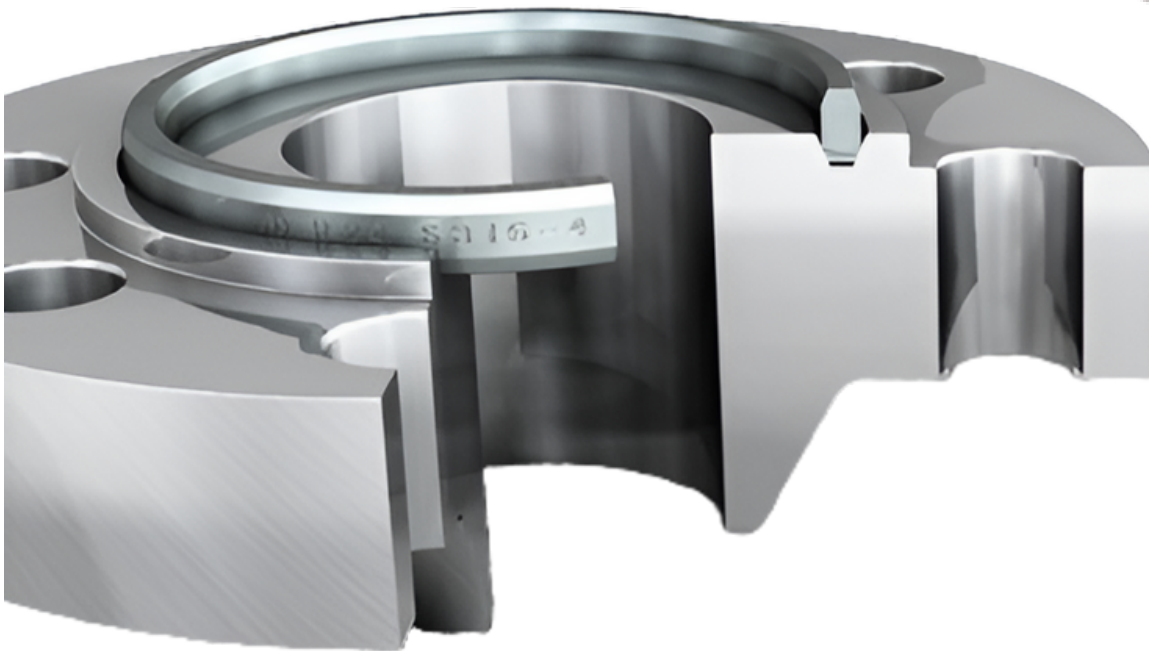




Jetpro
Industrial Tech
Tech Enabled

RING JOINT GASKET (RTJ)



Jetpro Industrial Tech
Plot. No. 4, Vetrivelavan Nagar,
Vellanur,
Avadi, Chennai, Tamil Nadu, INDIA.



+91 9092113242.



info@jetproit.com



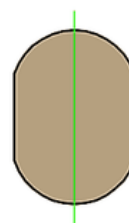
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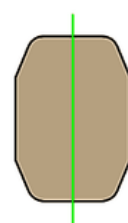
METALLIC RING JOINTS

Metallic ring joint gaskets are heavy duty, high-pressure gaskets largely used in off shore petrochemical applications. They are precision-engineered components designed to be used in conjunction with precision machined flanges. Our Ring Joints are manufactured according to ASME B16.20 or API 6A. The gasket material is selected on a number of grounds; primarily chemical compatibility with the media and the hardness of the flange. The gasket material ideally needs to be roughly 30 Brinell less than the flange material to ensure sufficient deformation of the gasket without damaging the flange facing. A number of ring joint styles are available designed for specific flange types as follows

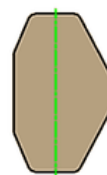
TYPE	NOMINAL PIPE SIZE	CLASS RINGS
R OVAL & OCTAGONAL	1/2" TO 24"	150 to 2500 ASME B16.20
	26" TO 36"	300 to 900 ASME B16.20
	1 1/2" TO 20"	Series A API 6A
RX	1 1/2" TO 24"	720 to 5000 ASME B16.20
	26" TO 36"	300 to 900 ASME B16.20
	1 1/2" TO 20"	Series A API 6A
BX	1 11/16" to 21 1/4"	5000 to 20000 ASME B16.20



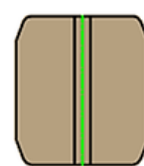
Oval Type



Octagonal Type



RX Type



BX Type





MATERIALS

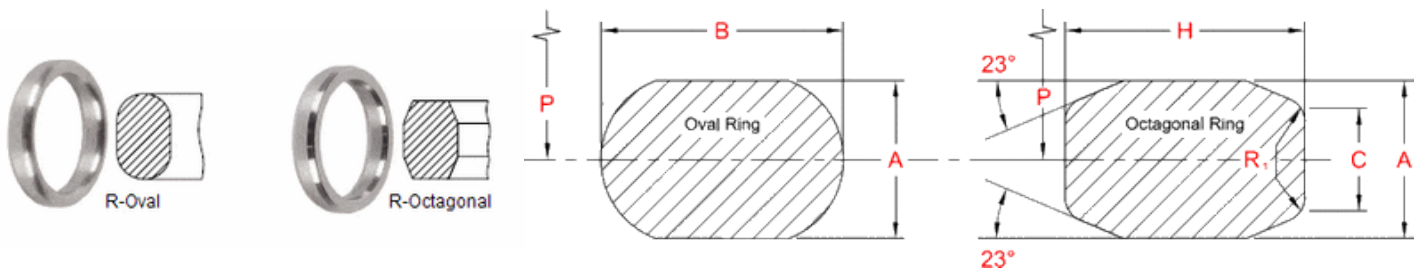
The gasket material is selected on a number of grounds primarily; chemical compatibility with the media and the hardness of the flange. The gasket material ideally needs to be less than the flange material to ensure sufficient deformation of the gasket without damaging the flange facing. Some common materials are listed in the table below:

MATERIAL	RTJ HARDNESS (BRINELL)	TEMPERATURE	IDENTIFICATION
SOFT IRON	90	-60 to 500°C	D
LOW CARBON STEEL	120	-40 to 500°C	S
4-6% Cr ½% Mo	130	125 to 500°C	F5
304	160	-250 to 650°C	S304
316	160	-196 to 800°C	S316
321	160	-250 to 870°C	S321
347	160	-250 to 870°C	S347
410	170	-20 to 500°C	S410
Monel (N04400)	135	400°C	N04400
UNS N08904	180	400°C	904L
Inconel 625	200	+1000°C	625
Incoloy 825	160	+1000°C	825
Hastelloy C-276	200	+1000°C	C-276
Titanium	160	+540°C	TI



R-TYPE RING JOINTS

STANDARD STYLE R RING TYPE JOINTS These are manufactured in accordance with ASME B16.20 or API 6A. Available in both oval and octagonal configurations, both types are interchangeable on the modern octagonal type grooved flanges. As with all solid metal Ring Type Joints including Style R, it is recommended to replace the ring when flanged connection is broken.



DIMENTIONAL DATA – R TYPES

Surface finish of the Style R Ring Type Joint sealing faces (radiused ends of an Oval and the 23° angled faces of an Octagonal shape) shall not be greater than 1.6µm Ra/ 63µin RMS. JETPRO Style R Ring Type Joints can be manufactured in accordance with all relevant standards to suit the following flange designations:

- ✦ API 6A
- ✦ ASME B16.5
- ✦ ASME B16.47
- ✦ SERIES A BS1560



STYLE R - DIMENTIONAL DATA

RING NUMBER	PRESSURE CLASS RATINGS								PITCH DIA. OF RING	WIDTH OF RING	HEIGHT OF RING		APPROX. DIST. BETWEEN MADE UP FLANGES
	ASME B 16.5 & ASME B16.47 SERIES A					API 6A (psi)					OVAL	OCTAG	
	150	300/600	900	1500	2500	2000	3000	5000					
	NOMINAL PIPE SIZES												
R 11	-	1/2	-	-	-	-	-	-	34.14	6.35	11.2	9.7	-
R 12	-	-	1/2	1/2	-	-	-	-	39.70	7.95	14.2	12.7	-
R 13	-	3/4	-	-	1/2	-	-	-	42.88	7.95	14.2	12.7	-
R 14	-	-	3/4	3/4	-	-	-	-	44.45	7.95	14.2	12.7	-
R 15	1	-	-	-	-	-	-	-	47.63	7.95	14.2	12.7	-
R 16	-	1	1	1	3/4	-	-	-	50.80	7.95	14.2	12.7	-
R 17	1 ¼	-	-	-	-	1	1	1	57.15	7.95	14.2	12.7	-
R 18	-	1 ¼	1 ¼	1 ¼	1	1 ¼	1 ¼	1 ¼	60.33	7.95	14.2	12.7	-
R 19	1 ½	-	-	-	-	-	-	-	65.10	7.95	14.2	12.7	-
R 20*	-	1 ½	1 ½	1 ½	-	1 ½	1 ½	1 ½	68.28	7.95	14.3	12.7	4.1
R 21	-	-	-	-	1 ¼	-	-	-	72.24	11.13	17.5	16.0	-
R 22	2	-	-	-	-	-	-	-	82.55	7.95	14.2	12.7	-
R 23*	-	2	-	-	1 ½	-	-	-	82.55	11.13	17.5	15.9	4.8
R 24*	-	-	2	2	-	-	2	2	95.25	11.13	17.5	15.9	4.8
R 25	2 ½	-	-	-	-	-	-	-	101.60	7.95	14.2	12.7	-
R 26*	-	2 ½	-	-	2	2 ½	-	-	101.60	11.13	17.5	15.9	4.8
R 27*	-	-	2 ½	-	-	-	2 ½	2 ½	107.95	11.13	17.15	15.19	4.8
R 28	-	-	-	-	2 ½	-	-	-	111.13	12.70	19.1	17.5	-
R 29	3	-	-	-	-	-	-	-	114.30	7.95	14.2	12.7	-
R 30(a)	-	3	-	-	-	-	-	-	117.48	11.13	17.5	16.0	-
R 31*	-	3	3	-	-	3	3	-	123.83	11.13	17.5	15.9	4.8
R 32	-	-	-	-	3	-	-	-	127.00	12.70	19.1	17.5	-
R 33	3 ½	-	-	-	-	-	-	-	131.78	7.95	14.2	12.7	-
R 34	-	3 ½	-	-	-	-	-	-	131.78	11.13	17.5	16.0	-
R 35*	-	-	-	3	-	-	-	3	136.53	11.13	17.5	15.9	4.8
R 36	4	-	-	-	-	-	-	-	149.23	7.95	14.2	12.7	-
R 37*	-	4	4	-	-	4	4	3 ½	149.23	11.13	17.5	15.9	4.8
R 38	-	-	-	-	4	-	-	-	157.18	15.88	22.44	20.6	-
R 39*	-	-	-	4	-	-	-	4	161.93	11.13	17.5	16.0	4.8
R 40	5	-	-	-	-	-	-	-	171.45	7.95	14.2	12.7	-
R 41*	-	5	5	-	-	5	5	-	180.98	11.13	17.5	15.9	-
R 42	-	-	-	-	5	-	-	-	190.50	19.05	25.4	23.9	-
R 43	6	-	-	-	-	-	-	-	193.68	7.95	14.2	12.7	-
R 44*	-	-	-	5	-	-	-	5	193.68	11.13	17.5	15.9	4.8
R 45*	-	6	6	-	-	6	6	-	211.15	11.13	17.5	15.9	4.8
R 46*	-	-	-	6	-	-	-	6	211.15	12.70	19.1	17.5	4.8
R 47*	-	-	-	-	6	-	-	6	228.60	19.05	25.4	23.9	4.1
R 48	8	-	-	-	-	-	-	-	247.65	7.95	14.2	12.7	-
R 49*	-	8	8	-	-	8	8	-	269.88	11.13	17.5	15.9	4.8
R 50*	-	-	-	8	-	-	-	8	269.88	15.88	22.4	20.6	4.1

NOTE - *Denotes ring number specified in API 6A



STYLE R - DIMENTIONAL DATA

RING NUMBER	PRESSURE CLASS RATINGS								PITCH DIA. OF RING	WIDTH OF RING	HEIGHT OF RING		APPROX. DIST. BETWEEN MADE UP FLANGES
	ASME B 16.5 & ASME B16.47 SERIES A					API 6A (psi)					OVAL	OCTAG	
	150	300/600	900	1500	2500	2000	3000	5000					
	NOMINAL PIPE SIZES												
R 51	-	-	-	-	8	-	-	-	279.40	22.23	28.7	26.9	-
R 52	10	-	-	-	-	-	-	-	304.80	7.95	14.2	12.7	-
R 53*	-	10	10	-	-	10	10	-	323.85	11.13	17.5	15.9	4.8
R 54*	-	-	-	10	-	-	-	10	323.85	15.88	22.4	20.6	4.1
R 55	-	-	-	-	10	-	-	-	342.90	28.58	36.6	35.1	-
R 56	12	-	-	-	-	-	-	-	381.00	7.95	14.2	12.7	-
R 57*	-	12	12	-	-	12	12	-	381.00	11.13	17.5	15.9	4.8
R 58	-	-	-	12	-	-	-	-	381.00	22.23	28.7	26.9	-
R 59	14	-	-	-	-	-	-	-	381.88	7.95	14.2	12.7	-
R 60	-	-	-	-	12	-	-	-	406.40	31.75	39.6	38.1	-
R 61	-	14	-	-	-	14	14	-	419.10	11.13	17.5	16.10	-
R 62	-	-	14	-	-	-	-	-	419.20	15.88	22.4	20.6	-
R 63*	-	-	-	14	-	-	-	-	419.00	25.40	33.3	31.8	5.6
R 64	16	-	-	-	-	-	-	-	454.03	7.95	14.2	12.7	-
R 65*	-	16	-	-	-	16	-	-	469.90	11.13	17.5	15.9	4.8
R 66*	-	-	16	-	-	-	16	-	469.90	15.88	22.4	20.6	4.1
R 67	-	-	-	16	-	-	-	-	517.53	28.58	36.6	35.1	-
R 68	18	-	-	-	-	-	-	-	533.40	7.95	14.2	12.7	-
R 69*	-	18	-	-	-	18	-	-	533.40	11.13	17.5	15.9	4.8
R 70*	-	-	18	-	-	-	18	-	533.40	19.05	25.4	23.9	4.8
R 71	-	-	-	18	-	-	-	-	533.40	28.58	36.6	35.1	-
R 72	20	-	-	-	3	-	-	-	558.80	7.95	14.2	12.7	-
R 73*	-	20	-	-	-	20	-	-	584.20	12.70	19.1	17.5	3.3
R 74*	-	-	20	-	-	-	20	-	584.20	19.05	25.4	23.9	4.8
R 75	-	-	-	20	-	-	-	-	584.20	31.75	39.6	38.1	-
R 76	24	-	-	-	-	-	-	-	673.10	7.95	14.2	12.7	-
R 77	-	24	-	-	-	-	-	-	692.15	15.88	22.4	20.6	-
R 78	-	-	24	-	-	-	-	-	692.15	25.40	33.3	31.8	-
R 79	-	-	-	24	-	-	-	-	692.15	34.93	44.5	41.4	-
R 80	22	-	-	-	-	-	-	-	615.95	7.95	-	12.7	-
R 81	-	22	-	-	-	-	-	-	635.00	14.30	-	19.1	-
R 82*	-	-	-	-	-	-	-	-	57.15	11.13	-	15.9	4.8
R 84*	-	-	-	-	-	-	-	-	63.50	11.13	-	15.9	4.8
R 85*	-	-	-	-	-	-	-	-	79.38	12.70	-	17.5	3.3
R 86*	-	-	-	-	-	-	-	-	90.50	15.88	-	20.6	4.1
R 87*	-	-	-	-	-	-	-	-	100.03	15.88	-	20.6	4.1
R 88*	-	-	-	-	-	-	-	-	123.83	19.05	-	23.9	4.8
R 89*	-	-	-	-	-	-	-	-	114.30	19.05	-	23.9	4.8
R 90*	-	-	-	-	-	-	-	-	155.58	22.23	-	26.9	4.8
R 91*	-	-	-	-	-	-	-	-	260.35	31.75	-	38.1	4.1

NOTE - *Denotes ring number specified in API 6A



STYLE R - DIMENSIONAL DATA

RING NUMBER	PRESSURE CLASS RATINGS								PITCH DIA. OF RING	WIDTH OF RING	HEIGHT OF RING		APPROX. DIST. BETWEEN MADE UP FLANGES
	ASME B 16.5 & ASME B16.47 SERIES A					API 6A (psi)					OVAL	OCTAG	
	150	300/600	900	1500	2500	2000	3000	5000					
	NOMINAL PIPE SIZES												
R 92	-	-	-	-	8	-	-	-	228.60	11.13	17.5	16.0	-
R 93	-	26	-	-	-	-	-	-	749.30	19.05	-	23.9	-
R 94	-	28	-	-	-	-	-	-	800.10	19.05	-	23.9	-
R 95	-	30	-	-	-	-	-	-	857.25	19.50	-	23.9	-
R 96	-	32	-	-	-	-	-	-	914.40	22.33	-	26.9	-
R 97	-	34	-	-	-	-	-	-	965.20	22.33	-	26.9	-
R 98	-	36	-	-	-	-	-	-	1022.35	-	22.23	-	-
R 99*	-	-	-	-	-	-	-	-	234.95	11.13	-	15.9	4.8
R 100	-	-	26	-	-	-	-	-	749.30	28.58	-	35.1	-
R 101	-	-	28	-	-	-	-	-	800.10	31.75	-	38.1	-
R 102	-	-	30	-	-	-	-	-	857.25	31.75	-	38.1	-
R 103	-	-	32	-	-	-	-	-	914.40	31.75	-	38.1	-
R 104	-	-	34	-	-	-	-	-	965.20	34.93	-	38.1	-
R 105	-	-	36	-	-	-	-	-	1022.35	-	34.93	-	-

a) R30 Ring type joint used for lapped joint only. Dimensions in mm.
Figures stated are for information only. Please refer to the current version of the original standards for dimensional information.

Tolerances :

A = width of ring ± 0.20 .

B, H = height of ring.

P = average pitch diameter of ring ± 0.18 .

R1 = radius in ring ± 0.5 . 23 deg = angle ± 0 deg 30 min