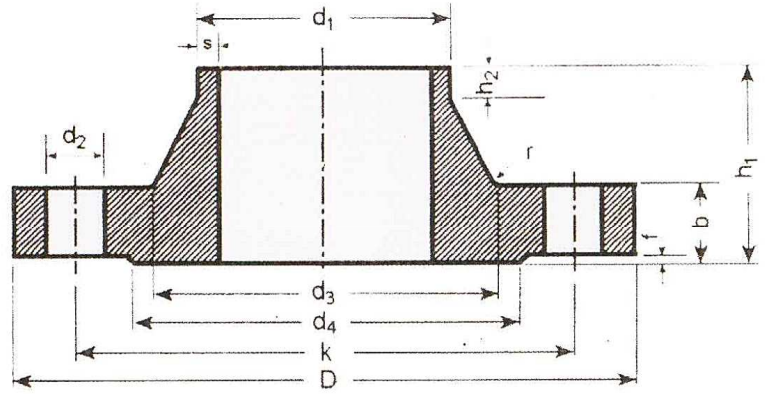
FLANSLAR

BORULAR ICIN, BOYUNLARI KAYNAKLI

Anma Basinci: 16kgf/cm²—ND16

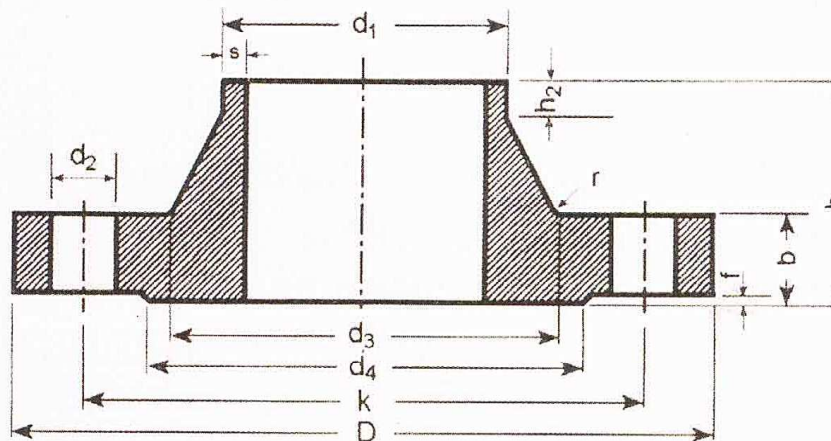
TS 811/4

(TS ISO 7005-1)



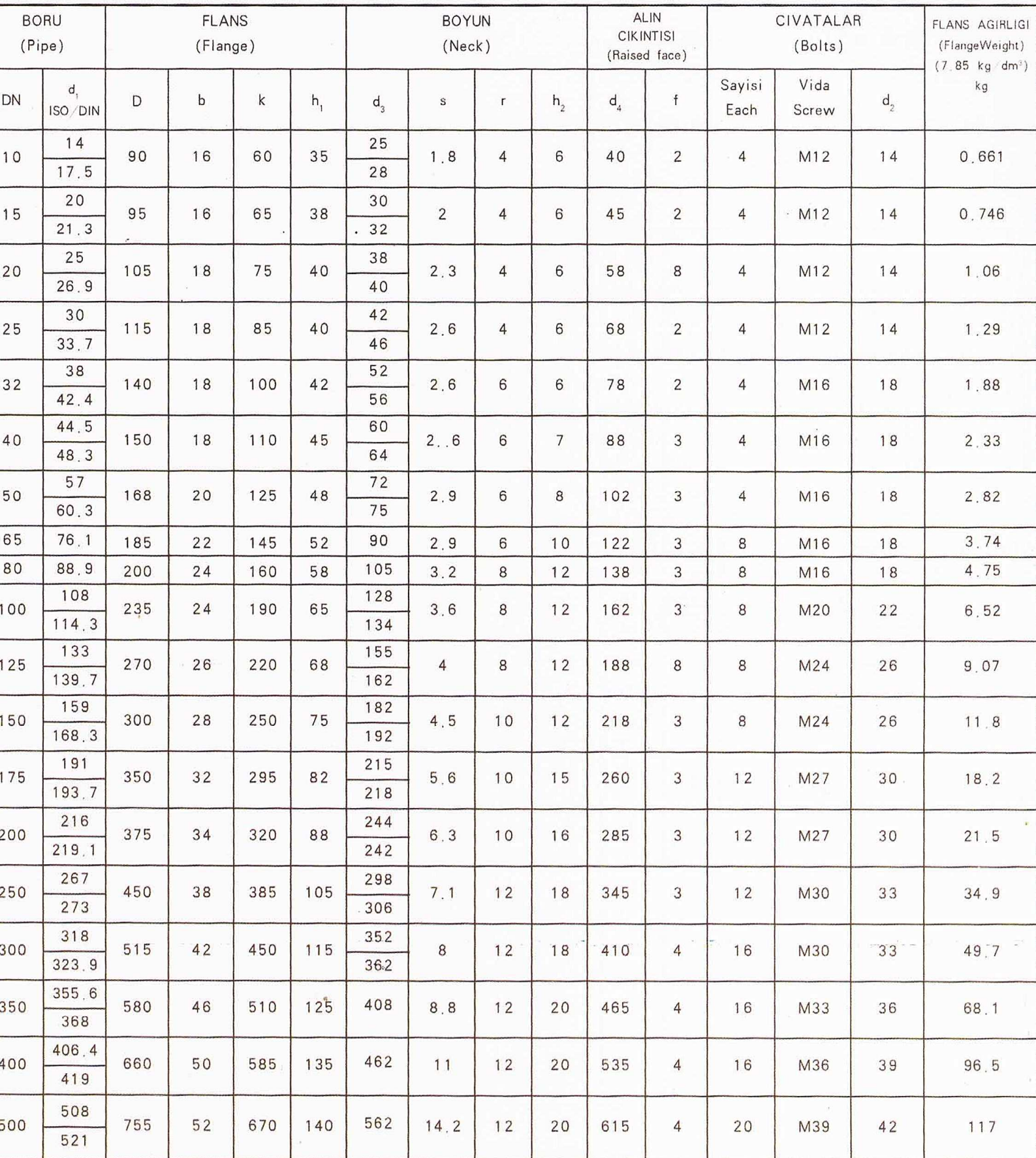
BORU (Pipe)		FLANS (Flange)				BOYUN (Neck)				ALINCIKINTISI (Raised face)		CIVATALAR (Bolts)			FLANS AGIRLEK (Weight) (7.85 kg/dm ³) kg
DN	d ₁ ISO/DIN	D	b	k	h ₁	d ₃	s	r	h ₂	d ₄	f	Sayisi (Each)	Vida (Screw)	d ₂	
10	14	90	14	60	35	25	1.8	4	6	40	2	4	M12	14	0.580
15	20	95	14	65	35	30	2	4	6	45	2	4	M12	14	0.648
20	25	105	16	75	38	38	2.3	4	6	58	2	4	M12	14	0.952
25	30	115	16	85	38	42	2.6	4	6	68	2	4	M12	14	1.14
32	38	140	16	100	40	52	2.6	6	6	78	2	4	M16	18	1.69
40	44.5	150	16	110	42	60	2.6	6	7	88	3	4	M16	18	1.86
50	57	165	18	125	45	72	2.9	6	8	102	3	4	M16	18	2.53
65	76.1	185	18	145	45	90	2.9	6	10	122	3	4	M16	18	3.06
80	88.9	200	20	160	50	105	3.2	8	10	138	3	4/8*	M16	18	3.70
100	108	220	20	180	52	125	3.6	8	12	158	3	8	M16	18	4.62
125	133	250	22	210	55	150	4	8	12	188	3	8	M16	18	6.30
150	159	285	22	240	55	175	4.5	10	12	212	3	8	M20	22	7.75
175	193.7	315	24	270	60	210	5.4	10	12	242	3	8	M20	22	9.85
200	219.1	340	24	295	62	235	5.9	10	16	268	3	12	M20	22	11.0
250	267	405	26	355	70	285	6.3	12	16	320	3	12	M24	26	15.6
300	323.9	460	28	410	78	344	7.1	12	16	378	4	12	M24	26	22.0
350	355.6	520	30	470	82	390	8	12	16	438	4	16	M24	26	28.8
400	406.4	580	32	525	85	445	8	12	16	490	4	16	M27	30	36.3
500	508	715	34	650	90	548	8	12	16	610	4	20	M30	33	61.0
600	610	840	36	770	95	652	8.8	12	18	725	5	20	M33	36	75.4
700	711	910	36	840	100	755	8.8	12	18	795	5	24	M33	36	77.0
800	813	1025	38	950	105	855	10	12	20	900	5	24	M36	39	101
900	914	1125	40	1050	110	955	10	12	20	1000	5	28	M36	39	122
1000	1016	1255	42	1170	120	1058	10	16	22	1115	5	28	M39	42	162
1200	1220	1485	48	1390	130	1262	12.5	16	30	1330	5	32	M45	48	243
1400	1420	1685	52	1590	145	1465	14.2	16	30	1530	5	36	M45	48	323
1600	1620	1930	58	1820	160	1668	16	16	35	1750	5	40	M52	56	479
1800	1820	2130	62	2020	170	1870	17.5	16	35	1950	5	44	M52	56	599
2000	2020	2345	66	2230	180	2072	20	16	40	2150	5	48	M56	62	719

(TS ISO 7005-1)



GRUP (Type)	FLANS (Flange)				BOYUN (Neck)				ALINCIKINTISI (Raised face)		CIVATALAR (Bolts)			FLANS AGIRLIK (Weight) (7.85 kg/dm ³ kg)
d ₁ ISO/DIN	D	b	k	h ₁	d ₃	s	r	h ₂	d ₄	f	Sayısı Each	Vida Screw	d ₂	
17.2 168.3	Değerler DIN 2635 (40 kgf/cm ²)' den alımlıdır.													
191	330	28	280	75	215	5.6	10	15	248	3	12	M24	26	13.4
193.7					218									
216	360	30	310	80	240	6.3	10	16	278	3	12	M24	26	17.0
219.1					244									
267	425	32	370	88	292	7.1	12	18	335	3	12	M27	30	24.4
273					298									
318	485	34	430	92	345	8	12	18	395	4	16	M27	30	31.2
323.9					352									
355.6	555	38	490	100	398	8	12	20	450	4	16	M30	33	47.2
368														44.2
406.4	620	40	550	110	452	8.8	12	20	505	4	16	M33	36	61.7
419														57.9
580	730	44	660	125	558	10	12	20	615	4	20	M33	36	89.6
521														
610	845	46	770	125	660	11	12	20	720	5	20	M36	39	104
622														
711	960	46	875	125	760	12.5	20	24	820	5	24	M39	42	136
720														
813	1085	50	990	135	865	14.2	22	24	930	5	24	M45	48	186
820														
914	1185	54	1090	145	968	16.0	24	28	1030	5	28	M45	48	236
920														
1016	1320	58	1210	155	1070	17.5	24	28	1140	5	28	M52	56	307
1020														

(TS ISO 7005-1)



WELDING NECK FLANGES

Nominal Pressure: 25kgf/cm²—ND25

DIN 2634

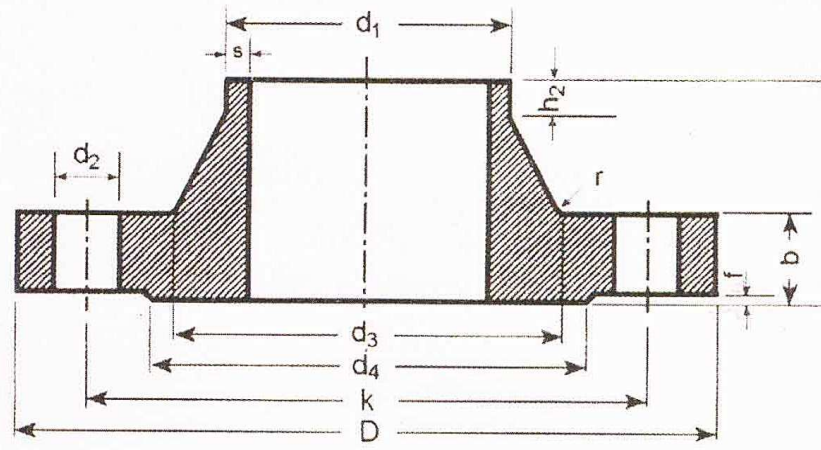
FLANSLAR

BOYUNLARI KAYNAKLI

Basıncı: 25kgf/cm²—ND25

TS 811/5

(TS ISO 7005-1)



BOYUN (Pipe)	FLANS (Flange)				BOYUN (Neck)				ALINCIKINTISI (Raised face)		CIVATALAR (Bolts)			FLANS AGIRLIK (Weight) (7.85 kg/dm ³)
d ₁ ISO/DIN	D	b	k	h ₁	d ₃	s	r	h ₂	d ₄	f	Sayısı Each	Vida Screw	d ₂	
17.2 168.3	Degerler DIN 2635 (40 kgf/cm ²)' den alimalidir.													
191 193.7	330	28	280	75	215 218	5.6	10	15	248	3	12	M24	26	13.4
216 219.1	360	30	310	80	240 244	6.3	10	16	278	3	12	M24	26	17.0
267 273	425	32	370	88	292 298	7.1	12	18	335	3	12	M27	30	24.4
318 323.9	485	34	430	92	345 352	8	12	18	395	4	16	M27	30	31.2
355.6 368	555	38	490	100	398	8	12	20	450	4	16	M30	33	47.2 44.2
406.4 419	620	40	550	110	452	8.8	12	20	505	4	16	M33	36	61.7 57.9
580 521	730	44	660	125	558	10	12	20	615	4	20	M33	36	89.6
610 622	845	46	770	125	660	11	12	20	720	5	20	M36	39	104
711 720	960	46	875	125	760	12.5	20	24	820	5	24	M39	42	136
813 820	1085	50	990	135	865	14.2	22	24	930	5	24	M45	48	186
914 920	1185	54	1090	145	968	16.0	24	28	1030	5	28	M45	48	236
1016 1020	1320	58	1210	155	1070	17.5	24	28	1140	5	28	M52	56	307

WELDING NECK FLANGES

Nominal Pressure : 64kgf/cm²—ND64

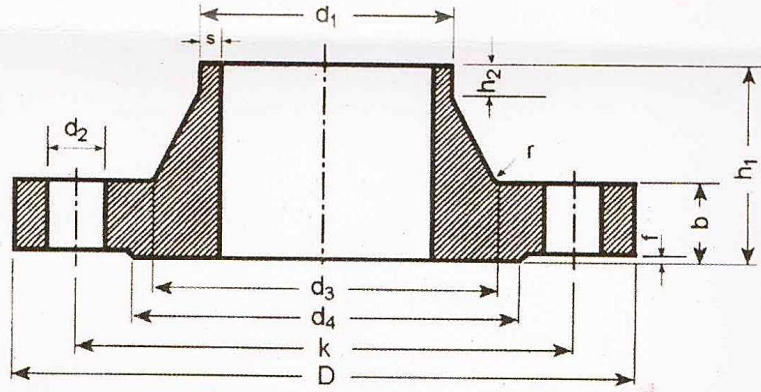
DIN 2636

FLANSLAR

BORULAR ICIN, BOYUNLARI KAYNAKLI

Anma Basincı: 64kgf/cm²—ND64

TS 811/7 (TS ISO 7005-1)



BORU (Pipe)		FLANS (Flange)				BOYUN (Neck)				ALIN ÇIKINTISI (Raised face)		CIVATALAR (Bolts)			FLANS AGIRLIGI (FlangeWeight) (7.85 kg/dm³) kg
DN	d ₁ ISO/DIN	D	b	k	h ₁	d ₃	s	r	h ₂	d ₄	f	Sayisi Each	Vida Screw	d ₂	
10 40	17.2 48.3	Degerler DIN 2637 (100kgf/cm²) 'den alınmalıdır.													
50	60.3	180	26	135	62	82	2.9	6	10	102	3	4	M20	22	4.55
65	76.1	205	26	160	68	98	3.2	6	12	122	3	8	M20	22	5.73
80	88.9	215	28	170	72	112	3.6	8	12	138	3	8	M20	22	6.69
100	114.3	250	30	200	78	138	4.0	8	12	162	3	8	M24	26	9.66
125	139.7	295	34	240	88	168	4.5	8	12	188	3	8	M27	30	15.1
150	168.3	345	36	280	95	202	5.6	10	12	218	3	8	M30	33	21.9
175	193.7	375	40	310	105	228	6.3	10	16	260	3	12	M30	33	23.7
200	219.1	415	42	345	110	256	7.1	10	16	285	3	12	M33	36	34.9
250	273	470	46	400	125	316	8.8	12	18	345	3	12	M33	36	49.6
300	323.9	530	52	460	140	372	11	12	18	410	4	16	M33	36	68.7
350	368	600	56	525	150	420	12.5	12	20	465	4	16	M36	39	94.6
400	419	670	60	585	160	475	14.2	12	20	535	4	16	M39	42	124

WELDING NECK FLANGES

Nominal Pressure : 100kgf/cm²—ND100

DIN 2637

FLANSLAR

BORULAR ICIN, BOYUNLARI KAYNAKLI

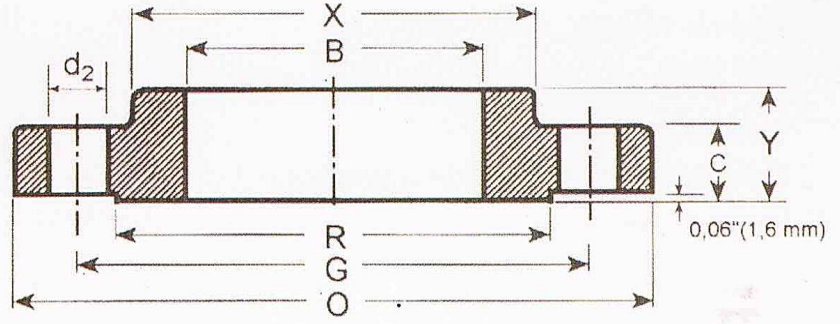
Anma Basincı: 100kgf/cm²—ND100

TS 811/8 (TS ISO 7005-1)

BORU (Pipe)		FLANS (Flange)				BOYUN (Neck)				ALIN ÇIKINTISI (Raised face)		CIVATALAR (Bolts)			FLANS AGIRLIĞI (FlangeWeight) (7.85 kg/dm ³) kg
DN	d ₁ ISO/DIN	D	b	k	h ₁	d ₃	s	r	h ₂	d ₄	f	Sayısı Each	Vida Screw	d ₂	
10	17.4	100	20	70	45	32	1.8	4	6	40	2	4	M12	14	1.09
15	21.3	105	20	75	45	34	2.0	4	6	45	2	4	M12	14	1.19
25	33.7	140	24	100	58	52	2.6	4	8	68	2	4	M16	18	2.66
40	48.3	170	26	125	62	70	2.9	6	10	88	3	4	M20	22	4.09
50	60.3	195	28	145	68	90	3.2	6	10	102	3	4	M24	26	5.98
65	76.1	220	30	170	76	108	3.6	6	12	122	3	8	M24	26	7.91
80	88.9	230	32	180	78	120	4.0	8	12	138	3	8	M24	26	8.95
100	114.3	265	36	210	90	150	5.0	8	12	162	3	8	M27	30	13.7
125	139.7	315	40	250	105	180	6.3	8	12	188	3	8	M30	33	22.7
150	168.3	355	44	290	115	210	7.1	10	12	218	3	12	M30	33	30.2
175	193.7	385	48	320	127	245	8.8	10	16	260	3	12	M30	33	38.9
200	219.1	430	52	360	130	278	10.0	10	16	285	3	12	M33	36	52.8
250	273	505	60	430	157	340	12.5	12	18	345	3	12	M36	39	81.4
300	323.9	585	68	500	170	400	14.2	12	18	410	4	16	M39	42	122
350	368	655	74	560	189	460	16.0	12	20	465	4	16	M45	48	165

*Borular için kaynak boyunlu flanşların ND 64, ND10, ND160, ND250, ND400 olarak imalatları yapılmaktadır.

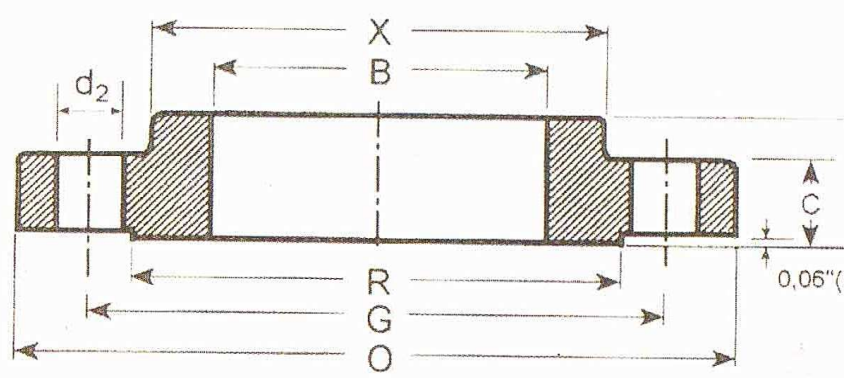
SLIP ON FLANGE
DUZ GECME FLANSLAR
Class 150—ANSI B 16-5
PN 20



BORU (Pipe)		O	B min	C	Y	X	R	DELİKLER (Drilling)			AGIRLIK (Weight) kg
DN	NPS							Sayısı (Each)	G	d ₂	
15	1/2"	89	22.5	11.5	16	30	35.0	4	60.5	16	0.4
20	3/4"	99	28.0	13.0	16	38	43.0	4	70.0	16	0.7
25	1"	108	34.5	14.0	17	49	51.0	4	79.5	16	0.8
32	1 1/4"	117	43.5	16.0	21	59	63.5	4	89.0	16	1.1
40	1 1/2"	127	49.5	17.5	22	65	73.0	4	98.5	16	1.4
50	2"	152	62.0	19.5	25	78	92.0	4	120.5	20	2.2
65	2 1/2"	178	74.5	22.5	29	90	105.0	4	139.5	20	3.6
80	3"	190	90.5	24.0	30	108	127.0	4	152.5	20	4.1
—	3 1/2"	216	103.5	24.0	32	122	140.0	8	178.0	20	5.2
100	4"	229	116.0	24.0	33	135	157.0	8	190.5	20	5.6
125	5"	254	144.0	24.0	36	164	185.5	8	216.0	22	6.3
150	6"	279	170.5	25.5	40	192	216.0	8	241.5	22	7.5
200	8"	343	221.5	29.0	44	246	270.0	8	298.5	22	12.6
250	10"	406	276.5	30.5	49	305	324.0	12	362.0	26	18.5
300	12"	483	327.0	32.0	56	365	381.0	12	432.0	26	28
350	14"	533	359.0	35.0	57	400	413.0	12	476.0	30	36
400	16"	597	410.5	37.0	64	457	470.0	16	540.0	30	46
450	18"	635	462.0	40.0	68	505	533.5	16	578.0	33	50
500	20"	698	513.0	43.0	73	559	584.0	20	635.0	33	64
600	24"	813	616.0	48.0	83	664	692.0	20	749.5	36	89
650	26"	869.9	666.7	50.8	85.7	723.9	742.9	24	806.4	35	106
700	28"	927.1	717.5	52.4	87.3	781.0	793.7	28	863.6	35	126
750	30"	984.2	768.3	54.0	89.9	831.8	857.2	28	914.4	35	140
800	32"	1060.4	819.1	57.1	92.1	889.0	908.0	28	977.9	41	168
850	34"	1111.2	869.9	58.7	93.7	939.8	958.8	32	1028.7	41	179
900	36"	1168.4	920.7	60.3	95.2	996.9	1022.3	32	1085.8	41	205
950	38"	1238.2	971.5	60.3	95.2	1060.4	1073.1	32	1149.3	41	230
1000	40"	1289.0	1022.3	63.5	98.4	1111.2	1123.9	36	1200.1	41	270
1050	42"	1346.2	1073.1	66.7	101.6	1168.4	1193.8	36	1257.3	41	310
1100	44"	1403.3	1123.9	66.7	101.6	1219.2	1244.6	40	1314.4	41	340
1150	46"	1454.1	1174.7	68.3	103.2	1270.0	1295.4	40	1365.2	41	375
1200	48"	1511.3	1225.5	69.8	104.8	1327.1	1358.9	44	1422.4	41	426

*26" 'den 48" 'e kadar olan flans ölçüleri BS.3293 'e uygundur.

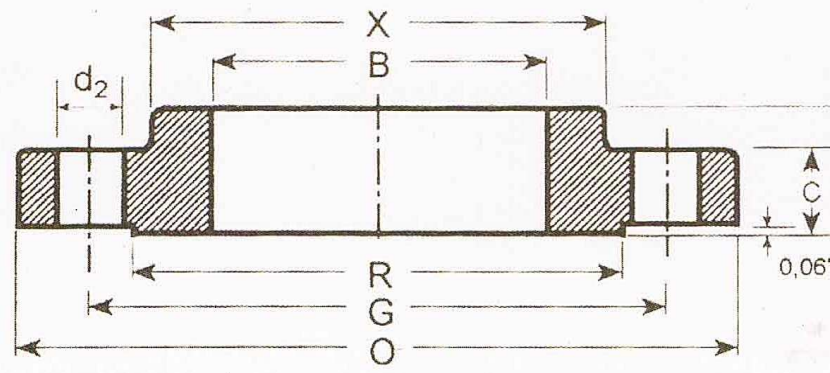
SLIP ON FLANGE
DUZ GECME FLANSLAR
Class 300—ANSI B 16-5
PN 50



BORU (Pipe)		O	B min	C	Y	X	R	DELİKLER (Drilling)			AGIRLIK (Weight) kg
DN	NPS							Sayısı (Each)	G	d ₂	
15	1/2"	95	22.5	14.5	22	38	35.0	4	66.5	16	0.7
20	3/4"	117	28.0	16.0	25	48	43.0	4	82.5	20	1.1
25	1"	124	34.5	17.5	27	54	51.0	4	89.0	20	1.4
32	1 1/4"	133	43.5	19.5	27	64	63.5	4	98.5	20	1.8
40	1 1/2"	156	49.5	21.0	30	70	73.0	4	114.5	22	2.6
50	2"	165	62.0	22.5	33	84	92.0	8	127.0	20	3.4
65	2 1/2"	190	74.5	25.5	38	100	105.0	8	149.0	22	4.4
80	3"	210	90.5	29.0	43	118	127.0	8	168.0	22	6.1
—	3 1/2"	229	103.5	30.5	44	133	140.0	8	184.0	22	7.5
100	4"	254	116.0	32.0	48	146	157.0	8	200.0	22	10.1
125	5"	279	144.0	35.0	51	178	185.5	8	235.0	22	12.5
150	6"	318	170.5	37.0	52	206	216.0	12	270.0	22	14.1
200	8"	381	221.5	41.5	62	260	270.0	12	330.0	26	24.8
250	10"	444	276.5	48.0	67	321	324.0	16	387.5	30	37.1
300	12"	521	327.0	51.0	73	375	381.0	16	451.0	33	50
350	14"	584	359.0	54.0	76	426	413.0	20	514.5	33	70
400	16"	648	410.5	57.5	83	483	470.0	20	571.5	36	97
450	18"	711	462.0	60.5	89	533	533.5	24	628.5	36	123
500	20"	775	513.0	63.5	95	587	584.0	24	686.0	36	133
600	24"	914	616.0	70.0	106	702	692.0	24	813.0	42	208
650	26"	971.5	666.7	79.4	184.1	720.7	749.3	28	876.3	44.4	255
700	28"	1035.0	717.5	85.7	196.8	774.7	800.1	28	939.8	44.4	321
750	30"	1090.2	768.3	92.1	209.5	827.1	857.2	28	996.9	47.6	362
800	32"	1149.3	819.1	98.4	222.2	881.1	914.4	28	1054.1	50.8	398
850	34"	1206.5	869.9	101.6	231.8	936.6	965.2	28	1104.9	50.8	480
900	36"	1270.0	920.7	104.8	241.3	990.6	1022.3	32	1168.4	54.0	540

*26" 'den 36" 'e kadar olan flans ölçüleri BS.3293 'e uygundur.

SLIP ON FLANGE
DUZ GECME FLANSLAR
Class 600—ANSI B 16-5
PN 100



BORU (Pipe)		O	B min	C	Y	X	R	DELIKLER (Drilling)			AGIRLIK (Weight) kg
DN	NPS							Sayisi (Each)	G	d ₂	
15	1/2"	95	22.5	14.5	22	38	35.0	4	66.5	16	0.8
20	3/4"	117	28.0	16.0	25	48	43.0	4	82.5	20	1.4
25	1"	124	34.5	17.5	27	54	51.0	4	89.0	20	1.6
32	1 1/4"	133	43.5	21.0	29	54	63.5	4	98.5	20	2.1
40	1 1/2"	156	49.5	22.5	32	70	73.0	4	114.5	22	3.1
50	2"	165	62.0	25.5	37	84	92.0	8	127.0	20	3.7
65	2 1/2"	190	74.5	29.0	41	100	105.0	8	149.0	22	5.4
80	3"	210	90.5	32.0	46	118	127.0	8	168.5	22	7.3
—	3 1/2"	229	103.5	35.0	49	133	140.0	8	184.0	26	8.9
100	4"	273	116.0	38.5	54	152	157.0	8	216.0	26	15.8
125	5"	330	144.0	44.5	60	189	185.5	8	267.0	30	24.5
150	6"	356	170.5	48.0	67	222	216.0	12	292.0	30	29.5
200	8"	419	221.5	55.5	76	273	270.0	12	349.0	33	43
250	10"	508	276.5	63.5	86	343	324.0	16	432.0	36	70
300	12"	559	327.0	66.5	92	400	381.0	20	489.0	36	86
350	14"	603	359.0	70.0	94	432	413.0	20	527.0	39	100
400	16"	686	410.5	76.5	106	495	470.3	20	603.0	42	142
450	18"	743	462.0	83.0	117	546	533.5	20	654.0	45	175
500	20"	813	513.0	89.0	127	610	584.0	24	724.0	45	221
600	24"	940	616.0	102.0	140	718	692.0	24	838.0	52	315
650	26"	1016.0	666.7	108.0	222.2	747.7	749.3	28	914.4	50.8	425
700	28"	1073.1	717.5	111.1	234.9	803.3	800.1	28	965.2	54.0	470
750	30"	1130.3	768.3	114.3	247.6	862.0	857.2	28	1022.3	54.0	533
800	32"	1193.8	819.1	117.5	260.3	917.6	914.4	28	1079.5	60.3	624
850	34"	1244.6	869.9	120.7	269.9	973.2	965.2	28	1130.3	60.3	681
900	36"	1314.4	920.7	123.8	282.6	1031.9	1022.3	28	1193.8	66.7	726

*Duz gecme flanslarin Class 400 'den Class 2500 'kadar uretime yapilmaktadr.

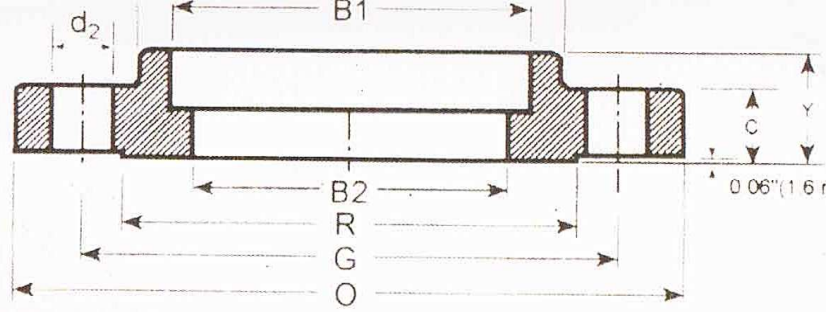
*ANSI B.16-5 normunda Lapped(Lap-Joint)destekli gevsek flanslarin da Class 150 'den Class 2500 'e kadar uretimi yapilmaktadir.

*26" 'dan 36' e kadar olan flans olculeri BS.3293 'e uygundur.

SOCKET WELDING FLANGES

SOCKET VELD FLANSLAR

ANSI B 16-5



CLASS 150

PN 20

BORU (Pipe)		O	B1	B2	C	Y	X	R	DELİKLER (Drilling)			AGIRLIK (Weight) kg
DN	NPS								Sayısı (Each)	G	d ₂	
15	1/2"	89	22.5	16.0	11.5	16	30	35.0	4	60.5	16	0.4
20	3/4"	99	28.0	21.0	13.0	16	38	43.0	4	70.0	16	0.7
25	1"	108	34.5	26.5	14.5	17	49	51.0	4	79.5	16	0.9
32	1 1/4"	117	43.5	35.0	16.0	21	59	63.5	4	89.0	16	1.2
40	1 1/2"	127	49.5	41.0	17.5	22	65	73.0	4	98.5	16	1.5
50	2"	152	62.0	52.5	19.5	25	78	92.0	4	120.5	20	2.3
65	2 1/2"	178	74.5	62.5	22.5	29	90	105.0	4	139.5	20	3.7
80	3"	190	90.5	78.0	24.0	30	108	127.0	4	152.5	20	4.2

CLASS 300

PN 50

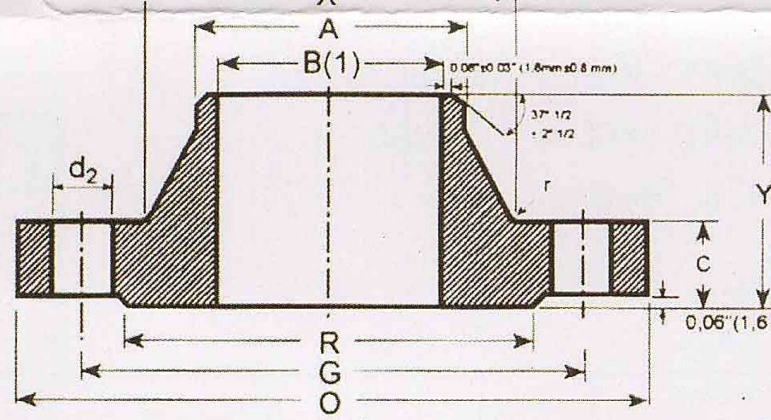
BORU (Pipe)		O	B1	B2	C	Y	X	R	DELİKLER (Drilling)			AGIRLIK (Weight) kg
DN	NPS								Sayısı (Each)	G	d ₂	
15	1/2"	95	22.5	16.0	14.5	22	38	35.0	4	66.5	16	0.7
20	3/4"	117	28.0	21.0	16.0	25	48	43.0	4	82.5	20	1.2
25	1"	124	34.5	26.5	17.5	27	54	51.0	4	89.0	20	1.4
32	1 1/4"	131	43.5	35.0	19.5	27	64	63.5	4	98.5	20	1.9
40	1 1/2"	156	49.5	41.0	21.0	30	70	73.0	4	114.5	22	2.8
50	2"	165	62.0	52.5	22.5	33	84	92.0	8	127.0	20	3.3
65	2 1/2"	190	74.5	62.5	25.5	38	100	105.0	8	149.0	22	4.6
80	3"	210	90.5	78.0	29.0	43	118	127.0	8	168.5	22	6.3

CLASS 600

PN 100

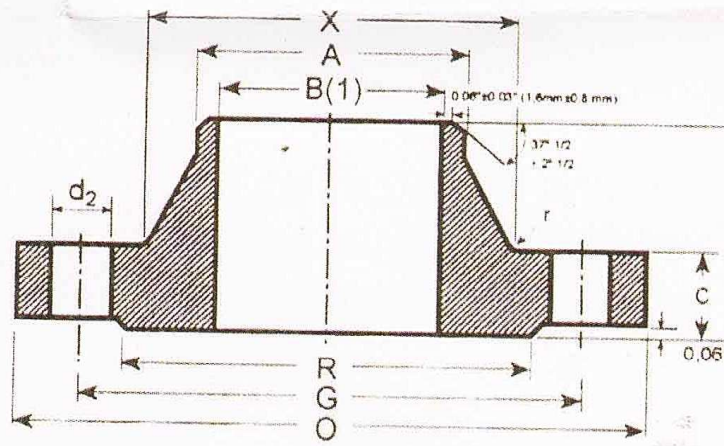
BORU (Pipe)		O	B1	B2	C	Y	X	R	DELİKLER (Drilling)			AGIRLIK (Weight) kg
DN	NPS								Sayısı (Each)	G	d ₂	
15	1/2"	95	22.5	B2 değerleri siparişe göre değişmektedir.	14.5	22	38	35.0	4	66.5	16	0.8
20	3/4"	117	28.0		16.0	25	48	43.0	4	82.5	20	1.4
25	1"	124	34.5		17.5	27	54	51.0	4	89.0	20	1.6
32	1 1/4"	133	43.5		21.0	29	64	63.5	4	98.5	20	2.1
40	1 1/2"	156	49.5		22.5	32	70	73.0	4	114.5	22	3.1
50	2"	165	62.0		25.5	37	84	92.0	8	127.0	20	3.7
65	2 1/2"	190	74.5		29.0	41	100	105.0	8	149.0	22	5.4
80	3"	210	90.5		32.0	46	118	127.0	8	168.5	22	7.3

WELDING NECK FLANGES
KAYNAK BOYUNLU FLANS
Class 150-ANSI B 16-5
PN 20



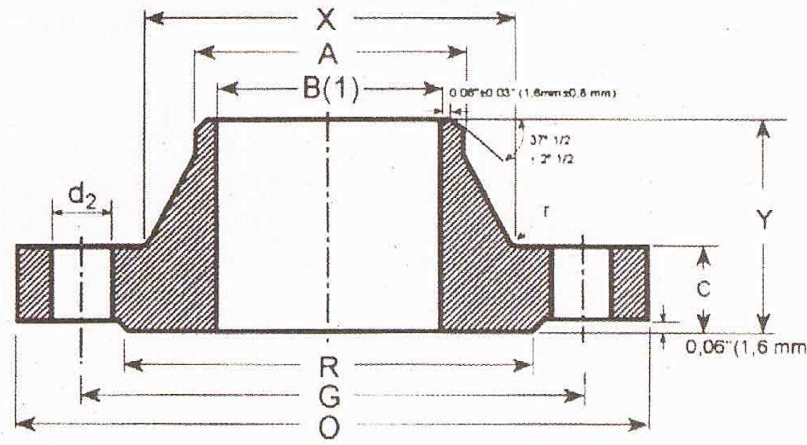
BORU (Pipe)		O	A	C	Y	X	R	DELİKLER (Drilling)			AGIRLIK (Weight) kg
DN	NPS							Sayısı (Each)	G	d ₂	
15	1/2"	89	21.3	11.5	48	30	35.0	4	60.5	16	0.5
20	3/4"	99	26.9	13.0	52	38	43.0	4	70.0	16	0.7
25	1"	108	33.7	14.5	56	49	51.0	4	79.5	16	1.1
32	1 1/4"	117	42.4	16.0	57	59	63.5	4	89.0	16	1.5
40	1 1/2"	127	48.3	17.5	62	65	73.0	4	98.5	16	1.8
50	2"	152	60.3	19.5	64	78	92.0	4	120.5	20	2.7
65	2 1/2"	178	73.0	22.5	70	90	105.0	4	139.5	20	4.4
80	3"	190	88.9	24.0	70	108	127.0	4	152.5	20	5.2
—	3 1/2"	216	101.6	24.0	71	122	140.0	8	178.0	20	6.4
100	4"	229	114.3	24.0	76	135	157.0	8	190.5	20	7.5
125	5"	254	141.3	24.0	89	164	185.5	8	216.0	22	9.2
150	6"	279	168.3	25.5	89	192	216.0	8	241.5	22	11
200	8"	343	219.1	29.0	102	246	270.0	8	298.5	22	18.3
250	10"	406	273.0	30.5	102	305	324.0	12	362.0	26	25
300	12"	483	323.9	32.0	114	365	381.0	12	432.0	26	39
350	14"	533	355.6	35.0	127	400	413.0	12	476.0	30	51
400	16"	597	406.4	37.0	127	457	470.0	16	540.0	30	60
450	18"	635	457.0	40.0	140	505	533.5	16	578.0	33	71
500	20"	698	508.0	43.0	145	559	584.0	20	635.0	33	88
600	24"	813	610.0	48.0	152	664	692.0	20	749.5	36	119
650	26"	869.9	660.4	50.8	127.0	723.9	742.9	24	806.4	35	136
700	38"	927.1	711.2	52.4	128.6	781.0	793.7	28	863.6	35	143
750	30"	984.2	762.0	54.0	130.2	831.8	857.0	28	914.4	35	163
800	32"	1060.4	812.8	57.1	133.3	889.0	908.0	28	977.9	41	197
850	34"	1111.2	863.6	58.7	134.9	939.8	958.8	32	1028.7	41	211
900	36"	1168.4	914.4	60.3	136.5	996.9	1022.3	32	1085.8	41	236
950	38"	1238.2	965.2	60.3	136.5	1060.4	1073.1	32	1149.3	41	270
1000	40"	1289.0	1016.0	63.5	139.7	1111.2	1123.9	36	1200.1	41	310
1050	42"	1346.2	1066.8	66.7	142.9	1168.4	1193.8	36	1257.3	41	340
1100	44"	1403.3	1117.4	66.7	142.9	1219.0	1244.6	40	1314.4	41	395
1150	46"	1454.1	1168.4	68.3	144.5	1270.0	1295.4	40	1365.2	41	470

WELDING NECK FLANGES
 KAYNAK BOYUNLU FLANS
 Class 300—ANSI B 16-5
 PN 50



BORU (Pipe)		O	A	C	Y	X	R	DELİKLER (Drilling)			AGIRLIK (Weight) kg
DN	NPS							Sayısı (Each)	G	d ₂	
15	1/2"	95	21.3	14.5	52	38	35.0	4	66.5	16	0.8
20	3/4"	117	26.9	16.0	57	48	43.0	4	82.5	20	1.3
25	1"	124	33.7	17.5	62	54	51.0	4	89.0	20	1.7
32	1 1/4"	133	42.4	19.5	65	64	63.5	4	98.5	20	2.2
40	1 1/2"	156	48.3	21.0	68	70	73.0	4	114.5	22	3.2
50	2"	165	60.3	22.5	70	84	92.0	8	127.0	20	3.6
65	2 1/2"	190	73.0	25.5	76	100	105.0	8	149.0	22	5.4
80	3"	210	88.9	29.0	79	118	127.0	8	168.5	22	7.4
—	3 1/2"	229	101.6	30.5	81	133	140.0	8	184.0	22	8.9
100	4"	254	114.3	32.0	86	146	157.0	8	200.0	22	11.9
125	5"	279	141.3	35.0	98	178	185.5	8	235.0	22	16
150	6"	318	168.3	37.0	98	206	216.0	12	270.0	22	20
200	8"	380	219.1	41.5	111	260	270.0	12	330.0	26	31
250	10"	444	273.0	48.0	117	321	324.0	16	387.5	30	44
300	12"	521	323.9	51.0	130	375	381.0	16	451.0	33	64
350	14"	584	355.6	54.0	143	426	413.0	20	514.5	33	88
400	16"	643	406.4	57.5	146	483	470.0	20	571.5	36	113
450	18"	711	457.0	60.5	159	533	533.5	24	628.5	36	134
500	20"	775	508.0	63.5	162	587	584.0	24	686.0	36	171
600	24"	914	610.0	70.0	168	702	692.0	24	813.0	42	238
650	26"	971.5	666.7	79.4	184.1	720.7	749.3	28	876.3	44.4	304
700	28"	1035.0	717.5	85.7	196.8	774.7	800.1	28	939.8	44.4	367
750	30"	1092.2	768.3	92.1	209.5	827.1	857.2	28	996.9	47.6	422
800	32"	1149.3	819.1	98.4	222.2	881.1	914.4	28	1054.1	50.8	465
850	34"	1206.5	871.6	101.6	231.8	936.6	965.2	28	1104.9	50.8	545
900	36"	1270.0	922.4	104.8	241.3	990.6	1022.3	32	1168.4	54.0	590

WELDING NECK FLANGES
KAYNAK BOYUNLU FLANS
Class 600—ANSI B 16—5
PN 100



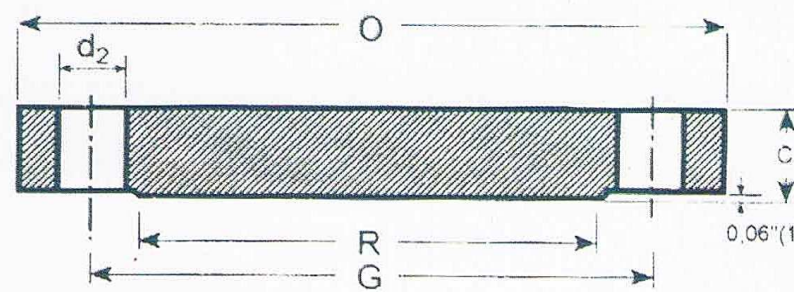
BORU (Pipe)		O	A	C	Y	X	R	DELİKLER (Drilling)			AGIRLIK (Weight) kg
DN	NPS							Sayısı (Each)	G	d ₂	
15	1/2"	95	21.3	14.5	52	38	35.0	4	66.5	16	0.9
20	3/4"	117	26.9	16.0	57	48	43.0	4	82.5	20	1.5
25	1"	124	33.7	17.5	62	54	51.0	4	89.0	20	1.9
32	1 1/4"	133	42.4	21.0	67	64	63.5	4	98.5	20	2.6
40	1 1/2"	156	48.3	22.5	70	70	73.0	4	114.5	22	3.3
50	2"	165	60.3	25.5	73	84	92.0	8	127.0	20	4.7
65	2 1/2"	190	73.0	29.0	79	100	105.0	8	149.0	22	6.5
80	3"	210	88.9	32.0	83	118	127.0	8	168.5	22	8.7
—	3 1/2"	229	101.6	35.0	88	133	140.0	8	184.0	26	11.2
100	4"	273	114.3	38.5	102	152	157.0	8	216.0	26	18.1
125	5"	330	141.3	44.5	114	189	185.5	8	267.0	30	30
150	6"	356	168.3	48.0	117	222	216.0	12	292.0	30	36
200	8"	419	219.1	55.5	133	273	270.0	12	349.0	33	50
250	10"	508	273.0	63.5	152	343	324.0	16	432.0	36	90
300	12"	559	323.9	66.5	156	400	381.0	20	489.0	36	110
350	14"	603	355.6	70.0	165	432	413.0	20	527.0	39	150
400	16"	686	406.0	76.5	178	495	470.0	20	603.0	42	190
450	18"	743	457.0	83.0	184	546	533.5	20	654.0	45	240
500	20"	813	508.0	89.0	190	610	584.0	24	724.0	45	295
600	24"	940	610.0	102.0	203	718	692.0	24	838.0	52	365
650	26"	1016.0	671.5	108.0	222.2	747.7	749.3	28	914.4	50.8	404
700	28"	1073.1	723.9	111.1	234.9	803.3	800.1	28	965.2	54.0	480
750	30"	1130.3	774.7	114.3	247.6	862.0	857.2	28	1022.3	54.0	560
800	32"	1193.8	825.5	117.5	260.3	917.6	914.4	28	1079.5	60.3	680
850	34"	1244.6	877.9	120.7	269.9	973.2	965.2	28	1130.3	60.3	750
900	36"	1314.4	928.7	123.8	282.6	1031.9	1022.3	28	1193.8	66.7	795

BLIND FLANGES

KOR FLANS

Class 150-ANSI B 16-5

PN 20



BORU (Pipe)		O	C	R	DELIKLER (Drilling)			AGIRLIK (Weight) kg
DN	NPS				Sayısı (Each)	G	d ₂	
15	1/2"	89	11.5	35.0	4	60.5	16	0.4
20	3/4"	99	13.0	43.0	4	70.0	16	0.7
25	1"	108	14.5	51.0	4	79.5	18	0.9
32	1 1/4"	117	16.0	63.5	4	89.0	16	1.3
40	1 1/2"	127	17.5	73.0	4	98.5	16	1.6
50	2"	152	19.5	92.0	4	120.5	20	2.6
65	2 1/2"	178	22.5	105.0	4	139.5	20	4.1
80	3"	190	24.0	127.0	4	152.5	20	5.0
—	3 1/2"	216	24.0	140.0	8	178	20	6.4
100	4"	229	24.0	157.0	8	190.5	20	7.1
125	5"	254	24.0	185.5	8	216	22	9.0
150	6"	279	25.5	216.0	8	241.5	22	12
200	8"	343	29.0	270.0	8	298.5	22	21
250	10"	406	30.5	324.0	12	362	26	30
300	12"	483	32.0	381.0	12	432	26	45
350	14"	533	35.0	413.0	12	476	30	59
400	16"	597	37.0	470.0	16	540	30	79
450	18"	635	40.0	533.5	16	578	33	97
500	20"	698	43.0	584.0	20	635	33	124
600	24"	813	48.0	692.0	20	749.5	36	188
650	26"	870	68.5	794	24	806	35	323
700	28"	925	71.5	800	28	863	35	382
750	30"	985	74.5	857	28	914	35	450
800	32"	1060	81.0	914	28	978	41	560
850	34"	1110	82.5	965	32	1029	41	630
900	36"	1170	90.5	1022	32	1086	41	765
950	38"	1240	87.5	1073	32	1150	41	850
1000	40"	1290	90.5	1124	36	1200	41	955
1050	42"	1345	97.0	1194	36	1257	41	1075
1100	44"	1405	102.0	1245	40	1314	41	1200
1150	46"	1455	103.0	1295	40	1365	41	1380
1200	48"	1510	108.0	1395	44	1422	41	1590