## Serrated Locking Plates

**Steel / Stainless Steel**

### GN 187.4

#### How to order

<table>
<thead>
<tr>
<th>1</th>
<th>Outer diameter (d_1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Tooth count (z)</td>
</tr>
<tr>
<td>3</td>
<td>Type</td>
</tr>
<tr>
<td>4</td>
<td>Material</td>
</tr>
</tbody>
</table>

**GN 187.4-27-48-C-ST**

### Metric table

<table>
<thead>
<tr>
<th>(d_1)</th>
<th>Tooth count</th>
<th>(d_2)</th>
<th>(d_3)</th>
<th>(d_4)</th>
<th>(d_5)</th>
<th>(h_1) ±0.09 Center of the teeth</th>
<th>(h_2) (2 x (h_1))</th>
<th>(m_1)</th>
<th>(m_2)</th>
<th>(w) min. Stroke</th>
</tr>
</thead>
<tbody>
<tr>
<td>22</td>
<td>48</td>
<td>60</td>
<td>15.5</td>
<td>0.61</td>
<td>M 4</td>
<td>4.2</td>
<td>0.17</td>
<td>13</td>
<td>0.51</td>
<td>0.61</td>
</tr>
<tr>
<td>27</td>
<td>48</td>
<td>60</td>
<td>19.5</td>
<td>0.77</td>
<td>M 5</td>
<td>5.2</td>
<td>0.20</td>
<td>15</td>
<td>0.59</td>
<td>0.77</td>
</tr>
<tr>
<td>32</td>
<td>48</td>
<td>60</td>
<td>23.5</td>
<td>0.93</td>
<td>M 6</td>
<td>6.2</td>
<td>0.24</td>
<td>18</td>
<td>0.71</td>
<td>0.93</td>
</tr>
<tr>
<td>40</td>
<td>48</td>
<td>60</td>
<td>30</td>
<td>1.18</td>
<td>M 8</td>
<td>8.2</td>
<td>0.32</td>
<td>23</td>
<td>0.91</td>
<td>1.3</td>
</tr>
</tbody>
</table>

### Information

With GN 187.4 serrated locking plates, components can be adjusted and locked form-fit at a defined angle.

The angle position of the serration is adapted to the mounting holes, ensuring an parallel or right-angled arrangement. The tooth count of 48 / 60 enables the adjustment in 7.5° or 6° steps, resulting in the indexing positions listed in the separate table.

The range of types makes these plates adaptable for almost any application. Useful complimentary components include GN 187.1 guide housings and GN 187.2 conical thrust springs.

**see also...**

- Serrated Locking Plates GN 188 (Stainless Steel, Weldable) → page 1168
- Serrated Locking Plates GN 187.5 (Stainless Steel) → page 1164
- Serrated Locking Plates EN 189 (Plastic) → page 1167

### Specification

- Steel (Distaloy AB) ST
  - Sintered
  - Type A / B / C / D
  - Hardened
  - Black steam oxidized
- Stainless steel AISI 316L NI
  - Sintered
  - Stainless Steel Characteristics → page 2143
- RoHS compliant

### Accessory

- Guide housings GN 187.1 → page 1162
- Conical thrust springs GN 187.2 → page 1763

### Diagram

- Type A
  - With tapped bore \(d_3\) in the center, with two countersunk bores for socket cap screws
- Type B
  - With bore \(d_4\) in the center, with two countersunk bores for socket cap screws
- Type C
  - With tapped bore \(d_3\) in the center, with two tapped bores to screw on
- Type D
  - With bore \(d_4\) in the center, with two tapped bores to screw on
- Type E
  - Without bores
### Application examples

<table>
<thead>
<tr>
<th>Tooth count</th>
<th>Angle steps</th>
<th>Possible angles / index positions</th>
</tr>
</thead>
<tbody>
<tr>
<td>48</td>
<td>7.5°</td>
<td>0°  7.5°  15°  30°  45°  60°  90°</td>
</tr>
<tr>
<td>60</td>
<td>6°</td>
<td>0°  6°  12°  18°  24°  30°  60°  90°</td>
</tr>
</tbody>
</table>

**Connection cam / shaft**

- Pressure spring GN 187.2
- Roll pins
- Serrated locking plate type B

**Adjustable link on sheet metal construction**

- Serrated locking plate type C
- Serrated locking plate type D
- Adjustable lever
- Thrust spring GN 187.2
- Guide housing GN 187.1