The GR series is Oseco’s high-tech answer to the disadvantages of graphite disks.

Oseco’s GR pressure relief devices provide an economical, high-performance solution to the disadvantages of fragile graphite disks. The fluoropolymer-encapsulated stainless steel GR series gives you superior pressure relief protection for the pharmaceutical and chemical process industries.

The GR is precision-cut by Oseco’s unparalleled in-house, five-axis laser to exacting standards, resulting in a precision disk with burst pressures as low as 2.5 psig! The Oseco advantage is the GR’s particular suitability for corrosive applications, since it is nonfragmenting, non-torque-sensitive, and highly resistant to corrosion and breakage.

The GR is easy to install on its own, designed to bolt between standard 150# ANSI pipe flanges and to fit within the bolt circle. The GR can also be supplied with a spacer on its vent side to provide interchangeability with existing monoblock graphite disk installations. The spacer may be constructed either of permanently attached Valox® 420, for one-time use (GRO™), or of stainless steel or carbon steel for reusability and easy attachment (GRR™).

The GR is excellent for applications where fragmentation is a problem, due to its nonfragmenting design. It is an ideal, economical solution for low-pressure explosion prevention.

Oseco GR Graphite Replacement Disks
Please consult the Oseco factory for sizes, pressures, materials, or other options not listed.

- **Standard Sizes:** 1” to 8” diameter.
- **Standard Burst Pressures:** 2.5 psig to 150 psig. Stocked burst pressures are listed for all standard sizes. See **Table 2**.
- **Manufacturing Range:** All Oseco GR disks meet a standard zero manufacturing range.
- **Burst Tolerance:**
  - ± 5% for disk ratings > 40 psig
  - ± 1 psig for disks rated < 15 psig
  - ± 2 psig from 15 to 40 psig

- **UD Stamping Available.**
- **Temperature Range:** Maximum 500° F for GR and GRR (maximum 420° F for GRO).
- **Applications:** Excellent for either gas or liquid service.
- **Operating Ratio:** In cycling applications, the GR can face operating pressures up to 60% of the stamped burst pressure.
- **Vacuum Supports:** Fully opening vacuum supports are available and recommended for all disks rated 30 psig and below that are required to withstand vacuum. The vacuum support must be ordered at the same time as the disk.

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**GR**

The GR disk is designed to fit between standard ANSI 150# flanges.

**GR Disk Temperature Correction Curve**

The above chart can be used to estimate the burst pressure of the GR disk at temperatures other than 72° F. Please consult with the factory to confirm the estimation.
TABLE 2
Stock Burst Pressures for GR Rupture Disks @ 72° F* (psig) / 22° C (barg)

<table>
<thead>
<tr>
<th>Pipe Size</th>
<th>Stocked Burst Pressures - psig / barg</th>
<th>Burst Pressure 316 SS MIN psig / barg</th>
<th>Overall GR Height in(^\circ) F</th>
<th>Overall GRO, GRR Height in(^\circ) F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0 DN 25</td>
<td>X X X X X X X X X X X X X X X X X</td>
<td>20 1.4 150 10.3</td>
<td>0.125 0.875</td>
<td></td>
</tr>
<tr>
<td>1.5 DN 40</td>
<td>X X X X X X X X X X X X X X X X X</td>
<td>13 0.9 150 10.3</td>
<td>0.125 0.875</td>
<td></td>
</tr>
<tr>
<td>2.0 DN 50</td>
<td>X X X X X X X X X X X X X X X X X</td>
<td>10 0.7 150 10.3</td>
<td>0.125 0.875</td>
<td></td>
</tr>
<tr>
<td>3.0 DN 80</td>
<td>X X X X X X X X X X X X X X X X X</td>
<td>7 0.5 150 10.3</td>
<td>0.125 0.875</td>
<td></td>
</tr>
<tr>
<td>4.0 DN 100</td>
<td>X X X X X X X X X X X X X X X X X</td>
<td>5 0.3 150 10.3</td>
<td>0.125 0.875</td>
<td></td>
</tr>
<tr>
<td>6.0 DN 150</td>
<td>X X X X X X X X X X X X X X X X X</td>
<td>3 0.2 100 6.9</td>
<td>0.125 0.875</td>
<td></td>
</tr>
<tr>
<td>8.0 DN 200</td>
<td>X X X X X X X X X X X X X X X X X</td>
<td>2.5 0.2 100 6.9</td>
<td>0.125 1.125</td>
<td></td>
</tr>
</tbody>
</table>

The lowest stocked burst pressure shown above is the minimum pressure available.

*Please consult the Oseco factory for other burst pressures.