

A.R. Thomson Group

FLUID CONTAINMENT AND CONTROL SPECIALISTS **SINCE 1967**



METAL RING JOINT GASKETS



Thomson Metal Ring Joint Gaskets

Commonly used in the oil, petroleum and chemical process industries, ring joint gaskets provide an exceptional seal where high mechanical and thermal performance is required. Ring joint gaskets are manufactured in a variety of configurations (RX, BX, R Oval and Octagonal) and materials for API wellhead assemblies and high pressure ASME piping systems. Custom profile gaskets and lens rings are also available upon request.

Styles



Style R

Style R is the original ring joint gasket design which can be used in modern flanges having the standard ring joint flat bottom groove as well as older flanges with the round bottom groove style. The octagonal version was introduced to provide increased contact area resulting in higher sealing efficiency.



Style BX & RX

Pressure energized ring joint gaskets with unique self sealing action. Internal pressure during service increases loading on the gasket thereby improving the gaskets sealing performance.

Materials & Dimensions

Gasket metal should be selected to suit the specific service conditions. In addition to this, the material hardness should be lower than that of the flange metal in order to ensure the gasket deforms under compression and not the groove of the sealing surface. Descriptions of common materials and hardness values are as follows:

Material	Designation	Max Hardness Rockwell B	Max Hardness Brinell
Soft Iron	D	56	90
Low Carbon Steel	S	68	120
4-6 Chrome	F-5*	72	130
304 Stainless Steel	S304	83	160
316 Stainless Steel	S316	83	160
347 Stainless Steel	S347	83	160
410 Stainless Steel	S410	86	170

*ASTM specification A 182-72 chemical composition requirements only

Quality



A.R. Thomson Group is committed to safety, reliability, repeatability, traceability and to providing quality products and services to our customers through a policy of "continuous improvement." This is demonstrated by our commitment to new product development, the integration of technologies into our manufacturing processes, the development and implementation of training programs for our employees, and our competitiveness in the global marketplace.

Size Designations for Oval or Octagonal Rings

Nominal Pipe Size	Pressure Class				
	150	300-600	900	1 500	2 500
1/2	*	R-11	R-12	R-12	R-13
3/4	*	R-13	R-14	R-14	R-16
1	R-15	R-16	R-16	R-16	R-18
1-1/4	R-17	R-18	R-18	R-18	R-21
1-1/2	R-19	R-20	R-20	R-20	R-23
2	R-22	R-23	R-24	R-24	R-26
2-1/2	R-25	R-26	R-27	R-27	R-28
3	R-29	R-31	R-31	R-35	R-32
3-1/2	R-33	R-34	*	*	*
4	R-36	R-37	R-37	R-39	R-38
5	R-40	R-41	R-41	R-44	R-42
6	R-43	R-45	R-45	R-46	R-47
8	R-48	R-49	R-49	R-50	R-51
10	R-52	R-53	R-53	R-54	R-55
12	R-56	R-57	R-57	R-58	R-60
14	R-59	R-61	R-62	R-63	*
16	R-64	R-65	R-66	R-67	*
18	R-68	R-69	R-70	R-71	*
20	R-72	R-73	R-74	R-75	*
24	R-76	R-77	R-78	R-79	*
26*	*	R-93	R-100	*	*
28*	*	R-94	R-101	*	*
30*	*	R-95	R-102	*	*
32*	*	R-96	R-103	*	*
34*	*	R-97	R-104	*	*
36*	*	R-98	R-105	*	*

* ASME B16.47 Series A

BX Gaskets for API 6BX Flanges

API Ring Number	Pressure Class					
	2 000	3 000	5 000	10 000	15 000	20 000
BX150	*	*	*	1-11/16	1-11/16	*
BX151	*	*	*	1-13/16	1-13/16	1-13/16
BX152	*	*	*	2-1/16	2-1/16	2-1/16
BX153	*	*	*	2-9/16	2-9/16	2-9/16
BX154	*	*	*	3-1/16	3-1/16	3-1/16
BX155	*	*	*	4-1/16	4-1/16	4-1/16
BX156	*	*	*	7-1/16	7-1/16	7-1/16
BX157	*	*	*	9	9	9
BX158	*	*	*	11	11	11
BX159	*	*	*	13-5/8	13-5/8	13-5/8
BX160	*	*	13-5/8	*	*	*
BX161	*	*	16-3/4	*	*	*
BX162	*	*	16-3/4	16-3/4	16-3/4	*
BX163	*	*	18-3/4	*	*	*
BX164	*	*	*	18-3/4	18-3/4	*
BX165	*	*	21-1/4	*	*	*
BX166	*	*	*	21-1/4	*	*
BX167	26-3/4	*	*	*	*	*
BX168	*	26-3/4	*	*	*	*
BX169	*	*	*	5-1/8	*	*
BX170	*	*	*	6-5/8	6-5/8	*
BX171	*	*	*	8-9/16	8-9/16	*
BX172	*	*	*	11-5/32	11-5/32	*
BX303	30	30	*	*	*	*

RX Gaskets for API 6B Flanges

API Ring Number	Pressure Class			
	720, 960 & 2 500*	2 900*	3 000	5 000
RX20	1-1/2	*	1-1/2	1-1/2
RX23	2	*	*	*
RX24	*	*	2	2
RX25	*	*	*	3-1/8
RX26	2-1/2	*	*	*
RX27	*	*	2-1/2	2-1/2
RX31	3	*	3	*
RX35	*	*	*	3
RX37	4	*	4	*
RX39	*	*	*	4
RX41	5	*	5	*
RX44	*	*	*	5
RX45	6	*	6	*
RX46	*	*	*	6
RX47	*	*	*	8**
RX49	8	*	8	*
RX50	*	*	*	8
RX53	10	*	10	*
RX54	*	*	*	10
RX57	12	*	12	*
RX63	*	*	*	14
RX65	16	*	*	*
RX66	*	*	16	*
RX69	18	*	*	*
RX70	*	*	18	*
RX73	20	*	*	*
RX74	*	*	20	*
RX82	*	1	*	*
RX84	*	1-1/2	*	*
RX85	*	2	*	*
RX86	*	2-1/2	*	*
RX87	*	3	*	*
RX88	*	4	*	*
RX89	*	3-1/2	*	*
RX90	*	5	*	*
RX91	*	10	*	*
RX99	8**	*	8**	*
RX201	*	*	*	1-3/8
RX205	*	*	*	1-13/16
RX210	*	*	*	2-9/16
RX215	*	*	*	4-1/16

* Class 720, 960, & 2900 flanges to API 6B are obsolete. Data are for information only.

** Crossover flange connection

Important Note: Product specifications shown are typical. For specific application recommendations please consult your local A.R. Thomson Group representative. Failure to select proper sealing products could result in property damage and/or serious personal injury. A.R. Thomson Group is not liable for consequential damages resulting from misuse or implied suitability for any service. Specifications are subject to change without notice.

CORPORATE PROFILE

The A.R. Thomson Group was established in 1967 as a regional manufacturer/ distributor of gaskets and other fluid containment products. With the rapid growth of oil and gas production, petrochemical, oil refining and pulp and paper industries, our manufacturing facilities expanded to meet increased demand for these products. We currently design and manufacture a wide variety of products using the latest technology. Some examples include:

- ALL VARIETIES OF INDUSTRIAL METALLIC AND NON-METALLIC GASKETS
- PRE-FORMED PACKING SETS FOR VALVES, PUMPS AND MIXERS
- FLEXIBLE METAL HOSE AND EXPANSION JOINTS
- SEAL SPECIALTIES FOR THE OIL AND GAS INDUSTRY

A.R. Thomson Group has also increased the product scope for its Fluid Control Division. This includes a complete line of process and specialty valves along with fittings, pumps and accessories for process as well as product transfer piping systems.

Further to our industrial product offering, ARTG has developed an Energy Efficiency and Environmental program which identifies and minimizes system inefficiencies. The various elements of the program can significantly reduce operating costs and environmental impact. As part of this program ARTG has developed a technical services team which provides:

- ON-SITE TRAINING
- EQUIPMENT SURVEYS AND AUDITS
- APPLICATION ENGINEERING
- MAINTENANCE AND REPAIR OPTIMIZATION PROGRAMS

Since 1967, we have developed our expertise and know-how to become the leader in solving fluid containment and control problems. No matter what your control or containment needs, we can help.

BRITISH COLUMBIA

*Surrey

7930 - 130th Street
V3W 0H7
Phone: (604) 507-6050
Fax: (604) 507-6098

Parksville

#8-1009 Allsbrook Rd.
V9P 2A9
Phone: (250) 954-1543
Fax: (250) 954-1591

Prince George

Unit 7, 1839 1st Avenue
V2L 2Y8
Phone: (250) 563-1444
Fax: (250) 563-2644

ALBERTA

Calgary

#7-6320 11th Street SE
T2H 2L7
Phone: (403) 253-0161
Fax: (403) 258-0394

*Edmonton

10030 - 31st Avenue
T6N 1G4
Phone: (780) 450-8080
Fax: (780) 463-2021

*Fort McMurray

230F Mackay Crescent
T9H 5C6
Phone: (780) 790-0730
Fax: (780) 790-0278

Grande Prairie

9602 113th Street
T8V 4Z7
Phone: (780) 538-1792
Fax: (780) 538-3488

*Red Deer

#279 - 37428 Range Road 273
T4E 0A1
Phone: (403) 341-4511
Fax: (403) 341-4243

SASKATCHEWAN

*Regina

707E McDonald Street
S4N 5M2
Phone: (306) 584-2422
Fax: (306) 584-2599

ONTARIO

*Sarnia

281 Campbell Street
N7T 2H2
Phone: (519) 336-3678
Fax: (519) 336-0589

Mississauga

Unit 1A, 3350 Ridgeway Dr.
L5L 5Z9
Phone: (905) 607-6587
Fax: (905) 607-6994

Thunder Bay

Unit B, 1131 Central Ave.
P7B 7C9
Phone: (807) 623-0641
Fax: (807) 623-5480

QUEBEC

*Pointe-Claire, PQ

294 Labrosse
H9R 5L8
Phone: (514) 694-2442
Fax: (514) 694-2445

NOVA SCOTIA

Dartmouth

10 Morris Drive, Unit 32
B3B 1M2
Phone: (902) 468-9120
Fax: (902) 468-9087

*Denotes manufacturing location