GNS-Series

THE IDEAL ALTERNATIVE WHEN COPPER IS NO LONGER ENOUGH

Whenever the resistance of copper is not enough, nickel as brazing material is chosen. The units of the GNS-Series offer all the advantages of a brazed plate heat exchanger, but they are essentially more stable against corrosive medias such as ammonia, deionised water, sulphides and sulphates. But not every nickel-brazing is the same: only around 75% is made of pure nickel, the remaining 25% is our secret – and your benefit. Also units of the GNS-series have the proven technical features like Safety Chamber™, Delta Injection™ and Full Flow System™ available.

Thus, the products of the GNS-Series serve with its wide range of applications up to 200°C/392°F and 16 bar/232 psi the demands of the market.

Always a suitable solution at hand

The brazed plate heat exchangers from Kelvion offer tailor-made solutions for the widest range of application. We configure the most economically favorable model for you from the wide range of available sizes and the numerous optional features. We adapt this with individually positioned connections to meet your specific requirements.

Example:
- laser cooling
- semiconductor industry
- applications with deionised water
- ammonia systems
- corrosive fluids

Your advantages at a glance:
- high corrosion resistance
- compact design
- wide range of applications
- low investment costs
**GNS-Series: Specifications**

- **Plate material**: Stainless steel AISI 316L / 1.4404
- **Brazing material**: Nickel-based-alloy

**Features**

- **Safety Chamber™** (model 700, 800)
- **Delta Injection™** (model 400, 500, 700M, 800)
- **Full Flow System™** (model 100, 200, 220, 240, 300, 400, 500)

**Performance limits**

- **Working temperature**: -196°C to +200°C / -321°F to +392°F
- **Working pressure**: up to 16 bar / 232 psi

**Approval**

- **PED (CE)**
- **ASME VIII-I**

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We need following information to select your optimum heat exchanger:

- required temperature range
- flow rates or required heat load
- maximal permitted pressure drop
- required working conditions

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<table>
<thead>
<tr>
<th>Type</th>
<th>Pressure (bar)</th>
<th>Standard dimensions (mm)</th>
<th>(mm) L-Dimension N = number of plates</th>
<th>(kg) Mass N = number of plates</th>
<th>(Litres/Channel) Max. number of plates</th>
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<tbody>
<tr>
<td>GNS 100M</td>
<td>16</td>
<td>A: 74, B: 204, C: 40, D: 170</td>
<td>10.23+2.23xN 0.70+0.050xN</td>
<td>0.025</td>
<td>50</td>
</tr>
<tr>
<td>GNS 200H</td>
<td>16</td>
<td>A: 90, B: 231, C: 43, D: 182</td>
<td>12.24+2.24xN 1.10+0.060xN</td>
<td>0.030</td>
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<tr>
<td>GNS 220H</td>
<td>16</td>
<td>A: 90, B: 328, C: 43, D: 279</td>
<td>12.20+2.22xN 1.28+0.080xN</td>
<td>0.046</td>
<td>50</td>
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<tr>
<td>GNS 240H</td>
<td>16</td>
<td>A: 90, B: 464, C: 43, D: 415</td>
<td>12.20+2.20xN 2.04+0.139xN</td>
<td>0.070</td>
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<tr>
<td>GNS 300H</td>
<td>16</td>
<td>A: 124, B: 173, C: 73, D: 120</td>
<td>12.30+2.22xN 1.20+0.060xN</td>
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<td>GNS 400H</td>
<td>16</td>
<td>A: 124, B: 335, C: 73, D: 281</td>
<td>11.80+2.30xN 1.58+0.130xN</td>
<td>0.065</td>
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<td>GNS 500H</td>
<td>16</td>
<td>A: 124, B: 532, C: 73, D: 478</td>
<td>11.80+2.28xN 2.00+0.240xN</td>
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<td>GNS 700L</td>
<td>16</td>
<td>A: 271, B: 532, C: 200, D: 460</td>
<td>13.30+2.34xN 9.60+0.540xN</td>
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<td>13.80+2.34xN 10.02+0.540xN</td>
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