

RTJ Type Orifice Plates

- Design Generally to BS EN ISO 5167
- Range of Orifice Types
 - Concentric Square Edge
 - Restriction
- Range of Designs
 - One Piece Construction
 - Screwed On Plate
- Proven technology
- Suitable for 1" lines and above
- Orifice sizing on request

General Description

The RTJ type orifice plate incorporates an integral gasket, either oval or octagonal ring, for mounting between ring type joint flanges. It is based on proven technology, has no moving parts and is suitable for high temperature and pressure applications. Orifice plates are recommended for clean liquids, gases and low velocity steam flows.

Dimensions

Plate thicknesses depend on line size and differential pressure, and should be sufficient to prevent the plate from bending under operating conditions. Recommended plate thicknesses for flow measurement plates are shown on page 5.

Standard plate and ring dimensions are shown on page 9. Orifice plates can be made in accordance with customer drawings as required.

Materials

RTJ type orifice plates may be machined in one piece, or alternatively from two pieces, with an orifice plate screwed



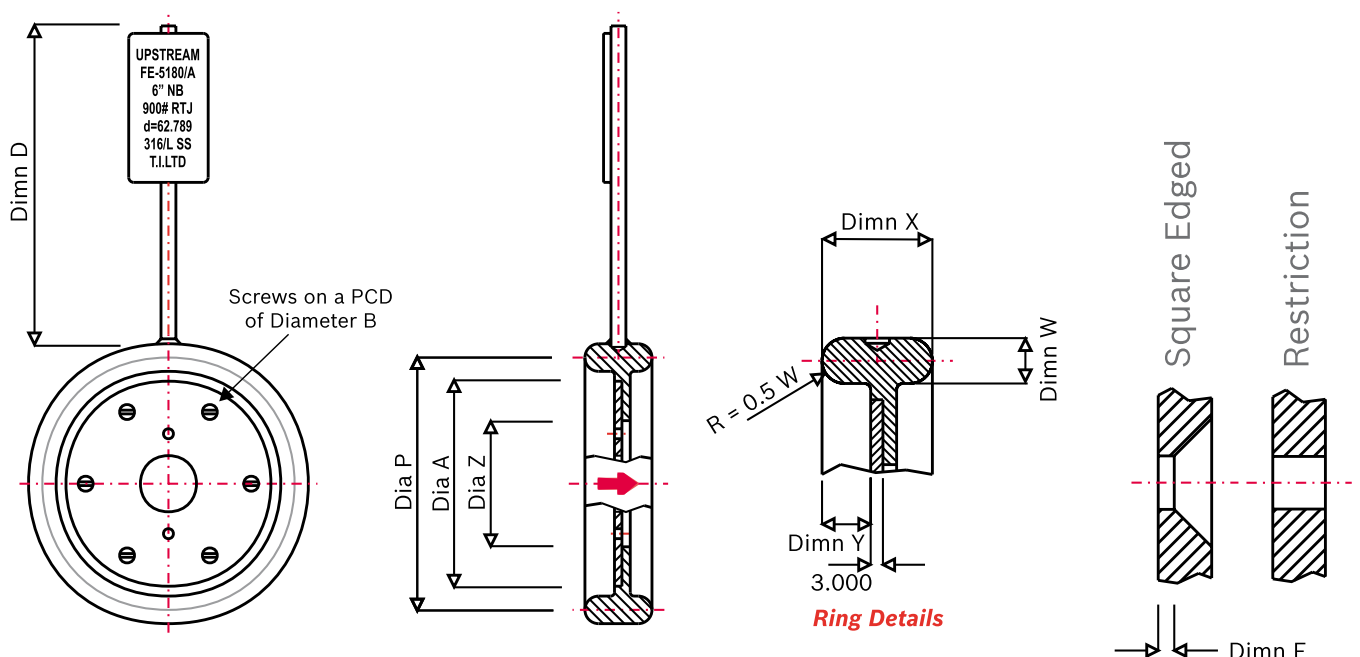
RTJ Type Orifice Plate

onto a carrier ring/gasket. Standard material grades for orifice plates include 316 Stainless Steel, 304 Stainless Steel, 310 Stainless Steel, Hastelloy® C276, Hastelloy® B3, Duplex Stainless Steel, Super Duplex Stainless Steel, Monel® 400, Carbon Steel, Titanium, Incoloy® 800, Incoloy® 825, Inconel® 600 and Inconel® 625.

Common carrier ring/gasket materials include Stainless Steel and soft iron. To ensure correct sealing when installed between flanges, the hardness of the carrier ring/gasket material is limited to a maximum value, typically 120HB for soft iron rings and 160HB for Stainless Steel Rings.

Please contact the sales office for other grades.

Standard Plate and Ring Dimensions



Rating and Line Size (Inches)				Ring No.	DIA. P	DIMN W	DIMN X	DIMN Y	DIA Z	DIMN F	DIA A	DIA B	DIMN D
300 # 600 #	900 #	1500 #	2500 #										
1	1	1		R 16	50.8	7.9	23.8	10.3	25.4	0.5	41.3	33.3	125
			1	R 18	60.2	7.9	23.8	10.3	25.4	0.5	41.3	33.3	150
1.5	1.5	1.5		R 20	68.3	7.9	23.8	10.3	38.1	0.5	54	46	125
			1.5	R 23	82.5	11.1	27	10.3	38.1	0.5	54	46	150
2				R 23	82.5	11.1	27	11.9	50.8	0.75	69.8	60.3	125
	2	2		R 24	95.3	11.1	27	11.9	50.8	0.75	82.55	66.6	150
			2	R 26	101.6	11.1	27	11.9	50.8	0.75	82.55	66.6	150
2.5				R 26	101.6	11.1	27	11.9	63.5	0.75	85.5	69.5	125
	2.5	2.5		R 27	107.9	11.1	27	11.9	63.5	0.75	91.8	75.8	150
			2.5	R 28	111.1	12.7	27	11.9	63.5	0.75	93.4	77.4	150
3	3			R 31	123.8	11.1	27	11.9	76.2	1	107.9	92	150
			3	R 32	127	12.7	28.6	12.7	76.2	1	107.9	92	150
		3		R 35	136.5	11.1	27	11.9	76.2	1	107.9	92	150
4	4			R 37	149.2	11.1	27	11.9	104	1.5	136.5	120.6	150
			4	R 38	157.2	15.9	31.7	14.3	104	1.5	136.5	120.6	150
		4		R 39	162	11.1	27	11.9	104	1.5	136.5	120.6	150
6	6			R 45	211.1	11.1	27	11.9	158.7	1.5	190.5	174.6	150
		6		R 46	211.1	12.7	34.9	12.7	158.7	1.5	190.5	174.6	150
			6	R 47	228.6	19.1	27	15.9	158.7	1.5	190.5	174.6	175
8	8			R 49	269.9	11.1	27	11.9	209.5	3.5	241.3	225.4	175
		8		R 50	269.9	15.9	31.7	14.3	209.5	3.5	241.3	225.4	175
			8	R 51	279.4	22.2	38.1	17.5	209.5	3.5	241.3	225.4	175
10	10			R 53	323.8	11.1	27	11.9	260.3	3.5	292.1	276.2	175
		10		R 54	323.8	15.9	31.7	14.3	260.3	3.5	292.1	276.2	175
			10	R 55	342.9	28.6	46	21.4	260.3	3.5	292.1	276.2	200
12	12			R 57	381	11.1	27	11.9	311.2	3.5	342.9	327	175
		12		R 58	381	22.2	38.1	17.5	311.2	3.5	342.9	327	175
			12	R 60	406.4	31.7	49.2	23	311.2	3.5	342.9	327	200
14 OD				R 61	419.1	11.1	27	11.9	343	5	374.6	358.8	150
	14 OD			R 62	419.1	15.9	31.7	14.3	343	5	374.6	358.8	175
		14 OD		R 63	419.1	25.4	27	19.8	343	5	374.6	358.8	175
16 OD				R 65	469.9	11.1	27	11.9	393.7	5	425.4	409.6	150
	16 OD			R 66	469.9	15.9	31.7	14.3	393.7	5	425.4	409.6	200
		16 OD		R 67	469.9	28.6	46	21.4	393.7	5	425.4	409.6	200
18 OD				R 69	533.4	11.1	27	11.9	444.5	5	476.2	460.4	175
	18 OD			R 70	533.4	19.1	34.9	15.9	444.5	5	476.2	460.4	200
		18 OD		R 71	533.4	28.6	46	21.4	444.5	5	476.2	460.4	200
20 OD				R 73	584.2	12.7	28.6	12.7	495.3	8	517.5	501.6	175

Standard Orifice Plate and Ring Dimensions



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