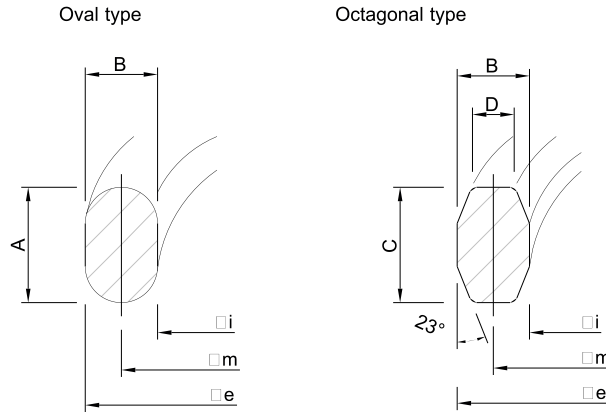


Notes:

- Under axial compressive load, ring joint gasket plastically deform and flow into irregularities of the flange groove: the seal is maintained by the action of this force upon the gasket.
- It is imperative that the gasket be significantly softer than the flange to not damage it during assembly.
- R, Rx and BX type are according to ANSI B16.5, API-Std.6A.
- R type typical sections :



- Are manufactured in both oval and octagonal configuration.
- Are designed to seal pressure up to 6250 psi (for ASME B 16.5 pressure rating) and up to 5000 psi (for API 6A pressure rating).
- Requested surface finish: 63 µm Ra - 1.6 µm Ra.
- Gasket seating factors:

Material	Factor <i>m</i>	Factor <i>y</i> (PSI)
Iron or soft metal	5.50	18000
Monel or 4-6 % Cr	6.00	21800
Stainless steel	6.50	26000

ASME-ANSI B16.5				ASME B16.47A		API 6A		Tolerances		± 0.38	± 0.17	± 0.39	± 0.20	Weight					
150	300-600	900	1500	2500	300-600	900	2000	3000	5000	R	o e (mm)	i (mm)	m (mm)	A (mm)	C (mm)	B (mm)	D (mm)	Oval (Kg)	Octagonal (Kg)
-	1/2	-	-	-	-	-	-	-	-	R11	40.48	27.28	34.13	11.11	9.52	6.35	4.30	0.05	0.05
-	-	1/2	1/2	-	-	-	-	-	-	R12	47.61	31.75	39.68	14.29	12.70	7.94	5.23	0.10	0.10
-	3/4	-	-	1/2	-	-	-	-	-	R13	50.79	34.93	42.86	14.29	12.70	7.94	5.23	0.10	0.10
-	-	3/4	3/4	-	-	-	-	-	-	R14	52.38	36.52	44.45	14.29	12.70	7.94	5.23	0.11	0.11
1	-	-	-	-	-	-	-	-	-	R15	55.55	39.69	47.62	14.29	12.70	7.94	5.23	0.12	0.11
-	1	1	1	3/4	-	-	1	1	1	R16	58.73	42.87	50.08	14.29	12.70	7.94	5.23	0.12	0.11
1 1/2	-	-	-	-	-	-	-	-	-	R17	65.08	49.22	57.15	14.29	12.70	7.94	5.23	0.14	0.13
-	1 1/2	1 1/2	1 1/2	1	-	-	1 1/2	1 1/2	1 1/2	R18	68.25	52.39	60.32	14.29	12.70	7.94	5.23	0.15	0.14
1 1/2	-	-	-	-	-	-	-	-	-	R19	73.01	57.15	65.08	14.29	12.70	7.94	5.23	0.16	0.15
-	1 1/2	1 1/2	1 1/2	-	-	-	1 1/2	1 1/2	1 1/2	R20*	76.19	60.33	68.26	14.29	12.70	7.94	5.23	0.17	0.15
-	-	-	-	1 1/2	-	-	-	-	-	R21	83.34	61.12	72.23	17.46	15.88	11.11	7.76	0.30	0.29
2	-	-	-	-	-	-	-	-	-	R22	90.48	74.62	82.55	14.29	12.70	7.94	5.23	0.20	0.19
-	2	-	-	1 1/2	-	-	2	-	-	R23*	93.66	71.44	82.55	17.46	15.88	11.11	7.76	0.34	0.33
-	-	2	2	-	-	-	2	2	-	R24*	106.36	84.14	95.25	17.46	15.88	11.11	7.76	0.39	0.38
2 1/2	-	-	-	-	-	-	-	-	-	R25	109.53	93.67	101.60	14.29	12.70	7.94	5.23	0.25	0.23
-	2 1/2	-	-	2	-	-	2 1/2	-	-	R26*	112.71	90.49	101.60	17.46	15.88	11.11	7.76	0.42	0.41
-	-	2 1/2	2 1/2	-	-	-	2 1/2	2 1/2	-	R27*	119.06	96.84	107.95	17.46	15.88	11.11	7.76	0.45	0.43
-	-	-	-	2 1/2	-	-	-	-	-	R28	123.82	98.42	111.12	19.05	17.46	12.70	8.66	0.57	0.55
3	-	-	-	-	-	-	-	-	-	R29	122.23	106.37	114.30	14.29	12.70	7.94	5.23	0.28	0.26
-	3	-	-	-	-	-	-	-	-	R30	128.58	106.36	117.47	17.46	15.88	11.11	7.76	0.48	0.47
-	3	3	-	-	-	-	3	3	-	R31*	134.93	112.71	123.82	17.46	15.88	11.11	7.76	0.51	0.50
-	-	-	3	-	-	-	-	-	-	R32	139.70	114.30	127.00	19.05	17.46	12.70	8.66	0.65	0.63
3 1/2	-	-	-	-	-	-	-	-	-	R33	139.69	123.83	131.76	14.29	12.70	7.94	5.23	0.32	0.30
-	3 1/2	-	-	-	-	-	-	-	-	R34	142.87	120.65	131.76	17.46	15.88	11.11	7.76	0.54	0.52
-	-	-	3	-	-	-	-	3	-	R35*	147.63	125.41	136.52	17.46	15.88	11.11	7.76	0.56	0.55
4	-	-	-	-	-	-	-	-	-	R36	157.15	141.29	149.22	14.29	12.70	7.94	5.23	0.37	0.34
-	4	4	-	-	-	-	4	4	3 1/2	R37*	160.33	138.11	149.22	17.46	15.88	11.11	7.76	0.62	0.60
-	-	-	4	-	-	-	-	-	-	R38	173.03	141.29	157.16	22.22	20.64	15.88	10.49	1.16	1.14
-	-	-	4	-	-	-	-	4	-	R39*	173.03	150.81	161.92	17.46	15.88	11.11	7.76	0.67	0.65
5	-	-	-	-	-	-	-	-	-	R40	179.38	163.52	171.45	14.29	12.70	7.94	5.23	0.42	0.39
-	5	5	-	-	-	-	5	5	-	R41*	192.08	169.85	180.97	17.46	15.88	11.11	7.76	0.75	0.73
-	-	-	-	5	-	-	-	-	-	R42	209.55	171.45	190.50	25.40	23.81	19.05	12.32	1.91	1.88
6	-	-	-	-	-	-	-	-	-	R43	201.60	185.74	193.67	14.29	12.70	7.94	5.23	0.48	0.44
-	-	-	5	-	-	-	-	5	-	R44*	204.78	182.56	193.67	17.46	15.88	11.11	7.76	0.80	0.78
-	6	6	-	-	-	-	6	6	-	R45*	222.24	200.02	211.13	17.46	15.88	11.11	7.76	0.87	0.85
-	-	-	6	-	-	-	-	6	-	R46*	223.83	198.43	211.13	19.05	17.46	12.70	8.66	1.08	1.05
-	-	-	6	-	-	-	-	-	-	R47*	247.65	209.55	228.60	25.40	23.81	19.05	12.32	2.29	2.26
8	-	-	-	-	-	-	-	-	-	R48	255.58	239.72	247.65	14.29	12.70	7.94	5.23	0.61	0.56
-	8	8	-	-	-	-	8	8	-	R49*	280.98	258.76	269.87	17.46	15.88	11.11	7.76	1.11	1.09
-	-	-	8	-	-	-	-	8	-	R50*	285.74	254.00	269.87	22.22	20.64	15.88	10.49	1.99	1.95
-	-	-	-	8	-	-	-	-	-	R51	301.62	257.18	279.40	28.58	26.99	22.22	14.81	3.65	3.69
10	-	-	-	-	-	-	-	-	-	R52	312.73	296.87	304.80	14.29	12.70	7.94	5.23	0.75	0.69
-	10	10	-	-	-	-	10	10	-	R53*	334.96	312.74	323.85	17.46	15.88	11.11	7.76	1.34	1.30
-	-	-	10	-	-	-	-	10	-	R54*	339.72	307.98	323.85	22.22	20.64	15.88	10.49	2.39	2.35
-	-	-	-	10	-	-	-	-	-	R55	371.47	314.33	342.90	36.51	34.92	28.58	19.81	7.35	7.68
12	-	-	-	-	-	-	-	-	-	R56	388.93	373.07	381.00	14.29	12.70	7.94	5.23	0.93	0.87
-	12	12	-	-	-	-	12	12	-	R57*	392.11	369.89	381.00	17.46	15.88	11.11	7.76	1.57	1.53

Title: Oval and Octagonal R ring joint gasket
 Designer: D.Bassi Rev.0 del 05/02/2009

