



ΧΡΥΣΑΦΙΔΗΣ Α.Ε.



KLINGER Maxiflex

- Spiral wound gaskets have the ability to recover under the action of fluctuating loads caused by process fluid pressure and temperature changes, flange face temperature variations, flange rotation, bolt stress relaxation and creep.
- The gasket-sealing element consists of a pre-formed metallic winding strip with layers of a softer, more compressible sealing material which, during compression, is densified and flows to fill imperfections in the flange surfaces when the gasket is seated. The metal strip holds the filler giving the gasket mechanical resistance and resilience.
- Maxiflex gaskets can be manufactured from a range of filler materials according to different service conditions:

| Filler Material | Maximum Temperature | ASME B16.20 Colour Coding |
|------------------------|---------------------|---------------------------|
| Graphite | 550°C | Grey stripe |
| PTFE | 260°C | White stripe |
| Nonas | 350°C | Pink stripe |
| Mica | 1000°C | Light Green |
| Mica & Graphite, Zonal | 900°C | N/A |

| Winding Material | Maximum Temperature | ASME B16.20 Colour Coding |
|----------------------|---------------------|---------------------------|
| Carbon Steel | 500°C | Silver |
| 304 Stainless Steel | 650°C | Yellow |
| 316L Stainless Steel | 800°C | Green |
| Duplex | 800°C | N/A |
| 347 Stainless Steel | 870°C | Blue |
| 321 Stainless Steel | 870°C | Turquoise |
| Monel 400 | 800°C | Orange |
| Nickel 200 | 600°C | Red |
| Titanium | 540°C | Purple |
| Hastelloy B-2 | 1000°C | Brown |
| Hastelloy C-276 | 1000°C | Beige |
| Inconel 600 | 1000°C | Gold |
| Inconel 625 | 1000°C | Gold |
| Inconel X-750 | 1000°C | Light Grey |
| Incoloy 825 | 1000°C | White |

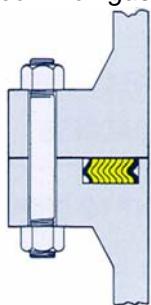


Certificate No. FM 10571



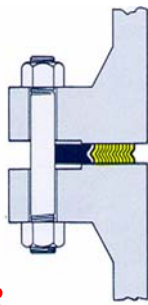
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Maxiflex Spiral Wound Gaskets are available in a range of configurations and materials. Below are the most common gasket types.



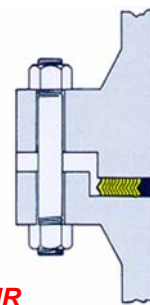
Type R

- Maxiflex spiral wound sealing element
- Wide choice of materials for filler and metal strip
- Suitable for high pressure and temperature applications
- Recommended flanges - tongue and groove, male to female and flat face to recess
- General and critical duties



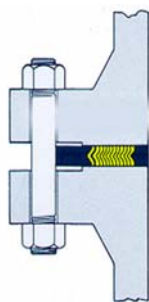
Type CR

- Maxiflex spiral wound sealing element
- Solid metal outer ring used as a centring device and compression stop
- Used mainly on raised face and flat face flanges
- General Duties



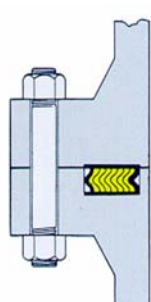
Type RIR

- Maxiflex spiral wound sealing element
- Solid metal inner ring
- High pressure temperature capability
- Male to female flanges
- General and critical duties



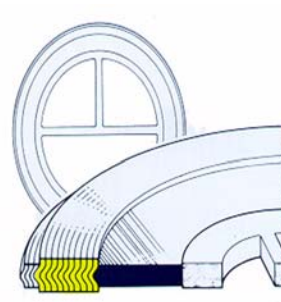
Type CRIR

- Maxiflex spiral wound sealing element
- Solid metal inner & outer ring
- Suitable for high pressure and temperature applications
- Raised face or flat flanges
- Prevents turbulence and erosion damage to flange
- Prevents damage to the gasket bore and inner windings
- Acts as a heat shield
- Acts as a corrosion barrier
- General and Critical Duties



Type RHD

- Maxiflex spiral wound sealing element
- Covered with 0.5mm Graflex
- Used on manhole covers
- Low bolt load applications
- Uneven sealing faces
- Double integrity seal



Type HTX

- (For heat exchanger applications)
- Maxiflex spiral wound sealing element
 - A combination of inner and outer rings
 - The inner ring could have pass bars or could carry either a metal clad or soft gasket with pass bars
 - Manufactured to customer designs

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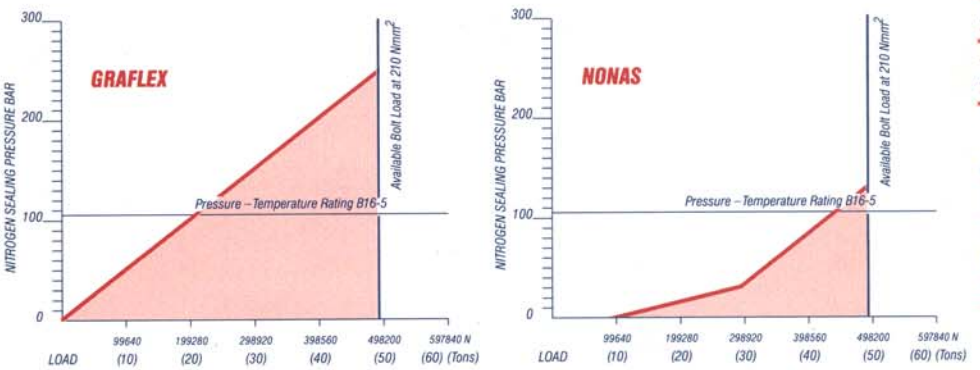
All information and recommendations contained in this specification sheet are to the best of our knowledge correct. Since conditions of use are beyond our control, users must satisfy themselves that the products are suitable for the intended processes and uses. No warranty is given or implied in respect of information or recommendations or that any use of products will not infringe rights belonging to other parties. In any event or occurrence our liability is limited to our invoice value of the goods delivered by us to you. We reserve the right to change product design and properties without notice



Technical Graphs

Technical Details

Sealing Performance against Compression.



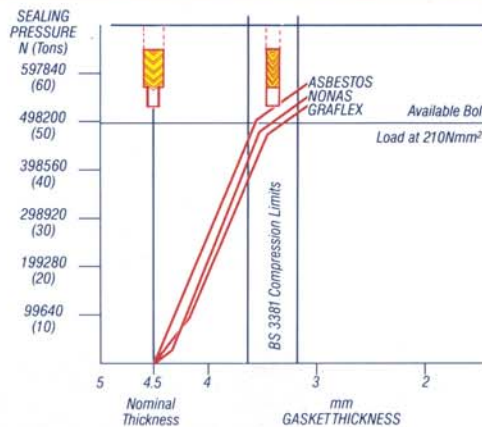
| Filler Materials | Temperature Limits |
|---------------------------------|--------------------|
| Special Canadian Asbestos | 550°C |
| Ceramic | 800°C |
| PTFE | 260°C |
| *'Graflex' Graphite | 550°C |
| Nonas (Asbestos Free) | 460°C |
| *3000°C in reducing atmospheres | |

Centering †† and Inner † Ring Standard Materials
Carbon Steel, Zinc Plated with Chrome Passivate ††
Stainless Steel, 316, †304, 410, 316L, 316TI Duplex
Monel Nickel Incoloy
Titanium Inconel 600 625
Standard Thickness 3.2mm

Metal Strip Material
Stainless Steel 316L, 316, 316TI, 304, 321, 310, 347, Duplex
Monel 400
Inconel 600, 625 X750
Nickel 200
Titanium, Hastelloy/Incoloy 800,825

| Gasket Nominal Thickness | Recommended Compressed Thickness |
|--------------------------|----------------------------------|
| 3.2mm | 2.3-2.5mm |
| 4.5mm | 3.2-3.4mm |
| 6.4mm | 4.6-4.9mm |
| 7.2mm | 4.8-5.0mm |

Compression Performance of Graflex, Nonas, Asbestos and PTFE on a 4" ANSI 600 spiral wound gasket.



Recommended Flange Surface Finish
Maxiflex gaskets are capable of giving an excellent seal over a wide range of flange surface finishes, but as a general guide we offer the following:

| | Micro Inch | Micro Metre |
|----------|------------|-------------|
| General | 125-200 | 3.2-5.1 |
| Critical | 125 | 3.2 |
| Vacuum | 80 | 2.0 |

Flange Suitability
BS1560 and ANSI B16.5 1/2"-24" 150-2500lbs
BS10 Tables D-T
B4504 10-250 Bar
MSS SP44 26"-60" 150-900lbs
API 605 26"-60" 150-900lbs
DIN