



Industrial Belt Design - Drive Detail Report

Design Flex® Pro by the Gates Corporation

Designed For:

Provided By: **gearing**

Application: **Design #1**

INPUT

Drive Information

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

Known Size: **Driver** 48 Grooves
 RPM: 1500.0 **DriveN** 48 Grooves
 1500.0

Bushings Checked: TL, MPB
 Belts Checked: PowerGrip GT2

Electric Motor

SELECTED DRIVE

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

Speed Ratio: **1.0**
 dN RPM: **1500.0**
 Rated Load: **17.33 kW, ODR: 3.61**
 Belt Pull: **402 N**
 Center Distance: 908.0 mm
 Install/Take-Up Range: 871.4 mm to 909.0 mm

Part No: 2200-8MGT-20
 Product No: 9207-1033
 Top Width: --
 Weight: 242 g
 Rim/Belt Speed: 9.6 m/s
 RPM: 261.8
 Bushing Part No: --
 Bore: --
 Pitch Diameter: --

Driver
 P48-8MGT-20
 7708-2048
 30.62 mm
 1.7 kg
 9.5 m/s
 1500.0
 2012
 12.7 mm - 54.0 mm
 122.2 mm

DriveN
 P48-8MGT-20
 7708-2048
 30.62 mm
 1.7 kg
 9.5 m/s
 1500.0
 2012
 12.7 mm - 54.0 mm
 122.2 mm

Noise: 70 dB @ 1200 Hz
 Savings: The three year savings can be up to 1221 kWh

TENSION

	New Belt	Used Belt
Rib/Strand Deflection Distance:	14.19 mm	14.19 mm
Rib/Strand Deflection Force:	1.8 to 1.9 kg	1.4 to 1.5 kg
Sonic Tension Meter Belt Frequency:	23 to 24 Hz	20 to 21 Hz
505C/507C Model STM Settings:	Mass 5.5g/m, Width: 20 mm/#R, Span: 908 mm	

When planning to re-install used belts, measure and record the tension before removing and re-install at the recorded tension.

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.

Handwritten marks:
 w
 / k
 z