Pulsed Nd: YAG Laser
10 to 220W output

- Unique for fine cutting, precision drilling and scribing
- Outstanding beam quality at high peak power
- For conventional beam and/or fiber beam delivery
- Optimum flexibility for a full line of processing and production demands
## Specifications

**LASAG KLS 246**

### Laser Sources

<table>
<thead>
<tr>
<th>Laser Sources</th>
<th>-040 FC</th>
<th>-046</th>
<th>-102</th>
<th>-302</th>
<th>-306</th>
<th>-502</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laser type</td>
<td>pulsed Nd:YAG solid state laser</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Wavelength [nm]</td>
<td>1064</td>
<td>1064</td>
<td>1064</td>
<td>1064</td>
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<td>1064</td>
</tr>
<tr>
<td>Beam diameter [mm]</td>
<td>2.5</td>
<td>4.0</td>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
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<tr>
<td>Pulse length [ms]</td>
<td>0.012–0.3</td>
<td>0.02–20</td>
<td>0.02–20</td>
<td>0.1–20</td>
<td>0.1–20</td>
<td>0.1–20</td>
</tr>
<tr>
<td>Pulse repetition rate [Hz]</td>
<td>0.1–5000</td>
<td>0.1–1000</td>
<td>0.1–1000</td>
<td>0.1–1000</td>
<td>0.1–1000</td>
<td>0.1–1000</td>
</tr>
<tr>
<td>Pulse energy max. 1) [J]</td>
<td>0.002–0.18</td>
<td>15</td>
<td>30</td>
<td>50</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Peak power at 3ms max. 1) [kW]</td>
<td>0.6 – 0.3</td>
<td>4</td>
<td>6</td>
<td>3</td>
<td>5.5</td>
<td>6</td>
</tr>
<tr>
<td>Average power max. 1) [W]</td>
<td>1.5</td>
<td>100</td>
<td>150</td>
<td>220</td>
<td>220</td>
<td>250</td>
</tr>
</tbody>
</table>

1) Measured without beam delivery with new flash lamp

### Line Power

- **Configuration**: 3-phase + ground ± 10%
- **Multitap transformer for**: 3 x 200 V, 208 V, 230 V, 380 V, 400V, 480 V
- **Power consumption**: 9 kVA
- **Line frequency**: 50 Hz or 60 Hz

### Cooling water connection

- **Water inlet max.**: 20 °C / 8 bar
- **Pressure drop to outlet, min.**: 4 bar
- **Cooling power max.**: 8.5 kW, depending on laser output

### Weight

- **Laser unit**: 200 kg

### Ambient conditions

- **Ambient temperature max.**: 10 – 35 °C
- **Relative humidity max.**: 80 %

### Emissions

- **Noise at 1m, idle**: 60 dBA

### Compliance with standards

- CE compliant, FDA compliant