

Carbon Steel Pipe and Fittings



SPECIFICATIONS • Carbon Steel Pipe, Buttwelding Fittings, Flanges

Linepipe	Buttwelding Fittings	Flanges
<p>Specification Dimensions Product Grades</p> <p>ASTM A53/A53M ASME B36.10M Welded and Seamless Steel Pipe for High and Low Temperature and Pressure A, B</p>	<p>Specification Dimensions Product Grade</p> <p>ASTM A234M (Moderate and High Temperature Service) ASTM A420M (Low Temperature Service) ASME B16.9 Elbows, Reducing Elbows, Returns, Tees, Crosses, Reducers, Stub Ends, Caps W/PB, WPL</p>	<p>Specification Dimensions Product Face Bore Class Grade</p> <p>ASTM A105M ASME B16.5 Weld Neck, Slip-on, Blind Flanges Plain, Raised Face Pipe Schedule 150, 300, 400, 600, 900, 1500, 2500 (to 600mm only) Carbon Steel</p>
<p>Specification Dimensions Product Grades</p> <p>ASTM A106 ASME B36.10M Seamless Carbon Steel Pipe for High Temperature Service A, B, C (Indicates tensile strength and yield point design)</p>	<p>Specification Dimensions Product Face Bore Class Grade</p> <p>ASTM A105M ASME B16.5 Weld Neck, Slip-on, Blind Flanges Plain, Raised Face Pipe Schedule 150, 300, 400, 600, 900, 1500, 2500 (to 600mm only) Carbon Steel</p>	<p>Specification Dimensions Product Face Bore Class Grade</p> <p>ASTM A105M ASME B16.5 Weld Neck, Slip-on, Blind Flanges Plain, Raised Face Pipe Schedule 150, 300, 400, 600, 900, 1500, 2500 (to 600mm only) Carbon Steel</p>
<p>Specification Dimensions Product Grade</p> <p>ASTM A335/A335M ASME B36.10M Seamless Ferritic Alloy-Steel Pipe for High Temperature Service Refer Standard for grades</p>	<p>Specification Dimensions Product Face Bore Class Grade</p> <p>ASTM A105M ASME B16.5 Weld Neck, Slip-on, Blind Flanges Plain, Raised Face Pipe Schedule 150, 300, 400, 600, 900, 1500, 2500 (to 600mm only) Carbon Steel</p>	<p>Specification Dimensions Product Face Bore Class Grade</p> <p>ASTM A105M ASME B16.5 Weld Neck, Slip-on, Blind Flanges Plain, Raised Face Pipe Schedule 150, 300, 400, 600, 900, 1500, 2500 (to 600mm only) Carbon Steel</p>
<p>Specification Dimensions Product Grade</p> <p>ASTM A333/A333M ASME B36.10M Seamless & ERW Carbon and Alloy Steel Pipe for Low Temperature Service Refer Standard for grades</p>	<p>Specification Dimensions Product Face Bore Class Grade</p> <p>ASTM A105M ASME B16.5 Weld Neck, Slip-on, Blind Flanges Plain, Raised Face Pipe Schedule 150, 300, 400, 600, 900, 1500, 2500 (to 600mm only) Carbon Steel</p>	<p>Specification Dimensions Product Face Bore Class Grade</p> <p>ASTM A105M ASME B16.5 Weld Neck, Slip-on, Blind Flanges Plain, Raised Face Pipe Schedule 150, 300, 400, 600, 900, 1500, 2500 (to 600mm only) Carbon Steel</p>
<p>Specification Dimensions Product Grades</p> <p>API 5L ASME API 5L, B36.10 Seamless & ERW for conveying Water, Oil, Gas B, X42, X52, X60, Refer API 5L specification for others</p>	<p>Specification Dimensions Product Face Bore Table</p> <p>AS 2129 AS 2129 "Table" flanges pressure – temperature ratings, materials and dimensions Slip-on, Blind "Table" Flanges Plain To suit Pipe & Tube OD D, E, F, and H</p>	<p>Specification Dimensions Product Face Bore Table</p> <p>AS 2129 AS 2129 "Table" flanges pressure – temperature ratings, materials and dimensions Slip-on, Blind "Table" Flanges Plain To suit Pipe & Tube OD D, E, F, and H</p>
<p>Structural Steel Specification Dimensions Product Grade</p> <p>AS 1163 AS 1163 Structural Steel Hollow Sections C.350</p>		

CARBON STEEL PIPE • Dimensions

Nominal size		Welded & Seamless Carbon Steel Pipe to ASME B36.10M										Structural Steel Hollow Sections to AS1163 Grade C350																
DN	NPS	OD		Schedule										Wall Thickness in mm														
		mm		10	20	30	40	Std	60	80	XS	100	120	140	160	XXS	4.8	5.5	6.0	6.4	7.1	8.2	9.3	9.5	12.7			
6	1/8	10.3		1.24		1.45	1.73	1.73		2.41																		
8	1/4	13.7		1.65		1.85	2.24	2.24		3.02																		
10	3/8	17.1		1.65		1.85	2.31	2.31		3.20																		
15	1/2	21.3		2.11		2.41	2.77	2.77		3.73																		
20	3/4	26.7		2.11		2.41	2.87	2.87		3.91																		
25	1	33.4		2.77		2.90	3.38	3.38		4.55																		
32	1 1/4	42.2		2.77		2.97	3.56	3.56		4.85																		
40	1 1/2	48.3		2.77		3.18	3.68	3.68		5.08																		
50	2	60.3		2.77		3.18	3.91	3.91		5.54																		
65	2 1/2	73.0		3.05		4.78	5.16	5.16		7.01																		
80	3	88.9		3.05		4.78	5.49	5.49		7.62																		
90	3 1/2	101.6		3.05		4.78	5.74	5.74		8.08																		
100	4	114.3		3.05		4.78	6.02	6.02		8.56																		
125	5	141.3		3.40			6.55	6.55		9.53																		
150	6	168.3		3.40			7.11	7.11		10.97																		
200	8	219.1		3.76		7.04	8.18	8.18		12.70																		
250	10	273.0		4.19		6.35	7.80	9.27		15.09																		
300	12	323.8		4.57		6.35	8.38	10.31		18.26																		
350	14	355.6		6.35		7.92	9.53	11.13		21.44																		
400	16	406.4		6.35		7.92	9.53	12.70		23.83																		
450	18	457		6.35		7.92	9.53	11.13		26.19																		
500	20	508		6.35		9.53	12.70	15.09		29.36																		
550	22	559		6.35		9.53	12.70	15.09		32.54																		
600	24	610		6.35		9.53	14.27	17.48		34.93																		
650	26	660		7.92		12.70				38.89																		
700	28	711		7.92		12.70	15.88			41.28																		
750	30	762		7.92		12.70	15.88			46.02																		
800	32	813		7.92		12.70	15.88	17.48		52.37																		
850	34	864		7.92		12.70	15.88	17.48																				
900	36	914		7.92		12.70	15.88	19.05																				
950	38	965																										
1000	40	1016																										
1050	42	1067																										
1100	44	1118																										
1150	46	1168																										
1200	48	1219																										

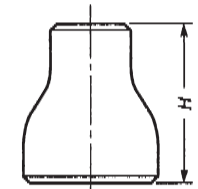
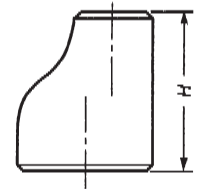
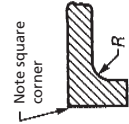
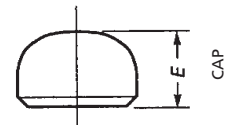
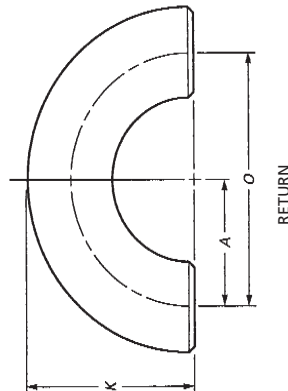
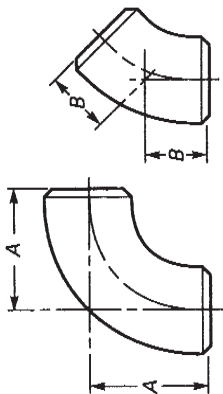
Note 1: For dimensional tolerances refer to ASME B36.10M
Equivalent sizes shown in API Specification 5L

CARBON STEEL BUTTWELDING FITTINGS • Dimensions

Buttwelding Fittings to ASME B16.9

Nominal size		OD	Elbows			Returns			Stub Ends					
			DN	NPS	D	Long		Short	Long	Short	Long	Short	Radius of Fillet	Diam of Lap
						90 deg	45 deg							
15	1/2	21.3	38	16	76	48	76	48	76	76	51	3	35	
20	3/4	26.7	38	19	76	51	76	51	76	76	51	3	43	
25	1	33.4	38	22	76	56	76	56	76	102	51	3	51	
32	1 1/4	42.2	48	25	95	70	95	70	95	102	51	5	64	
40	1 1/2	48.3	57	29	114	83	114	83	114	102	51	6	73	
50	2	60.3	76	35	152	106	152	106	152	152	64	8	92	
65	2 1/2	73.0	95	44	190	132	190	132	190	152	64	8	106	
80	3	88.9	114	51	229	159	229	159	229	152	64	10	127	
90	3 1/2	101.6	133	57	267	184	267	184	267	152	76	10	140	
100	4	114.3	152	64	305	210	305	210	305	152	76	11	157	
125	5	141.3	190	79	381	262	381	262	381	203	76	11	185	
150	6	168.3	229	95	457	313	457	313	457	203	89	13	218	
200	8	219.1	305	127	610	414	610	414	610	203	102	13	270	
250	10	273.0	381	159	762	518	762	518	762	254	127	13	324	
300	12	323.8	457	190	914	619	914	619	914	254	152	13	381	
350	14	355.6	533	222	1067	711	1067	711	1067	305	152	13	413	
400	16	406.4	610	254	1219	813	1219	813	1219	305	152	13	470	
450	18	457	686	286	1372	914	1372	914	1372	305	152	13	533	
500	20	508	762	318	1524	1016	1524	1016	1524	305	152	13	584	
550	22	559	838	343	1676	1118	1676	1118	1676	305	152	13	641	
600	24	610	914	381	1829	1219	1829	1219	1829	305	152	13	692	
650	26	660	991	405						305	152	13		
700	28	711	1067	438						305	152	13		
750	30	762	1143	470						305	152	13		
800	32	813	1219	502						305	152	13		
850	34	864	1295	533						305	152	13		
900	36	914	1372	565						305	152	13		
950	38	965	1448	600						305	152	13		
1000	40	1016	1524	632						305	152	13		
1050	42	1067	1600	660						305	152	13		
1100	44	1118	1676	695						305	152	13		
1150	46	1168	1753	727						305	152	13		
1200	48	1219	1829	759						305	152	13		

Note 1: Reducer dimension "H" is based on large end nominal size



Note square corner

Enlarged Section of Lap

CARBON STEEL FLANGES • Dimensions & Weights

Class 150 Flanges to ASME B16.5

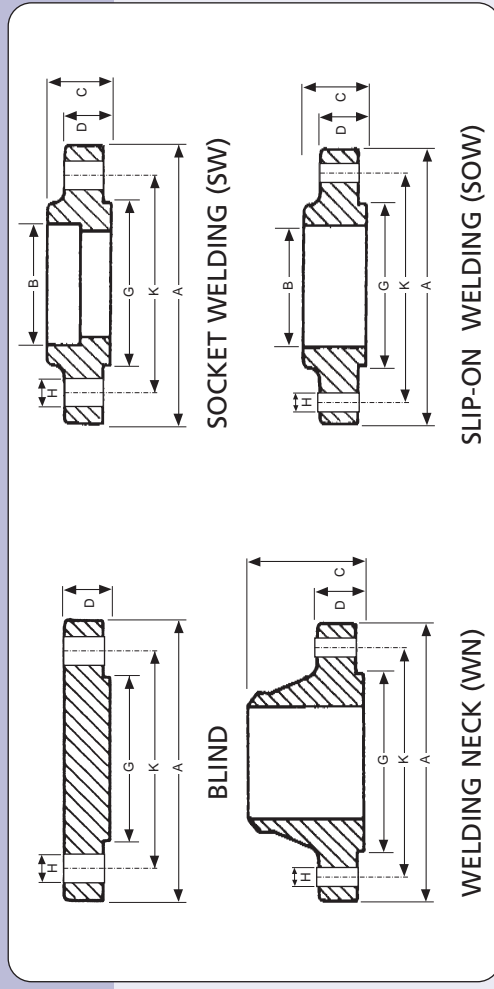
Nominal Size		Dimensions										Weight (kg)				
DN	NPS	Flange OD A mm	Flange Thickness D mm	Bore SOW SW B mm	Raised Face Diam. G mm	Length Thru Hub SOW, SW Threaded C mm	Bolt Drilling		RF Stud Bolt Length mm	RF Mach. Bolt Length mm	WN	Blind				
							Circle Diam. K mm	Hole Diam. H mm					Bolets No.			
15	1/2	88.9	11.2	22.4	35.1	15.8	47.8	60.4	15.7	4	1/2"	60.0	45.0	0.4	0.5	0.4
20	3/4	98.6	12.7	27.7	42.9	15.8	52.3	69.9	15.7	4	1/2"	65.0	50.0	0.6	0.7	0.6
25	1	108.0	14.2	34.5	50.8	17.5	55.6	79.2	15.7	4	1/2"	65.0	55.0	0.8	1.0	0.9
32	1 1/4	117.3	15.7	43.2	63.5	20.6	57.2	88.9	15.7	4	1/2"	70.0	55.0	1.0	1.3	1.2
40	1 1/2	127.0	17.5	49.5	73.2	22.4	62.0	98.6	15.7	4	1/2"	70.0	60.0	1.3	1.7	1.5
50	2	152.4	19.1	62.0	91.9	25.5	63.5	120.7	19.1	4	5/8"	80.0	65.0	2.1	2.6	2.4
65	2 1/2	177.8	22.4	74.7	104.6	28.5	69.9	139.7	19.1	4	5/8"	90.0	75.0	3.3	4.1	3.9
80	3	190.5	23.9	90.7	127.0	30.2	69.9	152.4	19.1	4	5/8"	90.0	75.0	3.9	4.9	4.9
90	3 1/2	215.9	23.9	103.4	139.7	31.8	71.4	177.8	19.1	8	5/8"	90.0	75.0	4.8	6.1	6.2
100	4	228.6	23.9	116.1	157.2	33.3	76.2	190.5	19.1	8	5/8"	90.0	75.0	5.3	6.8	7.0
125	5	254.0	23.9	143.8	185.7	36.6	88.9	215.9	22.4	8	3/4"	90.0	80.0	6.1	8.6	8.6
150	6	279.4	25.4	170.7	215.9	39.6	88.9	241.3	22.4	8	3/4"	100.0	85.0	7.5	10.6	11.3
200	8	342.9	28.4	221.5	269.7	44.5	101.6	298.5	22.4	8	3/4"	110.0	90.0	12.1	17.6	19.6
250	10	406.4	30.2	276.4	323.9	49.3	101.6	362.0	25.4	12	7/8"	115.0	95.0	16.5	24.0	28.8
300	12	482.6	31.8	327.2	381.0	55.6	114.3	431.8	25.4	12	7/8"	120.0	100.0	26.2	36.5	43.2
350	14	533.4	35.1	359.2	412.8	57.2	127.0	476.3	28.4	12	1"	130.0	110.0	34.6	48.4	58.1
400	16	596.9	36.6	410.5	469.9	63.5	127.0	539.8	28.4	16	1"	135.0	115.0	44.8	60.6	76.1
450	18	635.0	39.6	461.8	533.4	68.3	139.7	577.9	31.8	16	1 1/8"	150.0	125.0	48.9	68.3	93.7
500	20	698.5	42.9	513.1	584.2	73.2	144.5	635.0	31.8	20	1 1/8"	160.0	135.0	61.9	84.5	122.0
600	24	812.8	47.8	616.0	692.2	82.6	152.4	749.3	35.1	20	1 1/4"	175.0	145.0	86.9	115.0	185.0

Class 600 Flanges to ASME B16.5

Nominal Size		Dimensions										Weight (kg)			
DN	NPS	Flange OD A mm	Flange Thickness D mm	Bore SOW SW B mm	Raised Face Diam. G mm	Length Thru Hub SOW, SW Threaded C mm	Bolt Drilling		RF Stud Bolt Length mm	RF Mach. Bolt Length mm	WN	Blind			
							Circle Diam. K mm	Hole Diam. H mm					Bolets No.		
15	1/2	95.3	14.2	22.4	35.1	22.4	52.3	66.5	15.7	4	1/2"	80.0	0.7	0.9	0.8
20	3/4	117.3	15.7	27.7	42.9	25.4	57.2	82.6	19.1	4	5/8"	90.0	1.3	1.5	1.3
25	1	124.0	17.5	34.5	50.8	26.9	62.0	88.9	19.1	4	5/8"	90.0	1.5	1.8	1.6
32	1 1/4	133.4	20.6	43.2	63.5	28.4	66.5	98.6	19.1	4	5/8"	100.0	2.0	2.5	2.2
40	1 1/2	155.4	22.4	49.5	73.2	31.8	69.9	114.3	22.4	4	3/4"	105.0	3.0	3.5	3.3
50	2	165.1	25.4	62.0	91.9	36.6	73.2	127.0	19.1	8	5/8"	105.0	3.6	4.4	4.2
65	2 1/2	190.5	28.4	74.7	104.6	41.1	79.2	149.4	22.4	8	3/4"	120.0	5.3	6.4	6.1
80	3	209.6	31.8	90.7	127.0	46.0	82.6	168.1	22.4	8	3/4"	125.0	7.0	8.5	8.4
90	3 1/2	228.6	35.1	103.4	139.7	49.3	85.9	184.2	25.4	8	7/8"	140.0	8.8	10.7	11.0
100	4	273.1	38.1	116.1	157.2	53.8	101.6	215.9	25.4	8	7/8"	145.0	14.5	17.4	17.3
125	5	330.2	44.5	143.8	185.7	60.5	114.3	266.7	28.4	8	1"	165.0	24.4	29.2	29.4
150	6	355.6	47.8	170.7	215.9	66.5	117.3	292.1	28.4	12	1"	170.0	28.7	34.9	36.1
200	8	419.1	55.6	221.5	269.7	76.2	133.4	349.3	31.8	12	1 1/8"	195.0	43.4	53.9	58.9
250	10	508.0	63.5	276.4	323.9	85.9	152.4	431.8	35.1	16	1 1/4"	215.0	70.3	86.5	97.5
300	12	558.8	66.5	327.2	381.0	91.9	155.4	489.0	35.1	20	1 1/4"	220.0	84.2	103.0	124.0
350	14	603.3	69.9	359.2	412.8	93.7	165.1	527.1	38.1	20	1 3/8"	235.0	98.7	122.0	151.0
400	16	685.8	76.2	410.5	469.9	106.4	177.8	603.3	41.1	20	1 1/2"	255.0	142.0	170.0	214.0
450	18	743.0	82.6	461.8	533.4	117.3	184.2	654.1	44.5	20	1 5/8"	275.0	204.0	272.0	349.0
500	20	812.8	88.9	513.1	584.2	127.0	190.5	723.9	44.5	24	1 5/8"	290.0	220.0	254.0	349.0
600	24	939.8	101.6	616.0	692.2	139.7	203.2	838.2	50.8	24	1 7/8"	330.0	312.0	358.0	533.0

Class 300 Flanges to ASME B16.5

Nominal Size		Dimensions										Weight (kg)				
DN	NPS	Flange OD A mm	Flange Thickness D mm	Bore SOW SW B mm	Raised Face Diam. G mm	Length Thru Hub SOW, SW Threaded C mm	Bolt Drilling		RF Stud Bolt Length mm	RF Mach. Bolt Length mm	WN	Blind				
							Circle Diam. K mm	Hole Diam. H mm					Bolets No.			
15	1/2	95.3	14.2	22.4	35.1	22.4	52.3	66.5	15.7	4	1/2"	65.0	55.0	0.6	0.8	0.6
20	3/4	117.3	15.7	27.7	42.9	25.4	57.2	82.6	19.1	4	5/8"	75.0	60.0	1.1	1.3	1.1
25	1	124.0	17.5	34.5	50.8	26.9	62.0	88.9	19.1	4	5/8"	80.0	65.0	1.4	1.5	1.4
32	1 1/4	133.4	19.1	43.2	63.5	26.9	65.0	98.6	19.1	4	5/8"	80.0	65.0	1.7	2.0	1.8
40	1 1/2	155.5	20.6	49.5	73.2	30.2	68.3	114.3	22.4	4	3/4"	90.0	75.0	2.5	2.9	2.7
50	2	165.1	22.4	62.0	91.9	33.3	69.9	127.0	19.1	8	5/8"	90.0	75.0	2.9	3.4	3.2
65	2 1/2	190.5	25.4	74.7	104.6	38.1	76.2	149.4	22.4	8	3/4"	100.0	85.0	4.3	5.2	4.9
80	3	215.9	28.4	90.7	127.0	42.9	79.2	168.1	22.4	8	3/4"	110.0	90.0	5.9	6.9	6.8
90	3 1/2	228.6	30.2	103.4	139.7	44.5	81.0	184.2	22.4	8	3/4"	110.0	95.0	7.3	8.7	8.7
100	4	254.0	31.8	116.1	157.2	47.8	85.9	200.2	22.4	8	3/4"	110.0	95.0	9.6	11.2	11.5
125	5	279.4	35.1	143.8	185.7	50.8	98.6	235.0	22.4	8	3/4"	120.0	100.0	12.3	15.1	15.6
150	6	317.5	36.6	170.7	215.9	52.3	98.6	269.7	22.4	12	3/4"	125.0	105.0	15.6	19.1	20.9
200	8	381.0	41.1	221.5	269.7	62.0	112.3	330.2	25.4	12	7/8"	140.0	110.0	24.2	29.9	34.3
250	10	444.5	47.8	276.4	323.9	66.5	117.3	387.4	28.4	16	1"	155.0	130.0	34.1	42.7	53.3
300	12	520.7	50.8	327.2	381.0	73.2	130.0	450.9	31.8	16	1 1/8"	170.0	145.0	49.8	61.8	78.8
350	14	584.2	53.8	359.2	412.8	82.6	142.7	514.4	35.1	20	1 1/8"	175.0	150.0	69.9	85.8	105.0
400	16	647.7	57.2	410.5	469.9	86.6	146.1	571.5	35.1	20	1 1/4"	190.0	160.0	88.1	106.0	137.0
450	18	711.2	60.5	461.8	533.4	88.9	158.8	626.7	35.1	24	1 1/4"	195.0	170.0	109.0	131.0	175.0
500	20	774.7	63.5	513.1	584.2	95.3	162.1	685.8	35.1	24	1 1/4"	205.0	180.0	134.0	158.0	221.0
600	24	914.4	70.0	616.0	692.2	106.4	168.1	812.8	41.1	24	1 1/2"	230.0	195.0	201.0	230.0	339.0



Note 1: All weights are approximate.
Note 2: For Class 150, 300 the flange thickness "D" dimension includes approx. 1.5mm for the raised face height. For Class 600, 900, 1500, 2500 the flange thickness does not include the raised face height and approx. 6.4mm must be added to D dimension.
Note 3: Bolt length dimensions incorporate the height of the raised face.
Note 4: Welding Neck bore is derived from the pipe schedule.

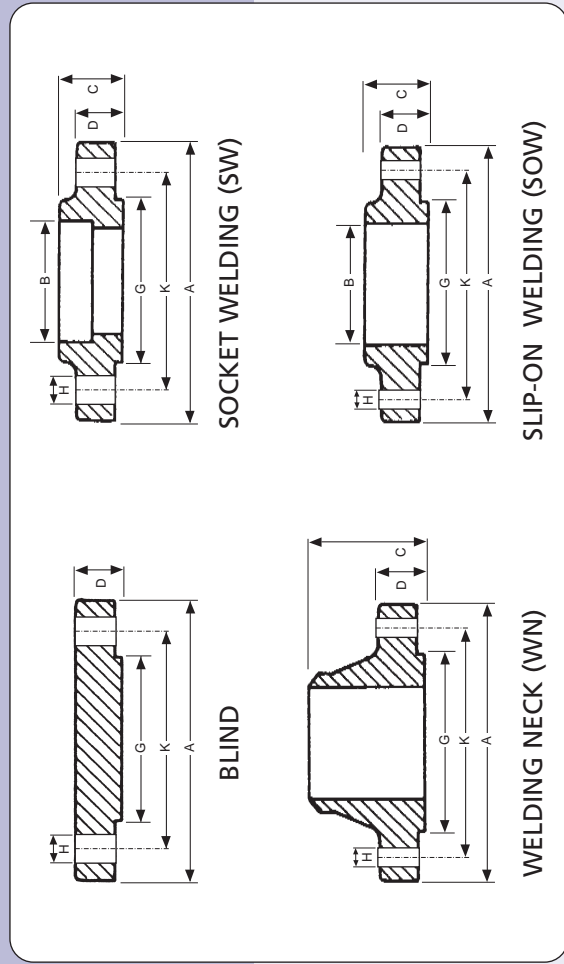
CARBON STEEL FLANGES • Dimensions & Weights

Class 900 Flanges to ASME B16.5

Nominal Size		Dimensions										Weight (kg)		
DN	NPS	Flange OD A mm	Flange Thickness D mm	Bore SOW SW B mm	Raised Face Diam. G mm	Length Thru Hub SOW, SW Threaded C mm	Bolt Drilling			RF Stud Bolt Length mm	Blind WN	Blind		
							Hole Diam. H mm	Circle Diam. K mm	Bolets No.					
15	1/2	120.7	22.4	22.4	35.1	31.8	60.5	82.6	22.4	4	105.0	1.8	1.9	1.8
20	3/4	130.0	25.4	27.7	42.9	35.1	70.0	88.9	22.4	4	115.0	2.4	2.6	2.4
25	1	149.4	28.4	34.5	50.8	41.1	73.2	101.6	25.4	4	125.0	3.6	3.7	3.6
32	1 1/4	158.8	28.4	43.2	63.5	41.1	73.2	111.3	25.4	4	125.0	4.0	4.3	4.1
40	1 1/2	177.8	31.8	49.5	73.2	44.5	82.6	124.0	28.4	4	140.0	5.5	5.9	5.8
50	2	215.9	38.1	62.0	91.9	57.2	101.6	165.1	25.4	8	145.0	10.2	10.8	10.1
65	2 1/2	244.3	41.1	74.7	104.6	63.5	104.6	190.5	28.4	8	160.0	13.9	15.0	14.0
80	3	241.3	38.1	90.7	127.0	53.8	101.6	190.5	25.4	8	145.0	11.6	13.7	13.1
100	4	292.1	44.5	116.1	157.2	69.9	114.3	235.0	31.8	8	170.0	19.7	22.5	26.9
125	5	349.3	50.8	143.8	185.7	79.2	127.0	279.4	35.1	8	190.0	31.9	37.4	36.5
150	6	381.0	55.6	170.7	215.9	85.9	139.7	317.5	31.8	12	195.0	41.1	47.7	47.4
200	8	469.9	63.5	221.5	269.7	101.6	162.1	393.7	38.1	12	220.0	70.7	81.3	82.5
250	10	546.1	69.9	276.4	323.9	108.0	184.2	469.9	38.1	16	235.0	101.0	119.0	122.0
300	12	609.6	79.2	327.2	381.0	117.3	200.2	533.4	38.1	20	255.0	133.0	157.0	173.0
350	14	641.4	85.6	359.2	412.8	130.0	212.9	558.8	41.1	20	275.0	153.0	180.0	206.0
400	16	704.9	88.9	410.5	469.9	133.4	215.9	616.0	44.5	20	285.0	185.0	217.0	259.0
450	18	787.4	101.6	461.8	533.4	152.4	228.6	685.8	50.8	20	325.0	258.0	292.0	367.0
500	20	857.3	108.0	513.1	584.2	158.8	247.7	749.3	53.8	20	345.0	317.0	362.0	463.0
600	24	1041.4	139.7	616.0	692.2	203.2	292.1	901.7	66.5	20	435.0	606.0	665.0	876.0

Class 2500 Flanges to ASME B16.5

Nominal Size		Dimensions										Weight (kg)	
DN	NPS	Flange OD A mm	Flange Thickness D mm	Raised Face Diam. G mm	Length Thru Hub SOW, SW Threaded C mm	Circle Diam. K mm	Bolt Drilling			RF Stud Bolt Length mm	Blind WN	Blind	
							Hole Diam. H mm	Circle Diam. K mm	Bolets No.				
15	1/2	135.4	30.2	35.1	39.6	73.2	88.9	22.4	4	125.0	3.1	3.0	
20	3/4	139.7	31.8	42.9	42.9	79.2	95.3	22.4	4	125.0	3.7	3.5	
25	1	158.8	35.1	50.8	47.8	88.9	108.0	25.4	4	150.0	5.2	5.0	
32	1 1/4	184.2	38.1	63.5	52.3	95.3	130.0	28.4	4	150.0	7.7	7.4	
40	1 1/2	203.2	44.5	73.2	60.5	111.3	146.1	31.8	4	170.0	10.9	10.4	
50	2	235.0	50.8	91.9	69.9	127.0	171.5	28.4	8	175.0	16.2	15.6	
65	2 1/2	266.7	57.2	104.6	79.2	142.7	196.9	31.8	8	195.0	23.7	22.6	
80	3	304.8	66.5	127.0	168.1	168.1	228.6	35.1	8	220.0	36.2	34.8	
100	4	355.6	76.2	157.2	190.5	190.5	273.1	41.1	8	255.0	55.3	53.9	
125	5	419.1	91.9	185.7	228.6	228.6	323.9	47.8	8	300.0	92.5	90.8	
150	6	482.6	108.0	215.9	273.1	273.1	368.3	53.8	8	345.0	143.0	141.0	
200	8	552.5	127.0	269.7	317.5	317.5	438.2	53.8	12	380.0	215.0	214.0	
250	10	673.1	165.1	323.9	419.1	419.1	539.8	66.5	12	485.0	406.0	411.0	
300	12	762.0	184.2	381.0	463.6	463.6	619.3	73.2	16	540.0	572.0	592.0	



Note 1: All weights are approximate.
Note 2: For Class 150, 300 the flange thickness "D" dimension includes approx. 1.5mm for the raised face height.
 For Class 600, 900, 1500, 2500 the flange thickness does not include the raised face height and approx. 6.4mm must be added to D dimension.
Note 3: Bolt length dimensions incorporate the height of the raised face.
Note 4: Welding Neck bore is derived from the pipe schedule.

Class 1500 Flanges to ASME B16.5

Nominal Size		Dimensions										Weight (kg)		
DN	NPS	Flange OD A mm	Flange Thickness D mm	Bore SOW SW B mm	Raised Face Diam. G mm	Length Thru Hub SOW, SW Threaded C mm	Bolt Drilling			RF Stud Bolt Length mm	Blind WN	Blind		
							Hole Diam. H mm	Circle Diam. K mm	Bolets No.					
15	1/2	120.7	22.4	22.4	35.1	31.8	60.5	82.6	22.4	4	105.0	1.8	1.9	1.8
20	3/4	130.0	25.4	27.7	42.9	35.1	69.9	88.9	22.4	4	115.0	2.4	2.6	2.4
25	1	149.4	28.4	34.5	50.8	41.1	73.2	101.6	25.4	4	125.0	3.6	3.7	3.6
32	1 1/4	158.8	28.4	43.2	63.5	41.1	73.2	111.3	25.4	4	125.0	4.0	4.3	4.1
40	1 1/2	177.8	31.8	49.5	73.2	44.5	82.6	124.0	28.4	4	140.0	5.5	5.9	5.8
50	2	215.9	38.1	62.0	91.9	57.2	101.6	165.1	25.4	8	145.0	10.2	10.8	10.1
65	2 1/2	244.3	41.1	74.7	104.6	63.5	104.6	190.5	28.4	8	160.0	13.9	15.0	14.0
80	3	266.7	47.8	90.7	127.0	53.8	117.3	203.2	31.8	8	180.0	19.9	19.9	19.1
100	4	311.2	53.8	116.1	157.2	63.5	124.0	241.3	35.1	8	195.0	29.9	29.9	29.9
125	5	374.7	73.2	143.8	185.7	79.2	155.4	292.1	41.1	8	250.0	55.4	58.4	58.4
150	6	393.7	82.6	170.7	215.9	85.9	171.5	317.5	38.1	12	260.0	68.4	71.8	71.8
200	8	482.6	91.9	221.5	269.7	101.6	212.9	393.7	44.5	12	290.0	117.0	122.0	122.0
250	10	584.2	108.0	276.4	323.9	108.0	254.0	482.6	50.8	12	335.0	194.0	210.0	210.0
300	12	673.1	124.0	327.2	381.0	117.3	282.4	571.5	53.8	16	375.0	288.0	316.0	316.0
350	14	749.3	133.4	359.2	412.8	130.0	298.5	635.0	60.4	16	405.0	380.0	420.0	420.0
400	16	825.5	146.1	410.5	469.9	133.4	311.2	704.9	66.5	16	445.0	485.0	558.0	558.0
450	18	914.4	162.1	461.8	533.4	152.4	327.2	774.7	73.2	16	495.0	644.0	760.0	760.0
500	20	984.3	177.8	513.1	584.2	158.8	355.6	831.9	79.2	16	540.0	775.0	965.0	965.0
600	24	1168.4	203.2	616.0	692.2	203.2	406.4	990.6	91.9	16	615.0	1232.0	1558.0	1558.0

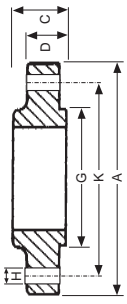
CARBON STEEL FLANGES • Dimensions & Weights

Table D Flanges to AS 2129

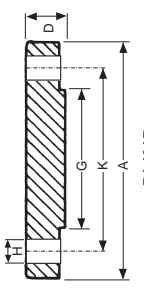
Nominal Size DN	Dimensions(mm)					Weight (kg)		
	OD A	Thickness D	Raised Face Diam G	Drilling Bolt Hole Diam H	Number of Bolts	Bolt Size & Thread	SOW	Blind
15	95	*5	47	67	4	M12	0.6	0.6
20	100	*5	53	73	4	M12	0.7	0.7
25	115	*6	63	83	4	M12	0.9	1.0
32	120	*6	67	87	4	M12	0.9	1.1
40	135	*8	78	98	4	M12	1.2	1.4
50	150	*8	90	114	4	M16	1.4	1.7
65	165	*8	103	127	4	M16	1.6	2.1
80	185	*10	122	146	4	M16	2.0	2.7
90	205	*10	141	165	4	M16	2.2	3.2
100	215	*10	154	178	4	M16	2.5	3.6
125	255	13	186	210	8	M16	3.3	4.9
150	280	13	211	235	8	M16	4.0	6.1
200	335	13	268	292	8	M16	5.0	8.8
250	405	16	328	356	8	M20	8.7	15.8
300	455	19	378	406	12	M20	11.3	23.6
350	525	22	438	470	12	M24	19.6	38.6
400	580	22	489	521	12	M24	22.3	44.9
450	640	25	532	584	12	M24	29.0	63.0
500	705	29	609	641	16	M24	39.9	86.0
550	760	29	637	699	16	M27	50.0	107.0
600	825	32	720	756	16	M27	58.0	125.0
700	910	35	809	845	20	M30		
750	995	41	888	927	20	M30		
800	1060	41	942	984	20	M33		
850	1090	44	974	1016	24	M33		
900	1175	48	1050	1092	24	M36		
1000	1255	51	1133	1175	24	M36		
1200	1490	60	1368	1410	32	M36		

Table F Flanges to AS 2129

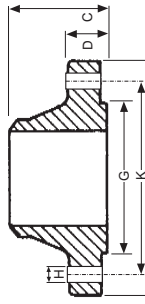
Nominal Size DN	Dimensions(mm)					Weight (kg)		
	Flange OD A	Flange Thickness D	Raised Face Diam G	Drilling Bolt Hole Diam H	Number of Bolts	Bolt Size & Thread	SOW	Blind
15	95	10	47	67	4	M12	0.6	0.7
20	100	10	53	73	4	M12	0.7	0.8
25	120	10	63	87	4	M16	0.9	1.0
32	120	13	74	98	4	M16	1.1	1.3
40	140	13	81	105	4	M16	1.2	1.4
50	165	16	103	127	4	M16	2.2	2.6
65	185	16	122	146	4	M16	2.5	3.0
80	205	16	141	165	8	M16	3.0	3.8
90	215	19	154	178	8	M16		
100	230	19	167	191	8	M16	4.3	5.9
125	280	22	207	235	8	M20	7.4	10.1
150	305	22	232	260	12	M20	8.1	11.9
200	430	29	324	381	12	M24	12.7	20.3
250	490	32	349	406	16	M24	18.1	31.4
300	550	35	406	438	16	M24	23.9	44.7
350	550	35	459	495	16	M27	35.3	63.0
400	610	41	516	552	20	M27	47.6	90.0
450	610	41	571	610	20	M30	62.0	120.0
500	735	51	634	673	24	M30	80.0	162.0
550	785	54	685	724	24	M30		
600	850	57	739	781	24	M33		
700	935	60	815	857	24	M33		
750	1015	67	898	940	28	M33		
800	1060	68	942	984	28	M33		
850	1090	70	974	1016	32	M36		
900	1185	76	1060	1105	32	M36		
1000	1275	83	1149	1194	39	M36		
1200	1550	95	1385	1441	42	M39		



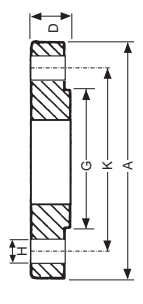
SLIP-ON WELDING (SOW)



BLIND



WELDING NECK (WVN)



PLATE

Table H Flanges to AS 2129

Nominal Size DN	Dimensions(mm)					Weight (kg)		
	Flange OD A	Flange Thickness D	Raised Face Diam G	Drilling Bolt Hole Diam H	Number of Bolts	Bolt Size & Thread	SOW	Blind
15	115	13	57	83	4	M16	0.8	1.0
20	115	13	57	83	4	M16	0.9	1.0
25	120	14	64	87	4	M16	1.1	1.2
32	135	17	76	98	4	M16	1.5	1.8
40	140	17	83	105	4	M16	1.7	2.0
50	165	19	102	127	4	M16	2.6	3.1
65	185	19	114	146	8	M16	3.1	3.8
80	205	22	127	165	8	M16	4.3	5.4
90	215	22	140	178	8	M16		
100	230	25	152	191	8	M16	5.8	7.9
125	280	29	178	235	8	M20	9.9	12.6
150	305	29	210	260	12	M20	10.8	15.4
200	430	32	260	324	12	M24	18.3	28.2
250	490	35	311	381	12	M24	22.1	38.0
300	550	41	362	438	16	M24	31.0	58.0
350	550	48	419	495	16	M27	47.7	85.0
400	610	54	483	552	20	M27	62.0	118.0
450	675	60	533	610	20	M30	105.0	196.0
500	735	67	597	673	24	M30		
550	785	70	648	724	24	M30		
600	850	76	699	781	24	M33		

Note 1: All weights are approximate
Note 2: A diametrical clearance of 4mm maximum applies to pipe or tube OD for plate flanges
Note 3: The flange thickness "D" dimension included the raised face height
Note 4: Welding Neck bore is derived from the pipe schedule