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Revoseal RJ Data Sheet

Ring joint gasket types RJ-O, RJ-K, RJ-RX and RJ-BX.



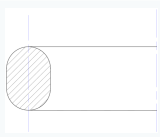
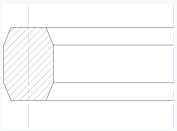
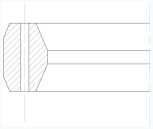
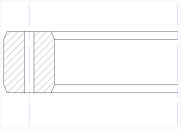
PRODUCT DESCRIPTION

revoseal ring joint gaskets of the RJ series are used primarily in refineries and in the petrochemical industry. Manufacturing standard: ASME B16.20.

KEY BENEFITS

- Suitable for very high pressures
- High compressive strength
- Wide choice of designs and alloys
- Designed for the oil and gas sector

TYPES

TYPE	CROSS-SECTION	DESCRIPTION
RJ-O		Ring joint gasket, oval design. Particularly suitable for flanges in existing plants; widely used in refineries and high-pressure pipelines. **Standards:** ASME B16.20, API 6A · flanges ANSI B16.5, ANSI B16.47 Table A
RJ-K		Ring joint gasket, octagonal design. Particularly suitable for newly manufactured flanges, e.g. on high-pressure valves; not recommended for existing flanges with worn gasket seats. **Standards:** ASME B16.20, API 6A · flanges ANSI B16.5, ANSI B16.47 Table A
RJ-RX		Ring joint gasket, type RX. For lines and equipment with working pressures above 20,000 psi (140 MPa), with pressure-balancing hole. **Standards:** ASME B16.20, API 6A · flanges API 6B
RJ-BX		Ring joint gasket, type BX. For lines and equipment with working pressures above 20,000 psi (140 MPa), with pressure-balancing hole. **Standards:** API 6A · flanges API BX

Materials and marking

Designation	Material no.	Hardness (HB)	US type AISI	Marking
Pure iron, Armco	1.1003	90–100	Soft-Iron	D
Low-carbon steel	–	120	Low-Carbon-Steel	S
13 CrMo 44	1.7335	approx. 130	–	7335
12 CrMo 19 5	1.7362	approx. 130	501	F5
X6 Cr 13	1.4000	approx. 170	410S	S 410
X5 CrNi 1810	1.4301	approx. 160	304	S 304
X5 CrNiMo 17122	1.4401	approx. 160	316	S 316
X6 CrNiTi 1810	1.4541	approx. 160	321	S 321
X6 CrNiNb 1810	1.4550	approx. 160	347	S 347
X6 CrNiMoTi 17122	1.4571	approx. 160	316 Ti	316 Ti

Materials to ASTM

Material	UNS	Brinell HB	Vickers HV	Material code
ASTM Soft Iron	G10060	90	56	D
ASTM Carbon Steel	G10080	120	68	S
ASTM 4–6 Cr ½ Mo	K41545	130	72	F5
ASTM AISI 410	S41000	170	86	S 410
ASTM AISI 304	S30400	160	83	S 304
ASTM AISI 316L	S31603	160	83	S 316
ASTM AISI 347	S34700	160	83	S 347

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Dimension table type RJ-O

to ANSI B16.20 or API Std. 6A

Ring	[DN] inch	[PN] lbs	Ring dimensions		
			d	b	h
R11	½	300 – 600	34.13	6.35	11.11
R12	½	900 – 1500	39.68	7.93	14.28
R13	½	2500	42.86	7.93	14.28
R13	¾	300 – 600	42.86	7.93	14.28
R14	¾	900 – 1500	44.45	7.93	14.28
R15	1	150	47.62	7.93	14.28
R16	¾	2500	50.80	7.93	14.28
R16	1	300 – 1500	50.80	7.93	14.28
R17	1 ¼	150	57.15	7.93	14.28
R18	1	2500	60.32	7.93	14.28
R18	1 ¼	300 – 1500	60.32	7.93	14.28
R19	1 ½	150	65.08	7.93	14.28
R20	1 ½	300 – 1500	68.26	7.93	14.28
R21	1 ¼	2500	72.23	11.11	17.46
R22	2	150	82.55	7.93	14.28
R23	1 ½	2500	82.55	11.11	17.46
R23	2	300 – 600	82.55	11.11	17.46
R24	2	900 – 1500	95.25	11.11	17.46
R25	2 ½	150	101.60	7.93	14.28
R26	2	2500	101.60	11.11	17.46
R26	2 ½	300 – 600	101.60	11.11	17.46
R27	2 ½	900 – 1500	107.95	11.11	17.46
R28	2 ½	2500	111.12	12.70	19.05
R29	3	150	114.30	7.93	14.28
R30	3	300 – 600	117.47	11.11	17.46
R31	3	300 – 900	123.82	11.11	17.46
R32	3	2500	127.00	12.70	19.05
R33	3 ½	150	131.76	7.93	14.28
R34	3 ½	300 – 600	131.76	11.11	17.46
R35	3	1500	136.52	11.11	17.46
R36	4	150	149.22	7.93	14.28
R37	4	300 – 900	149.22	11.11	17.46
R38	4	2500	157.16	15.87	22.22
R39	4	1500	161.92	11.11	17.46
R40	5	150	171.45	7.93	14.28
R41	5	300 – 900	180.97	11.11	17.46
R42	5	2500	190.50	19.05	25.40
R43	6	150	193.67	7.93	14.28
R44	5	1500	193.67	11.11	17.46
R45	6	300 – 900	211.13	11.11	17.46
R46	6	1500	211.13	12.70	19.05
R47	6	2500	228.60	19.05	25.40
R48	8	150	247.65	7.93	14.28
R49	8	300 – 900	269.87	11.11	17.46
R50	8	1500	269.87	15.87	22.22
R51	8	2500	279.40	22.22	25.57
R52	10	150	304.80	7.93	14.28
R53	10	300 – 900	323.85	11.11	17.46
R54	10	1500	323.85	15.87	22.22
R55	10	2500	342.90	28.57	36.51

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Dimension table type RJ-O (continued)

Ring	[DN] inch	[PN] lbs	Ring dimensions		
			d	b	h
R56	12	150	381.00	7.93	14.28
R57	12	300 – 900	381.00	11.11	17.46
R58	12	1500	381.00	22.22	28.57
R59	14	150	396.87	7.93	14.28
R60	12	2500	406.40	31.75	39.68
R61	14	300 – 600	419.10	11.11	17.46
R62	14	900	419.10	15.87	22.22
R63	14	1500	419.10	25.40	33.33
R64	16	150	454.02	7.93	14.28
R65	16	300 – 600	469.90	11.11	17.46
R66	16	900	469.90	15.87	22.22
R67	16	1500	469.90	28.57	36.51
R68	18	150	517.52	7.93	14.28
R69	18	300 – 600	533.40	11.11	17.46
R70	18	900	533.40	19.05	25.40
R71	18	1500	533.40	28.57	36.51
R72	20	150	558.80	7.93	14.28
R73	20	300 – 600	584.20	12.70	19.05
R74	20	900	584.20	19.05	25.40
R75	20	1500	584.20	31.75	39.68
R76	24	150	673.10	7.93	14.28
R77	24	300 – 600	692.15	15.87	22.22
R78	24	900	692.15	25.40	33.33
R79	24	1500	692.15	34.92	44.45
R80	22	150	615.95	7.93	–
R81	22	300 – 600	635.00	14.28	–
R82	1	10000	57.15	11.11	–
R84	1 ½	10000	63.50	11.11	–
R85	2	10000	79.37	12.70	–
R86	2 ½	10000	90.49	15.87	–
R87	3	10000	100.01	15.87	–
R88	4	10000	123.83	19.05	–
R89	3 ½	10000	114.30	19.05	–
R90	5	10000	155.58	22.22	–
R91	10	10000	260.35	31.75	–
R92	X	–	228.60	11.11	17.46
R93	26	300 – 600	749.30	19.05	–
R94	28	300 – 600	800.10	19.05	–
R95	30	300 – 600	857.25	19.05	–
R96	32	300 – 600	914.40	22.22	–
R97	34	300 – 600	965.20	22.22	–
R98	36	300 – 600	1022.35	22.22	–
R99	8	2000 – 3000	234.95	11.11	–
R100	26	900	749.30	28.57	–
R101	28	900	800.10	31.75	–
R102	30	900	857.25	31.75	–
R103	32	900	914.40	31.75	–
R104	34	900	965.20	34.92	–
R105	36	900	1022.35	34.92	–

X Not covered by the standard. Other dimensions available. Tolerances: d ± 0.18 mm, b ± 0.2 mm, ho and hk ± 0.4 mm. Design to revoseal company standard.

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Dimension table type RJ-RX

to ANSI B16.20 or API Std. 6A

Ring	[DN] inch	[PN] lbs	Ring dimensions					
			d	b	c	h1	h2	Hole e
RX20	1	2000. 3000. 5000	76.20	8.73	4.62	19.05	3.18	–
RX23	2	2000	93.27	11.91	6.45	25.40	4.24	–
RX24	2	3000. 5000	105.97	11.91	6.45	25.40	4.24	–
RX25	3	5000	109.54	8.73	4.62	19.05	3.18	–
RX26	2 ½	2000	111.92	11.91	6.45	25.40	4.24	–
RX27	2 ½	3000. 5000	118.27	11.91	6.45	25.40	4.24	–
RX31	3	2000. 3000	134.54	11.91	6.45	25.40	4.24	–
RX35	3	5000	147.24	11.91	6.45	25.40	4.24	–
RX37	4	2000. 3000	159.94	11.91	6.45	25.40	4.24	–
RX39	4	5000	172.64	11.91	6.45	25.40	4.24	–
RX41	5	2000. 3000	191.69	11.91	6.45	25.40	4.24	–
RX44	5	5000	204.39	11.91	6.45	25.40	4.24	–
RX45	6	2000. 3000	221.85	11.91	6.45	25.40	4.24	–
RX46	6	5000	222.25	13.49	6.68	28.58	4.78	–
RX47	8	crossover flange	245.30	19.84	10.34	41.28	6.88	–
RX49	8	2000. 3000	280.59	11.91	6.45	25.40	4.24	–
RX50	8	5000	283.37	16.67	8.51	31.75	5.28	–
RX53	10	2000. 3000	334.57	11.91	6.45	25.40	4.24	–
RX54	10	5000	337.34	16.67	8.51	31.75	5.28	–
RX57	12	2000. 3000	391.72	11.91	6.45	25.40	4.24	–
RX63	14	5000	441.72	26.99	14.78	50.80	8.46	–
RX65	16	2000	480.62	11.91	6.45	25.40	4.24	–
RX66	16	3000	483.39	16.67	8.51	31.75	5.28	–
RX69	18	2000	544.10	11.91	6.45	25.40	4.24	–
RX70	18	3000	550.10	19.84	10.34	41.28	6.88	–
RX73	20	2000	596.10	13.49	6.68	31.75	5.28	–
RX74	20	3000	600.87	19.84	10.34	41.28	6.88	–
RX82	X	–	67.87	11.91	6.45	25.40	4.24	1.6
RX84	X	–	74.22	11.91	6.45	25.40	4.24	1.6
RX85	X	–	90.09	13.49	6.68	25.40	4.24	1.6
RX86	X	–	103.58	15.08	8.51	28.58	4.78	2.4
RX87	X	–	113.11	15.08	8.51	28.58	4.78	2.4
RX88	X	–	139.30	17.46	10.34	31.75	5.28	3.2
RX89	X	–	129.78	18.26	10.34	31.75	5.28	3.2
RX90	X	–	174.62	19.84	12.17	44.45	7.42	3.2
RX91	X	–	286.94	30.16	19.81	45.24	7.54	3.2
RX99	X	–	245.67	11.91	6.45	25.40	4.24	–
RX201	1 ¼	5000	51.46	5.74	3.20	11.30	1.45	–
RX205	1 ¾	5000	62.31	5.56	3.05	11.10	1.83	–
RX210	2 ½	5000	97.63	9.53	5.41	19.05	3.18	–
RX215	4 – 4 ½	5000	140.89	11.91	5.33	25.40	4.24	–

X Not covered by the standard. Other dimensions available. Tolerances: d +0.51 mm, h1/h2 −0.8 mm, b +0.2 mm, c +0.15 mm. Design to revoseal company standard.

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Dimension table type RJ-BX

to ANSI B16.20 or API Std. 6A

Ring	[DN] inch	[PN] lbs	Ring dimensions			
			d	b	h	Hole e
BX 150	1 11/16	10000. 15000	72.19	9.30	9.30	1.60
BX 151	1 13/16	10000. 15000. 20000	76.40	9.63	9.63	1.60
BX 152	2 1/16	10000. 15000. 20000	84.68	10.24	10.24	1.60
BX 153	2 9/16	10000. 15000. 20000	100.94	11.38	11.38	1.60
BX 154	3 1/16	10000. 15000. 20000	116.84	12.40	12.40	1.60
BX 155	4 1/16	10000. 15000. 20000	147.96	14.22	14.22	1.60
BX 156	7 1/16	10000. 15000. 20000	237.92	18.62	18.62	3.20
BX 157	9	10000. 15000	294.46	20.98	20.98	3.20
BX 158	11	10000. 15000	352.04	23.14	23.14	3.20
BX 159	13 5/8	10000	426.72	25.70	25.70	3.20
BX 160	13 5/8	5000	402.59	13.74	23.83	3.20
BX 161	16 3/4	–	491.41	16.20	28.07	3.20
BX 162	16 3/4	5000. 10000	475.49	14.22	14.22	1.60
BX 163	18 3/4	5000	556.16	17.37	30.10	3.20
BX 164	18 3/4	10000	570.56	24.59	30.10	3.20
BX 165	21 1/4	5000	624.71	18.49	32.03	3.20
BX 166	21 1/4	10000	640.03	26.14	32.03	3.20
BX 167	26 3/4	2000	759.36	13.11	35.86	1.60
BX 168	26 3/4	3000	765.25	16.05	35.86	1.60
BX 169	5 1/8	10000	173.52	12.93	15.84	1.60
BX 170	9	–	218.03	14.22	14.22	1.60
BX 171	11	–	267.44	14.22	14.22	1.60
BX 172	13 5/8	–	333.07	14.22	14.22	1.60
BX 303	30	2000. 3000	852.75	16.97	37.95	1.60

Tolerances: d −0.15 mm, b +0.2 mm, h +0.2 mm. Design to revoseal company standard.