

Ring Joint Gaskets



PROPERTIES AND APPLICATIONS

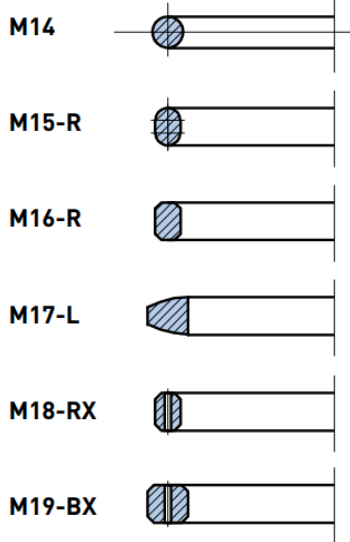
The metallic ring joint gaskets are manufactured according to the API 6A and ASME B16.20 standards for application at elevated temperatures and pressures. The small sealing area with high contact pressure results in great reliability. The contact surfaces of the gaskets and flange should be carefully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

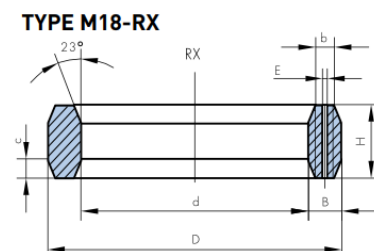
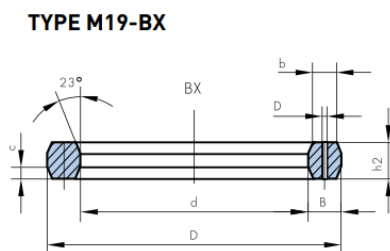
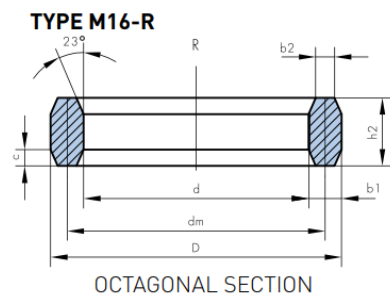
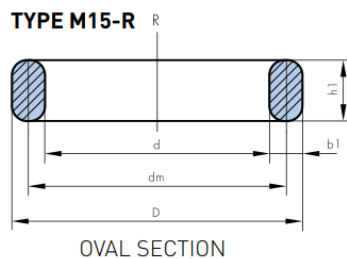


STANDARD MATERIALS

STANDARD MATERIALS RECOMMENDED BY THE ASME B16.20				
ASTM	EN Material No.	Maximum HB "Brinell"	Maximum HRb "Rockwell B"	Material code
Soft Iron	1.1003	90	56	D
Low carbon steel	1.0038	120	68	S
4-6 chrome ½ Mo	1.7362 [AISI 501]	130	72	F5
AISI 410	1.4000	170	86	S410
AISI 304	1.4301	160	83	S304
AISI 316	1.4401	160	83	S316
AISI 347	1.4550	160	83	S347

DIMENSIONS

STANDARDS FOR RING JOINT GASKETS USED WITH FLANGES		
Ring joints gaskets type	Ring joints gaskets standard	Flange standard
R	ASME B16.20, API 6A	ASME B16.5, ASME B16.47
RX	ASME B16.20, API 6A	API 6B
BX	API 6A	API 6BX



GASKET ORDERING EXAMPLE

RING-JOINT GASKET API 6A,
 R30-oval, material: AISI 321

ASME B16.20:2012 Type R ring gasket dimensions and tolerances

Tolerance	/	/	± 0.18	+ 1.3 - 0.5	+ 1.3 - 0.5	± 0.20
R	DIMENSIONS (mm)					
	D	d	d _m	h ₁	h ₂	b ₁
R 11	40.49	27.79	34.14	11.20	9.70	6.35
R 12	47.65	31.75	39.70	14.20	12.70	7.95
R 13	50.83	34.93	42.88	14.20	12.70	7.95
R 14	52.40	36.50	44.45	14.20	12.70	7.95
R 15	55.58	39.68	47.63	14.20	12.70	7.95
R 16	58.75	42.85	50.80	14.20	12.70	7.95
R 17	65.10	49.20	57.15	14.20	12.70	7.95
R 18	68.28	52.38	60.33	14.20	12.70	7.95
R 19	73.05	57.15	65.10	14.20	12.70	7.95
R 20	76.23	60.33	68.28	14.20	12.70	7.95
R 21	83.37	61.11	72.24	17.50	16	11.13
R 22	90.50	74.60	82.55	14.20	12.70	7.95
R 23	93.68	71.42	82.55	17.50	16	11.13
R 24	106.38	84.12	95.25	17.50	16	11.13
R 25	109.55	93.65	101.60	14.20	12.70	7.95
R 26	112.73	90.47	101.60	17.50	16	11.13
R 27	119.08	96.82	107.95	17.50	16	11.13
R 28	123.83	98.43	111.13	19.10	17.50	12.70
R 29	122.25	106.35	114.30	14.20	12.70	7.95
R 30	128.61	106.35	117.48	17.50	16	11.13
R 31	134.96	112.70	123.83	17.50	16	11.13
R 32	139.70	114.30	127	19.10	17.50	12.70
R 33	139.73	123.83	131.78	14.20	12.70	7.95
R 34	142.91	120.65	131.78	17.50	16	11.13
R 35	147.66	125.40	136.53	17.50	16	11.13
R 36	157.18	141.28	149.23	14.20	12.70	7.95
R 37	160.36	138.10	149.23	17.50	16	11.13
R 38	173.06	141.30	157.18	22.40	20.60	15.88
R 39	173.06	150.80	161.93	17.50	16	11.13
R 40	179.40	163.50	171.45	14.20	12.70	7.95
R 41	192.11	169.85	180.98	17.50	16	11.13
R 42	209.55	171.45	190.50	25.40	23.90	19.05
R 43	201.63	185.73	193.68	14.20	12.70	7.95
R 44	204.81	182.55	193.68	17.50	16	11.13
R 45	222.28	200.02	211.15	17.50	16	11.13
R 46	223.85	198.45	211.15	19.10	17.50	12.70
R 47	247.65	209.55	228.60	25.40	23.90	19.05
R 48	255.60	239.70	247.65	14.20	12.70	7.95
R 49	281.01	258.75	269.88	17.50	16	11.13
R 50	285.76	254.00	269.88	22.40	20.60	15.88
R 51	301.63	257.17	279.40	28.70	26.90	22.23
R 52	312.75	296.85	304.80	14.20	12.70	7.95
R 53	334.98	312.72	323.85	17.50	16	11.13
R 54	339.73	307.97	323.85	22.40	20.60	15.88
R 55	371.48	314.32	342.90	36.60	35.10	28.58
R 56	388.95	373.05	381	14.20	12.70	7.95
R 57	392.13	369.87	381	17.50	16	11.13

Tolerance	/	/	± 0.18	+ 1.3 - 0.5	+ 1.3 - 0.5	± 0.20
R	DIMENSIONS (mm)					
	D	d	d _m	h ₁	h ₂	b ₁
R 58	403.23	358.77	381	28.70	26.90	22.23
R 59	404.83	388.93	396.88	14.20	12.70	7.95
R 60	438.15	374.65	406.40	39.60	38.10	31.75
R 61	430.23	407.97	419.10	17.50	16	11.13
R 62	434.98	403.22	419.10	22.40	20.60	15.88
R 63	444.50	393.70	419.10	33.30	31.80	25.40
R 64	461.98	446.08	454.03	14.20	12.70	7.95
R 65	481.03	458.77	469.90	17.50	16	11.13
R 66	485.78	454.02	469.90	22.40	20.60	15.88
R 67	498.48	441.32	469.90	36.60	35.10	28.58
R 68	525.48	509.58	517.53	14.20	12.70	7.95
R 69	544.53	522.27	533.40	17.50	16	11.13
R 70	552.45	514.35	533.40	25.40	23.90	19.05
R 71	561.98	504.82	533.40	36.60	35.10	28.58
R 72	566.75	550.85	558.80	14.20	12.70	7.95
R 73	596.90	571.50	584.20	19.10	17.50	12.70
R 74	603.25	565.15	584.20	25.40	23.90	19.05
R 75	615.95	552.45	584.20	39.60	38.10	31.75
R 76	681.05	665.15	673.10	14.20	12.70	7.95
R 77	708.03	676.27	692.15	22.40	20.60	15.88
R 78	717.55	666.75	692.15	33.30	31.80	25.40
R 79	727.08	657.22	692.15	44.50	41.40	34.93
R 80	623.90	608.00	615.95	-	12.70	7.95
R 81	649.30	620.70	635	-	19.10	14.30
R 82	68.28	46.02	57.15	-	16	11.13
R 84	74.63	52.37	63.50	-	16	11.13
R 85	92.08	66.68	79.38	-	17.50	12.70
R 86	106.38	74.62	90.50	-	20.60	15.88
R 87	115.91	84.15	100.03	-	20.60	15.88
R 88	142.88	104.78	123.83	-	23.90	19.05
R 89	133.35	95.25	114.30	-	23.90	19.05
R 90	177.81	133.35	155.58	-	26.90	22.23
R 91	292.10	228.60	260.35	-	38.10	31.75
R 92	239.73	217.47	228.60	17.50	16	11.13
R 93	768.35	730.25	749.30	-	23.90	19.05
R 94	819.15	781.05	800.10	-	23.90	19.05
R 95	876.30	838.20	857.25	-	23.90	19.05
R 96	936.63	892.17	914.40	-	26.90	22.23
R 97	987.43	942.97	965.20	-	26.90	22.23
R 98	1044.58	1000.12	1022.35	-	26.90	22.23
R 99	246.08	223.82	234.95	-	16	11.13
R 100	777.88	720.72	749.30	-	35.10	28.58
R 101	831.85	768.35	800.10	-	38.10	31.75
R 102	889.00	825.50	857.25	-	38.10	31.75
R 103	946.15	882.65	914.40	-	38.10	31.75
R 104	1000.13	930.27	965.20	-	41.40	34.93
R 105	1057.28	987.42	1022.35	-	41.40	34.93

ASME B16.20:2012 Type BX ring gasket dimensions and tolerances

Tolerance	+0.0 - 0.15	/	+0.2 - 0.0	+0.2 - 0.0	± 0.5
R	DIMENSIONS (mm)				
	D	d	h ₂	B	E
BX-150	72.19	53.59	9.3	9.3	1.5
BX-151	76.4	57.14	9.63	9.63	1.5
BX-152	84.68	64.2	10.24	10.24	1.5
BX-153	100.94	78.18	11.38	11.38	1.5
BX-154	116.84	92.04	12.4	12.4	1.5
BX-155	147.96	119.52	14.22	14.22	1.5
BX-156	237.92	200.68	18.62	18.62	3
BX-157	294.46	252.5	20.98	20.98	3
BX-158	352.04	305.76	23.14	23.14	3
BX-159	426.72	375.32	25.7	25.7	3
BX-160	402.59	375.11	23.83	13.74	3
BX-161	491.41	458.99	28.07	16.21	3

Tolerance	+0.0 - 0.15	/	+0.2 - 0.0	+0.2 - 0.0	± 0.5
R	DIMENSIONS (mm)				
	D	d	h ₂	B	E
BX-162	475.49	447.05	14.22	14.22	1.5
BX-163	556.16	521.42	30.1	17.37	3
BX-164	570.56	521.38	30.1	24.59	3
BX-165	624.71	587.73	32.03	18.49	3
BX-166	640.03	587.75	32.03	26.14	3
BX-167	759.36	733.14	35.86	13.11	1.5
BX-168	765.25	733.15	35.86	16.05	1.5
BX-169	173.51	147.65	15.85	12.93	1.5
BX-170	218.03	189.59	14.22	14.22	1.5
BX-171	267.44	239	14.22	14.22	1.5
BX-172	333.07	304.63	14.22	14.22	1.5
BX-303	852.75	818.81	37.95	16.97	1.5



ASME B16.20:2012 Type RX ring gasket dimensions and tolerances

Tolerances	+0.51 - 0	/	+0.2 - 0	+0.2 - 0	± 0.5
R	DIMENSIONS (mm)				
	D	d	B	H	E
RX-20	76.20	66.96	8.74	19.05	-
RX-23	93.27	80.37	11.91	25.40	-
RX-24	105.97	93.07	11.91	25.40	-
RX-25	109.55	100.31	8.74	19.05	-
RX-26	111.91	99.01	11.91	25.40	-
RX-27	118.26	105.36	11.91	25.40	-
RX-31	134.54	121.64	11.91	25.40	-
RX-35	147.24	134.34	11.91	25.40	-
RX-37	159.94	147.04	11.91	25.40	-
RX-39	172.64	159.74	11.91	25.40	-
RX-41	191.69	178.79	11.91	25.40	-
RX-44	204.39	191.49	11.91	25.40	-
RX-45	221.84	208.94	11.91	25.40	-
RX-46	222.25	208.89	13.49	28.58	-
RX-47	245.26	224.58	19.84	41.28	-
RX-49	280.59	267.69	11.91	25.40	-
RX-50	283.36	266.34	16.66	31.75	-
RX-53	334.57	321.67	11.91	25.40	-
RX-54	337.34	320.32	16.66	31.75	-
RX-57	391.72	378.82	11.91	25.40	-
RX-63	441.73	412.17	27.00	50.80	-
RX-65	480.62	467.72	11.91	25.40	-
RX-66	457.99	440.97	16.66	31.75	-
RX-69	544.12	531.22	11.91	25.40	-
RX-70	550.06	529.38	19.84	41.28	-
RX-73	596.11	582.75	13.49	31.75	-
RX-74	600.86	580.18	19.84	41.28	-
RX-82	67.87	54.97	11.91	25.40	1.5
RX-84	74.22	61.32	11.91	25.40	1.5
RX-85	90.09	76.73	13.49	25.40	1.5
RX-86	103.58	86.56	15.09	28.58	2.3
RX-87	113.11	96.09	15.09	28.58	2.3
RX-88	139.29	118.61	17.48	31.75	3.0
RX-89	129.77	109.09	18.26	31.75	3.0
RX-90	174.63	150.29	19.84	44.45	3.0
RX-91	286.94	247.32	30.18	45.24	3.0
RX-99	245.67	232.77	11.91	25.40	-
RX-201	51.46	45.06	5.74	11.30	-
RX-205	62.31	56.21	5.56	11.10	-
RX-210	97.64	86.82	9.53	19.05	-
RX-215	140.89	130.23	11.91	25.40	-