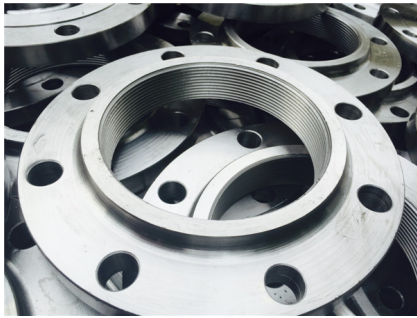


**GROUP 1200
FLANGES
WCB/SS04/
SS316
MOD.
1200A/121**



**DAVINCI
VALVES™**

DATA SHEET

WATER series

FLANGES WCB/SS04/SS316

**DAVINCI
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**QUALITY
ASSUREMENT**

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**PRODUCT QT
ASSUREMENT**

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**COMPANY QT
ASSUREMENT**

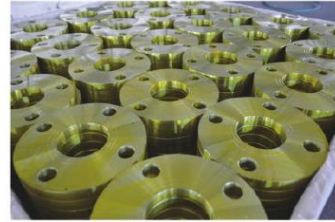
www.davincivalves.com

18 Dongyu Street, Square One,
11th Floor 1101, Jinjiang District,
Chengdu, Sichuan CHINA

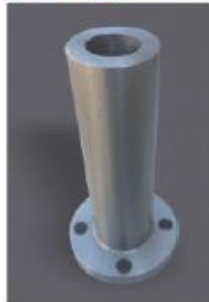
10F/Tower A, Billion Center,
1 Wang Kwong Road, Kowloon Bay
Kowloon HONG KONG

FLANGES WCB/SS04/SS316

Ref.1200A / PN 10-16



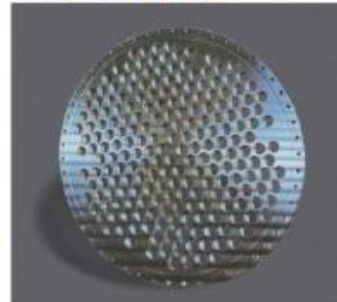
IF FLANGE



SPECTACLE BLANK



ORIFICE FLANGE



TECHNICAL DATA SHEET

All the components can be substituted with equivalent or higher-class materials.

FLANGES WCB/SS04/SS316

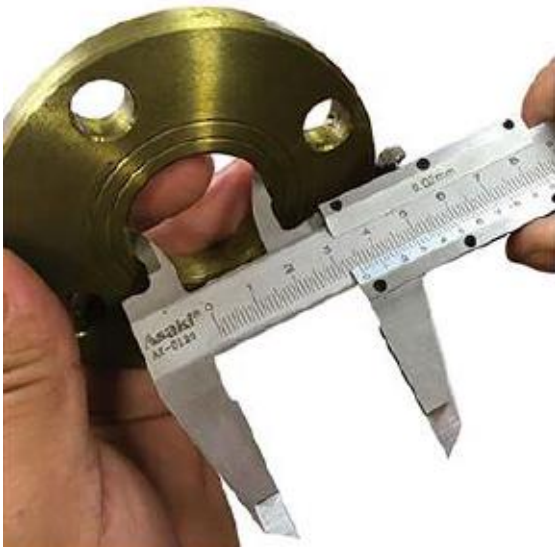
Ref.1200A / PN 10-16

FLANGES WCB/SS04/SS316

Material construction in WCB/SS04/SS316

Working pressure 1.0Mpa 1.6Mpa 2.0Mpa

Coating Galvanize/oiled/paint



All the components can be substituted with equivalent or higher-class materials.

FLANGES WCB/SS04/SS316
Ref.1200A / PN 10-16

AMERICAN STANDARDS

CLASS ANSI B 16.5

CLASS ASME B 16.47 SER B(API 605)

CLASS ASME B 16.47 SER A(MSS SP 44) ...

AWWA C207-07 -Rings & Blinds.CLASS B

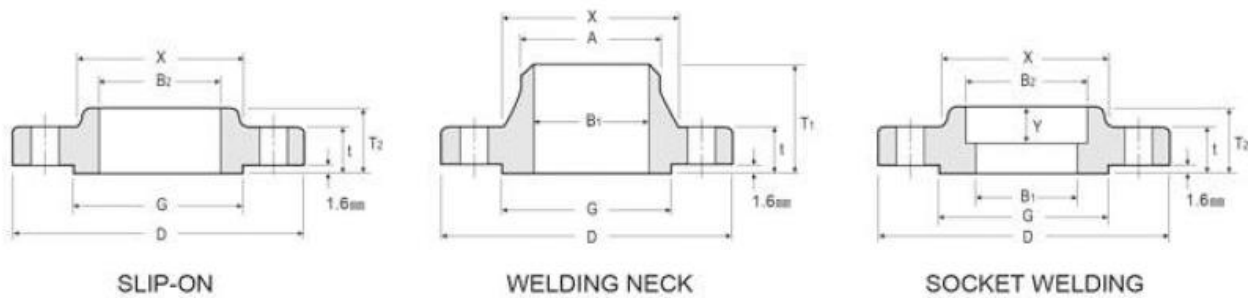
AWWA C207-07 -Rings & Blinds.CLASS D

TECHNICAL DATA SHEET

All the components can be substituted with equivalent or higher-class materials.

FLANGES WCB/SS04/SS316

Ref.1200A / PN 10-16



CLASS 150 FLANGES

ANSI B16.5 FORGED FLANGES

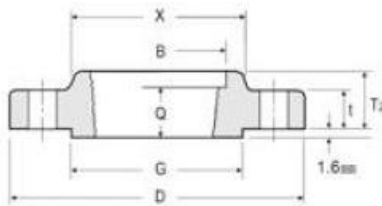
Unit:mm

Nominal Pipe Size	Outside Diam. D	Diam. at Base of Hub X	O.D of Raised Face G	Thick-ness t	BORE			LENGTH THRU HUB			Diam. of Hub at Bevel A	Radius of Fillet R	Thread Length Q
					Welding Neck Socket Welding B1	Slip-on Socket Welding B2	Lap Joint B3	Welding Neck T1	Slip-on Threaded Socket Welding T2	Lap Joint T3			
1/2	88.9	30.2	35.1	11.2	15.7	22.4	22.9	47.8	15.7	15.7	21.3	3.0	15.7
3/4	98.6	38.1	42.9	12.7	20.8	27.7	28.2	52.3	15.7	15.7	26.7	3.0	15.7
1	108	49.3	50.8	14.2	26.7	34.5	35.1	55.6	17.5	17.5	33.5	3.0	17.5
1 1/4	117.3	58.7	63.5	15.7	35.1	43.2	43.7	57.2	20.6	20.6	42.2	4.8	20.6
1 1/2	127	65.0	73.2	17.5	40.9	49.5	50.0	62.0	22.4	22.4	48.3	6.4	22.4
2	152.4	77.7	91.9	19.1	52.6	62.0	62.5	63.5	25.4	25.4	60.5	7.9	25.4
2 1/2	177.8	90.4	104.6	22.4	62.7	74.7	75.4	69.9	28.4	28.4	73.2	7.9	28.4
3	190.5	108.0	127.0	23.9	78.0	90.7	91.4	69.9	30.2	30.2	88.9	9.7	30.2
3 1/2	215.9	122.2	139.7	23.9	90.2	103.4	104.1	71.4	31.8	31.8	101.6	9.7	31.8
4	228.6	134.9	157.2	23.9	102.4	116.1	116.8	76.2	33.3	33.3	114.3	11.2	33.3
5	254	163.6	185.7	23.9	128.3	143.8	144.5	88.9	36.6	36.6	141.2	11.2	36.6
6	279.4	192.0	215.9	25.4	154.2	170.7	171.5	88.9	39.6	39.6	168.4	12.7	39.6
8	342.9	246.1	269.7	28.4	202.7	221.5	222.3	101.6	44.5	44.5	219.2	12.7	44.5
10	406.4	304.8	323.9	30.2	254.5	276.4	277.4	101.6	49.3	49.3	273.1	12.7	49.3
12	482.6	365.3	381.0	31.8	304.8	327.2	328.2	114.3	55.6	55.6	323.9	12.7	55.6
14	533.4	400.1	412.8	35.1	336.6	359.2	360.2	127.0	57.2	79.2	355.6	12.7	57.2
16	596.9	457.2	469.9	36.6	387.4	410.5	411.2	127.0	63.5	87.4	406.4	12.7	63.5
18	635	505.0	533.4	39.6	438.2	461.8	462.3	139.7	68.3	96.8	457.2	12.7	68.3
20	698.5	558.8	584.2	42.9	489.0	513.1	514.4	144.5	73.2	103.1	508.0	12.7	73.2
24	812.8	663.4	692.2	47.8	590.6	616.0	616.0	152.4	82.6	111.3	609.6	12.7	82.6

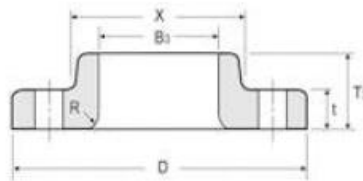
All the components can be substituted with equivalent or higher-class materials.

FLANGES WCB/SS04/SS316

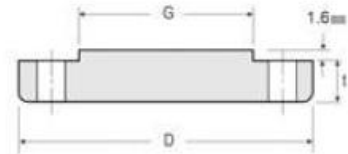
Ref.1200A / PN 10-16



THREADED



LAP JOINT



BLIND

CLASS 150 FLANGES

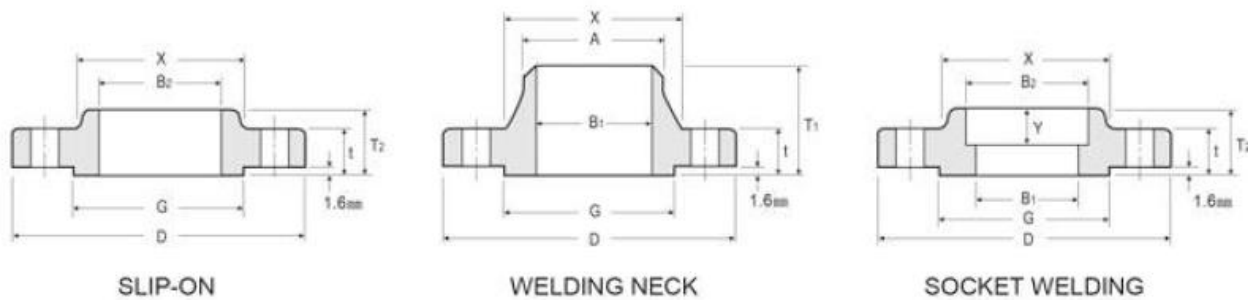
ANSI B16.5 FORGED FLANGES

Unit:mm

Nominal Pipe Size	Depth of Socket Y	DRILLING			BOLTING				APPROXIMATE WEIGHT						
		Bolt Circle Diam	Number of Holes	Diam of Holes	Diam of Bolts (inch)	Machine Bolt Length			Welding Neck			Slip-on and Threaded	Lap Joint	Blind	Socket Welding
						Raised Face	Raised Face	Ring Joint	SCH40	SCH80	SCH160				
1/2	9.7	60.5	4	15.7	1/2	50.8	57.2	-	0.60	0.60	0.60	0.47	0.51	0.47	0.47
3/4	11.2	69.9	4	15.7	1/2	50.8	63.5	-	0.90	0.90	0.90	0.58	0.64	0.63	0.59
1	12.7	79.2	4	15.7	1/2	57.2	63.5	76.2	1.14	1.18	1.24	0.86	0.93	0.94	0.87
1 1/4	14.2	88.9	4	15.7	1/2	57.2	69.9	82.6	1.41	1.48	1.54	1.08	1.16	1.23	1.11
1 1/2	15.7	98.6	4	15.7	1/2	63.5	69.9	82.6	1.81	1.90	2.01	1.41	1.51	1.62	1.45
2	17.5	120.7	4	19.1	5/8	69.9	82.6	95.3	2.72	2.84	3.07	2.26	2.38	2.64	2.33
2 1/2	19.1	139.7	4	19.1	5/8	76.2	88.9	101.6	4.45	4.70	4.98	3.43	3.6	4.07	3.55
3	20.6	152.4	4	19.1	5/8	76.2	88.9	101.6	5.22	5.54	5.90	3.87	4.04	4.92	4.02
3 1/2	22.4	177.8	8	19.1	5/8	76.2	88.9	101.6	6.40	6.76	7.46	5.20	5.24	5.90	5.24
4	23.9	190.5	8	19.1	5/8	76.2	88.9	101.6	7.49	7.96	8.90	5.75	5.96	7.41	5.99
5	23.9	215.9	8	22.4	3/4	82.6	95.3	108.0	9.53	10.54	12.04	6.26	6.44	8.76	6.68
6	26.9	241.3	8	22.4	3/4	82.6	101.6	114.3	11.80	13.12	15.11	7.38	7.65	11.40	8.60
8	31.8	298.5	8	22.4	3/4	88.9	108.0	120.7	19.10	21.34	25.84	12.36	12.66	20.10	13.60
10	33.3	362.0	12	25.4	7/8	101.6	114.3	127.0	24.50	28.85	35.74	17.10	17.4	29.39	19.50
12	39.6	431.8	12	25.4	7/8	101.6	120.7	133.4	39.90	46.80	58.01	27.68	28.3	43.80	29.10
14	41.4	476.3	12	28.4	1	114.3	133.4	146.1	51.80	62.58	77.60	35.2	41.5	59.42	40.90
16	44.5	539.8	16	28.4	1	114.3	133.4	146.1	64.50	79.42	98.82	45.5	52.98	77.40	47.17
18	49.3	577.9	16	31.8	1 1/8	127.0	146.1	158.8	74.90	97.63	124.32	49.71	59	94.8	54.43
20	54.1	635.0	20	31.8	1 1/8	139.7	158.8	171.5	89.40	120.44	154.18	66.5	72.12	123.4	70.31
24	63.5	749.3	20	35.1	1 1/4	152.4	171.5	184.2	121.70	169.37	223.92	90.5	99.42	188.24	95.25

All the components can be substituted with equivalent or higher-class materials.

FLANGES WCB/SS04/SS316 Ref.1200A / PN 10-16



CLASS 300 FLANGES

ANSI B16.5 FORGED FLANGES

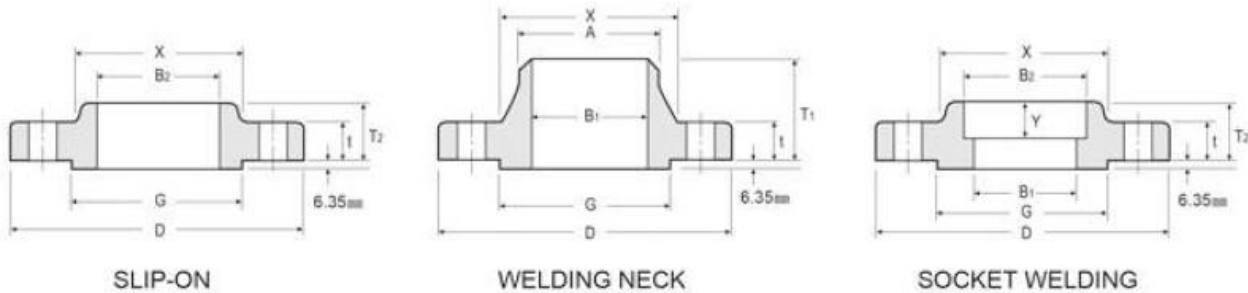
Unit:mm

Nominal Pipe Size	Outside Diam. D	Diam. at Base of Hub X	O.D of Raised Face G	Thick-ness t	BORE				LENGTH THRU HUB			Diam. of Hub at Bevel A	Radius of Fillet R	Thread Length Q
					Welding Neck Socket Welding B1	Slip-on Socket Welding B2	Lap Joint B3	Counter Bore Min. Threaded Min. B	Welding Neck T1	Slip-on Threaded Socket Welding T2	Lap Joint T3			
1/2	95.3	38.1	35.1	14.2	15.7	22.4	22.9	23.6	52.3	22.4	22.4	21.3	3.0	15.7
3/4	117.3	47.8	42.9	15.7	20.8	27.7	28.2	29.0	57.2	25.4	25.4	26.7	3.0	15.7
1	124	53.8	50.8	17.5	26.7	34.5	35.1	35.8	62.0	26.9	26.9	33.5	3.0	17.5
1 1/4	133.4	63.5	63.5	19.1	35.1	43.2	43.7	44.5	65.0	26.9	26.9	42.2	4.8	20.6
1 1/2	155.4	69.9	73.2	20.6	40.9	49.5	50.0	50.5	68.3	30.2	30.2	48.3	6.4	22.4
2	165.1	84.1	91.9	22.4	52.6	62.0	62.5	63.5	69.9	33.3	33.3	60.5	7.9	28.4
2 1/2	190.5	100.1	104.6	25.4	62.7	74.7	75.4	76.2	76.2	38.1	38.1	73.2	7.9	31.8
3	209.6	117.3	127.0	28.4	78.0	90.7	91.4	92.2	79.2	42.9	42.9	88.9	9.7	31.8
3 1/2	228.6	133.4	139.7	30.2	90.2	103.4	104.1	104.9	81.0	44.5	44.5	101.6	9.7	36.6
4	254	146.1	157.2	31.8	102.4	116.1	116.8	117.6	85.9	47.8	47.8	114.3	11.2	36.6
5	279.4	177.8	185.7	35.1	128.3	143.8	144.5	144.5	98.6	50.8	50.8	141.2	11.2	42.9
6	317.5	206.2	215.9	36.6	154.2	170.7	171.5	171.5	98.6	52.3	52.3	168.4	12.7	46.0
8	381	260.4	269.7	41.1	202.7	221.5	222.3	222.3	111.3	62.0	62.0	219.2	12.7	50.8
10	444.5	320.5	323.9	47.8	254.5	276.4	277.4	276.4	117.3	66.5	95.3	273.1	12.7	55.6
12	520.7	374.7	381.0	50.8	304.8	327.2	328.2	328.7	130.0	73.2	101.6	323.9	12.7	60.5
14	584.2	425.5	412.8	53.8	336.6	359.2	360.2	360.4	142.7	76.2	111.3	355.6	12.7	63.5
16	647.7	482.6	469.9	57.2	387.4	410.5	411.2	411.2	146.1	82.6	120.7	406.4	12.7	68.3
18	711.2	533.4	533.4	60.5	438.2	461.8	462.3	462.0	158.8	88.9	130.0	457.2	12.7	69.9
20	774.7	587.2	584.2	63.5	489.0	513.1	514.4	512.8	162.1	95.3	139.7	508.0	12.7	73.2
24	914.4	701.5	692.2	69.9	590.6	616.0	616.0	614.4	168.1	106.4	152.4	609.6	12.7	82.6

All the components can be substituted with equivalent or higher-class materials.

FLANGES WCB/SS04/SS316

Ref.1200A / PN 10-16



CLASS 600 FLANGES

ANSI B16.5 FORGED FLANGES

Unit:mm

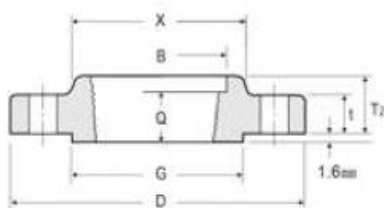
Nominal Pipe Size	Outside Diam.	Diam. at Base of Hub	O.D of Raised Face	Thick-ness	BORE				LENGTH THRU HUB			Diam. of Hub at Bevel	Radius of Fillet	Thread Length
					Welding Neck Socket Welding	Slip-on Socket Welding	Lap Joint	Counter Bore Min.	Welding Neck	Slip-on Threaded Socket Welding	Lap Joint			
					B1	B2	B3	B	T1	T2	T3			
1/2	95.3	38.1	35.1	14.2		22.4	22.9	23.6	52.3	22.4	22.4	21.3	3.0	15.7
3/4	117.3	47.8	42.9	15.7		27.7	28.2	29.0	57.2	25.4	25.4	26.7	3.0	15.7
1	124	53.8	50.8	17.5		34.5	35.1	35.8	62.0	26.9	26.9	33.5	3.0	17.5
1 1/4	133.4	63.5	63.5	20.6		43.2	43.7	44.5	66.5	28.4	28.4	42.2	4.8	20.6
1 1/2	155.4	69.9	73.2	22.4		49.5	50.0	50.5	69.9	31.8	31.8	48.3	6.4	22.4
2	165.1	84.1	91.9	25.4		62.0	62.5	63.5	73.2	36.6	36.6	60.5	7.9	28.4
2 1/2	190.5	100.1	104.6	28.4		74.7	75.4	76.2	79.2	41.1	41.1	73.2	7.9	31.8
3	209.6	117.3	127.0	31.8		90.7	91.4	92.2	82.6	46.0	46.0	88.9	9.7	35.1
3 1/2	228.6	133.4	139.7	35.1		103.4	104.1	104.9	85.9	49.3	49.3	101.6	9.7	39.6
4	273.1	152.4	157.2	38.1		116.1	116.8	117.6	101.6	53.8	53.8	114.3	11.2	41.1
5	330.2	189.0	185.7	44.5		143.8	144.5	144.5	114.3	60.5	60.5	141.2	11.2	47.8
6	355.6	222.3	215.9	47.8		170.7	171.5	171.5	117.3	66.5	66.5	168.4	12.7	50.8
8	419.1	273.1	269.7	55.6		221.5	222.3	222.3	133.4	76.2	76.2	219.2	12.7	57.2
10	508	342.9	323.9	63.5		276.4	277.4	276.4	152.4	85.9	111.3	273.1	12.7	65.0
12	558.8	400.1	381.0	66.5		327.2	328.2	328.7	155.4	91.9	117.3	323.9	12.7	69.9
14	603.3	431.8	412.8	69.9		359.2	360.2	360.4	165.1	93.7	127.0	355.6	12.7	73.2
16	685.8	495.3	469.9	76.2		410.5	411.2	411.2	177.8	106.4	139.7	406.4	12.7	77.7
18	743	546.1	533.4	82.6		461.8	462.3	462.0	184.2	117.3	152.4	457.2	12.7	79.2
20	812.8	609.6	584.2	88.9		513.1	514.4	512.8	190.5	127.0	165.1	508.0	12.7	82.6
24	939.8	717.6	692.2	101.6		616.0	616.0	614.4	203.2	139.7	184.2	609.6	12.7	91.9

See Note(1)
To be specified by purchaser

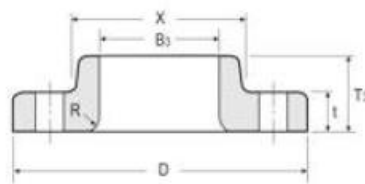
All the components can be substituted with equivalent or higher-class materials.

FLANGES WCB/SS04/SS316

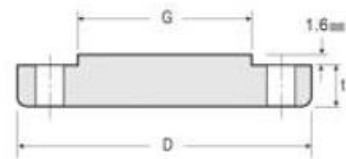
Ref.1200A / PN 10-16



THREADED



LAP JOINT



BLIND

CLASS 300 FLANGES

ANSI B16.5 FORGED FLANGES

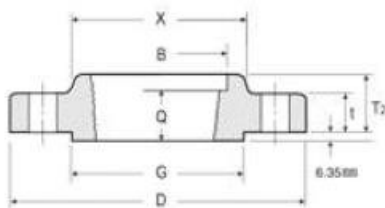
Unit:mm

Nominal Pipe Size	Depth of Socket Y	DRILLING			BOLTING				APPROXIMATE WEIGHT						
		Bolt Circle Diam	Number of Holes	Diam of Holes	Diam of Bolts (inch)	Machine Bolt Length		Stud Bolt Length	Welding Neck			Slip-on and Threaded	Lap Joint	Blind	Socket Welding
						Raised Face	Raised Face		Ring Joint	SCH40	SCH80				
1/2	9.7	66.5	4	15.7	1/2	57.2	63.5	76.2	0.91	0.91	0.91	0.63	0.63	0.63	0.63
3/4	11.2	82.6	4	19.1	5/8	63.5	76.2	88.9	1.36	1.36	1.36	1.16	1.16	1.16	1.19
1	12.7	88.9	4	19.1	5/8	63.5	76.2	88.9	1.82	1.87	1.93	1.39	1.39	1.42	1.44
1 1/4	14.2	98.6	4	19.1	5/8	69.9	82.6	95.3	2.27	2.35	2.41	1.75	1.75	1.88	1.75
1 1/2	15.7	114.3	4	22.4	3/4	76.2	88.9	101.6	3.18	3.28	3.40	2.53	2.53	2.68	2.62
2	17.5	127.0	8	19.1	5/8	76.2	88.9	101.6	3.36	3.49	3.75	2.90	2.91	3.22	2.94
2 1/2	19.1	149.4	8	22.4	3/4	82.6	101.6	114.3	5.45	5.72	6.02	4.25	4.25	4.80	4.49
3	20.6	168.1	8	22.4	3/4	88.9	108.0	120.7	7.32	7.52	8.94	5.92	5.94	6.89	6.2
3 1/2	22.4	184.2	8	22.4	3/4	95.3	108.0	127.0	8.93	9.31	10.10	7.72	7.74	9.53	
4	23.9	200.2	8	22.4	3/4	95.3	114.3	127.0	12.10	12.62	13.69	10.13	10.15	11.2	
5	23.9	235.0	8	22.4	3/4	108.0	120.7	133.4	16.30	17.42	19.08	12.58	12.6	15.96	
6	26.9	269.7	12	22.4	3/4	108.0	120.7	139.7	20.40	21.86	24.07	16.04	16.05	21.40	
8	31.8	330.2	12	25.4	7/8	120.7	139.7	152.4	31.30	33.75	38.69	24.5	24.53	34.6	
10	33.3	387.4	16	28.4	1	139.7	158.8	171.5	45.40	50.43	58.38	34.16	39.92	53.50	
12	39.6	450.9	16	31.8	1 1/8	146.1	171.5	184.2	64.50	72.35	85.10	51.26	58.7	78.9	
14	41.4	514.4	20	31.8	1 1/8	158.8	177.8	190.5	93.50	105.61	122.49	72.12	83.46	107.5	
16	44.5	571.5	20	35.1	1 1/4	165.1	190.5	203.2	113.10	130.25	152.56	90.4	106.14	139.25	
18	49.3	628.7	24	35.1	1 1/4	171.5	196.9	209.6	138.90	164.74	195.07	109	133.95	176.9	
20	54.1	685.8	24	35.1	1 1/4	184.2	203.2	222.3	167.70	202.32	240.17	136	157.65	223.17	
24	63.5	812.8	24	41.1	1 1/2	203.2	228.6	254.0	238.68	288.15	348.28	204	240.4	342	

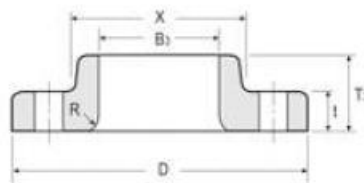
All the components can be substituted with equivalent or higher-class materials.

FLANGES WCB/SS04/SS316

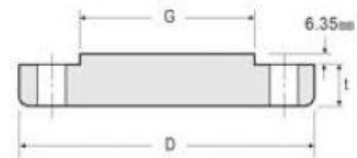
Ref.1200A / PN 10-16



THREADED



LAP JOINT



BLIND

CLASS 600 FLANGES

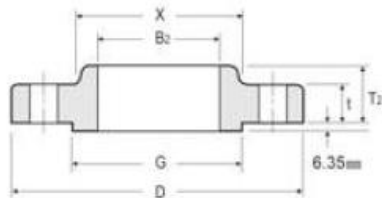
ANSI B16.5 FORGED FLANGES

Unit:mm

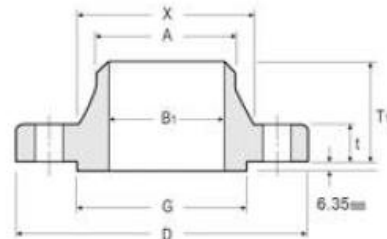
Nominal Pipe Size	Depth of Socket Y	DRILLING			BOLTING				APPROXIMATE WEIGHT						
		Bolt Circle Diam	Number of Holes	Diam of Holes	Diam of Bolts (inch)	Stud Bolt Length			Welding Neck			Slip-on and Threaded	Lap Joint	Blind	Socket Welding
						0.25" Raised Face	Male-Female Tongue-Groove	Ring Joint	SCH40	SCH80	SCH160				
1/2	9.7	66.5	4	15.7	1/2	76.2	69.9	76.2	1.36	1.36	1.36	0.91	0.91	0.91	0.91
3/4	11.2	82.6	4	19.1	5/8	88.9	82.6	88.9	1.59	1.63	1.67	1.4	1.4	1.4	1.36
1	12.7	88.9	4	19.1	5/8	88.9	82.6	88.9	1.82	1.87	1.94	1.7	1.7	1.81	1.81
1 1/4	14.2	98.6	4	19.1	5/8	95.3	88.9	95.3	2.50	2.59	2.66	2.27	2.27	2.4	2.6
1 1/2	15.7	114.3	4	22.4	3/4	108.0	101.6	108.0	3.63	3.74	3.88	3.1	3.1	3.4	3.18
2	17.5	127.0	8	19.1	5/8	108.0	101.6	108.0	4.54	4.69	4.98	3.71	3.85	4.4	3.9
2 1/2	19.1	149.4	8	22.4	3/4	120.7	114.3	120.7	6.36	6.66	7.00	5.44	5.44	6.8	5.9
3	20.6	168.1	8	22.4	3/4	127.0	120.7	127.0	8.17	8.58	9.04	7.26	7.26	8.9	7.4
3 1/2	22.4	184.2	8	25.4	7/8	139.7	133.4	139.7	12.00	12.44	13.28	9.53	9.53	13.17	
4	23.9	215.9	8	25.4	7/8	146.1	139.7	146.1	16.80	17.46	18.79	14.97	15.40	18.6	
5	23.9	266.7	8	28.4	1	165.1	158.8	165.1	30.90	32.27	34.30	28.5	29	30.84	
6	26.9	292.1	12	28.4	1	171.5	165.1	171.5	36.77	34.93	37.69	36.32	36.5	33.80	
8	31.8	349.3	12	31.8	1 1/8	190.5	184.2	196.9	50.90	53.98	60.16	44	50.8	62.2	
10	33.3	431.8	16	35.1	1 1/4	215.9	209.6	215.9	86.26	92.59	103.34	76.2	82	102	
12	39.6	489.0	20	35.1	1 1/4	222.3	215.9	222.3	102.60	112.36	128.19	97.52	108.86	132	
14	41.4	527.1	20	38.1	1 3/8	235.0	228.6	235.0	121.60	136.13	156.38	102	111.20	158	
16	44.5	603.3	20	41.1	1 1/2	254.0	247.7	254.0	177.10	198.70	226.80	149.82	165.71	224.13	
18	49.3	654.1	20	44.5	1 5/8	273.1	266.7	273.1	215.70	246.66	283.01	180.1	219.4	285	
20	54.1	723.9	24	44.5	1 5/8	285.8	279.4	292.1	268.00	310.23	356.13	231.54	258.8	365	
24	63.5	838.2	24	50.8	1 7/8	330.2	323.9	336.6	372.00	495.71	512.38	330	362	536.80	

All the components can be substituted with equivalent or higher-class materials.

FLANGES WCB/SS04/SS316 Ref.1200A / PN 10-16



SLIP-ON



WELDING NECK

CLASS 900 FLANGES

ANSI B16.5 FORGED FLANGES

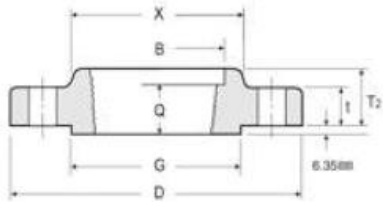
Unit:mm

Nominal Pipe Size	Outside Diam.	Diam. at Base of Hub	O.D of Raised Face	Thick-ness	BORE				LENGTH THRU HUB			Diam. of Hub at Bevel
					Welding Neck	Slip-on	Lap Joint	Counter Bore Min.	Welding Neck	Slip-on Threaded Socket Welding	Lap Joint	
1/2	120.7	38.1	35.1	22.4	See Note(1) To be specified by purchaser	22.4	22.9	23.6	60.5	31.8	31.8	21.3
3/4	130	44.5	42.9	25.4		27.7	28.2	29.0	69.9	35.1	35.1	26.7
1	149.4	52.3	50.8	28.4		34.5	35.1	35.8	73.2	41.1	41.1	33.5
1 1/4	158.8	63.5	63.5	28.4		43.2	43.7	44.5	73.2	41.1	41.1	42.2
1 1/2	177.8	69.9	73.2	31.8		49.5	50.0	50.5	82.6	44.5	44.5	48.3
2	215.9	104.6	91.9	38.1		62.0	62.5	63.5	101.6	57.2	57.2	60.5
2 1/2	244.3	124.0	104.6	41.1		74.7	75.4	76.2	104.6	63.5	63.5	73.2
3	241.3	127.0	127.0	38.1		90.7	91.4	92.2	101.6	53.8	53.8	88.9
4	292.1	158.8	157.2	44.5		116.1	116.8	117.6	114.3	69.9	69.9	114.3
5	349.3	190.5	185.7	50.8		143.8	144.5	144.5	127.0	79.2	79.2	141.2
6	381	235.0	215.9	55.6		170.7	171.5	171.5	139.7	85.9	85.9	168.4
8	469.9	298.5	269.7	63.5		221.5	222.3	222.3	162.1	101.6	114.3	219.2
10	546.1	368.3	323.9	69.9		276.4	277.4	276.4	184.2	108.0	127.0	273.1
12	609.6	419.1	381.0	79.2		327.2	328.2	328.7	200.2	117.3	142.7	323.9
14	641.4	450.9	412.8	85.9		359.2	360.4	360.4	212.9	130	155.4	355.6
16	704.9	508.0	469.9	88.9		410.5	411.2	411.2	215.9	133.4	165.1	406.4
18	787.4	565.2	533.4	101.6		461.8	462.3	462.0	228.6	152.4	190.5	457.2
20	857.3	622.3	584.2	108.0		513.1	514.4	512.8	247.7	158.8	209.6	508.0
24	1041.4	749.3	692.2	139.7		616.0	616.0	614.4	292.1	203.2	266.7	609.6

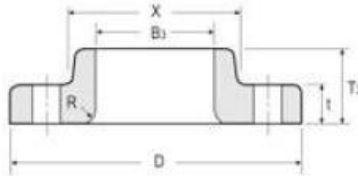
TECHNICAL DATA SHEET

All the components can be substituted with equivalent or higher-class materials.

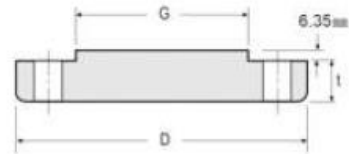
FLANGES WCB/SS04/SS316 Ref.1200A / PN 10-16



THREADED



LAP JOINT



BLIND

CLASS 900 FLANGES

ANSI B16.5 FORGED FLANGES

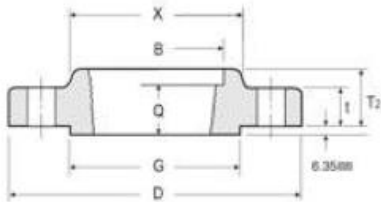
Unit:mm

Nominal Pipe Size	Radius of fillet R	Thread Length Q	DRILLING			BOLTING				APPROXIMATE WEIGHT					
			Bolt Circle Diam	Number of Holes	Diam of Holes	Diam of Bolts (inch)	Stud Bolt Length			Welding Neck			Slip-on and Threaded	Lap Joint	Blind
							0.25" Raised Face	Male-Female Tongue-Groove	Ring Joint	SCH40	SCH80	SCH160			
1/2	3.0	22.4	82.6	4	22.4	3/4	108.0	101.6	108.0	3.10	3.10	3.10	1.81	1.8	1.9
3/4	3.0	25.4	88.9	4	22.4	3/4	114.3	108.0	114.3	3.18	3.18	3.18	2.4	2.4	2.7
1	3.0	28.4	101.6	4	25.4	7/8	127.0	120.7	127.0	3.86	3.92	4.00	3.50	3.60	4.09
1 1/4	4.8	30.2	111.3	4	25.4	7/8	127.0	120.7	127.0	4.54	4.64	4.71	4.1	4.1	4.54
1 1/2	6.4	31.8	124.0	4	28.4	1	139.7	133.4	139.7	6.36	6.49	6.65	5.52	5.55	5.93
2	7.9	38.1	165.1	8	25.4	7/8	146.1	139.7	146.1	10.90	11.10	11.50	9.98	9.98	11.34
2 1/2	7.9	47.8	190.5	8	28.4	1	158.8	152.4	158.8	16.30	16.69	17.14	15.8	15.8	16.00
3	9.7	41.1	190.5	8	25.4	7/8	146.1	139.7	146.1	15.00	15.50	16.10	11.8	11.8	13.17
4	11.2	47.8	235.0	8	31.8	1 1/8	171.5	165.1	171.5	23.20	23.94	25.43	23.2	23.2	24.5
5	11.2	53.8	279.4	8	35.1	1 1/4	190.5	184.2	190.5	39.10	40.62	42.86	37.65	36.74	39.46
6	12.7	57.2	317.5	12	31.8	1 1/8	190.5	184.2	196.9	49.90	52.06	55.33	48.3	49	51.5
8	12.7	63.5	393.7	12	38.1	1 3/8	222.3	215.9	222.3	84.90	88.61	96.09	75	86	89
10	12.7	71.4	469.9	16	38.1	1 3/8	235.0	228.6	235.0	121.70	129.87	142.79	111.3	125.64	131.54
12	12.7	76.2	533.4	20	38.1	1 3/8	254.0	247.7	254.0	157.00	169.48	189.74	146	167.00	187
14	12.7	82.6	558.8	20	41.1	1 1/2	273.1	266.7	292.1	181.00	199.62	225.55	172.36	180.07	224.07
16	12.7	85.9	616.0	20	44.5	1 5/8	285.8	279.4	298.5	225.00	251.11	285.08	192.95	211.10	272.4
18	12.7	88.9	685.8	20	50.8	1 7/8	323.9	317.5	333.6	309.00	347.24	392.13	272.4	295.10	385.9
20	12.7	91.9	749.3	20	53.8	2	349.3	342.9	362.0	377.00	431.59	490.91	331.42	367.70	488
24	12.7	101.6	901.7	20	66.5	2 1/2	438.2	431.8	457.2	685.00	778.36	885.21	632	703.70	905

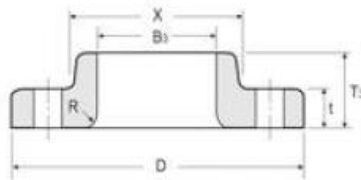
All the components can be substituted with equivalent or higher-class materials.

FLANGES WCB/SS04/SS316

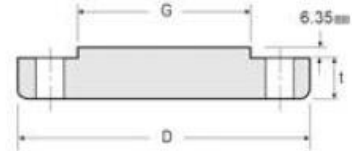
Ref.1200A / PN 10-16



THREADED



LAP JOINT



BLIND

CLASS 1500 FLANGES

ANSI B16.5 FORGED FLANGES

Unit:mm

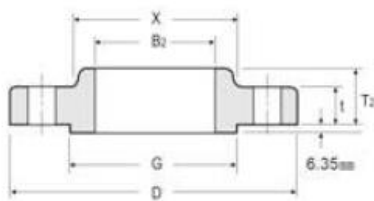
Nominal Pipe Size	Depth of Socket Y	DRILLING			BOLTING				APPROXIMATE WEIGHT						
		Bolt Circle Diam	Number of Holes	Diam of Holes	Diam of Bolts (inch)	Stud Bolt Length			Welding Neck			Slip-on and Threaded	Lap Joint	Blind	Socket Welding
						0.25" Raised Face	Male-Female Tongue-Groove	Ring Joint	SCH40	SCH80	SCH160				
1/2	9.7	82.6	4	22.4	3/4	108.0	101.6	108.0	3.10	3.10	3.10	1.8	1.9	1.9	1.81
3/4	11.2	88.9	4	22.4	3/4	114.3	108.0	114.3	3.18	3.18	3.18	2.35	2.35	2.72	2.81
1	12.7	101.6	4	25.4	7/8	127.0	120.7	127.0	3.86	3.92	4.00	3.50	3.60	4.08	3.61
1 1/4	14.21	113	4	25.4	7/8	127.0	120.7	127.0	4.54	4.64	4.71	4.1	4.10	4.3	4.99
1 1/2	15.71	24.0	4	28.4	1	139.7	133.4	139.7	6.36	6.49	6.65	5.45	5.45	5.9	6.76
2	17.5	165.1	8	25.4	7/8	146.1	139.7	146.1	10.90	11.10	11.50	10.5	10.45	11.3	10.89
2 1/2	19.1	190.5	8	28.4	1	158.8	152.4	158.8	16.34	16.69	17.14	15.8	15.8	16	16.34
3	20.6	203.2	8	31.8	1 1/8	177.8	171.5	177.8	21.80	22.37	23.01	21.80	21.80	21.79	
4	23.9	241.3	8	35.1	1 1/4	196.9	190.5	196.9	31.30	32.10	33.71	33.10	34.10	33.11	
5	23.9	292.1	8	41.1	1 1/2	247.7	241.3	247.7	59.90	61.75	64.47	59.00	63.60	60	
6	26.9	317.5	12	38.1	1 3/8	260.4	254.0	266.7	74.19	77.13	81.12	74	77	75	
8	31.8	393.7	12	44.5	1 5/8	292.1	285.8	323.9	124.00	128.83	138.56	117.73	129.73	136.98	
10	33.3	482.6	12	50.8	1 7/8	336.6	330.2	342.9	206.00	217.16	234.82	197.50	220.19	229.97	
12	39.6	571.5	16	53.8	2	374.7	368.3	387.4	306	330.75	359.07	264	286.00	316.40	
14	41.4	635.0	16	60.5	2 1/4	406.4	400.1	425.5	416	431.88	467.94		404.10	421	
16	44.5	704.9	16	66.5	2 1/2	444.5	438.2	469.9	567	562.30	610.84		522.10	559	
18	49.3	774.7	16	73.2	2 3/4	495.3	489.0	527.1	736	741.28	790.00		670.00	761.60	
20	54.1	831.9	16	79.2	3	539.8	533.4	565.2	929	892.00	980.00		806.00	967	
24	63.5	990.6	16	91.9	3 1/2	616.0	609.6	647.7	1504	1430.00	1580.00		1285.5	1568	

TECHNICAL DATA SHEET

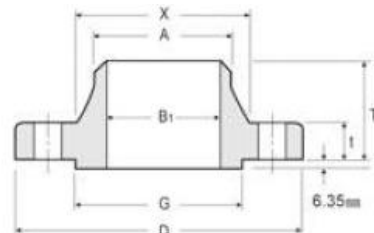
All the components can be substituted with equivalent or higher-class materials.

FLANGES WCB/SS04/SS316

Ref.1200A / PN 10-16



SLIP-ON



WELDING NECK

CLASS 2500 FLANGES

ANSI B16.5 FORGED FLANGES

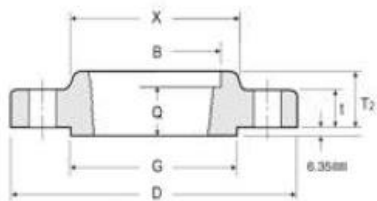
Unit:mm

Nominal Pipe Size	Outside Diam.	Diam. at Base of Hub	O.D of Raised Face	Thick-ness	BORE				LENGTH THRU HUB			Diam. of Hub at Bevel	Radius of Fillet	Thread Length
					Welding Neck Socket Welding	Slip-on Socket Welding	Lap Joint	Counter Bore Min. Threaded Min.	Welding Neck	Slip-on Threaded Socket Welding	Lap Joint			
					B1	B2	B3	B	T1	T2	T3			
1/2	133.4	42.9	35.1	30.2	To be specified by purchaser	22.4	22.9	23.6	73.2	39.6	39.6	21.3	3.0	28.4
3/4	139.7	50.8	42.9	31.8		27.7	28.2	29.0	79.2	42.9	42.9	26.7	3.0	31.8
1	158.8	57.2	50.8	35.1		34.5	35.1	35.8	88.9	47.8	47.8	33.5	3.0	35.1
1 1/4	184.2	73.2	63.5	38.1		43.2	43.7	44.5	95.3	52.3	52.3	42.2	4.8	38.1
1 1/2	203.2	79.2	73.2	44.5		49.5	50.0	50.5	111.3	60.5	60.5	48.3	6.4	44.5
2	235	95.3	91.9	50.8		62.0	62.5	63.5	127.0	69.9	69.9	60.5	7.9	50.8
2 1/2	266.7	114.3	104.6	57.2		74.7	75.4	76.2	142.7	79.2	79.2	73.2	7.9	57.2
3	304.8	133.4	127.0	66.5		90.7	91.4	92.2	168.1	91.9	91.9	88.9	9.7	63.5
4	355.6	165.1	157.2	76.2		116.1	116.8	117.6	190.5	108.0	108.0	114.3	11.2	69.9
5	419.1	203.2	185.7	91.9		143.8	144.5	144.5	228.6	130.0	130.0	141.2	11.2	76.2
6	482.6	235.0	215.9	108.0		170.7	171.5	171.5	273.1	152.4	152.4	168.4	12.7	82.6
8	552.5	304.8	269.7	127.0		221.5	222.3	222.3	317.5	177.8	177.8	219.2	12.7	95.3
10	673.1	374.7	323.9	165.1		276.4	277.4	276.4	419.1	228.6	228.6	273.1	12.7	108.0
12	762	441.5	381.0	184.2		327.2	328.2	328.7	463.6	254.0	254.0	232.9	12.7	120.7

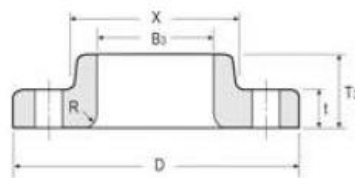
All the components can be substituted with equivalent or higher-class materials.

FLANGES WCB/SS04/SS316

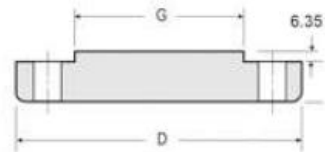
Ref.1200A / PN 10-16



THREADED



LAP JOINT



BLIND

CLASS 2500 FLANGES

ANSI B16.5 FORGED FLANGES

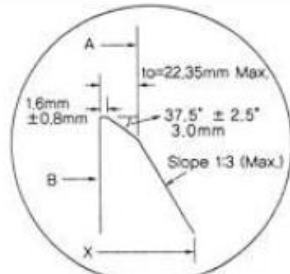
Unit:mm

Nominal Pipe Size	DRILLING			BOLTING			APPROXIMATE WEIGHT				
	Bolt Circle Diam	Number of Holes	Diam of Holes	Diam of Bolts (inch)	Stud Bolt Length			Welding Neck	Slip-on and Threaded	Lap Joint	Blind
					0.25" Raised Face	Male-Female Tongue-Groove	Ring Joint				
1/2	88.9	4	22.4	3/4	120.7	114.3	120.7	3.63	3.20	3.20	3.11
3/4	95.3	4	22.4	3/4	127.0	120.7	127.0	4.09	4.08	4.08	4.54
1	108.0	4	25.4	7/8	139.7	133.4	139.7	5.90	5.44	5.44	5.44
1 1/4	130.0	4	28.4	1	152.4	146.1	152.4	9.08	8.16	8.16	8.16
1 1/2	146.1	4	31.8	1 1/8	171.5	165.1	171.5	12.70	11.00	11.00	10.44
2	171.5	8	28.4	1	177.8	171.5	177.8	19.10	17.25	17.25	17.71
2 1/2	196.9	8	31.8	1 1/8	196.9	190.5	203.2	23.60	25.00	25.00	25.42
3	228.6	8	35.1	1 1/4	222.3	215.9	228.6	42.70	37.70	37.70	39.04
4	273.1	8	41.1	1 1/2	254.0	247.7	260.4	66.30	58.00	58.00	60.38
5	323.9	8	47.8	1 3/4	298.5	292.1	311.2	110.80	95.30	95.30	101.15
6	368.3	8	53.8	2	342.9	336.6	355.6	176.46	146.51	147.00	156.63
8	438.2	12	53.8	2	381.0	374.7	393.7	261.50	220.00	220.00	240.62
10	539.8	12	66.5	2 1/2	489.0	482.6	508.0	484.50	421.00	421.00	465.36
12	619.3	12	73.2	2 3/4	539.8	533.4	558.8	730.00	590.00	590.00	664.1

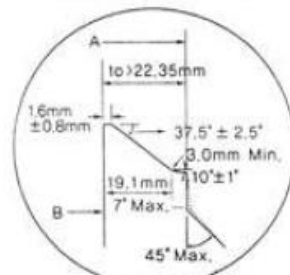
All the components can be substituted with equivalent or higher-class materials.

FLANGES WCB/SS04/SS316

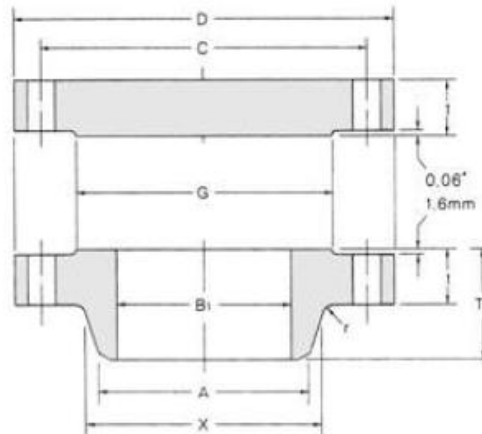
Ref.1200A / PN 10-16



BEVEL FOR WALL THICKNESS (to)
0.88" IN. (22.35mm) OR LESS.



BEVEL FOR WALL THICKNESS (to)
GREATER THAN 0.88 IN. (22.35mm)



CLASS 75 FLANGES

ASME B16.47 SER.B (API 605)

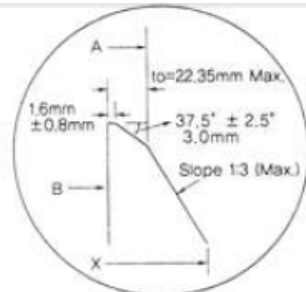
Unit:mm

Nominal Pipe Size	Outside Diam.	O.D of Raised Face	Diam. of Hub at Base	Diam. of Hub at Bevel	BORE			Length Thru Hub	THICKNESS		Radius at Base of Hub	DRILLING			Approximate Weight(kg)	
					Wall Thickness				Blind	Welding Neck		Bolt Circle Diam	Number of Holes	Diam. of Holes	Welding neck	Blind
					6.35mm	9.5mm	12.7mm									
D	G	X	A	B1			T1	t	t	r	c					
26	762	704.9	676.1	661.9	647.7	641.4	635.0	58.7	33.3	33.3	7.9	723.9	36	19.1	36.3	115.7
28	813	755.7	726.9	712.7	698.5	692.2	685.8	62.0	33.3	33.3	7.9	774.7	40	19.1	38.6	131.5
30	864	806.5	777.7	763.5	749.3	743.0	736.6	65.0	33.3	33.3	7.9	825.5	44	19.1	40.8	149.7
32	914	857.3	828.5	814.3	800.1	793.8	787.4	69.9	36.6	35.1	7.9	876.3	48	19.1	47.6	176.9
34	965	908.1	879.3	865.1	850.9	844.6	838.2	73.2	38.1	35.1	7.9	927.1	52	19.1	49.9	195.0
36	1034	965.2	935.0	915.9	850.9	895.4	889.0	85.9	42.4	36.6	9.7	992.1	40	22.4	65.8	235.0
38	1084	1016.0	985.8	966.7	952.5	946.2	939.8	88.9	44.5	38.1	9.7	1042.9	40	22.4	72.6	269.9
40	1135	1066.8	1036.6	1017.5	1003.3	997.0	990.6	91.9	44.5	38.1	9.7	1093.7	44	22.4	77.1	344.7
42	1186	1117.6	1087.4	1068.3	1054.1	1047.8	1041.4	95.3	47.8	39.6	9.7	1144.5	48	22.4	83.9	406.0
44	1251	1174.8	1140.0	1119.1	1104.9	1098.6	1092.2	104.6	49.3	42.9	9.7	1203.5	36	25.4	104.3	483.1
46	1302	1225.6	1190.8	1169.9	1155.7	1149.4	1143.0	108.0	50.8	44.5	9.7	1254.3	40	25.4	111.1	537.5
48	1353	1276.4	1241.6	1220.7	1206.5	1200.2	1193.8	111.3	53.8	46.0	9.7	1305.1	44	25.4	122.5	596.5
50	1403	1327.2	1293.9	1271.5	1257.3	1251.0	1244.6	115.8	55.4	47.8	9.7	1355.9	44	25.4	131.5	682.7
52	1457	1378.0	1344.7	1322.3	1308.1	1301.8	1295.4	120.7	57.2	47.8	9.7	1409.7	48	25.4	140.6	755.2
54	1508	1428.8	1397.0	1373.1	1358.9	1352.6	1346.2	125.5	60.5	49.3	9.7	1460.5	48	25.4	154.2	834.6
56	1575	1485.9	1450.8	1423.9	1409.7	1403.4	1397.0	134.9	62.0	50.8	11.2	1521.0	40	28.4	181.4	957.1
58	1626	1536.7	1501.6	1474.7	1460.5	1454.2	1447.8	138.2	63.5	52.3	11.2	1571.8	44	28.4	195.0	1043.3
60	1676	1587.5	1552.4	1525.5	1511.3	1505.0	1498.6	144.5	66.5	55.6	11.2	1622.6	44	28.4	215.5	1134.0

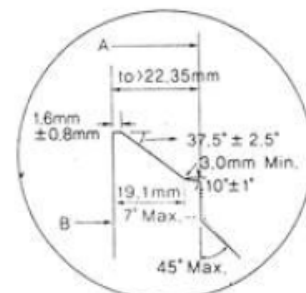
All the components can be substituted with equivalent or higher-class materials.

FLANGES WCB/SS04/SS316

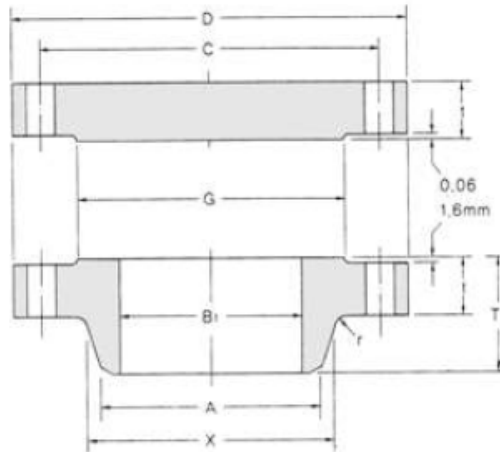
Ref.1200A / PN 10-16



BEVEL FOR WALL THICKNESS(t_o)
0.88" IN. (22.35mm) OR LESS.



BEVEL FOR WALL THICKNESS(t_o)
GREATER THAN 0.88 IN. (22.35mm)



CLASS 150 FLANGES

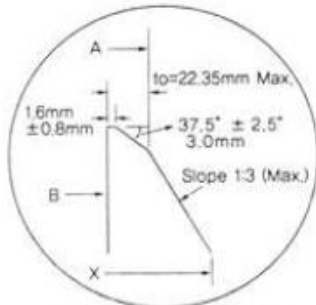
ASME B16.47 SER.B (API 605)

Unit:mm

Nominal Pipe Size	Outside Diam.	O.D of Raised Face	Diam. of Hub at Base	Diam. of Hub at Bevel	BORE			Length Thru Hub	THICKNESS		Radius at Base of Hub	DRILLING			Approximate Weight(kg)	
					Wall Thickness				Blind	Welding		Bolt Circle Diam	Number of Holes	Diam. of Holes	Welding neck	Blind
					6.35mm	9.5mm	12.7mm									
D	G	X	A	B1			T1	t	t	r	c					
26	786	711.2	684.3	661.9	647.7	641.4	635.0	88.9	44.5	41.1	9.7	744.5	36	22.4	54.4	169.2
28	837	762.0	735.1	712.7	698.5	692.2	685.8	95.3	47.8	44.5	9.7	795.3	40	22.4	63.5	205.9
30	887	812.8	787.4	763.5	749.3	743.0	736.6	100.1	50.8	44.5	9.7	846.1	44	22.4	68.0	246.3
32	941	863.6	839.7	814.3	800.1	793.8	787.4	108.0	53.8	46.0	9.7	900.2	48	22.4	77.1	293.9
34	1005	920.8	892.0	865.1	850.9	844.6	838.2	110.2	57.2	49.3	9.7	957.3	40	25.4	95.3	355.2
36	1057	971.6	944.6	915.9	901.7	895.4	889.0	117.3	58.7	52.3	9.7	1009.7	44	25.4	108.9	403.7
38	1124	1022.4	997.0	968.2	952.5	946.2	939.8	124.0	63.5	53.8	9.7	1069.8	40	28.4	131.5	494.0
40	1175	1079.5	1049.3	1019.0	1003.3	997.0	990.6	128.5	66.5	55.6	9.7	1120.6	44	28.4	140.6	565.6
42	1226	1130.3	1101.9	1069.8	1054.1	1047.8	1041.4	133.4	68.3	58.7	11.2	1171.4	48	28.4	156.5	631.9
44	1276	1181.1	1152.7	1120.6	1104.9	1098.6	1092.2	136.7	71.4	60.5	11.2	1222.2	52	28.4	167.8	716.2
46	1341	1234.9	1205.0	1171.4	1155.7	1149.4	1143.0	144.5	74.7	62.0	11.2	1284.2	40	31.8	197.3	827.4
48	1392	1289.1	1257.3	1222.2	1206.5	1200.2	1193.8	149.4	77.7	65.0	11.2	1335.0	44	31.8	217.7	927.6
50	1443	1339.9	1308.1	1273.0	1257.3	1251.0	1244.6	153.9	80.8	68.3	11.2	1385.8	48	31.8	235.9	1036.0
52	1494	1390.7	1360.4	1323.8	1308.1	1301.8	1295.4	157.2	84.1	69.9	11.2	1436.6	52	31.8	249.5	1155.3
54	1549	1441.5	1412.7	1374.6	1358.9	1352.6	1346.2	162.1	87.4	71.4	11.2	1492.3	56	31.8	281.2	1291.9
56	1600	1492.3	1465.3	1425.4	1409.7	1403.4	1397.0	166.6	90.4	73.2	14.2	1543.1	60	31.8	294.8	1426.1
58	1675	1543.1	1516.1	1476.2	1460.5	1454.2	1447.8	174.8	93.5	74.7	14.2	1611.4	48	35.1	353.8	1614.8
60	1726	1600.2	1570.0	1527.0	1511.3	1505.0	1498.6	179.3	96.8	76.2	14.2	1662.2	52	35.1	385.6	1774.9

All the components can be substituted with equivalent or higher-class materials.

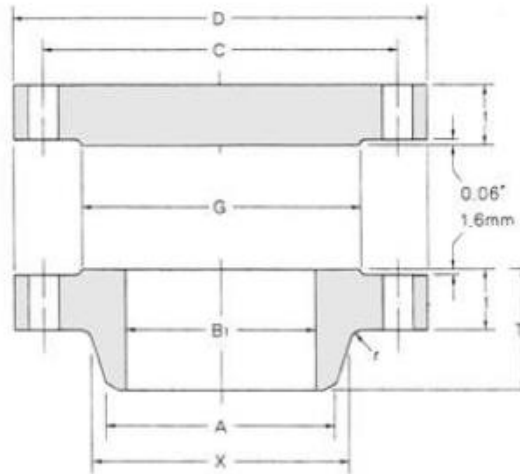
FLANGES WCB/SS04/SS316 Ref.1200A / PN 10-16



BEVEL FOR WALL THICKNESS (to)
0.88" IN. (22.35mm) OR LESS.



BEVEL FOR WALL THICKNESS (to)
GREATER THAN 0.88 IN. (22.35mm)



CLASS 300 FLANGES

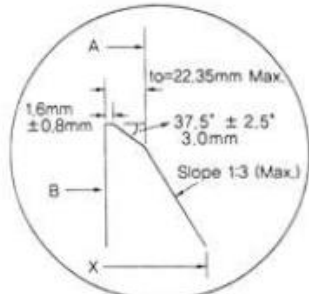
ASME B16.47 SER.B(API 605)

Unit:mm

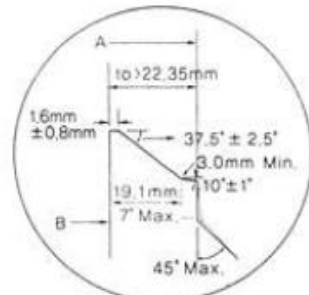
Nominal Pipe Size	Outside Diam.	O.D of Raised Face	Diam. of Hub at Base	Diam. of Hub at Bevel	BORE			Length Thru Hub	THICKNESS		Radius at Base of Hub	DRILLING			Approximate Weight(kg)	
					Wall Thickness				Blind	Welding Neck		Bolt Circle Diam	Number of Holes	Diam. of Holes	Welding neck	Blind
					6.35mm	9.5mm	12.7mm									
D	G	X	A	B1			T1	t	t	r	c					
26	867	736.6	701.5	665.2	647.7	641.4	635.0	144.5	88.9	88.9	14.2	803.1	32	35.1	181.4	411.4
28	921	787.4	755.7	716.0	698.5	692.2	685.8	149.4	88.9	88.9	14.2	857.3	36	35.1	204.1	464.0
30	991	844.6	812.8	768.4	749.3	743.0	736.6	158.0	93.7	93.7	14.2	920.8	36	38.1	249.5	566.5
32	1054	901.7	863.6	819.2	800.1	793.8	787.4	168.1	103.1	103.1	15.7	977.9	32	41.1	310.7	705.8
34	1108	952.5	917.4	870.0	850.9	844.6	838.2	173.0	103.1	103.1	15.7	1031.7	36	41.1	340.2	779.7
36	1171	1009.7	965.2	920.8	901.7	895.4	889.0	180.8	103.1	103.1	15.7	1089.2	32	44.5	381.0	871.4
38	1222	1060.5	1016.0	971.6	952.5	946.2	939.8	192.0	111.3	111.3	15.7	1140.0	36	44.5	415.0	1023.8
40	1273	1114.6	1066.8	1022.4	1003.3	997.0	990.6	198.4	115.8	115.8	15.7	1190.8	40	44.5	449.1	1156.2
42	1334	1168.4	1117.6	1074.7	1054.1	1047.8	1041.4	204.7	119.1	119.1	15.7	1244.6	36	47.8	514.8	1304.6
44	1384	1219.2	1173.2	1125.5	1104.9	1098.6	1092.2	214.4	127.0	127.0	15.7	1295.4	40	47.8	560.2	1498.7
46	1461	1270.0	1228.9	1176.3	1155.7	1149.4	1143.0	222.3	130.0	128.5	15.7	1365.3	36	50.8	666.8	1708.3
48	1511	1327.2	1277.9	1227.1	1206.5	1200.2	1193.8	223.8	134.9	128.5	15.7	1416.1	40	50.8	714.4	1897.4
50	1562	1378.0	1330.5	1277.9	1257.3	1251.0	1244.6	235.0	139.7	138.2	15.7	1466.9	44	50.8	775.7	2099.7
52	1613	1428.8	1382.8	1328.7	1308.1	1301.8	1295.4	242.8	144.3	142.7	15.7	1517.7	48	50.8	834.6	2311.5
54	1673	1479.6	1435.1	1379.5	1358.9	1352.6	1346.2	239.8	149.4	136.7	15.7	1577.8	48	50.8	898.1	2575.5
56	1765	1536.7	1493.8	1430.3	1409.7	1403.4	1397.0	268.2	157.0	153.9	17.5	1651.0	36	60.5	1177.1	3012.8
58	1827	1593.9	1547.9	1481.1	1460.5	1454.2	1447.8	274.6	162.1	153.9	17.5	1712.0	40	60.5	1256.6	3332.6
60	1878	1651.0	1598.7	1531.9	1511.3	1505.0	1498.6	271.5	166.6	150.9	17.5	1763.8	40	60.5	1301.8	3619.7

All the components can be substituted with equivalent or higher-class materials.

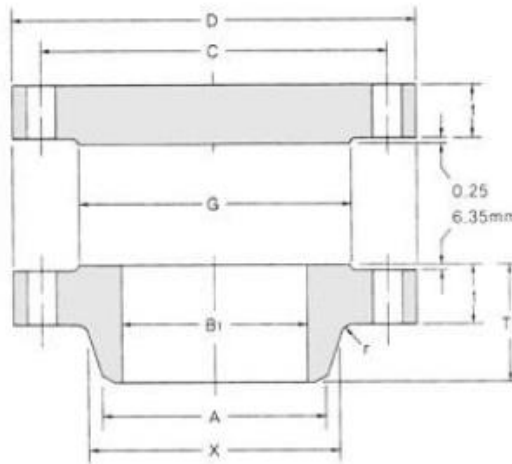
FLANGES WCB/SS04/SS316 Ref.1200A / PN 10-16



BEVEL FOR WALL THICKNESS(to)
0.88" IN. (22.35mm) OR LESS.



BEVEL FOR WALL THICKNESS(to)
GREATER THAN 0.88 IN. (22.35mm)



CLASS 400 FLANGES

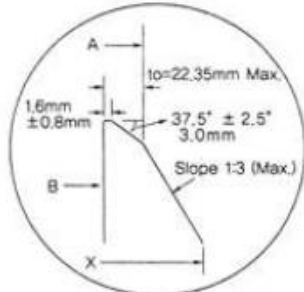
ASME B16.47 SER.B(API 605)

Unit:mm

Nominal Pipe Size	Outside Diam.	O.D of Raised Face	Diam. of Hub at Base	Diam. of Hub at Bevel	BORE			Length Thru Hub	THICKNESS		Radius at Base of Hub	DRILLING			Approximate Weight(kg)	
					Wall Thickness				Blind	Welding		Bolt Circle Diam	Number of Holes	Diam. of Holes	Approximate Weight(kg)	
					6.35mm	9.5mm	12.7mm								Welding neck	Blind
D	G	X	A	B1			T1	t	t	r	c					
26	850.9	711.2	688.8	660.4	647.7	641.4	635.0	149.4	88.9	88.9	11.2	781.1	28	38.1	163.3	396.4
28	914.4	762.0	739.6	711.2	698.5	692.2	685.8	158.8	95.3	95.3	12.7	838.2	24	41.1	204.1	490.3
30	971.6	819.2	793.8	762.0	749.3	743.0	736.6	169.9	101.6	101.6	12.7	895.4	28	41.1	240.4	590.6
32	1035.1	873.3	844.6	812.8	800.1	793.8	787.4	179.3	108.0	108.0	12.7	952.5	28	44.5	288.0	712.2
34	1085.9	927.1	898.7	863.6	850.9	844.6	838.2	187.5	111.3	111.3	14.2	1003.3	32	44.5	313.0	807.9
36	1155.7	980.9	952.5	914.4	901.7	895.4	889.0	200.2	119.1	119.1	14.2	1066.8	28	47.8	387.8	979.8
38	1206.5	1035.1	1003.3	965.2	952.5	946.2	939.8	206.2	124.0	124.0	14.2	1117.6	32	47.8	424.1	1111.3
40	1270.0	1092.2	1054.1	1016.0	1003.3	997.0	990.6	215.9	130.0	130.0	14.2	1174.8	32	50.8	494.4	1291.9
42	1320.8	1143.0	1107.9	1066.8	1054.1	1047.8	1041.4	223.8	133.4	133.4	14.2	1225.6	32	50.8	539.8	1432.9
44	1384.3	1200.2	1158.7	1117.6	1104.9	1098.6	1092.2	233.2	139.7	139.7	14.2	1282.7	32	53.8	623.7	1648.8
46	1441.5	1257.3	1212.9	1168.4	1155.7	1149.4	1143.0	244.3	146.1	146.1	14.2	1339.9	36	53.8	691.7	1868.8
48	1511.3	1308.1	1267.0	1219.2	1206.5	1200.2	1193.8	257.0	152.4	152.4	14.2	1403.4	28	60.5	811.9	2143.7
50	1568.5	1361.9	1320.8	1270.0	1257.3	1251.0	1244.6	268.2	158.8	157.2	14.2	1460.5	32	60.5	884.5	2405.4
52	1619.3	1412.7	1371.6	1320.8	1308.1	1301.8	1295.4	276.4	163.6	162.1	14.2	1511.3	32	60.5	963.9	2641.3
54	1701.8	1470.2	1425.4	1371.6	1358.9	1352.6	1346.2	289.1	171.5	169.9	14.2	1581.2	28	66.5	1163.5	3058.2
56	1752.6	1527.0	1479.6	1422.4	1409.7	1403.4	1397.0	298.5	176.3	174.8	14.2	1632.0	32	66.5	1229.3	3334.9
58	1803.4	1577.8	1530.4	1473.2	1460.5	1454.2	1447.8	306.3	180.8	177.8	14.2	1682.8	32	66.5	1465.1	3622.4
60	1886.0	1635.3	1584.5	1524.0	1511.3	1505.0	1498.6	319.0	189.0	185.7	14.2	1752.6	32	73.2	1732.6	4139.6

All the components can be substituted with equivalent or higher-class materials.

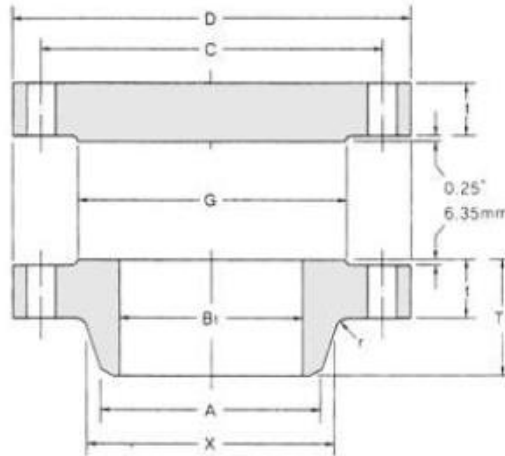
FLANGES WCB/SS04/SS316 Ref.1200A / PN 10-16



BEVEL FOR WALL THICKNESS (to)
0.88" IN. (22.35mm) OR LESS.



BEVEL FOR WALL THICKNESS (to)
GREATER THAN 0.88 IN. (22.35mm)



CLASS 600 FLANGES

ASME B16.47 SER.B(API 605)

Unit:mm

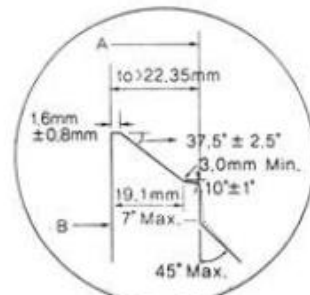
Nominal Pipe Size	Outside Diam.	O.D. of Raised Face	Diam. of Hub at Base	Diam. of Hub at Bevel	BORE			Length Thru Hub	THICKNESS		Radius at Base of Hub	DRILLING			Approximate Weight(kg)	
					Wall Thickness				Blind	Welding Neck		Bolt Circle Diam	Number of Holes	Diam. of Holes	Approximate Weight(kg)	
					6.35mm	9.5mm	12.7mm								Welding neck	Blind
D	G	X	A	B1			T1	t	t	r	c					
26	889.0	726.9	698.5	660.4	647.7	641.4	635.0	180.8	111.3	111.3	12.70	806.5	28	44.5	249.5	541.6
28	952.5	784.4	752.3	711.2	698.5	692.2	685.8	190.5	115.8	115.8	12.70	863.6	28	47.8	294.8	647.3
30	1022.4	841.2	806.5	762.0	749.3	743.0	736.6	204.7	127.0	125.5	12.70	927.1	28	50.8	367.4	817.4
32	1085.9	895.4	860.6	812.8	800.1	793.8	787.4	215.9	134.9	130.0	12.70	984.3	28	53.8	430.9	979.3
34	1162.1	952.5	914.4	863.6	850.9	844.6	838.2	233.4	144.3	141.2	14.22	1054.1	24	60.5	546.6	1199.8
36	1212.9	1009.7	968.2	914.4	901.7	895.4	889.0	242.8	150.9	146.1	14.22	1104.9	28	60.5	607.8	1366.7
38	1270.0	1054.1	1022.4	965.2	952.5	946.2	939.8	254.0	155.4	152.4	14.22	1162.3	28	60.5	666.8	1544.1
40	1320.8	1111.3	1073.2	1016.0	1003.3	997.0	990.6	263.7	162.1	158.8	14.22	1212.9	32	60.5	739.4	1740.9
42	1403.4	1168.4	1127.3	1066.8	1054.1	1047.8	1041.4	279.4	171.5	168.1	14.22	1282.7	28	66.5	920.8	2079.8
44	1454.2	1225.6	1181.1	1117.6	1104.9	1098.6	1092.2	289.1	177.8	173.0	14.22	1333.5	32	66.5	979.8	2315.6
46	1511.3	1276.4	1234.9	1168.4	1155.7	1149.4	1143.0	300.0	185.7	179.3	14.22	1390.7	32	66.5	1093.2	2611.8
48	1593.9	1333.5	1289.1	1219.2	1206.5	1200.2	1193.8	316.0	195.3	189.0	14.22	1460.5	32	73.2	1295.0	3055.9
50	1670.1	1384.3	1343.2	1270.0	1257.3	1251.0	1244.6	328.7	203.2	196.9	14.22	1524.0	28	79.2	1510.5	3490.5
52	1720.9	1435.1	1394.0	1320.8	1308.1	1301.8	1295.4	336.6	209.6	203.2	14.22	1574.8	32	79.2	1614.8	3822.0
54	1778.0	1492.3	1447.8	1371.6	1358.9	1352.6	1346.2	349.3	217.4	209.6	14.22	1632.0	32	79.2	1778.1	4233.4
56	1854.2	1543.1	1501.6	1422.4	1409.7	1403.4	1397.0	362.0	225.6	217.4	15.75	1695.5	32	85.9	1941.4	4776.0
58	1905.0	1600.2	1552.4	1473.2	1460.5	1454.2	1447.8	369.8	231.6	222.3	15.75	1746.3	32	85.9	2104.7	5177.4
60	1993.9	1657.4	1609.9	1524.0	1511.3	1505.0	1498.6	388.9	242.8	233.4	17.53	1822.5	28	91.9	2268.0	5945.8

All the components can be substituted with equivalent or higher-class materials.

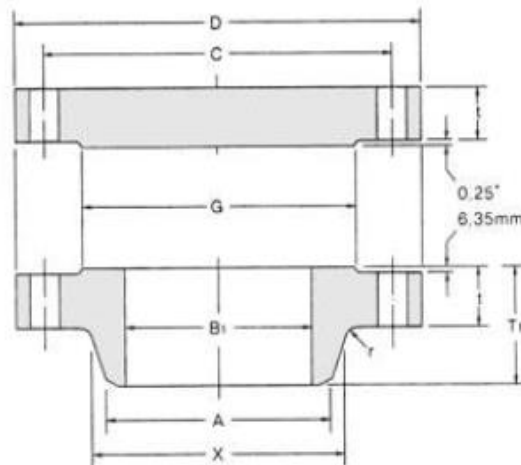
FLANGES WCB/SS04/SS316 Ref.1200A / PN 10-16



BEVEL FOR WALL THICKNESS(to)
0.88" IN.(22.35mm) OR LESS.



BEVEL FOR WALL THICKNESS(to)
GREATER THAN 0.88 IN.(22.35mm)



CLASS 900 FLANGES

ASME B16.47 SER.B(API 605)

Unit:mm

Nominal Pipe Size	Outside Diam.	O.D of Raised Face	Diam. of Hub at Base	Diam. of Hub at Bevel	BORE			Length Thru Hub	THICKNESS		Radius at Base of Hub	DRILLING			Approximate Weight(kg)	
					Wall Thickness				Blind	Welding		Bolt Circle Diam	Number of Holes	Diam. of Holes	Welding neck	Blind
					6.35mm	9.5mm	12.7mm									
D	G	X	A	B1			T1	t	t	r	c					
26	1022.4	762.0	743.0	660.4	647.7	641.4	635.0	258.8	153.9	134.9	11.2	901.7	20	66.5	476.3	990.7
28	1104.9	819.2	797.1	711.2	698.5	692.2	685.8	276.4	166.6	147.6	12.7	971.6	20	73.2	689.5	1252.8
30	1181.1	876.3	850.9	762.0	749.3	743.0	736.6	289.1	176.0	155.4	12.7	1035.1	20	79.2	825.6	1512.3
32	1238.3	927.1	908.1	812.8	800.1	793.8	787.4	303.3	185.7	160.3	12.7	1092.2	20	79.2	936.7	1753.2
34	1314.5	990.6	962.2	863.6	850.9	844.6	838.2	319.0	195.1	171.5	14.2	1155.7	20	85.9	1111.3	2075.7
36	1346.2	1028.7	1016.0	914.4	901.7	895.4	889.0	325.4	201.7	173.0	14.2	1200.2	24	79.2	1143.1	2251.2
38	1460.5	1098.6	1073.2	965.2	952.5	946.2	939.8	352.6	215.9	190.5	19.1	1289.1	20	91.9	1535.4	2836.4
40	1511.3	1162.1	1127.3	1016.0	1003.3	997.0	990.6	363.5	223.8	196.9	20.6	1339.9	24	91.9	1642.0	3148.0
42	1562.1	1212.9	1176.3	1066.8	1054.1	1047.8	1041.4	371.3	231.6	206.2	20.6	1390.7	24	91.9	1796.3	3481.4
44	1648.0	1270.0	1234.9	1117.6	1104.9	1098.6	1092.2	390.7	242.8	214.4	22.4	1463.5	24	98.6	1950.5	4061.5
46	1733.6	1333.5	1292.4	1168.4	1155.7	1149.4	1143.0	411.0	255.5	225.6	22.4	1536.7	24	104.6	2104.7	4729.2
48	1784.4	1384.3	1343.2	1219.2	1206.5	1200.2	1193.8	419.1	263.7	233.4	23.9	1587.5	24	104.6	2258.9	5170.1

All the components can be substituted with equivalent or higher-class materials.

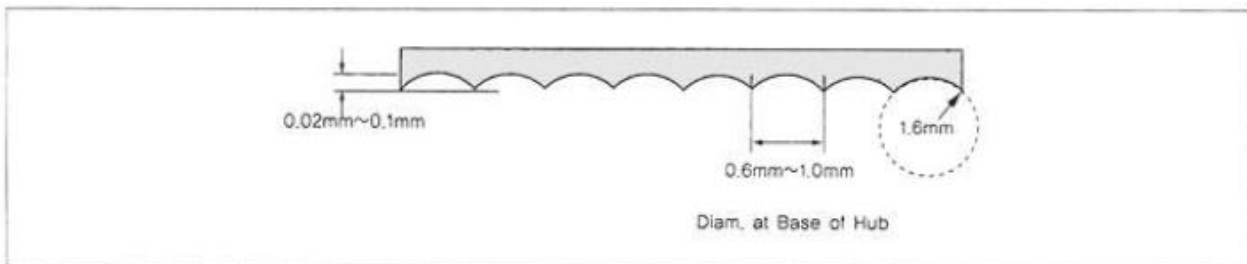
FLANGES WCB/SS04/SS316 Ref.1200A / PN 10-16

FINISH & TOLERANCE

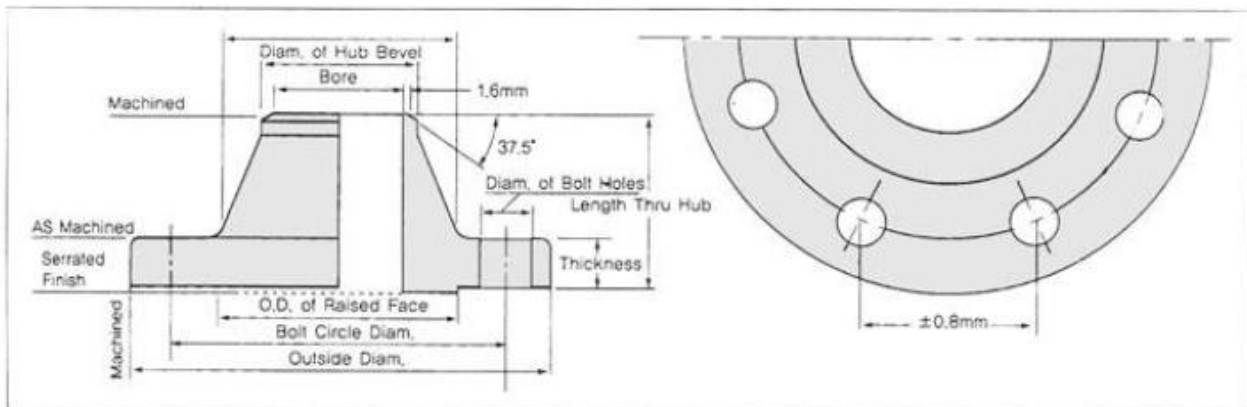
ANSI B16.47 SER.B Forged Flanges

1. Standard Finishes for Contact Face of Flanges

The flange face shall have a serrated finish consisting of 20 to 40 grooves per inch, 0.002 in. to 0.005 in. deep, cut spirally or concentrically with a round-nose tool.



2. Dimensional Tolerances for ASME B16.47 SER. B Flanges.



Dimension	Tolerance
outside diameter of raised face	± 0.8mm
Flange thickness	+ 4.8mm, - 0mm
Length thru hub	± 3.0mm
Diam. of hub at bevel	+ 4.1mm, - 0.8mm
Bolt circle diameter	± 1.6mm
Center-to-center of adjacent bolt holes	± 0.8mm
Bore	+ 3.0mm, - 1.6mm
Outside diameter	± 3.0mm
Diameter at base of hub	± 3.0mm

Notes

(1) Flanges shall have bearing surfaces for bolting that are parallel to the flange face within 1 degree. Any back facing or spot facing required to accomplish parallelism between the flange face and nut bearing surface on the back of the flange shall not reduce the flange thickness.

(2) Tolerance for the welding end of a welding neck flange shall be in conformance with ANSI B16.25.

(3) Other tolerances than specified the table shall be in accordance with ANSI B16.5.

(4) The flange shall be either back-faced or spot-faced at the bolt-holes on the flange back if the nut bearing surface at the back of the flange is not parallel with the flange face within the tolerances listed in Note, if the fillet at the hub interferes with the nut bearing surface or if the flange thickness exceed the minimum required thickness by more than 0.19 inch (4.8 millimeters). The nut bearing surface is the spot-facing diameter at the bolt-holes as given in MSS SP-9. Spot-facing shall be in accordance with MSS SP-9.

(5) Tolerances marked ' are not covered in API 605.

All the components can be substituted with equivalent or higher-class materials.

FLANGES WCB/SS04/SS316

Ref.1200A / PN 10-16

MATERIAL SPECIFICATIONS

A. MATERIALS

- The Steel used in the manufacture of these flanges shall be selected to meet the following requirements.
- The F48 and higher grades of Class 400, 600 and 900 flanges shall be killed steel.
- The steel used shall be suitable for field welding to other flanges fittings, or pipe manufactured under ASTM specifications A105, A53, A106, A381 or API Standards 5L and 5LX.
- The steel used shall have a maximum carbon content of 0.35 and a carbon equivalent computed by the following equation.

$$C_E = C + \frac{Mn}{6} + \frac{Si+Cr+Mo}{5} + \frac{Ni+Cu}{15}$$

that should not exceed 50%, based on check analysis, if the carbon equivalent factor exceeds 0.50%, the acceptance of the flanges shall be based on agreement of customer.

- The choice and used of alloying elements, combined with the elements within the limits prescribed in paragraph A. d. to give the required tensile properties prescribed in paragraph A. f. shall be made by AJF. and reported in the chemical analysis to identify the type of steel.
- The steel used shall have tensile properties conforming to the requirements prescribed in following table.

B. HEAT TREATMENT

The F42 and higher grades of flanges of all pressure classes and the class 400 and higher classes of Grade F36 flanges shall be normalized or quenched and tempered.

C. TEST SPECIMEN

The test specimens may be taken from the forgings or, at the manufactures option, from the billets or forging bar entering into the finished product, provided such test blank has undergone relatively the same forming and the equivalent heat treatment as the finished flange. The dimensions of the test blank must be such as to adequately reflect the heat treatment properties of the hub of the flange.

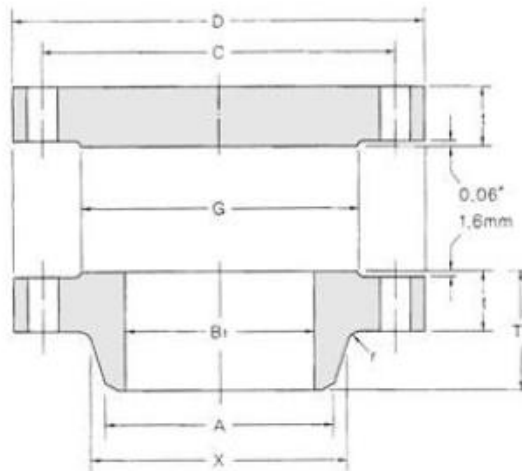
MSS SP44 FORGED FLANGES

Grade	Yield Point Min.		Tensile Strength Min.		Elongation in 2 in. Min Recent
	KSI	Mpa	KSI	Mpa	
F36	36	248	60	414	20
F42	42	290	60	414	20
F46	46	317	60	414	20
F48	48	331	62	427	20
F50	50	345	64	441	20
F52	52	359	66	455	20
F56	56	386	68	469	20
F60	60	414	75	517	20
F65	65	448	77	531	18

All the components can be substituted with equivalent or higher-class materials.

FLANGES WCB/SS04/SS316

Ref.1200A / PN 10-16



CLASS 150 FLANGES

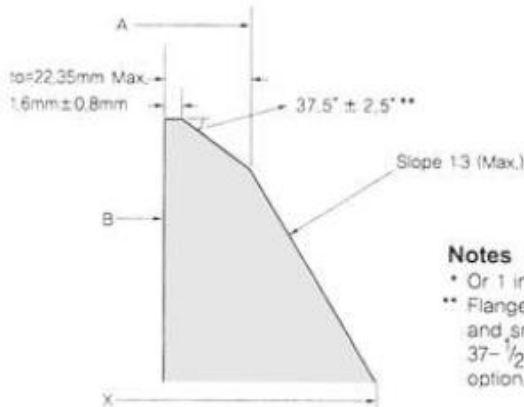
ASME B16.47 SER.A(MSS SP 44)

Unit:mm

Nominal Pipe Size	Outside Diam.	O.D of Raised Face	Diam. at Base of Hub	Thickness	BORE		Length Thru Hub
					Wall Thickness		
					9.5mm	12.7mm	
	D	G	X	t	B1		T1
12	483	381.0	365.3	31.8	304.8	298.5	114.3
14	533	412.8	400.1	35.1	336.6	330.2	127.0
16	597	469.9	457.2	36.6	387.4	381.0	127.0
18	635	533.4	505.0	39.6	438.2	431.8	139.7
20	699	584.2	558.8	42.9	489.0	482.6	144.5
22	749	641.4	609.6	46.0	539.8	533.4	149.4
24	813	692.2	663.4	47.8	590.6	584.2	152.4
26	870	749.3	676.1	68.3	641.4	635.0	120.7
28	927	800.1	726.9	71.4	692.2	685.8	125.5
30	984	857.3	781.1	74.7	743.0	736.6	136.7
32	1060	914.4	831.9	80.8	793.8	787.4	144.5
34	1111	965.2	882.7	82.6	844.6	838.2	149.4
36	1168	1022.4	933.5	90.4	895.4	889.0	157.0
38	1238	1073.2	990.6	87.4	946.2	939.8	157.2
40	1289	1124.0	1041.4	90.4	997.0	990.6	163.6
42	1346	1193.8	1092.2	96.8	1047.8	1041.4	171.5
44	1403	1244.6	1143.0	101.6	1098.6	1092.2	177.8
46	1454	1295.4	1196.8	103.1	1149.4	1143.0	185.7
48	1511	1358.9	1247.6	108.0	1200.2	1193.8	192.0
50	1568	1409.7	1301.8	111.3	1251.0	1244.6	203.2
52	1626	1460.5	1352.6	115.8	1301.8	1295.4	209.6
54	1683	1511.3	1403.4	120.7	1352.6	1346.2	215.9
56	1746	1574.8	1457.5	124.0	1403.4	1397.0	228.6
58	1803	1625.6	1508.3	128.5	1454.2	1447.8	235.0
60	1854	1676.4	1559.1	131.8	1505.0	1498.6	239.8

All the components can be substituted with equivalent or higher-class materials.

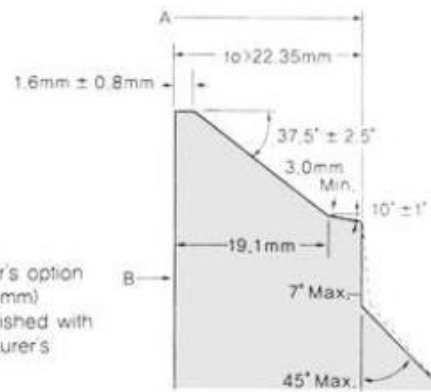
FLANGES WCB/SS04/SS316 Ref.1200A / PN 10-16



BEVEL FOR WALL THICKNESS(t_o)
0.88" IN.(22.35mm) OR LESS.

Notes

- * Or 1 inch at manufacturer's option
- ** Flanges sizes 24" (609.6mm) and smaller may be furnished with 37- $\frac{1}{2}$ ° bevel at manufacturer's option.



BEVEL FOR WALL THICKNESS(t_o)
GREATER THAN 0.88 IN.(22.35mm)

WELDING-ENDS FOR WELDING-NECK FLANGES

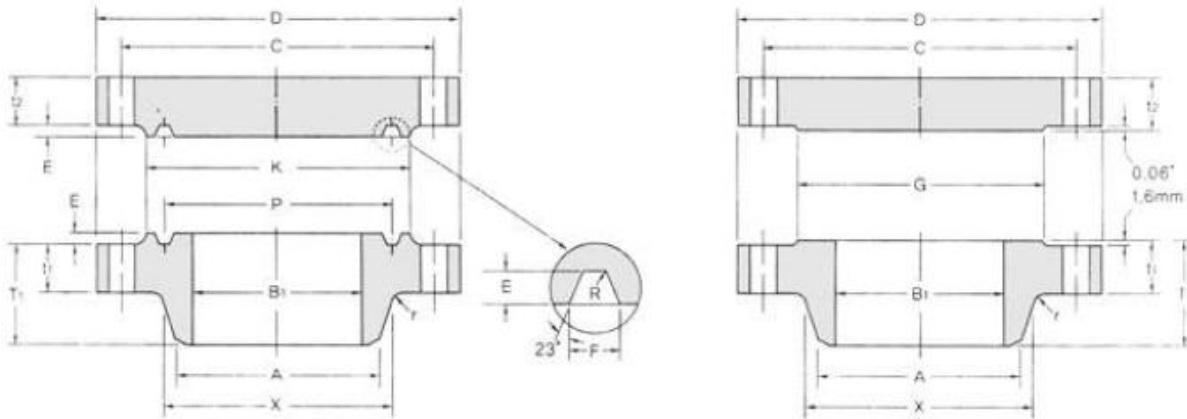
Unit:mm

Nominal Pipe Size	Diam. of Hub Bevel	Radius of Fillet	DRILLING			Approximate Weight(kg)	
			Bolt Circle Diam	Number of Holes	Diam of Holes	Weld-neck	Blind
12	304.8	9.7	431.8	12	25.4	38.98	43.70
14	355.6	9.7	476.3	12	28.4	51.71	59.42
16	406.4	9.7	539.8	16	28.4	64.41	77.11
18	457.2	9.7	577.9	16	31.8	74.84	94.80
20	508.0	9.7	635.0	20	31.8	89.36	123.38
22	558.8	9.7	692.2	20	35.1	112.00	-
24	609.6	9.7	749.3	20	35.1	119.66	188.24
26	660.4	9.7	806.5	24	35.1	136.10	318.40
28	711.2	11.2	863.6	28	35.1	156.50	377.80
30	762.0	11.2	914.4	28	35.1	181.40	445.40
32	812.8	11.2	977.9	28	41.1	229.10	561.10
34	863.6	12.7	1028.7	32	41.1	244.90	627.80
36	914.4	12.7	1085.9	32	41.1	290.30	760.20
38	965.2	12.7	1149.4	32	41.1	326.60	825.10
40	1016.0	12.7	1200.2	36	41.1	351.50	925.30
42	1066.8	12.7	1257.3	36	41.1	403.70	1080.00
44	1117.6	12.7	1314.5	40	41.1	449.10	1232.40
46	1168.4	12.7	1365.3	40	41.1	480.80	1343.10
48	1219.2	12.7	1422.4	44	41.1	537.50	1518.70
50	1270.0	12.7	1479.6	44	47.8	576.10	1685.60
52	1320.8	12.7	1536.7	44	47.8	639.60	1885.20
54	1371.6	12.7	1593.9	44	47.8	719.00	2104.30
56	1422.4	12.7	1651.0	48	47.8	798.30	2327.90
58	1473.2	12.7	1708.2	48	47.8	868.60	2574.20
60	1524.0	12.7	1759.0	52	47.8	927.60	2791.50

All the components can be substituted with equivalent or higher-class materials.

FLANGES WCB/SS04/SS316

Ref.1200A / PN 10-16



CLASS 300 FLANGES

ASME B16.47 SER.A(MSS SP 44)

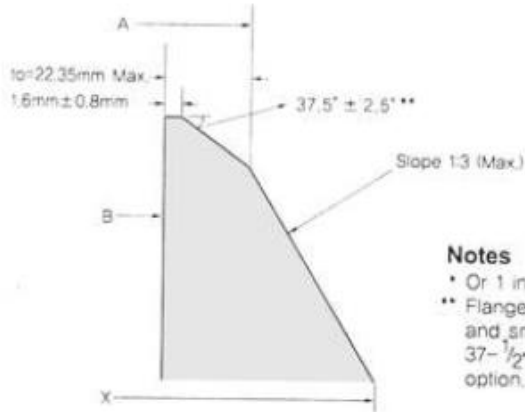
Unit:mm

Nominal Pipe Size	Outside Diam.	O.D of Raised Face	Diam. at Base of Hub	Thickness		BORE		Length Thru Hub	Diam. of Hub at Bevel	Radius of Fillet
						Wall Thickness				
						9.5mm	12.7mm			
D	G	X	t1	t2	B1	T1	A	r		
12	521	381.0	374.7	50.8	50.8	304.8	298.5	130.0	304.8	9.7
14	584	412.8	425.5	53.8	53.8	336.6	330.2	142.7	355.6	9.7
16	648	469.9	482.6	57.2	57.2	387.4	381.0	146.1	406.4	9.7
18	711	533.4	533.4	60.5	60.5	468.2	431.8	158.8	457.2	9.7
20	775	584.2	587.2	63.5	63.5	489.0	482.6	162.1	508.0	9.7
22	838	641.4	641.4	66.5	66.5	539.8	533.4	165.1	558.8	9.7
24	914	692.2	701.5	69.9	69.9	590.6	584.2	168.1	609.6	9.7
26	972	749.3	720.9	79.2	84.1	641.4	635.0	184.2	660.4	9.7
28	1035	800.1	774.7	85.9	90.4	692.2	685.8	196.9	711.2	11.2
30	1092	857.3	827.0	91.9	95.3	743.0	736.6	209.6	762.0	11.2
32	1149	914.4	881.1	98.6	100.1	793.8	787.4	222.3	812.8	11.2
34	1207	965.2	936.8	101.6	104.6	844.6	838.2	231.6	863.6	12.7
36	1270	1022.4	990.6	104.6	111.3	895.4	889.0	241.3	914.4	12.7
38	1168	1028.7	993.6	108.0	108.0	946.2	939.8	180.8	965.2	12.7
40	1238	1085.9	1047.8	114.3	114.3	997.0	990.6	193.5	1016.0	12.7
42	1289	1136.7	1098.6	119.1	119.1	1047.8	1041.4	200.2	1066.8	12.7
44	1353	1193.8	1149.4	124.0	124.0	1098.6	1092.2	206.2	1117.6	12.7
46	1416	1244.6	1203.5	128.5	128.5	1149.4	1143.0	215.9	1168.4	12.7
48	1467	1301.8	1254.3	133.4	133.4	1200.2	1193.8	223.8	1219.2	12.7
50	1530	1358.9	1305.1	139.7	139.7	1251.0	1244.6	231.6	1270.0	12.7
52	1581	1409.7	1355.9	144.5	144.5	1301.8	1295.4	238.3	1320.8	12.7
54	1657	1466.9	1409.7	152.4	152.4	1352.6	1346.2	252.5	1371.6	12.7
56	1708	1517.7	1463.5	153.9	153.9	1403.4	1397.0	260.4	1422.4	12.7
58	1759	1574.8	1514.3	158.8	158.8	1454.2	1447.8	266.7	1473.2	12.7
60	1810	1625.6	1565.1	163.6	163.6	1505.0	1498.6	273.1	1524.0	12.7

TECHNICAL DATA SHEET

All the components can be substituted with equivalent or higher-class materials.

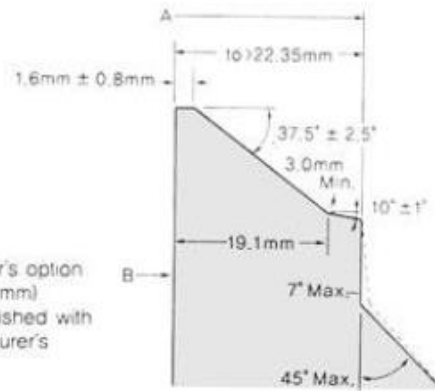
FLANGES WCB/SS04/SS316 Ref.1200A / PN 10-16



BEVEL FOR WALL THICKNESS(t_o)
0.88" IN.(22.35mm) OR LESS.

Notes

- * Or 1 inch at manufacturer's option
- ** Flanges sizes 24" (609.6mm) and smaller may be furnished with 37- $\frac{1}{2}$ ° bevel at manufacturer's option.



BEVEL FOR WALL THICKNESS(t_o)
GREATER THAN 0.88 IN.(22.35mm)

WELDING-ENDS FOR WELDING-NECK FLANGES

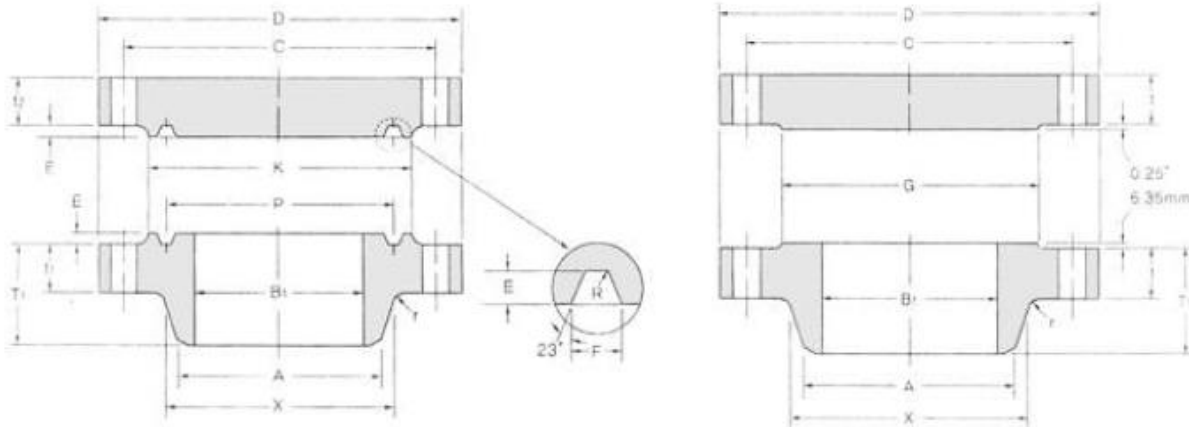
Unit:mm

Nominal Pipe Size	DRILLING			Pitch Dima	GROOVE DIMENSIONS			Diam. of Raised Face	Ring and Groove Number	Approximate Weight(kg)	
	Bolt Circle Diam	Number of Holes	Diam of Holes		Width	Depth	Radius			Weld-neck	Blind
12	450.9	16	31.8	381.0	11.9	7.9	0.8	412.8	R57	64.41	78.90
14	514.4	20	31.8	419.1	11.9	7.9	0.8	457.2	R61	88.30	107.05
16	571.5	20	35.1	469.9	11.9	7.9	0.8	508.0	R65	112.94	139.25
18	628.7	24	35.1	533.4	11.9	7.9	0.8	574.5	R69	138.34	176.90
20	685.8	24	35.1	584.2	13.5	9.5	1.5	635.0	R73	167.37	223.17
22	743.0	24	41.1	635.0	15.1	11.1	1.5	685.8	R81	213.00	-
24	812.8	24	41.1	692.2	16.7	11.1	1.5	749.3	R77	235.41	342.00
26	876.3	28	44.5	749.3	19.8	12.7	1.5	809.8	R93	274.40	489.00
28	939.8	28	44.5	800.1	19.8	12.7	1.5	860.6	R94	337.90	596.50
30	997.0	28	47.8	857.3	19.8	12.7	1.5	917.4	R95	394.60	699.90
32	1054.1	28	50.8	914.4	23.0	14.3	1.5	984.3	R96	455.90	814.20
34	1104.9	28	50.8	965.2	23.0	14.3	1.5	1035.1	R97	519.40	938.00
36	1168.4	32	53.8	1022.4	23.0	14.3	1.5	1092.2	R98	578.30	1105.00
38	1092.2	32	41.1	315.30						907.70	
40	1155.7	32	44.5	381.00						1079.60	
42	1206.5	32	44.5							430.90	1219.30
44	1263.7	32	47.8							478.50	1396.60
46	1320.8	28	50.8							560.20	1587.10
48	1371.6	32	50.8							626.00	1767.20
50	1428.8	32	53.8							694.00	2014.90
52	1479.6	32	53.8							753.00	2225.40
54	1549.4	28	60.5							929.90	2578.30
56	1600.2	28	60.5							977.50	2766.10
58	1651.0	32	60.5							1029.70	3025.10
60	1701.8	32	60.5							1120.40	3299.50

All the components can be substituted with equivalent or higher-class materials.

FLANGES WCB/SS04/SS316

Ref.1200A / PN 10-16



CLASS 400 FLANGES

ASME B16.47 SER.A (MSS SP 44)

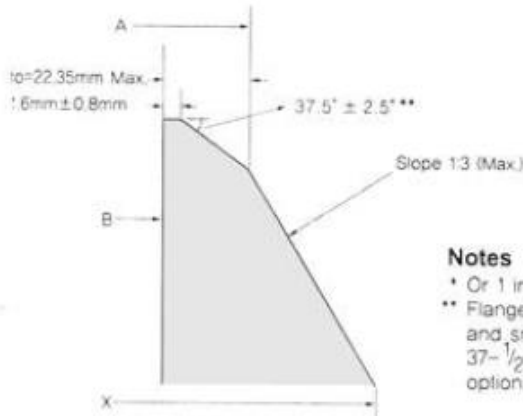
Unit:mm

Nominal Pipe Size	Outside Diam.	O.D of Raised Face	Diam. at Base of Hub	Thickness		BORE		Length Thru Hub	Diam. of Hub at Bevel	Radius of Fillet
						Wall Thickness				
						9.5mm	12.7mm			
D	G	X	t1	t2	B1	T1	A	r		
12	521	381.0	374.7	57.2	57.2	304.8	298.5	136.7	323.9	11.2
14	584	412.8	425.5	60.5	60.5	336.6	330.2	149.4	355.6	11.2
16	648	469.9	482.6	63.5	63.5	387.4	381.0	152.4	406.4	11.2
18	711	533.4	533.4	66.5	66.5	438.2	431.8	165.1	457.2	11.2
20	775	584.2	587.2	69.9	69.9	489.0	482.6	168.1	508.0	11.2
22	838	641.4	641.4	73.2	73.2	539.8	533.4	171.5	558.8	11.2
24	914	692.2	701.5	76.2	76.2	590.6	584.2	174.8	609.6	11.2
26	972	749.3	726.9	88.9	98.6	641.4	635.0	193.5	660.4	11.2
28	1035	800.1	782.6	95.3	104.6	692.2	685.8	206.2	711.2	12.7
30	1092	857.3	836.7	101.6	111.3	743.0	736.6	218.9	762.0	12.7
32	1149	914.4	889.0	108.0	115.8	793.8	787.4	231.6	812.8	12.7
34	1207	965.2	944.6	111.3	122.2	844.6	838.2	241.3	863.6	14.2
36	1270	1022.4	1000.3	114.3	128.5	895.4	889.0	251.0	914.4	14.2
38	1207	1035.1	1003.3	124.0	124.0	946.2	939.8	206.2	965.2	14.2
40	1270	1092.2	1054.1	130.0	130.0	997.0	990.6	215.9	1016.0	14.2
42	1321	1143.0	1107.9	133.4	133.4	1047.8	1041.4	223.8	1066.8	14.2
44	1384	1200.2	1158.7	139.7	139.7	1098.6	1092.2	233.4	1117.6	14.2
46	1441	1257.3	1212.9	146.1	146.1	1149.4	1143.0	244.3	1168.4	14.2
48	1511	1308.1	1267.0	152.4	152.4	1200.2	1193.8	257.0	1219.2	14.2
50	1568	1361.9	1320.8	157.2	158.8	1251.0	1244.6	268.2	1270.0	14.2
52	1619	1412.7	1371.6	162.1	163.6	1301.8	1295.4	276.4	1320.8	14.2
54	1702	1470.2	1425.4	169.9	171.5	1352.6	1346.2	289.1	1371.6	14.2
56	1753	1527.0	1479.6	174.8	176.3	1403.4	1397.0	298.5	1422.4	14.2
58	1803	1577.8	1530.4	177.8	180.8	1454.2	1447.8	306.3	1473.2	14.2
60	1886	1635.3	1584.5	185.7	189.0	1505.0	1498.6	319.0	1524.0	14.2

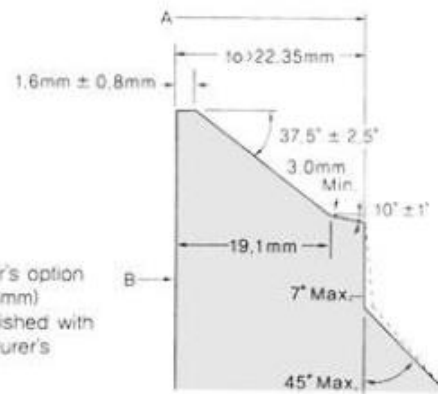
TECHNICAL DATA SHEET

All the components can be substituted with equivalent or higher-class materials.

FLANGES WCB/SS04/SS316 Ref.1200A / PN 10-16



BEVEL FOR WALL THICKNESS(t_o)
0.88" IN.(22.35mm) OR LESS.



BEVEL FOR WALL THICKNESS(t_o)
GREATER THAN 0.88 IN.(22.35mm)

Notes

- * Or 1 inch at manufacturer's option
- ** Flanges sizes 24" (609,6mm) and smaller may be furnished with 37-1/2° bevel at manufacturer's option.

WELDING-ENDS FOR WELDING-NECK FLANGES

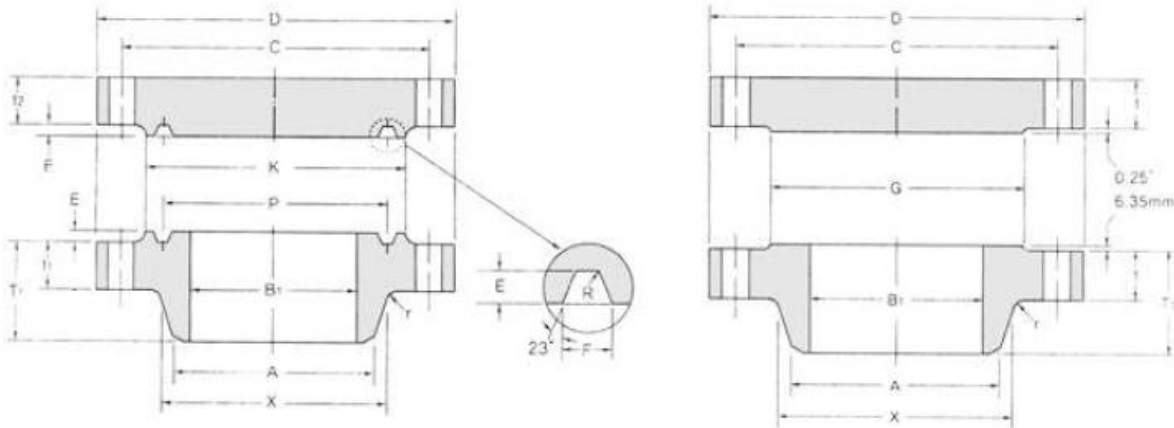
Unit:mm

Nominal Pipe Size	DRILLING			Pitch Dima	GROOVE DIMENSIONS			Diam. of Raised Face	Ring and Groove Number	Approximate Weight(kg)	
	Bolt Circle Diam	Number of Holes	Diam of Holes		Width	Depth	Radius			Weid-neck	Blind
12	450.9	16	35.1	381.0	11.9	7.9	0.8	412.8	R57	72.57	98.00
14	514.4	20	35.1	419.1	11.9	7.9	0.8	457.2	R61	105.69	131.66
16	571.5	20	38.1	469.9	11.9	7.9	0.8	508.0	R65	133.30	167.00
18	628.7	24	38.1	533.4	11.9	7.9	0.8	574.5	R69	158.90	206.57
20	685.8	24	41.1	584.2	13.5	9.5	1.5	635.0	R73	193.00	261.00
22	743.0	24	44.5	635.0	15.1	11.1	1.5	685.8	R81	235.00	-
24	812.8	24	47.8	692.2	16.7	11.1	1.5	749.3	R77	281.48	395.00
26	876.3	28	47.8	749.3	19.8	12.7	1.5	809.8	R93	294.80	572.90
28	939.8	28	50.8	800.1	19.8	12.7	1.5	860.6	R94	356.10	690.40
30	997.0	28	53.8	857.3	19.8	12.7	1.5	917.4	R95	410.50	817.40
32	1054.1	28	53.8	914.4	23.0	14.3	1.5	984.3	R96	483.10	942.10
34	1104.9	28	53.8	965.2	23.0	14.3	1.5	1035.1	R97	544.30	1095.40
36	1168.4	32	53.8	1022.4	23.0	14.3	1.5	1092.2	R98	607.80	1276.90
38	1117.6	32	47.8							424.10	1111.30
40	1174.8	32	50.8							494.40	1291.90
42	1225.6	32	50.8							539.80	1432.90
44	1282.7	32	53.8							623.70	1648.80
46	1339.9	36	53.8							691.70	1868.80
48	1403.4	28	60.5							811.90	2143.70
50	1460.5	32	60.5							884.50	2405.40
52	1511.3	32	60.5							963.90	2641.30
54	1581.2	28	66.5							1163.50	3058.20
56	1632.0	32	66.5							1229.30	3334.90
58	1682.8	32	66.5							1465.10	3622.40
60	1752.6	32	73.2							1732.80	4139.60

All the components can be substituted with equivalent or higher-class materials.

FLANGES WCB/SS04/SS316

Ref.1200A / PN 10-16



CLASS 600 FLANGES

ASME B16.47 SER.A(MSS SP 44)

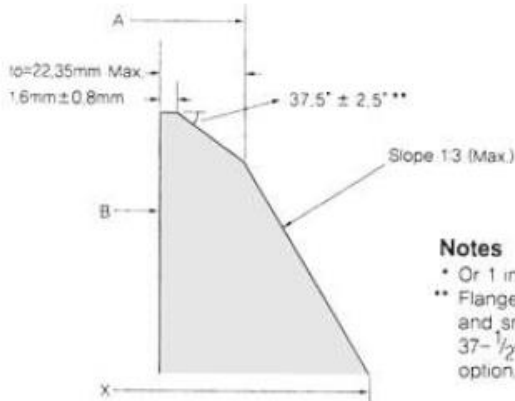
Unit:mm

Nominal Pipe Size	Outside Diam.	O.D of Raised Face	Diam. at Base of Hub	Thickness		BORE		Length Thru Hub	Diam. of Hub at Bevel	Radius of Fillet
						Wall Thickness				
						9.5mm	12.7mm			
D	G	X	t1	t2	B1		T1	A	r	
12	559	381.0	400.1	66.5	66.5	304.8	298.5	155.4	323.9	11.2
14	603	412.8	431.8	69.9	69.9	336.6	330.2	165.1	355.6	11.2
16	686	469.9	495.3	76.2	76.2	387.4	381.0	177.8	406.4	11.2
18	743	533.4	546.1	82.6	82.6	438.2	431.8	184.2	457.2	11.2
20	813	584.2	609.6	88.9	88.9	489.0	482.6	190.5	508.0	11.2
22	870	641.2	666.8	95.3	95.3	539.8	533.4	196.9	558.8	11.2
24	940	692.2	717.6	101.6	101.6	590.6	584.2	203.2	609.6	11.2
26	1016	749.3	747.8	108.0	125.5	641.4	635.0	222.3	660.4	12.7
28	1073	800.1	803.1	111.3	131.8	692.2	685.8	235.0	711.2	12.7
30	1130	857.3	862.1	114.3	139.7	743.0	736.6	247.7	762.0	12.7
32	1194	914.4	917.4	117.3	147.6	793.8	787.4	260.4	812.8	12.7
34	1245	965.2	973.1	120.7	153.9	844.6	838.2	269.7	863.6	14.2
36	1314	1022.4	1031.7	124.0	162.1	895.4	889.0	282.4	914.4	14.2
38	1270	1054.1	1022.4	152.4	155.4	946.2	939.8	254.0	965.2	14.2
40	1321	1111.3	1073.2	158.8	162.1	997.0	990.6	263.7	1016.0	14.2
42	1403	1168.4	1127.3	168.1	171.5	1047.8	1041.4	279.4	1066.8	14.2
44	1454	1225.6	1181.1	173.0	177.8	1098.6	1092.2	289.1	1117.6	14.2
46	1511	1276.4	1234.9	179.3	185.7	1149.4	1143.0	300.0	1168.4	14.2
48	1594	1333.5	1289.1	189.0	195.3	1200.2	1193.8	316.0	1219.2	14.2
50	1670	1384.3	1343.2	196.9	203.2	1251.0	1244.6	328.7	1270.0	14.2
52	1721	1435.1	1394.0	203.2	209.6	1301.8	1295.4	336.6	1320.8	14.2
54	1778	1492.3	1447.8	209.6	217.4	1352.6	1346.2	349.3	1371.6	14.2
56	1854	1543.1	1501.6	217.4	225.6	1403.4	1397.0	362.0	1422.4	15.7
58	1905	1600.2	1552.4	222.3	231.6	1454.2	1447.8	369.8	1473.2	15.7
60	1994	1657.4	1609.9	233.4	242.8	1505.0	1498.6	388.9	1524.0	17.5

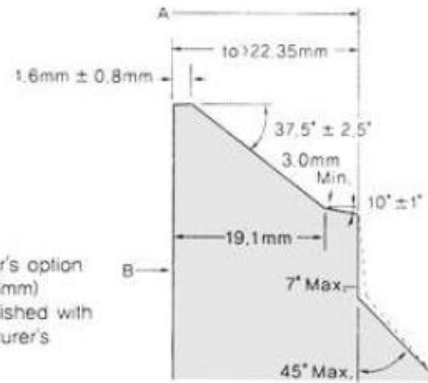
TECHNICAL DATA SHEET

All the components can be substituted with equivalent or higher-class materials.

FLANGES WCB/SS04/SS316 Ref.1200A / PN 10-16



BEVEL FOR WALL THICKNESS(to)
0.88" IN.(22.35mm) OR LESS.



BEVEL FOR WALL THICKNESS(to)
GREATER THAN 0.88 IN.(22.35mm)

Notes

- * Or 1 inch at manufacturer's option
- ** Flanges sizes 24" (609.6mm) and smaller may be furnished with 37-1/2° bevel at manufacturer's option.

WELDING-ENDS FOR WELDING-NECK FLANGES

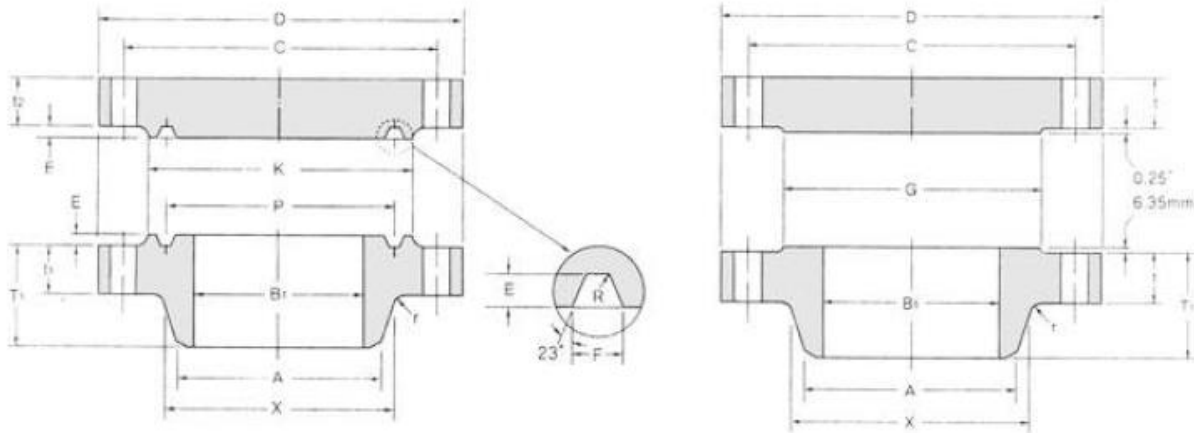
Unit:mm

Nominal Pipe Size	DRILLING			Pitch Dima P	GROOVE DIMENSIONS			Diam. of Raised Face K	Ring and Groove Number	Approximate Weight(kg)	
	Bolt Circle Diam C	Number of Holes	Diam of Holes		Width F	Depth E	Radius R			Weld-neck	Blind
12	489.0	20	35.1	381.0	11.9	7.9	0.8	412.8	R57	102.51	132.00
14	527.1	20	38.1	419.1	11.9	7.9	0.8	457.2	R61	121.56	158.00
16	603.3	20	41.1	469.9	11.9	7.9	0.8	508.0	R65	177.06	224.73
18	654.1	20	44.5	533.4	11.9	7.9	0.8	574.5	R69	215.65	285.00
20	723.9	24	44.5	584.2	13.5	9.5	1.5	635.0	R73	267.86	365.00
22	777.7	24	47.8	635.0	15.1	11.1	1.5	685.8	R81	330.00	-
24	838.2	24	50.8	692.2	16.7	11.1	1.5	749.3	R77	372.00	533.45
26	914.4	28	50.8	749.3	19.8	12.7	1.5	809.8	R93	426.40	797.90
28	965.2	28	53.8	800.1	19.8	12.7	1.5	860.6	R94	480.80	934.90
30	1022.4	28	53.8	857.3	19.8	12.7	1.5	917.4	R95	548.90	1099.10
32	1079.5	28	60.5	914.4	23.0	14.3	1.5	984.3	R96	623.70	1295.50
34	1130.3	28	60.5	965.2	23.0	14.3	1.5	1035.1	R97	698.50	1468.30
36	1193.8	28	66.5	1022.4	23.0	14.3	1.5	1092.2	R98	773.40	1724.60
38	1162.1	28	60.5							666.80	1544.10
40	1212.9	32	60.5							739.40	1740.90
42	1282.7	28	66.5							920.80	2079.80
44	1333.5	32	66.5							979.80	2315.60
46	1390.7	32	66.5							1093.20	2611.80
48	1460.5	32	73.2							1295.00	3055.90
50	1524.0	28	79.2							1510.50	3490.50
52	1574.8	32	79.2							1614.80	3822.00
54	1632.0	32	79.2							1778.10	4233.40
56	1695.5	32	85.9							1941.40	4776.00
58	1746.3	32	85.9							2104.70	5177.40
60	1822.5	28	91.9							2268.00	5945.80

All the components can be substituted with equivalent or higher-class materials.

FLANGES WCB/SS04/SS316

Ref.1200A / PN 10-16



CLASS 900 FLANGES

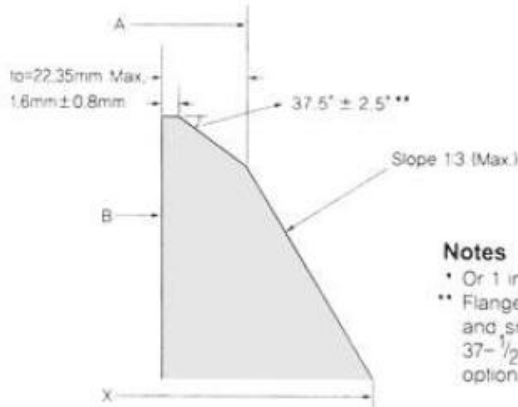
ASME B16.47 SER.A(MSS SP 44)

Unit:mm

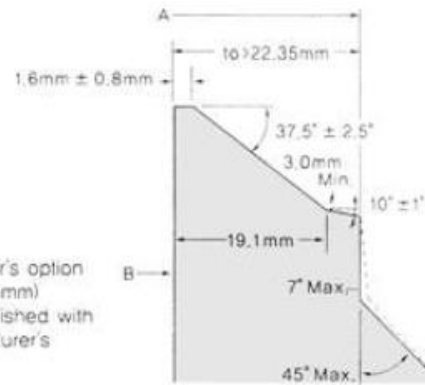
Nominal Pipe Size	Outside Diam.	O.D of Raised Face	Diam. at Base of Hub	Thickness		BORE		Length Thru Hub	Diam. of Hub at Bevel	Radius of Fillet
				Welding Neck	Blind	Wall Thickness				
						9.5mm	12.7mm			
D	G	X	t1	t2	B1		T1	A	r	
12	610	381.0	419.1	79.2	79.2	304.8	298.5	200.2	323.9	11.2
14	641	412.8	450.9	85.9	85.9	336.6	330.2	212.9	355.6	11.2
16	705	469.9	508.0	88.9	88.9	387.4	381.0	215.9	406.4	11.2
18	787	533.4	565.2	101.6	101.6	438.2	431.8	228.6	457.2	11.2
20	857	584.2	622.3	108.0	108.0	489.0	482.6	247.7	508.0	11.2
24	1041	692.2	749.3	139.7	139.7	590.6	584.2	292.1	609.6	11.2
26	1086	749.3	774.7	139.7	160.3	641.4	635.0	285.8	660.4	11.2
28	1168	800.1	831.9	142.7	171.5	692.2	685.8	298.5	711.2	12.7
30	1232	857.3	889.0	149.4	182.4	743.0	736.6	311.2	762.0	12.7
32	1314	914.4	946.2	158.8	193.5	793.8	787.4	330.2	812.8	12.7
34	1397	965.2	1006.3	165.1	204.7	844.6	838.2	349.3	863.6	14.2
36	1461	1022.4	1063.8	171.5	214.4	895.4	889.0	362.0	914.4	14.2
38	1461	1098.6	1073.2	190.5	215.9	946.2	939.8	352.6	965.2	19.1
40	1511	1162.1	1127.3	196.9	223.8	997.0	990.6	363.5	1016.0	20.6
42	1562	1212.9	1176.3	206.2	231.6	1047.8	1041.4	371.3	1066.8	20.6
44	1648	1270.0	1234.9	214.4	242.8	1098.6	1092.2	390.7	1117.6	22.4
46	1734	1333.5	1292.4	225.6	255.5	1149.4	1143.0	411.0	1168.4	22.4
48	1784	1384.3	1343.2	233.4	263.7	1200.2	1193.8	419.1	1219.2	23.9

All the components can be substituted with equivalent or higher-class materials.

FLANGES WCB/SS04/SS316 Ref.1200A / PN 10-16



BEVEL FOR WALL THICKNESS(to)
0.88" IN.(22.35mm) OR LESS.



BEVEL FOR WALL THICKNESS(to)
GREATER THAN 0.88 IN.(22.35mm)

Notes

- * Or 1 inch at manufacturer's option
- ** Flanges sizes 24" (609.6mm) and smaller may be furnished with 37-1/2° bevel at manufacturer's option.

WELDING-ENDS FOR WELDING-NECK FLANGES

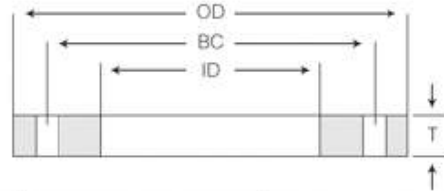
Unit:mm

Nominal Pipe Size	DRILLING			Pitch Dima	GROOVE DIMENSIONS			Diam. of Raised Face	Ring and Groove Number	Approximate Weight(kg)	
	Bolt Circle Diam	Number of Holes	Diam of Holes		Width	Depth	Radius			Weld-neck	Blind
12	533.4	20	38.1	381.0	11.9	7.9	0.8	419.1	R57	157.00	187.00
14	558.8	20	41.1	419.1	16.7	11.1	1.5	466.9	R62	181.00	224.07
16	616.0	20	44.5	469.9	16.7	11.1	1.5	523.7	R66	224.73	272.40
18	685.8	20	50.8	533.4	19.8	12.7	1.5	593.9	R70	308.72	385.90
20	749.3	20	53.8	584.2	19.8	12.7	1.5	647.7	R74	376.82	488.00
24	901.7	20	66.5	692.2	27.0	15.9	2.3	771.7	R78	685.00	905.00
26	952.5	20	73.2	749.3	30.2	17.5	2.3	831.9	R100	691.70	1163.90
28	1022.4	20	79.2	800.1	33.3	17.5	2.3	889.0	R101	821.00	1441.50
30	1085.9	20	79.2	857.3	33.3	17.5	2.3	946.2	R102	961.60	1704.60
32	1155.7	20	85.9	914.4	33.3	17.5	2.3	1003.3	R103	1154.40	2059.80
34	1225.6	20	91.9	965.2	36.5	20.6	2.3	1066.8	R104	1347.20	2460.80
36	1289.1	20	91.9	1022.4	36.5	20.6	2.3	1124.0	R105	1540.00	2816.40
38	1289.1	20	91.9							1535.40	2836.40
40	1339.9	24	91.9							1642.00	3148.00
42	1390.7	24	91.9							1796.30	3481.40
44	1463.5	24	98.6							1950.50	4061.50
46	1536.7	24	104.6							2104.70	4729.20
48	1587.5	24	104.6							2258.90	5170.10

All the components can be substituted with equivalent or higher-class materials.

FLANGES WCB/SS04/SS316 Ref.1200A / PN 10-16

AWWA C207-07 –Rings & Blinds.
CLASS B



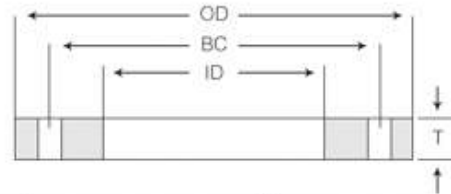
Nominal Size	Outside Diameter (OD)	Slip-on Bore (ID)	NO. of Bolt Holes	Diameter Bolt Holes	Bolt Circle (BC)	Thickness (T)		Weight Each	
						CLASS B			
						Slip-on	Blind	Slip-on	Blind
4	228.6	116.1	8	19.1	190.5	15.9	15.9	3.52	4.84
5	254	143.8	8	22.2	215.9	15.9	15.9	3.91	5.94
6	279.4	170.7	8	22.2	241.3	17.5	17.5	4.86	8
8	342.9	221.5	8	22.2	298.5	17.5	17.5	6.97	12.27
10	406.4	276.4	12	25.4	362	17.5	17.5	8.75	17
12	482.6	327.2	12	25.4	431.8	17.5	18.3	12.75	25.42
14	533.4	360.4	12	28.6	476.3	17.5	20.1	15.64	34.07
16	596.9	411.2	16	28.6	539.8	17.5	22.7	18.8	48.07
18	635	462	16	31.8	577.9	17.5	24.1	18.74	57.55
20	698.5	512.8	20	31.8	635	17.5	26.4	22.1	76.18
22	749.3	563.6	20	34.9	692.2	19.1	28.8	25.86	95.44
24	812.8	614.4	20	34.9	749.3	19.1	30.9	30.5	121.31
26	869.95	666.8	24	34.9	806.5	20.6	33.2	35.96	149.04
28	927.1	717.6	28	34.9	863.3	22.2	35.5	42.52	180.79
30	984.25	768.4	28	34.9	914.4	22.2	37.5	47.15	216.25
32	1060.5	819.2	28	41.3	977.9	23.8	40.2	59.59	267.11
34	1111.3	870	32	41.3	1028.7	23.8	42.2	62.19	307.35
36	1168.4	920.8	32	41.3	1085.9	25.4	44.5	72.51	359.84
38	1238.3	971.6	32	41.3	1149.4	25.4	47.1	83.81	429.75
40	1289.1	1022.4	36	41.3	1200.2	25.4	49.1	86.99	484.83
42	1346.2	1073.2	36	41.3	1257.3	28.6	51.4	105.72	555.26
44	1403.4	1124	40	41.3	1314.5	28.6	53.7	112.57	629.96
48	1511.3	1225.6	44	41.3	1422.4	31.8	58	138.69	790.5
54	1682.8	1378	44	47.6	1593.9	34.9	65	179.42	1095.72
60	1854.2	1530.4	52	47.6	1759	38.1	71.6	229.93	1466.79
66	2032	1682.8	52	47.6	1930.4	41.3	78.5	300.53	1942.81
72	2197.1	1835.2	60	47.6	2095.5	44.5	85.2	363.34	2466.14
78	2362.2	1987.6	64	54	2260.6	50.8		452.23	
84	2533.7	2140	64	54	2425.7	50.8		518.24	
90	2705.1	2292.4	68	61.9	2590.8	57.2		635.94	
96	2876.6	2444.8	68	61.9	2755.9	57.2		718.99	
102	3048	2597.2	72	68.3	2908.3	63.5		865.47	
108	3219.5	2749.6	72	68.3	3067.1	63.5		967.34	
120	3562.4	3054.4	76	74.6	3371.9	69.9		1267.3	
132	3905.3	3359.2	80	81	3702.1	76.2		1618.4	
144	4248.2	3664	84	87.3	4019.6	82.6		2029.5	

All the components can be substituted with equivalent or higher-class materials.

FLANGES WCB/SS04/SS316

Ref.1200A / PN 10-16

AWWA C207-07 –Rings & Blinds.
CLASS D



Nominal Size	Outside Diameter (OD)	Slip-on Bore (ID)	NO. of Bolt Holes	Diameter Bolt Holes	Bolt Circle (BC)	Thickness (T)		Weight Each	
						CLASS D			
						Slip-on	Blind	Slip-on	Blind
4	228.6	116.1	8	19.1	190.5	15.9	15.9	3.52	4.84
5	254	143.8	8	22.2	215.9	15.9	16.5	3.91	6.17
6	279.4	170.7	8	22.2	241.3	17.5	17.6	4.86	8.05
8	342.9	221.5	8	22.2	298.5	17.5	20.6	6.97	14.44
10	406.4	276.4	12	25.4	362	17.5	24.2	8.75	23.5
12	482.6	327.2	12	25.4	431.8	20.6	28.4	15.01	39.45
14	533.4	360.4	12	28.6	476.3	23.8	28.8	21.27	48.81
16	596.9	411.2	16	28.6	539.8	25.4	32.1	27.29	67.97
18	635	462	16	31.8	577.9	27	33.8	28.92	80.72
20	698.5	512.8	20	31.8	635	28.6	36.8	36.12	106.19
22	749.3	563.6	20	34.9	692.2	30.2	39.8	40.89	131.89
24	812.8	614.4	20	34.9	749.3	31.8	42.2	50.78	165.67
26	869.95	666.8	24	34.9	806.5	33.3	45.4	58.14	203.81
28	927.1	717.6	28	34.9	863.3	33.3	48.4	63.79	246.49
30	984.25	768.4	28	34.9	914.4	34.9	51	74.12	294.1
32	1060.5	819.2	28	41.3	977.9	38.1	54.6	95.4	362.79
34	1111.3	870	32	41.3	1028.7	38.1	57.2	99.56	416.59
36	1168.4	920.8	32	41.3	1085.9	41.3	60.2	117.91	486.79
38	1238.3	971.6	32	41.3	1149.4	41.3	63.7	136.28	581.21
40	1289.1	1022.4	36	41.3	1200.2	41.3	66.3	141.44	654.67
42	1346.2	1073.2	36	41.3	1257.3	44.5	69.3	164.49	748.63
44	1403.4	1124	40	41.3	1314.5	44.5	72.4	175.15	849.33
48	1511.3	1225.6	44	41.3	1422.4	47.6	78	207.61	1063.09
54	1682.8	1378	44	47.6	1593.9	54	87.2	277.62	1469.95
60	1854.2	1530.4	52	47.6	1759	57.2	96	345.2	1966.64
66	2032	1682.8	52	47.6	1930.4	63.5	105	462.08	2598.66
72	2197.1	1835.2	60	47.6	2095.5	66.7	114	544.61	3299.77
78	2362.2	1987.6	64	54	2260.6	69.9		622.26	
84	2533.7	2140	64	54	2425.7	73		744.71	
90	2705.1	2292.4	68	61.9	2590.8	76.2		847.18	
96	2876.6	2444.8	68	61.9	2755.9	82.6		1038.26	
102	3048	2597.2	72	68.3	2908.3	82.6		1125.79	
108	3219.5	2749.6	72	68.3	3067.1	85.7		1305.53	
120	3562.4	3054.4	76	74.6	3371.9	88.9		1611.74	
132	3905.3	3359.2	80	81	3702.1	98.4		2089.89	
144	4248.2	3664	84	87.3	4019.6	105		2579.82	

TECHNICAL DATA SHEET

All the components can be substituted with equivalent or higher-class materials.

FLANGES WCB/SS04/SS316
Ref.1200A / PN 10-16

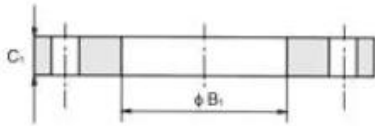
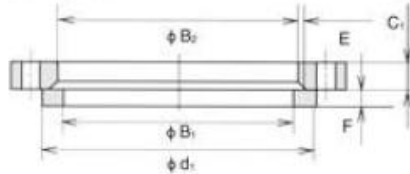
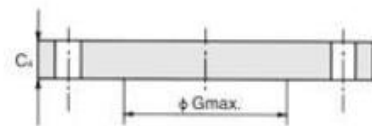
EUROPEAN STANDARDS

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TECHNICAL DATA SHEET

All the components can be substituted with equivalent or higher-class materials.

FLANGES WCB/SS04/SS316 Ref.1200A / PN 10-16

TYPE 01

TYPE 02

TYPE 05


DN	Outside diameter	Diameter of bolt circle	Diameter of bolt hole	Bolt number	Outside diameter of neck A	Bore diameters		Flange thickness			Chamfer E	Wall thickness S	Collar Thickness F	Diameter of shoulder Gmax	
						B ₁	B ₂	C ₁	C ₂	C ₄					
						Flange type									01
						01,02,05,11,12,13									
					11	01 12	02	01 02	11 12,13	05	02	11	32	05	
10	75	50	11	4	17.2	18.0	21	12	12	12	3	2	10	-	
15	80	55	11	4	21.3	22.0	25	12	12	12	3	2	10	-	
20	90	65	11	4	26.9	27.5	31	14	14	14	4	2.3	10	-	
25	100	75	11	4	33.7	34.5	38	14	14	14	4	2.6	10	-	
32	120	90	14	4	42.4	43.5	46	16	14	14	5	2.6	10	-	
40	130	100	14	4	48.3	49.5	53	16	14	14	5	2.6	10	-	
50	140	110	14	4	60.3	61.5	65	16	14	14	5	2.9	12	-	
65	160	130	14	4	76.1	77.5	81	16	14	14	6	2.9	12	55	
80	190	150	18	4	88.9	90.5	94	18	16	16	6	3.2	12	70	
100	210	170	18	4	114.3	116.0	120	18	16	16	6	3.6	14	90	
125	240	200	18	8	139.7	141.5	145	20	18	18	6	4.0	14	115	
150	265	225	18	8	168.3	170.5	174	20	18	18	6	4.5	14	140	
200	320	280	18	8	219.1	221.5	226	22	20	20	6	6.3	16	190	
250	375	335	18	12	273.0	276.5	281	24	22	22	8	6.3	18	235	
300	440	395	22	12	323.9	327.5	333	24	22	22	8	7.1	18	285	
350	490	445	22	12	355.6	359.5	365	26	22	22	8	7.1	18	330	
400	540	495	22	16	406.4	411.0	416	28	22	22	8	7.1	20	380	
450	595	550	22	16	457.0	462.0	467	30	22	24	8	7.1	20	425	
500	645	600	22	20	508.0	513.5	519	30	24	24	8	7.1	22	475	
600	755	705	26	20	610.0	616.5	622	32	30	30	8	7.1	22	575	
700	860	810	26	24	711.0		721	40	30	40	4	8	-	670	
800	975	920	30	24	813.0		824	44	30	44	4	8	-	770	
900	1075	1020	30	24	914.0		926	48	34	48	4	8	-	860	
1000	1175	1120	30	28	1016.0		1028	52	38	52	4	8	-	960	
1200	1405	1340	33	32	1219.0		1234	60	42	60	5	8.8	-	1160	
1400	1630	1560	36	36	1422		-	72	56	68	-	8.8	-	1346	
1600	1830	1760	36	40	1626		-	80	63	76	-	10	-	1546	
1800	2045	1970	39	44	1829		-	88	69	84	-	11	-	1746	
2000	2265	2180	42	48	2032		-	96	74	92	-	12.5	-	1950	

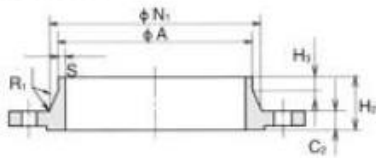
TECHNICAL DATA SHEET

All the components can be substituted with equivalent or higher-class materials.

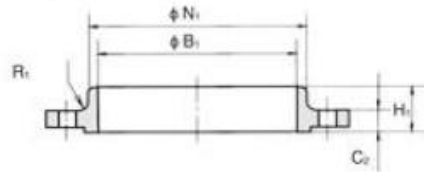
FLANGES WCB/SS04/SS316

Ref.1200A / PN 10-16

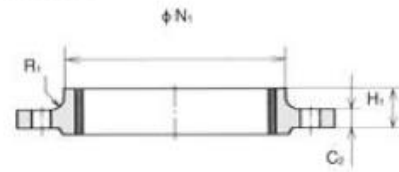
TYPE 11



TYPE 12



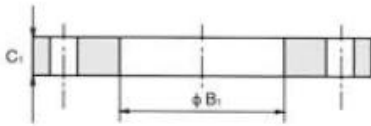
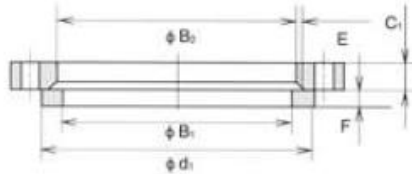
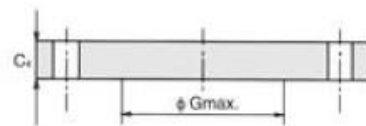
TYPE 13



DN	Raised face		Length			Neck diameters		Corner radii	APPROXIMATE WEIGHT				
	d ₁	f ₁	H ₁	H ₂	H ₃	N ₁	N ₂	R ₁					
	Flange type												
	01,05,11,12,13	12,13	11	11	11	12,13	11,12,13	Type01	Type02	Type05	Type11	Type12	
10	35	2	20	28	6	26	25	4	0.356	0.345	0.38	0.353	0.326
15	40	2	20	30	6	30	30	4	0.402	0.388	0.438	0.408	0.373
20	50	2	24	32	6	38	40	4	0.592	0.568	0.657	0.621	0.584
25	60	2	24	35	6	42	50	4	0.719	0.688	0.821	0.762	0.729
32	70	2	26	35	6	55	60	6	1.16	1.12	1.18	1.11	1.04
40	80	3	26	38	7	62	70	6	1.35	1.29	1.39	1.26	1.20
50	90	3	28	38	8	74	80	6	1.48	1.42	1.62	1.43	1.34
65	110	3	32	38	9	88	100	6	1.86	1.76	2.14	1.77	1.83
80	128	3	34	42	10	102	110	8	2.95	2.84	3.43	2.88	2.75
100	148	3	40	45	10	130	130	8	3.26	3.10	4.22	3.41	3.01
125	178	3	44	48	10	155	160	8	4.31	4.12	6.10	4.65	4.30
150	202	3	44	48	12	184	185	10	4.76	4.53	7.51	5.50	4.63
200	258	3	44	55	15	236	240	10	6.88	6.51	12.3	8.60	6.97
250	312	3	44	60	15	290	295	12	8.92	8.32	18.5	11.7	9.13
300	365	4	44	62	15	342	355	12	11.9	11.1	25.5	15.3	12.4
350	415	4	-	62	15	385	-	12	16.8	15.9	31.8	20.3	-
400	465	4	-	65	15	438	-	12	19.8	18.8	38.5	23.1	-
450	520	4	-	65	15	492	-	12	24.6	23.3	51.2	27.0	-
500	570	4	-	68	15	538	-	12	26.4	24.9	60.1	30.8	-
600	670	5	-	70	16	640	-	12	34.8	33.0	103	44.0	-
700	775	5	-	76	16	740	-	12	-	-	178	53.7	-
800	880	5	-	76	16	842	-	12	-	-	252	64.4	-
900	980	5	-	78	16	942	-	12	-	-	336	79.2	-
1000	1080	5	-	82	16	1045	-	16	-	-	435	98.6	-
1200	1295	5	-	104	20	1248	-	16	-	-	717	152	-
1400	1510	5	-	114	20	1452	-	16	-	-	1094	246	-
1600	1710	5	-	119	20	1655	-	16	-	-	1545	309	-
1800	1920	5	-	133	20	1855	-	16	-	-	2131	400	-
2000	2125	5	-	146	25	2058	-	16	-	-	2862	516	-

All the components can be substituted with equivalent or higher-class materials.

FLANGES WCB/SS04/SS316 Ref.1200A / PN 10-16

TYPE 01

TYPE 02

TYPE 05


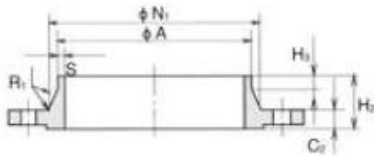
DN	Outside diameter	Diameter of bolt circle	Diameter of bolt hole	Bolt number	Outside diameter of neck A	Bore diameters		Flange thickness			Chamfer E	Wall thickness S	Collar Thickness F	Diameter of shoulder Gmax				
						B ₁	B ₂	C ₁	C ₂	C ₄								
						Flange type									01 02	11 12,13	05	02
						01,02,05,11,12,13												
10	90	60	14	4	17.2	18.0	21	14	16	16	3	2	12	-				
15	95	65	14	4	21.3	22.0	25	14	16	16	3	2	12	-				
20	105	75	14	4	26.9	27.5	31	16	18	18	4	2.3	14	-				
25	115	85	14	4	33.7	34.5	38	16	18	18	4	2.6	14	-				
32	140	100	18	4	42.4	43.5	47	18	18	18	5	2.6	14	-				
40	150	110	18	4	48.3	49.5	53	18	18	18	5	2.6	14	-				
50	165	125	18	4	60.3	61.5	65	20	18	18	5	2.9	16	-				
65	185	145	18	8	76.1	77.5	81	20	18	18	6	2.9	16	55				
80	200	160	18	8	88.9	90.5	94	20	20	20	6	3.2	16	70				
100	220	180	18	8	114.3	116.0	120	22	20	20	6	3.6	18	90				
125	250	210	18	8	139.7	141.5	145	22	22	22	6	4.0	18	115				
150	285	240	22	8	168.3	170.5	174	24	22	22	6	4.5	20	140				
200	340	295	22	8	219.1	221.5	226	24	24	24	6	6.3	20	190				
250	395	350	22	12	273.0	276.5	281	26	26	26	8	6.3	22	235				
300	445	400	22	12	323.9	327.5	333	26	26	26	8	7.1	22	285				
350	505	460	22	16	355.6	359.5	365	30	26	26	8	7.1	22	330				
400	565	515	26	16	406.4	411.0	416	32	26	26	8	7.1	24	380				
450	615	565	26	20	457.0	462.0	467	36	28	28	8	7.1	24	425				
500	670	620	26	20	508.0	513.5	519	38	28	28	8	7.1	26	475				
600	780	725	30	20	610.0	616.5	622	42	30	34	8	8.0	26	575				
700	895	840	30	24	711.0	To be specified by the purchaser	721	50	35	38	8	8.8	-	670				
800	1015	950	33	24	813.0		824	56	38	48	8	8.8	-	770				
900	1115	1050	33	28	914.0		926	62	38	50	8	12.5	-	860				
1000	1230	1160	36	28	1016.0		1028	70	44	54	8	12.5	-	960				
1200	1455	1380	39	32	1219.0		1234	83	55	66	8	12.5	-	1160				
1400	1675	1590	42	36	1422		-	-	65	-	-	14.2	-	-				
1600	1915	1820	48	40	1626		-	-	75	-	-	16	-	-				
1800	2115	2020	48	44	1829		-	-	85	-	-	17.5	-	-				
2000	2325	2230	48	48	2032		-	-	90	-	-	17.5	-	-				

All the components can be substituted with equivalent or higher-class materials.

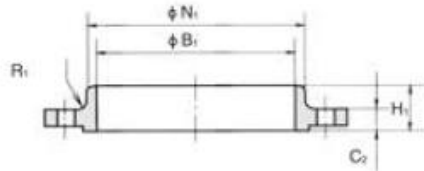
FLANGES WCB/SS04/SS316

Ref.1200A / PN 10-16

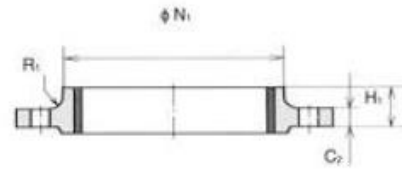
TYPE 11



TYPE 12



TYPE 13



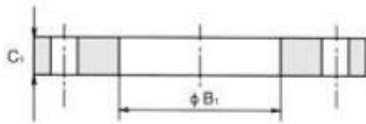
DN	Raised face		Length			Neck diameters		Corner radii	APPROXIMATE WEIGHT					
	d ₁	f ₁	H ₁	H ₂	H ₃	N ₁	N ₂	R ₁						
	Flange type									Type01	Type02	Type05	Type11	Type12
	01,05,11,12,13		12,13	11	11	11	12,13	11,12,13						
10	40	2	22	35	6	28	30	4	0.604	0.591	0.722	0.678	0.646	
15	45	2	22	38	6	32	35	4	0.670	0.654	0.813	0.768	0.722	
20	58	2	26	40	6	40	45	4	0.936	0.909	1.14	1.09	1.04	
25	68	2	28	40	6	46	52	4	1.11	1.08	1.38	1.30	1.25	
32	78	2	30	42	6	56	60	6	1.82	1.77	2.03	1.91	1.81	
40	88	3	32	45	7	64	70	6	2.08	2.02	2.35	2.15	2.06	
50	102	3	28	45	8	74	84	6	2.73	2.52	2.88	2.53	2.39	
65	122	3	32	45	10	92	104	6	3.16	3.05	3.51	3.03	2.97	
80	138	3	34	50	10	105	118	6	3.79	3.48	4.61	3.92	3.78	
100	158	3	40	52	12	131	140	8	4.39	4.20	5.65	4.62	4.38	
125	188	3	44	55	12	156	168	8	5.41	5.21	8.13	6.30	6.07	
150	212	3	44	55	12	184	195	10	7.14	6.89	10.5	7.81	7.24	
200	268	3	44	62	16	234	246	10	9.27	8.87	16.5	11.6	10.1	
250	320	3	46	68	16	292	298	12	11.8	11.2	24.1	15.8	12.8	
300	370	4	46	68	16	342	350	12	13.6	12.8	30.8	18.3	14.5	
350	430	4	53	68	16	385	400	12	20.4	19.4	39.6	25.3	22.7	
400	482	4	57	72	16	440	456	12	27.5	26.4	49.4	30.6	28.0	
450	532	4	63	72	16	488	502	12	33.6	32.2	63	35.1	32.3	
500	585	4	67	75	16	542	559	12	40.2	38.5	75.2	40.5	38.7	
600	685	5	75	82	18	642	658	12	54.5	52.2	124	52.9	48.9	
700	800	5	-	85	18	746	-	12	-	79.4	183	75.8	-	
800	905	5	-	96	18	850	-	12	-	112	297	102	-	
900	1005	5	-	99	20	950	-	12	-	135	374	121	-	
1000	1110	5	-	105	20	1052	-	16	-	180	492	161	-	
1200	1330	5	-	132	25	1256	-	16	-	278	842	258	-	
1400	1535	5	-	143	25	1460	-	16	-	-	-	371	-	
1600	1760	5	-	159	25	1666	-	16	-	-	-	547	-	
1800	1960	5	-	175	30	1868	-	16	-	-	-	691	-	
2000	2170	5	-	186	30	2072	-	16	-	-	-	830	-	

All the components can be substituted with equivalent or higher-class materials.

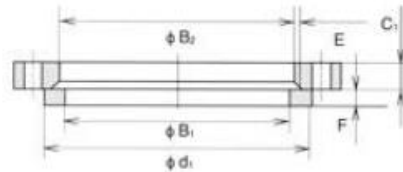
FLANGES WCB/SS04/SS316

Ref.1200A / PN 10-16

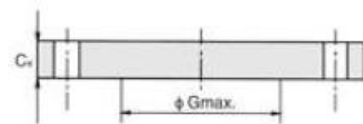
TYPE 01



TYPE 02



TYPE 05



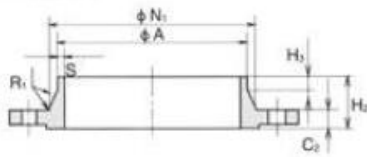
DN	Outside diameter	Diameter of bolt circle	Diameter of bolt hole	Bolt number	Outside diameter of neck A	Bore diameters		Flange thickness			Chamfer E	Wall thickness S	Collar Thickness F	Diameter of shoulder Gmax
						B ₁	B ₂	C ₁	C ₂	C ₃				
						Flange type								
	01,02,05,11,12,13				11	01 12	02	01 02	11 12,13	05	02	11	32	05
10	90	60	14	4	17.2	18.0	21	14	16	16	3	2	12	-
15	95	65	14	4	21.3	22.0	25	14	16	16	3	2	12	-
20	105	75	14	4	26.9	27.5	31	16	18	18	4	2.3	14	-
25	115	85	14	4	33.7	34.5	38	16	18	18	4	2.6	14	-
32	140	100	18	4	42.4	43.5	47	18	18	18	5	2.6	14	-
40	150	110	18	4	48.3	49.5	53	18	18	18	5	2.6	14	-
50	165	125	18	4	60.3	61.5	65	20	18	18	5	2.9	16	-
65	185	145	18	8	76.1	77.5	81	20	18	18	6	2.9	16	55
80	200	160	18	8	88.9	90.5	94	20	20	20	6	3.2	16	70
100	220	180	18	8	114.3	116.0	120	22	20	20	6	3.6	18	90
125	250	210	18	8	139.7	141.5	145	22	22	22	6	4.0	18	115
150	285	240	22	8	168.3	170.5	174	24	22	22	6	4.5	20	140
200	340	295	22	12	219.1	221.5	226	26	24	24	6	6.3	20	190
250	405	355	26	12	273.0	276.5	281	29	26	26	8	6.3	22	235
300	460	410	26	12	323.9	327.5	333	32	28	28	8	7.1	24	285
350	520	470	26	16	355.6	359.5	365	35	30	30	8	8.0	26	330
400	580	525	30	16	406.4	411.0	416	38	32	32	8	8.0	28	380
450	640	585	30	20	457.0	462.0	467	42	34	40	8	8.8	30	425
500	715	650	33	20	508.0	513.5	519	46	36	44	8	8.8	32	475
600	840	770	36	20	610.0	616.5	622	55	40	54	8	10.0	32	575
700	910	840	36	24	711.0		721	63	40	58	8	10.0	-	670
800	1025	950	39	24	813.0		824	74	41	62	8	12.5	-	770
900	1125	1050	39	28	914.0		926	82	48	64	8	12.5	-	860
1000	1255	1170	42	28	1016.0		1030	90	59	68	8	12.5	-	960
1200	1485	1390	48	32	1219		-	-	78	-	-	14.2	-	1160
1400	1685	1590	48	36	1422		-	-	84	-	-	16	-	1346
1600	1930	1820	56	40	1626		-	-	102	-	-	17.5	-	1546
1800	2130	2020	56	44	1829		-	-	110	-	-	20	-	1746
2000	2345	2230	62	48	2032		-	-	124	-	-	22	-	1950

All the components can be substituted with equivalent or higher-class materials.

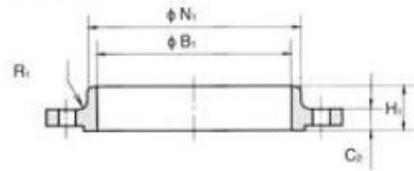
FLANGES WCB/SS04/SS316

Ref.1200A / PN 10-16

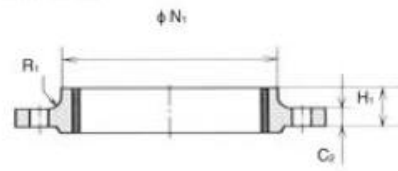
TYPE 11



TYPE 12



TYPE 13



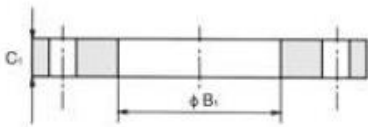
DN	Raised face		Length			Neck diameters		Corner radii	APPROXIMATE WEIGHT				
	d ₁	f ₁	H ₁	H ₂	H ₃	N ₁	N ₂	R ₁	Flange type				
	01,05,11,12,13		12 13	11	11	11	12 13	11 12,13	Type01	Type02	Type05	Type11	Type12
10	40	2	22	35	6	28	30	4	0.604	0.591	0.722	0.678	0.646
15	45	2	22	38	6	32	35	4	0.670	0.654	0.813	0.768	0.722
20	58	2	26	40	6	40	45	4	0.936	0.909	1.14	1.09	1.04
25	68	2	28	40	6	46	52	4	1.11	1.08	1.38	1.3	1.25
32	78	2	30	42	6	56	60	6	1.82	1.77	2.03	1.91	1.81
40	88	3	32	45	7	64	70	6	2.08	2.02	2.35	2.15	2.06
50	102	3	28	45	8	74	84	6	2.73	2.52	2.88	2.53	2.39
65	122	3	32	45	10	92	104	6	3.16	3.05	3.51	3.03	2.97
80	138	3	34	50	10	105	118	6	3.79	3.48	4.61	3.92	3.78
100	158	3	40	52	12	131	140	8	4.39	4.20	5.65	4.62	4.38
125	188	3	44	55	12	156	168	8	5.41	5.21	8.13	6.30	6.07
150	212	3	44	55	12	184	195	10	7.14	6.89	10.5	7.81	7.24
200	268	3	44	62	16	235	246	10	9.73	9.31	16.2	11.5	9.8
250	320	3	46	70	16	292	298	12	14.2	13.5	25.0	16.70	13.6
300	378	4	46	78	16	344	350	12	19	18.0	35.1	22.1	17.2
350	438	4	57	82	16	390	400	12	28.2	27.0	48.0	32.8	27.9
400	490	4	63	85	16	445	456	12	35.9	34.6	63.5	41.1	35.7
450	550	4	68	83	16	490	502	12	46.1	44.6	96.6	50.6	45.0
500	610	4	73	84	16	548	559	12	64.0	62.0	133	66.2	60.4
600	725	5	83	88	18	670	658	12	102	98.8	226	104	94
700	795	5	83	104	18	755	760	12	-	107	285	96.5	-
800	900	5	90	108	20	855	864	12	-	152	388	122	-
900	1000	5	94	118	20	955	968	12	-	184	483	155	-
1000	1115	5	100	137	22	1058	1072	16	-	257	640	233	-
1200	1330	5	-	160	30	1262	-	16	-	-	-	390	-
1400	1530	5	-	177	30	1465	-	16	-	-	-	495	-
1600	1750	5	-	204	35	1668	-	16	-	-	-	760	-
1800	1950	5	-	218	35	1870	-	16	-	-	-	929	-
2000	2150	5	-	238	40	2072	-	16	-	-	-	1185	-

All the components can be substituted with equivalent or higher-class materials.

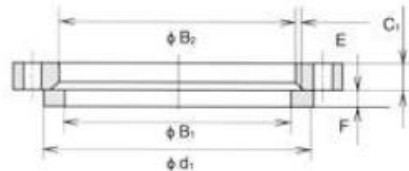
FLANGES WCB/SS04/SS316

Ref.1200A / PN 10-16

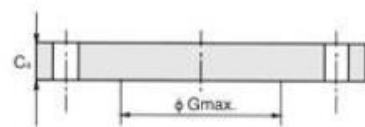
TYPE 01



TYPE 02



TYPE 05



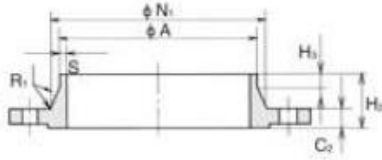
DN	Outside diameter	Diameter of bolt circle	Diameter of bolt hole	Bolt number	Outside diameter of neck A	Bore diameters		Flange thickness			Chamfer E	Wall thickness S	Collar Thickness F	Diameter of shoulder Gmax
						B ₁	B ₂	C ₁	C ₂	C ₄				
						Flange type								
	01,02,05,11,12,13				11	01 12	02	01 02	11 12,13	05	02	11	32	05
10	90	60	14	4	17.2	18.0	21	14	16	16	3	2.0	12	-
15	95	65	14	4	21.3	22.0	25	14	16	16	3	2.0	12	-
20	105	75	14	4	26.9	27.5	31	16	18	18	4	2.3	14	-
25	115	85	14	4	33.7	34.5	38	16	18	18	4	2.6	14	-
32	140	100	18	4	42.4	43.5	47	18	18	18	5	2.6	14	-
40	150	110	18	4	48.3	49.5	53	18	18	18	5	2.6	14	-
50	165	125	18	4	60.3	61.5	65	20	20	20	5	2.9	16	-
65	185	145	18	8	76.1	77.5	81	22	22	22	6	2.9	16	55
80	200	160	18	8	88.9	90.5	94	24	24	24	6	3.2	18	70
100	235	190	22	8	114.3	116.0	120	26	24	24	6	3.6	20	90
125	270	220	26	8	139.7	141.5	145	28	26	26	6	4.0	22	115
150	300	250	26	8	168.3	170.5	174	30	28	28	6	4.5	24	140
200	360	310	26	12	219.1	221.5	226	32	30	30	6	6.3	26	190
250	425	370	30	12	273.0	276.5	281	35	32	32	8	7.1	26	235
300	485	430	30	16	323.9	327.5	333	38	34	34	8	8.0	28	285
350	555	490	33	16	355.6	359.5	365	42	38	38	8	8.0	32	332
400	620	550	36	16	406.4	411.0	416	48	40	40	8	8.8	34	380
450	670	600	36	20	457.0	462.0	467	54	46	50	8	8.8	36	425
500	730	660	36	20	508.0	513.5	519	58	48	51	8	10.0	38	475
600	845	770	39	20	610.0	616.5	622	68	48	66	8	12.5	40	575
700	960	875	42	24	711	-	721	85	50	-	8	14.2	-	-
800	1085	990	48	24	813	-	824	95	53	-	8	16	-	-
900	1185	1090	48	28	914	-	-	-	57	-	-	17.5	-	-
1000	1320	1210	56	28	1016	-	-	-	63	-	-	20	-	-

All the components can be substituted with equivalent or higher-class materials.

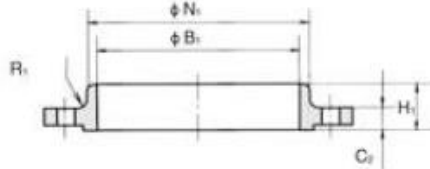
FLANGES WCB/SS04/SS316

Ref.1200A / PN 10-16

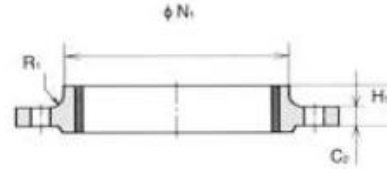
TYPE 11



TYPE 12



TYPE 13



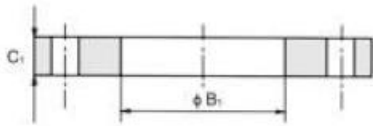
DN	Raised face		Length			Neck diameters		Corner radii	APPROXIMATE WEIGHT				
	d ₁	f ₁	H ₁	H ₂	H ₃	N ₁	N ₂	R ₁	Flange type				
	01,05,11,12,13		12 13	11	11	11	12 13	11 12,13	Type01	Type02	Type05	Type11	Type12
10	40	2	22	35	6	28	30	4	0.604	0.591	0.722	0.678	0.646
15	45	2	22	38	6	32	35	4	0.670	0.654	0.813	0.768	0.722
20	58	2	26	40	6	40	45	4	0.936	0.909	1.14	1.09	1.04
25	68	2	28	40	6	46	52	4	1.11	1.08	1.38	1.3	1.25
32	78	2	30	42	6	56	60	6	1.82	1.77	2.03	1.91	1.81
40	88	3	32	45	7	64	70	6	2.08	2.02	2.35	2.15	2.06
50	102	3	34	48	8	75	84	6	2.73	2.65	3.20	2.85	2.74
65	122	3	38	52	10	90	104	6	3.48	3.36	4.29	3.68	3.65
80	138	3	40	58	12	105	118	8	4.32	4.18	5.54	4.78	4.59
100	162	3	44	65	12	134	145	8	6.07	5.87	7.60	6.46	6.1
125	188	3	48	68	12	162	170	8	8.19	7.95	10.8	8.86	8.22
150	218	3	52	75	12	192	200	10	10.3	9.97	14.6	11.7	10.6
200	278	3	52	80	16	244	256	10	14.3	13.8	22.5	17.1	14.9
250	335	3	60	88	18	298	310	12	20.1	19.4	33.5	24.3	20.9
300	395	4	67	92	18	352	364	12	26.6	25.5	46.3	31.8	27.3
350	450	4	72	100	20	398	418	12	41.8	40.5	68.1	48.8	45.1
400	505	4	78	110	20	452	472	12	57.6	56.1	89.7	63.3	57.7
450	555	4	84	110	20	500	520	12	69.8	67.8	130	76	69.6
500	615	4	90	125	20	558	580	12	87.0	84.6	159	97	87
600	720	5	100	125	20	660	684	12	127	124	278	121	111
700	820	5	-	129	20	760	-	12	-	-	-	155	-
800	930	5	-	138	22	864	-	12	-	-	-	205	-
900	1030	5	-	148	24	968	-	12	-	-	-	249	-
1000	1140	5	-	160	24	1070	-	16	-	-	-	338	-

All the components can be substituted with equivalent or higher-class materials.

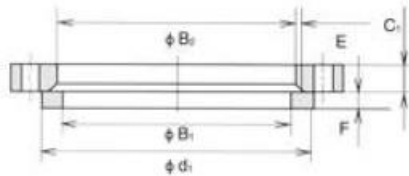
FLANGES WCB/SS04/SS316

Ref.1200A / PN 10-16

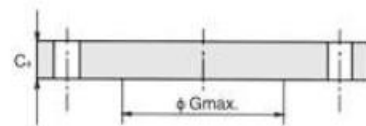
TYPE 01



TYPE 02



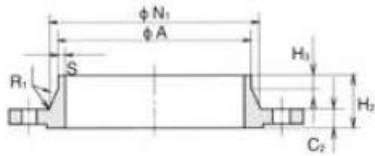
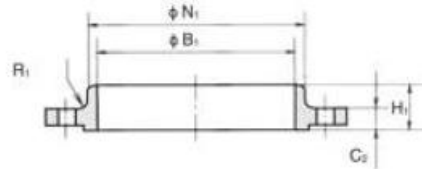
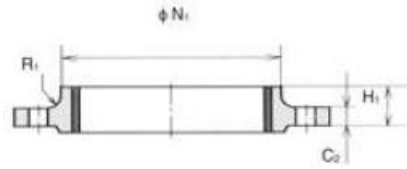
TYPE 05



DN	Outside diameter	Diameter of bolt circle	Diameter of bolt hole	Bolt number	Outside diameter of neck A	Bore diameters		Flange thickness			Chamfer E	Wall thickness S	Collar Thickness F	Diameter of shoulder Gmax
						B ₁	B ₂	C ₁	C ₂	C ₄				
						Flange type								
	01,02,05,11,12,13				11	01 12	02	01 02	11 12,13	05	02	11	32	05
10	90	60	14	4	17.2	18.0	21	14	16	16	3	2.0	12	-
15	95	65	14	4	21.3	22.0	25	14	16	16	3	2.0	12	-
20	105	75	14	4	26.9	27.5	31	16	18	18	4	2.3	14	-
25	115	85	14	4	33.7	34.5	38	16	18	18	4	2.6	14	-
32	140	100	18	4	42.4	43.5	47	18	18	18	5	2.6	14	-
40	150	110	18	4	48.3	49.5	53	18	18	18	5	2.6	14	-
50	165	125	18	4	60.3	61.5	65	20	20	20	5	2.9	16	-
65	185	145	18	8	76.1	77.5	81	22	22	22	6	2.9	16	55
80	200	160	18	8	88.9	90.5	94	24	24	24	6	3.2	18	70
100	235	190	22	8	114.3	116.0	120	26	24	24	6	3.6	20	90
125	270	220	26	8	139.7	141.5	145	28	26	26	6	4.0	22	115
150	300	250	26	8	168.3	170.5	174	30	28	28	6	4.5	24	140
200	375	320	30	12	219.1	221.5	226	36	34	36	6	6.3	28	190
250	450	385	33	12	273.0	276.5	281	42	38	38	8	7.1	30	235
300	515	450	33	16	323.9	327.5	333	52	42	42	8	8.0	34	285
350	580	510	36	16	355.6	359.5	365	58	46	46	8	8.8	36	330
400	660	585	39	16	406.4	411.0	416	65	50	50	8	11.0	42	380
450	685	610	39	20	457.0	462.0	467	To be specified by the purchaser	57	57	8	12.5	46	425
500	755	670	42	20	508.0	513.5	519		57	57	8	14.2	50	475
600	890	795	48	20	610.0	616.5	622		72	72	8	16.0	54	575

All the components can be substituted with equivalent or higher-class materials.

FLANGES WCB/SS04/SS316 Ref.1200A / PN 10-16

TYPE 11

TYPE 12

TYPE 13


DN	Raised face		Length			Neck diameters		Corner radii	APPROXIMATE WEIGHT				
	d ₁	f ₁	H ₁	H ₂	H ₃	N ₁	N ₂	R ₁					
	Flange type												
	01,05,11,12,13	12 13	11	11	11	12 13	11 12,13	Type01	Type02	Type05	Type11	Type12	
10	40	2	22	35	6	28	30	4	0.604	0.591	0.722	0.678	0.646
15	45	2	22	38	6	32	35	4	0.67	0.654	0.813	0.768	0.722
20	58	2	26	40	6	40	45	4	0.936	0.909	1.14	1.09	1.04
25	68	2	28	40	6	46	52	4	1.11	1.08	1.38	1.30	1.25
32	78	2	30	42	6	56	60	6	1.82	1.77	2.03	1.91	1.81
40	88	3	32	45	7	64	70	6	2.08	2.02	2.35	2.15	2.06
50	102	3	34	48	8	75	84	6	2.73	2.65	3.20	2.85	2.74
65	122	3	38	52	10	90	104	6	3.48	3.36	4.29	3.68	3.65
80	138	3	40	58	12	105	118	8	4.32	4.18	5.54	4.78	4.59
100	162	3	44	65	12	134	145	8	6.07	5.87	7.60	6.46	6.10
125	188	3	48	68	12	162	170	8	8.19	7.95	10.8	8.86	8.22
150	218	3	52	75	12	192	200	10	10.3	9.97	14.6	11.7	10.6
200	285	3	52	88	16	244	260	10	17.9	17.4	28.8	21.0	18.3
250	345	3	60	105	18	306	312	12	29.3	28.4	44.4	34.2	28.3
300	410	4	67	115	18	362	380	12	45.1	43.6	64.2	47.6	40.4
350	465	4	72	125	20	408	424	12	66.7	64.9	89.5	69.3	58.8
400	535	4	78	135	20	462	478	12	97.1	95.1	127	98	82.1
450	560	4	84	135	20	500	522	12	-	-	154	105	86.2
500	615	4	90	140	20	562	576	12	-	-	188	130	105
600	735	5	100	150	20	666	686	12	-	-	331	209	172

All the components can be substituted with equivalent or higher-class materials.

FLANGES WCB/SS04/SS316
Ref.1200A / PN 10-16

GERMAN STANDARDS

FLANGES WELD ON PIPES DIN 2573.....
FLANGES WELD ON PIPES DIN 2576.....
FLANGES WELD ON PIPES DIN 2502.....
FLANGES WELD ON PIPES DIN 2503.....
LAPPED FLANGES WITH COLLAR DIN 2642..
LAPPED FLANGES WITH COLLAR DIN 2655..
LAPPED FLANGES WITH COLLAR DIN 2656..
SCREWED PIPE FLANGES DIN2566.....
BLND FLANGES DIN 2527 PN6.....
BLND FLANGES DIN 2527 PN10.....

BLND FLANGES DIN 2527 PN16.....
BLND FLANGES DIN 2527 PN25.....
BLND FLANGES DIN 2527 PN40.....
WELDING NECK FLANGES DIN 2631..
WELDING NECK FLANGES DIN 2632..
WELDING NECK FLANGES DIN 2633..
WELDING NECK FLANGES DIN 2634..
WELDING NECK FLANGES DIN 2635..
WELDING NECK FLANGES DIN 2636..
WELDING NECK FLANGES DIN 2637..

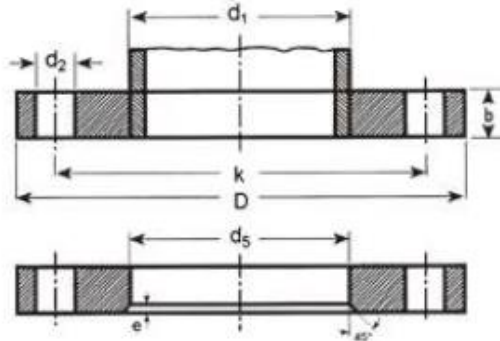
All the components can be substituted with equivalent or higher-class materials.

FLANGES WCB/SS04/SS316

Ref.1200A / PN 10-16

FLANGES WELD ON PIPES
Nominal pressure :6kgf/cm²-ND6
DIN 2573

FLANGES
DUZ,BORUYA KAYNAK EDILEN
Anma Basinci:6kgf/cm²-ND6
TS 816/1 (TS ISO 7005-1)



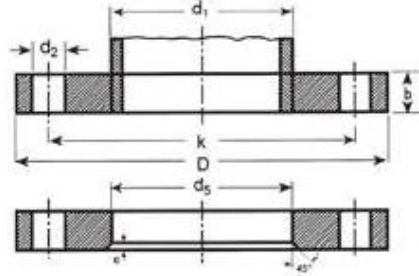
BORU (Pipe)		FLANS (Flange)						CIVATALAR (Bolts)			AGIRLIK (Weight) (7.85 kg/dm ³) kg
DN	d ₁ 1 2	d ₅	D	b	e	k	Sayisi (Each)	Vida (Screw)	d ₂		
10	14	14.5	75	12	5	50	4	M10	11.5	0.363	
	17.2	17.7									
15	20	21	80	12	5	55	4	M10	11.5	0.410	
	21.3	22									
20	25	26	90	14	5	65	4	M10	11.5	0.600	
	26.9	27.6									
25	30	31	100	14	5	75	4	M10	11.5	0.740	
	33.7	34.4									
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	23	12.6	
350	355.6	359.7	490	26	7	445	12	M20	23	15.6	
	368	372.2									
400	406.4	411	540	28	7	495	16	M20	23	18.4	
	419	423.7									
(450)	457	462.5	595	30	7	550	16	M20	23	21.4	
500	508	513.6	645	30	7	600	20	M20	23	24.6	

All the components can be substituted with equivalent or higher-class materials.

FLANGES WCB/SS04/SS316

Ref.1200A / PN 10-16

FLANGES WELD ON PIPES
Nominal pressure :10kgf/cm²-ND10
DIN 2576
FLANGES
DUZ,BORUYA KAYNAK EDILEN
Anma Basincı:10kgf/cm²-ND6
TS 816/2 (TS ISO 7005-1)



DN	BORU (Pipe)		FLANS (Flange)					CIVATALAR (Bolts)			AGIRLIK (Weight) (7.85 kg/dm ³) kg
	1	2	d ₅	D	b	e	k	Sayı (Each)	Vida (Screw)	d ₂	
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	4	M16	18	3.79
100		108	109.5	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		141.5								5.46
150		159	161.1	285	22	7	240	8	M20	23	6.72
	168.3		170.5								6.57
(175)	193.7		196.1	315	24	7	270	8	M20	23	8.45
200	219.1		221.8	340	24	7	295	8	M20	23	9.31
250		267	270.2	395	26	7	350	12	M20	23	12.5
	273		276.2								11.9
300	323.9		327.5	445	26	7	400	12	M20	23	13.8
350			359.7	505	28	7	460	16	M20	23	20.6
	355.6	368	372.2								19.0
400			411	565	32	7	515	16	M24	27	27.9
	406.4	419	423.7								25.9
(450)	457		462.5	615	38	7	565	20	M24	27	35.6
500	508		513.5	670	38	7	620	20	M24	27	41.1
600	610	-	616.5	780	40	7	725	20	M27	30	51.87
700	711	-	716	895	40	7	840	24	M27	30	65.79
800	813	-	818	1015	44	7	950	24	M30	33	90.87
900	914	-	920	1115	48	7	1050	28	M30	33	108.41
1000	1016	-	1022	1230	50	7	1160	28	M33	36	133.21
1200	1220	-	1226	1455	54	7	1380	32	M36	39	188.20
1400	1420	-	1426	1675	60	7	1590	36	M39	42	262.14
1600	1620	-	1626	1915	64	7	1820	40	M45	48	367.43
1800	1820	-	1826	2115	70	7	2020	44	M45	48	447.79
2000	2020	-	2026	2325	76	7	2230	48	M45	48	577.71
2200	2220	-	2226	2550	82	7	2440	52	M52	56	699.88
2400	2420	-	2426	2760	88	7	2650	56	M52	56	844.49
2600	2620	-	2626	2960	94	7	2850	60	M52	56	972.23
2800	2820	-	2826	3180	100	7	3070	64	M52	56	1187.1
3000	3020	-	3026	3405	106	7	3290	68	M52	56	

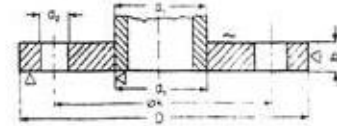
*Duz boruya kaynakli flanslarin ND 16-ND 25 -ND 40 olarak imalati yapilmaktadir.

All the components can be substituted with equivalent or higher-class materials.

FLANGES WCB/SS04/SS316

Ref.1200A / PN 10-16

DIN2502 PN16



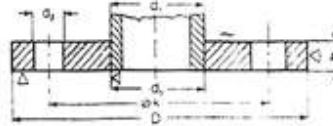
TUBO			BRIDA		TORNILLOS				PESO UNIDAD (7,85kg/dm ³) kg. m	
DN	ISO	d ₁ DIN	d ₅	D	b	k	CANT. ROSCA	d ₂		
10 a 175	Los diámetros nominales de 10 a 175, son iguales que la tabla DIN 2576									
10		14	14.5	90	14	60	4	M12	14	0.613
		17.2	17.7							0.605
15		20	21	95	14	65	4	M12	14	0.675
		21.3	22							0.669
20		25	26	105	16	75	4	M12	14	0.749
		26.9	27.6							0.936
25		30	31	115	16	85	4	M12	14	1.14
		33.7	34.4							1.11
32		38	39	140	16	100	4	M16	18	1.66
		42.4	43.1							1.62
40		44.5	45.5	150	16	110	4	M16	18	1.89
		48.3	49							1.86
50		57	58.1	165	18	125	4	M16	18	2.51
		60.3	61.1							2.47
65	76.1	-	77.1	185	18	145	4	M16	18	3.00
80	88.9	-	90.3	200	20	160	8	M16	18	3.79
100		108	109.6	220	20	180	8	M16	18	4.20
		114.3	115.9							4.03
125		133	134.8	250	22	210	8	M16	18	5.71
		139.7	141.6							5.46
150		159	161.1	285	22	240	8	M20	23	6.72
		168.3	170.5							6.57
175	193.7	-	196.1	315	24	270	8	M20	23	8.45
200	219.1	216	221.8	340	24	295	12	M20	23	9.2
250		267	270.2	405	26	355	12	M24	27	13.4
		273	276.2							
300	323.9	318	327.6	460	28	410	12	M24	27	17.4
350		-	359.7	520	30	470	16	M24	27	26.5
		355.6	372.2							
400		-	411	580	32	525	16	M27	30	30.9
		406.4	423.7							
500	508	521	513.6	715	38	650	20	M30	33	54.0
600	610	622	616.5	840	42	770	20	M33	36	77.58
700	711	720	716	910	44	840	24	M33	36	77.13
800	813	820	818	1.025	50	950	24	M36	39	106.35
900	914	920	920	1.125	54	1.050	28	M36	39	125.39
1.000	1.016	1020	1.022	1.255	60	1.170	28	M39	42	177.99
1.200	1.220	-	1.226	1.485	68	1.390	32	M45	48	263.46
1.400	1.420	-	1.426	1.685	74	1.590	36	M45	48	329.77
1.600	1.620	-	1.626	1.930	82	1.820	40	M52	56	483.11
1.800	1.820	-	1.826	2.130	88	2.020	44	M52	56	577.63
2.000	3.020	-	2.026	2.345	94	2.230	48	M56	62	720.85

All the components can be substituted with equivalent or higher-class materials.

FLANGES WCB/SS04/SS316

Ref.1200A / PN 10-16

DIN2503
PN25



TUBO			BRIDA				TORNILLOS			PESO UNIDAD (7,85kg/dm ³) kg
DN	ISO	d ₁ DIN	d _s	D	b	k	CANT.	ROSCA	d ₂	
10 a 150	Los diámetros nominales de 10 a 150, son iguales que la tabla de Presion Nominal 40									
15	21.3	20 21	22	95	16	65	4	M12	14	0.77
20	26.9	25 26	27.6	105	18	75	4	M12	14	1
25	33.7	30 31	34.4	115	18	85	4	M12	14	1.28
32	42.4	38 39	43.1	140	18	100	4	M16	18	1.87
40	48.3	44.5 45.5	49	150	18	110	4	M16	18	2.13
50	60.3	57 58.1	61.1	165	20	125	4	M16	18	2.79
65	76.1	77.1	185	22	145	8	M16	18	3.48	
80	88.9	90.3	200	24	160	8	M16	18	4.35	
100	114.3	108 109.6	115.9	235	24	190	8	M20	22	5.78
125	139.7	133 134.8	141.6	270	26	220	8	M24	26	7.87
150	168.3	159 161.1	170.5	300	28	250	8	M24	26	10.1
(175)	193.7	-	196.1	330	28	280	12	M24	26	11.0
200	219.1	-	221.8	360	30	310	12	M24	26	13.6
250	273	267 270.2	276.2	425	32	370	12	M27	30	19.4
300	323.9	-	327.6	485	34	430	16	M27	30	25.0
350	355.6	-	359.7	555	38	490	16	M30	33	38.2
400	406.4	-	411	620	40	550	16	M33	36	48.8
500	508	-	513.6	730	44	660	20	M33	36	67.2
600	610	-	616.5	845	50	770	20	M36	39	93.57
700	711	-	716	960	52	875	24	M39	42	117.53
800	813	-	818	1085	56	990	24	M45	48	156.31
900	914	-	920	1185	62	1090	28	M45	48	188.57
1000	1016	-	1022	1320	68	1210	28	M52	56	255.79
1200	1220	-	1226	1530	76	1420	32	M52	56	345.56
1400	1420	-	1426	1755	86	1640	36	M56	62	481.53
1600	1620	-	1626	1975	96	1860	40	M56	62	652.83
1800	1820	-	1826	2185	104	2070	44	M64	70	800.15

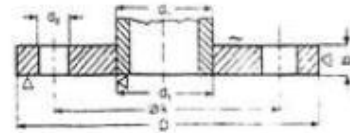
TECHNICAL DATA SHEET

All the components can be substituted with equivalent or higher-class materials.

FLANGES WCB/SS04/SS316

Ref.1200A / PN 10-16

DIN2503
PN40



DN	TUBO		BRIDA				TORNILLOS			PESO UNIDAD (7,85kg/dm ³) kg. #
	ISO	d ₁ DIN	d ₅	D	b	k	CANT.	ROSCA	d ₂	
15		20	21	95	16	65	4	M12	14	0.77
	21.3		22							
20		25	26	105	18	75	4	M12	14	1
	26.9		27.6							
25		30	31	115	18	85	4	M12	14	1.28
	33.7		34.4							
32		38	39	140	18	100	4	M16	18	1.87
	42.4		43.1							
40		44.5	45.5	150	18	110	4	M16	18	2.13
	48.3		49							
50		57	58.1	165	20	125	4	M16	18	2.79
	60.3		61.1							
65	76.1		77.1	185	22	145	8	M16	18	3.48
80	88.9		90.3	200	24	160	8	M16	18	4.35
100		108	109.6	235	24	190	8	M20	22	5.78
	114.3		115.9							
125		133	134.8	270	26	220	8	M24	26	7.87
	139.7		141.6							
150		159	161.1	300	28	250	8	M24	26	10.1
	168.3		170.5							
200	219.1		221.8	375	34	320	12	M27	30	17.4
250		267	270.2	450	38	385	12	M30	33	27.6
	273		276.2							
300	323.9		327.6	515	42	450	16	M30	33	37.8
350	355.6		359.7	580	46	510	16	M33	36	53.4
		368	372.2							
400	406.4		411	660	50	585	16	M36	39	75.4
		419	423.7							
500	508		513.6	755	52	670	20	M39	42	88.3

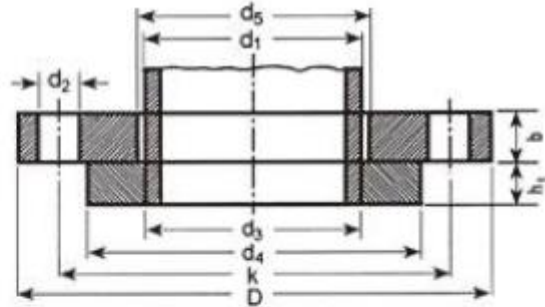
All the components can be substituted with equivalent or higher-class materials.

FLANGES WCB/SS04/SS316

Ref.1200A / PN 10-16

LAPPED FLANGES WITH COLLAR
Nominal Pressure :10kgf/cm²-ND10
DIN 2642

FLANGES
BORULARICIN,DESTEKLIGEVSİK
Anma Basıncı:10kgf/cm²-ND10
TS 814/2 (TS ISO 7005-1)



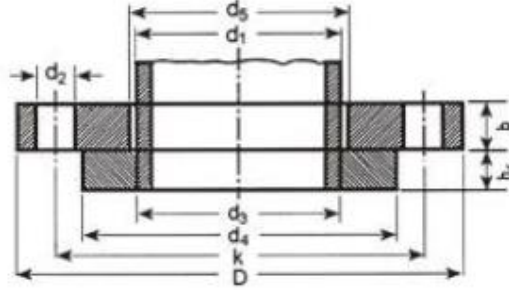
BORU (Pipe)		FLANS (Flange)			CIVATALAR (Bolts)		DESTEK (Beam)				AGIRLIK(Weight) 7.85 kg/dm ³		
DN	d_1	D	d_5	b	k	Sayısı (Each)	Vida (Screw)	d_2	d_3	d_4	h_1	Flans (flange)kg	Destek (Beam)kg
10	14	90	16	14	60	4	M12	14	17.7	40	10	0.599	0.087
	17.2		19										
15	20	95	22	14	65	4	M12	14	22	45	10	0.689	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

FLANGES WCB/SS04/SS316

Ref.1200A / PN 10-16

LAPPED FLANGES WITH COLLAR
Nominal Pressure :25kgf/cm²-ND25
DIN 2655

FLANGES
BORULARICIN,DESTEKLIGEVESEK
Anma Basincı:25kgf/cm²-ND25
TS 814/4 (TS ISO 7005-1)



BORU (Pipe)		FLANS (Flange)				CIVATALAR (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	17.2	Değerler DIN 2656 (40 kgf/cm ²) den alınmalıdır											
150	168.3												
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	355.6	555	362	38	490	16	M30	33	359.2	450	32	37.38	13.2
400	406.4	620	414	42	550	16	M33	36	411	505	34	50	16.5
500	508	730	517	50	660	20	M33	36	513.6	615	38	73.89	25.3

LAPPED FLANGES WITH COLLAR
Nominal Pressure :40kgf/cm²-ND40
DIN 2656

FLANGES
BORULARICIN,DESTEKLI GEVSEK
Anma Basincı:40kgf/cm²-ND40
TS 814/5 (TS ISO 7005-1)

BORU (Pipe)		FLANS (Flange)				CIVATALAR (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	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	34.42	14.0
350	355.6	580	362	46	510	16	M33	36	359.2	465	38	52.36	18.9
400	406.4	660	414	50	585	16	M36	39	411	535	42	74.2	28.4

All the components can be substituted with equivalent or higher-class materials.

FLANGES WCB/SS04/SS316

Ref.1200A / PN 10-16

SCREWED PIPE FLANGES

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

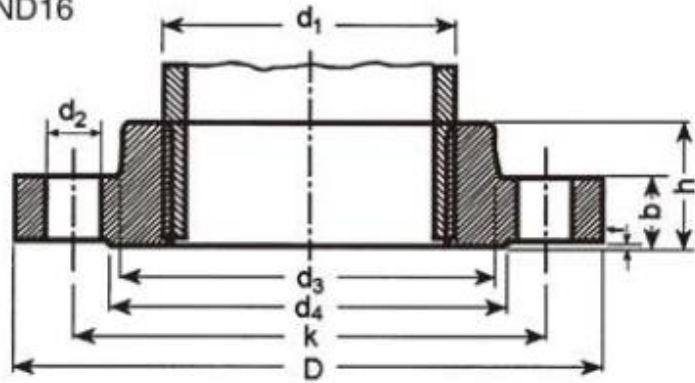
DIN 2566

FLANGES

BORULARICIN,VIDALI

Anma Basinci:10ve 16kgf/cm²-ND10-ND16

TS 813 (TS ISO 7005-1)



BORU (Pipe)		FLANS (Flange)					BOYUN (Neck)	ALINIKINTISI (Raised face)			CIVATALAR (Bolts)			FLANSAGIRLIGI (Flange weight) (7.85 kg/dm ³) kg
DN	d ₁	Boru Vidasi (Whitwort)	D	b	k	h	d ₃	d ₄	f	Sayisi 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	R1/4"	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	1.20	
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 gore galvanizli olarak imal edilebilir.

All the components can be substituted with equivalent or higher-class materials.

FLANGES WCB/SS04/SS316

Ref.1200A / PN 10-16

BLIND FLANGES

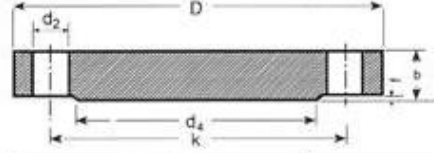
Nominal Pressure :6kgf/cm²-ND6

DIN 2527

KOR FLANS

Anma Basıncı:6kgf/cm²-ND6

(TS ISO 7005-1)



BORU (Pipe) DN	D	b	k	ALINCIKINTISI (Raised face)		DELIKLER (Drilling)			AGIRLIK (Weight) kg
				d ₁	f	Sayısı (Each)	Vida (Screw)	d ₂	
10	75	12	50	35	2	4	M10	11.5	0.38
15	80	12	55	40	2	4	M10	11.5	0.44
20	90	14	65	50	2	4	M10	11.5	0.654
25	100	14	75	60	2	4	M10	11.5	0.82
32	120	14	90	70	2	4	M12	14	1.176
40	130	14	100	80	3	4	M12	14	1.392
50	140	14	110	90	3	4	M12	14	1.63
65	160	14	130	110	3	4	M12	14	2.48
80	190	16	150	128	3	4	M16	18	3.49
100	210	16	170	148	3	4	M16	18	4.86
125	240	18	200	178	3	8	M16	18	6.28
150	265	18	225	202	3	8	M16	18	7.75
175	295	20	255	230	3	8	M16	18	10.7
200	320	20	280	258	3	8	M16	18	12.7
250	375	22	335	312	3	12	M16	18	19.0
300	440	22	395	365	4	12	M20	23	26.3
350	490	22	445	415	4	12	M20	23	32.9
400	540	22	495	455	4	16	M20	23	40.2
500	645	24	600	570	4	20	M20	23	63.2
600	755	28	705	670	5	20	M24	27	96.07
700	860	30	810	775	5	24	M24	27	133.8
800	975	32	920	880	5	24	M27	30	183.29
900	1075	36	1020	980	5	24	M27	30	251.7
1000	1175	42	1120	1080	5	28	M27	30	350.98

BLIND FLANGES

Nominal Pressure :10kgf/cm²-ND10

KOR FLANS

Anma Basıncı:10kgf/cm²-ND10

(TS ISO 7005-1)

BORU (Pipe) DN	D	b	k	ALINCIKINTISI (Raised face)		DELIKLER (Drilling)			AGIRLIK (Weight) kg
				d ₁	f	Sayısı (Each)	Vida (Screw)	d ₂	
10 175	10 ile 175 arasındaki değerler ND 16 ' dan alınmalıdır.								
200	340	24	295	268	3	8	M20	23	16.9
250	395	26	350	320	3	12	M20	23	24.7
300	445	26	400	370	4	12	M20	23	31.9
350	505	26	460	430	4	16	M20	23	41.9
400	565	26	515	482	4	16	M24	27	51.2
500	670	28	620	585	4	20	M24	27	77.8
600	780	30	725	685	5	20	M27	30	109.2
700	895	32	840	800	5	24	M27	30	153.77
800	1015	36	950	905	5	24	M30	33	222.86
900	1115	40	1050	1005	5	24	M30	33	299.08
1000	1230	46	1160	1110	5	28	M33	36	418.78

All the components can be substituted with equivalent or higher-class materials.

FLANGES WCB/SS04/SS316

Ref.1200A / PN 10-16

BLIND FLANGES

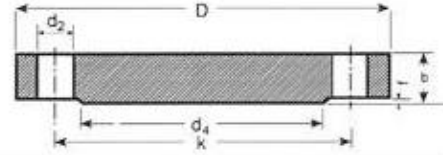
Nominal Pressure :16kgf/cm²-ND16

DIN 2527

KOR FLANS

Anma Basinci:16kgf/cm²-ND16

(TS ISO 7005-1)



BORU (Pipe) DN	D	b	k	ALINCIKINTISI (Raised face)		DELIKLER (Drilling)			AGIRLIK (Weight) kg
				d ₁	f	Sayisi (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	136	3	6	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	23	10.4
(175)	315	24	270	242	3	8	M20	23	14.0
200	340	24	295	266	3	12	M20	23	16.1
250	405	26	355	320	3	12	M24	27	24.9
300	460	28	410	378	4	12	M24	27	35.1
350	520	30	470	438	4	16	M24	27	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

BLIND FLANGES

Nominal Pressure :25kgf/cm²-ND25

DIN 2527

KOR FLANS

Anma Basinci:25kgf/cm²-ND25

(TS ISO 7005-1)

BORU (Pipe) DN	D	b	k	ALINCIKINTISI (Raised face)		DELIKLER (Drilling)			AGIRLIK (Weight) kg
				d ₁	f	Sayisi (Each)	Vida (Screw)	d ₂	
10 150	Anma basinci 40 kgf/cm ² olan ölçülerden alınmalıdır.								
(175)	330	28	280	248	3	12	M24	27	17.6
200	360	30	310	278	3	12	M24	27	22.7
250	425	32	370	335	3	12	M27	30	34.5
300	485	34	430	395	4	16	M27	30	47.3
350	555	38	490	450	4	16	M30	33	69.3
400	620	40	550	505	4	16	M33	36	91.5
500	730	44	660	615	4	20	M33	36	141
600	845	48	770	720	5	20	M36	39	202.3
700	960	50	875	820	5	24	M39	42	271.05
800	1085	54	990	930	5	24	M45	48	373.52
900	1185	58	1090	1030	5	28	M45	48	479.07
1000	1320	62	1210	1140	5	28	M52	56	632.47

All the components can be substituted with equivalent or higher-class materials.

FLANGES WCB/SS04/SS316

Ref.1200A / PN 10-16

BLIND FLANGE

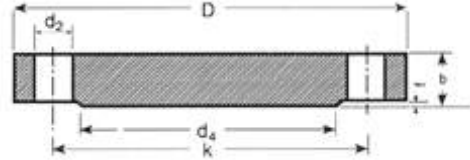
Nominal Pressure :40kgf/cm²-ND40

DIN 2527

KOR FLANS

Anma Basıncı:40kgf/cm²-ND40

(TS ISO 7005-1)



BORU (Pipe)	D	b	k	ALNÇIKINTISI (Raised face)		DELİKLER (Drilling)			AGIRLIK (Weight) kg
				d ₁	f	Sayısı (Each)	Vida (Screw)	d ₂	
DN									
10	90	16	60	40	2	4	M12	14	0.722
15	95	16	65	45	2	4	M12	14	0.813
20	105	18	75	58	2	4	M12	14	1.137
25	115	18	85	68	2	4	M12	14	1.382
32	140	18	100	78	2	4	M16	18	2.033
40	150	18	110	88	3	4	M16	18	2.355
50	165	20	125	102	3	4	M16	18	3.2
65	185	22	145	122	3	8	M16	18	4.33
80	200	24	160	138	3	8	M16	18	5.94
100	235	24	190	162	3	8	M20	23	7.64
125	270	26	220	188	3	8	M24	27	11.0
150	300	28	250	218	3	8	M24	27	14.7
(175)	350	32	295	260	3	12	M27	30	22.4
200	375	34	320	285	3	12	M27	30	27.6
250	450	38	385	345	3	12	M30	33	44.5
300	515	42	450	410	4	16	M30	33	64.3
350	580	46	510	460	4	16	M33	36	90.8
400	660	50	585	535	4	16	M36	39	129
500	755	56	670	615	4	20	M39	42	175
600	890	62	795	733	5	20	M45	48	285.17
700	995	64	900	838	5	24	M45	48	368.83
800	1140	70	1030	960	5	24	M52	56	528.39
900	1250	76	1140	1070	5	28	M52	56	690.99
1000	1360	84	1250	1180	5	28	M52	56	912.42

*Kor Flansların ND 64 ve DN100 normlarında imalatı yapılmaktadır

FLANGES WCB/SS04/SS316

Ref.1200A / PN 10-16

WELDING NECK FLANGES

Nominal Pressure :6kgf/cm²-ND6

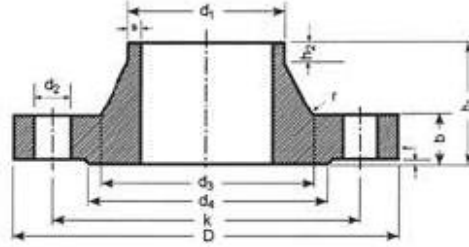
DIN 2631

FLANSLAR

BORULAR ICIN, BOYUNLARI KAYNAKLI

Anma Basincı:6kgf/cm²-ND6

TS 811/2 (TS ISO 7005-1)



BORU (Pipe)		FLANS (Flange)				BOYUN (Neck)				ALINCIKINTEIE (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	Sayısı (Each)	Vida (Screw)	d ₅	
15	20 21.3	80	12	55	30	28 30	2	4	6	40	2	4		11	0.392
20	25 26.9	90	14	65	32	35 38	2.3	4	6	50	2	4		11	0.592
25	30 33.7	100	14	75	35	40 42	2.6	4	6	60	2	4		11	0.747
32	38 42.4	120	14	90	35	50 55	2.6	6	6	70	2	4		14	1.05
40	44.5 48.3	130	14	100	38	58 62	2.6	6	7	80	3	4		14	1.18
50	57 60.3	140	14	110	38	70 74	2.9	6	8	90	3	4		14	1.34
65	76.1	160	14	130	38	88	2.9	6	9	110	3	4		14	1.67
80	88.9	190	16	150	42	102	3.2	8	10	128	3	4		18	2.71
100	108 114.3	210	16	170	45	122 130	3.6	8	10	148	3	4		18	3.24
125	133 139.7	240	18	200	48	148 155	4	8	10	178	3	8		18	4.49
150	159 168.3	265	18	225	48	172 184	4.5	10	12	202	3	8		18	5.15
200	219.1	320	20	280	55	236	5.9	10	15	258	3	8		18	7.78
250	267 273	375	22	335	60	282 290	6.3	12	15	312	3	12		18	10.8
300	323.9	440	22	395	62	342	7.1	12	15	365	4	12		22	14
350	355.6 368	490	22	445	62	385	7.1	12	15	415	4	12		22	16.7
400	406.4 419	540	22	495	65	438	7.1	12	15	465	4	16		22	19
500	508	645	24	600	68	538	7.1	12	15	570	4	20		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

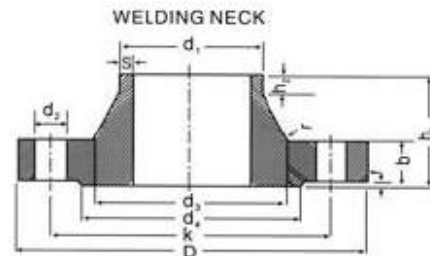
All the components can be substituted with equivalent or higher-class materials.

FLANGES WCB/SS04/SS316

Ref.1200A / PN 10-16

DIN 10Bar

DIN 2632 Welding Neck Flange



BORE		COMMON DIMENSION			HUB					RAISED FACE		DRILLING		Approx. Weight(kg)
DN	d ₁	D	b	k	h ₁	d ₃	s	r	h ₂	d ₄	f	Number of Bolt	d ₅	DIN 2632
10	14 17.2	90	14	60	35	25 28	1.8	4	6	40	2	4	14	0.58
15	20 21.3	95	14	65	35	30 32	2	4	6	45	2	4	14	0.648
20	25 26.9	105	16	75	38	38 40	2.3	4	6	58	2	4	14	0.952
25	30 33.7	115	16	85	38	42 45	2.6	4	6	68	2	4	14	1.14
32	38 42.4	140	16	100	40	52 56	2.6	6	6	78	2	4	18	1.69
40	44.5 48.3	150	16	110	42	60 64	2.6	6	7	88	3	4	18	1.86
50	57 60.3	165	18	125	45	72 75	2.9	6	8	102	3	4	18	2.53
65	76.1	185	18	145	45	90	2.9	6	10	122	3	4	18	3.06
80	88.9	200	20	160	50	105	3.2	8	10	138	3	8	18	3.7
100	108 114.3	220	20	180	52	125 131	3.6	8	12	158	3	8	18	4.62
125	133 139.7	250	22	210	55	150 156	4	8	12	188	3	8	18	6.3
150	159 168.3	285	22	240	55	175 184	4.5	10	12	212	3	8	22	7.75
175	193.7	315	24	270	60	210	5.4	10	12	242	3	8	22	9.85
200	219.1	340	24	295	62	235	5.9	10	16	268	3	8	22	11.3
250	267 273	395	26	350	68	285 292	6.3	12	16	320	3	12	22	14.7
300	323.9	445	26	400	68	344	7.1	12	16	370	4	12	22	17.4
350	355.6 368	505	26	460	68	385	7.1	12	16	430	4	16	22	21.6
400	406.4 419	565	26	515	72	440	7.1	12	16	482	4	16	26	26.2
500	508	670	28	620	75	542	7.1	12	16	585	4	20	26	38.1
600	610	780	28	725	80	642	7.1	12	18	685	5	20	30	44.6
700	711	895	30	840	80	745	8	12	18	800	5	24	30	62.4
800	813	1015	32	950	90	850	8	12	18	905	5	24	33	84.1
900	914	1115	34	1050	95	950	10	12	20	1005	5	28	33	98.5
1000	1016	1230	34	1160	95	1052	10	16	20	1110	5	28	36	115
1200	1220	1455	38	1380	115	1255	11	16	25	1330	5	32	39	182
1400	1420	1675	42	1590	120	1460	12	16	25	1535	5	36	42	248
1600	1620	1915	46	1820	130	1665	14	16	25	1760	5	40	48	347
1800	1820	2115	50	2020	140	1868	15	16	30	1960	5	44	48	430
2000	2020	2325	54	2230	150	2072	16	16	30	2170	5	48	48	539
2200	2220	2550	58	2440	160	2275	18	18	35	2370	6	52	56	658
2400	2420	2760	62	2650	170	2478	20	18	35	2570	6	56	56	825
2600	2620	2960	66	2850	180	2680	22	18	40	2780	6	60	56	979
2800	2820	3180	70	3070	190	2882	22	18	40	3000	6	64	56	1156
3000	3020	3405	75	3290	200	3085	24	18	45	3210	6	68	62	1420

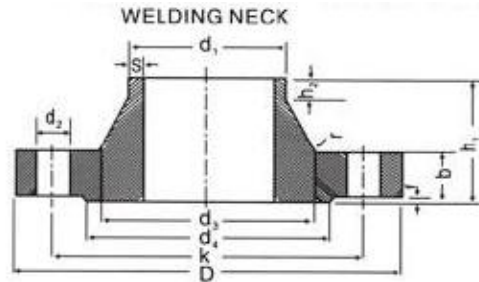
All the components can be substituted with equivalent or higher-class materials.

FLANGES WCB/SS04/SS316

Ref.1200A / PN 10-16

DIN 16Bar

DIN 2633 Welding Neck Flange



BORE		COMMON DIMENSION				HUB				RAISED FACE		DRILLING		Approx. Weight(kg)
DN	d ₁	D	b	k	h ₁	d ₂	s	r	h ₂	d ₃	l	Number of Bolt	d ₄	DIN 2633
10	14 17.2	90	14	60	35	25 28	1.8	4	6	40	2	4	14	0.58
15	20 21.3	95	14	65	35	30 32	2	4	6	45	2	4	14	0.648
20	25 26.9	105	16	75	38	38 40	2.3	4	6	58	2	4	14	0.952
25	30 33.7	115	16	85	38	42 45	2.6	4	6	68	2	4	14	1.14
32	38 42.4	140	16	100	40	52 56	2.6	6	6	78	2	4	18	1.69
40	44.5 48.3	150	16	110	42	60 64	2.6	6	7	88	3	4	18	1.86
50	57 60.3	165	18	125	45	72 75	2.9	6	8	102	3	4	18	2.63
65	76.1	185	18	145	45	90	2.9	6	10	122	3	4	18	3.06
80	88.9	200	20	160	50	105	3.2	8	10	138	3	8	18	3.7
100	108 114.3	220	20	180	52	125 131	3.6	8	12	158	3	8	18	4.62
125	133 139.7	250	22	210	55	150 156	4	8	12	188	3	8	18	6.3
150	159 168.3	285	22	240	55	175 184	4.5	10	12	212	3	8	22	7.75
175	193.7	315	24	270	60	210	5.4	10	12	242	3	8	22	9.85
200	219.1	340	24	295	62	235	5.9	10	16	268	3	12	22	11
250	267 273	405	26	355	70	285 292	6.3	12	18	320	3	12	26	15.6
300	323.9	460	28	410	78	344	7.1	12	16	378	4	12	26	22
350	355.6 368	520	30	470	82	390	8	12	16	438	4	16	26	28.8
400	406.4 419	580	32	525	85	445	8	12	16	490	4	16	30	36.3
500	508	715	34	650	90	548	8	12	16	610	4	20	33	61
600	610	840	36	770	95	652	8.8	12	18	725	5	20	36	75.4
700	711	910	36	840	100	755	8.8	12	18	795	5	24	36	77
800	813	1025	38	950	105	865	10	12	20	900	5	24	39	101
900	914	1125	40	1050	110	955	10	12	20	1000	5	28	39	122
1000	1016	1255	42	1170	120	1058	10	16	22	1115	5	28	42	162
1200	1220	1485	48	1390	130	1262	12.5	16	30	1330	5	32	48	243
1400	1420	1685	52	1590	145	1465	14.2	16	30	1530	5	36	48	323
1600	1620	1930	58	1820	160	1668	16	16	35	1750	5	40	56	479
1800	1820	2130	62	2020	170	1870	17.5	16	35	1950	5	44	56	599
2000	2020	2345	66	2230	180	2072	20	16	40	2150	5	48	62	719

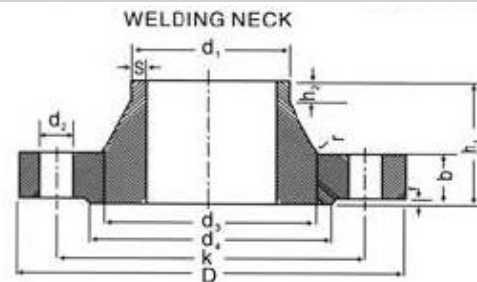
TECHNICAL DATA SHEET

All the components can be substituted with equivalent or higher-class materials.

FLANGES WCB/SS04/SS316 Ref.1200A / PN 10-16

DIN 25Bar

DIN 2634 Welding Neck Flange



BORE		COMMON DIMENSION			HUB					RAISED FACE		DRILLING		Approx. Weight(kg)
DN	d_1	D	b	k	h_1	d_3	s	r	h_2	d_4	f	Number of Bolt	d_2	DIN 2634
10	14 17.2	90	16	60	35	25 28	1.8	4	6	40	2	4	14	0.661
15	20 21.3	95	16	65	38	30 32	2	4	6	45	2	4	14	0.746
20	25 26.9	105	18	75	40	38 40	2.3	4	6	58	2	4	14	1.06
25	30 33.7	115	18	85	40	42 46	2.6	4	6	66	2	4	14	1.29
32	38 42.4	140	18	100	42	52 56	2.6	6	6	78	2	4	18	1.88
40	44.5 48.3	150	18	110	45	60 64	2.6	6	7	88	3	4	18	2.33
50	57 60.3	165	20	125	48	72 75	2.9	6	8	102	3	4	18	2.82
65	76.1	185	22	145	52	90	2.9	6	10	122	3	8	18	3.74
80	88.9	200	24	160	58	105	3.2	8	12	138	3	8	18	4.75
100	108 114.3	235	24	190	65	128 134	3.6	8	12	162	3	8	22	6.52
125	133 139.7	270	26	220	68	155 162	4	8	12	188	3	8	26	9.07
150	159 168.3	300	28	250	75	182 192	4.5	10	12	218	3	8	26	11.8
175	191 193.7	330	28	280	75	215 218	5.6	10	15	248	3	12	26	13.4
200	216 219.1	360	30	310	80	240 244	6.3	10	16	278	3	12	26	17
250	267 273	425	32	370	88	292 298	7.1	12	18	335	3	12	30	24.4
300	318 323.9	485	34	430	92	345 352	8	12	18	395	4	16	30	31.2
350	355.6 368	555	38	490	100	398	8	12	20	450	4	16	33	47.2 44.2
400	406.4 419	620	40	550	110	452	8.8	12	20	505	4	16	36	61.7 57.9
500	508	730	44	660	125	558	10	12	20	615	4	20	36	89.6
600	610	845	46	770	125	660	11	12	20	720	5	20	39	104
700	711	960	46	875	125	760	12.5	12	20	820	5	24	42	136
800	813	1085	50	990	135	865	14.2	12	22	930	5	24	48	186
900	914	1185	54	1090	145	968	16	12	24	1030	5	28	48	236
1000	1016	1320	58	1210	155	1070	17.5	16	24	1140	5	28	56	307

TECHNICAL DATA SHEET

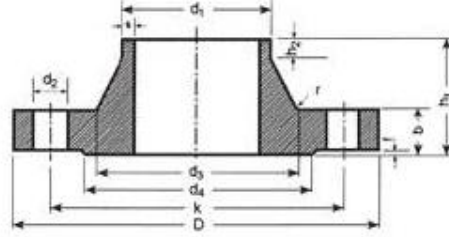
All the components can be substituted with equivalent or higher-class materials.

FLANGES WCB/SS04/SS316

Ref.1200A / PN 10-16

WELDENG NICK FLANGES
Nominal Pressure :40kgf/cm²-ND40
DIN 2635

FLANSLAR
BORULAR ICIN, BOYUNLARI KAYNAKLI
Anma Basinci:40kgf/cm²-ND40
TS 811/6 (TS ISO 7005-1)



BORU (Pipe)		FLANS (Flange)				BOYUN (Neck)				ALIN CIKINTISI (Raised face)		CIVATALAR (Bolts)			FLANS AGIRLIGI (Flange Weight) (7.85 kg/dm ³) kg
DN	d ₁ ISODIN	D	b	k	h ₁	d ₃	s	r	h ₂	d ₄	f	Sayisi Each	Vida Screw	d ₂	
10	14	90	16	60	35	25	1.8	4	6	40	2	4	M12	14	0.661
	17.2					28									
15	20	95	16	65	38	30	2	4	6	45	2	4	M12	14	0.746
	21.3					32									
20	25	105	18	75	40	38	2.3	4	6	58	2	4	M12	14	1.06
	26.9					40									
25	30	115	18	85	40	42	2.6	4	6	68	2	4	M12	14	1.29
	33.7					46									
32	38	140	18	100	42	52	2.6	6	6	78	2	4	M16	18	1.88
	42.4					56									
40	44.5	150	18	110	45	60	2.6	6	7	88	3	4	M16	18	2.33
	48.3					64									
50	57	165	20	125	48	72	2.9	6	8	102	3	4	M16	18	2.82
	60.3					75									
65	76.1	185	22	145	52	90	2.9	6	10	122	3	8	M16	18	3.74
80	88.9	200	24	160	58	105	3.2	8	12	138	3	8	M16	18	4.75
100	108	235	24	190	65	128	3.6	8	12	162	3	8	M20	23	6.52
	114.3					134									
125	133	270	26	220	68	155	4	8	12	188	3	8	M24	27	9.07
	139.7					162									
150	159	300	28	250	75	182	4.5	10	12	218	3	8	M24	27	11.8
	168.3					192									
175	191	350	32	295	82	215	5.6	10	15	260	3	12	M27	30	18.2
	193.7					218									
200	216	375	34	320	88	240	6.3	10	16	285	3	12	M27	30	21.5
	219.1					244									
250	267	450	38	385	105	298	7.1	12	18	345	3	12	M30	33	34.9
	273					306									
300	318	515	42	450	115	352	8	12	18	410	4	16	M30	33	49.7
	323.9					362									
350	355.6	580	46	510	125	408	8.8	12	20	465	4	16	M33	36	68.1
	368														
400	406.4	660	50	585	135	462	11	12	20	535	4	16	M36	39	96.5
	419														
500	508	755	52	670	140	562	14.2	12	20	615	4	20	M39	42	117
	521														

All the components can be substituted with equivalent or higher-class materials.

FLANGES WCB/SS04/SS316 Ref.1200A / PN 10-16

WELDING NECK FLANGES

Nominal Pressure:64kgf/cm²-ND64

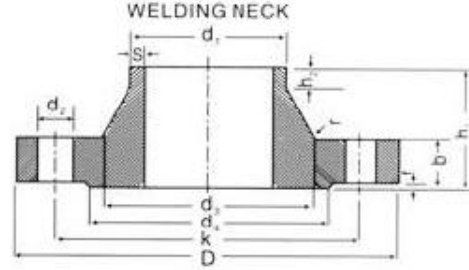
DIN2636

FLANSLAR

BORULARICIN,BOYUNLARI KAYNAKLI

Anma Basinc1:64kgf/cm²-ND64

TS 811/7 (TS ISO 7005-1)



BORE (Pipe)		FLANS (Flange)				BOYUN (Neck)				ALIN ÇIKINTISI (Raised face)		CLVATALAE (Bolts)			FLANS AĞIRLIĞI (Flange Weight) (7.85kg/dm ³) kg
DN	d ₁ ISO/DIN	D	b	k	h ₁	d ₂	s	r	h ₂	d ₄	f	Sayısı (Each)	Vida Screw	d ₅	
10	17.2	Değerler DIN 2637 (100kgf/cm ²) *den alınmalıdır.													
40	48.3														
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	355.6	600	56	525	150	420	12.5	12	20	465	4	16	M36	39	94.6
400	406.4	670	60	585	160	475	14.2	12	20	535	4	16	M39	42	124

WELDING NECK FLANGES

Nominal Pressure:100kgf/cm²-ND100

DIN2637

FLANSLAR

BORULAR ICIN, BOYUNLARI KAYNAKLI

Anm Basinc1:100kgf/cm²-DN100

TS 811/8 (TS ISO 7005-1)

BORE (Pipe)		FLANS (Flange)				BOYUN (Neck)				ALIN ÇIKINTISI (Raised face)		CLVATALAE (Bolts)			FLANS AĞIRLIĞI (Flange Weight) (7.85kg/dm ³) kg
DN	d ₁ ISO/DIN	D	b	k	h ₁	d ₂	s	r	h ₂	d ₄	f	Sayısı (Each)	Vida Screw	d ₅	
10	17.2	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	355.6	655	74	560	189	460	16.0	12	20	465	4	16	M45	48	165

All the components can be substituted with equivalent or higher-class materials.

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