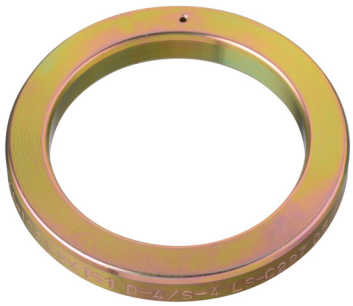
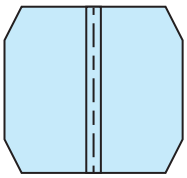
Leader Ring Joint Type BX

High Integrity Metallic Sealing





Description

Leader Ring Joint gaskets are developed for use in the petroleum industry and in particular for wellhead and Christmas tree- as well as drilling and oil & gas production equipment.
These solid precision machined metallic gaskets, also called and known as ring type joint (RTJ) gaskets are suitable for the highest possible pressure and temperature duties and form together with special grooved API 6A (ISO 10423) type 6BX flanges a high integrity seal.
BX ring gaskets are manufactured in a special symmetric shape of the cross-section.
The width of the sealing faces is small and high seating stresses can be formed. Dimensions of gaskets and corresponding grooves are designed in such a way that style BX gaskets do become self-sealing characteristics. This effect is also known as pressure energized sealing.

Sealing Characteristics

- Non blow-out type
- Pressure energized sealing.
- Style BX ring joint gaskets are not interchangeable with any other ring joint gaskets
- Solid metallic gaskets such as ring joint gaskets show minimum recovery characteristics.

In particular for fluctuating elevated temperatures sufficient sealing forces through the bolts should be present in this respect.

Application

- Ring Joint gaskets are widely used between pipeline flanges, valves and pressure vessels in the Oil & Gas industry.
- High operating pressure up to 1378 bar when applied in API 6B.
- BX gaskets are suitable for API 6A (ISO 10423) type 6X flanges for working pressure rated 5000, 10000 and 20000 lbs flanges.

Chemical compatibility, pressure and temperature

Corrosion and chemical resistance are depending on the selected RTJ gasket material.
For pressure and temperature range we refer to Technical Specifications, as per table 1.

Delivery options

BX shaped RTJ gaskets are available in ring numbers BX150 up to BX303. Special gaskets in non-standard dimensions can be manufactured upon request.
ERIKS has a large stock in Soft Iron and SS316(L). Other materials are also available, refer to table 2.
In addition to the above, ERIKS also has the SBX RTJ gasket. These gaskets are designed according to the API 17D (ISO 13628-4) norm. This variant is designed for subsea applications. Please consult ERIKS for further information regarding specific product information.

Approvals and Certificates

Leader Ring Joint gaskets are manufactured in strict accordance with API 6A (ISO 10423)
EN10.204 3.1 certificates can be delivered on request, as well as NACE MR0175/ISO 15156 conformity statement.

Table 1: Technical data

Max. working pressure	1378 bar (137,8 Mpa)
Max. test pressure	2000 bar (200 Mpa)
Maximum pressure and temperatures limitations	acc. API 6A
Min- en maximum temperatures	see material table below
M-value (ASME Boiler & Pressure Vessel code Div. I, section VIII, Appendix 2) :	
Soft Iron (D) and Soft Steel (S)	0
Stainless Steel	0
Monel and F5 (4-6% Cr + 0,5% Mo)	0
y-value (ASME Boiler & Pressure Vessel code Div. I, section VIII, Appendix 2) :	
Soft Iron (D) and Soft Steel (S)	0 psi (0 Mpa)
Stainless Steel	0 psi (0 Mpa)

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Table 1: Technical data

Monel and F5 (4-6% Cr + 0,5% Mo)	0 psi (0 Mpa)
Gasket- and required flange roughness (Ra)	Ra = 0,8 micron max.
Gasket- and required flange roughness (RMS)	RMS = 32 max.
Maximum pressure and temperatures	acc. API 6A

Table 2: Materials

	Identification	Max. Hardness Rockwell B	Max. Hardness Brinell	Temperature Range
	ASME B16.20 / API 6A	EN-ISO 6508	EN-ISO 6506	Degrees C.
Soft Iron	D	56	90	- 40 / + 500
Low Carbon Steel	S	68	120	- 25 / + 500
4-6 % Chrome - 1/2 % Molybdenum (F5)	F5	72	130	- 25 / + 550
SS304(L)	S304(L)	83	160	- 200 / + 550
SS316(L)	S316(L)	83	160	- 100 / + 550
SS321	S321	83	160	- 200 / + 550
SS347	S347	83	160	- 200 / + 550
SS410	S410	86	170	- 50 / + 500
Duplex (ASTM A182-F51) / SAF 2205 / 1.4462	S31803	98	220	- 60 / + 300
Avesta 254 SMO (6Mo)	S31254	92	195	- 100 / + 550
Nickel 200	N02200	71	125	- 100 / + 450
Nickel 201	N02201	71	125	- 100 / + 550
Monel® / Alloy 400	N04400	72	130	- 50 / + 500
Inconel® / Alloy 600	N06600	91	190	- 100 / + 650
Inconel® / Alloy 625	N06625	93	200	- 100 / + 800
Incoloy® / Alloy 800	N08800	88	180	- 100 / + 700
Incoloy® / Alloy 800H	N08810	88	180	- 100 / + 800
Incoloy® / Alloy 825	N08825	88	180	- 100 / + 550
Hasteloy® / Alloy B2	N010665	95	210	- 100 / + 500
Hasteloy® / Alloy C276	N010276	93	200	- 100 / + 600
1) This information is for general reference only. It does not take into consideration specific application conditions such as pressure or process fluid.				
2) Special hardness requirements on request.				

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For more information, quotations or orders: Phone +31 72 514 18 44 or E-mail seals@eriks.nl