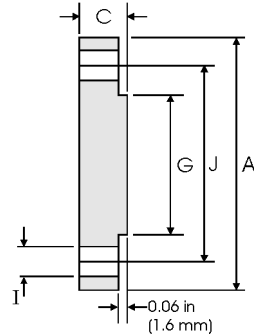
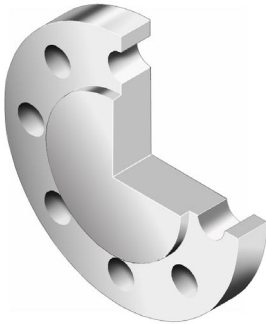


ZIZI ENGINEERING CO LTD



Blind Flanges - ANSI B16.5



Class 150 lb

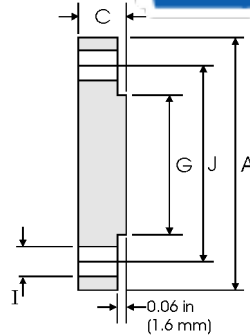
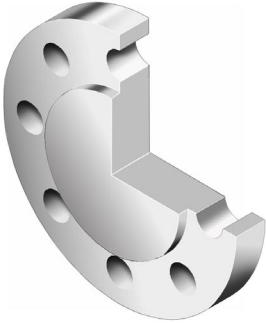
Pipe		Flange Data		Raised Face	Drilling Data			Weight
Nominal Pipe Size		A	C	G	H	I	J	
	Outside Diameter	Overall Diameter	Flange Thickness min	Face Diameter	Number of Holes	Bolt Hole Diameter	Diameter of Circle of Holes	kg/piece
	in mm	in mm	in mm	in mm		in mm	in mm	
1/2	0.840	3.500	0.440	1.380	4	0.620	2.380	0.42
	21.30	88.90	11.20	35.10		15.70	60.45	
3/4	1.050	3.880	0.500	1.690	4	0.620	2.750	0.61
	26.70	98.60	12.70	42.90		15.70	69.85	
1	1.315	4.250	0.560	2.000	4	0.620	3.120	0.86
	33.40	108.0	14.20	50.80		15.70	79.25	
1 1/4	1.660	4.620	0.620	2.500	4	0.620	3.500	1.17
	42.20	117.3	15.70	63.50		15.70	88.90	
1 1/2	1.900	5.000	0.690	2.880	4	0.620	3.880	1.53
	48.30	127.0	17.50	73.15		15.70	98.60	
2	2.375	6.000	0.750	3.620	4	0.750	4.750	2.42
	60.30	152.4	19.10	91.90		19.10	120.7	
2 1/2	2.875	7.000	0.880	4.120	4	0.750	5.500	3.94
	73.00	177.8	22.40	104.6		19.10	139.7	
3	3.500	7.500	0.940	5.000	4	0.750	6.000	4.93
	88.90	190.5	23.90	127.0		19.10	152.4	
3 1/2	4.000	8.500	0.940	5.500	8	0.750	7.000	6.17
	101.6	215.9	23.90	139.7		19.10	177.8	
4	4.500	9.000	0.940	6.190	8	0.750	7.500	7.00
	114.3	228.6	23.90	157.2		19.10	190.5	
5	5.563	10.00	0.940	7.310	8	0.880	8.500	8.63
	141.3	254.0	23.90	185.7		22.40	215.9	
6	6.625	11.00	1.000	8.500	8	0.880	9.500	11.3
	168.3	279.4	25.40	215.9		22.40	241.3	
8	8.625	13.50	1.120	10.62	8	0.880	11.75	19.6
	219.1	342.9	28.40	269.7		22.40	298.5	
10	10.75	16.00	1.190	12.75	12	1.000	14.25	28.8
	273.0	406.4	30.20	323.9		25.40	362.0	
12	12.75	19.00	1.250	15.00	12	1.000	17.00	43.2
	323.8	482.6	31.75	381.0		25.40	431.8	
14	14.00	21.00	1.380	16.25	12	1.120	18.75	58.1
	355.6	533.4	35.10	412.8		28.40	476.3	
16	16.00	23.50	1.440	18.50	16	1.120	21.25	76.0
	406.4	596.9	36.60	469.9		28.40	539.8	
18	18.00	25.00	1.560	21.00	16	1.250	22.75	93.7
	457.2	635.0	39.60	533.4		31.75	577.9	
20	20.00	27.50	1.690	23.00	20	1.250	25.00	122
	508.0	698.5	42.90	584.2		31.75	635.0	
24	24.00	32.00	1.880	27.25	20	1.380	29.50	185
	609.6	812.8	47.80	692.2		35.10	749.3	

Notes

- Weights are based on manufacturer's data and are approximate.
- Flat face flanges may be provided at full thickness, C, or with raised face removed (the latter is nonstandard).

ZIZI ENGINEERING CO LTD

Blind Flanges - ANSI B16.5



Class 300 lb

Pipe		Flange Data			Raised Face	Drilling Data			Weight
Nominal Pipe Size		A	C	G	H	I	J		
	Outside Diameter	Overall Diameter	Flange Thickness min	Face Diameter	Number of Holes	Bolt Hole Diameter	Diameter of Circle of Holes	kg/piece	
	in mm	in mm	in mm	in mm		in mm	in mm		
1/2	0.840	3.750	0.560	1.380	4	0.620	2.620	0.64	
	21.30	95.20	14.20	35.10		15.70	66.55		
3/4	1.050	4.620	0.620	1.690	4	0.750	3.250	1.11	
	26.70	117.3	15.70	42.90		19.00	82.50		
1	1.315	4.880	0.690	2.000	4	0.750	3.500	1.39	
	33.40	123.9	17.50	50.80		19.00	88.90		
1 1/4	1.660	5.250	0.750	2.500	4	0.750	3.880	1.79	
	42.20	133.3	19.00	63.50		19.00	98.50		
1 1/2	1.900	6.120	0.810	2.880	4	0.880	4.500	2.66	
	48.30	155.4	20.60	73.15		22.3	114.3		
2	2.375	6.500	0.880	3.620	8	0.750	5.000	3.18	
	60.30	165.1	22.30	91.90		19.10	127.0		
2 1/2	2.875	7.500	1.000	4.120	8	0.880	5.880	4.85	
	73.00	190.5	25.40	104.6		22.30	149.3		
3	3.500	8.250	1.120	5.000	8	0.880	6.620	6.81	
	88.90	209.5	28.40	127.0		22.30	168.1		
3 1/2	4.000	9.000	1.190	5.500	8	0.880	7.250	8.71	
	101.6	228.6	30.20	139.7		22.30	184.1		
4	4.500	10.00	1.250	6.190	8	0.880	7.800	11.5	
	114.3	254.0	31.70	157.2		22.30	200.1		
5	5.563	11.00	1.380	7.310	8	0.880	9.250	15.6	
	141.3	279.4	35.00	185.7		22.30	234.9		
6	6.625	12.50	1.440	8.500	12	0.880	10.62	20.9	
	168.3	317.5	36.50	215.9		22.30	269.7		
8	8.625	15.00	1.620	10.62	12	1.000	13.00	34.3	
	219.1	381.0	41.10	269.7		25.40	330.2		
10	10.75	17.50	1.880	12.75	16	1.120	15.25	53.3	
	273.0	444.5	47.70	323.9		28.40	387.3		
12	12.75	20.50	2.000	15.00	16	1.250	17.75	78.8	
	323.8	520.7	50.80	381.0		31.70	450.8		
14	14.00	23.00	2.120	16.25	20	1.250	20.25	105	
	355.6	584.2	53.80	412.8		31.70	514.3		
16	16.00	25.50	2.250	18.50	20	1.380	22.50	137	
	406.4	647.7	57.15	469.9		35.00	571.5		
18	18.00	28.00	2.380	21.00	24	1.380	24.75	175	
	457.2	711.2	60.45	533.4		35.00	628.6		
20	20.00	30.50	2.500	23.00	24	1.380	27.00	221	
	508.0	774.7	63.50	584.2		35.00	685.8		
24	24.00	36.00	2.750	27.25	24	1.620	32.00	339	
	609.6	914.4	69.85	692.2		41.10	812.8		

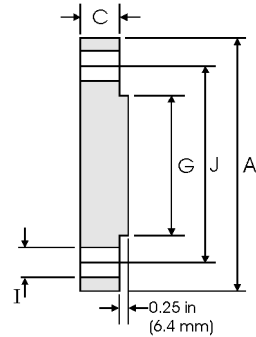
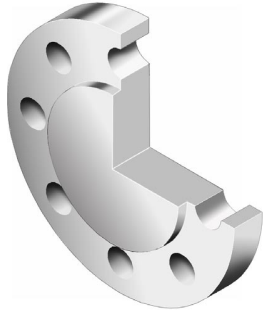
Notes

- Weights are based on manufacturer's data and are approximate.
- Flat face flanges may be provided at full thickness, C, or with raised face removed (the latter is nonstandard).

ZIZI ENGINEERING CO LTD



Blind Flanges - ANSI B16.5



Class 400 lb

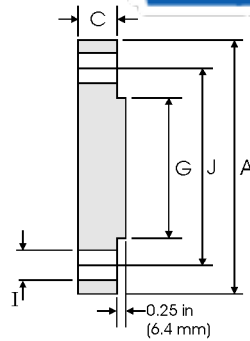
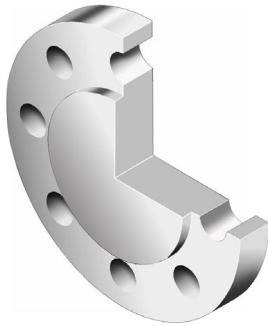
Pipe		Flange Data		Raised Face	Drilling Data			Weight
Nominal Pipe Size		A	C	G	H	I	J	
	Outside Diameter	Overall Diameter	Flange Thickness min	Face Diameter	Number of Holes	Bolt Hole Diameter	Diameter of Circle of Holes	kg/piece
	in mm	in mm	in mm	in mm		in mm	in mm	
1/2	0.840 21.30	3.750 95.20	0.560 14.20	1.380 35.10	4	0.620 15.70	2.620 66.55	0.76
3/4	1.050 26.70	4.620 117.3	0.620 15.70	1.690 42.90	4	0.750 19.10	3.250 82.60	1.28
1	1.315 33.40	4.880 123.9	0.690 17.50	2.000 50.80	4	0.750 19.10	3.500 88.90	1.60
1 1/4	1.660 42.20	5.250 133.3	0.810 20.60	2.500 63.50	4	0.750 19.10	3.880 98.60	2.23
1 1/2	1.900 48.30	6.120 155.4	0.880 22.30	2.880 73.15	4	0.880 22.40	4.500 114.3	3.25
2	2.375 60.30	6.500 165.1	1.000 25.40	3.620 91.90	8	0.750 19.10	5.000 127.0	4.15
2 1/2	2.875 73.00	7.500 190.5	1.120 28.40	4.120 104.6	8	0.880 22.40	5.880 149.4	6.13
3	3.500 88.90	8.250 209.5	1.250 31.70	5.000 127.0	8	0.880 22.40	6.620 168.1	8.44
3 1/2	4.000 101.6	9.000 228.6	1.380 35.00	5.500 139.7	8	1.000 25.40	7.250 184.2	11.0
4	4.500 114.3	10.00 254.0	1.380 35.10	6.190 157.2	8	1.000 25.40	7.880 200.2	13.7
5	5.563 141.3	11.00 279.4	1.500 38.10	7.310 185.7	8	1.000 25.40	9.250 235.0	18.5
6	6.625 168.3	12.50 317.5	1.620 41.10	8.500 215.9	12	1.000 25.40	10.62 269.7	25.5
8	8.625 219.1	15.00 381.0	1.880 47.80	10.62 269.7	12	1.120 28.40	13.00 330.2	42.6
10	10.75 273.0	17.50 444.5	2.120 53.80	12.75 323.9	16	1.250 31.75	15.25 387.4	64.5
12	12.75 323.8	20.50 520.7	2.250 57.15	15.00 381.0	16	1.380 35.10	17.75 450.9	94.30
14	14.00 355.6	23.00 584.2	2.380 60.45	16.25 412.8	20	1.380 35.10	20.25 514.4	124
16	16.00 406.4	25.50 647.7	2.500 63.50	18.50 469.9	20	1.500 38.10	22.50 571.5	162
18	18.00 457.2	28.00 711.2	2.620 66.55	21.00 533.4	24	1.500 38.10	24.75 628.7	205
20	20.00 508.0	30.50 774.7	2.750 69.85	23.00 584.2	24	1.620 41.10	27.00 685.8	254
24	24.00 609.6	36.00 914.4	3.000 76.20	27.25 692.2	24	1.880 47.80	32.00 812.8	386

Notes

- Weights are based on manufacturer's data and are approximate.

ZIZI ENGINEERING CO LTD

Blind Flanges - ANSIB16.5



Class 600 lb

Nominal Pipe Size	Pipe	Flange Data		Raised Face	Drilling Data			Weight
		A	C	G	H	I	J	
	Outside Diameter	Overall Diameter	Flange Thickness min	Face Diameter	Number of Holes	Bolt Hole Diameter	Diameter of Circle of Holes	kg/piece
in mm	in mm	in mm	in mm	in mm		in mm		
1/2	0.840	3.750	0.560	1.380	4	0.620	2.620	0.76
	21.30	95.20	14.20	35.10		15.70	66.55	
3/4	1.050	4.620	0.620	1.690	4	0.750	3.250	1.28
	26.70	117.3	15.70	42.90		19.10	82.60	
1	1.315	4.880	0.690	2.000	4	0.750	3.500	1.60
	33.40	123.9	17.50	50.80		19.10	88.90	
1 1/4	1.660	5.250	0.810	2.500	4	0.750	3.880	2.23
	42.20	133.3	20.60	63.50		19.10	98.60	
1 1/2	1.900	6.120	0.880	2.880	4	0.880	4.500	3.25
	48.30	155.4	22.30	73.15		22.40	114.3	
2	2.375	6.500	1.000	3.620	8	0.750	5.000	4.15
	60.30	165.1	25.40	91.90		19.10	127.0	
2 1/2	2.875	7.500	1.120	4.120	8	0.880	5.880	6.13
	73.00	190.5	28.40	104.6		22.40	149.4	
3	3.500	8.250	1.250	5.000	8	0.880	6.620	8.44
	88.90	209.5	31.70	127.0		22.40	168.1	
3 1/2	4.000	9.000	1.380	5.500	8	1.000	7.250	11.0
	101.6	228.6	35.00	139.7		25.40	184.2	
4	4.500	10.75	1.500	6.190	8	1.000	8.500	17.3
	114.3	273.1	38.10	157.2		25.40	215.9	
5	5.563	13.00	1.750	7.310	8	1.120	10.50	29.4
	141.3	330.2	44.50	185.7		28.40	266.7	
6	6.625	14.00	1.880	8.500	12	1.120	11.50	36.1
	168.3	355.6	47.80	215.9		28.40	292.1	
8	8.625	16.50	2.190	10.62	12	1.250	13.75	58.9
	219.1	419.1	55.60	269.7		31.75	349.3	
10	10.75	20.00	2.500	12.75	16	1.380	17.00	97.5
	273.0	508.0	63.50	323.9		35.10	431.8	
12	12.75	22.00	2.620	15.00	20	1.380	19.25	124
	323.8	558.8	66.55	381.0		35.10	489.0	
14	14.00	23.75	2.750	16.25	20	1.500	20.75	151
	355.6	603.3	69.85	412.8		38.10	527.1	
16	16.00	27.00	3.000	18.50	20	1.620	23.75	214
	406.4	685.8	76.20	469.9		41.10	603.3	
18	18.00	29.25	3.250	21.00	20	1.750	25.75	272
	457.2	743.0	82.60	533.4		44.50	654.1	
20	20.00	32.00	3.500	23.00	24	1.750	28.50	349
	508.0	812.8	88.90	584.2		44.50	723.9	
24	24.00	37.00	4.000	27.25	24	2.000	33.00	533
	609.6	939.8	101.6	692.2		50.80	838.2	

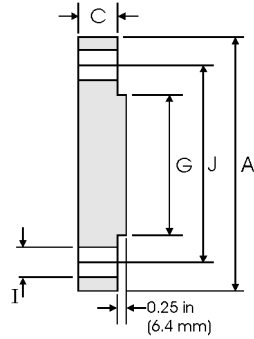
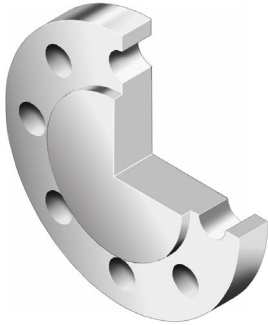
Notes

- Weights are based on manufacturer's data and are approximate.

ZIZI ENGINEERING CO LTD



Blind Flanges - ANSI B16.5



Class 900 lb

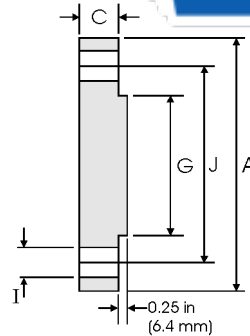
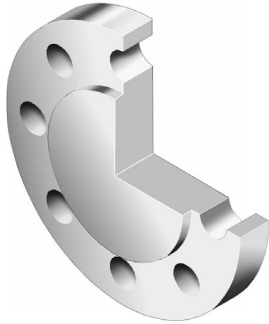
Pipe		Flange Data		Raised Face	Drilling Data			Weight
Nominal Pipe Size		A	C	G	H	I	J	
	Outside Diameter	Overall Diameter	Flange Thickness min	Face Diameter	Number of Holes	Bolt Hole Diameter	Diameter of Circle of Holes	kg/piece
	in mm	in mm	in mm	in mm		in mm	in mm	
1/2	0.840	4.750	0.880	1.380	4	0.880	3.250	1.77
	21.30	120.6	22.30	35.10		22.30	82.50	
3/4	1.050	5.120	1.000	1.690	4	0.880	3.500	2.42
	26.70	130.0	25.40	42.90		22.30	88.90	
1	1.315	5.880	1.120	2.000	4	1.000	4.000	3.57
	33.40	149.3	28.40	50.80		25.40	101.6	
1 1/4	1.660	6.250	1.120	2.500	4	1.000	4.380	4.15
	42.20	158.7	28.40	63.50		25.40	111.2	
1 1/2	1.900	7.000	1.250	2.880	4	1.120	4.880	5.75
	48.30	177.8	31.70	73.15		28.40	123.9	
2	2.375	8.500	1.500	3.620	8	1.000	6.500	10.1
	60.30	215.9	38.10	91.90		25.40	165.1	
2 1/2	2.875	9.620	1.620	4.120	8	1.120	7.500	14.0
	73.00	244.3	41.10	104.6		28.40	190.5	
3	3.500	9.500	1.500	5.000	8	1.000	7.500	13.1
	88.90	241.3	38.10	127.0		25.40	190.5	
4	4.500	11.50	1.750	6.190	8	1.250	9.250	26.9
	114.3	292.1	44.50	157.2		31.70	234.9	
5	5.563	13.75	2.000	7.310	8	1.380	11.00	36.5
	141.3	349.2	50.80	185.7		35.00	279.4	
6	6.625	15.00	2.190	8.500	12	1.250	12.50	47.40
	168.3	381.0	55.60	215.9		31.70	317.0	
8	8.625	18.50	2.500	10.62	12	1.500	15.50	82.5
	219.1	469.9	63.50	269.7		38.10	393.7	
10	10.75	21.50	2.750	12.75	16	1.500	18.50	122
	273.0	546.1	69.85	323.9		38.10	469.9	
12	12.75	24.00	3.120	15.00	20	1.500	21.00	173
	323.8	609.6	79.25	381.0		38.10	533.4	
14	14.00	25.25	3.380	16.25	20	1.620	22.00	206
	355.6	641.3	85.80	412.8		41.10	558.8	
16	16.00	27.75	3.500	18.50	20	1.750	24.25	259
	406.4	704.8	88.90	469.9		44.40	615.9	
18	18.00	31.00	4.000	21.00	20	2.000	27.00	367
	457.2	787.4	101.6	533.4		50.80	685.8	
20	20.00	33.75	4.250	23.00	20	2.120	29.50	463
	508.0	857.2	107.9	584.2		53.80	749.3	
24	24.00	41.00	5.500	27.25	20	2.620	35.50	876
	609.6	1041.4	139.7	692.2		66.55	901.7	

Notes

- Weights are based on manufacturer's data and are approximate.

ZIZI ENGINEERING CO LTD

Blind Flanges - ANSI B16.5



Class 1500 lb

Nominal Pipe Size	Pipe	Flange Data			Raised Face	Drilling Data			Weight
		A	C	G	H	I	J		
	Outside Diameter	Overall Diameter	Flange Thickness min	Face Diameter	Number of Holes	Bolt Hole Diameter	Diameter of Circle of Holes	kg/piece	
in mm	in mm	in mm	in mm	in mm		in mm			
1/2	0.840	4.750	0.880	1.380	4	0.880	3.250	1.77	
	21.30	120.6	22.30	35.10		22.30	82.50		
3/4	1.050	5.120	1.000	1.690	4	0.880	3.500	2.42	
	26.70	130.0	25.40	42.90		22.30	88.90		
1	1.315	5.880	1.120	2.000	4	1.000	4.000	3.57	
	33.40	149.3	28.40	50.80		25.40	101.6		
1 1/4	1.660	6.250	1.120	2.500	4	1.000	4.380	4.15	
	42.20	158.7	28.40	63.50		25.40	111.2		
1 1/2	1.900	7.000	1.250	2.880	4	1.120	4.880	5.75	
	48.30	177.8	31.70	73.15		28.40	123.9		
2	2.375	8.500	1.500	3.620	8	1.000	6.500	10.1	
	60.30	215.9	38.10	91.90		25.40	165.1		
2 1/2	2.875	9.620	1.620	4.120	8	1.120	7.500	14.0	
	73.00	244.3	41.10	104.6		28.40	190.5		
3	3.500	10.50	1.880	5.000	8	1.250	8.000	19.1	
	88.90	266.7	47.70	127.0		31.70	203.2		
4	4.500	12.25	2.120	6.190	8	1.380	9.500	29.9	
	114.3	311.1	53.80	157.2		35.00	241.3		
5	5.563	14.75	2.880	7.310	8	1.620	11.50	58.4	
	141.3	374.6	73.15	185.7		41.10	292.1		
6	6.625	15.50	3.250	8.500	12	1.500	12.50	71.8	
	168.3	393.7	82.50	215.9		38.10	317.5		
8	8.625	19.00	3.620	10.62	12	1.750	15.50	122	
	219.1	482.6	91.90	269.7		44.40	393.7		
10	10.75	23.00	4.250	12.75	12	2.000	19.00	210	
	273.0	584.2	107.9	323.9		50.80	482.6		
12	12.75	26.50	4.880	15.00	16	2.120	22.50	316	
	323.8	673.1	123.9	381.0		53.8	571.5		
14	14.00	29.50	5.250	16.25	16	2.380	25.00	420	
	355.6	749.3	133.3	412.8		60.45	635.0		
16	16.00	32.50	5.750	18.50	16	2.620	27.75	558	
	406.4	825.5	146.0	469.9		66.55	704.8		
18	18.00	36.00	6.380	21.00	16	2.880	30.50	760	
	457.2	914.4	162.0	533.4		73.15	774.7		
20	20.00	38.75	7.000	23.00	16	3.120	32.75	965	
	508.0	984.2	177.8	584.2		79.25	831.8		
24	24.00	46.00	8.000	27.25	16	3.620	39.00	1558	
	609.6	1168.4	203.2	692.2		91.90	990.6		

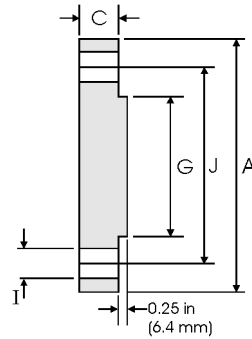
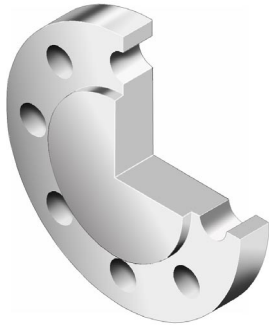
Notes

- Weights are based on manufacturer's data and are approximate.



ZIZI ENGINEERING CO LTD



Blind Flanges - ANSI B16.5



Class 2500 lb

Pipe		Flange Data		Raised Face	Drilling Data			Weight
Nominal Pipe Size		A	C	G	H	I	J	
	Outside Diameter	Overall Diameter	Flange Thickness min	Face Diameter	Number of Holes	Bolt Hole Diameter	Diameter of Circle of Holes	kg/piece
	in mm	in mm	in mm	in mm		in mm	in mm	
1/2	0.840	5.250	1.190	1.380	4	0.880	3.500	2.99
	21.30	133.4	30.20	35.10		22.40	88.90	
3/4	1.050	5.500	1.250	1.690	4	0.880	3.750	3.50
	26.70	139.7	31.70	42.90		22.40	95.30	
1	1.315	6.250	1.380	2.000	4	1.000	4.250	4.96
	33.40	158.8	35.10	50.80		25.40	108.0	
1 1/4	1.660	7.250	1.500	2.500	4	1.120	5.120	7.35
	42.20	184.2	38.10	63.50		28.40	130.0	
1 1/2	1.900	8.000	1.750	2.880	4	1.250	5.750	10.4
	48.30	203.2	44.50	73.15		31.75	146.1	
2	2.375	9.250	2.000	3.620	8	1.120	6.750	15.6
	60.30	235.0	50.80	91.90		28.40	171.5	
2 1/2	2.875	10.50	2.250	4.120	8	1.250	7.750	22.6
	73.00	266.7	57.15	104.6		31.75	196.9	
3	3.500	12.00	2.620	5.000	8	1.380	9.000	34.8
	88.90	304.8	66.55	127.0		35.10	228.6	
4	4.500	14.00	3.000	6.190	8	1.620	10.75	53.9
	114.3	355.6	76.20	157.2		41.10	273.1	
5	5.563	16.50	3.620	7.310	8	1.888	12.75	90.8
	141.3	419.1	91.90	185.7		47.88	323.9	
6	6.625	19.00	4.250	8.500	8	2.120	14.50	141
	168.3	482.6	108.0	215.9		53.80	368.3	
8	8.625	21.75	5.000	10.62	12	2.120	17.25	214
	219.1	552.5	127.0	269.7		53.80	438.2	
10	10.75	26.50	6.500	12.75	12	2.620	21.25	411
	273.0	673.1	165.1	323.9		66.55	539.8	
12	12.75	30.00	7.250	15.00	12	2.880	24.38	592
	323.8	762.0	184.2	381.0		73.15	619.3	

Notes

- Weights are based on manufacturer's data and are approximate.