



A.S.GASKETS

(CIXI AIFLON SAMSUNG SEALING MATERIALS CO.,LTD.)

Ring Joint Gaskets

Range of RTJ gaskets:

- 6500-F Flat Metal Gasket
- 6500-Oval Ring Joint Gasket Oval Style
- 6500-Oct Ring Joint Gasket Octagonal Style
- 6500-RX RX Ring Joint Gasket
- 6500-BX BX Ring Joint Gasket
- 6500-Lens Lens Ring Joint Gasket

Properties and Application:

The metallic Ring Joint Gaskets are manufactured according to the API 6 and ASME B 16.20 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. Some types of ring joints are pressure activated. The gasket in greater the pressure the better the sealability.

Shape and Constructions:

The ASGASKETS ring joint gaskets are produced in several shapes and sizes. (See standards and sizes ranges)

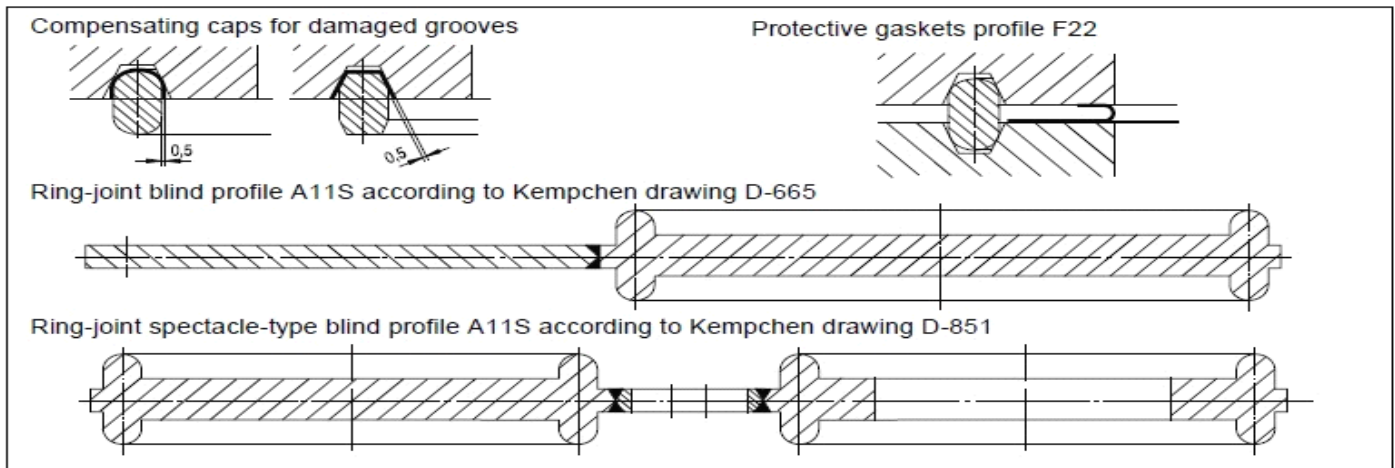
Standard Materials:

Code designation	Material no.	Hardness (HB)	US Type AISI	Identification
Pure iron e.g. Armco	1.1003	90-100	Soft-iron	D
Low-carbon steel	-	120	Low-carbon steel	S
13 CrMo 4 4	1.7335	< 150	-	7335
12 CrMo 19 5	1.7362	ca. 130	501	F5
X8 Cr 13	1.4000	ca. 180	410	S 410
X5 CrNi 18 10	1.4301	ca. 180	304	S 304
X5 CrNiMo 17 12 2	1.4401	ca. 180	316	S 316
X8 CrNiTi 18 10	1.4541	ca. 180	321	S 321
X6 CrNiNb 18 10	1.4550	ca. 180	347	S 347
X6 CrNiMoTi 17 12 2	1.4571	ca. 180	316 Ti	316 Ti

* See our brochure entitled "Commercial materials" for further technical data

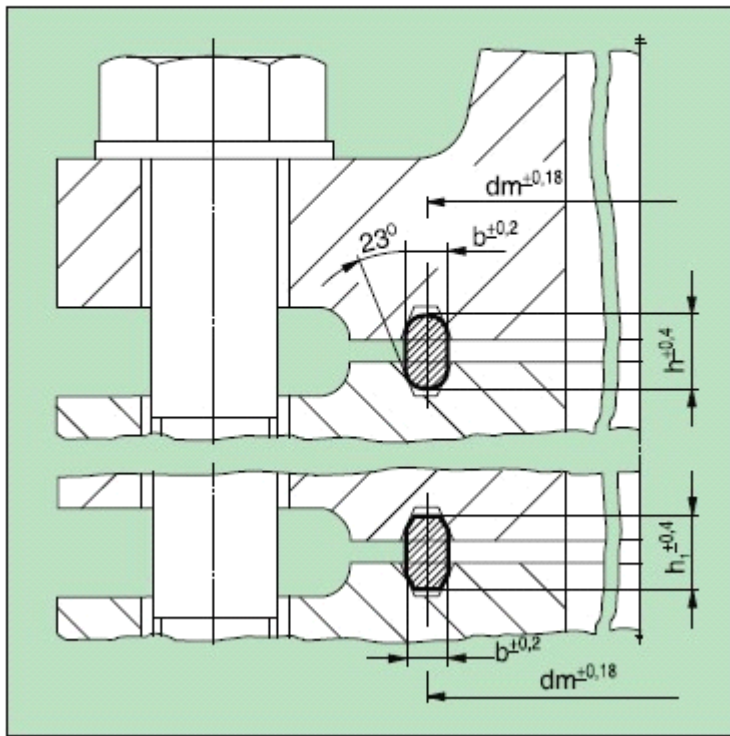
Profile	Cross section
A13	
A13S	
A13BS	
AR13	
A14	
F22	
AK11	
AK12	
AK13	
AK14	

Profile	Cross section
A11	
A11S	
A11BS	
A12	



Profile	A11, A11S, A11BS, A12, A13, A13S, A13BS, AR13, AR13S, AR13BS, A14										
	Material	Iron 1.1003	High-temperature structural steel 1.5415	High-temperature structural steel 1.7362	Stainless special steel 1.4541	Stainless special steel 1.4628	Copper-coated steel	Stainless steel 1.4541 silver-coated	Copper 2.0080	Monel 2.4360	
Recommended max. surface roughness of the flange surfaces	from	3,2	3,2	3,2	1,6	1,6	3,2	6,3	3,2	3,2	
	to	6,3	6,3	6,3	3,2	3,2	6,3	12,5	6,3	6,3	
Surface pressure limits for 20°C	σ_v	235	300	400	335	400	135	100	135	260	
	σ_θ	525	675	900	750	900	600	750	300	660	
E-modulus at 20°C	kN/mm ²	210	210	210	200	200	210	200	128	178	
Surface pressure limits for 300°C	σ_v	235	300	400	335	400	135	100	135	260	
	σ_θ	315	585	730	630	750	390	630	150	650	
E-modulus at 300°C	kN/mm ²	185	185	190	186	186	185	186	114	175	

Ring-joint gaskets, type R, dimensions according to ASME B16.20, API Std 6 A for flanges to ASME B16.5 and ASME B16.47, series A

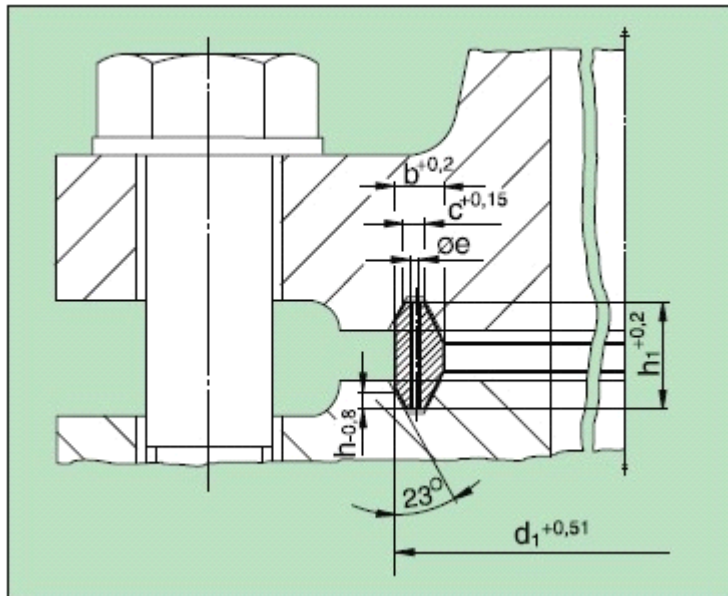


3	300 to 600	*R 30	117,47	11,11	17,46	15,87
3	300 to 900	*R 31	123,82	11,11	17,46	15,87
3	2500	R 32	127,0	12,7	19,05	17,46
3 1/2	150	R 33	131,76	7,93	14,28	12,7
3 1/2	300 to 600	R 34	131,76	11,11	17,46	15,87
3	1500	*R 35	136,52	11,11	17,46	15,87
4	150	R 36	149,22	7,93	14,28	12,7
4	300 to 900	*R 37	149,22	11,11	17,46	15,87
4	2500	R 38	157,16	15,87	22,22	20,64
4	1500	*R 39	161,92	11,11	17,46	15,87
5	150	R 40	171,45	7,93	14,28	12,7
5	300 to 900	*R 41	180,97	11,11	17,46	15,87
5	2500	R 42	190,5	19,05	25,4	23,81
6	150	R 43	193,67	7,93	14,28	12,7
5	1500	*R 44	193,67	11,11	17,46	15,87
6	300 to 900	*R 45	211,13	11,11	17,46	15,87
6	1500	*R 46	211,13	12,7	19,05	17,46
6	2500	*R 47	228,6	19,05	25,4	23,81
8	150	R 48	247,65	7,93	14,28	12,7
8	300 to 900	*R 49	269,87	11,11	17,46	15,87
8	1500	*R 50	269,87	15,87	22,22	20,64
8	2500	R 51	279,4	22,22	28,57	26,99
10	150	R 52	304,8	7,93	14,28	12,7
10	300 to 900	*R 53	323,85	11,11	17,46	15,87
10	1500	*R 54	323,85	15,87	22,22	20,64
10	2500	R 55	342,9	28,57	36,51	34,92
12	150	R 56	381,0	7,93	14,28	12,7
12	300 to 900	*R 57	381,0	11,11	17,46	15,87
12	1500	R 58	381,0	22,22	28,57	26,99
14	150	R 59	396,87	7,93	14,28	12,7
12	2500	R 60	406,4	31,75	39,68	38,1
14	300 to 600	R 61	419,1	11,11	17,46	15,87
14	900	R 62	419,1	15,87	22,22	20,64
14	1500	*R 63	419,1	25,4	33,33	31,75
16	150	R 64	454,0	7,93	14,28	12,7
16	300 to 600	*R 65	469,9	11,11	17,46	15,87

Dimensions in mm						
NPS	class	Ring no.	Ring dimensions			
			dm	b	h	h ₁
1/2	300 to 600	R 11	34,13	6,35	11,11	9,52
1/2	900, 1 500	R 12	39,68	7,93	14,28	12,7
1/2	2500	R 13	42,86	7,93	14,28	12,7
3/4	300 to 600	R 13	42,86	7,93	14,28	12,7
3/4	900, 1500	R 14	44,45	7,93	14,28	12,7
1	150	R 15	47,62	7,93	14,28	12,7
3/4	2500	R 16	50,8	7,93	14,28	12,7
1	300 to 1500	R 16	50,8	7,93	14,28	12,7
1 1/4	150	R 17	57,15	7,93	14,28	12,7
1	2500	R 18	60,32	7,93	14,28	12,7
1 1/4	300 to 1500	R 18	60,32	7,93	14,28	12,7
1 1/2	150	R 19	65,08	7,93	14,28	12,7
1 1/2	300 to 1500	*R 20	68,26	7,93	14,28	12,7
1 1/4	2500	R 21	72,23	11,11	17,46	15,87
2	150	R 22	82,55	7,93	14,28	12,7
1 1/2	2500	*R 23	82,55	11,11	17,46	15,87
2	300 to 600	*R 23	82,55	11,11	17,46	15,87
2	900, 1500	*R 24	95,25	11,11	17,46	15,87
2 1/2	150	R 25	101,6	7,93	14,28	12,7
2	2500	*R 26	101,6	11,11	17,46	15,87
2 1/2	300 to 600	*R 26	101,6	11,11	17,46	15,97
2 1/2	900, 1500	*R 27	107,95	11,11	17,46	15,87
2 1/2	2500	R 28	111,12	12,7	19,05	17,46
3	150	R 29	114,3	7,93	14,28	12,7

16	900	*R 66	469,9	15,87	22,22	20,64
16	1500	R 67	469,9	28,57	36,51	34,92
18	150	R 68	517,52	7,93	14,28	12,7
18	300 to 600	*R 69	533,4	11,11	17,46	15,87
18	900	*R 70	533,4	19,05	25,4	23,81
18	1500	R 71	533,4	28,57	36,51	34,92
20	150	R 72	558,8	7,93	14,28	12,7
20	300 to 600	*R 73	584,2	12,7	19,05	17,46
20	900	*R 74	584,2	19,05	25,4	23,81
20	1500	R 75	584,2	31,75	39,68	38,1
24	150	R 76	673,1	7,93	14,28	12,7
24	300 to 600	R 77	692,15	15,87	22,22	20,64
24	900	R 78	692,15	25,4	33,33	31,75
24	1500	R 79	692,15	34,92	44,45	41,27
22	150	R 80	615,95	7,93	14,28	12,7
22	300 to 600	R 81	635,0	14,28		19,05
1	10000	*R 82	57,15	11,11		15,87
1 1/2	10000	*R 84	63,5	11,11		15,87
2	10000	*R 85	79,37	12,7		17,46
2 1/2	10000	*R 86	90,49	15,87		20,63
3	10000	*R 87	100,01	15,87		20,63
4	10000	*R 88	123,83	19,05		23,81
3 1/2	10000	*R 89	114,3	19,05		23,81
5	10000	*R 90	155,68	22,22		26,98
10	10000	*R 91	260,35	31,75		38,1
		R 92	228,6	11,11	17,46	15,87
		R 93 ²⁾	749,3	19,05		23,81
28	300, 400, 600	R 94 ²⁾	800,1	19,05		23,81
30	300, 400, 600	R 95 ²⁾	857,25	19,05		23,81
32	300, 400, 600	R 96 ²⁾	914,4	22,22		26,98
34	300, 400, 600	R 97 ²⁾	965,2	22,22		26,98
36	300, 400, 600	R 98 ²⁾	1022,35	22,22		26,98
8	2000, 3000	*R 99	234,95	11,11		15,87
26	900	R 100 ²⁾	749,3	28,57		34,92
28	900	R 101 ²⁾	800,1	31,75		38,1
30	900	R 102 ²⁾	857,25	31,75		38,1
32	900	R 103 ²⁾	914,4	31,75		38,1
34	900	R 104 ²⁾	965,2	34,92		41,27
36	900	R 105 ²⁾	1022,35	34,92		41,27

Ring-joint gasket, type RX, dimensions according to ASME B16.20 and/or API Std 6 A for API 6B flanges

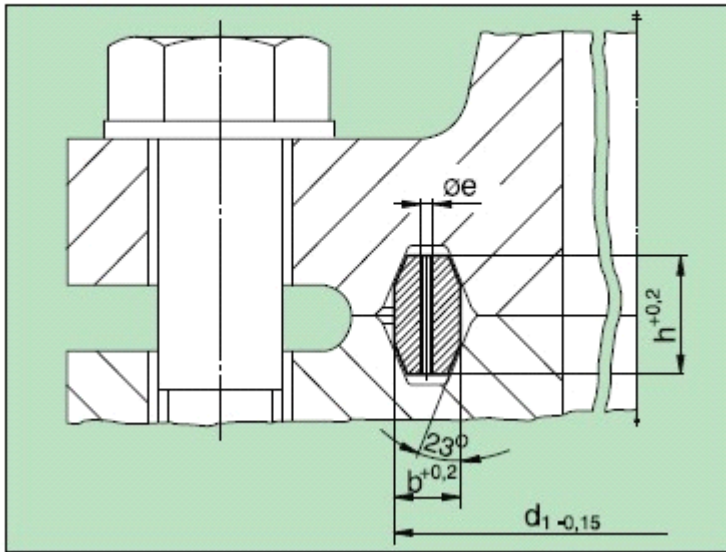


Dimensions in mm		Ring no.	Ring dimensions					1* drilled hole e
NPS	class		d ₁	b	c	h ₁	h	
1 1/2	2000, 3000, 5000	RX 20	76,2	8,73	4,62	19,05	3,18	
2	2000	RX 23	93,27	11,91	6,45	25,4	4,24	
2	3000, 5000	RX 24	105,97	11,91	6,45	25,4	4,24	
3 1/8	5000	RX 25	109,54	8,73	4,62	19,05	3,18	
2 1/2	2000	RX 26	111,92	11,91	6,45	25,4	3,78	
2 1/2	3000, 5000	RX 27	118,27	11,91	6,45	25,4	4,24	
3	2000, 3000	RX 31	134,54	11,91	6,45	25,4	4,24	
3	5000	RX 35	147,24	11,91	6,45	25,4	4,24	
4	2000, 3000	RX 37	159,94	11,91	6,45	25,4	4,24	
4	5000	RX 39	172,64	11,91	6,45	25,4	4,24	
5	2000, 3000	RX 41	191,69	11,91	6,45	25,4	4,24	
5	5000	RX 44	204,39	11,91	6,45	25,4	4,24	
6	2000, 3000	RX 45	221,85	11,91	6,45	25,4	4,24	
6	5000	RX 46	222,25	13,49	6,68	28,58	4,78	
8	crossover flange	RX 47	245,3	19,84	10,34	41,28	6,88	
8	2000, 3000	RX 49	280,59	11,91	6,45	25,4	4,24	
8	5000	RX 50	283,37	16,67	8,51	31,75	5,28	
10	2000, 3000	RX 53	334,57	11,91	6,45	25,4	4,24	
10	5000	RX 54	337,34	16,67	8,51	31,75	5,28	
12	2000, 3000	RX 57	391,72	11,91	6,45	25,4	4,24	
14	5000	RX 63	441,72	26,99	14,78	50,8	8,46	
16	2000	RX 65	480,62	11,91	6,45	25,4	4,24	
16	3000	RX 66	483,39	16,67	8,51	31,75	5,28	
18	2000	RX 69	544,1	11,91	6,45	25,4	4,24	
18	3000	RX 70	550,1	19,84	10,34	41,28	6,88	
20	2000	RX 73	596,1	13,49	6,68	31,75	5,28	
20	3000	RX 74	600,87	19,84	10,34	41,28	6,88	
		RX 82	67,87	11,91	6,45	25,4	4,24	1,6

		RX 84	74,22	11,91	6,45	25,4	4,24	1,6
		RX 85	90,09	13,49	6,68	25,4	4,24	1,6
		RX 86	103,58	15,08	8,51	28,58	4,78	2,4
		RX 87	113,1	15,08	8,51	28,58	4,78	2,4
		RX 88	139,3	17,46	10,34	31,75	5,28	3,2
		RX 89	129,78	18,26	10,34	31,75	5,28	3,2
		RX 90	174,62	19,84	12,17	44,45	7,42	3,2
		RX 91	286,94	30,16	19,81	45,24	7,54	3,2
		RX 99	245,67	11,91	6,45	25,4	4,24	
		RX 201	51,46	5,74	3,2	11,3	1,45	
1 1/4	5000	RX 205	62,31	5,56	3,05	11,1	1,83	
2 1/2	5000	RX 210	97,63	9,53	5,41	19,05	3,18	
4	5000	RX 215	140,89	11,91	5,33	25,4	4,24	
4x 4 1/4	5000	RX 215	140,89	11,91	5,33	25,4	4,24	

* A compensating drilled hole on the periphery of the ring.

Ring-joint gasket, type BX, dimensions according to API Std 6 A for API 6BX flanges



Dimensions in mm						
NPS	class	Ring no	Ring dimensions			1* drilled hole
			d1	b	h	e
1 1/16	10000, 15000	BX 150	72,19	9,30	9,30	1,6
1 3/16	10000, 15000, 20000	BX 151	76,40	9,63	9,63	1,6
2 1/16	10000, 15000, 20000	BX 152	84,68	10,24	10,25	1,6
2 5/16	10000, 15000, 20000	BX 153	100,94	11,38	11,38	1,6
3 1/16	10000, 15000, 20000	BX 154	116,84	12,40	12,40	1,6
4 1/16	10000, 15000, 20000	BX 155	147,96	14,22	14,22	1,6
7 1/16	10000, 15000, 20000	BX 156	237,92	18,62	18,62	3,2
9	10000, 15000	BX 157	294,46	20,98	20,98	3,2
11	10000, 15000	BX 158	352,04	23,14	23,14	3,2
13 5/8	10000	BX 159	426,72	25,70	25,70	3,2
13 5/8	5000	BX 160	402,59	13,74	23,83	3,2
16 3/4		BX 161	491,41	16,20	28,07	3,2
16 3/4	5000, 10000	BX 162	475,49	14,22	14,22	1,6
18 3/4	5000	BX 163	556,16	17,37	30,10	3,2
18 3/4	10000	BX 164	570,56	24,59	30,10	3,2
21 1/4	5000	BX 165	624,71	18,49	32,03	3,2
21 1/4	10000	BX 166	640,03	26,14	32,03	3,2
26 3/4	2000	BX 167	759,36	13,11	35,86	1,6
26 3/4	3000	BX 168	765,25	16,05	35,86	1,6
5 1/8	10000	BX 169	173,52	12,93	15,84	1,6
9		BX 170	218,03	14,22	14,22	1,6
11		BX 171	267,44	14,22	14,22	1,6
13 5/8		BX 172	333,07	14,22	14,22	1,6
30	2000, 3000	BX 303	852,75	16,97	37,95	1,6

* A compensating drilled hole on the periphery of the ring.