

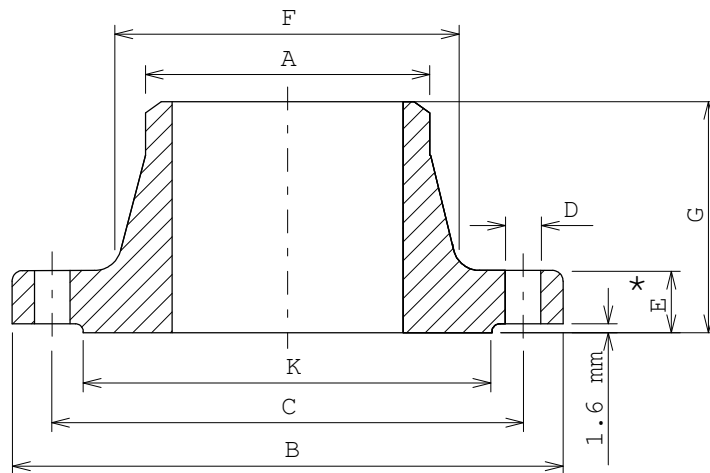
NOM. PIPE SIZE IN INCH	WEIGHT OF BLD. FLG. IN KG.	WEIGHT OF WN. FLG. IN KG.	O.D. OF PIPE	O.D. OF FLG.	DIA. OF BOLT CIRCLE	NUMBER OF BOLTS		DIA. OF BOLT HOLES	THICKNESS OF FLG.	DIA. OF HUB	TOTAL THICKNESS OF FLG.	DIA. OF RAISED FACE	GASKETS (2, 3)	
			A	B	C	NO.	DIA.	D	E	F	G	K	O.D.	I.D.
1/2	0.91	0.91	21.3	89	60	4	1/2	16	11	30	48	35	48	21
3/4	0.91	0.91	26.7	98	70	4	1/2	16	13	38	52	43	57	27
1	0.91	1.14	33.4	108	79	4	1/2	16	14	49	56	51	67	33
1 1/4	1.36	1.14	42.2	117	89	4	1/2	16	16	59	57	63	76	42
1 1/2	1.36	1.81	48.3	127	98	4	1/2	16	17	65	62	73	86	48
2	1.81	2.72	60.3	152	121	4	5/8	19	19	78	63	92	105	60
2 1/2	3.18	4.54	73	178	140	4	5/8	19	22	90	70	105	124	73
3	4.08	5.22	88.9	190	152	4	5/8	19	24	108	70	127	136	89
3 1/2	5.90	5.44	101.6	216	178	8	5/8	19	24	122	71	140	162	102
4	7.71	6.80	114.3	229	190	8	5/8	19	24	135	76	157	175	114
5	9.07	8.62	141.3	254	216	8	3/4	22	24	163	89	186	197	141
6	11.79	10.89	168.3	279	241	8	3/4	22	25	192	89	216	222	168
8	20.41	17.69	219.1	343	298	8	3/4	22	29	246	102	270	279	219
10	31.80	23.59	273	406	362	12	7/8	25	30	305	102	324	340	273
12	50.80	36.29	323.8	483	432	12	7/8	25	32	365	114	381	410	324
14	59.45	46.31	355.6	533	476	12	1	29	35	400	127	413	451	356
16	77.11	57.58	406.4	597	540	16	1	29	36	457	127	470	514	406
18	94.80	63.50	457.2	635	578	16	1 1/8	32	40	505	140	533	549	457
20	122.91	77.11	508	698	635	20	1 1/8	32	43	559	144	584	606	508
24	186.91	117.93	609.6	813	749	20	1 1/4	35	48	664	152	692	717	610

NOTES :

1. *E IS ALSO THICKNESS FOR BLIND FLANGES
2. FOR GASKET THICKNESS SEE PIPING SPEC.
3. DIMENSIONS OF GASKETS AS PER ANSI. STANDARD B 16.21-1978

**WELDING-NECK & BLIND
FLANGES ANSI 150 LB
(METRIC UNITS)**

ID. NO.	ISSUE	SHEET	DOC.NO.
	3	1 of 7	BN-DS-C9



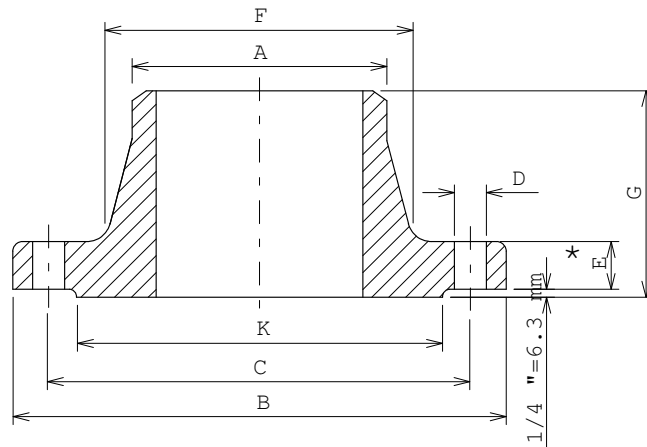
NOM. PIPE SIZE IN INCH	WEIGHT OF BLD. OF FLG. IN KG.	WEIGHT OF WN. OF FLG. IN KG.	O.D. OF PIPE	O.D. OF FLG.	DIA. OF BOLT CIRCLE	NUMBER OF BOLTS		DIA. OF BOLT HOLES	THICKNESS OF FLG.	DIA. OF HUB	TOTAL THICKNESS OF FLG.	DIA. OF RAISED FACE	GASKETS (2, 3)	
			A	B	C	NO.	DIA.	D	E	F	G	K	O.D.	I.D.
1/2	0.91	0.91	21.3	95	67	4	1/2	16	14	38	52	35	54	21
3/4	1.36	1.36	26.7	117	82	4	5/8	19	16	48	57	43	67	27
1	1.81	1.81	33.4	124	89	4	5/8	19	17	54	62	51	73	33
1 1/4	2.72	2.72	42.2	133	98	4	5/8	19	19	63	65	63	82	42
1 1/2	3.18	3.63	48.3	156	114	4	3/4	22	21	70	68	73	95	48
2	3.63	4.08	60.3	165	127	8	5/8	19	22	84	70	92	111	60
2 1/2	5.44	5.44	73	190	149	8	3/4	22	25	100	76	105	130	73
3	7.26	6.80	88.9	209	168	8	3/4	22	29	117	79	127	149	89
3 1/2	9.53	8.16	101.6	229	184	8	3/4	22	30	133	81	140	165	102
4	12.25	11.34	114.3	254	200	8	3/4	22	32	146	86	157	181	114
5	16.33	14.51	141.3	279	235	8	3/4	22	35	178	98	186	216	141
6	22.23	19.05	168.3	317	270	12	3/4	22	36	206	98	216	251	168
8	36.29	30.39	219.1	381	330	12	7/8	25	41	260	111	270	308	219
10	57.61	41.28	273	444	387	16	1	29	48	321	117	324	362	273
12	83.01	62.60	323.8	521	451	16	1 1/8	32	51	375	130	381	422	324
14	107.45	84.37	355.6	584	514	20	1 1/8	32	54	425	143	413	486	356
16	139.71	111.58	406.4	648	571	20	1 1/4	35	57	483	146	470	540	406
18	176.45	138.35	457.2	711	629	24	1 1/4	35	60	533	159	533	597	457
20	222.71	171.46	508	775	686	24	1 1/4	35	63	587	162	584	654	508
24	342.01	247.21	609.6	914	813	24	1 1/2	41	70	702	168	692	775	610

NOTES :

1. *E IS ALSO THICKNESS FOR BLIND FLANGES
2. FOR GASKET THICKNESS SEE PIPING SPEC.
3. DIMENSIONS OF GASKETS AS PER ANSI. STANDARD B 16.21-1978

**WELDING-NECK & BLIND
FLANGES ANSI 300 LB
(METRIC UNITS)**

ID. NO.	ISSUE	SHEET	DOC.NO.
	3	2 of 7	BN-DS-C9



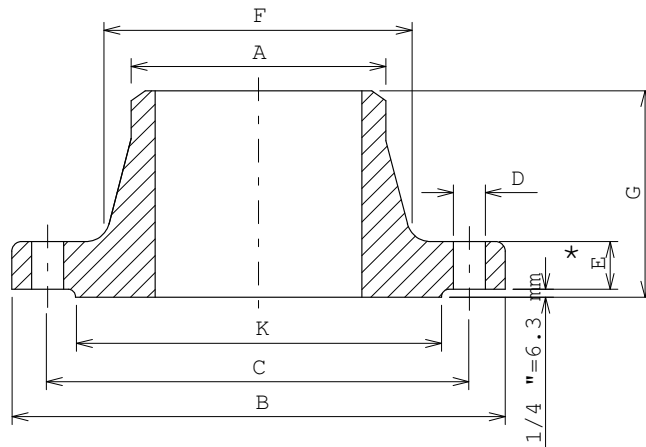
NOM. PIPE SIZE IN INCH	WEIGHT OF BLD. FLG. IN KG.	WEIGHT OF WN. FLG. IN KG.	O.D. OF PIPE	O.D. OF FLG.	DIA. OF BOLT CIRCLE	NUMBER OF BOLTS		DIA. OF BOLT HOLES	THICKNESS OF FLG.	DIA. OF HUB	TOTAL THICKNESS OF FLG.	DIA. OF RAISED FACE	GASKETS (2, 3)	
			A	B	C	NO.	DIA.	D	E	F	G	K	O.D.	I.D.
1/2	0.9	1.4	21.3	95	67	4	1/2	16	14	38	59	35	54	21
3/4	1.4	1.8	26.7	118	83	4	5/8	19	16	48	64	43	67	27
1	1.8	2.3	33.4	124	89	4	5/8	19	18	54	68	51	73	33
1 1/4	2.7	3.2	42.2	133	98	4	5/8	19	21	64	73	64	82	42
1 1/2	3.6	4.5	48.3	156	114	4	3/4	22	22	70	76	73	95	48
2	4.5	5.4	60.3	165	127	8	5/8	19	25	84	79	92	111	60
2 1/2	6.8	8.2	73	191	149	8	3/4	22	29	100	86	105	130	73
3	9.1	10.4	88.9	210	168	8	3/4	22	32	118	89	127	149	89
3 1/2	13.2	11.8	101.6	228	184	8	7/8	25	35	133	92	140	162	102
4	15	15.9	114.3	254	200	8	7/8	25	35	146	95	157	178	114
5	20	19.5	141.3	279	235	8	7/8	25	38	178	108	186	213	141
6	27.7	25.9	168.3	318	270	12	7/8	25	41	206	110	216	248	168
8	45.4	40.4	219.1	381	330	12	1	29	48	260	124	270	305	219
10	70.3	57.1	273	445	387	16	1 1/8	32	54	321	130	324	359	273
12	102.5	80.3	323.8	521	451	16	1 1/4	35	57	375	143	381	419	324
14	141	105.4	355.6	584	514	20	1 1/4	35	60	425	156	413	483	356
16	180.5	133.8	406.4	648	572	20	1 3/8	38	64	483	159	470	537	406
18	227.9	163.3	457.2	711	629	24	1 3/8	38	67	533	171	533	594	457
20	281.7	202.3	508	775	686	24	1 1/2	41	70	587	175	584	648	508
24	424.6	290.3	609.6	914	813	24	1 3/4	48	76	702	181	692	768	610

NOTES :

1. *E IS ALSO THICKNESS FOR BLIND FLANGES
2. FOR GASKET THICKNESS SEE PIPING SPEC.
3. DIMENSIONS OF GASKETS AS PER ANSI. STANDARD B 16.21-1978

**WELDING-NECK & BLIND
FLANGES ANSI 400 LB
(METRIC UNITS)**

ID. NO.	ISSUE	SHEET	DOC.NO.
	3	3 of 7	BN-DS-C9



NOM. PIPE SIZE IN INCH	WEIGHT OF BLD. FLG. IN KG.	WEIGHT OF WN. FLG. IN KG.	O.D. OF PIPE	O.D. OF FLG.	DIA. OF BOLT CIRCLE	NUMBER OF BOLTS		DIA. OF BOLT HOLES	THICKNESS OF FLG.	DIA. OF HUB	TOTAL THICKNESS OF FLG.	DIA. OF RAISED FACE	GASKETS (2, 3)	
			A	B	C	NO.	DIA.	D	E	F	G	K	O.D.	I.D.
3/4	1.4	1.8	26.7	118	83	4	5/8	19	16	48	64	43	67	27
1	1.8	2.3	33.4	124	89	4	5/8	19	18	54	68	51	73	33
1 1/4	2.7	3.2	42.2	133	98	4	5/8	19	21	64	73	64	83	42
1 1/2	3.6	4.5	48.3	156	114	4	3/4	22	22	70	76	73	95	48
2	4.5	5.4	60.3	165	127	8	5/8	19	25	84	79	92	111	60
2 1/2	6.8	8.2	73	191	149	8	3/4	22	29	100	86	105	130	73
3	9.1	10.4	88.9	210	168	8	3/4	22	32	118	89	127	149	89
3 1/2	13.2	11.8	101.6	229	184	8	7/8	25	35	133	92	140	162	102
4	18.6	19.1	114.3	273	216	8	7/8	25	38	152	108	157	194	114
5	30.8	30.8	141.3	330	267	8	1	29	45	189	121	186	241	141
6	39	36.7	168.3	356	292	12	1	29	48	222	124	216	267	168
8	63.1	53.1	219.1	419	349	12	1 1/8	32	56	273	140	270	321	219
10	104.4	85.7	273	508	432	16	1 1/4	35	64	343	159	324	400	273
12	133.8	102.5	323.8	559	489	20	1 1/4	35	67	400	162	381	457	324
14	171.5	156.9	355.6	603	527	20	1 3/8	38	70	432	171	413	492	356
16	239	218.4	406.4	686	603	20	1 1/2	41	76	495	184	470	565	406
18	301.6	252	457.2	743	654	20	1 5/8	45	83	546	191	533	613	457
20	387.8	313	508	813	724	24	1 5/8	45	89	610	197	584	683	508
24	533	442.9	609.6	940	838	24	1 7/8	51	102	718	210	692	791	610

NOTES :

1. *E IS ALSO THICKNESS FOR BLIND FLANGES
2. FOR GASKET THICKNESS SEE PIPING SPEC.
3. DIMENSIONS OF GASKETS AS PER ANSI. STANDARD B 16.21-1978

**WELDING-NECK & BLIND
FLANGES ANSI 600 LB
(METRIC UNITS)**

ID. NO.

ISSUE

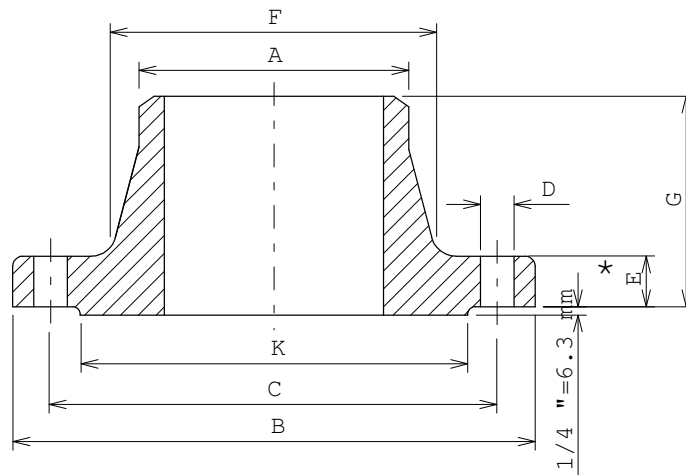
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DOC.NO.

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BN-DS-C9



NOM. PIPE SIZE IN INCH	WEIGHT OF BLD. FLG. IN KG.	WEIGHT OF WN. FLG. IN KG.	O.D. OF PIPE		DIA. OF BOLT CIRCLE C	NUMBER OF BOLTS		DIA. OF BOLT HOLES D	THICKNESS OF FLG. E	DIA. OF HUB F	TOTAL THICKNESS OF FLG. G	DIA. OF RAISED FACE K	GASKETS (2, 3)	
			A	B		NO.	DIA.						O.D.	I.D.
1/2	1.8	3.2	21.5	120	82.5	4	3/4	22	22.5	38	60	35	64	21
3/4	2.7	3.2	26.5	130	89	4	3/4	22	25.5	44	70	43	70	27
1	4.1	4.1	33.5	150	101.5	4	7/8	26	29	52	73	51	79	33
1 1/4	4.5	4.6	42	160	111	4	7/8	26	29	64	73	63	89	42
1 1/2	6.4	6.4	48	180	124	4	1	30	32	70	83	73	98	48
2	11.3	12	60.5	215	165	8	7/8	26	38.5	105	102	92	143	60
2 1/2	15.9	15	73	245	190.5	8	1	30	41.5	124	105	105	165	73
3	14.5	17	89	240	190.5	8	7/8	26	38.3	127	102	127	168	89
4	24.5	24	114.5	295	235	8	1 1/8	32	44.5	159	114	157	206	114
5	39	40	141	350	279.5	8	1 1/4	35	51	190	127	186	248	141
6	51	50	168.5	380	317.5	12	1 1/8	32	56	235	140	216	289	168
8	89	85	219	470	393.5	12	1 3/8	39	63.5	298	162	270	350	219
10	132	122	273	545	470	16	1 3/8	39	70	368	184	324	435	273
12	188	170	324	610	533.5	20	1 3/8	39	79.5	419	200	381	498	324
14	224	256	355.5	640	559	20	1 1/2	42	86	451	213	413	520	356
16	281	312	406.5	705	616	20	1 5/8	45	89	508	216	470	575	406
18	400	420	457	785	686	20	1 7/8	52	102	565	229	533	640	457
20	503	530	508	855	749.5	20	2	54	108	622	248	584	700	510
24	953	955	609.5	1040	901.5	20	2 1/2	68	140	749	292	692	840	610

NOTES :

1. *E IS ALSO THICKNESS FOR BLIND FLANGES
2. FOR GASKET THICKNESS SEE PIPING SPEC.
3. DIMENSIONS OF GASKETS AS PER ANSI. STANDARD B 16.21-1978

**WELDING-NECK & BLIND
FLANGES ANSI 900 LB
(METRIC UNITS)**

ID. NO.

ISSUE

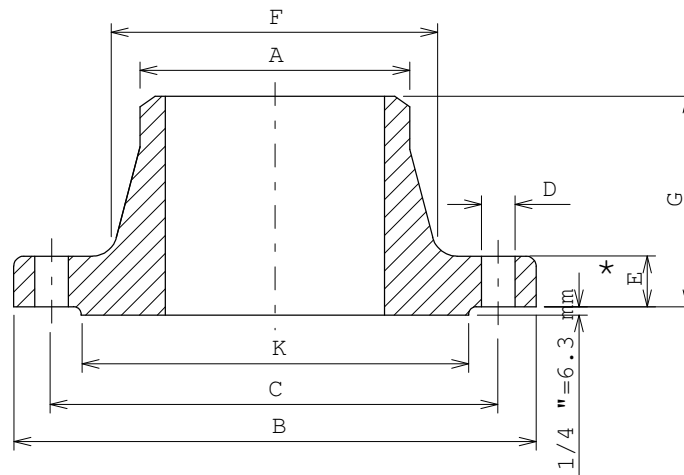
SHEET

DOC.NO.

3

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BN-DS-C9



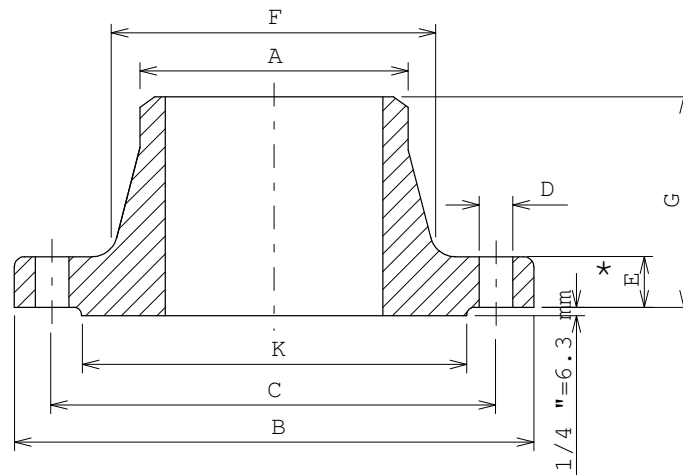
NOM. PIPE SIZE IN INCH	WEIGHT OF BLD. FLG. IN KG.	WEIGHT OF WN. FLG. IN KG.	O.D. OF PIPE		DIA. OF BOLT CIRCLE C	NUMBER OF BOLTS		DIA. OF BOLT HOLES D	THICKNESS OF FLG. E	DIA. OF HUB F	TOTAL THICKNESS OF FLG. G	DIA. OF RAISED FACE K	GASKETS (2, 3)	
			A	B		NO.	DIA.						O.D.	I.D.
1/2	1.8	3.2	21.5	120	82.5	4	3/4	22	22.5	38	60	35	64	21
3/4	2.7	3.2	26.5	130	89	4	3/4	22	25.5	44	70	43	70	27
1	4.1	4.1	33.5	150	101.5	4	7/8	26	29	52	73	51	79	33
1 1/4	4.5	4.6	42	160	111	4	7/8	26	29	64	73	63	89	42
1 1/2	6.4	6.4	48	180	124	4	1	30	32	70	83	73	98	48
2	11.3	12	60.5	215	165	8	7/8	26	38.5	105	102	92	143	60
2 1/2	15.9	15	73	245	190.5	8	1	30	41.5	124	105	105	165	73
3	21.8	22	89	270	203	8	1 1/8	33	48	133	118	127	171	89
4	33	34	114.5	310	241.5	8	1 1/4	36	54	165	124	157	210	114
5	64	60	141.5	375	292	8	1 1/2	42	73.5	197	155	186	254	141
6	72	75	168.5	395	317.5	12	3/8	39	83	229	171	216	283	168
8	137	125	219	465	393.5	12	5/8	45	92	292	213	270	352	219
10	230	207	273	585	482.5	12	7/8	52	108	368	254	324	435	273
12	352	314	324	675	571.5	16	2	56	124	451	283	381	520	324
14	461		355.5	750	635	16	2 1/4	60	133.5	495	298	413	580	356
16	613		406.5	825	705	16	2 1/2	68	146.5	552	311	470	640	406
18	835		457	915	774.5	16	3/4	76	162	597	327	533	705	457
20	1062		508	985	832	16	3	80	178	641	356	584	775	510
24	1712		610	1170	990.5	16	3 1/2	94	203.5	762	406	692	900	610

NOTES :

1. *E IS ALSO THICKNESS FOR BLIND FLANGES
2. FOR GASKET THICKNESS SEE PIPING SPEC.
3. DIMENSIONS OF GASKETS AS PER ANSI. STANDARD B 16.21-1978

**WELDING-NECK & BLIND
FLANGES ANSI 1500 LB
(METRIC UNITS)**

ID. NO.	ISSUE	SHEET	DOC.NO.
	3	6 of 7	BN-DS-C9



NOM. PIPE SIZE IN	WEIGHT OF BLD. FLG.	WEIGHT OF WN. FLG.	O.D. OF PIPE	O.D. OF FLG.	DIA. OF BOLT CIRCLE	NUMBER OF BOLTS		DIA. OF BOLT HOLES	THICKNESS OF FLG.	DIA. OF HUB	TOTAL THICKNESS OF FLG.	DIA. OF RAISED FACE	GASKETS (2, 3)	
						NO.	DIA.						O.D.	I.D.
INCH	IN KG.	IN KG.	A	B	C	NO.	DIA.	D	E	F	G	K	O.D.	I.D.
1/2	3.2	3.7	21.5	135	89	4	3/4	22	30.5	43	73	35	70	21
3/4	4.5	4.1	26.5	140	95	4	3/4	22	32	51	79	43	76	27
1	5.4	6	33.5	160	108	4	7/8	26	35	57	89	51	86	33
1 1/4	8.2	9.1	42	185	130	4	1	30	38.5	73	95	63	105	42
1 1/2	11.3	13	48.5	205	146	4	1 1/8	33	44.5	79	111	73	117	48
2	17.7	20	60.5	235	171.5	8	1	30	51	95	127	92	146	60
2 1/2	25.4	24	73	270	197	8	1 1/8	33	57.5	114	143	105	168	73
3	39	43	89	305	228.5	8	1 1/4	36	67	133	168	127	197	89
4	60	67	114.5	355	273	8	1 1/2	42	76.5	165	190	157	235	114
5	101	111	141.5	420	324	8	1 3/4	48	92.5	203	229	186	279	141
6	157	172	168.5	485	368.5	8	2	56	108	235	273	216	318	168
8	242	262	219	550	438	12	2	56	127	305	318	270	387	219
10	465	485	273	675	539.5	12	2 1/2	68	165.5	375	419	324	476	273
12	665	730	324	760	619	12	2 3/4	76	184.5	441	464	381	550	324
14														
16														
18														
20														
24														

NOTES :

1. *E IS ALSO THICKNESS FOR BLIND FLANGES
2. FOR GASKET THICKNESS SEE PIPING SPEC.
3. DIMENSIONS OF GASKETS AS PER ANSI. STANDARD B 16.21-1978

**WELDING-NECK & BLIND
FLANGES ANSI 2500 LB
(METRIC UNITS)**

ID. NO.	ISSUE	SHEET	DOC.NO.
	3	7 of 7	BN-DS-C9