

# 5. RING JOINT GASKETS



## PROPERTIES AND APPLICATION

The metallic ring joint gaskets are manufactured according to the API 6A and ASME B16.20 standards for application at elevated temperatures and pressures. The small sealing area with high contact pressure results in great reliability. The contact surfaces of the gaskets and flange should be carefully processed. Some types of ring-joints are pressure activated, that means, higher the pressure better the sealability.

## ADVANTAGES

The metal ring joint gaskets have been designed to withstand exceptionally high assembly loads over a small area, thus producing high seating stresses.

## SHAPE AND CONSTRUCTION

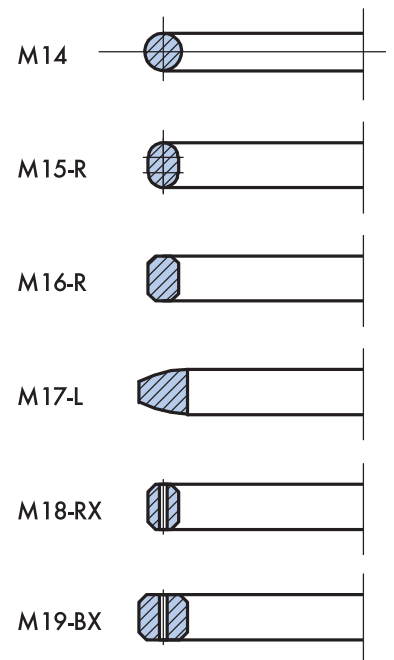
The ring joint gaskets are produced in several shapes and sizes to meet the most demanding applications.

## STANDARD MATERIALS

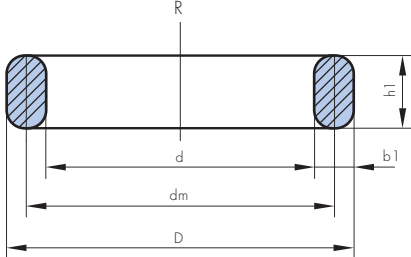
STANDARD MATERIALS RECOMMENDED BY THE ASME B 16.20				
ASTM	DIN Material No.	Maximum HB	Maximum HV	Material code
Soft Iron	1.1003	90	56	D
Low CS	1.0038	120	68	S
4-6 Cr 1/2 Mo	1.7362	130	72	F5
AISI 410	1.4000	170	86	S 410
AISI 304	1.4301	160	83	S 304
AISI 316	1.4401	160	83	S 316
AISI 347	1.4550	160	83	S 347

## DIMENSIONS

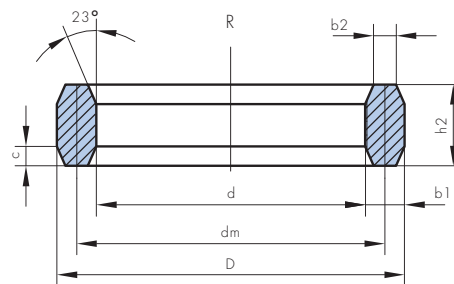
STANDARDS FOR RING JOINT GASKETS USED WITH FLANGES		
Ring Joints Gaskets Style	Ring Joints Gaskets Standard	Flange Standard
R	ASME B 16.20 API 6A	ASME B 16.5 ASME B 16.47 series A
RX	ASME B 16.20 API 6A	API 6B
BX	API 6A	API 6BX



### STYLE R

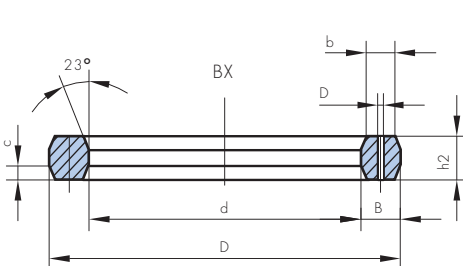


OVAL SECTION

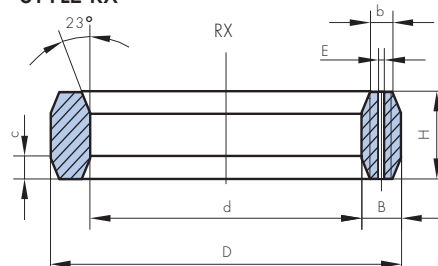


OCTAGONAL SECTION

### STYLE BX



### STYLE RX



**GASKET ORDERING EXAMPLE**  
RING-JOINT GASKET API 6A,  
R30-oval, material AISI 321

# 5. RING JOINT GASKETS

ASME-ANSI B16.5					ASME B16-47A		API 6B			Tolerances	+/- 0,38	+/- 0,38	+/- 0,17	+/- 0,39	+/- 0,39	+/- 0,20	WEIGHT (kg)	
NOMINAL PIPE SIZE (in)										R	DIMENSIONS (mm)						WEIGHT (kg)	
150 lb	300-600 lb	900 lb	1500 lb	2500 lb	300-600 lb	900 lb	2000 lb	3000 lb	5000 lb		D	d	dm	h1	h2	b1	OVAL	OCTAG.
	1/2									R11	40.49	27.79	34.14	11.18	9.65	6.35	0.05	0.05
		1/2	1/2							R12	47.65	31.75	39.70	14.22	12.70	7.95	0.10	0.10
		3/4		1/2						R13	50.83	34.93	42.88	14.22	12.70	7.95	0.10	0.10
			3/4	3/4						R14	52.40	36.50	44.45	14.22	12.70	7.95	0.11	0.11
1										R15	55.58	39.68	47.63	14.22	12.70	7.95	0.12	0.12
	1	1	1	3/4			1	1	1	R16	58.75	42.85	50.80	14.22	12.70	7.95	0.12	0.11
1 1/4										R17	65.10	49.20	57.15	14.22	12.70	7.95	0.14	0.13
	1 1/4	1 1/4	1 1/4	1			1 1/4	1 1/4	1 1/4	R18	62.28	52.38	60.33	14.82	12.70	7.95	0.15	0.14
1 1/2										R19	73.05	57.15	65.10	14.82	12.70	7.95	0.16	0.15
	1 1/2	1 1/2	1 1/2				1 1/2	1 1/2	1 1/2	R20	76.23	60.33	68.28	14.82	12.70	7.95	0.17	0.15
				1 1/4						R21	83.37	61.11	72.24	17.53	16.00	11.13	0.30	0.29
2										R22	90.50	74.60	82.55	14.82	12.70	7.95	0.20	0.19
				1 1/2			2			R23	93.68	71.42	82.55	17.53	16.00	11.13	0.34	0.33
	2							2	2	R24	106.3	84.12	95.25	17.53	16.00	11.13	0.39	0.38
2 1/2										R25	109.5	93.65	101.6	14.22	12.70	7.95	0.25	0.23
	2 1/2			2			2 1/2			R26	112.73	90.47	101.6	17.53	16.00	11.13	0.42	0.41
		2 1/2	2 1/2					2 1/2	2 1/2	R27	119.08	96.82	107.9	19.05	16.00	11.13	0.45	0.43
				2 1/2						R28	123.8	98.43	111.13	14.22	17.53	12.70	0.57	0.55
3										R29	122.2	107.9	114.30	17.53	12.70	7.95	0.28	0.26
	3							3	3	R30	128.6	106.3	117.48	17.53	16.00	11.13	0.48	0.47
		3								R31	134.9	112.70	123.8	17.53	16.00	11.13	0.51	0.50
				3						R32	139.7	114.30	127.0	19.05	17.53	12.70	0.65	0.63
3 1/2										R33	139.7	123.8	131.7	14.22	12.70	7.95	0.32	0.30
	3 1/2									R34	142.9	120.6	131.7	17.53	16.00	11.13	0.54	0.52
				3					3	R35	147.6	125.4	136.5	17.53	16.00	11.13	0.56	0.55
4										R36	157.1	141.2	149.2	14.22	12.70	7.95	0.37	0.34
	4	4						4	4	R37	160.3	138.1	149.2	17.53	16.00	11.13	0.62	0.60
				4						R38	173.0	141.3	157.1	22.35	20.57	15.88	1.16	1.14
									4	R39	173.0	150.8	161.9	17.53	16.00	11.13	0.67	0.65
5										R40	179.4	163.5	171.4	14.22	12.70	7.95	0.42	0.39
	5	5						5	5	R41	192.11	169.8	180.9	17.53	16.00	11.13	0.75	0.73
				5						R42	209.5	171.4	190.5	24.40	23.88	19.05	1.91	1.88
6										R43	201.6	185.7	193.6	14.22	12.70	7.95	0.48	0.44
				5					5	R44	204.8	182.5	193.6	17.53	16.00	11.13	0.80	0.78
	6	6						6	6	R45	222.2	200.0	211.15	17.53	16.00	11.13	0.87	0.85
				6					6	R46	223.8	198.4	211.15	19.05	17.53	12.70	1.08	1.05
					6					R47	247.6	209.5	228.6	25.40	23.88	19.05	2.29	2.26
8										R48	255.6	239.7	247.6	14.22	12.70	7.95	0.61	0.56
	8	8						8	8	R49	281.0	258.7	269.8	17.53	16.00	11.13	1.11	1.09
				8					8	R50	285.7	254.0	269.8	22.35	20.57	15.88	1.99	1.95
					8					R51	301.6	257.1	279.4	28.70	26.92	22.23	3.65	3.69
10										R52	312.7	296.8	304.8	14.22	12.70	7.95	0.75	0.69
	10	10						10	10	R53	334.9	312.7	323.8	17.53	16.00	11.13	1.34	1.30
			10						10	R54	339.7	307.9	323.8	22.35	20.57	15.88	2.39	2.35
				10						R55	371.4	314.3	342.9	36.58	35.05	28.58	7.35	7.68
12										R56	388.9	373.0	381.0	14.22	12.70	7.95	0.93	0.87
	12	12			12	12	12	12		R57	392.1	369.8	381.0	17.53	16.00	11.13	1.57	1.53
				12						R58	403.2	358.7	381.0	28.70	26.92	22.23	4.98	5.03
14										R59	404.8	388.9	396.8	14.22	12.70	7.95	0.98	0.90
				12						R60	438.1	374.6	406.4	39.62	38.10	31.75	10.47	11.09
	14				14		14	14		R61	430.2	407.9	419.1	17.53	16.00	11.13	1.73	1.69
						14				R62	434.9	403.2	419.1	22.35	20.57	15.88	3.09	3.04
16					14					R63	444.5	393.7	419.1	33.27	31.75	25.40	7.33	7.54
										R64	461.9	446.0	454.0	14.22	12.70	7.95	1.12	1.03
	16					16		16		R65	481.0	458.7	469.9	17.53	16.00	11.13	1.94	1.89
		16					16		16	R66	485.7	454.0	469.9	22.35	20.57	15.88	3.47	3.40
			16							R67	498.4	441.3	469.9	36.58	35.05	28.58	10.07	10.53
18										R68	525.4	509.5	517.5	14.22	12.70	7.95	1.28	1.18
	18					18		18		R69	544.5	522.2	533.4	17.53	16.00	11.13	2.20	2.15
		18					18		18	R70	552.4	514.3	533.4	25.40	23.88	19.05	5.35	5.27
			18							R71	561.9	504.8	533.4	36.58	35.05	28.58	11.43	11.95
20										R72	566.7	550.8	558.8	14.22	12.70	7.95	1.38	1.27
								20	20	R73	596.9	571.5	584.2	19.05	17.53	12.70	2.99	2.92
		20					20		20	R74	603.2	565.1	584.2	25.40	23.88	19.05	5.85	5.77
			20							R75	615.9	552.4	584.2	39.62	38.10	31.75	15.05	15.94
24										R76	681.0	665.1	673.1	14.22	12.70	7.95	1.66	1.53
	24					24				R77	708.0	676.2	692.1	22.35	20.57	15.88	5.11	5.01
		24					24			R78	717.5	666.7	692.1	33.27	31.75	25.40	12.10	12.46
			24							R79	727.0	657.2	692.1	44.45	41.40	34.93	22.58	22.06
				22						R80	623.9	608.0	615.9		12.70	7.95		1.40
					22					R81	649.3	620.7	635.0		19.05	14.30		3.86
									1	R82	68.28	46.02	57.15		16.00	11.13		0.23
									1 1/2	R84	74.63	52.37	63.50		16.00	11.13		0.25
									2	R85	92.08	66.68	79.38		17.53	12.70		0.40
									2 1/2	R86	106.3	74.62	90.50		20.57	15.88		0.65

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