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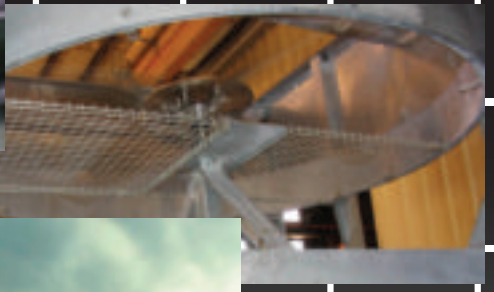
ACHE

Air-Cooled Heat Exchanger Drive Design Manual



The Driving Force in Power Transmission

Gates®

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Foreword

Synchronous belts are being used more extensively than ever before in the industry where synchronization of one shaft speed to another is of primary importance. The Gates Rubber Company has prepared this complete Poly Chain® GT® Belt Drive Design Manual to handle these exacting applications. Poly Chain drives also eliminate maintenance and noise problems associated with chain drives and reduce maintenance required on other problem power transmission drives.

Stock Belt Drives are presented in this manual for your convenience. If your drive requirements (Speed, Ratio, Center Distance, Space, Horsepower) are not met, contact your local Gates representative.

Printed in U.S. of America

Safety Policy

WARNING! Be Safe! Gates belt drive systems are very reliable when used safely and within Gates application recommendations. However, there are specific USES THAT MUST BE AVOIDED due to the risk of serious injury or death. These prohibited misuses include:

Primary In-Flight Aircraft Systems

Do not use Gates belts, pulleys or sprockets on aircraft, propeller or rotor drive systems or in-flight accessory drives. Gates belt drive systems are not intended for aircraft use.

Lift Systems

Do not use Gates belts, pulleys or sprockets in applications that depend solely upon the belt to raise/lower, support or sustain a mass without an independent safety backup system. Gates belt drive systems are not intended for use in applications requiring special “Lift” or “Proof” type chains with minimum tensile strength or certified/ test tensile strength requirements.

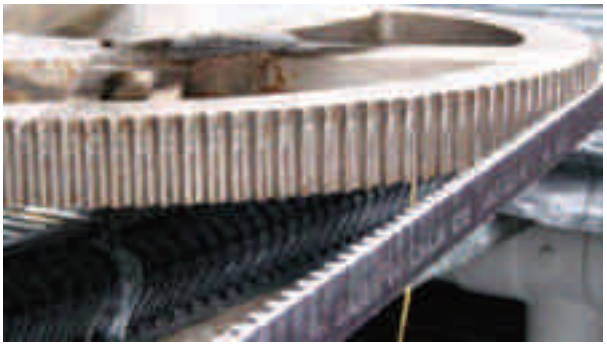
Braking Systems

Do not use Gates belts, pulleys or sprockets in applications that depend solely upon the belt to slow or stop a mass, or to act as a brake without an independent safety backup system. Gates belt drive systems are not intended to function as a braking device in “emergency stop” systems.

ACHE Application 'Alerts'

Air-Cooled Heat Exchangers are present in many industries including Power Generation and Oil Processing. Maximizing belt life means avoiding the following pitfalls:

Misalignment:
Incorrect installation practice, weak framework, and loose mounting bolts are common contributors to drive misalignment. See that bolts are properly secured and that the motor does not move. Ensure proper tracking of a belt drive by aligning the sprockets after tension has already been applied to the belt. Make sure the entire belt width is riding on the sprocket. Use a laser alignment device or straight edge to align the sprockets. The photograph below shows the belt more than half way off the sprocket!



Corrosion:
Rust is a common problem on Cooling Tower drives where moisture content is high. It results in premature tooth wear and short belt life. Nickel Plating of both sprockets is recommended to prevent corrosion.

Improper Belt Tension: Field problems are often related to belt tension. Low belt tension can result in self-tensioning or ratcheting. With self-tensioning, the belt's teeth begin to show hook wear. With ratcheting, the tensile members are compressed and weakened. Tooth shear or straight-across breaks are often the end result of low belt tension. Ensure proper tension is applied during installation. The use of a Sonic Tension Meter is recommended for quick and accurate tension measurements.

Additional Recommendations:

- Check tension, alignment, and inspect the hardware for wear on a yearly interval for Preventative Maintenance of the drive.
- Prevent wind milling of the fan by using an anti-reverse device on the fan shaft.

Preventive Maintenance Tools:

Gates 507C Sonic Tension Meter

Gates EZ-Align Laser Alignment Tool

An Alternate Belt Tensioning Method For ACHE Drives

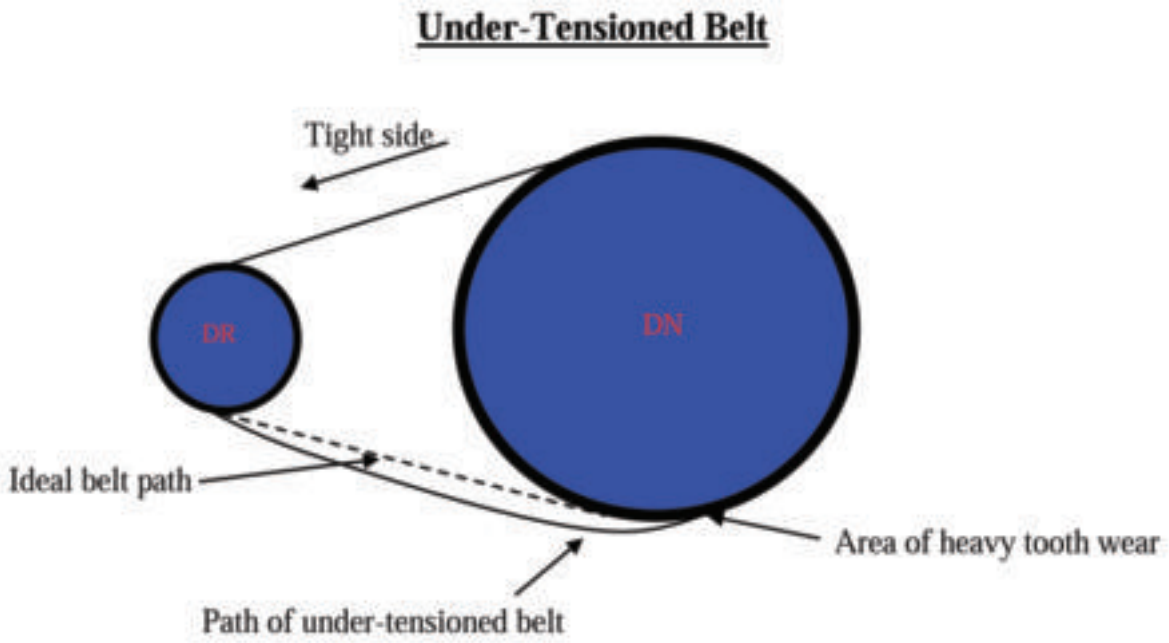
Introduction

The standard calculations used for belt installation tensions and the tensioning procedure published in Gates Drive Design Manuals is an excellent method for tensioning most belt drive systems. ACHE drives often use large driven sprockets with a lot of belt teeth engaged. These drives sometimes exhibit excessive belt tooth wear and less than optimal belt performance. In these cases an alternate visual tensioning method may be used to achieve optimal belt performance. The purpose of this PA Note is to explain how to assess belt meshing quality visually and present an alternate method of belt tensioning.

Background

Drives with a high speed ratio generally utilize large driven sprockets with a lot of belt teeth in mesh and may require special consideration when it comes to belt pre-tensioning. A belt meshing problem can be most easily identified by looking at the slack side of the belt as it enters the large driven sprocket while the drive is running. Tolerance accumulations and large wrap angles can lead to mis-meshing as can be seen by the belt teeth riding partially out of the sprocket. Any significant degree of mis-meshing can result in rapid belt tooth flank wear and ultimately, premature belt failure.

Belt meshing problems can be further compounded by the belt drive being excessively over designed, or underutilized, so that there is insufficient belt span tension to pull the belt into the correct design pitch. In other words, the belt pitch is short compared to the sprocket pitch. In these cases, the meshing quality (pitch fit) condition is far more critical than having the exact theoretical belt installation tension applied.



Viewing Pitch Fit

The simplest method for viewing belt pitch fit quality on drives with high speed ratios is to shine a variable frequency stroboscopic light, a stroboscope, on the belt span as it enters the large driven sprocket. The flash frequency can be adjusted to freeze the motion of the belt and sprocket to reveal the belt meshing quality.

Tensioning ACHE Belt Drives

ACHE Drive Problems

As previously mentioned, ACHE drives with high speed ratios (>5:1) using Driven sprockets larger than 168 grooves, can exhibit less than ideal belt meshing quality on the slack side span at the point where the belt enters the DriveN sprocket. If the belt is not correctly pre-tensioned, or meshed, the belt span rides out and away from the sprocket, causing the entering belt teeth to ride very high in the grooves (See Figure below).

Excessively low belt installation tension results in belt pitch error that worsens as the slack side belt span tension falls. The belt teeth eventually disengage completely from the sprocket grooves at the normal entry point (See Figure below).

Tensioning ACHE Belt Drives

Further around the sprocket circumference, the belt teeth are finally forced down into the grooves as the belt span tension transitions from the slack to the tight side. As the belt teeth finally engage the sprocket grooves completely, the teeth are deflected and dragged down against the groove flank, creating heavy belt tooth wear. This wear typically has the distinctive “shark fin,” or “hook” appearance (See Figure below).

In extreme cases, the belt teeth will start to sit on top of the sprocket and as the rotation continues, and the belt will “unzip” resulting in **Tooth Jump, or Ratcheting**. Belt ratcheting often damages the belt’s tensile members resulting in reduced belt tensile strength. This can lead to a premature belt ‘snap’ which appears as a clean, straight break between two consecutive belt teeth.

Initial Belt Tension

In order to maximize belt performance and longevity, mis-meshing must be prevented with proper belt installation tension. Clearly, the solution is to correctly tension the drive, but to what level?

Either Design Flex software or the formulas published in the appropriate Drive Design Manual can be used to calculate the standard recommended level of belt installation tension. Use caution in applying excessive service factors or allowing excessive drive load capacity. Rated belt drive capacity should not exceed about 3X the design load. Use the Sonic Tension Meter to set the belt tension to the recommended theoretical level, then start the drive and assess the belt pitch fit quality using the visual tensioning method.

The Visual Tensioning Method

The use of a stroboscope has been found to be very useful in assessing proper belt pitch fit.

- The drive should be initially tensioned as indicated above and then inspected with a strobe light with the drive operating at full power.
- If belt mis-meshing is evident, increase the belt installation tension until the first tooth enters the driven sprocket correctly.
- Inspect the belt pitch fit again after approximately one hour of running time to assure that the belt is fully seated.
- Finally, re-tension the belt if necessary to achieve proper belt meshing quality.

Remember: If it looks wrong, it probably is wrong!

Tensioning ACHE Belt Drives

Correct Tension

Ideal meshing of the belt teeth has been achieved when the drive is under full load and the belt's teeth are entering the sprocket smoothly and somewhat centered in between sprocket grooves (See Figure below).

Record the Correct Tension:

With the belt installation tension set for proper belt meshing quality under the full operating load, it is often helpful to record this tension level with the Sonic Tension Meter so that subsequent tensioning is performed quickly and efficiently. The STM can then be used again to re-install the belt if maintenance calls for the belt to be removed.

Maintaining Proper Tension:

Regular inspection intervals should be established every couple of months to ensure that the belt meshing quality remains correct. As a general rule-of-thumb, the tension will fall off 10-20% over the life of the drive. Increasing the initial tension by this amount, after the visual method has been used, minimizes the need for subsequent re-tensioning.

Start-Up and Structural Rigidity

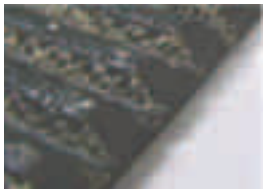
Occasionally a very loud "Bang!!" can be heard on start up. This may be the result of belt tooth jump, or ratcheting. Severely under-tensioned or mis-meshing drives will be considerably more prone to this. However, other factors may be the cause. Belt installation tension calculations do not consider structural rigidity. Belt drives which appear correctly tensioned when stationary, may become under-tensioned when operating, and particularly during starting.

Using direct across the line motor starts can result in severe shock loads, resulting in frame deflection which leads to belt tension loss and potential tooth jump. The visual method of assessing belt meshing quality described above can only provide information on the constant-speed running condition. However, close observation of the structure may reveal excessive structural movement. But don't blink, because it can occur very quickly and settle out.

If the drive system cannot be safely viewed, then a length of string can give a good indication of structural movement. Fix a taut string to or between the driver and driven supports in such a manner that any significant movement will either cause it to sag or break it. If the structure is weak, then belt pre-tension should be increased to prevent tooth jump occurring.

If either the motor starts with a direct across the line method, or the structural rigidity of the drive is questionable, the belt installation tension may need to be set higher than the theoretical calculated value, and even higher than the visual method indicates. The belt installation tension should be set high enough to prevent any chance of belt tooth jump or ratcheting from occurring.

Troubleshooting

Symptom	Diagnosis	Possible Remedy
Unusual noise	Misaligned drive Too low or high belt tension Backside idler Worn sprocket Bent guide flange Belt speed too high Incorrect belt profile for the sprocket (i.e., GT® etc.) Subminimal diameter Excess load	Correct alignment Adjust tension to recommended value Use inside idler Replace sprocket Replace sprocket/flange Redesign drive Use proper Gates Poly Chain® GT® Carbon™ and PowerGrip® GT®2 belt/sprocket Redesign drive using larger diameters Redesign drive for increased capacity
Tension loss 	Weak support structure Excessive sprocket wear Fixed (nonadjustable) centers Excessive load	Reinforce the structure Use alternate sprocket material Use inside idler for belt adjustment Redesign drive for increased capacity
Belt tracking 	Belt running partly off unflanged sprocket Centers exceed 8 times small sprocket diameter and the large sprocket is not flanged. Excessive belt edge wear	Correct alignment. Use PowerGrip GT2 ACHE Belts for special tracking Correct parallel alignment to set belt to track on both sprockets Correct alignment
Flange failure	Belt forcing flanges off	Correct alignment or properly secure flange to sprocket
Excessive belt edge wear 	Damage due to handling Flange damage Belt too wide Belt tension too low Rough flange surface finish Improper tracking Belt hitting drive guard or bracketry Excessive debris	Follow proper handling instructions Repair flange or replace sprocket Use proper width sprocket Adjust tension to recommended value Replace or repair flange (to eliminate abrasive surface) Correct alignment Remove obstruction or use inside idler Protect drive
Premature tooth wear 	Too low or high belt tension Belt running partly off unflanged sprocket Misaligned drive Incorrect belt profile for the sprocket (i.e., GT®, etc.) Worn sprocket Rough sprocket teeth Damaged sprocket Sprocket not to dimensional specification Belt hitting drive bracketry or other structure Excessive load Insufficient hardness of sprocket material Excessive debris Cocked bushing/sprocket assembly Rust	Adjust tension to recommended value Correct alignment Correct alignment Use proper Gates Poly Chain® GT® Carbon™ and PowerGrip® GT®2 belt/sprocket Replace sprocket Replace sprocket Replace sprocket Replace sprocket Remove obstruction or use inside idler Redesign drive for increased capacity Use a more wear-resistant material Protect belt Install bushing per instructions Nickel Plating

Troubleshooting

Symptom	Diagnosis	Possible Remedy
Tooth shear 	Excessive shock loads Less than 6 teeth-in-mesh Extreme sprocket runout Worn sprocket Backside idler Incorrect belt profile for the sprocket (i.e., GT®, etc.) Misaligned drive Belt undertensioned	Redesign drive for increased capacity Redesign drive Replace sprocket Replace sprocket Use inside idler Use proper Gates Poly Chain® GT® Carbon™ and PowerGrip® GT®2 belt/sprocket Correct alignment Adjust tension to recommended value
Tensile break 	Excessive shock load Subminimal diameter Improper belt handling and storage prior to installation Debris or foreign object in drive Extreme sprocket runout	Redesign drive for increased capacity Redesign drive using larger diameters Follow proper handling and storage procedures Protect drive Replace sprocket
Unusual sprocket wear	Sprocket has too little wear resistance (i.e., plastic, aluminum, softer metals) Misaligned drive Excessive debris Excessive load Too high, too low belt tension Incorrect belt profile (i.e. GT, etc.)	Use alternate sprocket material Correct alignment Protect drive Redesign drive for increased capacity Adjust tension to recommended value Use proper Gates Poly Chain® GT® Carbon™ and PowerGrip® GT®2 belt/sprocket
Belt cracking 	Subminimal diameter Backside idler Extreme low temperature startup Extended exposure to harsh chemicals Cocked bushing/sprocket assembly	Redesign drive using larger diameters Use inside idler Preheat drive environment Protect drive Install bushing per instructions
Excessive temperature (belt, bearing, housing, shafts, etc.)	Misaligned drive Too low or too high belt tension Incorrect belt profile (i.e. GT, etc.) Subminimal diameter Belt, sprockets or shafts running too hot Unusual belt degradation, such as softening or melting Excessive ambient temperature	Correct alignment Adjust tension to recommended value Use proper Gates Poly Chain® GT® Carbon™ and PowerGrip® GT®2 belt/sprocket Redesign drive using larger diameters Check for conductive heat transfer from prime mover Reduce ambient drive temperature to 180°F maximum Use High Temperature construction belt
Vibration	Incorrect belt profile for the sprocket (i.e. GT, etc.) Too low or too high belt tension Bushing or key loose	Use proper Gates Poly Chain® GT® Carbon™ and PowerGrip® GT®2 belt/sprocket Adjust tension to recommended value Check and reinstall per instructions

New!

Poly Chain® GT® Carbon™ Belt

Nothing Tougher

Gates new Poly Chain® GT® Carbon™ belt is part of a powerful synchronous belt drive system that outperforms roller chain in even the most demanding high-torque applications.

Gates Poly Chain GT Carbon belt offers enhancements that exceed the current market-leading Poly Chain GT®2 belt, including:

- better performance
- more flexibility for use with backside idlers
- greater resistance to moisture

Why carbon?

In today's high-performance driven world, parts that need to be incredibly strong and lightweight aren't made of steel. They're made of premium grade carbon fiber.

Gates is the first to apply these premium grade carbon fibers in a patented dynamic application, providing the Poly Chain GT Carbon belt with exceptionally high power transmission capacity, strength, flexibility and durability.

Poly Chain GT Carbon drives pack a lot of power into a small space, matching the capacity of roller chain drives width-for-width in most pitch sizes.

The Ideal Roller Chain Alternative

- maintenance-free drive
- outlasts roller chain 3-to-1
- accommodates the use of backside idlers
- compact drive components provide versatility to drive designers

Gates new Poly Chain® GT® Carbon™ belt offers performance enhancements that exceed the current market-leading Poly Chain® GT®2 belt.

Gates Poly Chain® GT® Carbon™ Belt System Specifications

To satisfy a wide range of loads, speeds and applications, Poly Chain GT Carbon Belts and Sprockets are made in a selection of sizes, capacities and dimensions.

The three principal dimensions of a belt are:

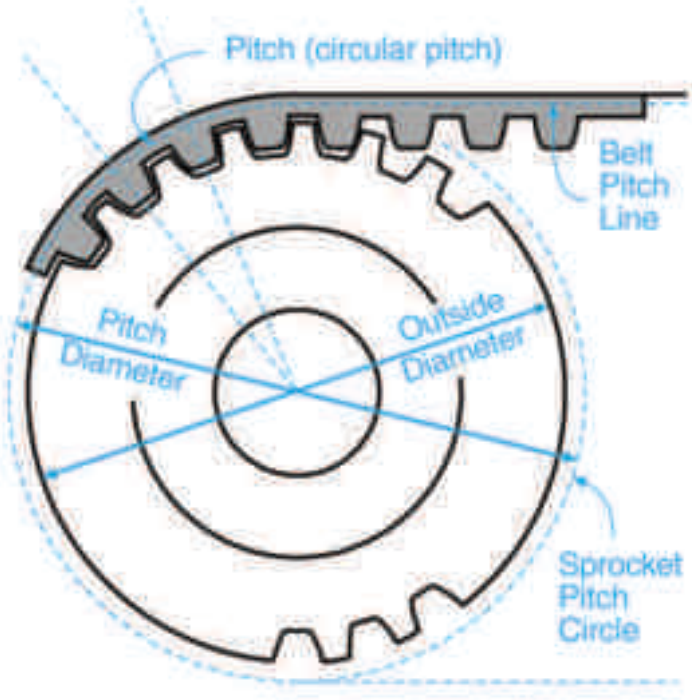
pitch pitch length width

Belt pitch is the distance in millimeters between two adjacent tooth centers as measured on the pitch line of the belt. Belt pitch length ism the total length (circumference) in millimeters as measured along the pitch line. The theoretical pitch line of a Poly Chain GT Carbon Belt lies within the tensile member.

The three principal dimensions of a sprocket are:

pitch number of sprocket grooves width

On the sprocket, pitch is the distance between groove centers and is measured on the sprocket's pitch circle. See illustration at right. The pitch circle of the sprocket coincides with the pitch line of the belt mating with it. The sprocket's pitch diameter is always greater than its outside diameter.

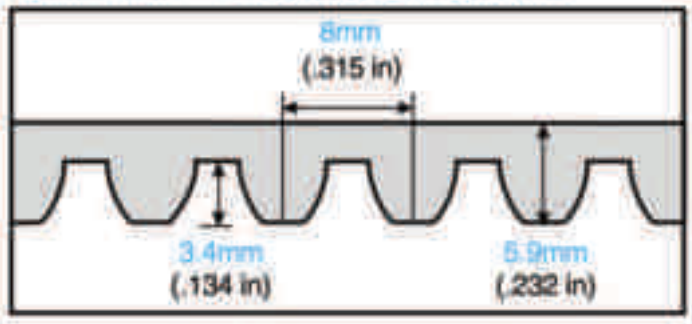


Any Gates Poly Chain GT Carbon Belt must be run with Gates Poly Chain GT2 sprockets of the same pitch for optimal performance.

Gates Poly Chain GT Carbon belts are made in 8mm and 14mm pitches. Standard belt sizes are listed in the stock Poly Chain GT Carbon Belt Tables on page 12. Specifications for the 8mm and 14mm pitch belts list the belt pitch lengths, number of teeth, stock widths and appropriate weights. Using the information from these tables, a code for ordering a specific belt can be determined as shown in the following examples:

Belt Pitch (mm)	Belt Pitch Length (mm)	Belt Width (mm)
8MGT	640	12
14MGT	1190	37

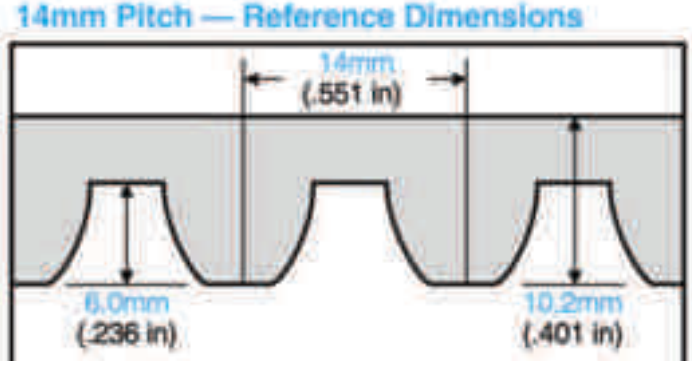
8mm Pitch — Reference Dimensions



Sprockets for Poly Chain GT Carbon belts are also made in 8mm and 14mm pitches. Standard sprocket sizes are listed in the Sprocket Specification Tables on Pages 84 through 91. For each Poly Chain GT Carbon Belt width, there is a table listing the sprocket code symbol, the applicable bushing style and pertinent dimensional information. The sprocket code symbol components are determined by using the following examples:

Pitch (mm)	Sprocket Designation & No. of Grooves	Width (mm)
8MX	48S*	12
14MX	36S*	37

14mm Pitch — Reference Dimensions



*The "S" is used after the number of grooves to help identify it is a sprocket and avoid any confusion with the belt code.

The Bushing style to be used with a specific sprocket is listed in the Sprocket Specifications Tables. Reference to the Stock Bushings for Poly Chain GT2 Sprockets plus Bore and Keyseat information on Pages 102 through 104 will give you the data needed to order the proper bushing. For example,

Style 2517 Bushing with a 2-inch bore

Style E Bushing with a 2-inch bore

Gates Poly Chain® GT® Carbon™ Belt Standard Line

Stock Sizes

8mm Pitch Lengths

Description	No. of Teeth	Length	
		mm	in
8MGT-352	44	**352**	13.86
8MGT-416	52	**416**	6.38
8MGT-456	57	**456**	17.96
8MGT-480	60	**480**	8.90
8MGT-544	68	**544**	21.42
8MGT-608	76	**608**	23.94
8MGT-640	80	**640**	25.20
8MGT-720	90	**720**	28.35
8MGT-800	100	**800**	31.50
8MGT-896	112	**896**	35.28
8MGT-960	120	**960**	37.80
8MGT-1000	125	**1000**	39.37
8MGT-1040	130	**1040**	40.95
8MGT-1120	140	**1120**	44.09
8MGT-1200	150	**1200**	47.24
8MGT-1224	153	**1224**	48.19
8MGT-1280	160	**1280**	50.39
8MGT-1440	180	**1440**	56.69
8MGT-1600	200	**1600**	62.99
8MGT-1760	220	**1760**	69.29
8MGT-1792	224	**1792**	70.55
8MGT-2000	250	**2000**	78.74
8MGT-2200	275	**2200**	86.61
8MGT-2240	280	**2240**	88.19
8MGT-2400	300	**2400**	94.49
8MGT-2520	315	**2520**	99.21
8MGT-2600	325	**2600**	102.36
8MGT-2800	350	**2800**	110.24
8MGT-2840	355	**2840**	111.81
8MGT-3048	381	**3048**	120.00
8MGT-3200	400	**3200**	125.98
8MGT-3280	410	**3280**	129.13
8MGT-3600	450	**3600**	141.73
8MGT-4000	500	**4000**	157.48
8MGT-4400	550	**4400**	173.23
8MGT-4480	560	**4480**	76.38

14mm Pitch Lengths

Description	No. of Teeth	Length	
		mm	in
14MGT-994	71	**994**	39.13
14MGT-1120	80	**1120**	44.09
14MGT-1190	85	**1190**	46.85
14MGT-1260	90	**1260**	49.61
14MGT-1400	100	**1400**	55.12
14MGT-1568	112	**1568**	61.73
14MGT-1610	115	**1610**	63.84
14MGT-1750	125	**1750**	68.90
14MGT-1890	135	**1890**	74.41
14MGT-1960	140	**1960**	77.17
14MGT-2100	150	**2100**	82.68
14MGT-2240	160	**2240**	88.19
14MGT-2310	165	**2310**	90.95
14MGT-2380	170	**2380**	93.70
14MGT-2450	175	**2450**	96.46
14MGT-2520	180	**2520**	99.21
14MGT-2590	185	**2590**	101.97
14MGT-2660	190	**2660**	104.72
14MGT-2800	200	**2800**	110.24
14MGT-3136	224	**3136**	123.46
14MGT-3304	236	**3304**	130.08
14MGT-3360	240	**3360**	132.28
14MGT-3500	250	**3500**	137.80
14MGT-3850	275	**3850**	151.58
14MGT-3920	280	**3920**	154.33
14MGT-4326	309	**4326**	170.32
14MGT-4410	315	**4410**	173.62

8mm Widths

12mm (.47 in.)	**21mm** (.83 in.)	**36mm** (1.42 in.)	**62mm** (2.44 in.)

14mm Widths

20mm (.79 in.)	**37mm** (1.46 in.)	**68mm** (2.68 in.)	**90mm** (3.54 in.)	**125mm** (4.92 in.)

Dimensions are given in inches and millimeters. Inches are shown in black type. Millimeters are shown in **blue** type.

Gates 8mm, 14mm pitch PowerGrip® GT®2 belts have helically-wound fiberglass tension members embedded in a Neoprene®* body with the belt teeth faced with a tough wear-resistant nylon fabric.

The three principal dimensions of a belt are

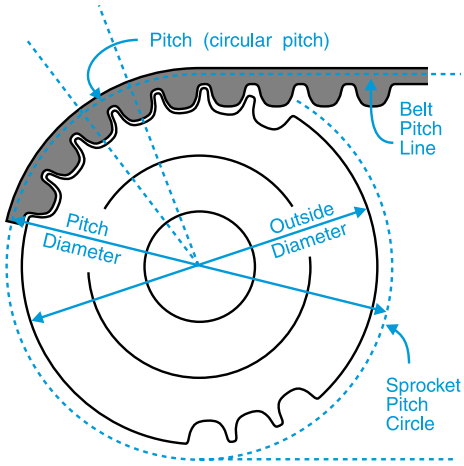
Pitch **Pitch Length** **Width**

Belt pitch is the distance in millimeters between two adjacent tooth centers as measured on the pitch line of the belt. Belt pitch length is the total length (circumference) in millimeters as measured along the pitch line. The theoretical pitch line of a PowerGrip® GT2 belt lies within the tensile member.

The part number designations for PowerGrip GT2 belts depend on the pitch of the belt. Belt designations are shown below for each of the available pitches.

8mm, 14mm PowerGrip GT2

Example: 14mm pitch, 1610mm pitch length, 55mm belt width
Belt Designation: 1610-14MGT-55

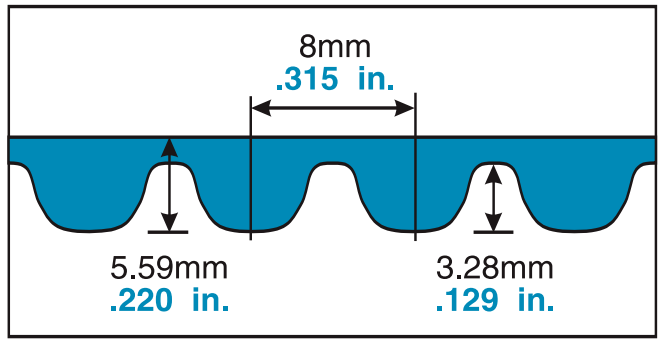


The part number designations for PowerGrip GT2 sprockets depend on the pitch of belt. Sprocket designations are shown below for each of the available pitches.

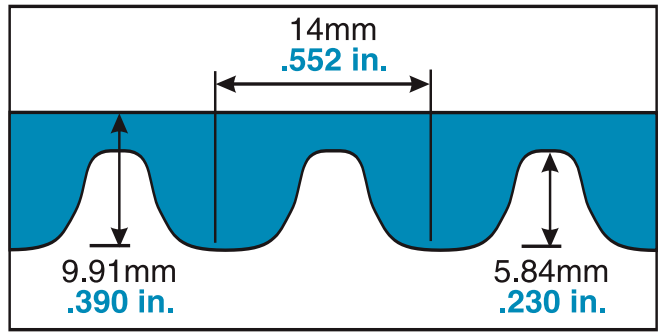
8mm, 14mm PowerGrip GT2

Example: 14mm pitch, 48 grooves, 55mm belt width
Sprocket Designation: P48-14MGT-55

8mm Pitch - Reference Dimensions



14mm Pitch - Reference Dimensions



* Neoprene is a trademark of DuPont

PowerGrip® GT®2 Belt Drives

The following tables list the stock PowerGrip® GT®2 belts and their dimensions.

8mm Pitch PowerGrip® GT®2 Stock Belt Lengths

Designation	Pitch Length (mm)	Pitch Length (in)	No. of Teeth
384-8MGT	384	15.12	48
480-8MGT	480	18.90	60
560-8MGT	560	22.05	70
600-8MGT	600	23.62	75
640-8MGT	640	25.20	80
720-8MGT	720	28.35	90
800-8MGT	800	31.50	100
840-8MGT	840	33.07	105
880-8MGT	880	34.65	110
920-8MGT	920	36.22	115
960-8MGT	960	37.80	120
1040-8MGT	1040	40.94	130
1064-8MGT	1064	41.89	133
1120-8MGT	1120	44.09	140
1160-8MGT	1164	45.67	145
1200-8MGT	1200	47.24	150
1224-8MGT	1224	48.19	153
1280-8MGT	1280	50.39	160
1440-8MGT	1440	56.69	180
1512-8MGT	1512	59.53	189
1584-8MGT	1584	62.36	198
1600-8MGT	1600	62.99	200
1760-8MGT	1760	69.29	220
1800-8MGT	1800	70.87	225
2000-8MGT	2000	78.74	250
2200-8MGT	2200	86.61	275
2400-8MGT	2400	94.49	300
2600-8MGT	2600	102.36	325
2800-8MGT	2800	110.24	350
3048-8MGT	3048	120.00	381
3280-8MGT	3280	129.13	410
3600-8MGT	3600	141.73	450
4400-8MGT	4400	173.23	550

8MGT Stock Belt Widths

Belt Width Code	Belt Width (mm)	Belt Width (in)
20	20	0.787
30	30	1.181
50	50	1.969
85	85	3.346

14mm Pitch PowerGrip® GT®2 Stock Belt Lengths

Designation	Pitch Length (mm)	Pitch Length (in)	No. of Teeth
966-14MGT	966	38.03	69
1190-14MGT	1190	46.85	85
1400-14MGT	1400	55.12	100
1610-14MGT	1610	63.39	115
1778-14MGT	1778	70.00	127
1890-14MGT	1890	74.41	135
2100-14MGT	2100	82.68	150
2310-14MGT	2310	90.94	165
2450-14MGT	2450	96.46	175
2590-14MGT	2590	101.97	185
2800-14MGT	2800	110.24	200
3150-14MGT	3150	124.02	225
3360-14MGT	3360	132.28	240
3500-14MGT	3500	137.80	250
3850-14MGT	3850	151.57	275
4326-14MGT	4326	170.31	309
4578-14MGT	4578	180.24	327
4956-14MGT	4956	195.12	354
5320-14MGT	5320	209.45	380
5740-14MGT	5740	225.98	410
6160-14MGT	6160	242.52	440
6860-14MGT	6860	270.08	490

14MGT Stock Belt Widths

Belt Width Code	Belt Width (mm)	Belt Width (in)
40	40	1.575
55	55	2.165
85	85	3.346
115	115	4.528
170	170	6.693

ACHE PowerGrip® GT®2 Belts

PowerGrip GT2 ACHE belts are available in 14mm pitch. A single twist cord helps prevent the belt from moving downward on vertical shaft ACHE applications. Stock belts are constructed with a "Z" twist tensile member.

Standard Tensile Member
Belts are normally produced with an "S" and "Z" twist cord construction (right and left hand) for neutral tracking. Neutral tracking does not mean the belt will run in the center of the pulley/sprocket, but rather lessens the side thrust.

"Z" Twist (Left) Tensile Member
Designed for special tracking purposes so belt will ride to one side of the sprockets. Recommended choice for drive systems that only have flanges on one side of the sprockets. Belts with "Z" twist cords will track in the opposite directions as those with "S" twist cords. Used in ACHE drives with vertical shafts or if belt needs to track in specific direction.

14mm Pitch PowerGrip® GT®2 ACHE Belts - 40, 55, and 85mm Wide
Stock Belt Lengths

Part No.	No. of Teeth	Pitch Length (in)
3150-14MGT-40F	225	124.01
3360-14MGT-40F	240	132.28
3500-14MGT-40F	250	137.79
3850-14MGT-40F	275	151.57
3150-14MGT-55F	225	124.01
3360-14MGT-55F	240	132.28

Part No.	No. of Teeth	Pitch Length (in)
3500-14MGT-55F	250	137.79
3850-14MGT-55F	275	151.57
3150-14MGT-85F	225	124.01
3360-14MGT-85F	240	132.28
3500-14MGT-85F	250	137.79
3850-14MGT-85F	275	151.57

ACHE Sprockets

Q.D. Air-Cooled Heat Exchanger (ACHE) Sprockets

ACHE sprockets are lighter weight than standard TL sprockets. The reduced length through bore allows for closer mounting of the sprocket on the shaft, reducing overhung loading. QD bushing designs allow for easier installation of horizontal drives where overhead mounting is necessary. The 'F' series sprockets are designed for speeds greater than 575 RPM.

Stock Size List

8mm Pitch Poly Chain® GT®2 ACHE - Q.D. Sprockets For 21mm Poly Chain® GT® Carbon™ Belts		
Part No.	**No. of Grooves**	**Pitch Dia. (in)**
F8M-36S-21-SH	36	3.609
F8M-38S-21-SH	38	3.810
F8M-40S-21-SH	40	4.010
F8M-42S-21-SH	42	4.211
F8M-140S-21-SF	140	14.036
F8M-168S-21-SF	168	16.843
F8M-180S-21-SF	180	18.046
F8M-224S-21-E	224	22.457

14mm Pitch Poly Chain® GT®2 ACHE - Q.D. Sprockets For 20mm Poly Chain® GT® Carbon™ Belts		
Part No.	**No. of Grooves**	**Pitch Dia. (in)**
F14M-28S-20-SK	28	4.912
F14M-29S-20-SK	29	5.088
F14M-30S-20-SK	30	5.263
F14M-31S-20-SK	31	5.439
F14M-32S-20-SK	32	5.614
F14M-33S-20-SK	33	5.790
F14M-34S-20-SK	34	5.965
F14M-35S-20-SK	35	6.141
F14M-140S-20-E	140	24.562
F14M-168S-20-F	168	29.475
F14M-180S-20-F	180	31.580
F14M-200S-20-F	200	35.089
F14M-224S-20-F	224	39.300

14mm Pitch Poly Chain® GT®2 ACHE - Q.D. Sprockets For 37mm Poly Chain® GT® Carbon™ Belts		
Part No.	**No. of Grooves**	**Pitch Dia. (in)**
F14M-28S-37-SK	28	4.912
F14M-29S-37-SK	29	5.088
F14M-30S-37-SK	30	5.263
F14M-31S-37-SK	31	5.439
F14M-32S-37-SK	32	5.614
F14M-33S-37-SK	33	5.790
F14M-34S-37-SK	34	5.965
F14M-35S-37-SK	35	6.141
F14M-180S-37-E	180	31.580
F14M-200S-37-E	200	35.089
F14M-224S-37-E	224	39.300

14mm Pitch PowerGrip® GT®2 ACHE - Q.D. Sprockets For 40mm PowerGrip® GT®2 Belts		
Part No.	**No. of Grooves**	**Pitch Dia. (in)**
F28-14MGT-40-SK	28	4.912
F29-14MGT-40-SK	29	5.088
F30-14MGT-40-SK	30	5.263
F31-14MGT-40-SK	31	5.439
F32-14MGT-40-SK	32	5.614
F33-14MGT-40-SK	33	5.790
F34-14MGT-40-SK	34	5.965
F35-14MGT-40-SK	35	6.141
F140-14MGT-40-E	140	24.562
F168-14MGT-40-E	168	29.475
F180-14MGT-40-E	180	31.580
F192-14MGT-40-E	192	33.686
F200-14MGT-40-E	200	35.089
F216-14MGT-40-E	216	37.896
F224-14MGT-40-F	224	39.300

14mm Pitch PowerGrip® GT®2 ACHE - Q.D. Sprockets For 55mm PowerGrip® GT®2 Belts		
Part No.	**No. of Grooves**	**Pitch Dia. (in)**
F28-14MGT-55-SK	28	4.912
F29-14MGT-55-SK	29	5.088
F30-14MGT-55-SK	30	5.263
F31-14MGT-55-SK	31	5.439
F32-14MGT-55-SK	32	5.614
F33-14MGT-55-SK	33	5.790
F34-14MGT-55-SK	34	5.965
F35-14MGT-55-SK	35	6.141
F180-14MGT-55-F	180	31.580
F200-14MGT-55-F	200	35.089
F224-14MGT-55-F	224	39.300

Taper-Lock* sprockets are also available for most sizes and widths.

Rust Resistant Sprockets and Bushings

Many industrial applications face problems associated with rusting parts. Sprockets used in very wet or humid environments, such as seen with air moving drives on cooling towers or wood kilns, are often facing corrosion. The constant effects of the wet air surrounding the belt drive can cause excessive rust.

Corrosion attacks sprocket grooves, building up rust deposits.

The corrosion will increase over time, building up in the sprocket grooves and non-driving surfaces (flanges, sprocket faces, bushing face). Sprockets with corrosion in the grooves will rapidly wear the belt's teeth and wear through the abrasion resistant tooth fabric, resulting in tooth shear and premature belt failure.

When an application is in a corrosive environment, the designer may elect to use special sprockets and bushings to prevent premature failures. Using special stainless steel sprockets and bushings or electroless nickel-plated sprockets can help eliminate corrosion as a cause of failure on belt drives located in these damaging environments.

Nickel Plated Taper-Lock* Sprockets for Poly Chain® GT® Carbon™ Belts

8mm Pitch Sprockets		
For Belts 21mm Width		
Product Description	**No. of Grooves**	**Pitch Dia. (in)**
NP8MX22S21	22	2.206
NP8MX25S21	25	2.506
NP8MX26S21	26	2.607
NP8MX27S21	27	2.707
NP8MX28S21	28	2.807
NP8MX29S21	29	2.907
NP8MX30S21	30	3.008
NP8MX31S21	31	3.108
NP8MX32S21	32	3.208
NP8MX33S21	33	3.308
NP8MX34S21	34	3.409
NP8MX35S21	35	3.509
NP8MX36S21	36	3.609
NP8MX37S21	37	3.709
NP8MX38S21	38	3.810
NP8MX39S21	39	3.910
NP8MX40S21	40	4.010
NP8MX41S21	41	4.110
NP8MX42S21	42	4.211
NP8MX45S21	45	4.511
NP8MX48S21	48	4.812
NP8MX50S21	50	5.013
NP8MX53S21	53	5.314
NP8MX56S21	56	5.614
NP8MX60S21	60	6.015
NP8MX63S21	63	6.316
NP8MX67S21	67	6.717
NP8MX71S21	71	7.118
NP8MX75S21	75	7.519
NP8MX80S21	80	8.020
NP8MX90S21	90	9.023
NP8MX112S21	112	11.229
NP8MX140S21	140	14.036
NP8MX180S21	180	18.046
NP8MX224S21	224	22.457

14mm Pitch Sprockets		
For Belts 20mm Width		
Product Description	**No. of Grooves**	**Pitch Dia. (in)**
NP14MX28S20	28	4.912
NP14MX29S20	29	5.088
NP14MX30S20	30	5.263
NP14MX31S20	31	5.439
NP14MX32S20	32	5.614
NP14MX33S20	33	5.790
NP14MX34S20	34	5.965
NP14MX35S20	35	6.141
NP14MX36S20	36	6.316
NP14MX37S20	37	6.492
NP14MX38S20	38	6.667
NP14MX39S20	39	6.842
NP14MX40S20	40	7.018
NP14MX43S20	43	7.544
NP14MX45S20	45	7.895
NP14MX48S20	48	8.421
NP14MX50S20	50	8.772
NP14MX53S20	53	9.299
NP14MX56S20	56	9.825
NP14MX60S20	60	10.527
NP14MX63S20	63	11.053
NP14MX67S20	67	11.755
NP14MX71S20	71	12.457
NP14MX75S20	75	13.158
NP14MX80S20	80	14.036
NP14MX90S20	90	15.790
NP14MX112S20	112	19.650
NP14MX140S20	140	24.562
NP14MX168S20	168	29.475
NP14MX180S20	180	31.580
NP14MX200S20	200	35.089
NP14MX224S20	224	39.300

*Taper-Lock is a registered trademark of Reliance Electric.

Rust Resistant Sprockets and Bushings

Stainless Steel Taper-Lock* Sprockets for Poly Chain® GT® Carbon™ Belts

8mm Pitch Sprockets For Belts 12mm Width		
Product Description	**No. of Grooves**	**Pitch Dia. (in)**
SS 8MX-28S-12 MPB	28	2.807
SS 8MX-28S-12	28	2.807
SS 8MX-29S-12 MPB	29	2.907
SS 8MX-29S-12	29	2.907
SS 8MX-30S-12 MPB	30	3.008
SS 8MX-30S-12	30	3.008
SS 8MX-32S-12 MPB	32	3.208
SS 8MX-32S-12	32	3.208
SS 8MX-34S-12 MPB	34	3.409
SS 8MX-34S-12	34	3.409
SS 8MX-36S-12	36	3.609
SS 8MX-38S-12	38	3.810
SS 8MX-40S-12	40	4.010
SS 8MX-42S-12	42	4.211
SS 8MX-45S-12	45	4.511
SS 8MX-48S-12	48	4.812
SS 8MX-50S-12	50	5.013
SS 8MX-53S-12	53	5.314
SS 8MX-56S-12	56	5.514
SS 8MX-60S-12	60	6.015

8mm Pitch Sprockets For Belts 21mm Width		
Product Description	**No. of Grooves**	**Pitch Dia. (in)**
SS 8MX-28S-21 MPB	28	2.807
SS 8MX-28S-21	28	2.807
SS 8MX-29S-21 MPB	29	2.907
SS 8MX-29S-21	29	2.907
SS 8MX-30S-21 MPB	30	3.008
SS 8MX-30S-21	30	3.008
SS 8MX-32S-21 MPB	32	3.208
SS 8MX-32S-21	32	3.208
SS 8MX-34S-21 MPB	34	3.409
SS 8MX-34S-21	34	3.409
SS 8MX-36S-21	36	3.609
SS 8MX-38S-21	38	3.810
SS 8MX-40S-21	40	4.010
SS 8MX-42S-21	42	4.211
SS 8MX-45S-21	45	4.511
SS 8MX-48S-21	48	4.812
SS 8MX-50S-21	50	5.013
SS 8MX-53S-21	53	5.314
SS 8MX-56S-21	56	5.514
SS 8MX-60S-21	60	6.015

*Taper-Lock is a registered trademark of Reliance Electric.

Stainless Steel Taper-Lock* Bushings - English Sizes

Product Description	Bore Size (in)
SS 1108 .1/2	1/2
SS 1108 .9/16	9/16
SS 1108 .5/8	5/8
SS 1108 .11/16	11/16
SS 1108 .3/4	3/4
SS 1108 .13/16	13/16
SS 1108 .7/8	7/8
SS 1108 .15/16	15/16
SS 1108 1.	1
SS 1108 1.1/8	1 1/8

Product Description	Bore Size (in)
SS 1210 .1/2	1/2
SS 1210 .9/16	9/16
SS 1210 .5/8	5/8
SS 1210 .11/16	11/16
SS 1210 .3/4	3/4
SS 1210 .13/16	13/16
SS 1210 .7/8	7/8
SS 1210 .15/16	15/16
SS 1210 1.	1
SS 1210 1.1/16	1 1/16
SS 1210 1.1/8	1 1/8
SS 1210 1.3/16	1 3/16
SS 1210 1.1/4	1 1/4

Product Description	Bore Size (in)
SS 1610 .1/2	1/2
SS 1610 .9/16	9/16
SS 1610 .5/8	5/8
SS 1610 .11/16	11/16
SS 1610 .3/4	3/4
SS 1610 .13/16	13/16
SS 1610 .7/8	7/8
SS 1610 .15/16	15/16
SS 1610 1.	1
SS 1610 1.1/16	1 1/16
SS 1610 1.1/8	1 1/8
SS 1610 1.3/16	1 3/16
SS 1610 1.1/4	1 1/4
SS 1610 1.5/16	1 5/16
SS 1610 1.3/8	1 3/8
SS 1610 1.7/16	1 7/16
SS 1610 1.1/2	1 1/2
SS 1610 1.9/16	1 9/16
SS 1610 1.5/8	1 5/8
SS 1610 1.11/16	1 11/16

Product Description	Bore Size (in)
SS 2012 .1/2	1/2
SS 2012 .9/16	9/16
SS 2012 .5/8	5/8
SS 2012 .11/16	11/16
SS 2012 .3/4	3/4
SS 2012 .13/16	13/16
SS 2012 .7/8	7/8
SS 2012 .15/16	15/16
SS 2012 1.	1
SS 2012 1.1/16	1 1/16
SS 2012 1.1/8	1 1/8
SS 2012 1.3/16	1 3/16
SS 2012 1.1/4	1 1/4
SS 2012 1.5/16	1 5/16
SS 2012 1.3/8	1 3/8
SS 2012 1.7/16	1 7/16
SS 2012 1.1/2	1 1/2
SS 2012 1.9/16	1 9/16
SS 2012 1.5/8	1 5/8
SS 2012 1.11/16	1 11/16
SS 2012 1.3/4	1 3/4
SS 2012 1.13/16	1 13/16
SS 2012 1.7/8	1 7/8
SS 2012 1.15/16	1 15/16
SS 2012 2.	2
SS 2012 2.1/8	2 1/8

Stainless Steel Taper-Lock* Bushings - Metric Sizes

Product Description	Bore Size (in)
SS 1108 X 16	16
SS 1108 X 19	19
SS 1108 X 20	20
SS 1108 X 22	22
SS 1108 X 24	24
SS 1108 X 25	25
SS 1210 X 16	16
SS 1210 X 20	20
SS 1210 X 24	24
SS 1210 X 25	25
SS 1210 X 28	28
SS 1210 X 30	30
SS 1610 X 20	20
SS 1610 X 24	24
SS 1610 X 25	25
SS 1610 X 28	28

Product Description	Bore Size (in)
SS 1610 X 30	30
SS 1610 X 32	32
SS 1610 X 35	35
SS 1610 X 38	38
SS 2012 X 20	20
SS 2012 X 22	22
SS 2012 X 24	24
SS 2012 X 25	25
SS 2012 X 28	28
SS 2012 X 30	30
SS 2012 X 32	32
SS 2012 X 35	35
SS 2012 X 38	38
SS 2012 X 40	40
SS 2012 X 42	42
SS 2012 X 45	45

*Taper-Lock is a registered trademark of Reliance Electric.

ACHE Application Design Procedure and Example

Selection of a stock ACHE Poly Chain® GT® Carbon Belt drive system involves these six steps.

1. Calculate the design horsepower.
2. Select belt pitch.
3. Select sprockets and belt.
4. Select belt width.
5. Check and specify stock drive components.
6. Examine environmental concerns.

Sample Problem

An air-cooled heat exchanger that eliminates heat from a Petrochemical process is driven by a 15 hp normal torque electric motor with an output speed of 1160 rpm. The cooling fan is to be driven at 270 rpm +-5%. The center distance is approximately 21 inches with a 2-inch adjustment outward and a 1-inch adjustment inward. The motor shaft is 1 1/2 inches and the fan shaft is 2 inches. No moisture is present. Design using Poly Chain GT Carbon.

Step 1. Determine Design Horsepower

Procedure

The API standard API 661 states that a service factor of 1.8 should be used for all ACHE belt drives. To calculate design horsepower, multiply the rated horsepower (usually the nameplate rating) by 1.8.

Example

Design HP = 15 x 1.8 = 27 dhp

Step 2. Select Belt Pitch

Procedure

Using the design horsepower and the rpm of the faster shaft, select the belt pitch from Belt Pitch Selection Guide graph on Page 25.

Example

Locate 1160 rpm on the RPM of Faster Shaft scale and move over to where the Design Horsepower of 27 dhp line intersects. The intersection falls within the 8 mm pitch area of the graph.

Step 3. Select Sprockets and Belt Length

Procedure

a. Determine speed ratio.
The speed ratio can be determined by dividing the rpm of the faster shaft by the rpm of the slower shaft rpm.

Example

$$\frac{\text{rpm of faster shaft}}{\text{rpm of slower shaft}} = 1160/270 = 4.3)$$

Procedure

b. Select sprocket combination and belt length.
Turn to the Stock Drive Selection Tables (pages 28 through 43 and 44 through 57) and in the proper pitch tables find the chosen speed ratio. Moving over within the speed ratio block, find the stock sprocket combinations available for that speed ratio. Selection of the proper combination will depend on the center distance required, minimum or maximum required sprocket diameter and the recommended minimum sprocket diameter for electric motors (See table on Page 111). After selecting possible sprocket combinations and center distances, record belt length (top of column) Length Factor (bottom of column), and the Teeth In Mesh Factor if applicable.

Example

First, using the Stock Drive Selection Tables for 8mm pitch belts on pages 28 through 43, we locate the speed ratio of 4.3 on pages 42 and 43. There nearest sprocket combination to the speed ratio of 4.3 is 180 to 42 with a ratio of 4.286. The minimum diameter for a 10 hp motor at 1160 rpm (See table on Page 111) is 4.0 inches. The diameter of the 42 tooth sprocket is 4.211 inches and is safe to use with the motor. One the line for the 42 to 180 sprocket combination, the center distance within the required tolerance range is 20.72 inches using the 2000 mm (78.74 inch), 8mm pitch belt. The belt length correction factor is 1.22 and is located at the bottom of the 2000mm belt length column.

Procedure

c. Check belt speed.
Do not exceed 6500 feet per minute (fpm) with stock sprockets. Belt speed is determined using the following formula:

$$V(\text{fpm}) = \frac{\text{PD (inches) x Speed (rpm)}}{3.92}$$

Example

Determining belt speed for the 8mm drive systems shows that the belt speed does not exceed 6500 fpm and can be considered further.

V = 4.211 x 1160 / 3.82 = 1278.7 fpm

Step 4. Select Belt Width.

Procedure

Belt Width Selection Tables on pages 80 through 81 shows the horsepower ranges of stock belt widths. The left-hand column shows the speed of the smaller sprocket. Across the top are various stock sprockets. The base rated horsepower capacity of a given sprocket at a specific rpm is at the point of intersection of the rpm row and sprocket column.

This base horsepower rating must be corrected for the belt length selected, the drive's speed ratio, and for the number of teeth in mesh (if applicable), all determined in Step 3. The corrected horsepower rating must equal or exceed design hp.

Where there are several choices, drive limitations may control the selection. In addition, the following design guidelines should be considered.

1. Larger diameter sprockets mean less belt width.
2. Larger diameter sprockets yield longer service life.
3. Longer center distances yield longer service life.
4. Less belt width mean lighter sprockets.

Example

Referring to the 8mm pitch Belt Width Selection tables on page 80, locate the 1160 rpm line in each table in turn. Proceeding across to the 42-groove sprocket column (Smaller sprocket groove number), note the base belt horsepower capacity in each table. The 21mm width belt has a base horsepower rating 26.2 hp. The additional Hp of 1.45 for a speed down ratio of 4.3 should be added to the base hp of 26.2, and equals 27.65 hp. This is then multiplied by the length correction factor of 1.22, which together exceeds the design horsepower.

27.65 hp x 1.22 = 33.73 hp

And, repeating the procedure for the 12mm width, we find that the base horsepower rating is 15 hp. This added to the speed ratio correction of 0.83, and multiplied by the length factor of 1.22, gives a corrected horsepower rating of 19.31 hp, which is below our design horsepower of 27 hp.

Step 5. Check and Specify Stock Drive Components.

Procedure

a. Check the sprockets selected in steps 3 and 4 against the design requirements using the dimensions given in the Sprocket Specification Tables on pages 84 through 91. Use flange diameter in checking against maximum diameter requirements.

Example

From the table on page 85, we find the F8M-180S-21-SF driveN sprocket has a pitch diameter of 18.046 inches.

Procedure

b. Determine the type of bushing and check bore sizes by using the Sprocket Specification Tables; find the bushings to be used with the required sprockets. From the Stock Bushing Tables on pages 100 through 104, check the bore range and keyway dimensions against the design requirements.

Example

Also from the sprocket data on page 85 we note that the F8M-42S-21-SH sprocket takes a SH bushing and the F8M-180S-21-SF sprocket takes a SF bushing. On page 101 in the bushing data table, a SH bushing has a bore range of 0.5 to 1.625 inches which includes the 1.5 inch bore requirement for the driver shaft. The SF bushing has a bore range from 0.5 to 2.8125 inches, which meets the 2-inch bore required for the driven shaft.

Notes: Taper Lock bushings and sprockets are also available.

Procedure

c. Specify stock drives components.

Example

Drive components are as follows:

1- 8MGT-2000-21 Poly Chain® GT® Carbon belt
1- F8M-42S-21-SH driver sprocket
1- SH Bushing with a 1-inch bore
1- F8M-180S-21-SF driven sprocket
1- SF Bushing with a 2-inch bore

Step 6: Examine Environmental Concerns.

Procedure

If moisture is present or a corrosive environment exists, then the use of Nickel-plated sprockets is recommended. Stock Nickel-plated sprockets are listed on page 17. Gates Made-to-Order Metals is also available for non-stock sizes.

ACHE Application Design Procedure and Example

Selection of a stock ACHE PowerGrip® GT®2 Belt drive system involves these six steps.

1. Calculate the design horsepower.
2. Select belt pitch.
3. Select sprockets and belt.
4. Select belt width.
5. Check and specify stock drive components.
6. Examine environmental concerns.

Sample Problem

An air-cooled heat exchanger that eliminates heat from a Chemical Refining process is driven by a 60 hp normal torque electric motor with an output speed of 1750 rpm. The cooling fan is to be driven at 350 rpm +-5%. The center distance is approximately 33.0 inches with a 2-inch adjustment outward and a 1-inch adjustment inward. The motor shaft is 2 inches and the fan shaft is 3 inches. Moisture is a concern and rust could be a problem. Design using PowerGrip GT2.

Step 1. Determine Design Horsepower

Procedure

The API standard API 661 states that a service factor of 1.8 should be used for all ACHE belt drives. To calculate design horsepower, multiply the rated horsepower (usually the nameplate rating) by 1.8.

Example

Design HP = 60 x 1.8 = 108 dhp

Step 2. Select Belt Pitch

Procedure

Using the design horsepower and the rpm of the faster shaft, select the belt pitch from Belt Pitch Selection Guide graph on page 26.

Example

Locate 1750 rpm on the RPM of Faster Shaft scale and move over to where the Design Horsepower of 108 dhp line intersects. The intersection falls within the 14 mm pitch area of the graph.

Step 3. Select Sprockets and Belt Length

Procedure

d. Determine speed ratio.
The speed ratio can be determined by dividing the rpm of the faster shaft by the rpm of the slower shaft rpm.

Example

$$\frac{\text{rpm of faster shaft}}{\text{rpm of slower shaft}} = 1750/350 = 5.00)$$

Procedure

e. Select sprocket combination and belt length.
Turn to the Stock Drive Selection Tables (pages 58 through 69 and 70 through 79) and in the proper pitch tables find the chosen speed ratio. Moving over within the speed ratio block, find the stock sprocket combinations available for that speed ratio. Selection of the proper combination will depend on the center distance required, minimum or maximum required sprocket diameter and the recommended minimum sprocket diameter for electric motors (See table on Page 111). After selecting possible sprocket combinations and center distances, record belt length (top of column) Length Factor (bottom of column), and the Teeth In Mesh Factor if applicable.

Example

First, using the Stock Drive Selection Tables for 14mm pitch belts on pages 70 through 79, we locate the speed ratio of 5.0 on pages 78 and 79. There nearest sprocket combination to the speed ratio of 5.00 is 200 to 40 with a ratio of 5.00. The minimum diameter for a 60 hp motor at 1750 rpm (See table on Page 111) is 6.7 inches. The diameter of the 40 tooth sprocket is 7.018 inches and is safe to use with the motor. One the line for the 40 to 200 sprocket combination, the center distance within the required tolerance range is 32.78 inches using the 3500 mm (137.795 inch), 14mm pitch belt. The belt length factor is 1.10 and is located at the bottom of the 3500mm belt length column.

Procedure

f. Check belt speed.
Do not exceed 6500 feet per minute (fpm) with stock sprockets. Belt speed is determined using the following formula:

$$V(fpm) = \frac{PD\ (inches) \times Speed\ (rpm)}{3.92}$$

Example

Determining belt speed for the 14mm drive systems shows that the belt speed does not exceed 6500 fpm and can be considered further.

V = 7.018 x 1750 / 3.82 = 3215.1 fpm

Step 4. Select Belt Width.

Procedure

Belt Width Selection Tables (pages 80 through 81) show the horsepower ranges of stock belt widths. The left-hand column shows the speed of the smaller sprocket. Across the top are various stock sprockets. The base rated horsepower capacity of a given sprocket at a specific rpm is at the point of intersection of the rpm row and sprocket column.

This base horsepower rating must be corrected for the belt length selected, the drive's speed ratio, and for the number of teeth in mesh (if applicable), all determined in Step 3. The corrected horsepower rating must equal or exceed design hp.

Where there are several choices, drive limitations may control the selection. In addition, the following rules must be observed.

1. Larger sprockets mean less belt width.
2. Larger sprockets yield longer service life.
3. Longer center distances yield longer service life.
4. Less belt width mean lighter sprockets.

Example

Referring to the 14mm pitch Belt Width Selection tables on page 81, locate the 1750 rpm line in each table in turn. Proceeding across to the 40-groove sprocket column (Smaller sprocket groove number), note the base belt horsepower capacity in each table. The 55mm width belt has a base horsepower rating 122.9 hp. This is then multiplied by the length correction factor of 1.10, which together exceeds the design horsepower.

122.9 hp x 1.10 = 135.2 hp

And, repeating the procedure for the 40mm width, we find that the base horsepower rating is 81.9 hp. This multiplied by the length factor of 1.10, gives a corrected horsepower rating of 90.1 hp, which is below our design horsepower of 108 hp.

Step 5. Check and Specify Stock Drive Components.

Procedure

a. Check the sprockets selected in steps 3 and 4 against the design requirements using the dimensions given in the Sprocket Specification Tables on pages 85 through 86, and 94 through 96. Use flange diameter in checking against maximum diameter requirements.

Example

From the table on page 86, we find the F200-14MGT-55-F driveN sprocket has a pitch diameter of 35.089 inches.

Procedure

b. Determine the type of bushing and check bore sizes by using the Sprocket Specification Tables; find the bushings to be used with the required sprockets. From the Stock Bushing Tables on pages 85 through 86, and 94 through 96, check the bore range and keyway dimensions against the design requirements.

Example

Also from the sprocket data on page 86 we note that the F40-14MGT-55 sprocket is a non-stock product and therefore a Taper-Lock P40-14MGT-55 sprocket on page 96 that takes a 2517 bushing will be used on the motor. The F200-14MGT-55-E sprocket takes a E bushing. On page 100 in the bushing data table, a 2517 bushing has a bore range of 0.5 to 2.688 inches, which includes the 2 inch bore requirement for the driver shaft. The E bushing on page 100 has a bore range from 0.875 to 3.50 inches, which meets the 3-inch bore required for the driven shaft.

Procedure

c. Specify stock drives components.

Example

Drive components are as follows:

1. 3500-14MGT-55 PowerGrip® GT®2 belt
2. P40-14MGT-55 driver sprocket
3. 2517 Bushing with a 2 inch bore
4. F200-14MGT-55-E driven sprocket
5. E Bushing with a 3-inch bore

Step 6: Examine Environmental Concerns.

Procedure

Since moisture is a major concern, then the use of Nickel-plated sprockets is recommended. Stock Nickel-plated sprockets are listed on page 17. Gates Made-to-Order Metals is also available for non-stock sizes.

ACHE Drive Survey and Energy Savings Worksheet

Customer Information

Distributor: _____

Customer: _____

DriveR Information

Drive Identification (location, number, etc.) _____

Description of DriveN Equipment: _____

Manufacturer of DriveN Equipment: _____

Motor Nameplate Data

Rated Horsepower = _____ Rated RPM = _____ Motor Type: AC ☐ DC ☐

Rated Voltage = _____ Rated Amps = _____ Motor Frame Size : _____

Measured Amps = _____ Measured Voltage = _____ Measured Speed (Tach/Strobe) = _____

Actual Motor Load = _____ Output Speed: Constant ☐ Variable ☐

Start Up Load: % Motor Rating at Startup AC Inverter? Yes ☐ No ☐ Soft Start? Yes ☐ No ☐

Existing Drive Information

Drive Type: _____ V-Belt ☐ Synchronous Belt ☐

Current Drive Service Life = _____ Belt Type/Size and Manufacturer = _____

DriveR Sprocket/Sheave = _____ (teeth/OD) DriveR Shaft Diameter = _____

DriveN Sprocket/Sheave = _____ (teeth/OD) DriveN Shaft Diameter = _____

Driven RPM= _____ Measured DriveN Speed (Strobe/Tach) = _____

Center Distance = _____ + _____ - _____

Type of Center Distance Adjustment: _____

Idler used: Yes ☐ No ☐ Inside ☐ Backside ☐

Motor Mount: Double Screw Base? Yes ☐ No ☐ Motor Mounted on Sheet Metal? Yes ☐ No ☐

Adequate Structure? Yes ☐ No ☐ Floating/Pivot Base? Yes ☐ No ☐

Hours/Day = _____ Days/Week = _____ Weeks/Year = _____

Special Requirements:

Space Limitations:

Maximum DriveR Dia. = _____ Maximim DriveN Dia = _____

Maximum DriveR Width = _____ Maximum DriveN Width = _____

Guard Description: _____

Environmental Conditions:

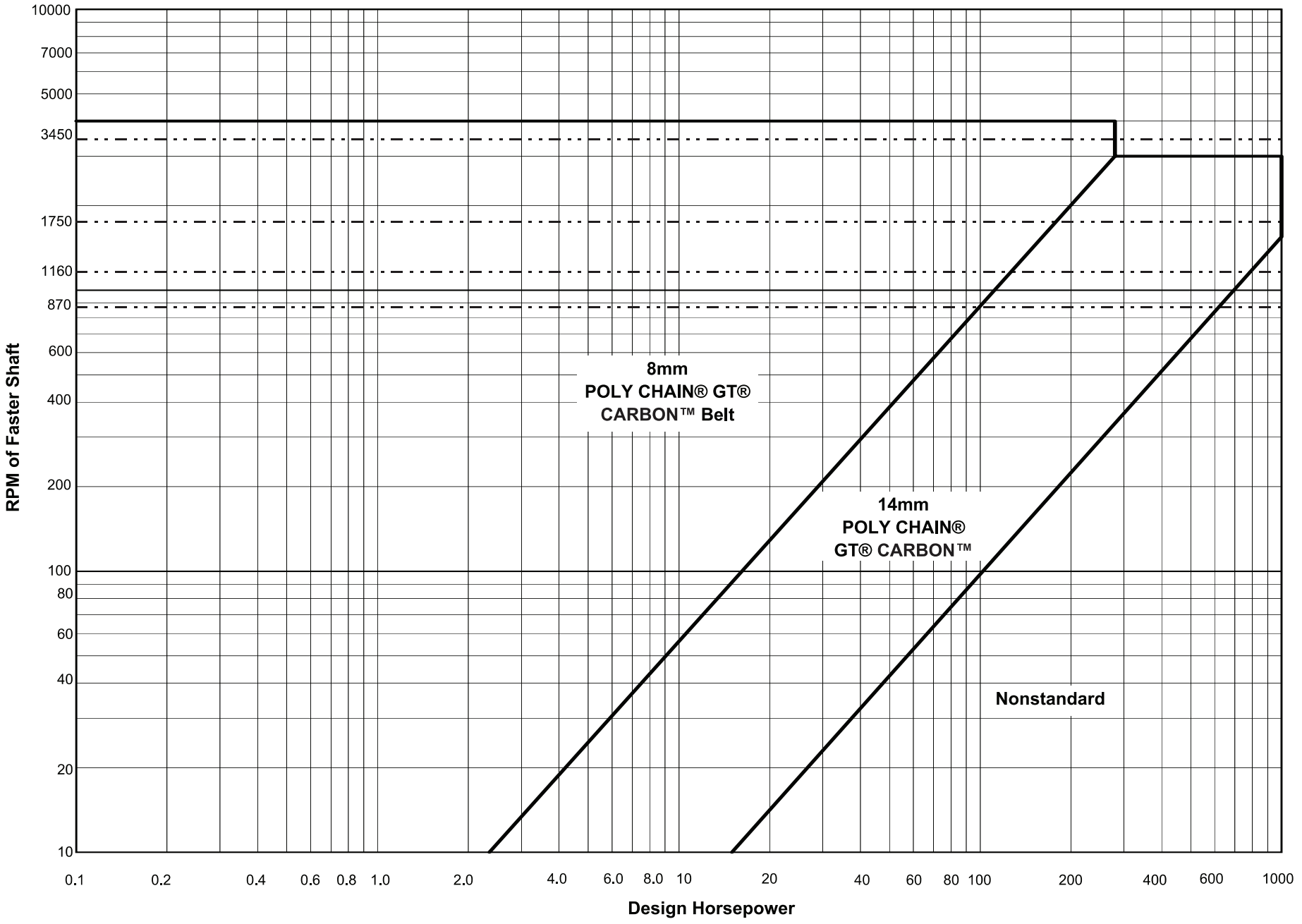
Temperature Range = _____ Belt Conductivity Required ☐

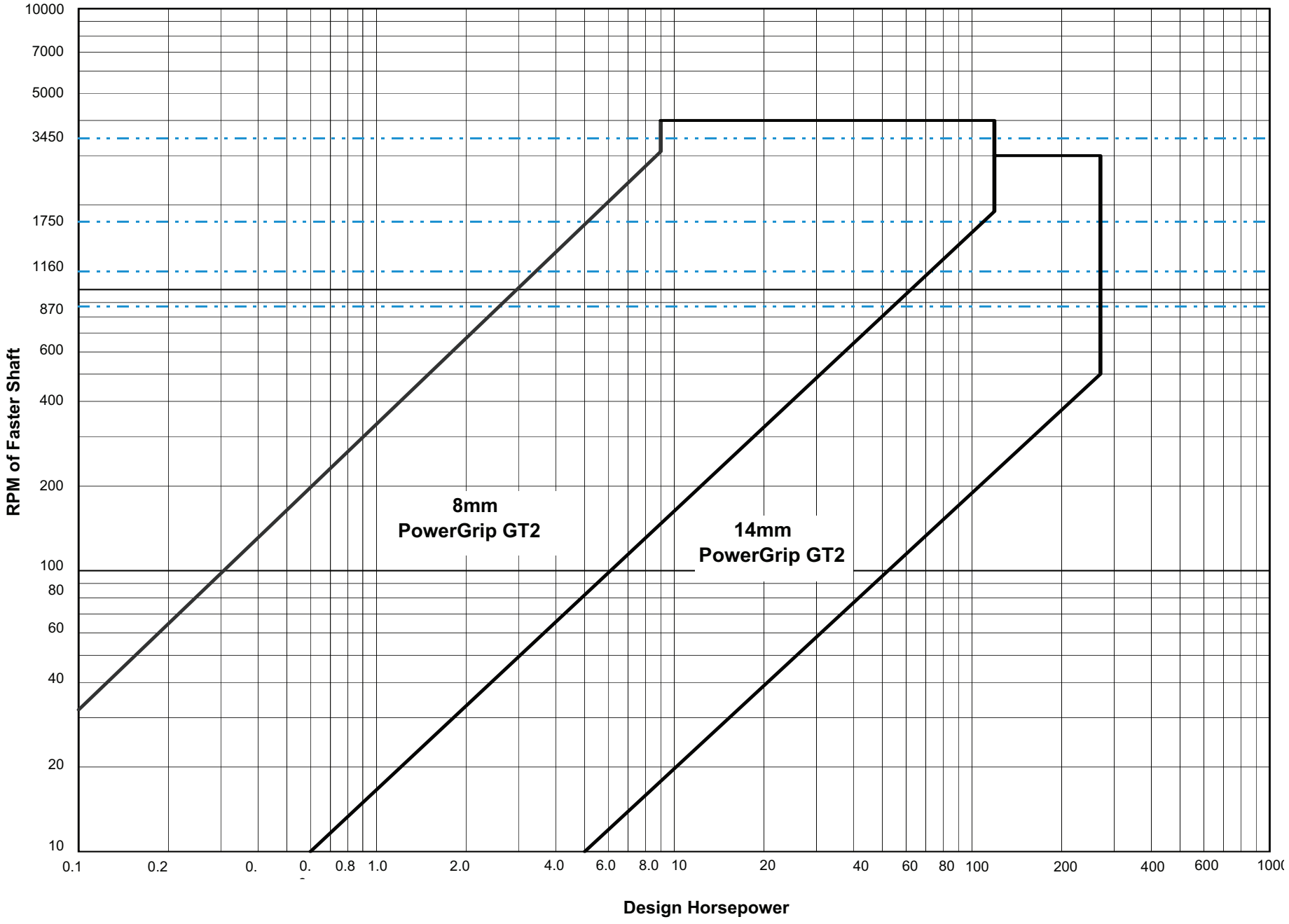
Moisture ☐

Energy Savings Information

Energy Cost per KW-Hour: _____

Hours of Operation: Hours per Day Days per Week Weeks per Year


RPM of Faster Shaft
10000
7000
5000
3450
1750
1160
870
600
400
200
100
80
60
40
20
10
8mm
POLY CHAIN® GT®
CARBON™ Belt
14mm
POLY CHAIN®
GT® CARBON™
Nonstandard
0.1
0.2
0.4
0.6
0.8
1.0
2.0
4.0
6.0
8.0
10
20
40
60
80
100
200
400
600
1000
Design Horsepower


RPM of Faster Shaft
10000
7000
5000
3450
1750
1160
870
600
400
200
100
80
60
40
20
10
8mm
PowerGrip GT2
14mm
PowerGrip GT2
0.1
0.2
0.8
1.0
2.0
4.0
6.0
8.0
10
20
40
60
80
100
200
400
600
Design Horsepower

Service Factor Selection

According to API standard API 661 (Air-Cooled Heat Exchangers for General Refinery Service), a safety factor of 1.8 must be used to design the belt drive.

Air-Cooled Heat Exchanger Drive Service Factor

	Service Factor*
All ACHE Drives (For use in general refinery service)	1.8

*As defined by API standard API 661.

8mm Pitch Poly Chain® GT® Carbon™ Belts Drive Selection Table

Sprocket Combinations				Speed Ratio	Center Distance, Inches													
DriveR		DriveN			8MGT-640 P.L. 25.20 80 Teeth	8MGT-720 P.L. 28.35 90 Teeth	8MGT-800 P.L. 31.50 100 Teeth	8MGT-896 P.L. 35.28 112 Teeth	8MGT-960 P.L. 37.80 120 Teeth	8MGT-1000 P.L. 39.37 125 Teeth	8MGT-1040 P.L. 40.94 130 Teeth	8MGT-1120 P.L. 44.09 140 Teeth	8MGT-1200 P.L. 47.24 150 Teeth	8MGT-1224 P.L. 48.19 153 Teeth	8MGT-1280 P.L. 50.39 160 Teeth	8MGT-1440 P.L. 56.69 180 Teeth	8MGT-1600 P.L. 62.99 200Teeth	8MGT-1760 P.L. 69.29 220 Teeth
Number of Grooves	Pitch Diameter (Inches)	Number of Grooves	Pitch Diameter (Inches)															
22	2.206	22	2.206	1.000	9.13	10.71	12.28	14.17	15.43	16.22	17.00	18.58	20.15	20.63	21.73	24.88	28.03	31.18
25	2.506	25	2.506	1.000	8.66	10.24	11.81	13.70	14.96	15.75	16.53	18.11	19.68	20.16	21.26	24.41	27.56	30.71
26	2.607	26	2.607	1.000	8.50	10.08	11.65	13.54	14.80	15.59	16.37	17.95	19.52	20.00	21.10	24.25	27.40	30.55
27	2.707	27	2.707	1.000	8.35	9.92	11.50	13.39	14.65	15.43	16.22	17.79	19.37	19.84	20.94	24.09	27.24	30.39
28	2.807	28	2.807	1.000	8.19	9.77	11.34	13.23	14.49	15.28	16.06	17.64	19.21	19.69	20.79	23.94	27.09	30.24
29	2.907	29	2.907	1.000	8.03	9.61	11.18	13.07	14.33	15.12	15.90	17.48	19.05	19.53	20.63	23.78	26.93	30.08
30	3.008	30	3.008	1.000	7.88	9.45	11.03	12.92	14.18	14.96	15.75	17.32	18.90	19.37	20.47	23.62	26.77	29.92
31	3.108	31	3.108	1.000	7.72	9.29	10.87	12.76	14.02	14.80	15.59	17.16	18.74	19.21	20.31	23.46	26.61	29.76
32	3.208	32	3.208	1.000	7.56	9.14	10.71	12.60	13.86	14.65	15.43	17.01	18.58	19.06	20.16	23.31	26.46	29.61
33	3.308	33	3.308	1.000	7.40	8.98	10.55	12.44	13.70	14.49	15.27	16.85	18.42	18.90	20.00	23.15	26.30	29.45
34	3.409	34	3.409	1.000	7.25	8.82	10.40	12.29	13.55	14.33	15.12	16.69	18.27	18.74	19.84	22.99	26.14	29.29
35	3.509	35	3.509	1.000	7.09	8.66	10.24	12.13	13.39	14.17	14.96	16.53	18.11	18.58	19.68	22.83	25.98	29.13
36	3.609	36	3.609	1.000	6.93	8.51	10.08	11.97	13.23	14.02	14.80	16.38	17.95	18.43	19.53	22.68	25.83	28.98
37	3.709	37	3.709	1.000	6.77	8.35	9.92	11.81	13.07	13.86	14.64	16.22	17.79	18.27	19.37	22.52	25.67	28.82
38	3.810	38	3.810	1.000	6.62	8.19	9.77	11.66	12.92	13.70	14.49	16.06	17.64	18.11	19.21	22.36	25.51	28.66
39	3.910	39	3.910	1.000	6.46	8.03	9.61	11.50	12.76	13.54	14.33	15.90	17.48	17.95	19.05	22.20	25.35	28.50
40	4.010	40	4.010	1.000	6.30	7.88	9.45	11.34	12.60	13.39	14.17	15.75	17.32	17.80	18.90	22.05	25.20	28.35
41	4.110	41	4.110	1.000	6.14	7.72	9.29	11.18	12.44	13.23	14.01	15.59	17.16	17.64	18.74	21.89	25.04	28.19
42	4.211	42	4.211	1.000	5.99	7.56	9.14	11.03	12.29	13.07	13.86	15.43	17.01	17.48	18.58	21.73	24.88	28.03
45	4.511	45	4.511	1.000	5.51	7.09	8.66	10.55	11.81	12.60	13.38	14.96	16.53	17.01	18.11	21.26	24.41	27.56
48	4.812	48	4.812	1.000		6.62	8.19	10.08	11.34	12.13	12.91	14.49	16.06	16.54	17.64	20.79	23.94	27.09
50	5.013	50	5.013	1.000		6.30	7.88	9.77	11.03	11.81	12.60	14.17	15.75	16.22	17.32	20.47	23.62	26.77
53	5.314	53	5.314	1.000		5.83	7.40	9.29	10.55	11.34	12.12	13.70	15.27	15.75	16.85	20.00	23.15	26.30
56	5.614	56	5.614	1.000			6.93	8.82	10.08	10.87	11.65	13.23	14.80	15.28	16.38	19.53	22.68	25.83
60	6.015	60	6.015	1.000				8.19	9.45	10.24	11.02	12.60	14.17	14.65	15.75	18.90	22.05	25.20
63	6.316	63	6.316	1.000				7.72	8.98	9.76	10.55	12.12	13.70	14.17	15.27	18.42	21.57	24.72
67	6.717	67	6.717	1.000					8.35	9.13	9.92	11.49	13.07	13.54	14.64	17.79	20.94	24.09
71	7.118	71	7.118	1.000					7.72	8.50	9.29	10.86	12.44	12.91	14.01	17.16	20.31	23.46
75	7.519	75	7.519	1.000							8.66	10.23	11.81	12.28	13.38	16.53	19.68	22.83
80	8.020	80	8.020	1.000								9.45	11.02	11.50	12.60	15.75	18.90	22.05
41	4.110	42	4.211	1.024	6.06	7.64	9.21	11.10	12.36	13.15	13.93	15.51	17.08	17.56	18.66	21.81	24.96	28.11
40	4.010	41	4.110	1.025	6.22	7.80	9.37	11.26	12.52	13.31	14.09	15.67	17.24	17.72	18.82	21.97	25.12	28.27
38	3.810	39	3.910	1.026	6.54	8.11	9.69	11.58	12.84	13.62	14.41	15.98	17.56	18.03	19.13	22.28	25.43	28.58
39	3.910	40	4.010	1.026	6.38	7.95	9.53	11.42	12.68	13.46	14.25	15.82	17.40	17.87	18.97	22.12	25.27	28.42
37	3.709	38	3.810	1.027	6.69	8.27	9.84	11.73	12.99	13.78	14.56	16.14	17.71	18.19	19.29	22.44	25.59	28.74
36	3.609	37	3.709	1.028	6.85	8.43	10.00	11.89	13.15	13.94	14.72	16.30	17.87	18.35	19.45	22.60	25.75	28.90
34	3.409	35	3.509	1.029	7.17	8.74	10.32	12.21	13.47	14.25	15.04	16.61	18.19	18.66	19.76	22.91	26.06	29.21
35	3.509	36	3.609	1.029	7.01	8.58	10.16	12.05	13.31	14.09	14.88	16.45	18.03	18.50	19.60	22.75	25.90	29.05
33	3.308	34	3.409	1.030	7.32	8.90	10.47	12.36	13.62	14.41	15.19	16.77	18.34	18.82	19.92	23.07	26.22	29.37
32	3.208	33	3.308	1.031	7.48	9.06	10.63	12.52	13.78	14.57	15.35	16.93	18.50	18.98	20.08	23.23	26.38	29.53
31	3.108	32	3.208	1.032	7.64	9.21	10.79	12.68	13.94	14.72	15.51	17.08	18.66	19.13	20.23	23.38	26.53	29.68
30	3.008	31	3.108	1.033	7.80	9.37	10.95	12.84	14.10	14.88	15.67	17.24	18.82	19.29	20.39	23.54	26.69	29.84
29	2.907	30	3.008	1.034	7.95	9.53	11.10	12.99	14.25	15.04	15.82	17.40	18.97	19.45	20.55	23.70	26.85	30.00
28	2.807	29	2.907	1.036	8.11	9.69	11.26	13.15	14.41	15.20	15.98	17.56	19.13	19.61	20.71	23.86	27.01	30.16
27	2.707	28	2.807	1.037	8.27	9.84	11.42	13.31	14.57	15.35	16.14	17.71	19.29	19.76	20.86	24.01	27.16	30.31
26	2.607	27	2.707	1.038	8.43	10.00	11.58	13.47	14.73	15.51	16.30	17.87	19.45	19.92	21.02	24.17	27.32	30.47
25	2.506	26	2.607	1.040	8.58	10.16	11.73	13.62	14.88	15.67	16.45	18.03	19.60	20.08	21.18	24.33	27.48	30.63
48	4.812	50	5.013	1.042		6.46	8.03	9.92	11.18	11.97	12.75	14.33	15.90	16.38	17.48	20.63	23.78	26.93
40	4.010	42	4.211	1.050	6.14	7.72	9.29	11.18	12.44	13.23	14.01	15.59	17.16	17.64	18.74	21.89	25.04	28.19
60	6.015	63	6.316	1.050				7.95	9.21	10.00	10.78	12.36	13.93	14.41	15.51	18.66	21.81	24.96
39	3.910	41	4.110	1.051	6.30	7.88	9.45	11.34	12.60	13.39	14.17	15.75	17.32	17.80	18.90	22.05	25.20	28.35
38	3.810	40	4.010	1.053	6.46	8.03	9.61	11.50	12.76	13.54	14.33	15.90	17.48	17.95	19.05	22.20	25.35	28.50
37	3.709	39	3.910	1.054	6.62	8.19	9.77	11.66	12.92	13.70	14.49	16.06	17.64	18.11	19.21	22.36	25.51	28.66
36	3.609	38	3.810	1.056	6.77	8.35	9.92	11.81	13.07	13.86	14.64	16.22	17.79	18.27	19.37	22.52	25.67	28.82
71	7.118	75	7.519	1.056						8.19	8.97	10.55	12.12	12.60	13.70	16.85	20.00	23.15
35	3.509	37	3.709	1.057	6.93	8.51	10.08	11.97	13.23	14.02	14.80	16.38	17.95	18.43	19.53	22.68	25.83	28.98
53	5.314	56	5.614	1.057			7.17	9.06	10.32	11.10	11.89	13.46	15.04	15.51	16.61	19.76	22.91	26.06
34	3.409	36	3.609	1.059	7.09	8.66	10.24	12.13	13.39	14.17	14.96	16.53	18.11	18.58	19.68	22.83	25.98	29.13
50	5.013	53	5.314	1.060		6.06	7.64	9.53	10.79	11.57	12.36	13.93	15.51	15.98	17.08	20.23	23.38	26.53
67	6.717	71	7.118	1.060					8.03	8.82	9.60	11.18	12.75	13.23	14.33	17.48	20.63	23.78
33	3.308	35	3.509	1.061	7.25	8.82	10.40	12.29	13.55	14.33	15.12	16.69	18.27	18.74	19.84	22.99	26.14	29.29
32	3.208	34	3.409	1.063	7.40	8.98	10.55	12.44	13.70	14.49	15.27	16.85	18.42	18.90	20.00	23.15	26.30	29.45
63	6.316	67	6.717	1.063				7.40	8.66	9.45	10.23	11.81	13.38	13.86	14.96	18.11	21.26	24.41
31	3.108	33	3.308	1.065	7.56	9.14	10.71	12.60	13.86	14.65	15.43	17.01	18.58	19.06	20.16	23.31	26.46	29.61
30	3.008	32	3.208	1.067	7.72	9.29	10.87	12.76	14.02	14.80	15.59	17.16	18.74	19.21	20.31	23.46	26.61	29.76
45	4.511	48	4.812	1.067	5.28	6.85	8.43	10.32	11.58	12.36	13.15	14.72	16.30	16.77	17.87	21.02	24.17	27.32
75	7.519	80	8.020	1.067								9.84	11.41	11.89	12.99	16.14	19.29	22.44
29	2.907	31	3.108	1.069	7.88	9.45	11.03	12.92	14.18	14.96	15.75	17.32	18.90	19.37	20.47	23.62	26.77	29.92
28	2.807	30	3.008	1.071	8.03	9.61	11.18	13.07	14.33	15.12	15.90	17.48	19.05	19.53	20.63	23.78	26.93	30.08
42	4.211	45	4.511	1.071	5.75	7.32	8.90	10.79	12.05	12.83	13.62	15.19	16.77	17.24	18.34	21.49	24.64	27.79
56	5.614	60	6.015	1.071			6.61	8.50	9.76	10.55	11.33	12.91	14.49	14.96	16.06	19.21	22.36	25.51
27	2.707	29	2.907	1.074	8.19	9.77	11.34	13.23	14.49	15.28	16.06	17.64	19.21	19.69	20.79	23.94	27.09	30.24
26	2.607	28	2.807	1.077	8.35	9.92	11.50	13.39	14.65	15.43	16.22	17.79	19.37	19.84	20.94	24.09	27.24	30.39
39	3.910	42	4.211	1.077	6.22	7.80	9.37	11.26	12.52	13.31	14.09	15.67	17.24	17.72	18.82	21.97	25.12	28.27
38	3.810	41	4.110	1.079	6.38	7.95	9.53	11.42	12.68	13.46	14.25	15.82	17.40	17.87	18.97	22.12	25.27	28.42
25	2.506	27	2.707	1.080	8.51	10.08	11.66	13.55	14.81	15.59	16.38	17.95	19.53	20.00	21.10	24.25	27.40	30.55
37	3.709	40	4.010	1.081	6.54	8.11	9.69	11.58	12.84	13.62	14.41	15.98	17.56	18.03	19.13	22.28	25.43	28.58
				Length Factor*	0.79	0.83	0.87	0.91	0.94	0.96	0.97	1.00	1.03	1.03	1.05	1.10	1.14	1.17

Note: 26, 27, 29 and 31 groove sprockets are only available as stock products in 12 and 21 mm widths. 33, 35, 37, 39 and 41 groove sprockets are only available as stock products in 12, 21, and 36 mm widths.
Check sprocket specification tables on pages 17 and 18 for stainless steel and nickel plated sprocket availability.
* This length factor must be used to determine the proper belt width.

8mm Pitch Poly Chain® GT® Carbon™ Belts Drive Selection Table

Center Distance, Inches																Speed Ratio	Sprocket Combinations	
																	DriveR	DriveR
8MGT-1792 P.L. 70.55 224Teeth	8MGT-2000 P.L. 78.74 250 Teeth	8MGT-2200 P.L. 86.61 275 Teeth	8MGT-2240 P.L. 88.19 280 Teeth	8MGT-2400 P.L. 94.49 300 Teeth	8MGT-2520 P.L. 99.21 315 Teeth	8MGT-2600 P.L. 102.36 325 Teeth	8MGT-2800 P.L. 110.24 350 Teeth	8MGT-2840 P.L. 111.81 355 Teeth	8MGT-3048 P.L. 120.00 381 Teeth	8MGT-3200 P.L. 125.98 400 Teeth	8MGT-3280 P.L. 129.13 410 Teeth	8MGT-3600 P.L. 141.73 450 Teeth	8MGT-4000 P.L. 157.48 500 Teeth	8MGT-4400 P.L. 173.23 550 Teeth	8MGT-4480 P.L. 176.38 560 Teeth		Number of Grooves	Number of Grooves
31.81	35.90	39.84	40.63	43.78	46.14	47.71	51.65	52.44	56.53	59.52	61.10	67.40	75.27	83.15	84.72	1.000	22	22
31.34	35.43	39.37	40.16	43.31	45.67	47.24	51.18	51.97	56.06	59.05	60.63	66.93	74.80	82.68	84.25	1.000	25	25
31.18	35.27	39.21	40.00	43.15	45.51	47.08	51.02	51.81	55.90	58.89	60.47	66.77	74.64	82.52	84.09	1.000	26	26
31.02	35.12	39.05	39.84	42.99	45.35	46.93	50.87	51.65	55.75	58.74	60.31	66.61	74.49	82.36	83.94	1.000	27	27
30.87	34.96	38.90	39.69	42.84	45.20	46.77	50.71	51.50	55.59	58.58	60.16	66.46	74.33	82.21	83.78	1.000	28	28
30.71	34.80	38.74	39.53	42.68	45.04	46.61	50.55	51.34	55.43	58.42	60.00	66.30	74.17	82.05	83.62	1.000	29	29
30.55	34.65	38.58	39.37	42.52	44.88	46.46	50.40	51.18	55.28	58.27	59.84	66.14	74.02	81.89	83.47	1.000	30	30
30.39	34.49	38.42	39.21	42.36	44.72	46.30	50.24	51.02	55.12	58.11	59.68	65.98	73.86	81.73	83.31	1.000	31	31
30.24	34.33	38.27	39.06	42.21	44.57	46.14	50.08	50.87	54.96	57.95	59.53	65.83	73.70	81.58	83.15	1.000	32	32
30.08	34.17	38.11	38.90	42.05	44.41	45.98	49.92	50.71	54.80	57.79	59.37	65.67	73.54	81.42	82.99	1.000	33	33
29.92	34.02	37.95	38.74	41.89	44.25	45.83	49.77	50.55	54.65	57.64	59.21	65.51	73.39	81.26	82.84	1.000	34	34
29.76	33.86	37.79	38.58	41.73	44.09	45.67	49.61	50.39	54.49	57.48	59.05	65.35	73.23	81.10	82.68	1.000	35	35
29.61	33.70	37.64	38.43	41.58	43.94	45.51	49.45	50.24	54.33	57.32	58.90	65.20	73.07	80.95	82.52	1.000	36	36
29.45	33.54	37.48	38.27	41.42	43.78	45.35	49.29	50.08	54.17	57.16	58.74	65.04	72.91	80.79	82.36	1.000	37	37
29.29	33.39	37.32	38.11	41.26	43.62	45.20	49.14	49.92	54.02	57.01	58.58	64.88	72.76	80.63	82.21	1.000	38	38
29.13	33.23	37.16	37.95	41.10	43.46	45.04	48.98	49.76	53.86	56.85	58.42	64.72	72.60	80.47	82.05	1.000	39	39
28.98	33.07	37.01	37.80	40.95	43.31	44.88	48.82	49.61	53.70	56.69	58.27	64.57	72.44	80.32	81.89	1.000	40	40
28.82	32.91	36.85	37.64	40.79	43.15	44.72	48.66	49.45	53.54	56.53	58.11	64.41	72.28	80.16	81.73	1.000	41	41
28.66	32.76	36.69	37.48	40.63	42.99	44.57	48.51	49.29	53.39	56.38	57.95	64.25	72.13	80.00	81.58	1.000	42	42
28.19	32.28	36.22	37.01	40.16	42.52	44.09	48.03	48.82	52.91	55.90	57.48	63.78	71.65	79.53	81.10	1.000	45	45
27.72	31.81	35.75	36.54	39.69	42.05	43.62	47.56	48.35	52.44	55.43	57.01	63.31	71.18	79.06	80.63	1.000	48	48
27.40	31.50	35.43	36.22	39.37	41.73	43.31	47.25	48.03	52.13	55.12	56.69	62.99	70.87	78.74	80.32	1.000	50	50
26.93	31.02	34.96	35.75	38.90	41.26	42.83	46.77	47.56	51.65	54.64	56.22	62.52	70.39	78.27	79.84	1.000	53	53
26.46	30.55	34.49	35.28	38.43	40.79	42.36	46.30	47.09	51.18	54.17	55.75	62.05	69.92	77.80	79.37	1.000	56	56
25.83	29.92	33.86	34.65	37.80	40.16	41.73	45.67	46.46	50.55	53.54	55.12	61.42	69.29	77.17	78.74	1.000	60	60
25.35	29.45	33.38	34.17	37.32	39.68	41.26	45.20	45.98	50.08	53.07	54.64	60.94	68.82	76.69	78.27	1.000	63	63
24.72	28.82	32.75	33.54	36.69	39.05	40.63	44.57	45.35	49.45	52.44	54.01	60.31	68.19	76.06	77.64	1.000	67	67
24.09	28.19	32.12	32.91	36.06	38.42	40.00	43.94	44.72	48.82	51.81	53.38	59.68	67.56	75.43	77.01	1.000	71	71
23.46	27.56	31.49	32.28	35.43	37.79	39.37	43.31	44.09	48.19	51.18	52.75	59.05	66.93	74.80	76.38	1.000	75	75
22.68	26.77	30.71	31.50	34.65	37.01	38.58	42.52	43.31	47.40	50.39	51.97	58.27	66.14	74.02	75.59	1.000	80	80
28.74	32.83	36.77	37.56	40.71	43.07	44.64	48.58	49.37	53.46	56.45	58.03	64.33	72.20	80.08	81.65	1.024	41	42
28.90	32.99	36.93	37.72	40.87	43.23	44.80	48.74	49.53	53.62	56.61	58.19	64.49	72.36	80.24	81.81	1.025	40	41
29.21	33.31	37.24	38.03	41.18	43.54	45.12	49.06	49.84	53.94	56.93	58.50	64.80	72.68	80.55	82.13	1.026	38	39
29.05	33.15	37.08	37.87	41.02	43.38	44.96	48.90	49.68	53.78	56.77	58.34	64.64	72.52	80.39	81.97	1.026	39	40
29.37	33.46	37.40	38.19	41.34	43.70	45.27	49.21	50.00	54.09	57.08	58.66	64.96	72.83	80.71	82.28	1.027	37	38
29.53	33.62	37.56	38.35	41.50	43.86	45.43	49.37	50.16	54.25	57.24	58.82	65.12	72.99	80.87	82.44	1.028	36	37
29.84	33.94	37.87	38.66	41.81	44.17	45.75	49.69	50.47	54.57	57.56	59.13	65.43	73.31	81.18	82.76	1.029	34	35
29.68	33.78	37.71	38.50	41.65	44.01	45.59	49.53	50.31	54.41	57.40	58.97	65.27	73.15	81.02	82.60	1.029	35	36
30.00	34.09	38.03	38.82	41.97	44.33	45.90	49.84	50.63	54.72	57.71	59.29	65.59	73.46	81.34	82.91	1.030	33	34
30.16	34.25	38.19	38.98	42.13	44.49	46.06	50.00	50.79	54.88	57.87	59.45	65.75	73.62	81.50	83.07	1.031	32	33
30.31	34.41	38.34	39.13	42.28	44.64	46.22	50.16	50.94	55.04	58.03	59.60	65.90	73.78	81.65	83.23	1.032	31	32
30.47	34.57	38.50	39.29	42.44	44.80	46.38	50.32	51.10	55.20	58.19	59.76	66.06	73.94	81.81	83.39	1.033	30	31
30.63	34.72	38.66	39.45	42.60	44.96	46.53	50.47	51.26	55.35	58.34	59.92	66.22	74.09	81.97	83.54	1.034	29	30
30.79	34.88	38.82	39.61	42.76	45.12	46.69	50.63	51.42	55.51	58.50	60.08	66.38	74.25	82.13	83.70	1.036	28	29
30.94	35.04	38.97	39.76	42.91	45.27	46.85	50.79	51.57	55.67	58.66	60.23	66.53	74.41	82.28	83.86	1.037	27	28
31.10	35.20	39.13	39.92	43.07	45.43	47.01	50.95	51.73	55.83	58.82	60.39	66.69	74.57	82.44	84.02	1.038	26	27
31.26	35.35	39.29	40.08	43.23	45.59	47.16	51.10	51.89	55.98	58.97	60.55	66.85	74.72	82.60	84.17	1.040	25	26
27.56	31.65	35.59	36.38	39.53	41.89	43.46	47.40	48.19	52.28	55.27	56.85	63.15	71.02	78.90	80.47	1.042	48	50
28.82	32.91	36.85	37.64	40.79	43.15	44.72	48.66	49.45	53.54	56.53	58.11	64.41	72.28	80.16	81.73	1.050	40	42
25.59	29.68	33.62	34.41	37.56	39.92	41.49	45.44	46.22	50.32	53.31	54.88	61.18	69.06	76.93	78.51	1.050	60	63
28.98	33.07	37.01	37.80	40.95	43.31	44.88	48.82	49.61	53.70	56.69	58.27	64.57	72.44	80.32	81.89	1.051	39	41
29.13	33.23	37.16	37.95	41.10	43.46	45.04	48.98	49.76	53.86	56.85	58.42	64.72	72.60	80.47	82.05	1.053	38	40
29.29	33.39	37.32	38.11	41.26	43.62	45.20	49.14	49.92	54.02	57.01	58.58	64.88	72.76	80.63	82.21	1.054	37	39
29.45	33.54	37.48	38.27	41.42	43.78	45.35	49.29	50.08	54.17	57.16	58.74	65.04	72.91	80.79	82.36	1.056	36	38
23.78	27.87	31.81	32.60	35.75	38.11	39.68	43.62	44.41	48.50	51.49	53.07	59.37	67.24	75.12	76.69	1.056	71	75
29.61	33.70	37.64	38.43	41.58	43.94	45.51	49.45	50.24	54.33	57.32	58.90	65.20	73.07	80.95	82.52	1.057	35	37
26.69	30.79	34.72	35.51	38.66	41.02	42.60	46.54	47.32	51.42	54.41	55.98	62.28	70.16	78.03	79.61	1.057	53	56
29.76	33.86	37.79	38.58	41.73	44.09	45.67	49.61	50.39	54.49	57.48	59.05	65.35	73.23	81.10	82.68	1.059	34	36
27.16	31.26	35.19	35.98	39.13	41.49	43.07	47.01	47.79	51.89	54.88	56.45	62.75	70.63	78.50	80.08	1.060	50	53
24.41	28.50	32.44	33.23	36.38	38.74	40.31	44.25	45.04	49.13	52.12	53.70	60.00	67.87	75.75	77.32	1.060	67	71
29.92	34.02	37.95	38.74	41.89	44.25	45.83	49.77	50.55	54.65	57.64	59.21	65.51	73.39	81.26	82.84	1.061	33	35
30.08	34.17	38.11	38.90	42.05	44.41	45.98	49.92	50.71	54.80	57.79	59.37	65.67	73.54	81.42	82.99	1.063	32	34
25.04	29.13	33.07	33.86	37.01	39.37	40.94	44.88	45.67	49.76	52.75	54.33	60.63	68.50	76.38	77.95	1.063	63	67
30.24	34.33	38.27	39.06	42.21	44.57	46.14	50.08	50.87	54.96	57.95	59.53	65.83	73.70	81.58	83.15	1.065	31	33
30.39	34.49	38.42	39.21	42.36	44.72	46.30	50.24	51.02	55.12	58.11	59.68	65.98	73.86	81.73	83.31	1.067	30	32
27.95	32.05	35.98	36.77	39.92	42.28	43.86	47.80	48.58	52.68	55.67	57.24	63.54	71.42	79.29	80.87	1.067	45	48
23.07	27.16	31.10	31.89	35.04	37.40	38.97	42.91	43.70	47.80	50.79	52.36	58.66	66.54	74.41	75.99	1.067	75	80
30.55	34.65	38.58	39.37	42.52	44.88	46.46	50.40	51.18	55.28	58.27	59.84	66.14	74.02	81.89	83.47	1.069	29	31
30.71	34.80	38.74	39.53	42.68	45.04	46.61	50.55	51.34	55.43	58.42	60.00	66.30	74.17	82.05	83.62	1.071	28	30
28.42	32.52	36.45	37.24	40.39	42.75	44.33	48.27	49.05	53.15	56.14	57.71	64.01	71.89	79.76	81.34	1.071	42	45
26.14	30.24	34.17	34.96	38.11	40.47	42.05	45.99	46.77	50.87	53.86	55.43	61.73	69.61	77.48	79.06	1.071	56	60
30.87	34.96	38.90	39.69	42.84	45.20	46.77	50.71	51.50	55.59	58.58	60.16	66.46	74.33	82.21	83.78	1.074	27	29
31.02	35.12	39.05	39.84	42.99	45.35	46.93	50.87	51.65	55.75	58.74	60.31	66.61	74.49	82.36	83.94	1.077	26	28
28.90	32.99	36.93	37.72	40.87	43.23	44.80	48.74	49.53	53.62	56.61	58.19	64.49	72.36	80.24	81.81	1.077	39	42
29.05	33.15	37.08	37.87	41.02	43.38	44.96	48.90	49.68	53.78	56.77	58.34	64.64	72.52	80.39	81.97	1.079	38	41
31.18	35.28	39.21	40.00	43.15	45.51	47.09	51.03	51.81	55.91	58.90	60.47	66.77	74.65	82.52	84.10	1.080	25	27
29.21	33.31	37.24	38.03	41.18	43.54	45.12	49.06	49.84	53.94	56.93	58.50	64.80	72.68	80.55	82.13	1.081	37	40
1.18	1.22	1.26	1.26	1.29	1.31	1.32	1.35	1.36	1.38	1.40	1.41	1.45	1.49	1.52	1.53	Length Factor*		

Note: 26, 27, 29 and 31 groove sprockets are only available as stock products in 12 and 21 mm widths. 33, 35, 37, 39 and 41 groove sprockets are only available as stock products in 12, 21, and 36 mm widths. Check sprocket specification tables on pages 17 and 18 for stainless steel and nickel plated sprocket availability.

* This length factor must be used to determine the proper belt width.

8mm Pitch Poly Chain® GT® Carbon™ Belts Drive Selection Table

Sprocket Combinations					Center Distance, Inches													
DriveR		DriveN																
Number of Grooves	Pitch Diameter (Inches)	Number of Grooves	Pitch Diameter (Inches)	Speed Ratio	8MGT-640 P.L. 25.20 80 Teeth	8MGT-720 P.L. 28.35 90 Teeth	8MGT-800 P.L. 31.50 100 Teeth	8MGT-896 P.L. 35.28 112 Teeth	8MGT-960 P.L. 37.80 120 Teeth	8MGT-1000 P.L. 39.37 125 Teeth	8MGT-1040 P.L. 40.94 130 Teeth	8MGT-1120 P.L. 44.09 140 Teeth	8MGT-1200 P.L. 47.24 150 Teeth	8MGT-1224 P.L. 48.19 153 Teeth	8MGT-1280 P.L. 50.39 160 Teeth	8MGT-1440 P.L. 56.69 180 Teeth	8MGT-1600 P.L. 62.99 200Teeth	8MGT-1760 P.L. 69.29 220 Teeth
36	3.609	39	3.910	1.083	6.69	8.27	9.84	11.73	12.99	13.78	14.56	16.14	17.71	18.19	19.29	22.44	25.59	28.74
35	3.509	38	3.810	1.086	6.85	8.43	10.00	11.89	13.15	13.94	14.72	16.30	17.87	18.35	19.45	22.60	25.75	28.90
34	3.409	37	3.709	1.088	7.01	8.58	10.16	12.05	13.31	14.09	14.88	16.45	18.03	18.50	19.60	22.75	25.90	29.05
33	3.308	36	3.609	1.091	7.17	8.74	10.32	12.21	13.47	14.25	15.04	16.61	18.19	18.66	19.76	22.91	26.06	29.21
32	3.208	35	3.509	1.094	7.32	8.90	10.47	12.36	13.62	14.41	15.19	16.77	18.34	18.82	19.92	23.07	26.22	29.37
31	3.108	34	3.409	1.097	7.48	9.06	10.63	12.52	13.78	14.57	15.35	16.93	18.50	18.98	20.08	23.23	26.38	29.53
41	4.110	45	4.511	1.098	5.83	7.40	8.98	10.87	12.13	12.91	13.70	15.27	16.85	17.32	18.42	21.57	24.72	27.87
30	3.008	33	3.308	1.100	7.64	9.21	10.79	12.68	13.94	14.72	15.51	17.08	18.66	19.13	20.23	23.38	26.53	29.68
29	2.907	32	3.208	1.103	7.80	9.37	10.95	12.84	14.10	14.88	15.67	17.24	18.82	19.29	20.39	23.54	26.69	29.84
48	4.812	53	5.314	1.104		6.22	7.79	9.68	10.94	11.73	12.51	14.09	15.67	16.14	17.24	20.39	23.54	26.69
38	3.810	42	4.211	1.105	6.30	7.87	9.45	11.34	12.60	13.38	14.17	15.74	17.32	17.79	18.89	22.04	25.19	28.34
28	2.807	31	3.108	1.107	7.95	9.53	11.10	12.99	14.25	15.04	15.82	17.40	18.97	19.45	20.55	23.70	26.85	30.00
37	3.709	41	4.110	1.108	6.46	8.03	9.61	11.50	12.76	13.54	14.33	15.90	17.48	17.95	19.05	22.20	25.35	28.50
27	2.707	30	3.008	1.111	8.11	9.69	11.26	13.15	14.41	15.20	15.98	17.56	19.13	19.61	20.71	23.86	27.01	30.16
36	3.609	40	4.010	1.111	6.61	8.19	9.76	11.65	12.91	13.70	14.48	16.06	17.63	18.11	19.21	22.36	25.51	28.66
45	4.511	50	5.013	1.111		6.69	8.27	10.16	11.42	12.20	12.99	14.56	16.14	16.61	17.71	20.86	24.01	27.16
35	3.509	39	3.910	1.114	6.77	8.35	9.92	11.81	13.07	13.86	14.64	16.22	17.79	18.27	19.37	22.52	25.67	28.82
26	2.607	29	2.907	1.115	8.27	9.84	11.42	13.31	14.57	15.35	16.14	17.71	19.29	19.76	20.86	24.01	27.16	30.31
60	6.015	67	6.717	1.117				7.63	8.89	9.68	10.46	12.04	13.62	14.09	15.19	18.34	21.49	24.64
34	3.409	38	3.810	1.118	6.93	8.50	10.08	11.97	13.23	14.01	14.80	16.37	17.95	18.42	19.52	22.67	25.82	28.97
67	6.717	75	7.519	1.119					7.71	8.49	9.28	10.86	12.43	12.91	14.01	17.16	20.31	23.46
25	2.506	28	2.807	1.120	8.43	10.00	11.58	13.47	14.73	15.51	16.30	17.87	19.45	19.92	21.02	24.17	27.32	30.47
50	5.013	56	5.614	1.120		5.82	7.40	9.29	10.55	11.33	12.12	13.70	15.27	15.75	16.85	20.00	23.15	26.30
33	3.308	37	3.709	1.121	7.09	8.66	10.24	12.13	13.39	14.17	14.96	16.53	18.11	18.58	19.68	22.83	25.98	29.13
32	3.208	36	3.609	1.125	7.24	8.82	10.39	12.28	13.54	14.33	15.11	16.69	18.26	18.74	19.84	22.99	26.14	29.29
40	4.010	45	4.511	1.125	5.90	7.48	9.05	10.94	12.21	12.99	13.78	15.35	16.93	17.40	18.50	21.65	24.80	27.95
56	5.614	63	6.316	1.125				8.26	9.52	10.31	11.09	12.67	14.25	14.72	15.82	18.97	22.12	25.27
80	8.020	90	9.023	1.125									10.22	10.70	11.80	14.95	18.10	21.25
63	6.316	71	7.118	1.127					8.34	9.13	9.91	11.49	13.06	13.54	14.64	17.79	20.94	24.09
71	7.118	80	8.020	1.127							8.57	10.15	11.72	12.20	13.30	16.45	19.60	22.75
31	3.108	35	3.509	1.129	7.40	8.98	10.55	12.44	13.70	14.49	15.27	16.85	18.42	18.90	20.00	23.15	26.30	29.45
53	5.314	60	6.015	1.132			6.84	8.74	10.00	10.78	11.57	13.14	14.72	15.19	16.29	19.44	22.59	25.74
30	3.008	34	3.409	1.133	7.56	9.13	10.71	12.60	13.86	14.64	15.43	17.00	18.58	19.05	20.15	23.30	26.45	29.60
37	3.709	42	4.211	1.135	6.37	7.95	9.53	11.42	12.68	13.46	14.25	15.82	17.40	17.87	18.97	22.12	25.27	28.42
22	2.206	25	2.506	1.136	8.90	10.47	12.05	13.94	15.20	15.98	16.77	18.34	19.92	20.39	21.49	24.64	27.79	30.94
29	2.907	33	3.308	1.138	7.72	9.29	10.87	12.76	14.02	14.80	15.59	17.16	18.74	19.21	20.31	23.46	26.61	29.76
36	3.609	41	4.110	1.139	6.53	8.11	9.68	11.57	12.84	13.62	14.41	15.98	17.56	18.03	19.13	22.28	25.43	28.58
28	2.807	32	3.208	1.143	7.87	9.45	11.02	12.91	14.17	14.96	15.74	17.32	18.89	19.37	20.47	23.62	26.77	29.92
35	3.509	40	4.010	1.143	6.69	8.27	9.84	11.73	12.99	13.78	14.56	16.14	17.71	18.19	19.29	22.44	25.59	28.74
42	4.211	48	4.812	1.143	5.51	7.08	8.66	10.55	11.81	12.59	13.38	14.96	16.53	17.01	18.11	21.26	24.41	27.56
34	3.409	39	3.910	1.147	6.85	8.42	10.00	11.89	13.15	13.93	14.72	16.29	17.87	18.34	19.45	22.60	25.75	28.90
27	2.707	31	3.108	1.148	8.03	9.61	11.18	13.07	14.33	15.12	15.90	17.48	19.05	19.53	20.63	23.78	26.93	30.08
33	3.308	38	3.810	1.152	7.01	8.58	10.16	12.05	13.31	14.09	14.88	16.45	18.03	18.50	19.60	22.75	25.90	29.05
26	2.607	30	3.008	1.154	8.19	9.76	11.34	13.23	14.49	15.27	16.06	17.63	19.21	19.68	20.78	23.93	27.08	30.23
39	3.910	45	4.511	1.154	5.98	7.56	9.13	11.02	12.28	13.07	13.85	15.43	17.00	17.48	18.58	21.73	24.88	28.03
32	3.208	37	3.709	1.156	7.16	8.74	10.31	12.20	13.47	14.25	15.04	16.61	18.19	18.66	19.76	22.91	26.06	29.21
25	2.506	29	2.907	1.160	8.35	9.92	11.50	13.39	14.65	15.43	16.22	17.79	19.37	19.84	20.94	24.09	27.24	30.39
31	3.108	36	3.609	1.161	7.32	8.90	10.47	12.36	13.62	14.41	15.19	16.77	18.34	18.82	19.92	23.07	26.22	29.37
30	3.008	35	3.509	1.167	7.48	9.05	10.63	12.52	13.78	14.56	15.35	16.92	18.50	18.97	20.07	23.23	26.38	29.53
36	3.609	42	4.211	1.167	6.45	8.03	9.60	11.49	12.75	13.54	14.33	15.90	17.48	17.95	19.05	22.20	25.35	28.50
48	4.812	56	5.614	1.167		5.97	7.55	9.44	10.70	11.49	12.27	13.85	15.43	15.90	17.00	20.15	23.30	26.45
35	3.509	41	4.110	1.171	6.61	8.19	9.76	11.65	12.91	13.70	14.48	16.06	17.63	18.11	19.21	22.36	25.51	28.66
41	4.110	48	4.812	1.171	5.58	7.16	8.74	10.63	11.89	12.67	13.46	15.03	16.61	17.08	18.18	21.33	24.49	27.64
29	2.907	34	3.409	1.172	7.64	9.21	10.79	12.68	13.94	14.72	15.51	17.08	18.66	19.13	20.23	23.38	26.53	29.68
34	3.409	40	4.010	1.176	6.77	8.34	9.92	11.81	13.07	13.85	14.64	16.22	17.79	18.27	19.37	22.52	25.67	28.82
45	4.511	53	5.314	1.178		6.45	8.02	9.92	11.18	11.96	12.75	14.32	15.90	16.37	17.47	20.62	23.78	26.93
28	2.807	33	3.308	1.179	7.79	9.37	10.94	12.83	14.10	14.88	15.67	17.24	18.82	19.29	20.39	23.54	26.69	29.84
22	2.206	26	2.607	1.182	8.82	10.39	11.97	13.86	15.12	15.90	16.69	18.26	19.84	20.31	21.41	24.56	27.71	30.86
33	3.308	39	3.910	1.182	6.92	8.50	10.08	11.97	13.23	14.01	14.80	16.37	17.95	18.42	19.52	22.67	25.82	28.97
60	6.015	71	7.118	1.183				7.30	8.57	9.35	10.14	11.72	13.29	13.77	14.87	18.02	21.17	24.32
38	3.810	45	4.511	1.184	6.05	7.63	9.21	11.10	12.36	13.15	13.93	15.51	17.08	17.56	18.66	21.81	24.96	28.11
27	2.707	32	3.208	1.185	7.95	9.53	11.10	12.99	14.25	15.04	15.82	17.40	18.97	19.45	20.55	23.70	26.85	30.00
32	3.208	38	3.810	1.188	7.08	8.66	10.23	12.12	13.38	14.17	14.96	16.53	18.11	18.58	19.68	22.83	25.98	29.13
53	5.314	63	6.316	1.189			6.60	8.49	9.75	10.54	11.32	12.90	14.48	14.95	16.05	19.20	22.36	25.51
42	4.211	50	5.013	1.190	5.34	6.92	8.50	10.39	11.65	12.43	13.22	14.80	16.37	16.85	17.95	21.10	24.25	27.40
63	6.316	75	7.519	1.190					8.01	8.80	9.59	11.16	12.74	13.22	14.32	17.47	20.62	23.77
26	2.607	31	3.108	1.192	8.11	9.68	11.26	13.15	14.41	15.19	15.98	17.55	19.13	19.60	20.70	23.86	27.01	30.16
31	3.108	37	3.709	1.194	7.24	8.82	10.39	12.28	13.54	14.33	15.11	16.69	18.26	18.74	19.84	22.99	26.14	29.29
67	6.717	80	8.020	1.194						8.08	8.87	10.45	12.03	12.50	13.60	16.76	19.91	23.06
56	5.614	67	6.717	1.196				7.94	9.20	9.99	10.77	12.35	13.92	14.40	15.50	18.65	21.80	24.95
25	2.506	30	3.008	1.200	8.27	9.84	11.42	13.31	14.57	15.35	16.14	17.71	19.29	19.76	20.86	24.01	27.16	30.31
30	3.008	36	3.609	1.200	7.40	8.97	10.55	12.44	13.70	14.48	15.27	16.85	18.42	18.90	20.00	23.15	26.30	29.45
35	3.509	42	4.211	1.200	6.53	8.10	9.68	11.57	12.83	13.62	14.40	15.98	17.55	18.03	19.13	22.28	25.43	28.58
40	4.010	48	4.812	1.200	5.66	7.24	8.81	10.70	11.96	12.75	13.54	15.11	16.69	17.16	18.26	21.41	24.56	27.71
50	5.013	60	6.015	1.200			7.07	8.96	10.23	11.01	11.80	13.37	14.95	15.43	16.53	19.68	22.83	25.98
75	7.519	90	9.023	1.200								9.02	10.60	11.08	12.18	15.33	18.49	21.64
34	3.409	41	4.110	1.206	6.69	8.26	9.84	11.73	12.99	13.78	14.56	16.14	17.71	18.19	19.29	22.44	25.59	28.74
				Length Factor*	0.79	0.83	0.87	0.91	0.94	0.96	0.97	1.00	1.03	1.03	1.05	1.10	1.14	1.17

Note: 26, 27, 29 and 31 groove sprockets are only available as stock products in 12 and 21 mm widths. 33, 35, 37, 39 and 41 groove sprockets are only available as stock products in 12, 21, and 36 mm widths. Check sprocket specification tables on pages 17 and 18 for stainless steel and nickel plated sprocket availability.

* This length factor must be used to determine the proper belt width.

8mm Pitch Poly Chain® GT® Carbon™ Belts Drive Selection Table

Center Distance, Inches																Speed Ratio	Sprocket Combinations	
																	DriveR	DriveR
8MGT-1792 P.L. 70.55 224Teeth	8MGT-2000 P.L. 78.74 250 Teeth	8MGT-2200 P.L. 86.61 275 Teeth	8MGT-2240 P.L. 88.19 280 Teeth	8MGT-2400 P.L. 94.49 300 Teeth	8MGT-2520 P.L. 99.21 315 Teeth	8MGT-2600 P.L. 102.36 325 Teeth	8MGT-2800 P.L. 110.24 350 Teeth	8MGT-2840 P.L. 111.81 355 Teeth	8MGT-3048 P.L. 120.00 381 Teeth	8MGT-3200 P.L. 125.98 400 Teeth	8MGT-3280 P.L. 129.13 410 Teeth	8MGT-3600 P.L. 141.73 450 Teeth	8MGT-4000 P.L. 157.48 500 Teeth	8MGT-4400 P.L. 173.23 550 Teeth	8MGT-4480 P.L. 176.38 560 Teeth		Number of Grooves	Number of Grooves
29.37	33.46	37.40	38.19	41.34	43.70	45.27	49.21	50.00	54.09	57.08	58.66	64.96	72.83	80.71	82.28	1.083	36	39
29.53	33.62	37.56	38.35	41.50	43.86	45.43	49.37	50.16	54.25	57.24	58.82	65.12	72.99	80.87	82.44	1.086	35	38
29.68	33.78	37.71	38.50	41.65	44.01	45.59	49.53	50.31	54.41	57.40	58.97	65.27	73.15	81.02	82.60	1.088	34	37
29.84	33.94	37.87	38.66	41.81	44.17	45.75	49.69	50.47	54.57	57.56	59.13	65.43	73.31	81.18	82.76	1.091	33	36
30.00	34.09	38.03	38.82	41.97	44.33	45.90	49.84	50.63	54.72	57.71	59.29	65.59	73.46	81.34	82.91	1.094	32	35
30.16	34.25	38.19	38.98	42.13	44.49	46.06	50.00	50.79	54.88	57.87	59.45	65.75	73.62	81.50	83.07	1.097	31	34
28.50	32.60	36.53	37.32	40.47	42.83	44.41	48.35	49.13	53.23	56.22	57.79	64.09	71.97	79.84	81.42	1.098	41	45
30.31	34.41	38.34	39.13	42.28	44.64	46.22	50.16	50.94	55.04	58.03	59.60	65.90	73.78	81.65	83.23	1.100	30	33
30.47	34.57	38.50	39.29	42.44	44.80	46.38	50.32	51.10	55.20	58.19	59.76	66.06	73.94	81.81	83.39	1.103	29	32
27.32	31.42	35.35	36.14	39.29	41.65	43.23	47.17	47.95	52.05	55.04	56.61	62.91	70.79	78.66	80.24	1.104	48	53
28.97	33.07	37.00	37.79	40.94	43.30	44.88	48.82	49.60	53.70	56.69	58.26	64.57	72.44	80.32	81.89	1.105	38	42
30.63	34.72	38.66	39.45	42.60	44.96	46.53	50.47	51.26	55.35	58.34	59.92	66.22	74.09	81.97	83.54	1.107	28	31
29.13	33.23	37.16	37.95	41.10	43.46	45.04	48.98	49.76	53.86	56.85	58.42	64.72	72.60	80.47	82.05	1.108	37	41
30.79	34.88	38.82	39.61	42.76	45.12	46.69	50.63	51.42	55.51	58.50	60.08	66.38	74.25	82.13	83.70	1.111	27	30
29.29	33.39	37.32	38.11	41.26	43.62	45.20	49.14	49.92	54.02	57.01	58.58	64.88	72.76	80.63	82.21	1.111	36	40
27.79	31.89	35.82	36.61	39.76	42.12	43.70	47.64	48.42	52.52	55.51	57.08	63.38	71.26	79.13	80.71	1.111	45	50
29.45	33.54	37.48	38.27	41.42	43.78	45.35	49.29	50.08	54.17	57.16	58.74	65.04	72.91	80.79	82.36	1.114	35	39
30.94	35.04	38.97	39.76	42.91	45.27	46.85	50.79	51.57	55.67	58.66	60.23	66.53	74.41	82.28	83.86	1.115	26	29
25.27	29.37	33.30	34.09	37.24	39.60	41.18	45.12	45.90	50.00	52.99	54.56	60.86	68.74	76.61	78.19	1.117	60	67
29.60	33.70	37.63	38.42	41.57	43.93	45.51	49.45	50.23	54.33	57.32	58.89	65.19	73.07	80.94	82.52	1.118	34	38
24.09	28.19	32.12	32.91	36.06	38.42	40.00	43.94	44.72	48.82	51.81	53.38	59.68	67.56	75.43	77.01	1.119	67	75
31.10	35.20	39.13	39.92	43.07	45.43	47.01	50.95	51.73	55.83	58.82	60.39	66.69	74.57	82.44	84.02	1.120	25	28
26.93	31.02	34.96	35.75	38.90	41.26	42.83	46.77	47.56	51.65	54.64	56.22	62.52	70.39	78.27	79.84	1.120	50	56
29.76	33.86	37.79	38.58	41.73	44.09	45.67	49.61	50.39	54.49	57.48	59.05	65.35	73.23	81.10	82.68	1.121	33	37
29.92	34.02	37.95	38.74	41.89	44.25	45.83	49.77	50.55	54.65	57.64	59.21	65.51	73.39	81.26	82.84	1.125	32	36
28.58	32.68	36.61	37.40	40.55	42.91	44.49	48.43	49.21	53.31	56.30	57.87	64.17	72.05	79.92	81.50	1.125	40	45
25.90	30.00	33.93	34.72	37.87	40.23	41.81	45.75	46.53	50.63	53.62	55.19	61.49	69.37	77.24	78.82	1.125	56	63
21.88	25.98	29.92	30.71	33.86	36.22	37.79	41.73	42.52	46.61	49.60	51.18	57.48	65.35	73.23	74.80	1.125	80	90
24.72	28.82	32.75	33.54	36.69	39.05	40.63	44.57	45.35	49.45	52.44	54.01	60.31	68.19	76.06	77.64	1.127	63	71
23.38	27.48	31.41	32.20	35.35	37.71	39.29	43.23	44.01	48.11	51.10	52.67	58.97	66.85	74.72	76.30	1.127	71	80
30.08	34.17	38.11	38.90	42.05	44.41	45.98	49.92	50.71	54.80	57.79	59.37	65.67	73.54	81.42	82.99	1.129	31	35
26.37	30.47	34.41	35.20	38.35	40.71	42.28	46.22	47.01	51.10	54.09	55.67	61.97	69.84	77.72	79.29	1.132	53	60
30.23	34.33	38.26	39.05	42.20	44.56	46.14	50.08	50.86	54.96	57.95	59.52	65.82	73.70	81.57	83.15	1.133	30	34
29.05	33.15	37.08	37.87	41.02	43.38	44.96	48.90	49.68	53.78	56.77	58.34	64.64	72.52	80.39	81.97	1.135	37	42
31.57	35.67	39.60	40.39	43.54	45.90	47.48	51.42	52.20	56.30	59.29	60.86	67.16	75.04	82.91	84.49	1.136	22	25
30.39	34.49	38.42	39.21	42.36	44.72	46.30	50.24	51.02	55.12	58.11	59.68	65.98	73.86	81.73	83.31	1.138	29	33
29.21	33.31	37.24	38.03	41.18	43.54	45.12	49.06	49.84	53.94	56.93	58.50	64.80	72.68	80.55	82.13	1.139	36	41
30.55	34.65	38.58	39.37	42.52	44.88	46.46	50.40	51.18	55.28	58.27	59.84	66.14	74.02	81.89	83.47	1.143	28	32
29.37	33.46	37.40	38.19	41.34	43.70	45.27	49.21	50.00	54.09	57.08	58.66	64.96	72.83	80.71	82.28	1.143	35	40
28.19	32.28	36.22	37.01	40.16	42.52	44.09	48.03	48.82	52.91	55.90	57.48	63.78	71.65	79.53	81.10	1.143	42	48
29.53	33.62	37.56	38.35	41.50	43.86	45.43	49.37	50.16	54.25	57.24	58.82	65.12	72.99	80.87	82.44	1.147	34	39
30.71	34.80	38.74	39.53	42.68	45.04	46.61	50.55	51.34	55.43	58.42	60.00	66.30	74.17	82.05	83.62	1.148	27	31
29.68	33.78	37.71	38.50	41.65	44.01	45.59	49.53	50.31	54.41	57.40	58.97	65.27	73.15	81.02	82.60	1.152	33	38
30.86	34.96	38.89	39.68	42.83	45.19	46.77	50.71	51.49	55.59	58.58	60.15	66.45	74.33	82.20	83.78	1.154	26	30
28.66	32.75	36.69	37.48	40.63	42.99	44.57	48.51	49.29	53.39	56.38	57.95	64.25	72.13	80.00	81.58	1.154	39	45
29.84	33.94	37.87	38.66	41.81	44.17	45.75	49.69	50.47	54.57	57.56	59.13	65.43	73.31	81.18	82.76	1.156	32	37
31.02	35.12	39.05	39.84	42.99	45.35	46.93	50.87	51.65	55.75	58.74	60.31	66.61	74.49	82.36	83.94	1.160	25	29
30.00	34.09	38.03	38.82	41.97	44.33	45.90	49.84	50.63	54.72	57.71	59.29	65.59	73.46	81.34	82.91	1.161	31	36
30.16	34.25	38.19	38.98	42.13	44.49	46.06	50.00	50.79	54.88	57.87	59.45	65.75	73.62	81.50	83.07	1.167	30	35
29.13	33.23	37.16	37.95	41.10	43.46	45.04	48.98	49.76	53.86	56.85	58.42	64.72	72.60	80.47	82.05	1.167	36	42
27.08	31.18	35.11	35.90	39.05	41.41	42.99	46.93	47.71	51.81	54.80	56.38	62.68	70.55	78.43	80.00	1.167	48	56
29.29	33.38	37.32	38.11	41.26	43.62	45.20	49.14	49.92	54.02	57.01	58.58	64.88	72.76	80.63	82.21	1.171	35	41
28.27	32.36	36.30	37.09	40.24	42.60	44.17	48.11	48.90	52.99	55.98	57.56	63.86	71.73	79.61	81.18	1.171	41	48
30.31	34.41	38.34	39.13	42.28	44.64	46.22	50.16	50.94	55.04	58.03	59.60	65.90	73.78	81.65	83.23	1.172	29	34
29.45	33.54	37.48	38.27	41.42	43.78	45.35	49.29	50.08	54.17	57.16	58.74	65.04	72.91	80.79	82.36	1.176	34	40
27.56	31.65	35.59	36.38	39.53	41.89	43.46	47.40	48.19	52.28	55.27	56.85	63.15	71.02	78.90	80.47	1.178	45	53
30.47	34.57	38.50	39.29	42.44	44.80	46.38	50.32	51.10	55.20	58.19	59.76	66.06	73.94	81.81	83.39	1.179	28	33
31.49	35.59	39.52	40.31	43.46	45.82	47.40	51.34	52.12	56.22	59.21	60.78	67.08	74.96	82.83	84.41	1.182	22	26
29.60	33.70	37.63	38.42	41.57	43.93	45.51	49.45	50.24	54.33	57.32	58.90	65.20	73.07	80.95	82.52	1.182	33	39
24.95	29.05	32.99	33.78	36.93	39.29	40.86	44.80	45.59	49.68	52.67	54.25	60.55	68.42	76.30	77.87	1.183	60	71
28.74	32.83	36.77	37.56	40.71	43.07	44.64	48.58	49.37	53.46	56.45	58.03	64.33	72.20	80.08	81.65	1.184	38	45
30.63	34.72	38.66	39.45	42.60	44.96	46.53	50.47	51.26	55.35	58.34	59.92	66.22	74.09	81.97	83.54	1.185	27	32
29.76	33.86	37.79	38.58	41.73	44.09	45.67	49.61	50.39	54.49	57.48	59.05	65.35	73.23	81.10	82.68	1.188	32	38
26.14	30.23	34.17	34.96	38.11	40.47	42.04	45.98	46.77	50.86	53.85	55.43	61.73	69.60	77.48	79.05	1.189	53	63
28.03	32.12	36.06	36.85	40.00	42.36	43.93	47.87	48.66	52.75	55.74	57.32	63.62	71.49	79.37	80.94	1.190	42	50
24.40	28.50	32.43	33.22	36.37	38.73	40.31	44.25	45.03	49.13	52.12	53.70	60.00	67.87	75.75	77.32	1.190	63	75
30.79	34.88	38.82	39.61	42.76	45.12	46.69	50.63	51.42	55.51	58.50	60.08	66.38	74.25	82.13	83.70	1.192	26	31
29.92	34.01	37.95	38.74	41.89	44.25	45.82	49.77	50.55	54.65	57.64	59.21	65.51	73.39	81.26	82.84	1.194	31	37
23.69	27.79	31.72	32.51	35.66	38.03	39.60	43.54	44.33	48.42	51.41	52.99	59.29	67.16	75.04	76.61	1.194	67	80
25.58	29.68	33.62	34.41	37.56	39.92	41.49	45.43	46.22	50.31	53.30	54.88	61.18	69.05	76.93	78.50	1.196	56	67
30.94	35.04	38.97	39.76	42.91	45.27	46.85	50.79	51.57	55.67	58.66	60.23	66.53	74.41	82.28	83.86	1.200	25	30
30.08	34.17	38.11	38.90	42.05	44.41	45.98	49.92	50.71	54.80	57.79	59.37	65.67	73.54	81.42	82.99	1.200	30	36
29.21	33.30	37.24	38.03	41.18	43.54	45.12	49.06	49.84	53.94	56.93	58.50	64.80	72.68	80.55	82.13	1.200	35	42
28.34	32.44	36.37	37.16	40.31	42.67	44.25	48.19	48.97	53.07	56.06	57.63	63.93	71.81	79.69	81.26	1.200	40	48
26.61	30.70	34.64	35.43	38.58	40.94	42.52	46.46	47.24	51.34	54.33	55.90	62.20	70.08	77.95	79.53	1.200	50	60
22.27	26.37	30.30	31.09	34.24	36.61	38.18	42.12	42.91	47.00	49.99	51.57	57.87	65.74	73.62	75.19	1.200	75	90
29.37	33.46	37.40	38.19	41.34	43.70	45.27	49.21	50.00	54.09	57.08	58.66	64.96	72.83	80.71	82.28	1.206	34	41
1.18	1.22	1.26	1.26	1.29	1.31	1.32	1.35	1.36	1.38	1.40	1.41	1.45	1.49	1.52	1.53	Length Factor*		

Note: 26, 27, 29 and 31 groove sprockets are only available as stock products in 12 and 21 mm widths. 33, 35, 37, 39 and 41 groove sprockets are only available as stock products in 12, 21, and 36 mm widths. Check sprocket specification tables on pages 17 and 18 for stainless steel and nickel plated sprocket availability.

* This length factor must be used to determine the proper belt width.

Center distance is greater than eight times the small sprocket and the large sprocket is not flanged. See Engineering Section for details.

8mm Pitch Poly Chain® GT® Carbon™ Belts Drive Selection Table

Sprocket Combinations					Center Distance, Inches													
DriveR		DriveN																
Number of Grooves	Pitch Diameter (Inches)	Number of Grooves	Pitch Diameter (Inches)	Speed Ratio	8MGT-640 P.L. 25.20 80 Teeth	8MGT-720 P.L. 28.35 90 Teeth	8MGT-800 P.L. 31.50 100 Teeth	8MGT-896 P.L. 35.28 112 Teeth	8MGT-960 P.L. 37.80 120 Teeth	8MGT-1000 P.L. 39.37 125 Teeth	8MGT-1040 P.L. 40.94 130 Teeth	8MGT-1120 P.L. 44.09 140 Teeth	8MGT-1200 P.L. 47.24 150 Teeth	8MGT-1224 P.L. 48.19 153 Teeth	8MGT-1280 P.L. 50.39 160 Teeth	8MGT-1440 P.L. 56.69 180 Teeth	8MGT-1600 P.L. 62.99 200Teeth	8MGT-1760 P.L. 69.29 220 Teeth
29	2.907	35	3.509	1.207	7.55	9.13	10.71	12.6	13.86	14.64	15.43	17	18.58	19.05	20.15	23.3	26.45	29.6
33	3.308	40	4.01	1.212	6.84	8.42	10	11.89	13.15	13.93	14.72	16.29	17.87	18.34	19.44	22.59	25.75	28.9
28	2.807	34	3.409	1.214	7.71	9.29	10.86	12.75	14.01	14.8	15.59	17.16	18.74	19.21	20.31	23.46	26.61	29.76
37	3.709	45	4.511	1.216	6.13	7.71	9.29	11.18	12.44	13.22	14.01	15.58	17.16	17.63	18.73	21.89	25.04	28.19
32	3.208	39	3.91	1.219	7	8.58	10.15	12.04	13.3	14.09	14.88	16.45	18.03	18.5	19.6	22.75	25.9	29.05
41	4.11	50	5.013	1.22	5.42	7	8.57	10.47	11.73	12.51	13.3	14.87	16.45	16.92	18.02	21.17	24.33	27.48
27	2.707	33	3.308	1.222	7.87	9.45	11.02	12.91	14.17	14.96	15.74	17.32	18.89	19.37	20.47	23.62	26.77	29.92
31	3.108	38	3.81	1.226	7.16	8.73	10.31	12.2	13.46	14.25	15.03	16.61	18.18	18.66	19.76	22.91	26.06	29.21
22	2.206	27	2.707	1.227	8.74	10.31	11.89	13.78	15.04	15.82	16.61	18.18	19.76	20.23	21.33	24.49	27.64	30.79
26	2.607	32	3.208	1.231	8.03	9.6	11.18	13.07	14.33	15.11	15.9	17.48	19.05	19.53	20.63	23.78	26.93	30.08
39	3.91	48	4.812	1.231	5.73	7.31	8.89	10.78	12.04	12.83	13.61	15.19	16.76	17.24	18.34	21.49	24.64	27.79
30	3.008	37	3.709	1.233	7.32	8.89	10.47	12.36	13.62	14.41	15.19	16.77	18.34	18.82	19.92	23.07	26.22	29.37
34	3.409	42	4.211	1.235	6.6	8.18	9.76	11.65	12.91	13.69	14.48	16.06	17.63	18.11	19.21	22.36	25.51	28.66
25	2.506	31	3.108	1.24	8.19	9.76	11.34	13.23	14.49	15.27	16.06	17.63	19.21	19.68	20.78	23.93	27.08	30.23
29	2.907	36	3.609	1.241	7.47	9.05	10.63	12.52	13.78	14.56	15.35	16.92	18.5	18.97	20.07	23.22	26.38	29.53
33	3.308	41	4.11	1.242	6.76	8.34	9.92	11.81	13.07	13.85	14.64	16.21	17.79	18.26	19.36	22.52	25.67	28.82
45	4.511	56	5.614	1.244		6.2	7.78	9.67	10.93	11.72	12.51	14.08	15.66	16.13	17.23	20.39	23.54	26.69
28	2.807	35	3.509	1.25	7.63	9.21	10.78	12.67	13.94	14.72	15.51	17.08	18.66	19.13	20.23	23.38	26.53	29.68
32	3.208	40	4.01	1.25	6.92	8.5	10.07	11.96	13.22	14.01	14.8	16.37	17.95	18.42	19.52	22.67	25.82	28.97
36	3.609	45	4.511	1.25	6.21	7.78	9.36	11.25	12.51	13.3	14.09	15.66	17.24	17.71	18.81	21.96	25.11	28.26
40	4.01	50	5.013	1.25	5.49	7.07	8.65	10.54	11.8	12.59	13.37	14.95	16.53	17	18.1	21.25	24.4	27.55
48	4.812	60	6.015	1.25			7.22	9.12	10.38	11.17	11.95	13.53	15.1	15.58	16.68	19.83	22.98	26.13
60	6.015	75	7.519	1.25					8.24	9.02	9.81	11.39	12.97	13.44	14.55	17.7	20.85	24
31	3.108	39	3.91	1.258	7.08	8.65	10.23	12.12	13.38	14.17	14.95	16.53	18.1	18.58	19.68	22.83	25.98	29.13
27	2.707	34	3.409	1.259	7.79	9.36	10.94	12.83	14.09	14.88	15.66	17.24	18.81	19.29	20.39	23.54	26.69	29.84
50	5.013	63	6.316	1.26			6.82	8.72	9.98	10.77	11.55	13.13	14.71	15.18	16.28	19.44	22.59	25.74
42	4.211	53	5.314	1.262		6.67	8.25	10.14	11.41	12.19	12.98	14.55	16.13	16.6	17.71	20.86	24.01	27.16
38	3.81	48	4.812	1.263	5.81	7.39	8.96	10.86	12.12	12.9	13.69	15.27	16.84	17.32	18.42	21.57	24.72	27.87
53	5.314	67	6.717	1.264				8.16	9.42	10.21	11	12.58	14.15	14.63	15.73	18.88	22.03	25.19
30	3.008	38	3.81	1.267	7.23	8.81	10.39	12.28	13.54	14.32	15.11	16.69	18.26	18.74	19.84	22.99	26.14	29.29
56	5.614	71	7.118	1.268				7.6	8.87	9.66	10.44	12.02	13.6	14.08	15.18	18.33	21.48	24.63
71	7.118	90	9.023	1.268								9.32	10.9	11.38	12.48	15.64	18.79	21.95
26	2.607	33	3.308	1.269	7.95	9.52	11.1	12.99	14.25	15.04	15.82	17.4	18.97	19.45	20.55	23.7	26.85	30
63	6.316	80	8.02	1.27						8.38	9.17	10.75	12.33	12.81	13.91	17.06	20.22	23.37
22	2.206	28	2.807	1.273	8.66	10.23	11.81	13.7	14.96	15.74	16.53	18.11	19.68	20.16	21.26	24.41	27.56	30.71
33	3.308	42	4.211	1.273	6.68	8.26	9.83	11.73	12.99	13.77	14.56	16.13	17.71	18.18	19.28	22.44	25.59	28.74
29	2.907	37	3.709	1.276	7.39	8.97	10.55	12.44	13.7	14.48	15.27	16.84	18.42	18.89	19.99	23.15	26.3	29.45
25	2.506	32	3.208	1.28	8.1	9.68	11.26	13.15	14.41	15.19	15.98	17.55	19.13	19.6	20.7	23.85	27	30.16
32	3.208	41	4.11	1.281	6.84	8.42	9.99	11.88	13.14	13.93	14.72	16.29	17.87	18.34	19.44	22.59	25.74	28.89
39	3.91	50	5.013	1.282	5.56	7.15	8.72	10.62	11.88	12.66	13.45	15.03	16.6	17.08	18.18	21.33	24.48	27.63
28	2.807	36	3.609	1.286	7.55	9.13	10.7	12.59	13.86	14.64	15.43	17	18.58	19.05	20.15	23.3	26.45	29.6
35	3.509	45	4.511	1.286	6.28	7.86	9.44	11.33	12.59	13.38	14.16	15.74	17.31	17.79	18.89	22.04	25.19	28.34
31	3.108	40	4.01	1.29	6.99	8.57	10.15	12.04	13.3	14.09	14.87	16.45	18.02	18.5	19.6	22.75	25.9	29.05
41	4.11	53	5.314	1.293		6.75	8.33	10.22	11.48	12.27	13.05	14.63	16.21	16.68	17.78	20.93	24.09	27.24
27	2.707	35	3.509	1.296	7.71	9.28	10.86	12.75	14.01	14.8	15.58	17.16	18.73	19.21	20.31	23.46	26.61	29.76
37	3.709	48	4.812	1.297	5.88	7.46	9.04	10.93	12.2	12.98	13.77	15.34	16.92	17.39	18.49	21.65	24.8	27.95
30	3.008	39	3.91	1.3	7.15	8.73	10.31	12.2	13.46	14.24	15.03	16.61	18.18	18.66	19.76	22.91	26.06	29.21
26	2.607	34	3.409	1.308	7.86	9.44	11.02	12.91	14.17	14.95	15.74	17.32	18.89	19.37	20.47	23.62	26.77	29.92
29	2.907	38	3.81	1.31	7.31	8.89	10.46	12.36	13.62	14.4	15.19	16.76	18.34	18.81	19.91	23.07	26.22	29.37
32	3.208	42	4.211	1.313	6.75	8.33	9.91	11.8	13.06	13.85	14.63	16.21	17.79	18.26	19.36	22.51	25.66	28.81
48	4.812	63	6.316	1.313			6.97	8.87	10.13	10.92	11.71	13.28	14.86	15.34	16.44	19.59	22.74	25.89
38	3.81	50	5.013	1.316	5.64	7.22	8.8	10.69	11.96	12.74	13.53	15.1	16.68	17.15	18.26	21.41	24.56	27.71
22	2.206	29	2.907	1.318	8.58	10.15	11.73	13.62	14.88	15.67	16.45	18.03	19.6	20.08	21.18	24.33	27.48	30.63
25	2.506	33	3.308	1.32	8.02	9.6	11.18	13.07	14.33	15.11	15.9	17.47	19.05	19.52	20.62	23.78	26.93	30.08
28	2.807	37	3.709	1.321	7.47	9.05	10.62	12.51	13.77	14.56	15.35	16.92	18.5	18.97	20.07	23.22	26.37	29.52
31	3.108	41	4.11	1.323	6.91	8.49	10.07	11.96	13.22	14.01	14.79	16.37	17.94	18.42	19.52	22.67	25.82	28.97
34	3.409	45	4.511	1.324	6.36	7.94	9.51	11.41	12.67	13.45	14.24	15.82	17.39	17.87	18.97	22.12	25.27	28.42
40	4.01	53	5.314	1.325	5.24	6.82	8.4	10.3	11.56	12.34	13.13	14.71	16.28	16.76	17.86	21.01	24.16	27.31
27	2.707	36	3.609	1.333	7.63	9.2	10.78	12.67	13.93	14.72	15.5	17.08	18.65	19.13	20.23	23.38	26.53	29.68
30	3.008	40	4.01	1.333	7.07	8.65	10.23	12.12	13.38	14.16	14.95	16.53	18.1	18.58	19.68	22.83	25.98	29.13
36	3.609	48	4.812	1.333	5.96	7.54	9.12	11.01	12.27	13.06	13.84	15.42	17	17.47	18.57	21.72	24.87	28.02
42	4.211	56	5.614	1.333		6.42	8	9.9	11.16	11.95	12.73	14.31	15.89	16.36	17.46	20.62	23.77	26.92
45	4.511	60	6.015	1.333		5.86	7.44	9.34	10.61	11.39	12.18	13.76	15.33	15.81	16.91	20.06	23.22	26.37
60	6.015	80	8.02	1.333					7.81	8.6	9.39	10.98	12.56	13.03	14.14	17.29	20.45	23.6
56	5.614	75	7.519	1.339				7.26	8.53	9.32	10.11	11.69	13.27	13.75	14.85	18.01	21.16	24.31
50	5.013	67	6.717	1.34			6.48	8.38	9.65	10.44	11.22	12.8	14.38	14.86	15.96	19.11	22.27	25.42
53	5.314	71	7.118	1.34				7.82	9.09	9.88	10.67	12.25	13.83	14.3	15.4	18.56	21.71	24.86
67	6.717	90	9.023	1.343								9.61	11.2	11.68	12.78	15.94	19.1	22.25
29	2.907	39	3.91	1.345	7.23	8.81	10.38	12.28	13.54	14.32	15.11	16.68	18.26	18.73	19.83	22.99	26.14	29.29
26	2.607	35	3.509	1.346	7.78	9.36	10.94	12.83	14.09	14.87	15.66	17.24	18.81	19.29	20.39	23.54	26.69	29.84
37	3.709	50	5.013	1.351	5.71	7.3	8.88	10.77	12.03	12.82	13.6	15.18	16.76	17.23	18.33	21.48	24.64	27.79
31	3.108	42	4.211	1.355	6.83	8.41	9.99	11.88	13.14	13.93	14.71	16.29	17.86	18.34	19.44	22.59	25.74	28.89
28	2.807	38	3.81	1.357	7.39	8.96	10.54	12.43	13.69	14.48	15.26	16.84	18.42	18.89	19.99	23.14	26.29	29.44
39	3.91	53	5.314	1.359	5.31	6.89	8.48	10.37	11.63	12.42	13.21	14.78	16.36	16.84	17.94	21.09	24.24	27.39
25	2.506	34	3.409	1.36	7.94	9.52	11.1	12.99	14.25	15.03	15.82	17.39	18.97	19.44	20.54	23.7	26.85	30
22	2.206	30	3.008	1.364	8.5	10.07	11.65	13.54	14.8	15.58	16.37	17.95	19.52	20	21.1	24.25	27.4	30.55
33	3.308	45	4.511	1.364	6.43	8.01	9.59	11.48	12.74	13.53	14.32	15.89	17.47	17.94	19.04	22.2	25.35	28.5
				Length Factor*	0.79	0.83	0.87	0.91	0.94	0.96	0.97	1	1.03	1.03	1.05	1.1	1.14	1.17

Note: 26, 27, 29 and 31 groove sprockets are only available as stock products in 12 and 21 mm widths. 33, 35, 37, 39 and 41 groove sprockets are only available as stock products in 12, 21, and 36 mm widths. Check sprocket specification tables on pages 17 and 18 for stainless steel and nickel plated sprocket availability.

* This length factor must be used to determine the proper belt width.

8mm Pitch Poly Chain® GT® Carbon™ Belts Drive Selection Table

Center Distance, Inches																Speed Ratio	Sprocket Combinations	
																	DriveR	DriveR
8MGT-1792 P.L. 70.55 224Teeth	8MGT-2000 P.L. 78.74 250 Teeth	8MGT-2200 P.L. 86.61 275 Teeth	8MGT-2240 P.L. 88.19 280 Teeth	8MGT-2400 P.L. 94.49 300 Teeth	8MGT-2520 P.L. 99.21 315 Teeth	8MGT-2600 P.L. 102.36 325 Teeth	8MGT-2800 P.L. 110.24 350 Teeth	8MGT-2840 P.L. 111.81 355 Teeth	8MGT-3048 P.L. 120.00 381 Teeth	8MGT-3200 P.L. 125.98 400 Teeth	8MGT-3280 P.L. 129.13 410 Teeth	8MGT-3600 P.L. 141.73 450 Teeth	8MGT-4000 P.L. 157.48 500 Teeth	8MGT-4400 P.L. 173.23 550 Teeth	8MGT-4480 P.L. 176.38 560 Teeth		Number of Grooves	Number of Grooves
30.23	34.33	38.26	39.05	42.2	44.56	46.14	50.08	50.86	54.96	57.95	59.53	65.83	73.7	81.58	83.15	1.207	29	35
29.53	33.62	37.56	38.35	41.5	43.86	45.43	49.37	50.16	54.25	57.24	58.82	65.12	72.99	80.87	82.44	1.212	33	40
30.39	34.49	38.42	39.21	42.36	44.72	46.3	50.24	51.02	55.12	58.11	59.68	65.98	73.86	81.73	83.31	1.214	28	34
28.82	32.91	36.85	37.64	40.79	43.15	44.72	48.66	49.45	53.54	56.53	58.11	64.41	72.28	80.16	81.73	1.216	37	45
29.68	33.78	37.71	38.5	41.65	44.01	45.59	49.53	50.31	54.41	57.4	58.97	65.27	73.15	81.02	82.6	1.219	32	39
28.11	32.2	36.14	36.93	40.08	42.44	44.01	47.95	48.74	52.83	55.82	57.4	63.7	71.57	79.45	81.02	1.22	41	50
30.55	34.64	38.58	39.37	42.52	44.88	46.45	50.39	51.18	55.28	58.27	59.84	66.14	74.02	81.89	83.47	1.222	27	33
29.84	33.93	37.87	38.66	41.81	44.17	45.75	49.69	50.47	54.57	57.56	59.13	65.43	73.31	81.18	82.76	1.226	31	38
31.42	35.51	39.45	40.24	43.39	45.75	47.32	51.26	52.05	56.14	59.13	60.71	67.01	74.88	82.76	84.33	1.227	22	27
30.71	34.8	38.74	39.53	42.68	45.04	46.61	50.55	51.34	55.43	58.42	60	66.3	74.17	82.05	83.62	1.231	26	32
28.42	32.52	36.45	37.24	40.39	42.75	44.33	48.27	49.05	53.15	56.14	57.71	64.01	71.89	79.76	81.34	1.231	39	48
30	34.09	38.03	38.82	41.97	44.33	45.9	49.84	50.63	54.72	57.71	59.29	65.59	73.46	81.34	82.91	1.233	30	37
29.29	33.38	37.32	38.11	41.26	43.62	45.19	49.13	49.92	54.01	57	58.58	64.88	72.75	80.63	82.2	1.235	34	42
30.86	34.96	38.89	39.68	42.83	45.19	46.77	50.71	51.49	55.59	58.58	60.16	66.46	74.33	82.21	83.78	1.24	25	31
30.16	34.25	38.19	38.98	42.13	44.49	46.06	50	50.79	54.88	57.87	59.45	65.75	73.62	81.5	83.07	1.241	29	36
29.45	33.54	37.48	38.27	41.42	43.78	45.35	49.29	50.08	54.17	57.16	58.74	65.04	72.91	80.79	82.36	1.242	33	41
27.32	31.41	35.35	36.14	39.29	41.65	43.22	47.16	47.95	52.04	55.04	56.61	62.91	70.79	78.66	80.24	1.244	45	56
30.31	34.41	38.34	39.13	42.28	44.64	46.22	50.16	50.94	55.04	58.03	59.6	65.9	73.78	81.65	83.23	1.25	28	35
29.6	33.7	37.63	38.42	41.57	43.93	45.51	49.45	50.23	54.33	57.32	58.89	65.19	73.07	80.95	82.52	1.25	32	40
28.89	32.99	36.92	37.71	40.87	43.23	44.8	48.74	49.53	53.62	56.61	58.19	64.49	72.36	80.24	81.81	1.25	36	45
28.18	32.28	36.21	37	40.16	42.52	44.09	48.03	48.82	52.91	55.9	57.48	63.78	71.65	79.53	81.1	1.25	40	50
26.76	30.86	34.8	35.59	38.74	41.1	42.67	46.61	47.4	51.49	54.48	56.06	62.36	70.23	78.11	79.68	1.25	48	60
24.63	28.73	32.67	33.46	36.61	38.97	40.54	44.48	45.27	49.36	52.36	53.93	60.23	68.11	75.98	77.56	1.25	60	75
29.76	33.86	37.79	38.58	41.73	44.09	45.67	49.61	50.39	54.49	57.48	59.05	65.35	73.23	81.1	82.68	1.258	31	39
30.47	34.56	38.5	39.29	42.44	44.8	46.38	50.32	51.1	55.2	58.19	59.76	66.06	73.94	81.81	83.39	1.259	27	34
26.37	30.47	34.4	35.19	38.34	40.7	42.28	46.22	47	51.1	54.09	55.66	61.96	69.84	77.71	79.29	1.26	50	63
27.79	31.88	35.82	36.61	39.76	42.12	43.7	47.64	48.42	52.52	55.51	57.08	63.38	71.26	79.13	80.71	1.262	42	53
28.5	32.59	36.53	37.32	40.47	42.83	44.41	48.35	49.13	53.23	56.22	57.79	64.09	71.97	79.84	81.42	1.263	38	48
25.82	29.91	33.85	34.64	37.79	40.15	41.72	45.67	46.45	50.55	53.54	55.11	61.41	69.29	77.16	78.74	1.264	53	67
29.92	34.01	37.95	38.74	41.89	44.25	45.82	49.76	50.55	54.64	57.63	59.21	65.51	73.38	81.26	82.83	1.267	30	38
25.26	29.36	33.3	34.09	37.24	39.6	41.17	45.11	45.9	49.99	52.98	54.56	60.86	68.74	76.61	78.19	1.268	56	71
22.58	26.68	30.61	31.4	34.55	36.92	38.49	42.43	43.22	47.31	50.3	51.88	58.18	66.06	73.93	75.51	1.268	71	90
30.63	34.72	38.66	39.45	42.6	44.96	46.53	50.47	51.26	55.35	58.34	59.92	66.22	74.09	81.97	83.54	1.269	26	33
24	28.1	32.03	32.82	35.98	38.34	39.91	43.85	44.64	48.73	51.72	53.3	59.6	67.48	75.35	76.93	1.27	63	80
31.34	35.43	39.37	40.16	43.31	45.67	47.24	51.18	51.97	56.06	59.05	60.63	66.93	74.8	82.68	84.25	1.273	22	28
29.37	33.46	37.4	38.19	41.34	43.7	45.27	49.21	50	54.09	57.08	58.66	64.96	72.83	80.71	82.28	1.273	33	42
30.08	34.17	38.11	38.9	42.05	44.41	45.98	49.92	50.71	54.8	57.79	59.37	65.67	73.54	81.42	82.99	1.276	29	37
30.79	34.88	38.82	39.61	42.76	45.12	46.69	50.63	51.42	55.51	58.5	60.08	66.38	74.25	82.13	83.7	1.28	25	32
29.52	33.62	37.55	38.34	41.5	43.86	45.43	49.37	50.16	54.25	57.24	58.82	65.12	72.99	80.87	82.44	1.281	32	41
28.26	32.36	36.29	37.08	40.23	42.59	44.17	48.11	48.89	52.99	55.98	57.55	63.85	71.73	79.6	81.18	1.282	39	50
30.23	34.33	38.26	39.05	42.2	44.56	46.14	50.08	50.86	54.96	57.95	59.52	65.82	73.7	81.57	83.15	1.286	28	36
28.97	33.07	37	37.79	40.94	43.3	44.88	48.82	49.6	53.7	56.69	58.26	64.56	72.44	80.31	81.89	1.286	35	45
29.68	33.78	37.71	38.5	41.65	44.01	45.59	49.53	50.31	54.41	57.4	58.97	65.27	73.15	81.02	82.6	1.29	31	40
27.87	31.96	35.9	36.69	39.84	42.2	43.77	47.71	48.5	52.59	55.59	57.16	63.46	71.34	79.21	80.79	1.293	41	53
30.39	34.49	38.42	39.21	42.36	44.72	46.3	50.24	51.02	55.12	58.11	59.68	65.98	73.86	81.73	83.31	1.296	27	35
28.58	32.67	36.61	37.4	40.55	42.91	44.48	48.42	49.21	53.3	56.29	57.87	64.17	72.05	79.92	81.5	1.297	37	48
29.84	33.93	37.87	38.66	41.81	44.17	45.74	49.68	50.47	54.56	57.55	59.13	65.43	73.31	81.18	82.76	1.3	30	39
30.55	34.64	38.58	39.37	42.52	44.88	46.45	50.39	51.18	55.27	58.26	59.84	66.14	74.01	81.89	83.46	1.308	26	34
30	34.09	38.03	38.82	41.97	44.33	45.9	49.84	50.63	54.72	57.71	59.29	65.59	73.46	81.34	82.91	1.31	29	38
29.44	33.54	37.47	38.26	41.42	43.78	45.35	49.29	50.08	54.17	57.16	58.74	65.04	72.91	80.79	82.36	1.313	32	42
26.52	30.62	34.56	35.35	38.5	40.86	42.43	46.37	47.16	51.25	54.24	55.82	62.12	70	77.87	79.45	1.313	48	63
28.34	32.43	36.37	37.16	40.31	42.67	44.25	48.19	48.97	53.07	56.06	57.63	63.93	71.81	79.68	81.26	1.316	38	50
31.26	35.35	39.29	40.08	43.23	45.59	47.16	51.1	51.89	55.98	58.97	60.55	66.85	74.72	82.6	84.17	1.318	22	29
30.71	34.8	38.74	39.53	42.68	45.04	46.61	50.55	51.34	55.43	58.42	60	66.3	74.17	82.05	83.62	1.32	25	33
30.15	34.25	38.18	38.97	42.12	44.49	46.06	50	50.79	54.88	57.87	59.45	65.75	73.62	81.5	83.07	1.321	28	37
29.6	33.7	37.63	38.42	41.57	43.93	45.51	49.45	50.23	54.33	57.32	58.89	65.19	73.07	80.94	82.52	1.323	31	41
29.05	33.15	37.08	37.87	41.02	43.38	44.96	48.9	49.68	53.78	56.77	58.34	64.64	72.52	80.39	81.97	1.324	34	45
27.94	32.04	35.98	36.77	39.92	42.28	43.85	47.79	48.58	52.67	55.66	57.24	63.54	71.41	79.29	80.86	1.325	40	53
30.31	34.41	38.34	39.13	42.28	44.64	46.22	50.16	50.94	55.04	58.03	59.6	65.9	73.78	81.65	83.23	1.333	27	36
29.76	33.85	37.79	38.58	41.73	44.09	45.67	49.61	50.39	54.49	57.48	59.05	65.35	73.23	81.1	82.68	1.333	30	40
28.65	32.75	36.69	37.48	40.63	42.99	44.56	48.5	49.29	53.38	56.37	57.95	64.25	72.12	80	81.57	1.333	36	48
27.55	31.65	35.58	36.37	39.52	41.88	43.46	47.4	48.18	52.28	55.27	56.84	63.14	71.02	78.9	80.47	1.333	42	56
27	31.09	35.03	35.82	38.97	41.33	42.91	46.85	47.63	51.73	54.72	56.29	62.59	70.47	78.34	79.92	1.333	45	60
24.23	28.33	32.27	33.06	36.21	38.57	40.14	44.09	44.87	48.97	51.96	53.53	59.83	67.71	75.59	77.16	1.333	60	80
24.94	29.04	32.98	33.77	36.92	39.28	40.85	44.8	45.58	49.68	52.67	54.24	60.54	68.42	76.29	77.87	1.339	56	75
26.05	30.15	34.08	34.87	38.02	40.38	41.96	45.9	46.68	50.78	53.77	55.35	61.65	69.52	77.4	78.97	1.34	50	67
25.49	29.59	33.53	34.32	37.47	39.83	41.41	45.35	46.13	50.23	53.22	54.79	61.09	68.97	76.85	78.42	1.34	53	71
22.88	26.98	30.92	31.71	34.86	37.22	38.8	42.74	43.53	47.62	50.61	52.19	58.49	66.37	74.24	75.82	1.343	67	90
29.92	34.01	37.95	38.74	41.89	44.25	45.82	49.76	50.55	54.64	57.63	59.21	65.51	73.38	81.26	82.83	1.345	29	39
30.47	34.56	38.5	39.29	42.44	44.8	46.37	50.31	51.1	55.19	58.18	59.76	66.06	73.94	81.81	83.39	1.346	26	35
28.42	32.51	36.45	37.24	40.39	42.75	44.32	48.27	49.05	53.15	56.14	57.71	64.01	71.89	79.76	81.34	1.351	37	50
29.52	33.62	37.55	38.34	41.49	43.85	45.43	49.37	50.15	54.25	57.24	58.81	65.11	72.99	80.86	82.44	1.355	31	42
30.07	34.17	38.1	38.89	42.05	44.41	45.98	49.92	50.71	54.8	57.79	59.37	65.67	73.54	81.42	82.99	1.357	28	38
28.02	32.12	36.05	36.84	39.99	42.35	43.93	47.87	48.66	52.75	55.74	57.32	63.62	71.49	79.37	80.94	1.359	39	53
30.63	34.72	38.66	39.45	42.6	44.96	46.53	50.47	51.26	55.35	58.34	59.92	66.22	74.09	81.97	83.54	1.36	25	34
31.18	35.27	39.21	40	43.15	45.51	47.08	51.02	51.81	55.9	58.89	60.47	66.77	74.64	82.52	84.09	1.364	22	30
29.13	33.22	37.16	37.95	41.1	43.46	45.03	48.98	49.76	53.86	56.85	58.42	64.72	72.6	80.47	82.05	1.364	33	45
1.18	1.22	1.26	1.26	1.29	1.31	1.32	1.35	1.36	1.38	1.4	1.41	1.45	1.49	1.52	1.53	Length Factor*		

Note: 26, 27, 29 and 31 groove sprockets are only available as stock products in 12 and 21 mm widths. 33, 35, 37, 39 and 41 groove sprockets are only available as stock products in 12, 21, and 36 mm widths. Check sprocket specification tables on pages 17 and 18 for stainless steel and nickel plated sprocket availability.

* This length factor must be used to determine the proper belt width.

Center distance is greater than eight times the small sprocket and the large sprocket is not flanged. See Engineering Section for details.

8mm Pitch Poly Chain® GT® Carbon™ Belts Drive Selection Table

Sprocket Combinations					Center Distance, Inches													
DriveR		DriveN																
Number of Grooves	Pitch Diameter (Inches)	Number of Grooves	Pitch Diameter (Inches)	Speed Ratio	8MGT-640 P.L. 25.20 80 Teeth	8MGT-720 P.L. 28.35 90 Teeth	8MGT-800 P.L. 31.50 100 Teeth	8MGT-896 P.L. 35.28 112 Teeth	8MGT-960 P.L. 37.80 120 Teeth	8MGT-1000 P.L. 39.37 125 Teeth	8MGT-1040 P.L. 40.94 130 Teeth	8MGT-1120 P.L. 44.09 140 Teeth	8MGT-1200 P.L. 47.24 150 Teeth	8MGT-1224 P.L. 48.19 153 Teeth	8MGT-1280 P.L. 50.39 160 Teeth	8MGT-1440 P.L. 56.69 180 Teeth	8MGT-1600 P.L. 62.99 200Teeth	8MGT-1760 P.L. 69.29 220 Teeth
41	4.11	56	5.614	1.366		6.49	8.08	9.97	11.24	12.02	12.81	14.39	15.97	16.44	17.54	20.69	23.85	27
30	3.008	41	4.11	1.367	6.99	8.57	10.14	12.04	13.3	14.08	14.87	16.45	18.02	18.5	19.6	22.75	25.9	29.05
27	2.707	37	3.709	1.37	7.54	9.12	10.7	12.59	13.85	14.64	15.42	17	18.57	19.05	20.15	23.3	26.45	29.6
35	3.509	48	4.812	1.371	6.03	7.61	9.19	11.09	12.35	13.13	13.92	15.5	17.07	17.55	18.65	21.8	24.95	28.1
29	2.907	40	4.01	1.379	7.15	8.72	10.3	12.19	13.46	14.24	15.03	16.6	18.18	18.65	19.75	22.91	26.06	29.21
26	2.607	36	3.609	1.385	7.7	9.28	10.86	12.75	14.01	14.79	15.58	17.16	18.73	19.21	20.31	23.46	26.61	29.76
36	3.609	50	5.013	1.389	5.79	7.37	8.95	10.85	12.11	12.89	13.68	15.26	16.83	17.31	18.41	21.56	24.71	27.86
28	2.807	39	3.91	1.393	7.3	8.88	10.46	12.35	13.61	14.4	15.18	16.76	18.34	18.81	19.91	23.06	26.21	29.36
38	3.81	53	5.314	1.395	5.38	6.97	8.55	10.45	11.71	12.5	13.28	14.86	16.44	16.91	18.01	21.17	24.32	27.47
48	4.812	67	6.717	1.396			6.63	8.53	9.8	10.59	11.38	12.96	14.53	15.01	16.11	19.27	22.42	25.57
25	2.506	35	3.509	1.4	7.86	9.44	11.01	12.91	14.17	14.95	15.74	17.31	18.89	19.36	20.46	23.62	26.77	29.92
30	3.008	42	4.211	1.4	6.9	8.48	10.06	11.96	13.22	14	14.79	16.36	17.94	18.42	19.52	22.67	25.82	28.97
40	4.01	56	5.614	1.4		6.57	8.15	10.05	11.31	12.1	12.89	14.46	16.04	16.52	17.62	20.77	23.92	27.07
45	4.511	63	6.316	1.4			7.19	9.09	10.36	11.14	11.93	13.51	15.09	15.57	16.67	19.82	22.97	26.13
80	8.02	112	11.229	1.4											9.95	13.13	16.3	19.46
32	3.208	45	4.511	1.406	6.5	8.09	9.67	11.56	12.82	13.61	14.39	15.97	17.55	18.02	19.12	22.27	25.42	28.58
27	2.707	38	3.81	1.407	7.46	9.04	10.62	12.51	13.77	14.56	15.34	16.92	18.49	18.97	20.07	23.22	26.37	29.52
22	2.206	31	3.108	1.409	8.41	9.99	11.57	13.46	14.72	15.5	16.29	17.87	19.44	19.92	21.02	24.17	27.32	30.47
34	3.409	48	4.812	1.412	6.1	7.69	9.27	11.16	12.42	13.21	14	15.57	17.15	17.62	18.73	21.88	25.03	28.18
29	2.907	41	4.11	1.414	7.06	8.64	10.22	12.11	13.38	14.16	14.95	16.52	18.1	18.57	19.67	22.83	25.98	29.13
53	5.314	75	7.519	1.415				7.48	8.75	9.54	10.33	11.91	13.5	13.97	15.08	18.23	21.39	24.54
50	5.013	71	7.118	1.42				8.04	9.31	10.1	10.89	12.47	14.05	14.53	15.63	18.79	21.94	25.1
26	2.607	37	3.709	1.423	7.62	9.2	10.78	12.67	13.93	14.71	15.5	17.08	18.65	19.13	20.23	23.38	26.53	29.68
28	2.807	40	4.01	1.429	7.22	8.8	10.38	12.27	13.53	14.32	15.1	16.68	18.26	18.73	19.83	22.98	26.13	29.28
35	3.509	50	5.013	1.429	5.86	7.44	9.03	10.92	12.18	12.97	13.76	15.33	16.91	17.39	18.49	21.64	24.79	27.94
42	4.211	60	6.015	1.429		6.08	7.67	9.57	10.83	11.62	12.41	13.98	15.56	16.04	17.14	20.29	23.45	26.6
56	5.614	80	8.02	1.429					8.1	8.9	9.69	11.27	12.86	13.33	14.44	17.6	20.75	23.91
63	6.316	90	9.023	1.429							8.31	9.91	11.49	11.97	13.08	16.24	19.4	22.56
37	3.709	53	5.314	1.432	5.45	7.04	8.63	10.52	11.79	12.57	13.36	14.94	16.51	16.99	18.09	21.24	24.4	27.55
39	3.91	56	5.614	1.436		6.64	8.23	10.12	11.39	12.18	12.96	14.54	16.12	16.59	17.69	20.85	24	27.15
25	2.506	36	3.609	1.44	7.78	9.36	10.93	12.83	14.09	14.87	15.66	17.23	18.81	19.28	20.38	23.54	26.69	29.84
27	2.707	39	3.91	1.444	7.38	8.96	10.54	12.43	13.69	14.48	15.26	16.84	18.41	18.89	19.99	23.14	26.29	29.44
29	2.907	42	4.211	1.448	6.98	8.56	10.14	12.03	13.29	14.08	14.87	16.44	18.02	18.49	19.59	22.75	25.9	29.05
31	3.108	45	4.511	1.452	6.58	8.16	9.74	11.63	12.9	13.68	14.47	16.05	17.62	18.1	19.2	22.35	25.5	28.65
22	2.206	32	3.208	1.455	8.33	9.91	11.49	13.38	14.64	15.42	16.21	17.79	19.36	19.84	20.94	24.09	27.24	30.39
33	3.308	48	4.812	1.455	6.18	7.76	9.34	11.24	12.5	13.29	14.07	15.65	17.23	17.7	18.8	21.95	25.11	28.26
26	2.607	38	3.81	1.462	7.54	9.12	10.69	12.59	13.85	14.63	15.42	16.99	18.57	19.05	20.15	23.3	26.45	29.6
41	4.11	60	6.015	1.463		6.15	7.74	9.64	10.91	11.69	12.48	14.06	15.64	16.11	17.22	20.37	23.52	26.68
28	2.807	41	4.11	1.464	7.14	8.72	10.3	12.19	13.45	14.24	15.02	16.6	18.18	18.65	19.75	22.9	26.05	29.21
34	3.409	50	5.013	1.471	5.93	7.52	9.1	11	12.26	13.05	13.83	15.41	16.99	17.46	18.56	21.72	24.87	28.02
36	3.609	53	5.314	1.472	5.53	7.12	8.7	10.6	11.86	12.65	13.43	15.01	16.59	17.07	18.17	21.32	24.47	27.62
38	3.81	56	5.614	1.474		6.71	8.3	10.2	11.46	12.25	13.04	14.62	16.19	16.67	17.77	20.92	24.08	27.23
48	4.812	71	7.118	1.479				8.19	9.46	10.25	11.04	12.62	14.2	14.68	15.78	18.94	22.1	25.25
25	2.506	37	3.709	1.48	7.7	9.27	10.85	12.74	14.01	14.79	15.58	17.15	18.73	19.2	20.3	23.46	26.61	29.76
27	2.707	40	4.01	1.481	7.3	8.88	10.45	12.35	13.61	14.39	15.18	16.76	18.33	18.81	19.91	23.06	26.21	29.36
45	4.511	67	6.717	1.489			6.84	8.75	10.02	10.81	11.6	13.18	14.76	15.24	16.34	19.5	22.65	25.8
75	7.519	112	11.229	1.493											10.3	13.49	16.67	19.83
22	2.206	33	3.308	1.5	8.25	9.83	11.41	13.3	14.56	15.34	16.13	17.71	19.28	19.76	20.86	24.01	27.16	30.31
26	2.607	39	3.91	1.5	7.45	9.03	10.61	12.5	13.77	14.55	15.34	16.91	18.49	18.97	20.07	23.22	26.37	29.52
28	2.807	42	4.211	1.5	7.05	8.63	10.21	12.11	13.37	14.16	14.94	16.52	18.09	18.57	19.67	22.82	25.97	29.12
30	3.008	45	4.511	1.5	6.65	8.24	9.82	11.71	12.97	13.76	14.55	16.12	17.7	18.17	19.27	22.43	25.58	28.73
32	3.208	48	4.812	1.5	6.25	7.84	9.42	11.31	12.58	13.36	14.15	15.73	17.3	17.78	18.88	22.03	25.18	28.33
40	4.01	60	6.015	1.5		6.22	7.81	9.71	10.98	11.77	12.56	14.14	15.71	16.19	17.29	20.45	23.6	26.75
42	4.211	63	6.316	1.5		5.81	7.41	9.31	10.58	11.37	12.16	13.74	15.32	15.79	16.89	20.05	23.2	26.36
50	5.013	75	7.519	1.5				7.7	8.97	9.76	10.55	12.14	13.72	14.2	15.3	18.46	21.62	24.77
60	6.015	90	9.023	1.5							8.53	10.12	11.71	12.19	13.3	16.47	19.63	22.78
53	5.314	80	8.02	1.509					8.32	9.11	9.9	11.49	13.08	13.55	14.66	17.82	20.98	24.13
35	3.509	53	5.314	1.514	5.6	7.19	8.77	10.67	11.94	12.72	13.51	15.09	16.67	17.14	18.24	21.4	24.55	27.7
37	3.709	56	5.614	1.514	5.19	6.79	8.37	10.27	11.54	12.33	13.11	14.69	16.27	16.75	17.85	21	24.15	27.31
33	3.308	50	5.013	1.515	6	7.59	9.18	11.07	12.34	13.12	13.91	15.49	17.06	17.54	18.64	21.79	24.95	28.1
27	2.707	41	4.11	1.519	7.21	8.79	10.37	12.27	13.53	14.31	15.1	16.68	18.25	18.73	19.83	22.98	26.13	29.28
25	2.506	38	3.81	1.52	7.61	9.19	10.77	12.66	13.92	14.71	15.5	17.07	18.65	19.12	20.22	23.38	26.53	29.68
41	4.11	63	6.316	1.537		5.88	7.48	9.39	10.65	11.44	12.23	13.81	15.39	15.87	16.97	20.13	23.28	26.43
26	2.607	40	4.01	1.538	7.37	8.95	10.53	12.42	13.69	14.47	15.26	16.83	18.41	18.88	19.99	23.14	26.29	29.44
39	3.91	60	6.015	1.538		6.29	7.88	9.79	11.05	11.84	12.63	14.21	15.79	16.27	17.37	20.52	23.68	26.83
22	2.206	34	3.409	1.545	8.17	9.75	11.32	13.22	14.48	15.26	16.05	17.62	19.2	19.68	20.78	23.93	27.08	30.23
31	3.108	48	4.812	1.548	6.32	7.91	9.49	11.39	12.65	13.44	14.22	15.8	17.38	17.85	18.96	22.11	25.26	28.41
29	2.907	45	4.511	1.552	6.73	8.31	9.89	11.79	13.05	13.84	14.62	16.2	17.78	18.25	19.35	22.5	25.66	28.81
27	2.707	42	4.211	1.556	7.13	8.71	10.29	12.18	13.45	14.23	15.02	16.59	18.17	18.65	19.75	22.9	26.05	29.2
36	3.609	56	5.614	1.556	5.26	6.86	8.45	10.35	11.61	12.4	13.19	14.77	16.35	16.82	17.92	21.08	24.23	27.38
34	3.409	53	5.314	1.559	5.67	7.26	8.85	10.75	12.01	12.8	13.59	15.16	16.74	17.22	18.32	21.47	24.63	27.78
25	2.506	39	3.91	1.56	7.53	9.11	10.69	12.58	13.84	14.63	15.41	16.99	18.57	19.04	20.14	23.3	26.45	29.6
32	3.208	50	5.013	1.563	6.08	7.67	9.25	11.15	12.41	13.2	13.98	15.56	17.14	17.62	18.72	21.87	25.02	28.17
48	4.812	75	7.519	1.563				7.84	9.11	9.91	10.7	12.29	13.87	14.35	15.45	18.61	21.77	24.92
40	4.01	63	6.316	1.575		5.95	7.55	9.46	10.73	11.52	12.31	13.89	15.47	15.94	17.05	20.2	23.36	26.51
26	2.607	41	4.11	1.577	7.29	8.87	10.45	12.34	13.6	14.39	15.18	16.75	18.33	18.8	19.91	23.06	26.21	29.36
71	7.118	112	11.229	1.577										9.46	10.59	13.78	16.96	20.13
				Length Factor*	0.79	0.83	0.87	0.91	0.94	0.96	0.97	1	1.03	1.03	1.05	1.1	1.14	1.17

Note: 26, 27, 29 and 31 groove sprockets are only available as stock products in 12 and 21 mm widths. 33, 35, 37, 39 and 41 groove sprockets are only available as stock products in 12, 21, and 36 mm widths.
Check sprocket specification tables on pages 17 and 18 for stainless steel and nickel plated sprocket availability.
* This length factor must be used to determine the proper belt width.

8mm Pitch Poly Chain® GT® Carbon™ Belts Drive Selection Table

Center Distance, Inches																Speed Ratio	Sprocket Combinations	
																	DriveR	DriveR
8MGT-1792 P.L. 70.55 224Teeth	8MGT-2000 P.L. 78.74 250 Teeth	8MGT-2200 P.L. 86.61 275 Teeth	8MGT-2240 P.L. 88.19 280 Teeth	8MGT-2400 P.L. 94.49 300 Teeth	8MGT-2520 P.L. 99.21 315 Teeth	8MGT-2600 P.L 102.36 325 Teeth	8MGT-2800 P.L 110.24 350 Teeth	8MGT-2840 P.L. 111.81 355 Teeth	8MGT-3048 P.L 120.00 381 Teeth	8MGT-3200 P.L 125.98 400 Teeth	8MGT-3280 P.L 129.13 410 Teeth	8MGT-3600 P.L 141.73 450 Teeth	8MGT-4000 P.L. 157.48 500 Teeth	8MGT-4400 P.L 173.23 550 Teeth	8MGT-4480 P.L 176.38 560 Teeth		Number of Grooves	Number of Grooves
27.63	31.72	35.66	36.45	39.6	41.96	43.54	47.48	48.26	52.2	55.35	56.92	63.22	71.1	78.97	80.55	1.366	41	56
29.68	33.78	37.71	38.5	41.65	44.01	45.59	49.53	50.31	54.25	57.4	58.97	65.27	73.15	81.02	82.6	1.367	30	41
30.23	34.33	38.26	39.05	42.2	44.56	46.14	50.08	50.86	54.8	57.95	59.52	65.82	73.7	81.57	83.15	1.37	27	37
28.73	32.83	36.76	37.55	40.7	43.06	44.64	48.58	49.37	53.3	56.45	58.03	64.33	72.2	80.08	81.65	1.371	35	48
29.84	33.93	37.87	38.66	41.81	44.17	45.74	49.68	50.47	54.4	57.55	59.13	65.43	73.31	81.18	82.76	1.379	29	40
30.39	34.48	38.42	39.21	42.36	44.72	46.3	50.24	51.02	54.96	58.11	59.68	65.98	73.86	81.73	83.31	1.385	26	36
28.49	32.59	36.53	37.32	40.47	42.83	44.4	48.34	49.13	53.06	56.21	57.79	64.09	71.96	79.84	81.42	1.389	36	50
29.99	34.09	38.03	38.82	41.97	44.33	45.9	49.84	50.63	54.56	57.71	59.29	65.59	73.46	81.34	82.91	1.393	28	39
28.1	32.2	36.13	36.92	40.07	42.43	44.01	47.95	48.73	52.67	55.82	57.39	63.69	71.57	79.45	81.02	1.395	38	53
26.2	30.3	34.24	35.03	38.18	40.54	42.11	46.06	46.84	50.78	53.93	55.5	61.8	69.68	77.55	79.13	1.396	48	67
30.55	34.64	38.58	39.37	42.52	44.88	46.45	50.39	51.18	55.11	58.26	59.84	66.14	74.01	81.89	83.46	1.4	25	35
29.6	33.69	37.63	38.42	41.57	43.93	45.51	49.45	50.23	54.17	57.32	58.89	65.19	73.07	80.94	82.52	1.4	30	42
27.7	31.8	35.74	36.53	39.68	42.04	43.61	47.55	48.34	52.28	55.43	57	63.3	71.18	79.05	80.63	1.4	40	56
26.76	30.85	34.79	35.58	38.73	41.09	42.67	46.61	47.39	51.33	54.48	56.05	62.35	70.23	78.11	79.68	1.4	45	63
20.09	24.2	28.14	28.93	32.09	34.45	36.03	39.97	40.76	44.69	47.84	49.42	55.72	63.6	71.48	73.05	1.4	80	112
29.21	33.3	37.24	38.03	41.18	43.54	45.11	49.05	49.84	53.77	56.92	58.5	64.8	72.67	80.55	82.12	1.406	32	45
30.15	34.25	38.18	38.97	42.12	44.48	46.06	50	50.78	54.72	57.87	59.44	65.74	73.62	81.49	83.07	1.407	27	38
31.1	35.19	39.13	39.92	43.07	45.43	47	50.94	51.73	55.66	58.81	60.39	66.69	74.57	82.44	84.02	1.409	22	31
28.81	32.91	36.84	37.63	40.78	43.14	44.72	48.66	49.44	53.38	56.53	58.1	64.4	72.28	80.16	81.73	1.412	34	48
29.76	33.85	37.79	38.58	41.73	44.09	45.66	49.61	50.39	54.33	57.48	59.05	65.35	73.23	81.1	82.68	1.414	29	41
25.17	29.27	33.21	34	37.15	39.51	41.09	45.03	45.81	49.75	52.9	54.47	60.78	68.65	76.53	78.1	1.415	53	75
25.73	29.82	33.76	34.55	37.7	40.06	41.64	45.58	46.37	50.3	53.45	55.03	61.33	69.2	77.08	78.66	1.42	50	71
30.31	34.41	38.34	39.13	42.28	44.64	46.22	50.16	50.94	54.88	58.03	59.6	65.9	73.78	81.65	83.23	1.423	26	37
29.91	34.01	37.95	38.74	41.89	44.25	45.82	49.76	50.55	54.48	57.63	59.21	65.51	73.38	81.26	82.83	1.429	28	40
28.57	32.67	36.6	37.39	40.54	42.91	44.48	48.42	49.21	53.14	56.29	57.87	64.17	72.04	79.92	81.49	1.429	35	50
27.23	31.33	35.26	36.05	39.2	41.56	43.14	47.08	47.87	51.8	54.95	56.53	62.83	70.7	78.58	80.15	1.429	42	60
24.54	28.64	32.57	33.37	36.52	38.88	40.45	44.4	45.18	49.12	52.27	53.84	60.14	68.02	75.9	77.47	1.429	56	80
23.19	27.29	31.23	32.02	35.17	37.53	39.11	43.05	43.84	47.77	50.92	52.5	58.8	66.68	74.56	76.13	1.429	63	90
28.18	32.27	36.21	37	40.15	42.51	44.09	48.03	48.81	52.75	55.9	57.47	63.77	71.65	79.52	81.1	1.432	37	53
27.78	31.88	35.81	36.6	39.76	42.12	43.69	47.63	48.42	52.35	55.5	57.08	63.38	71.25	79.13	80.71	1.436	39	56
30.47	34.56	38.5	39.29	42.44	44.8	46.37	50.31	51.1	55.03	58.18	59.76	66.06	73.94	81.81	83.39	1.44	25	36
30.07	34.17	38.1	38.89	42.04	44.4	45.98	49.92	50.7	54.64	57.79	59.36	65.67	73.54	81.42	82.99	1.444	27	39
29.68	33.77	37.71	38.5	41.65	44.01	45.58	49.53	50.31	54.25	57.4	58.97	65.27	73.15	81.02	82.6	1.448	29	42
29.28	33.38	37.31	38.1	41.26	43.62	45.19	49.13	49.92	53.85	57	58.58	64.88	72.75	80.63	82.2	1.452	31	45
31.02	35.11	39.05	39.84	42.99	45.35	46.93	50.87	51.65	55.59	58.74	60.31	66.61	74.49	82.36	83.94	1.455	22	32
28.89	32.98	36.92	37.71	40.86	43.22	44.8	48.74	49.52	53.46	56.61	58.18	64.48	72.36	80.23	81.81	1.455	33	48
30.23	34.32	38.26	39.05	42.2	44.56	46.14	50.08	50.86	54.8	57.95	59.52	65.82	73.7	81.57	83.15	1.462	26	38
27.31	31.4	35.34	36.13	39.28	41.64	43.22	47.16	47.94	51.88	55.03	56.6	62.91	70.78	78.66	80.23	1.463	41	60
29.84	33.93	37.87	38.66	41.81	44.17	45.74	49.68	50.47	54.4	57.55	59.13	65.43	73.3	81.18	82.75	1.464	28	41
28.65	32.75	36.68	37.47	40.62	42.98	44.56	48.5	49.28	53.22	56.37	57.94	64.25	72.12	80	81.57	1.471	34	50
28.25	32.35	36.29	37.08	40.23	42.59	44.16	48.1	48.89	52.83	55.98	57.55	63.85	71.73	79.6	81.18	1.472	36	53
27.86	31.96	35.89	36.68	39.83	42.19	43.77	47.71	48.5	52.43	55.58	57.16	63.46	71.33	79.21	80.78	1.474	38	56
25.88	29.98	33.92	34.71	37.86	40.22	41.79	45.74	46.52	50.46	53.61	55.18	61.48	69.36	77.24	78.81	1.479	48	71
30.39	34.48	38.42	39.21	42.36	44.72	46.29	50.24	51.02	54.96	58.11	59.68	65.98	73.86	81.73	83.31	1.48	25	37
29.99	34.09	38.02	38.81	41.96	44.32	45.9	49.84	50.63	54.56	57.71	59.29	65.59	73.46	81.34	82.91	1.481	27	40
26.43	30.53	34.47	35.26	38.41	40.77	42.35	46.29	47.07	51.01	54.16	55.74	62.04	69.91	77.79	79.36	1.489	45	67
20.47	24.58	28.52	29.31	32.47	34.83	36.41	40.35	41.14	45.08	48.23	49.81	56.11	63.99	71.87	73.44	1.493	75	112
30.94	35.03	38.97	39.76	42.91	45.27	46.85	50.79	51.57	55.51	58.66	60.23	66.53	74.41	82.28	83.86	1.5	22	33
30.15	34.25	38.18	38.97	42.12	44.48	46.06	50	50.78	54.72	57.87	59.44	65.74	73.62	81.49	83.07	1.5	26	39
29.75	33.85	37.79	38.58	41.73	44.09	45.66	49.6	50.39	54.32	57.47	59.05	65.35	73.22	81.1	82.68	1.5	28	42
29.36	33.46	37.39	38.18	41.33	43.69	45.27	49.21	49.99	53.93	57.08	58.65	64.96	72.83	80.71	82.28	1.5	30	45
28.97	33.06	37	37.79	40.94	43.3	44.87	48.81	49.6	53.54	56.69	58.26	64.56	72.44	80.31	81.89	1.5	32	48
27.38	31.48	35.42	36.21	39.36	41.72	43.29	47.24	48.02	51.96	55.11	56.68	62.98	70.86	78.74	80.31	1.5	40	60
26.99	31.08	35.02	35.81	38.96	41.32	42.9	46.84	47.63	51.56	54.71	56.29	62.59	70.46	78.34	79.92	1.5	42	63
25.4	29.5	33.44	34.23	37.38	39.74	41.32	45.26	46.05	49.98	53.13	54.71	61.01	68.89	76.76	78.34	1.5	50	75
23.42	27.52	31.46	32.25	35.4	37.76	39.34	43.28	44.07	48.01	51.16	52.73	59.04	66.91	74.79	76.36	1.5	60	90
24.77	28.87	32.8	33.6	36.75	39.11	40.69	44.63	45.41	49.35	52.5	54.08	60.38	68.25	76.13	77.71	1.509	53	80
28.33	32.43	36.36	37.15	40.31	42.67	44.24	48.18	48.97	52.9	56.05	57.63	63.93	71.8	79.68	81.26	1.514	35	53
27.94	32.03	35.97	36.76	39.91	42.27	43.85	47.79	48.57	52.51	55.66	57.23	63.54	71.41	79.29	80.86	1.514	37	56
28.73	32.82	36.76	37.55	40.7	43.06	44.64	48.58	49.36	53.3	56.45	58.02	64.32	72.2	80.08	81.65	1.515	33	50
29.91	34.01	37.94	38.73	41.89	44.25	45.82	49.76	50.55	54.48	57.63	59.21	65.51	73.38	81.26	82.83	1.519	27	41
30.31	34.4	38.34	39.13	42.28	44.64	46.21	50.16	50.94	54.88	58.03	59.6	65.9	73.78	81.65	83.23	1.52	25	38
27.06	31.16	35.1	35.89	39.04	41.4	42.98	46.92	47.7	51.64	54.79	56.37	62.67	70.54	78.42	79.99	1.537	41	63
30.07	34.17	38.1	38.89	42.04	44.4	45.98	49.92	50.7	54.64	57.79	59.36	65.66	73.54	81.41	82.99	1.538	26	40
27.46	31.56	35.49	36.28	39.44	41.8	43.37	47.31	48.1	52.03	55.18	56.76	63.06	70.94	78.81	80.39	1.538	39	60
30.86	34.95	38.89	39.68	42.83	45.19	46.77	50.71	51.49	55.43	58.58	60.15	66.45	74.33	82.2	83.78	1.545	22	34
29.04	33.14	37.07	37.87	41.02	43.38	44.95	48.89	49.68	53.61	56.76	58.34	64.64	72.51	80.39	81.97	1.548	31	48
29.44	33.53	37.47	38.26	41.41	43.77	45.35	49.29	50.07	54.01	57.16	58.73	65.03	72.91	80.78	82.36	1.552	29	45
29.83	33.93	37.86	38.65	41.8	44.17	45.74	49.68	50.47	54.4	57.55	59.13	65.43	73.3	81.18	82.75	1.556	27	42
28.01	32.11	36.05	36.84	39.99	42.35	43.92	47.87	48.65	52.59	55.74	57.31	63.61	71.49	79.36	80.94	1.556	36	56
28.41	32.51	36.44	37.23	40.38	42.74	44.32	48.26	49.04	52.98	56.13	57.71	64.01	71.88	79.76	81.33	1.559	34	53
30.23	34.32	38.26	39.05	42.2	44.56	46.14	50.08	50.86	54.8	57.95	59.52	65.82	73.7	81.57	83.15	1.56	25	39
28.8	32.9	36.84	37.63	40.78	43.14	44.71	48.65	49.44	53.38	56.53	58.1	64.4	72.28	80.15	81.73	1.563	32	50
25.55	29.65	33.59	34.38	37.54	39.9	41.47	45.42	46.2	50.14	53.29	54.86	61.17	69.04	76.92	78.49	1.563	48	75
27.14	31.24	35.18	35.97	39.12	41.48	43.05	47	47.78	51.72	54.87	56.44	62.74	70.62	78.5	80.07	1.575	40	63
29.99	34.09	38.02	38.81	41.96	44.32	45.9	49.84	50.62	54.56	57.71	59.28	65.59	73.46	81.34	82.91	1.577	26	41
20.76	24.88	28.82	29.61	32.77	35.14	36.71	40.66	41.44	45.38	48.54	50.11	56.42	64.3	72.18	73.75	1.577	71	112
1.18	1.22	1.26	1.26	1.29	1.31	1.32	1.35	1.36	1.38	1.4	1.41	1.45	1.49	1.52	1.53	Length Factor*		

Note: 26, 27, 29 and 31 groove sprockets are only available as stock products in 12 and 21 mm widths. 33, 35, 37, 39 and 41 groove sprockets are only available as stock products in 12, 21, and 36 mm widths. Check sprocket specification tables on pages 17 and 18 for stainless steel and nickel plated sprocket availability.

* This length factor must be used to determine the proper belt width.

Center distance is greater than eight times the small sprocket and the large sprocket is not flanged. See Engineering Section for details.

8mm Pitch Poly Chain® GT® Carbon™ Belts Drive Selection Table

Sprocket Combinations					Center Distance, Inches													
DriveR		DriveN																
Number of Grooves	Pitch Diameter (Inches)	Number of Grooves	Pitch Diameter (Inches)	Speed Ratio	8MGT-640 P.L. 25.20 80 Teeth	8MGT-720 P.L. 28.35 90 Teeth	8MGT-800 P.L. 31.50 100 Teeth	8MGT-896 P.L. 35.28 112 Teeth	8MGT-960 P.L. 37.80 120 Teeth	8MGT-1000 P.L. 39.37 125 Teeth	8MGT-1040 P.L. 40.94 130 Teeth	8MGT-1120 P.L. 44.09 140 Teeth	8MGT-1200 P.L. 47.24 150 Teeth	8MGT-1224 P.L. 48.19 153 Teeth	8MGT-1280 P.L. 50.39 160 Teeth	8MGT-1440 P.L. 56.69 180 Teeth	8MGT-1600 P.L. 62.99 200Teeth	8MGT-1760 P.L. 69.29 220 Teeth
45	4.511	71	7.118	1.578			6.49	8.41	9.68	10.47	11.26	12.85	14.43	14.9	16.01	19.17	22.32	25.48
38	3.81	60	6.015	1.579		6.36	7.96	9.86	11.13	11.92	12.71	14.29	15.87	16.34	17.44	20.6	23.75	26.91
22	2.206	35	3.509	1.591	8.09	9.66	11.24	13.14	14.4	15.18	15.97	17.54	19.12	19.6	20.7	23.85	27	30.15
42	4.211	67	6.717	1.595			7.06	8.97	10.24	11.03	11.82	13.4	14.98	15.46	16.56	19.72	22.88	26.03
25	2.506	40	4.01	1.6	7.44	9.03	10.61	12.5	13.76	14.55	15.33	16.91	18.49	18.96	20.06	23.22	26.37	29.52
30	3.008	48	4.812	1.6	6.39	7.98	9.57	11.46	12.73	13.51	14.3	15.88	17.45	17.93	19.03	22.18	25.34	28.49
35	3.509	56	5.614	1.6	5.33	6.93	8.52	10.42	11.69	12.48	13.26	14.84	16.42	16.9	18	21.15	24.31	27.46
50	5.013	80	8.02	1.6				7.25	8.53	9.33	10.12	11.71	13.3	13.78	14.88	18.05	21.21	24.36
33	3.308	53	5.314	1.606	5.74	7.33	8.92	10.82	12.09	12.87	13.66	15.24	16.82	17.29	18.4	21.55	24.7	27.86
28	2.807	45	4.511	1.607	6.8	8.38	9.97	11.86	13.12	13.91	14.7	16.28	17.85	18.33	19.43	22.58	25.73	28.88
56	5.614	90	9.023	1.607						8.01	8.81	10.41	12	12.48	13.59	16.76	19.93	23.09
31	3.108	50	5.013	1.613	6.15	7.74	9.32	11.22	12.49	13.27	14.06	15.64	17.22	17.69	18.79	21.95	25.1	28.25
26	2.607	42	4.211	1.615	7.2	8.78	10.36	12.26	13.52	14.31	15.09	16.67	18.25	18.72	19.82	22.98	26.13	29.28
39	3.91	63	6.316	1.615		6.02	7.62	9.53	10.8	11.59	12.38	13.96	15.54	16.02	17.12	20.28	23.43	26.59
37	3.709	60	6.015	1.622		6.43	8.03	9.94	11.2	11.99	12.78	14.36	15.94	16.42	17.52	20.68	23.83	26.98
41	4.11	67	6.717	1.634			7.13	9.04	10.31	11.1	11.9	13.48	15.06	15.54	16.64	19.8	22.95	26.11
22	2.206	36	3.609	1.636	8	9.58	11.16	13.05	14.32	15.1	15.89	17.46	19.04	19.52	20.62	23.77	26.92	30.07
25	2.506	41	4.11	1.64	7.36	8.94	10.52	12.42	13.68	14.47	15.25	16.83	18.41	18.88	19.98	23.13	26.29	29.44
34	3.409	56	5.614	1.647	5.4	7	8.59	10.5	11.76	12.55	13.34	14.92	16.5	16.97	18.07	21.23	24.38	27.54
29	2.907	48	4.812	1.655	6.47	8.06	9.64	11.54	12.8	13.59	14.38	15.95	17.53	18.01	19.11	22.26	25.41	28.57
32	3.208	53	5.314	1.656	5.81	7.41	9	10.9	12.16	12.95	13.74	15.32	16.89	17.37	18.47	21.63	24.78	27.93
38	3.81	63	6.316	1.658		6.09	7.69	9.61	10.87	11.66	12.45	14.04	15.62	16.09	17.2	20.35	23.51	26.66
27	2.707	45	4.511	1.667	6.87	8.46	10.04	11.94	13.2	13.99	14.77	16.35	17.93	18.4	19.51	22.66	25.81	28.96
30	3.008	50	5.013	1.667	6.22	7.81	9.4	11.3	12.56	13.35	14.13	15.71	17.29	17.77	18.87	22.02	25.18	28.33
36	3.609	60	6.015	1.667		6.5	8.1	10.01	11.28	12.07	12.85	14.44	16.02	16.49	17.6	20.75	23.91	27.06
45	4.511	75	7.519	1.667				8.05	9.33	10.12	10.92	12.51	14.09	14.57	15.67	18.84	22	25.15
48	4.812	80	8.02	1.667				7.39	8.67	9.47	10.27	11.86	13.45	13.92	15.03	18.2	21.36	24.51
67	6.717	112	11.229	1.672										9.74	10.87	14.07	17.25	20.43
40	4.01	67	6.717	1.675			7.2	9.11	10.39	11.18	11.97	13.55	15.13	15.61	16.72	19.87	23.03	26.19
25	2.506	42	4.211	1.68	7.27	8.86	10.44	12.34	13.6	14.38	15.17	16.75	18.32	18.8	19.9	23.05	26.21	29.36
22	2.206	37	3.709	1.682	7.92	9.5	11.08	12.97	14.23	15.02	15.81	17.38	18.96	19.43	20.54	23.69	26.84	29.99
42	4.211	71	7.118	1.69			6.69	8.62	9.9	10.69	11.48	13.07	14.65	15.13	16.23	19.39	22.55	25.71
33	3.308	56	5.614	1.697	5.47	7.07	8.67	10.57	11.84	12.62	13.41	14.99	16.57	17.05	18.15	21.31	24.46	27.61
53	5.314	90	9.023	1.698					7.41	8.21	9.02	10.62	12.22	12.7	13.81	16.98	20.15	23.31
37	3.709	63	6.316	1.703		6.16	7.77	9.68	10.95	11.74	12.53	14.11	15.69	16.17	17.27	20.43	23.59	26.74
31	3.108	53	5.314	1.71	5.88	7.48	9.07	10.97	12.24	13.02	13.81	15.39	16.97	17.45	18.55	21.7	24.86	28.01
28	2.807	48	4.812	1.714	6.54	8.13	9.71	11.61	12.88	13.66	14.45	16.03	17.61	18.08	19.18	22.34	25.49	28.64
35	3.509	60	6.015	1.714		6.58	8.17	10.08	11.35	12.14	12.93	14.51	16.09	16.57	17.67	20.83	23.98	27.14
39	3.91	67	6.717	1.718			7.27	9.19	10.46	11.25	12.04	13.63	15.21	15.69	16.79	19.95	23.11	26.26
29	2.907	50	5.013	1.724	6.29	7.88	9.47	11.37	12.64	13.42	14.21	15.79	17.37	17.84	18.95	22.1	25.25	28.41
22	2.206	38	3.81	1.727	7.83	9.42	11	12.89	14.15	14.94	15.72	17.3	18.88	19.35	20.45	23.61	26.76	29.91
26	2.607	45	4.511	1.731	6.94	8.53	10.11	12.01	13.28	14.06	14.85	16.43	18	18.48	19.58	22.73	25.89	29.04
41	4.11	71	7.118	1.732			6.76	8.69	9.97	10.76	11.55	13.14	14.72	15.2	16.31	19.47	22.63	25.78
32	3.208	56	5.614	1.75	5.54	7.14	8.74	10.64	11.91	12.7	13.49	15.07	16.65	17.12	18.23	21.38	24.54	27.69
36	3.609	63	6.316	1.75		6.23	7.84	9.75	11.02	11.81	12.6	14.19	15.77	16.24	17.35	20.51	23.66	26.82
80	8.02	140	14.036	1.75													13.84	17.06
38	3.81	67	6.717	1.763			7.34	9.26	10.53	11.32	12.11	13.7	15.28	15.76	16.86	20.02	23.18	26.34
34	3.409	60	6.015	1.765		6.65	8.25	10.15	11.42	12.21	13	14.59	16.17	16.64	17.75	20.9	24.06	27.21
30	3.008	53	5.314	1.767	5.95	7.55	9.14	11.04	12.31	13.1	13.89	15.47	17.04	17.52	18.62	21.78	24.93	28.09
22	2.206	39	3.91	1.773	7.75	9.33	10.91	12.81	14.07	14.86	15.64	17.22	18.8	19.27	20.37	23.53	26.68	29.83
40	4.01	71	7.118	1.775			6.83	8.76	10.04	10.83	11.63	13.21	14.8	15.28	16.38	19.54	22.7	25.86
27	2.707	48	4.812	1.778	6.61	8.2	9.79	11.69	12.95	13.74	14.53	16.11	17.68	18.16	19.26	22.41	25.57	28.72
45	4.511	80	8.02	1.778				7.59	8.88	9.68	10.48	12.08	13.67	14.14	15.25	18.42	21.58	24.74
63	6.316	112	11.229	1.778									9.52	10.01	11.14	14.35	17.54	20.72
28	2.807	50	5.013	1.786	6.36	7.96	9.54	11.44	12.71	13.5	14.29	15.86	17.44	17.92	19.02	22.18	25.33	28.48
42	4.211	75	7.519	1.786				8.26	9.54	10.34	11.13	12.72	14.31	14.79	15.9	19.06	22.22	25.38
25	2.506	45	4.511	1.8	7.02	8.61	10.19	12.09	13.35	14.14	14.93	16.5	18.08	18.56	19.66	22.81	25.96	29.12
35	3.509	63	6.316	1.8		6.3	7.91	9.82	11.09	11.89	12.68	14.26	15.84	16.32	17.42	20.58	23.74	26.89
50	5.013	90	9.023	1.8					7.61	8.42	9.23	10.84	12.43	12.92	14.03	17.2	20.37	23.54
31	3.108	56	5.614	1.806	5.61	7.22	8.81	10.72	11.98	12.77	13.56	15.14	16.72	17.2	18.3	21.46	24.61	27.77
37	3.709	67	6.717	1.811		5.79	7.41	9.33	10.6	11.4	12.19	13.77	15.36	15.83	16.94	20.1	23.26	26.41
22	2.206	40	4.01	1.818	7.66	9.25	10.83	12.73	13.99	14.78	15.56	17.14	18.72	19.19	20.29	23.45	26.6	29.75
33	3.308	60	6.015	1.818		6.72	8.32	10.23	11.5	12.29	13.08	14.66	16.24	16.72	17.82	20.98	24.13	27.29
39	3.91	71	7.118	1.821			6.9	8.83	10.11	10.91	11.7	13.29	14.87	15.35	16.46	19.62	22.78	25.93
29	2.907	53	5.314	1.828	6.02	7.62	9.21	11.12	12.38	13.17	13.96	15.54	17.12	17.6	18.7	21.86	25.01	28.16
41	4.11	75	7.519	1.829			6.39	8.33	9.62	10.41	11.21	12.8	14.39	14.86	15.97	19.14	22.3	25.45
26	2.607	48	4.812	1.846	6.68	8.27	9.86	11.76	13.03	13.81	14.6	16.18	17.76	18.23	19.34	22.49	25.64	28.8
27	2.707	50	5.013	1.852	6.43	8.03	9.62	11.52	12.78	13.57	14.36	15.94	17.52	17.99	19.1	22.25	25.41	28.56
34	3.409	63	6.316	1.853		6.37	7.98	9.9	11.17	11.96	12.75	14.33	15.92	16.39	17.5	20.66	23.81	26.97
36	3.609	67	6.717	1.861		5.86	7.48	9.4	10.68	11.47	12.26	13.85	15.43	15.91	17.01	20.18	23.33	26.49
22	2.206	41	4.11	1.864	7.58	9.16	10.75	12.64	13.91	14.69	15.48	17.06	18.64	19.11	20.21	23.37	26.52	29.67
30	3.008	56	5.614	1.867	5.68	7.29	8.88	10.79	12.06	12.85	13.64	15.22	16.8	17.27	18.38	21.53	24.69	27.84
60	6.015	112	11.229	1.867									9.73	10.22	11.35	14.57	17.76	20.94
75	7.519	140	14.036	1.867													14.19	17.41
38	3.81	71	7.118	1.868			6.97	8.9	10.18	10.98	11.77	13.36	14.95	15.42	16.53	19.69	22.85	26.01
32	3.208	60	6.015	1.875	5.16	6.79	8.39	10.3	11.57	12.36	13.15	14.73	16.32	16.79	17.9	21.05	24.21	27.37
40	4.01	75	7.519	1.875			6.46	8.4	9.69	10.48	11.28	12.87	14.46	14.94	16.04	19.21	22.37	25.53
48	4.812	90	9.023	1.875					7.75	8.56	9.37	10.98	12.58	13.06	14.17	17.35	20.52	23.69
				Length Factor*	0.79	0.83	0.87	0.91	0.94	0.96	0.97	1	1.03	1.03	1.05	1.1	1.14	1.17

Note: 26, 27, 29 and 31 groove sprockets are only available as stock products in 12 and 21 mm widths. 33, 35, 37, 39 and 41 groove sprockets are only available as stock products in 12, 21, and 36 mm widths.
Check sprocket specification tables on pages 17 and 18 for stainless steel and nickel plated sprocket availability.
* This length factor must be used to determine the proper belt width.

8mm Pitch Poly Chain® GT® Carbon™ Belts Drive Selection Table

Center Distance, Inches																Speed Ratio	Sprocket Combinations	
																	DriveR	DriveR
8MGT-1792 P.L. 70.55 224Teeth	8MGT-2000 P.L. 78.74 250 Teeth	8MGT-2200 P.L. 86.61 275 Teeth	8MGT-2240 P.L. 88.19 280 Teeth	8MGT-2400 P.L. 94.49 300 Teeth	8MGT-2520 P.L. 99.21 315 Teeth	8MGT-2600 P.L 102.36 325 Teeth	8MGT-2800 P.L 110.24 350 Teeth	8MGT-2840 P.L. 111.81 355 Teeth	8MGT-3048 P.L 120.00 381 Teeth	8MGT-3200 P.L 125.98 400 Teeth	8MGT-3280 P.L 129.13 410 Teeth	8MGT-3600 P.L 141.73 450 Teeth	8MGT-4000 P.L. 157.48 500 Teeth	8MGT-4400 P.L 173.23 550 Teeth	8MGT-4480 P.L 176.38 560 Teeth		Number of Grooves	Number of Grooves
26.11	30.21	34.15	34.94	38.09	40.45	42.03	45.97	46.75	50.85	53.84	55.42	61.72	69.59	77.47	79.05	1.578	45	71
27.54	31.63	35.57	36.36	39.51	41.87	43.45	47.39	48.18	52.27	55.26	56.84	63.14	71.01	78.89	80.47	1.579	38	60
30.78	34.88	38.81	39.6	42.75	45.11	46.69	50.63	51.41	55.51	58.5	60.07	66.37	74.25	82.12	83.7	1.591	22	35
26.66	30.76	34.7	35.49	38.64	41	42.58	46.52	47.31	51.4	54.39	55.97	62.27	70.15	78.02	79.6	1.595	42	67
30.15	34.24	38.18	38.97	42.12	44.48	46.06	50	50.78	54.88	57.87	59.44	65.74	73.62	81.49	83.07	1.6	25	40
29.12	33.22	37.15	37.94	41.09	43.45	45.03	48.97	49.76	53.85	56.84	58.42	64.72	72.59	80.47	82.04	1.6	30	48
28.09	32.19	36.12	36.91	40.07	42.43	44	47.94	48.73	52.82	55.81	57.39	63.69	71.57	79.44	81.02	1.6	35	56
24.99	29.1	33.03	33.83	36.98	39.34	40.92	44.86	45.64	49.74	52.73	54.31	60.61	68.49	76.36	77.94	1.6	50	80
28.49	32.58	36.52	37.31	40.46	42.82	44.4	48.34	49.12	53.22	56.21	57.78	64.09	71.96	79.84	81.41	1.606	33	53
29.52	33.61	37.55	38.34	41.49	43.85	45.42	49.37	50.15	54.25	57.24	58.81	65.11	72.99	80.86	82.44	1.607	28	45
23.72	27.82	31.76	32.55	35.71	38.07	39.65	43.59	44.38	48.47	51.47	53.04	59.34	67.22	75.1	76.68	1.607	56	90
28.88	32.98	36.91	37.7	40.86	43.22	44.79	48.73	49.52	53.61	56.6	58.18	64.48	72.36	80.23	81.81	1.613	31	50
29.91	34.01	37.94	38.73	41.88	44.24	45.82	49.76	50.54	54.64	57.63	59.2	65.51	73.38	81.26	82.83	1.615	26	42
27.22	31.32	35.25	36.04	39.2	41.56	43.13	47.07	47.86	51.95	54.95	56.52	62.82	70.7	78.57	80.15	1.615	39	63
27.61	31.71	35.65	36.44	39.59	41.95	43.53	47.47	48.25	52.35	55.34	56.92	63.22	71.09	78.97	80.54	1.622	37	60
26.74	30.84	34.78	35.57	38.72	41.08	42.66	46.6	47.38	51.48	54.47	56.05	62.35	70.22	78.1	79.68	1.634	41	67
30.7	34.8	38.73	39.52	42.67	45.03	46.61	50.55	51.33	55.43	58.42	59.99	66.29	74.17	82.04	83.62	1.636	22	36
30.07	34.16	38.1	38.89	42.04	44.4	45.98	49.92	50.7	54.8	57.79	59.36	65.66	73.54	81.41	82.99	1.64	25	41
28.17	32.26	36.2	36.99	40.14	42.5	44.08	48.02	48.81	52.9	55.89	57.47	63.77	71.64	79.52	81.1	1.647	34	56
29.2	33.29	37.23	38.02	41.17	43.53	45.11	49.05	49.83	53.93	56.92	58.49	64.8	72.67	80.55	82.12	1.655	29	48
28.56	32.66	36.6	37.39	40.54	42.9	44.47	48.42	49.2	53.3	56.29	57.86	64.16	72.04	79.91	81.49	1.656	32	53
27.29	31.39	35.33	36.12	39.27	41.63	43.21	47.15	47.94	52.03	55.02	56.6	62.9	70.78	78.65	80.23	1.658	38	63
29.59	33.69	37.63	38.42	41.57	43.93	45.5	49.44	50.23	54.32	57.31	58.89	65.19	73.07	80.94	82.52	1.667	27	45
28.96	33.06	36.99	37.78	40.93	43.29	44.87	48.81	49.6	53.69	56.68	58.26	64.56	72.43	80.31	81.88	1.667	30	50
27.69	31.79	35.73	36.52	39.67	42.03	43.6	47.55	48.33	52.43	55.42	56.99	63.29	71.17	79.05	80.62	1.667	36	60
25.78	29.88	33.82	34.61	37.77	40.13	41.7	45.65	46.43	50.53	53.52	55.1	61.4	69.28	77.15	78.73	1.667	45	75
25.15	29.25	33.19	33.98	37.13	39.49	41.07	45.01	45.8	49.9	52.89	54.46	60.77	68.64	76.52	78.1	1.667	48	80
21.06	25.17	29.12	29.92	33.07	35.44	37.02	40.96	41.75	45.85	48.84	50.42	56.73	64.61	72.49	74.06	1.672	67	112
26.82	30.92	34.85	35.64	38.8	41.16	42.73	46.68	47.46	51.56	54.55	56.12	62.43	70.3	78.18	79.75	1.675	40	67
29.99	34.08	38.02	38.81	41.96	44.32	45.9	49.84	50.62	54.72	57.71	59.28	65.58	73.46	81.34	82.91	1.68	25	42
30.62	34.72	38.65	39.44	42.59	44.95	46.53	50.47	51.25	55.35	58.34	59.91	66.22	74.09	81.97	83.54	1.682	22	37
26.34	30.44	34.38	35.17	38.32	40.68	42.26	46.2	46.98	51.08	54.07	55.65	61.95	69.83	77.7	79.28	1.69	42	71
28.24	32.34	36.28	37.07	40.22	42.58	44.16	48.1	48.88	52.98	55.97	57.55	63.85	71.72	79.6	81.17	1.697	33	56
23.94	28.05	31.99	32.78	35.94	38.3	39.88	43.82	44.61	48.7	51.7	53.27	59.58	67.45	75.33	76.91	1.698	53	90
27.37	31.47	35.41	36.2	39.35	41.71	43.29	47.23	48.01	52.11	55.1	56.68	62.98	70.85	78.73	80.31	1.703	37	63
28.64	32.74	36.67	37.46	40.62	42.98	44.55	48.49	49.28	53.37	56.36	57.94	64.24	72.12	79.99	81.57	1.71	31	53
29.27	33.37	37.31	38.1	41.25	43.61	45.18	49.13	49.91	54.01	57	58.57	64.87	72.75	80.62	82.2	1.714	28	48
27.77	31.87	35.8	36.59	39.75	42.11	43.68	47.62	48.41	52.5	55.5	57.07	63.37	71.25	79.12	80.7	1.714	35	60
26.89	30.99	34.93	35.72	38.87	41.23	42.81	46.75	47.54	51.63	54.63	56.2	62.5	70.38	78.26	79.83	1.718	39	67
29.04	33.13	37.07	37.86	41.01	43.37	44.95	48.89	49.67	53.77	56.76	58.34	64.64	72.51	80.39	81.96	1.724	29	50
30.54	34.64	38.57	39.36	42.51	44.87	46.45	50.39	51.17	55.27	58.26	59.83	66.14	74.01	81.89	83.46	1.727	22	38
29.67	33.77	37.7	38.49	41.64	44	45.58	49.52	50.31	54.4	57.39	58.97	65.27	73.14	81.02	82.59	1.731	26	45
26.41	30.51	34.45	35.24	38.4	40.76	42.33	46.28	47.06	51.16	54.15	55.73	62.03	69.91	77.78	79.36	1.732	41	71
28.32	32.42	36.36	37.15	40.3	42.66	44.23	48.18	48.96	53.06	56.05	57.62	63.92	71.8	79.68	81.25	1.75	32	56
27.45	31.55	35.48	36.27	39.43	41.79	43.36	47.31	48.09	52.19	55.18	56.75	63.06	70.93	78.81	80.38	1.75	36	63
17.7	21.84	25.81	26.6	29.77	32.14	33.72	37.68	38.46	42.57	45.57	47.15	53.46	61.34	69.23	70.8	1.75	80	140
26.97	31.07	35.01	35.8	38.95	41.31	42.89	46.83	47.61	51.71	54.7	56.28	62.58	70.46	78.33	79.91	1.763	38	67
27.84	31.94	35.88	36.67	39.82	42.18	43.76	47.7	48.49	52.58	55.57	57.15	63.45	71.33	79.2	80.78	1.765	34	60
28.72	32.81	36.75	37.54	40.69	43.05	44.63	48.57	49.36	53.45	56.44	58.02	64.32	72.19	80.07	81.65	1.767	30	53
30.46	34.56	38.49	39.28	42.43	44.79	46.37	50.31	51.09	55.19	58.18	59.76	66.06	73.93	81.81	83.38	1.773	22	39
26.49	30.59	34.53	35.32	38.47	40.84	42.41	46.35	47.14	51.24	54.23	55.8	62.11	69.98	77.86	79.43	1.775	40	71
29.35	33.45	37.38	38.18	41.33	43.69	45.26	49.2	49.99	54.08	57.07	58.65	64.95	72.83	80.7	82.28	1.778	27	48
25.37	29.48	33.42	34.21	37.36	39.72	41.3	45.24	46.03	50.13	53.12	54.7	61	68.88	76.75	78.33	1.778	45	80
21.35	25.47	29.42	30.22	33.37	35.74	37.32	41.27	42.05	46.15	49.15	50.73	57.03	64.91	72.79	74.37	1.778	63	112
29.11	33.21	37.15	37.94	41.09	43.45	45.02	48.97	49.75	53.85	56.84	58.41	64.71	72.59	80.47	82.04	1.786	28	50
26.01	30.11	34.05	34.84	38	40.36	41.93	45.88	46.66	50.76	53.75	55.33	61.63	69.51	77.38	78.96	1.786	42	75
29.75	33.84	37.78	38.57	41.72	44.08	45.66	49.6	50.38	54.48	57.47	59.05	65.35	73.22	81.1	82.67	1.8	25	45
27.52	31.62	35.56	36.35	39.5	41.86	43.44	47.38	48.17	52.26	55.26	56.83	63.13	71.01	78.89	80.46	1.8	35	63
24.17	28.28	32.22	33.01	36.17	38.53	40.11	44.05	44.84	48.94	51.93	53.5	59.81	67.69	75.56	77.14	1.8	50	90
28.4	32.5	36.43	37.22	40.38	42.74	44.31	48.25	49.04	53.13	56.13	57.7	64	71.88	79.75	81.33	1.806	31	56
27.04	31.15	35.08	35.87	39.03	41.39	42.97	46.91	47.69	51.79	54.78	56.36	62.66	70.54	78.41	79.99	1.811	37	67
30.38	34.48	38.41	39.2	42.35	44.71	46.29	50.23	51.01	55.11	58.1	59.68	65.98	73.85	81.73	83.3	1.818	22	40
27.92	32.02	35.96	36.75	39.9	42.26	43.84	47.78	48.56	52.66	55.65	57.23	63.53	71.4	79.28	80.86	1.818	33	60
26.57	30.67	34.61	35.4	38.55	40.91	42.49	46.43	47.22	51.31	54.3	55.88	62.18	70.06	77.94	79.51	1.821	39	71
28.79	32.89	36.83	37.62	40.77	43.13	44.71	48.65	49.43	53.53	56.52	58.1	64.4	72.27	80.15	81.72	1.828	29	53
26.09	30.19	34.13	34.92	38.07	40.44	42.01	45.95	46.74	50.84	53.83	55.41	61.71	69.59	77.46	79.04	1.829	41	75
29.43	33.53	37.46	38.25	41.4	43.76	45.34	49.28	50.07	54.16	57.15	58.73	65.03	72.9	80.78	82.36	1.846	26	48
29.19	33.29	37.22	38.01	41.17	43.53	45.1	49.04	49.83	53.92	56.92	58.49	64.79	72.67	80.54	82.12	1.852	27	50
27.6	31.7	35.64	36.43	39.58	41.94	43.52	47.46	48.25	52.34	55.33	56.91	63.21	71.09	78.96	80.54	1.853	34	63
27.12	31.22	35.16	35.95	39.1	41.47	43.04	46.98	47.77	51.87	54.86	56.43	62.74	70.61	78.49	80.06	1.861	36	67
30.3	34.4	38.33	39.12	42.27	44.63	46.21	50.15	50.94	55.03	58.02	59.6	65.9	73.77	81.65	83.22	1.864	22	41
28.47	32.57	36.51	37.3	40.45	42.81	44.39	48.33	49.12	53.21	56.2	57.78	64.08	71.96	79.83	81.41	1.867	30	56
21.57	25.69	29.65	30.44	33.6	35.97	37.55	41.49	42.28	46.38	49.38	50.95	57.26	65.14	73.03	74.6	1.867	60	112
18.05	22.2	26.17	26.97	30.14	32.51	34.09	38.05	38.84	42.95	45.95	47.52	53.84	61.72	69.61	71.19	1.867	75	140
26.64	30.74	34.68	35.47	38.63	40.99	42.57	46.51	47.29	51.39	54.38	55.96	62.26	70.14	78.01	79.59	1.868	38	71
28	32.1	36.03	36.82	39.98	42.34	43.91	47.86	48.64	52.74	55.73	57.3	63.61	71.48	79.36	80.93	1.875	32	60
26.16	30.26	34.21	35	38.15	40.51	42.09	46.03	46.82	50.91	53.91	55.48	61.79	69.66	77.54	79.12	1.875	40	75
24.32	28.43	32.37	33.16	36.32	38.68	40.26	44.2	44.99	49.09	52.08	53.66	59.96	67.84	75.72	77.3	1.875	48	90
1.18	1.22	1.26	1.26	1.29	1.31	1.32	1.35	1.36	1.38	1.4	1.41	1.45	1.49	1.52	1.53	Length Factor*		

Note: 26, 27, 29 and 31 groove sprockets are only available as stock products in 12 and 21 mm widths. 33, 35, 37, 39 and 41 groove sprockets are only available as stock products in 12, 21, and 36 mm widths. Check sprocket specification tables on pages 17 and 18 for stainless steel and nickel plated sprocket availability.

* This length factor must be used to determine the proper belt width.

Center distance is greater than eight times the small sprocket and the large sprocket is not flanged. See Engineering Section for details.

8mm Pitch Poly Chain® GT® Carbon™ Belts Drive Selection Table

Sprocket Combinations					Center Distance, Inches													
DriveR		DriveN																
Number of Grooves	Pitch Diameter (Inches)	Number of Grooves	Pitch Diameter (Inches)	Speed Ratio	8MGT-640 P.L. 25.20 80 Teeth	8MGT-720 P.L. 28.35 90 Teeth	8MGT-800 P.L. 31.50 100 Teeth	8MGT-896 P.L. 35.28 112 Teeth	8MGT-960 P.L. 37.80 120 Teeth	8MGT-1000 P.L. 39.37 125 Teeth	8MGT-1040 P.L. 40.94 130 Teeth	8MGT-1120 P.L. 44.09 140 Teeth	8MGT-1200 P.L. 47.24 150 Teeth	8MGT-1224 P.L. 48.19 153 Teeth	8MGT-1280 P.L. 50.39 160 Teeth	8MGT-1440 P.L. 56.69 180 Teeth	8MGT-1600 P.L. 62.99 200Teeth	8MGT-1760 P.L. 69.29 220 Teeth
28	2.807	53	5.314	1.893	6.09	7.69	9.29	11.19	12.46	13.25	14.04	15.62	17.20	17.67	18.77	21.93	25.09	28.24
42	4.211	80	8.020	1.905				7.80	9.09	9.89	10.69	12.29	13.88	14.36	15.47	18.64	21.81	24.97
22	2.206	42	4.211	1.909	7.49	9.08	10.66	12.56	13.82	14.61	15.40	16.98	18.55	19.03	20.13	23.28	26.44	29.59
33	3.308	63	6.316	1.909		6.44	8.05	9.97	11.24	12.03	12.82	14.41	15.99	16.47	17.57	20.73	23.89	27.04
35	3.509	67	6.717	1.914		5.93	7.55	9.47	10.75	11.54	12.33	13.92	15.51	15.98	17.09	20.25	23.41	26.57
37	3.709	71	7.118	1.919			7.04	8.97	10.25	11.05	11.84	13.43	15.02	15.50	16.60	19.77	22.93	26.09
25	2.506	48	4.812	1.920	6.75	8.35	9.94	11.84	13.10	13.89	14.68	16.26	17.84	18.31	19.41	22.57	25.72	28.87
26	2.607	50	5.013	1.923	6.50	8.10	9.69	11.59	12.86	13.65	14.44	16.02	17.59	18.07	19.17	22.33	25.48	28.63
39	3.910	75	7.519	1.923			6.52	8.47	9.76	10.55	11.35	12.94	14.53	15.01	16.12	19.28	22.45	25.61
29	2.907	56	5.614	1.931	5.75	7.36	8.96	10.86	12.13	12.92	13.71	15.29	16.87	17.35	18.45	21.61	24.77	27.92
31	3.108	60	6.015	1.935	5.23	6.86	8.46	10.37	11.64	12.43	13.22	14.81	16.39	16.87	17.97	21.13	24.29	27.44
41	4.110	80	8.020	1.951				7.87	9.16	9.97	10.77	12.36	13.96	14.44	15.55	18.72	21.88	25.04
27	2.707	53	5.314	1.963	6.16	7.77	9.36	11.26	12.53	13.32	14.11	15.69	17.27	17.75	18.85	22.01	25.16	28.32
32	3.208	63	6.316	1.969		6.51	8.12	10.04	11.31	12.10	12.90	14.48	16.06	16.54	17.65	20.81	23.96	27.12
34	3.409	67	6.717	1.971		5.99	7.62	9.54	10.82	11.61	12.41	13.99	15.58	16.06	17.16	20.32	23.48	26.64
36	3.609	71	7.118	1.972			7.11	9.04	10.33	11.12	11.92	13.51	15.09	15.57	16.68	19.84	23.00	26.16
71	7.118	140	14.036	1.972												11.19	14.47	17.69
38	3.810	75	7.519	1.974			6.59	8.54	9.83	10.62	11.42	13.01	14.60	15.08	16.19	19.36	22.52	25.68
25	2.506	50	5.013	2.000	6.57	8.17	9.76	11.67	12.93	13.72	14.51	16.09	17.67	18.15	19.25	22.40	25.56	28.71
28	2.807	56	5.614	2.000	5.82	7.43	9.03	10.94	12.21	13.00	13.78	15.37	16.95	17.42	18.53	21.69	24.84	28.00
30	3.008	60	6.015	2.000	5.30	6.92	8.53	10.44	11.72	12.51	13.30	14.88	16.46	16.94	18.05	21.21	24.36	27.52
40	4.010	80	8.020	2.000				7.94	9.23	10.04	10.84	12.43	14.03	14.51	15.62	18.79	21.96	25.12
45	4.511	90	9.023	2.000					7.95	8.76	9.57	11.19	12.79	13.27	14.39	17.57	20.74	23.91
56	5.614	112	11.229	2.000									9.99	10.49	11.63	14.85	18.05	21.23
37	3.709	75	7.519	2.027			6.66	8.61	9.90	10.70	11.49	13.09	14.68	15.16	16.26	19.43	22.60	25.76
35	3.509	71	7.118	2.029			7.18	9.11	10.40	11.19	11.99	13.58	15.17	15.64	16.75	19.92	23.08	26.24
33	3.308	67	6.717	2.030		6.06	7.69	9.61	10.89	11.69	12.48	14.07	15.65	16.13	17.24	20.40	23.56	26.72
31	3.108	63	6.316	2.032		6.58	8.19	10.11	11.39	12.18	12.97	14.55	16.14	16.62	17.72	20.88	24.04	27.20
26	2.607	53	5.314	2.038	6.23	7.84	9.43	11.34	12.61	13.40	14.18	15.77	17.35	17.82	18.93	22.08	25.24	28.39
22	2.206	45	4.511	2.045	7.23	8.82	10.41	12.31	13.58	14.36	15.15	16.73	18.31	18.78	19.89	23.04	26.19	29.35
39	3.910	80	8.020	2.051				8.00	9.30	10.11	10.91	12.51	14.10	14.58	15.69	18.86	22.03	25.19
29	2.907	60	6.015	2.069	5.37	6.99	8.60	10.52	11.79	12.58	13.37	14.96	16.54	17.02	18.12	21.28	24.44	27.59
27	2.707	56	5.614	2.074	5.88	7.50	9.10	11.01	12.28	13.07	13.86	15.44	17.02	17.50	18.60	21.76	24.92	28.07
36	3.609	75	7.519	2.083			6.72	8.68	9.97	10.77	11.56	13.16	14.75	15.23	16.34	19.51	22.67	25.83
34	3.409	71	7.118	2.088			7.24	9.18	10.47	11.26	12.06	13.65	15.24	15.72	16.82	19.99	23.15	26.31
67	6.717	140	14.036	2.090												11.46	14.74	17.97
32	3.208	67	6.717	2.094		6.13	7.76	9.69	10.96	11.76	12.55	14.14	15.73	16.20	17.31	20.47	23.63	26.79
30	3.008	63	6.316	2.100		6.65	8.26	10.18	11.46	12.25	13.04	14.63	16.21	16.69	17.80	20.96	24.12	27.27
38	3.810	80	8.020	2.105				8.07	9.37	10.18	10.98	12.58	14.17	14.65	15.76	18.94	22.10	25.27
53	5.314	112	11.229	2.113									10.20	10.69	11.83	15.06	18.26	21.45
25	2.506	53	5.314	2.120	6.30	7.91	9.50	11.41	12.68	13.47	14.26	15.84	17.42	17.90	19.00	22.16	25.31	28.47
28	2.807	60	6.015	2.143	5.43	7.06	8.67	10.59	11.86	12.65	13.45	15.03	16.61	17.09	18.20	21.36	24.51	27.67
35	3.509	75	7.519	2.143			6.79	8.75	10.04	10.84	11.64	13.23	14.82	15.30	16.41	19.58	22.75	25.91
42	4.211	90	9.023	2.143					8.15	8.97	9.78	11.40	13.00	13.49	14.60	17.79	20.96	24.13
33	3.308	71	7.118	2.152			7.31	9.25	10.54	11.34	12.13	13.72	15.31	15.79	16.90	20.07	23.23	26.39
26	2.607	56	5.614	2.154	5.95	7.57	9.17	11.08	12.35	13.14	13.93	15.52	17.10	17.57	18.68	21.84	24.99	28.15
31	3.108	67	6.717	2.161		6.19	7.82	9.76	11.04	11.83	12.62	14.21	15.80	16.28	17.38	20.55	23.71	26.87
37	3.709	80	8.020	2.162				8.14	9.44	10.25	11.05	12.65	14.24	14.73	15.84	19.01	22.18	25.34
29	2.907	63	6.316	2.172		6.71	8.33	10.25	11.53	12.32	13.12	14.70	16.29	16.76	17.87	21.03	24.19	27.35
22	2.206	48	4.812	2.182	6.97	8.56	10.15	12.06	13.32	14.11	14.90	16.48	18.06	18.54	19.64	22.80	25.95	29.10
41	4.110	90	9.023	2.195				6.88	8.22	9.03	9.85	11.47	13.07	13.56	14.67	17.86	21.04	24.21
34	3.409	75	7.519	2.206			6.86	8.82	10.11	10.91	11.71	13.30	14.90	15.37	16.48	19.65	22.82	25.98
32	3.208	71	7.118	2.219		5.73	7.38	9.32	10.61	11.41	12.20	13.80	15.39	15.86	16.97	20.14	23.30	26.46
27	2.707	60	6.015	2.222	5.50	7.13	8.74	10.66	11.93	12.73	13.52	15.10	16.69	17.17	18.27	21.43	24.59	27.75
36	3.609	80	8.020	2.222				8.21	9.51	10.31	11.12	12.72	14.32	14.80	15.91	19.08	22.25	25.42
63	6.316	140	14.036	2.222												11.72	15.01	18.25
30	3.008	67	6.717	2.233		6.26	7.89	9.83	11.11	11.90	12.70	14.29	15.87	16.35	17.46	20.62	23.78	26.94
25	2.506	56	5.614	2.240	6.02	7.64	9.24	11.15	12.43	13.22	14.01	15.59	17.17	17.65	18.75	21.91	25.07	28.22
50	5.013	112	11.229	2.240								8.73	10.40	10.89	12.03	15.27	18.48	21.67
28	2.807	63	6.316	2.250	5.13	6.78	8.40	10.33	11.60	12.40	13.19	14.78	16.36	16.84	17.94	21.11	24.27	27.42
40	4.010	90	9.023	2.250				6.95	8.28	9.10	9.92	11.54	13.14	13.63	14.75	17.93	21.11	24.28
80	8.020	180	18.046	2.250														
22	2.206	50	5.013	2.273	6.78	8.39	9.98	11.89	13.16	13.94	14.73	16.31	17.90	18.37	19.47	22.63	25.79	28.94
33	3.308	75	7.519	2.273			6.92	8.89	10.18	10.98	11.78	13.38	14.97	15.45	16.56	19.73	22.89	26.06
35	3.509	80	8.020	2.286			6.29	8.28	9.58	10.38	11.19	12.79	14.39	14.87	15.98	19.16	22.33	25.49
31	3.108	71	7.118	2.290		5.79	7.45	9.39	10.68	11.48	12.27	13.87	15.46	15.94	17.05	20.21	23.38	26.54
26	2.607	60	6.015	2.308	5.57	7.20	8.81	10.73	12.01	12.80	13.59	15.18	16.76	17.24	18.34	21.51	24.66	27.82
39	3.910	90	9.023	2.308				7.01	8.35	9.17	9.98	11.60	13.21	13.70	14.82	18.01	21.18	24.35
29	2.907	67	6.717	2.310		6.33	7.96	9.90	11.18	11.97	12.77	14.36	15.95	16.43	17.53	20.70	23.86	27.02
27	2.707	63	6.316	2.333	5.20	6.85	8.47	10.40	11.67	12.47	13.26	14.85	16.43	16.91	18.02	21.18	24.34	27.50
48	4.812	112	11.229	2.333								8.86	10.53	11.03	12.17	15.41	18.62	21.81
60	6.015	140	14.036	2.333												11.92	15.22	18.46
32	3.208	75	7.519	2.344			6.99	8.95	10.25	11.05	11.85	13.45	15.04	15.52	16.63	19.80	22.97	26.13
34	3.409	80	8.020	2.353			6.35	8.34	9.65	10.45	11.26	12.86	14.46	14.94	16.05	19.23	22.40	25.56
30	3.008	71	7.118	2.367		5.86	7.51	9.46	10.75	11.55	12.35	13.94	15.53	16.01	17.12	20.29	23.45	26.61
38	3.810	90	9.023	2.368				7.08	8.41	9.24	10.05	11.67	13.28	13.77	14.89	18.08	21.26	24.43
28	2.807	67	6.717	2.393		6.39	8.03	9.97	11.25	12.05	12.84	14.43	16.02	16.50	17.61	20.77	23.93	27.09
				Length Factor*	0.79	0.83	0.87	0.91	0.94	0.96	0.97	1.00	1.03	1.03	1.05	1.10	1.14	1.17

Note: 26, 27, 29 and 31 groove sprockets are only available as stock products in 12 and 21 mm widths. 33, 35, 37, 39 and 41 groove sprockets are only available as stock products in 12, 21, and 36 mm widths.
Check sprocket specification tables on pages 17 and 18 for stainless steel and nickel plated sprocket availability.
* This length factor must be used to determine the proper belt width.

8mm Pitch Poly Chain® GT® Carbon™ Belts Drive Selection Table

Center Distance, Inches																Speed Ratio	Sprocket Combinations	
																	DriveR	DriveR
8MGT-1792 P.L. 70.55 224Teeth	8MGT-2000 P.L. 78.74 250 Teeth	8MGT-2200 P.L. 86.61 275 Teeth	8MGT-2240 P.L. 88.19 280 Teeth	8MGT-2400 P.L. 94.49 300 Teeth	8MGT-2520 P.L. 99.21 315 Teeth	8MGT-2600 P.L 102.36 325 Teeth	8MGT-2800 P.L 110.24 350 Teeth	8MGT-2840 P.L. 111.81 355 Teeth	8MGT-3048 P.L 120.00 381 Teeth	8MGT-3200 P.L 125.98 400 Teeth	8MGT-3280 P.L 129.13 410 Teeth	8MGT-3600 P.L 141.73 450 Teeth	8MGT-4000 P.L. 157.48 500 Teeth	8MGT-4400 P.L 173.23 550 Teeth	8MGT-4480 P.L 176.38 560 Teeth		Number of Grooves	Number of Grooves
28.87	32.97	36.91	37.70	40.85	43.21	44.78	48.73	49.51	53.61	56.60	58.17	64.47	72.35	80.23	81.80	1.893	28	53
25.60	29.70	33.64	34.44	37.59	39.95	41.53	45.47	46.26	50.36	53.35	54.93	61.23	69.11	76.99	78.56	1.905	42	80
30.22	34.32	38.25	39.04	42.19	44.55	46.13	50.07	50.86	54.95	57.94	59.52	65.82	73.69	81.57	83.14	1.909	22	42
27.68	31.78	35.71	36.51	39.66	42.02	43.60	47.54	48.32	52.42	55.41	56.99	63.29	71.17	79.04	80.62	1.909	33	63
27.20	31.30	35.24	36.03	39.18	41.54	43.12	47.06	47.85	51.94	54.94	56.51	62.81	70.69	78.57	80.14	1.914	35	67
26.72	30.82	34.76	35.55	38.70	41.07	42.64	46.59	47.37	51.47	54.46	56.04	62.34	70.22	78.09	79.67	1.919	37	71
29.50	33.60	37.54	38.33	41.48	43.84	45.42	49.36	50.14	54.24	57.23	58.81	65.11	72.98	80.86	82.43	1.920	25	48
29.27	33.36	37.30	38.09	41.24	43.60	45.18	49.12	49.91	54.00	56.99	58.57	64.87	72.75	80.62	82.20	1.923	26	50
26.24	30.34	34.28	35.07	38.23	40.59	42.17	46.11	46.89	50.99	53.98	55.56	61.86	69.74	77.62	79.19	1.923	39	75
28.55	32.65	36.59	37.38	40.53	42.89	44.47	48.41	49.19	53.29	56.28	57.86	64.16	72.03	79.91	81.49	1.931	29	56
28.07	32.17	36.11	36.90	40.05	42.41	43.99	47.93	48.72	52.81	55.81	57.38	63.68	71.56	79.44	81.01	1.935	31	60
25.67	29.78	33.72	34.51	37.67	40.03	41.61	45.55	46.34	50.44	53.43	55.00	61.31	69.19	77.06	78.64	1.951	41	80
28.95	33.04	36.98	37.77	40.92	43.29	44.86	48.80	49.59	53.68	56.68	58.25	64.55	72.43	80.30	81.88	1.963	27	53
27.75	31.85	35.79	36.58	39.73	42.10	43.67	47.61	48.40	52.50	55.49	57.06	63.37	71.24	79.12	80.69	1.969	32	63
27.27	31.37	35.31	36.10	39.26	41.62	43.20	47.14	47.92	52.02	55.01	56.59	62.89	70.77	78.64	80.22	1.971	34	67
26.79	30.90	34.84	35.63	38.78	41.14	42.72	46.66	47.45	51.55	54.54	56.11	62.42	70.29	78.17	79.75	1.972	36	71
18.33	22.49	26.46	27.26	30.43	32.81	34.39	38.35	39.14	43.25	46.25	47.83	54.14	62.03	69.92	71.49	1.972	71	140
26.31	30.42	34.36	35.15	38.30	40.66	42.24	46.18	46.97	51.07	54.06	55.64	61.94	69.82	77.70	79.27	1.974	38	75
29.34	33.44	37.38	38.17	41.32	43.68	45.26	49.20	49.98	54.08	57.07	58.65	64.95	72.82	80.70	82.28	2.000	25	50
28.63	32.73	36.66	37.45	40.61	42.97	44.54	48.49	49.27	53.37	56.36	57.93	64.24	72.11	79.99	81.56	2.000	28	56
28.15	32.25	36.19	36.98	40.13	42.49	44.07	48.01	48.80	52.89	55.88	57.46	63.76	71.64	79.51	81.09	2.000	30	60
25.75	29.85	33.80	34.59	37.74	40.11	41.68	45.63	46.41	50.51	53.50	55.08	61.38	69.26	77.14	78.72	2.000	40	80
24.54	28.65	32.60	33.39	36.55	38.91	40.49	44.43	45.22	49.32	52.31	53.89	60.19	68.07	75.95	77.53	2.000	45	90
21.87	25.99	29.94	30.74	33.90	36.27	37.85	41.80	42.58	46.69	49.68	51.26	57.57	65.45	73.33	74.91	2.000	56	112
26.39	30.49	34.43	35.23	38.38	40.74	42.32	46.26	47.05	51.15	54.14	55.71	62.02	69.90	77.77	79.35	2.027	37	75
26.87	30.97	34.91	35.70	38.86	41.22	42.80	46.74	47.52	51.62	54.61	56.19	62.49	70.37	78.25	79.82	2.029	35	71
27.35	31.45	35.39	36.18	39.33	41.70	43.27	47.22	48.00	52.10	55.09	56.67	62.97	70.85	78.72	80.30	2.030	33	67
27.83	31.93	35.87	36.66	39.81	42.17	43.75	47.69	48.48	52.57	55.57	57.14	63.44	71.32	79.20	80.77	2.032	31	63
29.02	33.12	37.06	37.85	41.00	43.36	44.94	48.88	49.67	53.76	56.75	58.33	64.63	72.51	80.38	81.96	2.038	26	53
29.98	34.07	38.01	38.80	41.95	44.31	45.89	49.83	50.62	54.71	57.70	59.28	65.58	73.46	81.33	82.91	2.045	22	45
25.82	29.93	33.87	34.66	37.82	40.18	41.76	45.70	46.49	50.59	53.58	55.16	61.46	69.34	77.22	78.79	2.051	39	80
28.22	32.33	36.26	37.06	40.21	42.57	44.15	48.09	48.87	52.97	55.96	57.54	63.84	71.72	79.59	81.17	2.069	29	60
28.70	32.80	36.74	37.53	40.68	43.05	44.62	48.56	49.35	53.44	56.44	58.01	64.31	72.19	80.07	81.64	2.074	27	56
26.46	30.57	34.51	35.30	38.46	40.82	42.40	46.34	47.12	51.22	54.21	55.79	62.09	69.97	77.85	79.43	2.083	36	75
26.94	31.05	34.99	35.78	38.93	41.30	42.87	46.82	47.60	51.70	54.69	56.27	62.57	70.45	78.33	79.90	2.088	34	71
18.61	22.78	26.75	27.55	30.73	33.10	34.69	38.65	39.44	43.55	46.55	48.13	54.44	62.33	70.22	71.80	2.090	67	140
27.42	31.53	35.47	36.26	39.41	41.77	43.35	47.29	48.08	52.18	55.17	56.74	63.05	70.92	78.80	80.38	2.094	32	67
27.90	32.00	35.94	36.73	39.89	42.25	43.83	47.77	48.55	52.65	55.64	57.22	63.52	71.40	79.27	80.85	2.100	30	63
25.90	30.00	33.95	34.74	37.90	40.26	41.84	45.78	46.57	50.67	53.66	55.23	61.54	69.42	77.30	78.87	2.105	38	80
22.08	26.21	30.17	30.96	34.12	36.49	38.07	42.02	42.81	46.91	49.91	51.49	57.80	65.68	73.56	75.14	2.113	53	112
29.10	33.20	37.14	37.93	41.08	43.44	45.02	48.96	49.74	53.84	56.83	58.41	64.71	72.58	80.46	82.04	2.120	25	53
28.30	32.40	36.34	37.13	40.28	42.65	44.22	48.16	48.95	53.05	56.04	57.61	63.92	71.79	79.67	81.25	2.143	28	60
26.54	30.64	34.59	35.38	38.53	40.89	42.47	46.42	47.20	51.30	54.29	55.87	62.17	70.05	77.93	79.50	2.143	35	75
24.76	28.88	32.82	33.61	36.77	39.14	40.71	44.66	45.45	49.55	52.54	54.12	60.42	68.30	76.18	77.76	2.143	42	90
27.02	31.12	35.06	35.86	39.01	41.37	42.95	46.89	47.68	51.78	54.77	56.34	62.65	70.53	78.40	79.98	2.152	33	71
28.78	32.88	36.82	37.61	40.76	43.12	44.70	48.64	49.43	53.52	56.51	58.09	64.39	72.27	80.14	81.72	2.154	26	56
27.50	31.60	35.54	36.33	39.49	41.85	43.43	47.37	48.15	52.25	55.24	56.82	63.12	71.00	78.88	80.45	2.161	31	67
25.97	30.08	34.02	34.82	37.97	40.34	41.91	45.86	46.64	50.74	53.73	55.31	61.62	69.49	77.37	78.95	2.162	37	80
27.98	32.08	36.02	36.81	39.96	42.33	43.90	47.85	48.63	52.73	55.72	57.30	63.60	71.48	79.35	80.93	2.172	29	63
29.73	33.83	37.77	38.56	41.71	44.07	45.65	49.59	50.38	54.47	57.46	59.04	65.34	73.22	81.09	82.67	2.182	22	48
24.84	28.95	32.90	33.69	36.85	39.21	40.79	44.74	45.52	49.62	52.62	54.19	60.50	68.38	76.26	77.84	2.195	41	90
26.61	30.72	34.66	35.45	38.61	40.97	42.55	46.49	47.28	51.38	54.37	55.94	62.25	70.13	78.01	79.58	2.206	34	75
27.09	31.20	35.14	35.93	39.09	41.45	43.03	46.97	47.75	51.85	54.85	56.42	62.72	70.60	78.48	80.06	2.219	32	71
28.38	32.48	36.42	37.21	40.36	42.72	44.30	48.24	49.03	53.12	56.12	57.69	63.99	71.87	79.75	81.32	2.222	27	60
26.05	30.16	34.10	34.89	38.05	40.41	41.99	45.93	46.72	50.82	53.81	55.39	61.69	69.57	77.45	79.03	2.222	36	80
18.89	23.06	27.04	27.84	31.02	33.40	34.98	38.94	39.73	43.85	46.85	48.43	54.74	62.64	70.52	72.10	2.222	63	140
27.57	31.68	35.62	36.41	39.56	41.93	43.50	47.45	48.23	52.33	55.32	56.90	63.20	71.08	78.96	80.53	2.233	30	67
28.86	32.96	36.89	37.69	40.84	43.20	44.78	48.72	49.50	53.60	56.59	58.17	64.47	72.35	80.22	81.80	2.240	25	56
22.30	26.43	30.39	31.18	34.35	36.72	38.30	42.25	43.04	47.14	50.14	51.72	58.03	65.91	73.79	75.37	2.240	50	112
28.05	32.16	36.10	36.89	40.04	42.40	43.98	47.92	48.71	52.81	55.80	57.37	63.68	71.55	79.43	81.01	2.250	28	63
24.91	29.03	32.97	33.77	36.92	39.29	40.87	44.81	45.60	49.70	52.69	54.27	60.58	68.46	76.34	77.91	2.250	40	90
13.89	18.20	22.27	23.08	26.29	28.69	30.29	34.28	35.07	39.21	42.22	43.81	50.14	58.05	65.95	67.53	2.250	80	180
29.57	33.67	37.61	38.40	41.55	43.91	45.49	49.43	50.22	54.31	57.30	58.88	65.18	73.06	80.93	82.51	2.273	22	50
26.69	30.79	34.74	35.53	38.68	41.05	42.62	46.57	47.35	51.45	54.45	56.02	62.33	70.20	78.08	79.66	2.273	33	75
26.12	30.23	34.18	34.97	38.12	40.49	42.06	46.01	46.80	50.90	53.89	55.46	61.77	69.65	77.53	79.10	2.286	35	80
27.17	31.27	35.22	36.01	39.16	41.53	43.10	47.05	47.83	51.93	54.92	56.50	62.80	70.68	78.56	80.13	2.290	31	71
28.45	32.55	36.49	37.28	40.44	42.80	44.38	48.32	49.10	53.20	56.19	57.77	64.07	71.95	79.83	81.40	2.308	26	60
24.99	29.10	33.05	33.84	37.00	39.36	40.94	44.89	45.68	49.78	52.77	54.35	60.65	68.53	76.41	77.99	2.308	39	90
27.65	31.75	35.70	36.49	39.64	42.00	43.58	47.52	48.31	52.41	55.40	56.97	63.28	71.16	79.03	80.61	2.310	29	67
28.13	32.23	36.17	36.96	40.12	42.48	44.06	48.00	48.78	52.88	55.87	57.45	63.75	71.63	79.51	81.08	2.333	27	63
22.45	26.58	30.54	31.33	34.50	36.87	38.45	42.40	43.19	47.29	50.29	51.87	58.18	66.06	73.95	75.52	2.333	48	112
19.10	23.28	27.26	28.06	31.24	33.62	35.20	39.17	39.96	44.07	47.07	48.65	54.97	62.86	70.75	72.33	2.333	60	140
26.76	30.87	34.81	35.60	38.76	41.12	42.70	46.65	47.43	51.53	54.52	56.10	62.40	70.28	78.16	79.74	2.344	32	75
26.20	30.31	34.25	35.04	38.20	40.56	42.14	46.09	46.87	50.97	53.96	55.54	61.85	69.73	77.60	79.18	2.353	34	80
27.24	31.35	35.29	36.08	39.24	41.60	43.18	47.12	47.91	52.01	55.00	56.57	62.88	70.76	78.64	80.21	2.367	30	71
25.06	29.17	33.12	33.92	37.07	39.44	41.02	44.97	45.75	49.85	52.85	54.42	60.73	68.61	76.49	78.07	2.368	38	90
27.73	31.83	35.77	36.56	39.72	42.08	43.66	47.60	48.39	52.48	55.48	57.05	63.35	71.23	79.11	80.69	2.393	28	67
1.18	1.22	1.26	1.26	1.29	1.31	1.32	1.35	1.36	1.38	1.40	1.41	1.45	1.49	1.52	1.53	Length Factor*		

Note: 26, 27, 29 and 31 groove sprockets are only available as stock products in 12 and 21 mm widths. 33, 35, 37, 39 and 41 groove sprockets are only available as stock products in 12, 21, and 36 mm widths. Check sprocket specification tables on pages 17 and 18 for stainless steel and nickel plated sprocket availability.

* This length factor must be used to determine the proper belt width.

Center distance is greater than eight times the small sprocket and the large sprocket is not flanged. See Engineering Section for details.

8mm Pitch Poly Chain® GT® Carbon™ Belts Drive Selection Table

Sprocket Combinations					Center Distance, Inches												
DriveR		DriveN															
Number of Grooves	Pitch Diameter (Inches)	Number of Grooves	Pitch Diameter (Inches)	Speed Ratio	8MGT-640 P.L. 25.20 80 Teeth	8MGT-720 P.L. 28.35 90 Teeth	8MGT-800 P.L. 31.50 100 Teeth	8MGT-896 P.L. 35.28 112 Teeth	8MGT-960 P.L. 37.80 120 Teeth	8MGT-1000 P.L. 39.37 125 Teeth	8MGT-1040 P.L. 40.94 130 Teeth	8MGT-1120 P.L. 44.09 140 Teeth	8MGT-1200 P.L. 47.24 150 Teeth	8MGT-1224 P.L. 48.19 153 Teeth	8MGT-1280 P.L. 50.39 160 Teeth	8MGT-1440 P.L. 56.69 180 Teeth	8MGT-1600 P.L. 62.99 200Teeth	8MGT-1760 P.L. 69.29 220 Teeth
25	2.506	60	6.015	2.400	5.63	7.27	8.88	10.80	12.08	12.87	13.66	15.25	16.84	17.31	18.42	21.58	24.74	27.90
75	7.519	180	18.046	2.400														13.53
22	2.206	53	5.314	2.409	6.51	8.12	9.72	11.63	12.90	13.69	14.48	16.06	17.65	18.12	19.23	22.38	25.54	28.70
31	3.108	75	7.519	2.419			7.06	9.02	10.32	11.12	11.92	13.52	15.11	15.59	16.70	19.88	23.04	26.21
26	2.607	63	6.316	2.423	5.26	6.92	8.54	10.47	11.75	12.54	13.33	14.92	16.51	16.99	18.09	21.26	24.42	27.57
33	3.308	80	8.020	2.424			6.42	8.41	9.72	10.52	11.33	12.93	14.53	15.01	16.13	19.30	22.47	25.64
37	3.709	90	9.023	2.432				7.14	8.48	9.30	10.12	11.74	13.36	13.84	14.96	18.15	21.33	24.50
29	2.907	71	7.118	2.448		5.92	7.58	9.53	10.82	11.62	12.42	14.01	15.60	16.08	17.19	20.36	23.53	26.69
27	2.707	67	6.717	2.481		6.46	8.10	10.04	11.32	12.12	12.91	14.50	16.09	16.57	17.68	20.85	24.01	27.17
45	4.511	112	11.229	2.489								9.05	10.73	11.23	12.37	15.62	18.83	22.03
30	3.008	75	7.519	2.500			7.12	9.09	10.39	11.19	11.99	13.59	15.18	15.66	16.78	19.95	23.12	26.28
32	3.208	80	8.020	2.500			6.48	8.48	9.78	10.59	11.40	13.00	14.60	15.08	16.20	19.38	22.55	25.71
36	3.609	90	9.023	2.500				7.20	8.55	9.37	10.19	11.81	13.43	13.91	15.03	18.22	21.40	24.57
56	5.614	140	14.036	2.500												12.18	15.49	18.74
25	2.506	63	6.316	2.520	5.33	6.98	8.61	10.54	11.82	12.61	13.41	15.00	16.58	17.06	18.17	21.33	24.49	27.65
71	7.118	180	18.046	2.535														13.78
28	2.807	71	7.118	2.536		5.99	7.65	9.60	10.89	11.69	12.49	14.08	15.68	16.16	17.27	20.44	23.60	26.76
22	2.206	56	5.614	2.545	6.22	7.85	9.45	11.37	12.64	13.43	14.23	15.81	17.39	17.87	18.98	22.14	25.30	28.45
35	3.509	90	9.023	2.571				7.27	8.61	9.44	10.25	11.88	13.49	13.98	15.10	18.29	21.48	24.65
26	2.607	67	6.717	2.577		6.53	8.17	10.11	11.39	12.19	12.98	14.58	16.17	16.64	17.75	20.92	24.08	27.24
31	3.108	80	8.020	2.581			6.54	8.54	9.85	10.66	11.47	13.07	14.67	15.16	16.27	19.45	22.62	25.79
29	2.907	75	7.519	2.586			7.19	9.16	10.46	11.26	12.06	13.66	15.26	15.74	16.85	20.02	23.19	26.36
27	2.707	71	7.118	2.630		6.05	7.72	9.67	10.96	11.76	12.56	14.16	15.75	16.23	17.34	20.51	23.68	26.84
53	5.314	140	14.036	2.642												12.37	15.69	18.94
34	3.409	90	9.023	2.647				7.33	8.68	9.50	10.32	11.95	13.56	14.05	15.17	18.37	21.55	24.72
30	3.008	80	8.020	2.667			6.61	8.61	9.92	10.73	11.54	13.14	14.75	15.23	16.34	19.52	22.70	25.86
42	4.211	112	11.229	2.667								9.24	10.92	11.43	12.58	15.83	19.04	22.24
28	2.807	75	7.519	2.679			7.25	9.23	10.53	11.33	12.13	13.73	15.33	15.81	16.92	20.10	23.27	26.43
25	2.506	67	6.717	2.680		6.59	8.24	10.18	11.46	12.26	13.06	14.65	16.24	16.72	17.83	21.00	24.16	27.32
67	6.717	180	18.046	2.687														14.04
22	2.206	60	6.015	2.727	5.83	7.47	9.09	11.02	12.30	13.09	13.88	15.47	17.06	17.53	18.64	21.81	24.97	28.12
33	3.308	90	9.023	2.727				7.40	8.74	9.57	10.39	12.02	13.63	14.12	15.24	18.44	21.62	24.80
26	2.607	71	7.118	2.731		6.12	7.78	9.74	11.03	11.83	12.63	14.23	15.82	16.30	17.41	20.58	23.75	26.91
41	4.110	112	11.229	2.732								9.31	10.99	11.49	12.64	15.90	19.12	22.31
29	2.907	80	8.020	2.759			6.67	8.68	9.99	10.80	11.61	13.21	14.82	15.30	16.41	19.60	22.77	25.94
27	2.707	75	7.519	2.778		5.62	7.32	9.30	10.59	11.40	12.20	13.80	15.40	15.88	16.99	20.17	23.34	26.50
40	4.010	112	11.229	2.800								9.37	11.06	11.56	12.71	15.97	19.19	22.38
50	5.013	140	14.036	2.800												12.56	15.89	19.15
80	8.020	224	22.457	2.800														
32	3.208	90	9.023	2.813				7.46	8.81	9.64	10.46	12.09	13.70	14.19	15.31	18.51	21.69	24.87
25	2.506	71	7.118	2.840		6.18	7.85	9.81	11.10	11.90	12.70	14.30	15.89	16.37	17.48	20.66	23.82	26.99
28	2.807	80	8.020	2.857			6.74	8.75	10.06	10.87	11.67	13.28	14.89	15.37	16.49	19.67	22.84	26.01
63	6.316	180	18.046	2.857														14.29
22	2.206	63	6.316	2.864	5.52	7.19	8.82	10.75	12.03	12.83	13.62	15.21	16.80	17.28	18.39	21.55	24.72	27.88
39	3.910	112	11.229	2.872								9.44	11.12	11.62	12.78	16.04	19.26	22.46
26	2.607	75	7.519	2.885		5.68	7.38	9.36	10.66	11.47	12.27	13.87	15.47	15.95	17.07	20.24	23.41	26.58
31	3.108	90	9.023	2.903				7.52	8.87	9.70	10.52	12.16	13.77	14.26	15.38	18.58	21.77	24.94
48	4.812	140	14.036	2.917												12.69	16.02	19.29
38	3.810	112	11.229	2.947								9.50	11.19	11.69	12.84	16.10	19.33	22.53
27	2.707	80	8.020	2.963			6.80	8.81	10.12	10.94	11.74	13.35	14.96	15.44	16.56	19.74	22.92	26.08
75	7.519	224	22.457	2.987														
25	2.506	75	7.519	3.000		5.75	7.45	9.43	10.73	11.54	12.34	13.95	15.54	16.02	17.14	20.32	23.49	26.65
30	3.008	90	9.023	3.000				7.59	8.94	9.77	10.59	12.22	13.84	14.33	15.45	18.65	21.84	25.01
60	6.015	180	18.046	3.000														14.48
37	3.709	112	11.229	3.027							7.81	9.56	11.25	11.76	12.91	16.17	19.40	22.60
22	2.206	67	6.717	3.045	5.08	6.79	8.44	10.39	11.67	12.47	13.27	14.87	16.46	16.94	18.05	21.22	24.38	27.54
26	2.607	80	8.020	3.077			6.86	8.88	10.19	11.00	11.81	13.42	15.03	15.51	16.63	19.81	22.99	26.16
29	2.907	90	9.023	3.103				7.65	9.01	9.84	10.66	12.29	13.91	14.40	15.52	18.72	21.91	25.09
36	3.609	112	11.229	3.111							7.88	9.63	11.32	11.82	12.98	16.24	19.47	22.67
45	4.511	140	14.036	3.111												12.89	16.22	19.49
71	7.118	224	22.457	3.155														
25	2.506	80	8.020	3.200			6.93	8.94	10.26	11.07	11.88	13.50	15.10	15.58	16.70	19.89	23.06	26.23
35	3.509	112	11.229	3.200							7.94	9.69	11.38	11.89	13.04	16.31	19.54	22.74
28	2.807	90	9.023	3.214				7.71	9.07	9.90	10.73	12.36	13.98	14.47	15.59	18.80	21.98	25.16
56	5.614	180	18.046	3.214														14.73
22	2.206	71	7.118	3.227		6.37	8.05	10.01	11.31	12.11	12.91	14.51	16.11	16.59	17.70	20.88	24.05	27.21
34	3.409	112	11.229	3.294							8.00	9.75	11.45	11.95	13.11	16.38	19.61	22.81
27	2.707	90	9.023	3.333				7.78	9.14	9.97	10.79	12.43	14.05	14.54	15.66	18.87	22.06	25.23
42	4.211	140	14.036	3.333											9.57	13.08	16.42	19.70
67	6.717	224	22.457	3.343														
33	3.308	112	11.229	3.394							8.06	9.82	11.51	12.02	13.18	16.45	19.68	22.88
53	5.314	180	18.046	3.396														14.92
22	2.206	75	7.519	3.409		5.93	7.65	9.63	10.94	11.75	12.55	14.16	15.76	16.24	17.35	20.53	23.71	26.88
41	4.110	140	14.036	3.415											9.63	13.14	16.49	19.77
26	2.607	90	9.023	3.462				7.84	9.20	10.03	10.86	12.50	14.12	14.61	15.73	18.94	22.13	25.31
32	3.208	112	11.229	3.500							8.12	9.88	11.58	12.08	13.24	16.52	19.75	22.95
40	4.010	140	14.036	3.500											9.69	13.21	16.56	19.83
				Length Factor*	0.79	0.83	0.87	0.91	0.94	0.96	0.97	1.00	1.03	1.03	1.05	1.10	1.14	1.17

Note: 26, 27, 29 and 31 groove sprockets are only available as stock products in 12 and 21 mm widths. 33, 35, 37, 39 and 41 groove sprockets are only available as stock products in 12, 21, and 36 mm widths.
Check sprocket specification tables on pages 17 and 18 for stainless steel and nickel plated sprocket availability.
* This length factor must be used to determine the proper belt width.

8mm Pitch Poly Chain® GT® Carbon™ Belts Drive Selection Table

Center Distance, Inches																Speed Ratio	Sprocket Combinations	
																	DriveR	DriveR
8MGT-1792 P.L. 70.55 224Teeth	8MGT-2000 P.L. 78.74 250 Teeth	8MGT-2200 P.L. 86.61 275 Teeth	8MGT-2240 P.L. 88.19 280 Teeth	8MGT-2400 P.L. 94.49 300 Teeth	8MGT-2520 P.L. 99.21 315 Teeth	8MGT-2600 P.L. 102.36 325 Teeth	8MGT-2800 P.L. 110.24 350 Teeth	8MGT-2840 P.L. 111.81 355 Teeth	8MGT-3048 P.L. 120.00 381 Teeth	8MGT-3200 P.L. 125.98 400 Teeth	8MGT-3280 P.L. 129.13 410 Teeth	8MGT-3600 P.L. 141.73 450 Teeth	8MGT-4000 P.L. 157.48 500 Teeth	8MGT-4400 P.L. 173.23 550 Teeth	8MGT-4480 P.L. 176.38 560 Teeth		Number of Grooves	Number of Grooves
28.53	32.63	36.57	37.36	40.51	42.88	44.45	48.40	49.18	53.28	56.27	57.85	64.15	72.03	79.90	81.48	2.400	25	60
14.21	18.54	22.61	23.42	26.64	29.05	30.65	34.64	35.43	39.57	42.59	44.17	50.51	58.42	66.33	67.91	2.400	75	180
29.33	33.43	37.37	38.16	41.31	43.67	45.25	49.19	49.97	54.07	57.06	58.64	64.94	72.82	80.69	82.27	2.409	22	53
26.84	30.94	34.89	35.68	38.84	41.20	42.78	46.72	47.51	51.61	54.60	56.18	62.48	70.36	78.24	79.81	2.419	31	75
28.21	32.31	36.25	37.04	40.19	42.56	44.13	48.08	48.86	52.96	55.95	57.53	63.83	71.71	79.59	81.16	2.423	26	63
26.27	30.38	34.33	35.12	38.28	40.64	42.22	46.16	46.95	51.05	54.04	55.62	61.92	69.80	77.68	79.26	2.424	33	80
25.13	29.25	33.20	33.99	37.15	39.52	41.09	45.04	45.83	49.93	52.92	54.50	60.81	68.69	76.57	78.15	2.432	37	90
27.32	31.43	35.37	36.16	39.32	41.68	43.26	47.20	47.99	52.08	55.08	56.65	62.96	70.84	78.71	80.29	2.448	29	71
27.80	31.91	35.85	36.64	39.79	42.16	43.73	47.68	48.46	52.56	55.55	57.13	63.43	71.31	79.19	80.76	2.481	27	67
22.66	26.80	30.76	31.55	34.72	37.09	38.67	42.63	43.41	47.52	50.52	52.09	58.41	66.29	74.18	75.75	2.489	45	112
26.91	31.02	34.96	35.76	38.91	41.28	42.85	46.80	47.58	51.68	54.68	56.25	62.56	70.44	78.31	79.89	2.500	30	75
26.35	30.46	34.40	35.19	38.35	40.72	42.29	46.24	47.02	51.12	54.12	55.69	62.00	69.88	77.76	79.34	2.500	32	80
25.21	29.32	33.27	34.07	37.23	39.59	41.17	45.12	45.90	50.01	53.00	54.58	60.88	68.77	76.65	78.22	2.500	36	90
19.38	23.56	27.55	28.35	31.53	33.91	35.50	39.46	40.25	44.37	47.37	48.95	55.27	63.17	71.06	72.63	2.500	56	140
28.28	32.39	36.33	37.12	40.27	42.63	44.21	48.15	48.94	53.04	56.03	57.60	63.91	71.79	79.66	81.24	2.520	25	63
14.47	18.81	22.89	23.70	26.92	29.33	30.93	34.93	35.72	39.86	42.88	44.47	50.81	58.72	66.63	68.21	2.535	71	180
27.40	31.50	35.44	36.24	39.39	41.75	43.33	47.28	48.06	52.16	55.15	56.73	63.03	70.91	78.79	80.37	2.536	28	71
29.08	33.18	37.12	37.91	41.07	43.43	45.01	48.95	49.73	53.83	56.82	58.40	64.70	72.58	80.46	82.03	2.545	22	56
25.28	29.40	33.35	34.14	37.30	39.67	41.25	45.19	45.98	50.08	53.08	54.65	60.96	68.84	76.72	78.30	2.571	35	90
27.88	31.98	35.92	36.71	39.87	42.23	43.81	47.75	48.54	52.64	55.63	57.21	63.51	71.39	79.27	80.84	2.577	26	67
26.42	30.53	34.48	35.27	38.43	40.79	42.37	46.31	47.10	51.20	54.19	55.77	62.08	69.96	77.84	79.41	2.581	31	80
26.99	31.10	35.04	35.83	38.99	41.35	42.93	46.87	47.66	51.76	54.75	56.33	62.63	70.51	78.39	79.97	2.586	29	75
27.47	31.58	35.52	36.31	39.47	41.83	43.41	47.35	48.14	52.24	55.23	56.81	63.11	70.99	78.87	80.44	2.630	27	71
19.59	23.77	27.76	28.56	31.75	34.13	35.72	39.68	40.47	44.59	47.59	49.17	55.50	63.39	71.28	72.86	2.642	53	140
25.36	29.47	33.42	34.22	37.38	39.74	41.32	45.27	46.06	50.16	53.15	54.73	61.04	68.92	76.80	78.38	2.647	34	90
26.50	30.61	34.55	35.34	38.50	40.87	42.44	46.39	47.18	51.28	54.27	55.85	62.15	70.03	77.91	79.49	2.667	30	80
22.88	27.02	30.98	31.77	34.94	37.31	38.90	42.85	43.64	47.74	50.74	52.32	58.63	66.52	74.41	75.98	2.667	42	112
27.06	31.17	35.12	35.91	39.06	41.43	43.01	46.95	47.74	51.84	54.83	56.41	62.71	70.59	78.47	80.05	2.679	28	75
27.95	32.06	36.00	36.79	39.95	42.31	43.89	47.83	48.62	52.71	55.71	57.28	63.59	71.47	79.34	80.92	2.680	25	67
14.72	19.07	23.16	23.97	27.20	29.61	31.22	35.21	36.01	40.15	43.17	44.76	51.10	59.02	66.93	68.51	2.687	67	180
28.76	32.86	36.80	37.59	40.74	43.11	44.68	48.63	49.41	53.51	56.50	58.08	64.38	72.26	80.14	81.71	2.727	22	60
25.43	29.55	33.50	34.29	37.45	39.82	41.40	45.35	46.13	50.23	53.23	54.81	61.11	69.00	76.88	78.45	2.727	33	90
27.54	31.65	35.60	36.39	39.54	41.91	43.48	47.43	48.21	52.31	55.31	56.88	63.19	71.07	78.94	80.52	2.731	26	71
22.95	27.09	31.05	31.85	35.02	37.39	38.97	42.93	43.71	47.82	50.82	52.40	58.71	66.60	74.48	76.06	2.732	41	112
26.57	30.68	34.63	35.42	38.58	40.94	42.52	46.47	47.25	51.35	54.35	55.92	62.23	70.11	77.99	79.57	2.759	29	80
27.14	31.25	35.19	35.98	39.14	41.50	43.08	47.03	47.81	51.91	54.91	56.48	62.79	70.67	78.55	80.12	2.778	27	75
23.02	27.16	31.13	31.92	35.09	37.46	39.04	43.00	43.79	47.90	50.89	52.47	58.79	66.67	74.56	76.14	2.800	40	112
19.80	23.98	27.98	28.78	31.97	34.35	35.94	39.90	40.69	44.81	47.82	49.40	55.72	63.62	71.51	73.09	2.800	50	140
		17.89	18.75	22.12	24.60	26.24	30.32	31.13	35.32	38.37	39.97	46.37	54.32	62.26	63.84	2.800	80	224
25.50	29.62	33.57	34.37	37.53	39.89	41.47	45.42	46.21	50.31	53.30	54.88	61.19	69.07	76.95	78.53	2.813	32	90
27.62	31.73	35.67	36.46	39.62	41.98	43.56	47.51	48.29	52.39	55.38	56.96	63.26	71.14	79.02	80.60	2.840	25	71
26.64	30.76	34.70	35.50	38.65	41.02	42.60	46.54	47.33	51.43	54.42	56.00	62.31	70.19	78.07	79.64	2.857	28	80
14.98	19.34	23.43	24.25	27.48	29.89	31.50	35.50	36.30	40.44	43.46	45.05	51.40	59.32	67.23	68.81	2.857	63	180
28.51	32.61	36.55	37.35	40.50	42.86	44.44	48.38	49.17	53.27	56.26	57.84	64.14	72.02	79.90	81.47	2.864	22	63
23.09	27.23	31.20	32.00	35.16	37.54	39.12	43.07	43.86	47.97	50.97	52.55	58.86	66.75	74.64	76.21	2.872	39	112
27.21	31.32	35.27	36.06	39.22	41.58	43.16	47.10	47.89	51.99	54.98	56.56	62.86	70.74	78.62	80.20	2.885	26	75
25.58	29.69	33.65	34.44	37.60	39.97	41.55	45.50	46.28	50.39	53.38	54.96	61.27	69.15	77.03	78.61	2.903	31	90
19.94	24.12	28.12	28.92	32.11	34.49	36.08	40.05	40.84	44.96	47.96	49.55	55.87	63.77	71.66	73.24	2.917	48	140
23.17	27.31	31.27	32.07	35.24	37.61	39.19	43.15	43.94	48.05	51.04	52.62	58.94	66.83	74.71	76.29	2.947	38	112
26.72	30.83	34.78	35.57	38.73	41.09	42.67	46.62	47.41	51.51	54.50	56.08	62.38	70.26	78.14	79.72	2.963	27	80
		18.21	19.07	22.45	24.93	26.58	30.66	31.47	35.67	38.72	40.33	46.72	54.69	62.63	64.21	2.987	75	224
27.29	31.40	35.34	36.13	39.29	41.66	43.23	47.18	47.97	52.07	55.06	56.64	62.94	70.82	78.70	80.28	3.000	25	75
25.65	29.77	33.72	34.51	37.68	40.04	41.62	45.57	46.36	50.46	53.46	55.03	61.34	69.23	77.11	78.68	3.000	30	90
15.17	19.54	23.64	24.45	27.69	30.10	31.71	35.71	36.51	40.66	43.68	45.27	51.62	59.54	67.45	69.03	3.000	60	180
23.24	27.38	31.35	32.14	35.31	37.68	39.27	43.22	44.01	48.12	51.12	52.70	59.01	66.90	74.79	76.37	3.027	37	112
28.18	32.28	36.23	37.02	40.17	42.54	44.11	48.06	48.84	52.94	55.94	57.51	63.82	71.70	79.57	81.15	3.045	22	67
26.79	30.90	34.85	35.65	38.80	41.17	42.75	46.70	47.48	51.58	54.58	56.15	62.46	70.34	78.22	79.80	3.077	26	80
25.72	29.84	33.80	34.59	37.75	40.12	41.70	45.65	46.43	50.54	53.53	55.11	61.42	69.30	77.18	78.76	3.103	29	90
23.31	27.45	31.42	32.22	35.39	37.76	39.34	43.30	44.09	48.20	51.19	52.77	59.09	66.98	74.86	76.44	3.111	36	112
20.14	24.34	28.34	29.14	32.33	34.71	36.30	40.27	41.06	45.18	48.19	49.77	56.10	64.00	71.89	73.47	3.111	45	140
		18.46	19.32	22.71	25.20	26.85	30.94	31.75	35.95	39.01	40.61	47.01	54.98	62.92	64.51	3.155	71	224
26.87	30.98	34.93	35.72	38.88	41.25	42.82	46.77	47.56	51.66	54.65	56.23	62.54	70.42	78.30	79.88	3.200	25	80
23.38	27.52	31.49	32.29	35.46	37.83	39.42	43.37	44.16	48.27	51.27	52.85	59.16	67.05	74.94	76.52	3.200	35	112
25.80	29.92	33.87	34.66	37.83	40.19	41.77	45.72	46.51	50.61	53.61	55.19	61.50	69.38	77.26	78.84	3.214	28	90
15.42	19.80	23.91	24.73	27.97	30.38	31.99	36.00	36.80	40.94	43.97	45.56	51.91	59.83	67.75	69.33	3.214	56	180
27.84	31.95	35.90	36.69	39.85	42.21	43.79	47.73	48.52	52.62	55.61	57.19	63.49	71.37	79.25	80.83	3.227	22	71
23.45	27.60	31.57	32.36	35.53	37.91	39.49	43.45	44.24	48.35	51.34	52.92	59.24	67.13	75.02	76.59	3.294	34	112
25.87	29.99	33.95	34.74	37.90	40.27	41.85	45.80	46.59	50.69	53.68	55.26	61.57	69.46	77.34	78.91	3.333	27	90
20.35	24.55	28.55	29.35	32.54	34.93	36.52	40.49	41.28	45.40	48.41	49.99	56.32	64.22	72.12	73.70	3.333	42	140
		18.71	19.58	22.97	25.47	27.12	31.21	32.02	36.23	39.29	40.89	47.30	55.27	63.21	64.80	3.343	67	224
23.52	27.67	31.64	32.44	35.61	37.98	39.56	43.52	44.31	48.42	51.42	53.00	59.32	67.21	75.09	76.67	3.394	33	112
15.61	20.00	24.11	24.93	28.18	30.59	32.20	36.21	37.01	41.16	44.18	45.77	52.13	60.06	67.97	69.55	3.396	53	180
27.51	31.62	35.57	36.36	39.52	41.88	43.46	47.41	48.19	52.29	55.29	56.86	63.17	71.05	78.93	80.51	3.409	22	75
20.42	24.62	28.62	29.42	32.61	35.00	36.59	40.56	41.36	45.48	48.48	50.07	56.39	64.30	72.19	73.77	3.415	41	140
25.94	30.06	34.02	34.81	37.98	40.34	41.92	45.87	46.66	50.76	53.76	55.34	61.65	69.53	77.41	78.99	3.462	26	90
23.59	27.74	31.71	32.51	35.68	38.05	39.64	43.60	44.38	48.50	51.49	53.07	59.39	67.28	75.17	76.75	3.500	32	112
20.49	24.69	28.69	29.49	32.69	35.07	36.66	40.64	41.43	45.55	48.56	50.14	56.47	64.37	72.27	73.85	3.500	40	140
1.18	1.22	1.26	1.26	1.29	1.31	1.32	1.35	1.36	1.38	1.40	1.41	1.45	1.49	1.52	1.53	Length Factor*		

Note: 26, 27, 29 and 31 groove sprockets are only available as stock products in 12 and 21 mm widths. 33, 35, 37, 39 and 41 groove sprockets are only available as stock products in 12, 21, and 36 mm widths. Check sprocket specification tables on pages 17 and 18 for stainless steel and nickel plated sprocket availability.

* This length factor must be used to determine the proper belt width.

Center distance is greater than eight times the small sprocket and the large sprocket is not flanged. See Engineering Section for details.

8mm Pitch Poly Chain® GT® Carbon™ Belts Drive Selection Table

Sprocket Combinations					Center Distance, Inches													
DriveR		DriveN			8MGT-640 P.L. 25.20 80 Teeth	8MGT-720 P.L. 28.35 90 Teeth	8MGT-800 P.L. 31.50 100 Teeth	8MGT-896 P.L. 35.28 112 Teeth	8MGT-960 P.L. 37.80 120 Teeth	8MGT-1000 P.L. 39.37 125 Teeth	8MGT-1040 P.L. 40.94 130 Teeth	8MGT-1120 P.L. 44.09 140 Teeth	8MGT-1200 P.L. 47.24 150 Teeth	8MGT-1224 P.L. 48.19 153 Teeth	8MGT-1280 P.L. 50.39 160 Teeth	8MGT-1440 P.L. 56.69 180 Teeth	8MGT-1600 P.L. 62.99 200Teeth	8MGT-1760 P.L. 69.29 220 Teeth
Number of Grooves	Pitch Diameter (Inches)	Number of Grooves	Pitch Diameter (Inches)	Speed Ratio														
63	6.316	224	22.457	3.556														
39	3.910	140	14.036	3.590											9.75	13.27	16.62	19.90
25	2.506	90	9.023	3.600				7.90	9.27	10.10	10.93	12.57	14.19	14.68	15.80	19.01	22.20	25.38
50	5.013	180	18.046	3.600														15.11
31	3.108	112	11.229	3.613							8.18	9.94	11.64	12.15	13.31	16.59	19.82	23.03
22	2.206	80	8.020	3.636			7.12	9.14	10.46	11.28	12.09	13.70	15.31	15.80	16.91	20.10	23.28	26.45
38	3.810	140	14.036	3.684											9.81	13.34	16.69	19.97
30	3.008	112	11.229	3.733							8.24	10.01	11.71	12.21	13.38	16.65	19.89	23.10
60	6.015	224	22.457	3.733														
48	4.812	180	18.046	3.750														15.23
37	3.709	140	14.036	3.784											9.87	13.40	16.76	20.04
29	2.907	112	11.229	3.862						7.37	8.30	10.07	11.77	12.28	13.44	16.72	19.96	23.17
36	3.609	140	14.036	3.889											9.93	13.46	16.82	20.11
28	2.807	112	11.229	4.000						7.43	8.36	10.13	11.84	12.35	13.51	16.79	20.03	23.24
35	3.509	140	14.036	4.000											9.99	13.53	16.89	20.17
45	4.511	180	18.046	4.000													11.77	15.42
56	5.614	224	22.457	4.000														
22	2.206	90	9.023	4.091			5.92	8.09	9.46	10.30	11.12	12.77	14.40	14.88	16.01	19.22	22.42	25.60
34	3.409	140	14.036	4.118											10.05	13.59	16.95	20.24
27	2.707	112	11.229	4.148						7.49	8.42	10.20	11.90	12.41	13.58	16.86	20.10	23.31
53	5.314	224	22.457	4.226														
33	3.308	140	14.036	4.242											10.11	13.66	17.02	20.31
42	4.211	180	18.046	4.286													11.95	15.60
26	2.607	112	11.229	4.308						7.55	8.48	10.26	11.97	12.48	13.64	16.93	20.17	23.38
32	3.208	140	14.036	4.375											10.17	13.72	17.09	20.38
41	4.110	180	18.046	4.390													12.01	15.67
25	2.506	112	11.229	4.480						7.61	8.54	10.32	12.03	12.54	13.71	16.99	20.24	23.45
50	5.013	224	22.457	4.480														
40	4.010	180	18.046	4.500													12.07	15.73
31	3.108	140	14.036	4.516										8.89	10.23	13.78	17.15	20.45
39	3.910	180	18.046	4.615													12.13	15.79
30	3.008	140	14.036	4.667										8.95	10.29	13.85	17.22	20.51
48	4.812	224	22.457	4.667														
38	3.810	180	18.046	4.737													12.18	15.85
29	2.907	140	14.036	4.828										9.01	10.35	13.91	17.28	20.58
37	3.709	180	18.046	4.865													12.24	15.92
45	4.511	224	22.457	4.978														
28	2.807	140	14.036	5.000										9.06	10.41	13.97	17.35	20.65
36	3.609	180	18.046	5.000													12.30	15.98
22	2.206	112	11.229	5.091						7.78	8.72	10.51	12.23	12.74	13.90	17.20	20.44	23.66
35	3.509	180	18.046	5.143													12.36	16.04
27	2.707	140	14.036	5.185										9.12	10.47	14.04	17.42	20.72
34	3.409	180	18.046	5.294													12.42	16.10
42	4.211	224	22.457	5.333														
26	2.607	140	14.036	5.385										9.18	10.53	14.10	17.48	20.78
33	3.308	180	18.046	5.455													12.48	16.16
41	4.110	224	22.457	5.463														
25	2.506	140	14.036	5.600									8.61	9.24	10.59	14.16	17.55	20.85
40	4.010	224	22.457	5.600														
32	3.208	180	18.046	5.625													12.53	16.22
39	3.910	224	22.457	5.744														
31	3.108	180	18.046	5.806													12.59	16.29
38	3.810	224	22.457	5.895														
30	3.008	180	18.046	6.000													12.65	16.35
37	3.709	224	22.457	6.054														
29	2.907	180	18.046	6.207													12.71	16.41
36	3.609	224	22.457	6.222														
22	2.206	140	14.036	6.364									8.78	9.41	10.77	14.35	17.74	21.05
35	3.509	224	22.457	6.400														
28	2.807	180	18.046	6.429													12.77	16.47
34	3.409	224	22.457	6.588														
27	2.707	180	18.046	6.667													12.83	16.53
33	3.308	224	22.457	6.788														
26	2.607	180	18.046	6.923													12.88	16.59
32	3.208	224	22.457	7.000														
25	2.506	180	18.046	7.200													12.94	16.66
31	3.108	224	22.457	7.226														
30	3.008	224	22.457	7.467														
29	2.907	224	22.457	7.724														
28	2.807	224	22.457	8.000														
22	2.206	180	18.046	8.182													13.12	16.84
27	2.707	224	22.457	8.296														
26	2.607	224	22.457	8.615														
25	2.506	224	22.457	8.960														
22	2.206	224	22.457	10.182														
				Length Factor*	0.79	0.83	0.87	0.91	0.94	0.96	0.97	1.00	1.03	1.03	1.05	1.10	1.14	1.17

Note: 26, 27, 29 and 31 groove sprockets are only available as stock products in 12 and 21 mm widths. 33, 35, 37, 39 and 41 groove sprockets are only available as stock products in 12, 21, and 36 mm widths. Check sprocket specification tables on pages 17 and 18 for stainless steel and nickel plated sprocket availability.

* This length factor must be used to determine the proper belt width

Center distance is greater than eight times the small sprocket and the large sprocket is not flanged. See Engineering Section for details.

8mm Pitch Poly Chain® GT® Carbon™ Belts Drive Selection Table

Center Distance, Inches																Speed Ratio	Sprocket Combinations	
																	DriveR	DriveR
8MGT-1792 P.L. 70.55 224Teeth	8MGT-2000 P.L. 78.74 250 Teeth	8MGT-2200 P.L. 86.61 275 Teeth	8MGT-2240 P.L. 88.19 280 Teeth	8MGT-2400 P.L. 94.49 300 Teeth	8MGT-2520 P.L. 99.21 315 Teeth	8MGT-2600 P.L. 102.36 325 Teeth	8MGT-2800 P.L. 110.24 350 Teeth	8MGT-2840 P.L. 111.81 355 Teeth	8MGT-3048 P.L. 120.00 381 Teeth	8MGT-3200 P.L. 125.98 400 Teeth	8MGT-3280 P.L. 129.13 410 Teeth	8MGT-3600 P.L. 141.73 450 Teeth	8MGT-4000 P.L. 157.48 500 Teeth	8MGT-4400 P.L. 173.23 550 Teeth	8MGT-4480 P.L. 176.38 560 Teeth		Number of Grooves	Number of Grooves
		18.96	19.83	23.23	25.73	27.38	31.48	32.29	36.51	39.57	41.17	47.58	55.55	63.50	65.09	3.556	63	224
20.55	24.76	28.76	29.57	32.76	35.14	36.74	40.71	41.50	45.62	48.63	50.21	56.54	64.45	72.34	73.92	3.590	39	140
26.02	30.14	34.09	34.89	38.05	40.42	42.00	45.95	46.74	50.84	53.84	55.41	61.72	69.61	77.49	79.07	3.600	25	90
15.80	20.20	24.32	25.13	28.38	30.80	32.41	36.43	37.22	41.38	44.40	45.99	52.35	60.28	68.19	69.77	3.600	50	180
23.67	27.81	31.79	32.58	35.75	38.13	39.71	43.67	44.46	48.57	51.57	53.15	59.47	67.36	75.25	76.82	3.613	31	112
27.09	31.20	35.15	35.95	39.11	41.47	43.05	47.00	47.79	51.89	54.88	56.46	62.77	70.65	78.53	80.11	3.636	22	80
20.62	24.83	28.83	29.64	32.83	35.22	36.81	40.78	41.57	45.70	48.71	50.29	56.62	64.52	72.42	74.00	3.684	38	140
23.74	27.88	31.86	32.65	35.83	38.20	39.79	43.75	44.53	48.64	51.64	53.22	59.54	67.43	75.32	76.90	3.733	30	112
	14.63	19.15	20.02	23.43	25.93	27.58	31.69	32.50	36.71	39.78	41.38	47.79	55.77	63.72	65.31	3.733	60	224
15.93	20.33	24.45	25.27	28.52	30.94	32.55	36.57	37.36	41.52	44.55	46.14	52.49	60.42	68.34	69.92	3.750	48	180
20.69	24.90	28.91	29.71	32.90	35.29	36.88	40.86	41.65	45.77	48.78	50.36	56.69	64.60	72.49	74.07	3.784	37	140
23.81	27.96	31.93	32.73	35.90	38.28	39.86	43.82	44.61	48.72	51.72	53.30	59.62	67.51	75.40	76.98	3.862	29	112
20.76	24.97	28.98	29.78	32.97	35.36	36.95	40.93	41.72	45.84	48.85	50.44	56.77	64.67	72.57	74.15	3.889	36	140
23.88	28.03	32.00	32.80	35.97	38.35	39.93	43.89	44.68	48.79	51.79	53.37	59.69	67.58	75.47	77.05	4.000	28	112
20.83	25.03	29.05	29.85	33.05	35.43	37.03	41.00	41.79	45.92	48.93	50.51	56.84	64.75	72.64	74.22	4.000	35	140
16.12	20.53	24.65	25.47	28.73	31.15	32.76	36.78	37.58	41.73	44.76	46.35	52.71	60.65	68.56	70.15	4.000	45	180
	14.87	19.40	20.27	23.68	26.19	27.85	31.96	32.77	36.99	40.05	41.66	48.08	56.06	64.01	65.60	4.000	56	224
26.23	30.36	34.32	35.11	38.27	40.64	42.22	46.17	46.96	51.07	54.06	55.64	61.95	69.84	77.72	79.30	4.091	22	90
20.89	25.10	29.12	29.92	33.12	35.51	37.10	41.07	41.87	45.99	49.00	50.58	56.92	64.82	72.72	74.30	4.118	34	140
23.95	28.10	32.08	32.87	36.05	38.42	40.01	43.97	44.76	48.87	51.87	53.45	59.77	67.66	75.55	77.13	4.148	27	112
	15.04	19.59	20.46	23.88	26.39	28.05	32.16	32.97	37.20	40.26	41.87	48.29	56.27	64.23	65.82	4.226	53	224
20.96	25.17	29.19	29.99	33.19	35.58	37.17	41.15	41.94	46.07	49.07	50.66	56.99	64.90	72.80	74.37	4.242	33	140
16.30	20.72	24.86	25.68	28.93	31.36	32.97	36.99	37.79	41.95	44.98	46.57	52.93	60.87	68.79	70.37	4.286	42	180
24.02	28.17	32.15	32.95	36.12	38.50	40.08	44.04	44.83	48.94	51.94	53.52	59.84	67.74	75.63	77.20	4.308	26	112
21.03	25.24	29.26	30.06	33.26	35.65	37.24	41.22	42.01	46.14	49.15	50.73	57.06	64.97	72.87	74.45	4.375	32	140
16.37	20.79	24.92	25.74	29.00	31.43	33.04	37.06	37.86	42.02	45.05	46.64	53.01	60.94	68.86	70.44	4.390	41	180
24.09	28.25	32.22	33.02	36.19	38.57	40.16	44.12	44.91	49.02	52.02	53.60	59.92	67.81	75.70	77.28	4.480	25	112
	15.22	19.77	20.65	24.07	26.59	28.25	32.36	33.18	37.40	40.47	42.08	48.50	56.49	64.45	66.04	4.480	50	224
16.43	20.85	24.99	25.81	29.07	31.50	33.11	37.13	37.93	42.09	45.12	46.71	53.08	61.01	68.93	70.52	4.500	40	180
21.10	25.31	29.33	30.13	33.33	35.72	37.31	41.29	42.08	46.21	49.22	50.81	57.14	65.05	72.95	74.52	4.516	31	140
16.49	20.92	25.06	25.88	29.14	31.57	33.18	37.20	38.00	42.16	45.19	46.79	53.15	61.09	69.01	70.59	4.615	39	180
21.17	25.38	29.40	30.20	33.40	35.79	37.39	41.37	42.16	46.28	49.29	50.88	57.21	65.12	73.02	74.60	4.667	30	140
	15.34	19.90	20.77	24.20	26.72	28.38	32.50	33.31	37.54	40.61	42.22	48.65	56.63	64.59	66.18	4.667	48	224
16.55	20.99	25.12	25.95	29.21	31.64	33.25	37.27	38.07	42.23	45.26	46.86	53.22	61.16	69.08	70.67	4.737	38	180
21.23	25.45	29.47	30.28	33.47	35.87	37.46	41.44	42.23	46.36	49.37	50.95	57.29	65.20	73.10	74.68	4.828	29	140
16.62	21.05	25.19	26.01	29.28	31.70	33.32	37.34	38.14	42.30	45.34	46.93	53.30	61.23	69.16	70.74	4.865	37	180
	15.51	20.08	20.96	24.39	26.91	28.58	32.70	33.52	37.75	40.82	42.43	48.86	56.85	64.81	66.40	4.978	45	224
21.30	25.52	29.54	30.35	33.55	35.94	37.53	41.51	42.30	46.43	49.44	51.03	57.36	65.27	73.17	74.75	5.000	28	140
16.68	21.12	25.26	26.08	29.34	31.77	33.39	37.41	38.21	42.38	45.41	47.00	53.37	61.31	69.23	70.81	5.000	36	180
24.30	28.46	32.44	33.24	36.41	38.79	40.38	44.34	45.13	49.24	52.24	53.82	60.14	68.04	75.93	77.51	5.091	22	112
16.74	21.18	25.33	26.15	29.41	31.84	33.46	37.48	38.28	42.45	45.48	47.07	53.44	61.38	69.30	70.89	5.143	35	180
21.37	25.59	29.61	30.42	33.62	36.01	37.60	41.58	42.38	46.50	49.52	51.10	57.44	65.34	73.25	74.83	5.185	27	140
16.80	21.25	25.39	26.22	29.48	31.91	33.53	37.55	38.35	42.52	45.55	47.15	53.51	61.45	69.38	70.96	5.294	34	180
	15.69	20.27	21.15	24.59	27.11	28.78	32.90	33.72	37.95	41.03	42.64	49.07	57.06	65.03	66.62	5.333	42	224
21.44	25.66	29.68	30.49	33.69	36.08	37.67	41.66	42.45	46.58	49.59	51.17	57.51	65.42	73.32	74.90	5.385	26	140
16.87	21.31	25.46	26.28	29.55	31.98	33.60	37.62	38.42	42.59	45.62	47.22	53.59	61.53	69.45	71.04	5.455	33	180
	15.75	20.33	21.21	24.65	27.18	28.84	32.97	33.79	38.02	41.10	42.71	49.14	57.14	65.10	66.69	5.463	41	224
21.51	25.73	29.75	30.56	33.76	36.15	37.75	41.73	42.52	46.65	49.66	51.25	57.58	65.49	73.40	74.98	5.600	25	140
	15.81	20.39	21.28	24.72	27.24	28.91	33.04	33.85	38.09	41.17	42.78	49.21	57.21	65.17	66.76	5.600	40	224
16.93	21.38	25.53	26.35	29.62	32.05	33.67	37.69	38.49	42.66	45.69	47.29	53.66	61.60	69.53	71.11	5.625	32	180
	15.86	20.46	21.34	24.78	27.31	28.97	33.10	33.92	38.16	41.23	42.85	49.28	57.28	65.25	66.84	5.744	39	224
16.99	21.44	25.59	26.42	29.69	32.12	33.74	37.76	38.57	42.73	45.76	47.36	53.73	61.67	69.60	71.18	5.806	31	180
	15.92	20.52	21.40	24.84	27.37	29.04	33.17	33.99	38.23	41.30	42.92	49.35	57.35	65.32	66.91	5.895	38	224
17.05	21.51	25.66	26.48	29.75	32.19	33.80	37.83	38.64	42.80	45.84	47.43	53.80	61.75	69.67	71.26	6.000	30	180
	15.98	20.58	21.46	24.91	27.44	29.11	33.24	34.06	38.30	41.37	42.99	49.42	57.42	65.39	66.98	6.054	37	224
17.12	21.57	25.73	26.55	29.82	32.26	33.87	37.91	38.71	42.87	45.91	47.50	53.88	61.82	69.75	71.33	6.207	29	180
	16.04	20.64	21.52	24.97	27.50	29.17	33.31	34.12	38.36	41.44	43.06	49.49	57.49	65.46	67.05	6.222	36	224
21.71	25.94	29.96	30.77	33.97	36.37	37.96	41.95	42.74	46.87	49.88	51.47	57.81	65.72	73.62	75.20	6.364	22	140
	16.10	20.70	21.59	25.04	27.57	29.24	33.37	34.19	38.43	41.51	43.13	49.56	57.56	65.54	67.13	6.400	35	224
17.18	21.64	25.79	26.62	29.89	32.32	33.94	37.98	38.78	42.94	45.98	47.58	53.95	61.89	69.82	71.41	6.429	28	180
	16.16	20.76	21.65	25.10	27.63	29.30	33.44	34.26	38.50	41.58	43.20	49.63	57.64	65.61	67.20	6.588	34	224
17.24	21.70	25.86	26.69	29.96	32.39	34.01	38.04	38.85	43.02	46.05	47.65	54.02	61.97	69.89	71.48	6.667	27	180
	16.22	20.83	21.71	25.16	27.70	29.37	33.51	34.33	38.57	41.65	43.27	49.70	57.71	65.68	67.27	6.788	33	224
17.30	21.77	25.93	26.75	30.03	32.46	34.08	38.11	38.92	43.09	46.12	47.72	54.09	62.04	69.97	71.55	6.923	26	180
	16.27	20.89	21.77	25.23	27.76	29.43	33.57	34.39	38.64	41.72	43.33	49.77	57.78	65.75	67.34	7.000	32	224
17.36	21.83	25.99	26.82	30.09	32.53	34.15	38.19	38.99	43.16	46.19	47.79	54.17	62.11	70.04	71.63	7.200	25	180
	16.33	20.95	21.84	25.29	27.83	29.50	33.64	34.46	38.71	41.79	43.40	49.84	57.85	65.82	67.42	7.226	31	224
	16.39	21.01	21.90	25.36	27.89	29.57	33.71	34.53	38.77	41.85	43.47	49.91	57.92	65.90	67.49	7.467	30	224
	16.45	21.07	21.96	25.42	27.96	29.63	33.77	34.59	38.84	41.92	43.54	49.99	57.99	65.97	67.56	7.724	29	224
	16.51	21.13	22.02	25.48	28.02	29.70	33.84	34.66	38.91	41.99	43.61	50.06	58.06	66.04	67.63	8.000	28	224
17.55	22.02	26.19	27.02	30.30	32.74	34.36	38.39	39.20	43.37	46.41	48.00	54.38	62.33	70.26	71.85	8.182	22	180
	16.56	21.20	22.08	25.55	28.09	29.76	33.91	34.73	38.98	42.06	43.68	50.13	58.14	66.11	67.70	8.296	27	224
	16.62	21.26	22.15	25.61	28.15	29.83	33.97	34.79	39.05	42.13	43.75	50.20	58.21	66.18	67.78	8.615	26	224
	16.68	21.32	22.21	25.68	28.22	29.89	34.04	34.86	39.12	42.20	43.82	50.27	58.28	66.26	67.85	8.960	25	224
	16.85	21.50	22.39	25.87	28.41	30.09	34.24	35.06	39.32	42.40	44.03	50.48	58.49	66.47	68.07	10.182	22	224
1.18	1.22	1.26	1.26	1.29	1.31	1.32	1.35	1.36	1.38	1.40	1.41	1.45	1.49	1.52	1.53	Length Factor*		

* This length factor must be used to determine the proper belt width

Center distance is greater than eight times the small sprocket and the large sprocket is not flanged. See Engineering Section for details.

14mm Pitch Poly Chain® GT® Carbon™ Belts Drive Selection Table

Sprocket Combinations					Center Distance, Inches												
DriveR		DriveN															
Number of Grooves	Pitch Diameter (Inches)	Number of Grooves	Pitch Diameter (Inches)	Speed Ratio	14MGT-994 P.L. 39.13 71 Teeth	14MGT-1120 P.L. 44.09 80 Teeth	14MGT-1190 P.L. 46.85 85 Teeth	14MGT-1260 P.L. 49.61 90 Teeth	14MGT-1400 P.L. 55.12 100 Teeth	14MGT-1568 P.L. 61.73 112 Teeth	14MGT-1610 P.L. 63.39 115 Teeth	14MGT-1750 P.L. 68.90 125 Teeth	14MGT-1890 P.L. 74.41 135 Teeth	14MGT-1960 P.L. 77.17 140 Teeth	14MGT-2100 P.L. 82.68 150 Teeth	14MGT-2240 P.L. 88.19 160 Teeth	14MGT-2310 P.L. 90.94 165 Teeth
28	4.912	28	4.912	1.000	11.85	14.33	15.71	17.09	19.84	23.15	23.98	26.73	29.49	30.87	33.62	36.38	37.75
29	5.088	29	5.088	1.000	11.57	14.05	15.43	16.81	19.57	22.87	23.70	26.46	29.21	30.59	33.35	36.10	37.48
30	5.263	30	5.263	1.000	11.30	13.78	15.16	16.54	19.29	22.60	23.43	26.18	28.94	30.32	33.07	35.83	37.20
31	5.439	31	5.439	1.000	11.02	13.50	14.88	16.26	19.02	22.32	23.15	25.91	28.66	30.04	32.80	35.55	36.93
32	5.614	32	5.614	1.000	10.75	13.23	14.61	15.99	18.74	22.05	22.88	25.63	28.39	29.77	32.52	35.28	36.65
33	5.790	33	5.790	1.000	10.47	12.95	14.33	15.71	18.47	21.77	22.60	25.36	28.11	29.49	32.25	35.00	36.38
34	5.965	34	5.965	1.000	10.20	12.68	14.06	15.44	18.19	21.50	22.33	25.08	27.84	29.22	31.97	34.73	36.10
35	6.141	35	6.141	1.000	9.92	12.40	13.78	15.16	17.91	21.22	22.05	24.80	27.56	28.94	31.69	34.45	35.82
36	6.316	36	6.316	1.000	9.64	12.12	13.50	14.88	17.64	20.94	21.77	24.53	27.28	28.66	31.42	34.17	35.55
37	6.492	37	6.492	1.000	9.37	11.85	13.23	14.61	17.36	20.67	21.50	24.25	27.01	28.39	31.14	33.90	35.27
38	6.667	38	6.667	1.000	9.09	11.57	12.95	14.33	17.09	20.39	21.22	23.98	26.73	28.11	30.87	33.62	35.00
39	6.842	39	6.842	1.000	8.82	11.30	12.68	14.06	16.81	20.12	20.95	23.70	26.46	27.84	30.59	33.35	34.72
40	7.018	40	7.018	1.000	8.54	11.02	12.40	13.78	16.54	19.84	20.67	23.43	26.18	27.56	30.32	33.07	34.45
43	7.544	43	7.544	1.000		10.19	11.57	12.95	15.71	19.01	19.84	22.60	25.35	26.73	29.49	32.24	33.62
45	7.895	45	7.895	1.000		9.64	11.02	12.40	15.16	18.46	19.29	22.05	24.80	26.18	28.94	31.69	33.07
48	8.421	48	8.421	1.000			10.20	11.58	14.33	17.64	18.47	21.22	23.98	25.36	28.11	30.87	32.24
50	8.772	50	8.772	1.000			9.65	11.03	13.78	17.09	17.92	20.67	23.43	24.81	27.56	30.32	31.69
53	9.299	53	9.299	1.000				10.20	12.95	16.26	17.09	19.84	22.60	23.98	26.73	29.49	30.86
56	9.825	56	9.825	1.000					12.13	15.43	16.26	19.02	21.77	23.15	25.91	28.66	30.04
60	10.527	60	10.527	1.000						14.33	15.16	17.91	20.67	22.05	24.80	27.56	28.93
63	11.053	63	11.053	1.000						13.50	14.33	17.09	19.84	21.22	23.98	26.73	28.11
67	11.755	67	11.755	1.000							13.23	15.99	18.74	20.12	22.88	25.63	27.01
71	12.457	71	12.457	1.000								14.88	17.64	19.02	21.77	24.53	25.90
75	13.158	75	13.158	1.000									16.54	17.92	20.67	23.43	24.80
80	14.036	80	14.036	1.000									15.16	16.54	19.29	22.05	23.42
38	6.667	39	6.842	1.026	8.95	11.43	12.81	14.19	16.95	20.25	21.08	23.84	26.59	27.97	30.73	33.48	34.86
39	6.842	40	7.018	1.026	8.68	11.16	12.54	13.92	16.67	19.98	20.81	23.56	26.32	27.70	30.45	33.21	34.58
37	6.492	38	6.667	1.027	9.23	11.71	13.09	14.47	17.22	20.53	21.36	24.11	26.87	28.25	31.00	33.76	35.13
36	6.316	37	6.492	1.028	9.51	11.99	13.37	14.75	17.50	20.81	21.64	24.39	27.15	28.53	31.28	34.04	35.41
34	5.965	35	6.141	1.029	10.06	12.54	13.92	15.30	18.05	21.36	22.19	24.94	27.70	29.08	31.83	34.59	35.96
35	6.141	36	6.316	1.029	9.78	12.26	13.64	15.02	17.78	21.08	21.91	24.67	27.42	28.80	31.56	34.31	35.69
33	5.790	34	5.965	1.030	10.33	12.81	14.19	15.57	18.33	21.63	22.46	25.22	27.97	29.35	32.11	34.86	36.24
32	5.614	33	5.790	1.031	10.61	13.09	14.47	15.85	18.60	21.91	22.74	25.49	28.25	29.63	32.38	35.14	36.51
31	5.439	32	5.614	1.032	10.88	13.36	14.74	16.12	18.88	22.18	23.01	25.77	28.52	29.90	32.66	35.41	36.79
30	5.263	31	5.439	1.033	11.16	13.64	15.02	16.40	19.15	22.46	23.29	26.04	28.80	30.18	32.93	35.69	37.06
29	5.088	30	5.263	1.034	11.44	13.92	15.30	16.68	19.43	22.74	23.57	26.32	29.08	30.46	33.21	35.97	37.34
28	4.912	29	5.088	1.036	11.71	14.19	15.57	16.95	19.71	23.01	23.84	26.60	29.35	30.73	33.49	36.24	37.62
48	8.421	50	8.772	1.042			9.92	11.30	14.06	17.36	18.19	20.95	23.70	25.08	27.84	30.59	31.97
43	7.544	45	7.895	1.047		9.92	11.30	12.68	15.43	18.74	19.57	22.32	25.08	26.46	29.21	31.97	33.34
60	10.527	63	11.053	1.050						13.91	14.74	17.50	20.25	21.63	24.39	27.14	28.52
38	6.667	40	7.018	1.053	8.82	11.30	12.68	14.06	16.81	20.12	20.95	23.70	26.46	27.84	30.59	33.35	34.72
37	6.492	39	6.842	1.054	9.09	11.57	12.95	14.33	17.09	20.39	21.22	23.98	26.73	28.11	30.87	33.62	35.00
36	6.316	38	6.667	1.056	9.37	11.85	13.23	14.61	17.36	20.67	21.50	24.25	27.01	28.39	31.14	33.90	35.27
71	12.457	75	13.158	1.056								14.33	17.08	18.46	21.22	23.97	25.35
35	6.141	37	6.492	1.057	9.64	12.12	13.50	14.88	17.64	20.94	21.77	24.53	27.28	28.66	31.42	34.17	35.55
53	9.299	56	9.825	1.057					12.54	15.84	16.67	19.43	22.18	23.56	26.32	29.07	30.45
34	5.965	36	6.316	1.059	9.92	12.40	13.78	15.16	17.91	21.22	22.05	24.80	27.56	28.94	31.69	34.45	35.82
50	8.772	53	9.299	1.060				10.61	13.36	16.67	17.50	20.26	23.01	24.39	27.15	29.90	31.28
67	11.755	71	12.457	1.060								15.43	18.19	19.57	22.32	25.08	26.45
33	5.790	35	6.141	1.061	10.19	12.67	14.05	15.43	18.19	21.49	22.32	25.08	27.83	29.21	31.97	34.72	36.10
32	5.614	34	5.965	1.063	10.47	12.95	14.33	15.71	18.47	21.77	22.60	25.36	28.11	29.49	32.25	35.00	36.38
63	11.053	67	11.755	1.063						12.95	13.78	16.53	19.29	20.67	23.42	26.18	27.55
31	5.439	33	5.790	1.065	10.74	13.22	14.60	15.98	18.74	22.05	22.88	25.63	28.39	29.77	32.52	35.28	36.65
30	5.263	32	5.614	1.067	11.02	13.50	14.88	16.26	19.02	22.32	23.15	25.91	28.66	30.04	32.80	35.55	36.93
45	7.895	48	8.421	1.067		9.23	10.61	11.99	14.74	18.05	18.88	21.63	24.39	25.77	28.52	31.28	32.65
75	13.158	80	14.036	1.067									15.84	17.22	19.98	22.73	24.11
29	5.088	31	5.439	1.069	11.30	13.78	15.16	16.54	19.29	22.60	23.43	26.18	28.94	30.32	33.07	35.83	37.20
28	4.912	30	5.263	1.071	11.57	14.05	15.43	16.81	19.57	22.87	23.70	26.46	29.21	30.59	33.35	36.10	37.48
56	9.825	60	10.527	1.071					11.57	14.88	15.71	18.46	21.22	22.60	25.35	28.11	29.48
40	7.018	43	7.544	1.075	8.12	10.60	11.99	13.37	16.12	19.43	20.26	23.01	25.77	27.15	29.90	32.66	34.03
37	6.492	40	7.018	1.081	8.95	11.43	12.81	14.19	16.95	20.25	21.08	23.84	26.59	27.97	30.73	33.48	34.86
36	6.316	39	6.842	1.083	9.23	11.71	13.09	14.47	17.22	20.53	21.36	24.11	26.87	28.25	31.00	33.76	35.13
35	6.141	38	6.667	1.086	9.50	11.98	13.36	14.74	17.50	20.80	21.63	24.39	27.14	28.52	31.28	34.03	35.41
34	5.965	37	6.492	1.088	9.78	12.26	13.64	15.02	17.77	21.08	21.91	24.66	27.42	28.80	31.56	34.31	35.69
33	5.790	36	6.316	1.091	10.05	12.53	13.91	15.29	18.05	21.36	22.19	24.94	27.70	29.08	31.83	34.59	35.96
32	5.614	35	6.141	1.094	10.33	12.81	14.19	15.57	18.33	21.63	22.46	25.22	27.97	29.35	32.11	34.86	36.24
31	5.439	34	5.965	1.097	10.61	13.09	14.47	15.85	18.60	21.91	22.74	25.49	28.25	29.63	32.38	35.14	36.51
30	5.263	33	5.790	1.100	10.88	13.36	14.74	16.12	18.88	22.18	23.01	25.77	28.52	29.90	32.66	35.41	36.79
29	5.088	32	5.614	1.103	11.16	13.64	15.02	16.40	19.15	22.46	23.29	26.04	28.80	30.18	32.93	35.69	37.06
39	6.842	43	7.544	1.103	8.26	10.74	12.12	13.50	16.26	19.56	20.39	23.15	25.90	27.28	30.04	32.79	34.17
48	8.421	53	9.299	1.104				10.88	13.64	16.94	17.77	20.53	23.28	24.66	27.42	30.17	31.55
				Length Factor*	0.68	0.73	0.75	0.77	0.81	0.85	0.86	0.89	0.92	0.94	0.96	0.99	1.00

Note: Check Sprocket Specification table on page 17 for Nickel Plated sprocket availability.

* This length factor must be used to determine the proper belt width.

14mm Pitch Poly Chain® GT® Carbon™ Belts Drive Selection Table

Center Distance, Inches														Speed Ratio	Sprocket Combinations	
															DriveR	DriveR
14MGT-2380 P.L. 93.70 170 Teeth	14MGT-2450 P.L. 96.46 175 Teeth	14MGT-2520 P.L. 99.21 180 Teeth	14MGT-2590 P.L. 101.97 185 Teeth	14MGT-2660 P.L. 104.72 190 Teeth	14MGT-2800 P.L. 110.24 200 Teeth	14MGT-3136 P.L. 123.46 224 Teeth	14MGT-3304 P.L. 130.08 236 Teeth	14MGT-3360 P.L. 132.28 240 Teeth	14MGT-3500 P.L. 137.79 250 Teeth	14MGT-3850 P.L. 151.57 275 Teeth	14MGT-3920 P.L. 154.33 280 Teeth	14MGT-4326 P.L. 170.31 309 Teeth	14MGT-4410 P.L. 173.62 315 Teeth		Number of Grooves	Number of Grooves
39.13	40.51	41.89	43.27	44.64	47.40	54.01	57.32	58.42	61.18	68.07	69.45	77.44	79.09	1.000	28	28
38.86	40.24	41.61	42.99	44.37	47.13	53.74	57.05	58.15	60.90	67.79	69.17	77.16	78.82	1.000	29	29
38.58	39.96	41.34	42.72	44.09	46.85	53.46	56.77	57.87	60.63	67.52	68.90	76.89	78.54	1.000	30	30
38.31	39.69	41.06	42.44	43.82	46.58	53.19	56.50	57.60	60.35	67.24	68.62	76.61	78.27	1.000	31	31
38.03	39.41	40.79	42.17	43.54	46.30	52.91	56.22	57.32	60.08	66.97	68.35	76.34	77.99	1.000	32	32
37.76	39.14	40.51	41.89	43.27	46.03	52.64	55.95	57.05	59.80	66.69	68.07	76.06	77.72	1.000	33	33
37.48	38.86	40.24	41.62	42.99	45.75	52.36	55.67	56.77	59.53	66.42	67.80	75.79	77.44	1.000	34	34
37.20	38.58	39.96	41.34	42.71	45.47	52.08	55.39	56.49	59.25	66.14	67.52	75.51	77.16	1.000	35	35
36.93	38.31	39.68	41.06	42.44	45.20	51.81	55.12	56.22	58.97	65.86	67.24	75.23	76.89	1.000	36	36
36.65	38.03	39.41	40.79	42.16	44.92	51.53	54.84	55.94	58.70	65.59	66.97	74.96	76.61	1.000	37	37
36.38	37.76	39.13	40.51	41.89	44.65	51.26	54.57	55.67	58.42	65.31	66.69	74.68	76.34	1.000	38	38
36.10	37.48	38.86	40.24	41.61	44.37	50.98	54.29	55.39	58.15	65.04	66.42	74.41	76.06	1.000	39	39
35.83	37.21	38.58	39.96	41.34	44.10	50.71	54.02	55.12	57.87	64.76	66.14	74.13	75.79	1.000	40	40
35.00	36.38	37.75	39.13	40.51	43.27	49.88	53.19	54.29	57.04	63.93	65.31	73.30	74.96	1.000	43	43
34.45	35.83	37.20	38.58	39.96	42.72	49.33	52.64	53.74	56.49	63.38	64.76	72.75	74.41	1.000	45	45
33.62	35.00	36.38	37.76	39.13	41.89	48.50	51.81	52.91	55.67	62.56	63.94	71.93	73.58	1.000	48	48
33.07	34.45	35.83	37.21	38.58	41.34	47.95	51.26	52.36	55.12	62.01	63.39	71.38	73.03	1.000	50	50
32.24	33.62	35.00	36.38	37.75	40.51	47.12	50.43	51.53	54.29	61.18	62.56	70.55	72.20	1.000	53	53
31.42	32.80	34.17	35.55	36.93	39.69	46.30	49.61	50.71	53.46	60.35	61.73	69.72	71.38	1.000	56	56
30.31	31.69	33.07	34.45	35.82	38.58	45.19	48.50	49.60	52.36	59.25	60.63	68.62	70.27	1.000	60	60
29.49	30.87	32.24	33.62	35.00	37.76	44.37	47.68	48.78	51.53	58.42	59.80	67.79	69.45	1.000	63	63
28.39	29.77	31.14	32.52	33.90	36.66	43.27	46.58	47.68	50.43	57.32	58.70	66.69	68.35	1.000	67	67
27.28	28.66	30.04	31.42	32.79	35.55	42.16	45.47	46.57	49.33	56.22	57.60	65.59	67.24	1.000	71	71
26.18	27.56	28.94	30.32	31.69	34.45	41.06	44.37	45.47	48.23	55.12	56.50	64.49	66.14	1.000	75	75
24.80	26.18	27.56	28.94	30.31	33.07	39.68	42.99	44.09	46.85	53.74	55.12	63.11	64.76	1.000	80	80
36.24	37.62	38.99	40.37	41.75	44.51	51.12	54.43	55.53	58.28	65.17	66.55	74.55	76.20	1.026	38	39
35.96	37.34	38.72	40.10	41.47	44.23	50.84	54.15	55.25	58.01	64.90	66.28	74.27	75.92	1.026	39	40
36.51	37.89	39.27	40.65	42.02	44.78	51.39	54.70	55.80	58.56	65.45	66.83	74.82	76.47	1.027	37	38
36.79	38.17	39.55	40.93	42.30	45.06	51.67	54.98	56.08	58.84	65.73	67.11	75.10	76.75	1.028	36	37
37.34	38.72	40.10	41.48	42.85	45.61	52.22	55.53	56.63	59.39	66.28	67.66	75.65	77.30	1.029	34	35
37.07	38.45	39.82	41.20	42.58	45.34	51.95	55.26	56.36	59.11	66.00	67.38	75.37	77.03	1.029	35	36
37.62	39.00	40.37	41.75	43.13	45.89	52.50	55.81	56.91	59.66	66.55	67.93	75.92	77.58	1.030	33	34
37.89	39.27	40.65	42.03	43.40	46.16	52.77	56.08	57.18	59.94	66.83	68.21	76.20	77.85	1.031	32	33
38.17	39.55	40.92	42.30	43.68	46.44	53.05	56.36	57.46	60.21	67.10	68.48	76.47	78.13	1.032	31	32
38.44	39.82	41.20	42.58	43.95	46.71	53.32	56.63	57.73	60.49	67.38	68.76	76.75	78.40	1.033	30	31
38.72	40.10	41.48	42.86	44.23	46.99	53.60	56.91	58.01	60.77	67.66	69.04	77.03	78.68	1.034	29	30
39.00	40.38	41.75	43.13	44.51	47.27	53.88	57.19	58.29	61.04	67.93	69.31	77.30	78.96	1.036	28	29
33.35	34.73	36.10	37.48	38.86	41.62	48.23	51.54	52.64	55.39	62.28	63.66	71.65	73.31	1.042	48	50
34.72	36.10	37.48	38.86	40.23	42.99	49.60	52.91	54.01	56.77	63.66	65.04	73.03	74.68	1.047	43	45
29.90	31.28	32.66	34.04	35.41	38.17	44.78	48.09	49.19	51.95	58.84	60.22	68.21	69.86	1.050	60	63
36.10	37.48	38.86	40.24	41.61	44.37	50.98	54.29	55.39	58.15	65.04	66.42	74.41	76.06	1.053	38	40
36.38	37.76	39.13	40.51	41.89	44.65	51.26	54.57	55.67	58.42	65.31	66.69	74.68	76.34	1.054	37	39
36.65	38.03	39.41	40.79	42.16	44.92	51.53	54.84	55.94	58.70	65.59	66.97	74.96	76.61	1.056	36	38
26.73	28.11	29.48	30.87	32.24	35.00	41.61	44.92	46.02	48.78	55.67	57.05	65.04	66.69	1.056	71	75
36.93	38.31	39.68	41.06	42.44	45.20	51.81	55.12	56.22	58.97	65.86	67.24	75.23	76.89	1.057	35	37
31.83	33.21	34.58	35.96	37.34	40.10	46.71	50.02	51.12	53.87	60.76	62.14	70.13	71.79	1.057	53	56
37.20	38.58	39.96	41.34	42.71	45.47	52.08	55.39	56.49	59.25	66.14	67.52	75.51	77.16	1.059	34	36
32.66	34.04	35.41	36.79	38.17	40.93	47.54	50.85	51.95	54.70	61.59	62.97	70.96	72.62	1.060	50	53
27.83	29.21	30.59	31.97	33.34	36.10	42.71	46.02	47.12	49.88	56.77	58.15	66.14	67.79	1.060	67	71
37.48	38.86	40.23	41.61	42.99	45.75	52.36	55.67	56.77	59.52	66.41	67.79	75.78	77.44	1.061	33	35
37.76	39.14	40.51	41.89	43.27	46.03	52.64	55.95	57.05	59.80	66.69	68.07	76.06	77.72	1.063	32	34
28.93	30.31	31.69	33.07	34.44	37.20	43.82	47.13	48.23	50.98	57.87	59.25	67.24	68.90	1.063	63	67
38.03	39.41	40.79	42.17	43.54	46.30	52.91	56.22	57.32	60.08	66.97	68.35	76.34	77.99	1.065	31	33
38.31	39.69	41.06	42.44	43.82	46.58	53.19	56.50	57.60	60.35	67.24	68.62	76.61	78.27	1.067	30	32
34.03	35.41	36.79	38.17	39.54	42.30	48.91	52.22	53.32	56.08	62.97	64.35	72.34	73.99	1.067	45	48
25.49	26.87	28.24	29.62	31.00	33.76	40.37	43.68	44.78	47.53	54.43	55.81	63.80	65.45	1.067	75	80
38.58	39.96	41.34	42.72	44.09	46.85	53.46	56.77	57.87	60.63	67.52	68.90	76.89	78.54	1.069	29	31
38.86	40.24	41.61	42.99	44.37	47.13	53.74	57.05	58.15	60.90	67.79	69.17	77.16	78.82	1.071	28	30
30.86	32.24	33.62	35.00	36.37	39.13	45.74	49.05	50.15	52.91	59.80	61.18	69.17	70.82	1.071	56	60
35.41	36.79	38.17	39.55	40.92	43.68	50.29	53.60	54.70	57.46	64.35	65.73	73.72	75.37	1.075	40	43
36.24	37.62	38.99	40.37	41.75	44.51	51.12	54.43	55.53	58.28	65.17	66.55	74.54	76.20	1.081	37	40
36.51	37.89	39.27	40.65	42.02	44.78	51.40	54.71	55.81	58.56	65.45	66.83	74.82	76.48	1.083	36	39
36.79	38.17	39.54	40.92	42.30	45.06	51.67	54.98	56.08	58.84	65.73	67.11	75.10	76.75	1.086	35	38
37.07	38.45	39.82	41.20	42.58	45.34	51.95	55.26	56.36	59.11	66.00	67.38	75.37	77.03	1.088	34	37
37.34	38.72	40.10	41.48	42.85	45.61	52.22	55.53	56.63	59.39	66.28	67.66	75.65	77.30	1.091	33	36
37.62	39.00	40.37	41.75	43.13	45.89	52.50	55.81	56.91	59.66	66.55	67.93	75.92	77.58	1.094	32	35
37.89	39.27	40.65	42.03	43.40	46.16	52.77	56.08	57.18	59.94	66.83	68.21	76.20	77.85	1.097	31	34
38.17	39.55	40.92	42.30	43.68	46.44	53.05	56.36	57.46	60.21	67.10	68.48	76.47	78.13	1.100	30	33
38.44	39.82	41.20	42.58	43.95	46.71	53.32	56.63	57.73	60.49	67.38	68.76	76.75	78.40	1.103	29	32
35.55	36.93	38.30	39.68	41.06	43.82	50.43	53.74	54.84	57.60	64.49	65.87	73.86	75.51	1.103	39	43
32.93	34.31	35.69	37.07	38.44	41.20	47.81	51.12	52.22	54.98	61.87	63.25	71.24	72.89	1.104	48	53
1.01	1.02	1.03	1.04	1.05	1.07	1.12	1.14	1.14	1.16	1.19	1.20	1.24	1.25	Length Factor*		

Note: Check Sprocket Specification table on page 17 for Nickel Plated sprocket availability.

* This length factor must be used to determine the proper belt width.

14mm Pitch Poly Chain® GT® Carbon™ Belts Drive Selection Table

Sprocket Combinations					Center Distance, Inches												
DriveR		DriveN															
Number of Grooves	Pitch Diameter (Inches)	Number of Grooves	Pitch Diameter (Inches)	Speed Ratio	14MGT-994 P.L. 39.13 71 Teeth	14MGT-1120 P.L. 44.09 80 Teeth	14MGT-1190 P.L. 46.85 85 Teeth	14MGT-1260 P.L. 49.61 90 Teeth	14MGT-1400 P.L. 55.12 100 Teeth	14MGT-1568 P.L. 61.73 112 Teeth	14MGT-1610 P.L. 63.39 115 Teeth	14MGT-1750 P.L. 68.90 125 Teeth	14MGT-1890 P.L. 74.41 135 Teeth	14MGT-1960 P.L. 77.17 140 Teeth	14MGT-2100 P.L. 82.68 150 Teeth	14MGT-2240 P.L. 88.19 160 Teeth	14MGT-2310 P.L. 90.94 165 Teeth
28	4.912	31	5.439	1.107	11.43	13.91	15.29	16.67	19.43	22.73	23.56	26.32	29.07	30.45	33.21	35.96	37.34
36	6.316	40	7.018	1.111	9.09	11.57	12.95	14.33	17.08	20.39	21.22	23.97	26.73	28.11	30.87	33.62	35.00
45	7.895	50	8.772	1.111			10.33	11.71	14.46	17.77	18.60	21.36	24.11	25.49	28.25	31.00	32.38
35	6.141	39	6.842	1.114	9.36	11.84	13.22	14.60	17.36	20.67	21.50	24.25	27.01	28.39	31.14	33.90	35.27
43	7.544	48	8.421	1.116		9.50	10.88	12.26	15.01	18.32	19.15	21.91	24.66	26.04	28.80	31.55	32.93
60	10.527	67	11.755	1.117						13.35	14.18	16.94	19.70	21.08	23.83	26.59	27.96
34	5.965	38	6.667	1.118	9.64	12.12	13.50	14.88	17.64	20.94	21.77	24.53	27.28	28.66	31.42	34.17	35.55
67	11.755	75	13.158	1.119								14.87	17.62	19.01	21.76	24.52	25.89
50	8.772	56	9.825	1.120				10.19	12.94	16.25	17.08	19.84	22.59	23.97	26.73	29.48	30.86
33	5.790	37	6.492	1.121	9.91	12.39	13.77	15.15	17.91	21.22	22.05	24.80	27.56	28.94	31.69	34.45	35.82
32	5.614	36	6.316	1.125	10.19	12.67	14.05	15.43	18.19	21.49	22.32	25.08	27.83	29.21	31.97	34.72	36.10
40	7.018	45	7.895	1.125		10.32	11.70	13.09	15.84	19.15	19.98	22.73	25.49	26.87	29.62	32.38	33.75
56	9.825	63	11.053	1.125					11.15	14.45	15.29	18.04	20.80	22.18	24.93	27.69	29.07
80	14.036	90	15.790	1.125											17.89	20.65	22.03
63	11.053	71	12.457	1.127							13.21	15.97	18.73	20.11	22.86	25.62	27.00
71	12.457	80	14.036	1.127									16.38	17.76	20.52	23.27	24.65
31	5.439	35	6.141	1.129	10.46	12.95	14.33	15.71	18.46	21.77	22.60	25.35	28.11	29.49	32.24	35.00	36.37
38	6.667	43	7.544	1.132	8.39	10.87	12.26	13.64	16.39	19.70	20.53	23.28	26.04	27.42	30.18	32.93	34.31
53	9.299	60	10.527	1.132					11.97	15.28	16.11	18.87	21.62	23.01	25.76	28.52	29.89
30	5.263	34	5.965	1.133	10.74	13.22	14.60	15.98	18.74	22.04	22.87	25.63	28.38	29.76	32.52	35.27	36.65
29	5.088	33	5.790	1.138	11.02	13.50	14.88	16.26	19.01	22.32	23.15	25.90	28.66	30.04	32.79	35.55	36.92
28	4.912	32	5.614	1.143	11.29	13.77	15.15	16.53	19.29	22.60	23.43	26.18	28.94	30.32	33.07	35.83	37.20
35	6.141	40	7.018	1.143	9.22	11.70	13.08	14.46	17.22	20.53	21.36	24.11	26.87	28.25	31.00	33.76	35.13
34	5.965	39	6.842	1.147	9.50	11.98	13.36	14.74	17.50	20.80	21.63	24.39	27.14	28.52	31.28	34.03	35.41
33	5.790	38	6.667	1.152	9.77	12.25	13.63	15.01	17.77	21.08	21.91	24.66	27.42	28.80	31.55	34.31	35.68
39	6.842	45	7.895	1.154		10.46	11.84	13.22	15.98	19.28	20.11	22.87	25.63	27.01	29.76	32.52	33.89
32	5.614	37	6.492	1.156	10.05	12.53	13.91	15.29	18.05	21.35	22.18	24.94	27.69	29.07	31.83	34.58	35.96
31	5.439	36	6.316	1.161	10.32	12.81	14.19	15.57	18.32	21.63	22.46	25.21	27.97	29.35	32.10	34.86	36.23
37	6.492	43	7.544	1.162	8.52	11.01	12.39	13.77	16.53	19.83	20.66	23.42	26.18	27.56	30.31	33.07	34.44
43	7.544	50	8.772	1.163		9.21	10.59	11.97	14.73	18.04	18.87	21.63	24.38	25.76	28.52	31.27	32.65
30	5.263	35	6.141	1.167	10.60	13.08	14.46	15.84	18.60	21.90	22.73	25.49	28.24	29.63	32.38	35.14	36.51
48	8.421	56	9.825	1.167				10.45	13.21	16.52	17.35	20.11	22.86	24.24	27.00	29.76	31.13
29	5.088	34	5.965	1.172	10.88	13.36	14.74	16.12	18.87	22.18	23.01	25.77	28.52	29.90	32.66	35.41	36.79
34	5.965	40	7.018	1.176	9.35	11.84	13.22	14.60	17.36	20.66	21.49	24.25	27.00	28.38	31.14	33.89	35.27
45	7.895	53	9.299	1.178			9.90	11.28	14.04	17.35	18.18	20.93	23.69	25.07	27.83	30.58	31.96
28	4.912	33	5.790	1.179	11.15	13.63	15.01	16.39	19.15	22.46	23.29	26.04	28.80	30.18	32.93	35.69	37.06
33	5.790	39	6.842	1.182	9.63	12.11	13.49	14.87	17.63	20.94	21.77	24.52	27.28	28.66	31.41	34.17	35.54
60	10.527	71	12.457	1.183						12.78	13.61	16.37	19.13	20.51	23.27	26.03	27.40
38	6.667	45	7.895	1.184	8.10	10.59	11.97	13.35	16.11	19.42	20.25	23.00	25.76	27.14	29.90	32.65	34.03
32	5.614	38	6.667	1.188	9.91	12.39	13.77	15.15	17.91	21.21	22.04	24.80	27.55	28.93	31.69	34.45	35.82
53	9.299	63	11.053	1.189					11.54	14.85	15.69	18.44	21.20	22.58	25.34	28.10	29.47
63	11.053	75	13.158	1.190								15.40	18.16	19.54	22.30	25.06	26.43
31	5.439	37	6.492	1.194	10.18	12.66	14.04	15.43	18.18	21.49	22.32	25.07	27.83	29.21	31.97	34.72	36.10
36	6.316	43	7.544	1.194	8.66	11.14	12.52	13.91	16.66	19.97	20.80	23.56	26.31	27.69	30.45	33.20	34.58
67	11.755	80	14.036	1.194								14.15	16.91	18.29	21.05	23.81	25.19
56	9.825	67	11.755	1.196						13.88	14.71	17.47	20.23	21.61	24.37	27.13	28.50
30	5.263	36	6.316	1.200	10.46	12.94	14.32	15.70	18.46	21.76	22.59	25.35	28.11	29.49	32.24	35.00	36.37
40	7.018	48	8.421	1.200		9.89	11.28	12.66	15.42	18.73	19.56	22.31	25.07	26.45	29.21	31.96	33.34
50	8.772	60	10.527	1.200					12.37	15.68	16.51	19.27	22.03	23.41	26.17	28.92	30.30
75	13.158	90	15.790	1.200										15.79	18.56	21.32	22.70
29	5.088	35	6.141	1.207	10.73	13.22	14.60	15.98	18.73	22.04	22.87	25.63	28.38	29.76	32.52	35.27	36.65
33	5.790	40	7.018	1.212	9.49	11.97	13.35	14.73	17.49	20.80	21.63	24.38	27.14	28.52	31.27	34.03	35.41
28	4.912	34	5.965	1.214	11.01	13.49	14.87	16.25	19.01	22.32	23.15	25.90	28.66	30.04	32.79	35.55	36.92
37	6.492	45	7.895	1.216	8.24	10.72	12.11	13.49	16.25	19.55	20.38	23.14	25.90	27.28	30.03	32.79	34.16
32	5.614	39	6.842	1.219	9.76	12.25	13.63	15.01	17.77	21.07	21.90	24.66	27.42	28.80	31.55	34.31	35.68
31	5.439	38	6.667	1.226	10.04	12.52	13.90	15.28	18.04	21.35	22.18	24.93	27.69	29.07	31.83	34.58	35.96
35	6.141	43	7.544	1.229	8.79	11.28	12.66	14.04	16.80	20.10	20.94	23.69	26.45	27.83	30.58	33.34	34.71
39	6.842	48	8.421	1.231		10.03	11.41	12.79	15.55	18.86	19.69	22.45	25.21	26.59	29.34	32.10	33.47
30	5.263	37	6.492	1.233	10.31	12.80	14.18	15.56	18.32	21.62	22.45	25.21	27.97	29.35	32.10	34.86	36.23
43	7.544	53	9.299	1.233			10.16	11.54	14.30	17.61	18.45	21.20	23.96	25.34	28.10	30.85	32.23
29	5.088	36	6.316	1.241	10.59	13.07	14.46	15.84	18.59	21.90	22.73	25.49	28.24	29.62	32.38	35.13	36.51
45	7.895	56	9.825	1.244				10.84	13.61	16.92	17.75	20.51	23.27	24.65	27.41	30.16	31.54
28	4.912	35	6.141	1.250	10.87	13.35	14.73	16.11	18.87	22.18	23.01	25.76	28.52	29.90	32.65	35.41	36.78
32	5.614	40	7.018	1.250	9.62	12.10	13.49	14.87	17.62	20.93	21.76	24.52	27.27	28.66	31.41	34.17	35.54
36	6.316	45	7.895	1.250	8.37	10.85	12.24	13.62	16.38	19.69	20.52	23.28	26.03	27.41	30.17	32.92	34.30
40	7.018	50	8.772	1.250		9.60	10.99	12.37	15.13	18.44	19.27	22.03	24.79	26.17	28.93	31.68	33.06
48	8.421	60	10.527	1.250					12.63	15.95	16.78	19.54	22.30	23.68	26.44	29.19	30.57
60	10.527	75	13.158	1.250							13.03	15.79	18.56	19.94	22.70	25.46	26.84
31	5.439	39	6.842	1.258	9.89	12.38	13.76	15.14	17.90	21.21	22.04	24.79	27.55	28.93	31.69	34.44	35.82
50	8.772	63	11.053	1.260					11.93	15.25	16.08	18.84	21.60	22.99	25.74	28.50	29.88
38	6.667	48	8.421	1.263		10.16	11.54	12.93	15.69	18.99	19.83	22.58	25.34	26.72	29.48	32.23	33.61
				Length Factor*	0.68	0.73	0.75	0.77	0.81	0.85	0.86	0.89	0.92	0.94	0.96	0.99	1.00

Note: Check Sprocket Specification table on page 17 for Nickel Plated sprocket availability.

* This length factor must be used to determine the proper belt width.

14mm Pitch Poly Chain® GT® Carbon™ Belts Drive Selection Table

Center Distance, Inches														Speed Ratio	Sprocket Combinations	
															DriveR	DriveR
14MGT-2380 P.L. 93.70 170 Teeth	14MGT-2450 P.L. 96.46 175 Teeth	14MGT-2520 P.L. 99.21 180 Teeth	14MGT-2590 P.L. 101.97 185 Teeth	14MGT-2660 P.L. 104.72 190 Teeth	14MGT-2800 P.L. 110.24 200 Teeth	14MGT-3136 P.L. 123.46 224 Teeth	14MGT-3304 P.L. 130.08 236 Teeth	14MGT-3360 P.L. 132.28 240 Teeth	14MGT-3500 P.L. 137.79 250 Teeth	14MGT-3850 P.L. 151.57 275 Teeth	14MGT-3920 P.L. 154.33 280 Teeth	14MGT-4326 P.L. 170.31 309 Teeth	14MGT-4410 P.L. 173.62 315 Teeth		Number of Grooves	Number of Grooves
38.72	40.10	41.47	42.85	44.23	46.99	53.60	56.91	58.01	60.76	67.65	69.03	77.02	78.68	1.107	28	31
36.38	37.76	39.13	40.51	41.89	44.65	51.26	54.57	55.67	58.42	65.31	66.69	74.68	76.34	1.111	36	40
33.76	35.14	36.51	37.89	39.27	42.03	48.64	51.95	53.05	55.80	62.69	64.07	72.06	73.72	1.111	45	50
36.65	38.03	39.41	40.79	42.16	44.92	51.53	54.84	55.94	58.70	65.59	66.97	74.96	76.61	1.114	35	39
34.31	35.69	37.06	38.44	39.82	42.58	49.19	52.50	53.60	56.35	63.24	64.62	72.61	74.27	1.116	43	48
29.34	30.72	32.10	33.48	34.85	37.61	44.23	47.54	48.64	51.39	58.28	59.66	67.65	69.31	1.117	60	67
36.93	38.31	39.68	41.06	42.44	45.20	51.81	55.12	56.22	58.97	65.86	67.24	75.23	76.89	1.118	34	38
27.27	28.65	30.03	31.41	32.79	35.55	42.16	45.47	46.57	49.32	56.21	57.59	65.58	67.24	1.119	67	75
32.24	33.62	34.99	36.38	37.75	40.51	47.12	50.43	51.53	54.29	61.18	62.56	70.55	72.20	1.120	50	56
37.20	38.58	39.96	41.34	42.71	45.47	52.08	55.39	56.49	59.25	66.14	67.52	75.51	77.16	1.121	33	37
37.48	38.86	40.23	41.61	42.99	45.75	52.36	55.67	56.77	59.52	66.41	67.79	75.78	77.44	1.125	32	36
35.13	36.51	37.89	39.27	40.64	43.41	50.02	53.33	54.43	57.18	64.07	65.45	73.44	75.10	1.125	40	45
30.45	31.83	33.20	34.58	35.96	38.72	45.33	48.64	49.74	52.49	59.38	60.76	68.75	70.41	1.125	56	63
23.41	24.79	26.17	27.55	28.92	31.68	38.29	41.61	42.71	45.46	52.35	53.73	61.72	63.38	1.125	80	90
28.38	29.76	31.13	32.51	33.89	36.65	43.26	46.57	47.67	50.43	57.32	58.70	66.69	68.34	1.127	63	71
26.03	27.41	28.79	30.17	31.54	34.30	40.91	44.23	45.33	48.08	54.97	56.35	64.34	66.00	1.127	71	80
37.75	39.13	40.51	41.89	43.26	46.02	52.63	55.94	57.04	59.80	66.69	68.07	76.06	77.71	1.129	31	35
35.69	37.07	38.44	39.82	41.20	43.96	50.57	53.88	54.98	57.73	64.62	66.00	73.99	75.65	1.132	38	43
31.27	32.65	34.03	35.41	36.78	39.54	46.15	49.46	50.56	53.32	60.21	61.59	69.58	71.24	1.132	53	60
38.03	39.41	40.79	42.17	43.54	46.30	52.91	56.22	57.32	60.08	66.97	68.35	76.34	77.99	1.133	30	34
38.30	39.68	41.06	42.44	43.82	46.58	53.19	56.50	57.60	60.35	67.24	68.62	76.61	78.27	1.138	29	33
38.58	39.96	41.34	42.72	44.09	46.85	53.46	56.77	57.87	60.63	67.52	68.90	76.89	78.54	1.143	28	32
36.51	37.89	39.27	40.65	42.02	44.78	51.39	54.70	55.80	58.56	65.45	66.83	74.82	76.47	1.143	35	40
36.79	38.17	39.54	40.92	42.30	45.06	51.67	54.98	56.08	58.83	65.72	67.10	75.10	76.75	1.147	34	39
37.06	38.44	39.82	41.20	42.57	45.33	51.94	55.25	56.35	59.11	66.00	67.38	75.37	77.03	1.152	33	38
35.27	36.65	38.03	39.41	40.78	43.54	50.15	53.46	54.56	57.32	64.21	65.59	73.58	75.23	1.154	39	45
37.34	38.72	40.09	41.47	42.85	45.61	52.22	55.53	56.63	59.39	66.28	67.66	75.65	77.30	1.156	32	37
37.62	39.00	40.37	41.75	43.13	45.89	52.50	55.81	56.91	59.66	66.55	67.93	75.92	77.58	1.161	31	36
35.82	37.20	38.58	39.96	41.33	44.09	50.70	54.01	55.11	57.87	64.76	66.14	74.13	75.78	1.162	37	43
34.03	35.41	36.79	38.17	39.54	42.30	48.91	52.22	53.32	56.08	62.97	64.35	72.34	73.99	1.163	43	50
37.89	39.27	40.65	42.03	43.40	46.16	52.77	56.08	57.18	59.94	66.83	68.21	76.20	77.85	1.167	30	35
32.51	33.89	35.27	36.65	38.02	40.78	47.39	50.70	51.80	54.56	61.45	62.83	70.82	72.48	1.167	48	56
38.17	39.55	40.92	42.30	43.68	46.44	53.05	56.36	57.46	60.21	67.10	68.48	76.47	78.13	1.172	29	34
36.65	38.03	39.40	40.78	42.16	44.92	51.53	54.84	55.94	58.70	65.59	66.97	74.96	76.61	1.176	34	40
33.34	34.72	36.09	37.47	38.85	41.61	48.22	51.53	52.63	55.39	62.28	63.66	71.65	73.30	1.178	45	53
38.44	39.82	41.20	42.58	43.95	46.71	53.32	56.63	57.73	60.49	67.38	68.76	76.75	78.40	1.179	28	33
36.93	38.31	39.68	41.06	42.44	45.20	51.81	55.12	56.22	58.97	65.86	67.24	75.23	76.89	1.182	33	39
28.78	30.16	31.54	32.92	34.29	37.06	43.67	46.98	48.08	50.83	57.73	59.11	67.10	68.75	1.183	60	71
35.41	36.79	38.16	39.54	40.92	43.68	50.29	53.60	54.70	57.45	64.35	65.73	73.72	75.37	1.184	38	45
37.20	38.58	39.96	41.34	42.71	45.47	52.08	55.39	56.49	59.25	66.14	67.52	75.51	77.16	1.188	32	38
30.85	32.23	33.61	34.99	36.37	39.13	45.74	49.05	50.15	52.90	59.79	61.17	69.17	70.82	1.189	53	63
27.81	29.20	30.57	31.95	33.33	36.09	42.70	46.01	47.11	49.87	56.76	58.14	66.13	67.79	1.190	63	75
37.48	38.86	40.23	41.61	42.99	45.75	52.36	55.67	56.77	59.52	66.41	67.79	75.78	77.44	1.194	31	37
35.96	37.34	38.71	40.09	41.47	44.23	50.84	54.15	55.25	58.01	64.90	66.28	74.27	75.92	1.194	36	43
26.57	27.95	29.33	30.71	32.08	34.85	41.46	44.77	45.87	48.63	55.52	56.90	64.89	66.54	1.194	67	80
29.89	31.27	32.64	34.02	35.40	38.16	44.77	48.08	49.18	51.94	58.83	60.21	68.20	69.85	1.196	56	67
37.75	39.13	40.51	41.89	43.26	46.02	52.63	55.94	57.04	59.80	66.69	68.07	76.06	77.71	1.200	30	36
34.72	36.10	37.47	38.85	40.23	42.99	49.60	52.91	54.01	56.76	63.66	65.04	73.03	74.68	1.200	40	48
31.68	33.06	34.44	35.82	37.19	39.95	46.56	49.87	50.98	53.73	60.62	62.00	69.99	71.65	1.200	50	60
24.08	25.46	26.84	28.22	29.60	32.36	38.97	42.28	43.38	46.14	53.03	54.41	62.41	64.06	1.200	75	90
38.03	39.41	40.78	42.16	43.54	46.30	52.91	56.22	57.32	60.07	66.96	68.34	76.33	77.99	1.207	29	35
36.79	38.17	39.54	40.92	42.30	45.06	51.67	54.98	56.08	58.83	65.72	67.10	75.09	76.75	1.212	33	40
38.30	39.68	41.06	42.44	43.81	46.57	53.18	56.49	57.59	60.35	67.24	68.62	76.61	78.27	1.214	28	34
35.54	36.92	38.30	39.68	41.05	43.81	50.43	53.74	54.84	57.59	64.48	65.86	73.85	75.51	1.216	37	45
37.06	38.44	39.82	41.20	42.57	45.33	51.94	55.25	56.35	59.11	66.00	67.38	75.37	77.02	1.219	32	39
37.34	38.72	40.09	41.47	42.85	45.61	52.22	55.53	56.63	59.38	66.27	67.65	75.64	77.30	1.226	31	38
36.10	37.48	38.85	40.23	41.61	44.37	50.98	54.29	55.39	58.14	65.03	66.41	74.40	76.06	1.229	35	43
34.85	36.23	37.61	38.99	40.36	43.13	49.74	53.05	54.15	56.90	63.79	65.17	73.16	74.82	1.231	39	48
37.61	38.99	40.37	41.75	43.12	45.88	52.49	55.80	56.90	59.66	66.55	67.93	75.92	77.58	1.233	30	37
33.61	34.99	36.37	37.75	39.12	41.88	48.49	51.80	52.90	55.66	62.55	63.93	71.92	73.58	1.233	43	53
37.89	39.27	40.64	42.02	43.40	46.16	52.77	56.08	57.18	59.94	66.83	68.21	76.20	77.85	1.241	29	36
32.92	34.30	35.67	37.06	38.43	41.19	47.80	51.11	52.21	54.97	61.86	63.24	71.23	72.89	1.244	45	56
38.16	39.54	40.92	42.30	43.67	46.43	53.05	56.36	57.46	60.21	67.10	68.48	76.47	78.13	1.250	28	35
36.92	38.30	39.68	41.06	42.43	45.19	51.80	55.11	56.21	58.97	65.86	67.24	75.23	76.89	1.250	32	40
35.68	37.06	38.44	39.82	41.19	43.95	50.56	53.87	54.97	57.73	64.62	66.00	73.99	75.64	1.250	36	45
34.44	35.82	37.19	38.57	39.95	42.71	49.32	52.63	53.73	56.49	63.38	64.76	72.75	74.40	1.250	40	50
31.95	33.33	34.71	36.09	37.46	40.22	46.84	50.15	51.25	54.00	60.89	62.27	70.27	71.92	1.250	48	60
28.22	29.60	30.97	32.36	33.73	36.49	43.11	46.42	47.52	50.28	57.17	58.55	66.54	68.20	1.250	60	75
37.20	38.58	39.95	41.33	42.71	45.47	52.08	55.39	56.49	59.25	66.14	67.52	75.51	77.16	1.258	31	39
31.26	32.64	34.02	35.40	36.77	39.53	46.15	49.46	50.56	53.31	60.20	61.58	69.58	71.23	1.260	50	63
34.99	36.37	37.74	39.13	40.50	43.26	49.87	53.18	54.28	57.04	63.93	65.31	73.30	74.95	1.263	38	48
1.01	1.02	1.03	1.04	1.05	1.07	1.12	1.14	1.14	1.16	1.19	1.20	1.24	1.25	Length Factor*		

Note: Check Sprocket Specification table on page 17 for Nickel Plated sprocket availability.

* This length factor must be used to determine the proper belt width.

14mm Pitch Poly Chain® GT® Carbon™ Belts Drive Selection Table

Sprocket Combinations					Center Distance, Inches													
DriveR		DriveN																
Number of Grooves	Pitch Diameter (Inches)	Number of Grooves	Pitch Diameter (Inches)	Speed Ratio	14MGT-994 P.L. 39.13 71 Teeth	14MGT-1120 P.L. 44.09 80 Teeth	14MGT-1190 P.L. 46.85 85 Teeth	14MGT-1260 P.L. 49.61 90 Teeth	14MGT-1400 P.L. 55.12 100 Teeth	14MGT-1568 P.L. 61.73 112 Teeth	14MGT-1610 P.L. 63.39 115 Teeth	14MGT-1750 P.L. 68.90 125 Teeth	14MGT-1890 P.L. 74.41 135 Teeth	14MGT-1960 P.L. 77.17 140 Teeth	14MGT-2100 P.L. 82.68 150 Teeth	14MGT-2240 P.L. 88.19 160 Teeth	14MGT-2310 P.L. 90.94 165 Teeth
53	9.299	67	11.755	1.264						14.28	15.11	17.87	20.63	22.01	24.77	27.53	28.91
34	5.965	43	7.544	1.265	8.92	11.41	12.79	14.17	16.93	20.24	21.07	23.83	26.58	27.96	30.72	33.48	34.85
30	5.263	38	6.667	1.267	10.17	12.66	14.04	15.42	18.18	21.48	22.31	25.07	27.83	29.21	31.96	34.72	36.09
56	9.825	71	12.457	1.268						13.30	14.13	16.90	19.66	21.04	23.80	26.56	27.94
71	12.457	90	15.790	1.268									14.93	16.31	19.08	21.85	23.23
63	11.053	80	14.036	1.270								14.67	17.44	18.82	21.58	24.34	25.72
29	5.088	37	6.492	1.276	10.45	12.93	14.31	15.69	18.45	21.76	22.59	25.35	28.10	29.48	32.24	34.99	36.37
39	6.842	50	8.772	1.282		9.73	11.12	12.50	15.27	18.58	19.41	22.17	24.92	26.30	29.06	31.82	33.19
28	4.912	36	6.316	1.286	10.72	13.21	14.59	15.97	18.73	22.04	22.87	25.62	28.38	29.76	32.51	35.27	36.64
35	6.141	45	7.895	1.286	8.50	10.99	12.37	13.75	16.51	19.82	20.65	23.41	26.17	27.55	30.30	33.06	34.43
31	5.439	40	7.018	1.290	9.75	12.24	13.62	15.00	17.76	21.07	21.90	24.65	27.41	28.79	31.55	34.30	35.68
37	6.492	48	8.421	1.297		10.29	11.67	13.06	15.82	19.13	19.96	22.72	25.47	26.86	29.61	32.37	33.74
30	5.263	39	6.842	1.300	10.03	12.51	13.90	15.28	18.04	21.34	22.17	24.93	27.69	29.07	31.82	34.58	35.95
43	7.544	56	9.825	1.302			9.72	11.10	13.87	17.19	18.02	20.78	23.54	24.92	27.67	30.43	31.81
33	5.790	43	7.544	1.303	9.05	11.54	12.92	14.31	17.06	20.37	21.20	23.96	26.72	28.10	30.86	33.61	34.99
29	5.088	38	6.667	1.310	10.30	12.79	14.17	15.55	18.31	21.62	22.45	25.21	27.96	29.34	32.10	34.85	36.23
48	8.421	63	11.053	1.313					12.19	15.51	16.35	19.11	21.87	23.25	26.01	28.77	30.15
38	6.667	50	8.772	1.316		9.86	11.25	12.64	15.40	18.71	19.54	22.30	25.06	26.44	29.20	31.95	33.33
28	4.912	37	6.492	1.321	10.58	13.06	14.45	15.83	18.59	21.89	22.72	25.48	28.24	29.62	32.37	35.13	36.50
34	5.965	45	7.895	1.324	8.63	11.12	12.50	13.89	16.65	19.96	20.79	23.54	26.30	27.68	30.44	33.20	34.57
40	7.018	53	9.299	1.325		9.16	10.55	11.94	14.70	18.01	18.85	21.60	24.36	25.74	28.50	31.26	32.63
30	5.263	40	7.018	1.333	9.88	12.37	13.75	15.13	17.89	21.20	22.03	24.79	27.55	28.93	31.68	34.44	35.81
36	6.316	48	8.421	1.333		10.42	11.80	13.19	15.95	19.26	20.09	22.85	25.61	26.99	29.75	32.50	33.88
45	7.895	60	10.527	1.333				10.25	13.02	16.34	17.18	19.94	22.70	24.08	26.84	29.60	30.97
60	10.527	80	14.036	1.333								15.06	17.83	19.21	21.98	24.74	26.12
56	9.825	75	13.158	1.339						12.70	13.54	16.31	19.08	20.47	23.23	25.99	27.37
50	8.772	67	11.755	1.340					11.34	14.67	15.50	18.27	21.03	22.41	25.17	27.93	29.31
53	9.299	71	12.457	1.340						13.69	14.52	17.29	20.06	21.44	24.20	26.96	28.34
67	11.755	90	15.790	1.343									15.44	16.83	19.60	22.37	23.75
32	5.614	43	7.544	1.344	9.18	11.67	13.06	14.44	17.20	20.51	21.34	24.10	26.85	28.23	30.99	33.75	35.12
29	5.088	39	6.842	1.345	10.16	12.64	14.03	15.41	18.17	21.48	22.31	25.06	27.82	29.20	31.96	34.71	36.09
37	6.492	50	8.772	1.351		9.99	11.38	12.77	15.53	18.84	19.67	22.43	25.19	26.57	29.33	32.09	33.46
28	4.912	38	6.667	1.357	10.43	12.92	14.30	15.69	18.45	21.75	22.58	25.34	28.10	29.48	32.23	34.99	36.37
39	6.842	53	9.299	1.359		9.29	10.68	12.07	14.83	18.15	18.98	21.74	24.50	25.88	28.64	31.39	32.77
33	5.790	45	7.895	1.364	8.75	11.25	12.63	14.02	16.78	20.09	20.92	23.68	26.44	27.82	30.57	33.33	34.71
35	6.141	48	8.421	1.371	8.05	10.55	11.93	13.32	16.08	19.39	20.23	22.98	25.74	27.12	29.88	32.64	34.01
29	5.088	40	7.018	1.379	10.01	12.50	13.88	15.27	18.03	21.34	22.17	24.92	27.68	29.06	31.82	34.57	35.95
31	5.439	43	7.544	1.387	9.31	11.80	13.19	14.57	17.33	20.64	21.47	24.23	26.99	28.37	31.13	33.88	35.26
36	6.316	50	8.772	1.389		10.12	11.51	12.90	15.66	18.98	19.81	22.57	25.33	26.71	29.46	32.22	33.60
28	4.912	39	6.842	1.393	10.29	12.78	14.16	15.54	18.30	21.61	22.44	25.20	27.96	29.34	32.09	34.85	36.23
38	6.667	53	9.299	1.395		9.41	10.81	12.19	14.96	18.28	19.11	21.87	24.63	26.01	28.77	31.53	32.90
43	7.544	60	10.527	1.395				10.51	13.28	16.61	17.44	20.20	22.96	24.35	27.11	29.86	31.24
48	8.421	67	11.755	1.396					11.59	14.93	15.76	18.53	21.29	22.68	25.44	28.20	29.58
40	7.018	56	9.825	1.400			10.10	11.49	14.26	17.58	18.41	21.18	23.94	25.32	28.08	30.83	32.21
45	7.895	63	11.053	1.400					12.58	15.90	16.74	19.50	22.27	23.65	26.41	29.17	30.55
80	14.036	112	19.650	1.400												17.41	18.80
32	5.614	45	7.895	1.406	8.88	11.38	12.76	14.15	16.91	20.22	21.05	23.81	26.57	27.95	30.71	33.47	34.84
34	5.965	48	8.421	1.412	8.17	10.68	12.06	13.45	16.21	19.53	20.36	23.12	25.88	27.26	30.02	32.77	34.15
53	9.299	75	13.158	1.415						13.08	13.92	16.70	19.47	20.86	23.62	26.39	27.77
50	8.772	71	12.457	1.420						14.07	14.91	17.68	20.45	21.83	24.60	27.36	28.74
28	4.912	40	7.018	1.429	10.14	12.63	14.02	15.40	18.16	21.47	22.30	25.06	27.82	29.20	31.95	34.71	36.08
35	6.141	50	8.772	1.429		10.25	11.64	13.03	15.79	19.11	19.94	22.70	25.46	26.84	29.60	32.36	33.73
56	9.825	80	14.036	1.429							12.78	15.57	18.34	19.73	22.50	25.27	26.65
63	11.053	90	15.790	1.429									15.95	17.34	20.12	22.89	24.27
37	6.492	53	9.299	1.432		9.54	10.93	12.32	15.09	18.41	19.24	22.00	24.76	26.15	28.90	31.66	33.04
30	5.263	43	7.544	1.433	9.44	11.93	13.32	14.70	17.46	20.78	21.61	24.36	27.12	28.50	31.26	34.02	35.39
39	6.842	56	9.825	1.436			10.23	11.62	14.39	17.71	18.54	21.31	24.07	25.45	28.21	30.97	32.35
31	5.439	45	7.895	1.452	9.01	11.51	12.89	14.28	17.04	20.36	21.19	23.95	26.70	28.09	30.84	33.60	34.98
33	5.790	48	8.421	1.455	8.30	10.80	12.19	13.58	16.35	19.66	20.49	23.25	26.01	27.39	30.15	32.91	34.28
43	7.544	63	11.053	1.465				10.05	12.83	16.16	17.00	19.77	22.53	23.91	26.68	29.44	30.81
34	5.965	50	8.772	1.471		10.38	11.77	13.16	15.92	19.24	20.07	22.83	25.59	26.97	29.73	32.49	33.87
36	6.316	53	9.299	1.472		9.67	11.06	12.45	15.22	18.54	19.37	22.14	24.90	26.28	29.04	31.80	33.17
38	6.667	56	9.825	1.474		8.95	10.35	11.75	14.52	17.84	18.68	21.44	24.20	25.58	28.34	31.10	32.48
48	8.421	71	12.457	1.479						14.33	15.16	17.94	20.71	22.10	24.86	27.62	29.00
29	5.088	43	7.544	1.483	9.56	12.06	13.45	14.83	17.60	20.91	21.74	24.50	27.26	28.64	31.39	34.15	35.53
45	7.895	67	11.755	1.489					11.97	15.31	16.15	18.92	21.69	23.07	25.83	28.60	29.97
75	13.158	112	19.650	1.493												18.03	19.43
30	5.263	45	7.895	1.500	9.14	11.64	13.02	14.41	17.18	20.49	21.32	24.08	26.84	28.22	30.98	33.74	35.11
32	5.614	48	8.421	1.500	8.42	10.93	12.32	13.71	16.48	19.79	20.62	23.38	26.14	27.53	30.28	33.04	34.42
40	7.018	60	10.527	1.500			9.48	10.88	13.67	16.99	17.83	20.60	23.36	24.74	27.50	30.26	31.64
50	8.772	75	13.158	1.500						13.46	14.30	17.09	19.86	21.25	24.02	26.78	28.16
60	10.527	90	15.790	1.500								13.52	16.32	17.72	20.50	23.28	24.66
				Length Factor*	0.68	0.73	0.75	0.77	0.81	0.85	0.86	0.89	0.92	0.94	0.96	0.99	1.00

Note: Check Sprocket Specification table on page 17 for Nickel Plated sprocket availability.

* This length factor must be used to determine the proper belt width.

14mm Pitch Poly Chain® GT® Carbon™ Belts Drive Selection Table

Center Distance, Inches														Speed Ratio	Sprocket Combinations	
															DriveR	DriveR
14MGT-2380 P.L. 93.70 170 Teeth	14MGT-2450 P.L. 96.46 175 Teeth	14MGT-2520 P.L. 99.21 180 Teeth	14MGT-2590 P.L. 101.97 185 Teeth	14MGT-2660 P.L. 104.72 190 Teeth	14MGT-2800 P.L. 110.24 200 Teeth	14MGT-3136 P.L. 123.46 224 Teeth	14MGT-3304 P.L. 130.08 236 Teeth	14MGT-3360 P.L. 132.28 240 Teeth	14MGT-3500 P.L. 137.79 250 Teeth	14MGT-3850 P.L. 151.57 275 Teeth	14MGT-3920 P.L. 154.33 280 Teeth	14MGT-4326 P.L. 170.31 309 Teeth	14MGT-4410 P.L. 173.62 315 Teeth		Number of Grooves	Number of Grooves
30.29	31.67	33.05	34.43	35.80	38.56	45.18	48.49	49.59	52.34	59.24	60.62	68.61	70.26	1.264	53	67
36.23	37.61	38.99	40.37	41.74	44.50	51.11	54.42	55.52	58.28	65.17	66.55	74.54	76.20	1.265	34	43
37.47	38.85	40.23	41.61	42.98	45.74	52.36	55.67	56.77	59.52	66.41	67.79	75.78	77.44	1.267	30	38
29.32	30.70	32.08	33.46	34.83	37.60	44.21	47.52	48.62	51.38	58.27	59.65	67.64	69.30	1.268	56	71
24.61	25.99	27.37	28.75	30.13	32.89	39.51	42.82	43.92	46.68	53.57	54.95	62.95	64.60	1.268	71	90
27.10	28.49	29.86	31.24	32.62	35.38	42.00	45.31	46.41	49.17	56.06	57.44	65.43	67.09	1.270	63	80
37.75	39.13	40.50	41.88	43.26	46.02	52.63	55.94	57.04	59.80	66.69	68.07	76.06	77.71	1.276	29	37
34.57	35.95	37.33	38.71	40.09	42.85	49.46	52.77	53.87	56.62	63.51	64.89	72.89	74.54	1.282	39	50
38.03	39.41	40.78	42.16	43.54	46.30	52.91	56.22	57.32	60.07	66.96	68.34	76.33	77.99	1.286	28	36
35.82	37.20	38.57	39.95	41.33	44.09	50.70	54.01	55.11	57.86	64.76	66.14	74.13	75.78	1.286	35	45
37.06	38.44	39.81	41.19	42.57	45.33	51.94	55.25	56.35	59.11	66.00	67.38	75.37	77.02	1.290	31	40
35.12	36.50	37.88	39.26	40.64	43.40	50.01	53.32	54.42	57.17	64.07	65.45	73.44	75.09	1.297	37	48
37.33	38.71	40.09	41.47	42.85	45.61	52.22	55.53	56.63	59.38	66.27	67.65	75.64	77.30	1.300	30	39
33.19	34.57	35.95	37.33	38.70	41.46	48.07	51.39	52.49	55.24	62.13	63.51	71.50	73.16	1.302	43	56
36.37	37.75	39.12	40.50	41.88	44.64	51.25	54.56	55.66	58.42	65.31	66.69	74.68	76.33	1.303	33	43
37.61	38.99	40.36	41.75	43.12	45.88	52.49	55.80	56.90	59.66	66.55	67.93	75.92	77.57	1.310	29	38
31.53	32.91	34.28	35.67	37.04	39.80	46.42	49.73	50.83	53.58	60.48	61.86	69.85	71.50	1.313	48	63
34.71	36.09	37.46	38.84	40.22	42.98	49.59	52.90	54.00	56.76	63.65	65.03	73.02	74.68	1.316	38	50
37.89	39.27	40.64	42.02	43.40	46.16	52.77	56.08	57.18	59.93	66.82	68.20	76.19	77.85	1.321	28	37
35.95	37.33	38.71	40.09	41.46	44.22	50.84	54.15	55.25	58.00	64.89	66.27	74.26	75.92	1.324	34	45
34.02	35.40	36.77	38.15	39.53	42.29	48.90	52.21	53.31	56.07	62.96	64.34	72.33	73.99	1.325	40	53
37.19	38.57	39.95	41.33	42.71	45.47	52.08	55.39	56.49	59.24	66.13	67.51	75.50	77.16	1.333	30	40
35.26	36.64	38.02	39.40	40.77	43.53	50.14	53.46	54.56	57.31	64.20	65.58	73.57	75.23	1.333	36	48
32.35	33.74	35.11	36.49	37.87	40.63	47.24	50.55	51.65	54.41	61.30	62.68	70.67	72.33	1.333	45	60
27.50	28.88	30.26	31.64	33.02	35.79	42.40	45.71	46.82	49.57	56.47	57.85	65.84	67.50	1.333	60	80
28.75	30.13	31.51	32.89	34.27	37.03	43.65	46.96	48.06	50.82	57.71	59.09	67.08	68.74	1.339	56	75
30.69	32.07	33.45	34.83	36.21	38.97	45.58	48.90	50.00	52.75	59.64	61.02	69.02	70.67	1.340	50	67
29.72	31.10	32.48	33.86	35.24	38.00	44.61	47.93	49.03	51.78	58.68	60.06	68.05	69.70	1.340	53	71
25.14	26.52	27.90	29.28	30.66	33.43	40.05	43.36	44.46	47.22	54.11	55.49	63.49	65.14	1.343	67	90
36.50	37.88	39.26	40.64	42.01	44.78	51.39	54.70	55.80	58.55	65.44	66.82	74.81	76.47	1.344	32	43
37.47	38.85	40.23	41.61	42.98	45.74	52.35	55.66	56.76	59.52	66.41	67.79	75.78	77.44	1.345	29	39
34.84	36.22	37.60	38.98	40.36	43.12	49.73	53.04	54.14	56.90	63.79	65.17	73.16	74.81	1.351	37	50
37.75	39.13	40.50	41.88	43.26	46.02	52.63	55.94	57.04	59.79	66.69	68.07	76.06	77.71	1.357	28	38
34.15	35.53	36.91	38.29	39.66	42.43	49.04	52.35	53.45	56.20	63.10	64.48	72.47	74.12	1.359	39	53
36.09	37.47	38.84	40.22	41.60	44.36	50.97	54.28	55.38	58.14	65.03	66.41	74.40	76.05	1.364	33	45
35.39	36.78	38.15	39.53	40.91	43.67	50.28	53.59	54.69	57.45	64.34	65.72	73.71	75.36	1.371	35	48
37.33	38.71	40.09	41.47	42.84	45.60	52.21	55.52	56.62	59.38	66.27	67.65	75.64	77.30	1.379	29	40
36.64	38.02	39.39	40.77	42.15	44.91	51.52	54.83	55.93	58.69	65.58	66.96	74.95	76.61	1.387	31	43
34.98	36.36	37.73	39.12	40.49	43.25	49.86	53.18	54.28	57.03	63.92	65.30	73.29	74.95	1.389	36	50
37.61	38.99	40.36	41.74	43.12	45.88	52.49	55.80	56.90	59.66	66.55	67.93	75.92	77.57	1.393	28	39
34.29	35.67	37.04	38.42	39.80	42.56	49.17	52.48	53.58	56.34	63.23	64.61	72.60	74.26	1.395	38	53
32.62	34.00	35.38	36.76	38.14	40.90	47.51	50.83	51.93	54.68	61.57	62.95	70.95	72.60	1.395	43	60
30.96	32.34	33.72	35.10	36.48	39.24	45.85	49.17	50.27	53.02	59.92	61.30	69.29	70.94	1.396	48	67
33.59	34.97	36.35	37.73	39.11	41.87	48.48	51.79	52.89	55.65	62.54	63.92	71.91	73.57	1.400	40	56
31.93	33.31	34.69	36.07	37.44	40.21	46.82	50.13	51.23	53.99	60.88	62.26	70.26	71.91	1.400	45	63
20.20	21.59	22.98	24.37	25.75	28.52	35.16	38.48	39.58	42.35	49.25	50.63	58.63	60.29	1.400	80	112
36.22	37.60	38.98	40.36	41.73	44.50	51.11	54.42	55.52	58.27	65.17	66.55	74.54	76.19	1.406	32	45
35.53	36.91	38.29	39.67	41.04	43.80	50.42	53.73	54.83	57.58	64.47	65.85	73.85	75.50	1.412	34	48
29.15	30.53	31.91	33.29	34.67	37.43	44.05	47.36	48.46	51.22	58.12	59.50	67.49	69.15	1.415	53	75
30.12	31.50	32.88	34.26	35.64	38.40	45.02	48.33	49.43	52.19	59.08	60.46	68.46	70.11	1.420	50	71
37.47	38.85	40.22	41.60	42.98	45.74	52.35	55.66	56.76	59.52	66.41	67.79	75.78	77.43	1.429	28	40
35.11	36.49	37.87	39.25	40.63	43.39	50.00	53.31	54.41	57.17	64.06	65.44	73.43	75.09	1.429	35	50
28.03	29.41	30.79	32.18	33.55	36.32	42.94	46.25	47.35	50.11	57.01	58.39	66.38	68.04	1.429	56	80
25.66	27.04	28.42	29.81	31.19	33.95	40.58	43.89	45.00	47.75	54.65	56.03	64.03	65.68	1.429	63	90
34.42	35.80	37.18	38.56	39.93	42.69	49.31	52.62	53.72	56.48	63.37	64.75	72.74	74.39	1.432	37	53
36.77	38.15	39.53	40.91	42.29	45.05	51.66	54.97	56.07	58.83	65.72	67.10	75.09	76.74	1.433	30	43
33.73	35.11	36.48	37.87	39.24	42.00	48.62	51.93	53.03	55.78	62.68	64.06	72.05	73.70	1.436	39	56
36.36	37.74	39.11	40.49	41.87	44.63	51.24	54.55	55.65	58.41	65.30	66.68	74.67	76.33	1.452	31	45
35.66	37.05	38.42	39.80	41.18	43.94	50.55	53.86	54.96	57.72	64.61	65.99	73.98	75.64	1.455	33	48
32.20	33.58	34.95	36.34	37.71	40.48	47.09	50.40	51.50	54.26	61.15	62.53	70.53	72.18	1.465	43	63
35.25	36.63	38.00	39.39	40.76	43.52	50.14	53.45	54.55	57.30	64.20	65.58	73.57	75.22	1.471	34	50
34.55	35.94	37.31	38.69	40.07	42.83	49.44	52.75	53.86	56.61	63.50	64.88	72.88	74.53	1.472	36	53
33.86	35.24	36.62	38.00	39.38	42.14	48.75	52.06	53.16	55.92	62.81	64.19	72.18	73.84	1.474	38	56
30.39	31.77	33.15	34.53	35.91	38.67	45.29	48.60	49.70	52.46	59.35	60.73	68.73	70.38	1.479	48	71
36.91	38.29	39.66	41.05	42.42	45.18	51.79	55.11	56.21	58.96	65.85	67.23	75.22	76.88	1.483	29	43
31.36	32.74	34.12	35.50	36.88	39.64	46.26	49.57	50.67	53.43	60.32	61.70	69.70	71.35	1.489	45	67
20.83	22.23	23.61	25.01	26.39	29.17	35.82	39.14	40.24	43.01	49.91	51.29	59.30	60.96	1.493	75	112
36.49	37.87	39.25	40.63	42.01	44.77	51.38	54.69	55.79	58.55	65.44	66.82	74.81	76.46	1.500	30	45
35.80	37.18	38.56	39.94	41.31	44.07	50.69	54.00	55.10	57.85	64.75	66.13	74.12	75.77	1.500	32	48
33.02	34.41	35.78	37.16	38.54	41.30	47.92	51.23	52.33	55.09	61.98	63.36	71.35	73.01	1.500	40	60
29.54	30.93	32.31	33.69	35.07	37.83	44.45	47.77	48.87	51.62	58.52	59.90	67.90	69.55	1.500	50	75
26.05	27.43	28.82	30.20	31.58	34.35	40.98	44.29	45.39	48.15	55.05	56.43	64.43	66.09	1.500	60	90
1.01	1.02	1.03	1.04	1.05	1.07	1.12	1.14	1.14	1.16	1.19	1.20	1.24	1.25	Length Factor*		

Note: Check Sprocket Specification table on page 17 for Nickel Plated sprocket availability.

* This length factor must be used to determine the proper belt width.

14mm Pitch Poly Chain® GT® Carbon™ Belts Drive Selection Table

Sprocket Combinations					Center Distance, Inches												
DriveR		DriveN															
Number of Grooves	Pitch Diameter (Inches)	Number of Grooves	Pitch Diameter (Inches)	Speed Ratio	14MGT-994 P.L. 39.13 71 Teeth	14MGT-1120 P.L. 44.09 80 Teeth	14MGT-1190 P.L. 46.85 85 Teeth	14MGT-1260 P.L. 49.61 90 Teeth	14MGT-1400 P.L. 55.12 100 Teeth	14MGT-1568 P.L. 61.73 112 Teeth	14MGT-1610 P.L. 63.39 115 Teeth	14MGT-1750 P.L. 68.90 125 Teeth	14MGT-1890 P.L. 74.41 135 Teeth	14MGT-1960 P.L. 77.17 140 Teeth	14MGT-2100 P.L. 82.68 150 Teeth	14MGT-2240 P.L. 88.19 160 Teeth	14MGT-2310 P.L. 90.94 165 Teeth
53	9.299	80	14.036	1.509							13.15	15.95	18.73	20.12	22.89	25.66	27.04
35	6.141	53	9.299	1.514		9.79	11.19	12.58	15.35	18.67	19.50	22.27	25.03	26.41	29.17	31.93	33.31
37	6.492	56	9.825	1.514		9.08	10.48	11.87	14.65	17.97	18.81	21.57	24.33	25.72	28.48	31.24	32.61
33	5.790	50	8.772	1.515	7.99	10.50	11.89	13.28	16.05	19.37	20.20	22.96	25.72	27.11	29.87	32.62	34.00
28	4.912	43	7.544	1.536	9.69	12.19	13.58	14.96	17.73	21.04	21.87	24.63	27.39	28.77	31.53	34.29	35.66
39	6.842	60	10.527	1.538			9.61	11.01	13.80	17.12	17.96	20.73	23.49	24.88	27.64	30.40	31.78
31	5.439	48	8.421	1.548	8.55	11.06	12.45	13.84	16.61	19.92	20.76	23.52	26.28	27.66	30.42	33.18	34.55
29	5.088	45	7.895	1.552	9.26	11.76	13.15	14.54	17.31	20.62	21.45	24.21	26.97	28.35	31.11	33.87	35.25
36	6.316	56	9.825	1.556		9.20	10.60	12.00	14.78	18.10	18.94	21.70	24.46	25.85	28.61	31.37	32.75
43	7.544	67	11.755	1.558					12.22	15.56	16.40	19.18	21.95	23.33	26.10	28.86	30.24
34	5.965	53	9.299	1.559		9.92	11.31	12.71	15.48	18.80	19.64	22.40	25.16	26.54	29.30	32.06	33.44
32	5.614	50	8.772	1.563	8.11	10.63	12.02	13.41	16.18	19.50	20.33	23.10	25.86	27.24	30.00	32.76	34.13
48	8.421	75	13.158	1.563						13.71	14.55	17.34	20.12	21.51	24.28	27.04	28.42
40	7.018	63	11.053	1.575				10.42	13.21	16.55	17.38	20.16	22.92	24.31	27.07	29.83	31.21
71	12.457	112	19.650	1.577												18.53	19.93
45	7.895	71	12.457	1.578					11.35	14.70	15.54	18.32	21.10	22.48	25.25	28.02	29.40
38	6.667	60	10.527	1.579			9.73	11.13	13.92	17.25	18.09	20.86	23.62	25.01	27.77	30.53	31.91
30	5.263	48	8.421	1.600	8.67	11.19	12.58	13.97	16.74	20.06	20.89	23.65	26.41	27.79	30.55	33.31	34.69
35	6.141	56	9.825	1.600		9.32	10.73	12.13	14.91	18.23	19.07	21.83	24.60	25.98	28.74	31.50	32.88
50	8.772	80	14.036	1.600						12.68	13.52	16.32	19.11	20.50	23.28	26.05	27.43
33	5.790	53	9.299	1.606		10.04	11.44	12.83	15.61	18.93	19.77	22.53	25.29	26.68	29.44	32.20	33.57
28	4.912	45	7.895	1.607	9.39	11.89	13.28	14.67	17.44	20.75	21.58	24.35	27.11	28.49	31.25	34.00	35.38
56	9.825	90	15.790	1.607								14.01	16.82	18.22	21.01	23.79	25.18
31	5.439	50	8.772	1.613	8.23	10.75	12.15	13.54	16.31	19.63	20.47	23.23	25.99	27.37	30.13	32.89	34.27
39	6.842	63	11.053	1.615				10.54	13.34	16.68	17.51	20.29	23.05	24.44	27.20	29.97	31.34
37	6.492	60	10.527	1.622			9.85	11.26	14.05	17.38	18.22	20.99	23.75	25.14	27.90	30.66	32.04
34	5.965	56	9.825	1.647		9.45	10.85	12.25	15.03	18.36	19.20	21.96	24.73	26.11	28.87	31.63	33.01
43	7.544	71	12.457	1.651					11.59	14.95	15.79	18.58	21.35	22.74	25.51	28.28	29.66
29	5.088	48	8.421	1.655	8.80	11.31	12.71	14.10	16.87	20.19	21.02	23.78	26.54	27.93	30.68	33.44	34.82
32	5.614	53	9.299	1.656		10.16	11.57	12.96	15.74	19.06	19.90	22.66	25.43	26.81	29.57	32.33	33.71
38	6.667	63	11.053	1.658				10.66	13.46	16.80	17.64	20.41	23.18	24.57	27.33	30.10	31.48
30	5.263	50	8.772	1.667	8.36	10.88	12.28	13.67	16.44	19.76	20.60	23.36	26.12	27.51	30.27	33.03	34.40
36	6.316	60	10.527	1.667			9.97	11.38	14.17	17.51	18.35	21.12	23.88	25.27	28.03	30.79	32.17
45	7.895	75	13.158	1.667						14.08	14.93	17.72	20.50	21.89	24.66	27.43	28.81
48	8.421	80	14.036	1.667						12.92	13.77	16.57	19.36	20.76	23.53	26.31	27.69
67	11.755	112	19.650	1.672											16.19	19.02	20.42
40	7.018	67	11.755	1.675					12.59	15.94	16.78	19.56	22.34	23.72	26.49	29.25	30.63
33	5.790	56	9.825	1.697		9.57	10.98	12.38	15.16	18.49	19.33	22.09	24.86	26.24	29.01	31.77	33.14
53	9.299	90	15.790	1.698								14.38	17.19	18.60	21.39	24.17	25.56
37	6.492	63	11.053	1.703				10.78	13.59	16.93	17.77	20.54	23.31	24.70	27.47	30.23	31.61
31	5.439	53	9.299	1.710		10.29	11.69	13.09	15.87	19.19	20.03	22.79	25.56	26.94	29.70	32.46	33.84
28	4.912	48	8.421	1.714	8.92	11.44	12.83	14.22	17.00	20.32	21.15	23.91	26.68	28.06	30.82	33.58	34.95
35	6.141	60	10.527	1.714			10.09	11.50	14.30	17.64	18.47	21.25	24.01	25.40	28.16	30.93	32.30
39	6.842	67	11.755	1.718					12.72	16.07	16.91	19.69	22.46	23.85	26.62	29.39	30.77
29	5.088	50	8.772	1.724	8.48	11.00	12.40	13.80	16.57	19.89	20.73	23.49	26.25	27.64	30.40	33.16	34.54
43	7.544	75	13.158	1.744						14.33	15.18	17.97	20.76	22.15	24.92	27.69	29.08
32	5.614	56	9.825	1.750		9.69	11.10	12.50	15.29	18.62	19.46	22.22	24.99	26.38	29.14	31.90	33.28
36	6.316	63	11.053	1.750			9.49	10.91	13.71	17.06	17.90	20.67	23.44	24.83	27.60	30.36	31.74
80	14.036	140	24.562	1.750													
38	6.667	67	11.755	1.763				10.01	12.84	16.20	17.04	19.82	22.59	23.98	26.75	29.52	30.90
34	5.965	60	10.527	1.765			10.22	11.63	14.43	17.77	18.60	21.38	24.14	25.53	28.30	31.06	32.44
30	5.263	53	9.299	1.767		10.41	11.82	13.21	16.00	19.32	20.16	22.92	25.69	27.07	29.83	32.60	33.97
40	7.018	71	12.457	1.775					11.95	15.33	16.17	18.96	21.74	23.13	25.90	28.67	30.05
45	7.895	80	14.036	1.778						13.28	14.14	16.95	19.74	21.14	23.92	26.69	28.08
63	11.053	112	19.650	1.778											16.67	19.51	20.91
28	4.912	50	8.772	1.786	8.60	11.13	12.53	13.92	16.70	20.02	20.86	23.62	26.39	27.77	30.53	33.29	34.67
35	6.141	63	11.053	1.800			9.61	11.03	13.84	17.19	18.02	20.80	23.57	24.96	27.73	30.49	31.87
50	8.772	90	15.790	1.800								14.74	17.56	18.97	21.77	24.55	25.94
31	5.439	56	9.825	1.806		9.81	11.22	12.63	15.42	18.75	19.58	22.35	25.12	26.51	29.27	32.03	33.41
37	6.492	67	11.755	1.811				10.13	12.96	16.32	17.16	19.94	22.72	24.11	26.88	29.65	31.03
33	5.790	60	10.527	1.818		8.91	10.34	11.75	14.55	17.89	18.73	21.50	24.27	25.66	28.43	31.19	32.57
39	6.842	71	12.457	1.821					12.07	15.45	16.30	19.09	21.87	23.26	26.03	28.80	30.18
29	5.088	53	9.299	1.828	7.99	10.53	11.94	13.34	16.12	19.45	20.29	23.05	25.82	27.20	29.97	32.73	34.11
34	5.965	63	11.053	1.853			9.72	11.15	13.96	17.31	18.15	20.93	23.70	25.09	27.86	30.62	32.00
43	7.544	80	14.036	1.860						13.52	14.38	17.19	19.99	21.39	24.17	26.95	28.33
36	6.316	67	11.755	1.861				10.25	13.08	16.45	17.29	20.07	22.85	24.24	27.01	29.78	31.16
30	5.263	56	9.825	1.867		9.93	11.34	12.75	15.54	18.88	19.71	22.48	25.25	26.64	29.40	32.16	33.54
60	10.527	112	19.650	1.867											17.02	19.87	21.28
75	13.158	140	24.562	1.867													
38	6.667	71	12.457	1.868					12.19	15.58	16.42	19.21	21.99	23.39	26.16	28.93	30.31
				Length Factor*	0.68	0.73	0.75	0.77	0.81	0.85	0.86	0.89	0.92	0.94	0.96	0.99	1.00

Note: Check Sprocket Specification table on page 17 for Nickel Plated sprocket availability.

* This length factor must be used to determine the proper belt width.

14mm Pitch Poly Chain® GT® Carbon™ Belts Drive Selection Table

Center Distance, Inches														Speed Ratio	Sprocket Combinations	
															DriveR	DriveR
14MGT-2380 P.L. 93.70 170 Teeth	14MGT-2450 P.L. 96.46 175 Teeth	14MGT-2520 P.L. 99.21 180 Teeth	14MGT-2590 P.L. 101.97 185 Teeth	14MGT-2660 P.L. 104.72 190 Teeth	14MGT-2800 P.L. 110.24 200 Teeth	14MGT-3136 P.L. 123.46 224 Teeth	14MGT-3304 P.L. 130.08 236 Teeth	14MGT-3360 P.L. 132.28 240 Teeth	14MGT-3500 P.L. 137.79 250 Teeth	14MGT-3850 P.L. 151.57 275 Teeth	14MGT-3920 P.L. 154.33 280 Teeth	14MGT-4326 P.L. 170.31 309 Teeth	14MGT-4410 P.L. 173.62 315 Teeth		Number of Grooves	Number of Grooves
28.42	29.81	31.19	32.57	33.95	36.72	43.34	46.65	47.75	50.51	57.41	58.79	66.79	68.44	1.509	53	80
34.69	36.07	37.45	38.83	40.20	42.96	49.58	52.89	53.99	56.75	63.64	65.02	73.01	74.67	1.514	35	53
33.99	35.38	36.75	38.13	39.51	42.27	48.89	52.20	53.30	56.05	62.95	64.33	72.32	73.98	1.514	37	56
35.38	36.76	38.14	39.52	40.90	43.66	50.27	53.58	54.68	57.44	64.33	65.71	73.70	75.36	1.515	33	50
37.04	38.42	39.80	41.18	42.56	45.32	51.93	55.24	56.34	59.10	65.99	67.37	75.36	77.02	1.536	28	43
33.16	34.54	35.92	37.30	38.67	41.44	48.05	51.37	52.47	55.22	62.12	63.50	71.49	73.15	1.538	39	60
35.93	37.31	38.69	40.07	41.45	44.21	50.82	54.13	55.23	57.99	64.88	66.26	74.25	75.91	1.548	31	48
36.63	38.01	39.38	40.76	42.14	44.90	51.51	54.83	55.93	58.68	65.57	66.95	74.95	76.60	1.552	29	45
34.13	35.51	36.89	38.27	39.64	42.41	49.02	52.33	53.43	56.19	63.08	64.46	72.46	74.11	1.556	36	56
31.62	33.01	34.38	35.77	37.14	39.91	46.52	49.84	50.94	53.70	60.59	61.97	69.97	71.62	1.558	43	67
34.82	36.20	37.58	38.96	40.34	43.10	49.71	53.03	54.13	56.88	63.77	65.16	73.15	74.80	1.559	34	53
35.52	36.90	38.27	39.65	41.03	43.79	50.41	53.72	54.82	57.57	64.47	65.85	73.84	75.49	1.563	32	50
29.81	31.19	32.57	33.95	35.33	38.10	44.72	48.03	49.13	51.89	58.79	60.17	68.17	69.82	1.563	48	75
32.59	33.98	35.35	36.74	38.11	40.88	47.49	50.81	51.91	54.66	61.56	62.94	70.93	72.59	1.575	40	63
21.33	22.73	24.12	25.51	26.90	29.69	36.34	39.66	40.76	43.53	50.44	51.82	59.83	61.49	1.577	71	112
30.78	32.16	33.54	34.93	36.30	39.07	45.69	49.00	50.10	52.86	59.76	61.14	69.13	70.79	1.578	45	71
33.29	34.67	36.05	37.43	38.81	41.57	48.19	51.50	52.60	55.36	62.25	63.63	71.62	73.28	1.579	38	60
36.07	37.45	38.83	40.21	41.58	44.34	50.96	54.27	55.37	58.13	65.02	66.40	74.39	76.05	1.600	30	48
34.26	35.64	37.02	38.40	39.78	42.54	49.16	52.47	53.57	56.33	63.22	64.60	72.59	74.25	1.600	35	56
28.82	30.20	31.58	32.97	34.35	37.11	43.74	47.05	48.15	50.91	57.81	59.19	67.19	68.85	1.600	50	80
34.96	36.34	37.71	39.09	40.47	43.23	49.85	53.16	54.26	57.02	63.91	65.29	73.28	74.94	1.606	33	53
36.76	38.14	39.52	40.90	42.28	45.04	51.65	54.96	56.06	58.82	65.71	67.09	75.08	76.74	1.607	28	45
26.56	27.95	29.34	30.72	32.10	34.87	41.50	44.82	45.93	48.69	55.59	56.97	64.97	66.63	1.607	56	90
35.65	37.03	38.41	39.79	41.16	43.93	50.54	53.85	54.95	57.71	64.60	65.98	73.97	75.63	1.613	31	50
32.73	34.11	35.49	36.87	38.25	41.01	47.63	50.94	52.04	54.80	61.69	63.08	71.07	72.72	1.615	39	63
33.42	34.80	36.18	37.56	38.94	41.70	48.32	51.63	52.73	55.49	62.39	63.77	71.76	73.42	1.622	37	60
34.39	35.78	37.15	38.54	39.91	42.67	49.29	52.60	53.70	56.46	63.35	64.73	72.73	74.38	1.647	34	56
31.04	32.43	33.81	35.19	36.57	39.33	45.96	49.27	50.37	53.13	60.03	61.41	69.40	71.06	1.651	43	71
36.20	37.58	38.96	40.34	41.72	44.48	51.09	54.40	55.51	58.26	65.15	66.53	74.53	76.18	1.655	29	48
35.09	36.47	37.85	39.23	40.61	43.37	49.98	53.30	54.40	57.15	64.05	65.43	73.42	75.07	1.656	32	53
32.86	34.24	35.62	37.00	38.38	41.14	47.76	51.08	52.18	54.93	61.83	63.21	71.20	72.86	1.658	38	63
35.78	37.17	38.54	39.92	41.30	44.06	50.68	53.99	55.09	57.85	64.74	66.12	74.11	75.77	1.667	30	50
33.56	34.94	36.32	37.70	39.07	41.84	48.46	51.77	52.87	55.63	62.52	63.90	71.90	73.55	1.667	36	60
30.20	31.59	32.96	34.35	35.73	38.50	45.12	48.43	49.54	52.29	59.19	60.57	68.57	70.23	1.667	45	75
29.08	30.46	31.84	33.23	34.61	37.38	44.00	47.32	48.42	51.18	58.08	59.46	67.46	69.12	1.667	48	80
21.83	23.23	24.62	26.02	27.41	30.20	36.85	40.18	41.29	44.05	50.97	52.35	60.36	62.02	1.672	67	112
32.02	33.40	34.78	36.16	37.54	40.31	46.93	50.24	51.34	54.10	60.99	62.38	70.37	72.03	1.675	40	67
34.53	35.91	37.29	38.67	40.05	42.81	49.42	52.74	53.84	56.60	63.49	64.87	72.86	74.52	1.697	33	56
26.95	28.34	29.72	31.11	32.49	35.27	41.90	45.22	46.32	49.08	55.99	57.37	65.37	67.03	1.698	53	90
32.99	34.37	35.75	37.14	38.51	41.28	47.90	51.21	52.31	55.07	61.96	63.34	71.34	72.99	1.703	37	63
35.22	36.60	37.98	39.36	40.74	43.50	50.12	53.43	54.53	57.29	64.18	65.56	73.55	75.21	1.710	31	53
36.34	37.72	39.09	40.48	41.85	44.61	51.23	54.54	55.64	58.40	65.29	66.67	74.66	76.32	1.714	28	48
33.69	35.07	36.45	37.83	39.21	41.97	48.59	51.90	53.00	55.76	62.66	64.04	72.03	73.69	1.714	35	60
32.15	33.53	34.91	36.30	37.67	40.44	47.06	50.37	51.48	54.23	61.13	62.51	70.51	72.16	1.718	39	67
35.92	37.30	38.68	40.06	41.43	44.20	50.81	54.12	55.22	57.98	64.87	66.25	74.25	75.90	1.724	29	50
30.46	31.85	33.23	34.61	35.99	38.76	45.38	48.70	49.80	52.56	59.46	60.84	68.84	70.49	1.744	43	75
34.66	36.04	37.42	38.80	40.18	42.94	49.56	52.87	53.97	56.73	63.62	65.01	73.00	74.65	1.750	32	56
33.12	34.51	35.89	37.27	38.65	41.41	48.03	51.34	52.44	55.20	62.10	63.48	71.47	73.13	1.750	36	63
			19.97	21.39	24.23	30.97	34.32	35.43	38.22	45.16	46.55	54.59	56.25	1.750	80	140
32.28	33.67	35.04	36.43	37.81	40.57	47.19	50.51	51.61	54.37	61.26	62.64	70.64	72.30	1.763	38	67
33.82	35.20	36.58	37.96	39.34	42.11	48.72	52.04	53.14	55.90	62.79	64.17	72.17	73.82	1.765	34	60
35.36	36.74	38.11	39.50	40.87	43.64	50.25	53.57	54.67	57.42	64.32	65.70	73.69	75.35	1.767	30	53
31.44	32.82	34.20	35.59	36.96	39.73	46.35	49.67	50.77	53.53	60.43	61.81	69.81	71.46	1.775	40	71
29.47	30.85	32.23	33.62	35.00	37.77	44.40	47.72	48.82	51.58	58.48	59.86	67.86	69.52	1.778	45	80
22.32	23.73	25.12	26.52	27.91	30.70	37.37	40.70	41.80	44.57	51.49	52.88	60.89	62.55	1.778	63	112
36.05	37.43	38.81	40.19	41.57	44.33	50.95	54.26	55.36	58.12	65.01	66.39	74.38	76.04	1.786	28	50
33.26	34.64	36.02	37.40	38.78	41.54	48.16	51.48	52.58	55.34	62.23	63.61	71.61	73.26	1.800	35	63
27.33	28.72	30.11	31.50	32.88	35.66	42.29	45.61	46.72	49.48	56.38	57.77	65.77	67.43	1.800	50	90
34.79	36.18	37.55	38.93	40.31	43.08	49.69	53.01	54.11	56.86	63.76	65.14	73.13	74.79	1.806	31	56
32.41	33.80	35.18	36.56	37.94	40.70	47.33	50.64	51.74	54.50	61.40	62.78	70.77	72.43	1.811	37	67
33.95	35.34	36.71	38.10	39.47	42.24	48.86	52.17	53.27	56.03	62.93	64.31	72.30	73.96	1.818	33	60
31.57	32.95	34.33	35.72	37.10	39.86	46.49	49.80	50.91	53.66	60.56	61.94	69.94	71.60	1.821	39	71
35.49	36.87	38.25	39.63	41.01	43.77	50.39	53.70	54.80	57.56	64.45	65.83	73.83	75.48	1.828	29	53
33.39	34.77	36.15	37.53	38.91	41.68	48.30	51.61	52.71	55.47	62.37	63.75	71.74	73.40	1.853	34	63
29.72	31.11	32.49	33.88	35.26	38.03	44.66	47.98	49.08	51.84	58.75	60.13	68.13	69.79	1.860	43	80
32.54	33.93	35.31	36.69	38.07	40.84	47.46	50.77	51.88	54.63	61.53	62.91	70.91	72.57	1.861	36	67
34.93	36.31	37.69	39.07	40.45	43.21	49.83	53.14	54.24	57.00	63.89	65.28	73.27	74.93	1.867	30	56
22.69	24.10	25.49	26.90	28.29	31.08	37.75	41.09	42.19	44.96	51.88	53.27	61.28	62.94	1.867	60	112
			20.56	21.99	24.84	31.59	34.95	36.06	38.85	45.80	47.19	55.24	56.90	1.867	75	140
31.70	33.08	34.46	35.85	37.23	40.00	46.62	49.94	51.04	53.80	60.70	62.08	70.08	71.73	1.868	38	71
1.01	1.02	1.03	1.04	1.05	1.07	1.12	1.14	1.14	1.16	1.19	1.20	1.24	1.25	Length Factor*		

Note: Check Sprocket Specification table on page 17 for Nickel Plated sprocket availability.

* This length factor must be used to determine the proper belt width.

14mm Pitch Poly Chain® GT® Carbon™ Belts Drive Selection Table

Sprocket Combinations					Center Distance, Inches												
DriveR		DriveN															
Number of Grooves	Pitch Diameter (Inches)	Number of Grooves	Pitch Diameter (Inches)	Speed Ratio	14MGT-994 P.L. 39.13 71 Teeth	14MGT-1120 P.L. 44.09 80 Teeth	14MGT-1190 P.L. 46.85 85 Teeth	14MGT-1260 P.L. 49.61 90 Teeth	14MGT-1400 P.L. 55.12 100 Teeth	14MGT-1568 P.L. 61.73 112 Teeth	14MGT-1610 P.L. 63.39 115 Teeth	14MGT-1750 P.L. 68.90 125 Teeth	14MGT-1890 P.L. 74.41 135 Teeth	14MGT-1960 P.L. 77.17 140 Teeth	14MGT-2100 P.L. 82.68 150 Teeth	14MGT-2240 P.L. 88.19 160 Teeth	14MGT-2310 P.L. 90.94 165 Teeth
32	5.614	60	10.527	1.875		9.03	10.46	11.87	14.68	18.02	18.86	21.63	24.40	25.79	28.56	31.32	32.70
40	7.018	75	13.158	1.875					11.29	14.70	15.54	18.35	21.14	22.53	25.31	28.08	29.46
48	8.421	90	15.790	1.875								14.98	17.81	19.22	22.02	24.81	26.20
28	4.912	53	9.299	1.893	8.11	10.66	12.06	13.46	16.25	19.58	20.42	23.18	25.95	27.34	30.10	32.86	34.24
33	5.790	63	11.053	1.909			9.84	11.27	14.09	17.44	18.28	21.06	23.83	25.22	27.99	30.75	32.13
35	6.141	67	11.755	1.914				10.37	13.21	16.57	17.41	20.20	22.98	24.37	27.14	29.91	31.29
37	6.492	71	12.457	1.919					12.31	15.70	16.54	19.34	22.12	23.51	26.29	29.06	30.44
39	6.842	75	13.158	1.923					11.41	14.82	15.67	18.47	21.26	22.66	25.44	28.21	29.59
29	5.088	56	9.825	1.931		10.05	11.47	12.87	15.67	19.00	19.84	22.61	25.38	26.77	29.53	32.30	33.67
31	5.439	60	10.527	1.935		9.15	10.58	11.99	14.80	18.15	18.98	21.76	24.53	25.92	28.69	31.45	32.83
32	5.614	63	11.053	1.969			9.96	11.39	14.21	17.56	18.40	21.18	23.96	25.35	28.12	30.88	32.27
34	5.965	67	11.755	1.971				10.49	13.33	16.70	17.54	20.33	23.11	24.50	27.27	30.04	31.42
36	6.316	71	12.457	1.972					12.43	15.82	16.67	19.46	22.25	23.64	26.42	29.19	30.57
71	12.457	140	24.562	1.972													
38	6.667	75	13.158	1.974					11.53	14.94	15.79	18.60	21.39	22.78	25.56	28.34	29.72
28	4.912	56	9.825	2.000		10.17	11.59	13.00	15.79	19.13	19.97	22.74	25.51	26.90	29.66	32.43	33.81
30	5.263	60	10.527	2.000		9.27	10.70	12.12	14.93	18.27	19.11	21.89	24.66	26.05	28.82	31.58	32.96
40	7.018	80	14.036	2.000						13.88	14.74	17.56	20.37	21.77	24.55	27.33	28.72
45	7.895	90	15.790	2.000							12.46	15.34	18.17	19.58	22.39	25.18	26.57
56	9.825	112	19.650	2.000											17.50	20.35	21.76
37	6.492	75	13.158	2.027					11.65	15.06	15.91	18.72	21.51	22.91	25.69	28.47	29.85
35	6.141	71	12.457	2.029					12.55	15.94	16.79	19.59	22.37	23.77	26.55	29.32	30.70
33	5.790	67	11.755	2.030				10.60	13.45	16.82	17.66	20.45	23.23	24.62	27.40	30.17	31.55
31	5.439	63	11.053	2.032			10.08	11.51	14.33	17.69	18.53	21.31	24.09	25.48	28.25	31.02	32.40
39	6.842	80	14.036	2.051						14.00	14.86	17.69	20.49	21.89	24.68	27.46	28.85
29	5.088	60	10.527	2.069		9.38	10.82	12.24	15.05	18.40	19.24	22.02	24.79	26.18	28.95	31.71	33.09
36	6.316	75	13.158	2.083					11.76	15.18	16.03	18.84	21.64	23.04	25.82	28.60	29.98
34	5.965	71	12.457	2.088					12.67	16.07	16.91	19.71	22.50	23.90	26.67	29.45	30.83
67	11.755	140	24.562	2.090													
43	7.544	90	15.790	2.093							12.69	15.57	18.42	19.83	22.64	25.43	26.83
32	5.614	67	11.755	2.094				10.72	13.57	16.94	17.79	20.58	23.36	24.75	27.53	30.30	31.68
30	5.263	63	11.053	2.100			10.20	11.63	14.45	17.81	18.66	21.44	24.22	25.61	28.38	31.15	32.53
80	14.036	168	29.475	2.100													
38	6.667	80	14.036	2.105						14.12	14.98	17.81	20.61	22.02	24.81	27.59	28.98
53	9.299	112	19.650	2.113										14.94	17.85	20.71	22.13
28	4.912	60	10.527	2.143		9.50	10.94	12.36	15.17	18.53	19.37	22.15	24.92	26.31	29.08	31.85	33.23
35	6.141	75	13.158	2.143					11.88	15.30	16.16	18.97	21.76	23.16	25.95	28.72	30.11
33	5.790	71	12.457	2.152				9.91	12.79	16.19	17.04	19.84	22.63	24.02	26.80	29.58	30.96
31	5.439	67	11.755	2.161			9.38	10.84	13.69	17.07	17.91	20.70	23.49	24.88	27.66	30.43	31.81
37	6.492	80	14.036	2.162						14.24	15.10	17.93	20.74	22.14	24.93	27.72	29.10
29	5.088	63	11.053	2.172		8.86	10.31	11.75	14.58	17.94	18.78	21.57	24.34	25.73	28.51	31.28	32.66
34	5.965	75	13.158	2.206					12.00	15.42	16.28	19.09	21.89	23.29	26.07	28.85	30.24
32	5.614	71	12.457	2.219				10.02	12.91	16.31	17.16	19.96	22.75	24.15	26.93	29.70	31.09
36	6.316	80	14.036	2.222					10.88	14.36	15.22	18.05	20.86	22.27	25.06	27.84	29.23
63	11.053	140	24.562	2.222													
30	5.263	67	11.755	2.233			9.50	10.95	13.81	17.19	18.04	20.83	23.62	25.01	27.78	30.56	31.94
50	8.772	112	19.650	2.240										15.28	18.20	21.07	22.49
75	13.158	168	29.475	2.240													
28	4.912	63	11.053	2.250		8.98	10.43	11.87	14.70	18.06	18.91	21.69	24.47	25.86	28.64	31.41	32.79
40	7.018	90	15.790	2.250						12.15	13.04	15.93	18.78	20.19	23.01	25.81	27.20
80	14.036	180	31.580	2.250													
33	5.790	75	13.158	2.273					12.11	15.54	16.40	19.21	22.01	23.41	26.20	28.98	30.36
35	6.141	80	14.036	2.286					11.00	14.48	15.34	18.17	20.99	22.39	25.18	27.97	29.36
31	5.439	71	12.457	2.290				10.14	13.03	16.43	17.28	20.09	22.88	24.28	27.06	29.83	31.22
39	6.842	90	15.790	2.308						12.26	13.15	16.05	18.90	20.32	23.13	25.93	27.33
29	5.088	67	11.755	2.310			9.61	11.07	13.93	17.31	18.16	20.96	23.74	25.14	27.91	30.69	32.07
48	8.421	112	19.650	2.333										15.51	18.43	21.30	22.73
60	10.527	140	24.562	2.333													
32	5.614	75	13.158	2.344					12.23	15.67	16.52	19.34	22.14	23.54	26.33	29.11	30.49
34	5.965	80	14.036	2.353					11.11	14.59	15.46	18.29	21.11	22.51	25.31	28.10	29.48
71	12.457	168	29.475	2.366													
30	5.263	71	12.457	2.367				10.25	13.15	16.56	17.40	20.21	23.01	24.40	27.18	29.96	31.35
38	6.667	90	15.790	2.368						12.38	13.27	16.16	19.02	20.44	23.25	26.06	27.45
28	4.912	67	11.755	2.393			9.73	11.19	14.05	17.44	18.28	21.08	23.87	25.26	28.04	30.81	32.20
75	13.158	180	31.580	2.400													
31	5.439	75	13.158	2.419					12.35	15.78	16.64	19.46	22.26	23.66	26.45	29.23	30.62
33	5.790	80	14.036	2.424					11.22	14.71	15.57	18.42	21.23	22.64	25.43	28.22	29.61
37	6.492	90	15.790	2.432						12.49	13.38	16.28	19.14	20.56	23.38	26.18	27.58
29	5.088	71	12.457	2.448				10.36	13.27	16.68	17.53	20.34	23.13	24.53	27.31	30.09	31.47
45	7.895	112	19.650	2.489									14.35	15.85	18.78	21.66	23.08
30	5.263	75	13.158	2.500					12.46	15.90	16.76	19.58	22.39	23.79	26.58	29.36	30.75
32	5.614	80	14.036	2.500					11.34	14.83	15.69	18.54	21.36	22.76	25.56	28.35	29.74
36	6.316	90	15.790	2.500						12.60	13.49	16.40	19.26	20.68	23.50	26.31	27.70
56	9.825	140	24.562	2.500													
80	14.036	200	35.089	2.500													
				Length Factor*	0.68	0.73	0.75	0.77	0.81	0.85	0.86	0.89	0.92	0.94	0.96	0.99	1.00

Note: Check Sprocket Specification table on page 17 for Nickel Plated sprocket availability.

* This length factor must be used to determine the proper belt width.

14mm Pitch Poly Chain® GT® Carbon™ Belts Drive Selection Table

Center Distance, Inches														Speed Ratio	Sprocket Combinations DriveR Number of Grooves	Sprocket Combinations DriveR Number of Grooves
14MGT-2380 P.L. 93.70 170 Teeth	14MGT-2450 P.L. 96.46 175 Teeth	14MGT-2520 P.L. 99.21 180 Teeth	14MGT-2590 P.L. 101.97 185 Teeth	14MGT-2660 P.L. 104.72 190 Teeth	14MGT-2800 P.L. 110.24 200 Teeth	14MGT-3136 P.L. 123.46 224 Teeth	14MGT-3304 P.L. 130.08 236 Teeth	14MGT-3360 P.L. 132.28 240 Teeth	14MGT-3500 P.L. 137.79 250 Teeth	14MGT-3850 P.L. 151.57 275 Teeth	14MGT-3920 P.L. 154.33 280 Teeth	14MGT-4326 P.L. 170.31 309 Teeth	14MGT-4410 P.L. 173.62 315 Teeth			
34.08	35.47	36.85	38.23	39.61	42.37	48.99	52.31	53.41	56.16	63.06	64.44	72.44	74.09	1.875	32	60
30.85	32.24	33.62	35.00	36.38	39.15	45.78	49.10	50.20	52.96	59.86	61.24	69.24	70.90	1.875	40	75
27.59	28.98	30.37	31.76	33.14	35.92	42.56	45.88	46.98	49.74	56.65	58.03	66.04	67.69	1.875	48	90
35.62	37.00	38.38	39.76	41.14	43.90	50.52	53.83	54.93	57.69	64.59	65.97	73.96	75.62	1.893	28	53
33.52	34.90	36.28	37.66	39.04	41.81	48.43	51.74	52.85	55.60	62.50	63.88	71.88	73.53	1.909	33	63
32.67	34.06	35.44	36.82	38.20	40.97	47.59	50.91	52.01	54.77	61.67	63.05	71.04	72.70	1.914	35	67
31.83	33.21	34.59	35.98	37.36	40.13	46.75	50.07	51.17	53.93	60.83	62.21	70.21	71.87	1.919	37	71
30.98	32.37	33.75	35.14	36.52	39.29	45.91	49.23	50.33	53.09	59.99	61.38	69.38	71.03	1.923	39	75
35.06	36.44	37.82	39.20	40.58	43.34	49.96	53.27	54.38	57.13	64.03	65.41	73.40	75.06	1.931	29	56
34.22	35.60	36.98	38.36	39.74	42.50	49.12	52.44	53.54	56.30	63.19	64.58	72.57	74.23	1.935	31	60
33.65	35.03	36.41	37.80	39.18	41.94	48.56	51.88	52.98	55.74	62.64	64.02	72.01	73.67	1.969	32	63
32.80	34.19	35.57	36.95	38.33	41.10	47.72	51.04	52.14	54.90	61.80	63.18	71.18	72.84	1.971	34	67
31.96	33.34	34.72	36.11	37.49	40.26	46.89	50.20	51.30	54.06	60.96	62.35	70.34	72.00	1.972	36	71
		19.59	21.03	22.46	25.32	32.08	35.45	36.56	39.35	46.31	47.71	55.75	57.42	1.972	71	140
31.11	32.50	33.88	35.27	36.65	39.42	46.05	49.36	50.47	53.23	60.13	61.51	69.51	71.17	1.974	38	75
35.19	36.57	37.95	39.33	40.71	43.48	50.10	53.41	54.51	57.27	64.16	65.54	73.54	75.20	2.000	28	56
34.35	35.73	37.11	38.49	39.87	42.64	49.26	52.57	53.67	56.43	63.33	64.71	72.71	74.36	2.000	30	60
30.11	31.50	32.88	34.27	35.65	38.42	45.06	48.38	49.48	52.24	59.15	60.53	68.53	70.19	2.000	40	80
27.97	29.36	30.75	32.14	33.53	36.30	42.95	46.27	47.37	50.14	57.05	58.43	66.44	68.09	2.000	45	90
23.18	24.59	25.99	27.39	28.79	31.59	38.26	41.60	42.71	45.48	52.40	53.79	61.81	63.47	2.000	56	112
31.24	32.63	34.01	35.39	36.78	39.55	46.18	49.49	50.60	53.36	60.26	61.64	69.64	71.30	2.027	37	75
32.09	33.47	34.86	36.24	37.62	40.39	47.02	50.33	51.44	54.20	61.10	62.48	70.48	72.13	2.029	35	71
32.94	34.32	35.70	37.09	38.46	41.23	47.86	51.17	52.28	55.03	61.93	63.31	71.31	72.97	2.030	33	67
33.78	35.17	36.54	37.93	39.31	42.07	48.70	52.01	53.11	55.87	62.77	64.15	72.15	73.80	2.032	31	63
30.24	31.63	33.01	34.40	35.78	38.55	45.19	48.51	49.61	52.37	59.28	60.66	68.66	70.32	2.051	39	80
34.48	35.86	37.24	38.63	40.00	42.77	49.39	52.71	53.81	56.57	63.46	64.84	72.84	74.50	2.069	29	60
31.37	32.76	34.14	35.53	36.91	39.68	46.31	49.63	50.73	53.49	60.39	61.78	69.78	71.43	2.083	36	75
32.22	33.60	34.99	36.37	37.75	40.52	47.15	50.47	51.57	54.33	61.23	62.61	70.61	72.27	2.088	34	71
	18.59	20.05	21.50	22.94	25.80	32.58	35.94	37.06	39.86	46.82	48.22	56.27	57.93	2.090	67	140
28.22	29.62	31.00	32.40	33.78	36.56	43.21	46.53	47.63	50.40	57.31	58.69	66.70	68.36	2.093	43	90
33.07	34.45	35.83	37.22	38.60	41.36	47.99	51.31	52.41	55.17	62.07	63.45	71.45	73.10	2.094	32	67
33.91	35.30	36.68	38.06	39.44	42.21	48.83	52.15	53.25	56.01	62.90	64.29	72.28	73.94	2.100	30	63
						26.42	29.86	31.00	33.84	40.88	42.28	50.39	52.06	2.100	80	168
30.37	31.76	33.14	34.53	35.91	38.68	45.32	48.64	49.74	52.51	59.41	60.79	68.80	70.45	2.105	38	80
23.54	24.95	26.36	27.76	29.16	31.96	38.65	41.98	43.09	45.87	52.79	54.18	62.20	63.86	2.113	53	112
34.61	35.99	37.37	38.76	40.14	42.90	49.52	52.84	53.94	56.70	63.60	64.98	72.98	74.63	2.143	28	60
31.50	32.89	34.27	35.65	37.04	39.81	46.44	49.76	50.86	53.62	60.53	61.91	69.91	71.57	2.143	35	75
32.35	33.73	35.12	36.50	37.88	40.65	47.28	50.60	51.70	54.46	61.36	62.75	70.75	72.40	2.152	33	71
33.20	34.58	35.96	37.35	38.73	41.50	48.12	51.44	52.54	55.30	62.20	63.58	71.58	73.24	2.161	31	67
30.49	31.88	33.27	34.66	36.04	38.81	45.45	48.77	49.87	52.64	59.54	60.93	68.93	70.59	2.162	37	80
34.04	35.43	36.81	38.19	39.57	42.34	48.96	52.28	53.38	56.14	63.04	64.42	72.42	74.07	2.172	29	63
31.63	33.01	34.40	35.78	37.17	39.94	46.57	49.89	50.99	53.76	60.66	62.04	70.04	71.70	2.206	34	75
32.48	33.86	35.25	36.63	38.01	40.78	47.41	50.73	51.83	54.59	61.50	62.88	70.88	72.54	2.219	32	71
30.62	32.01	33.40	34.79	36.17	38.94	45.58	48.90	50.01	52.77	59.68	61.06	69.06	70.72	2.222	36	80
	19.05	20.51	21.97	23.41	26.27	33.07	36.44	37.56	40.36	47.33	48.72	56.78	58.45	2.222	63	140
33.33	34.71	36.09	37.48	38.86	41.63	48.25	51.57	52.67	55.43	62.33	63.72	71.72	73.37	2.233	30	67
23.91	25.32	26.73	28.14	29.54	32.34	39.03	42.37	43.48	46.25	53.18	54.57	62.60	64.26	2.240	50	112
						27.00	30.46	31.60	34.44	41.50	42.90	51.02	52.69	2.240	75	168
34.17	35.56	36.94	38.32	39.70	42.47	49.10	52.41	53.51	56.27	63.17	64.55	72.55	74.21	2.250	28	63
28.60	30.00	31.38	32.78	34.16	36.95	43.60	46.92	48.03	50.79	57.70	59.09	67.10	68.76	2.250	40	90
						24.30	27.82	28.98	31.85	38.97	40.38	48.53	50.22	2.250	80	180
31.75	33.14	34.53	35.91	37.30	40.07	46.70	50.02	51.13	53.89	60.79	62.17	70.18	71.83	2.273	33	75
30.75	32.14	33.53	34.91	36.30	39.07	45.71	49.03	50.14	52.90	59.81	61.19	69.20	70.85	2.286	35	80
32.61	33.99	35.38	36.76	38.14	40.91	47.54	50.86	51.97	54.73	61.63	63.01	71.01	72.67	2.290	31	71
28.73	30.12	31.51	32.91	34.29	37.07	43.73	47.05	48.16	50.92	57.84	59.22	67.23	68.89	2.308	39	90
33.46	34.84	36.22	37.61	38.99	41.76	48.39	51.70	52.81	55.57	62.47	63.85	71.85	73.51	2.310	29	67
24.15	25.56	26.97	28.38	29.78	32.59	39.28	42.62	43.73	46.51	53.44	54.83	62.86	64.52	2.333	48	112
	19.39	20.85	22.31	23.76	26.63	33.43	36.81	37.93	40.73	47.71	49.10	57.16	58.83	2.333	60	140
31.88	33.27	34.66	36.04	37.43	40.20	46.83	50.15	51.26	54.02	60.92	62.31	70.31	71.97	2.344	32	75
30.88	32.27	33.65	35.04	36.43	39.20	45.84	49.17	50.27	53.03	59.94	61.32	69.33	70.99	2.353	34	80
						27.47	30.93	32.07	34.92	41.99	43.39	51.52	53.19	2.366	71	168
32.73	34.12	35.51	36.89	38.27	41.05	47.68	51.00	52.10	54.86	61.76	63.15	71.15	72.80	2.367	30	71
28.85	30.25	31.64	33.03	34.42	37.20	43.85	47.18	48.29	51.05	57.97	59.35	67.36	69.02	2.368	38	90
33.59	34.97	36.35	37.74	39.12	41.89	48.52	51.84	52.94	55.70	62.60	63.98	71.98	73.64	2.393	28	67
						24.87	28.40	29.56	32.44	39.57	40.99	49.15	50.84	2.400	75	180
32.01	33.40	34.78	36.17	37.56	40.33	46.97	50.29	51.39	54.15	61.06	62.44	70.44	72.10	2.419	31	75
31.00	32.40	33.78	35.17	36.56	39.33	45.97	49.30	50.40	53.16	60.07	61.46	69.46	71.12	2.424	33	80
28.98	30.37	31.76	33.16	34.55	37.33	43.98	47.31	48.42	51.18	58.10	59.48	67.49	69.15	2.432	37	90
32.86	34.25	35.63	37.02	38.40	41.18	47.81	51.13	52.23	54.99	61.90	63.28	71.28	72.94	2.448	29	71
24.51	25.93	27.34	28.75	30.15	32.96	39.66	43.00	44.11	46.89	53.83	55.22	63.25	64.91	2.489	45	112
32.14	33.53	34.91	36.30	37.69	40.46	47.10	50.42	51.52	54.28	61.19	62.57	70.58	72.23	2.500	30	75
31.13	32.52	33.91	35.30	36.68	39.46	46.10	49.43	50.53	53.30	60.20	61.59	69.59	71.25	2.500	32	80
29.10	30.50	31.89	33.29	34.67	37.46	44.11	47.44	48.55	51.31	58.23	59.61	67.63	69.29	2.500	36	90
18.34	19.84	21.31	22.77	24.22	27.10	33.92	37.30	38.42	41.23	48.21	49.61	57.68	59.34	2.500	56	140
								25.34	28.33	35.64	37.08	45.34	47.04	2.500	80	200
1.01	1.02	1.03	1.04	1.05	1.07	1.12	1.14	1.14	1.16	1.19	1.20	1.24	1.25	Length Factor*		

Note: Check Sprocket Specification table on page 17 for Nickel Plated sprocket availability.

* This length factor must be used to determine the proper belt width.

Center distance is greater than eight times the small sprocket and the large sprocket is not flanged. See Engineering Section for details.

14mm Pitch Poly Chain® GT® Carbon™ Belts Drive Selection Table

Sprocket Combinations					Center Distance, Inches													
DriveR		DriveN																
Number of Grooves	Pitch Diameter (Inches)	Number of Grooves	Pitch Diameter (Inches)	Speed Ratio	14MGT-994 P.L. 39.13 71 Teeth	14MGT-1120 P.L. 44.09 80 Teeth	14MGT-1190 P.L. 46.85 85 Teeth	14MGT-1260 P.L. 49.61 90 Teeth	14MGT-1400 P.L. 55.12 100 Teeth	14MGT-1568 P.L. 61.73 112 Teeth	14MGT-1610 P.L. 63.39 115 Teeth	14MGT-1750 P.L. 68.90 125 Teeth	14MGT-1890 P.L. 74.41 135 Teeth	14MGT-1960 P.L. 77.17 140 Teeth	14MGT-2100 P.L. 82.68 150 Teeth	14MGT-2240 P.L. 88.19 160 Teeth	14MGT-2310 P.L. 90.94 165 Teeth
67	11.755	168	29.475	2.507														
71	12.457	180	31.580	2.535														
28	4.912	71	12.457	2.536				10.48	13.38	16.80	17.65	20.46	23.26	24.65	27.44	30.22	31.60	
35	6.141	90	15.790	2.571						12.71	13.61	16.52	19.38	20.80	23.62	26.43	27.83	
31	5.439	80	14.036	2.581					11.45	14.95	15.81	18.66	21.48	22.88	25.68	28.47	29.86	
29	5.088	75	13.158	2.586					12.58	16.02	16.88	19.71	22.51	23.91	26.70	29.49	30.88	
43	7.544	112	19.650	2.605									14.57	16.07	19.01	21.89	23.32	
53	9.299	140	24.562	2.642														
34	5.965	90	15.790	2.647						12.83	13.72	16.63	19.50	20.92	23.74	26.55	27.95	
30	5.263	80	14.036	2.667					11.56	15.06	15.93	18.78	21.60	23.01	25.81	28.60	29.99	
63	11.053	168	29.475	2.667														
75	13.158	200	35.089	2.667														
28	4.912	75	13.158	2.679					12.69	16.14	17.00	19.83	22.64	24.04	26.83	29.62	31.00	
67	11.755	180	31.580	2.687														
33	5.790	90	15.790	2.727						12.94	13.83	16.75	19.62	21.04	23.87	26.68	28.07	
29	5.088	80	14.036	2.759					11.67	15.18	16.05	18.90	21.72	23.13	25.93	28.73	30.12	
40	7.018	112	19.650	2.800									14.90	16.41	19.36	22.25	23.68	
50	8.772	140	24.562	2.800													17.47	
60	10.527	168	29.475	2.800														
80	14.036	224	39.300	2.800														
32	5.614	90	15.790	2.813						13.05	13.95	16.87	19.73	21.16	23.99	26.80	28.20	
71	12.457	200	35.089	2.817														
28	4.912	80	14.036	2.857					11.78	15.30	16.17	19.02	21.85	23.25	26.06	28.85	30.24	
63	11.053	180	31.580	2.857														
39	6.842	112	19.650	2.872									15.01	16.52	19.47	22.36	23.80	
31	5.439	90	15.790	2.903						13.16	14.06	16.98	19.85	21.28	24.11	26.92	28.32	
48	8.421	140	24.562	2.917													17.69	
38	6.667	112	19.650	2.947									15.12	16.63	19.58	22.48	23.91	
67	11.755	200	35.089	2.985														
75	13.158	224	39.300	2.987														
30	5.263	90	15.790	3.000						13.27	14.17	17.10	19.97	21.40	24.23	27.05	28.45	
56	9.825	168	29.475	3.000														
60	10.527	180	31.580	3.000														
37	6.492	112	19.650	3.027									15.23	16.74	19.70	22.60	24.03	
29	5.088	90	15.790	3.103						13.38	14.28	17.21	20.09	21.52	24.35	27.17	28.57	
36	6.316	112	19.650	3.111									15.34	16.85	19.81	22.72	24.15	
45	7.895	140	24.562	3.111													18.01	
71	12.457	224	39.300	3.155														
53	9.299	168	29.475	3.170														
63	11.053	200	35.089	3.175														
35	6.141	112	19.650	3.200									15.45	16.97	19.93	22.83	24.27	
28	4.912	90	15.790	3.214						13.49	14.40	17.33	20.21	21.64	24.47	27.29	28.69	
56	9.825	180	31.580	3.214														
43	7.544	140	24.562	3.256												16.65	18.23	
34	5.965	112	19.650	3.294									15.56	17.08	20.04	22.95	24.39	
60	10.527	200	35.089	3.333														
67	11.755	224	39.300	3.343														
50	8.772	168	29.475	3.360														
33	5.790	112	19.650	3.394									15.66	17.19	20.16	23.07	24.50	
53	9.299	180	31.580	3.396														
32	5.614	112	19.650	3.500									15.77	17.30	20.27	23.18	24.62	
40	7.018	140	24.562	3.500												16.97	18.55	
48	8.421	168	29.475	3.500														
63	11.053	224	39.300	3.556														
56	9.825	200	35.089	3.571														
39	6.842	140	24.562	3.590												17.08	18.66	
50	8.772	180	31.580	3.600														
31	5.439	112	19.650	3.613									15.88	17.41	20.38	23.30	24.74	
38	6.667	140	24.562	3.684												17.18	18.77	
30	5.263	112	19.650	3.733									15.99	17.52	20.50	23.41	24.85	
45	7.895	168	29.475	3.733														
60	10.527	224	39.300	3.733														
48	8.421	180	31.580	3.750														
53	9.299	200	35.089	3.774														
37	6.492	140	24.562	3.784												17.29	18.87	
29	5.088	112	19.650	3.862								12.91	16.10	17.63	20.61	23.53	24.97	
36	6.316	140	24.562	3.889												17.39	18.98	
43	7.544	168	29.475	3.907														
28	4.912	112	19.650	4.000								13.01	16.21	17.74	20.72	23.65	25.09	
35	6.141	140	24.562	4.000												17.50	19.09	
45	7.895	180	31.580	4.000														
50	8.772	200	35.089	4.000														
56	9.825	224	39.300	4.000														
				Length Factor*	0.68	0.73	0.75	0.77	0.81	0.85	0.86	0.89	0.92	0.94	0.96	0.99	1.00	

Note: Check Sprocket Specification table on page 17 for Nickel Plated sprocket availability.

* This length factor must be used to determine the proper belt width.

14mm Pitch Poly Chain® GT® Carbon™ Belts Drive Selection Table

Center Distance, Inches														Speed Ratio	Sprocket Combinations DriveR Number of Grooves	Sprocket Combinations DriveR Number of Grooves
14MGT-2380 P.L. 93.70 170 Teeth	14MGT-2450 P.L. 96.46 175 Teeth	14MGT-2520 P.L. 99.21 180 Teeth	14MGT-2590 P.L. 101.97 185 Teeth	14MGT-2660 P.L. 104.72 190 Teeth	14MGT-2800 P.L. 110.24 200 Teeth	14MGT-3136 P.L. 123.46 224 Teeth	14MGT-3304 P.L. 130.08 236 Teeth	14MGT-3360 P.L. 132.28 240 Teeth	14MGT-3500 P.L. 137.79 250 Teeth	14MGT-3850 P.L. 151.57 275 Teeth	14MGT-3920 P.L. 154.33 280 Teeth	14MGT-4326 P.L. 170.31 309 Teeth	14MGT-4410 P.L. 173.62 315 Teeth			
						27.93	31.40	32.54	35.40	42.48	43.89	52.02	53.70	2.507	67	168
						25.32	28.85	30.02	32.91	40.05	41.47	49.64	51.33	2.535	71	180
32.99	34.38	35.76	37.15	38.53	41.31	47.94	51.26	52.36	55.12	62.03	63.41	71.41	73.07	2.536	28	71
29.23	30.62	32.02	33.41	34.80	37.59	44.24	47.57	48.68	51.44	58.36	59.75	67.76	69.42	2.571	35	90
31.26	32.65	34.04	35.43	36.81	39.59	46.23	49.56	50.66	53.43	60.34	61.72	69.73	71.38	2.581	31	80
32.27	33.66	35.04	36.43	37.81	40.59	47.23	50.55	51.65	54.41	61.32	62.70	70.71	72.37	2.586	29	75
24.75	26.17	27.58	28.99	30.40	33.21	39.91	43.26	44.37	47.15	54.09	55.48	63.51	65.17	2.605	43	112
18.67	20.17	21.65	23.12	24.57	27.46	34.28	37.67	38.79	41.60	48.59	49.99	58.06	59.73	2.642	53	140
29.35	30.75	32.14	33.54	34.93	37.71	44.37	47.70	48.81	51.57	58.49	59.88	67.89	69.55	2.647	34	90
31.39	32.78	34.17	35.56	36.94	39.72	46.36	49.69	50.79	53.56	60.47	61.85	69.86	71.52	2.667	30	80
					21.26	28.39	31.87	33.02	35.88	42.96	44.37	52.51	54.19	2.667	63	168
							24.67	25.89	28.90	36.22	37.66	45.95	47.65	2.667	75	200
32.40	33.79	35.17	36.56	37.94	40.72	47.36	50.68	51.78	54.55	61.45	62.84	70.84	72.50	2.679	28	75
						25.76	29.31	30.48	33.38	40.53	41.95	50.14	51.82	2.687	67	180
29.48	30.88	32.27	33.66	35.05	37.84	44.50	47.83	48.94	51.70	58.62	60.01	68.02	69.68	2.727	33	90
31.51	32.91	34.29	35.68	37.07	39.85	46.49	49.82	50.92	53.69	60.60	61.98	69.99	71.65	2.759	29	80
25.11	26.53	27.94	29.36	30.76	33.58	40.29	43.64	44.75	47.53	54.47	55.86	63.90	65.56	2.800	40	112
19.00	20.51	21.99	23.46	24.92	27.81	34.65	38.04	39.16	41.97	48.97	50.36	58.44	60.11	2.800	50	140
					21.59	28.74	32.22	33.37	36.23	43.33	44.74	52.89	54.57	2.800	60	168
										31.31	32.81	41.32	43.05	2.800	80	224
29.60	31.00	32.39	33.79	35.18	37.97	44.63	47.96	49.07	51.83	58.75	60.14	68.15	69.81	2.813	32	90
							25.10	26.33	29.34	36.68	38.13	46.43	48.13	2.817	71	200
31.64	33.03	34.42	35.81	37.20	39.98	46.62	49.95	51.05	53.82	60.73	62.12	70.12	71.78	2.857	28	80
						26.21	29.77	30.94	33.84	41.01	42.43	50.63	52.32	2.857	63	180
25.23	26.65	28.06	29.48	30.89	33.70	40.41	43.76	44.88	47.66	54.60	55.99	64.03	65.69	2.872	39	112
29.73	31.13	32.52	33.92	35.31	38.09	44.76	48.09	49.19	51.96	58.88	60.27	68.29	69.95	2.903	31	90
19.22	20.73	22.22	23.69	25.15	28.05	34.89	38.28	39.41	42.22	49.22	50.62	58.69	60.36	2.917	48	140
25.34	26.77	28.18	29.60	31.01	33.83	40.54	43.89	45.00	47.78	54.73	56.12	64.16	65.82	2.947	38	112
							25.53	26.76	29.79	37.15	38.60	46.91	48.61	2.985	67	200
										31.86	33.37	41.90	43.64	2.987	75	224
29.85	31.25	32.64	34.04	35.43	38.22	44.89	48.22	49.32	52.09	59.02	60.40	68.42	70.08	3.000	30	90
					22.02	29.19	32.69	33.84	36.71	43.81	45.23	53.38	55.06	3.000	56	168
						26.54	30.11	31.28	34.19	41.37	42.79	50.99	52.68	3.000	60	180
25.46	26.89	28.31	29.72	31.13	33.95	40.66	44.02	45.13	47.91	54.86	56.25	64.29	65.95	3.027	37	112
29.97	31.38	32.77	34.17	35.56	38.35	45.01	48.35	49.45	52.22	59.15	60.53	68.55	70.21	3.103	29	90
25.58	27.01	28.43	29.84	31.25	34.07	40.79	44.14	45.25	48.04	54.99	56.38	64.42	66.08	3.111	36	112
19.55	21.07	22.56	24.03	25.49	28.40	35.25	38.65	39.77	42.59	49.59	50.99	59.07	60.75	3.111	45	140
										32.30	33.81	42.36	44.10	3.155	71	224
					22.35	29.54	33.03	34.19	37.06	44.18	45.59	53.75	55.44	3.170	53	168
							25.97	27.20	30.23	37.61	39.06	47.38	49.09	3.175	63	200
25.70	27.13	28.55	29.96	31.37	34.19	40.91	44.27	45.38	48.16	55.11	56.50	64.55	66.21	3.200	35	112
30.10	31.50	32.90	34.29	35.69	38.48	45.14	48.48	49.58	52.35	59.28	60.66	68.68	70.34	3.214	28	90
						26.99	30.56	31.74	34.65	41.84	43.27	51.48	53.17	3.214	56	180
19.77	21.29	22.78	24.26	25.72	28.63	35.49	38.89	40.02	42.83	49.84	51.24	59.33	61.00	3.256	43	140
25.82	27.25	28.67	30.09	31.50	34.32	41.04	44.39	45.51	48.29	55.24	56.63	64.67	66.34	3.294	34	112
							26.29	27.53	30.57	37.95	39.41	47.74	49.45	3.333	60	200
										32.74	34.26	42.82	44.57	3.343	67	224
					22.67	29.88	33.38	34.54	37.41	44.54	45.96	54.12	55.81	3.360	50	168
25.94	27.37	28.79	30.21	31.62	34.44	41.16	44.52	45.63	48.42	55.37	56.76	64.80	66.47	3.394	33	112
						27.32	30.90	32.08	35.00	42.20	43.63	51.85	53.54	3.396	53	180
26.06	27.49	28.91	30.33	31.74	34.56	41.29	44.64	45.76	48.54	55.50	56.89	64.93	66.60	3.500	32	112
20.10	21.62	23.12	24.60	26.07	28.98	35.85	39.25	40.38	43.20	50.21	51.61	59.71	61.38	3.500	40	140
				19.71	22.89	30.11	33.61	34.77	37.65	44.78	46.20	54.37	56.06	3.500	48	168
										33.18	34.70	43.28	45.03	3.556	63	224
						22.87	26.72	27.96	31.01	38.41	39.87	48.22	49.93	3.571	56	200
20.21	21.73	23.23	24.71	26.18	29.10	35.97	39.37	40.50	43.32	50.34	51.74	59.83	61.51	3.590	39	140
						27.65	31.24	32.42	35.35	42.56	43.99	52.21	53.91	3.600	50	180
26.17	27.61	29.03	30.45	31.86	34.68	41.41	44.77	45.88	48.67	55.63	57.02	65.06	66.73	3.613	31	112
20.32	21.84	23.34	24.83	26.30	29.21	36.09	39.49	40.62	43.44	50.46	51.86	59.96	61.63	3.684	38	140
26.29	27.72	29.15	30.57	31.98	34.81	41.54	44.90	46.01	48.80	55.75	57.15	65.19	66.86	3.733	30	112
				20.03	23.21	30.45	33.96	35.12	38.00	45.14	46.56	54.74	56.42	3.733	45	168
									25.60	33.51	35.03	43.63	45.38	3.733	60	224
						27.87	31.47	32.65	35.58	42.79	44.22	52.45	54.15	3.750	48	180
						23.18	27.04	28.28	31.34	38.76	40.22	48.57	50.29	3.774	53	200
20.43	21.95	23.45	24.94	26.41	29.33	36.21	39.62	40.74	43.56	50.59	51.99	60.08	61.76	3.784	37	140
26.41	27.84	29.27	30.69	32.10	34.93	41.66	45.02	46.14	48.92	55.88	57.27	65.32	66.98	3.862	29	112
20.54	22.06	23.56	25.05	26.52	29.44	36.33	39.74	40.87	43.69	50.71	52.11	60.21	61.88	3.889	36	140
				20.23	23.43	30.67	34.19	35.35	38.24	45.38	46.80	54.98	56.67	3.907	43	168
26.53	27.96	29.39	30.81	32.22	35.05	41.79	45.15	46.26	49.05	56.01	57.40	65.45	67.11	4.000	28	112
20.65	22.17	23.68	25.17	26.64	29.56	36.45	39.86	40.99	43.81	50.83	52.24	60.34	62.01	4.000	35	140
					20.61	28.20	31.81	32.99	35.92	43.15	44.58	52.82	54.51	4.000	45	180
						23.49	27.36	28.61	31.67	39.10	40.56	48.93	50.64	4.000	50	200
									26.01	33.95	35.47	44.09	45.84	4.000	56	224
1.01	1.02	1.03	1.04	1.05	1.07	1.12	1.14	1.14	1.16	1.19	1.20	1.24	1.25	Length Factor*		

Note: Check Sprocket Specification table on page 17 for Nickel Plated sprocket availability.

* This length factor must be used to determine the proper belt width.

Center distance is greater than eight times the small sprocket and the large sprocket is not flanged. See Engineering Section for details.

14mm Pitch Poly Chain® GT® Carbon™ Belts Drive Selection Table

Sprocket Combinations					Center Distance, Inches													
DriveR		DriveN																
Number of Grooves	Pitch Diameter (Inches)	Number of Grooves	Pitch Diameter (Inches)	Speed Ratio	14MGT-994 P.L. 39.13 71 Teeth	14MGT-1120 P.L. 44.09 80 Teeth	14MGT-1190 P.L. 46.85 85 Teeth	14MGT-1260 P.L. 49.61 90 Teeth	14MGT-1400 P.L. 55.12 100 Teeth	14MGT-1568 P.L. 61.73 112 Teeth	14MGT-1610 P.L. 63.39 115 Teeth	14MGT-1750 P.L. 68.90 125 Teeth	14MGT-1890 P.L. 74.41 135 Teeth	14MGT-1960 P.L. 77.17 140 Teeth	14MGT-2100 P.L. 82.68 150 Teeth	14MGT-2240 P.L. 88.19 160 Teeth	14MGT-2310 P.L. 90.94 165 Teeth
34	5.965	140	24.562	4.118												17.60	19.19
48	8.421	200	35.089	4.167													
43	7.544	180	31.580	4.186													
40	7.018	168	29.475	4.200													
53	9.299	224	39.300	4.226													
33	5.790	140	24.562	4.242												17.70	19.30
39	6.842	168	29.475	4.308													
32	5.614	140	24.562	4.375												17.81	19.41
38	6.667	168	29.475	4.421													
45	7.895	200	35.089	4.444													
50	8.772	224	39.300	4.480													
40	7.018	180	31.580	4.500													
31	5.439	140	24.562	4.516												17.91	19.51
37	6.492	168	29.475	4.541													
39	6.842	180	31.580	4.615													
43	7.544	200	35.089	4.651													
30	5.263	140	24.562	4.667												18.02	19.62
36	6.316	168	29.475	4.667													
48	8.421	224	39.300	4.667													
38	6.667	180	31.580	4.737													
35	6.141	168	29.475	4.800													
29	5.088	140	24.562	4.828												18.12	19.73
37	6.492	180	31.580	4.865													
34	5.965	168	29.475	4.941													
45	7.895	224	39.300	4.978													
28	4.912	140	24.562	5.000												18.23	19.83
36	6.316	180	31.580	5.000													
40	7.018	200	35.089	5.000													
33	5.790	168	29.475	5.091													
39	6.842	200	35.089	5.128													
35	6.141	180	31.580	5.143													
43	7.544	224	39.300	5.209													
32	5.614	168	29.475	5.250													
38	6.667	200	35.089	5.263													
34	5.965	180	31.580	5.294													
37	6.492	200	35.089	5.405													
31	5.439	168	29.475	5.419													
33	5.790	180	31.580	5.455													
36	6.316	200	35.089	5.556													
30	5.263	168	29.475	5.600													
40	7.018	224	39.300	5.600													
32	5.614	180	31.580	5.625													
35	6.141	200	35.089	5.714													
39	6.842	224	39.300	5.744													
29	5.088	168	29.475	5.793													
31	5.439	180	31.580	5.806													
34	5.965	200	35.089	5.882													
38	6.667	224	39.300	5.895													
28	4.912	168	29.475	6.000													
30	5.263	180	31.580	6.000													
37	6.492	224	39.300	6.054													
33	5.790	200	35.089	6.061													
29	5.088	180	31.580	6.207													
36	6.316	224	39.300	6.222													
32	5.614	200	35.089	6.250													
35	6.141	224	39.300	6.400													
28	4.912	180	31.580	6.429													
31	5.439	200	35.089	6.452													
34	5.965	224	39.300	6.588													
30	5.263	200	35.089	6.667													
33	5.790	224	39.300	6.788													
29	5.088	200	35.089	6.897													
32	5.614	224	39.300	7.000													
28	4.912	200	35.089	7.143													
31	5.439	224	39.300	7.226													
30	5.263	224	39.300	7.467													
29	5.088	224	39.300	7.724													
28	4.912	224	39.300	8.000													
				Length Factor*	0.68	0.73	0.75	0.77	0.81	0.85	0.86	0.89	0.92	0.94	0.96	0.99	1.00

Note: Check Sprocket Specification table on page 17 for Nickel Plated sprocket availability.

* This length factor must be used to determine the proper belt width.

14mm Pitch Poly Chain® GT® Carbon™ Belts Drive Selection Table

Center Distance, Inches														Speed Ratio	Sprocket Combinations	
															DriveR	DriveR
14MGT-2380 P.L. 93.70 170 Teeth	14MGT-2450 P.L. 96.46 175 Teeth	14MGT-2520 P.L. 99.21 180 Teeth	14MGT-2590 P.L. 101.97 185 Teeth	14MGT-2660 P.L. 104.72 190 Teeth	14MGT-2800 P.L. 110.24 200 Teeth	14MGT-3136 P.L. 123.46 224 Teeth	14MGT-3304 P.L. 130.08 236 Teeth	14MGT-3360 P.L. 132.28 240 Teeth	14MGT-3500 P.L. 137.79 250 Teeth	14MGT-3850 P.L. 151.57 275 Teeth	14MGT-3920 P.L. 154.33 280 Teeth	14MGT-4326 P.L. 170.31 309 Teeth	14MGT-4410 P.L. 173.62 315 Teeth		Number of Grooves	Number of Grooves
20.75	22.28	23.79	25.28	26.75	29.68	36.57	39.98	41.11	43.93	50.96	52.36	60.46	62.14	4.118	34	140
						23.70	27.58	28.82	31.89	39.33	40.79	49.16	50.88	4.167	48	200
					20.81	28.42	32.03	33.21	36.15	43.38	44.82	53.06	54.76	4.186	43	180
			18.87	20.55	23.75	31.01	34.54	35.70	38.59	45.74	47.16	55.35	57.04	4.200	40	168
									26.32	34.28	35.80	44.43	46.18	4.226	53	224
20.86	22.39	23.90	25.39	26.86	29.79	36.68	40.10	41.23	44.05	51.08	52.49	60.59	62.26	4.242	33	140
			18.97	20.65	23.86	31.13	34.65	35.81	38.71	45.86	47.28	55.47	57.16	4.308	39	168
20.97	22.50	24.01	25.50	26.98	29.91	36.80	40.22	41.35	44.17	51.21	52.61	60.71	62.39	4.375	32	140
			19.08	20.75	23.97	31.24	34.77	35.93	38.82	45.98	47.40	55.60	57.29	4.421	38	168
						24.01	27.90	29.15	32.22	39.67	41.14	49.52	51.24	4.444	45	200
									26.63	34.60	36.13	44.77	46.53	4.480	50	224
					21.12	28.75	32.37	33.55	36.49	43.73	45.17	53.42	55.12	4.500	40	180
21.08	22.61	24.12	25.62	27.09	30.02	36.92	40.34	41.47	44.30	51.33	52.73	60.84	62.51	4.516	31	140
			19.18	20.86	24.07	31.35	34.88	36.04	38.94	46.10	47.52	55.72	57.41	4.541	37	168
					21.23	28.86	32.48	33.66	36.61	43.85	45.29	53.54	55.24	4.615	39	180
						24.21	28.11	29.36	32.44	39.90	41.37	49.75	51.47	4.651	43	200
21.19	22.72	24.23	25.73	27.21	30.14	37.04	40.46	41.59	44.42	51.45	52.86	60.97	62.64	4.667	30	140
			19.28	20.96	24.18	31.46	35.00	36.16	39.06	46.22	47.64	55.84	57.53	4.667	36	168
									26.84	34.82	36.35	45.00	46.76	4.667	48	224
					21.33	28.97	32.59	33.78	36.72	43.97	45.41	53.66	55.36	4.737	38	180
			19.38	21.06	24.29	31.58	35.11	36.27	39.17	46.34	47.76	55.96	57.65	4.800	35	168
21.30	22.83	24.34	25.84	27.32	30.25	37.16	40.58	41.71	44.54	51.58	52.98	61.09	62.77	4.828	29	140
					21.43	29.08	32.70	33.89	36.84	44.09	45.52	53.78	55.48	4.865	37	180
			19.48	21.17	24.39	31.69	35.23	36.39	39.29	46.46	47.88	56.08	57.78	4.941	34	168
									27.14	35.15	36.68	45.34	47.10	4.978	45	224
21.40	22.94	24.45	25.95	27.43	30.37	37.28	40.70	41.83	44.66	51.70	53.10	61.22	62.89	5.000	28	140
					21.53	29.19	32.81	34.00	36.95	44.20	45.64	53.90	55.61	5.000	36	180
						24.52	28.43	29.68	32.77	40.24	41.71	50.11	51.83	5.000	40	200
			19.58	21.27	24.50	31.80	35.34	36.50	39.40	46.57	48.00	56.21	57.90	5.091	33	168
						24.62	28.53	29.79	32.88	40.35	41.82	50.22	51.95	5.128	39	200
					21.63	29.30	32.93	34.11	37.06	44.32	45.76	54.02	55.73	5.143	35	180
									27.35	35.37	36.90	45.57	47.33	5.209	43	224
			19.69	21.38	24.61	31.91	35.45	36.62	39.52	46.69	48.12	56.33	58.02	5.250	32	168
						24.73	28.64	29.90	32.99	40.47	41.94	50.34	52.06	5.263	38	200
					21.74	29.41	33.04	34.23	37.18	44.44	45.88	54.15	55.85	5.294	34	180
						24.83	28.75	30.01	33.10	40.58	42.05	50.46	52.18	5.405	37	200
		18.00	19.79	21.48	24.71	32.03	35.57	36.73	39.64	46.81	48.24	56.45	58.14	5.419	31	168
					21.84	29.52	33.15	34.34	37.29	44.56	45.99	54.27	55.97	5.455	33	180
						24.93	28.85	30.11	33.21	40.70	42.17	50.58	52.30	5.556	36	200
		18.10	19.89	21.58	24.82	32.14	35.68	36.85	39.75	46.93	48.36	56.57	58.26	5.600	30	168
								24.13	27.66	35.69	37.23	45.91	47.67	5.600	40	224
					21.94	29.62	33.26	34.45	37.41	44.67	46.11	54.39	56.09	5.625	32	180
						25.03	28.96	30.22	33.32	40.81	42.28	50.69	52.42	5.714	35	200
								24.23	27.76	35.80	37.34	46.02	47.79	5.744	39	224
		18.19	19.99	21.69	24.93	32.25	35.80	36.96	39.87	47.05	48.48	56.69	58.39	5.793	29	168
					22.04	29.73	33.37	34.56	37.52	44.79	46.23	54.51	56.21	5.806	31	180
						25.14	29.07	30.33	33.43	40.92	42.39	50.81	52.53	5.882	34	200
								24.32	27.86	35.91	37.45	46.14	47.90	5.895	38	224
		18.29	20.09	21.79	25.03	32.36	35.91	37.08	39.99	47.17	48.60	56.81	58.51	6.000	28	168
					22.14	29.84	33.48	34.68	37.63	44.91	46.35	54.63	56.33	6.000	30	180
								24.42	27.96	36.02	37.56	46.25	48.01	6.054	37	224
						25.24	29.17	30.43	33.53	41.03	42.51	50.93	52.65	6.061	33	200
					22.25	29.95	33.59	34.79	37.75	45.02	46.46	54.75	56.45	6.207	29	180
								24.52	28.07	36.12	37.67	46.36	48.13	6.222	36	224
						25.34	29.28	30.54	33.64	41.15	42.62	51.04	52.77	6.250	32	200
								24.62	28.17	36.23	37.78	46.48	48.24	6.400	35	224
				18.70	22.35	30.06	33.71	34.90	37.86	45.14	46.58	54.87	56.57	6.429	28	180
						25.44	29.38	30.65	33.75	41.26	42.74	51.16	52.89	6.452	31	200
							23.19	24.72	28.27	36.34	37.88	46.59	48.36	6.588	34	224
						25.55	29.49	30.76	33.86	41.37	42.85	51.28	53.01	6.667	30	200
							23.28	24.82	28.37	36.45	37.99	46.70	48.47	6.788	33	224
						25.65	29.59	30.86	33.97	41.49	42.96	51.40	53.12	6.897	29	200
							23.38	24.92	28.47	36.56	38.10	46.82	48.58	7.000	32	224
						25.75	29.70	30.97	34.08	41.60	43.08	51.51	53.24	7.143	28	200
							23.48	25.02	28.58	36.66	38.21	46.93	48.70	7.226	31	224
							23.58	25.11	28.68	36.77	38.32	47.04	48.81	7.467	30	224
							23.67	25.21	28.78	36.88	38.43	47.15	48.93	7.724	29	224
							23.77	25.31	28.88	36.99	38.54	47.27	49.04	8.000	28	224
1.01	1.02	1.03	1.04	1.05	1.07	1.12	1.14	1.14	1.16	1.19	1.20	1.24	1.25	Length Factor*		

Note: Check Sprocket Specification table on page 17 for Nickel Plated sprocket availability.

* This length factor must be used to determine the proper belt width.

Center distance is greater than eight times the small sprocket and the large sprocket is not flanged. See Engineering Section for details.

8mm Pitch PowerGrip® GT®2 Belts Drive Selection Table

Sprocket Combinations					Center Distance, Inches														
DriveR		DriveN			384-8MGT P.L. 15.118 48 teeth	480-8MGT P.L. 18.898 60 teeth	560-8MGT P.L. 22.047 70 teeth	600-8MGT P.L. 23.622 75 teeth	640-8MGT P.L. 25.197 80 teeth	720-8MGT P.L. 28.346 90 teeth	800-8MGT P.L. 31.496 100 teeth	840-8MGT P.L. 33.071 105 teeth	880-8MGT P.L. 34.646 110 teeth	920-8MGT P.L. 36.220 115 teeth	960-8MGT P.L. 37.795 120 teeth	1040-8MGT P.L. 40.945 130 teeth	1064-8MGT P.L. 41.890 133 teeth	1120-8MGT P.L. 44.094 140 teeth	1160-8MGT P.L. 45.669 145 teeth
No. of Grooves	Pitch Diameter (Inches)	No. of Grooves	Pitch Diameter (Inches)	Speed Ratio															
22	2.206	22	2.206	1.000	4.09	5.98	7.56	8.34	9.13	10.71	12.28	13.07	13.86	14.64	15.43	17.00	17.48	18.58	19.37
24	2.406	24	2.406	1.000	3.78	5.67	7.25	8.03	8.82	10.40	11.97	12.76	13.55	14.33	15.12	16.69	17.17	18.27	19.06
25	2.506	25	2.506	1.000	3.62	5.51	7.09	7.87	8.66	10.24	11.81	12.60	13.39	14.17	14.96	16.53	17.01	18.11	18.90
26	2.607	26	2.607	1.000	3.46	5.35	6.93	7.71	8.50	10.08	11.65	12.44	13.23	14.01	14.80	16.37	16.85	17.95	18.74
27	2.707	27	2.707	1.000	3.31	5.20	6.77	7.56	8.35	9.92	11.50	12.28	13.07	13.86	14.65	16.22	16.69	17.79	18.58
28	2.807	28	2.807	1.000		5.04	6.62	7.40	8.19	9.77	11.34	12.13	12.92	13.70	14.49	16.06	16.54	17.64	18.43
29	2.907	29	2.907	1.000		4.88	6.46	7.24	8.03	9.61	11.18	11.97	12.76	13.54	14.33	15.90	16.38	17.48	18.27
30	3.008	30	3.008	1.000		4.73	6.30	7.09	7.88	9.45	11.03	11.81	12.60	13.39	14.18	15.75	16.22	17.32	18.11
31	3.108	31	3.108	1.000		4.57	6.14	6.93	7.72	9.29	10.87	11.65	12.44	13.23	14.02	15.59	16.06	17.16	17.95
32	3.208	32	3.208	1.000		4.41	5.99	6.77	7.56	9.14	10.71	11.50	12.29	13.07	13.86	15.43	15.91	17.01	17.80
33	3.308	33	3.308	1.000		4.25	5.83	6.61	7.40	8.98	10.55	11.34	12.13	12.91	13.70	15.27	15.75	16.85	17.64
34	3.409	34	3.409	1.000		4.10	5.67	6.46	7.25	8.82	10.40	11.18	11.97	12.76	13.55	15.12	15.59	16.69	17.48
35	3.509	35	3.509	1.000			5.51	6.30	7.09	8.66	10.24	11.02	11.81	12.60	13.39	14.96	15.43	16.53	17.32
36	3.609	36	3.609	1.000			5.36	6.14	6.93	8.51	10.08	10.87	11.66	12.44	13.23	14.80	15.28	16.38	17.17
37	3.709	37	3.709	1.000			5.20	5.98	6.77	8.35	9.92	10.71	11.50	12.28	13.07	14.64	15.12	16.22	17.01
38	3.810	38	3.810	1.000			5.04	5.83	6.62	8.19	9.77	10.55	11.34	12.13	12.92	14.49	14.96	16.06	16.85
39	3.910	39	3.910	1.000			4.88	5.67	6.46	8.03	9.61	10.39	11.18	11.97	12.76	14.33	14.80	15.90	16.69
40	4.010	40	4.010	1.000			4.73	5.51	6.30	7.88	9.45	10.24	11.03	11.81	12.60	14.17	14.65	15.75	16.54
42	4.211	42	4.211	1.000				5.20	5.99	7.56	9.14	9.92	10.71	11.50	12.29	13.86	14.33	15.43	16.22
44	4.411	44	4.411	1.000					5.67	7.25	8.82	9.61	10.40	11.18	11.97	13.54	14.02	15.12	15.91
46	4.612	46	4.612	1.000					5.36	6.93	8.51	9.29	10.08	10.87	11.66	13.23	13.70	14.80	15.59
48	4.812	48	4.812	1.000						6.62	8.19	8.98	9.77	10.55	11.34	12.91	13.39	14.49	15.28
50	5.013	50	5.013	1.000						6.30	7.88	8.66	9.45	10.24	11.03	12.60	13.07	14.17	14.96
53	5.314	53	5.314	1.000						5.83	7.40	8.19	8.98	9.76	10.55	12.12	12.60	13.70	14.49
56	5.614	56	5.614	1.000							6.93	7.72	8.51	9.29	10.08	11.65	12.13	13.23	14.02
64	6.416	64	6.416	1.000									7.25	8.03	8.82	10.39	10.87	11.97	12.76
72	7.218	72	7.218	1.000												9.13	9.61	10.71	11.50
80	8.020	80	8.020	1.000														9.45	10.24
38	3.810	39	3.910	1.026			4.96	5.75	6.54	8.11	9.69	10.47	11.26	12.05	12.84	14.41	14.88	15.98	16.77
39	3.910	40	4.010	1.026			4.80	5.59	6.38	7.95	9.53	10.31	11.10	11.89	12.68	14.25	14.72	15.82	16.61
37	3.709	38	3.810	1.027			5.12	5.90	6.69	8.27	9.84	10.63	11.42	12.20	12.99	14.56	15.04	16.14	16.93
36	3.609	37	3.709	1.028			5.28	6.06	6.85	8.43	10.00	10.79	11.58	12.36	13.15	14.72	15.20	16.30	17.09
34	3.409	35	3.509	1.029		4.02	5.59	6.38	7.17	8.74	10.32	11.10	11.89	12.68	13.47	15.04	15.51	16.61	17.40
35	3.509	36	3.609	1.029			5.43	6.22	7.01	8.58	10.16	10.94	11.73	12.52	13.31	14.88	15.35	16.45	17.24
33	3.308	34	3.409	1.030		4.17	5.75	6.53	7.32	8.90	10.47	11.26	12.05	12.83	13.62	15.19	15.67	16.77	17.56
32	3.208	33	3.308	1.031		4.33	5.91	6.69	7.48	9.06	10.63	11.42	12.21	12.99	13.78	15.35	15.83	16.93	17.72
31	3.108	32	3.208	1.032		4.49	6.06	6.85	7.64	9.21	10.79	11.57	12.36	13.15	13.94	15.51	15.98	17.08	17.87
30	3.008	31	3.108	1.033		4.65	6.22	7.01	7.80	9.37	10.95	11.73	12.52	13.31	14.10	15.67	16.14	17.24	18.03
29	2.907	30	3.008	1.034		4.80	6.38	7.16	7.95	9.53	11.10	11.89	12.68	13.46	14.25	15.82	16.30	17.40	18.19
28	2.807	29	2.907	1.036		4.96	6.54	7.32	8.11	9.69	11.26	12.05	12.84	13.62	14.41	15.98	16.46	17.56	18.35
27	2.707	28	2.807	1.037		5.12	6.69	7.48	8.27	9.84	11.42	12.20	12.99	13.78	14.57	16.14	16.61	17.71	18.50
26	2.607	27	2.707	1.038	3.39	5.28	6.85	7.64	8.43	10.00	11.58	12.36	13.15	13.94	14.73	16.30	16.77	17.87	18.66
25	2.506	26	2.607	1.040	3.54	5.43	7.01	7.79	8.58	10.16	11.73	12.52	13.31	14.09	14.88	16.45	16.93	18.03	18.82
24	2.406	25	2.506	1.042	3.70	5.59	7.17	7.95	8.74	10.32	11.89	12.68	13.47	14.25	15.04	16.61	17.09	18.19	18.98
48	4.812	50	5.013	1.042						6.46	8.03	8.82	9.61	10.39	11.18	12.75	13.23	14.33	15.12
46	4.612	48	4.812	1.043					5.20	6.77	8.35	9.13	9.92	10.71	11.50	13.07	13.54	14.64	15.43
44	4.411	46	4.612	1.045					5.51	7.09	8.66	9.45	10.24	11.02	11.81	13.38	13.86	14.96	15.75
42	4.211	44	4.411	1.048				5.04	5.83	7.40	8.98	9.76	10.55	11.34	12.13	13.70	14.17	15.27	16.06
40	4.010	42	4.211	1.050				5.35	6.14	7.72	9.29	10.08	10.87	11.65	12.44	14.01	14.49	15.59	16.38
38	3.810	40	4.010	1.053			4.88	5.67	6.46	8.03	9.61	10.39	11.18	11.97	12.76	14.33	14.80	15.90	16.69
37	3.709	39	3.910	1.054			5.04	5.83	6.62	8.19	9.77	10.55	11.34	12.13	12.92	14.49	14.96	16.06	16.85
36	3.609	38	3.810	1.056			5.20	5.98	6.77	8.35	9.92	10.71	11.50	12.28	13.07	14.64	15.12	16.22	17.01
35	3.509	37	3.709	1.057			5.36	6.14	6.93	8.51	10.08	10.87	11.66	12.44	13.23	14.80	15.28	16.38	17.17
53	5.314	56	5.614	1.057							7.17	7.95	8.74	9.53	10.32	11.89	12.36	13.46	14.25
34	3.409	36	3.609	1.059			5.51	6.30	7.09	8.66	10.24	11.02	11.81	12.60	13.39	14.96	15.43	16.53	17.32
50	5.013	53	5.314	1.060						6.06	7.64	8.42	9.21	10.00	10.79	12.36	12.83	13.93	14.72
33	3.308	35	3.509	1.061		4.09	5.67	6.46	7.25	8.82	10.40	11.18	11.97	12.76	13.55	15.12	15.59	16.69	17.48
32	3.208	34	3.409	1.063		4.25	5.83	6.61	7.40	8.98	10.55	11.34	12.13	12.91	13.70	15.27	15.75	16.85	17.64
31	3.108	33	3.308	1.065		4.41	5.99	6.77	7.56	9.14	10.71	11.50	12.29	13.07	13.86	15.43	15.91	17.01	17.80
30	3.008	32	3.208	1.067		4.57	6.14	6.93	7.72	9.29	10.87	11.65	12.44	13.23	14.02	15.59	16.06	17.16	17.95
29	2.907	31	3.108	1.069		4.72	6.30	7.09	7.88	9.45	11.03	11.81	12.60	13.39	14.18	15.75	16.22	17.32	18.11
28	2.807	30	3.008	1.071		4.88	6.46	7.24	8.03	9.61	11.18	11.97	12.76	13.54	14.33	15.90	16.38	17.48	18.27
27	2.707	29	2.907	1.074		5.04	6.62	7.40	8.19	9.77	11.34	12.13	12.92	13.70	14.49	16.06	16.54	17.64	18.43
26	2.607	28	2.807	1.077	3.31	5.20	6.77	7.56	8.35	9.92	11.50	12.28	13.07	13.86	14.65	16.22	16.69	17.79	18.58
39	3.910	42	4.211	1.077			4.64	5.43	6.22	7.80	9.37	10.16	10.95	11.73	12.52	14.09	14.57	15.67	16.46
25	2.506	27	2.707	1.080	3.46	5.35	6.93	7.72	8.51	10.08	11.66	12.44	13.23	14.02	14.81	16.38	16.85	17.95	18.74
37	3.709	40	4.010	1.081			4.96	5.75	6.54	8.11	9.69	10.47	11.26	12.05	12.84	14.41	14.88	15.98	16.77
24	2.406	26	2.607	1.083	3.62	5.51	7.09	7.87	8.66	10.24	11.81	12.60	13.39	14.17	14.96	16.53	17.01	18.11	18.90
36	3.609	39	3.910	1.083			5.12	5.90	6.69	8.27	9.84	10.63	11.42	12.20	12.99	14.56	15.04	16.14	16.93
35	3.509	38	3.810	1.086			5.27	6.06	6.85	8.43	10.00	10.79	11.58	12.36	13.15	14.72	15.20	16.30	17.09
46	4.612	50	5.013	1.087						6.61	8.19	8.97	9.76	10.55	11.34	12.91	13.38	14.48	15.27
34	3.409	37	3.709	1.088			5.43	6.22	7.01	8.58	10.16	10.94	11.73	12.52	13.31	14.88	15.35	16.45	17.24
22	2.206	24	2.406	1.091	3.94	5.83	7.40	8.19	8.98	10.55	12.13	12.91	13.70	14.49	15.28	16.85	17.32	18.42	19.21
33	3.308	36	3.609	1.091		4.01	5.59	6.38	7.17	8.74	10.32	11.10	11.89	12.68	13.47	15.04	15.51	16.61	17.40
44	4.411	48	4.812	1.091					5.35	6.93	8.50	9.29	10.08	10.86	11.65	13.22	13.70	14.80	15.59
32	3.208	35	3.509	1.094		4.17	5.75	6.53	7.32	8.90	10.47	11.26	12.05	12.83	13.62	15.19	15.67	16.77	17.56
42	4.211	46	4.612	1.095					5.67	7.24	8.82	9.60	10.39	11.18	11.97	13.54	14.01	15.11	15.90
31	3.108	34	3.409	1.097		4.33	5.90	6.69	7.48	9.06	10.63	11.42	12.21	12.99	13.78	15.35	15.83	16.93	17.72
30	3.008	33	3.308	1.100		4.49	6.06	6.85	7.64	9.21	10.79	11.57	12.36	13.15	13.94	15.51	15.98	17.08	17.87
40	4.010	44	4.411	1.100				5.19	5.98	7.56	9.13	9.92	10.71	11.49	12.28	13.85	14.33	15.43	16.22
29	2.907	32	3.208	1.103		4.64	6.22	7.01	7.80	9.37	10.95	11.73	12.52	13.31	14.10	15.67	16.14	17.24	18.03
48	4.812	53	5.314	1.104						6.22	7.79	8.58	9.37	10.15	10.94	12.51	12.99	14.09	14.88
Length Factor*					0.70	0.80	0.80	0.80	0.90	0.90	0.90	0.90	0.90	1.00	1.00	1.00	1.00	1.00	1.00

Note: 25, 27, 29, 31, 33, 35, 37, 39, 42, 46, 50 and 53 groove sprockets are only available as stock products in 20 and 30mm widths.

* This length correction factor must be used to determine the proper belt width.

Center distance is greater than eight times the small sprocket and the large sprocket is not flanged. See Engineering Section I-7, Use of Flanged Sprockets, on page 113.

Center Distance, Inches																			Speed Ratio	Sprocket Combinations	
1200-8MGT P.L. 47.244 150 teeth	1224-8MGT P.L. 48.189 153 teeth	1280-8MGT P.L. 50.394 160 teeth	1440-8MGT P.L. 56.693 180 teeth	1512-8MGT P.L. 59.528 189 teeth	1584-8MGT P.L. 62.362 198 teeth	1600-8MGT P.L. 62.992 200 teeth	1760-8MGT P.L. 69.291 220 teeth	1800-8MGT P.L. 70.866 225 teeth	2000-8MGT P.L. 78.740 250 teeth	2200-8MGT P.L. 86.614 275 teeth	2400-8MGT P.L. 94.488 300 teeth	2600-8MGT P.L. 102.362 325 teeth	2800-8MGT P.L. 110.236 350 teeth	3048-8MGT P.L. 120.000 381 teeth	3288-8MGT P.L. 129.134 410 teeth	3600-8MGT P.L. 141.732 450 teeth	4400-8MGT P.L. 173.228 550 teeth		DriveR No. of Grooves	DriveN No. of Grooves
20.15	20.63	21.73	24.88	26.30	27.71	28.03	31.18	31.97	35.90	39.84	43.78	47.71	51.65	56.53	61.10	67.40	83.15	1.000	22	22
19.84	20.32	21.42	24.57	25.99	27.40	27.72	30.87	31.66	35.59	39.53	43.47	47.40	51.34	56.22	60.79	67.09	82.84	1.000	24	24
19.68	20.16	21.26	24.41	25.83	27.24	27.56	30.71	31.50	35.43	39.37	43.31	47.24	51.18	56.06	60.63	66.93	82.68	1.000	25	25
19.52	20.00	21.10	24.25	25.67	27.08	27.40	30.55	31.34	35.27	39.21	43.15	47.08	51.02	55.90	60.47	66.77	82.52	1.000	26	26
19.37	19.84	20.94	24.09	25.51	26.93	27.24	30.39	31.18	35.12	39.05	42.99	46.93	50.87	55.75	60.31	66.61	82.36	1.000	27	27
19.21	19.69	20.79	23.94	25.36	26.77	27.09	30.24	31.03	34.96	38.90	42.84	46.77	50.71	55.59	60.16	66.46	82.21	1.000	28	28
19.05	19.53	20.63	23.78	25.20	26.61	26.93	30.08	30.87	34.80	38.74	42.68	46.61	50.55	55.43	60.00	66.30	82.05	1.000	29	29
18.90	19.37	20.47	23.62	25.04	26.46	26.77	29.92	30.71	34.65	38.58	42.52	46.46	50.40	55.28	59.84	66.14	81.89	1.000	30	30
18.74	19.21	20.31	23.46	24.88	26.30	26.61	29.76	30.55	34.49	38.42	42.36	46.30	50.24	55.12	59.68	65.98	81.73	1.000	31	31
18.58	19.06	20.16	23.31	24.73	26.14	26.46	29.61	30.40	34.33	38.27	42.21	46.14	50.08	54.96	59.53	65.83	81.58	1.000	32	32
18.42	18.90	20.00	23.15	24.57	25.98	26.30	29.45	30.24	34.17	38.11	42.05	45.98	49.92	54.80	59.37	65.67	81.42	1.000	33	33
18.27	18.74	19.84	22.99	24.41	25.83	26.14	29.29	30.08	34.02	37.95	41.89	45.83	49.77	54.65	59.21	65.51	81.26	1.000	34	34
18.11	18.58	19.68	22.83	24.25	25.67	25.98	29.13	29.92	33.86	37.79	41.73	45.67	49.61	54.49	59.05	65.35	81.10	1.000	35	35
17.95	18.43	19.53	22.68	24.10	25.51	25.83	28.98	29.77	33.70	37.64	41.58	45.51	49.45	54.33	58.90	65.20	80.95	1.000	36	36
17.79	18.27	19.37	22.52	23.94	25.35	25.67	28.82	29.61	33.54	37.48	41.42	45.35	49.29	54.17	58.74	65.04	80.79	1.000	37	37
17.64	18.11	19.21	22.36	23.78	25.20	25.51	28.66	29.45	33.39	37.32	41.26	45.20	49.14	54.02	58.58	64.88	80.63	1.000	38	38
17.48	17.95	19.05	22.20	23.62	25.04	25.35	28.50	29.29	33.23	37.16	41.10	45.04	48.98	53.86	58.42	64.72	80.47	1.000	39	39
17.32	17.80	18.90	22.05	23.47	24.88	25.20	28.35	29.14	33.07	37.01	40.95	44.88	48.82	53.70	58.27	64.57	80.32	1.000	40	40
17.01	17.48	18.58	21.73	23.15	24.57	24.88	28.03	28.82	32.76	36.69	40.63	44.57	48.51	53.39	57.95	64.25	80.00	1.000	42	42
16.69	17.17	18.27	21.42	22.84	24.25	24.57	27.72	28.51	32.44	36.38	40.32	44.25	48.19	53.07	57.64	63.94	79.69	1.000	44	44
16.38	16.85	17.95	21.10	22.52	23.94	24.25	27.40	28.19	32.13	36.06	40.00	43.94	47.88	52.76	57.32	63.62	79.37	1.000	46	46
16.06	16.54	17.64	20.79	22.21	23.62	23.94	27.09	27.88	31.81	35.75	39.69	43.62	47.56	52.44	57.01	63.31	79.06	1.000	48	48
15.75	16.22	17.32	20.47	21.89	23.31	23.62	26.77	27.56	31.50	35.43	39.37	43.31	47.25	52.13	56.69	62.99	78.74	1.000	50	50
15.27	15.75	16.85	20.00	21.42	22.83	23.15	26.30	27.09	31.02	34.96	38.90	42.83	46.77	51.65	56.22	62.52	78.27	1.000	53	53
14.80	15.28	16.38	19.53	20.95	22.36	22.68	25.83	26.62	30.55	34.49	38.43	42.36	46.30	51.18	55.75	62.05	77.80	1.000	56	56
13.54	14.02	15.12	18.27	19.69	21.10	21.42	24.57	25.36	29.29	33.23	37.17	41.10	45.04	49.92	54.49	60.79	76.54	1.000	64	64
12.28	12.76	13.86	17.01	18.43	19.84	20.16	23.31	24.10	28.03	31.97	35.91	39.84	43.78	48.66	53.23	59.53	75.28	1.000	72	72
11.02	11.50	12.60	15.75	17.17	18.58	18.90	22.05	22.84	26.77	30.71	34.65	38.58	42.52	47.40	51.97	58.27	74.02	1.000	80	80
17.56	18.03	19.13	22.28	23.70	25.12	25.43	28.58	29.37	33.31	37.24	41.18	45.12	49.06	53.94	58.50	64.80	80.55	1.026	38	39
17.40	17.87	18.97	22.12	23.54	24.96	25.27	28.42	29.21	33.15	37.08	41.02	44.96	48.90	53.78	58.34	64.64	80.39	1.026	39	40
17.71	18.19	19.29	22.44	23.86	25.27	25.59	28.74	29.53	33.46	37.40	41.34	45.27	49.21	54.09	58.66	64.96	80.71	1.027	37	38
17.87	18.35	19.45	22.60	24.02	25.43	25.75	28.90	29.69	33.62	37.56	41.50	45.43	49.37	54.25	58.82	65.12	80.87	1.028	36	37
18.19	18.66	19.76	22.91	24.33	25.75	26.06	29.21	30.00	33.94	37.87	41.81	45.75	49.69	54.57	59.13	65.43	81.18	1.029	34	35
18.03	18.50	19.60	22.75	24.17	25.59	25.90	29.05	29.84	33.78	37.71	41.65	45.59	49.53	54.41	58.97	65.27	81.02	1.029	35	36
18.34	18.82	19.92	23.07	24.49	25.90	26.22	29.37	30.16	34.09	38.03	41.97	45.90	49.84	54.72	59.29	65.59	81.34	1.030	33	34
18.50	18.98	20.08	23.23	24.65	26.06	26.38	29.53	30.32	34.25	38.19	42.13	46.06	50.00	54.88	59.45	65.75	81.50	1.031	32	33
18.66	19.13	20.23	23.38	24.80	26.22	26.53	29.68	30.47	34.41	38.34	42.28	46.22	50.16	55.04	59.60	65.90	81.65	1.032	31	32
18.82	19.29	20.39	23.54	24.96	26.38	26.69	29.84	30.63	34.57	38.50	42.44	46.38	50.32	55.20	59.76	66.06	81.81	1.033	30	31
18.97	19.45	20.55	23.70	25.12	26.53	26.85	30.00	30.79	34.72	38.66	42.60	46.53	50.47	55.35	59.92	66.22	81.97	1.034	29	30
19.13	19.61	20.71	23.86	25.28	26.69	27.01	30.16	30.95	34.88	38.82	42.76	46.69	50.63	55.51	60.08	66.38	82.13	1.036	28	29
19.29	19.76	20.86	24.01	25.43	26.85	27.16	30.31	31.10	35.04	38.97	42.91	46.85	50.79	55.67	60.23	66.53	82.28	1.037	27	28
19.45	19.92	21.02	24.17	25.59	27.01	27.32	30.47	31.26	35.20	39.13	43.07	47.01	50.95	55.83	60.39	66.69	82.44	1.038	26	27
19.60	20.08	21.18	24.33	25.75	27.16	27.48	30.63	31.42	35.35	39.29	43.23	47.16	51.10	55.98	60.55	66.85	82.60	1.040	25	26
19.76	20.24	21.34	24.49	25.91	27.32	27.64	30.79	31.58	35.51	39.45	43.39	47.32	51.26	56.14	60.71	67.01	82.76	1.042	24	25
15.90	16.38	17.48	20.63	22.05	23.46	23.78	26.93	27.72	31.65	35.59	39.53	43.46	47.40	52.28	56.85	63.15	78.90	1.042	48	50
16.22	16.69	17.79	20.94	22.36	23.78	24.09	27.24	28.03	31.97	35.90	39.84	43.78	47.72	52.60	57.16	63.46	79.21	1.043	46	48
16.53	17.01	18.11	21.26	22.68	24.09	24.41	27.56	28.35	32.28	36.22	40.16	44.09	48.03	52.91	57.48	63.78	79.53	1.045	44	46
16.85	17.32	18.42	21.57	22.99	24.41	24.72	27.87	28.66	32.60	36.53	40.47	44.41	48.35	53.23	57.79	64.09	79.84	1.048	42	44
17.16	17.64	18.74	21.89	23.31	24.72	25.04	28.19	28.98	32.91	36.85	40.79	44.72	48.66	53.54	58.11	64.41	80.16	1.050	40	42
17.48	17.95	19.05	22.20	23.62	25.04	25.35	28.50	29.29	33.23	37.16	41.10	45.04	48.98	53.86	58.42	64.72	80.47	1.053	38	40
17.64	18.11	19.21	22.36	23.78	25.20	25.51	28.66	29.45	33.39	37.32	41.26	45.20	49.14	54.02	58.58	64.88	80.63	1.054	37	39
17.79	18.27	19.37	22.52	23.94	25.35	25.67	28.82	29.61	33.54	37.48	41.42	45.35	49.29	54.17	58.74	65.04	80.79	1.056	36	38
17.95	18.43	19.53	22.68	24.10	25.51	25.83	28.98	29.77	33.70	37.64	41.58	45.51	49.45	54.33	58.90	65.20	80.95	1.057	35	37
15.04	15.51	16.61	19.76	21.18	22.60	22.91	26.06	26.85	30.79	34.72	38.66	42.60	46.54	51.42	55.98	62.28	78.03	1.057	53	56
18.11	18.58	19.68	22.83	24.25	25.67	25.98	29.13	29.92	33.86	37.79	41.73	45.67	49.61	54.49	59.05	65.35	81.10	1.059	34	36
15.51	15.98	17.08	20.23	21.65	23.07	23.38	26.53	27.32	31.26	35.19	39.13	43.07	47.01	51.89	56.45	62.75	78.50	1.060	50	53
18.27	18.74	19.84	22.99	24.41	25.83	26.14	29.29	30.08	34.02	37.95	41.89	45.83	49.77	54.65	59.21	65.51	81.26	1.061	33	35
18.42	18.90	20.00	23.15	24.57	25.98	26.30	29.45	30.24	34.17	38.11	42.05	45.98	49.92	54.80	59.37	65.67	81.42	1.063	32	34
18.58	19.06	20.16	23.31	24.73	26.14	26.46	29.61	30.40	34.33	38.27	42.21	46.14	50.08	54.96	59.53	65.83	81.58	1.065	31	33
18.74	19.21	20.31	23.46	24.88	26.30	26.61	29.76	30.55	34.49	38.42	42.36	46.30	50.24	55.12	59.68	65.98	81.73	1.067	30	32
18.90	19.37	20.47	23.62	25.04	26.46	26.77	29.92	30.71	34.65	38.58	42.52	46.46	50.40	55.28	59.84	66.14	81.89	1.069	29	31
19.05	19.53	20.63	23.78	25.20	26.61	26.93	30.08	30.87	34.80	38.74	42.68	46.61	50.55	55.43	60.00	66.30	82.05	1.071	28	30
19.21	19.69	20.79	23.94	25.36	26.77	27.09	30.24	31.03	34.96	38.90	42.84	46.77	50.71	55.59	60.16	66.46	82.21	1.074	27	29
19.37	19.84	20.94	24.09	25.51	26.93	27.24	30.39	31.18	35.12	39.05	42.99	46.93	50.87	55.75	60.31	66.61	82.36	1.077	26	28
17.24	17.72	18.82	21.97	23.39	24.80	25.12	28.27	29.06	32.99	36.93	40.87	44.80	48.74	53.62	58.19	64.49	80.24	1.077	39	42
19.53	20.00	21.10	24.25	25.67	27.09	27.40	30.55	31.34	35.28	39.21	43.15	47.09	51.03	55.91	60.47	66.77	82.52	1.080	25	27
17.56	18.03	19.13	22.28	23.70	25.12	25.43	28.58	29.37	33.31	37.24	41.18	45.12	49.06	53.94	58.50	64.80	80.55	1.081	37	40
19.68	20.16	21.26	24.41	25.83	27.24	27.56	30.71	31.50	35.43	39.37	43.31	47.24	51.18	56.06	60.63	66.93	82.68	1.083	24	26
17.71	18.19	19.29	22.44	23.86	25.27	25.59	28.74	29.53	33.46	37.40	41.34	45.27	49.21	54.09	58.66	64.96	80.71	1.083	36	39
17.87	18.35	19.45	22.60	24.02	25.43	25.75	28.90	29.69	33.62	37.56	41.50	45.43	49.37	54.25	58.82	65.12	80.87	1.086	35	38
16.06	16.53	17.63	20.78	22.20	23.62	23.93	27.08	27.87	31.81	35.74	39.69	43.62	47.56	52.44	57.01	63.31	79.06	1.087	46	50
18.03	18.50	19.60	22.75	24.17	25.59	25.90	29.05	29.84	33.78	37.71	41.65	45.59	49.53	54.41	58.97	65.27	81.02	1.088	34	37
20.00	20.47	21.57	24.72	26.14	27.56	27.87	31.02	31.81	35.75	39.68	43.62	47.56	51.50	56.38	60.94	67.24	82.99	1.091	22	24
18.19	18.66	19.76	22.91	24.33	25.75	26.06	29.21	30.00	33.94	37.87	41.81	45.75	49.69	54.57	59.13	65.43	81.18	1.091	33	36
16.38	16.85	17.95	21.10	22.52	23.94	24.25	27.40	28.19	32.13	36.06	40.00	43.94	47.88	52.76	57.32	63.62	79.37	1.091	44	48
18.34	18.82	19.92	23.07	24.49	25.90	26.22	29.37	30.16	34.09	38.03	41.97	45.90	49.84	54.72	59.29	65.59	81.34	1.094	32	35
16.69	17.16	18.26	21.41	22.83	24.25	24.56	27.71	28.50	32.44	36.37	40.31	44.25	48.19	53.07	57.64	63.94	79.69	1.095	42	46
18.50	18.98	20.08	23.23	24.65	26.06	26.38	29.53	30.32	34.25	38.19	42.13	46.06	50.00	54.88	59.45	65.75	81.50	1.097	31	34
18.66	19.13	20.23	23.38	24.80	26.22	26.53	29.68	30.47	34.41	38.34	42.28	46.22	50.16	55.04	59.60	65.90	81.65	1.100	30	33
17.00	17.48	18.58	21.73	23.15	24.57	24.88	28.03	28.82	32.76	36.69	40.63	44.57	48.51	53.39	57.95	64.25	80.00	1.100	40	44
18.82	19.29	20.39	23.54	24.96	26.38	26.69	29.84	30.63	34.57	38.50	42.44	46.38	50.32	55.20	59.76	66.06	81.81	1.103	29	32
15.67	16.14	17.24	20.39	21.81	23.23	23.54	26.69	27.48	31.42	35.35	39.29	43.23	47.17	52.05	56.61	62.91	78.66	1.104	48	53
1.00	1.00	1.10	1.10	1.10	1.10	1.10	1.10	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	Length Factor*		

Note: 25, 27, 29, 31, 33, 35, 37, 39, 42, 46, 50 and 53 groove sprockets are only available as stock products in 20 and 30mm widths.

* This length correction factor must be used to determine the proper belt width.

Center distance is greater than eight times the small sprocket and the large sprocket is not flanged. See Engineering Section I-7, Use of Flanged Sprockets, on page 113.

8mm Pitch PowerGrip® GT®2 Belts — Drive Selection Table

Sprocket Combinations					Center Distance, Inches														
DriveR		DriveN			384-8MGT P.L. 15.118 48 teeth	480-8MGT P.L. 18.898 60 teeth	560-8MGT P.L. 22.047 70 teeth	600-8MGT P.L. 23.622 75 teeth	640-8MGT P.L. 25.197 80 teeth	720-8MGT P.L. 28.346 90 teeth	800-8MGT P.L. 31.496 100 teeth	840-8MGT P.L. 33.071 105 teeth	880-8MGT P.L. 34.646 110 teeth	920-8MGT P.L. 36.220 115 teeth	960-8MGT P.L. 37.795 120 teeth	1040-8MGT P.L. 40.945 130 teeth	1064-8MGT P.L. 41.890 133 teeth	1120-8MGT P.L. 44.094 140 teeth	1160-8MGT P.L. 45.669 145 teeth
No. of Grooves	Pitch Diameter (Inches)	No. of Grooves	Pitch Diameter (Inches)	Speed Ratio															
38	3.810	42	4.211	1.105			4.72	5.51	6.30	7.87	9.45	10.23	11.02	11.81	12.60	14.17	14.64	15.74	16.53
28	2.807	31	3.108	1.107		4.80	6.38	7.16	7.95	9.53	11.10	11.89	12.68	13.46	14.25	15.82	16.30	17.40	18.19
27	2.707	30	3.008	1.111		4.96	6.53	7.32	8.11	9.69	11.26	12.05	12.84	13.62	14.41	15.98	16.46	17.56	18.35
36	3.609	40	4.010	1.111			5.04	5.82	6.61	8.19	9.76	10.55	11.34	12.12	12.91	14.48	14.96	16.06	16.85
72	7.218	80	8.020	1.111												8.49	8.97	10.07	10.86
35	3.509	39	3.910	1.114			5.19	5.98	6.77	8.35	9.92	10.71	11.50	12.28	13.07	14.64	15.12	16.22	17.01
26	2.607	29	2.907	1.115		5.12	6.69	7.48	8.27	9.84	11.42	12.20	12.99	13.78	14.57	16.14	16.61	17.71	18.50
34	3.409	38	3.810	1.118			5.35	6.14	6.93	8.50	10.08	10.86	11.65	12.44	13.23	14.80	15.27	16.37	17.16
25	2.506	28	2.807	1.120	3.38	5.28	6.85	7.64	8.43	10.00	11.58	12.36	13.15	13.94	14.73	16.30	16.77	17.87	18.66
50	5.013	56	5.614	1.120						5.82	7.40	8.18	8.97	9.76	10.55	12.12	12.59	13.70	14.49
33	3.308	37	3.709	1.121			5.51	6.30	7.09	8.66	10.24	11.02	11.81	12.60	13.39	14.96	15.43	16.53	17.32
24	2.406	27	2.707	1.125	3.54	5.43	7.01	7.79	8.58	10.16	11.73	12.52	13.31	14.09	14.88	16.45	16.93	18.03	18.82
32	3.208	36	3.609	1.125		4.09	5.67	6.45	7.24	8.82	10.39	11.18	11.97	12.75	13.54	15.11	15.59	16.69	17.48
64	6.416	72	7.218	1.125										7.39	8.18	9.75	10.23	11.33	12.12
80	8.020	90	9.023	1.125															9.44
39	3.910	44	4.411	1.128				5.27	6.06	7.64	9.21	10.00	10.79	11.57	12.36	13.93	14.41	15.51	16.30
31	3.108	35	3.509	1.129		4.25	5.82	6.61	7.40	8.98	10.55	11.34	12.13	12.91	13.70	15.27	15.75	16.85	17.64
30	3.008	34	3.409	1.133		4.41	5.98	6.77	7.56	9.13	10.71	11.49	12.28	13.07	13.86	15.43	15.90	17.00	17.79
37	3.709	42	4.211	1.135			4.80	5.58	6.37	7.95	9.53	10.31	11.10	11.89	12.68	14.25	14.72	15.82	16.61
22	2.206	25	2.506	1.136	3.86	5.75	7.32	8.11	8.90	10.47	12.05	12.83	13.62	14.41	15.20	16.77	17.24	18.34	19.13
44	4.411	50	5.013	1.136						6.77	8.34	9.13	9.92	10.70	11.49	13.06	13.54	14.64	15.43
29	2.907	33	3.308	1.138		4.56	6.14	6.93	7.72	9.29	10.87	11.65	12.44	13.23	14.02	15.59	16.06	17.16	17.95
28	2.807	32	3.208	1.143		4.72	6.30	7.08	7.87	9.45	11.02	11.81	12.60	13.38	14.17	15.74	16.22	17.32	18.11
35	3.509	40	4.010	1.143			5.11	5.90	6.69	8.27	9.84	10.63	11.42	12.20	12.99	14.56	15.04	16.14	16.93
42	4.211	48	4.812	1.143					5.51	7.08	8.66	9.44	10.23	11.02	11.81	13.38	13.86	14.96	15.75
56	5.614	64	6.416	1.143								7.08	7.87	8.65	9.44	11.01	11.49	12.59	13.38
34	3.409	39	3.910	1.147			5.27	6.06	6.85	8.42	10.00	10.78	11.57	12.36	13.15	14.72	15.19	16.29	17.08
27	2.707	31	3.108	1.148		4.88	6.45	7.24	8.03	9.61	11.18	11.97	12.76	13.54	14.33	15.90	16.38	17.48	18.27
40	4.010	46	4.612	1.150				5.03	5.82	7.40	8.97	9.76	10.55	11.33	12.12	13.69	14.17	15.27	16.06
33	3.308	38	3.810	1.152			5.43	6.21	7.01	8.58	10.16	10.94	11.73	12.52	13.31	14.88	15.35	16.45	17.24
46	4.612	53	5.314	1.152						6.37	7.95	8.73	9.52	10.31	11.10	12.67	13.14	14.24	15.04
26	2.607	30	3.008	1.154		5.04	6.61	7.40	8.19	9.76	11.34	12.12	12.91	13.70	14.49	16.06	16.53	17.63	18.42
32	3.208	37	3.709	1.156		4.01	5.59	6.37	7.16	8.74	10.31	11.10	11.89	12.67	13.47	15.04	15.51	16.61	17.40
38	3.810	44	4.411	1.158				5.34	6.14	7.71	9.29	10.07	10.86	11.65	12.44	14.01	14.49	15.59	16.38
25	2.506	29	2.907	1.160	3.30	5.19	6.77	7.56	8.35	9.92	11.50	12.28	13.07	13.86	14.65	16.22	16.69	17.79	18.58
31	3.108	36	3.609	1.161		4.17	5.74	6.53	7.32	8.90	10.47	11.26	12.05	12.83	13.62	15.19	15.67	16.77	17.56
24	2.406	28	2.807	1.167	3.46	5.35	6.93	7.71	8.50	10.08	11.65	12.44	13.23	14.01	14.80	16.37	16.85	17.95	18.74
30	3.008	35	3.509	1.167		4.32	5.90	6.69	7.48	9.05	10.63	11.41	12.20	12.99	13.78	15.35	15.82	16.92	17.71
36	3.609	42	4.211	1.167			4.87	5.66	6.45	8.03	9.60	10.39	11.18	11.96	12.75	14.33	14.80	15.90	16.69
48	4.812	56	5.614	1.167						5.97	7.55	8.34	9.13	9.91	10.70	12.27	12.75	13.85	14.64
29	2.907	34	3.409	1.172		4.48	6.06	6.84	7.64	9.21	10.79	11.57	12.36	13.15	13.94	15.51	15.98	17.08	17.87
34	3.409	40	4.010	1.176			5.19	5.98	6.77	8.34	9.92	10.70	11.49	12.28	13.07	14.64	15.12	16.22	17.01
28	2.807	33	3.308	1.179		4.64	6.22	7.00	7.79	9.37	10.94	11.73	12.52	13.30	14.10	15.67	16.14	17.24	18.03
39	3.910	46	4.612	1.179				5.10	5.90	7.47	9.05	9.84	10.63	11.41	12.20	13.77	14.25	15.35	16.14
22	2.206	26	2.607	1.182	3.77	5.67	7.24	8.03	8.82	10.39	11.97	12.75	13.54	14.33	15.12	16.69	17.16	18.26	19.05
33	3.308	39	3.910	1.182			5.35	6.13	6.92	8.50	10.08	10.86	11.65	12.44	13.23	14.80	15.27	16.37	17.16
27	2.707	32	3.208	1.185		4.80	6.37	7.16	7.95	9.53	11.10	11.89	12.68	13.46	14.25	15.82	16.30	17.40	18.19
32	3.208	38	3.810	1.188			5.50	6.29	7.08	8.66	10.23	11.02	11.81	12.59	13.38	14.96	15.43	16.53	17.32
37	3.709	44	4.411	1.189			4.63	5.42	6.21	7.79	9.37	10.15	10.94	11.73	12.52	14.09	14.56	15.66	16.45
42	4.211	50	5.013	1.190					5.34	6.92	8.50	9.28	10.07	10.86	11.65	13.22	13.69	14.80	15.59
26	2.607	31	3.108	1.192		4.96	6.53	7.32	8.11	9.68	11.26	12.04	12.83	13.62	14.41	15.98	16.45	17.55	18.34
31	3.108	37	3.709	1.194		4.08	5.66	6.45	7.24	8.82	10.39	11.18	11.97	12.75	13.54	15.11	15.59	16.69	17.48
25	2.506	30	3.008	1.200		5.11	6.69	7.48	8.27	9.84	11.42	12.20	12.99	13.78	14.57	16.14	16.61	17.71	18.50
30	3.008	36	3.609	1.200		4.24	5.82	6.61	7.40	8.97	10.55	11.33	12.12	12.91	13.70	15.27	15.75	16.85	17.64
35	3.509	42	4.211	1.200			4.95	5.74	6.53	8.10	9.68	10.47	11.26	12.04	12.83	14.40	14.88	15.98	16.77
40	4.010	48	4.812	1.200					5.66	7.24	8.81	9.60	10.39	11.17	11.96	13.54	14.01	15.11	15.90
44	4.411	53	5.314	1.205						6.52	8.10	8.89	9.68	10.46	11.25	12.82	13.30	14.40	15.19
29	2.907	35	3.509	1.207		4.40	5.98	6.76	7.55	9.13	10.71	11.49	12.28	13.07	13.86	15.43	15.90	17.00	17.79
24	2.406	29	2.907	1.208	3.38	5.27	6.85	7.63	8.42	10.00	11.57	12.36	13.15	13.93	14.73	16.30	16.77	17.87	18.66
53	5.314	64	6.416	1.208							6.51	7.30	8.09	8.88	9.67	11.24	11.72	12.82	13.61
38	3.810	46	4.612	1.211				5.18	5.97	7.55	9.13	9.91	10.70	11.49	12.28	13.85	14.32	15.43	16.22
33	3.308	40	4.010	1.212			5.27	6.05	6.84	8.42	10.00	10.78	11.57	12.36	13.15	14.72	15.19	16.29	17.08
28	2.807	34	3.409	1.214		4.56	6.14	6.92	7.71	9.29	10.86	11.65	12.44	13.22	14.01	15.59	16.06	17.16	17.95
46	4.612	56	5.614	1.217						6.12	7.70	8.49	9.28	10.07	10.86	12.43	12.90	14.00	14.80
32	3.208	39	3.910	1.219			5.42	6.21	7.00	8.58	10.15	10.94	11.73	12.51	13.30	14.88	15.35	16.45	17.24
27	2.707	33	3.308	1.222		4.72	6.29	7.08	7.87	9.45	11.02	11.81	12.60	13.38	14.17	15.74	16.22	17.32	18.11
36	3.609	44	4.411	1.222			4.71	5.50	6.29	7.87	9.44	10.23	11.02	11.80	12.59	14.17	14.64	15.74	16.53
31	3.108	38	3.810	1.226		4.00	5.58	6.37	7.16	8.73	10.31	11.10	11.89	12.67	13.46	15.03	15.51	16.61	17.40
22	2.206	27	2.707	1.227	3.69	5.59	7.16	7.95	8.74	10.31	11.89	12.67	13.46	14.25	15.04	16.61	17.08	18.18	18.97
26	2.607	32	3.208	1.231		4.87	6.45	7.24	8.03	9.60	11.18	11.96	12.75	13.54	14.33	15.90	16.38	17.48	18.27
39	3.910	48	4.812	1.231				4.94	5.73	7.31	8.89	9.67	10.47	11.25	12.04	13.61	14.09	15.19	15.98
30	3.008	37	3.709	1.233		4.16	5.74	6.53	7.32	8.89	10.47	11.25	12.04	12.83	13.62	15.19	15.67	16.77	17.56
34	3.409	42	4.211	1.235			5.02	5.81	6.60	8.18	9.76	10.54	11.33	12.12	12.91	14.48	14.95	16.06	16.85
25	2.506	31	3.108	1.240		5.03	6.61	7.39	8.19	9.76	11.34	12.12	12.91	13.70	14.49	16.06	16.53	17.63	18.42
29	2.907	36	3.609	1.241		4.32	5.90	6.68	7.47	9.05	10.63	11.41	12.20	12.99	13.78	15.35	15.82	16.92	17.71
37	3.709	46	4.612	1.243				5.26	6.05	7.63	9.20	9.99	10.78	11.57	12.36	13.93	14.40	15.50	16.29
24	2.406	30	3.008	1.250	3.29	5.19	6.77	7.55	8.34	9.92	11.49	12.28	13.07	13.85	14.64	16.22	16.69	17.79	18.58
28	2.807	35	3.509	1.250		4.48	6.05	6.84	7.63	9.21	10.78	11.57	12.36	13.14	13.94	15.51	15.98	17.08	17.87
32	3.208	40	4.010	1.250			5.34	6.13	6.92	8.50	10.07	10.86	11.65	12.43	13.22	14.80	15.27	16.37	17.16
40	4.010	50	5.013	1.250					5.49	7.07	8.65	9.44	10.23	11.01	11.80	13.37	13.85	14.95	15.74
64	6.416	80	8.020	1.250												9.10	9.57	10.68	11.47
72	7.218	90	9.023	1.250														9.25	10.04
Length Factor*					0.70	0.80	0.80	0.80	0.90	0.90	0.90	0.90	0.90	1.00	1.00	1.00	1.00	1.00	1.00

Note: 25, 27, 29, 31, 33, 35, 37, 39, 42, 46, 50 and 53 groove sprockets are only available as stock products in 20 and 30mm widths.

* This length correction factor must be used to determine the proper belt width.

Center distance is greater than eight times the small sprocket and the large sprocket is not flanged. See Engineering Section I-7, Use of Flanged Sprockets, on page 113.

8mm Pitch PowerGrip® GT®2 Belts — Drive Selection Table

Center Distance, Inches																			Speed Ratio	Sprocket Combinations	
1200-8MGT P.L. 47.244 150 teeth	1224-8MGT P.L. 48.189 153 teeth	1280-8MGT P.L. 50.394 160 teeth	1440-8MGT P.L. 56.693 180 teeth	1512-8MGT P.L. 59.528 189 teeth	1584-8MGT P.L. 62.362 198 teeth	1600-8MGT P.L. 62.992 200 teeth	1760-8MGT P.L. 69.291 220 teeth	1800-8MGT P.L. 70.866 225 teeth	2000-8MGT P.L. 78.740 250 teeth	2200-8MGT P.L. 86.614 275 teeth	2400-8MGT P.L. 94.488 300 teeth	2600-8MGT P.L. 102.362 325 teeth	2800-8MGT P.L. 110.236 350 teeth	3048-8MGT P.L. 120.000 381 teeth	3288-8MGT P.L. 129.134 410 teeth	3600-8MGT P.L. 141.732 450 teeth	4400-8MGT P.L. 173.228 550 teeth		DriveR No. of Grooves	DriveN No. of Grooves
17.32	17.79	18.89	22.04	23.46	24.88	25.19	28.34	29.13	33.07	37.00	40.94	44.88	48.82	53.70	58.26	64.57	80.32	1.105	38	42
18.97	19.45	20.55	23.70	25.12	26.53	26.85	30.00	30.79	34.72	38.66	42.60	46.53	50.47	55.35	59.92	66.22	81.97	1.107	28	31
19.13	19.61	20.71	23.86	25.28	26.69	27.01	30.16	30.95	34.88	38.82	42.76	46.69	50.63	55.51	60.08	66.38	82.13	1.111	27	30
17.63	18.11	19.21	22.36	23.78	25.20	25.51	28.66	29.45	33.39	37.32	41.26	45.20	49.14	54.02	58.58	64.88	80.63	1.111	36	40
11.65	12.12	13.22	16.37	17.79	19.21	19.52	22.67	23.46	27.40	31.33	35.27	39.21	43.15	48.03	52.60	58.90	74.65	1.111	72	80
17.79	18.27	19.37	22.52	23.94	25.35	25.67	28.82	29.61	33.54	37.48	41.42	45.35	49.29	54.17	58.74	65.04	80.79	1.114	35	39
19.29	19.76	20.86	24.01	25.43	26.85	27.16	30.31	31.10	35.04	38.97	42.91	46.85	50.79	55.67	60.23	66.53	82.28	1.115	26	29
17.95	18.42	19.52	22.67	24.09	25.51	25.82	28.97	29.76	33.70	37.63	41.57	45.51	49.45	54.33	58.89	65.19	80.94	1.118	34	38
19.45	19.92	21.02	24.17	25.59	27.01	27.32	30.47	31.26	35.20	39.13	43.07	47.01	50.95	55.83	60.39	66.69	82.44	1.120	25	28
15.27	15.75	16.85	20.00	21.42	22.83	23.15	26.30	27.09	31.02	34.96	38.90	42.83	46.77	51.65	56.22	62.52	78.27	1.120	50	56
18.11	18.58	19.68	22.83	24.25	25.67	25.98	29.13	29.92	33.86	37.79	41.73	45.67	49.61	54.49	59.05	65.35	81.10	1.121	33	37
19.60	20.08	21.18	24.33	25.75	27.16	27.48	30.63	31.42	35.35	39.29	43.23	47.16	51.10	55.98	60.55	66.85	82.60	1.125	24	27
18.26	18.74	19.84	22.99	24.41	25.83	26.14	29.29	30.08	34.02	37.95	41.89	45.83	49.77	54.65	59.21	65.51	81.26	1.125	32	36
12.91	13.38	14.48	17.63	19.05	20.47	20.78	23.93	24.72	28.66	32.59	36.53	40.47	44.41	49.29	53.86	60.16	75.91	1.125	64	72
10.22	10.70	11.80	14.95	16.37	17.79	18.10	21.25	22.04	25.98	29.92	33.86	37.79	41.73	46.61	51.18	57.48	73.23	1.125	80	90
17.08	17.56	18.66	21.81	23.23	24.64	24.96	28.11	28.90	32.83	36.77	40.71	44.64	48.58	53.46	58.03	64.33	80.08	1.128	39	44
18.42	18.90	20.00	23.15	24.57	25.98	26.30	29.45	30.24	34.17	38.11	42.05	45.98	49.92	54.80	59.37	65.67	81.42	1.129	31	35
18.58	19.05	20.15	23.30	24.72	26.14	26.45	29.60	30.39	34.33	38.26	42.20	46.14	50.08	54.96	59.52	65.82	81.57	1.133	30	34
17.40	17.87	18.97	22.12	23.54	24.96	25.27	28.42	29.21	33.15	37.08	41.02	44.96	48.90	53.78	58.34	64.64	80.39	1.135	37	42
19.92	20.39	21.49	24.64	26.06	27.48	27.79	30.94	31.73	35.67	39.60	43.54	47.48	51.42	56.30	60.86	67.16	82.91	1.136	22	25
16.22	16.69	17.79	20.94	22.36	23.78	24.09	27.24	28.03	31.97	35.90	39.84	43.78	47.72	52.60	57.16	63.46	79.21	1.136	44	50
18.74	19.21	20.31	23.46	24.88	26.30	26.61	29.76	30.55	34.49	38.42	42.36	46.30	50.24	55.12	59.68	65.98	81.73	1.138	29	33
18.89	19.37	20.47	23.62	25.04	26.46	26.77	29.92	30.71	34.65	38.58	42.52	46.46	50.40	55.28	59.84	66.14	81.89	1.143	28	32
17.71	18.19	19.29	22.44	23.86	25.27	25.59	28.74	29.53	33.46	37.40	41.34	45.27	49.21	54.09	58.66	64.96	80.71	1.143	35	40
16.53	17.01	18.11	21.26	22.68	24.09	24.41	27.56	28.35	32.28	36.22	40.16	44.09	48.03	52.91	57.48	63.78	79.53	1.143	42	48
14.17	14.64	15.74	18.89	20.31	21.73	22.04	25.19	25.98	29.92	33.85	37.79	41.73	45.67	50.55	55.12	61.42	77.17	1.143	56	64
17.87	18.34	19.45	22.60	24.02	25.43	25.75	28.90	29.69	33.62	37.56	41.50	45.43	49.37	54.25	58.82	65.12	80.87	1.147	34	39
19.05	19.53	20.63	23.78	25.20	26.61	26.93	30.08	30.87	34.80	38.74	42.68	46.61	50.55	55.43	60.00	66.30	82.05	1.148	27	31
16.85	17.32	18.42	21.57	22.99	24.41	24.72	27.87	28.66	32.60	36.53	40.47	44.41	48.35	53.23	57.79	64.09	79.84	1.150	40	46
18.03	18.50	19.60	22.75	24.17	25.59	25.90	29.05	29.84	33.78	37.71	41.65	45.59	49.53	54.41	58.97	65.27	81.02	1.152	33	38
15.82	16.30	17.40	20.55	21.97	23.38	23.70	26.85	27.64	31.57	35.51	39.45	43.38	47.32	52.20	56.77	63.07	78.82	1.152	46	53
19.21	19.68	20.78	23.93	25.35	26.77	27.08	30.23	31.02	34.96	38.89	42.83	46.77	50.71	55.59	60.15	66.45	82.20	1.154	26	30
18.19	18.66	19.76	22.91	24.33	25.75	26.06	29.21	30.00	33.94	37.87	41.81	45.75	49.69	54.57	59.13	65.43	81.18	1.156	32	37
17.16	17.64	18.74	21.89	23.31	24.72	25.04	28.19	28.98	32.91	36.85	40.79	44.72	48.66	53.54	58.11	64.41	80.16	1.158	38	44
19.37	19.84	20.94	24.09	25.51	26.93	27.24	30.39	31.18	35.12	39.05	42.99	46.93	50.87	55.75	60.31	66.61	82.36	1.160	25	29
18.34	18.82	19.92	23.07	24.49	25.90	26.22	29.37	30.16	34.09	38.03	41.97	45.90	49.84	54.72	59.29	65.59	81.34	1.161	31	36
19.52	20.00	21.10	24.25	25.67	27.08	27.40	30.55	31.34	35.28	39.21	43.15	47.09	51.03	55.91	60.47	66.77	82.52	1.167	24	28
18.50	18.97	20.07	23.23	24.65	26.06	26.38	29.53	30.32	34.25	38.19	42.13	46.06	50.00	54.88	59.45	65.75	81.50	1.167	30	35
17.48	17.95	19.05	22.20	23.62	25.04	25.35	28.50	29.29	33.23	37.16	41.10	45.04	48.98	53.86	58.42	64.72	80.47	1.167	36	42
15.43	15.90	17.00	20.15	21.57	22.99	23.30	26.45	27.24	31.18	35.11	39.05	42.99	46.93	51.81	56.38	62.68	78.43	1.167	48	56
18.66	19.13	20.23	23.38	24.80	26.22	26.53	29.68	30.47	34.41	38.34	42.28	46.22	50.16	55.04	59.60	65.90	81.65	1.172	29	34
17.79	18.27	19.37	22.52	23.94	25.35	25.67	28.82	29.61	33.54	37.48	41.42	45.35	49.29	54.17	58.74	65.04	80.79	1.176	34	40
18.82	19.29	20.39	23.54	24.96	26.38	26.69	29.84	30.63	34.57	38.50	42.44	46.38	50.32	55.20	59.76	66.06	81.81	1.179	28	33
16.92	17.40	18.50	21.65	23.07	24.48	24.80	27.95	28.74	32.67	36.61	40.55	44.49	48.43	53.31	57.87	64.17	79.92	1.179	39	46
19.84	20.31	21.41	24.56	25.98	27.40	27.71	30.86	31.65	35.59	39.52	43.46	47.40	51.34	56.22	60.78	67.08	82.83	1.182	22	26
17.95	18.42	19.52	22.67	24.09	25.51	25.82	28.97	29.76	33.70	37.63	41.57	45.51	49.45	54.33	58.90	65.20	80.95	1.182	33	39
18.97	19.45	20.55	23.70	25.12	26.53	26.85	30.00	30.79	34.72	38.66	42.60	46.53	50.47	55.35	59.92	66.22	81.97	1.185	27	32
18.11	18.58	19.68	22.83	24.25	25.67	25.98	29.13	29.92	33.86	37.79	41.73	45.67	49.61	54.49	59.05	65.35	81.10	1.188	32	38
17.24	17.71	18.81	21.96	23.38	24.80	25.12	28.27	29.06	32.99	36.93	40.87	44.80	48.74	53.62	58.19	64.49	80.24	1.189	37	44
16.37	16.85	17.95	21.10	22.52	23.93	24.25	27.40	28.19	32.12	36.06	40.00	43.93	47.87	52.75	57.32	63.62	79.37	1.190	42	50
19.13	19.60	20.70	23.86	25.28	26.69	27.01	30.16	30.95	34.88	38.82	42.76	46.69	50.63	55.51	60.08	66.38	82.13	1.192	26	31
18.26	18.74	19.84	22.99	24.41	25.82	26.14	29.29	30.08	34.01	37.95	41.89	45.82	49.77	54.65	59.21	65.51	81.26	1.194	31	37
19.29	19.76	20.86	24.01	25.43	26.85	27.16	30.31	31.10	35.04	38.97	42.91	46.85	50.79	55.67	60.23	66.53	82.28	1.200	25	30
18.42	18.90	20.00	23.15	24.57	25.98	26.30	29.45	30.24	34.17	38.11	42.05	45.98	49.92	54.80	59.37	65.67	81.42	1.200	30	36
17.55	18.03	19.13	22.28	23.70	25.11	25.43	28.58	29.37	33.30	37.24	41.18	45.12	49.06	53.94	58.50	64.80	80.55	1.200	35	42
16.69	17.16	18.26	21.41	22.83	24.25	24.56	27.71	28.50	32.44	36.37	40.31	44.25	48.19	53.07	57.63	63.93	79.69	1.200	40	48
15.98	16.45	17.55	20.70	22.12	23.54	23.85	27.00	27.79	31.73	35.66	39.60	43.54	47.48	52.36	56.93	63.23	78.98	1.205	44	53
18.58	19.05	20.15	23.30	24.72	26.14	26.45	29.60	30.39	34.33	38.26	42.20	46.14	50.08	54.96	59.53	65.83	81.58	1.207	29	35
19.45	19.92	21.02	24.17	25.59	27.01	27.32	30.47	31.26	35.20	39.13	43.07	47.01	50.95	55.83	60.39	66.69	82.44	1.208	24	29
14.40	14.87	15.97	19.12	20.54	21.96	22.28	25.43	26.22	30.15	34.09	38.03	41.96	45.90	50.78	55.35	61.65	77.40	1.208	53	64
17.00	17.48	18.58	21.73	23.15	24.56	24.88	28.03	28.82	32.75	36.69	40.63	44.56	48.50	53.38	57.95	64.25	80.00	1.211	38	46
17.87	18.34	19.44	22.59	24.01	25.43	25.75	28.90	29.69	33.62	37.56	41.50	45.43	49.37	54.25	58.82	65.12	80.87	1.212	33	40
18.74	19.21	20.31	23.46	24.88	26.30	26.61	29.76	30.55	34.49	38.42	42.36	46.30	50.24	55.12	59.68	65.98	81.73	1.214	28	34
15.58	16.06	17.16	20.31	21.73	23.14	23.46	26.61	27.40	31.33	35.27	39.21	43.15	47.09	51.97	56.53	62.83	78.58	1.217	46	56
18.03	18.50	19.60	22.75	24.17	25.59	25.90	29.05	29.84	33.78	37.71	41.65	45.59	49.53	54.41	58.97	65.27	81.02	1.219	32	39
18.89	19.37	20.47	23.62	25.04	26.45	26.77	29.92	30.71	34.64	38.58	42.52	46.45	50.39	55.28	59.84	66.14	81.89	1.222	27	33
17.32	17.79	18.89	22.04	23.46	24.88	25.19	28.34	29.13	33.07	37.00	40.94	44.88	48.82	53.70	58.26	64.56	80.32	1.222	36	44
18.18	18.66	19.76	22.91	24.33	25.74	26.06	29.21	30.00	33.93	37.87	41.81	45.75	49.69	54.57	59.13	65.43	81.18	1.226	31	38
19.76	20.23	21.33	24.49	25.91	27.32	27.64	30.79	31.58	35.51	39.45	43.39	47.32	51.26	56.14	60.71	67.01	82.76	1.227	22	27
19.05	19.53	20.63	23.78	25.20	26.61	26.93	30.08	30.87	34.80	38.74	42.68	46.61	50.55	55.43	60.00	66.30	82.05	1.231	26	32
16.76	17.24	18.34	21.49	22.91	24.33	24.64	27.79	28.58	32.52	36.45	40.39	44.33	48.27	53.15	57.71	64.01	79.76	1.231	39	48
18.34	18.82	19.92	23.07	24.49	25.90	26.22	29.37	30.16	34.09	38.03	41.97	45.90	49.84	54.72	59.29	65.59	81.34	1.233	30	37
17.63	18.11	19.21	22.36	23.78	25.19	25.51	28.66	29.45	33.38	37.32	41.26	45.19	49.13	54.01	58.58	64.88	80.63	1.235	34	42
19.21	19.68	20.78	23.93	25.35	26.77	27.08	30.23	31.02	34.96	38.89	42.83	46.77	50.71	55.59	60.16	66.46	82.21	1.240	25	31
18.50	18.97	20.07	23.22	24.64	26.06	26.38	29.53	30.32	34.25	38.19	42.13	46.06	50.00	54.88	59.45	65.75	81.50	1.241	29	36
17.08	17.55	18.65	21.81	23.23	24.64	24.96	28.11	28.90	32.83	36.77	40.71	44.64	48.58	53.46	58.03	64.33	80.08	1.243	37	46
19.37	19.84	20.94	24.09	25.51	26.93	27.24	30.39	31.18	35.12	39.05	42.99	46.93	50.87	55.75	60.31	66.61	82.36	1.250	24	30
18.66	19.13	20.23	23.38	24.80	26.22	26.53	29.68	30.47	34.41	38.34	42.28	46.22	50.16	55.04	59.60	65.90	81.65	1.250	28	35
17.95	18.42	19.52	22.67	24.09	25.51	25.82	28.97	29.76	33.70	37.63	41.57	45.51	49.45	54.33	58.89	65.19	80.95	1.250	32	40
16.53	17.00	18.10	21.25	22.67	24.09	24.40	27.55	28.34	32.28	36.21	40.16	44.09	48.03	52.91	57.48	63.78	79.53	1.250	40	50
12.26	12.73	13.83	16.99	18.41	19.83	20.14	23.29	24.08	28.02	31.96	35.90	39.83	43.77	48.66	53.22	59.52	75.27	1.250	64	80
10.83	11.30	12.41	15.56	16.99	18.40	18.72	21.87	22.66	26.60	30.54	34.48	38.41	42.35	47.24	51.80	58.10	73.85	1.250	72	90
1.00	1.00	1.10	1.10	1.10	1.10	1.10	1.10	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	Length Factor*		

Note: 25, 27, 29, 31, 33, 35, 37, 39, 42, 46, 50 and 53 groove sprockets are only available as stock products in 20 and 30mm widths.

* This length correction factor must be used to determine the proper belt width.

Center distance is greater than eight times the small sprocket and the large sprocket is not flanged. See Engineering Section I-7, Use of Flanged Sprockets, on page 113.

8mm Pitch PowerGrip® GT®2 Belts — Drive Selection Table

Sprocket Combinations					Center Distance, Inches														
DriveR		DriveN			384-8MGT P.L. 15.118 48 teeth	480-8MGT P.L. 18.898 60 teeth	560-8MGT P.L. 22.047 70 teeth	600-8MGT P.L. 23.622 75 teeth	640-8MGT P.L. 25.197 80 teeth	720-8MGT P.L. 28.346 90 teeth	800-8MGT P.L. 31.496 100 teeth	840-8MGT P.L. 33.071 105 teeth	880-8MGT P.L. 34.646 110 teeth	920-8MGT P.L. 36.220 115 teeth	960-8MGT P.L. 37.795 120 teeth	1040-8MGT P.L. 40.945 130 teeth	1064-8MGT P.L. 41.890 133 teeth	1120-8MGT P.L. 44.094 140 teeth	1160-8MGT P.L. 45.669 145 teeth
No. of Grooves	Pitch Diameter (Inches)	No. of Grooves	Pitch Diameter (Inches)	Speed Ratio															
35	3.509	44	4.411	1.257			4.78	5.57	6.36	7.94	9.52	10.30	11.10	11.88	12.67	14.24	14.72	15.82	16.61
31	3.108	39	3.910	1.258			5.50	6.29	7.08	8.65	10.23	11.02	11.81	12.59	13.38	14.95	15.43	16.53	17.32
27	2.707	34	3.409	1.259		4.63	6.21	7.00	7.79	9.36	10.94	11.73	12.52	13.30	14.09	15.66	16.14	17.24	18.03
42	4.211	53	5.314	1.262						6.67	8.25	9.04	9.83	10.61	11.41	12.98	13.45	14.55	15.34
38	3.810	48	4.812	1.263				5.01	5.81	7.39	8.96	9.75	10.54	11.33	12.12	13.69	14.16	15.27	16.06
30	3.008	38	3.810	1.267		4.08	5.66	6.44	7.23	8.81	10.39	11.17	11.96	12.75	13.54	15.11	15.58	16.69	17.48
26	2.607	33	3.308	1.269		4.79	6.37	7.16	7.95	9.52	11.10	11.88	12.67	13.46	14.25	15.82	16.30	17.40	18.19
22	2.206	28	2.807	1.273	3.61	5.50	7.08	7.87	8.66	10.23	11.81	12.59	13.38	14.17	14.96	16.53	17.01	18.11	18.90
33	3.308	42	4.211	1.273			5.10	5.89	6.68	8.26	9.83	10.62	11.41	12.20	12.99	14.56	15.03	16.13	16.92
44	4.411	56	5.614	1.273						6.27	7.85	8.64	9.43	10.22	11.01	12.58	13.06	14.16	14.95
29	2.907	37	3.709	1.276		4.23	5.81	6.60	7.39	8.97	10.55	11.33	12.12	12.91	13.70	15.27	15.74	16.84	17.63
36	3.609	46	4.612	1.278				5.33	6.12	7.70	9.28	10.07	10.86	11.64	12.43	14.00	14.48	15.58	16.37
25	2.506	32	3.208	1.280		4.95	6.53	7.31	8.10	9.68	11.26	12.04	12.83	13.62	14.41	15.98	16.45	17.55	18.34
50	5.013	64	6.416	1.280							6.74	7.53	8.32	9.11	9.90	11.47	11.95	13.05	13.84
39	3.910	50	5.013	1.282					5.56	7.15	8.72	9.51	10.30	11.09	11.88	13.45	13.93	15.03	15.82
28	2.807	36	3.609	1.286		4.39	5.97	6.76	7.55	9.13	10.70	11.49	12.28	13.06	13.86	15.43	15.90	17.00	17.79
56	5.614	72	7.218	1.286									7.20	7.99	8.79	10.36	10.84	11.94	12.73
31	3.108	40	4.010	1.290			5.42	6.20	6.99	8.57	10.15	10.94	11.73	12.51	13.30	14.87	15.35	16.45	17.24
24	2.406	31	3.108	1.292		5.11	6.69	7.47	8.26	9.84	11.41	12.20	12.99	13.77	14.57	16.14	16.61	17.71	18.50
34	3.409	44	4.411	1.294			4.86	5.65	6.44	8.02	9.60	10.38	11.17	11.96	12.75	14.32	14.79	15.90	16.69
27	2.707	35	3.509	1.296		4.55	6.13	6.92	7.71	9.28	10.86	11.65	12.44	13.22	14.01	15.58	16.06	17.16	17.95
37	3.709	48	4.812	1.297				5.09	5.88	7.46	9.04	9.83	10.62	11.40	12.20	13.77	14.24	15.34	16.13
30	3.008	39	3.910	1.300		3.99	5.57	6.36	7.15	8.73	10.31	11.09	11.88	12.67	13.46	15.03	15.51	16.61	17.40
26	2.607	34	3.409	1.308		4.71	6.29	7.07	7.86	9.44	11.02	11.80	12.59	13.38	14.17	15.74	16.22	17.32	18.11
29	2.907	38	3.810	1.310		4.15	5.73	6.52	7.31	8.89	10.46	11.25	12.04	12.83	13.62	15.19	15.66	16.76	17.55
32	3.208	42	4.211	1.313			5.17	5.96	6.75	8.33	9.91	10.70	11.49	12.27	13.06	14.63	15.11	16.21	17.00
35	3.509	46	4.612	1.314			4.61	5.40	6.20	7.78	9.36	10.14	10.93	11.72	12.51	14.08	14.56	15.66	16.45
38	3.810	50	5.013	1.316					5.64	7.22	8.80	9.59	10.38	11.16	11.96	13.53	14.00	15.10	15.89
22	2.206	29	2.907	1.318	3.53	5.42	7.00	7.79	8.58	10.15	11.73	12.51	13.30	14.09	14.88	16.45	16.93	18.03	18.82
25	2.506	33	3.308	1.320		4.87	6.45	7.23	8.02	9.60	11.18	11.96	12.75	13.54	14.33	15.90	16.37	17.47	18.26
28	2.807	37	3.709	1.321		4.31	5.89	6.68	7.47	9.05	10.62	11.41	12.20	12.98	13.77	15.35	15.82	16.92	17.71
40	4.010	53	5.314	1.325					5.24	6.82	8.40	9.19	9.98	10.77	11.56	13.13	13.61	14.71	15.50
24	2.406	32	3.208	1.333		5.02	6.60	7.39	8.18	9.76	11.33	12.12	12.91	13.69	14.49	16.06	16.53	17.63	18.42
27	2.707	36	3.609	1.333		4.47	6.05	6.83	7.63	9.20	10.78	11.57	12.36	13.14	13.93	15.50	15.98	17.08	17.87
30	3.008	40	4.010	1.333			5.49	6.28	7.07	8.65	10.23	11.01	11.80	12.59	13.38	14.95	15.42	16.53	17.32
33	3.308	44	4.411	1.333			4.93	5.72	6.51	8.09	9.67	10.46	11.25	12.03	12.83	14.40	14.87	15.97	16.76
36	3.609	48	4.812	1.333				5.16	5.96	7.54	9.12	9.90	10.69	11.48	12.27	13.84	14.32	15.42	16.21
42	4.211	56	5.614	1.333						6.42	8.00	8.79	9.58	10.37	11.16	12.73	13.21	14.31	15.10
48	4.812	64	6.416	1.333							6.88	7.67	8.47	9.26	10.05	11.62	12.10	13.20	13.99
29	2.907	39	3.910	1.345		4.06	5.65	6.44	7.23	8.81	10.38	11.17	11.96	12.75	13.54	15.11	15.58	16.68	17.47
26	2.607	35	3.509	1.346		4.62	6.21	6.99	7.78	9.36	10.94	11.72	12.51	13.30	14.09	15.66	16.14	17.24	18.03
37	3.709	50	5.013	1.351				4.92	5.71	7.30	8.88	9.66	10.45	11.24	12.03	13.60	14.08	15.18	15.97
34	3.409	46	4.612	1.353			4.69	5.48	6.27	7.85	9.43	10.22	11.01	11.79	12.59	14.16	14.63	15.73	16.52
31	3.108	42	4.211	1.355			5.25	6.04	6.83	8.41	9.99	10.77	11.56	12.35	13.14	14.71	15.19	16.29	17.08
28	2.807	38	3.810	1.357		4.22	5.81	6.59	7.39	8.96	10.54	11.33	12.12	12.90	13.69	15.26	15.74	16.84	17.63
53	5.314	72	7.218	1.358									7.42	8.21	9.01	10.58	11.06	12.17	12.96
39	3.910	53	5.314	1.359					5.31	6.89	8.48	9.26	10.06	10.84	11.63	13.21	13.68	14.78	15.57
25	2.506	34	3.409	1.360		4.78	6.36	7.15	7.94	9.52	11.10	11.88	12.67	13.46	14.25	15.82	16.29	17.39	18.18
22	2.206	30	3.008	1.364	3.44	5.34	6.92	7.70	8.50	10.07	11.65	12.43	13.22	14.01	14.80	16.37	16.85	17.95	18.74
27	2.707	37	3.709	1.370		4.38	5.96	6.75	7.54	9.12	10.70	11.48	12.28	13.06	13.85	15.42	15.90	17.00	17.79
35	3.509	48	4.812	1.371				5.23	6.03	7.61	9.19	9.98	10.77	11.56	12.35	13.92	14.39	15.50	16.29
24	2.406	33	3.308	1.375		4.94	6.52	7.31	8.10	9.68	11.25	12.04	12.83	13.61	14.41	15.98	16.45	17.55	18.34
32	3.208	44	4.411	1.375			5.00	5.79	6.59	8.17	9.75	10.53	11.33	12.11	12.90	14.47	14.95	16.05	16.84
29	2.907	40	4.010	1.379		3.98	5.57	6.35	7.15	8.72	10.30	11.09	11.88	12.67	13.46	15.03	15.50	16.60	17.39
26	2.607	36	3.609	1.385		4.54	6.12	6.91	7.70	9.28	10.86	11.64	12.43	13.22	14.01	15.58	16.06	17.16	17.95
36	3.609	50	5.013	1.389				4.99	5.79	7.37	8.95	9.74	10.53	11.32	12.11	13.68	14.16	15.26	16.05
46	4.612	64	6.416	1.391							7.03	7.82	8.62	9.41	10.20	11.77	12.25	13.35	14.14
28	2.807	39	3.910	1.393		4.14	5.72	6.51	7.30	8.88	10.46	11.25	12.04	12.82	13.61	15.18	15.66	16.76	17.55
33	3.308	46	4.612	1.394			4.76	5.55	6.35	7.93	9.51	10.29	11.09	11.87	12.66	14.23	14.71	15.81	16.60
38	3.810	53	5.314	1.395					5.38	6.97	8.55	9.34	10.13	10.92	11.71	13.28	13.76	14.86	15.65
25	2.506	35	3.509	1.400		4.70	6.28	7.07	7.86	9.44	11.01	11.80	12.59	13.38	14.17	15.74	16.21	17.31	18.10
30	3.008	42	4.211	1.400			5.32	6.11	6.90	8.48	10.06	10.85	11.64	12.43	13.22	14.79	15.26	16.36	17.15
40	4.010	56	5.614	1.400						6.57	8.15	8.94	9.73	10.52	11.31	12.89	13.36	14.46	15.26
80	8.020	112	11.229	1.400															
64	6.416	90	9.023	1.406												8.24	8.72	9.83	10.63
27	2.707	38	3.810	1.407		4.30	5.88	6.67	7.46	9.04	10.62	11.40	12.19	12.98	13.77	15.34	15.82	16.92	17.71
22	2.206	31	3.108	1.409	3.36	5.26	6.84	7.62	8.41	9.99	11.57	12.35	13.14	13.93	14.72	16.29	16.77	17.87	18.66
34	3.409	48	4.812	1.412				5.31	6.10	7.69	9.27	10.05	10.85	11.63	12.42	14.00	14.47	15.57	16.36
24	2.406	34	3.409	1.417		4.86	6.44	7.23	8.02	9.59	11.17	11.96	12.75	13.53	14.32	15.89	16.37	17.47	18.26
31	3.108	44	4.411	1.419			5.08	5.87	6.66	8.24	9.82	10.61	11.40	12.19	12.98	14.55	15.03	16.13	16.92
26	2.607	37	3.709	1.423		4.46	6.04	6.83	7.62	9.20	10.78	11.56	12.35	13.14	13.93	15.50	15.97	17.08	17.87
28	2.807	40	4.010	1.429		4.05	5.64	6.43	7.22	8.80	10.38	11.16	11.96	12.74	13.53	15.10	15.58	16.68	17.47
35	3.509	50	5.013	1.429				5.06	5.86	7.44	9.03	9.81	10.61	11.39	12.18	13.76	14.23	15.33	16.12
56	5.614	80	8.020	1.429											8.10	9.69	10.17	11.27	12.07
37	3.709	53	5.314	1.432					5.45	7.04	8.63	9.41	10.21	10.99	11.79	13.36	13.84	14.94	15.73
39	3.910	56	5.614	1.436						6.64	8.23	9.01	9.81	10.60	11.39	12.96	13.44	14.54	15.33
32	3.208	46	4.612	1.438			4.83	5.62	6.42	8.00	9.58	10.37	11.16	11.95	12.74	14.31	14.79	15.89	16.68
25	2.506	36	3.609	1.440		4.61	6.20	6.99	7.78	9.36	10.93	11.72	12.51	13.30	14.09	15.66	16.13	17.23	18.02
50	5.013	72	7.218	1.440								6.84	7.64	8.43	9.23	10.81	11.28	12.39	13.18
27	2.707	39	3.910	1.444		4.21	5.80	6.59	7.38	8.96	10.54	11.32	12.11	12.90	13.69	15.26	15.74	16.84	17.63
29	2.907	42	4.211	1.448			5.40	6.19	6.98	8.56	10.14	10.93	11.72	12.50	13.29	14.87	15.34	16.44	17.23
Length Factor*					0.70	0.80	0.80	0.80	0.90	0.90	0.90	0.90	0.90	1.00	1.00	1.00	1.00	1.00	1.00

Note: 25, 27, 29, 31, 33, 35, 37, 39, 42, 46, 50 and 53 groove sprockets are only available as stock products in 20 and 30mm widths.

* This length correction factor must be used to determine the proper belt width.

▭ Center distance is greater than eight times the small sprocket and the large sprocket is not flanged. See Engineering Section I-7, Use of Flanged Sprockets, on page 113.

Center Distance, Inches																			Speed Ratio	Sprocket Combinations	
1200-8MGT P.L. 47.244 150 teeth	1224-8MGT P.L. 48.189 153 teeth	1280-8MGT P.L. 50.394 160 teeth	1440-8MGT P.L. 56.693 180 teeth	1512-8MGT P.L. 59.528 189 teeth	1584-8MGT P.L. 62.362 198 teeth	1600-8MGT P.L. 62.992 200 teeth	1760-8MGT P.L. 69.291 220 teeth	1800-8MGT P.L. 70.866 225 teeth	2000-8MGT P.L. 78.740 250 teeth	2200-8MGT P.L. 86.614 275 teeth	2400-8MGT P.L. 94.488 300 teeth	2600-8MGT P.L. 102.362 325 teeth	2800-8MGT P.L. 110.236 350 teeth	3048-8MGT P.L. 120.000 381 teeth	3288-8MGT P.L. 129.134 410 teeth	3600-8MGT P.L. 141.732 450 teeth	4400-8MGT P.L. 173.228 550 teeth		DriveR No. of Grooves	DriveN No. of Grooves
17.39	17.87	18.97	22.12	23.54	24.96	25.27	28.42	29.21	33.15	37.08	41.02	44.96	48.90	53.78	58.34	64.64	80.39	1.257	35	44
18.10	18.58	19.68	22.83	24.25	25.66	25.98	29.13	29.92	33.86	37.79	41.73	45.67	49.61	54.49	59.05	65.35	81.10	1.258	31	39
18.81	19.29	20.39	23.54	24.96	26.37	26.69	29.84	30.63	34.56	38.50	42.44	46.38	50.32	55.20	59.76	66.06	81.81	1.259	27	34
16.13	16.60	17.71	20.86	22.28	23.69	24.01	27.16	27.95	31.88	35.82	39.76	43.70	47.64	52.52	57.08	63.38	79.13	1.262	42	53
16.84	17.32	18.42	21.57	22.99	24.40	24.72	27.87	28.66	32.59	36.53	40.47	44.41	48.35	53.23	57.79	64.09	79.84	1.263	38	48
18.26	18.74	19.84	22.99	24.41	25.82	26.14	29.29	30.08	34.01	37.95	41.89	45.82	49.76	54.64	59.21	65.51	81.26	1.267	30	38
18.97	19.45	20.55	23.70	25.12	26.53	26.85	30.00	30.79	34.72	38.66	42.60	46.53	50.47	55.35	59.92	66.22	81.97	1.269	26	33
19.68	20.16	21.26	24.41	25.83	27.24	27.56	30.71	31.50	35.43	39.37	43.31	47.24	51.18	56.06	60.63	66.93	82.68	1.273	22	28
17.71	18.18	19.28	22.44	23.86	25.27	25.59	28.74	29.53	33.46	37.40	41.34	45.27	49.21	54.09	58.66	64.96	80.71	1.273	33	42
15.73	16.21	17.31	20.46	21.88	23.30	23.61	26.76	27.55	31.49	35.43	39.37	43.30	47.24	52.12	56.69	62.99	78.74	1.273	44	56
18.42	18.89	19.99	23.15	24.57	25.98	26.30	29.45	30.24	34.17	38.11	42.05	45.98	49.92	54.80	59.37	65.67	81.42	1.276	29	37
17.16	17.63	18.73	21.88	23.30	24.72	25.03	28.18	28.97	32.91	36.84	40.79	44.72	48.66	53.54	58.11	64.41	80.16	1.278	36	46
19.13	19.60	20.70	23.85	25.27	26.69	27.00	30.16	30.95	34.88	38.82	42.76	46.69	50.63	55.51	60.08	66.38	82.13	1.280	25	32
14.63	15.10	16.20	19.36	20.78	22.19	22.51	25.66	26.45	30.39	34.32	38.26	42.20	46.14	51.02	55.58	61.88	77.64	1.280	50	64
16.60	17.08	18.18	21.33	22.75	24.17	24.48	27.63	28.42	32.36	36.29	40.23	44.17	48.11	52.99	57.55	63.85	79.60	1.282	39	50
18.58	19.05	20.15	23.30	24.72	26.14	26.45	29.60	30.39	34.33	38.26	42.20	46.14	50.08	54.96	59.52	65.82	81.57	1.286	28	36
13.52	13.99	15.10	18.25	19.67	21.09	21.40	24.55	25.34	29.28	33.22	37.16	41.09	45.03	49.92	54.48	60.78	76.53	1.286	56	72
18.02	18.50	19.60	22.75	24.17	25.59	25.90	29.05	29.84	33.78	37.71	41.65	45.59	49.53	54.41	58.97	65.27	81.02	1.290	31	40
19.29	19.76	20.86	24.01	25.43	26.85	27.16	30.31	31.10	35.04	38.97	42.91	46.85	50.79	55.67	60.23	66.53	82.28	1.292	24	31
17.47	17.95	19.05	22.20	23.62	25.03	25.35	28.50	29.29	33.22	37.16	41.10	45.04	48.98	53.86	58.42	64.72	80.47	1.294	34	44
18.73	19.21	20.31	23.46	24.88	26.29	26.61	29.76	30.55	34.49	38.42	42.36	46.30	50.24	55.12	59.68	65.98	81.73	1.296	27	35
16.92	17.39	18.49	21.65	23.07	24.48	24.80	27.95	28.74	32.67	36.61	40.55	44.48	48.42	53.30	57.87	64.17	79.92	1.297	37	48
18.18	18.66	19.76	22.91	24.33	25.74	26.06	29.21	30.00	33.93	37.87	41.81	45.74	49.68	54.56	59.13	65.43	81.18	1.300	30	39
18.89	19.37	20.47	23.62	25.04	26.45	26.77	29.92	30.71	34.64	38.58	42.52	46.45	50.39	55.27	59.84	66.14	81.89	1.308	26	34
18.34	18.81	19.91	23.07	24.49	25.90	26.22	29.37	30.16	34.09	38.03	41.97	45.90	49.84	54.72	59.29	65.59	81.34	1.310	29	38
17.79	18.26	19.36	22.51	23.93	25.35	25.66	28.81	29.60	33.54	37.47	41.42	45.35	49.29	54.17	58.74	65.04	80.79	1.313	32	42
17.23	17.71	18.81	21.96	23.38	24.80	25.11	28.26	29.05	32.99	36.92	40.86	44.80	48.74	53.62	58.18	64.48	80.23	1.314	35	46
16.68	17.15	18.26	21.41	22.83	24.24	24.56	27.71	28.50	32.43	36.37	40.31	44.25	48.19	53.07	57.63	63.93	79.68	1.316	38	50
19.60	20.08	21.18	24.33	25.75	27.16	27.48	30.63	31.42	35.35	39.29	43.23	47.16	51.10	55.98	60.55	66.85	82.60	1.318	22	29
19.05	19.52	20.62	23.78	25.20	26.61	26.93	30.08	30.87	34.80	38.74	42.68	46.61	50.55	55.43	60.00	66.30	82.05	1.320	25	33
18.50	18.97	20.07	23.22	24.64	26.06	26.37	29.52	30.31	34.25	38.18	42.12	46.06	50.00	54.88	59.45	65.75	81.50	1.321	28	37
16.28	16.76	17.86	21.01	22.43	23.85	24.16	27.31	28.10	32.04	35.98	39.92	43.85	47.79	52.67	57.24	63.54	79.29	1.325	40	53
19.21	19.68	20.78	23.93	25.35	26.77	27.08	30.23	31.02	34.96	38.89	42.83	46.77	50.71	55.59	60.15	66.45	82.20	1.333	24	32
18.65	19.13	20.23	23.38	24.80	26.22	26.53	29.68	30.47	34.41	38.34	42.28	46.22	50.16	55.04	59.60	65.90	81.65	1.333	27	36
18.10	18.58	19.68	22.83	24.25	25.66	25.98	29.13	29.92	33.85	37.79	41.73	45.67	49.61	54.49	59.05	65.35	81.10	1.333	30	40
17.55	18.02	19.12	22.28	23.70	25.11	25.43	28.58	29.37	33.30	37.24	41.18	45.11	49.05	53.93	58.50	64.80	80.55	1.333	33	44
17.00	17.47	18.57	21.72	23.14	24.56	24.87	28.02	28.81	32.75	36.69	40.63	44.56	48.50	53.38	57.95	64.25	80.00	1.333	36	48
15.89	16.36	17.46	20.62	22.04	23.45	23.77	26.92	27.71	31.65	35.58	39.52	43.46	47.40	52.28	56.84	63.14	78.90	1.333	42	56
14.78	15.26	16.36	19.51	20.93	22.35	22.66	25.81	26.60	30.54	34.48	38.42	42.35	46.29	51.18	55.74	62.04	77.79	1.333	48	64
18.26	18.73	19.83	22.99	24.41	25.82	26.14	29.29	30.08	34.01	37.95	41.89	45.82	49.76	54.64	59.21	65.51	81.26	1.345	29	39
18.81	19.29	20.39	23.54	24.96	26.37	26.69	29.84	30.63	34.56	38.50	42.44	46.37	50.31	55.19	59.76	66.06	81.81	1.346	26	35
16.76	17.23	18.33	21.48	22.91	24.32	24.64	27.79	28.58	32.51	36.45	40.39	44.32	48.27	53.15	57.71	64.01	79.76	1.351	37	50
17.31	17.79	18.89	22.04	23.46	24.87	25.19	28.34	29.13	33.06	37.00	40.94	44.88	48.82	53.70	58.26	64.56	80.31	1.353	34	46
17.86	18.34	19.44	22.59	24.01	25.43	25.74	28.89	29.68	33.62	37.55	41.49	45.43	49.37	54.25	58.81	65.11	80.86	1.355	31	42
18.42	18.89	19.99	23.14	24.56	25.98	26.29	29.44	30.23	34.17	38.10	42.05	45.98	49.92	54.80	59.37	65.67	81.42	1.357	28	38
13.74	14.22	15.32	18.48	19.90	21.32	21.63	24.78	25.57	29.51	33.45	37.39	41.33	45.27	50.15	54.71	61.01	76.77	1.358	53	72
16.36	16.84	17.94	21.09	22.51	23.93	24.24	27.39	28.18	32.12	36.05	39.99	43.93	47.87	52.75	57.32	63.62	79.37	1.359	39	53
18.97	19.44	20.54	23.70	25.12	26.53	26.85	30.00	30.79	34.72	38.66	42.60	46.53	50.47	55.35	59.92	66.22	81.97	1.360	25	34
19.52	20.00	21.10	24.25	25.67	27.08	27.40	30.55	31.34	35.27	39.21	43.15	47.08	51.02	55.90	60.47	66.77	82.52	1.364	22	30
18.57	19.05	20.15	23.30	24.72	26.14	26.45	29.60	30.39	34.33	38.26	42.20	46.14	50.08	54.96	59.52	65.82	81.57	1.370	27	37
17.07	17.55	18.65	21.80	23.22	24.64	24.95	28.10	28.89	32.83	36.76	40.70	44.64	48.58	53.46	58.03	64.33	80.08	1.371	35	48
19.13	19.60	20.70	23.85	25.27	26.69	27.00	30.15	30.94	34.88	38.81	42.75	46.69	50.63	55.51	60.08	66.38	82.13	1.375	24	33
17.63	18.10	19.20	22.35	23.77	25.19	25.50	28.65	29.44	33.38	37.32	41.26	45.19	49.13	54.01	58.58	64.88	80.63	1.375	32	44
18.18	18.65	19.75	22.91	24.33	25.74	26.06	29.21	30.00	33.93	37.87	41.81	45.74	49.68	54.56	59.13	65.43	81.18	1.379	29	40
18.73	19.21	20.31	23.46	24.88	26.29	26.61	29.76	30.55	34.48	38.42	42.36	46.30	50.24	55.12	59.68	65.98	81.73	1.385	26	36
16.83	17.31	18.41	21.56	22.98	24.40	24.71	27.86	28.65	32.59	36.53	40.47	44.40	48.34	53.22	57.79	64.09	79.84	1.389	36	50
14.93	15.41	16.51	19.66	21.08	22.50	22.82	25.97	26.76	30.70	34.63	38.57	42.51	46.45	51.33	55.90	62.20	77.95	1.391	46	64
18.34	18.81	19.91	23.06	24.48	25.90	26.21	29.36	30.15	34.09	38.03	41.97	45.90	49.84	54.72	59.29	65.59	81.34	1.393	28	39
17.39	17.86	18.96	22.12	23.54	24.95	25.27	28.42	29.21	33.14	37.08	41.02	44.95	48.90	53.78	58.34	64.64	80.39	1.394	33	46
16.44	16.91	18.01	21.17	22.59	24.00	24.32	27.47	28.26	32.20	36.13	40.07	44.01	47.95	52.83	57.39	63.69	79.45	1.395	38	53
18.89	19.36	20.46	23.62	25.04	26.45	26.77	29.92	30.71	34.64	38.58	42.52	46.45	50.39	55.27	59.84	66.14	81.89	1.400	25	35
17.94	18.42	19.52	22.67	24.09	25.50	25.82	28.97	29.76	33.69	37.63	41.57	45.51	49.45	54.33	58.89	65.19	80.94	1.400	30	42
16.04	16.52	17.62	20.77	22.19	23.61	23.92	27.07	27.86	31.80	35.74	39.68	43.61	47.55	52.44	57.00	63.30	79.05	1.400	40	56
		9.95	13.13	14.56	15.98	16.30	19.46	20.25	24.20	28.14	32.09	36.03	39.97	44.85	49.42	55.72	71.48	1.400	80	112
11.42	11.90	13.00	16.17	17.59	19.01	19.33	22.48	23.27	27.21	31.15	35.10	39.03	42.97	47.86	52.42	58.72	74.48	1.406	64	90
18.49	18.97	20.07	23.22	24.64	26.06	26.37	29.52	30.31	34.25	38.18	42.12	46.06	50.00	54.88	59.44	65.74	81.49	1.407	27	38
19.44	19.92	21.02	24.17	25.59	27.00	27.32	30.47	31.26	35.19	39.13	43.07	47.00	50.94	55.82	60.39	66.69	82.44	1.409	22	31
17.15	17.62	18.73	21.88	23.30	24.71	25.03	28.18	28.97	32.91	36.84	40.78	44.72	48.66	53.54	58.10	64.40	80.16	1.412	34	48
19.05	19.52	20.62	23.77	25.19	26.61	26.92	30.07	30.86	34.80	38.73	42.67	46.61	50.55	55.43	60.00	66.30	82.05	1.417	24	34
17.70	18.18	19.28	22.43	23.85	25.27	25.58	28.73	29.52	33.46	37.39	41.33	45.27	49.21	54.09	58.66	64.96	80.71	1.419	31	44
18.65	19.13	20.23	23.38	24.80	26.21	26.53	29.68	30.47	34.41	38.34	42.28	46.22	50.16	55.04	59.60	65.90	81.65	1.423	26	37
18.26	18.73	19.83	22.98	24.40	25.82	26.13	29.28	30.07	34.01	37.95	41.89	45.82	49.76	54.64	59.21	65.51	81.26	1.429	28	40
16.91	17.39	18.49	21.64	23.06	24.48	24.79	27.94	28.73	32.67	36.60	40.54	44.48	48.42	53.30	57.87	64.17	79.92	1.429	35	50
12.86	13.33	14.44	17.60	19.02	20.44	20.75	23.91	24.70	28.64	32.57	36.52	40.45	44.40	49.28	53.84	60.14	75.90	1.429	56	80
16.51	16.99	18.09	21.24	22.66	24.08	24.40	27.55	28.34	32.27	36.21	40.15	44.09	48.03	52.91	57.47	63.77	79.52	1.432	37	53
16.12	16.59	17.69	20.85	22.27	23.68	24.00	27.15	27.94	31.88	35.81	39.76	43.69	47.63	52.51	57.08	63.38	79.13	1.436	39	56
17.46	17.94	19.04	22.19	23.61	25.03	25.34	28.49	29.28	33.22	37.16	41.10	45.03	48.97	53.85	58.42	64.72	80.47	1.438	32	46
18.81	19.28	20.38	23.54	24.96	26.37	26.69	29.84	30.63	34.56	38.50	42.44	46.37	50.31	55.19	59.76	66.06	81.81	1.440	25	36
13.97	14.45	15.55	18.71	20.13	21.55	21.86	25.01	25.81	29.74	33.68	37.62	41.56	45.50	50.38	54.95	61.25	77.00	1.440	50	72
18.41	18.89	19.99	23.14	24.56	25.98	26.29	29.44	30.23	34.17	38.10	42.04	45.98	49.92	54.80	59.36	65.67	81.42	1.444	27	39
18.02	18.49	19.59	22.75	24.17	25.58	25.90	29.05	29.84	33.77	37.71	41.65	45.58	49.53	54.41	58.97	65.27	81.02	1.448	29	42
1.00	1.00	1.10	1.10	1.10	1.10	1.10	1.10	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	Length Factor*		

Note: 25, 27, 29, 31, 33, 35, 37, 39, 42, 46, 50 and 53 groove sprockets are only available as stock products in 20 and 30mm widths.

* This length correction factor must be used to determine the proper belt width.

Center distance is greater than eight times the small sprocket and the large sprocket is not flanged. See Engineering Section I-7, Use of Flanged Sprockets, on page 113.

8mm Pitch PowerGrip® GT®2 Belts — Drive Selection Table

Sprocket Combinations					Center Distance, Inches															
DriveR		DriveN			384-8MGT P.L. 15.118 48 teeth	480-8MGT P.L. 18.898 60 teeth	560-8MGT P.L. 22.047 70 teeth	600-8MGT P.L. 23.622 75 teeth	640-8MGT P.L. 25.197 80 teeth	720-8MGT P.L. 28.346 90 teeth	800-8MGT P.L. 31.496 100 teeth	840-8MGT P.L. 33.071 105 teeth	880-8MGT P.L. 34.646 110 teeth	920-8MGT P.L. 36.220 115 teeth	960-8MGT P.L. 37.795 120 teeth	1040-8MGT P.L. 40.945 130 teeth	1064-8MGT P.L. 41.890 133 teeth	1120-8MGT P.L. 44.094 140 teeth	1160-8MGT P.L. 45.669 145 teeth
No. of Grooves	Pitch Diameter (Inches)	No. of Grooves	Pitch Diameter (Inches)	Speed Ratio																
22	2.206	32	3.208	1.455	3.27	5.17	6.75	7.54	8.33	9.91	11.49	12.27	13.06	13.85	14.64	16.21	16.69	17.79	18.58
33	3.308	48	4.812	1.455			4.59	5.38	6.18	7.76	9.34	10.13	10.92	11.71	12.50	14.07	14.55	15.65	16.44
44	4.411	64	6.416	1.455							7.18	7.97	8.76	9.55	10.35	11.92	12.40	13.50	14.30
24	2.406	35	3.509	1.458		4.77	6.36	7.14	7.94	9.51	11.09	11.88	12.67	13.45	14.24	15.81	16.29	17.39	18.18
26	2.607	38	3.810	1.462		4.37	5.95	6.74	7.54	9.12	10.69	11.48	12.27	13.06	13.85	15.42	15.89	16.99	17.78
30	3.008	44	4.411	1.467			5.15	5.94	6.74	8.32	9.90	10.69	11.48	12.26	13.05	14.63	15.10	16.20	16.99
34	3.409	50	5.013	1.471				5.13	5.93	7.52	9.10	9.89	10.68	11.47	12.26	13.83	14.31	15.41	16.20
36	3.609	53	5.314	1.472					5.53	7.12	8.70	9.49	10.28	11.07	11.86	13.43	13.91	15.01	15.80
38	3.810	56	5.614	1.474						6.71	8.30	9.09	9.88	10.67	11.46	13.04	13.51	14.62	15.41
25	2.506	37	3.709	1.480		4.53	6.11	6.90	7.70	9.27	10.85	11.64	12.43	13.22	14.01	15.58	16.05	17.15	17.94
27	2.707	40	4.010	1.481		4.12	5.71	6.50	7.30	8.88	10.45	11.24	12.03	12.82	13.61	15.18	15.66	16.76	17.55
31	3.108	46	4.612	1.484			4.90	5.70	6.49	8.08	9.66	10.44	11.24	12.02	12.81	14.39	14.86	15.96	16.75
22	2.206	33	3.308	1.500		5.09	6.67	7.46	8.25	9.83	11.41	12.19	12.98	13.77	14.56	16.13	16.61	17.71	18.50
24	2.406	36	3.609	1.500		4.69	6.27	7.06	7.85	9.43	11.01	11.80	12.59	13.37	14.16	15.73	16.21	17.31	18.10
26	2.607	39	3.910	1.500		4.28	5.87	6.66	7.45	9.03	10.61	11.40	12.19	12.98	13.77	15.34	15.81	16.91	17.70
28	2.807	42	4.211	1.500			5.47	6.26	7.05	8.63	10.21	11.00	11.79	12.58	13.37	14.94	15.42	16.52	17.31
32	3.208	48	4.812	1.500			4.66	5.45	6.25	7.84	9.42	10.20	11.00	11.78	12.58	14.15	14.62	15.73	16.52
48	4.812	72	7.218	1.500								6.98	7.78	8.58	9.37	10.96	11.43	12.54	13.33
53	5.314	80	8.020	1.509										7.52	8.32	9.90	10.38	11.49	12.29
35	3.509	53	5.314	1.514					5.60	7.19	8.77	9.56	10.36	11.14	11.94	13.51	13.99	15.09	15.88
37	3.709	56	5.614	1.514					5.19	6.79	8.37	9.16	9.96	10.75	11.54	13.11	13.59	14.69	15.48
33	3.308	50	5.013	1.515				5.20	6.00	7.59	9.18	9.96	10.76	11.54	12.34	13.91	14.38	15.49	16.28
29	2.907	44	4.411	1.517			5.22	6.02	6.81	8.39	9.97	10.76	11.55	12.34	13.13	14.70	15.18	16.28	17.07
25	2.506	38	3.810	1.520		4.44	6.03	6.82	7.61	9.19	10.77	11.56	12.35	13.13	13.92	15.50	15.97	17.07	17.86
42	4.211	64	6.416	1.524							7.32	8.11	8.91	9.70	10.50	12.07	12.55	13.65	14.45
30	3.008	46	4.612	1.533			4.98	5.77	6.57	8.15	9.73	10.52	11.31	12.10	12.89	14.46	14.94	16.04	16.83
26	2.607	40	4.010	1.538		4.19	5.79	6.58	7.37	8.95	10.53	11.32	12.11	12.89	13.69	15.26	15.73	16.83	17.62
24	2.406	37	3.709	1.542		4.60	6.19	6.98	7.77	9.35	10.93	11.71	12.51	13.29	14.08	15.65	16.13	17.23	18.02
22	2.206	34	3.409	1.545		5.00	6.59	7.38	8.17	9.75	11.32	12.11	12.90	13.69	14.48	16.05	16.52	17.62	18.42
31	3.108	48	4.812	1.548			4.73	5.52	6.32	7.91	9.49	10.28	11.07	11.86	12.65	14.22	14.70	15.80	16.59
27	2.707	42	4.211	1.556			5.54	6.33	7.13	8.71	10.29	11.08	11.87	12.65	13.45	15.02	15.49	16.59	17.39
36	3.609	56	5.614	1.556					5.26	6.86	8.45	9.24	10.03	10.82	11.61	13.19	13.66	14.77	15.56
72	7.218	112	11.229	1.556															
34	3.409	53	5.314	1.559				4.87	5.67	7.26	8.85	9.64	10.43	11.22	12.01	13.59	14.06	15.16	15.96
25	2.506	39	3.910	1.560		4.35	5.94	6.73	7.53	9.11	10.69	11.47	12.27	13.05	13.84	15.41	15.89	16.99	17.78
32	3.208	50	5.013	1.563				5.28	6.08	7.67	9.25	10.04	10.83	11.62	12.41	13.98	14.46	15.56	16.35
46	4.612	72	7.218	1.565								7.12	7.93	8.72	9.52	11.10	11.58	12.69	13.48
28	2.807	44	4.411	1.571			5.30	6.09	6.88	8.47	10.05	10.84	11.63	12.42	13.21	14.78	15.25	16.36	17.15
24	2.406	38	3.810	1.583		4.51	6.10	6.89	7.69	9.27	10.85	11.63	12.42	13.21	14.00	15.57	16.05	17.15	17.94
29	2.907	46	4.612	1.586			5.05	5.84	6.64	8.23	9.81	10.60	11.39	12.17	12.97	14.54	15.02	16.12	16.91
22	2.206	35	3.509	1.591		4.92	6.50	7.29	8.09	9.66	11.24	12.03	12.82	13.61	14.40	15.97	16.44	17.54	18.33
25	2.506	40	4.010	1.600		4.27	5.86	6.65	7.44	9.03	10.61	11.39	12.18	12.97	13.76	15.33	15.81	16.91	17.70
30	3.008	48	4.812	1.600			4.80	5.60	6.39	7.98	9.57	10.35	11.15	11.93	12.73	14.30	14.78	15.88	16.67
35	3.509	56	5.614	1.600					5.33	6.93	8.52	9.31	10.10	10.89	11.69	13.26	13.74	14.84	15.63
40	4.010	64	6.416	1.600						5.86	7.46	8.26	9.06	9.85	10.64	12.22	12.70	13.80	14.60
50	5.013	80	8.020	1.600										7.73	8.53	10.12	10.60	11.71	12.51
33	3.308	53	5.314	1.606				4.94	5.74	7.33	8.92	9.71	10.51	11.29	12.09	13.66	14.14	15.24	16.03
56	5.614	90	9.023	1.607												8.81	9.29	10.41	11.21
31	3.108	50	5.013	1.613			4.55	5.35	6.15	7.74	9.32	10.11	10.91	11.69	12.49	14.06	14.54	15.64	16.43
26	2.607	42	4.211	1.615		4.01	5.61	6.40	7.20	8.78	10.36	11.15	11.94	12.73	13.52	15.09	15.57	16.67	17.46
24	2.406	39	3.910	1.625		4.43	6.02	6.81	7.60	9.18	10.76	11.55	12.34	13.13	13.92	15.49	15.97	17.07	17.86
27	2.707	44	4.411	1.630			5.37	6.16	6.96	8.54	10.12	10.91	11.70	12.49	13.28	14.86	15.33	16.43	17.22
22	2.206	36	3.609	1.636		4.83	6.42	7.21	8.00	9.58	11.16	11.95	12.74	13.52	14.32	15.89	16.36	17.46	18.25
44	4.411	72	7.218	1.636							6.46	7.27	8.07	8.87	9.66	11.25	11.73	12.83	13.63
39	3.910	64	6.416	1.641						5.93	7.54	8.33	9.13	9.92	10.72	12.30	12.77	13.88	14.67
28	2.807	46	4.612	1.643			5.12	5.91	6.71	8.30	9.88	10.67	11.46	12.25	13.04	14.62	15.09	16.19	16.98
34	3.409	56	5.614	1.647					5.40	7.00	8.59	9.38	10.18	10.97	11.76	13.34	13.81	14.92	15.71
29	2.907	48	4.812	1.655			4.87	5.67	6.47	8.06	9.64	10.43	11.22	12.01	12.80	14.38	14.85	15.95	16.75
32	3.208	53	5.314	1.656				5.01	5.81	7.41	9.00	9.79	10.58	11.37	12.16	13.74	14.21	15.32	16.11
24	2.406	40	4.010	1.667		4.34	5.93	6.72	7.52	9.10	10.68	11.47	12.26	13.05	13.84	15.41	15.89	16.99	17.78
30	3.008	50	5.013	1.667			4.62	5.42	6.22	7.81	9.40	10.19	10.98	11.77	12.56	14.13	14.61	15.71	16.50
48	4.812	80	8.020	1.667									7.06	7.87	8.67	10.27	10.75	11.86	12.65
25	2.506	42	4.211	1.680		4.09	5.69	6.48	7.27	8.86	10.44	11.23	12.02	12.81	13.60	15.17	15.65	16.75	17.54
22	2.206	37	3.709	1.682		4.74	6.33	7.12	7.92	9.50	11.08	11.87	12.66	13.44	14.23	15.81	16.28	17.38	18.17
38	3.810	64	6.416	1.684						6.00	7.61	8.40	9.20	9.99	10.79	12.37	12.85	13.95	14.75
26	2.607	44	4.411	1.692			5.44	6.23	7.03	8.62	10.20	10.99	11.78	12.57	13.36	14.93	15.41	16.51	17.30
33	3.308	56	5.614	1.697					5.47	7.07	8.67	9.46	10.25	11.04	11.84	13.41	13.89	14.99	15.79
53	5.314	90	9.023	1.698												9.02	9.50	10.62	11.42
27	2.707	46	4.612	1.704			5.19	5.99	6.78	8.37	9.96	10.74	11.54	12.32	13.12	14.69	15.17	16.27	17.06
31	3.108	53	5.314	1.710				5.08	5.88	7.48	9.07	9.86	10.65	11.44	12.24	13.81	14.29	15.39	16.18
28	2.807	48	4.812	1.714			4.94	5.74	6.54	8.13	9.71	10.50	11.30	12.08	12.88	14.45	14.93	16.03	16.82
42	4.211	72	7.218	1.714							6.60	7.41	8.21	9.01	9.81	11.39	11.87	12.98	13.78
29	2.907	50	5.013	1.724			4.69	5.49	6.29	7.88	9.47	10.26	11.05	11.84	12.64	14.21	14.69	15.79	16.58
22	2.206	38	3.810	1.727		4.66	6.25	7.04	7.83	9.42	11.00	11.78	12.57	13.36	14.15	15.72	16.20	17.30	18.09
37	3.709	64	6.416	1.730						6.07	7.68	8.47	9.27	10.07	10.86	12.44	12.92	14.03	14.82
46	4.612	80	8.020	1.739									7.20	8.01	8.81	10.41	10.89	12.00	12.80
24	2.406	42	4.211	1.750		4.15	5.76	6.55	7.35	8.93	10.51	11.30	12.09	12.88	13.67	15.25	15.72	16.82	17.61
32	3.208	56	5.614	1.750					5.54	7.14	8.74	9.53	10.33	11.12	11.91	13.49	13.96	15.07	15.86
64	6.416	112	11.229	1.750															
25	2.506	44	4.411	1.760			5.51	6.31	7.10	8.69	10.27	11.06	11.85	12.64	13.43	15.01	15.48	16.59	17.38
30	3.008	53	5.314	1.767				5.14	5.95	7.55	9.14	9.93	10.73	11.52	12.31	13.89	14.36	15.47	16.26
26	2.607	46	4.612	1.769			5.26	6.06	6.86	8.45	10.03	10.82	11.61	12.40	13.19	14.77	15.24	16.34	17.14
Length Factor*					0.70	0.80	0.80	0.80	0.90	0.90	0.90	0.90	0.90	1.00	1.00	1.00	1.00	1.00	1.00

Note: 25, 27, 29, 31, 33, 35, 37, 39, 42, 46, 50 and 53 groove sprockets are only available as stock products in 20 and 30mm widths.

* This length correction factor must be used to determine the proper belt width.

Center distance is greater than eight times the small sprocket and the large sprocket is not flanged. See Engineering Section I-7, Use of Flanged Sprockets, on page 113.

Center Distance, Inches																			Speed Ratio	Sprocket Combinations	
1200-8MGT P.L. 47.244 150 teeth	1224-8MGT P.L. 48.189 153 teeth	1280-8MGT P.L. 50.394 160 teeth	1440-8MGT P.L. 56.693 180 teeth	1512-8MGT P.L. 59.528 189 teeth	1584-8MGT P.L. 62.362 198 teeth	1600-8MGT P.L. 62.992 200 teeth	1760-8MGT P.L. 69.291 220 teeth	1800-8MGT P.L. 70.866 225 teeth	2000-8MGT P.L. 78.740 250 teeth	2200-8MGT P.L. 86.614 275 teeth	2400-8MGT P.L. 94.488 300 teeth	2600-8MGT P.L. 102.362 325 teeth	2800-8MGT P.L. 110.236 350 teeth	3048-8MGT P.L. 120.000 381 teeth	3288-8MGT P.L. 129.134 410 teeth	3600-8MGT P.L. 141.732 450 teeth	4400-8MGT P.L. 173.228 550 teeth		DriveR No. of Grooves	DriveN No. of Grooves
19.36	19.84	20.94	24.09	25.51	26.92	27.24	30.39	31.18	35.11	39.05	42.99	46.93	50.87	55.75	60.31	66.61	82.36	1.455	22	32
17.23	17.70	18.80	21.95	23.38	24.79	25.11	28.26	29.05	32.98	36.92	40.86	44.80	48.74	53.62	58.18	64.48	80.23	1.455	33	48
15.08	15.56	16.66	19.82	21.24	22.65	22.97	26.12	26.91	30.85	34.79	38.73	42.66	46.61	51.49	56.05	62.35	78.11	1.455	44	64
18.97	19.44	20.54	23.69	25.11	26.53	26.84	29.99	30.78	34.72	38.66	42.60	46.53	50.47	55.35	59.92	66.22	81.97	1.458	24	35
18.57	19.05	20.15	23.30	24.72	26.13	26.45	29.60	30.39	34.32	38.26	42.20	46.14	50.08	54.96	59.52	65.82	81.57	1.462	26	38
17.78	18.25	19.36	22.51	23.93	25.34	25.66	28.81	29.60	33.54	37.47	41.41	45.35	49.29	54.17	58.73	65.03	80.79	1.467	30	44
16.99	17.46	18.56	21.72	23.14	24.55	24.87	28.02	28.81	32.75	36.68	40.62	44.56	48.50	53.38	57.94	64.25	80.00	1.471	34	50
16.59	17.07	18.17	21.32	22.74	24.16	24.47	27.62	28.41	32.35	36.29	40.23	44.16	48.10	52.99	57.55	63.85	79.60	1.472	36	53
16.19	16.67	17.77	20.92	22.35	23.76	24.08	27.23	28.02	31.96	35.89	39.83	43.77	47.71	52.59	57.16	63.46	79.21	1.474	38	56
18.73	19.20	20.30	23.46	24.88	26.29	26.61	29.76	30.55	34.48	38.42	42.36	46.29	50.24	55.12	59.68	65.98	81.73	1.480	25	37
18.33	18.81	19.91	23.06	24.48	25.90	26.21	29.36	30.15	34.09	38.02	41.96	45.90	49.84	54.72	59.29	65.59	81.34	1.481	27	40
17.54	18.02	19.12	22.27	23.69	25.11	25.42	28.57	29.36	33.30	37.23	41.17	45.11	49.05	53.93	58.50	64.80	80.55	1.484	31	46
19.28	19.76	20.86	24.01	25.43	26.84	27.16	30.31	31.10	35.03	38.97	42.91	46.85	50.79	55.67	60.23	66.53	82.28	1.500	22	33
18.89	19.36	20.46	23.61	25.03	26.45	26.76	29.91	30.70	34.64	38.58	42.52	46.45	50.39	55.27	59.84	66.14	81.89	1.500	24	36
18.49	18.97	20.07	23.22	24.64	26.05	26.37	29.52	30.31	34.25	38.18	42.12	46.06	50.00	54.88	59.44	65.74	81.49	1.500	26	39
18.09	18.57	19.67	22.82	24.24	25.66	25.97	29.12	29.91	33.85	37.79	41.73	45.66	49.60	54.48	59.05	65.35	81.10	1.500	28	42
17.30	17.78	18.88	22.03	23.45	24.87	25.18	28.33	29.13	33.06	37.00	40.94	44.87	48.81	53.70	58.26	64.56	80.31	1.500	32	48
14.12	14.60	15.70	18.86	20.28	21.70	22.01	25.17	25.96	29.90	33.84	37.78	41.71	45.66	50.54	55.10	61.40	77.16	1.500	48	72
13.08	13.55	14.66	17.82	19.24	20.66	20.98	24.13	24.93	28.87	32.80	36.75	40.69	44.63	49.51	54.08	60.38	76.13	1.509	53	80
16.67	17.14	18.24	21.40	22.82	24.23	24.55	27.70	28.49	32.43	36.36	40.31	44.24	48.18	53.06	57.63	63.93	79.68	1.514	35	53
16.27	16.75	17.85	21.00	22.42	23.84	24.15	27.31	28.10	32.03	35.97	39.91	43.85	47.79	52.67	57.23	63.54	79.29	1.514	37	56
17.06	17.54	18.64	21.79	23.21	24.63	24.95	28.10	28.89	32.82	36.76	40.70	44.64	48.58	53.46	58.02	64.32	80.08	1.515	33	50
17.86	18.33	19.43	22.58	24.01	25.42	25.74	28.89	29.68	33.61	37.55	41.49	45.43	49.37	54.25	58.81	65.11	80.86	1.517	29	44
18.65	19.12	20.22	23.38	24.80	26.21	26.53	29.68	30.47	34.40	38.34	42.28	46.21	50.16	55.04	59.60	65.90	81.65	1.520	25	38
15.23	15.71	16.81	19.97	21.39	22.81	23.12	26.28	27.07	31.00	34.94	38.88	42.82	46.76	51.64	56.21	62.51	78.26	1.524	42	64
17.62	18.09	19.19	22.35	23.77	25.18	25.50	28.65	29.44	33.38	37.31	41.25	45.19	49.13	54.01	58.57	64.88	80.63	1.533	30	46
18.41	18.88	19.99	23.14	24.56	25.97	26.29	29.44	30.23	34.17	38.10	42.04	45.98	49.92	54.80	59.36	65.66	81.41	1.538	26	40
18.81	19.28	20.38	23.53	24.95	26.37	26.68	29.84	30.63	34.56	38.50	42.44	46.37	50.31	55.19	59.76	66.06	81.81	1.542	24	37
19.20	19.68	20.78	23.93	25.35	26.76	27.08	30.23	31.02	34.95	38.89	42.83	46.77	50.71	55.59	60.15	66.45	82.20	1.545	22	34
17.38	17.85	18.96	22.11	23.53	24.95	25.26	28.41	29.20	33.14	37.07	41.02	44.95	48.89	53.77	58.34	64.64	80.39	1.548	31	48
18.17	18.65	19.75	22.90	24.32	25.74	26.05	29.20	29.99	33.93	37.86	41.80	45.74	49.68	54.56	59.13	65.43	81.18	1.556	27	42
16.35	16.82	17.92	21.08	22.50	23.92	24.23	27.38	28.17	32.11	36.05	39.99	43.92	47.87	52.75	57.31	63.61	79.36	1.556	36	56
		10.51	13.71	15.14	16.57	16.89	20.06	20.85	24.80	28.75	32.70	36.64	40.58	45.47	50.04	56.34	72.10	1.556	72	112
16.74	17.22	18.32	21.47	22.89	24.31	24.63	27.78	28.57	32.51	36.44	40.38	44.32	48.26	53.14	57.71	64.01	79.76	1.559	34	53
18.57	19.04	20.14	23.30	24.72	26.13	26.45	29.60	30.39	34.32	38.26	42.20	46.14	50.08	54.96	59.52	65.82	81.57	1.560	25	39
17.14	17.62	18.72	21.87	23.29	24.71	25.02	28.17	28.96	32.90	36.84	40.78	44.71	48.65	53.54	58.10	64.40	80.15	1.563	32	50
14.27	14.75	15.85	19.01	20.43	21.85	22.17	25.32	26.11	30.05	33.99	37.93	41.87	45.81	50.69	55.26	61.56	77.31	1.565	46	72
17.93	18.41	19.51	22.66	24.08	25.50	25.81	28.96	29.76	33.69	37.63	41.57	45.50	49.44	54.33	58.89	65.19	80.94	1.571	28	44
18.72	19.20	20.30	23.45	24.87	26.29	26.60	29.75	30.54	34.48	38.42	42.36	46.29	50.23	55.11	59.68	65.98	81.73	1.583	24	38
17.69	18.17	19.27	22.42	23.84	25.26	25.58	28.73	29.52	33.45	37.39	41.33	45.27	49.21	54.09	58.65	64.95	80.71	1.586	29	46
19.12	19.60	20.70	23.85	25.27	26.68	27.00	30.15	30.94	34.88	38.81	42.75	46.69	50.63	55.51	60.07	66.37	82.12	1.591	22	35
18.49	18.96	20.06	23.22	24.64	26.05	26.37	29.52	30.31	34.24	38.18	42.12	46.06	50.00	54.88	59.44	65.74	81.49	1.600	25	40
17.45	17.93	19.03	22.18	23.61	25.02	25.34	28.49	29.28	33.22	37.15	41.09	45.03	48.97	53.85	58.42	64.72	80.47	1.600	30	48
16.42	16.90	18.00	21.15	22.58	23.99	24.31	27.46	28.25	32.19	36.12	40.07	44.00	47.94	52.82	57.39	63.69	79.44	1.600	35	56
15.38	15.86	16.96	20.12	21.54	22.96	23.28	26.43	27.22	31.16	35.10	39.04	42.97	46.92	51.80	56.36	62.66	78.42	1.600	40	64
13.30	13.78	14.88	18.05	19.47	20.89	21.21	24.36	25.15	29.10	33.03	36.98	40.92	44.86	49.74	54.31	60.61	76.36	1.600	50	80
16.82	17.29	18.40	21.55	22.97	24.39	24.70	27.86	28.65	32.58	36.52	40.46	44.40	48.34	53.22	57.78	64.09	79.84	1.606	33	53
12.00	12.48	13.59	16.76	18.19	19.61	19.93	23.09	23.88	27.82	31.76	35.71	39.65	43.59	48.47	53.04	59.34	75.10	1.607	56	90
17.22	17.69	18.79	21.95	23.37	24.78	25.10	28.25	29.04	32.98	36.91	40.86	44.79	48.73	53.61	58.18	64.48	80.23	1.613	31	50
18.25	18.72	19.82	22.98	24.40	25.81	26.13	29.28	30.07	34.01	37.94	41.88	45.82	49.76	54.64	59.20	65.51	81.26	1.615	26	42
18.64	19.12	20.22	23.37	24.79	26.21	26.52	29.67	30.47	34.40	38.34	42.28	46.21	50.15	55.03	59.60	65.90	81.65	1.625	24	39
18.01	18.48	19.59	22.74	24.16	25.58	25.89	29.04	29.83	33.77	37.70	41.65	45.58	49.52	54.40	58.97	65.27	81.02	1.630	27	44
19.04	19.52	20.62	23.77	25.19	26.60	26.92	30.07	30.86	34.80	38.73	42.67	46.61	50.55	55.43	59.99	66.29	82.04	1.636	22	36
14.42	14.90	16.00	19.16	20.58	22.00	22.32	25.47	26.26	30.20	34.14	38.09	42.02	45.97	50.85	55.41	61.72	77.47	1.636	44	72
15.46	15.94	17.04	20.20	21.62	23.04	23.35	26.51	27.30	31.23	35.17	39.11	43.05	46.99	51.87	56.44	62.74	78.49	1.641	39	64
17.77	18.25	19.35	22.50	23.92	25.34	25.65	28.80	29.59	33.53	37.47	41.41	45.34	49.28	54.17	58.73	65.03	80.78	1.643	28	46
16.50	16.97	18.07	21.23	22.65	24.07	24.38	27.54	28.33	32.26	36.20	40.14	44.08	48.02	52.90	57.47	63.77	79.52	1.647	34	56
17.53	18.01	19.11	22.26	23.68	25.10	25.41	28.57	29.36	33.29	37.23	41.17	45.11	49.05	53.93	58.49	64.80	80.55	1.655	29	48
16.89	17.37	18.47	21.63	23.05	24.46	24.78	27.93	28.72	32.66	36.60	40.54	44.47	48.42	53.30	57.86	64.16	79.91	1.656	32	53
18.56	19.04	20.14	23.29	24.71	26.13	26.44	29.60	30.39	34.32	38.26	42.20	46.13	50.07	54.96	59.52	65.82	81.57	1.667	24	40
17.29	17.77	18.87	22.02	23.44	24.86	25.18	28.33	29.12	33.06	36.99	40.93	44.87	48.81	53.69	58.26	64.56	80.31	1.667	30	50
13.45	13.92	15.03	18.20	19.62	21.04	21.36	24.51	25.31	29.25	33.19	37.13	41.07	45.01	49.90	54.46	60.77	76.52	1.667	48	80
18.32	18.80	19.90	23.05	24.47	25.89	26.21	29.36	30.15	34.08	38.02	41.96	45.90	49.84	54.72	59.28	65.58	81.34	1.680	25	42
18.96	19.43	20.54	23.69	25.11	26.52	26.84	29.99	30.78	34.72	38.65	42.59	46.53	50.47	55.35	59.91	66.22	81.97	1.682	22	37
15.53	16.01	17.11	20.27	21.69	23.11	23.43	26.58	27.37	31.31	35.25	39.19	43.13	47.07	51.95	56.52	62.82	78.57	1.684	38	64
18.09	18.56	19.66	22.82	24.24	25.65	25.97	29.12	29.91	33.85	37.78	41.72	45.66	49.60	54.48	59.05	65.35	81.10	1.692	26	44
16.57	17.05	18.15	21.31	22.73	24.15	24.46	27.61	28.40	32.34	36.28	40.22	44.16	48.10	52.98	57.55	63.85	79.60	1.697	33	56
12.22	12.70	13.81	16.98	18.41	19.83	20.15	23.31	24.10	28.05	31.99	35.94	39.88	43.82	48.70	53.27	59.58	75.33	1.698	53	90
17.85	18.32	19.42	22.58	24.00	25.41	25.73	28.88	29.67	33.61	37.54	41.49	45.42	49.36	54.24	58.81	65.11	80.86	1.704	27	46
16.97	17.45	18.55	21.70	23.12	24.54	24.86	28.01	28.80	32.74	36.67	40.62	44.55	48.49	53.37	57.94	64.24	79.99	1.710	31	53
17.61	18.08	19.18	22.34	23.76	25.18	25.49	28.64	29.43	33.37	37.31	41.25	45.18	49.13	54.01	58.57	64.87	80.62	1.714	28	48
14.57	15.04	16.15	19.31	20.73	22.15	22.47	25.62	26.42	30.36	34.30	38.24	42.18	46.12	51.00	55.57	61.87	77.62	1.714	42	72
17.37	17.84	18.95	22.10	23.52	24.94	25.25	28.41	29.20	33.13	37.07	41.01	44.95	48.89	53.77	58.34	64.64	80.39	1.724	29	50
18.88	19.35	20.45	23.61	25.03	26.44	26.76	29.91	30.70	34.64	38.57	42.51	46.45	50.39	55.27	59.83	66.14	81.89	1.727	22	38
15.61	16.09	17.19	20.35	21.77	23.19	23.50	26.66	27.45	31.39	35.33	39.27	43.21	47.15	52.03	56.60	62.90	78.65	1.730	37	64
13.59	14.07	15.18	18.34	19.77	21.19	21.51	24.66	25.46	29.40	33.34	37.28	41.22	45.17	50.05	54.62	60.92	76.67	1.739	46	80
18.40	18.88	19.98	23.13	24.55	25.97	26.28	29.43	30.22	34.16	38.10	42.04	45.97	49.91	54.80	59.36	65.66	81.41	1.750	24	42
16.65	17.12	18.23	21.38	22.80	24.22	24.54	27.69	28.48	32.42	36.36	40.30	44.23	48.18	53.06	57.62	63.92	79.68	1.750	32	56
9.45	9.94	11.07	14.28	15.72	17.15	17.47	20.65	21.44	25.40	29.35	33.30	37.24	41.19	46.08	50.65	56.96	72.72	1.750	64	112
18.16	18.64	19.74	22.89	24.31	25.73	26.04	29.20	29.99	33.92	37.86	41.80	45.74	49.68	54.56	59.12	65.43	81.18	1.760	25	44
17.04	17.52	18.62	21.78	23.20	24.62	24.93	28.09	28.88	32.81	36.75	40.69	44.63	48.57	53.45	58.02	64.32	80.07	1.767	30	53
17.92	18.40	19.50	22.65	24.07	25.49	25.81	28.96	29.75	33.69	37.62	41.56	45.50	49.44	54.32	58.89	65.19	80.94	1.769	26	46
1.00	1.00	1.10	1.10	1.10	1.10	1.10	1.10	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	Length Factor*		

Note: 25, 27, 29, 31, 33, 35, 37, 39, 42, 46, 50 and 53 groove sprockets are only available as stock products in 20 and 30mm widths.

* This length correction factor must be used to determine the proper belt width.

Center distance is greater than eight times the small sprocket and the large sprocket is not flanged. See Engineering Section I-7, Use of Flanged Sprockets, on page 113.

8mm Pitch PowerGrip® GT®2 Belts — Drive Selection Table

Sprocket Combinations					Center Distance, Inches														
DriveR		DriveN			384-8MGT P.L. 15.118 48 teeth	480-8MGT P.L. 18.898 60 teeth	560-8MGT P.L. 22.047 70 teeth	600-8MGT P.L. 23.622 75 teeth	640-8MGT P.L. 25.197 80 teeth	720-8MGT P.L. 28.346 90 teeth	800-8MGT P.L. 31.496 100 teeth	840-8MGT P.L. 33.071 105 teeth	880-8MGT P.L. 34.646 110 teeth	920-8MGT P.L. 36.220 115 teeth	960-8MGT P.L. 37.795 120 teeth	1040-8MGT P.L. 40.945 130 teeth	1064-8MGT P.L. 41.890 133 teeth	1120-8MGT P.L. 44.094 140 teeth	1160-8MGT P.L. 45.669 145 teeth
No. of Grooves	Pitch Diameter (Inches)	No. of Grooves	Pitch Diameter (Inches)	Speed Ratio															
22	2.206	39	3.910	1.773		4.57	6.16	6.95	7.75	9.33	10.91	11.70	12.49	13.28	14.07	15.64	16.12	17.22	18.01
27	2.707	48	4.812	1.778			5.01	5.81	6.61	8.20	9.79	10.58	11.37	12.16	12.95	14.53	15.00	16.11	16.90
36	3.609	64	6.416	1.778						6.14	7.75	8.55	9.35	10.14	10.94	12.52	13.00	14.10	14.90
28	2.807	50	5.013	1.786			4.75	5.56	6.36	7.96	9.54	10.33	11.13	11.92	12.71	14.29	14.76	15.86	16.66
40	4.010	72	7.218	1.800							6.74	7.55	8.35	9.15	9.95	11.54	12.02	13.13	13.92
50	5.013	90	9.023	1.800											7.61	9.23	9.71	10.84	11.64
80	8.020	144	14.437	1.800															
31	3.108	56	5.614	1.806					5.61	7.22	8.81	9.60	10.40	11.19	11.98	13.56	14.04	15.14	15.94
22	2.206	40	4.010	1.818		4.48	6.08	6.87	7.66	9.25	10.83	11.62	12.41	13.20	13.99	15.56	16.04	17.14	17.93
44	4.411	80	8.020	1.818									7.34	8.15	8.95	10.55	11.03	12.15	12.95
29	2.907	53	5.314	1.828				5.21	6.02	7.62	9.21	10.01	10.80	11.59	12.38	13.96	14.44	15.54	16.33
35	3.509	64	6.416	1.829						6.21	7.82	8.62	9.42	10.21	11.01	12.59	13.07	14.18	14.97
24	2.406	44	4.411	1.833		3.97	5.58	6.38	7.18	8.76	10.35	11.14	11.93	12.72	13.51	15.08	15.56	16.66	17.45
25	2.506	46	4.612	1.840			5.33	6.13	6.93	8.52	10.10	10.89	11.69	12.48	13.27	14.84	15.32	16.42	17.21
26	2.607	48	4.812	1.846			5.08	5.88	6.68	8.27	9.86	10.65	11.44	12.23	13.03	14.60	15.08	16.18	16.97
39	3.910	72	7.218	1.846							6.81	7.61	8.42	9.22	10.02	11.61	12.09	13.20	14.00
27	2.707	50	5.013	1.852			4.82	5.63	6.43	8.03	9.62	10.41	11.20	11.99	12.78	14.36	14.84	15.94	16.73
30	3.008	56	5.614	1.867				4.86	5.68	7.29	8.88	9.68	10.47	11.26	12.06	13.64	14.11	15.22	16.01
48	4.812	90	9.023	1.875											7.75	9.37	9.85	10.98	11.78
34	3.409	64	6.416	1.882						6.28	7.89	8.69	9.49	10.28	11.08	12.66	13.14	14.25	15.04
28	2.807	53	5.314	1.893				5.28	6.09	7.69	9.29	10.08	10.87	11.66	12.46	14.04	14.51	15.62	16.41
38	3.810	72	7.218	1.895							6.88	7.68	8.49	9.29	10.09	11.68	12.16	13.27	14.07
42	4.211	80	8.020	1.905								6.65	7.47	8.28	9.09	10.69	11.18	12.29	13.09
22	2.206	42	4.211	1.909		4.29	5.90	6.69	7.49	9.08	10.66	11.45	12.24	13.03	13.82	15.40	15.87	16.98	17.77
24	2.406	46	4.612	1.917			5.40	6.20	7.00	8.59	10.18	10.97	11.76	12.55	13.34	14.92	15.39	16.50	17.29
25	2.506	48	4.812	1.920			5.15	5.95	6.75	8.35	9.94	10.73	11.52	12.31	13.10	14.68	15.15	16.26	17.05
26	2.607	50	5.013	1.923			4.89	5.70	6.50	8.10	9.69	10.48	11.28	12.07	12.86	14.44	14.91	16.02	16.81
29	2.907	56	5.614	1.931				4.93	5.75	7.36	8.96	9.75	10.55	11.34	12.13	13.71	14.19	15.29	16.09
33	3.308	64	6.416	1.939						6.35	7.96	8.76	9.56	10.36	11.15	12.74	13.22	14.32	15.12
37	3.709	72	7.218	1.946							6.95	7.75	8.56	9.36	10.17	11.76	12.24	13.35	14.14
46	4.612	90	9.023	1.957											7.88	9.50	9.99	11.12	11.92
27	2.707	53	5.314	1.963			4.54	5.35	6.16	7.77	9.36	10.15	10.95	11.74	12.53	14.11	14.59	15.69	16.48
22	2.206	44	4.411	2.000		4.10	5.72	6.52	7.32	8.91	10.50	11.28	12.08	12.87	13.66	15.23	15.71	16.81	17.60
24	2.406	48	4.812	2.000			5.22	6.02	6.82	8.42	10.01	10.80	11.59	12.38	13.18	14.75	15.23	16.33	17.12
25	2.506	50	5.013	2.000			4.96	5.77	6.57	8.17	9.76	10.56	11.35	12.14	12.93	14.51	14.99	16.09	16.88
28	2.807	56	5.614	2.000				5.00	5.82	7.43	9.03	9.82	10.62	11.41	12.21	13.78	14.26	15.37	16.16
32	3.208	64	6.416	2.000						6.41	8.03	8.83	9.63	10.43	11.23	12.81	13.29	14.40	15.19
36	3.609	72	7.218	2.000							7.01	7.82	8.63	9.43	10.24	11.83	12.31	13.42	14.22
40	4.010	80	8.020	2.000								6.79	7.61	8.42	9.23	10.84	11.32	12.43	13.23
56	5.614	112	11.229	2.000															9.17
72	7.218	144	14.437	2.000															
26	2.607	53	5.314	2.038			4.60	5.42	6.23	7.84	9.43	10.22	11.02	11.81	12.61	14.18	14.66	15.77	16.56
44	4.411	90	9.023	2.045										7.19	8.01	9.64	10.13	11.26	12.06
39	3.910	80	8.020	2.051								6.85	7.68	8.49	9.30	10.91	11.39	12.51	13.31
35	3.509	72	7.218	2.057							7.08	7.89	8.70	9.50	10.31	11.90	12.38	13.49	14.29
31	3.108	64	6.416	2.065						6.48	8.10	8.90	9.70	10.50	11.30	12.88	13.36	14.47	15.27
27	2.707	56	5.614	2.074				5.06	5.88	7.50	9.10	9.89	10.69	11.48	12.28	13.86	14.34	15.44	16.23
24	2.406	50	5.013	2.083			5.03	5.84	6.64	8.24	9.84	10.63	11.42	12.21	13.01	14.58	15.06	16.17	16.96
22	2.206	46	4.612	2.091		3.91	5.54	6.34	7.14	8.74	10.32	11.11	11.91	12.70	13.49	15.07	15.54	16.65	17.44
38	3.810	80	8.020	2.105								6.92	7.75	8.56	9.37	10.98	11.46	12.58	13.38
53	5.314	112	11.229	2.113															9.37
34	3.409	72	7.218	2.118							7.15	7.96	8.77	9.57	10.38	11.97	12.45	13.56	14.36
25	2.506	53	5.314	2.120			4.67	5.49	6.30	7.91	9.50	10.30	11.09	11.89	12.68	14.26	14.74	15.84	16.63
30	3.008	64	6.416	2.133						6.55	8.17	8.97	9.77	10.57	11.37	12.96	13.44	14.54	15.34
42	4.211	90	9.023	2.143										7.32	8.15	9.78	10.27	11.40	12.20
26	2.607	56	5.614	2.154				5.13	5.95	7.57	9.17	9.96	10.76	11.56	12.35	13.93	14.41	15.52	16.31
37	3.709	80	8.020	2.162								6.99	7.81	8.63	9.44	11.05	11.53	12.65	13.45
22	2.206	48	4.812	2.182			5.35	6.16	6.97	8.56	10.15	10.95	11.74	12.53	13.32	14.90	15.38	16.48	17.27
33	3.308	72	7.218	2.182							7.22	8.03	8.84	9.64	10.45	12.04	12.53	13.64	14.44
29	2.907	64	6.416	2.207						6.62	8.24	9.04	9.85	10.64	11.44	13.03	13.51	14.62	15.41
24	2.406	53	5.314	2.208			4.74	5.56	6.37	7.98	9.58	10.37	11.17	11.96	12.75	14.33	14.81	15.92	16.71
36	3.609	80	8.020	2.222								7.05	7.88	8.70	9.51	11.12	11.60	12.72	13.52
25	2.506	56	5.614	2.240				5.20	6.02	7.64	9.24	10.04	10.84	11.63	12.43	14.01	14.48	15.59	16.38
50	5.013	112	11.229	2.240														8.73	9.57
32	3.208	72	7.218	2.250							7.28	8.10	8.91	9.71	10.52	12.12	12.60	13.71	14.51
40	4.010	90	9.023	2.250										7.45	8.28	9.92	10.41	11.54	12.34
64	6.416	144	14.437	2.250															
22	2.206	50	5.013	2.273			5.16	5.97	6.78	8.39	9.98	10.77	11.57	12.36	13.16	14.73	15.21	16.31	17.11
28	2.807	64	6.416	2.286						6.69	8.31	9.11	9.92	10.71	11.51	13.10	13.58	14.69	15.49
35	3.509	80	8.020	2.286							6.29	7.12	7.95	8.76	9.58	11.19	11.67	12.79	13.59
39	3.910	90	9.023	2.308										7.51	8.35	9.98	10.47	11.60	12.41
31	3.108	72	7.218	2.323						5.69	7.35	8.16	8.98	9.78	10.59	12.19	12.67	13.78	14.58
24	2.406	56	5.614	2.333				5.26	6.09	7.71	9.31	10.11	10.91	11.70	12.50	14.08	14.56	15.66	16.46
48	4.812	112	11.229	2.333														8.86	9.70
34	3.409	80	8.020	2.353							6.35	7.19	8.01	8.83	9.65	11.26	11.74	12.86	13.66
38	3.810	90	9.023	2.368									6.74	7.58	8.41	10.05	10.54	11.67	12.48
27	2.707	64	6.416	2.370					5.09	6.75	8.38	9.18	9.99	10.78	11.59	13.17	13.65	14.76	15.56
30	3.008	72	7.218	2.400						5.75	7.42	8.23	9.05	9.85	10.66	12.26	12.74	13.85	14.65
22	2.206	53	5.314	2.409			4.87	5.69	6.51	8.12	9.72	10.51	11.31	12.10	12.90	14.48	14.96	16.06	16.86
33	3.308	80	8.020	2.424							6.42	7.25	8.08	8.90	9.72	11.33	11.81	12.93	13.74
37	3.709	90	9.023	2.432									6.80	7.64	8.48	10.12	10.61	11.74	12.55
46	4.612	112	11.229	2.435														8.99	9.83
Length Factor*					0.70	0.80	0.80	0.80	0.90	0.90	0.90	0.90	0.90	1.00	1.00	1.00	1.00	1.00	1.00

Note: 25, 27, 29, 31, 33, 35, 37, 39, 42, 46, 50 and 53 groove sprockets are only available as stock products in 20 and 30mm widths.

* This length correction factor must be used to determine the proper belt width.

Center distance is greater than eight times the small sprocket and the large sprocket is not flanged. See Engineering Section I-7, Use of Flanged Sprockets, on page 113.

Center Distance, Inches																			Speed Ratio	Sprocket Combinations	
1200-8MGT P.L. 47.244 150 teeth	1224-8MGT P.L. 48.189 153 teeth	1280-8MGT P.L. 50.394 160 teeth	1440-8MGT P.L. 56.693 180 teeth	1512-8MGT P.L. 59.528 189 teeth	1584-8MGT P.L. 62.362 198 teeth	1600-8MGT P.L. 62.992 200 teeth	1760-8MGT P.L. 69.291 220 teeth	1800-8MGT P.L. 70.866 225 teeth	2000-8MGT P.L. 78.740 250 teeth	2200-8MGT P.L. 86.614 275 teeth	2400-8MGT P.L. 94.488 300 teeth	2600-8MGT P.L. 102.362 325 teeth	2800-8MGT P.L. 110.236 350 teeth	3048-8MGT P.L. 120.000 381 teeth	3288-8MGT P.L. 129.134 410 teeth	3600-8MGT P.L. 141.732 450 teeth	4400-8MGT P.L. 173.228 550 teeth		DriveR No. of Grooves	DriveN No. of Grooves
18.80	19.27	20.37	23.53	24.95	26.36	26.68	29.83	30.62	34.56	38.49	42.43	46.37	50.31	55.19	59.76	66.06	81.81	1.773	22	39
17.68	18.16	19.26	22.41	23.84	25.25	25.57	28.72	29.51	33.45	37.38	41.33	45.26	49.20	54.08	58.65	64.95	80.70	1.778	27	48
15.68	16.16	17.26	20.42	21.85	23.26	23.58	26.73	27.53	31.47	35.40	39.35	43.28	47.23	52.11	56.67	62.98	78.73	1.778	36	64
17.44	17.92	19.02	22.18	23.60	25.01	25.33	28.48	29.27	33.21	37.15	41.09	45.02	48.97	53.85	58.41	64.71	80.47	1.786	28	50
14.71	15.19	16.30	19.46	20.88	22.30	22.62	25.78	26.57	30.51	34.45	38.39	42.33	46.27	51.16	55.72	62.03	77.78	1.800	40	72
12.43	12.92	14.03	17.20	18.63	20.06	20.37	23.54	24.33	28.28	32.22	36.17	40.11	44.05	48.94	53.50	59.81	75.56	1.800	50	90
				11.68	13.15	13.47	16.70	17.50	21.49	25.46	29.43	33.39	37.34	42.24	46.82	53.13	68.90	1.800	80	144
16.72	17.20	18.30	21.46	22.88	24.30	24.61	27.77	28.56	32.50	36.43	40.38	44.31	48.25	53.13	57.70	64.00	79.75	1.806	31	56
18.72	19.19	20.29	23.45	24.87	26.28	26.60	29.75	30.54	34.48	38.41	42.35	46.29	50.23	55.11	59.68	65.98	81.73	1.818	22	40
13.74	14.22	15.33	18.49	19.92	21.34	21.66	24.82	25.61	29.55	33.49	37.44	41.38	45.32	50.20	54.77	61.08	76.83	1.818	44	80
17.12	17.60	18.70	21.86	23.28	24.69	25.01	28.16	28.95	32.89	36.83	40.77	44.71	48.65	53.53	58.10	64.40	80.15	1.828	29	53
15.76	16.23	17.34	20.50	21.92	23.34	23.66	26.81	27.60	31.54	35.48	39.42	43.36	47.30	52.18	56.75	63.05	78.81	1.829	35	64
18.24	18.71	19.82	22.97	24.39	25.81	26.12	29.27	30.06	34.00	37.94	41.88	45.81	49.76	54.64	59.20	65.50	81.25	1.833	24	44
18.00	18.47	19.58	22.73	24.15	25.57	25.88	29.04	29.83	33.76	37.70	41.64	45.58	49.52	54.40	58.97	65.27	81.02	1.840	25	46
17.76	18.23	19.34	22.49	23.91	25.33	25.64	28.80	29.59	33.53	37.46	41.40	45.34	49.28	54.16	58.73	65.03	80.78	1.846	26	48
14.79	15.27	16.37	19.54	20.96	22.38	22.69	25.85	26.64	30.59	34.53	38.47	42.41	46.35	51.23	55.80	62.10	77.86	1.846	39	72
17.52	17.99	19.10	22.25	23.67	25.09	25.41	28.56	29.35	33.29	37.22	41.17	45.10	49.04	53.92	58.49	64.79	80.54	1.852	27	50
16.80	17.27	18.38	21.53	22.96	24.37	24.69	27.84	28.63	32.57	36.51	40.45	44.39	48.33	53.21	57.78	64.08	79.83	1.867	30	56
12.58	13.06	14.17	17.35	18.78	20.20	20.52	23.69	24.48	28.43	32.37	36.32	40.26	44.20	49.09	53.66	59.96	75.72	1.875	48	90
15.83	16.31	17.41	20.57	22.00	23.42	23.73	26.89	27.68	31.62	35.56	39.50	43.44	47.38	52.26	56.83	63.13	78.88	1.882	34	64
17.20	17.67	18.77	21.93	23.35	24.77	25.09	28.24	29.03	32.97	36.91	40.85	44.78	48.73	53.61	58.17	64.47	80.23	1.893	28	53
14.86	15.34	16.45	19.61	21.03	22.45	22.77	25.93	26.72	30.66	34.60	38.55	42.48	46.43	51.31	55.88	62.18	77.94	1.895	38	72
13.88	14.36	15.47	18.64	20.07	21.49	21.81	24.97	25.76	29.70	33.64	37.59	41.53	45.47	50.36	54.93	61.23	76.99	1.905	42	80
18.55	19.03	20.13	23.28	24.70	26.12	26.44	29.59	30.38	34.32	38.25	42.19	46.13	50.07	54.95	59.52	65.82	81.57	1.909	22	42
18.07	18.55	19.65	22.81	24.23	25.64	25.96	29.11	29.90	33.84	37.78	41.72	45.65	49.60	54.48	59.04	65.34	81.10	1.917	24	46
17.84	18.31	19.41	22.57	23.99	25.41	25.72	28.87	29.67	33.60	37.54	41.48	45.42	49.36	54.24	58.81	65.11	80.86	1.920	25	48
17.59	18.07	19.17	22.33	23.75	25.17	25.48	28.63	29.43	33.36	37.30	41.24	45.18	49.12	54.00	58.57	64.87	80.62	1.923	26	50
16.87	17.35	18.45	21.61	23.03	24.45	24.77	27.92	28.71	32.65	36.59	40.53	44.47	48.41	53.29	57.86	64.16	79.91	1.931	29	56
15.91	16.38	17.49	20.65	22.07	23.49	23.81	26.96	27.75	31.69	35.63	39.58	43.52	47.46	52.34	56.91	63.21	78.96	1.939	33	64
14.93	15.41	16.52	19.68	21.11	22.53	22.85	26.00	26.80	30.74	34.68	38.62	42.56	46.50	51.39	55.96	62.26	78.01	1.946	37	72
12.72	13.20	14.32	17.50	18.93	20.35	20.67	23.83	24.63	28.58	32.52	36.47	40.41	44.36	49.24	53.81	60.12	75.87	1.957	46	90
17.27	17.75	18.85	22.01	23.43	24.85	25.16	28.32	29.11	33.04	36.98	40.92	44.86	48.80	53.68	58.25	64.55	80.30	1.963	27	53
18.39	18.87	19.97	23.12	24.54	25.96	26.27	29.43	30.22	34.16	38.09	42.03	45.97	49.91	54.79	59.36	65.66	81.41	2.000	22	44
17.91	18.39	19.49	22.64	24.07	25.48	25.80	28.95	29.74	33.68	37.62	41.56	45.50	49.44	54.32	58.88	65.18	80.94	2.000	24	48
17.67	18.15	19.25	22.40	23.83	25.24	25.56	28.71	29.50	33.44	37.38	41.32	45.26	49.20	54.08	58.65	64.95	80.70	2.000	25	50
16.95	17.42	18.53	21.69	23.11	24.53	24.84	28.00	28.79	32.73	36.66	40.61	44.54	48.49	53.37	57.93	64.24	79.99	2.000	28	56
15.98	16.46	17.56	20.72	22.15	23.57	23.88	27.04	27.83	31.77	35.71	39.65	43.59	47.53	52.42	56.98	63.29	79.04	2.000	32	64
15.01	15.49	16.59	19.76	21.18	22.60	22.92	26.08	26.87	30.81	34.75	38.70	42.64	46.58	51.46	56.03	62.34	78.09	2.000	36	72
14.03	14.51	15.62	18.79	20.22	21.64	21.96	25.12	25.91	29.85	33.80	37.74	41.68	45.63	50.51	55.08	61.38	77.14	2.000	40	80
9.99	10.49	11.63	14.85	16.29	17.73	18.05	21.23	22.03	25.99	29.94	33.90	37.85	41.80	46.69	51.26	57.57	73.33	2.000	56	112
				12.22	13.69	14.02	17.26	18.07	22.07	26.05	30.02	33.98	37.94	42.84	47.42	53.74	69.51	2.000	72	144
17.35	17.82	18.93	22.08	23.50	24.92	25.24	28.39	29.18	33.12	37.06	41.00	44.94	48.88	53.76	58.33	64.63	80.38	2.038	26	53
12.86	13.34	14.46	17.64	19.07	20.50	20.82	23.98	24.78	28.73	32.67	36.62	40.56	44.51	49.40	53.96	60.27	76.03	2.045	44	90
14.10	14.58	15.69	18.86	20.29	21.71	22.03	25.19	25.98	29.93	33.87	37.82	41.76	45.70	50.59	55.16	61.46	77.22	2.051	39	80
15.08	15.56	16.67	19.83	21.26	22.68	23.00	26.15	26.95	30.89	34.83	38.78	42.71	46.66	51.54	56.11	62.41	78.17	2.057	35	72
16.05	16.53	17.64	20.80	22.22	23.64	23.96	27.11	27.91	31.85	35.79	39.73	43.67	47.61	52.49	57.06	63.36	79.12	2.065	31	64
17.02	17.50	18.60	21.76	23.18	24.60	24.92	28.07	28.86	32.80	36.74	40.68	44.62	48.56	53.44	58.01	64.31	80.07	2.074	27	56
17.75	18.22	19.32	22.48	23.90	25.32	25.63	28.79	29.58	33.52	37.46	41.40	45.33	49.28	54.16	58.72	65.03	80.78	2.083	24	50
18.23	18.70	19.80	22.96	24.38	25.80	26.11	29.27	30.06	33.99	37.93	41.87	45.81	49.75	54.63	59.20	65.50	81.25	2.091	22	46
14.17	14.65	15.76	18.94	20.36	21.79	22.10	25.27	26.06	30.00	33.95	37.90	41.84	45.78	50.67	55.23	61.54	77.30	2.105	38	80
10.20	10.69	11.83	15.06	16.51	17.94	18.26	21.45	22.25	26.21	30.17	34.12	38.07	42.02	46.91	51.49	57.80	73.56	2.113	53	112
15.15	15.63	16.74	19.91	21.33	22.75	23.07	26.23	27.02	30.97	34.91	38.85	42.79	46.73	51.62	56.19	62.49	78.25	2.118	34	72
17.42	17.90	19.00	22.16	23.58	25.00	25.31	28.47	29.26	33.20	37.14	41.08	45.02	48.96	53.84	58.41	64.71	80.46	2.120	25	53
16.13	16.61	17.71	20.87	22.30	23.72	24.03	27.19	27.98	31.92	35.86	39.81	43.75	47.69	52.57	57.14	63.44	79.20	2.133	30	64
13.00	13.49	14.60	17.79	19.22	20.65	20.96	24.13	24.92	28.88	32.82	36.77	40.71	44.66	49.55	54.12	60.42	76.18	2.143	42	90
17.10	17.57	18.68	21.84	23.26	24.68	24.99	28.15	28.94	32.88	36.82	40.76	44.70	48.64	53.52	58.09	64.39	80.14	2.154	26	56
14.24	14.73	15.84	19.01	20.44	21.86	22.18	25.34	26.13	30.08	34.02	37.97	41.91	45.86	50.74	55.31	61.62	77.37	2.162	37	80
18.06	18.54	19.64	22.80	24.22	25.63	25.95	29.10	29.89	33.83	37.77	41.71	45.65	49.59	54.47	59.04	65.34	81.09	2.182	22	48
15.23	15.71	16.81	19.98	21.41	22.83	23.15	26.31	27.10	31.04	34.98	38.93	42.87	46.81	51.70	56.26	62.57	78.32	2.182	33	72
16.20	16.68	17.79	20.95	22.37	23.79	24.11	27.27	28.06	32.00	35.94	39.88	43.82	47.77	52.65	57.22	63.52	79.27	2.207	29	64
17.50	17.97	19.08	22.23	23.66	25.07	25.39	28.54	29.34	33.27	37.21	41.16	45.09	49.04	53.92	58.48	64.79	80.54	2.208	24	53
14.32	14.80	15.91	19.08	20.51	21.94	22.25	25.42	26.21	30.16	34.10	38.05	41.99	45.93	50.82	55.39	61.69	77.45	2.222	36	80
17.17	17.65	18.75	21.91	23.34	24.75	25.07	28.22	29.02	32.96	36.89	40.84	44.78	48.72	53.60	58.17	64.47	80.22	2.240	25	56
10.40	10.89	12.03	15.27	16.72	18.16	18.48	21.67	22.46	26.43	30.39	34.35	38.30	42.25	47.14	51.72	58.03	73.79	2.240	50	112
15.30	15.78	16.89	20.06	21.48	22.90	23.22	26.38	27.17	31.12	35.06	39.00	42.94	46.89	51.77	56.34	62.64	78.40	2.250	32	72
13.14	13.63	14.75	17.93	19.37	20.79	21.11	24.28	25.07	29.03	32.97	36.92	40.87	44.81	49.70	54.27	60.58	76.34	2.250	40	90
			11.24	12.75	14.23	14.56	17.81	18.62	22.64	26.62	30.60	34.57	38.53	43.44	48.02	54.34	70.12	2.250	64	144
17.90	18.37	19.47	22.63	24.05	25.47	25.79	28.94	29.73	33.67	37.61	41.55	45.49	49.43	54.31	58.88	65.18	80.93	2.273	22	50
16.28	16.75	17.86	21.02	22.45	23.87	24.18	27.34	28.13	32.08	36.02	39.96	43.90	47.84	52.73	57.29	63.60	79.35	2.286	28	64
14.39	14.87	15.98	19.16	20.59	22.01	22.33	25.49	26.28	30.23	34.18	38.12	42.06	46.01	50.90	55.46	61.77	77.53	2.286	35	80
13.21	13.70	14.82	18.01	19.44	20.87	21.18	24.35	25.15	29.10	33.05	37.00	40.94	44.89	49.78	54.35	60.65	76.41	2.308	39	90
15.37	15.85	16.96	20.13	21.56	22.98	23.29	26.46	27.25	31.19	35.13	39.08	43.02	46.97	51.85	56.42	62.72	78.48	2.323	31	72
17.25	17.72	18.83	21.99	23.41	24.83	25.14	28.30	29.09	33.03	36.97	40.91	44.85	48.79	53.68	58.24	64.55	80.30	2.333	24	56
10.53	11.03	12.17	15.41	16.86	18.30	18.62	21.81	22.61	26.58	30.54	34.50	38.45	42.40	47.29	51.87	58.18	73.95	2.333	48	112
14.46	14.94	16.05	19.23	20.66	22.08	22.40	25.56	26.36	30.31	34.25	38.20	42.14	46.09	50.97	55.54	61.85	77.60	2.353	34	80
13.28	13.77	14.89	18.08	19.51	20.94	21.26	24.43	25.22	29.17	33.12	37.07	41.02	44.97	49.85	54.42	60.73	76.49	2.368	38	90
16.35	16.83	17.93	21.10	22.52	23.94	24.26	27.42	28.21	32.15	36.09	40.04	43.98	47.92	52.80	57.37	63.67	79.43	2.370	27	64
15.44	15.92	17.03	20.20	21.63	23.05	23.37	26.53	27.32	31.27	35.21	39.16	43.10	47.04	51.93	56.49	62.80	78.56	2.400	30	72
17.65	18.12	19.23	22.38	23.81	25.23	25.54	28.70	29.49	33.43	37.37	41.31	45.25	49.19	54.07	58.64	64.94	80.69	2.409	22	53
14.53	15.01	16.13	19.30	20.73	22.16	22.47	25.64	26.43	30.38	34.33	38.28	42.22	46.16	51.05	55.62	61.92	77.68	2.424	33	80
13.36	13.84	14.96	18.15	19.58	21.01	21.33	24.50	25.30	29.25	33.20	37.15	41.09	45.04	49.93	54.50	60.81	76.57	2.432	37	90
10.66	11.16	12.31	15.55	17.00	18.44	18.76	21.95	22.75	26.72	30.68	34.65	38.60	42.55	47.44	52.02	58.33	74.10	2.435	46	112
1.00	1.00	1.10	1.10	1.10	1.10	1.10	1.10	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	Length Factor*		

Note: 25, 27, 29, 31, 33, 35, 37, 39, 42, 46, 50 and 53 groove sprockets are only available as stock products in 20 and 30mm widths.

* This length correction factor must be used to determine the proper belt width.

Center distance is greater than eight times the small sprocket and the large sprocket is not flanged. See Engineering Section I-7, Use of Flanged Sprockets, on page 113.

Sprocket Combinations DriveR No. of Grooves	DriveR Pitch Diameter (Inches)	DriveN No. of Grooves	DriveN Pitch Diameter (Inches)	Speed Ratio	Center Distance, Inches 384-8MGT P.L. 15.118 48 teeth	480-8MGT P.L. 18.898 60 teeth	560-8MGT P.L. 22.047 70 teeth	600-8MGT P.L. 23.622 75 teeth	640-8MGT P.L. 25.197 80 teeth	720-8MGT P.L. 28.346 90 teeth	800-8MGT P.L. 31.496 100 teeth	840-8MGT P.L. 33.071 105 teeth	880-8MGT P.L. 34.646 110 teeth	920-8MGT P.L. 36.220 115 teeth	960-8MGT P.L. 37.795 120 teeth	1040-8MGT P.L. 40.945 130 teeth	1064-8MGT P.L. 41.890 133 teeth	1120-8MGT P.L. 44.094 140 teeth	1160-8MGT P.L. 45.669 145 teeth
26	2.607	64	6.416	2.462					5.16	6.82	8.45	9.25	10.06	10.86	11.66	13.25	13.73	14.84	15.63
29	2.907	72	7.218	2.483						5.82	7.49	8.30	9.12	9.92	10.73	12.33	12.81	13.93	14.72
32	3.208	80	8.020	2.500							6.48	7.32	8.15	8.97	9.78	11.40	11.88	13.00	13.81
36	3.609	90	9.023	2.500									6.86	7.71	8.55	10.19	10.68	11.81	12.62
22	2.206	56	5.614	2.545			4.56	5.40	6.22	7.85	9.45	10.25	11.05	11.85	12.64	14.23	14.70	15.81	16.61
44	4.411	112	11.229	2.545														9.12	9.96
25	2.506	64	6.416	2.560					5.22	6.89	8.52	9.32	10.13	10.93	11.73	13.32	13.80	14.91	15.71
28	2.807	72	7.218	2.571						5.88	7.55	8.37	9.19	9.99	10.80	12.40	12.88	14.00	14.80
35	3.509	90	9.023	2.571									6.93	7.77	8.61	10.25	10.75	11.88	12.69
56	5.614	144	14.437	2.571															
31	3.108	80	8.020	2.581							6.54	7.38	8.22	9.03	9.85	11.47	11.95	13.07	13.88
34	3.409	90	9.023	2.647									6.99	7.84	8.68	10.32	10.81	11.95	12.76
24	2.406	64	6.416	2.667					5.29	6.96	8.59	9.39	10.20	11.00	11.80	13.39	13.87	14.98	15.78
27	2.707	72	7.218	2.667						5.95	7.62	8.44	9.25	10.06	10.87	12.47	12.95	14.07	14.87
30	3.008	80	8.020	2.667							6.61	7.45	8.28	9.10	9.92	11.54	12.02	13.14	13.95
42	4.211	112	11.229	2.667													8.04	9.24	10.09
53	5.314	144	14.437	2.717															
33	3.308	90	9.023	2.727									7.05	7.90	8.74	10.39	10.88	12.02	12.83
29	2.907	80	8.020	2.759							6.67	7.51	8.35	9.17	9.99	11.61	12.09	13.21	14.02
26	2.607	72	7.218	2.769						6.01	7.68	8.50	9.32	10.13	10.94	12.54	13.02	14.14	14.94
40	4.010	112	11.229	2.800													8.16	9.37	10.22
32	3.208	90	9.023	2.813									7.12	7.97	8.81	10.46	10.95	12.09	12.90
28	2.807	80	8.020	2.857							6.74	7.58	8.41	9.24	10.06	11.67	12.16	13.28	14.09
39	3.910	112	11.229	2.872													8.23	9.44	10.29
25	2.506	72	7.218	2.880						6.07	7.75	8.57	9.39	10.20	11.01	12.61	13.10	14.21	15.01
50	5.013	144	14.437	2.880															
31	3.108	90	9.023	2.903									7.18	8.03	8.87	10.52	11.02	12.16	12.97
22	2.206	64	6.416	2.909					5.41	7.09	8.72	9.53	10.34	11.14	11.94	13.53	14.01	15.13	15.92
38	3.810	112	11.229	2.947													8.29	9.50	10.35
27	2.707	80	8.020	2.963							6.80	7.64	8.48	9.30	10.12	11.74	12.23	13.35	14.16
24	2.406	72	7.218	3.000						6.14	7.82	8.64	9.46	10.27	11.08	12.68	13.17	14.28	15.08
30	3.008	90	9.023	3.000								6.36	7.24	8.10	8.94	10.59	11.09	12.22	13.04
48	4.812	144	14.437	3.000															
37	3.709	112	11.229	3.027												7.81	8.35	9.56	10.42
26	2.607	80	8.020	3.077							6.86	7.71	8.55	9.37	10.19	11.81	12.30	13.42	14.23
29	2.907	90	9.023	3.103								6.42	7.31	8.16	9.01	10.66	11.15	12.29	13.11
36	3.609	112	11.229	3.111												7.88	8.41	9.63	10.48
46	4.612	144	14.437	3.130															
25	2.506	80	8.020	3.200							6.93	7.77	8.61	9.44	10.26	11.88	12.37	13.50	14.30
35	3.509	112	11.229	3.200												7.94	8.47	9.69	10.55
28	2.807	90	9.023	3.214								6.48	7.37	8.22	9.07	10.73	11.22	12.36	13.18
22	2.206	72	7.218	3.273						6.27	7.95	8.77	9.59	10.41	11.22	12.82	13.31	14.43	15.23
44	4.411	144	14.437	3.273															
34	3.409	112	11.229	3.294												8.00	8.54	9.75	10.61
24	2.406	80	8.020	3.333							6.99	7.84	8.68	9.50	10.33	11.95	12.44	13.56	14.37
27	2.707	90	9.023	3.333								6.54	7.43	8.29	9.14	10.79	11.29	12.43	13.24
33	3.308	112	11.229	3.394												8.06	8.60	9.82	10.67
42	4.211	144	14.437	3.429															
26	2.607	90	9.023	3.462								6.61	7.49	8.35	9.20	10.86	11.35	12.50	13.31
32	3.208	112	11.229	3.500												8.12	8.66	9.88	10.74
25	2.506	90	9.023	3.600								6.67	7.56	8.42	9.27	10.93	11.42	12.57	13.38
40	4.010	144	14.437	3.600															
31	3.108	112	11.229	3.613												8.18	8.72	9.94	10.80
22	2.206	80	8.020	3.636							7.12	7.97	8.81	9.64	10.46	12.09	12.58	13.70	14.51
39	3.910	144	14.437	3.692															
30	3.008	112	11.229	3.733												8.24	8.78	10.01	10.87
24	2.406	90	9.023	3.750								6.73	7.62	8.48	9.33	10.99	11.49	12.63	13.45
38	3.810	144	14.437	3.789															
29	2.907	112	11.229	3.862												8.30	8.84	10.07	10.93
37	3.709	144	14.437	3.892															
28	2.807	112	11.229	4.000												8.36	8.91	10.13	10.99
36	3.609	144	14.437	4.000															
22	2.206	90	9.023	4.091							5.92	6.85	7.74	8.61	9.46	11.12	11.62	12.77	13.59
35	3.509	144	14.437	4.114															
27	2.707	112	11.229	4.148												8.42	8.97	10.20	11.06
34	3.409	144	14.437	4.235															
26	2.607	112	11.229	4.308												8.48	9.03	10.26	11.12
33	3.308	144	14.437	4.364															
25	2.506	112	11.229	4.480												8.54	9.09	10.32	11.19
32	3.208	144	14.437	4.500															
31	3.108	144	14.437	4.645															
24	2.406	112	11.229	4.667												8.60	9.15	10.38	11.25
30	3.008	144	14.437	4.800															
29	2.907	144	14.437	4.966															
22	2.206	112	11.229	5.091												8.72	9.27	10.51	11.38
28	2.807	144	14.437	5.143															
27	2.707	144	14.437	5.333															
26	2.607	144	14.437	5.538															
25	2.506	144	14.437	5.760															
24	2.406	144	14.437	6.000															
22	2.206	144	14.437	6.545															
Length Factor*					0.70	0.80	0.80	0.80	0.90	0.90	0.90	0.90	0.90	1.00	1.00	1.00	1.00	1.00	1.00

Note: 25, 27, 29, 31, 33, 35, 37, 39, 42, 46, 50 and 53 groove sprockets are only available as stock products in 20 and 30mm widths.

* This length correction factor must be used to determine the proper belt width.
Teeth in Mesh Factor: 0.8

Center distance is greater than eight times the small sprocket and the large sprocket is not flanged. See Engineering Section I-7, Use of Flanged Sprockets, on page 113.

Center Distance, Inches																			Speed Ratio	Sprocket Combinations	
1200-8MGT P.L. 47.244 150 teeth	1224-8MGT P.L. 48.189 153 teeth	1280-8MGT P.L. 50.394 160 teeth	1440-8MGT P.L. 56.693 180 teeth	1512-8MGT P.L. 59.528 189 teeth	1584-8MGT P.L. 62.362 198 teeth	1600-8MGT P.L. 62.992 200 teeth	1760-8MGT P.L. 69.291 220 teeth	1800-8MGT P.L. 70.866 225 teeth	2000-8MGT P.L. 78.740 250 teeth	2200-8MGT P.L. 86.614 275 teeth	2400-8MGT P.L. 94.488 300 teeth	2600-8MGT P.L. 102.362 325 teeth	2800-8MGT P.L. 110.236 350 teeth	3048-8MGT P.L. 120.000 381 teeth	3288-8MGT P.L. 129.134 410 teeth	3600-8MGT P.L. 141.732 450 teeth	4400-8MGT P.L. 173.228 550 teeth		DriveR No. of Grooves	DriveN No. of Grooves
16.42	16.90	18.01	21.17	22.60	24.02	24.33	27.49	28.28	32.23	36.17	40.11	44.05	48.00	52.88	57.45	63.75	79.51	2.462	26	64
15.52	16.00	17.11	20.28	21.71	23.13	23.44	26.61	27.40	31.34	35.29	39.23	43.17	47.12	52.00	56.57	62.88	78.63	2.483	29	72
14.60	15.08	16.20	19.38	20.81	22.23	22.55	25.71	26.51	30.46	34.40	38.35	42.29	46.24	51.12	55.69	62.00	77.76	2.500	32	80
13.43	13.91	15.03	18.22	19.66	21.08	21.40	24.57	25.37	29.32	33.27	37.23	41.17	45.12	50.01	54.58	60.88	76.65	2.500	36	90
17.39	17.87	18.98	22.14	23.56	24.98	25.30	28.45	29.24	33.18	37.12	41.07	45.01	48.95	53.83	58.40	64.70	80.46	2.545	22	56
10.79	11.29	12.44	15.69	17.14	18.58	18.90	22.10	22.90	26.87	30.83	34.79	38.75	42.70	47.59	52.17	58.48	74.25	2.545	44	112
16.50	16.97	18.08	21.25	22.67	24.09	24.41	27.57	28.36	32.30	36.24	40.19	44.13	48.07	52.96	57.52	63.83	79.58	2.560	25	64
15.59	16.07	17.18	20.35	21.78	23.20	23.52	26.68	27.47	31.42	35.36	39.31	43.25	47.19	52.08	56.65	62.95	78.71	2.571	28	72
13.49	13.98	15.10	18.29	19.73	21.16	21.48	24.65	25.44	29.40	33.35	37.30	41.25	45.19	50.08	54.65	60.96	76.72	2.571	35	90
			11.76	13.28	14.77	15.10	18.36	19.18	23.20	27.20	31.18	35.15	39.12	44.03	48.62	54.94	70.73	2.571	56	144
14.67	15.16	16.27	19.45	20.88	22.30	22.62	25.79	26.58	30.53	34.48	38.43	42.37	46.31	51.20	55.77	62.08	77.84	2.581	31	80
13.56	14.05	15.17	18.37	19.80	21.23	21.55	24.72	25.52	29.47	33.42	37.38	41.32	45.27	50.16	54.73	61.04	76.80	2.647	34	90
16.57	17.05	18.16	21.32	22.75	24.17	24.48	27.64	28.44	32.38	36.32	40.27	44.21	48.15	53.03	57.60	63.90	79.66	2.667	24	64
15.66	16.14	17.25	20.43	21.85	23.28	23.59	26.75	27.55	31.49	35.44	39.39	43.33	47.27	52.16	56.73	63.03	78.79	2.667	27	72
14.75	15.23	16.34	19.52	20.95	22.38	22.70	25.86	26.66	30.61	34.55	38.50	42.44	46.39	51.28	55.85	62.15	77.91	2.667	30	80
10.92	11.43	12.58	15.83	17.28	18.72	19.04	22.24	23.04	27.02	30.98	34.94	38.90	42.85	47.74	52.32	58.63	74.41	2.667	42	112
			11.95	13.47	14.97	15.30	18.57	19.38	23.41	27.41	31.40	35.37	39.34	44.25	48.84	55.16	70.96	2.717	53	144
13.63	14.12	15.24	18.44	19.87	21.30	21.62	24.80	25.59	29.55	33.50	37.45	41.40	45.35	50.23	54.81	61.11	76.88	2.727	33	90
14.82	15.30	16.41	19.60	21.03	22.45	22.77	25.94	26.73	30.68	34.63	38.58	42.52	46.47	51.35	55.92	62.23	77.99	2.759	29	80
15.73	16.21	17.32	20.50	21.93	23.35	23.67	26.83	27.62	31.57	35.51	39.46	43.40	47.35	52.23	56.80	63.11	78.86	2.769	26	72
11.06	11.56	12.71	15.97	17.42	18.86	19.19	22.38	23.18	27.16	31.13	35.09	39.04	43.00	47.90	52.47	58.79	74.56	2.800	40	112
13.70	14.19	15.31	18.51	19.95	21.38	21.69	24.87	25.66	29.62	33.57	37.53	41.47	45.42	50.31	54.88	61.19	76.95	2.813	32	90
14.89	15.37	16.49	19.67	21.10	22.53	22.84	26.01	26.80	30.76	34.70	38.65	42.60	46.54	51.43	56.00	62.31	78.07	2.857	28	80
11.12	11.62	12.78	16.04	17.49	18.94	19.26	22.46	23.26	27.23	31.20	35.16	39.12	43.07	47.97	52.55	58.86	74.64	2.872	39	112
15.81	16.29	17.40	20.57	22.00	23.42	23.74	26.90	27.70	31.65	35.59	39.54	43.48	47.42	52.31	56.88	63.18	78.94	2.880	25	72
			12.14	13.67	15.17	15.50	18.77	19.59	23.62	27.63	31.62	35.59	39.56	44.47	49.06	55.39	71.18	2.880	50	144
13.77	14.26	15.38	18.58	20.02	21.45	21.77	24.94	25.74	29.69	33.65	37.60	41.55	45.50	50.39	54.96	61.27	77.03	2.903	31	90
16.72	17.19	18.30	21.47	22.90	24.32	24.63	27.79	28.59	32.53	36.47	40.42	44.36	48.30	53.19	57.75	64.06	79.82	2.909	22	64
11.19	11.69	12.84	16.10	17.56	19.01	19.33	22.53	23.33	27.31	31.27	35.24	39.19	43.15	48.05	52.62	58.94	74.71	2.947	38	112
14.96	15.44	16.56	19.74	21.17	22.60	22.92	26.08	26.88	30.83	34.78	38.73	42.67	46.62	51.51	56.08	62.38	78.14	2.963	27	80
15.88	16.36	17.47	20.65	22.08	23.50	23.81	26.98	27.77	31.72	35.67	39.61	43.55	47.50	52.39	56.96	63.26	79.02	3.000	24	72
13.84	14.33	15.45	18.65	20.09	21.52	21.84	25.01	25.81	29.77	33.72	37.68	41.62	45.57	50.46	55.03	61.34	77.11	3.000	30	90
			12.27	13.80	15.30	15.63	18.91	19.73	23.76	27.77	31.76	35.74	39.71	44.62	49.21	55.54	71.33	3.000	48	144
11.25	11.76	12.91	16.17	17.63	19.08	19.40	22.60	23.40	27.38	31.35	35.31	39.27	43.22	48.12	52.70	59.01	74.79	3.027	37	112
15.03	15.51	16.63	19.81	21.25	22.67	22.99	26.16	26.95	30.90	34.85	38.80	42.75	46.70	51.58	56.15	62.46	78.22	3.077	26	80
13.91	14.40	15.52	18.72	20.16	21.59	21.91	25.09	25.88	29.84	33.80	37.75	41.70	45.65	50.54	55.11	61.42	77.18	3.103	29	90
11.32	11.82	12.98	16.24	17.70	19.15	19.47	22.67	23.47	27.45	31.42	35.39	39.34	43.30	48.20	52.77	59.09	74.86	3.111	36	112
			12.40	13.93	15.43	15.76	19.05	19.86	23.90	27.91	31.91	35.88	39.86	44.77	49.36	55.69	71.49	3.130	46	144
15.10	15.58	16.70	19.89	21.32	22.75	23.06	26.23	27.03	30.98	34.93	38.88	42.82	46.77	51.66	56.23	62.54	78.30	3.200	25	80
11.38	11.89	13.04	16.31	17.77	19.22	19.54	22.74	23.54	27.52	31.49	35.46	39.42	43.37	48.27	52.85	59.16	74.94	3.200	35	112
13.98	14.47	15.59	18.80	20.23	21.67	21.98	25.16	25.96	29.92	33.87	37.83	41.77	45.72	50.61	55.19	61.50	77.26	3.214	28	90
16.02	16.50	17.61	20.79	22.22	23.65	23.96	27.13	27.92	31.87	35.82	39.76	43.71	47.65	52.54	57.11	63.41	79.17	3.273	22	72
			12.52	14.06	15.56	15.89	19.18	20.00	24.04	28.05	32.05	36.03	40.00	44.92	49.51	55.84	71.64	3.273	44	144
11.45	11.95	13.11	16.38	17.84	19.29	19.61	22.81	23.61	27.60	31.57	35.53	39.49	43.45	48.35	52.92	59.24	75.02	3.294	34	112
15.17	15.65	16.77	19.96	21.39	22.82	23.14	26.31	27.10	31.05	35.00	38.96	42.90	46.85	51.74	56.31	62.61	78.38	3.333	24	80
14.05	14.54	15.66	18.87	20.31	21.74	22.06	25.23	26.03	29.99	33.95	37.90	41.85	45.80	50.69	55.26	61.57	77.34	3.333	27	90
11.51	12.02	13.18	16.45	17.91	19.36	19.68	22.88	23.69	27.67	31.64	35.61	39.56	43.52	48.42	53.00	59.32	75.09	3.394	33	112
			12.65	14.19	15.69	16.03	19.32	20.14	24.18	28.19	32.19	36.17	40.15	45.06	49.66	55.99	71.79	3.429	42	144
14.12	14.61	15.73	18.94	20.38	21.81	22.13	25.31	26.10	30.06	34.02	37.98	41.92	45.87	50.76	55.34	61.65	77.41	3.462	26	90
11.58	12.08	13.24	16.52	17.98	19.43	19.75	22.95	23.76	27.74	31.71	35.68	39.64	43.60	48.50	53.07	59.39	75.17	3.500	32	112
14.19	14.68	15.80	19.01	20.45	21.88	22.20	25.38	26.18	30.14	34.09	38.05	42.00	45.95	50.84	55.41	61.72	77.49	3.600	25	90
			12.78	14.32	15.82	16.16	19.45	20.27	24.32	28.34	32.34	36.32	40.29	45.21	49.80	56.13	71.94	3.600	40	144
11.64	12.15	13.31	16.59	18.05	19.50	19.82	23.03	23.83	27.81	31.79	35.75	39.71	43.67	48.57	53.15	59.47	75.25	3.613	31	112
15.31	15.80	16.91	20.10	21.54	22.96	23.28	26.45	27.25	31.20	35.15	39.11	43.05	47.00	51.89	56.46	62.77	78.53	3.636	22	80
			12.84	14.38	15.89	16.22	19.52	20.34	24.39	28.41	32.41	36.39	40.37	45.28	49.88	56.21	72.01	3.692	39	144
11.71	12.21	13.38	16.65	18.11	19.56	19.89	23.10	23.90	27.88	31.86	35.83	39.79	43.75	48.64	53.22	59.54	75.32	3.733	30	112
14.26	14.75	15.87	19.08	20.52	21.95	22.27	25.45	26.25	30.21	34.17	38.13	42.07	46.02	50.92	55.49	61.80	77.57	3.750	24	90
			12.90	14.45	15.96	16.29	19.59	20.41	24.46	28.48	32.48	36.46	40.44	45.36	49.95	56.28	72.09	3.789	38	144
11.77	12.28	13.44	16.72	18.18	19.64	19.96	23.17	23.97	27.96	31.93	35.90	39.86	43.82	48.72	53.30	59.62	75.40	3.862	29	112
		9.36	12.97	14.51	16.02	16.36	19.66	20.48	24.53	28.55	32.55	36.53	40.51	45.43	50.03	56.36	72.16	3.892	37	144
11.84	12.35	13.51	16.79	18.25	19.70	20.03	23.24	24.04	28.03	32.00	35.97	39.93	43.89	48.79	53.37	59.69	75.47	4.000	28	112
		9.42	13.03	14.57	16.09	16.42	19.72	20.54	24.60	28.62	32.62	36.61	40.59	45.50	50.10	56.43	72.24	4.000	36	144
14.40	14.88	16.01	19.22	20.66	22.10	22.42	25.60	26.40	30.36	34.32	38.27	42.22	46.17	51.07	55.64	61.95	77.72	4.091	22	90
		9.48	13.09	14.64	16.15	16.49	19.79	20.61	24.67	28.69	32.69	36.68	40.66	45.58	50.17	56.51	72.31	4.114	35	144
11.90	12.41	13.58	16.86	18.32	19.77	20.10	23.31	24.11	28.10	32.08	36.05	40.01	43.97	48.87	53.45	59.77	75.55	4.148	27	112
		9.53	13.16	14.70	16.22	16.55	19.86	20.68	24.74	28.76	32.76	36.75	40.73	45.65	50.25	56.58	72.39	4.235	34	144
11.97	12.48	13.64	16.93	18.39	19.84	20.17	23.38	24.18	28.17	32.15	36.12	40.08	44.04	48.94	53.52	59.84	75.63	4.308	26	112
		9.59	13.22	14.77	16.28	16.62	19.93	20.75	24.81	28.83	32.84	36.82	40.80	45.72	50.32	56.65	72.46	4.364	33	144
12.03	12.54	13.71	16.99	18.46	19.91	20.24	23.45	24.25	28.25	32.22	36.19	40.16	44.12	49.02	53.60	59.92	75.70	4.480	25	112
		9.65	13.28	14.83	16.35	16.68	19.99	20.81	24.88	28.90	32.91	36.89	40.88	45.80	50.39	56.73	72.54	4.500	32	144
		9.71	13.34	14.89	16.41	16.75	20.06	20.88	24.94	28.97	32.98	36.97	40.95	45.87	50.47	56.80	72.61	4.645	31	144
12.10	12.61	13.77	17.06	18.53	19.98	20.30	23.52	24.32	28.32	32.29	36.27	40.23	44.19	49.09	53.67	59.99	75.78	4.667	24	112
		9.77	13.41	14.96	16.48	16.81	20.13	20.95	25.01	29.04	33.05	37.04	41.02	45.94	50.54	56.88	72.69	4.800	30	144
		9.83	13.47	15.02	16.54	16.88	20.19	21.02	25.08	29.11	33.12	37.11	41.09	46.02	50.61	56.95	72.76	4.966	29	144
12.23	12.74	13.90	17.20	18.67	20.12	20.44	23.66	24.47	28.46	32.44	36.41	40.38	44.34	49.24	53.82	60.14	75.93	5.091	22	112
		9.89	13.53	15.09	16.61	16.94	20.26	21.08	25.15	29.18	33.19	37.18	41.17	46.09	50.69	57.02	72.84	5.143	28	144
		9.94	13.59	15.15	16.67	17.01	20.33	21.15	25.22	29.25	33.26	37.25	41.24	46.16	50.76	57.10	72.91	5.333	27	144
		10.00	13.66	15.21	16.74	17.07	20.39	21.22	25.29	29.32	33.33	37.32	41.31	46.23	50.83	57.17	72.99	5.538	26	144
		10.06	13.72	15.28	16.80	17.14	20.46	21.29	25.36	29.39	33.40	37.40	41.38	46.31	50.91	57.25	73.06	5.760	25	144
		10.12	13.78	15.34	16.87	17.20	20.53	21.35	25.43	29.46	33.47	37.47	41.45	46.38	50.98	57.32	73.14	6.000	24	144
	8.80	10.24	13.91	15.47	17.00	17.33	20.66	21.49	25.56	29.60	33.62	37.61	41.60	46.53	51.13	57.47	73.29	6.545	22	144
1.00	1.00	1.10	1.10	1.10	1.10	1.10	1.10	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	Length Factor*		

Note: 25, 27, 29, 31, 33, 35, 37, 39, 42, 46, 50 and 53 groove sprockets are only available as stock products in 20 and 30mm widths.

* This length correction factor must be used to determine the proper belt width.
Teeth in Mesh Factor: 0.8

Center distance is greater than eight times the small sprocket and the large sprocket is not flanged. See Engineering Section I-7, Use of Flanged Sprockets, on page 113.

14mm Pitch PowerGrip® GT®2 Belts Drive Selection Table

Sprocket Combinations					Center Distance, Inches								
DriveR		DriveN											
No. of Grooves	Pitch Diameter (Inches)	No. of Grooves	Pitch Diameter (Inches)	Speed Ratio	1778-14MGT P.L. 70.000 127 Teeth	1890-14MGT P.L. 74.409 135 Teeth	2100-14MGT P.L. 82.677 150 Teeth	2310-14MGT P.L. 90.945 165 Teeth	2450-14MGT P.L. 96.457 175 Teeth	2590-14MGT P.L. 101.968 185 Teeth	2800-14MGT P.L. 110.236 200 Teeth	3150-14MGT P.L. 124.016 225 Teeth	3360-14MGT P.L. 132.283 240 Teeth
28	4.912	28	4.912	1.000	27.28	29.49	33.62	37.75	40.51	43.27	47.40	54.29	58.42
29	5.088	29	5.088	1.000	27.01	29.21	33.35	37.48	40.24	42.99	47.13	54.02	58.15
30	5.263	30	5.263	1.000	26.73	28.94	33.07	37.20	39.96	42.72	46.85	53.74	57.87
32	5.614	32	5.614	1.000	26.18	28.39	32.52	36.65	39.41	42.17	46.30	53.19	57.32
34	5.965	34	5.965	1.000	25.63	27.84	31.97	36.10	38.86	41.62	45.75	52.64	56.77
36	6.316	36	6.316	1.000	25.08	27.28	31.42	35.55	38.31	41.06	45.20	52.09	56.22
38	6.667	38	6.667	1.000	24.53	26.73	30.87	35.00	37.76	40.51	44.65	51.54	55.67
40	7.018	40	7.018	1.000	23.98	26.18	30.32	34.45	37.21	39.96	44.10	50.99	55.12
44	7.720	44	7.720	1.000	22.87	25.08	29.21	33.34	36.10	38.86	42.99	49.88	54.01
48	8.421	48	8.421	1.000	21.77	23.98	28.11	32.24	35.00	37.76	41.89	48.78	52.91
52	9.123	52	9.123	1.000	20.67	22.87	27.01	31.14	33.90	36.65	40.79	47.68	51.81
56	9.825	56	9.825	1.000	19.57	21.77	25.91	30.04	32.80	35.55	39.69	46.58	50.71
60	10.527	60	10.527	1.000	18.46	20.67	24.80	28.93	31.69	34.45	38.58	45.47	49.60
64	11.229	64	11.229	1.000	17.36	19.57	23.70	27.83	30.59	33.35	37.48	44.37	48.50
68	11.930	68	11.930	1.000	16.26	18.47	22.60	26.73	29.49	32.25	36.38	43.27	47.40
72	12.632	72	12.632	1.000	15.16	17.36	21.50	25.63	28.39	31.14	35.28	42.17	46.30
80	14.036	80	14.036	1.000		15.16	19.29	23.42	26.18	28.94	33.07	39.96	44.09
29	5.088	30	5.263	1.034	26.87	29.08	33.21	37.34	40.10	42.86	46.99	53.88	58.01
28	4.912	29	5.088	1.036	27.15	29.35	33.49	37.62	40.38	43.13	47.27	54.16	58.29
38	6.667	40	7.018	1.053	24.25	26.46	30.59	34.72	37.48	40.24	44.37	51.26	55.39
36	6.316	38	6.667	1.056	24.80	27.01	31.14	35.27	38.03	40.79	44.92	51.81	55.94
34	5.965	36	6.316	1.059	25.35	27.56	31.69	35.82	38.58	41.34	45.47	52.36	56.49
68	11.930	72	12.632	1.059	15.71	17.91	22.05	26.18	28.94	31.69	35.83	42.72	46.85
32	5.614	34	5.965	1.063	25.91	28.11	32.25	36.38	39.14	41.89	46.03	52.92	57.05
64	11.229	68	11.930	1.063	16.81	19.01	23.15	27.28	30.04	32.79	36.93	43.82	47.95
30	5.263	32	5.614	1.067	26.46	28.66	32.80	36.93	39.69	42.44	46.58	53.47	57.60
60	10.527	64	11.229	1.067	17.91	20.11	24.25	28.38	31.14	33.90	38.03	44.92	49.05
28	4.912	30	5.263	1.071	27.01	29.21	33.35	37.48	40.24	42.99	47.13	54.02	58.15
56	9.825	60	10.527	1.071	19.01	21.22	25.35	29.48	32.24	35.00	39.13	46.02	50.15
52	9.123	56	9.825	1.077	20.12	22.32	26.46	30.59	33.35	36.10	40.24	47.13	51.26
48	8.421	52	9.123	1.083	21.22	23.42	27.56	31.69	34.45	37.20	41.34	48.23	52.36
44	7.720	48	8.421	1.091	22.32	24.53	28.66	32.79	35.55	38.31	42.44	49.33	53.46
40	7.018	44	7.720	1.100	23.42	25.63	29.76	33.89	36.65	39.41	43.54	50.43	54.56
29	5.088	32	5.614	1.103	26.59	28.80	32.93	37.06	39.82	42.58	46.71	53.60	57.73
36	6.316	40	7.018	1.111	24.52	26.73	30.87	35.00	37.76	40.51	44.65	51.54	55.67
72	12.632	80	14.036	1.111	14.04	16.24	20.38	24.51	27.28	30.03	34.17	41.06	45.19
34	5.965	38	6.667	1.118	25.08	27.28	31.42	35.55	38.31	41.06	45.20	52.09	56.22
32	5.614	36	6.316	1.125	25.63	27.83	31.97	36.10	38.86	41.61	45.75	52.64	56.77
64	11.229	72	12.632	1.125	16.24	18.45	22.59	26.72	29.48	32.24	36.37	43.26	47.39
80	14.036	90	15.790	1.125			17.89	22.03	24.79	27.55	31.68	38.57	42.71
30	5.263	34	5.965	1.133	26.18	28.38	32.52	36.65	39.41	42.17	46.30	53.19	57.32
60	10.527	68	11.930	1.133	17.35	19.55	23.69	27.82	30.58	33.34	37.48	44.37	48.50
28	4.912	32	5.614	1.143	26.73	28.94	33.07	37.20	39.96	42.72	46.85	53.74	57.87
56	9.825	64	11.229	1.143	18.45	20.66	24.79	28.93	31.69	34.44	38.58	45.47	49.60
52	9.123	60	10.527	1.154	19.55	21.76	25.90	30.03	32.79	35.54	39.68	46.57	50.70
38	6.667	44	7.720	1.158	23.69	25.90	30.04	34.17	36.93	39.68	43.82	50.71	54.84
48	8.421	56	9.825	1.167	20.66	22.86	27.00	31.13	33.89	36.65	40.78	47.67	51.80
29	5.088	34	5.965	1.172	26.32	28.52	32.66	36.79	39.55	42.30	46.44	53.33	57.46
34	5.965	40	7.018	1.176	24.80	27.00	31.14	35.27	38.03	40.78	44.92	51.81	55.94
68	11.930	80	14.036	1.176	14.57	16.78	20.92	25.05	27.82	30.57	34.71	41.60	45.73
44	7.720	52	9.123	1.182	21.76	23.97	28.10	32.23	34.99	37.75	41.89	48.78	52.91
32	5.614	38	6.667	1.188	25.35	27.55	31.69	35.82	38.58	41.34	45.47	52.36	56.49
30	5.263	36	6.316	1.200	25.90	28.11	32.24	36.37	39.13	41.89	46.02	52.91	57.04
40	7.018	48	8.421	1.200	22.86	25.07	29.21	33.34	36.10	38.85	42.99	49.88	54.01
60	10.527	72	12.632	1.200	16.78	18.99	23.13	27.26	30.02	32.78	36.92	43.81	47.94
28	4.912	34	5.965	1.214	26.45	28.66	32.79	36.92	39.68	42.44	46.57	53.46	57.59
56	9.825	68	11.930	1.214	17.88	20.09	24.23	28.36	31.13	33.88	38.02	44.91	49.04
36	6.316	44	7.720	1.222	23.97	26.17	30.31	34.44	37.20	39.95	44.09	50.98	55.11
52	9.123	64	11.229	1.231	18.99	21.19	25.33	29.47	32.23	34.98	39.12	46.01	50.14
29	5.088	36	6.316	1.241	26.04	28.24	32.38	36.51	39.27	42.02	46.16	53.05	57.18
Length Factor*					0.95	0.95	1.00	1.00	1.00	1.05	1.05	1.05	1.10

* This length correction factor must be used to determine the proper belt width.

Center distance is greater than eight times the small sprocket and the large sprocket is not flanged. See Engineering Section for details.

Center Distance, Inches									Speed Ratio	Sprocket Combinations	
										DriveR	DriveN
3500-14MGT P.L. 137.795 250 Teeth	3850-14MGT P.L. 151.575 275 Teeth	4326-14MGT P.L. 170.315 309 Teeth	4578-14MGT P.L. 180.236 327 Teeth	4956-14MGT P.L. 195.118 354 Teeth	5320-14MGT P.L. 209.449 380 Teeth	5740-14MGT P.L. 225.984 410 Teeth	6160-14MGT P.L. 242.520 440 Teeth	6860-14MGT P.L. 270.079 490 Teeth		No. of Grooves	No. of Grooves
61.18	68.07	77.44	82.40	89.84	97.01	105.27	113.54	127.32	1.000	28	28
60.91	67.79	77.16	82.13	89.57	96.73	105.00	113.27	127.05	1.000	29	29
60.63	67.52	76.89	81.85	89.29	96.46	104.72	112.99	126.77	1.000	30	30
60.08	66.97	76.34	81.30	88.74	95.91	104.17	112.44	126.22	1.000	32	32
59.53	66.42	75.79	80.75	88.19	95.36	103.62	111.89	125.67	1.000	34	34
58.98	65.86	75.23	80.20	87.64	94.80	103.07	111.34	125.12	1.000	36	36
58.43	65.31	74.68	79.65	87.09	94.25	102.52	110.79	124.57	1.000	38	38
57.88	64.76	74.13	79.10	86.54	93.70	101.97	110.24	124.02	1.000	40	40
56.77	63.66	73.03	77.99	85.43	92.60	100.86	109.13	122.91	1.000	44	44
55.67	62.56	71.93	76.89	84.33	91.50	99.76	108.03	121.81	1.000	48	48
54.57	61.45	70.82	75.79	83.23	90.39	98.66	106.93	120.71	1.000	52	52
53.47	60.35	69.72	74.69	82.13	89.29	97.56	105.83	119.61	1.000	56	56
52.36	59.25	68.62	73.58	81.02	88.19	96.45	104.72	118.50	1.000	60	60
51.26	58.15	67.52	72.48	79.92	87.09	95.35	103.62	117.40	1.000	64	64
50.16	57.05	66.42	71.38	78.82	85.99	94.25	102.52	116.30	1.000	68	68
49.06	55.94	65.31	70.28	77.72	84.88	93.15	101.42	115.20	1.000	72	72
46.85	53.74	63.11	68.07	75.51	82.68	90.94	99.21	112.99	1.000	80	80
60.77	67.66	77.03	81.99	89.43	96.60	104.86	113.13	126.91	1.034	29	30
61.05	67.93	77.30	82.27	89.71	96.87	105.14	113.41	127.19	1.036	28	29
58.15	65.04	74.41	79.37	86.81	93.98	102.24	110.51	124.29	1.053	38	40
58.70	65.59	74.96	79.92	87.36	94.53	102.79	111.06	124.84	1.056	36	38
59.25	66.14	75.51	80.47	87.91	95.08	103.34	111.61	125.39	1.059	34	36
49.61	56.49	65.86	70.83	78.27	85.43	93.70	101.97	115.75	1.059	68	72
59.81	66.69	76.06	81.03	88.47	95.63	103.90	112.17	125.95	1.063	32	34
50.71	57.59	66.97	71.93	79.37	86.54	94.80	103.07	116.85	1.063	64	68
60.36	67.24	76.61	81.58	89.02	96.18	104.45	112.72	126.50	1.067	30	32
51.81	58.70	68.07	73.03	80.47	87.64	95.90	104.17	117.95	1.067	60	64
60.91	67.79	77.16	82.13	89.57	96.73	105.00	113.27	127.05	1.071	28	30
52.91	59.80	69.17	74.13	81.57	88.74	97.00	105.27	119.06	1.071	56	60
54.02	60.90	70.27	75.24	82.68	89.84	98.11	106.38	120.16	1.077	52	56
55.12	62.00	71.38	76.34	83.78	90.95	99.21	107.48	121.26	1.083	48	52
56.22	63.11	72.48	77.44	84.88	92.05	100.31	108.58	122.36	1.091	44	48
57.32	64.21	73.58	78.54	85.98	93.15	101.41	109.68	123.46	1.100	40	44
60.49	67.38	76.75	81.71	89.15	96.32	104.58	112.85	126.63	1.103	29	32
58.43	65.31	74.68	79.65	87.09	94.25	102.52	110.79	124.57	1.111	36	40
47.95	54.84	64.21	69.17	76.61	83.78	92.04	100.31	114.09	1.111	72	80
58.98	65.86	75.23	80.20	87.64	94.80	103.07	111.34	125.12	1.118	34	38
59.53	66.41	75.78	80.75	88.19	95.35	103.62	111.89	125.67	1.125	32	36
50.15	57.04	66.41	71.38	78.82	85.98	94.25	102.52	116.30	1.125	64	72
45.47	52.35	61.72	66.69	74.13	81.29	89.56	97.83	111.61	1.125	80	90
60.08	66.97	76.34	81.30	88.74	95.91	104.17	112.44	126.22	1.133	30	34
51.26	58.14	67.51	72.48	79.92	87.08	95.35	103.62	117.40	1.133	60	68
60.63	67.52	76.89	81.85	89.29	96.46	104.72	112.99	126.77	1.143	28	32
52.36	59.25	68.62	73.58	81.02	88.19	96.45	104.72	118.50	1.143	56	64
53.46	60.35	69.72	74.68	82.12	89.29	97.55	105.82	119.60	1.154	52	60
57.60	64.48	73.85	78.82	86.26	93.42	101.69	109.96	123.74	1.158	38	44
54.57	61.45	70.82	75.79	83.23	90.39	98.66	106.93	120.71	1.167	48	56
60.22	67.10	76.47	81.44	88.88	96.04	104.31	112.58	126.36	1.172	29	34
58.70	65.59	74.96	79.92	87.36	94.53	102.79	111.06	124.84	1.176	34	40
48.49	55.38	64.75	69.72	77.16	84.32	92.59	100.86	114.64	1.176	68	80
55.67	62.55	71.92	76.89	84.33	91.49	99.76	108.03	121.81	1.182	44	52
59.25	66.14	75.51	80.47	87.91	95.08	103.34	111.61	125.39	1.188	32	38
59.80	66.69	76.06	81.02	88.46	95.63	103.89	112.16	125.94	1.200	30	36
56.77	63.66	73.03	77.99	85.43	92.60	100.86	109.13	122.91	1.200	40	48
50.70	57.59	66.96	71.92	79.36	86.53	94.80	103.07	116.85	1.200	60	72
60.35	67.24	76.61	81.58	89.02	96.18	104.45	112.72	126.50	1.214	28	34
51.80	58.69	68.06	73.03	80.47	87.63	95.90	104.17	117.95	1.214	56	68
57.87	64.76	74.13	79.09	86.53	93.70	101.96	110.23	124.01	1.222	36	44
52.91	59.79	69.16	74.13	81.57	88.73	97.00	105.27	119.05	1.231	52	64
59.94	66.83	76.20	81.16	88.60	95.77	104.03	112.30	126.08	1.241	29	36
1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	Length Factor*		

* This length correction factor must be used to determine the proper belt width.

Center distance is greater than eight times the small sprocket and the large sprocket is not flanged. See Engineering Section for details.

14mm Pitch PowerGrip® GT®2 Belts — Drive Selection Table

Sprocket Combinations					Center Distance, Inches								
DriveR		DriveN											
No. of Grooves	Pitch Diameter (Inches)	No. of Grooves	Pitch Diameter (Inches)	Speed Ratio	1778-14MGT P.L. 70.000 127 Teeth	1890-14MGT P.L. 74.409 135 Teeth	2100-14MGT P.L. 82.677 150 Teeth	2310-14MGT P.L. 90.945 165 Teeth	2450-14MGT P.L. 96.457 175 Teeth	2590-14MGT P.L. 101.968 185 Teeth	2800-14MGT P.L. 110.236 200 Teeth	3150-14MGT P.L. 124.016 225 Teeth	3360-14MGT P.L. 132.283 240 Teeth
32	5.614	40	7.018	1.250	25.07	27.27	31.41	35.54	38.30	41.06	45.19	52.08	56.21
48	8.421	60	10.527	1.250	20.09	22.30	26.44	30.57	33.33	36.09	40.22	47.12	51.25
64	11.229	80	14.036	1.250	15.09	17.30	21.45	25.59	28.35	31.11	35.25	42.14	46.28
72	12.632	90	15.790	1.250		14.80	18.95	23.09	25.86	28.62	32.76	39.66	43.79
38	6.667	48	8.421	1.263	23.13	25.34	29.48	33.61	36.37	39.13	43.26	50.15	54.28
30	5.263	38	6.667	1.267	25.62	27.83	31.96	36.09	38.85	41.61	45.74	52.64	56.77
44	7.720	56	9.825	1.273	21.19	23.40	27.54	31.67	34.43	37.19	41.33	48.22	52.35
28	4.912	36	6.316	1.286	26.17	28.38	32.51	36.64	39.41	42.16	46.30	53.19	57.32
56	9.825	72	12.632	1.286	17.31	19.52	23.66	27.80	30.56	33.32	37.46	44.35	48.48
34	5.965	44	7.720	1.294	24.24	26.44	30.58	34.71	37.47	40.23	44.36	51.25	55.38
40	7.018	52	9.123	1.300	22.30	24.51	28.64	32.78	35.54	38.29	42.43	49.32	53.45
52	9.123	68	11.930	1.308	18.41	20.62	24.77	28.90	31.66	34.42	38.56	45.45	49.59
29	5.088	38	6.667	1.310	25.76	27.96	32.10	36.23	38.99	41.75	45.88	52.77	56.90
68	11.930	90	15.790	1.324		15.31	19.47	23.62	26.39	29.15	33.29	40.19	44.33
30	5.263	40	7.018	1.333	25.34	27.55	31.68	35.81	38.57	41.33	45.47	52.36	56.49
36	6.316	48	8.421	1.333	23.40	25.61	29.75	33.88	36.64	39.40	43.53	50.42	54.56
48	8.421	64	11.229	1.333	19.52	21.73	25.87	30.00	32.77	35.52	39.66	46.56	50.69
60	10.527	80	14.036	1.333	15.61	17.83	21.98	26.12	28.88	31.64	35.79	42.68	46.82
28	4.912	38	6.667	1.357	25.89	28.10	32.23	36.37	39.13	41.88	46.02	52.91	57.04
44	7.720	60	10.527	1.364	20.62	22.83	26.97	31.11	33.87	36.63	40.76	47.66	51.79
38	6.667	52	9.123	1.368	22.57	24.77	28.91	33.05	35.81	38.56	42.70	49.59	53.72
32	5.614	44	7.720	1.375	24.50	26.71	30.85	34.98	37.74	40.50	44.64	51.53	55.66
29	5.088	40	7.018	1.379	25.47	27.68	31.82	35.95	38.71	41.47	45.60	52.49	56.62
52	9.123	72	12.632	1.385	17.83	20.04	24.19	28.33	31.09	33.85	37.99	44.89	49.02
40	7.018	56	9.825	1.400	21.73	23.94	28.08	32.21	34.97	37.73	41.87	48.76	52.89
80	14.036	112	19.650	1.400				18.80	21.59	24.37	28.52	35.44	39.58
64	11.229	90	15.790	1.406		15.82	19.99	24.14	26.91	29.68	33.82	40.73	44.86
34	5.965	48	8.421	1.412	23.67	25.88	30.02	34.15	36.91	39.67	43.80	50.70	54.83
48	8.421	68	11.930	1.417	18.94	21.15	25.30	29.43	32.20	34.96	39.10	45.99	50.13
28	4.912	40	7.018	1.429	25.61	27.82	31.95	36.08	38.85	41.60	45.74	52.63	56.76
56	9.825	80	14.036	1.429	16.12	18.34	22.50	26.65	29.41	32.18	36.32	43.22	47.35
36	6.316	52	9.123	1.444	22.83	25.04	29.18	33.31	36.08	38.83	42.97	49.86	54.00
44	7.720	64	11.229	1.455	20.04	22.25	26.40	30.54	33.30	36.06	40.20	47.09	51.23
30	5.263	44	7.720	1.467	24.77	26.98	31.12	35.25	38.01	40.77	44.91	51.80	55.93
38	6.667	56	9.825	1.474	21.99	24.20	28.34	32.48	35.24	38.00	42.14	49.03	53.16
32	5.614	48	8.421	1.500	23.94	26.14	30.28	34.42	37.18	39.94	44.07	50.97	55.10
40	7.018	60	10.527	1.500	21.15	23.36	27.50	31.64	34.41	37.16	41.30	48.20	52.33
48	8.421	72	12.632	1.500	18.34	20.56	24.72	28.86	31.62	34.39	38.53	45.43	49.56
60	10.527	90	15.790	1.500	14.08	16.32	20.50	24.66	27.43	30.20	34.35	41.26	45.39
29	5.088	44	7.720	1.517	24.91	27.11	31.25	35.39	38.15	40.90	45.04	51.93	56.07
34	5.965	52	9.123	1.529	23.10	25.31	29.45	33.58	36.35	39.10	43.24	50.14	54.27
52	9.123	80	14.036	1.538	16.63	18.86	23.02	27.17	29.94	32.70	36.85	43.75	47.89
44	7.720	68	11.930	1.545	19.45	21.67	25.82	29.96	32.73	35.49	39.63	46.53	50.66
36	6.316	56	9.825	1.556	22.25	24.46	28.61	32.75	35.51	38.27	42.41	49.30	53.43
72	12.632	112	19.650	1.556				19.80	22.60	25.39	29.56	36.49	40.63
28	4.912	44	7.720	1.571	25.04	27.25	31.39	35.52	38.28	41.04	45.18	52.07	56.20
38	6.667	60	10.527	1.579	21.41	23.62	27.77	31.91	34.67	37.43	41.57	48.47	52.60
30	5.263	48	8.421	1.600	24.20	26.41	30.55	34.69	37.45	40.21	44.34	51.24	55.37
40	7.018	64	11.229	1.600	20.56	22.78	26.93	31.07	33.83	36.59	40.73	47.63	51.77
56	9.825	90	15.790	1.607	14.58	16.82	21.01	25.18	27.95	30.72	34.87	41.79	45.93
32	5.614	52	9.123	1.625	23.36	25.57	29.71	33.85	36.61	39.37	43.51	50.41	54.54
44	7.720	72	12.632	1.636	18.86	21.08	25.24	29.38	32.15	34.91	39.06	45.96	50.10
34	5.965	56	9.825	1.647	22.52	24.73	28.87	33.01	35.78	38.54	42.67	49.57	53.70
68	11.930	112	19.650	1.647				20.30	23.10	25.89	30.07	37.01	41.16
29	5.088	48	8.421	1.655	24.33	26.54	30.68	34.82	37.58	40.34	44.48	51.37	55.51
36	6.316	60	10.527	1.667	21.67	23.88	28.03	32.17	34.94	37.70	41.84	48.74	52.87
48	8.421	80	14.036	1.667	17.13	19.36	23.53	27.69	30.46	33.23	37.38	44.28	48.42
38	6.667	64	11.229	1.684	20.82	23.04	27.19	31.33	34.10	36.86	41.00	47.90	52.03
40	7.018	68	11.930	1.700	19.97	22.19	26.34	30.49	33.26	36.02	40.16	47.06	51.20
28	4.912	48	8.421	1.714	24.47	26.68	30.82	34.95	37.72	40.48	44.61	51.51	55.64
52	9.123	90	15.790	1.731	15.06	17.32	21.51	25.69	28.47	31.24	35.40	42.31	46.45
30	5.263	52	9.123	1.733	23.62	25.83	29.98	34.12	36.88	39.64	43.78	50.67	54.81
Length Factor*					0.95	0.95	1.00	1.00	1.00	1.05	1.05	1.05	1.10

* This length correction factor must be used to determine the proper belt width.

Center distance is greater than eight times the small sprocket and the large sprocket is not flanged. See Engineering Section for details.

Center Distance, Inches									Speed Ratio	Sprocket Combinations	
										DriveR	DriveN
3500-14MGT P.L. 137.795 250 Teeth	3850-14MGT P.L. 151.575 275 Teeth	4326-14MGT P.L. 170.315 309 Teeth	4578-14MGT P.L. 180.236 327 Teeth	4956-14MGT P.L. 195.118 354 Teeth	5320-14MGT P.L. 209.449 380 Teeth	5740-14MGT P.L. 225.984 410 Teeth	6160-14MGT P.L. 242.520 440 Teeth	6860-14MGT P.L. 270.079 490 Teeth		No. of Grooves	No. of Grooves
58.97	65.86	75.23	80.20	87.64	94.80	103.07	111.34	125.12	1.250	32	40
54.01	60.89	70.27	75.23	82.67	89.84	98.10	106.37	120.15	1.250	48	60
49.04	55.92	65.30	70.26	77.70	84.87	93.14	101.41	115.19	1.250	64	80
46.55	53.44	62.81	67.78	75.22	82.39	90.65	98.92	112.71	1.250	72	90
57.04	63.93	73.30	78.26	85.71	92.87	101.14	109.41	123.19	1.263	38	48
59.53	66.41	75.78	80.75	88.19	95.35	103.62	111.89	125.67	1.267	30	38
55.11	62.00	71.37	76.33	83.77	90.94	99.20	107.48	121.26	1.273	44	56
60.08	66.96	76.33	81.30	88.74	95.90	104.17	112.44	126.22	1.286	28	36
51.24	58.13	67.50	72.47	79.91	87.08	95.34	103.61	117.39	1.286	56	72
58.15	65.03	74.40	79.37	86.81	93.97	102.24	110.51	124.29	1.294	34	44
56.21	63.10	72.47	77.44	84.88	92.04	100.31	108.58	122.36	1.300	40	52
52.35	59.23	68.61	73.57	81.01	88.18	96.44	104.72	118.50	1.308	52	68
59.66	66.55	75.92	80.88	88.32	95.49	103.75	112.02	125.81	1.310	29	38
47.09	53.98	63.35	68.32	75.76	82.93	91.20	99.47	113.25	1.324	68	90
59.25	66.13	75.50	80.47	87.91	95.08	103.34	111.61	125.39	1.333	30	40
57.32	64.20	73.57	78.54	85.98	93.14	101.41	109.68	123.46	1.333	36	48
53.45	60.34	69.71	74.67	82.11	89.28	97.55	105.82	119.60	1.333	48	64
49.58	56.47	65.84	70.81	78.25	85.42	93.68	101.95	115.73	1.333	60	80
59.80	66.69	76.06	81.02	88.46	95.63	103.89	112.16	125.94	1.357	28	38
54.55	61.44	70.81	75.78	83.22	90.38	98.65	106.92	120.70	1.364	44	60
56.49	63.37	72.74	77.71	85.15	92.32	100.58	108.85	122.63	1.368	38	52
58.42	65.30	74.68	79.64	87.08	94.25	102.51	110.78	124.56	1.375	32	44
59.38	66.27	75.64	80.61	88.05	95.21	103.48	111.75	125.53	1.379	29	40
51.78	58.67	68.05	73.01	80.45	87.62	95.89	104.16	117.94	1.385	52	72
55.65	62.54	71.91	76.88	84.32	91.49	99.75	108.02	121.80	1.400	40	56
42.35	49.25	58.63	63.60	71.05	78.22	86.49	94.76	108.55	1.400	80	112
47.62	54.52	63.89	68.86	76.31	83.47	91.74	100.01	113.80	1.406	64	90
57.59	64.47	73.85	78.81	86.25	93.42	101.68	109.95	123.74	1.412	34	48
52.89	59.78	69.15	74.12	81.56	88.72	96.99	105.26	119.04	1.417	48	68
59.52	66.41	75.78	80.74	88.18	95.35	103.61	111.89	125.67	1.429	28	40
50.12	57.01	66.38	71.35	78.79	85.96	94.23	102.50	116.28	1.429	56	80
56.76	63.64	73.02	77.98	85.42	92.59	100.85	109.13	122.91	1.444	36	52
53.99	60.88	70.25	75.22	82.66	89.83	98.09	106.36	120.14	1.455	44	64
58.69	65.58	74.95	79.91	87.35	94.52	102.79	111.06	124.84	1.467	30	44
55.92	62.81	72.18	77.15	84.59	91.76	100.02	108.30	122.08	1.474	38	56
57.86	64.75	74.12	79.08	86.53	93.69	101.96	110.23	124.01	1.500	32	48
55.09	61.98	71.35	76.32	83.76	90.93	99.19	107.47	121.25	1.500	40	60
52.32	59.21	68.59	73.55	81.00	88.16	96.43	104.70	118.49	1.500	48	72
48.16	55.05	64.43	69.40	76.85	84.01	92.28	100.56	114.34	1.500	60	90
58.83	65.71	75.08	80.05	87.49	94.66	102.92	111.19	124.97	1.517	29	44
57.03	63.92	73.29	78.25	85.70	92.86	101.13	109.40	123.18	1.529	34	52
50.65	57.54	66.92	71.89	79.33	86.50	94.77	103.04	116.83	1.538	52	80
53.43	60.32	69.69	74.66	82.10	89.27	97.53	105.81	119.59	1.545	44	68
56.20	63.08	72.46	77.42	84.86	92.03	100.30	108.57	122.35	1.556	36	56
43.40	50.31	59.70	64.67	72.12	79.29	87.57	95.84	109.63	1.556	72	112
58.96	65.85	75.22	80.19	87.63	94.79	103.06	111.33	125.11	1.571	28	44
55.36	62.25	71.62	76.59	84.03	91.20	99.47	107.74	121.52	1.579	38	60
58.13	65.02	74.39	79.36	86.80	93.96	102.23	110.50	124.28	1.600	30	48
54.53	61.42	70.79	75.76	83.20	90.37	98.64	106.91	120.69	1.600	40	64
48.69	55.59	64.97	69.94	77.38	84.55	92.82	101.10	114.88	1.607	56	90
57.30	64.19	73.56	78.53	85.97	93.13	101.40	109.67	123.45	1.625	32	52
52.86	59.75	69.13	74.09	81.54	88.71	96.97	105.25	119.03	1.636	44	72
56.47	63.35	72.73	77.69	85.14	92.30	100.57	108.84	122.62	1.647	34	56
43.93	50.84	60.23	65.20	72.65	79.83	88.10	96.38	110.17	1.647	68	112
58.27	65.15	74.53	79.49	86.93	94.10	102.37	110.64	124.42	1.655	29	48
55.63	62.52	71.90	76.86	84.31	91.47	99.74	108.01	121.79	1.667	36	60
51.19	58.08	67.46	72.43	79.87	87.04	95.31	103.58	117.37	1.667	48	80
54.80	61.69	71.06	76.03	83.47	90.64	98.91	107.18	120.96	1.684	38	64
53.96	60.85	70.23	75.20	82.64	89.81	98.08	106.35	120.13	1.700	40	68
58.40	65.29	74.66	79.63	87.07	94.24	102.50	110.77	124.56	1.714	28	48
49.22	56.12	65.50	70.47	77.92	85.09	93.36	101.64	115.43	1.731	52	90
57.57	64.46	73.83	78.80	86.24	93.41	101.67	109.94	123.73	1.733	30	52
1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	Length Factor*		

* This length correction factor must be used to determine the proper belt width.

Center distance is greater than eight times the small sprocket and the large sprocket is not flanged. See Engineering Section for details.

14mm Pitch PowerGrip® GT®2 Belts — Drive Selection Table

Sprocket Combinations					Center Distance, Inches								
DriveR		DriveN											
No. of Grooves	Pitch Diameter (Inches)	No. of Grooves	Pitch Diameter (Inches)	Speed Ratio	1778-14MGT P.L. 70.000 127 Teeth	1890-14MGT P.L. 74.409 135 Teeth	2100-14MGT P.L. 82.677 150 Teeth	2310-14MGT P.L. 90.945 165 Teeth	2450-14MGT P.L. 96.457 175 Teeth	2590-14MGT P.L. 101.968 185 Teeth	2800-14MGT P.L. 110.236 200 Teeth	3150-14MGT P.L. 124.016 225 Teeth	3360-14MGT P.L. 132.283 240 Teeth
32	5.614	56	9.825	1.750	22.78	24.99	29.14	33.28	36.04	38.80	42.94	49.84	53.97
64	11.229	112	19.650	1.750			16.55	20.79	23.60	26.40	30.58	37.52	41.67
34	5.965	60	10.527	1.765	21.93	24.14	28.30	32.44	35.20	37.96	42.11	49.00	53.14
36	6.316	64	11.229	1.778	21.08	23.30	27.45	31.59	34.36	37.12	41.27	48.17	52.30
38	6.667	68	11.930	1.789	20.22	22.44	26.60	30.75	33.52	36.28	40.43	47.33	51.47
29	5.088	52	9.123	1.793	23.75	25.97	30.11	34.25	37.01	39.77	43.91	50.81	54.94
40	7.018	72	12.632	1.800	19.36	21.59	25.75	29.91	32.68	35.44	39.59	46.49	50.63
80	14.036	144	25.264	1.800							23.58	30.63	34.82
44	7.720	80	14.036	1.818	17.63	19.87	24.05	28.21	30.98	33.75	37.90	44.81	48.95
28	4.912	52	9.123	1.857	23.88	26.10	30.24	34.38	37.15	39.91	44.05	50.94	55.08
30	5.263	56	9.825	1.867	23.04	25.25	29.40	33.54	36.31	39.07	43.21	50.11	54.24
60	10.527	112	19.650	1.867			17.02	21.28	24.10	26.90	31.08	38.04	42.19
32	5.614	60	10.527	1.875	22.19	24.40	28.56	32.70	35.47	38.23	42.37	49.27	53.41
48	8.421	90	15.790	1.875	15.55	17.81	22.02	26.20	28.98	31.76	35.92	42.84	46.98
34	5.965	64	11.229	1.882	21.33	23.55	27.71	31.86	34.63	37.39	41.53	48.43	52.57
36	6.316	68	11.930	1.889	20.48	22.70	26.86	31.01	33.78	36.55	40.69	47.60	51.73
38	6.667	72	12.632	1.895	19.62	21.84	26.01	30.17	32.94	35.70	39.85	46.76	50.90
29	5.088	56	9.825	1.931	23.17	25.38	29.53	33.67	36.44	39.20	43.34	50.24	54.38
28	4.912	56	9.825	2.000	23.30	25.51	29.66	33.81	36.57	39.33	43.48	50.38	54.51
30	5.263	60	10.527	2.000	22.44	24.66	28.82	32.96	35.73	38.49	42.64	49.54	53.67
32	5.614	64	11.229	2.000	21.59	23.81	27.97	32.12	34.89	37.65	41.80	48.70	52.84
34	5.965	68	11.930	2.000	20.73	22.96	27.12	31.27	34.04	36.81	40.96	47.86	52.00
36	6.316	72	12.632	2.000	19.87	22.10	26.27	30.42	33.20	35.96	40.11	47.02	51.16
40	7.018	80	14.036	2.000	18.12	20.37	24.55	28.72	31.50	34.27	38.42	45.34	49.48
56	9.825	112	19.650	2.000			17.50	21.76	24.59	27.39	31.59	38.55	42.71
72	12.632	144	25.264	2.000						20.23	24.54	31.61	35.82
44	7.720	90	15.790	2.045	16.02	18.29	22.51	26.70	29.49	32.27	36.43	43.36	47.50
29	5.088	60	10.527	2.069	22.57	24.79	28.95	33.09	35.86	38.63	42.77	49.67	53.81
80	14.036	168	29.475	2.100								26.71	31.00
38	6.667	80	14.036	2.105	18.37	20.61	24.81	28.98	31.76	34.53	38.68	45.60	49.74
34	5.965	72	12.632	2.118	20.12	22.35	26.52	30.68	33.46	36.23	40.38	47.29	51.43
68	11.930	144	25.264	2.118						20.69	25.01	32.10	36.31
32	5.614	68	11.930	2.125	20.98	23.21	27.38	31.53	34.31	37.07	41.22	48.13	52.27
30	5.263	64	11.229	2.133	21.84	24.07	28.23	32.38	35.15	37.91	42.06	48.97	53.10
28	4.912	60	10.527	2.143	22.70	24.92	29.08	33.23	35.99	38.76	42.90	49.81	53.94
52	9.123	112	19.650	2.154			17.97	22.25	25.08	27.89	32.09	39.06	43.22
29	5.088	64	11.229	2.207	21.97	24.19	28.36	32.51	35.28	38.05	42.19	49.10	53.24
36	6.316	80	14.036	2.222	18.61	20.86	25.06	29.23	32.01	34.79	38.94	45.86	50.01
32	5.614	72	12.632	2.250	20.37	22.60	26.78	30.94	33.72	36.49	40.64	47.55	51.69
40	7.018	90	15.790	2.250	16.50	18.78	23.01	27.20	30.00	32.78	36.95	43.88	48.03
64	11.229	144	25.264	2.250						21.15	25.49	32.59	36.81
80	14.036	180	31.580	2.250								24.60	28.98
30	5.263	68	11.930	2.267	21.23	23.46	27.64	31.79	34.57	37.33	41.48	48.39	52.53
28	4.912	64	11.229	2.286	22.10	24.32	28.49	32.64	35.41	38.18	42.32	49.23	53.37
48	8.421	112	19.650	2.333			18.43	22.73	25.56	28.38	32.59	39.56	43.73
72	12.632	168	29.475	2.333								27.65	31.95
29	5.088	68	11.930	2.345	21.36	23.59	27.76	31.92	34.70	37.46	41.61	48.52	52.66
34	5.965	80	14.036	2.353	18.86	21.11	25.31	29.48	32.27	35.04	39.20	46.12	50.27
38	6.667	90	15.790	2.368	16.74	19.02	23.25	27.45	30.25	33.03	37.20	44.14	48.29
30	5.263	72	12.632	2.400	20.62	22.85	27.03	31.20	33.98	36.75	40.90	47.81	51.95
60	10.527	144	25.264	2.400					18.64	21.61	25.96	33.08	37.30
80	14.036	192	33.686	2.400									26.84
28	4.912	68	11.930	2.429	21.49	23.72	27.89	32.05	34.83	37.59	41.74	48.66	52.80
68	11.930	168	29.475	2.471								28.11	32.43
29	5.088	72	12.632	2.483	20.74	22.98	27.16	31.33	34.10	36.87	41.03	47.94	52.09
32	5.614	80	14.036	2.500	19.10	21.36	25.56	29.74	32.52	35.30	39.46	46.39	50.53
36	6.316	90	15.790	2.500	16.97	19.26	23.50	27.70	30.50	33.29	37.46	44.40	48.55
72	12.632	180	31.580	2.500								25.51	29.90
80	14.036	200	35.089	2.500									25.34
44	7.720	112	19.650	2.545		14.46	18.89	23.20	26.05	28.87	33.08	40.07	44.24
Length Factor*					0.95	0.95	1.00	1.00	1.00	1.05	1.05	1.05	1.10

* This length correction factor must be used to determine the proper belt width.

Center distance is greater than eight times the small sprocket and the large sprocket is not flanged. See Engineering Section for details.

Center Distance, Inches									Speed Ratio	Sprocket Combinations	
										DriveR	DriveN
3500-14MGT P.L. 137.795 250 Teeth	3850-14MGT P.L. 151.575 275 Teeth	4326-14MGT P.L. 170.315 309 Teeth	4578-14MGT P.L. 180.236 327 Teeth	4956-14MGT P.L. 195.118 354 Teeth	5320-14MGT P.L. 209.449 380 Teeth	5740-14MGT P.L. 225.984 410 Teeth	6160-14MGT P.L. 242.520 440 Teeth	6860-14MGT P.L. 270.079 490 Teeth		No. of Grooves	No. of Grooves
56.74	63.62	73.00	77.97	85.41	92.58	100.84	109.11	122.90	1.750	32	56
44.45	51.36	60.76	65.73	73.19	80.36	88.64	96.92	110.71	1.750	64	112
55.90	62.79	72.17	77.13	84.58	91.74	100.01	108.28	122.07	1.765	34	60
55.07	61.96	71.33	76.30	83.74	90.91	99.18	107.45	121.24	1.778	36	64
54.23	61.12	70.50	75.47	82.91	90.08	98.35	106.62	120.41	1.789	38	68
57.70	64.59	73.97	78.93	86.38	93.54	101.81	110.08	123.86	1.793	29	52
53.39	60.29	69.67	74.63	82.08	89.25	97.52	105.79	119.57	1.800	40	72
37.61	44.56	54.00	58.99	66.46	73.64	81.93	90.22	104.02	1.800	80	144
51.72	58.61	67.99	72.96	80.41	87.58	95.85	104.12	117.91	1.818	44	80
57.84	64.73	74.10	79.07	86.51	93.68	101.95	110.22	124.00	1.857	28	52
57.00	63.89	73.27	78.24	85.68	92.85	101.11	109.39	123.17	1.867	30	56
44.97	51.88	61.28	66.26	73.72	80.90	89.17	97.45	111.25	1.867	60	112
56.17	63.06	72.44	77.40	84.85	92.02	100.28	108.56	122.34	1.875	32	60
49.75	56.65	66.04	71.01	78.46	85.63	93.90	102.18	115.97	1.875	48	90
55.33	62.23	71.60	76.57	84.01	91.18	99.45	107.72	121.51	1.882	34	64
54.50	61.39	70.77	75.74	83.18	90.35	98.62	106.89	120.68	1.889	36	68
53.66	60.55	69.93	74.90	82.35	89.52	97.79	106.06	119.85	1.895	38	72
57.14	64.03	73.40	78.37	85.81	92.98	101.25	109.52	123.30	1.931	29	56
57.27	64.16	73.54	78.51	85.95	93.12	101.39	109.66	123.44	2.000	28	56
56.44	63.33	72.71	77.67	85.12	92.29	100.55	108.83	122.61	2.000	30	60
55.60	62.49	71.87	76.84	84.28	91.45	99.72	108.00	121.78	2.000	32	64
54.76	61.66	71.04	76.01	83.45	90.62	98.89	107.16	120.95	2.000	34	68
53.93	60.82	70.20	75.17	82.62	89.79	98.06	106.33	120.12	2.000	36	72
52.25	59.15	68.53	73.50	80.95	88.12	96.39	104.67	118.45	2.000	40	80
45.48	52.40	61.81	66.79	74.25	81.43	89.71	97.99	111.78	2.000	56	112
38.62	45.58	55.03	60.02	67.50	74.69	82.99	91.28	105.09	2.000	72	144
50.27	57.18	66.57	71.54	78.99	86.17	94.44	102.72	116.51	2.045	44	90
56.57	63.46	72.84	77.81	85.25	92.42	100.69	108.96	122.75	2.069	29	60
33.84	40.88	50.39	55.41	62.91	70.13	78.44	86.74	100.57	2.100	80	168
52.51	59.41	68.80	73.77	81.22	88.39	96.66	104.94	118.72	2.105	38	80
54.19	61.09	70.47	75.44	82.89	90.06	98.33	106.60	120.39	2.118	34	72
39.12	46.09	55.54	60.54	68.02	75.22	83.51	91.81	105.62	2.118	68	144
55.03	61.93	71.31	76.28	83.72	90.89	99.16	107.43	121.22	2.125	32	68
55.87	62.76	72.14	77.11	84.55	91.72	99.99	108.27	122.05	2.133	30	64
56.70	63.60	72.98	77.94	85.39	92.56	100.83	109.10	122.88	2.143	28	60
46.00	52.92	62.33	67.32	74.78	81.96	90.24	98.52	112.32	2.154	52	112
56.00	62.89	72.27	77.24	84.69	91.86	100.13	108.40	122.19	2.207	29	64
52.77	59.68	69.06	74.03	81.48	88.66	96.93	105.20	118.99	2.222	36	80
54.46	61.35	70.74	75.71	83.16	90.33	98.60	106.87	120.66	2.250	32	72
50.80	57.70	67.10	72.07	79.53	86.70	94.98	103.25	117.04	2.250	40	90
39.62	46.59	56.05	61.05	68.54	75.74	84.04	92.33	106.15	2.250	64	144
31.86	38.97	48.53	53.57	61.10	68.33	76.66	84.98	98.82	2.250	80	180
55.30	62.19	71.57	76.54	83.99	91.16	99.43	107.71	121.49	2.267	30	68
56.13	63.03	72.41	77.38	84.82	91.99	100.26	108.54	122.32	2.286	28	64
46.51	53.44	62.86	67.84	75.30	82.49	90.77	99.05	112.85	2.333	48	112
34.81	41.86	51.39	56.42	63.93	71.16	79.47	87.78	101.62	2.333	72	168
55.43	62.33	71.71	76.68	84.12	91.29	99.57	107.84	121.63	2.345	29	68
53.04	59.94	69.33	74.30	81.75	88.92	97.20	105.47	119.26	2.353	34	80
51.06	57.97	67.36	72.34	79.79	86.97	95.24	103.52	117.31	2.368	38	90
54.72	61.62	71.00	75.98	83.42	90.60	98.87	107.14	120.93	2.400	30	72
40.11	47.10	56.56	61.57	69.06	76.26	84.56	92.86	106.68	2.400	60	144
29.78	36.99	46.64	51.70	59.26	66.52	74.86	83.20	97.06	2.400	80	192
55.56	62.46	71.84	76.81	84.26	91.43	99.70	107.98	121.76	2.429	28	68
35.28	42.35	51.89	56.92	64.44	71.67	79.99	88.30	102.14	2.471	68	168
54.85	61.75	71.14	76.11	83.56	90.73	99.00	107.28	121.06	2.483	29	72
53.30	60.20	69.59	74.57	82.02	89.19	97.47	105.74	119.53	2.500	32	80
51.32	58.23	67.63	72.60	80.06	87.23	95.51	103.79	117.58	2.500	36	90
32.80	39.93	49.52	54.57	62.11	69.35	77.69	86.01	99.87	2.500	72	180
28.34	35.64	45.34	50.43	58.02	65.29	73.65	82.00	95.88	2.500	80	200
47.02	53.96	63.38	68.36	75.83	83.01	91.30	99.58	113.39	2.545	44	112
1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	Length Factor*		

* This length correction factor must be used to determine the proper belt width.

Center distance is greater than eight times the small sprocket and the large sprocket is not flanged. See Engineering Section for details.

14mm Pitch PowerGrip® GT®2 Belts Drive Selection Table

Sprocket Combinations					Center Distance, Inches								
DriveR		DriveN											
No. of Grooves	Pitch Diameter (Inches)	No. of Grooves	Pitch Diameter (Inches)	Speed Ratio	1778-14MGT P.L. 70.000 127 Teeth	1890-14MGT P.L. 74.409 135 Teeth	2100-14MGT P.L. 82.677 150 Teeth	2310-14MGT P.L. 90.945 165 Teeth	2450-14MGT P.L. 96.457 175 Teeth	2590-14MGT P.L. 101.968 185 Teeth	2800-14MGT P.L. 110.236 200 Teeth	3150-14MGT P.L. 124.016 225 Teeth	3360-14MGT P.L. 132.283 240 Teeth
28	4.912	72	12.632	2.571	20.86	23.10	27.29	31.45	34.23	37.00	41.16	48.08	52.22
56	9.825	144	25.264	2.571					19.09	22.06	26.43	33.56	37.79
64	11.229	168	29.475	2.625							21.15	28.57	32.90
34	5.965	90	15.790	2.647	17.21	19.50	23.74	27.95	30.75	33.54	37.71	44.65	48.81
68	11.930	180	31.580	2.647								25.95	30.36
30	5.263	80	14.036	2.667	19.34	21.60	25.81	29.99	32.78	35.56	39.72	46.65	50.79
72	12.632	192	33.686	2.667									27.74
80	14.036	216	37.896	2.700									
29	5.088	80	14.036	2.759	19.46	21.72	25.93	30.12	32.91	35.68	39.85	46.78	50.92
52	9.123	144	25.264	2.769					19.53	22.51	26.89	34.04	38.28
72	12.632	200	35.089	2.778									26.22
40	7.018	112	19.650	2.800		14.90	19.36	23.68	26.53	29.36	33.58	40.57	44.75
60	10.527	168	29.475	2.800							21.59	29.03	33.37
80	14.036	224	39.300	2.800									
32	5.614	90	15.790	2.813	17.44	19.73	23.99	28.20	31.00	33.79	37.97	44.91	49.07
64	11.229	180	31.580	2.813								26.40	30.82
68	11.930	192	33.686	2.824								23.63	28.19
28	4.912	80	14.036	2.857	19.58	21.85	26.06	30.24	33.03	35.81	39.98	46.91	51.05
68	11.930	200	35.089	2.941									26.65
38	6.667	112	19.650	2.947		15.12	19.58	23.91	26.77	29.60	33.83	40.82	45.00
30	5.263	90	15.790	3.000	17.68	19.97	24.23	28.45	31.25	34.04	38.22	45.17	49.32
48	8.421	144	25.264	3.000					19.97	22.97	27.36	34.52	38.77
56	9.825	168	29.475	3.000							22.02	29.49	33.84
60	10.527	180	31.580	3.000								26.85	31.28
64	11.229	192	33.686	3.000								24.06	28.63
72	12.632	216	37.896	3.000									
29	5.088	90	15.790	3.103	17.79	20.09	24.35	28.57	31.38	34.17	38.35	45.30	49.45
36	6.316	112	19.650	3.111		15.34	19.81	24.15	27.01	29.84	34.07	41.07	45.25
72	12.632	224	39.300	3.111									
64	11.229	200	35.089	3.125									27.09
68	11.930	216	37.896	3.176									
60	10.527	192	33.686	3.200								24.49	29.08
28	4.912	90	15.790	3.214	17.91	20.21	24.47	28.69	31.50	34.29	38.48	45.42	49.58
56	9.825	180	31.580	3.214								27.29	31.74
52	9.123	168	29.475	3.231							22.46	29.95	34.30
44	7.720	144	25.264	3.273				17.29	20.41	23.42	27.82	35.00	39.25
34	5.965	112	19.650	3.294		15.56	20.04	24.39	27.25	30.09	34.32	41.32	45.51
68	11.930	224	39.300	3.294									
60	10.527	200	35.089	3.333									27.53
64	11.229	216	37.896	3.375									
56	9.825	192	33.686	3.429								24.92	29.52
52	9.123	180	31.580	3.462								27.74	32.19
32	5.614	112	19.650	3.500	13.25	15.77	20.27	24.62	27.49	30.33	34.56	41.57	45.76
48	8.421	168	29.475	3.500							22.89	30.41	34.77
64	11.229	224	39.300	3.500									
56	9.825	200	35.089	3.571								23.20	27.96
40	7.018	144	25.264	3.600				17.71	20.85	23.86	28.28	35.48	39.73
60	10.527	216	37.896	3.600									
52	9.123	192	33.686	3.692								25.35	29.96
30	5.263	112	19.650	3.733	13.46	15.99	20.50	24.85	27.72	30.57	34.81	41.82	46.01
60	10.527	224	39.300	3.733									
48	8.421	180	31.580	3.750								28.18	32.65
38	6.667	144	25.264	3.789				17.92	21.06	24.09	28.51	35.71	39.98
44	7.720	168	29.475	3.818							23.32	30.86	35.23
52	9.123	200	35.089	3.846								23.62	28.39
56	9.825	216	37.896	3.857									24.52
29	5.088	112	19.650	3.862	13.57	16.10	20.61	24.97	27.84	30.69	34.93	41.95	46.14
28	4.912	112	19.650	4.000	13.67	16.21	20.72	25.09	27.96	30.81	35.05	42.07	46.26
36	6.316	144	25.264	4.000				18.13	21.28	24.31	28.74	35.95	40.22
48	8.421	192	33.686	4.000								25.78	30.41
56	9.825	224	39.300	4.000									
44	7.720	180	31.580	4.091							20.71	28.62	33.10
Length Factor*					0.95	0.95	1.00	1.00	1.00	1.05	1.05	1.05	1.10

* This length correction factor must be used to determine the proper belt width.

Center distance is greater than eight times the small sprocket and the large sprocket is not flanged. See Engineering Section for details.

Center Distance, Inches									Speed Ratio	Sprocket Combinations	
										DriveR	DriveN
3500-14MGT P.L. 137.795 250 Teeth	3850-14MGT P.L. 151.575 275 Teeth	4326-14MGT P.L. 170.315 309 Teeth	4578-14MGT P.L. 180.236 327 Teeth	4956-14MGT P.L. 195.118 354 Teeth	5320-14MGT P.L. 209.449 380 Teeth	5740-14MGT P.L. 225.984 410 Teeth	6160-14MGT P.L. 242.520 440 Teeth	6860-14MGT P.L. 270.079 490 Teeth		No. of Grooves	No. of Grooves
54.99	61.89	71.27	76.24	83.69	90.86	99.14	107.41	121.20	2.571	28	72
40.61	47.60	57.07	62.08	69.57	76.78	85.08	93.38	107.20	2.571	56	144
35.76	42.84	52.39	57.42	64.95	72.18	80.50	88.82	102.67	2.625	64	168
51.58	58.49	67.89	72.87	80.32	87.50	95.78	104.06	117.85	2.647	34	90
33.27	40.41	50.01	55.07	62.61	69.86	78.20	86.53	100.39	2.647	68	180
53.56	60.47	69.86	74.83	82.29	89.46	97.73	106.01	119.80	2.667	30	80
30.70	37.94	47.61	52.69	60.26	67.52	75.88	84.22	98.10	2.667	72	192
	32.80	42.69	47.84	55.49	62.80	71.20	79.58	93.49	2.700	80	216
53.69	60.60	69.99	74.97	82.42	89.59	97.87	106.15	119.94	2.759	29	80
41.10	48.10	57.58	62.59	70.09	77.30	85.60	93.91	107.73	2.769	52	144
29.24	36.57	46.31	51.41	59.01	66.29	74.66	83.02	96.91	2.778	72	200
47.53	54.47	63.90	68.89	76.35	83.54	91.83	100.12	113.92	2.800	40	112
36.24	43.33	52.89	57.93	65.46	72.69	81.02	89.34	103.19	2.800	60	168
	31.31	41.32	46.50	54.19	61.53	69.96	78.35	92.28	2.800	80	224
51.84	58.75	68.15	73.13	80.59	87.77	96.04	104.33	118.12	2.813	32	90
33.73	40.89	50.50	55.56	63.12	70.37	78.71	87.04	100.90	2.813	64	180
31.15	38.41	48.09	53.18	60.76	68.03	76.39	84.73	98.61	2.824	68	192
53.82	60.73	70.12	75.10	82.55	89.73	98.00	106.28	120.07	2.857	28	80
29.68	37.03	46.79	51.89	59.50	66.79	75.17	83.53	97.42	2.941	68	200
47.79	54.73	64.16	69.15	76.62	83.80	92.09	100.38	114.19	2.947	38	112
52.10	59.02	68.42	73.40	80.85	88.03	96.31	104.59	118.39	3.000	30	90
41.59	48.60	58.09	63.10	70.60	77.81	86.12	94.43	108.26	3.000	48	144
36.71	43.81	53.38	58.43	65.96	73.20	81.53	89.86	103.71	3.000	56	168
34.20	41.37	50.99	56.06	63.62	70.87	79.22	87.56	101.42	3.000	60	180
31.61	38.88	48.58	53.66	61.25	68.53	76.89	85.24	99.13	3.000	64	192
26.09	33.70	43.63	48.79	56.46	63.79	72.20	80.58	94.51	3.000	72	216
52.23	59.15	68.55	73.53	80.99	88.17	96.44	104.73	118.52	3.103	29	90
48.04	54.99	64.42	69.41	76.88	84.07	92.36	100.65	114.45	3.111	36	112
	32.19	42.25	47.45	55.15	62.51	70.95	79.35	93.30	3.111	72	224
30.13	37.49	47.26	52.38	59.99	67.29	75.67	84.03	97.93	3.125	64	200
26.52	34.15	44.10	49.27	56.94	64.28	72.69	81.09	95.02	3.176	68	216
32.06	39.34	49.06	54.15	61.75	69.03	77.40	85.75	99.64	3.200	60	192
52.36	59.28	68.68	73.66	81.12	88.30	96.58	104.86	118.66	3.214	28	90
34.66	41.84	51.48	56.55	64.12	71.38	79.73	88.07	101.94	3.214	56	180
37.18	44.30	53.88	58.92	66.46	73.71	82.04	90.37	104.23	3.231	52	168
42.08	49.09	58.59	63.61	71.11	78.33	86.64	94.95	108.78	3.273	44	144
48.30	55.24	64.67	69.67	77.14	84.33	92.62	100.91	114.72	3.294	34	112
	32.64	42.71	47.92	55.63	63.00	71.44	79.85	93.80	3.294	68	224
30.57	37.95	47.74	52.86	60.48	67.78	76.17	84.54	98.45	3.333	60	200
26.95	34.60	44.56	49.74	57.42	64.76	73.19	81.59	95.53	3.375	64	216
32.51	39.81	49.54	54.64	62.24	69.53	77.90	86.26	100.16	3.429	56	192
35.12	42.32	51.97	57.04	64.61	71.88	80.23	88.58	102.46	3.462	52	180
48.55	55.50	64.93	69.93	77.40	84.59	92.88	101.17	114.98	3.500	32	112
37.66	44.78	54.37	59.42	66.97	74.21	82.55	90.89	104.75	3.500	48	168
	33.07	43.17	48.38	56.11	63.48	71.93	80.35	94.31	3.500	64	224
31.01	38.41	48.22	53.34	60.97	68.28	76.67	85.04	98.96	3.571	56	200
42.56	49.59	59.10	64.12	71.62	78.84	87.16	95.47	109.30	3.600	40	144
27.37	35.05	45.03	50.21	57.90	65.25	73.68	82.09	96.03	3.600	60	216
32.96	40.28	50.02	55.12	62.73	70.02	78.40	86.77	100.67	3.692	52	192
48.80	55.75	65.19	70.18	77.66	84.85	93.15	101.44	115.25	3.733	30	112
25.61	33.51	43.63	48.85	56.59	63.97	72.42	80.84	94.81	3.733	60	224
35.58	42.79	52.45	57.53	65.11	72.38	80.74	89.09	102.97	3.750	48	180
42.81	49.84	59.35	64.37	71.88	79.10	87.42	95.73	109.57	3.789	38	144
38.12	45.26	54.86	59.92	67.47	74.72	83.06	91.40	105.26	3.818	44	168
31.46	38.87	48.69	53.82	61.46	68.77	77.17	85.55	99.47	3.846	52	200
27.79	35.49	45.49	50.68	58.38	65.74	74.18	82.58	96.54	3.857	56	216
48.93	55.88	65.32	70.31	77.79	84.98	93.28	101.57	115.38	3.862	29	112
49.05	56.01	65.45	70.44	77.92	85.11	93.41	101.70	115.51	4.000	28	112
43.05	50.08	59.60	64.62	72.13	79.36	87.67	95.99	109.83	4.000	36	144
33.41	40.74	50.50	55.61	63.22	70.52	78.91	87.27	101.18	4.000	48	192
26.02	33.95	44.09	49.32	57.06	64.45	72.91	81.34	95.32	4.000	56	224
36.04	43.26	52.94	58.02	65.61	72.88	81.25	89.60	103.49	4.091	44	180
1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	Length Factor*		

* This length correction factor must be used to determine the proper belt width.

Center distance is greater than eight times the small sprocket and the large sprocket is not flanged. See Engineering Section for details.

14mm Pitch PowerGrip® GT®2 Belts — Drive Selection Table

Sprocket Combinations					Center Distance, Inches								
DriveR		DriveN			1778-14MGT P.L. 70.000 127 Teeth	1890-14MGT P.L. 74.409 135 Teeth	2100-14MGT P.L. 82.677 150 Teeth	2310-14MGT P.L. 90.945 165 Teeth	2450-14MGT P.L. 96.457 175 Teeth	2590-14MGT P.L. 101.968 185 Teeth	2800-14MGT P.L. 110.236 200 Teeth	3150-14MGT P.L. 124.016 225 Teeth	3360-14MGT P.L. 132.283 240 Teeth
No. of Grooves	Pitch Diameter (Inches)	No. of Grooves	Pitch Diameter (Inches)	Speed Ratio									
52	9.123	216	37.896	4.154									24.93
48	8.421	200	35.089	4.167								24.03	28.82
40	7.018	168	29.475	4.200						18.87	23.75	31.31	35.70
34	5.965	144	25.264	4.235				18.34	21.50	24.53	28.97	36.19	40.46
52	9.123	224	39.300	4.308									
44	7.720	192	33.686	4.364								26.20	30.84
38	6.667	168	29.475	4.421						19.08	23.97	31.54	35.93
32	5.614	144	25.264	4.500				18.55	21.72	24.76	29.20	36.43	40.70
40	7.018	180	31.580	4.500							21.12	29.06	33.55
48	8.421	216	37.896	4.500									25.34
44	7.720	200	35.089	4.545								24.45	29.25
36	6.316	168	29.475	4.667						19.28	24.18	31.76	36.16
48	8.421	224	39.300	4.667									
38	6.667	180	31.580	4.737							21.33	29.28	33.78
30	5.263	144	25.264	4.800				18.76	21.93	24.98	29.43	36.66	40.94
40	7.018	192	33.686	4.800								26.63	31.28
44	7.720	216	37.896	4.909									25.75
34	5.965	168	29.475	4.941						19.48	24.39	31.99	36.39
29	5.088	144	25.264	4.966				18.86	22.04	25.09	29.54	36.78	41.06
36	6.316	180	31.580	5.000							21.53	29.50	34.00
40	7.018	200	35.089	5.000								24.86	29.68
38	6.667	192	33.686	5.053								26.84	31.50
44	7.720	224	39.300	5.091									
28	4.912	144	25.264	5.143				18.97	22.15	25.20	29.66	36.90	41.18
32	5.614	168	29.475	5.250						19.69	24.61	32.22	36.62
38	6.667	200	35.089	5.263								25.07	29.90
34	5.965	180	31.580	5.294							21.74	29.72	34.23
36	6.316	192	33.686	5.333								27.05	31.72
40	7.018	216	37.896	5.400									26.16
36	6.316	200	35.089	5.556								25.27	30.11
30	5.263	168	29.475	5.600						19.89	24.82	32.44	36.85
40	7.018	224	39.300	5.600									24.13
32	5.614	180	31.580	5.625							21.94	29.94	34.45
34	5.965	192	33.686	5.647								27.26	31.94
38	6.667	216	37.896	5.684									26.36
29	5.088	168	29.475	5.793						19.99	24.93	32.55	36.96
34	5.965	200	35.089	5.882								25.48	30.33
38	6.667	224	39.300	5.895									24.32
28	4.912	168	29.475	6.000						20.09	25.03	32.67	37.08
30	5.263	180	31.580	6.000							22.14	30.15	34.68
32	5.614	192	33.686	6.000								27.47	32.16
36	6.316	216	37.896	6.000									26.57
29	5.088	180	31.580	6.207							22.25	30.26	34.79
36	6.316	224	39.300	6.222									24.52
32	5.614	200	35.089	6.250								25.68	30.54
34	5.965	216	37.896	6.353									26.77
30	5.263	192	33.686	6.400								27.68	32.38
28	4.912	180	31.580	6.429							22.35	30.37	34.90
34	5.965	224	39.300	6.588									24.72
29	5.088	192	33.686	6.621								27.79	32.49
30	5.263	200	35.089	6.667								25.89	30.76
32	5.614	216	37.896	6.750									26.98
28	4.912	192	33.686	6.857								27.90	32.60
29	5.088	200	35.089	6.897								25.99	30.86
32	5.614	224	39.300	7.000									24.92
28	4.912	200	35.089	7.143								26.10	30.97
30	5.263	216	37.896	7.200									27.18
29	5.088	216	37.896	7.448									27.28
30	5.263	224	39.300	7.467									25.11
28	4.912	216	37.896	7.714									27.38
29	5.088	224	39.300	7.724									25.21
28	4.912	224	39.300	8.000									25.31
Length Factor*					0.95	0.95	1.00	1.00	1.00	1.05	1.05	1.05	1.10

* This length correction factor must be used to determine the proper belt width.

Center distance is greater than eight times the small sprocket and the large sprocket is not flanged. See Engineering Section for details.

Center Distance, Inches									Speed Ratio	Sprocket Combinations	
										DriveR	DriveN
3500-14MGT P.L. 137.795 250 Teeth	3850-14MGT P.L. 151.575 275 Teeth	4326-14MGT P.L. 170.315 309 Teeth	4578-14MGT P.L. 180.236 327 Teeth	4956-14MGT P.L. 195.118 354 Teeth	5320-14MGT P.L. 209.449 380 Teeth	5740-14MGT P.L. 225.984 410 Teeth	6160-14MGT P.L. 242.520 440 Teeth	6860-14MGT P.L. 270.079 490 Teeth		No. of Grooves	No. of Grooves
28.22	35.94	45.96	51.15	58.86	66.23	74.67	83.08	97.04	4.154	52	216
31.90	39.33	49.16	54.30	61.95	69.26	77.67	86.05	99.98	4.167	48	200
38.59	45.74	55.35	60.41	67.97	75.22	83.57	91.91	105.78	4.200	40	168
43.29	50.33	59.85	64.87	72.39	79.61	87.93	96.25	110.09	4.235	34	144
26.43	34.39	44.54	49.78	57.54	64.93	73.40	81.83	95.82	4.308	52	224
33.86	41.20	50.97	56.09	63.71	71.01	79.41	87.78	101.69	4.364	44	192
38.83	45.98	55.60	60.66	68.22	75.48	83.83	92.17	106.04	4.421	38	168
43.54	50.58	60.10	65.13	72.64	79.87	88.19	96.51	110.35	4.500	32	144
36.50	43.73	53.42	58.51	66.10	73.38	81.75	90.11	104.00	4.500	40	180
28.64	36.38	46.42	51.62	59.34	66.71	75.16	83.58	97.55	4.500	48	216
32.34	39.79	49.63	54.78	62.43	69.76	78.17	86.55	100.48	4.545	44	200
39.06	46.22	55.84	60.91	68.47	75.73	84.08	92.42	106.30	4.667	36	168
26.84	34.82	45.00	50.25	58.01	65.41	73.89	82.33	96.32	4.667	48	224
36.73	43.97	53.66	58.76	66.35	73.63	82.00	90.36	104.26	4.737	38	180
43.78	50.82	60.35	65.38	72.90	80.12	88.45	96.77	110.61	4.800	30	144
34.31	41.66	51.45	56.57	64.20	71.51	79.91	88.28	102.20	4.800	40	192
29.06	36.82	46.88	52.09	59.82	67.20	75.65	84.08	98.05	4.909	44	216
39.29	46.46	56.08	61.15	68.72	75.98	84.33	92.68	106.56	4.941	34	168
43.90	50.94	60.47	65.50	73.02	80.25	88.58	96.90	110.74	4.966	29	144
36.96	44.20	53.90	59.00	66.59	73.88	82.25	90.61	104.51	5.000	36	180
32.78	40.24	50.11	55.26	62.92	70.25	78.66	87.06	100.99	5.000	40	200
34.53	41.89	51.69	56.81	64.45	71.76	80.16	88.53	102.45	5.053	38	192
27.25	35.26	45.45	50.71	58.49	65.89	74.38	82.82	96.82	5.091	44	224
44.02	51.07	60.60	65.63	73.15	80.38	88.71	97.03	110.87	5.143	28	144
39.53	46.69	56.33	61.40	68.97	76.23	84.59	92.93	106.81	5.250	32	168
32.99	40.47	50.34	55.50	63.16	70.49	78.91	87.31	101.25	5.263	38	200
37.18	44.44	54.15	59.24	66.84	74.13	82.51	90.87	104.77	5.294	34	180
34.75	42.12	51.92	57.05	64.69	72.00	80.41	88.79	102.71	5.333	36	192
29.48	37.26	47.34	52.56	60.30	67.68	76.14	84.57	98.55	5.400	40	216
33.21	40.70	50.58	55.73	63.40	70.74	79.16	87.56	101.50	5.556	36	200
39.76	46.93	56.57	61.64	69.22	76.48	84.84	93.19	107.07	5.600	30	168
27.66	35.69	45.91	51.17	58.96	66.37	74.87	83.31	97.32	5.600	40	224
37.41	44.67	54.39	59.49	67.09	74.38	82.76	91.12	105.02	5.625	32	180
34.97	42.35	52.16	57.29	64.93	72.25	80.65	89.04	102.96	5.647	34	192
29.69	37.48	47.57	52.79	60.54	67.92	76.39	84.82	98.80	5.684	38	216
39.87	47.05	56.69	61.77	69.34	76.61	84.97	93.32	107.20	5.793	29	168
33.43	40.92	50.81	55.97	63.64	70.98	79.41	87.81	101.75	5.882	34	200
27.87	35.91	46.14	51.41	59.19	66.61	75.11	83.56	97.57	5.895	38	224
39.99	47.17	56.81	61.89	69.46	76.73	85.09	93.44	107.33	6.000	28	168
37.64	44.91	54.63	59.73	67.33	74.63	83.01	91.37	105.28	6.000	30	180
35.20	42.58	52.40	57.53	65.18	72.50	80.90	89.29	103.22	6.000	32	192
29.90	37.70	47.80	53.03	60.77	68.16	76.63	85.07	99.05	6.000	36	216
37.75	45.02	54.75	59.85	67.46	74.75	83.13	91.50	105.41	6.207	29	180
28.07	36.12	46.36	51.64	59.43	66.85	75.35	83.81	97.82	6.222	36	224
33.65	41.15	51.04	56.21	63.88	71.23	79.65	88.06	102.01	6.250	32	200
30.11	37.92	48.03	53.26	61.01	68.40	76.88	85.31	99.31	6.353	34	216
35.42	42.81	52.63	57.77	65.42	72.74	81.15	89.54	103.47	6.400	30	192
37.87	45.14	54.87	59.97	67.58	74.87	83.26	91.63	105.54	6.429	28	180
28.28	36.34	46.59	51.87	59.67	67.09	75.59	84.05	98.07	6.588	34	224
35.53	42.93	52.75	57.89	65.54	72.86	81.28	89.66	103.60	6.621	29	192
33.87	41.37	51.28	56.45	64.13	71.47	79.90	88.31	102.26	6.667	30	200
30.32	38.14	48.26	53.49	61.25	68.65	77.12	85.56	99.56	6.750	32	216
35.64	43.04	52.87	58.01	65.66	72.99	81.40	89.79	103.73	6.857	28	192
33.98	41.49	51.40	56.56	64.25	71.59	80.02	88.43	102.38	6.897	29	200
28.48	36.56	46.82	52.10	59.90	67.33	75.84	84.30	98.32	7.000	32	224
34.09	41.60	51.51	56.68	64.37	71.72	80.15	88.55	102.51	7.143	28	200
30.53	38.36	48.49	53.73	61.49	68.89	77.37	85.81	99.81	7.200	30	216
30.63	38.47	48.60	53.84	61.60	69.01	77.49	85.93	99.93	7.448	29	216
28.69	36.77	47.04	52.33	60.14	67.57	76.08	84.54	98.57	7.467	30	224
30.74	38.58	48.71	53.96	61.72	69.13	77.61	86.05	100.06	7.714	28	216
28.79	36.88	47.15	52.44	60.25	67.69	76.20	84.66	98.69	7.724	29	224
28.89	36.99	47.27	52.56	60.37	67.81	76.32	84.79	98.82	8.000	28	224
1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	Length Factor*		

* This length correction factor must be used to determine the proper belt width.

Center distance is greater than eight times the small sprocket and the large sprocket is not flanged. See Engineering Section for details.

Horsepower Rating for 12mm Wide

8mm Pitch POLY CHAIN® GT® CARBON™ Belt

RPM OF FASTER SHAFT	Rated Horsepower for Small Sprocket (Number of Grooves and Pitch Diameter, Inches)																														
	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	45	48	50	53	56	60	63	67	71	75	80
	2.607	2.707	2.807	2.907	3.008	3.108	3.208	3.308	3.409	3.509	3.609	3.709	3.810	3.910	4.010	4.110	4.211	4.511	4.812	5.013	5.314	5.614	6.015	6.316	6.717	7.118	7.519	8.020
870	5.80	6.17	6.53	6.90	7.27	7.63	7.99	8.35	8.72	9.08	9.44	9.79	10.2	10.5	10.9	11.2	11.6	12.6	13.7	14.4	15.5	16.5	17.9	18.9	20.3	21.7	23.0	24.7
900	5.97	6.35	6.73	7.11	7.48	7.86	8.23	8.61	8.98	9.35	9.72	10.1	10.5	10.8	11.2	11.6	11.9	13.0	14.1	14.9	15.9	17.0	18.4	19.5	20.9	22.3	23.7	25.5
1000	6.54	6.96	7.38	7.79	8.21	8.62	9.03	9.44	9.86	10.3	10.7	11.1	11.5	11.9	12.3	12.7	13.1	14.3	15.5	16.3	17.5	18.7	20.3	21.4	23.0	24.6	26.1	28.0
1160	7.44	7.92	8.39	8.87	9.35	9.82	10.3	10.8	11.2	11.7	12.2	12.6	13.1	13.6	14.0	14.5	15.0	16.3	17.7	18.6	20.0	21.4	23.2	24.5	26.3	28.1	29.8	32.0
1750	10.6	11.3	12.0	12.7	13.4	14.1	14.8	15.4	16.1	16.8	17.5	18.2	18.9	19.5	20.2	20.9	21.5	23.6	25.5	26.9	28.8	30.8	33.4	35.3	37.9	40.5	43.0	46.1
2000	11.9	12.7	13.5	14.2	15.0	15.8	16.6	17.4	18.1	18.9	19.7	20.4	21.2	22.0	22.7	23.5	24.2	26.5	28.8	30.2	32.5	34.7	37.6	39.8	42.7	45.5	48.3	51.9
3000	16.8	17.9	19.1	20.2	21.3	22.5	23.6	24.7	25.8	26.9	28.0	29.1	30.2	31.3	32.4	33.5	34.6	37.8	41.0	43.1	46.3	49.4	53.5	56.6	60.6	64.6	68.5	73.3
3450	18.9	20.2	21.5	22.8	24.0	25.3	26.6	27.8	29.1	30.3	31.6	32.8	34.1	35.3	36.5	37.8	39.0	42.6	46.2	48.6	52.2	55.6	60.3	63.7	68.1	72.6		
4000	21.4	22.9	24.3	25.8	27.2	28.7	30.1	31.6	33.0	34.4	35.8	37.2	38.7	40.1	41.4	42.8	44.2	48.3	52.4	55.1	59.1	63.0	68.1					
4500	23.6	25.2	26.8	28.5	30.1	31.7	33.3	34.8	36.4	38.0	39.6	41.1	42.7	44.2	45.8	47.3	48.8	53.3	57.8	60.7	65.1							
5000	25.7	27.5	29.3	31.0	32.8	34.6	36.3	38.0	39.8	41.5	43.2	44.9	46.6	48.3	49.9	51.6	53.2	58.1	63.0	66.1								
5500	27.8	29.7	31.6	33.6	35.5	37.4	39.3	41.1	43.0	44.9	46.7	48.5	50.3	52.2	53.9	55.7	57.5	62.8										

RPM OF FASTER SHAFT	Additional Horsepower per belt for Speed Ratio of Speed-Down Drives									
	1.00 to 1.02	1.03 to 1.05	1.06 to 1.10	1.11 to 1.15	1.16 to 1.21	1.22 to 1.30	1.31 to 1.43	1.44 to 1.64	1.65 to 2.15	2.16 and Over
870	0.00	0.07	0.14	0.21	0.28	0.35	0.42	0.48	0.55	0.62
900	0.00	0.07	0.14	0.22	0.29	0.36	0.43	0.50	0.57	0.64
1000	0.00	0.08	0.16	0.24	0.32	0.40	0.48	0.56	0.64	0.72
1160	0.00	0.09	0.18	0.28	0.37	0.46	0.55	0.65	0.74	0.83
1750	0.00	0.14	0.28	0.42	0.56	0.70	0.84	0.97	1.11	1.25
2000	0.00	0.16	0.32	0.48	0.64	0.80	0.95	1.11	1.27	1.43
3000	0.00	0.24	0.48	0.72	0.95	1.19	1.43	1.67	1.91	2.15
3450	0.00	0.28	0.55	0.82	1.10	1.37	1.65	1.92	2.20	2.47
4000	0.00	0.32	0.64	0.96	1.27	1.59	1.91	2.23	2.55	2.86
4500	0.00	0.36	0.72	1.08	1.43	1.79	2.15	2.51	2.87	3.22
5000	0.00	0.40	0.79	1.19	1.59	1.99	2.39	2.78	3.18	3.58
5500	0.00	0.44	0.87	1.31	1.75	2.19	2.63	3.06	3.50	3.94

Horsepower Rating for 21mm Wide

8mm Pitch POLY CHAIN® GT® CARBON™ Belt

RPM OF FASTER SHAFT	Rated Horsepower for Small Sprocket (Number of Grooves and Pitch Diameter, Inches)																														
	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	45	48	50	53	56	60	63	67	71	75	80
	2.607	2.707	2.807	2.907	3.008	3.108	3.208	3.308	3.409	3.509	3.609	3.709	3.810	3.910	4.010	4.110	4.211	4.511	4.812	5.013	5.314	5.614	6.015	6.316	6.717	7.118	7.519	8.020
870	10.2	10.8	11.4	12.1	12.7	13.4	14.0	14.6	15.3	15.9	16.5	17.1	17.8	18.4	19.0	19.6	20.3	22.1	24.0	25.2	27.1	28.9	31.3	33.1	35.5	37.9	40.3	43.3
900	10.5	11.1	11.8	12.4	13.1	13.8	14.4	15.1	15.7	16.4	17.0	17.7	18.3	19.0	19.6	20.2	20.9	22.8	24.7	26.0	27.9	29.8	32.3	34.2	36.6	39.1	41.6	44.6
1000	11.5	12.2	12.9	13.6	14.4	15.1	15.8	16.5	17.2	18.0	18.7	19.4	20.1	20.8	21.5	22.2	22.9	25.1	27.2	28.6	30.6	32.7	35.5	37.5	40.3	43.0	45.7	49.0
1160	13.0	13.9	14.7	15.5	16.4	17.2	18.0	18.8	19.7	20.5	21.3	22.1	22.9	23.7	24.6	25.4	26.2	28.6	31.0	32.6	35.0	37.4	40.5	42.9	46.0	49.1	52.2	56.0
1750	18.6	19.8	21.0	22.2	23.4	24.6	25.8	27.0	28.2	29.4	30.6	31.8	33.0	34.2	35.4	36.5	37.7	41.2	44.7	47.0	50.5	53.9	58.5	61.9	66.3	70.8	75.2	80.7
2000	20.8	22.2	23.6	24.9	26.3	27.7	29.0	30.4	31.7	33.1	34.4	35.8	37.1	38.4	39.8	41.1	42.4	46.4	50.3	52.9	56.8	60.7	65.8	69.6	74.6	79.6	84.6	90.7
3000	29.4	31.4	33.4	35.3	37.3	39.3	41.2	43.2	45.2	47.1	49.0	50.9	52.9	54.8	56.7	58.6	60.5	66.1	71.7	75.5	81.0	86.4	93.7	99.0	106.1	113.0	119.9	128.3
3450	33.1	35.3	37.6	39.8	42.1	44.3	46.5	48.7	50.9	53.1	55.3	57.5	59.6	61.8	63.9	66.1	68.2	74.6	80.9	85.1	91.3	97.4	105.4	111.4	119.3	127.0		
4000	37.4	40.0	42.6	45.1	47.7	50.2	52.7	55.2	57.8	60.2	62.7	65.2	67.7	70.1	72.5	75.0	77.4	84.6	91.7	96.4	103.4	110.2	119.2					
4500	41.3	44.1	47.0	49.8	52.6	55.4	58.2	61.0	63.8	66.5	69.2	72.0	74.7	77.4	80.1	82.7	85.4	93.3	101.1	106.3	113.9							
5000	45.0	48.1	51.2	54.3	57.4	60.5	63.5	66.6	69.6	72.6	75.6	78.5	81.5	84.5	87.4	90.3	93.2	101.7	110.2	115.7								
5500	48.6	52.0	55.4	58.7	62.1	65.4	68.7	72.0	75.3	78.5	81.7	84.9	88.1	91.3	94.4	97.5	100.6	109.8										

RPM OF FASTER SHAFT	Additional Horsepower per belt for Speed Ratio of Speed-Down Drives									
	1.00 to 1.02	1.03 to 1.05	1.06 to 1.10	1.11 to 1.15	1.16 to 1.21	1.22 to 1.30	1.31 to 1.43	1.44 to 1.64	1.65 to 2.15	2.16 and Over
870	0.00	0.12	0.24	0.36	0.48	0.61	0.73	0.85	0.97	1.09
900	0.00	0.13	0.25	0.38	0.50	0.63	0.75	0.88	1.00	1.13
1000	0.00	0.14	0.28	0.42	0.56	0.70	0.84	0.97	1.11	1.25
1160	0.00	0.16	0.32	0.49	0.65	0.81	0.97	1.13	1.29	1.45
1750	0.00	0.24	0.49	0.73	0.97	1.22	1.46	1.71	1.95	2.19
2000	0.00	0.28	0.56	0.84	1.11	1.39	1.67	1.95	2.23	2.51
3000	0.00	0.42	0.83	1.25	1.67	2.09	2.51	2.92	3.34	3.76
3450	0.00	0.48	0.96	1.44	1.92	2.40	2.88	3.36	3.84	4.32
4000	0.00	0.56	1.11	1.67	2.23	2.79	3.34	3.90	4.46	5.01
4500	0.00	0.63	1.25	1.88	2.51	3.13	3.76	4.39	5.01	5.64
5000	0.00	0.70	1.39	2.09	2.78	3.48	4.18	4.87	5.57	6.27
5500	0.00	0.77	1.53	2.30	3.06	3.83	4.60	5.36	6.13	6.89

POLY CHAIN® GT® CARBON™ Belt Length Correction Factor Table

Pitch/Length Designation	Number of Teeth	Correction Factor
8MGT-1000	125	0.96
8MGT-1040	130	0.97
8MGT-1120	140	1.00
8MGT-1200	150	1.03
8MGT-1224	153	1.03
8MGT-1280	160	1.05
8MGT-1440	180	1.10

Pitch/Length Designation	Number of Teeth	Correction Factor
8MGT-1600	200	1.14
8MGT-1760	220	1.17
8MGT-1792	224	1.18
8MGT-2000	250	1.22
8MGT-2200	275	1.26
8MGT-2240	280	1.26
8MGT-2400	300	1.29

Pitch/Length Designation	Number of Teeth	Correction Factor
8MGT-2520	315	1.31
8MGT-2600	325	1.32
8MGT-2800	350	1.35
8MGT-2840	355	1.36
8MGT-3048	381	1.38
8MGT-3200	400	1.40
8MGT-3280	410	1.41

Pitch/Length Designation	Number of Teeth	Correction Factor
8MGT-3600	450	1.45
8MGT-4000	500	1.49
8MGT-4400	550	1.52
8MGT-4480	560	1.53

Horsepower Rating for 20mm Wide

14mm Pitch POLY CHAIN® GT® CARBON™ Belt

RPM OF FASTER SHAFT	Rated Horsepower for Small Sprocket (Number of Grooves and Pitch Diameter, Inches)																									RPM OF FASTER SHAFT	Additional Horsepower per belt for Speed Ratio of Speed-Down Drives									
	28 4.912	29 5.088	30 5.263	31 5.439	32 5.614	33 5.790	34 5.965	35 6.141	36 6.316	37 6.492	38 6.667	39 6.842	40 7.018	43 7.544	45 7.895	48 8.421	50 8.772	53 9.299	56 9.825	60 10.527	63 11.053	67 11.755	71 12.457	75 13.158	80 14.036		1.00 to 1.03	1.04 to 1.10	1.11 to 1.19	1.20 to 1.30	1.31 to 1.45	1.46 to 1.67	1.68 to 2.02	2.03 to 2.69	2.70 to 4.64	4.65 and Over
870	34.1	35.7	37.2	38.8	40.4	41.9	43.5	45.0	46.6	48.1	49.6	51.1	52.7	57.2	60.2	64.6	67.6	72.0	76.3	82.1	86.3	92.0	97.6	103.1	110.0	870	0.00	0.44	0.88	1.32	1.77	2.21	2.65	3.09	3.53	3.97
900	35.1	36.7	38.3	39.9	41.5	43.1	44.7	46.3	47.9	49.5	51.1	52.6	54.2	58.8	61.9	66.5	69.5	74.0	78.5	84.4	88.8	94.6	100.4	106.1	113.1	900	0.00	0.46	0.91	1.37	1.83	2.28	2.74	3.20	3.65	4.11
1000	38.3	40.1	41.8	43.6	45.4	47.1	48.9	50.6	52.3	54.1	55.8	57.5	59.2	64.3	67.6	72.6	76.0	80.9	85.8	92.2	97.0	103.4	109.6	115.8	123.5	1000	0.00	0.51	1.01	1.52	2.03	2.54	3.04	3.55	4.06	4.57
1160	43.3	45.3	47.3	49.3	51.3	53.3	55.3	57.3	59.2	61.2	63.1	65.1	67.0	72.8	76.6	82.3	86.0	91.6	97.1	104.4	109.8	116.9	123.9	130.9	139.4	1160	0.00	0.59	1.18	1.77	2.35	2.94	3.53	4.12	4.71	5.30
1750	60.6	63.5	66.3	69.2	72.0	74.8	77.6	80.4	83.2	85.9	88.7	91.4	94.1	102.2	107.5	115.4	120.6	128.3	135.9	145.9	153.2	162.9	172.3	181.5	192.8	1750	0.00	0.89	1.78	2.66	3.55	4.44	5.33	6.22	7.10	7.99
2000	67.5	70.7	73.9	77.1	80.2	83.4	86.5	89.6	92.7	95.8	98.8	101.8	104.9	113.8	119.7	128.4	134.2	142.7	151.0	162.0	170.0	180.5	190.7			2000	0.00	1.02	2.03	3.04	4.06	5.08	6.09	7.10	8.12	9.13
3000	92.9	97.4	101.8	106.1	110.5	114.8	119.0	123.3	127.5	131.6	135.7	139.8	143.9	155.8	163.6											3000	0.00	1.52	3.04	4.57	6.09	7.61	9.13	10.7	12.2	13.7
3450	103.3	108.3	113.1	118.0	122.8	127.5	132.2	136.9	141.4	146.0	150.5	155.0	159.4													3450	0.00	1.75	3.50	5.25	7.00	8.75	10.5	12.3	14.0	15.8
4000	115.2	120.7	126.1	131.4	136.7	141.9	147.0	152.1	157.1																	4000	0.00	2.03	4.06	6.09	8.12	10.2	12.2	14.2	16.2	18.3

Horsepower Rating for 37mm Wide

14mm Pitch POLY CHAIN® GT® CARBON™ Belt

RPM OF FASTER SHAFT	Rated Horsepower for Small Sprocket (Number of Grooves and Pitch Diameter, Inches)																									RPM OF FASTER SHAFT	Additional Horsepower per belt for Speed Ratio of Speed-Down Drives									
	28 4.912	29 5.088	30 5.263	31 5.439	32 5.614	33 5.790	34 5.965	35 6.141	36 6.316	37 6.492	38 6.667	39 6.842	40 7.018	43 7.544	45 7.895	48 8.421	50 8.772	53 9.299	56 9.825	60 10.527	63 11.053	67 11.755	71 12.457	75 13.158	80 14.036		1.00 to 1.03	1.04 to 1.10	1.11 to 1.19	1.20 to 1.30	1.31 to 1.45	1.46 to 1.67	1.68 to 2.02	2.03 to 2.69	2.70 to 4.64	4.65 and Over
870	63.1	66.0	68.9	71.8	74.7	77.6	80.4	83.3	86.1	89.0	91.8	94.6	97.4	105.8	111.3	119.5	125.0	133.1	141.2	151.8	159.7	170.2	180.5	190.8	203.5	870	0.00	0.82	1.63	2.45	3.27	4.08	4.90	5.72	6.53	7.35
900	64.9	67.9	70.9	73.9	76.8	79.8	82.7	85.7	88.6	91.5	94.4	97.3	100.2	108.8	114.5	123.0	128.6	137.0	145.3	156.2	164.3	175.1	185.7	196.3	209.3	900	0.00	0.85	1.69	2.53	3.38	4.23	5.07	5.91	6.76	7.60
1000	70.8	74.1	77.4	80.7	83.9	87.2	90.4	93.6	96.8	100.0	103.2	106.3	109.5	118.9	125.1	134.4	140.5	149.7	158.7	170.6	179.5	191.2	202.8	214.2	228.4	1000	0.00	0.94	1.88	2.82	3.76	4.69	5.63	6.57	7.51	8.45
1160	80.1	83.8	87.5	91.2	94.9	98.6	102.3	105.9	109.6	113.2	116.8	120.4	124.0	134.6	141.7	152.2	159.1	169.4	179.6	193.1	203.1	216.3	229.3	242.1	258.0	1160	0.00	1.09	2.18	3.27	4.36	5.45	6.53	7.62	8.71	9.80
1750	112.1	117.4	122.7	128.0	133.2	138.4	143.6	148.7	153.8	159.0	164.0	169.1	174.1	189.0	198.9	213.5	223.1	237.4	251.4	269.9	283.4	301.3	318.7	335.8	356.7	1750	0.00	1.64	3.29	4.93	6.57	8.22	9.85	11.5	13.1	14.8
2000	124.9	130.8	136.7	142.6	148.4	154.2	160.0	165.8	171.4	177.1	182.8	188.4	194.0	210.6	221.5	237.6	248.2	264.0	279.4	299.6	314.5	333.9	352.8			2000	0.00	1.88	3.76	5.63	7.51	9.39	11.3	13.1	15.0	16.9
3000	171.9	180.1	188.3	196.4	204.4	212.3	220.2	228.0	235.8	243.5	251.1	258.6	266.2	288.3	302.7											3000	0.00	2.82	5.63	8.45	11.3	14.1	16.9	19.7	22.5	25.3
3450	191.1	200.3	209.3	218.3	227.1	235.9	244.5	253.2	261.7	270.1	278.4	286.7	294.9													3450	0.00	3.24	6.48	9.71	13.0	16.2	19.4	22.7	25.9	29.1
4000	213.1	223.2	233.2	243.1	252.8	262.5	272.0	281.4	290.7																	4000	0.00	3.76	7.51	11.3	15.0	18.8	22.5	26.3	30.0	33.8

POLY CHAIN® GT® CARBON™ Belt Length Correction Factor Table

Pitch/Length Designation	Number of Teeth	Correction Factor	Pitch/Length Designation	Number of Teeth	Correction Factor	Pitch/Length Designation	Number of Teeth	Correction Factor	Pitch/Length Designation	Number of Teeth	Correction Factor
14MGT-1750	125	0.89	14MGT-2310	165	1.00	14MGT-2660	190	1.05	14MGT-3500	250	1.16
14MGT-1890	135	0.92	14MGT-2380	170	1.01	14MGT-2800	200	1.07	14MGT-3850	275	1.19
14MGT-1960	140	0.94	14MGT-2450	175	1.02	14MGT-3136	224	1.12	14MGT-3920	280	1.20
14MGT-2100	150	0.96	14MGT-2520	180	1.03	14MGT-3304	236	1.14	14MGT-4326	309	1.24
14MGT-2240	160	0.99	14MGT-2590	185	1.04	14MGT-3360	240	1.14	14MGT-4410	315	1.25

8M Pitch PowerGrip® GT2® Power Rating Table --- 20mm Belt Width

RPM OF FASTER SHAFT	Rated Horsepower for Small Sprocket (Number of Grooves and Pitch Diameter, Inches)															
	22 2.206	24 2.406	26 2.607	28 2.807	30 3.008	32 3.208	34 3.409	36 3.609	38 3.810	40 4.010	44 4.411	48 4.812	56 5.614	64 6.416	72 7.218	80 8.020
870	3.96	4.60	5.23	5.86	6.49	7.12	7.74	8.36	8.98	9.60	10.8	12.0	14.5	16.9	19.2	21.6
1160	5.13	5.97	6.80	7.62	8.45	9.26	10.1	10.9	11.7	12.5	14.1	15.7	18.9	22.0	25.1	28.1
1750	7.41	8.64	9.86	11.1	12.3	13.5	14.7	15.9	17.1	18.2	20.6	22.9	27.5	32.0	36.5	40.8
3450	13.5	15.8	18.0	20.3	22.5	24.8	27.0	29.1	31.3	33.5	37.7	41.9	50.0	57.7	65.1	

PowerGrip® GT2® Belt Length Correction Factor Table

Pitch/Length Designation	Number of Teeth	Correction Factor	Pitch/Length Designation	Number of Teeth	Correction Factor
1040-8MGT	130	1.00	1760-8MGT	220	1.10
1064-8MGT	133	1.00	1800-8MGT	225	1.20
1120-8MGT	140	1.00	2000-8MGT	250	1.20
1160-8MGT	145	1.00	2200-8MGT	275	1.20
1200-8MGT	150	1.00	2400-8MGT	300	1.20
1224-8MGT	153	1.00	2600-8MGT	325	1.20
1280-8MGT	160	1.10	2800-8MGT	350	1.20
1440-8MGT	180	1.10	3048-8MGT	381	1.20
1512-8MGT	189	1.10	3280-8MGT	410	1.20
1584-8MGT	198	1.10	3600-8MGT	450	1.20
1600-8MGT	200	1.10	4400-8MGT	550	1.20

Horsepower Ratings for PowerGrip® GT2®

14M Pitch PowerGrip® GT2® Power Rating Table --- 40mm Belt Width

RPM OF FASTER SHAFT	Rated Horsepower for Small Sprocket (Number of Grooves and Pitch Diameter, Inches)																
	28 4.912	29 5.088	30 5.263	32 5.614	34 5.965	36 6.316	38 6.667	40 7.018	44 7.720	48 8.421	52 9.123	56 9.825	60 10.527	64 11.229	68 11.930	72 12.632	80 14.036
870	29.5	30.9	32.2	34.9	37.6	40.2	42.9	45.5	50.6	55.7	60.8	65.8	70.7	75.6	80.4	85.1	94.5
1160	37.7	39.4	41.1	44.6	48.0	51.4	54.8	58.1	64.7	71.2	77.6	84.0	90.2	96.3	102.3	108.3	119.9
1750	53.1	55.5	58.0	62.9	67.7	72.5	77.2	81.9	91.1	100.1	108.9	117.4	125.8	134.0	141.9	149.6	164.3
3200	85.5	89.5	93.4	101.1	108.6	116.0	123.2	130.1	143.5								
3600	93.2	97.5	101.7	110.0	118.1	125.9	133.5										

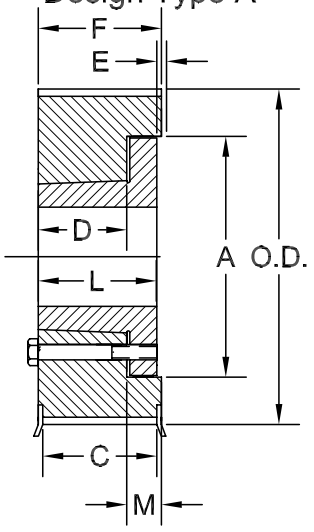
14M Pitch PowerGrip® GT2® Power Rating Table --- 55mm Belt Width

RPM OF FASTER SHAFT	Rated Horsepower for Small Sprocket (Number of Grooves and Pitch Diameter, Inches)																
	28 4.912	29 5.088	30 5.263	32 5.614	34 5.965	36 6.316	38 6.667	40 7.018	44 7.720	48 8.421	52 9.123	56 9.825	60 10.527	64 11.229	68 11.930	72 12.632	80 14.036
870	44.2	46.3	48.3	52.4	56.4	60.3	64.3	68.2	76.0	83.6	91.2	98.7	106.0	113.3	120.6	127.7	141.7
1160	56.5	59.1	61.7	66.9	72.0	77.1	82.2	87.2	97.1	106.9	116.5	125.9	135.3	144.5	153.5	162.4	179.8
1750	79.6	83.3	87.0	94.3	101.6	108.8	115.9	122.9	136.7	150.1	163.3	176.2	188.7	200.9	212.8	224.4	246.5
3200	128.3	134.2	140.1	151.7	163.0	174.0	184.7	195.2	215.3								
3600	139.8	146.3	152.6	165.0	177.1	188.8	200.2										

PowerGrip® GT2® Belt Length Correction Factor Table

Pitch/Length Designation	Number of Teeth	Correction Factor	Pitch/Length Designation	Number of Teeth	Correction Factor
1778-14MGT	127	0.95	3500-14MGT	250	1.10
1890-14MGT	135	0.95	3850-14MGT	275	1.10
2100-14MGT	150	1.00	4326-14MGT	309	1.10
2310-14MGT	165	1.00	4578-14MGT	327	1.10
2450-14MGT	175	1.00	4956-14MGT	354	1.10
2590-14MGT	185	1.05	5320-14MGT	380	1.10
2800-14MGT	200	1.05	5740-14MGT	410	1.10
3150-14MGT	225	1.05	6160-14MGT	440	1.10
3360-14MGT	240	1.10	6860-14MGT	490	1.10

Design Type A



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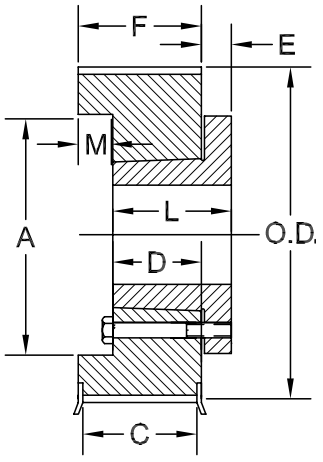

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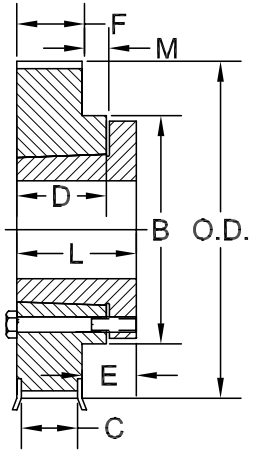

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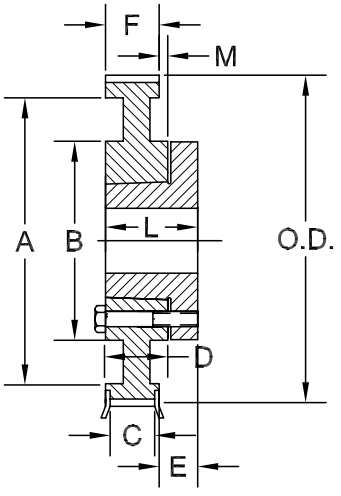

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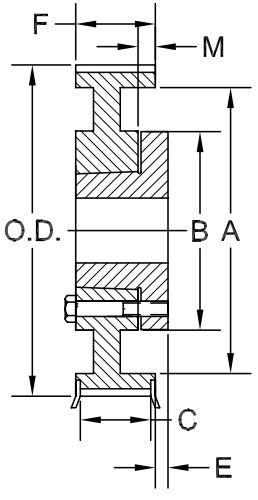

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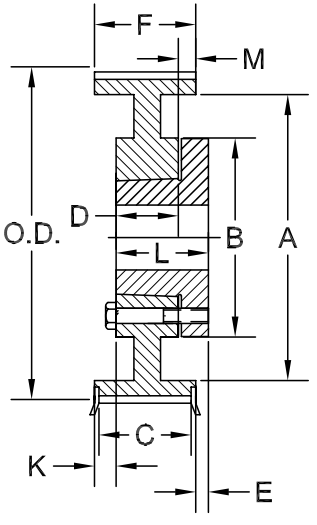

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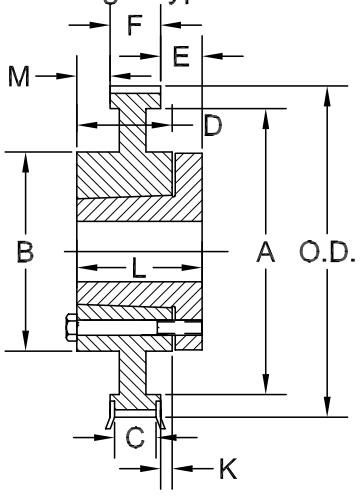
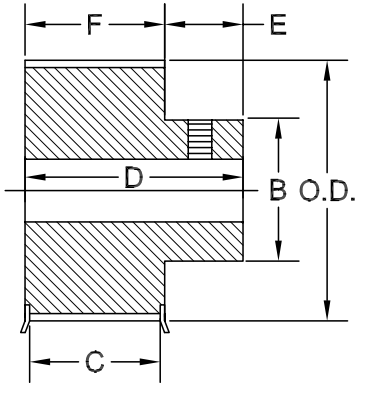


Design Type 6



2D and 3D Sprocket Drawings are available at www.gates.com/designview

Sprocket Number	Number of Teeth	Diameters (in)			Design Type	Dimensions (in)													Approx Wt. (lb)	Approx Wr^2	Matl. Spec
		Pitch	O.D.	Flange Ref.		A	B	C	D	E	F	K	L	M	Bushing Size	Bore Sizes Min	Bore Sizes Max				
F8M-36S-21-SH	36	3.609	3.546	4.009	AF-1	2.85	-	0.92	0.81	0.0475	1.20	-	1.9375	0.390	SH	0.500	1.625	2.10	0.02	GI
F8M-38S-21-SH	38	3.810	3.747	4.21	AF-1	3.04	-	0.92	0.81	0.0475	1.20	-	1.9375	0.390	SH	0.500	1.625	2.10	0.02	GI
F8M-40S-21-SH	40	4.010	3.947	4.410	AF-1	3.24	-	0.92	0.81	0.0475	1.20	-	1.9375	0.390	SH	0.500	1.625	2.30	0.03	GI
F8M-42S-21-SH	42	4.211	4.148	4.91	AF-1	3.44	-	0.92	0.81	0.0475	1.20	-	1.9375	0.390	SH	0.500	1.625	2.50	0.03	GI
F8M-140S-21-SF	140	14.036	13.973	-	C-1	13.17	6.38	-	1.25	0.6125	1.20	-	2.0625	0.050	SF	0.500	2.813	25.00	4.01	GI
F8M-168S-21-SF	168	16.843	16.780	-	C-3	15.95	6.38	-	1.25	0.6125	1.20	-	2.0625	0.050	SF	0.500	2.813	33.80	3.70	GI
F8M-180S-21-SF	180	18.046	17.983	-	C-3	17.14	6.38	-	1.25	0.5875	1.20	-	2.0625	0.025	SF	0.500	2.813	36.60	4.68	GI
F8M-224S-21-E	224	22.457	22.394	-	C-3	21.51	7.50	-	1.63	1.3050	1.20	-	2.7500	0.430	E	0.875	3.500	50.10	20.46	GI
F14M-28S-20-SK	28	4.912	4.802	5.4	AF-1	3.61	-	1.04	1.25	0.4525	1.36	-	1.9375	0.110	SK	0.500	2.500	3.90	0.07	GI
F14M-29S-20-SK	29	5.088	4.978	5.76	AF-1	3.85	-	1.04	1.25	0.4525	1.36	-	1.9375	0.110	SK	0.500	2.500	4.50	0.09	GI
F14M-30S-20-SK	30	5.263	5.153	5.76	AF-1	3.99	-	1.04	1.25	0.4525	1.36	-	1.9375	0.110	SK	0.500	2.500	4.80	0.10	GI
F14M-31S-20-SK	31	5.439	5.329	6.11	AF-1	4.2	-	1.04	1.25	0.4525	1.36	-	1.9375	0.110	SK	0.500	2.500	5.50	0.12	GI
F14M-32S-20-SK	32	5.614	5.504	6.11	AF-1	4.22	-	1.04	1.25	0.4525	1.36	-	1.9375	0.110	SK	0.500	2.500	5.90	0.14	GI
F14M-33S-20-SK	33	5.790	5.680	6.46	AF-1	4.53	-	1.04	1.25	0.4525	1.36	-	1.9375	0.110	SK	0.500	2.500	6.30	0.16	GI
F14M-34S-20-SK	34	5.965	5.855	6.46	AF-1	4.53	-	1.04	1.25	0.4525	1.36	-	1.9375	0.110	SK	0.500	2.500	6.90	0.19	GI
F14M-35S-20-SK	35	6.141	6.031	6.82	AF-1	4.89	-	1.04	1.25	0.4525	1.36	-	1.9375	0.110	SK	0.500	2.500	7.30	0.21	GI
F14M-140S-20-E	140	24.562	24.452	-	C-3	23.21	7.50	-	1.63	1.1450	1.36	-	2.7500	0.270	E	0.875	3.500	66.10	20.72	GI
F14M-168S-20-F	168	29.475	29.365	-	G-3	27.46	7.75	-	2.5	1.5800	1.36	0.58	3.7500	0.560	F	1.000	3.938	90.00	40.14	GI
F14M-180S-20-F	180	31.580	31.470	-	C-3	29.38	7.25	-	2.5	2.14	1.36	-	3.7500	1.140	F	1.000	3.938	107.30	51.26	GI
F14M-200S-20-F	200	35.089	34.979	-	G-3	32.88	7.25	-	2.5	1.2600	1.36	0.26	3.7500	0.880	F	1.000	3.938	119.00	74.60	GI
F14M-224S-20-F	224	39.300	39.190	-	C-3	37.13	7.25	-	2.5	2.14	1.36	-	3.7500	1.140	F	1.000	3.938	125.00	111.92	GI
F14M-28S-37-SK	28	4.912	4.802	5.4	BF-1	3.61	-	1.74	1.25	0.5625	2.06	-	1.9375	0.810	SK	0.500	2.500	4.20	0.10	GI
F14M-29S-37-SK	29	5.088	4.978	5.76	BF-1	3.71	-	1.74	1.25	0.5625	2.06	-	1.9375	0.810	SK	0.500	2.500	4.70	0.11	GI
F14M-30S-37-SK	30	5.263	5.153	5.76	BF-1	3.89	-	1.74	1.25	0.5625	2.06	-	1.9375	0.810	SK	0.500	2.500	5.00	0.13	GI
F14M-31S-37-SK	31	5.439	5.329	6.11	AF-1	4.06	-	1.74	1.25	-0.2475	2.06	-	1.9375	0.810	SK	0.500	2.500	6.00	0.16	GI
F14M-32S-37-SK	32	5.614	5.504	6.11	AF-1	4.22	-	1.74	1.25	-0.2475	2.06	-	1.9375	0.810	SK	0.500	2.500	7.10	0.19	GI
F14M-33S-37-SK	33	5.790	5.680	6.46	AF-1	4.41	-	1.74	1.25	-0.2475	2.06	-	1.9375	0.810	SK	0.500	2.500	7.50	0.21	GI
F14M-34S-37-SK	34	5.965	5.855	6.46	AF-1	4.53	-	1.74	1.25	-0.2475	2.06	-	1.9375	0.810	SK	0.500	2.500	7.80	0.25	GI
F14M-35S-37-SK	35	6.141	6.031	6.82	AF-1	4.75	-	1.74	1.25	-0.2475	2.06	-	1.9375	0.810	SK	0.500	2.500	8.30	0.27	GI
F14M-36S-37-SF	36	6.316	6.206	6.82	AF-1	4.94	-	1.74	1.5	-0.188	2.06	-	2.0625	0.563	SF	0.500	2.813	8.40	0.31	DI
F14M-180S-37-E	180	31.58	31.470	-	D-3	29.38	7.50	-	1.63	0.685	2.03	0.19	2.7500	0.210	E	0.875	3.500	120.00	81.21	GI
F14M-200S-37-E	200	35.089	34.979	-	D-3	32.92	7.50	-	1.63	0.685	2.03	0.19	2.7500	0.210	E	0.875	3.500	130.00	118.41	GI
F14M-224S-37-E	224	39.3	39.190	-	D-3	37.13	7.50	-	1.63	0.685	2.03	0.19	2.7500	0.210	E	0.875	3.500	177.00	177.71	GI

Material Spec: S - Steel SS - Stainless Steel GI - Grey Iron DI - Ductile Iron
Design Type Suffix: 1 - Solid 2 - Web 3 - Arms

2D and 3D Sprocket Drawings are available at www.gates.com/designview

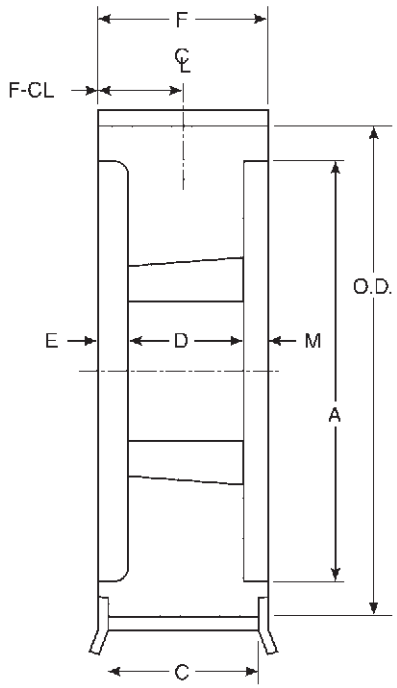
Sprocket Number	Number of Teeth	Diameters (in)			Design Type	Dimensions (in)										Bore Sizes		Approx Wt. (lb)	Approx Wr^2	Matl. Spec
		Pitch	O.D.	Flange Ref.		A	B	C	D	E	F	K	L	M	Bushing Size	Min	Max			
F28-14MGT-40-SK	28	4.912	4.802	5.402	BF-1	3.6	--	1.81	1.25	0.13	2.13	--	--	0.88	SK	0.5	2.5	4.3	0.10	GI
F29-14MGT-40-SK	29	5.088	4.978	5.763	AF-1	3.93	--	1.81	1.25	0.13	2.13	--	--	0.88	SK	0.5	2.5	4.6	0.11	GI
F30-14MGT-40-SK	30	5.263	5.153	5.763	AF-1	3.99	--	1.81	1.25	0.13	2.13	--	1.9375	0.88	SK	0.5	2.5	5.2	0.13	GI
F31-14MGT-40-SK	31	5.439	5.329	6.114	AF-1	4.22	--	1.81	1.25	0.13	2.13	--	1.9375	0.88	SK	0.5	2.5	5.6	0.15	GI
F32-14MGT-40-SK	32	5.614	5.504	6.114	AF-1	4.22	--	1.81	1.25	0.13	2.13	--	1.9375	0.88	SK	0.5	2.5	6.4	0.18	GI
F33-14MGT-40-SK	33	5.79	5.68	6.465	AF-1	4.53	--	1.81	1.25	0.13	2.13	--	1.9375	0.88	SK	0.5	2.5	6.7	0.20	GI
F34-14MGT-40-SK	34	5.965	5.855	6.465	AF-1	4.53	--	1.81	1.25	0.13	2.13	--	1.9375	0.88	SK	0.5	2.5	7.1	0.23	GI
F35-14MGT-40-SK	35	6.141	6.031	6.816	AF-1	4.95	--	1.81	1.25	0.13	2.13	--	1.9375	0.88	SK	0.5	2.5	7.7	0.27	GI
F140-14MGT-40-E	140	24.562	24.452	--	F-3	23.21	7.5	--	1.63	0.61	2.13	0.51	2.75	0.51	E	0.875	3.5	64.6	26.41	GI
F168-14MGT-40-E	168	29.475	29.365	--	F-3	28.07	7.5	--	1.63	0.61	2.13	0.51	2.75	0.51	E	0.875	3.5	85.3	50.43	GI
F180-14MGT-40-E	180	31.58	31.47	--	F-3	30.16	7.5	--	1.63	0.61	2.13	0.51	2.75	0.51	E	0.875	3.5	95.0	64.49	GI
F192-14MGT-40-E	192	33.686	33.576	--	F-3	32.24	7.5	--	1.63	0.61	2.13	0.51	2.75	0.51	E	0.875	3.5	99.5	81.21	GI
F200-14MGT-40-E	200	35.089	34.979	--	F-3	33.63	7.5	--	1.63	0.61	2.13	0.51	2.75	0.51	E	0.875	3.5	107.6	93.98	GI
F216-14MGT-40-E	216	37.896	37.786	--	F-3	36.41	7.5	--	1.63	0.61	2.13	0.51	2.75	0.51	E	0.875	3.5	109.3	123.81	GI
F224-14MGT-40-F	224	39.3	39.19	--	G-3	37.8	7.75	--	2.5	0.61	2.13	0.41	3.75	0.41	F	1.000	3.938	124.4	141.47	GI
F28-14MGT-55-SK	28	4.912	4.802	5.402	BF-1	3.6	--	2.43	1.25	0.16	2.75	--	1.9375	1.5	SK	0.5	2.5	5.0	0.12	GI
F29-14MGT-55-SK	29	5.088	4.978	5.763	AF-1	3.89	--	2.43	1.25	0.16	2.75	--	1.9375	1.5	SK	0.5	2.5	5.5	0.12	GI
F30-14MGT-55-SK	30	5.263	5.153	5.763	AF-1	3.99	--	2.43	1.25	0.16	2.75	--	1.9375	1.5	SK	0.5	2.5	6.0	0.16	GI
F31-14MGT-55-SK	31	5.439	5.329	6.114	AF-1	4.22	--	2.43	1.25	0.16	2.75	--	1.9375	1.5	SK	0.5	2.5	6.5	0.18	GI
F32-14MGT-55-SK	32	5.614	5.504	6.114	AF-1	4.22	--	2.43	1.25	0.16	2.75	--	1.9375	1.5	SK	0.5	2.5	7.1	0.21	GI
F33-14MGT-55-SK	33	5.79	5.68	6.465	AF-1	4.53	--	2.43	1.25	0.16	2.75	--	1.9375	1.5	SK	0.5	2.5	7.6	0.24	GI
F34-14MGT-55-SK	34	5.965	5.855	6.465	AF-1	4.53	--	2.43	1.25	0.16	2.75	--	1.9375	1.5	SK	0.5	2.5	8.2	0.28	GI
F35-14MGT-55-SK	35	6.141	6.031	6.816	AF-1	4.93	--	2.43	1.25	0.16	2.75	--	1.9375	1.5	SK	0.5	2.5	8.8	0.31	GI
F180-14MGT-55-F	180	31.58	31.47	--	F-3	30.12	7.75	--	2.5	--	2.75	0.78	3.75	0.78	F	1.000	3.938	119.2	85.78	GI
F200-14MGT-55-F	200	35.089	34.979	--	F-3	33.59	7.75	--	2.5	--	2.75	0.78	3.75	0.78	F	1.000	3.938	121.6	124.81	GI
F224-14MGT-55-F	224	39.3	39.19	--	F-3	37.76	7.75	--	2.5	--	2.75	0.78	3.75	0.78	F	1.000	3.938	168.4	187.07	GI

Material Spec: S - Steel SS - Stainless Steel GI - Grey Iron DI - Ductile Iron
Design Type Suffix: 1 - Solid 2 - Web 3 - Arms

2D and 3D Sprocket Drawings are available at www.gates.com/designview

Poly Chain® GT2® Spocket Specifications

Type A



Type AF

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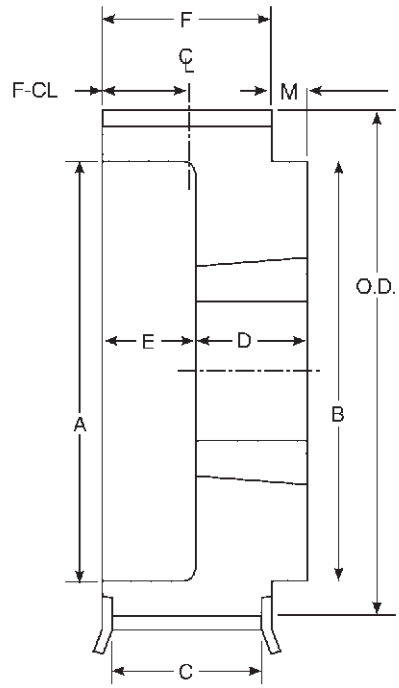

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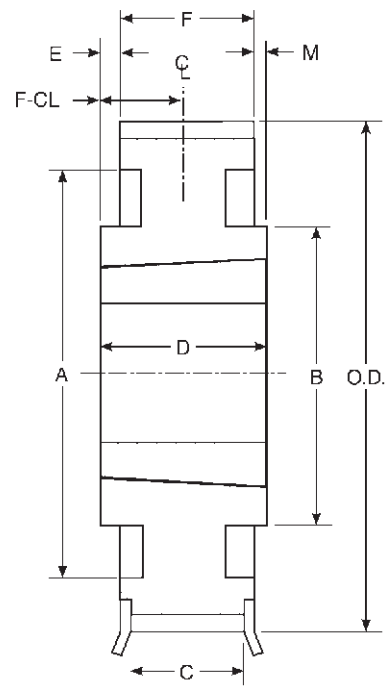

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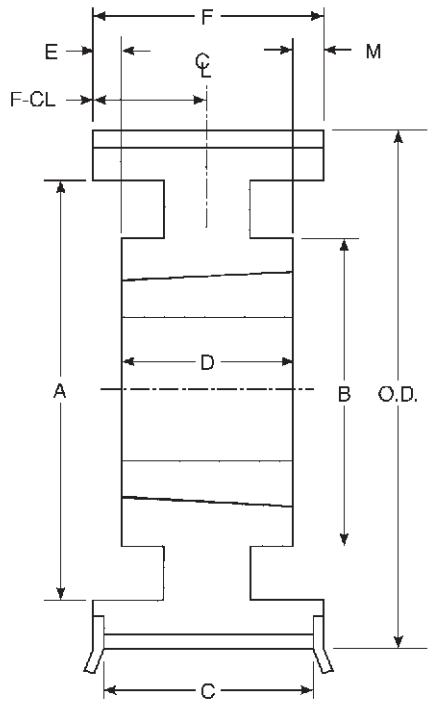
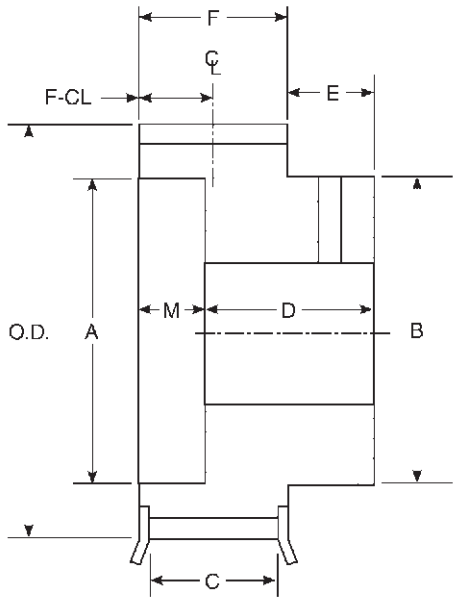


Type DF

Type 6



Type 6F

2D and 3D Sprocket Drawings are available at www.gates.com/designview

Stock 8mm Poly Chain® GT2® Sprocket Specifications

Sprocket Number	Number of Teeth	Diameters (in)			Design Type	Dimensions (in)									Approx Wt. (lb)	Approx WR²	Matl. Spec
		Pitch	O.D.	Flange Ref.		A	B	C	D	E	F	M	F-CL	Bushing Size	Bore Sizes Min	Bore Sizes Max	
8MX-22S-12	22	2.206	2.143	2.610	AF-1	0.00	—	0.60	0.88	—	0.88	0.01	0.44	1008	0.500	1.000	0. 4	0.002	DI
8MX-22S-12-PB	22	2.206	2.143	2.610	6F-1	—	1.79	0.57	1.31	0.46	0.85	0	0.43	MPB	0.500	1.188	1. 0	0.004	DI
8MX-25S-12	25	2.506	2.443	2.910	AF-1	0.00	—	0.60	0.88	—	0.88	0.01	0.44	1108	0.500	1.125	0. 6	0.004	GI
8MX-25S-12-PB	25	2.506	2.443	2.910	6F-1	—	2.08	0.57	1.31	0.46	0.85	0	0.43	MPB	0.500	1.500	1. 4	0.006	DI
8MX-26S-12	26	2.607	2.544	2.906	AF-1	-	-	0.60	0.88	-	0.88	0	0.44	1108	0.500	1.125	0.60	0.005	GI
8MX-27S-12	27	2.707	2.644	3.207	AF-1	-	-	0.60	0.88	-	0.88	0	0.44	1108	0.500	1.125	0.70	0.006	GI
8MX-28S-12	28	2.807	2.744	3.210	AF-1	0.00	—	0.60	0.88	—	0.88	0.01	0.44	1108	0.500	1.125	0. 9	0.007	GI, SS
8MX-28S-12-PB	28	2.807	2.744	3.210	6F-1	—	2.34	0.57	1.31	0.46	0.85	0	0.43	MPB	0.500	1.750	1. 8	0.011	DI, SS
8MX-29S-12	29	2.907	2.844	3.090	AF-1	-	-	0.68	0.88	-	0.88	0	0.44	1108	0.500	1.125	1.10	0.008	GI, SS
8MX-30S-12	30	3.008	2.945	3.410	AF-1	0.00	—	0.60	0.88	—	0.88	0.01	0.44	1108	0.500	1.125	1. 1	0.009	GI, SS
8MX-30S-12-PB	30	3.008	2.945	3.410	6F-1	—	2.54	0.57	1.42	0.57	0.85	0	0.43	MPB	0.500	1.813	2. 2	0.015	DI, SS
8MX-31S-12	31	3.108	3.045	3.328	AF-1	-	-	0.80	1.00	-	1.00	0	0.50	1210	0.500	1.250	1.10	0.012	GI, SS
8MX-32S-12	32	3.208	3.145	3.610	AF-1	—	—	0.72	1.00	—	1.00	0	0.50	1210	0.500	1.250	1. 2	0.012	DI, SS
8MX-32S-12-PB	32	3.208	3.145	3.610	6F-1	—	2.73	0.57	1.42	0.57	0.85	0	0.43	MPB	0.500	2.000	2.5	0.020	DI, SS
8MX-33S-12	33	3.308	3.245	3.566	AF-1	-	-	0.80	1.00	-	1.00	0	0.50	1610	0.500	1.688	1.10	0.014	DI
8MX-34S-12	34	3.409	3.346	3.810	AF-1	—	—	0.72	1.00	—	1.00	0	0.50	1610	0.500	1.688	1.1	0.014	DI, SS
8MX-35S-12	35	3.509	3.446	3.805	AF-1	-	-	0.80	1.00	-	1.00	0	0.50	1610	0.500	1.688	1.30	0.019	GI
8MX-36S-12	36	3.609	3.546	4.010	AF-1	—	—	0.72	1.00	—	1.00	0	0.50	1610	0.500	1.688	1.4	0.019	GI, SS
8MX-37S-12	37	3.709	3.646	4.044	AF-1	-	-	0.80	1.00	-	1.00	0	0.50	1610	0.500	1.688	1.60	0.024	GI
8MX-38S-12	38	3.810	3.747	4.210	AF-1	—	—	0.72	1.00	—	1.00	0	0.50	1610	0.500	1.688	1.7	0.025	GI
8MX-39S-12	39	3.910	3.847	4.410	AF-1	-	-	0.72	1.00	-	1.00	0	0.50	1610	0.500	1.688	1.90	0.032	GI
8MX-40S-12	40	4.010	3.947	4.410	BF-1	—	3.56	0.57	1.25	—	0.85	0.40	0.43	2012	0.500	2.125	1.7	0.031	DI
8MX-41S-12	41	4.110	4.047	4.520	BF-1	-	3.645	0.65	1.25	-	0.85	0.40	0.43	2012	0.500	2.125	2.30	0.038	DI
8MX-42S-12	42	4.211	4.148	4.910	BF-1	—	3.76	0.57	1.25	—	0.85	0.40	0.43	2012	0.500	2.125	2.1	0.042	GI
8MX-45S-12	45	4.511	4.448	4.910	BF-1	—	3.76	0.57	1.25	—	0.85	0.40	0.43	2012	0.500	2.125	2.6	0.055	GI
8MX-48S-12	48	4.812	4.749	5.210	BF-1	—	3.76	0.57	1.25	—	0.85	0.40	0.43	2012	0.500	2.125	3.4	0.081	GI
8MX-50S-12	50	5.013	4.950	5.410	BF-1	—	3.76	0.57	1.25	—	0.85	0.40	0.43	2012	0.500	2.125	3.7	0.094	GI
8MX-53S-12	53	5.314	5.251	5.500	BF-1	—	3.76	0.57	1.25	—	0.85	0.40	0.43	2012	0.500	2.125	4.7	0.132	GI
8MX-56S-12	56	5.614	5.551	6.010	BF-1	—	3.76	0.57	1.25	—	0.85	0.40	0.43	2012	0.500	2.125	5.4	0.165	GI
8MX-60S-12	60	6.015	5.952	6.410	BF-1	—	3.76	0.57	1.25	—	0.85	0.40	0.43	2012	0.500	2.125	6.3	0.217	GI
8MX-63S-12	63	6.316	6.253	6.720	CF-1	5.71	4.00	0.57	1.25	—	0.85	0.40	0.43	2012	0.500	2.125	4.1	0.140	GI
8MX-67S-12	67	6.717	6.654	6.870	CF-1	6.14	4.00	0.57	1.25	—	0.85	0.40	0.43	2012	0.500	2.125	4.3	0.164	GI
8MX-71S-12	71	7.118	7.055	7.500	CF-1	6.51	4.00	0.57	1.25	—	0.85	0.40	0.43	2012	0.500	2.125	4.7	0.199	GI
8MX-75S-12	75	7.519	7.456	7.920	CF-1	6.90	4.00	0.57	1.25	—	0.85	0.40	0.43	2012	0.500	2.125	5.1	0.239	GI
8MX-80S-12	80	8.020	7.957	8.420	CF-1	7.23	4.00	0.57	1.25	—	0.85	0.40	0.43	2012	0.500	2.125	5.8	0.323	GI
8MX-90S-12	90	9.023	8.960	—	C-2	8.05	4.00	—	1.25	—	0.85	0.40	0.43	2012	0.500	2.125	8.0	0.563	GI
8MX-112S-12	112	11.229	11.166	—	C-2	10.25	4.00	—	1.25	—	0.85	0.40	0.43	2012	0.500	2.125	12.0	1.405	GI
8MX-140S-12	140	14.036	13.973	—	C-3	11.96	4.38	—	1.25	—	0.85	0.40	0.43	2012	0.500	2.125	17.0	3.176	GI
8MX-180S-12	180	18.046	17.983	—	C-3	15.80	4.88	—	1.75	—	0.85	0.90	0.43	2517	0.500	2.688	26.6	8.146	GI
8MX-224S-12	224	22.457	22.394	—	C-3	20.17	4.88	—	1.75	—	0.85	0.90	0.43	2517	0.500	2.688	37.0	17.98	GI

Material Spec : GI - Grey Iron DI - Ductile Iron SS - Stainless Steel Design Type Suffix: 1 - Solid 2 - Web 3 - Arms

NOTE: 2D and 3D sprocket drawings are available at www.gates.com/designview

NOTE: •Weights for Minimum Plain Bore (MPB) Sprockets are with minimum bore. •Weights and WR^2 for Bushed Sprockets do not include bushings. •WR^2 values have $lb\text{-}ft^2$ units.

Sprocket Number	Number of Teeth	Diameters (in)			Design Type	Dimensions (in)											Approx Wt. (lb)	Approx WR²	Matl. Spec
		Pitch	O.D.	Flange Ref.		A	B	C	D	E	F	M	F-CL	Bushing Size	Bore Sizes				
															Min	Max			
8MX-22S-21	22	2.206	2.143	2.610	AF-1	1.63	—	0.92	0.88	—	1.20	0.33	0.60	1008	0.500	1.000	0.6	0.002	DI, NP
8MX-22S-21-PB	22	2.206	2.143	2.610	6F-1	—	1.79	0.92	1.65	0.45	1.20	0	0.60	MPB	0.500	1.188	1.3	0.005	DI
8MX-25S-21	25	2.506	2.443	2.910	AF-1	1.92	—	0.92	0.88	—	1.20	0.33	0.60	1108	0.500	1.125	0.8	0.005	GI, NP
8MX-25S-21-PB	25	2.506	2.443	2.910	6F-1	—	2.08	0.92	1.65	0.45	1.20	0	0.60	MPB	0.500	1.500	1.8	0.009	DI
8MX-26S-21	26	2.607	2.544	2.906	AF	1.85	-	0.92	0.88	-	1.2	0.32	0.6	1108	0.500	1.125	0.80	0.006	GI, NP
8MX-27S-21	27	2.707	2.644	3.207	AF	1.95	-	0.92	0.88	-	1.2	0.32	0.6	1108	0.500	1.125	0.90	0.007	GI, NP
8MX-28S-21	28	2.807	2.744	3.210	AF-1	2.18	—	0.92	0.88	—	1.20	0.33	0.60	1108	0.500	1.125	1.0	0.008	G, SS, NP
8MX-28S-21-PB	28	2.807	2.744	3.210	6F-1	—	2.34	0.92	1.65	0.45	1.20	0	0.60	MPB	0.500	1.750	2.3	0.014	DI, SS
8MX-29S-21	29	2.907	2.844	3.09	AF	2.15	-	0.92	0.88	-	1.2	0.32	0.6	1108	0.500	1.125	1.00	0.010	GI, SS, NP
8MX-30S-21	30	3.008	2.945	3.410	AF-1	2.38	—	0.92	0.88	—	1.20	0.33	0.60	1108	0.500	1.125	1.3	0.011	GI, SS, NP
8MX-30S-21-PB	30	3.008	2.945	3.410	6F-1	—	2.54	0.92	1.77	0.57	1.20	0	0.60	MPB	0.500	1.813	2.8	0.020	DI, SS
8MX-31S-21	31	3.108	3.045	3.328	AF	2.35	-	0.92	1	-	1.2	0.2	0.6	1210	0.500	1.250	1.10	0.013	GI, SS, NP
8MX-32S-21	32	3.208	3.145	3.610	AF-1	2.58	—	0.92	1.00	—	1.20	0.20	0.60	1210	0.500	1.250	1.4	0.015	DI, SS, NP
8MX-32S-21-PB	32	3.208	3.145	3.610	6F-1	—	2.73	0.92	1.77	0.57	1.20	0	0.60	MPB	0.500	2.000	3.2	0.026	DI, SS
8MX-33S-21	33	3.308	3.245	3.566	AF	2.6	-	0.92	1	-	1.2	0.2	0.6	1610	0.500	1.688	1.10	0.016	DI, NP
8MX-34S-21	34	3.409	3.346	3.810	AF-1	2.66	—	0.92	1.00	—	1.20	0.20	0.60	1610	0.500	1.688	1.4	0.018	DI, SS, NP
8MX-35S-21	35	3.509	3.446	3.805	AF	2.75	-	0.92	1	-	1.2	0.2	0.6	1610	0.500	1.688	1.30	0.021	GI, NP
8MX-36S-21	36	3.609	3.546	4.010	AF-1	2.96	—	0.92	1.00	—	1.20	0.20	0.60	1610	0.500	1.688	1.66	0.023	DI, SS, NP
8MX-37S-21	37	3.709	3.646	4.044	AF	2.95	-	0.92	1	-	1.2	0.2	0.6	1610	0.500	1.688	1.60	0.028	GI, NP
8MX-38S-21	38	3.810	3.747	4.210	AF-1	3.15	—	0.92	1.00	—	1.20	0.20	0.60	1610	0.500	1.688	1.9	0.030	DI, SS, NP
8MX-39S-21	39	3.910	3.847	4.41	AF	3.14	-	0.92	1	-	1.2	0.2	0.6	1610	0.500	1.688	1.90	0.035	GI, NP
8MX-40S-21	40	4.010	3.947	4.410	AF-1	—	—	0.97	1.25	—	1.25	0	0.63	2012	0.500	2.125	2.0	0.037	DI, SS, NP
8MX-41S-21	41	4.110	4.047	4.52	BF	-	3.4	1	-	1.25	1.2	0.05	0.6	2012	0.500	2.125	2.30	0.043	DI, NP
8MX-42S-21	42	4.211	4.148	4.910	AF-1	—	—	0.97	1.25	—	1.25	0	0.63	2012	0.500	2.125	2.4	0.048	GI, SS, NP
8MX-45S-21	45	4.511	4.448	4.910	AF-1	—	—	0.97	1.25	—	1.25	0	0.63	2012	0.500	2.125	3.0	0.067	GI, SS, NP
8MX-48S-21	48	4.812	4.749	5.210	AF-1	—	—	0.97	1.25	—	1.25	0	0.63	2012	0.500	2.125	3.7	0.092	GI, SS, NP
8MX-50S-21	50	5.013	4.950	5.410	AF-1	—	—	0.97	1.25	—	1.25	0	0.63	2012	0.500	2.125	4.2	0.111	GI, SS, NP
8MX-53S-21	53	5.314	5.251	5.500	AF-1	—	—	0.97	1.25	—	1.25	0	0.63	2012	0.500	2.125	5.0	0.145	GI, SS, NP
8MX-56S-21	56	5.614	5.551	6.010	AF-1	—	—	0.97	1.25	—	1.25	0	0.63	2012	0.500	2.125	5.8	0.184	GI, SS, NP
8MX-60S-21	60	6.015	5.952	6.420	AF-1	—	—	0.97	1.25	—	1.25	0	0.63	2012	0.500	2.125	6.9	0.247	GI, SS, NP
8MX-63S-21	63	6.316	6.253	6.720	CF-1	5.71	3.76	0.92	1.25	—	1.20	0.05	0.60	2012	0.500	2.125	4.1	0.154	GI, NP
8MX-67S-21	67	6.717	6.654	6.880	CF-1	6.14	4.50	0.92	1.75	—	1.20	0.55	0.60	2517	0.500	2.688	5.7	0.232	GI, NP
8MX-71S-21	71	7.118	7.055	7.500	CF-1	6.51	4.50	0.92	1.75	—	1.20	0.55	0.60	2517	0.500	2.688	6.1	0.275	GI, NP
8MX-75S-21	75	7.519	7.456	7.920	CF-1	6.90	4.50	0.92	1.75	—	1.20	0.55	0.60	2517	0.500	2.688	6.5	0.323	GI, NP
8MX-80S-21	80	8.020	7.957	8.420	CF-1	7.23	4.50	0.92	1.75	—	1.20	0.55	0.60	2517	0.500	2.688	7.5	0.432	GI, NP
8MX-90S-21	90	9.023	8.960	—	C-2	7.78	4.50	—	1.75	—	1.20	0.55	0.60	2517	0.500	2.688	11.0	0.825	GI, NP
8MX-112S-21	112	11.229	11.166	—	C-2	10.00	4.50	—	1.75	—	1.20	0.55	0.60	2517	0.500	2.688	16.0	1.892	GI, NP
8MX-140S-21	140	14.036	13.973	—	C-3	11.74	4.88	—	1.75	—	1.20	0.55	0.60	2517	0.500	2.688	24.1	4.707	GI, NP
8MX-180S-21	180	18.046	17.983	—	C-3	15.49	6.25	—	2.00	—	1.20	0.80	0.60	3020	0.875	3.250	39.0	12.02	GI, NP
8MX-224S-21	224	22.457	22.394	—	C-3	19.86	6.25	—	2.00	—	1.20	0.80	0.60	3020	0.875	3.250	53.4	26.34	GI, NP

Material Spec : GI - Grey Iron DI - Ductile Iron SS - Stainless Steel NP - Nickel Plated Design Type Suffix: 1 - Solid 2 - Web 3 - Arms

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Sprocket Number	Number of Teeth	Diameters (in)			Design Type	Dimensions (in)											Approx Wt. (lb)	Approx WR²	Matl. Spec
		Pitch	O.D.	Flange Ref.		A	B	C	D	E	F	M	F-CL	Bushing Size	Bore Sizes				
															Min	Max			
14MX-28S-20	28	4.912	4.802	5.400	A1-F	3.61	—	1.04	1.25	—	1.36	0.11	0.68	2012	0.500	2.125	3.9	0.105	GI, NP
14MX-29S-20	29	5.088	4.978	5.760	A1-F	3.99	—	1.04	1.25	—	1.36	0.11	0.68	2012	0.500	2.125	4.3	0.122	GI, NP
14MX-30S-20	30	5.263	5.153	5.760	A1-F	3.99	—	1.04	1.25	—	1.36	0.11	0.68	2012	0.500	2.125	4.8	0.143	GI, NP
14MX-31S-20	31	5.439	5.329	6.110	A1-F	4.22	—	1.04	1.25	—	1.36	0.11	0.68	2012	0.500	2.125	5.3	0.165	GI, NP
14MX-32S-20	32	5.614	5.504	6.110	A1-F	4.22	—	1.04	1.25	—	1.36	0.11	0.68	2012	0.500	2.125	5.8	0.191	GI, NP
14MX-33S-20	33	5.790	5.680	6.460	A1-F	4.53	—	1.04	1.25	—	1.36	0.11	0.68	2012	0.500	2.125	6.3	0.217	GI, NP
14MX-34S-20	34	5.965	5.855	6.460	A1-F	4.53	—	1.04	1.25	—	1.36	0.11	0.68	2012	0.500	2.125	6.8	0.248	GI, NP
14MX-35S-20	35	6.141	6.031	6.820	A1-F	4.95	—	1.04	1.25	—	1.36	0.11	0.68	2012	0.500	2.125	7.3	0.279	GI, NP
14MX-36S-20	36	6.316	6.206	6.820	BF-1	—	4.25	1.04	1.75	—	1.36	0.39	0.68	2517	0.500	2.688	8.4	0.346	GI, NP
14MX-37S-20	37	6.492	6.382	7.170	BF-1	—	4.25	1.04	1.75	—	1.36	0.39	0.68	2517	0.500	2.688	9.3	0.398	GI, NP
14MX-38S-20	38	6.667	6.557	7.170	BF-1	—	4.25	1.04	1.75	—	1.36	0.39	0.68	2517	0.500	2.688	9.9	0.443	GI, NP
14MX-39S-20	39	6.842	6.732	7.520	BF-1	—	4.25	1.04	1.75	—	1.36	0.39	0.68	2517	0.500	2.688	10.7	0.502	GI, NP
14MX-40S-20	40	7.018	6.908	7.520	BF-1	—	4.25	1.04	1.75	—	1.36	0.39	0.68	2517	0.500	2.688	11.4	0.554	GI, NP
14MX-43S-20	43	7.544	7.434	8.040	BF-1	—	4.25	1.04	1.75	—	1.36	0.39	0.68	2517	0.500	2.688	14.0	0.770	GI, NP
14MX-45S-20	45	7.895	7.785	8.400	BF-1	—	5.41	1.04	2.00	—	1.36	0.64	0.68	3020	0.875	3.250	15.0	0.948	GI, NP
14MX-48S-20	48	8.421	8.311	8.940	BF-1	—	5.75	1.04	2.00	—	1.36	0.64	0.68	3020	0.875	3.250	18.2	1.277	GI, NP
14MX-50S-20	50	8.772	8.662	9.290	BF-1	—	5.75	1.04	2.00	—	1.36	0.64	0.68	3020	0.875	3.250	20.8	1.561	GI, NP
14MX-53S-20	53	9.299	9.189	9.690	BF-1	—	5.75	1.04	2.00	—	1.36	0.64	0.68	3020	0.875	3.250	24.1	1.992	GI, NP
14MX-56S-20	56	9.825	9.715	10.360	BF-1	—	8.70	1.04	2.50	—	1.36	1.14	0.68	3525	1.188	3.938	30.2	2.834	GI, NP
14MX-60S-20	60	10.527	10.417	11.070	BF-1	—	8.75	1.04	2.50	—	1.36	1.14	0.68	3525	1.188	3.938	36.9	3.888	GI, NP
14MX-63S-20	63	11.053	10.943	11.590	BF-1	—	8.75	1.04	2.50	—	1.36	1.14	0.68	3525	1.188	3.938	42.3	4.837	GI, NP
14MX-67S-20	67	11.755	11.645	12.500	BF-1	—	8.75	1.04	2.50	—	1.36	1.14	0.68	3525	1.188	3.938	50.3	6.428	GI, NP
14MX-71S-20	71	12.457	12.347	13.070	CF-1	11.05	8.75	1.04	2.50	—	1.36	1.14	0.68	3525	1.188	3.938	40.6	4.832	GI, NP
14MX-75S-20	75	13.158	13.048	13.730	CF-1	11.68	8.75	1.04	2.50	—	1.36	1.14	0.68	3525	1.188	3.938	42.3	5.260	GI, NP
14MX-80S-20	80	14.036	13.926	14.620	CF-2	12.56	8.75	1.04	2.50	—	1.36	1.14	0.68	3525	1.188	3.938	48.0	6.573	GI, NP
14MX-90S-20	90	15.790	15.680	—	C-2	14.26	8.75	—	2.50	—	1.36	1.14	0.68	3525	1.188	3.938	53.8	9.215	GI, NP
14MX-112S-20	112	19.650	19.540	—	C-3	16.47	8.75	—	2.50	—	1.36	1.14	0.68	3525	1.188	3.938	70.1	21.11	GI, NP
14MX-140S-20	140	24.562	24.452	—	C-3	21.04	8.75	—	2.50	—	1.36	1.14	0.68	3525	1.188	3.938	94.8	48.06	GI, NP
14MX-168S-20	168	29.475	29.365	—	C-3	25.90	8.75	—	2.50	—	1.36	1.14	0.68	3525	1.188	3.938	120.8	91.40	GI, NP
14MX-180S-20	180	31.580	31.470	—	C-3	27.99	8.75	—	2.50	—	1.36	1.14	0.68	3525	1.188	3.938	134.6	118.6	GI, NP
14MX-200S-20	200	35.089	34.979	—	C-3	31.46	8.75	—	2.50	—	1.36	1.14	0.68	3525	1.188	3.938	158.1	176.5	GI, NP
14MX-224S-20	224	39.300	39.190	—	C-3	35.63	10.00	—	3.00	—	1.36	1.64	0.68	4030	1.438	4.438	201.1	271.7	GI, NP

Material Spec : GI - Grey Iron DI - Ductile Iron SS - Stainless Steel NP - Nickel Plated Design Type Suffix: 1 - Solid 2 - Web 3 - Arms

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Sprocket Number	Number of Teeth	Diameters (in)			Design Type	Dimensions (in)											Approx Wt. (lb)	Approx WR²	Matl. Spec
		Pitch	O.D.	Flange Ref.		A	B	C	D	E	F	M	F-CL	Bushing Size	Bore Sizes				
															Min	Max			
14MX-28S-37	28	4.912	4.802	5.400	6F-1	—	3.97	1.74	2.86	0.80	2.06	0	1.03	MPB	1.000	2.938	11.7	0.228	DI
14MX-28S-37	28	4.912	4.802	5.400	AF-1	3.61	—	1.74	1.25	—	2.06	0.81	1.03	2012	0.500	2.125	5.2	0.145	GI
14MX-29S-37	29	5.088	4.978	5.760	AF-1	3.99	—	1.74	1.75	—	2.06	0.31	1.03	2517	0.500	2.688	5.1	0.16	GI
14MX-30S-37	30	5.263	5.153	5.760	AF-1	3.99	—	1.74	1.75	—	2.06	0.31	1.03	2517	0.500	2.688	5.8	0.192	GI
14MX-31S-37	31	5.439	5.329	6.110	AF-1	4.22	—	1.74	1.75	—	2.06	0.31	1.03	2517	0.500	2.688	6.4	0.223	GI
14MX-32S-37	32	5.614	5.504	6.110	AF-1	4.22	—	1.74	1.75	—	2.06	0.31	1.03	2517	0.500	2.688	7.2	0.262	GI
14MX-33S-37	33	5.790	5.680	6.460	AF-1	4.53	—	1.74	1.75	—	2.06	0.31	1.03	2517	0.500	2.688	7.8	0.299	GI
14MX-34S-37	34	5.965	5.855	6.460	AF-1	4.53	—	1.74	1.75	—	2.06	0.31	1.03	2517	0.500	2.688	8.7	0.346	GI
14MX-35S-37	35	6.141	6.031	6.820	AF-1	4.95	—	1.74	1.75	—	2.06	0.31	1.03	2517	0.500	2.688	9.3	0.388	GI
14MX-36S-37	36	6.316	6.206	6.820	AF-1	4.95	—	1.74	1.75	—	2.06	0.31	1.03	2517	0.500	2.688	10.2	0.444	GI
14MX-37S-37	37	6.492	6.382	7.170	AF-1	5.27	—	1.74	1.75	—	2.06	0.31	1.03	2517	0.500	2.688	10.8	0.496	GI
14MX-38S-37	38	6.667	6.557	7.170	AF-1	5.27	—	1.74	2.00	—	2.06	0.06	1.03	3020	0.875	3.250	10.3	0.687	GI
14MX-39S-37	39	6.842	6.732	7.520	AF-1	5.54	—	1.74	2.00	—	2.06	0.06	1.03	3020	0.875	3.250	11.3	0.757	GI
14MX-40S-37	40	7.018	6.908	7.520	AF-1	5.54	—	1.74	2.00	—	2.06	0.06	1.03	3020	0.875	3.250	12.3	0.862	GI
14MX-43S-37	43	7.544	7.434	8.040	AF-1	6.16	—	1.74	2.00	—	2.06	0.06	1.03	3020	0.875	3.250	15.6	1.148	GI
14MX-45S-37	45	7.895	7.785	8.400	AF-1	6.42	—	1.74	2.00	—	2.06	0.06	1.03	3020	0.875	3.250	18.0	1.394	GI
14MX-48S-37	48	8.421	8.311	8.940	AF-1	6.96	—	1.74	2.00	—	2.06	0.06	1.03	3020	0.875	3.250	21.5	1.802	GI
14MX-50S-37	50	8.772	8.662	9.290	AF-1	7.44	—	1.74	2.00	—	2.06	0.06	1.03	3020	0.875	3.250	24.1	2.102	GI
14MX-53S-37	53	9.299	9.189	9.690	AF-1	7.84	—	1.74	2.00	—	2.06	0.06	1.03	3020	0.875	3.250	28.3	2.694	GI
14MX-56S-37	56	9.825	9.715	10.360	BF-1	—	8.70	1.74	2.50	—	2.06	0.44	1.03	3525	1.188	3.938	33.0	3.247	GI
14MX-60S-37	60	10.527	10.417	11.070	BF-1	—	8.75	1.74	2.50	—	2.06	0.44	1.03	3525	1.188	3.938	40.6	4.499	GI
14MX-63S-37	63	11.053	10.943	11.590	BF-1	—	8.75	1.74	2.50	—	2.06	0.44	1.03	3525	1.188	3.938	46.7	5.631	GI
14MX-67S-37	67	11.755	11.645	12.500	BF-1	—	8.75	1.74	2.50	—	2.06	0.44	1.03	3525	1.188	3.938	55.6	7.476	GI
14MX-71S-37	71	12.457	12.347	13.070	BF-1	—	8.75	1.74	2.50	—	2.06	0.44	1.03	3525	1.188	3.938	61.2	8.443	GI
14MX-75S-37	75	13.158	13.048	13.730	CF-1	11.68	8.75	1.74	2.50	—	2.06	0.44	1.03	3525	1.188	3.938	46.9	6.468	GI
14MX-80S-37	80	14.036	13.926	14.620	CF-2	12.56	8.75	1.74	2.50	—	2.06	0.44	1.03	3525	1.188	3.938	52.5	7.891	GI
14MX-90S-37	90	15.790	15.680	—	C-2	14.26	8.75	—	2.50	—	2.06	0.44	1.03	3525	1.188	3.938	61.5	11.78	GI
14MX-112S-37	112	19.650	19.540	—	C-3	16.39	8.75	—	2.50	—	2.06	0.44	1.03	3525	1.188	3.938	89.1	30.71	GI
14MX-140S-37	140	24.562	24.452	—	C-3	20.84	8.75	—	2.50	—	2.06	0.44	1.03	3525	1.188	3.938	125.5	72.00	GI
14MX-168S-37	168	29.475	29.365	—	C-3	25.51	10.00	—	3.00	—	2.06	0.94	1.03	4030	1.438	4.438	175.1	139.8	GI
14MX-180S-37	180	31.580	31.470	—	C-3	27.59	10.00	—	3.00	—	2.06	0.94	1.03	4030	1.438	4.438	191.4	176.8	GI
14MX-200S-37	200	35.089	34.979	—	C-3	31.07	10.00	—	3.00	—	2.06	0.94	1.03	4030	1.438	4.438	224.9	261.6	GI
14MX-224S-37	224	39.300	39.190	—	C-3	35.24	10.00	—	3.00	—	2.06	0.94	1.03	4030	1.438	4.438	267.7	397.9	GI

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Poly Chain® GT®2 Bored-To-Size Sprocket Bore Range Listing

Sprocket Size	Minimum Bore (in)	Full Keyway Bore Range (in)	Shallow Keyway Bore Range (in)
8MX-22S-12	0.500	0.500 - 1.063	1.125 - 1.188
8MX-22S-21	0.500	0.500 - 1.063	1.125 - 1.188
8MX-22S-36	0.500	0.500 - 1.063	1.125 - 1.188
8MX-25S-12	0.500	0.500 - 1.313	1.375 - 1.500
8MX-25S-21	0.500	0.500 - 1.313	1.375 - 1.500
8MX-25S-36	0.500	0.500 - 1.313	1.375 - 1.500
8MX-25S-62	1.000	1.000 - 1.313	1.375 - 1.500
8MX-28S-12	0.500	0.500 - 1.500	1.563 - 1.750
8MX-28S-21	0.500	0.500 - 1.500	1.563 - 1.750
8MX-28S-36	0.500	0.500 - 1.500	1.563 - 1.750
8MX-28S-62	1.000	1.000 - 1.500	1.563 - 1.750
8MX-30S-12	0.500	0.500 - 1.563	1.625 - 1.813
8MX-30S-21	0.500	0.500 - 1.563	1.625 - 1.813
8MX-30S-36	0.500	0.500 - 1.563	1.625 - 1.813
8MX-30S-62	1.000	1.000 - 1.563	1.625 - 1.813
8MX-32S-12	0.500	0.500 - 1.750	1.813 - 2.000
8MX-32S-21	0.500	0.500 - 1.750	1.813 - 2.000
8MX-32S-36	0.500	0.500 - 1.750	1.813 - 2.000
8MX-32S-62	1.000	1.000 - 1.750	1.813 - 2.000
8MX-34S-36	0.500	0.500 - 1.750	1.813 - 2.125
8MX-34S-62	1.000	1.000 - 1.750	1.813 - 2.125
8MX-36S-36	0.500	0.500 - 1.938	2.000 - 2.313
8MX-36S-62	1.000	1.000 - 1.938	2.000 - 2.313
8MX-38S-36	0.500	0.500 - 2.125	2.188 - 2.438
8MX-38S-62	1.000	1.000 - 2.125	2.188 - 2.438
8MX-40S-62	1.000	1.000 - 2.188	2.250 - 2.563
8MX-42S-62	1.000	1.000 - 2.375	2.438 - 2.750
8MX-45S-62	1.000	1.000 - 2.375	2.438 - 2.750

All bored-to-size Sprockets are available through Gates rebore center. Check with your local Gates representative or Customer Service for a quote and delivery.

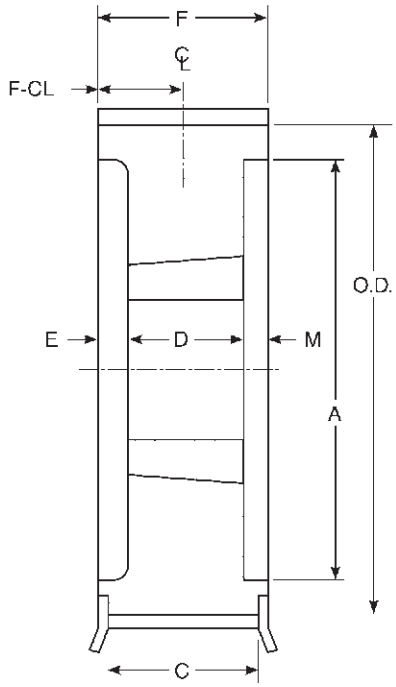
Sprocket Size	Minimum Bore (in)	Full Keyway Bore Range (in)	Shallow Keyway Bore Range (in)
14MX-28S-37	1.000	1.000 - 2.500	2.563 - 2.938
14MX-28S-68	1.000	1.000 - 2.500	2.563 - 2.938
14MX-28S-90	1.500	1.500 - 2.500	2.563 - 2.938
14MX-28S-125	1.500	1.500 - 2.500	2.563 - 2.938
14MX-29S-68	1.000	1.000 - 2.750	2.813 - 3.188
14MX-29S-90	1.500	1.500 - 2.750	2.813 - 3.188
14MX-29S-125	1.500	1.500 - 2.750	2.813 - 3.188
14MX-30S-68	1.000	1.000 - 2.750	2.813 - 3.188
14MX-30S-90	1.500	1.500 - 2.750	2.813 - 3.188
14MX-30S-125	1.500	1.500 - 2.750	2.813 - 3.188
14MX-31S-68	1.000	1.000 - 2.875	2.938 - 3.438
14MX-31S-90	1.500	1.500 - 2.875	2.938 - 3.438
14MX-31S-125	1.500	1.500 - 2.875	2.938 - 3.438
14MX-32S-68	1.000	1.000 - 2.875	2.938 - 3.438
14MX-32S-90	1.500	1.500 - 2.875	2.938 - 3.438
14MX-32S-125	1.500	1.500 - 2.875	2.938 - 3.438
14MX-33S-68	1.000	1.000 - 2.938	3.000 - 3.500
14MX-33S-90	1.500	1.500 - 2.938	3.000 - 3.500
14MX-33S-125	1.500	1.500 - 2.938	3.000 - 3.500
14MX-34S-37	1.000	1.000 - 2.938	3.000 - 3.500
14MX-34S-68	1.000	1.000 - 2.938	3.000 - 3.500
14MX-34S-90	1.500	1.500 - 2.938	3.000 - 3.500
14MX-34S-125	1.500	1.500 - 2.938	3.000 - 3.500
14MX-35S-90	1.500	1.500 - 3.250	3.313 - 3.813
14MX-35S-125	1.500	1.500 - 3.250	3.313 - 3.813
14MX-36S-90	1.500	1.500 - 3.250	3.313 - 3.813
14MX-36S-125	1.500	1.500 - 3.250	3.313 - 3.813
14MX-37S-90	1.500	1.500 - 3.563	3.625 - 4.125
14MX-37S-125	1.500	1.500 - 3.563	3.625 - 4.125
14MX-38S-90	1.500	1.500 - 3.563	3.625 - 4.125
14MX-38S-125	1.500	1.500 - 3.563	3.625 - 4.125
14MX-39S-90	1.500	1.500 - 3.750	3.182 - 4.375
14MX-39S-125	1.500	1.500 - 3.750	3.182 - 4.375
14MX-40S-90	1.500	1.500 - 3.750	3.182 - 4.375
14MX-40S-125	1.500	1.500 - 3.750	3.182 - 4.375
14MX-43S-125	1.500	1.500 - 4.125	4.188 - 4.813
14MX-45S-125	1.500	1.500 - 4.375	4.438 - 5.000
14MX-48S-125	1.500	1.500 - 4.688	4.750 - 5.625

All bored-to-size Sprockets are available through Gates rebore center. Check with your local Gates representative or Customer Service for a quote and delivery.

PowerGrip® GT2® Spocket Specifications

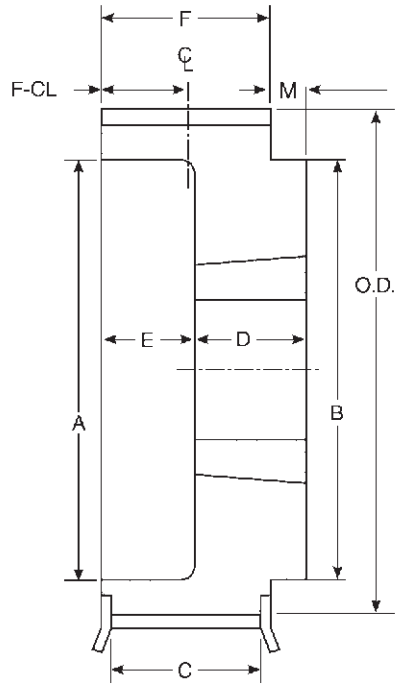
For 8mm and 14mm PowerGrip GT2 Belts

Type A



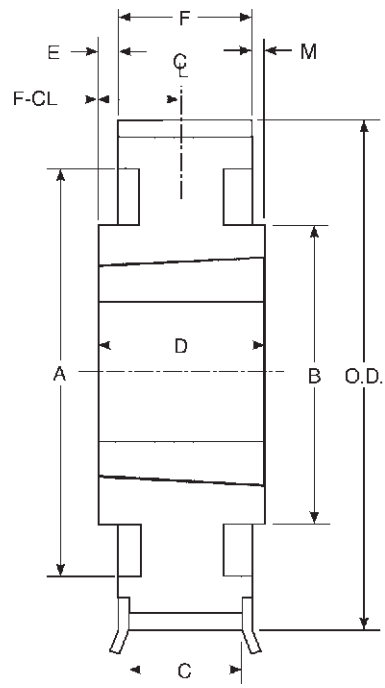
Type AF

Type B



Type BF

Type C



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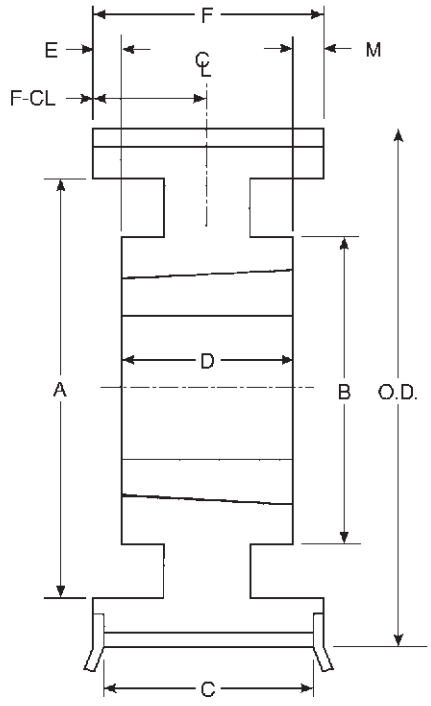
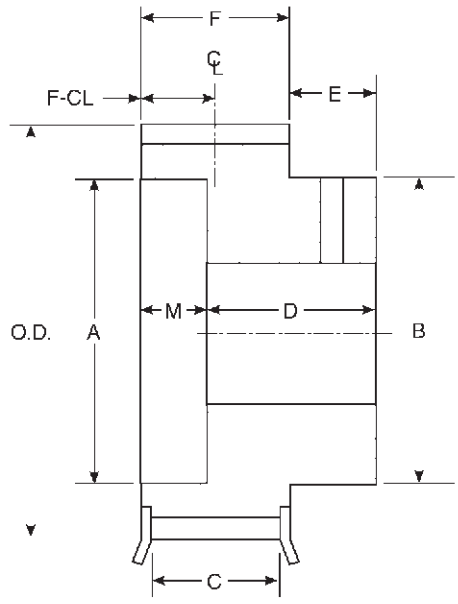
Type D



Type DF

Type 6



Type 6F

2D and 3D Sprocket Drawings are available at www.gates.com/designview

Sprocket Number	Number of Teeth	Diameters (in)			Design Type	Dimensions (in)									Bore Sizes		Approx. Wt.(lb)	Approx. WR2	Matl. Spec.
		Pitch	O.D.	Flange Ref.		A	B	C	D	E	F	M	F-CL	Bushing Size	Min.	Max.			
P22-8MGT-20	22	2.206	2.152	2.559	AF-1	1.55	—	0.85	0.88	0	1.14	0.26	0.57	1108	0.500	1.125	0.5	0.002	DI
P24-8MGT-20	24	2.406	2.352	2.756	AF-1	1.55	—	0.85	0.88	0	1.14	0.26	0.57	1108	0.500	1.125	0.7	0.004	DI
P25-8MGT-20	25	2.506	2.452	2.76	AF-1	1.79	—	0.85	0.88	0	1.13	0.26	0.57	1108	0.500	1.125	0.8	0.008	DI
P26-8MGT-20	26	2.607	2.553	2.953	AF-1	1.55	—	0.85	0.88	0	1.14	0.26	0.57	1108	0.500	1.125	0.9	0.006	DI
P27-8MGT-20	27	2.707	2.653	3.21	AF-1	2.07	—	0.85	0.88	0	1.13	0.26	0.57	1108	0.500	1.125	1.1	0.010	DI
P28-8MGT-20	28	2.807	2.753	3.150	AF-1	1.10	—	0.85	0.88	0.26	1.14	0	0.57	1108	0.500	1.125	1.2	0.009	DI
P29-8MGT-20	29	2.907	2.853	3.09	AF-1	2.22	—	0.93	0.88	0	1.13	0.25	0.57	1108	0.500	1.125	1.3	0.011	DI
P30-8MGT-20	30	3.008	2.954	3.346	AF-1	1.20	—	0.85	1.00	0.13	1.13	0	0.57	1210	0.500	1.250	1.2	0.011	DI
P31-8MGT-20	31	3.108	3.054	3.33	AF-1	2.47	—	0.93	1.00	0.13	1.13	0	0.57	1210	0.500	1.250	1.4	0.013	DI
P32-8MGT-20	32	3.208	3.154	3.543	AF-1	1.91	—	0.85	1.00	0	1.13	0.13	0.57	1210	0.500	1.250	1.4	0.015	DI
P33-8MGT-20	33	3.308	3.254	3.81	AF-1	2.67	—	0.85	1.00	0	1.13	0.13	0.57	1210	0.500	1.250	1.5	0.018	DI
P34-8MGT-20	34	3.409	3.355	3.819	AF-1	1.60	—	0.85	1.00	0.13	1.13	0	0.57	1610	0.500	1.688	1.4	0.018	DI
P35-8MGT-20	35	3.509	3.455	3.81	AF-1	2.86	—	0.93	1.00	0	1.13	0.13	0.57	1610	0.500	1.688	1.6	0.022	DI
P36-8MGT-20	36	3.609	3.555	3.937	AF-1	1.60	—	0.85	1.00	0.13	1.13	0	0.57	1610	0.500	1.688	1.7	0.024	DI
P37-8MGT-20	37	3.709	3.655	4.04	AF-1	3.06	—	0.93	1.00	0	1.13	0.13	0.57	1610	0.500	1.688	1.9	0.027	DI
P38-8MGT-20	38	3.810	3.756	4.134	AF-1	1.60	—	0.85	1.00	0.13	1.13	0	0.57	1610	0.500	1.688	2.0	0.032	GI
P39-8MGT-20	39	3.910	3.856	4.41	AF-1	3.26	—	0.85	1.00	0	1.13	0.13	0.57	1610	0.500	1.688	2.3	0.033	GI
P40-8MGT-20	40	4.010	3.956	4.331	AF-1	1.60	—	0.85	1.00	0.13	1.13	0	0.57	1610	0.500	1.688	2.4	0.040	GI
P42-8MGT-20	42	4.211	4.157	4.91	AF-1	3.47	—	0.85	1.00	0	1.13	0.13	0.57	1610	0.500	1.688	2.6	0.044	GI
P44-8MGT-20	44	4.411	4.357	4.764	BF-1	—	3.88	0.85	1.25	0	1.12	0.13	0.56	2012	0.500	2.125	2.7	0.058	GI
P46-8MGT-20	46	4.612	4.558	4.91	BF-1	—	0	0.97	1.25	0	1.12	0.13	0.56	2012	0.500	2.125	3.2	0.062	GI
P48-8MGT-20	48	4.812	4.758	5.157	BF-1	—	4.25	0.85	1.25	0	1.12	0.13	0.56	2012	0.500	2.125	3.7	0.091	GI
P50-8MGT-20	50	5.013	4.959	5.41	BF-1	—	4.18	0.85	1.25	0	1.12	0.13	0.56	2012	0.500	2.125	4.5	0.073	GI
P53-8MGT-20	53	5.314	5.260	5.76	BF-1	—	0	0.93	1.25	0	1.12	0	0.56	2012	0.500	2.125	5.0	0.133	GI
P56-8MGT-20	56	5.614	5.560	5.945	BF-1	—	4.38	0.85	1.25	0	1.12	0.13	0.56	2012	0.500	2.125	5.6	0.176	GI
P64-8MGT-20	64	6.416	6.362	6.772	BF-1	—	4.38	0.85	1.25	0	1.12	0.13	0.56	2012	0.500	2.125	7.7	0.307	GI
P72-8MGT-20	72	7.218	7.164	7.598	BF-1	—	4.38	0.85	1.25	0	1.12	0.13	0.56	2012	0.500	2.125	10.2	0.499	GI
P80-8MGT-20	80	8.020	7.966	8.386	BF-1	—	4.88	0.85	1.75	0	1.12	0.63	0.56	2517	0.500	2.688	13.1	0.772	GI
P90-8MGT-20	90	9.023	8.969	—	C-2	7.90	4.88	—	1.75	0.31	1.13	0.31	0.57	2517	0.500	2.688	12.5	0.903	GI

Material Spec : GI - Grey Iron DI - Ductile Iron SS - Stainless Steel Design Type Suffix: 1 - Solid 2 - Web 3 - Arms

NOTE: 2D and 3D sprocket drawings are available at www.gates.com/designview

NOTE: •Weights for Minimum Plain Bore (MPB) Sprockets are with minimum bore. •Weights and WR^2 for Bushed Sprockets do not include bushings. •WR^2 values have $lb\text{-}ft^2$ units.

Details shown which do not affect drive function may be changed without notification.

Sprocket Number	Number of Teeth	Diameters (in)			Design Type	Dimensions (in)									Bore Sizes		Approx. Wt.(lb)	Approx. WR2	Matl. Spec.
		Pitch	O.D.	Flange Ref.		A	B	C	D	E	F	M	F-CL	Bushing Size	Min.	Max.			
P28-14MGT-40	28	4.912	4.802	5.560	AF-1	3.13	—	1.81	1.25	0	2.13	0.88	1.06	2012	0.500	2.125	5.9	0.153	GI
P29-14MGT-40	29	5.088	4.978	5.560	AF-1	3.15	—	1.81	1.25	0	2.13	0.88	1.06	2012	0.500	2.125	6.6	0.181	GI
P30-14MGT-40	30	5.263	5.153	6.125	AF-1	3.85	—	1.81	1.25	0	2.13	0.88	1.06	2012	0.500	2.125	6.5	0.193	GI
P31-14MGT-40	31	5.439	5.329	6.110	AF-1	4.22	—	1.81	1.25	0	2.13	0.88	1.06	2012	0.500	2.125	7.5	0.164	GI
P32-14MGT-40	32	5.614	5.504	6.125	AF-1	3.92	—	1.81	1.25	0	2.13	0.88	1.06	2012	0.500	2.125	8.0	0.265	GI
P33-14MGT-40	33	5.790	5.680	6.470	AF-1	4.53	—	1.81	1.25	0	2.13	0.88	1.06	2012	0.500	2.125	9.0	0.208	GI
P34-14MGT-40	34	5.965	5.855	6.500	AF-1	4.06	—	1.81	1.25	0	2.13	0.88	1.06	2012	0.500	2.125	9.4	0.349	GI
P35-14MGT-40	35	6.141	6.031	6.820	AF-1	4.95	—	1.81	1.25	0	2.13	0.88	1.06	2012	0.500	2.125	10.0	0.269	GI
P36-14MGT-40	36	6.316	6.206	6.875	AF-1	4.69	—	1.81	1.75	0	2.13	0.38	1.06	2517	0.500	2.688	10.5	0.444	GI
P37-14MGT-40	37	6.492	6.382	7.170	AF-1	5.27	—	1.81	1.75	0	2.13	0.38	1.06	2517	0.500	2.688	11.7	0.392	GI
P38-14MGT-40	38	6.667	6.557	7.219	AF-1	4.94	—	1.81	1.75	0	2.13	0.38	1.06	2517	0.500	2.688	12.2	0.565	GI
P39-14MGT-40	39	6.842	6.732	7.520	AF-1	5.54	—	1.81	1.75	0	2.13	0.38	1.06	2517	0.500	2.688	13.7	0.502	GI
P40-14MGT-40	40	7.018	6.908	7.500	AF-1	5.06	—	1.81	1.75	0	2.13	0.38	1.06	2517	0.500	2.688	14.2	0.713	GI
P42-14MGT-40	42	7.369	7.259	8.040	AF-1	6.16	—	1.81	1.75	0	2.13	0.38	1.06	2517	0.500	2.688	16.0	0.691	GI
P44-14MGT-40	44	7.720	7.610	8.343	AF-1	6.14	—	1.81	1.75	0	2.13	0.38	1.06	2517	0.500	2.688	17.6	1.046	GI
P46-14MGT-40	46	8.071	7.961	8.420	AF-1	6.88	—	1.85	1.75	0	2.13	0.38	1.06	2517	0.500	2.688	21.0	1.026	GI
P48-14MGT-40	48	8.421	8.311	8.937	AF-1	6.50	—	1.81	1.75	0	2.13	0.38	1.06	2517	0.500	2.688	22.0	1.527	GI
P50-14MGT-40	50	8.772	8.662	9.290	DF-1	7.44	4.88	1.81	1.75	0.19	2.13	0.19	1.06	2517	0.500	2.688	25.0	0.954	GI
P52-14MGT-40	52	9.123	9.013	9.687	AF-1	7.18	—	1.81	1.75	0	2.13	0.38	1.06	2517	0.500	2.688	26.5	2.126	GI
P56-14MGT-40	56	9.825	9.715	10.375	AF-1	7.88	—	1.81	1.75	0	2.13	0.38	1.06	2517	0.500	2.688	31.3	2.878	GI
P60-14MGT-40	60	10.527	10.417	11.062	AF-1	8.50	—	1.81	2.00	0	2.13	0.13	1.06	3020	0.875	3.250	28.9	3.177	GI
P64-14MGT-40	64	11.229	11.119	11.750	AF-1	9.25	—	1.81	2.00	0	2.13	0.13	1.06	3020	0.875	3.250	31.0	3.872	GI
P68-14MGT-40	68	11.930	11.820	12.500	DF-1	10.00	6.25	1.81	2.00	0	2.13	0.13	1.06	3020	0.875	3.250	31.3	4.446	GI
P72-14MGT-40	72	12.632	12.522	13.187	DF-1	10.69	6.25	1.81	2.00	0	2.13	0.13	1.06	3020	0.875	3.250	33.9	5.410	GI
P80-14MGT-40	80	14.036	13.926	14.625	DF-3	12.53	5.50	1.81	2.00	0	2.13	0.13	1.06	3020	0.875	3.250	33.7	7.474	GI
P90-14MGT-40	90	15.790	15.680	—	D-3	14.25	5.50	1.81	2.00	0	2.13	0.13	1.06	3020	0.875	3.250	39.7	9.396	GI
P112-14MGT-40	112	19.650	19.540	—	A-3	18.09	—	—	2.00	0	2.13	0.13	1.06	3020	0.875	3.250	100.5	29.660	GI
P144-14MGT-40	144	25.264	25.154	—	A-3	23.65	—	—	2.00	0	2.13	0.13	1.06	3020	0.875	3.250	154.1	75.160	GI
P168-14MGT-40	168	29.475	29.365	—	A-3	27.50	—	—	2.00	0	2.13	0.13	1.06	3020	0.875	3.250	133.2	113.300	GI
P192-14MGT-40	192	33.686	33.576	—	A-3	31.75	—	—	2.00	0	2.13	0.13	1.06	3020	0.875	3.250	167.6	189.800	GI

Material Spec : GI - Grey Iron DI - Ductile Iron SS - Stainless Steel Design Type Suffix: 1 - Solid 2 - Web 3 - Arms
NOTE: 2D and 3D sprocket drawings are available at www.gates.com/designview
NOTE: •Weights for Minimum Plain Bore (MPB) Sprockets are with minimum bore. •Weights and WR^2 for Bushed Sprockets do not include bushings. •WR^2 values have $lb\text{-}ft^2$ units.

Details shown which do not affect drive function may be changed without notification.

Sprocket Number	Number of Teeth	Diameters (in)			Design Type	Dimensions (in)									Bore Sizes		Approx. Wt.(lb)	Approx. WR2	Matl. Spec.
		Pitch	O.D.	Flange Ref.		A	B	C	D	E	F	M	F-CL	Bushing Size	Min.	Max.			
P28-14MGT-55	28	4.912	4.802	5.560	AF-1	3.13	—	2.43	1.25	0	2.75	1.50	1.38	2012	0.500	2.125	7.4	0.194	GI
P29-14MGT-55	29	5.088	4.978	5.560	AF-1	3.13	—	2.43	1.25	0	2.75	1.50	1.38	2012	0.500	2.125	8.4	0.231	GI
P30-14MGT-55	30	5.263	5.153	6.125	AF-1	3.80	—	2.43	1.75	0	2.75	1.00	1.38	2517	0.500	2.688	7.4	0.237	GI
P32-14MGT-55	32	5.614	5.504	6.125	AF-1	3.92	—	2.43	1.75	0	2.75	1.00	1.38	2517	0.500	2.688	9.3	0.327	GI
P34-14MGT-55	34	5.965	5.855	6.500	AF-1	4.06	—	2.43	1.75	0	2.75	1.00	1.38	2517	0.500	2.688	11.2	0.437	GI
P36-14MGT-55	36	6.316	6.206	6.875	AF-1	4.69	—	2.43	1.75	0	2.75	1.00	1.38	2517	0.500	2.688	12.4	0.54	GI
P38-14MGT-55	38	6.669	6.557	7.219	AF-1	4.94	—	2.43	1.75	0	2.75	1.00	1.38	2517	0.500	2.688	14.4	0.686	GI
P40-14MGT-55	40	7.018	6.908	7.500	AF-1	5.06	—	2.43	1.75	0	2.75	1.00	1.38	2517	0.500	2.688	16.7	0.871	GI
P44-14MGT-55	44	7.720	7.610	8.343	AF-1	6.12	—	2.43	1.75	0	2.75	1.00	1.38	2517	0.500	2.688	19.9	1.234	GI
P48-14MGT-55	48	8.421	8.311	8.937	AF-1	6.50	—	2.43	2.00	0	2.75	0.75	1.38	3020	0.875	3.250	24.4	1.84	GI
P52-14MGT-55	52	9.123	9.013	9.687	AF-1	7.18	—	2.43	2.00	0	2.75	0.75	1.38	3020	0.875	3.250	29.6	2.573	GI
P56-14MGT-55	56	9.825	9.715	10.375	AF-1	7.88	—	2.43	2.00	0	2.75	0.75	1.38	3020	0.875	3.250	35.3	3.489	GI
P60-14MGT-55	60	10.527	10.417	11.062	AF-1	8.50	—	2.43	2.00	0	2.75	0.75	1.38	3020	0.875	3.250	41.6	4.647	GI
P64-14MGT-55	64	11.229	11.119	11.750	AF-1	9.25	—	2.43	2.00	0	2.75	0.75	1.38	3020	0.875	3.250	47.9	6.012	GI
P68-14MGT-55	68	11.930	11.820	12.500	DF-1	10.00	6.25	2.43	2.00	0	2.75	0.75	0.69	3020	0.875	3.250	40.2	5.909	GI
P72-14MGT-55	72	12.632	12.522	13.187	DF-1	10.69	6.25	2.43	2.00	0	2.75	0.75	0.69	3020	0.875	3.250	45.1	7.387	GI
P80-14MGT-55	80	14.036	13.926	14.625	DF-3	12.00	5.50	2.43	2.00	0	2.75	0.75	0.69	3020	0.875	3.250	41.6	9.021	GI
P90-14MGT-55	90	15.790	15.680	—	D-3	14.22	5.50	—	2.00	0	2.75	0.75	0.69	3020	0.875	3.250	45.0	12.36	GI
P112-14MGT-55	112	19.650	19.540	—	D-2	18.04	6.25	—	2.00	0	2.75	0.75	0.69	3020	0.875	3.250	116.7	36.86	GI
P144-14MGT-55	144	25.264	25.154	—	D-3	23.38	6.25	—	2.00	0	2.75	0.75	0.69	3020	0.875	3.250	98.0	65.38	GI
P168-14MGT-55	168	29.475	29.365	—	D-3	27.50	6.25	—	2.00	0.19	2.75	0.56	0.88	3020	0.875	3.250	145.5	150.2	GI
P192-14MGT-55	192	33.686	33.576	—	C-3	31.93	6.56	—	3.50	0	2.75	0.75	0.69	3535	1.188	3.938	432.3	404.3	GI

Material Spec : GI - Grey Iron DI - Ductile Iron SS - Stainless Steel Design Type Suffix: 1 - Solid 2 - Web 3 - Arms

NOTE: 2D and 3D sprocket drawings are available at www.gates.com/designview

NOTE: •Weights for Minimum Plain Bore (MPB) Sprockets are with minimum bore. •Weights and WR^2 for Bushed Sprockets do not include bushings. •WR^2 values have $lb\text{-}ft^2$ units.

Details shown which do not affect drive function may be changed without notification.

Spocket Tolerance Specifications

Poly Chain® GT®2 and PowerGrip® GT®2 sprockets are made to close tolerances. Modifications such as reboring may result in unsatisfactory drive performance. Strict adherence to the standard tolerances (as shown in table below) is highly recommended.

Sprocket Outside Diameter and Pitch

Outside Diameter Range (in)	Outside Diameter Tolerance (in)	Pitch To Pitch Tolerance (in)	
		Adjacent Grooves	Accumulative Over 90 Degrees
Over 2.000 to and including 4.000	+ 0.004 -0.000	±0.001	±0.0045
Over 4.000 to and including 7.000	+ 0.005 -0.000	±0.001	±0.005
Over 7.000 to and including 12.000	+ 0.006 -0.000	±0.001	±0.006
Over 12.000 to and including 20.000	+ 0.007 -0.000	±0.001	±0.0065
Over 20.000	+ 0.008 -0.000	±0.001	±0.0075

Sprocket Runout

Radial Runout*

Outside Diameter	Outside Diameter	Total Eccentricity Total Indicator Reading	
(in)	(mm)	(in)	(mm)
Over to 4	50 100	0.003	0.08
Over to 8	100 200	0.004	0.10
Over 8	200	.0005 per inch O.D. over 8"	.013 per mm O.D. over 200mm
		(may not exceed face diameter tolerance)	

*** Total Indicator Reading**

Axial Runout*

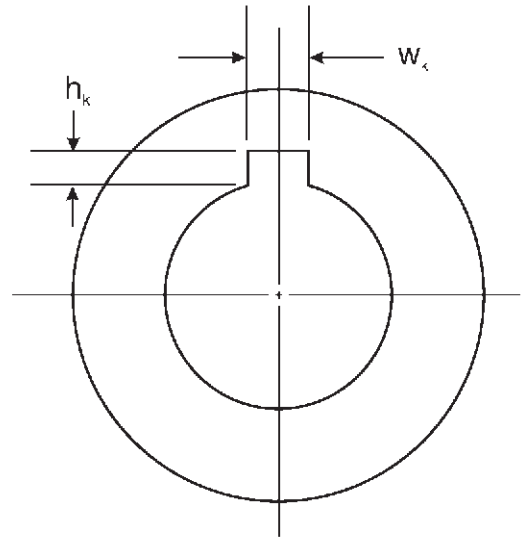
For outside diameters 1.0 inches and under. . 0.001 inches
For each additional inch of outside diameter up through 10.0 inches, add . . . . . 0.001 inches
For each additional inch of outside diameter over 10.0 inches, add . . . . . 0.0005 inches

*** Total Indicator Reading**

Sprocket and Bushing Keyseat

Shaft Diameter (in)	Width wk † (in)	Depth, hk (in)+ 0.015 0.000
Up through 7/16 (0.44)	3/32 (0.0938)	3/64 (0.047)
Over 7/16 (0.44) to and incl. 9/16 (0.56)	1/8 (0.125)	1/16 (0.062)
Over 9/16 (0.56) to and incl. 7/8 (0.88)	3/16 (0.1875)	3/32 (0.094)
Over 7/8 (0.88) to and incl. 1 1/4 (1.25)	1/4 (0.250)	1/8 (0.125)
Over 1 1/4 (1.25) to and incl. 1 3/8 (1.38)	5/16 (0.3125)	5/32 (0.156)
Over 1 3/8 1.38) to and incl. 1 3/4 (1.75)	3/8 (0.375)	3/16 (0.188)
Over 1 3/4 (1.75) to and incl. 2 1/4 (2.25)	1/2 (0.500)	1/4 (0.250)
Over 2 1/4 (2.25) to and incl. 2 3/4 (2.75)	5/8 (0.625)	5/16 (0.312)
Over 2 3/4 (2.75) to and incl. 3 1/4 (3.25)	3/4 (0.750)	3/8 (0.375)
Over 3 1/4 (3.25) to and incl. 3 3/4 (3.75)	7/8 (0.875)	7/16 (0.438)
Over 3 3/4 (3.75) to and incl. 4 1/2 (4.50)	1 (1.000)	1/2 (0.500)
Over 4 1/2 (4.50) to and incl. 5 1/2 (5.50)	1 1/4 (1.250)	5/8 (0.625)

Tolerance on width, Wk
For width up through 1/2 (0.500) . . . . . + 0.002, 0.000 inches
For width over 1/2 (0.500) up through 1 (1.000) . . + 0.003, 0.000 inches
For width over 1 (1.000). . . . . + 0.004, 0.000 inches



Balancing

Stock Sprockets are statically balanced per MPTA (Mechanical Power Transmission Association) Standard Practice for Pulley Balancing SPB-86 using the weight based on the following two criteria:

1. Balance limit (ounces) = Sprocket Weight (lb) x 0.016; or
2. 0.176 ounce (5 grams), whichever is greater.

Caution: Stock sprockets should not be used on drives where rim surface speeds exceed 6,500 fpm. Sprocket construction and materials will determine the dynamic balancing requirements of the sprocket(s) where rim surface speeds exceed 6,500 fpm.

Sprocket Tooth Profile and Surface Quality

The Poly Chain GT2 and PowerGrip GT2 sprocket tooth profile was designed and developed exclusively by The Gates Rubber Company to operate with the Gates Poly Chain GT Carbon and PowerGrip GT2 belts. See Engineering Section II-3, Tooth Profile, on page 116 for a complete discussion of the performance characteristics of this new tooth profile. The tooth surface should be free of any surface defects and should be 80 micro-inches finish or better.

Recommended Re-bore Specifications and Instructions

For Minimum Plain Bore (MPB) Sprockets

When using MPB Poly Chain® GT®2 and PowerGrip® GT®2 sprockets in power transmission systems, important guidelines should be followed for proper product finishing and application. Due to the high load carrying capacity and high operating tensions often found in Poly Chain GT2 and PowerGrip GT2 belt drive systems, it is imperative to use and adhere to industry standard practices.

When finishing MPB sprockets for high performance belt drive systems, care should be taken to ensure proper functionality and performance. General re-bore instructions and specifications are as follows:

1. Materials used in Poly Chain GT2 and PowerGrip GT2 sprockets are steel, gray iron, and ductile iron. The materials used may vary with the size of the sprocket. See the Sprocket Specification Tables, pages 85 through 96 for specific materials.
2. The maximum bore diameter specified by the manufacturer for each sprocket size should NOT be exceeded, or a keyway used which reduces the hub thickness to less than its minimum allowable value. See the Sprocket Specification Tables for a listing of recommended bore ranges by sprocket size. Bores exceeding the maximum recommended value for a particular sprocket size can adversely affect the structural integrity, thereby reducing their load-carrying capability.

   The minimum metal thickness between the keyway and hub O.D. should be no less than the set screw diameter specified for the corresponding sprocket size. See Figure 1. A listing of minimum set screw diameters is included below.

   P18-5MGT - 8-32
   P19-5MGT thru P22-5MGT - 10-32
   P23-5MGT thru P32-5MGT - 1/4"
   P34-5MGT thru P38-5MGT - 5/16"
   P40-5MGT thru P50-5MGT - 3/8"

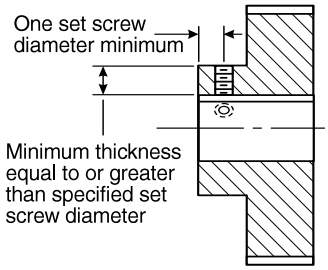


Figure 1 — Minimum Hub Thickness And Set Screw Placement Guidelines

   P28-14MGT thru P29-14MGT - 7/16"
   P36-14MGT thru P38-14MGT - 5/8"

3. The fit between a finished sprocket bore and its mating shaft in a power transmission system must not allow relative movement between the bore and the shaft when the drive is subjected to belt tension and torque loads. This is accomplished, in the case of plain bore sprockets, with the use of set screws and keys and by controlling the fit or clearance between the sprocket bore and its mating shaft. Cyclical, pulsating, or reversing loads may wear the sprocket bore and/or keyway due to the relative movement between the contacting surfaces of the shaft and the bore. The resulting wear may increase the clearance further, if an interference fit is not used.

In order to maximize the performance of high capacity belt drives using plain bore style sprockets, the following for recommendations presented in Table 1 should be followed:

Class 1 Clearance Fits should be used when the transmitted load is smooth in nature.

Interference Fits should be used for Poly Chain GT2 and PowerGrip GT2 curvilinear drives *transmitting cyclical, pulsating, or reversing loads.*

Table 1 - Recommended Shaft / Bore Fits (Inches)

		Clearance Fits		Interference Fits			
		Class 1- Smooth Load		Cyclical, Pulsating, Reversing Load			
Nominal Bore Range Over - To (Incl.)	Shaft Tol. (minus)	Bore Tol. (Plus)	Fit Tol. (Plus)	Bore Tolerance Range (Minus)		Fit Tolerance Range (Minus)	
0.4375 - 0.5626	0.0005	0.0010	0.0015	0.0005	0.0010	0.0000	0.0010
0.5625 - 0.8750	0.0005	0.0010	0.0015	0.0005	0.0010	0.0000	0.0010
0.8750 - 1.2500	0.0005	0.0010	0.0015	0.0005	0.0010	0.0000	0.0010
1.2500 - 1.3750	0.0005	0.0010	0.0015	0.0005	0.0010	0.0000	0.0010
1.3750 - 1.500	0.0005	0.0010	0.0015	0.0005	0.0010	0.0000	0.0010
1.5000 - 1.7500	0.0010	0.0010	0.0020	0.0010	0.0020	0.0000	0.0020
1.7500 - 2.0000	0.0010	0.0010	0.0020	0.0010	0.0020	0.0000	0.0020
2.0000 - 2.2500	0.0010	0.0015	0.0025	0.0010	0.0020	0.0000	0.0020
2.2500 - 2.7500	0.0010	0.0015	0.0025	0.0010	0.0020	0.0000	0.0020
2.7500 - 3.0000	0.0010	0.0015	0.0025	0.0010	0.0020	0.0000	0.0020
3.0000 - 3.2500	0.0010	0.0015	0.0025	0.0015	0.0030	0.0005	0.0030
3.2500 - 3.7500	0.0010	0.0015	0.0025	0.0015	0.0030	0.0005	0.0030
3.7500 - 4.0000	0.0010	0.0015	0.0025	0.0015	0.0030	0.0005	0.0030
4.0000 - 4.5000	0.0010	0.0015	0.0025	0.0020	0.0035	0.0010	0.0035
4.5000 - 5.0000	0.0010	0.0015	0.0025	0.0020	0.0035	0.0010	0.0035
5.0000 - 5.5000	0.0010	0.0015	0.0025	0.0025	0.0040	0.0015	0.0040
5.5000 - 6.5000	0.0010	0.0015	0.0025	0.0025	0.0040	0.0015	0.0040

Table 1 was extracted in part from AGMA Standard for Bores and Keyways for Flexible Couplings (Inch Series) AGMA 9002-A86 Table.

4. DO NOT chuck or center the sprocket on guide flanges. Soft jaws should be used when chucking on the sprocket teeth. Center (indicate) the sprocket using the sprocket tooth O.D.

   If chucked on the Rim I.D. or Hub O.D., the sprocket should be centered with respect to the sprocket tooth O.D. Guide flanges are permanently mounted and should not be removed. If original flanges must be removed, they should be replaced with NEW flanges. New guide flanges should be attached securely with care using mechanical fasteners such as screws. **Note: Improper guide flange reassembly may cause serious personal injury and/or mechanical damage.**
5. Set screw holes in the sprocket hub must be placed properly for maximum holding strength. For both standard and shallow keyseats, two (2) set screws should be used as illustrated in Figure 2. The total holding strength of the set screws is dependent upon their placement and design. Generally, one screw should be placed directly over the keyway, and the other screw at ninety degrees (90°) from the keyway, or at sixty-five degrees (65°) from the keyway—a more recent practice that improves holding power. Sometimes four set screws (or two pair) are used for increased holding strength.

Note: Gates Rebore Center is now available for quick turnaround of sprockets.

For Minimum Plain Bore (MPB) Sprockets

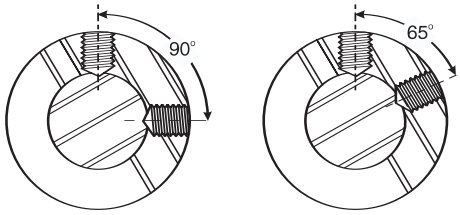


Figure 2 — Set Screw Angles

Each set screw should be placed axially—a minimum of one set screw diameter from the end of the sprocket hub extension. See Figure 1. For recommended set screw tightening torque values see Table 2 below.

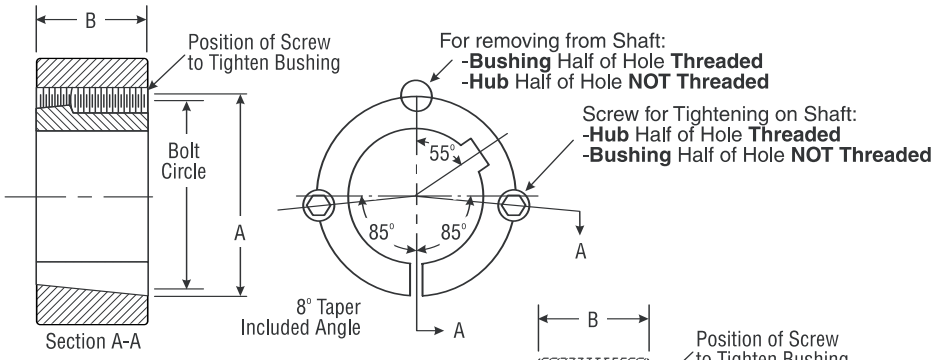
Table 2 - Recommended Tightening Torque Values For Set Screws

Set Screw Size	Hex Key Size (in)	Approximate Installation Torque Values (lb-in)
8-32	5/64	20
10-32	3/32	35
1/4	1/8	80
5/16	5/32	160
3/8	3/16	275
7/16	7/32	430
1/2	1/4	615
5/8	5/16	1315
3/4	3/8	2150
7/8	1/2	5130

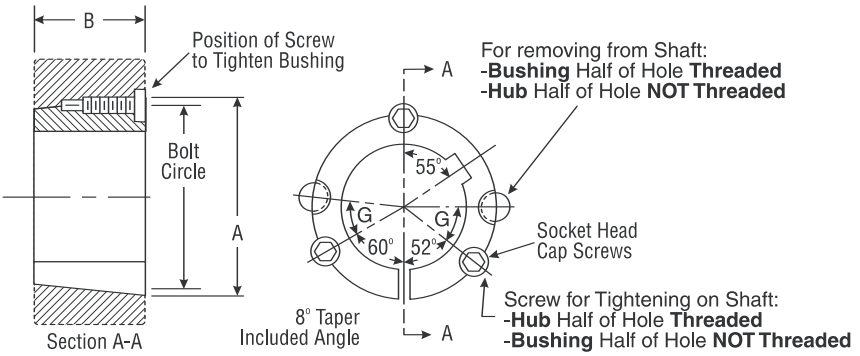
6. After reboring, the sprocket may require rebalancing. Vibration, noise, reduced bearing life, and undue stresses on the mechanical components in the system could result if improper rebalancing practices are used. See Sprocket Specifications, page 97, for recommended sprocket balancing specifications.
7. Standard square or rectangular keys should be used. See page 102 for standard key dimensions.

Refer to Sprocket Specifications, page 97 through 98, for specifications and tolerances for sprocket eccentricity, parallelism, and balancing.

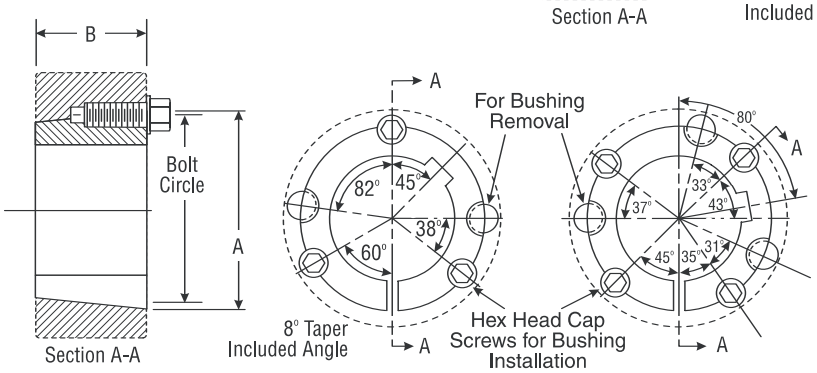
Stock Bushings for Sprockets



1008 thru 3020



3525 thru 5040



6050 **7060**

TAPER-LOCK®* BUSHINGS

Taper-Lock Bushings are available in Stainless Steel

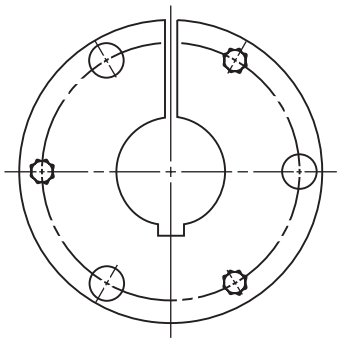
Bushing Size	Torque Capacity (lb-in)	Dimensions (in)		Bolt Circle (in)	Mounting Screws			Bore Range (in)			Weight Range (lb)	
									Max Bore			
		A	B		Qty.	Size	G (deg)	Min. Bore	Standard Keyseat***	Shallow Keyseat**	Max. Bore	Min. Bore
1008	1,200	1.386	0.875	1.328	2	1/4 x 1/2	—	0.500	0.875	1.000	0.2	0.3
1108****	1,300	1.511	0.875	1.453	2	1/4 x 1/2	—	0.500	1.000	1.125	0.1	0.3
1210****	3,600	1.875	1.000	1.750	2	3/8 x 5/8	—	0.500	1.250	—	0.4	0.6
1610****	4,300	2.250	1.000	2.125	2	3/8 x 5/8	—	0.500	1.500	1.688	0.5	0.9
1615	4,300	2.25	1.500	2.125	2	3/8 x 5/8	—	0.500	1.500	1.688	0.6	1.3
2012****	7,150	2.750	1.250	2.625	2	7/16 x 7/8	—	0.500	1.875	2.125	0.9	1.7
2517	11,600	3.375	1.750	3.250	2	1/2 x 1	—	0.500	2.250	2.688	1.8	3.7
3020	24,000	4.250	2.000	4.000	2	5/8 x 1 1/4	—	0.875	2.750	3.250	3.3	6.5
3525	44,800	5.000	2.500	4.830	3	1/2 x 1 1/2	39	1.188	3.250	3.938	3.7	10.9
3535	44,800	5.000	3.500	4.830	3	1/2 x 1 1/2	39	1.188	3.250	3.938	5.0	14.8
4030	77,300	5.750	3.000	5.540	3	5/8 x 1 3/4	40	1.438	3.625	4.438	6.4	17.3
4040	77,300	5.750	4.000	5.540	3	5/8 x 1 3/4	40	1.438	3.625	4.438	8.2	22.1
4535	110,000	6.375	3.500	6.130	3	3/4 x 2	40	1.938	4.250	4.938	8.8	23.7
4545	110,000	6.375	4.500	6.130	3	3/4 x 2	40	1.938	4.250	4.938	11.2	30.3
5040	126,000	7.000	4.000	6.720	3	7/8 x 2 1/4	37	2.438	4.500	5.000	15.9	31.5
6050	282,000	9.250	5.000	9.000	3	1 1/4 x 3 1/2	—	4.438	6.000	—	45.0	57.0
7060	416,000	10.250	6.000	10.000	4	1 1/4 x 3 1/2	—	4.938	7.000	—	66.0	87.0

* Registered trademark of Reliance Electric.

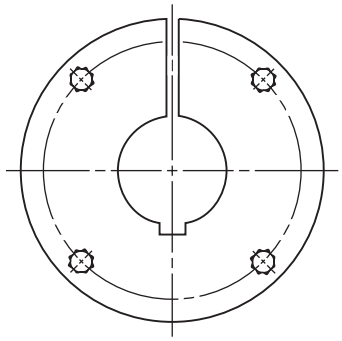
** Key is furnished with each bushing having a shallow keyseat.

*** Keys are not furnished with bushings having standard keyseats.

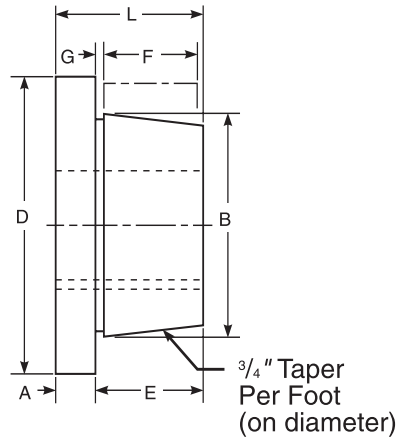
**** Also available in stainless steel construction.



Style SH to J



Style M through S



QD®***BUSHINGS

Bushing Size	Torque Capacity (lb-in)	Dimensions (in)							Bolt Circle	Cap Screws		Bore Range (in)		Weight Range (lb)	
		A	B	D	E	F	G	L		No.	Size	Min.	Max	Max. Bore	Min. Bore
SH	3,500	0.425	1.875	2.625	0.888	0.813	0.120	1.313	2.250	3	1/4 x 1-3/8	0.500	2.938*	0.6	1.2
SK	7,000	0.563	2.813	3.875	1.363	1.250	0.220	1.925	3.313	3	5/16 x 2	0.500	2.625*	1.3	3.8
SF	11,000	0.625	3.125	4.625	1.438	1.250	0.220	2.063	3.875	3	3/8 x 2	0.500	2.938**	2.2	5.3
E	20,000	0.875	3.825	6.000	1.875	1.625	0.250	2.750	5.000	3	1/2-13 x 2 3/4	0.875	3.500**	9.0	12.3
F	30,000	1.000	4.438	6.625	2.844	2.500	0.344	3.750	5.625	3	9/16-12 x 3 5/8	1.000	4.000*	8.5	19.5
J	45,000	1.125	5.141	7.250	3.563	3.188	0.375	4.625	6.250	3	5/8-11 x 4 1/2	1.438	4.500**	12.8	29.7
M	85,000	1.250	6.500	9.000	5.594	5.188	0.406	6.750	7.875	4	3/4-10 x 6 3/4	2.000	5.500**	47.8	63.8
N	150,000	1.500	7.000	10.000	6.813	6.250	0.563	8.125	8.500	4	7/8-9 x 8	2.438	6.000**	48.0	94.0
P	250,000	1.750	8.250	11.750	7.875	7.250	0.625	9.375	10.000	4	1-8 x 9 1/2	2.938	7.000**	69.5	133.0
W	375,000	2.000	10.422	15.000	9.500	9.000	0.500	11.375	12.750	4	1 1/8-7 x 11 1/2	4.000	8.500**	164.0	262.0
S	625,000	2.750	12.125	17.750	12.750	12.000	0.750	15.250	15.000	5	1 1/4-7 x 15	5.500	10.000**	133.0	350.0

* Maximum bore without keyway.
** Maximum bore with shallow keyway.
*** QD® is a trademark of Emerson Electric

Bushing Bore and Keyseat Information

Taper-Lock®* and QD®** Bushings are available from stock with all popular bores within the bore range of each size bushing.

The Taper-Lock and QD Bushing Keyseat Dimension charts below list the bore range for each bushing and the appropriate keyseat dimensions.

Where standard keyseats are indicated, refer to the Standard Keyseat Dimensions chart. Where bores do not permit standard depth keyseats, a flat key of the proper dimensions is furnished with the bushing.

Taper-Lock® Bushing Keyseat Dimensions

Bushing	Bores (in)	Keyseat
1008	0.500 - 0.875 0.938 - 1.000	Standard 1/4 x 1/16
1108	0.500 - 1.000 1.062 - 1.125	Standard 1/4 x 1/16
1210	0.500 - 1.250	Standard
1610	0.500 - 1.500 1.563 - 1.688	Standard 3/8 x 1/8
1615	0.500 - 1.500 1.563 - 1.688	Standard 3/8 x 1/8
2012	0.500 - 1.875 1.938 - 2.125	Standard 1/2 x 3/16
2517	0.500 - 2.250 2.313 - 2.688	Standard 5/8 x 3/16
3020	0.875 - 2.750 2.813 - 3.250	Standard 3/4 x 1/4
3525	1.188 - 3.250 3.313 - 3.750 3.875 - 3.938	Standard 7/8 x 1/4 1 x 1/4
3535	1.188 - 3.250 3.313 - 3.750 3.875 - 3.938	Standard 7/8 x 1/4 1 x 1/4
4030	1.438 - 3.625 3.688 - 3.750 3.875 - 4.438	Standard 7/8 x 1/4 1 x 1/4
4040	1.438 - 3.625 3.688 - 3.750 3.875 - 4.438	Standard 7/8 X 1/4 1 x 1/4
4535	1.938 - 4.250 4.375 - 4.500 4.750 - 4.938	Standard 1 x 1/4 1 1/4 x 1/4
4545	1.938 - 4.250 4.375 - 4.500 4.750 - 4.938	Standard 1 x 1/4 1 1/4 x 1/4
5040	2.438 - 4.500 4.875 - 5.000	Standard 1 1/4 x 7/16
6050	4.438 - 6.000	Standard
7060	4.938 - 7.000	Standard

* Taper-Lock® is a trademark of Reliance Electric

** QD® is a trademark of Emerson Electric

QD® Bushing Keyseat Dimensions

Bushing	Bores (in)	Keyseat
JA	1/2-1 1 1/16-1 3/16	Standard 1/4 x 1/16
SH	1/2-1 3/8 1 7/16-1 5/8	Standard 3/8 x 1/16
SDS	1/2-1 5/8 1 11/16-1 3/4 1 13/16-1 15/16	Standard 3/8 x 1/8 1/2 x 1/16
SD	1/2-1 5/8 1 11/16-1 3/4 1 13/16-1 15/16	Standard 3/8 x 1/8 1/2 x 1/16
SK	1/2-2 1/8 2 3/16-2 1/4 2 1/4-2 1/2	Standard 1/2 x 3/16 5/8 x 1/16
SF	1/2-2 5/16 2 3/8-2 3/4 2 13/16	Standard 5/8 x 1/16 3/4 x 1/16
E	7/8-2 7/8 2 15/16-3 1/4 3 3/8-3 1/2	Standard 3/4 x 1/8 7/8 x 1/16
F	1-3 1/4 3 3/8-3 3/4 3 7/8-3 15/16	Standard 7/8 x 3/16 1 x 1/8
J	1 1/2-3 3/4 3 7/8-4 1/2	Standard 1 x 1/8
M	2-4 3/4 4 7/8-5 1/2	Standard 1 1/4 x 1/4
N	2 7/16-5 5 1/8-5 7/8 5 5/8-5 7/8	Standard 1 1/4 x 1/4 1 1/2 x 1/8
P	2 15/16-5 15/16 6-6 1/2 6 3/4 7	Standard 1 1/2 x 1/4 1 3/4 x 3/4 1 3/4 x 1/8
W	4-8 1/2	Made to order
S	5 1/2-10	Made to order

All dimensions are given in inches

Standard Keyseat Dimensions

Shaft Diameter (in)	Keyseat (in)		Key (in)	
	Width	Depth	Width	Depth
0.313 - 0.438	3/32	3/64	3/32	3/32
0.500 - 0.563	1/8	1/16	1/8	1/8
0.625 - 0.875	3/16	3/32	3/16	3/16
0.938 - 1.250	1/4	1/8	1/4	1/4
1.313 - 1.375	5/16	5/32	5/16	5/16
1.438 - 1.750	3/8	3/16	3/8	3/8
1.813 - 2.250	1/2	1/4	1/2	1/2
2.313 - 2.750	5/8	5/16	5/8	5/8
2.813 - 3.250	3/4	3/8	3/4	3/4
3.313 - 3.750	7/8	7/16	7/8	7/8
3.813 - 4.500	1	1/2	1	1
4.563 - 5.500	1 1/4	5/8	1 1/4	1 1/4
5.563 - 6.500	1 1/2	3/4	1 1/2	1 1/2
6.563 - 7.500	1 3/4	3/4	1 3/4	1 1/2
7.563 - 9.000	2	3/4	2	1 1/2

Specifying English and Metric Keyways

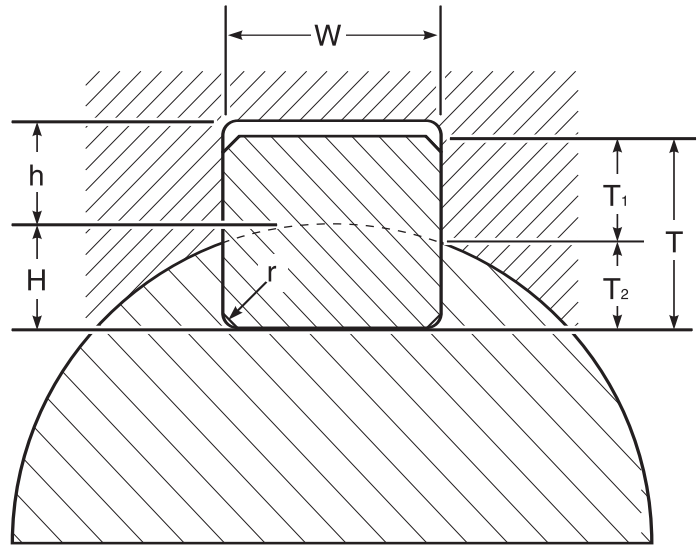
Dimensioning and specifying metric keys and keyways varies significantly from the English system. In the English system, it is the standard practice to dimension the keyway, while in the metric system it is common practice to specify the key size. In the English system, the keyway in the hub is dimensioned by the width and depth at the side, but in the metric system the keyway is dimensioned by the width and the depth measured from the radius of the shaft to the center of the keyway. One of the following methods should be used to specify keyways:

English:	**Metric:**
W x T1 Keyway	W x T Key
W x T Key	W x h Keyway

Unless otherwise noted, the keyway in the shaft is assumed to be standard. Also, T1 and T2 are not necessarily equal.

The metric system does not refer to keyseat or keyway dimensions as does the English system. Instead, dimensions are given for the key itself which is rectangular in shape, not square, as in the English system. The correct terminology when ordering metric bored bushings with millimeter keyways will be either of the following:

1. Specify “standard Keyway”
2. Customer to specify keysize (keyseat to be standard size in shaft)



Metric Bore and Key Dimensions for Taper-Lock®** Bushings

Bushing	Bore (mm)	Keyway (WxT) (mm)	Key Size (ref.) (mm)
1008	14, 16 18, 19, 20, 22 24	5 X 2.3 6 X 2.8 8 X 3.3	5 X 5 6 X 6 8 X 7
1108	14*, 16 18, 19, 20, 22 24, 25	5 X 2.3 6 X 2.8 8 X 3.3	5 X 5 6 X 6 8 X 7
1210	14, 16 18, 19, 20, 22* 24, 25, 28, 30	5 X 2.3 6 X 2.8 8 X 3.3	5 X 5 6 X 6 8 X 7
1610	14*, 16* 18*, 19, 20, 22 24, 25, 28, 30 32, 35, 38 40	5 X 2.3 6 X 2.8 8 X 3.3 10 X 3.3 12 X 3.3	5 X 5 6 X 6 8 X 7 10 X 8 12 X 8
2012	14, 16 18, 19, 20, 22 24, 25, 28, 30 32, 35, 38 40, 42 45, 48*	5 X 2.3 6 X 2.8 8 X 3.3 10 X 3.3 12 X 3.3 14 X 3.8	5 X 5 6 X 6 8 X 7 10 X 8 12 X 8 14 X 9
2517	14, 16 18, 19*, 20, 22 24, 25, 28, 30 32, 35, 38 40, 42 45, 48, 50 55 60, 65*	5 X 2.3 6 X 2.8 8 X 3.3 10 X 3.3 12 X 3.3 14 X 3.8 16 X 4.3 18 X 4.4	5 X 5 6 X 6 8 X 7 10 X 8 12 X 8 14 X 9 16 X 10 18 X 11
3020	24, 25, 28, 30* 32*, 35*, 38* 40, 42* 45, 48, 50 55 60, 65 70*, 75*	8 X 3.3 10 X 3.3 12 X 3.3 14 X 3.8 16 X 4.3 18 X 4.4 20 X 4.9	8 X 7 10 X 8 12 X 8 14 X 9 16 X 10 18 X 11 20 X 12

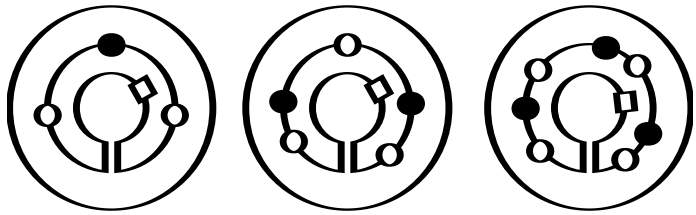
** Taper-Lock® is a trademark of Reliance Electric

* Non-stock, made to order bushing

Note: Available in Stainless Steel

Metric Bore and Key Dimensions for QD Bushings			
Bushing	Bore (mm)	Keyway (WxT) (mm)	Key Size (ref.) (mm)
SH	24, 28, 30	8 X 3.3	8 X 7
	35	10 X 3.3	10 X 8
SDS	24, 25, 28, 30	8 X 3.3	8 X 7
	35, 38	10 X 3.3	10 X 8
	42	12 X 3.3	12 X 8
SD	25, 28, 30	8 X 3.3	8 X 7
	35	10 X 3.3	10 X 8
	42	12 X 3.3	12 X 8
SK	24, 25, 30	8 X 3.3	8 X 7
	32, 35, 38	10 X 3.3	10 X 8
	40, 42	12 X 3.3	12 X 8
	48, 50	14 X 3.8	14 X 9
	55	16 X 4.3	16 X 10
SF	50	14 X 3.8	14 X 9
	60	18 X 4.4	18 X 11
E	50	14 X 3.8	14 X 9
	60	18 X 4.4	18 X 11
J	55	16 X 4.3	16 X 10
	70	20 X 4.9	20 X 12

Taper-Lock®* Type Sprocket Installation and Removal



To Install TAPER-LOCK Type Bushings

1. Clean the shaft, bore of bushing, outside of bushing and the sprocket hub bore of all oil, paint and dirt. File away any burrs.

   Note: The use of lubricants can cause sprocket breakage. USE NO LUBRICANTS IN THIS INSTALLATION.
2. Insert the bushing into the sprocket hub. Match the hole pattern, not threaded holes (each complete hole will be threaded on one side only).
3. LIGHTLY oil the set screws and thread them into those half-threaded holes indicated by on the diagram above.

   Note: Do not lubricate the bushing taper, hub taper, bushing bore, or the shaft. Doing so could result in sprocket breakage.
4. With the key in the shaft keyway, position the assembly onto the shaft allowing for small axial movement of the sprocket which will occur during the tightening process.

   Note: When mounting sprockets on a vertical shaft, precautions must be taken to positively prevent the sprocket and/or bushing from falling during installation.
5. Alternately torque the set screws until the sprocket and bushing tapers are completely seated together (at approximately half of the recommended torque; see table below).

   Note: Do not use worn hex key wrenches. Doing so may result in a loose assembly or may damage screws.
6. Check the alignment and sprocket axial runout (wobble), and correct as necessary.
7. Continue alternate tightening of the cap screws to the recommended torque values specified in the table below.
8. To increase the bushing gripping force, hammer the face of the bushing using a drift or sleeve (Do Not Hit The Bushing Directly With The Hammer).
9. Re-torque the bushing screws after hammering.
10. Recheck all screw torque values after the initial drive run-in, and periodically thereafter. Repeat steps 5 through 9 if loose.

To Remove

1. Loosen and remove all mounting screws.
2. Insert screws into all jack screw holes indicated by "•" (see figure above).
3. Loosen the bushing by alternately tightening the screws in small but equal increments until the tapered sprocket and bushing surfaces disengage.

Sprocket Installation

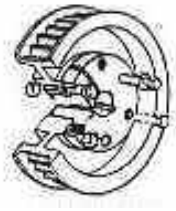
Bushing Style	Bolts		Torque Wrench	
	Qty.	Size	lb-ft	lb-in
1008	2	1/4-20 x 1/2	4.6	55
1108	2	1/4-20 x 1/2	4.6	55
1210	2	3/8-16 x 5/8	14.6	175
1610	2	3/8-16 x 5/8	14.6	175
1615	2	3/8-16 x 5/8	14.6	175
2012	2	7/16-14 x 7/8	23.3	280
2517	2	1/2-13 x 1	35.8	430
3020	2	5/8-11 x 1 1/4	66.7	800
3525	3	1/2-13 x 1 1/2	83.3	1000
3535	3	1/2-13 x 1 1/2	83.3	1000
4030	3	5/8-11 x 1 3/4	141.7	1700
4040	3	5/8-11 x 1 3/4	141.7	1700
4535	3	3/4-10 x 2	204.2	2450
4545	3	3/4-10 x 2	204.2	2450
5040	3	7/8-9 x 2 1/4	258.3	3100
6050	3	1 1/4-7 x 3 1/2	651.7	7820
7060	4	1 1/4-7 x 3 1/2	651.7	7820

Caution: Excessive bolt torque can cause sprocket and/or bushing breakage.
Note: To insure proper bushing/sprocket performance, full bushing contact on the shaft is recommended.

* Taper-Lock® is a trademark of Reliance Electric

QD®* Type Sprocket Installation and Removal

Conventional Mount



Reverse Mount

To Install QD Type Bushings

1. Clean the shaft, bore of bushing, outside of bushing and the sprocket hub bore of all oil, paint and dirt. File away any burrs.

   Note: The use of lubricants can cause sprocket breakage. USE NO LUBRICANTS IN THIS INSTALLATION.

2. For Position One or Position Two (whichever applies), line up the unthreaded bushing holes C with the threaded sprocket hub holes T. Lightly oil the cap screws and thread them (with lock washers) into the sprocket hub engaging only 2 or 3 threads. Screw heads should be mounted outside to allow for disassembly. When mounting sprockets on M through W bushing sizes, position the threaded jack screw hole (J) as far from the bushing saw slot as possible to reduce the possibility of bushing breakage during disassembly.

   Note: Do not lubricate the bushing taper, hub taper, bushing bore, or the shaft. Doing so could result in sprocket breakage.

3. With the key in the shaft keyway, position the assembly onto the shaft allowing for small axial movement of the sprocket which will occur during the tightening process.

   When installing large or heavy parts in Position One (see figure above), it may be easier to mount the key and bushing onto the shaft first then place the sprocket on the bushing and align the holes.

   Note: When mounting sprockets on a vertical shaft, precautions must be taken to positively prevent the sprocket and/or bushing from falling during installation.

4. Alternately tighten the cap screws until the sprocket and bushing tapers are completely seated together (at approximately half the recommended torque).

5. Check the alignment and sprocket runout (wobble), and correct as necessary.

6. Continue alternate tightening of the cap screws to the recommended torque values specified in the table below.

   Note: Excessive cap screw torque can cause sprocket and/or bushing breakage. When properly mounted, there must be a gap between bushing flange and sprocket after the screws are tightened.

7. Tighten the set screw, when available, to hold the key securely during operation.

To Remove

1. Loosen and remove all mounting screws.
2. Insert cap screws into all threaded jack screw holes J (see figure above).
3. Loosen the bushing by first tightening the screw furthest from the bushing saw slot, then alternately tighten remaining screws. Keep tightening the screws in small but equal increments until the tapered sprocket and bushing surfaces disengage.

   Note: Excessive or unequal pressure on the cap screws can break the bushing flange, making removal nearly impossible without destroying the sprocket.

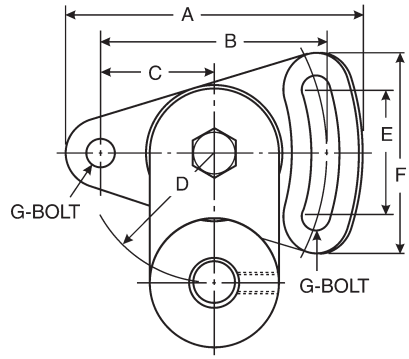
Sprocket Installation

Bushing Style	Bolts		Torque Wrench	
	Qty.	Size	lb-ft	lb-in
H	2	1/4 x 3/4	7.9	95
JA	3	10-24 x 1	4.5	54
SH & SDS	3	1/4-20 x 1 3/8	9.0	108
SD	3	1/4-20 x 1 7/8	9.0	108
SK	3	5/16-18 x 2	15.0	180
SF	3	3/8-16 x 2	30.0	360
E	3	1/2-13 x 2 3/4	60.0	720
F	3	9/16-12 x 3 5/8	75.0	900
J	3	5/8-11 x 4 1/2	135.0	1620
M	4	3/4-10 x 6 3/4	225.0	2700
N	4	7/8-9 x 8	300.0	3600
P	4	1-8 x 9 1/2	450.0	5400
W	4	1 1/8-7 x 11 1/2	600.0	7200
S	5	1 1/4-7 x 15 1/2	750.0	9000

Caution: Excessive bolt torque can cause sprocket and/or bushing breakage.
Note: To insure proper bushing/sprocket performance, full bushing contact on the shaft is recommended.

* QD® is a trademark of Emerson Electric

(Double Adjustable)



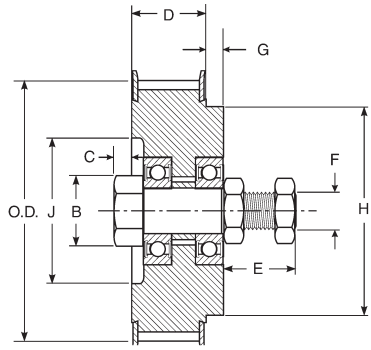
Idler Bracket Specifications

Part No.	Tensioner Part No.	Use With	A (in)	B (in)	C (in)	D (in)	E (in)	F (in)	G (in)	H (in)	J (in)	M (Threads)	N (in)	P (in)	Q (in)	Weight (lb)
05-IDL-BRAK	7720-1005	1610-IDL-BUSH	4.62	3.50	1.75	2.00	2.06	3.06	0.38	1.63	0.62	5/8-18	1.16	2.01	2.00	2.80
10-IDL-BRAK	7720-1010	8mm Pitch Idler Sprockets, 2012-IDL-BUSH, 2517-IDL-BUSH, 20-IDL-BUSH (SK),	4.63	3.50	1.75	2.00	2.06	3.06	0.38	1.50	0.56	3/4-16	1.00	1.88	1.75	3.4
20-IDL-BRAK	7720-1020	14mm Pitch Idler Sprockets, 30-IDL-BUSH (SF), 40-IDL-BUSH (E)	6.94	5.25	2.63	5.00	3.00	4.56	0.63	2.38	1.00	1-14	1.63	2.94	2.75	11.2

Nickel Plated Idler Bracket Specifications

Part No.	Tensioner Part No.	Use With	A (in)	B (in)	C (in)	D (in)	E (in)	F (in)	G (in)	H (in)	J (in)	M (Threads)	N (in)	P (in)	Q (in)	Weight (lb)
NP-10-IDL-BRAK	7720-1011	8mm Pitch Idler Sprockets, 2012-IDL-BUSH 2517-IDL-BUSH, 20-IDL-BUSH (SK)	4.63	3.50	1.75	2.00	2.06	3.06	0.38	1.50	0.56	3/4-16	1.00	1.88	1.75	3.4
NP-20-IDL-BRAK	7720-1061	14mm Pitch Idler Sprockets, 30-IDL-BUSH (SF), 40-IDL-BUSH (E)	6.94	5.25	2.63	5.00	3.00	4.56	0.63	2.38	1.00	1-14	1.63	2.94	2.75	11.2

Idler Sprockets



Poly Chain® GT®2 Idler Dimensions

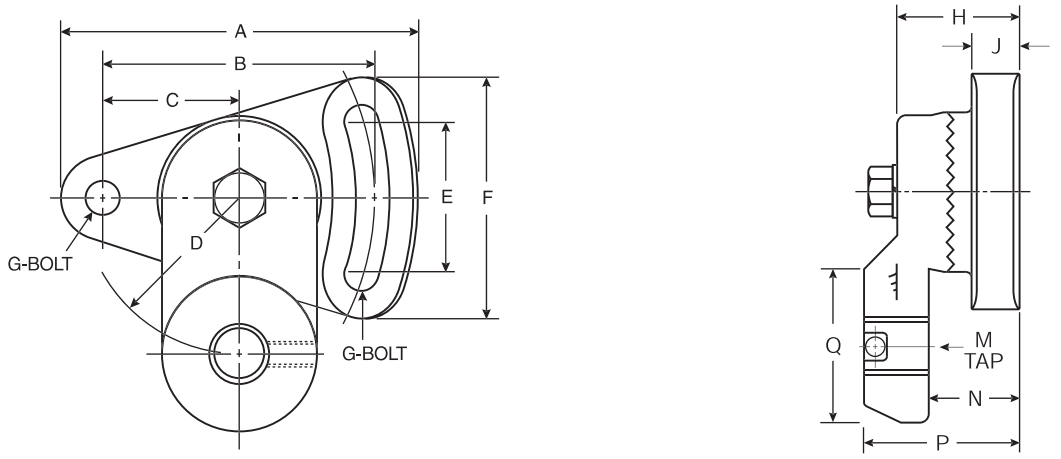
Part No.	Product No.	Use With	Size Designation	Belt Width (mm)	No. of Teeth	O.D. (in)	B Ref. (in)	C (in)	D (in)	E Ref. (in)	F (Threads) (in)	G Ref. (in)	H (in)	J (in)	Weight (lb)
12-IDL-SPRK	7720-1500	8mm Pitch Poly Chain GT Carbon	8MX-32S-12	12	32	3.145	1.25	0.50	0.85	1.56	3/4-16	0.94	2.75	-	1.0
21-IDL-SPRK	7720-1510		8MX-32S-21	21	32	3.145	1.25	0.50	1.24	1.56	3/4-16	0.56	2.75	-	1.1
36-IDL-SPRK	7720-1520		8MX-36S-36	36	36	3.546	1.91	0.75	1.86	1.63	3/4-16	-	-	-	2.0
62-IDL-SPRK	7720-1530		8MX-36S-62	62	36	3.546	1.91	0.75	2.91	1.69	3/4-16	0.69	3.13	-	2.1
20-IDL-SPRK	7720-1600	14mm Pitch Poly Chain GT Carbon	14MX-30S-20	20	30	5.153	2.55	1.00	1.36	2.25	1-14	1.00	4.38	-	9.0
37-IDL-SPRK	7720-1610		14MX-30S-37	37	30	5.153	2.55	1.00	2.06	2.25	1-14	0.25	4.38	-	12.0
68-IDL-SPRK	7720-1620		14MX-34S-68	68	34	5.855	3.38	0.56	3.33	2.25	1-14	1.00	4.88	4.34	15.6
90-IDL-SPRK	7720-1640		14MX-34S-90	90	34	5.855	3.38	0.31	4.20	2.25	1-14	1.00	4.88	4.34	16.7
125-IDL-SPRK	7720-1630		14MX-35S-125	125	35	6.031	3.38	0.19	5.61	2.25	1-14	1.09	4.88	4.34	23.1

Nickel Plated Poly Chain GT2 Idler Dimensions

Part No.	Product No.	Use With	Size Designation	Belt Width (mm)	No. of Teeth	O.D. (in)	B Ref. (in)	C (in)	D (in)	E Ref. (in)	F (Threads) (in)	G Ref. (in)	H (in)	J (in)	Weight (lb)
NP-12-IDL-SPRK	7720-1501	8mm Pitch Poly Chain GT Carbon	8MX-32S-12	12	32	3.145	1.25	0.50	0.85	1.56	3/4-16	0.94	2.75	-	1.0
NP-21-IDL-SPRK	7720-1511		8MX-32S-21	21	32	3.145	1.25	0.50	1.24	1.56	3/4-16	0.56	2.75	-	1.1

(Double Adjustable)

Available in Nickel Plated

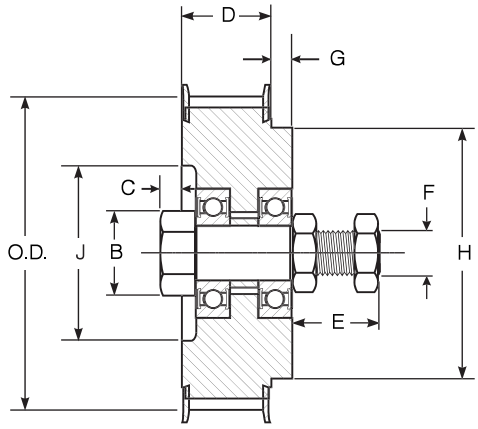


Specifications

Product No.	Use With	Part No.	A (in)	B (in)	C (in)	D (in)	E (in)	F (in)	G (in)	H (in)	J (in)	M (Threads)	N (in)	P (in)	Q (in)	Weight (lb)
7720-1005	1610-IDL-BUSH	5-IDL-BRAK	4.62	3.50	1.75	2.00	2.06	3.06	3/8	1.63	0.62	5/8-18	1.16	2.01	2.00	2.60
7720-1010	20-SPK2-IDL 30-SPK2-IDL 2012-IDL-BUSH 2517-IDL-BUSH	10-IDL-BRAK	4.63	3.50	1.75	2.00	2.06	3.06	3/8	1.63	0.62	3/4-16	1.16	2.01	2.00	3.40
7720-1020	40-SPK2-IDL 55-SPK2-IDL	20-IDL-BRAK	6.94	5.25	2.62	5.00	3.00	4.56	5/8	2.38	0.88	1-14	1.63	2.94	3.00	11.20

PowerGrip® GT®2 Idler Sprockets

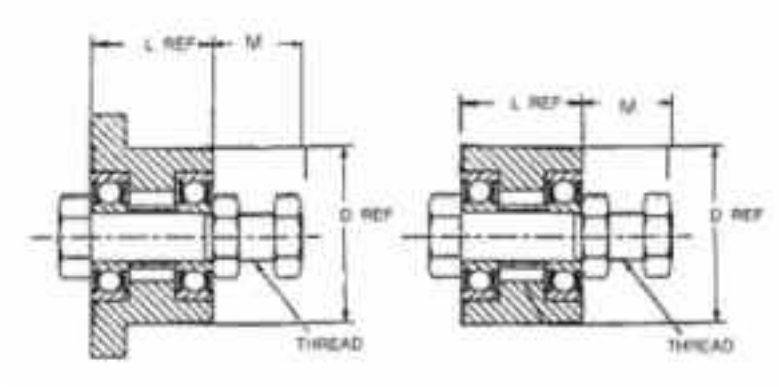
Available in Nickel Plated



PowerGrip® GT®2 Idler Dimensions

Product No.	Use With	Part No.	Size Designation	Belt Width (mm)	No. of Teeth	O.D. (in)	B Ref. (in)	C (in)	D (in)	E Ref. (in)	F (Threads) (in)	G Ref. (in)	H (in)	J (in)	Weight (lb)
7720-1740	8mm Pitch	20-SPK2-IDL	32S-8MGT-20	20	32	3.154	1.25	0.50	1.24	1.56	3/4-16	0.56	2.75	-	1.10
7720-1750	PowerGrip GT2	30-SPK2-IDL	36S-8MGT-30	30	36	3.555	1.91	0.75	1.86	1.63	3/4-16	-	-	-	2.00
7720-1850	14mm Pitch	40-SPK2-IDL	30S-14MGT-40	40	30	5.153	2.55	1.00	2.06	2.25	1-14	0.25	4.38	-	12.00
7720-1860	PowerGrip GT2	55-SPK2-IDL	34S-14MGT-55	55	34	5.855	3.38	0.56	3.33	2.25	1-14	1.00	4.88	4.34	15.60

Idler Bushings



Idler Bushings (Integral Shaft Included)

Product No.	Part No.	Use with Bracket	D (in)	L (in)	M (in)	Threads	Weight (lb)
7720-2610	1610-IDL-BUSH	5-IDL-BRAK	2.25	1.00	1.38	5/8-18	1.30
7720-2012	2012-IDL-BUSH	10-IDL-BRAK	2.75	1.25	1.56	3/4-16	2.30
7720-2517	2517-IDL-BUSH	10-IDL-BRAK	3.38	1.75	1.56	3/4-16	3.90
7720-1120	20-IDL-BUSH (SK)	10-IDL-BRAK	2.81	1.94	1.44	3/4-16	4.10
7720-1130	30-IDL-BUSH (SF)	20-IDL-BRAK	3.13	2.08	2.13	1-14	6.40
7720-1140	40-IDL-BUSH (E)	20-IDL-BRAK	3.83	2.75	2.19	1-14	8.60

ENGINEERING DATA

NOTE: This engineering section provides general engineering information for synchronous belts and sprockets (or pulleys) which are useful in general drive design work. Where we refer to sprockets (for Poly Chain® GT® Carbon™ and PowerGrip® GT®2 belts), you can substitute pulleys for PowerGrip Timing Belts. If you need additional information, contact Gates Power Transmission Product Application.

Section I

Application Design Considerations

When designing synchronous drives, there are several special circumstances that may require additional consideration:

1. **Overhung Shaft Consideration**
2. **Minimum Sprocket Diameter Recommendations for Electric Motors**
3. **High-Driven Inertia**
4. **Air Moving Drives**
5. **Energy Conservation**
6. **Belt Drive Noise**
7. **Use of Flanged Sprockets**
8. **Use of Idlers**
9. **Minimum Belt Wrap and Tooth Engagement**
10. **Adverse Operating Environments**

Each of these circumstances and special considerations are reviewed below.

1. Overhung Shaft Consideration

When designing a belt drive system to transfer power from the output shaft of a speed reducer to the final driven shaft, the designer must make certain that the belt drive does not exert shaft loads greater than the speed reducing device is rated to carry. Failure to do so can result in premature shaft/ bearing failures whether the belt drive has been designed with the appropriate power capacity or not.

This concept is similar to the National Electric Motor Association (NEMA) establishing minimum acceptable sprocket diameters for each of their standardized motor frames. Abiding by these minimum recommended diameters, when designing a belt drive system, prevents the motor bearings from failing prematurely due to excessive shaft loads exerted by the belt drive.

Overhung load is generally defined as a force exerted by a belt or chain drive, that is perpendicular to a speed reducer shaft, and applied beyond its outermost bearing. Calculated overhung load values are intended to serve as an indication of how heavily loaded the shaft and outermost bearing of a speed reducer actually is.

Overhung load calculations are generally assumed to apply to the slower output shaft of a speed reducer. It is important to note that these calculations apply to higher speed input shafts as well.

Most speed reducer manufacturers publish allowable overhung load values for every model in their product line. This

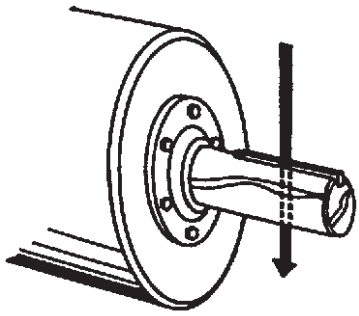


Figure 3 - Overhung Load

value represents the maximum load that the shaft and bearings can support without negatively impacting the durability of the speed reducer. When the actual overhung load exceeds the published allowable value, premature shaft or bearing failure may occur. In extreme cases, catastrophic failures can occur.

A general formula used to calculate overhung load (OHL) is as follows:

$$OHL = \frac{126{,}000 \times HP \times k_{LCF} \times K_{SF} \times K_{LLF}}{PD \times RPM}$$

Where: HP = Actual horsepower being transmitted at the gear motor/reducer output shaft with no service factor applied
K_{LCF} = Overhung load connection factor (1.3 for all synchronous belt drives)
K_{SF} = Service factor for the speed reducer (available from the manufacturer)
K_{LLF} = Load location factor for the speed reducer (available from the manufacturer)
PD = Pitch diameter of the speed reducer output shaft sprocket
RPM = RPM of the speed reducer output shaft

Speed reducer manufacturers each publish their own specific formula and constants to calculate overhung load. They also publish specific overhung load ratings for each speed reducer product that they produce. It is very important to use the correct overhung load calculation procedure in conjunction with the manufacturer's accompanying overhung load rating.

If the calculated overhung load for a particular belt drive system does exceed the speed reducer manufacturer's maximum recommended value, consider altering the belt drive design. In order to reduce the calculated overhung load, consider:

- Increasing sprocket diameters
- Reducing belt width
- Mounting the sprocket closer to the speed reducer outboard bearing

Increasing the sprocket diameter not only reduces calculated overhung load, it also potentially reduces the required belt width. Reducing the belt width and mounting the sprocket as close as possible to the outermost bearing of the speed reducer both move the center of the belt load closer to the speed reducer. This also reduces the calculated overhung load. Alterations to the belt drive design should be made until the calculated overhung load is within the speed reducer manufacturer's recommendations.

Motor Frames and Minimum Diameters for 60 Cycle Electric Motors

Motor Frame Code	Shaft Dia. (in)	Horsepower at Synchronous Speed (rpm)				Synchronous Belts
		3600 (3450)	1800 (1750)	1200 (1160)	900 (870)	Min. Pitch Dia. (in)
143T	0.875	1-1/2	1	3/4	1/2	2.0
145T	0.875	2—3	1-1/2— 2	1	3/4	2.2
182T	1.125	3	3	1-1/2	1	2.2
182T	1.125	5	—	—	—	2.4
184T	1.125	—	—	2	1-1/2	2.2
184T	1.125	5	—	—	—	2.2
184T	1.125	7-1/2	5	—	—	2.7
213T	1.375	7-1/2—10	7-1/2	3	2	2.7
215T	1.375	10	—	5	3	2.7
215T	1.375	15	10	—	—	3.4
254T	1.625	15	—	7-1/2	5	3.4
254T	1.625	20	15	—	—	4.0
256T	1.625	20—25	—	10	7-1/2	4.0
256T	1.625	—	20	—	—	4.0
284T	1.875	—	—	15	10	4.0
284T	1.875	—	25	—	—	4.0
286T	1.875	—	30	20	15	4.7
324T	2.125	—	40	25	20	5.4
236T	2.125	—	50	30	25	6.1
364T	2.375	—	—	40	30	6.1
364T	2.375	—	60	—	—	6.7
365T	2.375	—	—	50	40	7.4
365T	2.375	—	75	—	—	7.7
404T	2.875	—	—	60	—	7.2
404T	2.875	—	—	—	50	7.6
404T	2.875	—	100	—	—	7.7
405T	2.875	—	—	75	60	9.0
405T	2.875	—	100	—	—	7.7
405T	2.875	—	125	—	—	9.5
444T	3.375	—	—	100	—	9.0
444T	3.375	—	—	—	75	8.6
444T	3.375	—	125	—	—	9.5
444T	3.375	—	150	—	—	9.5
445T	3.375	—	—	125	—	10.8
445T	3.375	—	—	—	100	10.8
445T	3.375	—	150	—	—	9.5
445T	3.375	—	200	—	—	11.9

2. Minimum Sprocket Diameter Recommendations for Electric Motors

Minimum Recommended Sprocket / Sheave Diameters

NEMA (The National Electric Manufacturers Association) publishes recommendations for the minimum diameter of sprockets and sheaves to be used on General Purpose Electric Motors. The purpose of these recommendations is to prevent the use of excessively small sprockets or sheaves. This can result in motor shaft or bearing damage since belt pull increases as the diameter is reduced.

Table data has been compiled from NEMA Standard MG-1-14-42; 11/78, MG-1-14-43; 1/68, and a composite of electric motor manufacturers data. Values are generally conservative, and specific motors may permit the use of a smaller sprocket or sheave. Consult the motor manufacturer.

3. High-Driven Inertia

Many drives, such as piston compressors, punch presses and crushers, depend on the driveN pulley acting as a flywheel. This flywheel effect, or WR^2 is used to help moderate or smooth out fluctuations in driven load and speed. Failure to compensate for this during a redesign can result in premature damage to the prime mover or early belt failures. This can be a consideration when replacing older belt drives with new, higher capacity belts.

When replacing large pulleys or sheaves with sprockets, be careful not to remove a designed-in flywheel effect. Ask questions of the user to make sure there is not a concern for a high WR^2. If there is a concern, you may have to use a wider sprocket, a larger diameter, or a special made-to-order sprocket designed with added weight and WR^2.

Drives which have a high driveN inertia and are subjected to high acceleration or emergency stop conditions require additional design expertise. Contact Gates Power Transmission Product Application for further engineering assistance.

4. Air Moving Drives

HVAC Equipment Inspection

Many air handling drives have structures that are not particularly rigid, which can create belt tension and drive alignment problems resulting in unusual and premature belt wear. Synchronous belts are sensitive to fluctuations in center distance that can be caused by inadequate bracketry. Under start up conditions, an AC motor can be required to provide 150% to 200% of its rated capacity. Synchronous belts cannot slip, and must transmit the higher start up torque. Under these conditions, the drive center distance may collapse if the structure is not sufficiently rigid.

With the drive shut off and safely locked out, a simple method to use when inspecting potential drive conversions is to grab the two belt spans and push them together while

observing the motor. If any significant relative change in center distance or motor position is noticed, the drive's structural strength is most likely insufficient for a simple conversion. The structure would need to be reinforced to obtain optimum performance from a synchronous belt drive. The best conversion candidates have motors that are mounted solidly on support bracketry that is part of the fan's structural system. When possible, select synchronous drives with diameters similar to existing V-belt sheave diameters. This will maintain similar belt pulls and loads on the shafts and structure.

Air Handling Unit Start-Up Characteristics

Full Load Start Up

Start up loads can be a concern when evaluating potential drives for conversion to synchronous belts. Synchronous belts will transmit all of the start up torque, where V-belts may slip if the load is excessive. Due to the inertia of the fan, start up loads can potentially be 150% to 200% of the normal operating load. It is important that the start up load be considered by selecting appropriate service factors when designing a belt drive system.

Controlled Start Up

An air handling drive with soft start or variable frequency controller (AC Inverter) is ideal for conversion to synchronous belts. The fan will be ramped up to speed slowly, with a corresponding increase in load as the speed increases. Structural flexing is typically not a concern when designing synchronous belt drives on systems using soft starts or variable frequency controllers.

Fan Speed

The volume of air being transmitted and the required horsepower are both sensitive to changes in the driveN fan speed. If designing a synchronous belt drive for energy savings, it is important that the synchronous belt drive be designed to operate at the proper driveN fan speed. All conversions from existing V-belt drives should have the synchronous belt drive speed ratio based on a measured driveN shaft RPM, and not calculated from the theoretical V-belt speed ratio. This measurement can be made by either using a mechanical contact tachometer or a strobe tachometer.

The horsepower requirement for fans varies with the cube of the fan speed. A small change in the fan speed makes a much larger difference in the actual horsepower and energy required.

$$HP_1/HP_2 = (RPM_1/RPM_2)^3$$

Where: HP_1 = Initial Horsepower
HP_2 = New Horsepower @ New Fan RPM
RPM_1 = Initial Fan RPM
RPM_2 = New Fan RPM

Air-Cooled Heat Exchanger (ACHE) Applications

Air-cooled heat exchangers are used in Petrochemical, Oil and Gas Production, Power Generation, and Petroleum Refining Industries where process heat must be removed. Electric motors as large as 60 hp commonly drive the cooling fans with either large ratio V-belt or Synchronous belt drives.

According to the American Petroleum Institute (**API 661** - Air-Cooled Heat Exchangers for General Refinery Service), a safety factor of 1.8 must be used in the belt drive design process. Synchronous belt drives typically have higher horsepower capacities than V-belt drives with an equivalent width. This increased capacity results in narrower belt drives and lighter drive hardware. Synchronous belt drive systems are especially beneficial on higher horsepower heat exchanger units, and they are commonly used on new or redesigned units. V-belt drive systems are commonly used on low to medium HP fans because of their relatively low cost and good availability.

Surface rust on sheaves and sprockets is very abrasive, and rapidly wears belts. Sprockets on wet heat exchanger applications (water drawn through heat exchanger coils by fan) such as Cooling Towers, often rust and require the use of electroless nickel plating to prevent excessive corrosion. Cooling Towers are commonly used to cool large buildings (HVAC; Heating-Ventilating-Air Conditioning Systems). Misalignment is a common cause of premature belt failures on ACHE drive systems. Care should be taken to ensure proper sheave / sprocket alignment when installing the belt drive system. See **Gates Belt Drive Preventative Maintenance and Safety Manual** for detailed information about proper belt drive alignment. www.gates.com

Proper belt pre-tension is necessary to obtain optimum belt performance. This is particularly true for the high inertia start up loads seen in ACHE applications. If belt installation tension is too low, V-belts will be prone to slippage and synchronous belts will be prone to tooth jump or ratcheting. Motor controllers are sometimes used to bring the fan up to speed slowly (soft start), decreasing the chance of synchronous belt ratcheting.

5. Energy Conservation

Minimizing energy usage is a concern for most industries. The use of synchronous power transmission components can often improve efficiency and reduce the consumption of energy. Energy savings can often be realized with the conversion of V-belts to synchronous belts.

V-belts, in general, are 94-98% efficient under proper tension due to heat losses and belt creep over time. Improper maintenance and low tensioning can significantly reduce the efficiency of a V-belt drive by 5% or more.

Synchronous belts are 97-99% efficient due to the positive engagement of the belt teeth, lack of slip, and low hysteresis loss, as evident by the low belt running temperature. Because the belt does not slip, the energy consumption is reduced and the driven components are held at a constant RPM.

When converting a V-belt drive to a synchronous belt drive, the use of a tachometer is recommended to measure the driven RPM in order to design for the proper speed ratio. As a general rule of thumb, the V-belt driven speed is 5% slower than the speed ratio dictates because of belt slip. Make sure to account for this in the design of the synchronous belt drive.

Contact Gates Power Transmission Product Application for further information or design assistance.

6. Belt Drive Noise

V-belt, synchronous belt, roller chain, and gear drives will all generate noise while transmitting power. Each type of system has its own characteristic sound. V-belt drives tend to be the quietest and synchronous belt drives are much quieter than roller chain drives. When noise is an issue, there are several design and maintenance tips that should be followed to minimize belt drive noise.

Noise: Decibel and Frequency
Noise is an unwanted or unpleasant sound that can be described with two criteria – frequency and decibel (dB) levels. Frequency is measured in Hertz. A perfect human ear is capable of distinguishing frequencies typically from 20 to 20,000 Hertz. The human ear does generally not perceive frequencies higher than 20,000 Hertz.

The sound pressure level or intensity of noise is measured in terms of decibels (dB). The decibel has become the basic unit of measure since it is an objective measurement that approximately corresponds to the subjective measurement made by the human ear. Since sound is composed of several distinct and measurable parts and the human ear doesn't differentiate between these parts, measuring scales that approximate the human ear's reaction have been adopted. Three scales – A, B, and C are used to duplicate the ear's response over the scale's ranges. The A scale is most commonly used in industry because of its adoption as the standard in OSHA regulations. Noise described in decibels (dBA - "A" weighting for the human ear) is generally perceived as the loudness or intensity of the noise.

While the human ear can distinguish frequencies over a broad range, the ear is most sensitive in the range of normal speech – 500 to 2000 Hertz. As a consequence, this is the range most commonly of concern for noise control ("A" weighting gives more weight or emphasis to sounds in the 500 to 2000 hz range). Frequency is most closely related to what the ear hears as pitch. High frequency sounds are perceived as whining or piercing, while low frequency sounds are perceived as rumbling.

The combination of sound pressure level (dB) and frequency describes the overall level of loudness perceived by the human ear. One without the other does not adequately describe the loudness potential of the noise. For example, an 85 dBA noise at 3000 Hertz is going to be perceived as being much louder than an 85 dBA noise at 500 Hertz.

Reducing Noise
Following proper installation and maintenance procedures, as well as some simple design alternatives can reduce belt drive noise.

Belt Drive Tension and Alignment
Properly tensioning and aligning a belt drive will allow the belt drive to perform at its quietest level. Improper tension in synchronous belt drives can affect how the belt fits in the sprocket grooves. Proper tension minimizes tooth to groove interference, and thereby reduces belt noise.

Misaligned synchronous belt drives tend to be much noisier than properly aligned drives due to the amount of interference that is created between the belt teeth and the sprocket grooves. Misaligned synchronous belt drives also may cause belt tracking that forces the edge of the belt to ride hard against a sprocket flange. Misalignment causing belt contact with a flange will generate noise that is easily detected.

Noise Barriers and Absorbers
Sometimes, even properly aligned and tensioned belt drives may be too noisy for a work environment. When this occurs, steps can be taken to modify the drive guard to reduce the noise level.

Noise barriers are used to block and reflect noise. Noise barriers do not absorb or deaden the noise; they block the noise and generally reflect most of the noise back towards its point of origin. Good noise barriers are dense, and should not vibrate. A sheet metal belt guard is a noise barrier. The more complete the enclosure is, the more effective it is as a noise barrier. Noise barrier belt guards can be as sophisticated as a completely enclosed case, or as simple as sheet metal covering the front of the guard to prevent direct sound transmission.

Noise absorbers are used to reduce noise reflections and to dissipate noise energy. Noise absorbers should be used in combination with a noise barrier. Noise absorbers are commonly referred to as acoustic insulation. Acoustic insulation (the noise absorber) is used inside of belt guards (the noise barrier) where necessary. A large variety of acoustic insulation manufacturers are available to provide different products for the appropriate situation.

A combination of noise barrier (solid belt guard) and noise absorber (acoustic insulation) will provide the largest reduction in belt drive noise. While the noise reduction cannot be predicted, field experience has shown that noise levels have been reduced by 10 to 20 dBA when using complete belt guards with acoustic insulation.

7. Use of Flanged Sprockets

Guide flanges are needed in order to keep the belt on the sprocket. Due to tracking characteristics, even on the best aligned drives, belts will ride off the edge of the sprockets. Flanges will prevent this belt ride-off.

On all drives using stock or made-to-order sprockets, the following conditions should be considered when selecting flanged sprockets:

1. On all two-sprocket drives, the minimum flanging requirements are two flanges on one sprocket or one flange on each sprocket on opposite sides.

2. On drives where the center distance is more than eight times the diameter of the small sprocket, both sprockets should be flanged on both sides. (See Engineering Section II, Belt Installation and Drive Alignment on Pages 120 and 121.)

3. On vertical shaft drives, one sprocket should be flanged on both sides, and all the other sprockets in the system should be flanged on the bottom side only.

4. On drives with more than two sprockets, the minimum flanging requirements are two flanges on every other sprocket or one flange on every sprocket—on alternating sides around the system.

On made-to-order sprockets, flanges must be securely fastened, such as using mechanical fasteners, welding, shrink-fit or other equivalent methods.

Single-Double Sprockets
Ventilation or cooling fans and conveyor roll-to-roll drives are applications that often require multiple belts to be driven by the same shaft. The use of Single-Double sprockets on such applications is recommended. These consist of one wide (Double Width) sprocket separated by a flange in the center, allowing for two single belts to be driven by the same sprocket.

8. Use of Idlers

Use of idlers should be restricted to those cases in which they are functionally necessary. Idlers are often used as a means of applying tension when the center distance is not adjustable.

Idlers should be located on the slack side span of the belt drive. General size recommendations are listed for inside grooved, inside flat, and backside idlers. In some cases, such as high capacity drives utilizing large sprockets, idlers as large as the smallest loaded sprocket in the system may be more appropriate.

Idler Size Recommendations

Belt	Minimum Inside Idler	Minimum Inside Flat Idler	Minimum Backside Idler
8M PowerGrip GT2	22 grooves	4.00" O.D.	2.80" O.D.
14M PowerGrip GT2	28 grooves	7.00" O.D.	6.50" O.D.

Outside or backside idlers should be flat and uncrowned; flanges may or may not be necessary. Drives with flat inside idlers should be tested, as noise and belt wear may occur.

Idler arc of contact should be held to a minimum. All idlers should be rigidly mounted in place to minimize movement or deflection during drive startup and operation.

Formula 1

$$\text{Teeth in Mesh} = \left[0.5 - \left(\frac{D-d}{6C}\right)\right] N_g$$

Where: D = pitch diameter, large sprocket, inches
d = pitch diameter, small sprocket, inches
C = center distance between shafts, inches
N_g = number of grooves in small sprocket

9. Minimum Belt Wrap and Tooth Engagement

Horsepower ratings listed in this catalog are based on a minimum of six teeth in mesh between the belt and the sprocket. The ratings must be corrected for excessive tooth loading if there are less than six teeth in mesh. For non-stock drives not listed in the Drive Selection Tables, the teeth in mesh may be calculated by using this formula:
In cases where fewer than six teeth are in full contact, 20% of the horsepower rating must be subtracted for each tooth less than six not in full contact. After computing the teeth in mesh, the belt rating should be multiplied by the appropriate K_{tm} factor shown in the following table.

Teeth In Mesh Correction Factor

Teeth in Mesh	Factor K_{TM}
6 or more	1.00
5	0.80
4	0.60
3	0.40
2	0.20

In addition to the number of teeth in mesh, some drives with more than two shafts may have a greater potential for the belts to ratchet where loaded sprockets have six teeth in mesh, but a small arc of contact. In order to minimize this condition, each loaded sprocket in the drive system should have an arc of contact or belt wrap angle of at least 60 degrees. Non-loaded idler sprockets do not have tooth meshing or wrap angle requirements.

10. Adverse Operating Environments

Debris
Be very careful when using synchronous drives in high debris environments. Debris can be more damaging to a positive belt drive than a V-belt drive, which has a tendency to remove debris from the sheave grooves through drive operation. Entrapment of debris in synchronous drives is a major concern. Debris can be packed into sprocket grooves causing improper belt tooth engagement, reducing belt life and accelerating belt and sprocket wear. Care must be taken to provide adequate shielding to drives in environments where debris is likely. Completely enclosing a synchronous belt drive may be acceptable. Since synchronous belts generate minimal heat during drive operation, air circulation is not critical except where extremely high temperatures already are present. Depending on the type and abrasive characteristics of the debris, excessive wear can be generated on both belt and sprockets.

Temperature
Belt performance is generally unaffected in ambient temperature environments between -30° and 185°F (-34° and 85°C). Temperature extremes beyond these limits should be reviewed by Gates Power Transmission Product Application.

Chemical Resistance
Based on lab and field testing, Poly Chain® and PowerGrip® belts provide excellent resistance to most chemicals. Actual performance characteristics will be determined by the degree of concentration of the chemical, the time of exposure and the type of exposure (drip, splash, immersion, etc.). In addition to possible belt degradation, these chemicals can act as a lubricant in the drive system. As with any positive belt drive, Poly Chain and PowerGrip drives which run where excessive lubrication is present have an increased tendency to ratchet (See Engineering Section II-13, Self Generated Tension on Page 122). Special attention should be given to assure that recommended tension is maintained (See Engineering Section II-7, Belt Installation Tension on Page 118).

High Humidity/Corrosive Environments
Many industrial applications face problems associated with rusting parts. Numerous applications in the food and beverage industry are located in areas that require periodic wash down. Unless a drive is completely shielded and protected from wash down, rust and corrosion will be rapidly apparent in these types of environments. This is equally true of sprockets when used in very wet or humid environments, such as seen with air moving drives on cooling towers or wood kilns. The constant effects of the wet air surrounding the belt drive can cause excessive rust.

Corrosion attacks sprocket grooves, building up rust deposits. The corrosion will increase over time, building up in the sprocket grooves and non-driving surfaces (flanges, sprocket faces, bushing face). Sprockets with corrosion in the grooves will rapidly wear the belt's teeth and wear through the abrasion resistant tooth fabric, resulting in tooth shear and premature belt failure.

When an application is in a corrosive environment, the designer may elect to use special sprockets and bushings to prevent premature failures. Using special stainless steel sprockets and bushings or electroless nickel-plated sprockets can help eliminate corrosion as a cause of failure on belt drives located in these damaging environments.

Section II

Engineering Design Considerations

All synchronous belt drives require proper installation procedures for optimum performance. In addition, topics such as tooth profile advantages, sprocket rim speed limitations, efficiency, and tolerances are common to all Gates synchronous belt drives.

1. **Belt Storage and Handling**
2. **Center Distance and Belt Length**
3. **Tooth Profiles**
4. **Static Conductivity**
5. **Sprocket Diameter - Speed**
6. **Efficiency**
7. **Belt Installation Tension**
8. **Center Distance Allowances for Installation and Tensioning**
9. **Drive Alignment**
10. **Belt Installation**
11. **Belt Pull Calculations**
12. **Bearing/Shaft Load Calculations**
13. **Self-Generated Tension**

Each of these circumstances and special considerations are reviewed below.

1. Belt Storage and Handling

Storage Recommendations
In order to retain their serviceability and dimensions, proper storage procedures must be followed for synchronous belts. Quite often premature belt failures can be traced to improper belt storage procedures that damaged the belt before it was installed on the drive. By following a few guidelines, these types of belt failures can be avoided.

Recommended
Belts should be stored in a cool and dry environment with no direct sunlight. Ideally, belts should be stored at less than 85° F and with lower than 70% relative humidity.

Belts should be stored in original packaging.

Not Recommended
Belts should not be stored near windows, which may expose the belts to direct sunlight or moisture.

Belts should not be stored near heaters, radiators, or in the direct airflow of heating devices.

Belts should not be stored near any devices that generate ozone such as transformers and electric motors.

Belts should not be stored where they are exposed to solvents or chemicals in the atmosphere.

Do not store belts on the floor unless they are in a protec-

tive container. Floor locations are exposed to traffic that may damage the belts.

Do not crimp belts during handling or while being stored. To avoid this, belts must not be bent to diameters smaller than what is recommended (minimum recommended sprocket diameter for inside bends and 1.3 times the minimum recommended sprocket diameter for back side bends). Do not use ties or tape to pull belt spans tightly together near the end of the belt. Do not hang on a small diameter pin that suspends all of the belt weight and bends the belt to a diameter smaller than the minimum recommended sprocket diameter. Improper storage will damage the tensile cord and the belt will fail prematurely. Handle belts carefully when removing from storage and moving to the application.

Storage Effects
Belts may be stored up to six years if properly stored at temperatures less than 85° F and relative humidity less than 70%.

For every 15° F increase in storage temperature above 85°F, the time the belt can be stored without reduced performance decreases by one-half. Belts should never be stored at temperatures above 115° F.

At relative humidity levels above 70%, fungus or mildew may form on stored belts. This has minimal affect on belt performance, but should be avoided if possible.

When equipment is stored for prolonged periods of time (over six months), the belt tension should be relaxed so that the belt does not take a set, and the storage environment should meet the 85° F and 70% or less relative humidity condition. If this is not possible, belts should be removed and stored separately in a proper environment.

2. Center Distance and Belt Length

The approximate relationship between a center distance and belt pitch length is given by the following formula:

Formula 2

$$L_p = 2C + 1.57(D + d) + \frac{(D - d)^2}{4C}$$

Where: L_p = belt pitch length, inches
D = diameter of large sprocket, inches
d = diameter of small sprocket, inches
C = center distance, inches

A more precise formula is given below:

Formula 3

$$L_p = 2C \cos \varphi + \frac{\pi (D + d)}{2} + \frac{\pi \varphi (D - d)}{180}$$

Where: L_p = belt pitch length, inches
C = center distance, inches
D = pitch diameter of large sprocket, inches
d = pitch diameter of small sprocket, inches

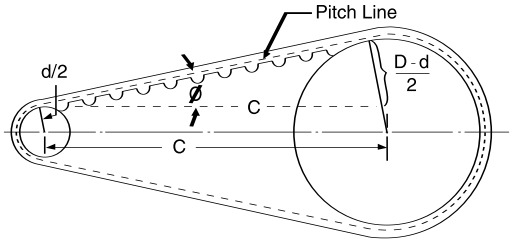
$$\varphi = \sin^{-1}\left(\frac{D - d}{2C}\right) \text{ degrees}$$

The approximate center distance can be found by this formula:

Formula 4

$$C = \frac{K + \sqrt{K^2 - 32 (D - d)^2}}{16}$$

Where: $K = 4L_p - .28 (D + d)$



The exact center distance can be calculated using an iterative process between the center distance (Formula 4) and belt length (Formula 3) equations. The exact center distance has been found when the two equations converge. The pitch length increment of a synchronous belt is equal to a multiple of the belt pitch.

3. Tooth Profiles

Conventional trapezoidal belts (MXL, XL, etc.) were the earliest developments of positive drive belts. In more recent years, new curvilinear profiles have entered the market. The most predominant of these profiles is the HTD® system (5mm, 8mm, etc.). While these curvilinear profiles provide many advantages, they also can provide significant disadvantages.

With the development of the Gates GT® tooth profile, the combined advantages of the various curvilinear profiles have now been optimized. Characteristics such as ratcheting resistance, improved load/life and noise reduction were prime factors in the design of the Gates GT profile. Additionally, it allowed optimization in incorporating premium materials into its superior construction.

The GT tooth profile is based on the tractix mathematical function. Engineering handbooks describe this function as a “frictionless” system. This early development by Schiele is described as an involute form of a catenary. With this system, the belt and sprocket teeth move substantially tangentially during entry and exit, thus improving significantly the belts’ performance characteristics. This is illustrated in

Fig. 6. For information on belt/sprocket interchangeability between various Gates products as well as interchange with other manufacturers, consult Gates' Belt/Sprocket Interchange Guide (12998-B) or contact Industrial Belt Product Application.

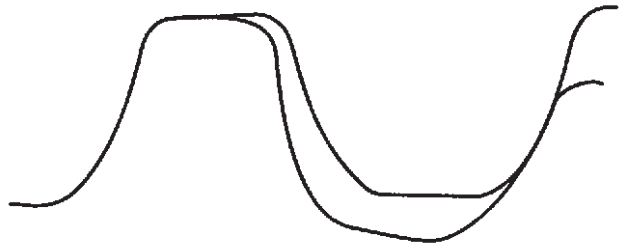


Figure 6

4. Static Conductivity

Static discharge can pose a hazard on belt drives that operate in potentially explosive environments. Static discharge can also interfere with radios, electronic instruments, or controls used in a facility. While uncommon, static discharge can also cause bearing pitting if the discharge occurs through the bearing. Static conductivity is a required belt characteristic in these cases in order to prevent static discharge.

The **Rubber Manufacturer's Association** (RMA) has published **Bulletin IP 3-3** for static conductivity. Static conductivity testing involves using an ohmmeter to pass an electrical current with a nominal open circuit 500 volt potential through a belt. The test should be performed with the belt off of the belt drive. The belt's resistance is measured by placing electrodes 8.5 inches apart on the clean driving surface of the belt. A resistance reading of six (6) megohms or more constitutes a test failure. Belts that measure a resistance of 6 megohms or more are considered to be non-conductive. Belts that measure a resistance of less than 6 megohms are considered to be static conductive. A static conductive belt with a resistance of 6 megohms or less has sufficient conductivity to prevent measurable static voltage buildup, thus preventing a static discharge.

Poly Chain® and PowerGrip GT®2 belts do not meet the static conductivity requirements specified in RMA Bulletin IP 3-3 and are not considered to be static conductive. PowerGrip GT2 belts can be manufactured in a static conductive construction on a made-to-order basis.

When a belt is used in a hazardous environment, additional protection must be employed to assure that there are no accidental static spark discharges. The portion of the belt that contacts the sprocket must be conductive to ensure that static charge is conducted into the drive hardware. Synchronous belts must have a static conductive tooth surface in contact with conductive sprocket grooves. Unusual or excessive debris or contaminant on the belt contact surface or sprocket grooves should be cleaned and removed.

Any belt drive system that operates in a potentially hazardous environment must be properly grounded. A continuous conductive path to ground is necessary to bleed off the static charge. This path includes a static conductive belt, a conductive sprocket, a conductive bushing, a conductive shaft, conductive bearings, and the ground. As an additional measure of protection, a static-conductive brush or similar device should be employed to bleed off any residual static buildup that might remain around the belt. The user must ensure that belt drives operating in potentially hazardous or explosive environments are designed and installed in accordance with existing building codes, OSHA requirements, and/or recognized safety-related organizations.

5. Sprocket Diameter—Speed

Drives shaded in the Belt Width Selection Tables use sprocket diameters that may reduce belt life. The amount of reduction will depend on speed—the higher the speed, the greater the reduction. The drives are included for use where speed ratio or space requirements must be met. Blanks in the lower right-hand portions of the Belt Width Selection Tables occur because sprocket rim speed exceeds 6,500 feet per minute. Centrifugal forces developed beyond this speed may prohibit the use of stock gray cast iron sprockets. For rim speeds above 6,500 feet per minute, contact Gates Power Transmission Product Application for other alternatives.

6. Efficiency

Sprockets Recommended
For maximum performance, we recommend using Gates Poly Chain and PowerGrip® belts only with Gates Poly Chain and PowerGrip® Sprockets

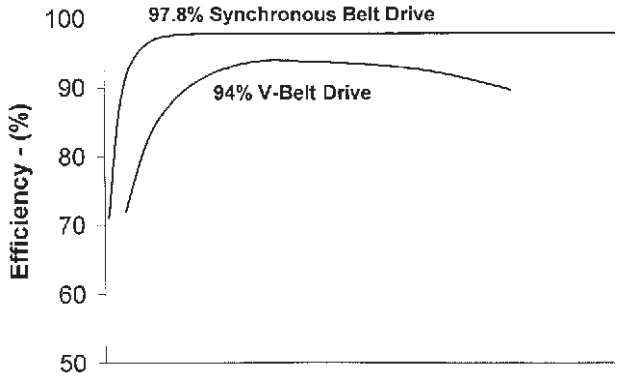
When properly designed and applied, Poly Chain and PowerGrip belt drive efficiency will be as high as 98%. This high efficiency is primarily due to the positive, no slip characteristic of synchronous belts. Since the belt has a thin profile, it flexes easily, thus resulting in low hysteresis losses as evidenced by low heat buildup in the belt.

Gates synchronous belts are uniquely constructed because they use high performance materials. Optimization of these high-technology features provide maximum performance and efficiency.
Synchronous belt drive efficiency can be simply defined as shown in the following equation:

$$\text{Efficiency, percent} = \frac{\text{DN RPM} \times \text{DN Torque}}{\text{DR RPM} \times \text{DR Torque}} \times 100$$

When examining the loss of energy, it is necessary to consider belt losses in terms of shaft torque and shaft speed. Torque losses result from bending stress and friction. Chain drives running unlubricated may generate significant heat build up due to increased friction in the roller joints. Even properly lubricated chains running at higher speeds tend to throw off the oil due to centrifugal forces, making it difficult to maintain proper lubrication at the load bearing surfaces. Consequently, chain drives are typically only 92-98% efficient.

Speed losses result from belt slip and creep. Unlike V-belts, slip is not a factor with synchronous belts. Well maintained V-belt drives are typically in the range of 95-98% efficient. However, on a poorly designed or maintained drive, the efficiency may drop as much as 5% or more. If proper maintenance cannot be scheduled for a V-belt drive or it is located in an inaccessible area, a positive belt drive system should be considered.



Increasing DriveN Torque

The belt drive is only part of the total system. Motors should be properly sized for the application. They must have sufficient capacity to meet the power needs, yet overdesigned motors will lead to electrical inefficiencies. DriveN machines also may have inherent inefficiencies which may contribute to overall system efficiency.

7. Belt Installation Tension

Standard Belt Tensioning Procedure

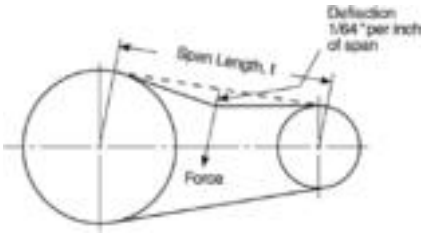
See www.gates.com for Design Flex II download.

When installing a Gates Poly Chain® or PowerGrip® belt:

A. Be sure it is tensioned adequately to prevent tooth jumping (ratcheting) under the most severe load conditions which the drive will encounter during operation.

B. Avoid extremely high tension which can reduce belt life and possibly damage bearings, shafts and other drive components.

The proper way to check belt tension is to use a tension tester. Gates has a variety of tension testers, ranging from the simple spring scale type tester to the sophisticated Sonic Tension Meter. The spring scale type tester is used by measuring how much force is required to deflect the belt at the center of its span by a specified distance (force deflection method), as shown in the sketch below.



The Sonic Tension Meter measures the vibration of the belt span and instantly converts the vibration frequency into belt static tension (span vibration method).

When you wish to use a numerical method for calculating recommended belt installation tension values, the following procedure may be used.

STEP 1: Calculate the required base static installation tension.

Use Formula 5 to calculate the required base static installation tension.

Formula 5

$$T_{st} = \frac{20HP}{S} + mS^2 \text{ , pounds}$$

Where: T_{st} = base static installation tension
HP = Horsepower
$S = \frac{PD \times RPM}{3820}$
m = Value from Table 3
PD = Sprocket Pitch Diameter, inches
RPM = Sprocket Speed

Table 3

Pitch	Belt Width	m	Y	Minimum T_{st} (lb) per span
8mm Poly Chain GT Carbon	12mm	0.33	43.83	28
	21mm	0.57	76.70	49
	36mm	0.97	131.49	84
	62mm	1.68	226.45	145
14mm Poly Chain GT Carbon	20mm	0.92	134.57	119
	37mm	1.69	248.95	220
	68mm	3.11	457.52	405
	90mm	4.12	605.55	536
	125mm	5.72	841.04	744
8M PowerGrip GT2	20mm	0.58	34.18	18.5
	30mm	0.88	51.27	30.0
	50mm	1.46	85.45	52.0
	85mm	2.45	145.26	94.5
14M PowerGrip GT2	40mm	1.78	93.04	76.5
	55mm	2.44	127.93	120.0
	85mm	3.77	197.72	205.5
	115mm	5.11	267.50	291.0
	170mm	7.55	395.43	447.5

Because of the high performance capabilities of Poly Chain and PowerGrip belts, it is possible to design drives that have significantly greater load than are necessary to carry the actual design load. Consequently, Formula 5 can provide Tst values less than are necessary for the belt to operate properly, resulting in poor belt performance and reduced service life.
If a more appropriately sized drive cannot be designed, minimum recommended Tst values are provided in Table 3 to assure that the Poly Chain® and PowerGrip® belts function properly when lightly loaded.

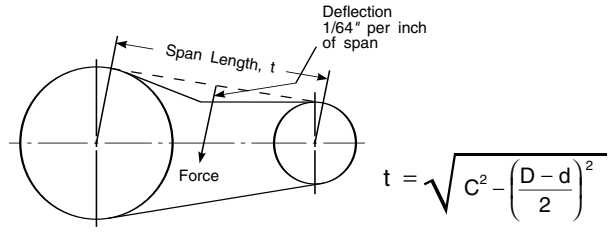
Always use the greater Tst value; i.e., from Tst Formula 5 or Table 3.

NOTE: When applying static belt tension values directly, multiply the required base static installation tension(Tst) calculated in Formula 4 by the following factors:
For New Belts:
Minimum Static Tension = 1.0 x Tst
Maximum Static Tension = 1.1 x Tst

For Used Belts:
Minimum Static Tension = 0.7 x Tst
Maximum Static Tension = 0.8 x Tst

STEP 2: Calculate the minimum and maximum recommended deflection forces.

A. Measure the span length of your drive (see sketch).



$$t = \sqrt{C^2 - \left(\frac{D-d}{2}\right)^2}$$

B. New belt minimum recommended force:

Formula 6

$$\text{deflection force, Min.} = \frac{1.0\ T_{st} + \left(\frac{t}{L}\right)Y}{16}, \text{ lb}_f$$

C. New belt maximum recommended force:

Formula 7

$$\text{deflection force, Min.} = \frac{1.1\ T_{st} + \left(\frac{t}{L}\right)Y}{16}, \text{ lb}_f$$

Where: T_{st} = Base Static tension, lb_f
t = span length, inches
L = belt pitch length, inches
Y= constant from Table 3

USED BELT NOTE: For re-installation of a used belt, a recommended tension of 0.7 T_{st} to 0.8 T_{st} value should be used in calculating the deflection forces, instead of the 1.0 T_{st} to 1.1 T_{st} shown for new belts.

STEP 3: Applying the tension.

Force deflection tension method

A. At the center of the span (t) apply a force perpendicular to the span large enough to deflect the belt on the drive 1/64 inch per inch of span length from its normal position. One sprocket should be free to rotate. Be sure the force is applied evenly across the entire belt width. If the belt is a wide synchronous belt place a piece of steel or angle iron across the belt width and deflect the entire width of the belt evenly.

B. Compare this deflection force with the range of forces calculated in Step 2.
1. If it is less than the minimum recommended deflection force, the belt should be tightened.
2. If it is greater than the maximum recommended deflection force, the belt should be loosened.

Span vibration tension method

The Sonic Tension Meter detects the vibration frequency in the belt span, and converts that measurement into the actual static tension in the belt. To use the Sonic Tension Meter, begin by entering the belt unit weight, belt width, and the span length. To measure the span vibration, press the "Measure" button on the meter, tap the belt span, and hold the microphone approximately 1/4" away from the back of the belt. The Sonic Tension Meter will display the static tension, and can also display the span vibration frequency.

The belt unit weights for use with the Gates Sonic Tension Meter are shown in the following table.

Belt Product Family	Belt Cross Section	Adjusted Belt Weight (grams/meter)
Poly Chain® GT® Carbon™	8M	5.5
	14M	9.6
PowerGrip® GT®2	8M	5.5
	14M	9.6

8. Center Distance Allowances for Installation and Tensioning

Since fixed center drives are not recommended, center distance allowances for a Gates Poly Chain® and PowerGrip® belt drives are necessary to assure that the belt can be installed without damage and then tensioned correctly. The standard installation allowance is the minimum decrease in center distance required to install a belt when flanged sprockets are removed from their shafts for belt installation. This is shown in the first column of Table 4. This table also lists the minimum increase in center distance required to assure that a belt can be properly tensioned over its normal lifetime. If a belt is to be installed over flanged sprockets without removing them, the additional center distance allowance for installation shown in the second table below must be added to the first table data.

Table 4

Center Distance Allowance For Installation and Tensioning

Length Belt (mm) (in)	Standard Installation Allowance (Flanged Sprockets Removed For Installation) (mm) (in)	Tensioning Allowance (All Drives) (mm) (in)
Up to 125 **5**	0.5 **0.02**	0.5 **0.02**
Over 125 **5** to 250 **10**	0.8 **0.03**	0.8 **0.03**
Over 250 **10** to 500 **20**	1.0 **0.04**	0.8 **0.03**
Over 500 **20** to 1000 **40**	1.8 **0.07**	0.8 **0.03**
Over 1000 **40** to 1780 **70**	2.8 **0.10**	0.8 **0.04**
Over 1780 **70** to 2540 **100**	3.3 **0.13**	1.0 **0.04**
Over 2540 **100** to 3300 **130**	4.1 **0.16**	1.3 **0.05**
Over 3300 **130** to 4600 **180**	4.8 **0.19**	1.3 **0.05**
Over 4600 **180** to 6900 **270**	5.6 **0.22**	1.3 **0.05**

Additional Center Distance Allowance For Installation Over Flanged Sprockets*

(Add to Installation Allowance In Table No. 4)

Pitch	One Sprocket Flanged (mm) (in)	Both Sprockets Flanged (mm) (in)
8mm	21.8 **0.86**	33.3 **1.31**
14mm	31.2 **1.23**	50.0 **1.97**

* For drives that require installation of the belt over one sprocket at a time, use the value for "Both Sprockets Flanged"

9. Drive Alignment

Provision should be made for center distance adjustment, according to the two tables on this page, or to change the idler position so the belt can be slipped easily onto the drive. When installing a belt, never force it over the flange. This will cause internal damage to the belt tensile member.

Synchronous belts typically are made with high modulus tensile members which provide length stability over the belt life. Consequently, misalignment does not allow equal load distribution across the entire belt top width. In a misaligned drive, the load is being carried by only a small portion of the belt top width, resulting in uneven belt wear and premature tensile failure.

There are two types of misalignment: parallel and angular (See Fig. 7). Parallel misalignment is where the driveR and driveN shafts are parallel, but the two sprockets lie in different planes. When the two shafts are not parallel, the drive is angularly misaligned.

A fleeting angle is the angle at which the belt enters and exits the sprocket, and equals the sum of the parallel and angular misalignments.

Any degree of sprocket misalignment will result in some reduction of belt life, which is not accounted for in the normal drive design procedure. Misalignment of all synchronous belt drives should not exceed 1/4° or 1/16" per foot of linear distance. Misalignment should be checked with a good straight edge or by using a laser alignment tool. The straight edge tool should be applied from driveR to driveN, and then from driveN to driveR so that the total effect of parallel and angular misalignment is made visible.
Drive misalignment can also cause belt tracking problems.

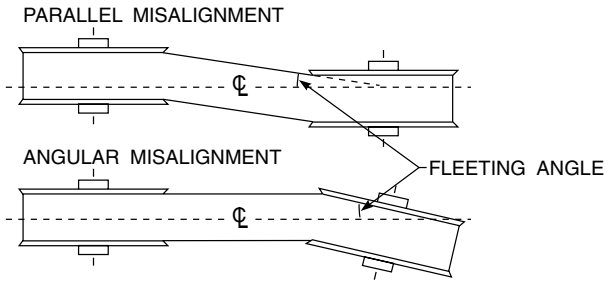


Figure 7

However, light flange contact by the belt is normal and won't affect performance.

For those drives in which the center distance is greater than eight times the small sprocket diameter, belt tracking can be a problem. In these cases, the parallel position of the two sprockets may need to be adjusted until only one flange guides the belt in the system and the belt tracks fully on all sprockets. Regardless of the drive center distance, the optimum drive performance will occur with the belt lightly contacting one flange in the system. The worst case is for the belt to contact flanges on opposite sides of the system. This traps the belt between opposite flanges and can force the belt into undesirable parallel misalignment. Improper installation of the bushing can result in the bushing/ sprocket assembly being "cocked" on the shaft. This leads to angular misalignment and sprocket wobble. Be sure to follow the instructions provided with the bushings.

10. Belt Installation

During the belt installation process, it is very important the belt be fully seated in the sprocket grooves before applying final tension. Serpentine drives with multiple sprockets and drives with large sprockets are particularly vulnerable to belt tensioning problems resulting from the belt teeth being only partially engaged in the sprockets during installation. In order to prevent these problems, the belt installation tension should be evenly distributed to all belt spans by rotating the system by hand. After confirming that belt teeth are fully engaged in the sprocket grooves, belt tension should be rechecked and verified. Failure to do this may result in an undertensioned condition with the potential for belt ratcheting.

11. Belt Pull Calculations

When the machine designer requests shaft load calculations from the drive designer, the following procedure can be applied:

A. Calculate Belt Span Tensions

Belt pull is the vector sum of T_T and T_S, the tightside and slackside tensions. T_T and T_S may be calculated using the following formulas:

Formula 8

$$T_T = \frac{144{,}067\ HP}{(PD)(RPM)}$$

Formula 9

$$T_S = \frac{18{,}008\ HP}{(PD)(RPM)}$$

Where: HP = Horsepower
PD = Sprocket Pitch Diameter (in)
RPM = Sprocket Speed (rev/min)

B. Solution For Both Magnitude and Direction

The vector sum of T_T and T_S can be found so that the direction of belt pull, as well as magnitude, is known. This is necessary if belt pull is to be vectorially added to sprocket weight, shaft weight, etc., to find true bearing loads. In this case, the easiest method of finding the belt pull vector is by graphical addition of T_T and T_S. If only the magnitude of belt pull is needed, numerical methods for vector additions are faster to use.

If both direction and magnitude of belt pull are required, the vector sum of T_T and T_S can be found by graphical vector addition as shown in Fig. 8. T_T and T_S vectors are drawn to a convenient scale and parallel to the tightside and slackside, respectively. Fig. 8 shows vector addition for belt pull on the motor shaft. The same procedures can be used for finding belt pull on the driveN shaft. This method may be used for drives using three or more sprockets or idlers. For two-sprocket drives, belt pull on the driveR and driveN shafts is equal but opposite in direction . For drives using idlers, both magnitude and direction may be different.

C. Solution For Magnitude Only

If only the magnitude of belt pull is needed, follow the steps below. Use this method for drives with two sprockets. Use the graphical method shown if the drive uses idlers.

1. Add T_T and T_S
2. Using the value of $\frac{D - d}{C}$ for the drive, find the vector sum correction factor using Fig. 9, where:

   D = large diameter
   d = small diameter
   C = center distance

   Or, use the arc of contact on the small sprocket if known.
3. Multiply the sum of T_T plus T_S by the vector sum correction factor to find the vector sum of T_T plus T_S.

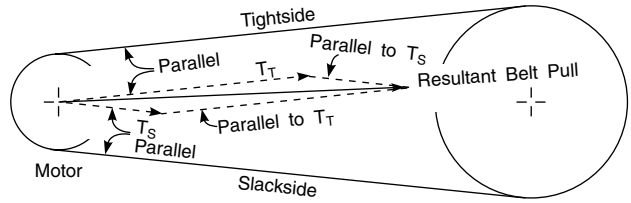


Figure 8

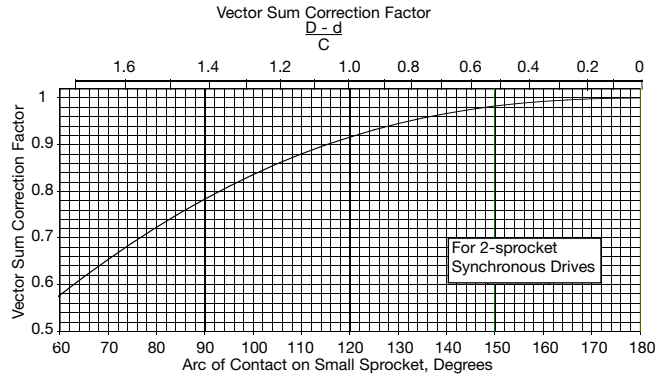


Figure 9

12. Bearing / Shaft Load Calculations

A. Shaft Load Calculations

If true side load on the shaft, including sprocket weight, is desired, the sprocket weight can be added to the belt pull using the same graphical method shown in Fig. 8. The sprocket weight vector is vertical toward the ground. Weights for standard sprockets are shown in the sprocket specification tables.

B. Bearing Load Calculations

In order to find actual bearing loads, it is necessary to know weights of machine components and the value of all other forces contributing to the load. However, it is sometimes desirable to know the bearing load contributed by the synchronous drive alone. Bearing loads resulting from a synchronous belt drive can be calculated knowing bearing placement with respect to the sprocket center and the shaft load as previously calculated. For rough estimates, machine designers sometimes use belt pull alone, ignoring sprocket weight. If accuracy is desired, or if the sprocket is unusually heavy, actual shaft load values including sprocket weight should be used.

A. Overhung Sprocket

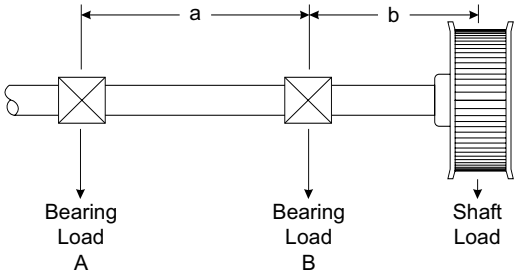


Figure 10

Formula 10

$$\text{Load at B, (lb)} = \frac{\text{Shaft Load} \times (a+b)}{a}$$

Formula 11

$$\text{Load at A, (lb)} = \text{Shaft Load} \times \frac{b}{a}$$

Where: a and b = spacing, (in), per Fig. 10

B. Sprocket Between Bearings

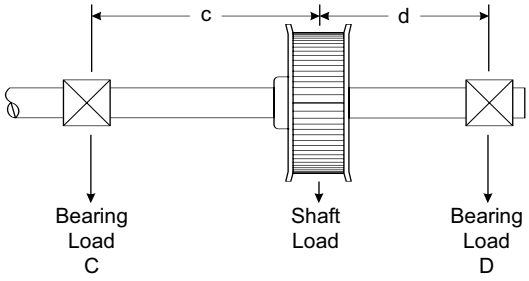


Figure 11

Formula 12

$$\text{Load at D (lb)} = \frac{\text{Shaft Load} \times c}{(c+d)}$$

Formula 13

$$\text{Load at C (lb)} = \frac{\text{Shaft Load} \times d}{(c+d)}$$

Where: c and d = spacing (in), per Fig. 11

13. Self-Generated Tension

All synchronous belt drives exhibit a self-generating or self-tightening characteristic when transmitting a load. Laboratory testing has shown this characteristic to be similar with all tooth profiles. The designer/user should be aware that self-tensioning can result in increased bearing and shaft loads and reduced drive performance; i.e., short belt life. This can be avoided by following proper tensioning procedures.

While belt overtensioning can impose higher bearing and shaft loads and lead to reduced belt life, undertensioning can result in self-tensioning. Properly designed and tensioned drives will not be significantly affected by self-generated tension.

When a belt is too loose for the design load, the self-tensioning characteristic results in the belt teeth climbing out of the sprocket grooves, leading to increased stresses on the belt teeth, accelerated tooth wear and reduced belt life. When a belt is severely undertensioned, this self-tensioning characteristic can result in the belt ratcheting (jumping teeth). When this occurs, significant shaft separation forces are instantaneously developed in the drive, resulting in damage to bearings, shafts, and other drive components including the belt.
NOTE: This is true for all synchronous belts.

Maximum drive performance and belt life are achieved when the belt is properly tensioned for the design load and maintained.

Useful Formulas and Calculations

Power Transmission Conversions

FORCE CONVERSION CONSTANTS

Metric to U.S.
Newtons x 3.5969 = $Ounces_f$
Newtons x 0.2248 = $Pounds_f$
$Kilograms_f$ x 2.2046 = $Pounds_f$

U.S. to Metric
$Ounces_f$ x 0.2780 = Newtons
$Pounds_f$ x 4.4482 = Newtons
$Pounds_f$ x 0.4536 = $Kilograms_f$

Metric to Metric
$Kilograms_f$ x 9.8067 = Newtons
Newtons x 0.1020 = $Kilograms_f$

TORQUE CONVERSION CONSTANTS

Metric to U.S.
Newton Meters x 141.6119 = $Ounce_f$ Inches
Newton Meters x 8.8508 = $Pound_f$ Inches
Newton Meters x 0.7376 = $Pound_f$ Feet

U.S. to Metric
$Ounce_f$ Inches x 0.0071 = Newton Meters
$Pound_f$ Inches x 0.1130 = Newton Meters
$Pound_f$ Feet x 1.3558 = Newton Meters

Metric to Metric
Newton Meters x 10.1972 = $Kilogram_f$ Centimeters
$Kilogram_f$ Centimeters x 0.0981 = Newton Meters
Newton Meters x 0.1020 = $Kilogram_f$ Meters
$Kilogram_f$ Meters x 9.8067 = Newton Meters

POWER CONVERSION CONSTANTS

Metric to U.S.
Kilowatt x 1.3410 = Horsepower
Watt x 0.0013 = Horsepower

U.S. to Metric
Horsepower x 745.6999 = Watt
Horsepower x 0.7457 = Kilowatt

VELOCITY CONVERSION CONSTANTS

Metric to U.S.
Meters per Second x 196.8504 = Feet per Minute

U.S. to Metric
Feet per Minute x 0.0057 = Meters per Second

Metric to Metric
Meters per Second x 3.6000 = Kilometers per Hour

LINEAR BELT SPEED CONVERSION CONSTANTS

Metric to U.S.
Meters per second x 196.8504 = Feet per Minute

U.S. to Metric
Feet per Minute x 0.005080 = Meters per Second
Square Miles x 2.5900 = Square Kilometers

U.S. to U.S.
Feet per Second x 60.00 = Feet per Minute
Feet per Minute x 0.0167 = Feet per Second

Other Conversions

LENGTH CONVERSION CONSTANTS

Metric to U.S.
Millimeters x 0.0394 = Inches
Meters x 39.3701 = Inches
Meters x 3.2808 = Feet
Meters x 1.0936 = Yards
Kilometers x 3280.84 = Feet
Kilometers x 0.6214 = Statute Miles
Kilometers x 0.5396 = Nautical Miles

U.S. to Metric
Inches x 25.4000 = Millimeters
Inches x 0.0254 = Meters
Feet x 0.3048 = Meters
Yards x 0.9144 = Meters
Feet x 0.0003048 = Kilometers
Statute Miles x 1.6093 = Kilometers
Nautical Miles x 1.8532 = Kilometers

AREA CONVERSION CONSTANTS

Metric to U.S.
Square Millimeters x 0.0016 = Square Inches
Square Centimeters x 0.1550 = Square Inches
Square Meters x 10.7639 = Square Feet
Square Meters x 1.1960 = Square Yards
Hectares x 2.4711 = Acres
Square Kilometers x 247.105 = Acres
Square Kilometers x 0.3861 = Square Miles

U.S. to Metric
Square Inches x 645.160 = Square Millimeters
Square Inches x 6.4516 = Square Centimeters
Square Feet x 0.0929 = Square Meters
Square Yards x 0.8361 = Square Meters
Acres x 0.4047 = Hectares
Acres x 0.004047 = Square Kilometers
Square Miles x 2.5900 = Square Kilometers

Other Conversions — continued

WEIGHT CONVERSION CONSTANTS

Metric to U.S.

Grams x 15.4324 = Grains
Grams x 0.0353 = Ounces (Avd.)
Grams x 0.0338 = Fluid Ounces (water)
Kilograms x 35.2740 = Ounces (Avd.)
Kilograms x 2.2046 = Pounds (Avd.)
Metric Tons (1000 Kg) x 1.1023 = Net Ton (2000 lbs.)
Metric Tons (1000 Kg) x 0.9842 = Gross Ton (2240 lbs.)

U.S. to Metric

Grains x 0.0648 = Grams
Ounces (Avd.) x 28.3495 = Grams
Fluid Ounces (water) x 29.5735 = Grams
Ounces (Avd.) x 0.0283 = Kilograms
Pounds (Avd.) x 0.4536 = Kilograms
Net Ton (2000 lbs.) x 0.9072 = Metric Tons (1000 Kg)
Gross Ton (2240 lbs.) x 1.0160 = Metric Tons (1000 Kg)

DECIMAL AND MILLIMETER EQUIVALENTS OF FRACTIONS

Inches			Inches		
Fractions	Decimals	Millimeters	Fractions	Decimals	Millimeters
1/64	.015625	.397	33/64	.515625	13.097
1/32	.03125	.794	17/32	.53125	13.494
3/64	.046875	1.191	35/64	.546875	13.891
1/16	.0625	1.588	9/16	.5625	14.288
5/64	.078125	1.984	37/64	.578125	14.684
3/32	.09375	2.381	19/32	.59375	15.081
7/64	.109375	2.778	39/64	.609375	15.478
1/8	.125	3.175	5/8	.625	15.875
9/64	.140625	3.572	41/64	.640625	16.272
5/32	.15625	3.969	21/32	.65625	16.669
11/64	.171875	4.366	43/64	.671875	17.066
3/16	.1875	4.763	11/16	.6875	17.463
13/64	.203125	5.159	45/64	.703125	17.859
7/32	.21875	5.556	23/32	.71875	18.256
15/64	.234375	5.953	47/64	.734375	18.653
1/4	.250	6.350	3/4	.750	19.050
17/64	.265625	6.747	49/64	.765625	19.447
9/32	.28125	7.144	25/32	.78125	19.844
19/64	.296875	7.541	51/64	.796875	20.241
5/16	.3125	7.938	13/16	.8125	20.638
21/64	.328125	8.334	53/64	.828125	21.034
11/32	.34375	8.731	27/32	.84375	21.431
23/64	.359375	9.128	55/64	.859375	21.828
3/8	.375	9.525	7/8	.875	22.225
25/64	.390625	9.922	57/64	.890625	22.622
13/32	.40625	10.319	29/32	.90625	23.019
27/64	.421875	10.716	59/64	.921875	23.416
7/16	.4375	11.113	15/16	.9375	23.813
29/64	.453125	11.509	61/64	.953125	24.209
15/32	.46875	11.906	31/32	.96875	24.606
31/64	.484375	12.303	63/64	.984375	25.003
1/2	.500	12.700	1	1.000	25.400

Made-to-order (MTO) Poly Chain® and PowerGrip® Belts

In addition to the stock industrial Poly Chain® and PowerGrip® belts listed in this catalog, Gates offers many special construction, made-to-order belts for use with stock sprockets. The table below lists some of them. Contact Gates for more information.

MTO BELT TYPES	APPLICATION
Alternate tensile member	Special applications: i.e., low rpm, shock loads and precise registration.
Nonstock widths and/or lengths in stock pitches	When exact width or length is required.
High temperature	Dry operation from –40°F to 230°F (–40°C to 110°C)
Oil resistance	For excessively oily conditions, including immersion in commercial motor oil. Temperature range: in oil, –20°F to 240°F (–29°C to 116°C); dry, –20°F to 210°F (–29°C to 99°C)
Static dissipating	Resistance of 6 megohms or less.
Low temperature	Dry temperature operation from –65°F to 180°F (–54°C to 82°C)
Nonmarking backing	For conveyors, food handling, etc., with taste and toxicity subject to customer approval.
PowerPainT™	Paint & Varnish Applications
Precision ground backing	Special applications involving a critical overall belt thickness dimension.
Special thickness rubber backing	For functional and other applications where belt back may require special thickness, durometer or material.
Special tracking	When belt must track in a specific direction.

In addition to the stock industrial Poly Chain® and PowerGrip® hardware listed in this catalog, Gates offers many additional Made-to-order options. The table below lists some of the available options. For more information, contact the Gates Made-to-order Metals Team at 1-800-709-6001 or via fax at 303-744-4080. www.gates.com

Made-to-order (MTO) Metals	
Pulleys, Sheaves and Sprockets	All Gates Synchronous Profiles and Pitches, Micro-V® and V-belt, Plain or Profiled Idlers
Bores	Plain, Straight, Tapered, Splined or any special bore. Manufactured to accept Taper-Lock®*, Ringfeder®*, QD®*, Torque Tamer, Trantorque®* or other special bushings
Styles	Bar Stock, Idlers, Ringfeder Connections, Torque Tamers, Custom Configurations, Special Hubs and more
Materials	Aluminum, Steel, Ductile Iron, Cast Iron, Phenolic, Stainless Steel or Plastics
Finishes	Hard Coat, Food Grade, Zinc, Black Anodize, Painted, Custom Plating or any special coatings
Processes	Hob Cutting, Shaper Cutting, Die Casting and Molding
Other Services	Sub-Assemblies, Press Bearings, Sprocket/Bushing Balancing and Index Marking

* Taper-Lock is a trademark of Reliance Electric.
* Ringfeder is a trademark of Ringfeder Corporation.
* Trantorque is a trademark of BTL, a subsidiary of Fenner PLC.
* QD is a trademark of Emerson Electric.
* Torque Tamer is a trademark of Reliance Electric.

Synchronous Belt Product Design Catalogs

Gates Synchronous Belt Products	Pitch	For Design Information Refer to:
Poly Chain® GT® Carbon™	8mm, 14mm	Poly Chain® GT® Carbon™ Belt Drive Design Manual Catalog 17595
PowerGrip® GT®2	5mm, 8mm, 14mm, 20mm	PowerGrip® Belt Systems Drive Design Manual Catalog 17195
Poly Chain® GT® Long Length Belting	8mm, 14mm	Poly Chain® GT® Carbon™ Belt Drive Design Manual Catalog 17595

Download all catalogs online by going direct to www.gates.com

Standard Calculations

Required	Given	Formula
Speed ratio (R)	Shaft speeds (rpm)	$R = \frac{\text{rpm (faster shaft speed)}}{\text{rpm (slower shaft speed)}}$
	Pulley diameter (D & d)	$R = \frac{\text{D (larger pulley diameter)}}{\text{d (smaller pulley diameter))}}$
	Number of pulley grooves (N & n)	$R = \frac{\text{N (larger pulley groove no.)}}{\text{n (smaller pulley groove no.)}}$
Horsepower (hp) (33,000 lb-ft/min)	Torque (T) in lb-in Shaft speed (rpm)	$hp = \frac{T \times rpm}{63{,}025}$
	Effective tension (Te) in lb. Belt velocity in fpm	$hp = \frac{Te \times V}{33{,}000}$
Design horsepower (Dhp)	Rated horsepower (hp) Service factor (SF)	$Dhp = hp \times SF$
Power (kw)	Horsepower (hp)	$kw = .7457 \times hp$
Torque (T) in lb-in	Shaft horsepower (hp) Shaft speed (rpm)	$T = \frac{63{,}025 \times hp}{rpm}$
	Effective tension (Te) in lbs Pulley radius (R) in inches	$T = Te \times R$
Torque (T) in N-mm	Torque (T) in lb-inches	$T(N - mm) = 112.98 \times T(lb - in)$
Belt velocity in ft/min	Pulley pd in inches Pulley speed in rpm	$V = \frac{pd \times rpm}{3.82}$
Belt velocity in m/s	Pulley pd in mm Pulley speed in rpm	$V = .0000524 \times pd \times rpm$
Belt pitch length (PL) in inches (approximate)	Center distance (C) in inches Pulley diameters (D & d) in inches	$PL = 2C + [1.57 \times (D + d)] + \frac{(D - d)^2}{4C}$
Arc of contact on smaller pulley (A/Cs)	Pulley diameters (D & d) in inches Center distance (C) in inches	$A/Cs = 180 - \left[\frac{(D - d) \times 60}{4C}\right]$
Torque (T) due to flywheel effect (WR^2) in lb-inches (accel. and/or decel.)	Final speed (RPM) Initial speed (rpm) Flywheel effect (WR^2) in lbs-ft^2 Time (t) in seconds	$T = \frac{.039 \times (RPM - rpm) \times WR^2}{t}$
Flywheel effect (WR^2) in lb-ft^2	Face width of rim (F) in inches Material density (Z) in lbs/in^3 Outside rim diameter (D) in inches Inside rim diameter (d) in inches	$WR^2 = \frac{F \times Z \times (D^4 - d^4)}{1467}$