# Industrial Belt Design - Drive Detail Report

**Design Flex® Pro by the Gates Corporation**

## Designed For:

**Provided By:**

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**Application:** Design #1

### INPUT

**Drive Information**

<table>
<thead>
<tr>
<th>Known Size</th>
<th>DriveR</th>
<th>DriveN</th>
</tr>
</thead>
<tbody>
<tr>
<td>48 Grooves</td>
<td>48</td>
<td>48</td>
</tr>
</tbody>
</table>

**Speed Ratio:** 1.00

**Input Load:** 3 kW, Efficiency: 92.00%

**Service Factor:** 1.6

**Design Power:** 4.8 kW

**Center Distance:** 783 to 957 mm

**Bushings Checked:** TL, MPB

**Belts Checked:** PowerGrip GT2

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### SELECTED DRIVE

**Belt Type:** PowerGrip GT2 - 8M

<table>
<thead>
<tr>
<th>Part No</th>
<th>Top Width</th>
<th>Weight</th>
<th>Rim/Belt Speed</th>
<th>Bushing Part No</th>
<th>Bore</th>
<th>Pitch Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>9207-1033</td>
<td>30.62 mm</td>
<td>1.7 kg</td>
<td>9.5 m/s</td>
<td>2012</td>
<td>12.7 mm - 54.0 mm</td>
<td>122.2 mm</td>
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<td>30.62 mm</td>
<td>1.7 kg</td>
<td>9.5 m/s</td>
<td>2012</td>
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**Bushings Checked:** TL, MPB

**Noise:** 70 dB @ 1200 Hz

**Savings:** The three year savings can be up to 1221 KWh

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### TENSION

**Rib/Strand Deflection Distance:** 14.19 mm

**Rib/Strand Deflection Force:** 1.8 to 1.9 kg

**Belt Frequency:** 23 to 24 Hz

**Sonic Tension Meter**

**Model STM Settings:**

<table>
<thead>
<tr>
<th>Mass 5.5g/m</th>
<th>Width: 20 mm</th>
<th>Span: 908 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>505C/507C</td>
<td></td>
<td></td>
</tr>
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**New Belt**

<table>
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<th>New Belt</th>
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<td>14.19 mm</td>
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### NOTES

- Drive over-designed and efficiency may be reduced.
- The belt width was user specified.
- This drive was not selected by Design Flex; the belt width/length was specified by the user.
- Yearly Usage: 10 Hrs / Day, 5 Days / Wk, 50 Wks / Yr

- Design Flex Drive Solutions assume Gates products and are not applicable to non-Gates products.
- Products are not intended for use in any application where the failure of the product to perform could cause injury or death. This includes use on aircraft propeller or rotor drive systems or other in-flight systems necessary for safe flight.