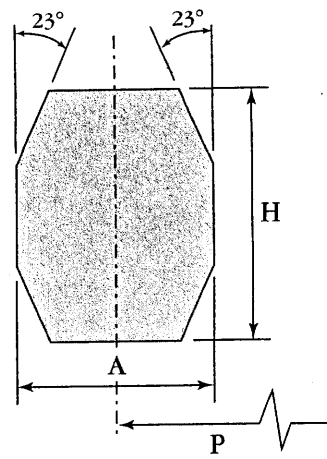
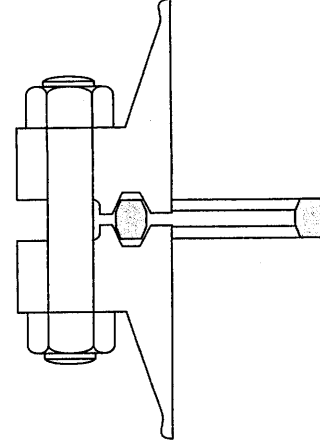


STYLE R

DIMENSIONS IN MILLIMETRES

RING NO	PRESSURE CLASS RATINGS							PITCH DIAMETER OF RING P	WIDTH OF RING A	HEIGHT OF RING	
	ANSI, BS & MSS					API (MPa)				OVAL B	OCTAGONAL H
	150	300/600	900	1500	2500	13.8/20.7	34.5				
	NOMINAL PIPE SIZE (inches)										
R11	-	1/2	-	-	-	-	34.13	6.35	11.1	9.5	
R12	-	-	1/2	1/2	-	-	39.69	7.95	14.3	12.7	
R13	-	3/4	-	-	1/2	-	42.86	7.95	14.3	12.7	
R14	-	-	3/4	3/4	-	-	44.45	7.95	14.3	12.7	
R15	1	-	-	-	-	-	47.63	7.95	14.3	12.7	
R16	-	1	1	1	1/4	-	50.80	7.95	14.3	12.7	
R17	1 1/4	-	-	-	-	-	57.15	7.95	14.3	12.7	
R18	-	1 1/4	1 1/4	1 1/4	1	-	60.33	7.95	14.3	12.7	
R19	1 1/2	-	-	-	-	-	65.09	7.95	14.3	12.7	
R20*	-	1 1/2	1 1/2	1 1/2	-	-	68.28	7.95	14.3	12.7	
R21	-	-	-	-	1/4	-	72.23	11.11	17.5	15.9	
R22	2	-	-	-	-	-	82.55	7.95	14.3	12.7	
R23*	-	2	-	-	1 1/2	2 1/16**	82.55	11.11	17.5	15.9	
R24*	-	-	2	2	-	2 1/16	95.25	11.11	17.5	15.9	
R25	2 1/2	-	-	-	-	-	101.60	7.95	14.3	12.7	
R26*	-	2 1/2	-	-	2	2 1/16	101.60	11.11	17.5	15.9	
R27*	-	-	2 1/2	2 1/2	-	(2 9/16)	107.95	11.11	17.5	15.9	
R28	-	-	-	-	2 1/2	-	111.13	12.70	19.1	17.5	
R29	3	-	-	-	-	-	114.30	7.95	14.3	12.7	
R30†	-	3	-	-	-	-	117.48	11.11	17.5	15.9	
R31*	-	3	3	-	-	3 1/8	123.83	11.11	17.5	15.9	
R32	-	-	-	-	3	-	127.00	12.70	19.1	17.5	
R33	3 1/2	-	-	-	-	-	131.76	7.95	14.3	12.7	
R34	-	3 1/2	-	-	-	-	131.76	11.11	17.5	15.9	
R35*	-	-	-	3	-	3 1/8	136.53	11.11	17.5	15.9	
R36	4	-	-	-	-	-	149.23	7.95	14.3	12.7	
R37*	-	4	4	-	-	4 1/16	149.23	11.11	17.5	15.9	
R38	-	-	-	-	4	-	157.16	15.88	22.2	20.6	
R39*	-	-	-	4	-	4 1/16	161.93	11.11	17.5	15.9	
R40	5	-	-	-	-	-	171.45	7.95	14.3	12.7	
R41*	-	5	5	-	-	-	180.98	11.11	17.5	15.9	
R42	-	-	-	-	5	-	190.50	19.05	25.4	23.9	
R43	6	-	-	-	-	-	193.68	7.95	14.3	12.7	
R44*	-	-	-	5	-	-	193.68	11.11	17.5	15.9	
R45*	-	6	6	-	-	7 1/16	211.14	11.11	17.5	15.9	
R46*	-	-	-	6	-	7 1/16	211.14	12.70	19.1	17.5	
R47*	-	-	-	-	6	-	228.60	19.05	25.4	23.9	
R48	8	-	-	-	-	-	247.65	7.95	14.3	12.7	
R49*	-	8	8	-	-	9	269.88	11.11	17.5	16.0	
R50*	-	-	-	8	-	-	269.88	15.88	22.2	20.6	
R51	-	-	-	-	8	-	279.40	22.23	28.6	27.0	
R52	10	-	-	-	-	-	304.80	7.95	14.3	12.7	
R53*	-	10	10	-	-	11	323.85	11.11	17.5	16.0	
R54*	-	-	-	10	-	11	323.85	15.88	22.2	20.6	
R55	-	-	-	-	10	-	342.90	28.58	36.5	34.9	
R56	12	-	-	-	-	-	381.00	7.95	14.3	12.7	
R57*	-	12	12	-	-	13 3/8	381.00	11.11	17.5	16.0	



TOLERANCES

A (WIDTH OF RING)
 B, H (HEIGHT OF RING)
 P (AVERAGE PITCH DIAMETER OF RING)
 23° ANGLE

MILLIMETRES

+/-0.20
 +/-0.5
 +/-0.18
 +/-1/2°

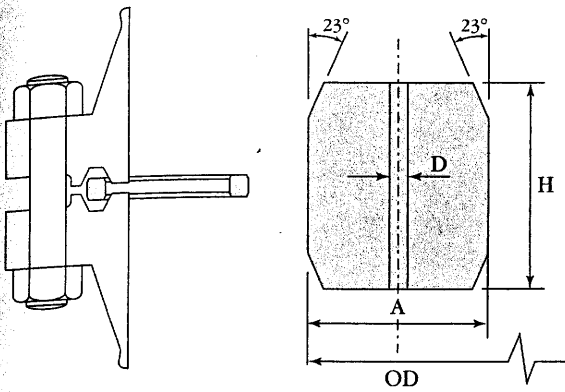
RING NO	PRESSURE CLASS RATINGS							PITCH DIAMETER OF RING P	WIDTH OF RING A	HEIGHT OF RING	
	ANSI, BS & MSS					API (MPa)				OVAL B	OCTAGONAL H
	150	300/600	900	1500	2500	13.8/20.7	34.5				
	NOMINAL PIPE SIZE (inches)										
R58	-	-	-	-	12	-	381.00	22.23	28.6	27.0	
R59	14	-	-	-	-	-	396.88	7.95	14.3	12.7	
R60	-	-	-	-	12	-	406.40	31.75	39.7	38.1	
R61	-	14	-	-	-	-	419.10	11.11	17.5	15.9	
R62	-	-	14	-	-	-	419.10	15.88	22.2	20.6	
R63*	-	-	-	14	-	-	419.10	25.40	33.3	31.8	
R64	16	-	-	-	-	-	454.03	7.95	14.3	12.7	
R65*	-	16	-	-	-	16 3/4**	469.90	11.11	17.5	16.0	
R66*	-	-	16	-	-	(16)	469.90	15.88	22.2	20.6	
R67	-	-	-	16	-	-	469.90	28.58	36.5	34.9	
R68	18	-	-	-	-	-	517.53	7.95	14.3	12.7	
R69*	-	18	-	-	-	-	533.40	11.11	17.5	16.0	
R70*	-	-	18	-	-	(18)	533.40	19.05	25.4	23.9	
R71	-	-	-	18	-	-	533.40	28.58	36.5	34.9	
R72	20	-	-	-	-	-	558.80	7.95	14.3	12.7	
R73*	-	20	-	-	-	21 1/4**	584.20	12.7	19.1	17.5	
R74*	-	-	20	-	-	(20 3/4)	584.20	19.05	25.4	23.9	
R75	-	-	-	20	-	-	584.20	31.75	39.7	38.1	
R76	24	-	-	-	-	-	673.10	7.95	14.3	12.7	
R77	-	24	-	-	-	-	692.15	15.88	22.2	20.6	
R78	-	-	24	-	-	-	692.15	25.4	33.3	31.8	
R79	-	-	-	24	-	-	692.15	34.93	44.5	41.3	
R80	22	-	-	-	-	-	615.95	7.95	-	12.7	
R81	-	22	-	-	-	-	635.00	14.29	-	19.1	
R82*	-	-	-	-	-	-	57.14	11.11	-	16.0	
R84*	-	-	-	-	-	-	63.50	11.11	-	16.0	
R85*	-	-	-	-	-	-	79.38	12.70	-	17.5	
R86*	-	-	-	-	-	-	90.50	15.88	-	20.6	
R87*	-	-	-	-	-	-	100.03	15.88	-	20.6	
R88*	-	-	-	-	-	-	122.83	19.05	-	23.9	
R89*	-	-	-	-	-	-	114.30	19.05	-	23.9	
R90*	-	-	-	-	-	-	155.58	22.23	-	26.9	
R91*	-	-	-	-	-	-	260.25	31.75	-	38.1	
R92	-	-	-	-	-	-	228.60	11.11	17.5	15.9	
R93	-	26	-	-	-	-	749.30	19.05	-	23.9	
R94	-	28	-	-	-	-	800.10	19.05	-	23.9	
R95	-	30	-	-	-	-	857.25	19.05	-	23.9	
R96	-	32	-	-	-	-	914.40	22.23	-	27.0	
R97	-	34	-	-	-	-	965.20	22.23	-	27.0	
R98	-	36	-	-	-	-	1019.18	22.23	-	27.0	
R99*	-	-	-	-	-	-	234.95	11.11	-	16.0	
R100	-	-	26	-	-	-	749.30	28.58	-	34.9	
R101	-	-	28	-	-	-	800.10	31.75	-	38.1	
R102	-	-	30	-	-	-	857.25	31.75	-	38.1	
R103	-	-	32	-	-	-	914.40	31.75	-	38.1	
R104	-	-	34	-	-	-	965.20	34.93	-	41.3	
R105	-	-	36	-	-	-	1022.35	34.93	-	41.3	

* Denotes ring number specified in in API 6A. Nominal Pipe sizes marked ** apply to class rating 13.8 only Nominal Pipe sizes in brackets apply to class rating 20.7 only. † Ring No. R30 is suitable for lapped flanges only.

TOLERANCES
 A* (Width of ring)
 D (Hole size)
 H* (Height of ring)
 OD (OD of ring)
 23° (Angle)

+0.020, -0.000
 ±0.50
 +0.020, -0.000
 +0.000, -0.015
 ±1/4°

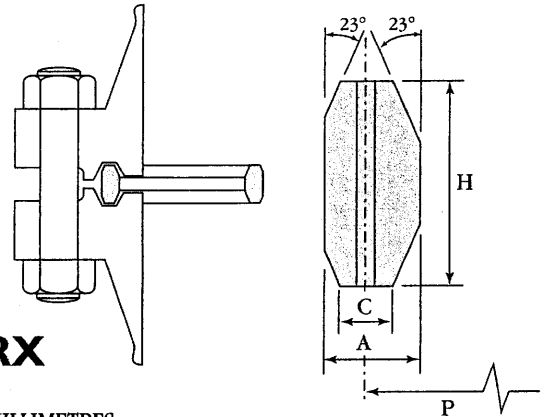
One pressure passage hole required per ring on centre line
 * A plus tolerance of 0.20 mm for width 'A' and height 'H' is permitted, provided the variation in width or height does not exceed 0.10 mm throughout its entire circumference
 Note 1: Radius of the ring shall be 8% to 12% of the ring height 'H'



TOLERANCES
 A* (Width of ring)
 H* (Height of ring)
 OD (OD of ring)
 230 (Angle)

+0.20, -0
 +0.20, -0
 +0.50, -0
 ± 1/2°

* A plus tolerance of 0.20 mm for width 'A' and height 'H' is permitted, provided the variation in width or height does not exceed 0.10 mm throughout its entire circumference.
 Note 1: The pressure passage hole illustrated in the RX ring cross section is in rings RX82 through to RX91 only. Centre line of hole shall be located at mid point of dimension 'C' (width of flat).
 Hole diameter shall be as follows: 1.5mm for rings RX82 Through RX85; 2.3mm for rings RX86 and RX87 3.0mm for rings RX88 through RX91.



STYLE RX

DIMENSIONS IN MILLIMETRES

STYLE BX

DIMENSIONS IN MILLIMETRES

RING NO	PRESSURE CLASS RATING (MPa)				OUTSIDE DIAMETER OF RING OD	HEIGHT OF RING H	WIDTH OF RING A	HOLE SIZE D
	34.5	69	103.5	138				
	NOMINAL PIPE SIZE (inches)							
BX150	-	-	-	-	72.19	9.30	9.30	1.59
BX151	-	1 1/16	1 1/16	1 1/16	76.40	9.63	9.63	1.59
BX152	-	2 1/16	2 1/16	2 1/16	84.68	10.24	10.24	1.59
BX153	-	2 3/16	2 3/16	2 3/16	100.94	11.38	11.38	1.59
BX154	-	3 1/16	3 1/16	3 1/16	116.84	12.40	12.40	1.59
BX155	-	4 1/16	4 1/16	4 1/16	147.96	14.22	14.22	1.59
BX156	-	7 1/16	7 1/16	7 1/16	237.92	18.62	18.62	3.18
BX157	-	9	9	9	294.46	20.98	20.98	3.18
BX158	-	11	11	11	352.04	23.14	23.14	3.18
BX159	-	13 3/8	13 3/8	13 3/8	426.72	25.70	25.70	3.18
BX160	13 3/8	-	-	-	402.59	23.83	13.74	3.18
BX161	-	-	-	-	491.41	28.07	16.21	3.18
BX162	16 3/4	16 3/4	-	-	475.49	14.22	14.22	1.59
BX163	18 3/4	-	-	-	556.16	30.10	17.37	3.18
BX164	-	18 3/4	18 3/4	-	570.56	30.10	24.59	3.18
BX165	21 1/4	-	-	-	624.71	32.03	18.49	3.18
BX166	-	21 1/4	-	-	640.03	32.03	26.14	3.18
BX167*	-	-	-	-	759.36	35.87	13.11	1.59
BX168†	-	-	-	-	765.25	35.87	16.05	1.59
BX169**	-	-	-	-	173.51	15.85	12.93	1.59
BX170	-	-	-	-	218.03	14.22	14.22	1.59
BX171	-	-	-	-	267.44	14.22	14.22	1.59
BX172	-	-	-	-	333.07	14.22	14.22	1.59
BX303††	-	-	-	-	852.75	37.95	16.97	1.59

* BX167 is suitable for 26 1/4 nominal pipe size, 13.8 MPa rating. ** BX169 is suitable for 5 1/2 nominal pipe size, 69 MPa rating. † BX168 is suitable for 26 1/4 nominal pipe size, 20.7 MPa rating. †† BX167 is suitable for 30 nominal pipe size, 13.8 and 20.7 MPa rating

RING NO	PRESSURE CLASS RATING (MPa)			PITCH DIAMETER OF RING P	OUTSIDE DIAMETER OF RING OD	WIDTH OF RING A	HEIGHT OF RING H
	13.8	20.7	34.5				
	NOMINAL PIPE SIZE (inches)						
RX20	-	-	-	68.26	76.20	8.73	19.05
RX20†	-	-	2 1/16	68.26	76.20	8.73	19.05
RX23	2 1/16	-	-	82.55	93.27	11.91	25.40
RX24	-	2 1/16	2 1/16	95.25	105.97	11.91	25.40
RX25†	-	-	3 1/8	101.60	109.54	8.73	19.05
RX26	2 3/16	-	-	101.60	111.92	11.91	25.40
RX27	-	2 3/16	2 3/16	107.95	118.27	11.91	25.40
RX31	3 1/8	3 1/8	-	123.83	134.54	11.91	25.40
RX35	-	-	3 1/8	136.53	147.24	11.91	25.40
RX37	4 1/16	4 1/16	-	149.23	159.94	11.91	25.40
RX39	-	-	4 1/16	161.93	172.64	11.91	25.40
RX41	-	-	-	180.98	191.69	11.91	25.40
RX44	-	-	-	193.68	204.39	11.91	25.40
RX45	7 1/16	7 1/16	-	211.14	211.93	11.91	25.40
RX46	-	-	7 1/16	211.14	222.25	13.49	28.58
RX47	-	-	-	228.60	245.27	19.84	41.28
RX49	9	9	-	269.88	280.59	11.91	25.40
RX50	-	-	9	269.88	283.37	16.67	31.75
RX53	11	11	-	323.85	334.57	11.91	25.40
RX54	-	-	11	323.85	337.34	16.67	31.75
RX57	13 3/8	13 3/8	-	381.00	391.72	11.91	25.40
RX63	-	-	-	419.10	441.72	26.99	50.80
RX65	16 3/4	-	-	469.90	480.62	11.91	25.40
RX66	-	16 3/4	-	469.90	483.39	16.67	31.75
RX69	-	-	-	533.40	544.12	11.91	25.40
RX70	-	-	-	533.40	550.07	19.84	41.28
RX73	21 1/4	-	-	584.20	596.11	13.49	31.75
RX74	-	20 3/4	-	584.20	600.87	19.84	41.28
RX82	-	-	-	57.15	67.87	11.91	25.40
RX84	-	-	-	63.50	74.22	11.91	25.40
RX85	-	-	-	79.38	90.09	13.49	25.40
RX86	-	-	-	90.49	103.58	15.08	28.58
RX87	-	-	-	100.01	113.11	15.08	28.58
RX88	-	-	-	123.83	139.30	17.46	31.75
RX89	-	-	-	114.30	129.78	18.26	31.75
RX90	-	-	-	155.58	174.63	19.84	44.45
RX91	-	-	-	260.35	286.94	30.16	45.24
RX99	-	-	-	234.95	234.95	11.91	25.40
RX201†	-	-	1 3/8	46.04	46.04	5.74	11.30
RX205†	-	-	1 1/2	57.15	62.31	5.56	11.10
RX210†	-	-	2 3/16	88.90	97.63	9.53	19.05
RX215	-	-	4 1/16	130.18	140.89	11.91	25.40
RX215†	-	-	4 1/16 x 4 1/4	130.18	140.89	11.91	25.40

† Denotes API ring type joints for segmented flanges for dual completions to API standard 6A.