

Leader Ring Joint Type RX High Integrity Metallic Sealing



Description

Leader ring type joint flange gaskets (RTJ gaskets) are used in applications that involve extreme pressures and high temperatures. All Leader ring type joint gaskets are manufactured in compliance with API-6A and ANSI B16.2 specifications.

Whether you are looking for a standard ring type joint gasket or custom design assemblies, our team of application engineers have the product and application know-how to find the right solution for your specific application.

Sealing Characteristics

- Non blow-out type;
- Interchangeable with other R Oval, Octagonal and RX type gaskets;
- Solid metallic gaskets such as ring joint gaskets exhibit minimum recovery characteristics.

Please note, the gaskets require sufficient surface pressure. This is especially the case for applications with large fluctuations in temperature.

Application

- Ring Joint gaskets are widely used between pipeline flanges, valves and pressure vessels in the Oil & Gas industry;

- Withstand high pressure situations up to 400 bar (pending on flange construction and rating);
- Style RX gaskets are suitable for ASME B16.5 flanges up to 2500 lbs. API 6A type 6B flanges can withstand a pressure up to 5000 psi.

Chemical compatibility, pressure and temperature

Corrosion and chemical resistance depend on the selected RTJ gasket material.

The pressure and temperature ranges can be found in the Technical Specifications, see table 1.

Delivery options

RX shaped RTJ gaskets are available in ring numbers RX20 up to RX215. Customer specific gaskets can be manufactured upon request. ERIKS has a large stock in Soft Iron and SS316(L) materials. Other materials are also available, see table 2.

Approvals and Certificates

Leader Ring Joint gaskets are manufactured in strict accordance with API 6A (ISO 10423) and ASME B16.20 specifications.

EN10.204 3.1 certificates can be delivered on request, as well as a NACE MR0175/ISO 15156 conformity statement.

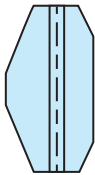


Table 1: Technical data

| | |
|---|----------------------------|
| Max. working pressure | 345 bar (34,5 Mpa) |
| Max. test pressure | 550 bar (550 Mpa) |
| Maximum pressure and temperatures limitations | acc. ASME B16.5 and 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) |
| Monel and F5 (4-6% Cr + 0,5% Mo) | 0 psi (0 Mpa) |
| Gasket- and required flange roughness (Ra) | Ra = 1,6 micron max. |
| Gasket- and required flange roughness (RMS) | RMS = 63 max. |

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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