

# LeaderKAM Kammprofile Gasket Style FR

## Kammprofile Gaskets

#### **DESCRIPTION**

LeaderKAM style FR kammprofile gaskets feature an integral outer locating ring, making them ideal for use with standard raised face and flat face flange assemblies. The gasket consists of a metallic core with precision-machined concentric grooves on both sides, covered with soft sealing layers made of graphite, PTFE, or LeaderTHERM NXT 1010 (a modified phlogopite for high-temperature performance).

#### **APPLICATION**

LeaderKAM kammprofile gaskets are widely used in the petrochemical industry, steam systems, offshore and onshore exploration, pipelines, pressure vessels, heat exchangers, and coolers. They are especially effective in heat exchanger applications where process conditions fluctuate or cycle. These gaskets are an excellent alternative to traditional metal jacketed gaskets.

#### **CHEMICAL COMPATIBILITY**

LeaderKAM kammprofile gaskets are compatible with a broad range of media, supporting the full pH spectrum from 0 to 14.

#### **AVAILABLE OPTIONS**

These gaskets are available in a wide range of sizes and materials, suitable for both standard and custom equipment. Upon request, EN 10204 3.1 material certificates and NACE MR0175/ISO 15156 compliance statements can be provided.

#### **TEMPERATURE RANGE**

With graphite sealing layers, LeaderKAM gaskets are suitable for temperatures from -450 °F to 850 °F (up to 1200 °F for steam). When using LeaderTHERM (phlogopite) layers, they can withstand temperatures up to 1800 °F. For specific applications, a detailed compatibility guide is available on request.

#### **APPROVALS & CERTIFICATES**

- TA-Luft
- BAM
- EN 10204 3.1

#### **SEALING CHARACTERISTICS**

- Excellent sealing performance across a broad range of seating stresses
- Suitable for low-torque flange assemblies
- Capable of withstanding high pressures and temperatures
- Wide chemical resistance (dependent on selected core and facing materials)
- Fire-safe design
- Ideal for applications with fluctuating temperatures and pressures when using FG or NXT materials
- Blowout resistant

| TECHNICAL DATA                               |                          |  |  |  |  |  |  |  |
|--|--------------------------|--|--|--|--|--|--|--|
| Maximum Temperature [°F]                     | See material table below |  |  |  |  |  |  |  |
| Maximum Pressure [PSI]                       | ASME B16.5 2500 Class    |  |  |  |  |  |  |  |
| Minimum Initial Stress [DIN E 2505 part 2]   | 2175 psi                 |  |  |  |  |  |  |  |
| Maximum Initial Stress [DIN E 2505 part 2]   | 43511 psi                |  |  |  |  |  |  |  |
| M-Value                                      | 2                        |  |  |  |  |  |  |  |
| Y- Value [psi]                               | 2500                     |  |  |  |  |  |  |  |
| Gasket Required Flange Roughness [Ra micron] | 3.2-6.3                  |  |  |  |  |  |  |  |
| Gasket Required Flange Roughness [RMS]       | 125-250                  |  |  |  |  |  |  |  |
| Max Seating Stress [Qsmax bei RT EN13555]    | 72518                    |  |  |  |  |  |  |  |

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### **Color Code Chart - ASME B 16.20**

| Material             | Miniı<br>°F | mum<br>°C | Maxi<br>°F | mum<br>°C | Abbreviation | Guide Ring<br>Color Code |
|----------------------|-------------|-----------|------------|-----------|--------------|--------------------------|
| 304 Stainless Steel  | -320        | -195      | 1400       | 760       | 304          | Yellow                   |
| 316L Stainless Steel | -150        | -100      | 1400       | 760       | 316L         | Green                    |
| 317L Stainless Steel | -150        | -100      | 1400       | 760       | 317L         | Maroon                   |
| 321 Stainless Steel  | -320        | -195      | 1400       | 760       | 321          | Turquoise                |
| 347 Stainless Steel  | -320        | -195      | 1600       | 925       | 347          | Blue                     |
| Carbon Steel         | -40         | -40       | 1000       | 540       | CRS          | Silver                   |
| 20Cb-3 (Alloy 20)    | -300        | -185      | 1400       | 760       | A-20         | Black                    |
| HASTELLOY® B 2       | -300        | -185      | 2000       | 1090      | HAST B       | Brown                    |
| HASTELLOY® C 276     | -300        | -185      | 2000       | 1090      | HAST C       | Beige                    |
| INCOLOY® 800         | -150        | -100      | 1600       | 870       | IN 800       | White                    |
| INCONEL® 600         | -150        | -100      | 2000       | 1090      | INC 600      | Gold                     |
| INCONEL® X750        | -150        | -100      | 2000       | 1090      | INX          | No Color                 |
| MONEL® 400           | -200        | -130      | 1500       | 820       | MON          | Orange                   |
| Nickel 200           | -320        | -195      | 1400       | 760       | NI           | Red                      |
| Titanium             | -320        | -195      | 2000       | 1090      | TI           | Purple                   |

## Non-Metallic Facings - ASME B 16.20

| Material               | Mini:<br>°F | mum<br>°C | Maxi<br>°F | mum<br>°C | Abbreviation | Guide Ring<br>Color Code |
|------------------------|-------------|-----------|------------|-----------|--------------|--------------------------|
| Ceramic                | -350        | -212      | 2000       | 1090      | CER          | Light Green              |
| Flexible Graphite      | -350        | -212      | 975        | 510       | FG           | Gray                     |
| PTFE                   | -400        | -240      | 500        | 260       | PTFE         | White                    |
| LeaderTherm NXT        | -350        | -212      | 1800       | 677       | LTNXT        | Light Blue               |
| LeaderTherm / Graphite | -350        | -212      | 1500       | 816       | LTD          | Lt Blue / Gray           |