

**TABLE - 1**
**ORIFICE PLATE DIMENSIONS, FLANGE SIZE & RATING**

FLANGE SIZE		FLANGE RATING (ANSI B16.36)							RATING 125# TO 2500#			T SEE NOTE
									≤315°C		≥315°C	
NB		125#	250#	400#	600#	900#	1500#	2500#	W	T	W	
mm	Inch	150#	300#						+0.12	-0.25 SEE NOTE	+0.25	
		ORIFICE PLATE OUTER DIAMETER "A" +/- 0.4							-0.25	SEE NOTE	-0.25	
25	1	66.7	73.0	73.0	73.0	79.4	79.4	85.7	3.18	0.51	6.35	
40	1.5	85.7	95.3	95.3	95.3	98.4	98.4	117.5	3.18	0.76	6.35	
50	2	104.8	111.1	111.1	111.1	142.9	142.9	146.1	3.18	0.79	6.35	
65	2.5	123.7	130.2	130.2	130.2	165.1	165.1	168.3	3.18	0.79	6.35	
80	3	136.5	149.2	149.2	149.2	168.3	174.6	196.9	3.18	0.79	6.35	
100	4	174.6	181.0	177.8	193.7	206.4	209.6	235.0	3.18	1.59	9.52	
150	6	222.3	250.8	247.7	266.7	288.9	282.6	317.5	3.18	1.59	9.52	
200	8	279.4	308.0	304.8	320.7	358.8	352.4	387.4	3.18	3.18	12.7	
250	10	339.7	362.0	358.8	400.1	435.0	435.0	476.3	3.18	3.18	12.7	
300	12	409.6	422.3	419.1	457.2	498.5	520.7	549.3	3.18	3.18	12.7	
350	14	450.8	485.8	482.6	492.1	520.7	577.9		3.18	3.18	12.7	
400	16	514.4	539.8	536.6	565.2	574.7	641.4		6.35	6.35	12.7	
450	18	549.3	596.9	593.7	612.8	638.2	704.9		6.35	6.35	12.7	
500	20	606.4	654.1	647.7	682.6	698.5	755.7		6.35	6.35	12.7	
550	22	660.4	704.9	701.7	733.4				6.35	6.35	12.7	
600	24	717.6	774.7	768.4	790.8	838.2	901.7		6.35	6.35	12.7	

NOTE:- Orifice Plate OD for Carrier Ring and RTJ Holders shall be suitable for Carrier Ring and RTJ Holders, and the Plate OD dimensions given in this Table-1 shall not referred. All other dimensions like W, T, G etc., will be same

NB		B -0 +10							C +/-0.4		R
		RATING							RATING		
		125#	250#	400#	600#	900#	1500#	2500#	125#	600# TO 2500#	$R = \frac{(D-G)}{2}$
mm	Inch	150#	300#					400#	2500#		
25	1	90	90	90	90	100	100	100	30		
40	1.5							115			
50	2							115			
65	2.5										
80	3										
100	4		100	100	100			130			
150	6					115		160	40		
200	8							130			
250	10							140			
300	12		115	115				180			
350	14										
400	16					130	150		50		
450	18	100	130	130		140	180	130			
500	20	150									
550	22										
600	24		140	140	140	165	205				

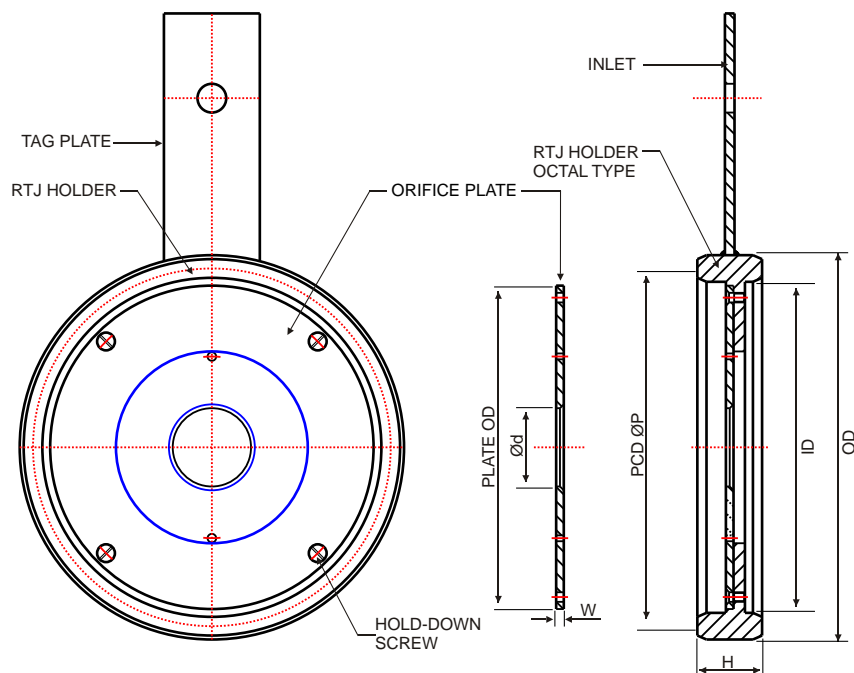
NOTE:-  
 Values of "T" shown in this Table are valid for the corresponding "W" and d/D (Beta) between 0.25 and 0.70 inclusive. When the values are not shown and got beta < 0.25 & beta > 0.70, "T" shall be calculated every time and shall not be greater than the smaller of the values resulting from the following ratios:  

$$\frac{d}{8} \quad \frac{D}{50} \quad \frac{D-d}{8}$$
  
 D - Internal Diameter of the Pipe  
 NB - Nominal Bore  
 d - Orifice Bore Diameter

ALL DIMENSIONS ARE IN "MM" UNLESS OTHERWISE SPECIFIED

**TABLE - 2**

**ORIFICE PALTE WITH RTJ HOLDER - DIMENSIONS**



Code RTJ Holder Material	
MS	Soft Iron (90 BHM Max)
F5	A 182 Gr. F5
F11	A 182 Gr. F11
F12	A 182 Gr. F12
F316	A 182 Gr. F316
Other	Please Specify

**Note:**

RTJ Holders of Oval type as per ANSI B16.20 can also be supplied on demand

N.B. (INCH) / RATING				RING NO	HOLDER DIMENSIONS			PLATE OD
300# 600#	900#	1500#	2500#		P	OD	ID	
1	1	1		R 16	50.80	58.75	42.85	47.60
			1	R 18	60.33	68.28	52.37	57.12
1.5	1.5	1.5		R 20	68.28	76.23	60.33	65.07
			1.5	R 23	82.55	76.23	71.42	61.90
2				R 23	82.55	76.23	71.42	61.90
	2	2		R 24	95.25	106.38	84.12	92.05
			2	R 26	101.60	93.68	90.47	79.35
2.5				R 26	101.60	93.68	90.47	79.35
	2.5	2.5		R 27	107.95	106.38	96.82	92.05
			2.5	R 28	111.13	123.83	98.43	107.92
3	3			R 31	123.83	134.95	112.70	120.62
			3	R 32	127.00	139.70	114.30	123.80
		3		R 35	136.53	147.65	125.40	133.32
4	4			R 37	149.23	160.35	138.10	134.90
			4	R 38	157.18	173.05	141.30	138.10
		4		R 39	161.93	173.05	150.80	147.60
5	5			R 41	180.98	192.10	169.85	166.65
		5		R 44	193.68	204.80	182.55	179.35
			5	R 42	190.50	209.55	171.45	168.25
6	6			R 45	211.15	222.28	200.03	196.82
		6		R 46	211.15	223.85	198.45	195.25
			6	R 47	228.60	247.65	209.55	206.35

N.B. (INCH) / RATING				RING NO	HOLDER DIMENSIONS			PLATE OD
300 # 600#	900#	1500#	2500#		P	OD	ID	
8	8			R 49	269.88	281.00	258.75	255.55
		8		R 50	269.88	285.75	254.00	250.80
			8	R 51	279.40	301.63	257.18	253.97
10	10			R 53	323.85	334.98	312.72	309.52
		10		R 54	323.85	339.73	307.98	304.77
			10	R 55	342.90	371.48	314.33	311.12
12	12			R 57	381.00	392.13	369.87	366.67
		12		R 58	381.00	403.23	358.78	355.57
			12	R 60	406.40	438.15	374.65	371.45
14				R 61	419.10	430.23	407.97	404.77
	14			R 62	419.10	434.98	403.23	400.02
		14		R 63	419.10	444.50	393.70	390.50
16				R 65	469.90	481.03	458.77	455.57
	16			R 66	469.90	485.78	454.03	450.82
		16		R 67	469.90	498.48	441.33	438.12
18				R 69	533.40	544.53	522.27	519.07
	18			R 70	533.40	549.28	517.53	514.32
		18		R 71	533.40	561.98	504.83	501.62
20				R 73	584.20	595.33	573.07	569.87
	20			R 74	584.20	603.25	565.15	561.95
		20		R 75	584.20	612.78	555.63	552.42
24				R 77	692.15	704.85	679.45	676.25
	24			R 78	692.15	711.20	673.10	669.90

**TABLE - 3**
**PIPE SCHEDULE / FLANGE BORE**

NB	PIPE		PIPE SCHEDULE (AS PER ANSI STANDARD)													
	OD	5	10	20	30	STD	40	60	XS	80	100	120	140	160	XXS	Other
mm	Inch	"MM"	PIPE ID & WALL THICKNESS IN "MM"													
25	1	33.40	30.10 1.60				26.64 3.40	26.64 3.40		24.30 4.50	24.30 4.50				20.70 6.35	15.22 9.10
40	1.5	48.30	45.00 1.60				40.94 3.70	40.94 3.70		38.14 5.00	38.14 5.00				34.02 7.10	27.98 10.20
50	2	60.30	57.00 1.60				52.48 3.90	52.48 3.90		49.22 5.50	49.22 5.50				42.88 8.70	38.16 11.00
65	2.5	73.00	68.78 2.10				62.88 5.10	62.88 5.10		58.98 7.00	58.98 7.00				53.96 9.50	44.96 14.00
80	3	88.90	84.68 2.10				77.92 5.50	77.92 5.50		73.66 7.60	73.66 7.60				66.56 11.10	58.42 15.20
100	4	114.30	110.08 2.10				102.26 6.00	102.26 6.00		97.18 8.60	97.18 8.60		92.04 11.10		87.34 13.50	80.06 17.10
150	6	168.30	162.78 2.70				154.08 7.10	154.08 7.10		146.36 11.00	146.36 11.00		139.76 14.20		131.84 18.20	124.42 21.90
200	8	219.10	213.58 2.70		206.40 6.30	205.02 7.00	202.74 8.20	202.74 8.20	198.48 10.30	193.70 12.70	193.70 12.70	188.98 15.10	182.64 18.20	177.86 20.60	173.08 23.00	174.66 22.20
250	10	273.00	266.20 3.40		260.30 6.30	257.40 7.80	254.46 9.20	254.46 9.20	247.60 12.70	247.60 12.70	242.88 15.00	236.54 18.20	230.18 21.40	222.20 25.40	215.84 28.60	222.20 25.40
300	12	323.90	315.98 3.90		311.10 6.30	307.04 8.40	304.86 9.50	303.28 10.30	295.36 14.20	295.36 14.20	289.02 17.40	281.08 21.40	273.10 25.40	266.74 28.60	257.26 33.30	273.10 25.40
350	14	355.60	347.68 3.90	342.90 6.30	339.70 7.90	336.56 9.50	336.56 9.50	333.34 11.10	325.48 15.00	330.20 12.70	317.50 19.00	308.02 23.80	300.08 27.70	292.10 31.70	284.18 35.70	
400	16	406.40	398.02 4.10	393.70 6.30	390.56 7.90	387.36 9.50	387.36 9.50	381.00 12.70	373.08 16.60	381.00 12.70	363.58 21.40	354.02 26.20	344.52 30.90	333.36 36.50	325.48 40.50	
450	18	457.20	448.82 4.10	444.50 6.30	441.36 7.90	434.94 11.10	438.16 9.50	428.66 14.20	419.10 19.00	431.80 12.70	409.60 23.80	398.48 29.40	387.36 34.90	377.86 39.70	366.72 45.20	
500	20	508.00	498.46 4.70	495.30 6.30	488.96 9.50	482.60 12.70	488.96 9.50	477.88 15.00	466.72 20.60	482.60 12.70	455.62 26.10	442.92 32.50	431.80 38.10	419.10 44.40	408.04 49.90	
550	22	558.80	549.26 4.70	546.10 6.30	539.76 9.50	533.40 12.70	539.76 9.50		514.36 22.30	533.40 12.70	501.64 28.60	488.96 34.90	476.24 41.20	463.56 47.60	450.84 54.00	
600	24	609.60	598.54 5.50	596.90 6.30	590.56 9.50	581.06 14.20	590.56 9.50	574.72 17.40	560.44 24.60	584.20 12.70	547.74 31.00	531.82 38.90	517.56 46.00	504.86 52.40	490.58 59.50	

PLEASE SPECIFY

**TABLE - 4**

**STUDS / NUTS & JACK SCREW MATERIALS**

Code	Studs / Nuts & Jack Screw Materials
B7/2H	A193 Gr.B7 / A194 Gr.2H
B7M/2HM	A193 Gr.B7M / A194 Gr.2HM
B16	A193 Gr.B16 / A194 Gr.4
B8	A193 Gr.B8 / A194 Gr.B8
B8M	A193 Gr.B8M / A194 Gr.B8M
B	A307 Gr.B / A563 Gr.B
L7/7	A320 Gr.L7 / A194 Gr.7
Other	Please specify

**TABLE - 5**

**FLAT RING & SPIRAL WOUND GASKET MATERIALS**

Code	Gasket Materials
G1	CAF
GP	PTFE
G2	(SS304+CAF)
G3	(SS316+CAF)
G4	(SS304L+CAF)
G5	(SS304+GRAPHITE)
G6	(SS316L+GRAFOIL)
G7	(SS316L+PTFE)
G8	(SS316+FLEXIBLE GRAPHITE)
Other	Please specify

**TABLE - 6**

**PRESSURE TAPPING CONNECTION**

Code	Pressure Tapping Connection
1N	1/4" NPT(F)
2N	3/8" NPT(F)
3N	1/2" NPT(F)
1B	1/2" BSP(F)
4N	3/4" NPT(F)
2B	3/4" BSP(F)
Other	Please specify

**TABLE - 7**

**OPTIONS**

Code	Description
0	None
1	IBR Form III C
2	NACE Mr0175
3	HIC
4	H2 Service
5	Impact Testing
6	IGC Test
7	Meter Run
8	PWHT
9	Radiography of Weld Joints
10	Wet Calibration
11	Nipples
12	Valves
13	3-way valve manifold
14	Condensate Pot
15	Other (Specify)
PR	Piezometric Ring

**TABLE - 8**

**FLANGE FACINGS**

Code	Flange Facing
RF	Raised Facing
FF	Flat Facing
RTJ	Ring Type Joint
LMF	Large Male Facing
SMF	Small Male Facing
LFF	Large Female Face
SMF	Small Male Facing
LFF	Large Female Facing
SFF	Small Female Face
LTF	Large Tongue Face
STF	Small Tongue Face
LGF	Large Groove Face
SGF	Small Groove Face

Note:-

1. Flat Ring Gaskets' thickness = 1.6 mm, 2 mm, 3 mm
2. Spiral Wound Gaskets' thickness = 4.5 mm