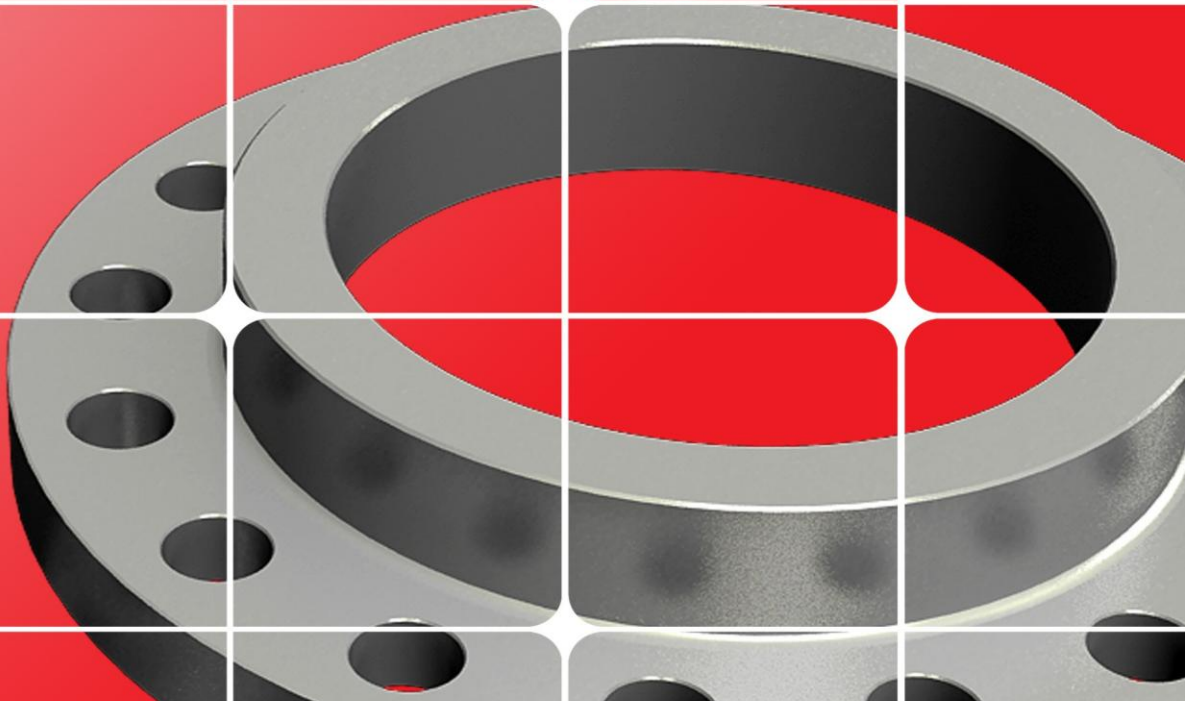
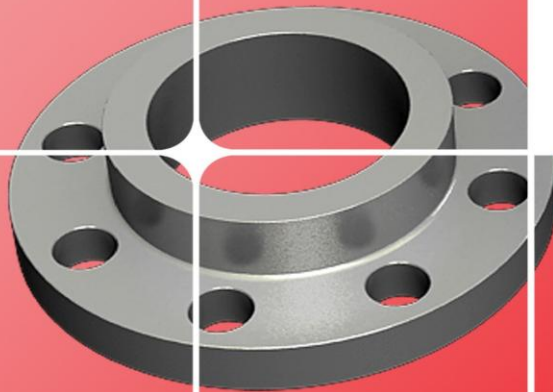
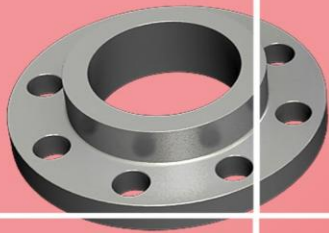


ANSI / ASME B16.36

- Weld Neck Orifice Flange
- Threaded Orifice Flanges
- Slip On Orifice Flanges



ASME/ANSI B16.36 Flanges Specifications	
Flange Types:	Weld Neck Orifice Flange, Threaded Orifice Flange, Slip-on Orifice Flange
Dimension Standards:	B16.36 Orifice Flange
Pressure Class:	300 LBS, 600 LBS, 900 LBS, 1500 LBS, 2500 LBS
Sizes:	1/2" NB to 24" NB (DN 12 – 600 mm)
Material	Carbon Steel, Stainless Steel, Alloy Steel, Nickle Alloy
Surface Treatment:	Anti-rust Paint, Oil Black Paint, Zinc Plated, Cold and Hot Dip Galvanized

Industries and Applications

An ASME/ANSI B16.36 Orifice Flange is used in combination with orifice flange measures to the inflow rates of oil, gas, and other liquids conveyed by the pipeline. Orifice flanges are manufactured to ASME B 16.36 in multiple sizes and material grades. Orifice flanges measure the inflow of fluid conveyed by the Piping an inflow nozzle positioned on the flange itself. couples of pressure tapping are machined onto the perforation flange, making separate tapping on the pipe wall inessential.

Industrial pumps and manufacturing systems

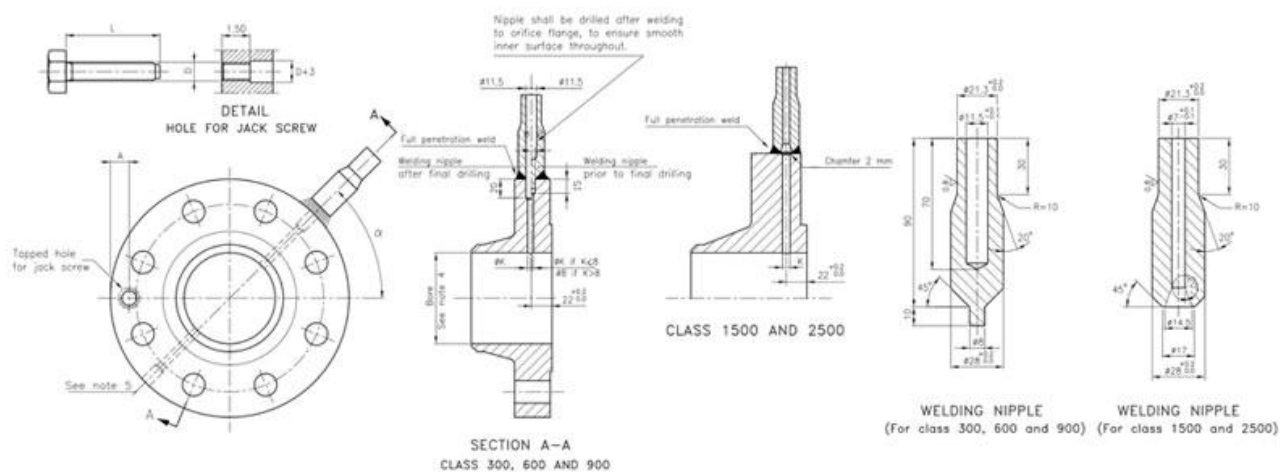
Food and beverage processing

Nuclear power plants

Oil and gas drilling

Petrochemical treatment and processing

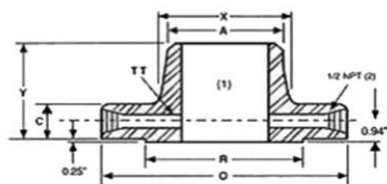
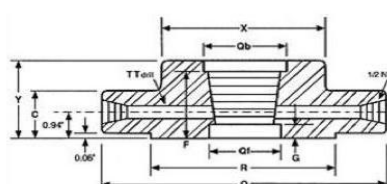
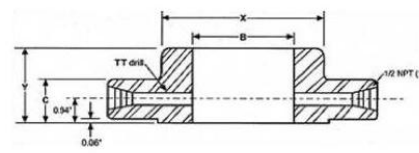
Chemical Industry



ASME/ANSI B16.36 Orifice Types

Weld Neck Orifice Flange

Threaded Orifice Flange

Slip-on Orifice Flange

Weld Neck Orifice Flange

Threaded Orifice Flange

Slip-on Orifice Flange
ASME/ANSI B16.36 Orifice Class

Class 300 Weld Neck Orifice Flanges	Class 400 Weld Neck Orifice Flanges
Class 600 Weld Neck Orifice Flanges	Class 900 Weld Neck Orifice Flanges
Class 1500 Weld Neck Orifice Flanges	Class 2500 Weld Neck Orifice Flanges
Class 300 Threaded Orifice Flanges	Class 300 Slip On Orifice Flanges

ASME-ANSI B16.36 Class 300 Weld Neck Orifice Flange Dimensions

Nominal Pipe Size	O.D. Flange	Thk. Of Flange Min	Diam. of Raised face	Diam. of Hub	Hub Diam. Chamfer of W.N.	Length Hub	Diam. of Pressure Connection	Drilling			
								Diam. of Bolt Circle	Diam. of Bolt Holes	Number of Bolts	Diam. of Bolts
NPS	O	C	R	X	A	Y	TT				
in 1	4.88	1.5	2	2.12	1.32	3.25	1/4	3.5	0.69	4	5/8
mm 25	124	38.1	50.8	53.8	33.5	82.6	6.4	88.9	17.5		15.9
in 1 1/2	6.12	1.5	2.88	2.75	1.9	3.38	1/4	4.5	0.81	4	3/4
mm 40	155.4	38.1	73.2	69.9	48.3	85.9	6.4	114.3	20.6		19.1
in 2	6.5	1.5	3.62	3.31	2.38	3.38	1/4	5	0.69	8	5/8
mm 50	165.1	38.1	91.9	84.1	60.5	85.9	6.4	127	17.5		15.9

in	2 1/2	7.5	1.5	4.12	3.94	2.88	3.5	1/4	5.88	0.81	8	3/4
mm	65	190.5	38.1	104.6	100.1	73.2	88.9	6.4	149.4	20.6		19.1
in	3	8.25	1.5	5	4.62	3.5	3.5	3/8	6.62	0.81	8	3/4
mm	80	209.6	38.1	127	117.3	88.9	88.9	9.5	168.1	20.6		19.1
in	4	10	1.5	6.19	5.75	4.5	3.62	1/2	7.88	0.81	8	3/4
mm	100	254	38.1	157.2	146.1	114.3	91.9	12.7	200.2	20.6		19.1
in	6	12.5	1.5	8.5	8.12	6.63	3.94	1/2	10.62	0.88	12	3/4
mm	150	317.5	38.1	215.9	206.2	168.4	100.1	12.7	269.7	22.4		19.1
in	8	15	1.62	10.62	10.25	8.63	4.38	1/2	13	1	12	3/8
mm	200	381	41.1	269.7	260.4	219.2	111.3	12.7	330.2	25.4		22.2
in	10	17.5	1.88	12.75	12.62	10.75	4.62	1/2	15.25	1.12	16	1
mm	250	444.5	47.8	323.9	320.5	273.1	117.3	12.7	387.4	28.4		25.4
in	12	20.5	2	15	14.75	12.75	5.12	1/2	17.75	1.25	16	1 1/8
mm	300	520.7	50.8	381	374.7	323.9	130	12.7	450.9	31.8		28.6
in	14	23	2.12	16.25	16.75	14	5.62	1/2	20.25	1.25	20	1 1/8
mm	350	584.2	53.8	412.8	425.5	355.6	142.7	12.7	514.4	31.8		28.6
in	16	25.5	2.25	18.5	19	16	5.75	1/2	22.5	1.38	20	1 1/4
mm	400	647.7	57.2	469.9	482.6	406.4	146.1	12.7	571.5	35.1		31.8
in	18	28	2.38	21	21	18	6.25	1/2	24.75	1.38	24	1 1/4
mm	450	711.2	60.5	533.4	533.4	457.2	158.8	12.7	628.7	35.1		31.8
in	20	30.5	2.5	23	23.12	20	6.38	1/2	27	1.38	24	1 1/4
mm	500	774.7	63.5	584.2	587.2	508	162.1	12.7	685.8	35.1		31.8
in	24	36	2.75	27.25	27.62	24	6.62	1/2	32	1.62	24	1 1/2
mm	600	914.4	69.9	692.2	701.5	609.6	168.1	12.7	812.8	41.1		38.1

* Dimensions are in Inch and mm.

ASME-ANSI B16.36 Class 400 Weld Neck Orifice Flange Dimensions

Nominal Pipe Size	O.D. Flange	Thk. Of Flange Min	Diam. of Raised face	Diam. of Hub	Hub Diam. Chamfer of W.N.	Length Hub	Diam. of Pressure Connection	Drilling				Ring Type Joint					
								Diam. of Bolt Circle	Diam. of Bolt Holes	Number of Bolts	Diam. of Bolts	Groove Dia	Pitch Dia	Groove Depth	Groove Width	Radius at Bottom	Spec Oval RH
NPS	O	C	R	X	A	Y	TT						P	E	F	r max	W
in 4	10	1.5	6.19	5.75	4.5	3.5	1/2	7.88	1	8	3/8	R37	5.875	0.312	0.469	0.03	1.06
mm 100	254	38.1	157	146	114.3	88.9	12.7	200.2	25.4		22.2		149.225	7.925	11.913	0.8	26.9
in 6	12.5	1.62	8.5	8.12	6.63	4.06	1/2	10.62	1	12	3/8	R45	8.312	0.312	0.469	0.03	1.06
mm 150	317.5	41.1	216	206	168.4	103	12.7	269.7	25.4		22.2		211.125	7.925	11.913	0.8	26.9
in 8	15	1.88	10.62	10.25	8.63	4.62	1/2	13	1.12	12	1	R49	10.625	0.312	0.469	0.03	1.06
mm 200	381	47.8	270	260	219.2	117	12.7	330.2	28.4		25.4		269.875	7.925	11.913	0.8	26.9
in 10	17.5	2.12	12.75	12.62	10.75	4.88	1/2	15.25	1.25	16	1 1/8	R53	12.75	0.312	0.469	0.03	1.06
mm 250	444.5	53.8	324	321	273.1	124	12.7	387.4	31.8		28.6		323.85	7.925	11.913	0.8	26.9
in 12	20.5	2.25	15	14.75	12.75	5.38	1/2	17.75	1.38	16	1 1/4	R57	15	0.312	0.469	0.03	1.06
mm 300	520.7	57.2	381	375	323.9	137	12.7	450.9	35.1		31.8		381	7.925	11.913	0.8	26.9
in 14	23	2.39	16.25	16.75	14	5.88	1/2	20.25	1.38	20	1 1/4	R61	16.5	0.312	0.469	0.03	1.06
mm 350	584.2	60.7	413	426	355.6	149	12.7	514.4	35.1		31.8		419.1	7.925	11.913	0.8	26.9
in 16	25.5	2.5	18.5	19	16	6	1/2	22.5	1.5	20	1 3/8	R65	18.5	0.312	0.469	0.03	1.19
mm 400	647.7	63.5	470	483	406.4	152	12.7	571.5	38.1		34.9		469.9	7.925	11.913	0.8	30.2
in 18	28	2.62	21	21	18	6.5	1/2	24.75	1.5	24	1 3/8	R69	21	0.312	0.469	0.03	1.19
mm 450	711.2	66.5	533	533	457.2	165	12.7	628.7	38.1		34.9		533.4	7.925	11.913	0.8	30.2
in 20	30.5	2.75	23	23.12	20	6.62	1/2	27	1.62	24	1 1/2	R73	23	0.375	0.531	0.06	1.25
mm 500	774.7	69.9	584	587	508	168	12.7	685.8	41.1		38 1/9		584.2	9.525	13.487	1.5	31.8
in 24	36	3	27.25	27.62	24	6.88	1/2	32	1.89	24	1 3/4						
mm 600	914.4	76.2	692.2	702	609.6	174.8	12.7	812.8	48		44 1/2						



* Dimensions are in Inch and mm.

ASME-ANSI B16.36 Class 600 Weld Neck Orifice Flange Dimensions

Nominal Pipe Size	O.D. Flange	Thk. Of Flange Min	Diam. of Raised face	Diam. of Hub	Hub Diam. Chamfer of W.N.	Length Hub	Diam. of Pressure Connection	Drilling				Ring Type Joint							
								Diam. of Bolt Circle	Diam. of Bolt Holes	Number of Bolts	Diam. of Bolts	Grove #	Pitch Dia	Groove Depth	Groove Width	Radius at Bottom	Spec Oval RH		
NPS	O	C	R	X	A	Y	TT	RF	RTJ				P	E	F	r max	W		
in	1	4.88	1.5	2	2.12	1.32	3.25	¾	3.5	0.69	0.8	4	¾	R16	2	0.25	0.344	0.03	1
mm	25	124	38.1	50.8	53.8	33.5	82.6	6.4	88.9	17.5	19		15.9		50.8	6.35	8.738	0.8	25.4
in	1 1/2	6.12	1.5	2.88	2.75	1.9	3.38	¾	4.5	0.81	0.9	4	3/4	R20	2.688	0.25	0.344	0.03	1
mm	40	155.4	38.1	73.2	69.9	48.3	85.9	6.4	114.3	20.6	22		19.1		68.275	6.35	8.738	0.8	25.4
in	2	6.5	1.5	3.62	3.31	2.38	3.38	¾	5	0.69	0.8	8	¾	R23	3.25	0.312	0.469	0.03	1.06
mm	50	165.1	38.1	91.9	84.1	60.5	85.9	6.4	127	17.5	19		15.9		82.55	7.925	11.91	0.8	26.9
in	2 1/2	7.5	1.5	4.12	3.94	2.88	3.5	¾	5.88	0.81	0.9	8	3/4	R26	4	0.312	0.469	0.03	1.06
mm	65	190.5	38.1	104.6	100.1	73.2	88.9	6.4	149.4	20.6	22		19.1		101.6	7.925	11.91	0.8	26.9
in	3	8.25	1.5	5	4.62	3.5	3.5	¾	6.62	0.81	0.9	8	3/4	R31	4.875	0.312	0.469	0.03	1.06
mm	80	209.6	38.1	127	117.3	88.9	88.9	9.5	168.2	20.6	22		19.1		123.83	7.925	11.91	0.8	26.9
in	4	10.75	1.5	6.19	6	4.5	4	½	8.5	1	1	8	¾	R37	5.875	0.312	0.469	0.03	1.06
mm	100	273.1	38.1	157.2	152.4	114.3	101.6	13	215.9	25.4	25		22.2		149.23	7.925	11.91	0.8	26.9
in	6	14	1.88	8.5	8.75	6.63	4.62	½	11.5	1.12	1.1	12	1	R45	8.312	0.312	0.469	0.03	1.06
mm	150	355.6	47.8	215.9	222.3	168.4	117	13	292.1	28.4	28		25.4		211.13	7.925	11.91	0.8	26.9
in	8	16.5	2.19	10.62	10.75	8.63	5.25	½	13.75	1.25	1.3	12	1 1/8	R49	10.625	0.312	0.469	0.03	1.06
mm	200	419.1	55.6	269.7	273.1	219.2	133	13	349.3	31.8	32		28.6		269.88	7.925	11.91	0.8	26.9
in	10	20	2.5	12.75	13.5	10.75	6	½	17	1.38	1.4	16	1 1/4	R53	12.75	0.312	0.469	0.03	1.06
mm	250	508	63.5	323.9	342.9	273.1	152	13	431.8	35.1	35		31.8		323.85	7.925	11.91	0.8	26.9
in	12	22	2.62	15	15.75	12.75	6.12	½	19.25	1.38	1.4	20	1 1/4	R57	15	0.312	0.469	0.03	1.06
mm	300	558.8	66.5	381	400.1	323.9	155.4	13	489	35.1	35		31.8		381	7.925	11.91	0.8	26.9
in	14	23.75	2.75	16.25	17	14	6.5	½	20.75	1.5	1.5	20	1 3/8	R61	16.5	0.312	0.469	0.03	1.06
mm	350	603.3	69.9	412.8	431.8	355.6	165	13	527.1	38.1	38		35.1		419.1	7.925	11.91	0.8	26.9
in	16	27	3	18.5	19.5	16	7	½	23.75	1.6	1.6	20	1 1/2	R65	18.5	0.312	0.469	0.03	1.19
mm	400	685.8	76.2	469.9	495.3	406.4	178	13	603.3	41.1	41		38.1		469.9	7.925	11.91	0.8	30.2
in	18	29.25	3.25	21	21.5	18	7.25	½	25.75	1.75	1.8	20	1 5/8	R69	21	0.312	0.469	0.03	1.19
mm	450	743	82.6	533.4	546.1	457.2	184	13	654.1	44.5	45		41.3		533.4	7.925	11.91	0.8	30.2
in	20	32	3.5	23	24	20	7.5	½	28.5	1.75	1.8	24	1 5/8	R73	23	0.375	0.531	0.06	1.25
mm	500	812.8	88.9	584.2	609.6	508	191	13	723.9	44.5	45		41.3		584.2	9.525	13.49	1.5	31.8
in	24	37	4	27.25	28.25	24	8	½	33	2	2	24	1 7/8						
mm	600	939.8	101.6	692.2	717.6	609.6	203	13	838.2	50.8	51		47.6						

* Dimensions are in Inch and mm.

ASME-ANSI B16.36 Class 900 Weld Neck Orifice Flange Dimensions

ANSI Flange Dimensions																		
Nominal Pipe Size	Thk. Of Flange Min	Diameter of Raised Face	O.D. Flange	Hub Diam,Chamfer of W.N.	Diam. Of Hub	Length Hub	Drilling						Ring Type Joint					
							Diam. of Pressure Connection	Diam. of Bolt Circle	Diam. of Bolt Holes	Number of Bolts	Diam. of Bolt	Grove#	Pitch Dia	Groove Depth	Groove Width	Radiusat Bottom	Spec Oval RH	

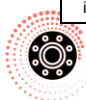


NPS	O	C	R	X	A	Y	TT						P	E	F	r max	W
in 3	9.5	1.5	5	5	3.5	4	3/8	7.5	1	8	7/8	R31	4.88	0.312	0.469	0.03	1.06
mm 80	241.3	38.1	127	127	88.9	101.6	9.5	190.5	25.4		22.2		124	7.925	11.913	0.8	26.9
in 4	11.5	1.75	6.19	6.25	4.5	4.5	1/2	9.25	1.25	8	1 1/8	R37	5.88	0.312	0.469	0.03	1.06
mm 100	292.1	44.5	157.2	158.8	114.3	114.3	12.7	235	31.8		28.6		149	7.925	11.913	0.8	26.9
in 6	15	2.19	8.5	9.25	6.63	5.5	1/2	12.5	1.25	12	1 1/8	R45	8.31	0.312	0.469	0.03	1.06
mm 150	381	55.6	215.9	235	168.4	139.7	12.7	317.5	31.8		28.6		211	7.925	11.913	0.8	26.9
in 8	18.5	2.5	10.62	11.75	8.63	6.38	1/2	15.5	1.5	12	1 3/8	R49	10.6	0.312	0.469	0.03	1.06
mm 200	469.9	63.5	269.7	298.5	219.2	162.1	12.7	393.7	38.1		34.9		270	7.925	11.913	0.8	26.9
in 10	21.5	2.75	12.75	14.5	10.75	7.25	1/2	18.5	1.5	16	1 3/8	R53	12.8	0.312	0.469	0.03	1.06
mm 250	546.1	69.9	323.9	368.3	273.1	184.2	12.7	469.9	38.1		34.9		324	7.925	11.913	0.8	26.9
in 12	24	3.12	15	16.5	12.75	7.88	1/2	21	1.5	20	1 3/8	R57	15	0.312	0.469	0.03	1.06
mm 300	609.6	79.2	381	419.1	323.9	200.2	12.7	533.4	38.1		34.9		381	7.925	11.913	0.8	26.9
in 14	25.25	3.38	16.25	17.75	14	8.38	1/2	22	1.62	20	1 1/2						
mm 350	641.4	85.9	412.8	450.9	355.6	212.9	12.7	558.8	41.1		38.1						
in 16	27.75	3.5	18.5	20	16	8.5	1/2	24.3	1.75	20	1 5/8						
mm 400	704.9	88.9	469.9	508	406.4	215.9	12.7	616	44.5		41.3						
in 18	31	4	21	22.25	18	9	1/2	27	2	20	1 7/8						
mm 450	787.4	101.6	533.4	565.2	457.2	228.6	12.7	685.8	50.8		47 3/5						
in 20	33.75	4.25	23	24.5	20	9.75	1/2	29.5	2.12	20	2						
mm 500	857.3	108	584.2	622.3	508	247.7	12.7	749.3	53.8		50 4/5						
in 24	41	5.5	27.25	29.5	24	11.5	1/2	35.5	2.62	20	2 1/2						
mm 600	1041.4	139.7	692.2	749.3	609.6	292.1	12.7	901.7	66.5		63.5						

* Dimensions are in Inch and mm.

ASME-ANSI B16.36 Class 1500 Weld Neck Orifice Flange Dimensions

						Hub Diam.			Drilling						Ring Type Joint				
Nominal Pipe		O.D.	Thk. Of	Diam eter of	Diam . Of		Chamfe r of	Length Hub	Diam. of	Diam. of Bolt	Diam.of Bolt Holes	No.				Pitch	Groov e	Groov e	Radiusa t
Size		Flang e	Flang e Min	Raise d Face	Hub	W.N.		Pressure	Circle	Bolt	of	Diam . of	Groov e #	Dia	Depth	Width	Bottom	Spec	
							Connection												
											Bolts	Bolt							
NPS		O	C	R	X	A	Y	TT						P	E	F	r max	W	
in	1	5.88	1.5	2	2.06	1.32	3.25	¾	4	1	4	⅝	R16	2	0.25	0.344	0.03	1	
mm	25	149.4	38.1	50.8	52.3	33.5	82.6	6.4	101.6	25.4		22.2		50.8	6.35	8.738	0.8	25.4	
in	1 1/2	7	1.5	2.88	2.75	1.9	3.5	¾	4.88	1.12	4	1	R20	2.69	0.25	0.344	0.03	1	
mm	40	177.8	38.1	73.2	69.9	48.3	88.9	6.4	124	28.4		25.4		68.3	6.35	8.738	0.8	25.4	
in	2	8.5	1.5	3.62	4.12	2.38	4	¾	6.5	1	8	⅝	R24	3.75	0.312	0.469	0.03	1.06	
mm	50	215.9	38.1	91.9	104.6	60.5	101.6	6.4	165.1	25.4		22.2		95.3	7.925	11.913	0.8	26.9	
in	2 1/2	9.62	1.62	4.12	4.88	2.88	4.12	¾	7.5	1.12	8	1	R27	4.25	0.312	0.469	0.03	1.06	
mm	65	244.3	41.1	104.6	124	73.2	104.6	6.4	190.5	28.4		25.4		108	7.925	11.913	0.8	26.9	
in	3	10.5	1.88	5	5.25	3.5	4.62	⅞	8	1.25	8	1 1/8	R35	5.38	0.312	0.469	0.03	1.06	
mm	80	266.7	47.8	127	133.4	88.9	117.3	9.5	203.2	31.8		28.6		137	7.925	11.913	0.8	26.9	
in	4	12.25	2.12	6.19	6.38	4.5	4.88	½	9.5	1.38	8	1 1/4	R39	6.38	0.312	0.469	0.03	1.06	
mm	100	311.2	53.8	157.2	162.1	114.3	124	12.7	241.3	35.1		31.8		162	7.925	11.913	0.8	26.9	
in	6	15.5	3.25	8.5	9	6.63	6.75	½	12.5	1.5	12	1 3/8	R46	8.31	0.375	0.531	0.06	1.12	
mm	150	393.7	82.6	215.9	228.6	168.4	171.5	12.7	317.5	38.1		34.9		211	9.525	13.487	1.5	28.4	
in	8	19	3.62	10.62	11.5	8.63	8.38	½	15.5	1.75	12	1 5/8							
mm	200	482.6	91.9	269.7	292.1	219.2	212.9	12.7	393.7	44.5		41.3							
in	10	23	4.25	12.75	14.5	10.75	10	½	19	2	12	1 7/8							
mm	250	584.2	108	323.9	368.3	273.1	254	12.7	482.6	50.8		47 3/5							
in	12	26.5	4.88	15	17.75	12.75	11.12	½	22.5	2.12	16	2							
mm	300	673.1	124	381	450.9	323.9	282.4	12.7	571.5	53.8		50 4/5							
in	14	29.5	5.25	16.25	19.5	14	11.75	½	25	2.38	16	2 1/4							
mm	350	749.3	133.4	412.8	495.3	355.6	298.5	12.7	635	60.5		57.2							
in	16	32.5	5.75	18.5	21.75	16	12.25	½	27.8	2.6	16	2 1/2							



mm	400	825.5	146.1	469.9	552.1	406.4	311.2	12.7	704.9	66.5		63.5					
in	18	36	6.38	21	23.5	18	12.88	½	30.5	2.88	16	2 3/4					
mm	450	914.4	162.1	533.4	596.9	457.2	327.2	12.7	774.7	73.2		69.9					
in	20	38.75	7	23	25.25	20	14	½	32.75	3.12	16	3					
mm	500	984.3	177.8	584.2	641.4	508	355.6	12.7	831.9	79.2		76.2					
in	24	46	8	27.25	30	24	16	½	39	3.62	16	3 1/2					
mm	600	1168.4	203.2	692.2	762	609.6	406.4	12.7	990.6	91.9		88.9					

* Dimensions are in Inch and mm.

ASME-ANSI B16.36 Class 2500 Weld Neck Orifice Flange Dimensions

			Thk. Of	Diam eter		Hub Diam.			Drilling					Ring Type Joint				
Nominal		O.D.	Flang e	of Raise d	Diam ·	Chamfe r of	Lengt h	Diam. of	Diam ·	Diam ·							Radius	Spec
Pipe Size		Flang e																
									of Bolt	of Bolt	of Bolts	of	Gro v e	Dia	Depth	Width	at	Oval
								Connection										
NPS		O	C	R	X	A	Y	TT	Circle	Holes		Bolt		P	E	F	r max	W
in	1	6.25	1.5	2	2.25	1.32	3.62	¼	4.25	1	4	⅝	R18	2.38	0.25	0.344	0.03	1
mm	25	158.8	38.1	50.8	57.2	33.5	91.9	6.4	108	25.4		22.2		60.3	6.35	8.738	0.8	25.4
in	1 1/2	8	1.75	2.88	3.12	1.9	4.38	¼	5.75	1.25	4	1 1/8	R23	3.25	0.312	0.469	0.03	1.06
mm	40	203.2	44.5	73.2	79.2	48.3	111.3	6.4	146.1	31.8		28.6		82.6	7.925	11.913	0.8	26.9
in	2	9.25	2	3.62	3.75	2.38	5	¼	6.75	1.12	8	1	R26	4	0.312	0.469	0.03	1.06
mm	50	235	50.8	91.9	95.3	60.5	127	6.4	171.5	28.4		25.4		102	7.925	11.913	0.8	26.9
in	2 1/2	10.5	2.25	4.12	4.5	2.88	5.62	¼	7.75	1.25	8	1 1/8	R28	4.38	0.375	0.531	0.06	1.19
mm	65	266.7	57.2	104.6	114.3	73.2	142.7	6.4	196.9	31.8		28.6		111	9.525	13.487	1.5	30.2
in	3	12	2.62	5	5.25	3.5	6.62	⅝	9	1.38	8	1 1/4	R32	5	0.375	0.531	0.06	1.19
mm	80	304.8	66.5	127	133.4	88.9	168.1	9.5	228.6	35.1		31.8		127	9.525	13.487	1.5	30.2
in	4	14	3	6.19	6.5	4.5	7.5	½	10.75	1.62	8	1 1/2						
mm	100	355.6	76.2	157.2	165.1	114.3	190.5	12.7	273.1	41.1		38.1						
in	6	19	4.25	8.5	9.25	6.63	10.75	½	14.5	2.12	8	2						
mm	150	482.6	108	215.9	235	168.4	273.1	12.7	368.3	53.8		50.8						
in	8	21.75	5	10.62	12	8.63	12.5	½	17.25	2.12	12	2						
mm	200	552.5	127	269.7	304.8	219.2	317.5	12.7	438.2	53.8		50.8						
in	10	26.5	6.5	12.75	14.75	10.75	16.5	½	21.25	2.62	12	2 1/2						
mm	250	673.1	165.1	323.9	374.7	273.1	419.1	12.7	539.8	66.5		63 1/2						
in	12	30	7.25	15	17.38	12.75	18.25	½	24.38	2.88	12	2 3/4						
mm	300	762	184.2	381	441.5	323.9	463.6	12.7	619.3	73.2		70						

* Dimensions are in Inch and mm.

ASME-ANSI B16.36 Class 300 Slip-On Orifice Flange Dimensions

									Drilling			
	Nom Size	OD	Thickness	OD of RF	Dia at Base	Dia Bevel	LTH	Dia of Pressure Connection	Bolt Circle	Hole Dia	# of Holes	Bolt Dia
		O	C	R	X	B	Y	TT				
in	1	4.88	1.5	2	2.12	1.36	1.88	1/4	3.5	0.69	4	5/8
mm		124	38.1	50.8	53.8	34.5	47.8	6.4	88.9	17.5		15.9
in	1 1/2	6.12	1.5	2.88	2.75	1.95	1.88	1/4	4.5	0.81	4	3/4
mm		155.4	38.1	73.2	69.9	49.5	47.8	6.4	114.3	20.6		19.1
in	2	6.5	1.5	3.62	3.31	2.44	1.94	1/4	5	0.69	8	5/8
mm		165.1	38.1	91.9	84.1	62	49.3	6.4	127	17.5		15.9
in	2 1/2	7.5	1.5	4.12	3.94	2.94	2	1/4	5.88	0.81	8	3/4



mm		190.5	38.1	104.6	100.1	74.7	50.8	6.4	149.4	20.6		19.1
in	3	8.25	1.5	5	4.62	3.57	2.06	3/8	6.62	0.81	8	3/4
mm		209.6	38.1	127	117.3	90.7	52.3	9.5	168.1	20.6		19.1
in	4	10	1.5	6.19	5.75	4.57	2.12	1/2	7.88	0.81	8	3/4
mm		254	38.1	157.2	146.1	116.1	53.8	12.7	200.2	20.6		19.1
in	6	12.5	1.5	8.5	8.12	6.72	2.12	1/2	10.62	0.88	12	3/4
mm		317.5	38.1	215.9	206.2	170.7	53.8	12.7	269.7	22.4		19.1
in	8	15	1.62	10.62	10.25	8.72	2.44	1/2	13	1	12	7/8
mm		381	41.1	269.7	260.4	221.5	62	12.7	330.2	25.4		22.2
in	10	17.5	1.88	12.75	12.62	10.88	2.62	1/2	15.25	1.12	16	1
mm		444.5	47.8	323.9	320.5	276.4	66.5	12.7	387.4	28.4		25.4
in	12	20.5	2	15	14.75	12.88	2.88	1/2	17.75	1.25	16	1 1/8
mm		520.7	50.8	381	374.7	327.2	73.2	12.7	450.9	31.8		28.6
in	14	23	2.12	16.25	16.75	14.14	3	1/2	20.25	1.25	20	1 1/8
mm		584.2	53.8	412.8	425.5	359.2	76.2	12.7	514.4	31.8		28.6
in	16	25.5	2.25	18.5	19	16.16	3.25	1/2	22.5	1.38	20	1 1/4
mm		647.7	57.2	469.9	482.6	410.5	82.6	12.7	571.5	35.1		31.8
in	18	28	2.38	21	21	18.18	3.5	1/2	24.75	1.38	24	1 1/4
mm		711.2	60.5	533.4	533.4	461.8	88.9	12.7	628.7	35.1		31.8
in	20	30.5	2.5	23	23.12	20.2	3.75	1/2	27	1.38	24	1 1/4
mm		774.7	63.5	584.2	587.2	513.1	95.3	12.7	685.8	35.1		31.8
in	24	36	2.75	27.25	27.62	24.25	4.19	1/2	32	1.62	24	1 1/2
mm		914.4	69.9	692.2	701.5	616	106.4	12.7	812.8	41.1		38.1

* Dimensions are in Inch and mm.

ASME-ANSI B16.36 Class 300 Threaded Orifice Flange Dimensions

												Drilling			
Nom Size		OD	Thickness	OD of RF	Dia at Base	LTH	OD of Counter Bore		Counter Bore Depth (from face)		Dia of Pressure Connection	Bolt Circle	Hole Dia	# of Holes	Bolt Dia
		O	C	R	X	Y	Qb ⁽²⁾	Qf ⁽³⁾	F	G	TT				
in.	1	4.88	1.5	2	2.12	1.88	1.41	1.3	1.44	0.75	1/4	3.5	0.7	4	5/8
mm.		124	38.1	50.8	53.8	47.8	35.8	33	36.6	19.1	6.4	88.9	18		15.9
in.	1 1/2	6.12	1.5	2.88	2.75	1.88	1.99	1.89	1.47	0.72	1/4	4.5	0.8	4	3/4
mm.		155.4	38.1	73.2	69.9	47.8	50.5	48	37.3	18.3	6.4	114.3	21		19.1
in.	2	6.5	1.5	3.62	3.31	1.94	2.5	2.36	1.5	0.69	1/4	5	0.7	8	5/8
mm.		165.1	38.1	91.9	84.1	49.3	63.5	59.9	38.1	17.5	6.4	127	18		15.9
in.	2 1/2	7.5	1.5	4.12	3.94	2	3	2.84	1.75	0.56	1/4	5.88	0.8	8	3/4
mm.		190.5	38.1	104.6	100.1	50.8	76.2	72.1	44.5	14.2	6.4	149.4	21		19.1
in.	3	8.25	1.5	5	4.62	2.06	3.63	3.46	1.81	0.56	3/8	6.62	0.8	8	3/4
mm.		209.6	38.1	127	117.3	52.3	92.2	87.9	46	14.2	9.5	168.1	21		19.1
in.	4	10	1.5	6.19	5.75	2.12	4.63	4.45	1.88	0.56	1/2	7.88	0.8	8	3/4
mm.		254	38.1	157.2	146.1	53.8	117.6	113	47.8	14.2	12.7	200.2	21		19.1
in.	6	12.5	1.5	8.5	8.12	2.12	6.75	6.57	1.88	0.31	1/2	10.62	0.9	12	3/4
mm.		317.5	38.1	215.9	206.2	53.8	171.5	166.9	47.8	7.9	12.7	269.7	22		19.1
in.	8	15	1.62	10.62	10.25	2.44	8.75	8.55	2.19	0.44	1/2	13	1	12	7/8
mm.		381	41.1	269.7	260.4	62	222.3	217.2	55.6	11.2	12.7	330.2	25		22.2

* Dimensions are in Inch and mm.

* Other NPT and SW connections available upon request.

* Qb counterbore back.

* Qf counterbore face.



General Notes..

- Dimensions are in millimetres and inches,
- Height of Raised Face (RF) in CLASS 300 is 2 mm.
- All other dimensions are in accordance with ASME B16.5.
- Ring joint flanges larger than NPS 3 will require angular meter taps.
- Qb counterbore back.
- Qf counterbore face.

Notes..

- Other NPT sizes may be furnished if required.
- Bolt lengths for raised face flanges include allowance for orifice and gasket thickness of 6 mm (0.25 in.) for NPS 1 to NPS 12. Bolt lengths for ring-type joint flanges include allowance of 15 mm (0.62 in.) for NPS 1 to NPS 3.
- Bore (B) is to be specified by the purchaser.
- The length of the Stud Bolt does not include the height of the chamfers (points).

Tolerances

Tolerances on all dimensions shall be as shown in ASME B16.5 except for those shown below.

Pressure Tap Location

Tolerance on location of centre of pressure tap hole from flange face shall be..

- ± 0.5 mm (± 0.02 in.) for flanges smaller than NPS 4
- ± 0.8 mm (± 0.03 in.) for flanges NPS 4 and larger

Bore Diameter

- Bore diameter tolerance (Welding Neck flanges only) is $\pm 0.5\%$ of nominal value.