



Nom. Pipe Size (inches)	O	Q	R	X	No. and** Dia. of Bolt Holes	Bolt Circle Dia	YY	H	J	Y	B	R	YY	BB	Z
1/2	3.50	.44	1.38	1.19	4-0.62	2.38	1.88	.84	.62	.62	.88	.12	.62	.90	.38
3/4	3.88	.50	1.69	1.50	4-0.62	2.75	2.06	1.05	.82	.62	1.09	.12	.62	1.11	.44
1	4.25	.56	2.00	1.94	4-0.62	3.12	2.19	1.32	1.05	.69	1.36	.12	.69	1.38	.50
1 1/4	4.62	.62	2.50	2.31	4-0.62	3.50	2.25	1.66	1.38	.81	1.70	.19	.81	1.72	.56
1 1/2	5.00	.68	2.88	2.56	4-0.62	3.88	2.44	1.90	1.61	.88	1.95	.25	.88	1.97	.62
2	6.00	.75	3.62	3.06	4-0.75	4.75	2.50	2.38	2.07	1.00	2.44	.31	1.00	2.46	.69
2 1/2	7.00	.88	4.12	3.56	4-0.75	5.50	2.75	2.88	2.47	1.12	2.94	.31	1.12	2.97	.75
3	7.50	.94	5.00	4.25	4-0.75	6.00	2.75	3.50	3.07	1.19	3.57	.38	1.19	3.60	.81
3 1/2	8.50	.94	5.50	4.81	8-0.75	7.00	2.81	4.00	3.55	1.25	40.70	.38	1.25	4.10	
4	9.00	.94	6.19	5.31	8-0.75	7.50	3.00	4.50	4.03	1.31	4.57	.44	1.31	4.60	
5	10.00	.94	7.31	6.44	8-0.88	8.50	3.50	5.56	5.05	1.44	5.66	.44	1.44	5.69	
6	11.00	1.00	8.50	7.56	8-0.88	9.50	3.50	6.63	6.07	1.56	6.72	.50	1.56	6.75	
8	13.50	1.12	10.62	9.69	8-0.88	11.75	4.00	8.63	7.98	1.75	8.72	.50	1.75	8.75	
10	16.00	1.19	12.75	12.00	12-1.00	14.25	4.00	10.75	10.02	1.94	10.88	.50	1.94	10.92	
12	19.00	1.25	15.00	14.38	12-1.00	17.00	4.50	12.75	12.00	2.19	12.88	.50	2.19	12.92	
14	21.00	1.38	16.25	15.75	12-1.12	18.75	5.00	14.00	To Be Specified by Purchaser		2.25	14.14	.50	3.12	14.18
16	23.50	1.44	18.50	18.00	16-1.12	21.25	5.00	16.00			2.50	16.16	.50	3.44	16.19
18	25.00	1.56	21.00	19.88	16-1.25	22.75	5.50	18.00			2.69	18.18	.50	3.81	18.20
20	27.50	1.69	23.00	22.00	20-1.25	25.00	5.69	20.00			2.88	20.2	.50	4.06	20.25
24	32.00	1.88	27.25	26.12	20-1.38	29.50	6.00	24.00			3.25	24.25	.50	4.38	24.25

The following charts are for reference use only. They are based upon older piping systems. Refer to current specifications when designing new systems

Weight (L.B.S.)***								Flange Types	
Pressure Class	Nom. Size Pipe	Weld Neck	Slip-On	Thd.	Lap Joint	Blind	Socket	Thermometriccorp.com WELD NECK FLANGE	
150	1/2	2	1	1	1	2	2		
	3/4	2	1.5	1.5	1.5	2	2		
	1	2.5	2	2	2	2	2		
	1 1/4	2.5	2.5	2.5	2.5	3	3		
	1 1/2	4	3	3	3	3	3		
	2	6	5	5	5	4	5		
	2 1/2	10	8	8	8	7	7		
	3	11.5	9	10	9	9	8		
	3 1/2	12	11	12	11	13			
	4	16.5	13	13	12	17			
	5	21	15	15	13	20			
	6	26	17	19.5	18	27			
	8	42	28	30	28	47			
	10	54	40	41	36	67			
	12	88	61	65	60	123			
	14	114	83	85	77	139			
	16	142	106	93	104	187			
	18	165	109	120	146	217			
	20	197	148	155	159	283			
	24	268	204	210	195	415			

All dimensions given in inches.

Dimensions & tolerances in accordance with ANSI B16.5. Carbon steel flanges mechanical properties and chemistry conform to ASTM A105.

Flanges are furnished faced, drilled and spot faced or back faced.

*1/16 in. raised face included in dimensions Q, Y and YY.

**Bolt hole diameter 1/8 in. larger than bolt diameter.

***Weights listed are approximate values.

**** To be specified by the customer