Design Manual

Poly Chain® GT2

Gates®

E2/20109 ED 2005

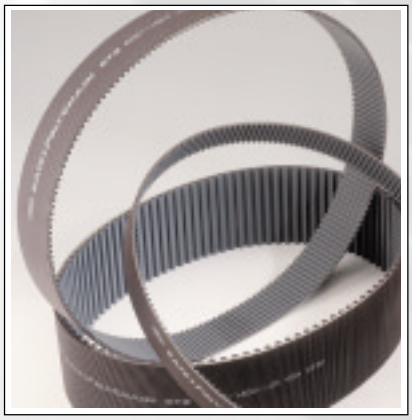
DRIVE DESIGN MANUAL FOR POLY CHAIN® GT2 SYNCHRONOUS BELTS

CONTENTS

INTRODUCTION

POLY CHAIN® GT2
Synchronous belt for high torque, low speed drives

Extended range of sizes with 40% additional power capacity in the speed range up to 500 rpm.



Through innovative product design and advanced technical know-how, Gates is capable of answering industry's increasing power drive requirements. Gates Poly Chain® GT2 synchronous belt has been designed for optimum performance on high torque, low speed drives for any industrial application.

This lightweight belt **transmits 40% more power than previous constructions in the same space. Or it transmits the same power in a much more compact space.**
Compared to classical belt drive systems, Poly Chain® GT2 allows the design of up to 75% more compact drives, transmits up to 8 times more power and saves up to 60% more weight.

Poly Chain® GT2 belts can be used on existing drives, operating in standard PCGT pulleys and do not require any adaptation of the system.

Poly Chain® GT2 belts can also be used in gearboxes and make **an excellent alternative to roller chains, requiring no retensioning or lubrication.** Space-saving, weight-saving and money-saving, Poly Chain® GT2 drives offer **a long and reliable service life.**

Make the switch to Poly Chain® GT2

Poly Chain® GT2 drives tested in a variety of applications ensured long lasting and maintenance-free service. The following industries are ideal for Poly Chain® GT2 drive systems:

- **Industrial equipment (mining, construction, food & beverage, wood, paper, pulp, textile)**
- **Vehicles and engines (motorcycles and other motor vehicles)**
- **Lift and handling equipment**
- **Machine tools**
- **Agricultural and forestry equipment (combines, debarkers, saws)**

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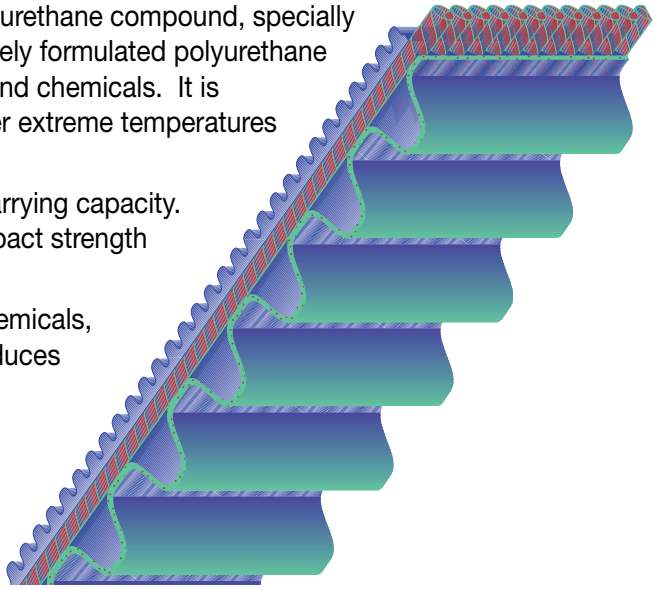
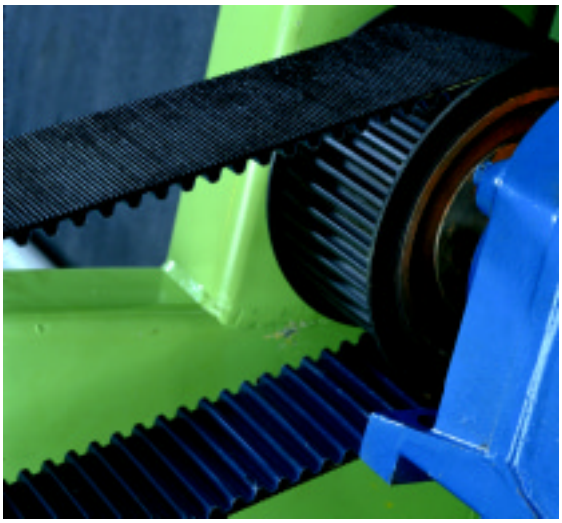
POLY CHAIN® GT2 FEATURES AND BENEFITS

FEATURES

- The belt's teeth and body are made of a lightweight polyurethane compound, specially blended for adhesion to the cords and fabric. This uniquely formulated polyurethane makes the belt tough and virtually immune to abrasion and chemicals. It is exceptionally durable and remains fully operational under extreme temperatures from -54°C up to +85°C.
- The aramid tensile cords provide extraordinary power carrying capacity. Flex fatigue life of aramid is exceptional, and its high impact strength withstands shocks and surge loading.
- The fabric covering the teeth is highly resistant to oil, chemicals, pollutants, corrosion and abrasion. The fabric facing reduces friction with the pulley, thereby minimising temperature build-up.





BENEFITS

- Substantially increased power ratings.
- Highly efficient positive drive.
- Maintenance-free: no lubrication or retensioning needed.
- Savings in space, weight and money.

POLY CHAIN® GT2 FEATURES AND BENEFITS

POLY CHAIN® GT2: A UNIQUE ALTERNATIVE TO ROLLER CHAIN

Gates' Poly Chain® GT2 polyurethane synchronous belt is the ultimate in advanced synchronous technology. With increased power capacity and performance it opens up new opportunities in the design of synchronous drives. It can replace existing synchronous drives with a much more compact design and replace roller chain to eliminate virtually all maintenance and costly downtime.
Compared to roller chain Poly Chain® GT2 offers following advantages:

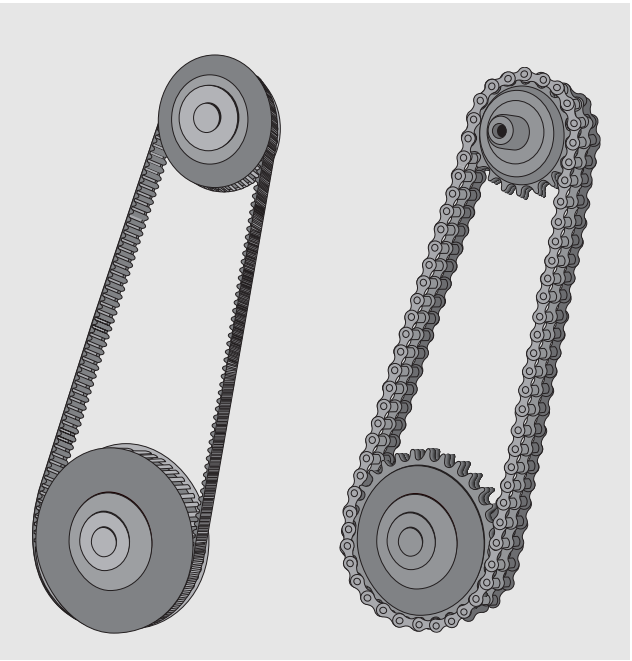
- substantial savings in weight and space
- no lubrication
- no tensioning
- low noise levels, even at high transport speeds
- resistance against aggressive influences (dust, oil, chemicals, …)
- special belt construction resulting in a longer service life

DRIVE PACKAGE COMPARISON

The drive package comparison below clearly demonstrates that Poly Chain® GT2 belts allow a much more compact and lighter drive design than chain.
This 14 mm Poly Chain® GT2 belt transmits the same power (30kW) as the 1" duplex chain type 16B - 2 in 1/2 less space. The duplex chain is 74 mm wide, whereas the Poly Chain® GT2 belt is only 37 mm wide. In addition, Poly Chain GT2 belts weigh significantly less than chain resulting in substantial total weight savings.

The calculation of the chain drive is made according to DIN/ ISO 10823.

For more detailed information on this comparison, please contact your Gates representative.



	POLY CHAIN® GT2 14MGT-2520-37	CHAIN DIN 8178 16B - 2
Length belt / chain - mm	2520	2540
Pitch - mm	14	25.4
Ratio	2.64	2.63
No of grooves - driveR pulley	34	19
No of grooves - driveN pulley	90	50
Outside diameter driveR pulley - mm	151.52	153.32
Outside diameter driveN pulley - mm	401.07	404.52
Weight driveR pulley - kg	3.8	8.3
Weight driveN pulley - kg	17.2	27.6
Width belt / chain - mm	**37**	**74**
Centre distance - mm	816.45	822.13
Speed - Rpm	700	700
Design power - kW	30	30
Weight belt / chain - kg	0.74	13.72
Total drive weight - kg	**21.74**	**49.62**

1 POLY CHAIN® GT2 FEATURES AND BENEFITS

POLY CHAIN® GT2: IDEAL FOR GEAR SYSTEMS

POWER DENSITY COMPARISON

Poly Chain® GT2 has power densities similar to those normally associated with gear systems and can therefore be used to supplement or replace gearbox arrangements.

Drive type	System power density (kW/mm*)
Classical timing belt	0.22
Roller chain	0.39
Spur gear	1.25
Helical gear	1.45
Poly Chain® GT2	1.4

* Values calculated as design kW per mm system width at a nominal 1000 rpm.

POLY CHAIN® GT2 BELT SYSTEM SPECIFICATIONS

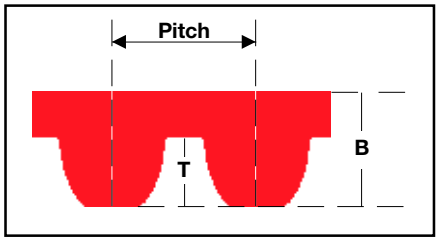
POLY CHAIN® GT2 BELT DIMENSIONS

The three principal dimensions of a Poly Chain® GT2 belt are
pitch;
pitch length;
width.

Belt pitch is the distance in millimetres between two adjacent tooth centres as measured on the pitch line of the belt. Belt pitch length is the total length (circumference) in millimetres as measured along the pitch line. The theoretical pitch line of a Poly Chain® GT2 belt lies within the tensile member. Gates Poly Chain® GT2 belts are made in 8 mm and 14 mm pitches.

REFERENCE DIMENSIONS

	Pitch mm	T mm	B mm
8MGT	8	3.40	5.90
14MGT	14	6.00	10.20



Gates Poly Chain® GT2 belt sizes are listed on page 6. The tables list the pitch lengths in mm and the number of teeth. Also the standard widths are given. Using these tables you will have all necessary information to complete the Poly Chain® GT2 ordering code.

Example: PC2 8MGT-1200-12

PC2 ..... Poly Chain® GT2
8MGT ..... Pitch 8 mm
1200 ..... Pitch length (mm)
12 ..... Belt width (mm)

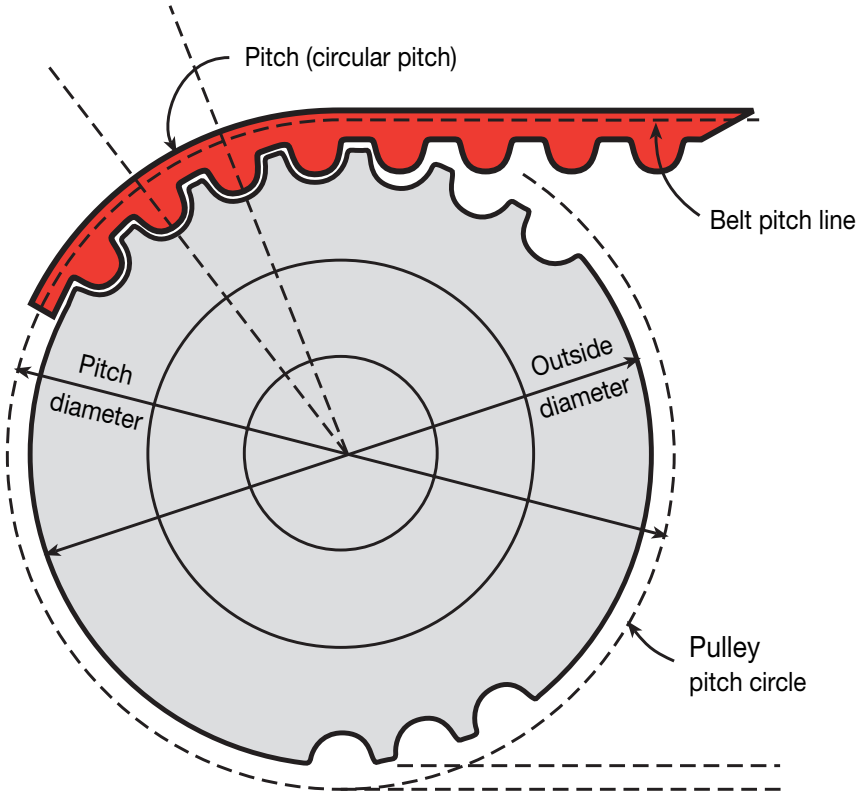
POLY CHAIN® GT PULLEY DIMENSIONS

The three principal dimensions of a pulley are
- pitch;
- number of grooves;
- belt width.

On the pulley, pitch is the distance between groove centres and is measured on the pulley's pitch circle. The pitch circle of the pulley coincides with the pitch line of the belt engaging with it. The pulley's pitch diameter is always greater than its outside diameter.

Any Poly Chain® GT2 belt must be run with pulleys of the same pitch. Poly Chain® GT2 belts can be used on existing PCGT drives. They operate on the same pulleys and do not require any adaptation of the system. Pulleys for Poly Chain® GT2 belts are made in 8 mm and 14 mm pitches. Standard pulley sizes are listed on pages 59 through 63. For each Poly Chain® GT2 belt width, there is a table listing the pulley codes, the applicable bushing style and pertinent dimensional information. Reference to the stock bushings for Poly Chain® GT pulleys plus bore and keyway information on pages 65 and 66 will give you the data needed to order the proper bushing.
The pulley ordering code is composed as follows:

Example: PCGT 8M 22S 12
8M..... Pitch 8 mm
22S ..... 22 teeth (S stands for pulley)
12..... Belt width (mm)



POLY CHAIN® GT2 STANDARD BELT RANGE

8MGT

Pitch: 8 mm

Pitch and length designation	Pitch length mm	No of teeth
8MGT-640	640	80
8MGT-720	720	90
8MGT-800	800	100
8MGT-896	896	112
8MGT-960	960	120
8MGT-1000	1000	125
8MGT-1040	1040	130
8MGT-1120	1120	140
8MGT-1200	1200	150
8MGT-1224	1224	153
8MGT-1280	1280	160
8MGT-1440	1440	180
8MGT-1600	1600	200
8MGT-1760	1760	220
8MGT-1792	1792	224
8MGT-2000	2000	250
8MGT-2200	2200	275
8MGT-2240	2240	280
8MGT-2400	2400	300
8MGT-2520	2520	315
8MGT-2600	2600	325
8MGT-2800	2800	350
8MGT-2840	2840	355
8MGT-3048	3048	381
8MGT-3200	3200	400
8MGT-3280	3280	410
8MGT-3600	3600	450
8MGT-4000	4000	500
8MGT-4400	4400	550
8MGT-4480	4480	560

Available in widths of 12 mm, 21 mm, 36 mm and 62 mm.

14MGT

Pitch: 14 mm

Pitch and length designation	Pitch length mm	No of teeth
14MGT-994	994	71
14MGT-1120	1120	80
14MGT-1190	1190	85
14MGT-1260	1260	90
14MGT-1400	1400	100
14MGT-1568	1568	112
14MGT-1610	1610	115
14MGT-1750	1750	125
14MGT-1890	1890	135
14MGT-1960	1960	140
14MGT-2100	2100	150
14MGT-2240	2240	160
14MGT-2310	2310	165
14MGT-2380	2380	170
14MGT-2450	2450	175
14MGT-2520	2520	180
14MGT-2590	2590	185
14MGT-2660	2660	190
14MGT-2800	2800	200
14MGT-3136	3136	224
14MGT-3304	3304	236
14MGT-3360	3360	240
14MGT-3500	3500	250
14MGT-3850	3850	275
14MGT-3920	3920	280
14MGT-4326	4326	309
14MGT-4410	4410	315

Available in widths of 20 mm, 37 mm, 68 mm, 90 mm and 125 mm.

All sizes are available from stock.

Gates 507C sonic tension meter

Correct belt installation is essential for optimum performance of V- and synchronous belt drives. Gates' 507C sonic tension meter allows a simple and accurate tension measurement by analysing sound waves (natural frequencies) from the belt through the sensor. The tension meter processes the input signals and gives an accurate digital display of tension. The tester is compact, computerised and stores data for repetitive use measuring belt tension accurately time after time.
Gates' 507C sonic tension meter is supplied with a handy instruction manual (E/20136). See also pages 14 - 15 for more information on how to check belt tension.

Features

- Stores weight, width and span constants for up to twenty different systems.
- New auto gain adjustment function cancels out background noise automatically.
- Shuts off automatically after five minutes of inactivity, making it an energy-saving device.
- Measurement range: 10 Hz to 5000 Hz.
- Flexible sensor (cord sensor and inductive sensor available on request).
- H 160 mm x D 26 mm x W 59 mm.

Optional accessories

Cord sensor
The cord sensor is recommended for measuring tensions at a distance from the tension meter.
Inductive sensor
The inductive sensor is recommended for measurement of steel corded belts particularly in noisy or windy environments.
Sonic tension meter calibrator – model U-305-OS1
This special calibrator (oscillator) is available for the frequency test of the 507C model. This oscillator generates five types of oscillations (sine wave): 25, 90, 500, 2000 and 4000 Hz. It features a frequency accuracy of 0.1% or even lower.

Gates laser alignment device LASER AT-1

The LASER AT-1 identifies parallel as well as angular misalignment between the pulleys and is suitable for pulley diameters of 60 mm and larger. Mounted in a few seconds, the laser line projected on the targets allows you to quickly ascertain and correct misalignment. It is so light it can be mounted on non-magnetic pulleys with the double sided adhesive tape and used on both horizontal and vertical shaft installations.
For more information please see leaflet E2/20121.

WARNING
Gates' Sonic tension meter 507C and laser alignment device LASER AT-1 are not certified for use in explosion risk areas.

BELT DRIVE SELECTION PROCEDURE

2

Before designing a Gates Poly Chain® GT2 synchronous belt drive, you need to determine following drive requirements:

1. power requirement and type of driveN machine
2. the rpm of the driveR machine
3. the rpm of the driveN machine
4. the approximate centre distance for the drive
5. hours per day operation

To select a Gates Poly Chain® GT2 belt drive, you need to complete the following steps:

STEP 1

CALCULATE THE DESIGN POWER

Design power = service factor x power requirement

A. To calculate the design power it is necessary to determine the service factor for the drive. Determine the type of the driveR machine using the service factor chart on page 9.

B. Using the service factor chart, determine the service factor for the driveN machine and the type of operational service.

C. Multiply the power requirement of the drive by the service factor you have selected. This gives you the design power for use in designing the drive.

BELT DRIVE SELECTION PROCEDURE

SERVICE FACTOR CHART

DRIVE N MACHINE	DRIVE R					
The driveN machines listed below are representative samples only. Select a driveN machine whose load characteristics most closely approximate those of the machine being considered.	AC motors: normal torque, squirrel cage, synchronous, split phase, inverter controlled. DC motors: shunt wound, stepper motors. Engines: multiple cylinder internal combustion.			AC motors: high torque, high slip, repulsion induction, single phase, series wound, slip ring. DC motors: series wound, compound wound, servomotors. Engines: single cylinder internal combustion. Line shafts. Clutches.		
	Intermittent service	**Normal service**	**Continuous service**	**Intermittent service**	**Normal service**	**Continuous service**
	3-8 hours daily or seasonal	**8-16 hours daily**	**16-24 hours daily**	**3-8 hours daily or seasonal**	**8-16 hours daily**	**16-24 hours daily**
Display equipment. Dispensing equipment. Instrumentation. Measuring equipment. Medical equipment. Office equipment. Projection equipment.	**1.0**	**1.2**	**1.4**	**1.2**	**1.4**	**1.6**
Appliances. Sweepers. Sewing machines. Screens: oven, drum, conical. Woodworking equipment (light): band saws, drills, lathes.	**1.1**	**1.3**	**1.5**	**1.3**	**1.5**	**1.7**
Agitators for liquids. Conveyors: belt, light package. Drill presses. Lathes. Saws. Laundry machinery. Woodworking equipment (heavy): circular saws, jointers, planers.	**1.2**	**1.4**	**1.6**	**1.6**	**1.8**	**2.0**
Agitators for semi-liquids. Centrifugal compressors. Conveyor belt: ore, coal, sand. Dough mixers. Line shafts. Machine tools: grinders, shapers, boring mills, milling machines. Paper machinery (except pulpers): presses, punches, shears. Printing machinery. Pumps: centrifugal, gear. Screens: revolving, vibratory.	**1.3**	**1.5**	**1.7**	**1.6**	**1.8**	**2.0**
Brick machinery (except pug mills). Conveyors: apron, pan, bucket, elevator. Extractors. Washers. Fans. Centrifugal blowers. Generators and exciters. Hoists. Rubber calender. Mills. Extruders.	**1.4**	**1.6**	**1.8**	**1.8**	**2.0**	**2.2**
Centrifuges. Screw conveyors. Hammer mills. Paper pulpers. Textile machinery.	**1.5**	**1.7**	**1.9**	**1.9**	**2.1**	**2.3**
Blowers: positive displacement. Mine fans. Pulverisers.	**1.6**	**1.8**	**2.0**	**2.0**	**2.2**	**2.4**
Reciprocating compressors. Crushers: gyratory, jaw, roll. Mills: ball, rod, pebble, etc. Pumps: reciprocating. Saw mill equipment.	**1.7**	**1.9**	**2.1**	**2.1**	**2.3**	**2.5**

These service factors are adequate for most belt drive applications. Note that service factors cannot be substituted for good engineering judgement. Service factors may be adjusted based upon an understanding of the severity of actual drive operating conditions.

BELT DRIVE SELECTION PROCEDURE

2

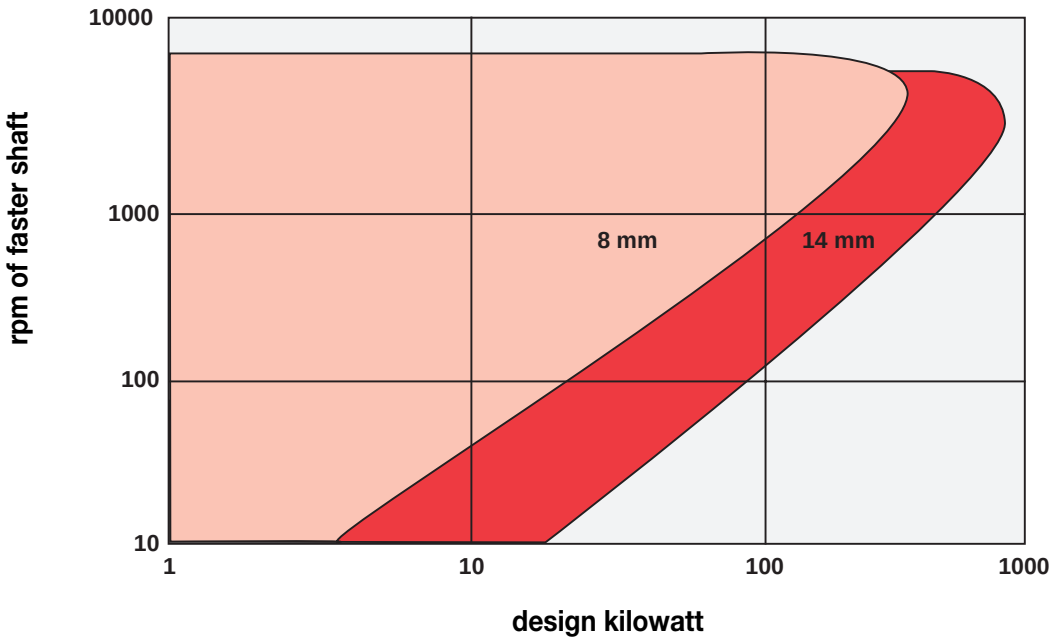
STEP 2

DETERMINE THE BELT PITCH

A. Locate the design power along the horizontal axis of the belt pitch selection guide below. Read up to the rpm of the faster shaft (smaller pulley). The belt pitch indicated in the area surrounding the point of intersection which you located is the one you should use for your design. If the point of intersection falls outside of any specific area, see your Gates representative. If the point falls very near the line between 8 mm and 14 mm, a good drive can likely be designed using either belt pitch.

B. Design the drives using both belt pitches and select the drive best meeting your size requirements or the most economical drive.

POLY CHAIN® GT2 BELT PITCH SELECTION GUIDE



STEP 3

SELECT THE PULLEY COMBINATION, BELT LENGTH AND CENTRE DISTANCE

Locate the appropriate centre distance table for the belt pitch you selected (pages 18 - 39).

For standard and non-standard motor speeds:

A. Calculate the speed ratio by dividing the rpm of the faster shaft by the rpm of the slower shaft. If you are replacing a chain or gear drive, divide the number of teeth on the larger pulley or gear by the number of teeth on the smaller pulley or gear. In the centre distance tables, refer to the column headed speed ratio. Locate the speed ratio nearest to your requirements.

B. For the speed ratio selected, record the number of grooves and pitch diameter of each pulley. If there are several combinations close to your requirements, you may want to consider more than one combination in your drive selection.

C. Reading further to the right on the same line, locate and record the centre distance nearest to your requirements. The belt pitch length designation is given at the top of that column in terms of pitch length. Note these values.

Alternative method to establish the belt length/ centre distance

If you do not know a tentative centre distance, a good estimate is to use the large pulley diameter, or 1/2 (D + 3d), whichever is the larger. You can then find a tentative belt length by solving the following formula:

Formula 1

Tentative belt length =
1.57 (D + d) + (tentative centre distance x 2)

Where: D = diameter of large pulley
d = diameter of small pulley

The approximate relationship between a centre 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 length
D = diameter of large pulley
d = diameter of small pulley
C = centre distance

A more precise formula is given below:

Formula 3

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

Where: L_p = pitch length of belt
C = centre distance
D = pitch diameter of large pulley
d = pitch diameter of small pulley
Ø = $\sin^{-1}\left(\frac{D - d}{2C}\right)$ distance

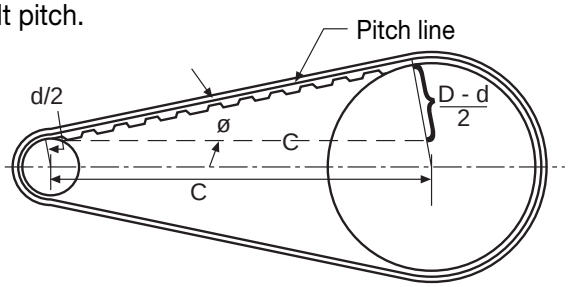
The approximate centre distance can be found by this formula:

Formula 4

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

Where: $K = 4L_p - 6.28\,(D + d)$

The exact centre distance can then be determined by trial using the belt pitch length formula. The pitch length increment of a positive belt is equal to a multiple of the belt pitch.



STEP 4

SELECT THE BELT WIDTH

For all reduction and speed-up drives

A. Power rating tables on pages 40 to 57 show the ratings covered by each stock width. Each table represents one stock belt width for a specific pitch belt. The left-hand column lists the rpm of the smaller pulley, while the stock pulleys are listed across the top of the columns and are designated by the number of grooves and pitch diameter. By reading down the first column to the speed of your faster shaft and across the line to the column headed by your smaller pulley, the power rating can be determined for any stock belt width.

For reduction drives only, read across to the add-on power for speed ratio. Select the value from the appropriate column headed by speed ratio range. Add this value to the basic power rating.

IMPORTANT

Power ratings listed in this catalogue are based on a minimum of six teeth in mesh between the belt and the pulley. 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 centre distance tables, the teeth in mesh may be calculated by using this formula:

Formula 5

$$\text{Teeth in mesh (T.I.M.)} = \left[0.5 - \left(\frac{D - d}{6C}\right)\right] Ng$$

Where: D = pitch circle diameter of large pulley (mm)
d = pitch circle diameter of small pulley (mm)
C = centre distance between shafts (mm)
Ng = number of grooves in small pulley

In cases where fewer than six teeth are in full contact, 20% of the power 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.

Table 1

Teeth in mesh factor

Teeth in mesh	> 6	5	4	3	2
Factor K_{tm}	1	0.8	0.6	0.4	0.2

B. Select a stock belt width and determine the power rating as outlined in Step 1. If the power rating is equal to or exceeds the design power found in Step 2, that belt width can be used. If not, move on to the next wider stock belt width and repeat this step. If

the widest stock belt width for the pitch selected is still not acceptable, you may want to consider larger pulley diameters or a larger pitch belt if possible.

C. Where there are several pulley combinations which meet your drive requirements, the following rules of thumb may influence your choice.

a. The larger the pulley diameter, typically the less belt width required.

b. Larger diameter pulleys typically reduce bearing and shaft loads.

STEP 5

INSTALLATION AND TAKE-UP

Because of its high resistance to elongation (stretch), there is no need to take up a Poly Chain® GT2 belt drive. However, some adjustment must be provided when installing synchronous belt drives to accomodate manufacturing and assembly tolerances and initial tensioning requirements.

Installation and tensioning allowances

Since fixed centre drives are not recommended, centre distance allowances for a Gates Poly Chain® GT2 belt drive are necessary to ensure that the belt can be installed without damage and then tensioned correctly. The standard installation allowance is the minimum decrease in centre distance required to install a belt when flanged pulleys are removed from their shafts for belt installation. This is shown in the first column of table 2. The table also lists the minimum increase in centre distance required to ensure that a belt can be properly tensioned.

If a belt is to be installed over flanged pulleys without removing the pulleys, the additional centre distance allowance for installation shown in table 3 must be added to the allowance shown in table 2.

Table 2

Poly Chain® GT2 installation & tensioning allowances

Centre distance allowance for installation and tensioning

Belt	Standard installation allowance in mm (flanged pulleys removed for installation)	Tensioning allowance in mm (any drive)
<1000 mm	1.8	0.8
>1000 mm to 1780 mm	2.8	0.8
>1780 mm to 2540 mm	3.3	1.0
>2540 mm to 3300 mm	4.1	1.0
>3300 mm to 4600 mm	5.3	1.3

Table 3

Additional centre distance allowance for installation over flanged pulley*

(Add to installation allowance in table 2)

Pitch	One pulley flanged (mm)	Both pulleys flanged (mm)
8 mm	21.8	33.3
14 mm	31.2	50.0

** For drives that require installation of the belt over one pulley at a time, use the value for both pulleys flanged, even if only one pulley is flanged.*

STEP 6

CALCULATE BELT TENSIONING REQUIREMENTS - STANDARD PROCEDURE

When you install a Gates Poly Chain® GT2 belt, you will want to:

- Be sure it is tensioned sufficiently to prevent jumping of teeth (ratcheting) under the most severe load conditions which the drive will encounter during operation.
- Avoid extremely high tension which can reduce belt life and possibly damage bearings, shafts and other drive components.

When you wish to use a numerical method for tensioning the belt drive, the following procedure consists of measuring the force required to deflect one span of the belt a given amount, as shown in the sketch.

BELT DRIVE SELECTION PROCEDURE

A. Calculate the required minimum installation tension

Using the following formula, calculate the required minimum installation tension:

Formula 6

$$T_{st} = 425 \frac{P}{v} + mv^2$$

where: T_{st} = static tension (N)
P = power (kW)
v = belt speed (m/s)
m = belt unit mass per meter length (kg/m); value in table 4

Table 4

Pitch (mm)	Belt width (mm)	m (kg/m)	Y (N)
8	12	0.057	80
	21	0.098	140
	36	0.167	240
	62	0.290	413
14	20	0.158	245
	37	0.291	454
	68	0.536	834
	90	0.711	1103
	125	0.986	1530

Because of the high performance capabilities of Poly Chain® GT2, it is possible to design drives that have significantly greater load ratings than are necessary to carry the actual design load. Consequently, formula 6 can provide T_{st} values less than 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 T_{st} values are provided in table 5 to ensure that the Poly Chain® GT2 belts are tensioned properly when lightly loaded.

Always use the greater T_{st} values; i.e. from formula 6 or table 5.

Table 5

Pitch (mm)	Belt width (mm)	Min. recomm. T_{st} (N)
8	12	125
	21	220
	36	375
	62	645
14	20	530
	37	980
	68	1800
	90	2380
	125	3310

B. Calculate pretension parameters

To calculate the optimum pretension values you will need to calculate the static tension (formula 6) and either measure or calculate the span length (formula 7).

Formula 7

$$S = \sqrt{a^2 - \frac{(D_p - d_p)^2}{4}}$$

where:
S = span length (mm)
a = centre distance (mm)
D_p = large pitch diameter (mm)
d_p = small pitch diameter (mm)

I. For the most precise determination of pretension the Gates sonic tension tester is recommended. This device uses the belt's natural frequency to determine tension.

Calculate the natural frequency of the belt.

When an impulse is applied to a belt span, the frequency of span is related to the static belt tension. This is calculated as follows:

Formula 8

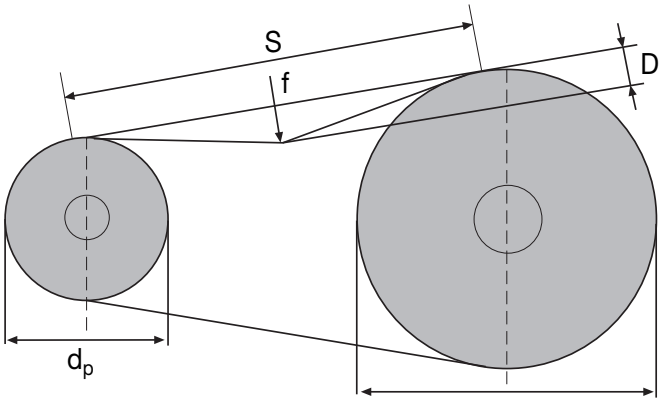
$$f = \sqrt{\frac{T_{st}}{4 \times S^2 \times m \times 10^{-6}}}$$

where: f = frequency (Hz)
T_{st} = static tension (N)
S = span length (mm)
m = belt unit mass (kg/m) per meter length; value in table 4

Note:
It is critical for the exact calculation of the frequency that the correct span length is used. An error of 10% in span length will result in an error of about 20% as the span length value is squared in the formula.

If a Gates Sonic tension tester is not available a load/deflection method may be used.

II. Calculate the minimum recommended deflection forces



Formula 9

$$\text{Deflection force, Min.} = \frac{T_{st} + \left(\frac{S}{L}\right) Y}{25}$$

where: T_{st} = static tension (N)
S = span length (mm)
L = belt pitch length (mm)
Y = constant from table 4

Deflection is 1/100 per mm of span length

$$\text{Deflection D} = \frac{S}{100}$$

Note: For unusual, shock or pulsating loads consult Gates Application Engineering Department for guidance.

Important

If belts need to be removed and replaced, the tension prior to removal has to be measured and applied for re-installation.

STEP 7

CHECK BELT TENSION

A. By use of the Gates Sonic tension meter

The best procedure to check belt tension is measuring the frequency by means of Gates' sonic tension meter. This sonic tension meter measures tension by analysing the sound waves, which the belt produces when strummed. A belt vibrates at a particular frequency based on its static tension, the belt mass and the free-swinging span. The tension tester transforms this frequency in a tension value.

1. Enter belt unit weight (provided with operating instructions), width and span on the keypad. These data remain in the meter even after shut-off.
2. Hold the small sensor up to the belt span and strum the belt slightly to make it vibrate.
3. Press the "measure" button. The computer processes the variations in sound pressure emanating from the belt span. The belt tension values are displayed on the panel in Newtons (N). If desired, the belt span frequencies can be displayed directly in Hertz (Hz).

For more detailed information, e.g. suitability of the tension meter for different belt product lines, please contact your Gates representative.

Warning
Gates sonic tension meter is not certified for use in explosion risk areas.

Sonic tension meter

B. By use of the conventional tension tester

The deflection of the span creates an elongation of the belt and increase of the span tension. The required deflection force at a defined deflection will be measured.

Gates' conventional tension testers measure deflection force. The single tension tester measures up to ± 120 N and the double tension tester up to ± 300 N. Both testers consist of a calibrated spring with two scales: one to measure the deflection and another to measure the applied force.

The reading of these scales can be done as follows.

1. Measure the span length (S).
2. The calculated deflection (span/100) should be positioned with the lower ring on the distance scale. The upper ring should be on the zero position of the deflection force scale.
3. Put the tension tester perpendicular to the span and in the middle of the span. Exercise enough pressure to the tension tester to deflect the belt by the amount indicated by the lower ring. A straight edge, laid across pulleys, can help accuracy of reading.
4. The upper ring will slide up the upper scale and indicates the deflection force. Read at the bottom edge of the ring. When you use the double tension tester you can read the values just underneath the rings and calculate the sum of both values. This value has to be compared with the calculated min./max. force as per formula 9, page 14.

STEP 8

CHECK AND SPECIFY STOCK DRIVE COMPONENTS

A. Check the pulleys selected against any special design requirements using the dimensions given in the pulley specification tables on pages 59 - 63.

B. Using the pulley specification tables, determine the type of bushing to be used with each pulley. Check the bore range against the design requirements.

BELT DRIVE SELECTION EXAMPLE

Given

Standard motor speed - reduction

A 5 kW, 1800 rpm high torque AC motor will be used to drive a wood lathe at a nominal 1485 rpm. The required nominal centre distance is 510 mm ± 20 mm. Duty will be 10 to 12 hours per day.

Comments	Results
STEP 1	
Calculate the design power	
A. From the service factor chart on page 9, the driveR would be found in the second group.	
B. From the chart the **service factor** = 1.5	Service factor = 1.5
C. Design power = 5 x 1.5 = 7.5 kW	Design power = 7.5 kW
STEP 2	
Determine the belt pitch	
From the belt pitch selection guide on page 10, a 7.5 kW power and 1800 rpm faster shaft requires an 8 mm pitch Gates Poly Chain® GT2 belt.	Belt pitch = 8 mm
STEP 3	
Select the pulley combination, belt length and centre distance	
A. Calculate the speed ratio by dividing the faster rpm by the slower rpm. **Speed ratio** = $\frac{1800}{1485}$ = 1.212	Speed ratio = 1.212
B. In the centre distance tables, refer to the column headed by speed ratio. Locate the speed ratio nearest to your requirements. For this example let's select 1.21. Actual driveN speed = 1800 : 1.21 = 1487 rpm	
C. For the speed ratio selected, record these pulleys: **DriveR = 8M-28S (28 grooves), 71.3 mm pitch diameter; DriveN = 8M-34S (34 grooves), 86.6 mm pitch diameter.**	DriveR = 28 grooves, 71.3 mm P.D. DriveN = 34 grooves, 86.6 mm P.D.
Reading to the right, the nearest to required centre distance 515.94 mm. Reading up that column record the belt which is an **8MGT-1280, 1280 mm pitch length, 160 teeth.**	Nearest centre distance = 515.94 mm Required belt = 8MGT-1280 P.L. 160 teeth
STEP 4	
Select the belt width	
In the 8MGT power rating table on page 40, the basic power rating = 8.17 kW for a 28-groove pulley at 1800 rpm, 12 mm width.	Belt width = 12 mm
Service rating = (basic power rating + additional factor) x length correction factor = (8.17 + 0.35) x 1.05 = 8.95 kW	Service rating = 8.95 kW
This exceeds the 7.5 kW design power, so it is an acceptable drive.	

BELT DRIVE SELECTION EXAMPLE

STEP 5

Find the required installation and take-up allowances
From tables 2 and 3 on page 12 **the minimum centre distance allowance to install and tension the belt is** 2.8 mm/+0.8 mm. Additional allowance from table 3 is required when installing over flanged pulleys not removed from the shafts.

Minimum centre distance allowance for installation and tensioning = -2.8 mm/+0.8 mm

STEP 6

Calculate the belt tensioning requirements
Using formulae 6 and 7 on page 13.

Deflection force = 14 to 16 N
Deflection = 5.2 mm

CENTRE DISTANCE TABLES 8MGT

Speed ratio	DriveR	DriveN	Theoretical centre distance in mm												
	No. of groov.	No. of groov.	Belt length code designation in mm												
			640	720	800	896	960	1000	1040	1120	1200	1224	1280	1440	1600
1.00	22	22	232.0	272.0	312.0	360.0	392.0	412.0	432.0	472.0	512.0	524.0	552.0	632.0	712.0
1.00	25	25	220.0	260.0	300.0	348.0	380.0	400.0	420.0	460.0	500.0	512.0	540.0	620.0	700.0
1.00	28	28	208.0	248.0	288.0	336.0	368.0	388.0	408.0	448.0	488.0	500.0	528.0	608.0	688.0
1.00	30	30	200.0	240.0	280.0	328.0	360.0	380.0	400.0	440.0	480.0	492.0	520.0	600.0	680.0
1.00	32	32	192.0	232.0	272.0	320.0	352.0	372.0	392.0	432.0	472.0	484.0	512.0	592.0	672.0
1.00	34	34	184.0	224.0	264.0	312.0	344.0	364.0	384.0	424.0	464.0	476.0	504.0	584.0	664.0
1.00	36	36	176.0	216.0	256.0	304.0	336.0	356.0	376.0	416.0	456.0	468.0	496.0	576.0	656.0
1.00	38	38	168.0	208.0	248.0	296.0	328.0	348.0	368.0	408.0	448.0	460.0	488.0	568.0	648.0
1.00	40	40	160.0	200.0	240.0	288.0	320.0	340.0	360.0	400.0	440.0	452.0	480.0	560.0	640.0
1.00	45	45		180.0	220.0	268.0	300.0	320.0	340.0	380.0	420.0	432.0	460.0	540.0	620.0
1.00	48	48			208.0	256.0	288.0	308.0	328.0	368.0	408.0	420.0	448.0	528.0	608.0
1.00	50	50			200.0	248.0	280.0	300.0	320.0	360.0	400.0	412.0	440.0	520.0	600.0
1.00	56	56.00				224.0	256.0	276.0	296.0	336.0	376.0	388.0	416.0	496.0	576.0
1.00	60	60				208.0	240.0	260.0	280.0	320.0	360.0	372.0	400.0	480.0	560.0
1.00	64	64					224.0	244.0	264.0	304.0	344.0	356.0	384.0	464.0	544.0
1.00	75	75								260.0	300.0	312.0	340.0	420.0	500.0
1.00	80	80									280.0	292.0	320.0	400.0	480.0
1.04	48	50			204.0	252.0	284.0	304.0	324.0	364.0	404.0	416.0	444.0	524.0	604.0
1.05	38	40	164.0	204.0	244.0	292.0	324.0	344.0	364.0	404.0	444.0	456.0	484.0	564.0	644.0
1.06	36	38	172.0	212.0	252.0	300.0	332.0	352.0	372.0	412.0	452.0	464.0	492.0	572.0	652.0
1.06	34	36	180.0	220.0	260.0	308.0	340.0	360.0	380.0	420.0	460.0	472.0	500.0	580.0	660.0
1.06	32	34	188.0	228.0	268.0	316.0	348.0	368.0	388.0	428.0	468.0	480.0	508.0	588.0	668.0
1.07	30	32	196.0	236.0	276.0	324.0	356.0	376.0	396.0	436.0	476.0	488.0	516.0	596.0	676.0
1.07	45	48		174.0	214.0	262.0	294.0	314.0	334.0	374.0	414.0	426.0	454.0	534.0	614.0
1.07	60	64					231.9	251.9	272.0	312.0	352.0	364.0	392.0	472.0	552.0
1.07	75	80								249.9	289.9	301.9	329.9	410.0	490.0
1.07	28	30	204.0	244.0	284.0	332.0	364.0	384.0	404.0	444.0	484.0	496.0	524.0	604.0	684.0
1.07	56	60				215.9	247.9	268.0	288.0	328.0	368.0	380.0	408.0	488.0	568.0
1.11	36	40	167.9	207.9	247.9	296.0	328.0	348.0	368.0	408.0	448.0	460.0	488.0	568.0	648.0
1.11	45	50		169.9	209.9	257.9	289.9	309.9	329.9	369.9	410.0	422.0	450.0	530.0	610.0
1.12	34	38	175.9	215.9	255.9	304.0	336.0	356.0	376.0	416.0	456.0	468.0	496.0	576.0	656.0
1.12	25	28	214.0	254.0	294.0	342.0	374.0	394.0	414.0	454.0	494.0	506.0	534.0	614.0	694.0
1.12	50	56			187.8	235.9	267.9	287.9	307.9	347.9	387.9	399.9	427.9	507.9	588.0
1.13	32	36	183.9	223.9	264.0	312.0	344.0	364.0	384.0	424.0	464.0	476.0	504.0	584.0	664.0
1.13	40	45		189.9	229.9	277.9	309.9	329.9	349.9	389.9	430.0	442.0	470.0	550.0	630.0
1.13	80	90										271.7	299.7	379.8	459.8
1.13	30	34	191.9	231.9	272.0	320.0	352.0	372.0	392.0	432.0	472.0	484.0	512.0	592.0	672.0
1.14	22	25	226.0	266.0	306.0	354.0	386.0	406.0	426.0	466.0	506.0	518.0	546.0	626.0	706.0
1.14	28	32	199.9	239.9	280.0	328.0	360.0	380.0	400.0	440.0	480.0	492.0	520.0	600.0	680.0
1.14	56	64				207.8	239.8	259.8	279.8	319.8	359.9	371.9	399.9	479.9	559.9

Theoretical centre distance in mm																
Belt length code designation in mm																
1760	1792	2000	2200	2240	2400	2520	2600	2800	2840	3048	3200	3280	3600	4000	4400	4480
792.0	808.0	912.0	1012.0	1032.0	1112.0	1172.0	1212.0	1312.0	1332.0	1436.0	1512.0	1552.0	1712.0	1912.0	2112.0	2152.0
780.0	796.0	900.0	1000.0	1020.0	1100.0	1160.0	1200.0	1300.0	1320.0	1424.0	1500.0	1540.0	1700.0	1900.0	2100.0	2140.0
768.0	784.0	888.0	988.0	1008.0	1088.0	1148.0	1188.0	1288.0	1308.0	1412.0	1488.0	1528.0	1688.0	1888.0	2088.0	2128.0
760.0	776.0	880.0	980.0	1000.0	1080.0	1140.0	1180.0	1280.0	1300.0	1404.0	1480.0	1520.0	1680.0	1880.0	2080.0	2120.0
752.0	768.0	872.0	972.0	992.0	1072.0	1132.0	1172.0	1272.0	1292.0	1396.0	1472.0	1512.0	1672.0	1872.0	2072.0	2112.0
744.0	760.0	864.0	964.0	984.0	1064.0	1124.0	1164.0	1264.0	1284.0	1388.0	1464.0	1504.0	1664.0	1864.0	2064.0	2104.0
736.0	752.0	856.0	956.0	976.0	1056.0	1116.0	1156.0	1256.0	1276.0	1380.0	1456.0	1496.0	1656.0	1856.0	2056.0	2096.0
728.0	744.0	848.0	948.0	968.0	1048.0	1108.0	1148.0	1248.0	1268.0	1372.0	1448.0	1488.0	1648.0	1848.0	2048.0	2088.0
720.0	736.0	840.0	940.0	960.0	1040.0	1100.0	1140.0	1240.0	1260.0	1364.0	1440.0	1480.0	1640.0	1840.0	2040.0	2080.0
700.0	716.0	820.0	920.0	940.0	1020.0	1080.0	1120.0	1220.0	1240.0	1344.0	1420.0	1460.0	1620.0	1820.0	2020.0	2060.0
688.0	704.0	808.0	908.0	928.0	1008.0	1068.0	1108.0	1208.0	1228.0	1332.0	1408.0	1448.0	1608.0	1808.0	2008.0	2048.0
680.0	696.0	800.0	900.0	920.0	1000.0	1060.0	1100.0	1200.0	1220.0	1324.0	1400.0	1440.0	1600.0	1800.0	2000.0	2040.0
656.0	672.0	776.0	876.0	896.0	976.0	1036.0	1076.0	1176.0	1196.0	1300.0	1376.0	1416.0	1576.0	1776.0	1976.0	2016.0
640.0	656.0	760.0	860.0	880.0	960.0	1020.0	1060.0	1160.0	1180.0	1284.0	1360.0	1400.0	1560.0	1760.0	1960.0	2000.0
624.0	640.0	744.0	844.0	864.0	944.0	1004.0	1044.0	1144.0	1164.0	1268.0	1344.0	1384.0	1544.0	1744.0	1944.0	1984.0
580.0	596.0	700.0	800.0	820.0	900.0	960.0	1000.0	1100.0	1120.0	1224.0	1300.0	1340.0	1500.0	1700.0	1900.0	1940.0
560.0	576.0	680.0	780.0	800.0	880.0	940.0	980.0	1080.0	1100.0	1204.0	1280.0	1320.0	1480.0	1680.0	1880.0	1920.0
684.0	700.0	804.0	904.0	924.0	1004.0	1064.0	1104.0	1204.0	1224.0	1328.0	1404.0	1444.0	1604.0	1804.0	2004.0	2044.0
724.0	740.0	844.0	944.0	964.0	1044.0	1104.0	1144.0	1244.0	1264.0	1368.0	1444.0	1484.0	1644.0	1844.0	2044.0	2084.0
732.0	748.0	852.0	952.0	972.0	1052.0	1112.0	1152.0	1252.0	1272.0	1376.0	1452.0	1492.0	1652.0	1852.0	2052.0	2092.0
740.0	756.0	860.0	960.0	980.0	1060.0	1120.0	1160.0	1260.0	1280.0	1384.0	1460.0	1500.0	1660.0	1860.0	2060.0	2100.0
748.0	764.0	868.0	968.0	988.0	1068.0	1128.0	1168.0	1268.0	1288.0	1392.0	1468.0	1508.0	1668.0	1868.0	2068.0	2108.0
756.0	772.0	876.0	976.0	996.0	1076.0	1136.0	1176.0	1276.0	1296.0	1400.0	1476.0	1516.0	1676.0	1876.0	2076.0	2116.0
694.0	710.0	814.0	914.0	934.0	1014.0	1074.0	1114.0	1214.0	1234.0	1338.0	1414.0	1454.0	1614.0	1814.0	2014.0	2054.0
632.0	648.0	752.0	852.0	872.0	952.0	1012.0	1052.0	1152.0	1172.0	1276.0	1352.0	1392.0	1552.0	1752.0	1952.0	1992.0
570.0	586.0	690.0	790.0	810.0	890.0	950.0	990.0	1090.0	1110.0	1214.0	1290.0	1330.0	1490.0	1690.0	1890.0	1930.0
764.0	780.0	884.0	984.0	1004.0	1084.0	1144.0	1184.0	1284.0	1304.0	1408.0	1484.0	1524.0	1684.0	1884.0	2084.0	2124.0
648.0	664.0	768.0	868.0	888.0	968.0	1028.0	1068.0	1168.0	1188.0	1292.0	1368.0	1408.0	1568.0	1768.0	1968.0	2008.0
728.0	744.0	848.0	948.0	968.0	1048.0	1108.0	1148.0	1248.0	1268.0	1372.0	1448.0	1488.0	1648.0	1848.0	2048.0	2088.0
690.0	706.0	810.0	910.0	930.0	1010.0	1070.0	1110.0	1210.0	1230.0	1334.0	1410.0	1450.0	1610.0	1810.0	2010.0	2050.0
736.0	752.0	856.0	956.0	976.0	1056.0	1116.0	1156.0	1256.0	1276.0	1380.0	1456.0	1496.0	1656.0	1856.0	2056.0	2096.0
774.0	790.0	894.0	994.0	1014.0	1094.0	1154.0	1194.0	1294.0	1314.0	1418.0	1494.0	1534.0	1694.0	1894.0	2094.0	2134.0
668.0	684.0	788.0	888.0	908.0	988.0	1048.0	1088.0	1188.0	1208.0	1312.0	1388.0	1428.0	1588.0	1788.0	1988.0	2028.0
744.0	760.0	864.0	964.0	984.0	1064.0	1124.0	1164.0	1264.0	1284.0	1388.0	1464.0	1504.0	1664.0	1864.0	2064.0	2104.0
710.0	726.0	830.0	930.0	950.0	1030.0	1090.0	1130.0	1230.0	1250.0	1354.0	1430.0	1470.0	1630.0	1830.0	2030.0	2070.0
539.8	555.9	659.9	759.9	779.9	859.9	919.9	959.9	1059.9	1079.9	1183.9	1259.9	1299.9	1459.9	1660.0	1860.0	1900.0
752.0	768.0	872.0	972.0	992.0	1072.0	1132.0	1172.0	1272.0	1292.0	1396.0	1472.0	1512.0	1672.0	1872.0	2072.0	2112.0
786.0	802.0	906.0	1006.0	1026.0	1106.0	1166.0	1206.0	1306.0	1326.0	1430.0	1506.0	1546.0	1706.0	1906.0	2106.0	2146.0
760.0	776.0	880.0	980.0	1000.0	1080.0	1140.0	1180.0	1280.0	1300.0	1404.0	1480.0	1520.0	1680.0	1880.0	2080.0	2120.0
639.9	655.9	759.9	859.9	879.9	959.9	1019.9	1060.0	1160.0	1180.0	1284.0	1360.0	1400.0	1560.0	1760.0	1960.0	2000.0

CENTRE DISTANCE TABLES 8MGT

Speed ratio	DriveR	DriveN	Theoretical centre distance in mm												
	No. of groov.	No. of groov.	Belt length code designation in mm												
			640	720	800	896	960	1000	1040	1120	1200	1224	1280	1440	1600
1.17	48	56			191.7	239.8	271.8	291.8	311.8	351.9	391.9	403.9	431.9	511.9	591.9
1.17	64	75							241.6	281.7	321.7	333.7	361.7	441.8	521.8
1.18	34	40	171.8	211.9	251.9	299.9	331.9	351.9	371.9	411.9	451.9	463.9	491.9	571.9	652.0
1.18	38	45		193.8	233.8	281.9	313.9	333.9	353.9	393.9	433.9	445.9	473.9	553.9	633.9
1.19	32	38	179.8	219.9	259.9	307.9	339.9	359.9	379.9	419.9	459.9	471.9	499.9	579.9	660.0
1.20	25	30	209.9	249.9	289.9	337.9	369.9	389.9	410.0	450.0	490.0	502.0	530.0	610.0	690.0
1.20	30	36	187.8	227.9	267.9	315.9	347.9	367.9	387.9	427.9	467.9	479.9	507.9	588.0	668.0
1.20	40	48		183.7	223.8	271.8	303.8	323.8	343.8	383.9	423.9	435.9	463.9	543.9	623.9
1.20	50	60				227.6	259.7	279.7	299.7	339.8	379.8	391.8	419.8	499.8	579.9
1.20	75	90									269.3	281.4	309.4	389.5	469.6
1.21	28	34	195.9	235.9	275.9	323.9	355.9	375.9	395.9	435.9	475.9	487.9	515.9	596.0	676.0
1.24	45	56			197.5	245.6	277.6	297.7	317.7	357.7	397.8	409.8	437.8	517.8	597.8
1.25	32	40	175.7	215.8	255.8	303.8	335.8	355.9	375.9	415.9	455.9	467.9	495.9	575.9	655.9
1.25	36	45	157.6	197.7	237.7	285.8	317.8	337.8	357.8	397.8	437.8	449.9	477.9	557.9	637.9
1.25	40	50		179.5	219.6	267.7	299.7	319.7	339.8	379.8	419.8	431.8	459.8	539.8	619.9
1.25	48	60				231.5	263.6	283.6	303.6	343.7	383.7	395.7	423.7	503.8	583.8
1.25	60	75						229.2	249.3	289.4	329.4	341.5	369.5	449.6	529.7
1.25	64	80								271.2	311.3	323.4	351.4	431.5	511.6
1.26	38	48		187.6	227.6	275.7	307.7	327.8	347.8	387.8	427.8	439.8	467.8	547.9	627.9
1.27	30	38	183.7	223.8	263.8	311.8	343.8	363.9	383.9	423.9	463.9	475.9	503.9	583.9	663.9
1.27	22	28	219.9	259.9	299.9	347.9	379.9	399.9	419.9	459.9	499.9	511.9	539.9	620.0	700.0
1.28	25	32	205.8	245.8	285.9	333.9	365.9	385.9	405.9	445.9	485.9	497.9	525.9	605.9	685.9
1.28	50	64				219.3	251.4	271.4	291.5	331.5	371.6	383.6	411.6	491.7	571.7
1.29	28	36	191.7	231.8	271.8	319.8	351.9	371.9	391.9	431.9	471.9	483.9	511.9	591.9	671.9
1.32	38	50		183.4	223.5	271.6	303.6	323.6	343.7	383.7	423.7	435.7	463.7	543.8	623.8
1.32	34	45	161.4	201.5	241.6	289.7	321.7	341.7	361.7	401.8	441.8	453.8	481.8	561.8	641.8
1.33	30	40	179.5	219.6	259.7	307.7	339.8	359.8	379.8	419.8	459.8	471.8	499.8	579.9	659.9
1.33	36	48		191.4	231.5	279.6	311.6	331.6	351.7	391.7	431.7	443.7	471.8	551.8	631.8
1.33	45	60			189.0	237.2	269.3	289.4	309.4	349.5	389.5	401.5	429.6	509.6	589.7
1.33	48	64				223.1	255.2	275.2	295.3	335.4	375.4	387.5	415.5	495.6	575.6
1.33	60	80							238.6	278.8	319.0	331.0	359.1	439.3	519.4
1.34	56	75					216.6	236.8	256.9	297.0	337.1	349.2	377.2	457.4	537.5
1.36	28	38	187.6	227.6	267.7	315.7	347.8	367.8	387.8	427.8	467.8	479.8	507.8	587.9	667.9
1.36	25	34	201.7	241.7	281.8	329.8	361.8	381.8	401.8	441.9	481.9	493.9	521.9	601.9	681.9
1.36	22	30	215.8	255.8	295.8	343.8	375.9	395.9	415.9	455.9	495.9	507.9	535.9	615.9	695.9
1.39	36	50		187.2	227.3	275.4	307.5	327.5	347.5	387.6	427.6	439.6	467.7	547.7	627.7
1.40	40	56			207.0	255.2	287.3	307.3	327.4	367.4	407.5	419.5	447.5	527.6	607.7
1.40	80	112												333.5	414.0
1.41	32	45	165.2	205.3	245.4	293.5	325.6	345.6	365.6	405.7	445.7	457.7	485.7	565.8	645.8
1.41	64	90								249.8	290.1	302.2	330.3	410.7	490.9

Theoretical centre distance in mm																
Belt length code designation in mm																
1760	1792	2000	2200	2240	2400	2520	2600	2800	2840	3048	3200	3280	3600	4000	4400	4480
671.9	687.9	791.9	891.9	911.9	991.9	1052.0	1092.0	1192.0	1212.0	1316.0	1392.0	1432.0	1592.0	1792.0	1992.0	2032.0
601.8	617.8	721.9	821.9	841.9	921.9	981.9	1021.9	1121.9	1141.9	1245.9	1321.9	1361.9	1521.9	1721.9	1921.9	1961.9
732.0	748.0	852.0	952.0	972.0	1052.0	1112.0	1152.0	1252.0	1272.0	1376.0	1452.0	1492.0	1652.0	1852.0	2052.0	2092.0
713.9	729.9	834.0	934.0	954.0	1034.0	1094.0	1134.0	1234.0	1254.0	1358.0	1434.0	1474.0	1634.0	1834.0	2034.0	2074.0
740.0	756.0	860.0	960.0	980.0	1060.0	1120.0	1160.0	1260.0	1280.0	1384.0	1460.0	1500.0	1660.0	1860.0	2060.0	2100.0
770.0	786.0	890.0	990.0	1010.0	1090.0	1150.0	1190.0	1290.0	1310.0	1414.0	1490.0	1530.0	1690.0	1890.0	2090.0	2130.0
748.0	764.0	868.0	968.0	988.0	1068.0	1128.0	1168.0	1268.0	1288.0	1392.0	1468.0	1508.0	1668.0	1868.0	2068.0	2108.0
703.9	719.9	823.9	923.9	943.9	1023.9	1084.0	1124.0	1224.0	1244.0	1348.0	1424.0	1464.0	1624.0	1824.0	2024.0	2064.0
659.9	675.9	779.9	879.9	899.9	979.9	1039.9	1079.9	1179.9	1199.9	1303.9	1379.9	1419.9	1579.9	1780.0	1980.0	2020.0
549.7	565.7	669.7	769.8	789.8	869.8	929.8	969.8	1069.8	1089.8	1193.8	1269.9	1309.9	1469.9	1669.9	1869.9	1909.9
756.0	772.0	876.0	976.0	996.0	1076.0	1136.0	1176.0	1276.0	1296.0	1400.0	1476.0	1516.0	1676.0	1876.0	2076.0	2116.0
677.9	693.9	797.9	897.9	917.9	997.9	1057.9	1097.9	1197.9	1217.9	1321.9	1397.9	1437.9	1597.9	1797.9	1998.0	2038.0
735.9	751.9	855.9	955.9	975.9	1056.0	1116.0	1156.0	1256.0	1276.0	1380.0	1456.0	1496.0	1656.0	1856.0	2056.0	2096.0
717.9	733.9	837.9	937.9	957.9	1037.9	1097.9	1137.9	1237.9	1257.9	1362.0	1438.0	1478.0	1638.0	1838.0	2038.0	2078.0
699.9	715.9	819.9	919.9	939.9	1019.9	1079.9	1119.9	1219.9	1239.9	1343.9	1419.9	1459.9	1619.9	1820.0	2020.0	2060.0
663.8	679.8	783.9	883.9	903.9	983.9	1043.9	1083.9	1183.9	1203.9	1307.9	1383.9	1423.9	1583.9	1783.9	1983.9	2023.9
609.7	625.7	729.7	829.8	849.8	929.8	989.8	1029.8	1129.8	1149.8	1253.9	1329.9	1369.9	1529.9	1729.9	1929.9	1969.9
591.6	607.7	711.7	811.7	831.8	911.8	971.8	1011.8	1111.8	1131.8	1235.8	1311.8	1351.8	1511.9	1711.9	1911.9	1951.9
707.9	723.9	827.9	927.9	947.9	1027.9	1087.9	1127.9	1227.9	1247.9	1351.9	1427.9	1467.9	1628.0	1828.0	2028.0	2068.0
743.9	759.9	863.9	963.9	983.9	1064.0	1124.0	1164.0	1264.0	1284.0	1388.0	1464.0	1504.0	1664.0	1864.0	2064.0	2104.0
780.0	796.0	900.0	1000.0	1020.0	1100.0	1160.0	1200.0	1300.0	1320.0	1424.0	1500.0	1540.0	1700.0	1900.0	2100.0	2140.0
765.9	781.9	886.0	986.0	1006.0	1086.0	1146.0	1186.0	1286.0	1306.0	1410.0	1486.0	1526.0	1686.0	1886.0	2086.0	2126.0
651.8	667.8	771.8	871.8	891.8	971.8	1031.8	1071.9	1171.9	1191.9	1295.9	1371.9	1411.9	1571.9	1771.9	1971.9	2011.9
751.9	767.9	871.9	971.9	991.9	1072.0	1132.0	1172.0	1272.0	1292.0	1396.0	1472.0	1512.0	1672.0	1872.0	2072.0	2112.0
703.8	719.8	823.9	923.9	943.9	1023.9	1083.9	1123.9	1223.9	1243.9	1347.9	1423.9	1463.9	1623.9	1823.9	2023.9	2063.9
721.9	737.9	841.9	941.9	961.9	1041.9	1101.9	1141.9	1241.9	1261.9	1365.9	1441.9	1481.9	1641.9	1841.9	2042.0	2082.0
739.9	755.9	859.9	959.9	979.9	1059.9	1119.9	1159.9	1259.9	1279.9	1383.9	1459.9	1499.9	1660.0	1860.0	2060.0	2100.0
711.8	727.8	831.9	931.9	951.9	1031.9	1091.9	1131.9	1231.9	1251.9	1355.9	1431.9	1471.9	1631.9	1831.9	2031.9	2071.9
669.7	685.7	789.8	889.8	909.8	989.8	1049.8	1089.8	1189.8	1209.8	1313.9	1389.9	1429.9	1589.9	1789.9	1989.9	2029.9
655.7	671.7	775.7	875.8	895.8	975.8	1035.8	1075.8	1175.8	1195.8	1299.8	1375.8	1415.9	1575.9	1775.9	1975.9	2015.9
599.5	615.5	719.5	819.6	839.6	919.6	979.7	1019.7	1119.7	1139.7	1243.7	1319.8	1359.8	1519.8	1719.8	1919.8	1959.8
617.5	633.5	737.6	837.7	857.7	937.7	997.7	1037.7	1137.7	1157.7	1261.8	1337.8	1377.8	1537.8	1737.8	1937.8	1977.9
747.9	763.9	867.9	967.9	987.9	1067.9	1127.9	1167.9	1267.9	1287.9	1391.9	1467.9	1507.9	1668.0	1868.0	2068.0	2108.0
761.9	777.9	881.9	981.9	1001.9	1081.9	1141.9	1181.9	1281.9	1301.9	1406.0	1482.0	1522.0	1682.0	1882.0	2082.0	2122.0
775.9	791.9	895.9	995.9	1015.9	1096.0	1156.0	1196.0	1296.0	1316.0	1420.0	1496.0	1536.0	1696.0	1896.0	2096.0	2136.0
707.8	723.8	827.8	927.8	947.8	1027.8	1087.9	1127.9	1227.9	1247.9	1351.9	1427.9	1467.9	1627.9	1827.9	2027.9	2067.9
687.7	703.7	807.7	907.8	927.8	1007.8	1067.8	1107.8	1207.8	1227.8	1331.8	1407.9	1447.9	1607.9	1807.9	2007.9	2047.9
494.3	510.4	614.6	714.8	734.9	815.0	875.1	915.1	1015.2	1035.2	1139.3	1215.3	1255.3	1415.4	1615.5	1815.5	1855.6
725.8	741.8	845.8	945.9	965.9	1045.9	1105.9	1145.9	1245.9	1265.9	1369.9	1445.9	1485.9	1645.9	1845.9	2045.9	2085.9
571.0	587.1	691.2	791.3	811.3	891.4	951.4	991.4	1091.5	1111.5	1215.5	1291.6	1331.6	1491.6	1691.7	1891.7	1931.7

CENTRE DISTANCE TABLES 8MGT

Speed ratio	DriveR	DriveN	Theoretical centre distance in mm												
	No. of groov.	No. of groov.	Belt length code designation in mm												
			640	720	800	896	960	1000	1040	1120	1200	1224	1280	1440	1600
1.41	34	48	155.0	195.2	235.3	283.4	315.5	335.5	355.6	395.6	435.6	447.6	475.7	555.7	635.7
1.42	45	64				228.7	260.9	281.0	301.0	341.1	381.2	393.3	421.3	501.4	581.5
1.43	28	40	183.4	223.5	263.6	311.6	343.7	363.7	383.7	423.7	463.7	475.8	503.8	583.8	663.8
1.43	56	80						225.9	246.1	286.4	326.6	338.6	366.7	447.0	527.1
1.44	25	36	197.5	237.6	277.6	325.7	357.7	377.7	397.8	437.8	477.8	489.8	517.8	597.8	677.9
1.45	22	32	211.6	251.7	291.7	339.8	371.8	391.8	411.8	451.8	491.8	503.8	531.8	611.9	691.9
1.47	34	50		190.9	231.1	279.3	311.3	331.4	351.4	391.5	431.5	443.5	471.6	551.6	631.7
1.47	38	56		170.5	210.8	259.0	291.1	311.2	331.2	371.3	411.4	423.4	451.4	531.5	611.6
1.49	75	112												342.8	423.4
1.50	30	45	168.9	209.1	249.3	297.4	329.4	349.5	369.5	409.6	449.6	461.6	489.6	569.7	649.7
1.50	32	48	158.7	199.0	239.1	287.3	319.3	339.4	359.4	399.5	439.5	451.5	479.6	559.6	639.7
1.50	40	60			198.4	246.7	278.8	298.9	319.0	359.1	399.2	411.2	439.3	519.4	599.5
1.50	50	75					227.8	248.0	268.1	308.4	348.5	360.6	388.7	468.9	549.1
1.50	60	90								257.2	297.5	309.6	337.8	418.3	498.5
1.52	25	38	193.3	233.4	273.5	321.6	353.6	373.6	393.7	433.7	473.7	485.7	513.7	593.8	673.8
1.55	22	34	207.4	247.5	287.6	335.7	367.7	387.7	407.7	447.7	487.8	499.8	527.8	607.8	687.8
1.56	36	56		174.1	214.5	262.8	294.9	315.0	335.0	375.1	415.2	427.2	455.3	535.4	615.5
1.56	32	50	154.3	194.6	234.9	283.1	315.2	335.2	355.3	395.3	435.4	447.4	475.4	555.5	635.6
1.56	48	75					231.4	251.6	271.8	312.1	352.3	364.4	392.5	472.7	552.9
1.58	38	60			202.1	250.4	282.6	302.7	322.8	362.9	403.0	415.1	443.1	523.2	603.3
1.60	25	40	189.0	229.2	269.3	317.4	349.5	369.5	389.5	429.6	469.6	481.6	509.6	589.7	669.7
1.60	30	48	162.4	202.7	242.9	291.1	323.2	343.2	363.3	403.3	443.4	455.4	483.5	563.5	643.6
1.60	40	64			189.5	238.0	270.3	290.4	310.5	350.7	390.8	402.8	430.9	511.1	591.2
1.60	50	80					216.6	236.9	257.2	297.5	337.8	349.9	378.1	458.4	538.6
1.61	28	45	172.6	212.9	253.1	301.2	333.3	353.3	373.4	413.4	453.5	465.5	493.5	573.6	653.6
1.61	56	90								264.4	304.9	317.0	345.3	425.8	506.1
1.64	22	36	203.2	243.3	283.4	331.5	363.6	383.6	403.6	443.6	483.7	495.7	523.7	603.7	683.8
1.65	34	56		177.8	218.2	266.5	298.7	318.8	338.8	379.0	419.1	431.1	459.1	539.3	619.4
1.67	30	50	157.9	198.4	238.6	286.9	319.0	339.0	359.1	399.2	439.3	451.3	479.3	559.4	639.5
1.67	36	60			205.7	254.2	286.4	306.5	326.6	366.7	406.9	418.9	447.0	527.1	607.2
1.67	45	75				204.4	236.9	257.2	277.4	317.7	358.0	370.0	398.2	478.5	558.7
1.67	48	80					220.2	240.5	260.8	301.2	341.6	353.7	381.8	462.2	542.5
1.68	38	64			193.2	241.7	274.0	294.1	314.3	354.5	394.6	406.7	434.7	514.9	595.1
1.71	28	48	166.0	206.4	246.7	294.9	327.0	347.1	367.1	407.2	447.3	459.3	487.3	567.4	647.5
1.73	22	38	199.0	239.1	279.3	327.4	359.4	379.5	399.5	439.5	479.6	491.6	519.6	599.7	679.7
1.75	32	56		181.4	221.9	270.3	302.5	322.6	342.6	382.8	422.9	434.9	463.0	543.1	623.3
1.75	64	112											281.3	362.8	443.8
1.75	80	140													351.7
1.76	34	60		168.7	209.4	257.9	290.1	310.2	330.3	370.5	410.7	422.7	450.8	531.0	611.1
1.78	36	64			196.8	245.4	277.7	297.9	318.0	358.2	398.4	410.5	438.5	518.8	598.9

CENTRE DISTANCE TABLES 8MGT

Theoretical centre distance in mm																
Belt length code designation in mm																
1760	1792	2000	2200	2240	2400	2520	2600	2800	2840	3048	3200	3280	3600	4000	4400	4480
715.8	731.8	835.8	935.8	955.8	1035.8	1095.9	1135.9	1235.9	1255.9	1359.9	1435.9	1475.9	1635.9	1835.9	2035.9	2075.9
661.6	677.6	781.6	881.7	901.7	981.7	1041.7	1081.7	1181.8	1201.8	1305.8	1381.8	1421.8	1581.8	1781.8	1981.9	2021.9
743.8	759.8	863.9	963.9	983.9	1063.9	1123.9	1163.9	1263.9	1283.9	1387.9	1463.9	1503.9	1663.9	1863.9	2063.9	2103.9
607.2	623.3	727.4	827.4	847.4	927.5	987.5	1027.5	1127.6	1147.6	1251.6	1327.6	1367.7	1527.7	1727.7	1927.8	1967.8
757.9	773.9	877.9	977.9	997.9	1077.9	1137.9	1177.9	1277.9	1297.9	1401.9	1477.9	1517.9	1677.9	1877.9	2078.0	2118.0
771.9	787.9	891.9	991.9	1011.9	1091.9	1151.9	1191.9	1291.9	1311.9	1415.9	1491.9	1531.9	1692.0	1892.0	2092.0	2132.0
711.7	727.7	831.8	931.8	951.8	1031.8	1091.8	1131.8	1231.8	1251.8	1355.8	1431.9	1471.9	1631.9	1831.9	2031.9	2071.9
691.6	707.6	811.7	911.7	931.7	1011.7	1071.8	1111.8	1211.8	1231.8	1335.8	1411.8	1451.8	1611.8	1811.9	2011.9	2051.9
503.8	519.9	624.2	724.5	744.5	824.7	884.7	924.8	1024.9	1044.9	1149.0	1225.1	1265.1	1425.2	1625.3	1825.4	1865.4
729.7	745.8	849.8	949.8	969.8	1049.8	1109.8	1149.8	1249.9	1269.9	1373.9	1449.9	1489.9	1649.9	1849.9	2049.9	2089.9
719.7	735.7	839.8	939.8	959.8	1039.8	1099.8	1139.8	1239.8	1259.8	1363.8	1439.9	1479.9	1639.9	1839.9	2039.9	2079.9
679.5	695.5	799.6	899.6	919.6	999.7	1059.7	1099.7	1199.7	1219.7	1323.8	1399.8	1439.8	1599.8	1799.8	1999.8	2039.8
629.2	645.2	749.3	849.4	869.4	949.5	1009.5	1049.5	1149.6	1169.6	1273.6	1349.6	1389.6	1549.7	1749.7	1949.7	1989.7
578.7	594.8	699.0	799.1	819.1	899.2	959.2	999.3	1099.3	1119.3	1223.4	1299.4	1339.5	1499.5	1699.6	1899.6	1939.6
753.8	769.8	873.8	973.9	993.9	1073.9	1133.9	1173.9	1273.9	1293.9	1397.9	1473.9	1513.9	1673.9	1873.9	2073.9	2113.9
767.8	783.9	887.9	987.9	1007.9	1087.9	1147.9	1187.9	1287.9	1307.9	1411.9	1487.9	1527.9	1687.9	1887.9	2087.9	2127.9
695.5	711.5	815.6	915.6	935.7	1015.7	1075.7	1115.7	1215.7	1235.7	1339.8	1415.8	1455.8	1615.8	1815.8	2015.8	2055.8
715.6	731.6	835.7	935.7	955.7	1035.7	1095.8	1135.8	1235.8	1255.8	1359.8	1435.8	1475.8	1635.8	1835.9	2035.9	2075.9
633.1	649.1	753.2	853.3	873.3	953.4	1013.4	1053.4	1153.5	1173.5	1277.5	1353.6	1393.6	1553.6	1753.7	1953.7	1993.7
683.4	699.4	803.5	903.6	923.6	1003.6	1063.6	1103.6	1203.7	1223.7	1327.7	1403.7	1443.7	1603.8	1803.8	2003.8	2043.8
749.8	765.8	869.8	969.8	989.8	1069.8	1129.8	1169.8	1269.9	1289.9	1393.9	1469.9	1509.9	1669.9	1869.9	2069.9	2109.9
723.6	739.6	843.7	943.7	963.7	1043.7	1103.8	1143.8	1243.8	1263.8	1367.8	1443.8	1483.8	1643.8	1843.9	2043.9	2083.9
671.3	687.3	791.4	891.5	911.5	991.5	1051.6	1091.6	1191.6	1211.6	1315.6	1391.7	1431.7	1591.7	1791.7	1991.8	2031.8
618.8	634.9	739.0	839.1	859.2	939.2	999.3	1039.3	1139.4	1159.4	1263.4	1339.5	1379.5	1539.5	1739.6	1939.6	1979.6
733.7	749.7	853.7	953.8	973.8	1053.8	1113.8	1153.8	1253.8	1273.8	1377.8	1453.8	1493.8	1653.9	1853.9	2053.9	2093.9
586.4	602.4	706.7	806.8	826.9	907.0	967.0	1007.1	1107.2	1127.2	1231.2	1307.3	1347.3	1507.4	1707.5	1907.5	1947.5
763.8	779.8	883.8	983.8	1003.8	1083.9	1143.9	1183.9	1283.9	1303.9	1407.9	1483.9	1523.9	1683.9	1883.9	2083.9	2123.9
699.4	715.5	819.5	919.6	939.6	1019.6	1079.6	1119.6	1219.7	1239.7	1343.7	1419.7	1459.7	1619.8	1819.8	2019.8	2059.8
719.5	735.6	839.6	939.7	959.7	1039.7	1099.7	1139.7	1239.7	1259.7	1363.8	1439.8	1479.8	1639.8	1839.8	2039.8	2079.8
687.3	703.3	807.4	907.5	927.5	1007.5	1067.6	1107.6	1207.6	1227.6	1331.6	1407.7	1447.7	1607.7	1807.7	2007.8	2047.8
638.9	654.9	759.0	859.2	879.2	959.2	1019.3	1059.3	1159.4	1179.4	1283.4	1359.5	1399.5	1559.5	1759.6	1959.6	1999.6
622.7	638.7	742.9	843.0	863.0	943.1	1003.2	1043.2	1143.3	1163.3	1267.3	1343.4	1383.4	1543.5	1743.5	1943.6	1983.6
675.2	691.2	795.3	895.4	915.4	995.4	1055.5	1095.5	1195.5	1215.5	1319.6	1395.6	1435.6	1595.7	1795.7	1995.7	2035.7
727.6	743.6	847.6	947.7	967.7	1047.7	1107.7	1147.7	1247.7	1267.7	1371.8	1447.8	1487.8	1647.8	1847.8	2047.8	2087.8
759.7	775.7	879.8	979.8	999.8	1079.8	1139.8	1179.8	1279.8	1299.8	1403.9	1479.9	1519.9	1679.9	1879.9	2079.9	2119.9
703.3	719.4	823.4	923.5	943.5	1023.5	1083.6	1123.6	1223.6	1243.6	1347.7	1423.7	1463.7	1623.7	1823.7	2023.8	2063.8
524.4	540.5	645.1	745.5	765.6	845.8	905.9	946.0	1046.2	1066.2	1170.4	1246.5	1286.5	1446.7	1646.9	1847.0	1887.0
433.2	449.5	554.7	655.5	675.7	756.1	816.4	856.6	956.9	977.0	1081.3	1157.5	1197.6	1357.9	1558.1	1758.3	1798.4
691.2	707.2	811.3	911.4	931.4	1011.5	1071.5	1111.5	1211.5	1231.6	1335.6	1411.6	1451.6	1611.7	1811.7	2011.7	2051.7
679.1	695.1	799.2	899.3	919.3	999.4	1059.4	1099.4	1199.5	1219.5	1323.5	1399.5	1439.6	1599.6	1799.6	1999.7	2039.7

CENTRE DISTANCE TABLES 8MGT

Speed ratio	DriveR	DriveN	Theoretical centre distance in mm												
	No. of groov.	No. of groov.	Belt length code designation in mm												
			640	720	800	896	960	1000	1040	1120	1200	1224	1280	1440	1600
1.78	45	80					225.6	246.0	266.3	306.8	347.1	359.2	387.4	467.9	548.2
1.79	28	50	161.6	202.1	242.4	290.6	322.8	342.9	362.9	403.0	443.1	455.1	483.2	563.3	643.4
1.80	25	45	178.2	218.5	258.7	306.9	339.0	359.1	379.1	419.2	459.3	471.3	499.4	579.4	659.5
1.80	50	90							234.4	275.3	315.9	328.0	356.4	437.0	517.5
1.82	22	40	194.6	234.9	275.0	323.2	355.3	375.3	395.3	435.4	475.4	487.5	515.5	595.6	675.6
1.87	30	56		185.0	225.6	274.0	306.2	326.3	346.4	386.6	426.7	438.8	466.8	547.0	627.1
1.87	60	112											288.4	370.1	451.1
1.87	75	140													360.5
1.88	32	60		172.3	213.0	261.6	293.8	314.0	334.1	374.3	414.5	426.5	454.6	534.8	615.0
1.88	40	75				213.3	246.0	266.3	286.5	327.0	367.3	379.4	407.6	488.0	568.3
1.88	48	90							238.0	278.9	319.5	331.7	360.0	440.8	521.3
1.88	34	64			200.3	249.1	281.4	301.6	321.7	362.0	402.2	414.2	442.3	522.6	602.8
1.92	25	48	171.5	212.0	252.3	300.6	332.7	352.8	372.8	413.0	453.1	465.1	493.1	573.3	653.3
1.97	38	75				216.9	249.5	269.9	290.2	330.6	371.0	383.1	411.3	491.7	572.1
2.00	25	50	167.0	207.6	248.0	296.3	328.5	348.5	368.6	408.8	448.9	460.9	489.0	569.1	649.2
2.00	28	56		188.6	229.2	277.7	309.9	330.1	350.2	390.4	430.5	442.6	470.6	550.8	631.0
2.00	30	60		175.8	216.6	265.2	297.5	317.7	337.8	378.1	418.3	430.3	458.4	538.6	618.8
2.00	32	64			203.9	252.7	285.1	305.3	325.4	365.7	406.0	418.0	446.1	526.4	606.6
2.00	40	80				201.5	234.4	254.9	275.3	315.9	356.4	368.5	396.7	477.3	557.7
2.00	45	90						222.6	243.2	284.2	324.9	337.1	365.5	446.3	526.9
2.00	56	112										266.4	295.4	377.2	458.4
2.05	22	45	183.7	224.1	264.4	312.6	344.8	364.8	384.9	425.0	465.1	477.1	505.2	585.3	665.4
2.08	36	75				220.4	253.1	273.5	293.8	334.3	374.7	386.8	415.0	495.5	575.9
2.10	80	168													
2.11	38	80				205.0	238.0	258.4	278.9	319.5	360.0	372.2	400.4	481.0	561.5
2.13	30	64			207.5	256.3	288.7	309.0	329.1	369.5	409.7	421.8	449.9	530.2	610.5
2.14	28	60		179.4	220.2	268.9	301.2	321.4	341.6	381.8	422.0	434.1	462.2	542.5	622.7
2.18	22	48	176.9	217.5	257.9	306.2	338.4	358.5	378.6	418.7	458.8	470.8	498.9	579.1	659.2
2.19	64	140													379.6
2.21	34	75				223.9	256.7	277.1	297.4	338.0	378.4	390.5	418.7	499.3	579.6
2.22	36	80				208.4	241.5	262.0	282.4	323.1	363.7	375.8	404.1	484.8	565.2
2.24	25	56	152.9	194.0	234.7	283.2	315.5	335.7	355.8	396.0	436.2	448.3	476.4	556.6	636.8
2.24	50	112									264.1	276.7	305.8	387.9	469.3
2.24	75	168													
2.25	40	90						231.2	251.9	293.1	333.9	346.1	374.6	455.5	536.2
2.27	22	50	172.3	213.0	253.5	301.9	334.1	354.2	374.3	414.5	454.6	466.6	494.7	574.9	655.0
2.29	28	64		169.8	211.0	259.9	292.4	312.6	332.8	373.2	413.5	425.5	453.7	534.0	614.3
2.33	48	112									267.5	280.1	309.2	391.5	473.0
2.33	60	140													386.5
2.34	32	75				227.4	260.2	280.6	301.0	341.6	382.1	394.2	422.4	503.0	583.4

Theoretical centre distance in mm																
Belt length code designation in mm																
1760	1792	2000	2200	2240	2400	2520	2600	2800	2840	3048	3200	3280	3600	4000	4400	4480
628.4	644.5	748.7	848.8	868.9	949.0	1009.0	1049.1	1149.1	1169.2	1273.2	1349.3	1389.3	1549.4	1749.4	1949.5	1989.5
723.5	739.5	843.5	943.6	963.6	1043.6	1103.6	1143.7	1243.7	1263.7	1367.7	1443.7	1483.7	1643.8	1843.8	2043.8	2083.8
739.6	755.6	859.6	959.7	979.7	1059.7	1119.7	1159.7	1259.7	1279.7	1383.8	1459.8	1499.8	1659.8	1859.8	2059.8	2099.8
597.8	613.9	718.2	818.4	838.5	918.6	978.7	1018.7	1118.8	1138.9	1243.0	1319.0	1359.0	1519.1	1719.2	1919.3	1959.3
755.7	771.7	875.7	975.7	995.7	1075.8	1135.8	1175.8	1275.8	1295.8	1399.8	1475.8	1515.8	1675.8	1875.9	2075.9	2115.9
707.2	723.2	827.3	927.4	947.4	1027.5	1087.5	1127.5	1227.6	1247.6	1351.6	1427.6	1467.6	1627.7	1827.7	2027.7	2067.7
531.9	548.0	652.6	753.1	773.2	853.4	913.6	953.7	1053.9	1074.0	1178.1	1254.3	1294.3	1454.5	1654.7	1854.8	1894.8
442.2	458.5	563.9	664.8	685.0	765.5	825.8	866.0	966.5	986.5	1090.9	1167.1	1207.2	1367.5	1567.8	1768.1	1808.1
695.1	711.1	815.2	915.3	935.3	1015.4	1075.4	1115.4	1215.5	1235.5	1339.5	1415.6	1455.6	1615.6	1815.6	2015.7	2055.7
648.5	664.5	768.7	868.9	888.9	969.0	1029.0	1069.1	1169.2	1189.2	1293.2	1369.3	1409.3	1569.4	1769.4	1969.5	2009.5
601.6	617.7	722.0	822.3	842.3	922.4	982.5	1022.6	1122.7	1142.7	1246.9	1322.9	1363.0	1523.1	1723.2	1923.3	1963.3
682.9	699.0	803.1	903.2	923.2	1003.3	1063.3	1103.3	1203.4	1223.4	1327.5	1403.5	1443.5	1603.5	1803.6	2003.6	2043.6
733.4	749.4	853.5	953.6	973.6	1053.6	1113.6	1153.6	1253.7	1273.7	1377.7	1453.7	1493.7	1653.7	1853.8	2053.8	2093.8
652.3	668.3	772.6	872.7	892.8	972.9	1032.9	1073.0	1173.1	1193.1	1297.1	1373.2	1413.2	1573.3	1773.4	1973.4	2013.4
729.3	745.3	849.4	949.5	969.5	1049.5	1109.5	1149.6	1249.6	1269.6	1373.6	1449.7	1489.7	1649.7	1849.7	2049.8	2089.8
711.1	727.1	831.2	931.3	951.3	1031.4	1091.4	1131.4	1231.5	1251.5	1355.5	1431.6	1471.6	1631.6	1831.7	2031.7	2071.7
699.0	715.0	819.1	919.2	939.2	1019.3	1079.3	1119.3	1219.4	1239.4	1343.5	1419.5	1459.5	1619.5	1819.6	2019.6	2059.6
686.8	702.8	807.0	907.1	927.1	1007.2	1067.2	1107.3	1207.3	1227.3	1331.4	1407.4	1447.4	1607.5	1807.5	2007.6	2047.6
638.0	654.0	758.3	858.5	878.5	958.6	1018.7	1058.8	1158.9	1178.9	1283.0	1359.0	1399.1	1559.2	1759.3	1959.3	1999.4
607.3	623.4	727.7	828.0	848.1	928.2	988.3	1028.4	1128.5	1148.6	1252.7	1328.8	1368.8	1528.9	1729.1	1929.1	1969.2
539.3	555.4	660.1	760.7	780.7	861.0	921.2	961.4	1061.6	1081.6	1185.9	1262.0	1302.0	1462.3	1662.5	1862.6	1902.7
745.4	761.4	865.5	965.6	985.6	1065.6	1125.6	1165.6	1265.7	1285.7	1389.7	1465.7	1505.7	1665.7	1865.8	2065.8	2105.8
656.1	672.2	776.4	876.6	896.6	976.7	1036.8	1076.9	1177.0	1197.0	1301.1	1377.1	1417.1	1577.2	1777.3	1977.4	2017.4
366.7	383.5	491.2	593.4	613.7	694.9	755.7	796.1	897.0	917.1	1021.9	1098.3	1138.5	1299.2	1499.8	1700.3	1740.4
641.8	657.8	762.1	862.3	882.4	962.5	1022.6	1062.7	1162.8	1182.8	1286.9	1363.0	1403.0	1563.1	1763.2	1963.3	2003.3
690.6	706.7	810.8	911.0	931.0	1011.1	1071.1	1111.2	1211.2	1231.2	1335.3	1411.3	1451.4	1611.4	1811.5	2011.5	2051.5
702.8	718.8	823.0	923.1	943.1	1023.2	1083.2	1123.3	1223.3	1243.3	1347.4	1423.4	1463.4	1623.5	1823.5	2023.6	2063.6
739.3	755.3	859.4	959.4	979.4	1059.5	1119.5	1159.5	1259.6	1279.6	1383.6	1459.6	1499.6	1659.7	1859.7	2059.7	2099.7
461.8	478.2	584.0	685.2	705.4	786.0	846.5	886.7	987.3	1007.3	1111.8	1188.1	1228.2	1388.6	1589.1	1789.4	1829.4
659.9	676.0	780.3	880.5	900.5	980.6	1040.7	1080.7	1180.8	1200.9	1305.0	1381.0	1421.0	1581.1	1781.2	1981.3	2021.3
645.6	661.6	766.0	866.2	886.2	966.4	1026.5	1066.5	1166.7	1186.7	1290.8	1366.9	1406.9	1567.0	1767.1	1967.2	2007.2
716.9	732.9	837.1	937.2	957.2	1037.2	1097.3	1137.3	1237.4	1257.4	1361.4	1437.5	1477.5	1637.5	1837.6	2037.6	2077.6
550.3	566.5	671.4	772.0	792.1	872.4	932.7	972.8	1073.1	1093.1	1197.4	1273.6	1313.6	1473.9	1674.1	1874.3	1914.4
375.2	392.0	499.9	602.3	622.7	704.0	764.8	805.3	906.3	926.4	1031.2	1107.7	1147.9	1308.6	1509.4	1709.9	1750.0
616.7	632.8	737.2	837.6	857.6	937.8	998.0	1038.0	1138.2	1158.2	1262.4	1338.5	1378.5	1538.7	1738.8	1939.0	1979.0
735.1	751.2	855.3	955.3	975.3	1055.4	1115.4	1155.4	1255.5	1275.5	1379.5	1455.6	1495.6	1655.6	1855.7	2055.7	2095.7
694.5	710.5	814.7	914.9	934.9	1015.0	1075.0	1115.1	1215.1	1235.1	1339.2	1415.3	1455.3	1615.3	1815.4	2015.5	2055.5
554.0	570.2	675.1	775.7	795.8	876.2	936.5	976.6	1076.9	1097.0	1201.2	1277.4	1317.5	1477.8	1678.0	1878.2	1918.3
468.9	485.3	591.2	692.5	712.7	793.5	853.9	894.2	994.8	1014.9	1119.4	1195.7	1235.8	1396.3	1596.7	1797.1	1837.2
663.7	679.8	784.1	884.3	904.3	984.5	1044.6	1084.6	1184.7	1204.8	1308.9	1384.9	1424.9	1585.1	1785.2	1985.2	2025.3

CENTRE DISTANCE TABLES 8MGT

Speed ratio	DriveR	DriveN	Theoretical centre distance in mm												
	No. of groov.	No. of groov.	Belt length code designation in mm												
			640	720	800	896	960	1000	1040	1120	1200	1224	1280	1440	1600
0.00	34	0	248.2	288.7	329.1	377.5	409.7	429.8	449.9	490.1	530.2	542.3	570.4	650.6	730.7
2.37	38	90					213.7	234.6	255.4	296.6	337.5	349.7	378.2	459.2	539.9
2.40	25	60		184.6	225.6	274.4	306.8	327.0	347.1	387.4	427.7	439.7	467.9	548.2	628.4
2.40	80	192													
2.49	45	112									272.5	285.1	314.4	396.8	478.4
2.50	30	75				230.9	263.8	284.2	304.6	345.2	385.7	397.9	426.1	506.8	587.2
2.50	32	80				215.3	248.4	269.0	289.5	330.3	371.0	383.1	411.5	492.2	572.7
2.50	36	90					217.0	238.0	258.8	300.1	341.0	353.3	381.8	462.9	543.6
2.50	56	140												309.3	393.4
2.55	22	56	158.0	199.3	240.1	288.7	321.1	341.3	361.4	401.7	441.9	453.9	482.1	562.3	642.5
2.56	25	64		174.9	216.3	265.3	297.9	318.1	338.3	378.7	419.1	431.1	459.3	539.7	620.0
2.56	75	192													
2.63	64	168													
2.65	34	90					220.4	241.4	262.2	303.6	344.6	356.9	385.4	466.5	547.3
2.67	30	80				218.7	251.9	272.5	293.1	333.9	374.6	386.7	415.1	495.9	576.5
2.68	28	75			184.2	234.3	267.3	287.8	308.2	348.9	389.4	401.5	429.8	510.5	591.0
2.73	22	60		189.8	230.9	279.8	312.2	332.5	352.7	393.0	433.3	445.4	473.5	553.9	634.2
2.80	40	112									280.9	293.6	322.9	405.6	487.4
2.80	50	140												319.2	403.6
2.80	60	168													
2.81	32	90					223.7	244.8	265.7	307.1	348.1	360.4	389.0	470.2	551.0
2.86	28	80				222.1	255.4	276.0	296.6	337.5	378.2	390.4	418.8	499.6	580.2
2.91	22	64		180.0	221.5	270.7	303.3	323.6	343.8	384.3	424.6	436.7	464.9	545.4	625.7
2.92	48	140												322.5	407.0
2.95	38	112								241.4	284.2	296.9	326.3	409.1	490.9
3.00	25	75			189.2	239.5	272.5	293.1	313.5	354.3	394.9	407.0	435.3	516.1	596.6
3.00	30	90					227.0	248.1	269.1	310.6	351.7	364.0	392.5	473.8	554.7
3.00	56	168													
3.00	64	192													
31.19	36	1123													
3.11	45	140												327.4	412.1
3.20	25	80				227.1	260.5	281.2	301.8	342.8	383.6	395.8	424.2	505.1	585.8
3.20	60	192													
3.21	28	90					230.3	251.5	272.5	314.0	355.2	367.5	396.1	477.5	558.4
3.29	34	112								247.8	290.9	303.6	333.1	416.1	498.1
3.36	50	168													329.1
3.41	22	75			194.1	244.6	277.8	298.3	318.8	359.7	400.3	412.5	440.8	521.6	602.2
3.43	56	192													
3.50	32	112								251.0	294.2	306.9	336.5	419.6	501.6
3.50	40	140												335.5	420.6

Theoretical centre distance in mm																
Belt length code designation in mm																
1760	1792	2000	2200	2240	2400	2520	2600	2800	2840	3048	3200	3280	3600	4000	4400	4480
810.8	826.9	931.0	1031.1	1051.1	1131.2	1191.2	1231.2	1331.3	1351.3	1455.4	1531.4	1571.4	1731.5	1931.5	2131.6	2171.6
620.5	636.6	741.0	841.4	861.5	941.7	1001.8	1041.9	1142.1	1162.1	1266.3	1342.4	1382.4	1542.6	1742.7	1942.9	1982.9
708.6	724.6	828.8	928.9	949.0	1029.0	1089.1	1129.1	1229.2	1249.2	1353.3	1429.3	1469.3	1629.4	1829.5	2029.5	2069.5
		432.3	536.9	557.7	640.0	701.5	742.3	843.9	864.2	969.5	1046.3	1086.6	1247.8	1449.0	1649.8	1690.0
559.5	575.7	680.6	781.3	801.5	881.9	942.1	982.3	1082.6	1102.7	1207.0	1283.2	1323.2	1483.5	1683.8	1884.1	1924.1
667.5	683.6	787.9	888.2	908.2	988.3	1048.4	1088.5	1188.6	1208.6	1312.7	1388.8	1428.9	1589.0	1789.1	1989.2	2029.2
653.1	669.2	773.6	873.9	893.9	974.1	1034.2	1074.3	1174.4	1194.4	1298.6	1374.6	1414.7	1574.8	1774.9	1975.1	2015.1
624.2	640.3	744.8	845.2	865.3	945.5	1005.6	1045.7	1145.9	1166.0	1270.1	1346.2	1386.3	1546.5	1746.6	1946.8	1986.8
475.9	492.3	598.4	699.8	720.0	800.8	861.4	901.6	1002.3	1022.4	1126.9	1203.2	1243.4	1403.9	1604.4	1804.8	1844.9
722.7	738.7	842.9	943.0	963.0	1043.1	1103.2	1143.2	1243.2	1263.3	1367.3	1443.4	1483.4	1643.4	1843.5	2043.5	2083.6
700.2	716.3	820.5	920.7	940.7	1020.8	1080.9	1120.9	1221.0	1241.0	1345.1	1421.1	1461.2	1621.2	1821.3	2021.4	2061.4
		440.6	545.5	566.3	648.8	710.3	751.2	853.0	873.3	978.6	1055.5	1095.9	1257.2	1458.4	1659.3	1699.5
393.5	410.4	519.0	621.8	642.3	723.9	784.8	825.4	926.5	946.7	1051.7	1128.2	1168.5	1329.4	1530.3	1730.9	1771.0
627.9	644.0	748.6	849.0	869.1	949.3	1009.5	1049.6	1149.8	1169.8	1274.0	1350.1	1390.2	1550.4	1750.5	1950.7	1990.7
656.9	673.0	777.4	877.7	897.7	977.9	1038.0	1078.1	1178.3	1198.3	1302.4	1378.5	1418.6	1578.7	1778.9	1979.0	2019.0
671.3	687.4	791.7	892.0	912.0	992.2	1052.3	1092.4	1192.5	1212.5	1316.6	1392.7	1432.7	1592.9	1793.0	1993.1	2033.1
714.4	730.4	834.6	934.7	954.8	1034.9	1094.9	1135.0	1235.1	1255.1	1359.1	1435.2	1475.2	1635.3	1835.4	2035.4	2075.4
568.6	584.8	689.9	790.7	810.8	891.3	951.6	991.8	1092.2	1112.2	1216.5	1292.7	1332.8	1493.2	1693.5	1893.8	1933.8
486.4	502.9	609.2	710.7	731.0	811.9	872.5	912.8	1013.5	1033.6	1138.2	1214.6	1254.8	1415.4	1615.9	1816.4	1856.5
400.1	417.1	525.9	628.9	649.4	731.0	792.0	832.6	933.9	954.1	1059.1	1135.7	1176.0	1336.9	1537.8	1738.6	1778.7
631.7	647.8	752.4	852.8	872.9	953.1	1013.3	1053.4	1153.6	1173.7	1277.9	1354.0	1394.0	1554.2	1754.4	1954.6	1994.6
660.7	676.8	781.2	881.5	901.6	981.8	1041.9	1082.0	1182.1	1202.2	1306.3	1382.4	1422.5	1582.6	1782.8	1982.9	2022.9
706.0	722.0	826.3	926.5	946.5	1026.6	1086.7	1126.7	1226.8	1246.9	1350.9	1427.0	1467.0	1627.1	1827.2	2027.3	2067.3
489.9	506.4	612.8	714.4	734.6	815.6	876.2	916.5	1017.2	1037.4	1142.0	1218.4	1258.5	1419.2	1619.8	1820.2	1860.3
572.2	588.4	693.6	794.4	814.5	895.0	955.3	995.5	1095.9	1116.0	1220.4	1296.6	1336.7	1497.0	1697.4	1897.7	1937.7
677.0	693.1	797.5	897.7	917.8	998.0	1058.1	1098.2	1198.3	1218.3	1322.5	1398.6	1438.6	1598.7	1798.9	1999.0	2039.0
635.4	651.5	756.1	856.6	876.7	956.9	1017.1	1057.2	1157.5	1177.5	1281.7	1357.9	1397.9	1558.1	1758.3	1958.5	1998.5
406.7	423.8	532.8	635.9	656.4	738.2	799.2	839.9	941.2	961.4	1066.5	1143.1	1183.4	1344.4	1545.4	1746.2	1786.3
		458.7	564.3	585.2	668.0	729.7	770.7	872.7	893.1	998.7	1075.6	1116.1	1277.6	1479.0	1680.1	1720.3
495.2	511.6	618.1	719.8	740.1	821.1	881.7	922.1	1022.8	1043.0	1147.6	1224.0	1264.2	1424.9	1625.5	1826.0	1866.1
666.3	682.4	786.9	887.2	907.3	987.5	1047.7	1087.7	1187.9	1208.0	1312.1	1388.2	1428.3	1588.5	1788.6	1988.8	2028.8
		465.3	571.1	592.0	675.0	736.7	777.8	879.9	900.3	1005.9	1082.9	1123.4	1285.0	1486.5	1687.6	1727.8
639.1	655.2	759.9	860.4	880.5	960.8	1020.9	1061.1	1161.3	1181.4	1285.6	1361.7	1401.8	1562.0	1762.2	1962.4	2002.4
579.5	595.7	701.0	801.8	822.0	902.5	962.9	1003.1	1103.5	1123.6	1228.0	1304.2	1344.3	1504.7	1705.1	1905.4	1945.5
416.6	433.7	543.1	646.5	667.0	748.9	810.0	850.7	952.1	972.4	1077.5	1154.2	1194.5	1355.7	1556.7	1757.6	1797.7
682.7	698.7	803.2	903.5	923.5	1003.7	1063.9	1103.9	1204.1	1224.1	1328.3	1404.4	1444.4	1604.6	1804.7	2004.9	2044.9
		471.9	577.9	598.8	681.9	743.7	784.8	887.0	907.4	1013.2	1090.2	1130.7	1292.4	1494.0	1695.1	1735.4
583.1	599.3	704.6	805.6	825.7	906.3	966.6	1006.8	1107.3	1127.4	1231.8	1308.0	1348.1	1508.6	1709.0	1909.3	1949.3
503.8	520.3	627.0	728.8	749.2	830.2	890.9	931.3	1032.1	1052.3	1157.0	1233.4	1273.6	1434.3	1635.0	1835.6	1875.7

CENTRE DISTANCE TABLES 8MGT

Speed ratio	DriveR	DriveN	Theoretical centre distance in mm												
	No. of groov.	No. of groov.	Belt length code designation in mm												
			640	720	800	896	960	1000	1040	1120	1200	1224	1280	1440	1600
3.50	48	168													332.2
3.60	25	90				200.7	235.3	256.5	277.6	319.2	360.5	372.8	401.4	482.9	563.9
3.64	22	80			180.7	232.2	265.7	286.4	307.1	348.1	389.0	401.2	429.6	510.7	591.4
3.68	38	140												338.8	423.9
3.73	30	112								254.2	297.5	310.3	339.8	423.0	505.2
3.73	45	168													336.9
3.84	50	192													
3.89	36	140												342.0	427.3
4.00	28	112								257.4	300.8	313.6	343.2	426.5	508.7
4.00	48	192													
4.09	22	90				205.5	240.2	261.5	282.6	324.4	365.7	378.0	406.7	488.3	569.4
4.12	34	140												345.3	430.7
4.20	40	168													344.7
4.27	45	192													
4.38	32	140												348.5	434.0
4.42	38	168													347.8
4.48	25	112								262.2	305.7	318.5	348.2	431.7	514.0
4.67	30	140												351.7	437.4
4.67	36	168													350.9
4.80	40	192													
4.94	34	168													354.0
5.00	28	140											264.5	354.9	440.7
5.05	38	192													
5.09	22	112							221.7	267.0	310.6	323.5	353.2	436.9	519.3
5.25	32	168													357.1
5.33	36	192													
5.60	25	140											269.1	359.8	445.7
5.60	30	168													360.2
5.65	34	192													
6.00	28	168													363.3
6.00	32	192													
6.36	22	140											273.6	364.6	450.7
6.40	30	192													
6.72	25	168													368.0
6.86	28	192													
7.64	22	168													372.6
7.68	25	192													
8.73	22	192													

Theoretical centre distance in mm																
Belt length code designation in mm																
1760	1792	2000	2200	2240	2400	2520	2600	2800	2840	3048	3200	3280	3600	4000	4400	4480
419.9	437.0	546.5	650.0	670.5	752.4	813.6	854.3	955.8	976.0	1081.2	1157.9	1198.2	1359.4	1560.5	1761.4	1801.5
644.7	660.8	765.5	866.0	886.1	966.5	1026.7	1066.8	1167.1	1187.1	1291.3	1367.5	1407.6	1567.8	1768.1	1968.3	2008.3
671.9	688.0	792.6	892.9	913.0	993.3	1053.4	1093.5	1193.7	1213.8	1317.9	1394.0	1434.1	1594.3	1794.5	1994.6	2034.7
507.3	523.8	630.6	732.5	752.8	833.9	894.6	935.0	1035.8	1056.0	1160.7	1237.2	1277.4	1438.1	1638.9	1839.4	1879.5
586.7	602.9	708.3	809.3	829.4	910.0	970.4	1010.6	1111.1	1131.2	1235.6	1311.8	1352.0	1512.4	1712.8	1913.2	1953.2
424.8	441.9	551.6	655.2	675.8	757.8	819.0	859.7	961.2	981.5	1086.7	1163.4	1203.8	1365.0	1566.2	1767.1	1807.2
	366.4	481.6	588.0	609.0	692.3	754.2	795.4	897.7	918.1	1024.0	1101.1	1141.7	1303.4	1505.1	1706.4	1746.6
510.7	527.3	634.1	736.1	756.4	837.5	898.2	938.6	1039.6	1059.7	1164.5	1240.9	1281.2	1441.9	1642.7	1843.2	1883.3
590.3	606.5	712.0	813.0	833.1	913.7	974.1	1014.4	1114.9	1135.0	1239.4	1315.7	1355.8	1516.2	1716.7	1917.0	1957.1
	369.5	484.9	591.3	612.3	695.7	757.7	798.9	901.3	921.7	1027.6	1104.8	1145.3	1307.1	1508.8	1710.2	1750.4
650.2	666.4	771.1	871.7	891.8	972.1	1032.4	1072.5	1172.8	1192.9	1297.1	1373.3	1413.3	1573.6	1773.9	1974.1	2014.1
514.2	530.7	637.7	739.7	760.0	841.1	901.9	942.3	1043.3	1063.4	1168.2	1244.7	1284.9	1445.7	1646.5	1847.1	1887.2
432.9	450.2	560.1	663.9	684.5	766.6	827.9	868.7	970.3	990.6	1095.9	1172.7	1213.0	1374.3	1575.6	1776.5	1816.7
355.5	374.1	489.8	596.4	617.4	700.9	762.9	804.1	906.6	927.0	1033.0	1110.2	1150.7	1312.6	1514.4	1715.8	1756.0
517.6	534.2	641.2	743.2	763.6	844.8	905.5	946.0	1047.0	1067.1	1171.9	1248.4	1288.7	1449.5	1650.3	1850.9	1891.0
436.2	453.4	563.5	667.4	688.0	770.1	831.5	872.2	973.9	994.2	1099.5	1176.3	1216.7	1378.0	1579.3	1780.3	1820.5
595.7	611.9	717.4	818.5	838.7	919.3	979.7	1020.0	1120.5	1140.6	1245.1	1321.4	1361.5	1522.0	1722.4	1922.8	1962.9
521.1	537.7	644.7	746.8	767.2	848.4	909.2	949.7	1050.7	1070.8	1175.6	1252.2	1292.4	1453.2	1654.1	1854.7	1894.8
439.5	456.7	566.9	670.8	691.5	773.7	835.0	875.8	977.5	997.8	1103.2	1180.0	1220.4	1381.8	1583.1	1784.1	1824.3
363.1	381.8	497.9	604.8	625.8	709.4	771.6	812.8	915.5	935.9	1042.0	1119.2	1159.8	1321.8	1523.7	1725.1	1765.4
442.7	460.0	570.3	674.3	694.9	777.2	838.6	879.4	981.1	1001.4	1106.8	1183.7	1224.1	1385.5	1586.8	1787.9	1828.0
524.5	541.1	648.3	750.4	770.8	852.0	912.8	953.3	1054.3	1074.5	1179.4	1255.9	1296.1	1457.0	1657.9	1858.5	1898.6
366.1	384.9	501.1	608.1	629.2	712.9	775.1	816.3	919.0	939.5	1045.6	1122.8	1163.4	1325.5	1527.4	1728.9	1769.1
601.0	617.3	722.9	824.0	844.2	924.9	985.3	1025.6	1126.2	1146.3	1250.7	1327.0	1367.2	1527.7	1728.2	1928.6	1968.7
445.9	463.2	573.7	677.8	698.4	780.7	842.1	883.0	984.7	1005.0	1110.5	1187.4	1227.8	1389.2	1590.6	1791.6	1831.8
369.1	387.9	504.4	611.4	632.6	716.3	778.5	819.8	922.5	943.0	1049.1	1126.4	1167.1	1329.1	1531.1	1732.6	1772.9
529.6	546.3	653.5	755.8	776.1	857.5	918.3	958.8	1059.9	1080.1	1184.9	1261.5	1301.8	1462.7	1663.6	1864.2	1904.4
449.2	466.5	577.0	681.2	701.9	784.2	845.7	886.5	988.3	1008.7	1114.1	1191.0	1231.4	1392.9	1594.3	1795.4	1835.6
372.2	391.0	507.6	614.8	635.9	719.7	782.0	823.3	926.1	946.5	1052.7	1130.0	1170.7	1332.8	1534.8	1736.3	1776.6
452.4	469.8	580.4	684.7	705.4	787.7	849.2	890.1	991.9	1012.3	1117.8	1194.7	1235.1	1396.6	1598.0	1799.2	1839.4
375.2	394.1	510.8	618.1	639.3	723.1	785.4	826.8	929.6	950.1	1056.3	1133.6	1174.3	1336.4	1538.5	1740.1	1780.3
534.8	551.4	658.8	761.1	781.5	862.9	923.8	964.3	1065.4	1085.6	1190.5	1267.1	1307.4	1468.3	1669.2	1870.0	1910.1
378.2	397.1	514.0	621.4	642.6	726.5	788.9	830.2	933.1	953.6	1059.9	1137.2	1177.9	1340.1	1542.2	1743.8	1784.1
457.2	474.6	585.5	689.8	710.5	793.0	854.5	895.4	997.3	1017.7	1123.2	1200.2	1240.6	1402.2	1603.7	1804.8	1845.0
381.2	400.2	517.2	624.8	645.9	729.9	792.3	833.7	936.6	957.1	1063.4	1140.8	1181.5	1343.7	1545.9	1747.5	1787.8
462.1	479.5	590.5	695.0	715.7	798.3	859.8	900.7	1002.7	1023.1	1128.7	1205.6	1246.1	1407.7	1609.3	1810.4	1850.7
385.8	404.7	522.1	629.7	651.0	735.0	797.5	838.9	941.9	962.4	1068.8	1146.2	1186.9	1349.2	1551.4	1753.1	1793.4
390.3	409.3	526.9	634.7	656.0	740.1	802.6	844.1	947.2	967.7	1074.1	1151.6	1192.3	1354.7	1556.9	1758.7	1799.0

CENTRE DISTANCE TABLES 14MGT

Speed ratio	DriveR	DriveN	Theoretical centre distance in mm											
	No. of groov.	No. of groov.	Belt length code designation in mm											
			994	1120	1190	1260	1400	1568	1610	1750	1890	1960	2100	2240
1.00	28	28.0	301.0	364.0	399.0	434.0	504.0	588.0	609.0	679.0	749.0	784.0	854.0	924.0
1.00	30	30.0	287.0	350.0	385.0	420.0	490.0	574.0	595.0	665.0	735.0	770.0	840.0	910.0
1.00	32	32.0	273.0	336.0	371.0	406.0	476.0	560.0	581.0	651.0	721.0	756.0	826.0	896.0
1.00	34	34.0	259.0	322.0	357.0	392.0	462.0	546.0	567.0	637.0	707.0	742.0	812.0	882.0
1.00	36	36.0	245.0	308.0	343.0	378.0	448.0	532.0	553.0	623.0	693.0	728.0	798.0	868.0
1.00	38	38.0	231.0	294.0	329.0	364.0	434.0	518.0	539.0	609.0	679.0	714.0	784.0	854.0
1.00	40	40.0	217.0	280.0	315.0	350.0	420.0	504.0	525.0	595.0	665.0	700.0	770.0	840.0
1.00	44	44.0		252.0	287.0	322.0	392.0	476.0	497.0	567.0	637.0	672.0	742.0	812.0
1.00	48	48.0			259.0	294.0	364.0	448.0	469.0	539.0	609.0	644.0	714.0	784.0
1.00	50	50.0				280.0	350.0	434.0	455.0	525.0	595.0	630.0	700.0	770.0
1.00	56	56.0					308.0	392.0	413.0	483.0	553.0	588.0	658.0	728.0
1.00	60	60.0						364.0	385.0	455.0	525.0	560.0	630.0	700.0
1.00	64	64.0						336.0	357.0	427.0	497.0	532.0	602.0	672.0
1.00	72	72.0								371.0	441.0	476.0	546.0	616.0
1.00	80	80.0									385.0	420.0	490.0	560.0
1.04	48	50.0			252.0	287.0	357.0	441.0	462.0	532.0	602.0	637.0	707.0	777.0
1.05	38	40.0	224.0	287.0	322.0	357.0	427.0	511.0	532.0	602.0	672.0	707.0	777.0	847.0
1.06	36	38.0	238.0	301.0	336.0	371.0	441.0	525.0	546.0	616.0	686.0	721.0	791.0	861.0
1.06	34	36.0	252.0	315.0	350.0	385.0	455.0	539.0	560.0	630.0	700.0	735.0	805.0	875.0
1.06	32	34.0	266.0	329.0	364.0	399.0	469.0	553.0	574.0	644.0	714.0	749.0	819.0	889.0
1.07	30	32.0	280.0	343.0	378.0	413.0	483.0	567.0	588.0	658.0	728.0	763.0	833.0	903.0
1.07	60	64.0						349.9	370.9	440.9	510.9	545.9	615.9	685.9
1.07	28	30.0	294.0	357.0	392.0	427.0	497.0	581.0	602.0	672.0	742.0	777.0	847.0	917.0
1.07	56	60.0					293.9	377.9	398.9	468.9	538.9	573.9	643.9	713.9
1.09	44	48.0		237.8	272.9	307.9	377.9	461.9	482.9	552.9	622.9	657.9	727.9	797.9
1.10	40	44.0		265.9	300.9	335.9	405.9	489.9	510.9	580.9	650.9	685.9	755.9	826.0
1.11	36	40.0	230.8	293.9	328.9	363.9	433.9	517.9	538.9	608.9	678.9	713.9	783.9	854.0
1.11	72	80.0									412.6	447.6	517.7	587.7
1.12	34	38.0	244.8	307.9	342.9	377.9	447.9	531.9	552.9	622.9	692.9	727.9	798.0	868.0
1.12	50	56.0				258.7	328.7	412.8	433.8	503.8	573.8	608.9	678.9	748.9
1.13	32	36.0	258.8	321.9	356.9	391.9	461.9	545.9	566.9	636.9	706.9	741.9	812.0	882.0
1.13	64	72.0								398.6	468.7	503.7	573.7	643.8
1.13	80	90.0											454.5	524.5
1.13	30	34.0	272.9	335.9	370.9	405.9	475.9	559.9	580.9	650.9	720.9	755.9	826.0	896.0
1.14	44	50.0			265.7	300.7	370.8	454.8	475.8	545.8	615.9	650.9	720.9	790.9
1.14	28	32.0	286.9	349.9	384.9	419.9	489.9	573.9	594.9	664.9	734.9	769.9	840.0	910.0
1.14	56	64.0						363.6	384.6	454.7	524.7	559.7	629.7	699.8
1.16	38	44.0	209.6	272.7	307.7	342.7	412.8	496.8	517.8	587.8	657.9	692.9	762.9	832.9
1.17	48	56.0				265.4	335.5	419.6	440.6	510.7	580.7	615.7	685.8	755.8
1.18	34	40.0	237.6	300.7	335.7	370.8	440.8	524.8	545.8	615.9	685.9	720.9	790.9	860.9

Theoretical centre distance in mm														
Belt length code designation in mm														
2310	2380	2450	2520	2590	2660	2800	3136	3304	3360	3500	3850	3920	4326	4410
959.0	994.0	1029.0	1064.0	1099.0	1134.0	1204.0	1372.0	1456.0	1484.0	1554.0	1729.0	1764.0	1967.0	2009.0
945.0	980.0	1015.0	1050.0	1085.0	1120.0	1190.0	1358.0	1442.0	1470.0	1540.0	1715.0	1750.0	1953.0	1995.0
931.0	966.0	1001.0	1036.0	1071.0	1106.0	1176.0	1344.0	1428.0	1456.0	1526.0	1701.0	1736.0	1939.0	1981.0
917.0	952.0	987.0	1022.0	1057.0	1092.0	1162.0	1330.0	1414.0	1442.0	1512.0	1687.0	1722.0	1925.0	1967.0
903.0	938.0	973.0	1008.0	1043.0	1078.0	1148.0	1316.0	1400.0	1428.0	1498.0	1673.0	1708.0	1911.0	1953.0
889.0	924.0	959.0	994.0	1029.0	1064.0	1134.0	1302.0	1386.0	1414.0	1484.0	1659.0	1694.0	1897.0	1939.0
875.0	910.0	945.0	980.0	1015.0	1050.0	1120.0	1288.0	1372.0	1400.0	1470.0	1645.0	1680.0	1883.0	1925.0
847.0	882.0	917.0	952.0	987.0	1022.0	1092.0	1260.0	1344.0	1372.0	1442.0	1617.0	1652.0	1855.0	1897.0
819.0	854.0	889.0	924.0	959.0	994.0	1064.0	1232.0	1316.0	1344.0	1414.0	1589.0	1624.0	1827.0	1869.0
805.0	840.0	875.0	910.0	945.0	980.0	1050.0	1218.0	1302.0	1330.0	1400.0	1575.0	1610.0	1813.0	1855.0
763.0	798.0	833.0	868.0	903.0	938.0	1008.0	1176.0	1260.0	1288.0	1358.0	1533.0	1568.0	1771.0	1813.0
735.0	770.0	805.0	840.0	875.0	910.0	980.0	1148.0	1232.0	1260.0	1330.0	1505.0	1540.0	1743.0	1785.0
707.0	742.0	777.0	812.0	847.0	882.0	952.0	1120.0	1204.0	1232.0	1302.0	1477.0	1512.0	1715.0	1757.0
651.0	686.0	721.0	756.0	791.0	826.0	896.0	1064.0	1148.0	1176.0	1246.0	1421.0	1456.0	1659.0	1701.0
595.0	630.0	665.0	700.0	735.0	770.0	840.0	1008.0	1092.0	1120.0	1190.0	1365.0	1400.0	1603.0	1645.0
812.0	847.0	882.0	917.0	952.0	987.0	1057.0	1225.0	1309.0	1337.0	1407.0	1582.0	1617.0	1820.0	1862.0
882.0	917.0	952.0	987.0	1022.0	1057.0	1127.0	1295.0	1379.0	1407.0	1477.0	1652.0	1687.0	1890.0	1932.0
896.0	931.0	966.0	1001.0	1036.0	1071.0	1141.0	1309.0	1393.0	1421.0	1491.0	1666.0	1701.0	1904.0	1946.0
910.0	945.0	980.0	1015.0	1050.0	1085.0	1155.0	1323.0	1407.0	1435.0	1505.0	1680.0	1715.0	1918.0	1960.0
924.0	959.0	994.0	1029.0	1064.0	1099.0	1169.0	1337.0	1421.0	1449.0	1519.0	1694.0	1729.0	1932.0	1974.0
938.0	973.0	1008.0	1043.0	1078.0	1113.0	1183.0	1351.0	1435.0	1463.0	1533.0	1708.0	1743.0	1946.0	1988.0
720.9	755.9	790.9	826.0	861.0	896.0	966.0	1134.0	1218.0	1246.0	1316.0	1491.0	1526.0	1729.0	1771.0
952.0	987.0	1022.0	1057.0	1092.0	1127.0	1197.0	1365.0	1449.0	1477.0	1547.0	1722.0	1757.0	1960.0	2002.0
748.9	783.9	819.0	854.0	889.0	924.0	994.0	1162.0	1246.0	1274.0	1344.0	1519.0	1554.0	1757.0	1799.0
833.0	868.0	903.0	938.0	973.0	1008.0	1078.0	1246.0	1330.0	1358.0	1428.0	1603.0	1638.0	1841.0	1883.0
861.0	896.0	931.0	966.0	1001.0	1036.0	1106.0	1274.0	1358.0	1386.0	1456.0	1631.0	1666.0	1869.0	1911.0
889.0	924.0	959.0	994.0	1029.0	1064.0	1134.0	1302.0	1386.0	1414.0	1484.0	1659.0	1694.0	1897.0	1939.0
622.7	657.8	692.8	727.8	762.8	797.8	867.8	1035.8	1119.9	1147.9	1217.9	1392.9	1427.9	1630.9	1672.9
903.0	938.0	973.0	1008.0	1043.0	1078.0	1148.0	1316.0	1400.0	1428.0	1498.0	1673.0	1708.0	1911.0	1953.0
783.9	818.9	853.9	888.9	923.9	958.9	1028.9	1196.9	1280.9	1308.9	1378.9	1553.9	1588.9	1791.9	1834.0
917.0	952.0	987.0	1022.0	1057.0	1092.0	1162.0	1330.0	1414.0	1442.0	1512.0	1687.0	1722.0	1925.0	1967.0
678.8	713.8	748.8	783.8	818.8	853.8	923.8	1091.9	1175.9	1203.9	1273.9	1448.9	1483.9	1686.9	1728.9
559.6	594.6	629.6	664.6	699.6	734.7	804.7	972.7	1056.8	1084.8	1154.8	1329.8	1364.8	1567.8	1609.8
931.0	966.0	1001.0	1036.0	1071.0	1106.0	1176.0	1344.0	1428.0	1456.0	1526.0	1701.0	1736.0	1939.0	1981.0
825.9	860.9	895.9	930.9	965.9	1000.9	1070.9	1238.9	1322.9	1350.9	1420.9	1595.9	1630.9	1834.0	1876.0
945.0	980.0	1015.0	1050.0	1085.0	1120.0	1190.0	1358.0	1442.0	1470.0	1540.0	1715.0	1750.0	1953.0	1995.0
734.8	769.8	804.8	839.8	874.8	909.8	979.8	1147.9	1231.9	1259.9	1329.9	1504.9	1539.9	1742.9	1784.9
867.9	902.9	937.9	972.9	1007.9	1042.9	1112.9	1280.9	1364.9	1392.9	1462.9	1637.9	1672.9	1876.0	1918.0
790.8	825.8	860.8	895.8	930.8	965.8	1035.8	1203.9	1287.9	1315.9	1385.9	1560.9	1595.9	1798.9	1840.9
895.9	930.9	965.9	1000.9	1035.9	1070.9	1140.9	1308.9	1392.9	1420.9	1490.9	1665.9	1700.9	1904.0	1946.0

CENTRE DISTANCE TABLES 14MGT

Speed ratio	DriveR	DriveN	Theoretical centre distance in mm											
	No. of groov.	No. of groov.	Belt length code designation in mm											
			994	1120	1190	1260	1400	1568	1610	1750	1890	1960	2100	2240
1.19	32	38.0	251.6	314.7	349.7	384.8	454.8	538.8	559.8	629.9	699.9	734.9	804.9	874.9
1.20	30	36.0	265.7	328.7	363.8	398.8	468.8	552.8	573.8	643.9	713.9	748.9	818.9	888.9
1.20	40	48.0		251.4	286.4	321.5	391.6	475.7	496.7	566.7	636.8	671.8	741.8	811.8
1.20	50	60.0					314.2	398.4	419.4	489.5	559.6	594.6	664.6	734.7
1.20	60	72.0						320.9	342.0	412.1	482.3	517.3	587.4	657.5
1.21	28	34.0	279.7	342.7	377.8	412.8	482.8	566.8	587.8	657.9	727.9	762.9	832.9	902.9
1.22	36	44.0	216.3	279.4	314.5	349.5	419.6	503.7	524.7	594.7	664.8	699.8	769.8	839.8
1.25	32	40.0	244.3	307.5	342.5	377.6	447.6	531.7	552.7	622.7	692.8	727.8	797.8	867.8
1.25	40	50.0		244.0	279.1	314.2	384.4	468.5	489.5	559.6	629.6	664.6	734.7	804.7
1.25	48	60.0					320.9	405.1	426.2	496.3	566.4	601.4	671.5	741.5
1.25	64	80.0								369.3	439.6	474.7	544.8	615.0
1.25	72	90.0										411.0	481.3	551.5
1.26	38	48.0		258.0	293.2	328.2	398.4	482.5	503.5	573.6	643.6	678.6	748.7	818.7
1.27	30	38.0	258.4	321.5	356.6	391.6	461.7	545.7	566.7	636.8	706.8	741.8	811.8	881.8
1.27	44	56.0				278.7	349.0	433.2	454.2	524.3	594.4	629.4	699.5	769.5
1.28	50	64.0					299.4	383.7	404.8	475.0	545.1	580.2	650.3	720.3
1.29	28	36.0	272.4	335.5	370.6	405.6	475.7	559.7	580.7	650.8	720.8	755.8	825.8	895.8
1.29	56	72.0						334.1	355.2	425.5	495.7	530.8	600.9	671.1
1.29	34	44.0	222.9	286.1	321.2	356.3	426.4	510.5	531.5	601.6	671.6	706.6	776.7	846.7
1.32	38	50.0		250.6	285.7	320.9	391.1	475.2	496.3	566.4	636.4	671.5	741.5	811.6
1.33	30	40.0	251.0	314.2	349.3	384.4	454.5	538.5	559.6	629.6	699.6	734.7	804.7	874.7
1.33	36	48.0		264.6	299.8	334.9	405.1	489.3	510.3	580.4	650.5	685.5	755.5	825.6
1.33	48	64.0					305.9	390.4	411.5	481.7	551.8	586.9	657.0	727.1
1.33	60	80.0								382.4	452.8	488.0	558.2	628.4
1.36	28	38.0	265.1	328.2	363.3	398.4	468.5	552.6	573.6	643.6	713.7	748.7	818.7	888.7
1.36	44	60.0				263.6	334.1	418.5	439.6	509.8	579.9	615.0	685.1	755.2
1.38	32	44.0	229.4	292.8	327.9	363.0	433.2	517.3	538.3	608.4	678.5	713.5	783.5	853.6
1.39	36	50.0		257.1	292.3	327.5	397.8	482.0	503.0	573.2	643.2	678.3	748.3	818.4
1.40	40	56.0			256.5	291.8	362.2	446.6	467.6	537.8	608.0	643.0	713.1	783.2
1.40	80	112.0												
1.41	64	90.0									401.8	437.2	507.7	578.1
1.41	34	48.0	207.7	271.2	306.4	341.6	411.8	496.0	517.1	587.2	657.3	692.3	762.4	832.4
1.43	28	40.0	257.6	320.9	356.0	391.1	461.2	545.3	566.4	636.4	706.5	741.5	811.6	881.6
1.43	56	80.0								395.4	465.9	501.1	571.5	641.8
1.44	50	72.0						353.6	374.8	445.3	515.7	550.8	621.1	691.3
1.45	44	64.0					318.9	403.5	424.7	495.0	565.2	600.3	670.5	740.7
1.47	30	44.0	235.9	299.4	334.5	369.7	439.9	524.1	545.1	615.2	685.3	720.3	790.4	860.4
1.47	34	50.0		263.6	298.9	334.1	404.4	488.7	509.8	579.9	650.0	685.1	755.2	825.2
1.47	38	56.0			262.9	298.3	368.8	453.2	474.3	544.5	614.7	649.8	719.9	790.0
1.50	32	48.0	214.0	277.7	313.0	348.2	418.5	502.7	523.8	593.9	664.0	699.1	769.2	839.2

Theoretical centre distance in mm														
Belt length code designation in mm														
2310	2380	2450	2520	2590	2660	2800	3136	3304	3360	3500	3850	3920	4326	4410
909.9	944.9	979.9	1014.9	1049.9	1084.9	1154.9	1322.9	1406.9	1434.9	1504.9	1679.9	1714.9	1918.0	1960.0
923.9	958.9	993.9	1028.9	1063.9	1098.9	1168.9	1336.9	1420.9	1448.9	1518.9	1693.9	1728.9	1932.0	1974.0
846.8	881.8	916.8	951.8	986.8	1021.8	1091.9	1259.9	1343.9	1371.9	1441.9	1616.9	1651.9	1854.9	1896.9
769.7	804.7	839.7	874.7	909.7	944.7	1014.8	1182.8	1266.8	1294.8	1364.8	1539.8	1574.8	1777.9	1819.9
692.5	727.5	762.5	797.6	832.6	867.6	937.6	1105.7	1189.7	1217.7	1287.7	1462.8	1497.8	1700.8	1742.8
937.9	972.9	1007.9	1042.9	1077.9	1112.9	1182.9	1350.9	1434.9	1462.9	1532.9	1707.9	1742.9	1946.0	1988.0
874.8	909.8	944.8	979.8	1014.8	1049.8	1119.9	1287.9	1371.9	1399.9	1469.9	1644.9	1679.9	1882.9	1924.9
902.8	937.8	972.8	1007.8	1042.8	1077.9	1147.9	1315.9	1399.9	1427.9	1497.9	1672.9	1707.9	1910.9	1952.9
839.7	874.7	909.7	944.7	979.7	1014.8	1084.8	1252.8	1336.8	1364.8	1434.8	1609.8	1644.8	1847.9	1889.9
776.5	811.6	846.6	881.6	916.6	951.6	1021.6	1189.7	1273.7	1301.7	1371.7	1546.8	1581.8	1784.8	1826.8
650.0	685.1	720.1	755.2	790.2	825.2	895.3	1063.4	1147.4	1175.5	1245.5	1420.6	1455.6	1658.6	1700.6
586.6	621.7	656.8	691.8	726.9	761.9	832.0	1000.2	1084.3	1112.3	1182.3	1357.4	1392.4	1595.5	1637.5
853.7	888.7	923.7	958.7	993.7	1028.8	1098.8	1266.8	1350.8	1378.8	1448.8	1623.8	1658.9	1861.9	1903.9
916.8	951.8	986.8	1021.8	1056.8	1091.9	1161.9	1329.9	1413.9	1441.9	1511.9	1686.9	1721.9	1924.9	1966.9
804.6	839.6	874.6	909.6	944.6	979.6	1049.7	1217.7	1301.7	1329.7	1399.7	1574.8	1609.8	1812.8	1854.8
755.4	790.4	825.4	860.4	895.5	930.5	1000.5	1168.6	1252.6	1280.6	1350.6	1525.7	1560.7	1763.7	1805.7
930.8	965.8	1000.8	1035.8	1070.9	1105.9	1175.9	1343.9	1427.9	1455.9	1525.9	1700.9	1735.9	1938.9	1980.9
706.1	741.1	776.2	811.2	846.2	881.3	951.3	1119.4	1203.5	1231.5	1301.5	1476.6	1511.6	1714.6	1756.6
881.7	916.7	951.7	986.7	1021.8	1056.8	1126.8	1294.8	1378.8	1406.8	1476.8	1651.8	1686.9	1889.9	1931.9
846.6	881.6	916.6	951.6	986.6	1021.6	1091.7	1259.7	1343.7	1371.7	1441.8	1616.8	1651.8	1854.8	1896.8
909.7	944.7	979.7	1014.8	1049.8	1084.8	1154.8	1322.8	1406.8	1434.8	1504.8	1679.9	1714.9	1917.9	1959.9
860.6	895.6	930.6	965.6	1000.6	1035.7	1105.7	1273.7	1357.7	1385.7	1455.8	1630.8	1665.8	1868.8	1910.8
762.2	797.2	832.2	867.3	902.3	937.3	1007.4	1175.5	1259.5	1287.5	1357.5	1532.6	1567.6	1770.6	1812.6
663.5	698.6	733.6	768.7	803.8	838.8	908.9	1077.1	1161.1	1189.2	1259.2	1434.3	1469.3	1672.4	1714.4
923.7	958.7	993.7	1028.8	1063.8	1098.8	1168.8	1336.8	1420.8	1448.8	1518.8	1693.9	1728.9	1931.9	1973.9
790.2	825.2	860.3	895.3	930.3	965.3	1035.4	1203.5	1287.5	1315.5	1385.5	1560.6	1595.6	1798.6	1840.7
888.6	923.6	958.6	993.6	1028.7	1063.7	1133.7	1301.7	1385.7	1413.7	1483.8	1658.8	1693.8	1896.8	1938.8
853.4	888.5	923.5	958.5	993.5	1028.5	1098.6	1266.6	1350.6	1378.6	1448.7	1623.7	1658.7	1861.7	1903.7
818.2	853.3	888.3	923.3	958.3	993.4	1063.4	1231.5	1315.5	1343.5	1413.6	1588.6	1623.6	1826.7	1868.7
477.7	513.0	548.4	583.6	618.9	654.1	724.5	893.2	977.4	1005.5	1075.6	1251.0	1286.0	1489.3	1531.3
613.3	648.4	683.5	718.7	753.8	788.9	859.0	1027.4	1111.5	1139.5	1209.6	1384.8	1419.8	1623.0	1665.0
867.4	902.5	937.5	972.5	1007.5	1042.5	1112.6	1280.6	1364.6	1392.7	1462.7	1637.7	1672.7	1875.7	1917.7
916.6	951.6	986.6	1021.6	1056.7	1091.7	1161.7	1329.7	1413.7	1441.8	1511.8	1686.8	1721.8	1924.8	1966.8
676.9	712.0	747.1	782.2	817.2	852.3	922.4	1090.7	1174.8	1202.8	1272.9	1448.0	1483.0	1686.2	1728.2
726.3	761.4	796.5	831.6	866.6	901.7	971.8	1139.9	1224.0	1252.0	1322.1	1497.2	1532.2	1735.3	1777.3
775.7	810.8	845.8	880.9	915.9	951.0	1021.0	1189.2	1273.2	1301.2	1371.3	1546.4	1581.4	1784.4	1826.5
895.5	930.5	965.5	1000.5	1035.5	1070.5	1140.6	1308.6	1392.7	1420.7	1490.7	1665.7	1700.7	1903.7	1945.7
860.3	895.3	930.3	965.3	1000.4	1035.4	1105.4	1273.5	1357.5	1385.5	1455.6	1630.6	1665.6	1868.7	1910.7
825.0	860.1	895.1	930.1	965.2	1000.2	1070.2	1238.4	1322.4	1350.4	1420.4	1595.5	1630.5	1833.6	1875.6
874.3	909.3	944.3	979.4	1014.4	1049.4	1119.4	1287.5	1371.5	1399.5	1469.6	1644.6	1679.6	1882.7	1924.7

CENTRE DISTANCE TABLES 14MGT

Speed ratio	DriveR	DriveN	Theoretical centre distance in mm											
	No. of groov.	No. of groov.	Belt length code designation in mm											
			994	1120	1190	1260	1400	1568	1610	1750	1890	1960	2100	2240
1.50	40	60.0				276.4	347.1	431.7	452.8	523.1	593.3	628.4	698.6	768.7
1.50	48	72.0						360.0	381.2	451.8	522.3	557.4	627.7	698.0
1.50	60	90.0									414.6	450.0	520.7	591.2
1.56	36	56.0		233.7	269.3	304.7	375.4	459.8	480.9	551.2	621.4	656.5	726.6	796.8
1.56	72	112.0												467.5
1.56	32	50.0	206.1	270.0	305.4	340.6	411.0	495.4	516.4	586.6	656.8	691.8	761.9	832.0
1.57	28	44.0	242.4	305.9	341.1	376.3	446.6	530.8	551.8	622.0	692.1	727.1	797.2	867.3
1.58	38	60.0			247.1	282.7	353.6	438.3	459.4	529.7	600.0	635.1	705.3	775.4
1.60	30	48.0	220.3	284.2	319.5	354.7	425.1	509.4	530.5	600.7	670.8	705.9	776.0	846.0
1.60	40	64.0				260.5	331.7	416.6	437.7	508.2	578.5	613.7	683.9	754.1
1.60	50	80.0						322.0	343.5	414.6	485.4	520.7	591.2	661.6
1.61	56	90.0								355.9	427.3	462.8	533.6	604.2
1.64	44	72.0					287.2	372.8	394.1	464.8	535.4	570.6	641.0	711.3
1.65	34	56.0		240.0	275.6	311.1	381.8	466.4	487.5	557.8	628.1	663.2	733.4	803.5
1.67	30	50.0	212.3	276.4	311.8	347.1	417.6	502.0	523.1	593.3	663.5	698.6	768.7	838.8
1.67	36	60.0			253.3	289.0	360.0	444.8	465.9	536.3	606.6	641.8	712.0	782.2
1.67	48	80.0						328.2	349.7	420.9	491.8	527.2	597.7	668.2
1.68	38	64.0				266.7	338.0	423.0	444.2	514.7	585.1	620.3	690.6	760.8
1.71	28	48.0	226.6	290.6	325.9	361.2	431.7	516.1	537.2	607.4	677.5	712.6	782.7	852.8
1.75	32	56.0		246.2	281.9	317.5	388.3	473.0	494.1	564.5	634.7	669.9	740.1	810.2
1.75	64	112.0											420.3	492.3
1.75	80	140.0												
1.76	34	60.0			259.5	295.3	366.4	451.3	472.4	542.9	613.3	648.4	718.7	788.9
1.78	36	64.0				272.8	344.3	429.5	450.7	521.3	591.7	626.9	697.2	767.5
1.79	28	50.0	218.5	282.7	318.2	353.6	424.2	508.6	529.7	600.0	670.2	705.3	775.4	845.6
1.80	40	72.0					299.5	385.4	406.7	477.7	548.4	583.6	654.1	724.5
1.80	50	90.0								374.3	446.1	481.7	552.8	623.6
1.82	44	80.0						340.5	362.1	433.6	504.6	540.0	610.7	681.3
1.87	30	56.0		252.3	288.2	323.8	394.7	479.5	500.6	571.1	641.4	676.5	746.8	816.9
1.87	60	112.0											432.4	504.6
1.88	32	60.0		229.5	265.6	301.5	372.8	457.7	478.9	549.5	619.9	655.0	725.3	795.6
1.88	48	90.0								380.4	452.3	488.0	559.1	630.0
1.88	34	64.0			242.7	279.0	350.6	435.9	457.1	527.8	598.3	633.5	703.8	774.1
1.89	38	72.0					305.6	391.6	413.0	484.1	554.8	590.1	660.7	731.1
1.94	72	140.0												
2.00	28	56.0		258.4	294.4	330.1	401.1	486.0	507.2	577.6	648.0	683.1	753.4	823.6
2.00	30	60.0		235.4	271.7	307.7	379.1	464.2	485.4	556.0	626.4	661.6	731.9	802.2
2.00	32	64.0			248.7	285.0	356.9	442.2	463.5	534.2	604.8	640.0	710.4	780.7
2.00	36	72.0					311.6	397.9	419.3	490.4	561.3	596.6	667.2	737.6
2.00	40	80.0						352.7	374.3	446.1	517.3	552.8	623.6	694.3

Theoretical centre distance in mm														
Belt length code designation in mm														
2310	2380	2450	2520	2590	2660	2800	3136	3304	3360	3500	3850	3920	4326	4410
803.8	838.8	873.9	908.9	943.9	979.0	1049.1	1217.2	1301.2	1329.3	1399.3	1574.4	1609.4	1812.5	1854.5
733.0	768.1	803.2	838.3	873.4	908.4	978.5	1146.8	1230.8	1258.9	1328.9	1504.0	1539.1	1742.2	1784.2
626.4	661.6	696.8	731.9	767.1	802.2	872.4	1040.9	1125.0	1153.1	1223.2	1398.4	1433.4	1636.6	1678.7
831.8	866.9	901.9	936.9	972.0	1007.0	1077.1	1245.2	1329.3	1357.3	1427.3	1602.4	1637.4	1840.5	1882.5
503.1	538.6	574.1	609.5	644.8	680.2	750.7	919.7	1004.0	1032.1	1102.4	1277.9	1313.0	1516.4	1558.5
867.1	902.1	937.1	972.2	1007.2	1042.2	1112.3	1280.4	1364.4	1392.4	1462.4	1637.5	1672.5	1875.6	1917.6
902.3	937.3	972.3	1007.4	1042.4	1077.4	1147.4	1315.5	1399.5	1427.6	1497.6	1672.6	1707.6	1910.7	1952.7
810.5	845.6	880.6	915.7	950.7	985.8	1055.9	1224.0	1308.1	1336.1	1406.1	1581.2	1616.3	1819.3	1861.4
881.1	916.1	951.2	986.2	1021.2	1056.2	1126.3	1294.4	1378.4	1406.4	1476.5	1651.5	1686.5	1889.6	1931.6
789.2	824.3	859.3	894.4	929.5	964.5	1034.6	1202.8	1286.9	1314.9	1385.0	1560.1	1595.1	1798.2	1840.2
696.8	731.9	767.1	802.2	837.3	872.4	942.6	1111.0	1195.1	1223.2	1293.3	1468.5	1503.5	1706.7	1748.7
639.5	674.7	710.0	745.1	780.3	815.5	885.8	1054.3	1138.5	1166.5	1236.7	1412.0	1447.0	1650.3	1692.3
746.4	781.5	816.6	851.7	886.8	921.9	992.0	1160.3	1244.4	1272.5	1342.5	1517.7	1552.7	1755.9	1797.9
838.6	873.6	908.7	943.7	978.8	1013.8	1083.9	1252.0	1336.1	1364.1	1434.2	1609.3	1644.3	1847.3	1889.4
873.9	908.9	943.9	979.0	1014.0	1049.1	1119.1	1287.2	1371.3	1399.3	1469.3	1644.4	1679.4	1882.5	1924.5
817.2	852.3	887.4	922.4	957.5	992.6	1062.7	1230.8	1314.9	1342.9	1413.0	1588.1	1623.1	1826.2	1868.2
703.4	738.6	773.7	808.9	844.0	879.1	949.3	1117.7	1201.9	1229.9	1300.0	1475.3	1510.3	1713.5	1755.6
795.9	831.0	866.1	901.1	936.2	971.3	1041.4	1209.6	1293.7	1321.7	1391.8	1566.9	1602.0	1805.1	1847.1
887.9	922.9	958.0	993.0	1028.0	1063.1	1133.1	1301.2	1385.3	1413.3	1483.3	1658.4	1693.4	1896.5	1938.5
845.3	880.4	915.4	950.5	985.5	1020.6	1090.7	1258.9	1342.9	1371.0	1441.0	1616.1	1651.1	1854.2	1896.2
528.1	563.8	599.4	635.0	670.5	705.9	776.6	945.9	1030.4	1058.6	1128.9	1304.6	1339.7	1543.3	1585.4
					543.5	615.4	786.6	871.7	900.1	970.8	1147.2	1182.4	1386.5	1428.7
824.0	859.0	894.1	929.2	964.3	999.3	1069.4	1237.6	1321.7	1349.8	1419.8	1594.9	1630.0	1833.1	1875.1
802.6	837.7	872.8	907.9	942.9	978.0	1048.1	1216.4	1300.5	1328.5	1398.6	1573.8	1608.8	1811.9	1853.9
880.6	915.7	950.7	985.8	1020.8	1055.9	1125.9	1294.1	1378.1	1406.1	1476.2	1651.3	1686.3	1889.4	1931.4
759.7	794.8	829.9	865.1	900.2	935.3	1005.5	1173.8	1258.0	1286.0	1356.1	1531.3	1566.4	1769.6	1811.6
659.0	694.3	729.5	764.8	800.0	835.2	905.6	1074.3	1158.6	1186.7	1256.8	1432.2	1467.3	1670.6	1712.7
716.5	751.7	786.9	822.1	857.2	892.4	962.7	1131.2	1215.4	1243.4	1313.5	1488.8	1523.9	1727.1	1769.2
852.0	887.1	922.2	957.2	992.3	1027.4	1097.5	1265.7	1349.8	1377.8	1447.8	1623.0	1658.0	1861.1	1903.1
540.5	576.3	612.0	647.6	683.2	718.6	789.5	959.0	1043.6	1071.7	1142.1	1317.9	1353.0	1556.7	1598.8
830.7	865.8	900.8	935.9	971.0	1006.1	1076.2	1244.4	1328.5	1356.6	1426.6	1601.8	1636.8	1839.9	1882.0
665.4	700.7	736.0	771.3	806.6	841.8	912.2	1080.9	1165.2	1193.3	1263.5	1439.0	1474.0	1677.4	1719.5
809.2	844.4	879.5	914.6	949.6	984.7	1054.9	1223.2	1307.3	1335.3	1405.4	1580.6	1615.6	1818.8	1860.8
766.3	801.4	836.6	871.7	906.8	942.0	1012.2	1180.6	1264.7	1292.8	1362.9	1538.1	1573.2	1776.4	1818.4
			494.6	531.2	567.7	640.0	811.8	897.2	925.6	996.5	1173.2	1208.5	1412.9	1455.1
858.7	893.8	928.9	964.0	999.1	1034.1	1104.2	1272.5	1356.6	1384.6	1454.7	1629.8	1664.8	1868.0	1910.0
837.3	872.4	907.5	942.6	977.7	1012.8	1082.9	1251.2	1335.3	1363.4	1433.4	1608.6	1643.6	1846.8	1888.8
815.9	851.0	886.1	921.2	956.3	991.4	1061.6	1229.9	1314.1	1342.1	1412.2	1587.4	1622.4	1825.6	1867.6
772.8	808.0	843.2	878.3	913.5	948.6	1018.8	1187.3	1271.5	1299.5	1369.7	1544.9	1580.0	1783.2	1825.2
729.5	764.8	800.0	835.2	870.4	905.6	975.9	1144.5	1228.8	1256.8	1327.0	1502.4	1537.4	1740.7	1782.8

CENTRE DISTANCE TABLES 14MGT

Speed ratio	DriveR	DriveN	Theoretical centre distance in mm											
	No. of groov.	No. of groov.	Belt length code designation in mm											
			994	1120	1190	1260	1400	1568	1610	1750	1890	1960	2100	2240
2.00	56	112.0											444.4	516.9
2.05	44	90.0								392.5	464.6	500.5	571.8	642.8
2.10	80	168.0												
2.11	38	80.0						358.7	380.4	452.3	523.6	559.1	630.0	700.7
2.12	34	72.0					317.6	404.1	425.5	496.8	567.7	603.0	673.7	744.2
2.13	30	64.0			254.6	291.1	363.1	448.6	469.9	540.7	611.3	646.6	717.0	787.4
2.14	28	60.0		241.4	277.8	313.9	385.4	470.6	491.8	562.5	633.0	668.2	738.6	808.9
2.19	64	140.0												
2.22	36	80.0						364.7	386.5	458.5	529.9	565.5	636.4	707.2
2.24	50	112.0										388.1	462.2	535.1
2.25	32	72.0					323.6	410.3	431.8	503.1	574.1	609.5	680.2	750.7
2.25	40	90.0								404.6	476.9	512.9	584.3	655.5
2.29	28	64.0			260.6	297.1	369.3	454.9	476.2	547.1	617.8	653.1	723.5	793.9
2.33	48	112.0										393.9	468.1	541.1
2.33	60	140.0												
2.33	72	168.0												
2.35	34	80.0					282.2	370.7	392.5	464.6	536.2	571.8	642.8	713.6
2.37	38	90.0						314.4	336.9	410.5	483.0	519.0	590.6	661.8
2.40	30	72.0				255.7	329.6	416.4	438.0	509.4	580.4	615.9	686.6	757.2
2.40	80	192.0												
2.50	32	80.0					287.9	376.7	398.6	470.8	542.4	578.1	649.2	720.0
2.50	36	90.0						320.1	342.6	416.5	489.1	525.2	596.8	668.1
2.50	56	140.0												
2.55	44	112.0										405.3	479.9	553.1
2.57	28	72.0				261.4	335.6	422.6	444.1	515.7	586.8	622.3	693.1	763.7
2.63	64	168.0												
2.65	34	90.0						325.8	348.4	422.4	495.2	531.3	603.0	674.4
2.67	30	80.0					293.6	382.7	404.6	476.9	548.6	584.3	655.5	726.4
2.67	72	192.0												
2.80	40	112.0									378.5	416.7	491.6	565.1
2.80	50	140.0												
2.80	60	168.0												
2.81	32	90.0						331.5	354.1	428.4	501.2	537.4	609.2	680.7
2.86	28	80.0					299.3	388.6	410.5	483.0	554.9	590.6	661.8	732.8
2.92	48	140.0												
2.95	38	112.0									384.0	422.4	497.4	571.0
3.00	30	90.0						337.1	359.9	434.3	507.3	543.5	615.4	686.9
3.00	56	168.0												
3.00	64	192.0												
3.11	36	112.0									389.6	428.0	503.2	577.0

Theoretical centre distance in mm														
Belt length code designation in mm														
2310	2380	2450	2520	2590	2660	2800	3136	3304	3360	3500	3850	3920	4326	4410
552.9	588.7	624.5	660.2	695.8	731.3	802.3	972.0	1056.6	1084.8	1155.3	1331.1	1366.3	1570.0	1612.2
678.2	713.6	749.0	784.3	819.6	854.8	925.3	1094.2	1178.5	1206.6	1276.9	1452.4	1487.5	1690.9	1733.0
							671.1	758.5	787.5	859.5	1038.4	1074.1	1280.0	1322.4
736.0	771.3	806.6	841.8	877.0	912.2	982.5	1151.2	1235.5	1263.5	1333.7	1509.1	1544.2	1747.5	1789.6
779.4	814.6	849.8	884.9	920.1	955.2	1025.5	1194.0	1278.2	1306.3	1376.4	1551.7	1586.7	1790.0	1832.0
822.5	857.7	892.8	927.9	963.0	998.1	1068.3	1236.7	1320.8	1348.9	1419.0	1594.2	1629.2	1832.4	1874.5
844.0	879.1	914.2	949.3	984.4	1019.5	1089.7	1258.0	1342.1	1370.1	1440.2	1615.4	1650.5	1853.6	1895.7
			518.1	555.0	591.6	664.3	836.8	922.4	950.9	1021.9	1199.0	1234.4	1439.0	1481.3
742.5	777.8	813.1	848.3	883.6	918.8	989.1	1157.8	1242.1	1270.2	1340.4	1515.8	1550.9	1754.3	1796.3
571.2	607.2	643.1	678.9	714.6	750.2	821.4	991.4	1076.1	1104.3	1174.9	1350.9	1386.1	1590.0	1632.1
785.9	821.2	856.4	891.5	926.7	961.9	1032.1	1200.7	1284.9	1313.0	1383.1	1558.5	1593.5	1796.8	1838.8
691.0	726.4	761.8	797.2	832.5	867.8	938.4	1107.4	1191.8	1219.9	1290.2	1465.8	1500.9	1704.4	1746.4
829.1	864.3	899.4	934.6	969.7	1004.8	1075.0	1243.4	1327.6	1355.6	1425.7	1601.0	1636.0	1839.3	1881.3
577.3	613.3	649.3	685.1	720.8	756.5	827.7	997.8	1082.6	1110.8	1181.4	1357.5	1392.7	1596.6	1638.8
			529.7	566.7	603.5	676.4	849.2	935.0	963.5	1034.6	1211.9	1247.2	1452.0	1494.4
							694.8	782.6	811.6	884.0	1063.4	1099.1	1305.4	1348.0
749.0	784.3	819.6	854.8	890.1	925.3	995.7	1164.5	1248.8	1276.9	1347.1	1522.5	1557.6	1761.0	1803.1
697.4	732.8	768.2	803.6	839.0	874.3	944.9	1114.0	1198.4	1226.5	1296.8	1472.4	1507.5	1711.1	1753.2
792.5	827.7	862.9	898.1	933.3	968.5	1038.8	1207.4	1291.6	1319.7	1389.8	1565.2	1600.3	1803.6	1845.6
								651.6	681.8	756.4	939.7	975.9	1184.6	1227.5
755.4	790.8	826.1	861.4	896.6	931.9	1002.3	1171.1	1255.4	1283.5	1353.8	1529.3	1564.3	1767.8	1809.8
703.7	739.2	774.6	810.0	845.4	880.8	951.4	1120.5	1205.0	1233.1	1303.4	1479.1	1514.2	1717.8	1759.9
	465.9	503.8	541.3	578.4	615.3	688.4	861.6	947.5	976.0	1047.2	1224.7	1260.1	1465.0	1507.4
589.4	625.6	661.6	697.5	733.3	769.0	840.3	1010.6	1095.5	1123.8	1194.4	1370.6	1405.8	1609.9	1652.0
799.0	834.2	869.5	904.7	939.9	975.1	1045.4	1214.0	1298.3	1326.4	1396.6	1571.9	1607.0	1810.3	1852.4
							718.3	806.5	835.7	908.3	1088.2	1124.0	1330.8	1373.4
710.0	745.5	781.0	816.4	851.8	887.2	957.9	1127.1	1211.6	1239.7	1310.1	1485.8	1520.9	1724.5	1766.6
761.8	797.2	832.5	867.8	903.1	938.4	1008.8	1177.7	1262.1	1290.2	1360.4	1536.0	1571.0	1774.5	1816.6
								674.3	704.6	779.7	963.7	1000.0	1209.3	1252.3
601.5	637.7	673.8	709.8	745.7	781.5	852.9	1023.4	1108.4	1136.7	1207.3	1383.7	1418.9	1623.1	1665.3
	482.7	520.9	558.6	595.9	633.0	706.3	880.1	966.1	994.7	1066.1	1243.8	1279.2	1484.4	1526.8
						548.3	730.0	818.4	847.6	920.4	1100.6	1136.4	1343.4	1386.1
716.3	751.9	787.4	822.8	858.3	893.6	964.3	1133.6	1218.1	1246.3	1316.7	1492.4	1527.5	1731.2	1773.3
768.2	803.6	839.0	874.3	909.6	944.9	1015.4	1184.3	1268.7	1296.8	1367.1	1542.6	1577.7	1781.2	1823.3
	488.3	526.6	564.3	601.7	638.8	712.3	886.2	972.3	1000.9	1072.3	1250.2	1285.6	1490.9	1533.3
607.5	643.8	679.9	715.9	751.8	787.7	859.1	1029.8	1114.8	1143.1	1213.8	1390.2	1425.5	1629.7	1671.9
722.6	758.2	793.7	829.2	864.6	900.1	970.8	1140.2	1224.7	1252.9	1323.2	1499.0	1534.2	1737.9	1780.0
						559.3	741.6	830.2	859.5	932.4	1112.9	1148.8	1356.0	1398.7
							603.2	696.8	727.3	802.8	987.5	1024.0	1233.9	1277.0
613.5	649.8	686.0	722.0	758.0	793.9	865.4	1036.1	1121.2	1149.5	1220.2	1396.7	1432.0	1636.2	1678.4

CENTRE DISTANCE TABLES 14MGT

Speed ratio	DriveR	DriveN	Theoretical centre distance in mm											
	No. of groov.	No. of groov.	Belt length code designation in mm											
			994	1120	1190	1260	1400	1568	1610	1750	1890	1960	2100	2240
3.18	44	140.0												
3.20	60	192.0												
3.21	28	90.0						342.8	365.6	440.1	513.3	549.5	621.6	693.2
3.29	34	112.0									395.1	433.7	509.0	582.9
3.36	50	168.0												
3.43	56	192.0												
3.50	32	112.0									400.6	439.3	514.8	588.8
3.50	40	140.0												431.0
3.50	48	168.0												
3.68	38	140.0												436.3
3.73	30	112.0									406.2	444.9	520.6	594.7
3.82	44	168.0												
3.84	50	192.0												
3.89	36	140.0												441.7
4.00	28	112.0									411.7	450.5	526.4	600.6
4.00	48	192.0												
4.12	34	140.0												447.0
4.20	40	168.0												
4.36	44	192.0												
4.38	32	140.0												452.3
4.42	38	168.0												
4.67	30	140.0												457.6
4.67	36	168.0												
4.80	40	192.0												
4.94	34	168.0												
5.00	28	140.0												462.9
5.05	38	192.0												
5.25	32	168.0												
5.33	36	192.0												
5.60	30	168.0												
5.65	34	192.0												
6.00	28	168.0												
6.00	32	192.0												
6.40	30	192.0												
6.86	28	192.0												

Theoretical centre distance in mm															
Belt length code designation in mm															
2310	2380	2450	2520	2590	2660	2800	3136	3304	3360	3500	3850	3920	4326	4410
460.3	499.5	537.9	575.8	613.3	650.5	724.2	898.4	984.7	1013.3	1084.8	1262.8	1298.3	1503.8	1546.2
							614.1	708.0	738.6	814.3	999.4	1036.0	1246.1	1289.3
728.9	764.5	800.0	835.6	871.0	906.5	977.2	1146.7	1231.2	1259.4	1329.8	1505.7	1540.8	1744.5	1786.7
619.5	655.8	692.1	728.2	764.1	800.0	871.6	1042.5	1127.6	1155.9	1226.7	1403.2	1438.5	1642.8	1685.0
						575.9	759.0	847.9	877.3	950.4	1131.3	1167.3	1374.8	1417.5
							625.0	719.2	749.9	825.7	1011.2	1047.9	1258.3	1301.6
625.4	661.8	698.1	734.3	770.3	806.2	877.8	1048.8	1134.0	1162.3	1233.1	1409.7	1445.0	1649.4	1691.6
471.3	510.6	549.1	587.2	624.8	662.1	736.0	910.6	997.0	1025.7	1097.3	1275.5	1311.0	1516.6	1559.0
						581.4	764.8	853.8	883.2	956.4	1137.4	1173.4	1381.0	1423.8
476.7	516.1	554.8	592.9	630.6	667.9	741.9	916.7	1003.1	1031.9	1103.5	1281.8	1317.3	1523.0	1565.5
631.4	667.8	704.2	740.3	776.4	812.4	884.1	1055.1	1140.3	1168.7	1239.5	1416.2	1451.5	1655.9	1698.2
					511.4	592.3	776.3	865.5	895.0	968.3	1149.6	1185.7	1393.5	1436.3
							641.2	735.9	766.7	842.9	1029.0	1065.7	1276.6	1319.9
482.2	521.6	560.4	598.6	636.3	673.7	747.8	922.7	1009.3	1038.0	1109.7	1288.1	1323.7	1529.4	1571.9
637.3	673.8	710.2	746.4	782.5	818.5	890.3	1061.5	1146.7	1175.1	1245.9	1422.7	1458.0	1662.5	1704.7
							646.6	741.4	772.3	848.6	1034.8	1071.6	1282.7	1326.0
487.6	527.1	566.0	604.2	642.0	679.5	753.7	928.8	1015.4	1044.2	1115.9	1294.4	1330.0	1535.8	1578.3
					521.9	603.2	787.8	877.2	906.8	980.2	1161.8	1197.9	1406.0	1448.8
							657.4	752.5	783.5	860.0	1046.6	1083.4	1294.8	1338.2
493.0	532.7	571.5	609.9	647.8	685.3	759.6	934.9	1021.5	1050.3	1122.1	1300.7	1336.3	1542.2	1584.7
					527.2	608.7	793.5	883.1	912.6	986.1	1167.9	1204.0	1412.2	1455.1
498.4	538.2	577.1	615.5	653.5	691.1	765.4	940.9	1027.6	1056.4	1128.3	1306.9	1342.6	1548.6	1591.1
					532.5	614.1	799.2	888.9	918.5	992.1	1174.0	1210.1	1418.4	1461.3
							668.2	763.6	794.7	871.3	1058.3	1095.2	1306.9	1350.3
				494.8	537.8	619.6	805.0	894.7	924.3	998.0	1180.0	1216.2	1424.6	1467.5
503.8	543.6	582.7	621.2	659.2	696.8	771.3	946.9	1033.7	1062.6	1134.4	1313.2	1348.8	1554.9	1597.5
							673.5	769.1	800.2	877.0	1064.2	1101.1	1312.9	1356.4
				500.0	543.0	625.0	810.7	900.5	930.2	1003.9	1186.1	1222.2	1430.8	1473.7
							678.9	774.6	805.8	882.6	1070.0	1107.0	1318.9	1362.4
			459.7	505.1	548.3	630.4	816.4	906.3	936.0	1009.8	1192.1	1228.3	1437.0	1479.9
							684.3	780.1	811.3	888.3	1075.9	1112.8	1324.9	1368.5
			464.7	510.3	553.5	635.8	822.1	912.1	941.9	1015.7	1198.2	1234.4	1443.2	1486.1
							689.6	785.6	816.9	893.9	1081.7	1118.7	1331.0	1374.5
							695.0	791.1	822.4	899.6	1087.5	1124.6	1337.0	1380.5
						700.3	796.6		905.2		1130.4		1386.6	

POWER RATING IN kW FOR 12 MM WIDE

8 mm PITCH BELTS

rpm of faster shaft	Rated kilowatt for small pulley (Number of grooves and pitch diameter in mm)																
	22 56.02	25 63.66	28 71.30	30 76.39	32 81.49	34 86.58	36 91.67	38 96.77	40 101.86	45 114.59	48 122.23	50 127.32	56 142.60	60 152.79	64 162.97	75 190.99	80 203.72
10	0.10	0.12	0.14	0.15	0.16	0.17	0.18	0.19	0.20	0.23	0.24	0.25	0.29	0.31	0.33	0.39	0.41
20	0.16	0.18	0.21	0.23	0.24	0.26	0.28	0.29	0.31	0.35	0.38	0.40	0.45	0.48	0.51	0.60	0.64
40	0.25	0.30	0.34	0.37	0.40	0.43	0.46	0.48	0.51	0.58	0.63	0.66	0.74	0.80	0.85	1.00	1.07
60	0.34	0.40	0.46	0.50	0.54	0.58	0.62	0.66	0.70	0.80	0.86	0.90	1.02	1.09	1.17	1.38	1.48
100	0.51	0.60	0.70	0.76	0.82	0.88	0.94	1.00	1.07	1.22	1.31	1.37	1.54	1.66	1.78	2.10	2.25
200	0.90	1.07	1.24	1.35	1.47	1.58	1.69	1.80	1.91	2.19	2.35	2.46	2.78	3.00	3.21	3.79	4.05
300	1.26	1.51	1.75	1.91	2.07	2.23	2.39	2.55	2.71	3.10	3.33	3.49	3.95	4.26	4.56	5.39	5.76
400	1.61	1.92	2.24	2.45	2.66	2.86	3.07	3.27	3.48	3.98	4.28	4.48	5.08	5.47	5.87	6.93	7.41
500	1.94	2.33	2.71	2.97	3.22	3.47	3.72	3.97	4.22	4.84	5.21	5.45	6.18	6.66	7.13	8.43	9.02
600	2.26	2.72	3.17	3.47	3.77	4.07	4.36	4.66	4.95	5.68	6.11	6.39	7.25	7.81	8.37	9.90	10.58
700	2.58	3.11	3.63	3.97	4.31	4.65	4.99	5.33	5.66	6.50	6.99	7.32	8.30	8.94	9.59	11.33	12.12
730	2.67	3.22	3.76	4.12	4.47	4.83	5.18	5.53	5.87	6.74	7.25	7.59	8.61	9.28	9.95	11.76	12.58
800	2.89	3.48	4.07	4.46	4.84	5.23	5.61	5.99	6.36	7.30	7.86	8.23	9.33	10.06	10.78	12.75	13.63
900	3.19	3.85	4.50	4.93	5.36	5.79	6.21	6.63	7.05	8.09	8.71	9.12	10.35	11.15	11.96	14.13	15.11
1000	3.49	4.22	4.93	5.41	5.88	6.34	6.81	7.27	7.73	8.88	9.56	10.01	11.35	12.23	13.11	15.50	16.58
1200	4.07	4.93	5.77	6.33	6.88	7.43	7.98	8.53	9.07	10.41	11.21	11.74	13.31	14.35	15.38	18.18	19.44
1400	4.64	5.62	6.59	7.23	7.86	8.50	9.12	9.75	10.37	11.91	12.82	13.43	15.23	16.42	17.60	20.79	22.22
1460	4.81	5.82	6.83	7.49	8.15	8.81	9.46	10.11	10.76	12.35	13.30	13.93	15.80	17.03	18.25	21.56	23.04
1600	5.19	6.30	7.39	8.11	8.83	9.54	10.24	10.95	11.65	13.38	14.41	15.09	17.11	18.44	19.76	23.34	24.94
1800	5.73	6.96	8.17	8.97	9.77	10.56	11.34	12.12	12.90	14.82	15.96	16.71	18.95	20.42	21.88	25.83	27.58
2000	6.27	7.61	8.94	9.82	10.69	11.56	12.42	13.28	14.13	16.23	17.48	18.30	20.75	22.36	23.96	28.25	30.16
2400	7.30	8.88	10.44	11.48	12.50	13.52	14.53	15.53	16.52	18.98	20.44	21.40	24.25	26.13	27.97	32.93	35.13
2800	8.29	10.11	11.90	13.08	14.25	15.41	16.57	17.71	18.85	21.65	23.30	24.39	27.63	29.74	31.82	37.38	39.82
2880	8.49	10.35	12.19	13.40	14.60	15.79	16.97	18.14	19.30	22.17	23.86	24.98	28.28	30.44	32.57	38.24	40.73
3200	9.26	11.30	13.31	14.64	15.95	17.26	18.55	19.83	21.10	24.22	26.07	27.28	30.87	33.20	35.50	41.58	
3500	9.97	12.18	14.35	15.78	17.20	18.60	20.00	21.38	22.74	26.10	28.08	29.38	33.21	35.70	38.14		
4000	11.11	13.59	16.03	17.63	19.22	20.79	22.34	23.88	25.40	29.12	31.31	32.75	36.96	39.68			
4500	12.22	14.97	17.66	19.43	21.17	22.90	24.60	26.29	27.95	32.02	34.39	35.95					
5000	13.30	16.30	19.23	21.16	23.06	24.93	26.78	28.60	30.40	34.78	37.32	38.98					
5500	14.34	17.58	20.76	22.83	24.88	26.89	28.87	30.83	32.74	37.40							

Use this pulley and rpm only if required to obtain speed ratio or to meet diameter limitations.

NB: Pulleys shown in this table that are not stock items are available on an MTO basis.

POWER RATING IN kW FOR 12 MM WIDE

rpm of faster shaft	Additional power per belt for speed ratio of reduction drives									
	1.00 to 1.04	1.05 to 1.11	1.12 to 1.19	1.20 to 1.30	1.31 to 1.45	1.46 to 1.65	1.66 to 1.99	2.00 to 2.63	2.64 to 4.47	4.48 and over
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
20	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01
40	0.00	0.00	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02
60	0.00	0.00	0.01	0.01	0.02	0.02	0.02	0.03	0.03	0.04
100	0.00	0.01	0.01	0.02	0.03	0.03	0.04	0.05	0.05	0.06
200	0.00	0.01	0.03	0.04	0.05	0.07	0.08	0.09	0.10	0.12
300	0.00	0.02	0.04	0.06	0.08	0.10	0.12	0.14	0.16	0.18
400	0.00	0.03	0.05	0.08	0.10	0.13	0.16	0.18	0.21	0.23
500	0.00	0.03	0.07	0.10	0.13	0.16	0.20	0.23	0.26	0.29
600	0.00	0.04	0.08	0.12	0.16	0.20	0.23	0.27	0.31	0.35
700	0.00	0.05	0.09	0.14	0.18	0.23	0.27	0.32	0.36	0.41
730	0.00	0.05	0.09	0.14	0.19	0.24	0.28	0.33	0.38	0.43
800	0.00	0.05	0.10	0.16	0.21	0.26	0.31	0.36	0.42	0.47
900	0.00	0.06	0.12	0.18	0.23	0.29	0.35	0.41	0.47	0.53
1000	0.00	0.06	0.13	0.20	0.26	0.33	0.39	0.46	0.52	0.59
1200	0.00	0.08	0.16	0.23	0.31	0.39	0.47	0.55	0.62	0.70
1400	0.00	0.09	0.18	0.27	0.36	0.46	0.55	0.64	0.73	0.82
1460	0.00	0.09	0.19	0.28	0.38	0.47	0.57	0.66	0.76	0.85
1600	0.00	0.10	0.21	0.31	0.42	0.52	0.62	0.73	0.83	0.94
1800	0.00	0.12	0.23	0.35	0.47	0.59	0.70	0.82	0.94	1.05
2000	0.00	0.13	0.26	0.39	0.52	0.65	0.78	0.91	1.04	1.17
2400	0.00	0.16	0.31	0.47	0.62	0.78	0.94	1.09	1.25	1.40
2800	0.00	0.18	0.36	0.55	0.73	0.91	1.09	1.27	1.46	1.64
2880	0.00	0.19	0.37	0.56	0.75	0.94	1.12	1.31	1.50	1.68
3200	0.00	0.21	0.42	0.62	0.83	1.04	1.25	1.46	1.66	1.87
3500	0.00	0.23	0.46	0.68	0.91	1.14	1.37	1.59	1.82	2.05
4000	0.00	0.26	0.52	0.78	1.04	1.30	1.56	1.82	2.08	2.34
4500	0.00	0.29	0.59	0.88	1.17	1.46	1.76	2.05	2.34	2.63
5000	0.00	0.32	0.65	0.98	1.30	1.63	1.95	2.28	2.60	2.93
5500	0.00	0.36	0.72	1.07	1.43	1.79	2.15	2.50	2.86	3.22

Belt length correction factor

Pitch and length designation	No. of teeth	Correction factor
8MGT-640	80	0.79
8MGT-720	90	0.83
8MGT-800	100	0.87
8MGT-896	112	0.91
8MGT-960	120	0.94
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
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
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
8MGT-3600	450	1.45
8MGT-4000	500	1.49
8MGT-4400	550	1.52
8MGT-4480	560	1.53

Service rating = (power rating + additional factor) x length correction factor.

POWER RATING IN kW FOR 21 MM WIDE

8 mm PITCH BELTS

rpm of faster shaft	Rated kilowatt for small pulley (Number of grooves and pitch diameter in mm)																
	22 56.02	25 63.66	28 71.30	30 76.39	32 81.49	34 86.58	36 91.67	38 96.77	40 101.86	45 114.59	48 122.23	50 127.32	56 142.60	60 152.79	64 162.97	75 190.99	80 203.72
10	0.18	0.21	0.24	0.26	0.27	0.29	0.31	0.33	0.35	0.40	0.43	0.44	0.50	0.54	0.57	0.68	0.72
20	0.27	0.32	0.36	0.39	0.42	0.45	0.48	0.51	0.54	0.62	0.66	0.69	0.78	0.84	0.90	1.06	1.13
40	0.44	0.52	0.59	0.65	0.70	0.75	0.80	0.85	0.90	1.02	1.10	1.15	1.29	1.39	1.49	1.76	1.88
60	0.60	0.70	0.81	0.88	0.95	1.02	1.09	1.16	1.23	1.40	1.51	1.58	1.78	1.92	2.05	2.42	2.58
100	0.89	1.06	1.22	1.33	1.44	1.54	1.65	1.76	1.86	2.13	2.29	2.39	2.70	2.91	3.12	3.68	3.93
200	1.57	1.87	2.17	2.37	2.57	2.76	2.96	3.15	3.34	3.82	4.11	4.30	4.87	5.24	5.62	6.63	7.09
300	2.21	2.64	3.06	3.35	3.63	3.91	4.19	4.46	4.74	5.43	5.83	6.11	6.91	7.45	7.98	9.43	10.09
400	2.81	3.37	3.92	4.28	4.65	5.01	5.37	5.73	6.08	6.97	7.50	7.85	8.89	9.58	10.26	12.13	12.97
500	3.39	4.07	4.75	5.19	5.64	6.08	6.52	6.95	7.39	8.47	9.11	9.54	10.81	11.65	12.48	14.76	15.78
600	3.96	4.76	5.56	6.08	6.60	7.12	7.64	8.15	8.66	9.93	10.69	11.19	12.68	13.67	14.65	17.32	18.52
700	4.52	5.43	6.35	6.95	7.55	8.14	8.73	9.32	9.91	11.37	12.23	12.81	14.52	15.65	16.78	19.84	21.21
730	4.68	5.63	6.58	7.20	7.83	8.44	9.06	9.67	10.28	11.79	12.69	13.29	15.07	16.24	17.41	20.58	22.01
800	5.06	6.09	7.12	7.80	8.47	9.14	9.81	10.48	11.14	12.78	13.75	14.40	16.33	17.60	18.87	22.31	23.85
900	5.59	6.74	7.88	8.64	9.39	10.13	10.87	11.61	12.34	14.17	15.25	15.97	18.11	19.52	20.92	24.74	26.45
1000	6.11	7.38	8.63	9.46	10.28	11.10	11.92	12.73	13.53	15.53	16.72	17.51	19.86	21.41	22.95	27.13	29.01
1200	7.13	8.62	10.10	11.07	12.04	13.01	13.97	14.92	15.87	18.22	19.62	20.54	23.30	25.12	26.92	31.82	34.01
1400	8.12	9.84	11.53	12.65	13.76	14.87	15.97	17.06	18.15	20.84	22.44	23.50	26.66	28.74	30.80	36.39	38.89
1460	8.41	10.19	11.95	13.12	14.27	15.42	16.56	17.69	18.82	21.62	23.28	24.38	27.65	29.81	31.95	37.74	40.33
1600	9.09	11.02	12.93	14.19	15.44	16.69	17.93	19.16	20.38	23.41	25.21	26.40	29.94	32.28	34.59	40.85	43.64
1800	10.04	12.18	14.30	15.70	17.09	18.48	19.85	21.21	22.57	25.93	27.92	29.24	33.16	35.74	38.30	45.20	48.27
2000	10.96	13.32	15.65	17.19	18.72	20.23	21.74	23.24	24.72	28.40	30.58	32.03	36.32	39.13	41.92	49.44	52.79
2400	12.77	15.54	18.28	20.08	21.88	23.66	25.42	27.18	28.92	33.22	35.77	37.45	42.45	45.72	48.95	57.63	61.47
2800	14.51	17.69	20.83	22.89	24.94	26.98	28.99	30.99	32.98	37.88	40.78	42.69	48.34	52.04	55.69	65.41	69.68
2880	14.86	18.11	21.33	23.44	25.55	27.63	29.69	31.74	33.78	38.79	41.76	43.72	49.50	53.28	57.00	66.91	71.27
3200	16.21	19.78	23.30	25.62	27.92	30.20	32.46	34.70	36.92	42.39	45.62	47.74	54.02	58.11	62.12	72.77	
3500	17.44	21.31	25.11	27.62	30.10	32.56	34.99	37.41	39.80	45.67	49.14	51.41	58.12	62.48	66.75		
4000	19.45	23.79	28.05	30.86	33.64	36.38	39.10	41.79	44.44	50.97	54.79	57.31	64.67	69.43			
4500	21.39	26.19	30.90	34.00	37.05	40.07	43.06	46.00	48.91	56.03	60.19	62.91					
5000	23.27	28.52	33.66	37.03	40.35	43.63	46.87	50.06	53.20	60.86	65.31	68.22					
5500	25.10	30.77	36.32	39.96	43.54	47.06	50.53	53.94	57.30	65.45							

Use this pulley and rpm only if required to obtain speed ratio or to meet diameter limitations.

NB: Pulleys shown in this table that are not stock items are available on an MTO basis.

POWER RATING IN kW FOR 21 MM WIDE

rpm of faster shaft	Additional power per belt for speed ratio of reduction drives									
	1.00 to 1.04	1.05 to 1.11	1.12 to 1.19	1.20 to 1.30	1.31 to 1.45	1.46 to 1.65	1.66 to 1.99	2.00 to 2.63	2.64 to 4.47	4.48 and over
10	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01
20	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.02	0.02	0.02
40	0.00	0.00	0.01	0.01	0.02	0.02	0.03	0.03	0.04	0.04
60	0.00	0.01	0.01	0.02	0.03	0.03	0.04	0.05	0.05	0.06
100	0.00	0.01	0.02	0.03	0.05	0.06	0.07	0.08	0.09	0.10
200	0.00	0.02	0.05	0.07	0.09	0.11	0.14	0.16	0.18	0.20
300	0.00	0.03	0.07	0.10	0.14	0.17	0.20	0.24	0.27	0.31
400	0.00	0.05	0.09	0.14	0.18	0.23	0.27	0.32	0.36	0.41
500	0.00	0.06	0.11	0.17	0.23	0.28	0.34	0.40	0.46	0.51
600	0.00	0.07	0.14	0.20	0.27	0.34	0.41	0.48	0.55	0.61
700	0.00	0.08	0.16	0.24	0.32	0.40	0.48	0.56	0.64	0.72
730	0.00	0.08	0.17	0.25	0.33	0.42	0.50	0.58	0.66	0.75
800	0.00	0.09	0.18	0.27	0.36	0.46	0.55	0.64	0.73	0.82
900	0.00	0.10	0.20	0.31	0.41	0.51	0.61	0.72	0.82	0.92
1000	0.00	0.11	0.23	0.34	0.46	0.57	0.68	0.80	0.91	1.02
1200	0.00	0.14	0.27	0.41	0.55	0.68	0.82	0.96	1.09	1.23
1400	0.00	0.16	0.32	0.48	0.64	0.80	0.96	1.11	1.27	1.43
1460	0.00	0.17	0.33	0.50	0.66	0.83	1.00	1.16	1.33	1.49
1600	0.00	0.18	0.36	0.55	0.73	0.91	1.09	1.27	1.46	1.64
1800	0.00	0.20	0.41	0.61	0.82	1.02	1.23	1.43	1.64	1.84
2000	0.00	0.23	0.46	0.68	0.91	1.14	1.37	1.59	1.82	2.05
2400	0.00	0.27	0.55	0.82	1.09	1.37	1.64	1.91	2.18	2.46
2800	0.00	0.32	0.64	0.96	1.27	1.59	1.91	2.23	2.55	2.87
2880	0.00	0.33	0.66	0.98	1.31	1.64	1.97	2.29	2.62	2.95
3200	0.00	0.36	0.73	1.09	1.46	1.82	2.18	2.55	2.91	3.28
3500	0.00	0.40	0.80	1.19	1.59	1.99	2.39	2.79	3.19	3.58
4000	0.00	0.45	0.91	1.37	1.82	2.28	2.73	3.19	3.64	4.10
4500	0.00	0.51	1.02	1.54	2.05	2.56	3.07	3.58	4.10	4.61
5000	0.00	0.57	1.14	1.71	2.28	2.84	3.41	3.98	4.55	5.12
5500	0.00	0.63	1.25	1.88	2.50	3.13	3.75	4.38	5.01	5.63

Belt length correction factor

Pitch and length designation	No. of teeth	Correction factor
8MGT-640	80	0.79
8MGT-720	90	0.83
8MGT-800	100	0.87
8MGT-896	112	0.91
8MGT-960	120	0.94
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
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
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
8MGT-3600	450	1.45
8MGT-4000	500	1.49
8MGT-4400	550	1.52
8MGT-4480	560	1.53

Service rating = (power rating + additional factor) x length correction factor.

POWER RATING IN kW FOR 36 MM WIDE

8 mm PITCH BELTS

rpm of faster shaft	Rated kilowatt for small pulley (Number of grooves and pitch diameter in mm)																
	22 56.02	25 63.66	28 71.30	30 76.39	32 81.49	34 86.58	36 91.67	38 96.77	40 101.86	45 114.59	48 122.23	50 127.32	56 142.60	60 152.79	64 162.97	75 190.99	80 203.72
10	0.31	0.36	0.41	0.44	0.47	0.50	0.54	0.57	0.60	0.68	0.73	0.76	0.86	0.92	0.98	1.16	1.24
20	0.47	0.55	0.62	0.68	0.73	0.78	0.83	0.88	0.93	1.06	1.14	1.19	1.34	1.44	1.54	1.81	1.93
40	0.76	0.89	1.02	1.11	1.19	1.28	1.37	1.45	1.54	1.75	1.88	1.97	2.22	2.39	2.55	3.01	3.22
60	1.02	1.21	1.39	1.51	1.63	1.75	1.87	1.99	2.11	2.41	2.58	2.70	3.05	3.28	3.51	4.15	4.43
100	1.53	1.81	2.09	2.28	2.46	2.65	2.83	3.01	3.20	3.65	3.92	4.10	4.63	4.99	5.34	6.31	6.74
200	2.69	3.21	3.72	4.06	4.40	4.73	5.07	5.40	5.73	6.56	7.05	7.37	8.34	8.99	9.63	11.37	12.16
300	3.78	4.52	5.25	5.74	6.22	6.70	7.18	7.65	8.13	9.30	10.00	10.47	11.85	12.77	13.68	16.17	17.29
400	4.82	5.77	6.72	7.34	7.97	8.59	9.20	9.82	10.43	11.95	12.85	13.45	15.24	16.42	17.60	20.80	22.24
500	5.82	6.98	8.14	8.90	9.66	10.42	11.17	11.92	12.67	14.52	15.62	16.35	18.53	19.97	21.40	25.30	27.05
600	6.79	8.16	9.52	10.42	11.32	12.21	13.09	13.97	14.85	17.03	18.32	19.18	21.74	23.43	25.12	29.69	31.75
700	7.74	9.32	10.88	11.91	12.94	13.96	14.97	15.98	16.99	19.49	20.97	21.96	24.89	26.83	28.76	34.00	36.36
730	8.02	9.66	11.28	12.35	13.42	14.48	15.53	16.58	17.62	20.22	21.76	22.78	25.83	27.84	29.84	35.28	37.73
800	8.67	10.45	12.21	13.37	14.53	15.68	16.82	17.96	19.09	21.90	23.58	24.69	27.99	30.17	32.34	38.24	40.89
900	9.58	11.56	13.51	14.80	16.09	17.37	18.64	19.90	21.16	24.28	26.14	27.37	31.04	33.46	35.87	42.40	45.34
1000	10.47	12.65	14.79	16.22	17.63	19.03	20.43	21.82	23.20	26.63	28.67	30.02	34.05	36.70	39.34	46.51	49.73
1200	12.22	14.78	17.31	18.98	20.65	22.30	23.94	25.58	27.20	31.23	33.63	35.22	39.94	43.06	46.15	54.55	58.31
1400	13.92	16.86	19.77	21.69	23.59	25.49	27.37	29.25	31.11	35.73	38.47	40.29	45.70	49.26	52.80	62.38	66.67
1460	14.42	17.47	20.49	22.48	24.46	26.43	28.39	30.33	32.27	37.06	39.91	41.79	47.40	51.10	54.76	64.69	69.13
1600	15.58	18.89	22.17	24.33	26.48	28.61	30.73	32.84	34.94	40.13	43.22	45.26	51.33	55.33	59.29	70.02	74.81
1800	17.20	20.88	24.52	26.92	29.31	31.67	34.03	36.37	38.69	44.45	47.87	50.13	56.85	61.27	65.65	77.48	82.75
2000	18.80	22.84	26.83	29.47	32.08	34.68	37.27	39.83	42.38	48.69	52.43	54.91	62.26	67.09	71.87	84.76	90.49
2400	21.89	26.64	31.33	34.43	37.50	40.55	43.58	46.59	49.57	56.95	61.32	64.21	72.76	78.38	83.92	98.79	105.38
2800	24.88	30.33	35.70	39.24	42.76	46.24	49.70	53.13	56.54	64.94	69.90	73.18	82.88	89.22	95.46	112.13	119.46
2880	25.47	31.05	36.56	40.19	43.79	47.36	50.90	54.42	57.91	66.50	71.59	74.94	84.85	91.33	97.71	114.71	122.18
3200	27.78	33.91	39.94	43.92	47.86	51.77	55.64	59.48	63.29	72.67	78.20	81.85	92.60	99.61	106.49	124.75	
3500	29.90	36.53	43.05	47.35	51.60	55.81	59.99	64.13	68.22	78.30	84.23	88.14	99.64	107.11	114.43		
4000	33.34	40.78	48.09	52.90	57.66	62.37	67.03	71.63	76.19	87.37	93.93	98.24	110.87	119.03			
4500	36.67	44.90	52.97	58.28	63.52	68.69	73.81	78.86	83.85	96.05	103.18	107.85					
5000	39.90	48.89	57.70	63.47	69.17	74.80	80.34	85.81	91.20	104.33	111.96	116.95					
5500	43.02	52.75	62.27	68.50	74.63	80.68	86.62	92.48	98.23	112.20							

Use this pulley and rpm only if required to obtain speed ratio or to meet diameter limitations.

NB: Pulleys shown in this table that are not stock items are available on an MTO basis.

POWER RATING IN kW FOR 36 MM WIDE

rpm of faster shaft	Additional power per belt for speed ratio of reduction drives									
	1.00 to 1.04	1.05 to 1.11	1.12 to 1.19	1.20 to 1.30	1.31 to 1.45	1.46 to 1.65	1.66 to 1.99	2.00 to 2.63	2.64 to 4.47	4.48 and over
10	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.02	0.02
20	0.00	0.00	0.01	0.01	0.02	0.02	0.02	0.03	0.03	0.04
40	0.00	0.01	0.02	0.02	0.03	0.04	0.05	0.05	0.06	0.07
60	0.00	0.01	0.02	0.04	0.05	0.06	0.07	0.08	0.09	0.11
100	0.00	0.02	0.04	0.06	0.08	0.10	0.12	0.14	0.16	0.18
200	0.00	0.04	0.08	0.12	0.16	0.20	0.23	0.27	0.31	0.35
300	0.00	0.06	0.12	0.18	0.23	0.29	0.35	0.41	0.47	0.53
400	0.00	0.08	0.16	0.23	0.31	0.39	0.47	0.55	0.62	0.70
500	0.00	0.10	0.20	0.29	0.39	0.49	0.59	0.68	0.78	0.88
600	0.00	0.12	0.23	0.35	0.47	0.59	0.70	0.82	0.94	1.05
700	0.00	0.14	0.27	0.41	0.55	0.68	0.82	0.96	1.09	1.23
730	0.00	0.14	0.28	0.43	0.57	0.71	0.85	1.00	1.14	1.28
800	0.00	0.16	0.31	0.47	0.62	0.78	0.94	1.09	1.25	1.40
900	0.00	0.18	0.35	0.53	0.70	0.88	1.05	1.23	1.40	1.58
1000	0.00	0.19	0.39	0.59	0.78	0.98	1.17	1.37	1.56	1.76
1200	0.00	0.23	0.47	0.70	0.94	1.17	1.40	1.64	1.87	2.11
1400	0.00	0.27	0.55	0.82	1.09	1.37	1.64	1.91	2.18	2.46
1460	0.00	0.28	0.57	0.85	1.14	1.42	1.71	1.99	2.28	2.56
1600	0.00	0.31	0.62	0.94	1.25	1.56	1.87	2.18	2.50	2.81
1800	0.00	0.35	0.70	1.05	1.40	1.76	2.11	2.46	2.81	3.16
2000	0.00	0.39	0.78	1.17	1.56	1.95	2.34	2.73	3.12	3.51
2400	0.00	0.47	0.94	1.40	1.87	2.34	2.81	3.28	3.74	4.21
2800	0.00	0.55	1.09	1.64	2.18	2.73	3.28	3.82	4.37	4.91
2880	0.00	0.56	1.12	1.69	2.25	2.81	3.37	3.93	4.49	5.05
3200	0.00	0.62	1.25	1.87	2.50	3.12	3.74	4.37	4.99	5.62
3500	0.00	0.68	1.37	2.05	2.73	3.41	4.10	4.78	5.46	6.14
4000	0.00	0.78	1.56	2.34	3.12	3.90	4.68	5.46	6.24	7.02
4500	0.00	0.88	1.76	2.63	3.51	4.39	5.27	6.14	7.02	7.90
5000	0.00	0.97	1.95	2.93	3.90	4.88	5.85	6.83	7.80	8.78
5500	0.00	1.07	2.15	3.22	4.29	5.36	6.44	7.51	8.58	9.65

Belt length correction factor

Pitch and length designation	No. of teeth	Correction factor
8MGT-640	80	0.79
8MGT-720	90	0.83
8MGT-800	100	0.87
8MGT-896	112	0.91
8MGT-960	120	0.94
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
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
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
8MGT-3600	450	1.45
8MGT-4000	500	1.49
8MGT-4400	550	1.52
8MGT-4480	560	1.53

Service rating = (power rating + additional factor) x length correction factor.

POWER RATING IN kW FOR 62 MM WIDE

8 mm PITCH BELTS

rpm of faster shaft	Rated kilowatt for small pulley (Number of grooves and pitch diameter in mm)																
	22	25	28	30	32	34	36	38	40	45	48	50	56	60	64	75	80
	56.02	63.66	71.30	76.39	81.49	86.58	91.67	96.77	101.86	114.59	122.23	127.32	142.60	152.79	162.97	190.99	203.72
10	0.53	0.61	0.70	0.76	0.81	0.87	0.92	0.98	1.04	1.17	1.26	1.31	1.48	1.59	1.70	1.99	2.13
20	0.80	0.94	1.07	1.16	1.25	1.34	1.43	1.52	1.61	1.83	1.96	2.04	2.30	2.48	2.65	3.12	3.33
40	1.30	1.53	1.76	1.91	2.06	2.21	2.36	2.51	2.65	3.02	3.24	3.39	3.83	4.11	4.40	5.19	5.55
60	1.76	2.08	2.40	2.61	2.81	3.02	3.23	3.43	3.64	4.15	4.45	4.65	5.26	5.66	6.06	7.14	7.64
100	2.63	3.12	3.61	3.93	4.24	4.56	4.88	5.19	5.51	6.29	6.75	7.06	7.99	8.60	9.21	10.87	11.62
200	4.64	5.53	6.41	7.00	7.58	8.16	8.73	9.31	9.88	11.30	12.14	12.71	14.38	15.49	16.59	19.60	20.95
300	6.52	7.79	9.05	9.89	10.72	11.54	12.37	13.19	14.00	16.03	17.24	18.04	20.43	22.01	23.58	27.87	29.80
400	8.30	9.95	11.58	12.66	13.73	14.80	15.86	16.92	17.97	20.59	22.14	23.18	26.26	28.30	30.32	35.84	38.32
500	10.03	12.04	14.03	15.34	16.65	17.96	19.25	20.54	21.83	25.02	26.91	28.17	31.93	34.41	36.88	43.59	46.62
600	11.70	14.07	16.41	17.96	19.50	21.04	22.56	24.08	25.59	29.34	31.57	33.05	37.47	40.38	43.28	51.17	54.72
700	13.34	16.06	18.75	20.52	22.29	24.05	25.80	27.55	29.28	33.58	36.14	37.84	42.90	46.24	49.56	58.60	62.66
730	13.82	16.64	19.44	21.28	23.12	24.95	26.76	28.57	30.37	34.84	37.50	39.26	44.51	47.98	51.43	60.80	65.01
800	14.94	18.00	21.03	23.04	25.03	27.01	28.99	30.95	32.90	37.75	40.63	42.54	48.24	52.00	55.74	65.90	70.46
900	16.51	19.91	23.28	25.51	27.73	29.93	32.12	34.30	36.47	41.85	45.05	47.17	53.49	57.67	61.81	73.08	78.14
1000	18.05	21.79	25.50	27.95	30.38	32.80	35.21	37.60	39.98	45.89	49.41	51.74	58.67	63.25	67.80	80.15	85.69
1200	21.06	25.47	29.83	32.72	35.58	38.43	41.26	44.08	46.88	53.82	57.95	60.69	68.83	74.20	79.54	94.00	100.49
1400	23.99	29.06	34.06	37.37	40.66	43.92	47.17	50.40	53.61	61.57	66.30	69.43	78.75	84.90	90.99	107.50	114.89
1460	24.86	30.12	35.31	38.75	42.16	45.55	48.92	52.27	55.61	63.87	68.77	72.02	81.69	88.06	94.38	111.49	119.14
1600	26.85	32.56	38.20	41.93	45.63	49.31	52.96	56.60	60.21	69.16	74.47	78.00	88.46	95.35	102.18	120.67	128.93
1800	29.65	35.99	42.25	46.39	50.50	54.59	58.64	62.67	66.68	76.60	82.49	86.39	97.97	105.59	113.14	133.52	142.61
2000	32.39	39.36	46.24	50.78	55.29	59.77	64.22	68.64	73.04	83.91	90.36	94.62	107.29	115.61	123.85	146.07	155.95
2400	37.72	45.91	54.00	59.34	64.63	69.89	75.10	80.29	85.43	98.14	105.67	110.65	125.40	135.07	144.62	170.26	181.60
2800	42.88	52.27	61.53	67.63	73.69	79.69	85.65	91.57	97.43	111.91	120.47	126.12	142.82	153.75	164.51	193.24	205.87
2880	43.89	53.51	63.00	69.26	75.47	81.62	87.73	93.78	99.79	114.61	123.37	129.15	146.23	157.39	168.38	197.69	210.55
3200	47.88	58.43	68.84	75.69	82.49	89.22	95.89	102.51	109.07	125.23	134.76	141.05	159.58	171.66	183.52	214.98	
3500	51.53	62.95	74.19	81.59	88.93	96.19	103.38	110.51	117.57	134.94	145.16	151.89	171.71	184.59	197.19		
4000	57.46	70.28	82.88	91.17	99.37	107.48	115.51	123.45	131.30	150.57	161.87	169.30	191.07	205.13			
4500	63.20	77.38	91.29	100.43	109.46	118.38	127.20	135.90	144.50	165.53	177.81	185.86					
5000	68.76	84.25	99.43	109.39	119.21	128.90	138.46	147.88	157.17	179.79	192.95	201.54					
5500	74.14	90.91	107.31	118.05	128.62	139.03	149.28	159.37	169.29	193.35							

Use this pulley and rpm only if required to obtain speed ratio or to meet diameter limitations.

NB: Pulleys shown in this table that are not stock items are available on an MTO basis.

POWER RATING IN kW FOR 62 MM WIDE

rpm of faster shaft	Additional power per belt for speed ratio of reduction drives									
	1.00 to 1.04	1.05 to 1.11	1.12 to 1.19	1.20 to 1.30	1.31 to 1.45	1.46 to 1.65	1.66 to 1.99	2.00 to 2.63	2.64 to 4.47	4.48 and over
10	0.00	0.00	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.03
20	0.00	0.01	0.01	0.02	0.03	0.03	0.04	0.05	0.05	0.06
40	0.00	0.01	0.03	0.04	0.05	0.07	0.08	0.09	0.11	0.12
60	0.00	0.02	0.04	0.06	0.08	0.10	0.12	0.14	0.16	0.18
100	0.00	0.03	0.07	0.10	0.13	0.17	0.20	0.24	0.27	0.30
200	0.00	0.07	0.13	0.20	0.27	0.34	0.40	0.47	0.54	0.60
300	0.00	0.10	0.20	0.30	0.40	0.50	0.60	0.71	0.81	0.91
400	0.00	0.13	0.27	0.40	0.54	0.67	0.81	0.94	1.08	1.21
500	0.00	0.17	0.34	0.50	0.67	0.84	1.01	1.18	1.34	1.51
600	0.00	0.20	0.40	0.60	0.81	1.01	1.21	1.41	1.61	1.81
700	0.00	0.24	0.47	0.71	0.94	1.18	1.41	1.65	1.88	2.12
730	0.00	0.25	0.49	0.74	0.98	1.23	1.47	1.72	1.96	2.21
800	0.00	0.27	0.54	0.81	1.08	1.34	1.61	1.88	2.15	2.42
900	0.00	0.30	0.61	0.91	1.21	1.51	1.81	2.12	2.42	2.72
1000	0.00	0.34	0.67	1.01	1.34	1.68	2.02	2.35	2.69	3.02
1200	0.00	0.40	0.81	1.21	1.61	2.02	2.42	2.82	3.23	3.63
1400	0.00	0.47	0.94	1.41	1.88	2.35	2.82	3.29	3.76	4.23
1460	0.00	0.49	0.98	1.47	1.96	2.45	2.94	3.44	3.93	4.42
1600	0.00	0.54	1.08	1.61	2.15	2.69	3.23	3.76	4.30	4.84
1800	0.00	0.60	1.21	1.81	2.42	3.02	3.63	4.24	4.84	5.44
2000	0.00	0.67	1.35	2.02	2.69	3.36	4.03	4.71	5.38	6.05
2400	0.00	0.81	1.61	2.42	3.23	4.03	4.84	5.65	6.45	7.26
2800	0.00	0.94	1.88	2.82	3.76	4.71	5.65	6.59	7.53	8.47
2880	0.00	0.97	1.94	2.90	3.87	4.84	5.81	6.78	7.74	8.71
3200	0.00	1.08	2.15	3.23	4.30	5.38	6.45	7.53	8.60	9.68
3500	0.00	1.18	2.35	3.53	4.71	5.88	7.06	8.23	9.41	10.59
4000	0.00	1.34	2.69	4.03	5.38	6.72	8.07	9.41	10.75	12.10
4500	0.00	1.51	3.03	4.54	6.05	7.56	9.07	10.59	12.10	13.61
5000	0.00	1.68	3.36	5.04	6.72	8.40	10.08	11.76	13.44	15.12
5500	0.00	1.85	3.70	5.55	7.39	9.24	11.09	12.94	14.79	16.64

Belt length correction factor

Pitch and length designation	No. of teeth	Correction factor
8MGT-640	80	0.79
8MGT-720	90	0.83
8MGT-800	100	0.87
8MGT-896	112	0.91
8MGT-960	120	0.94
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
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
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
8MGT-3600	450	1.45
8MGT-4000	500	1.49
8MGT-4400	550	1.52
8MGT-4480	560	1.53

Service rating = (power rating + additional factor) x length correction factor.

POWER RATING IN kW FOR 20 MM WIDE

14 mm PITCH BELTS

rpm of faster shaft	Rated kilowatt for small pulley (Number of grooves and pitch diameter in mm)															
	28	30	32	34	36	38	40	44	48	50	56	60	64	72	75	80
	124.78	133.69	142.60	151.52	160.43	169.34	178.25	196.08	213.90	222.82	249.55	267.38	285.21	320.86	334.23	356.51
10	0.72	0.77	0.83	0.89	0.95	1.00	1.06	1.17	1.29	1.34	1.51	1.62	1.73	1.96	2.04	2.18
20	1.10	1.19	1.29	1.38	1.47	1.56	1.65	1.83	2.01	2.10	2.36	2.54	2.71	3.06	3.19	3.41
40	1.80	1.95	2.10	2.26	2.41	2.56	2.71	3.02	3.32	3.46	3.91	4.20	4.50	5.08	5.30	5.66
80	3.05	3.32	3.59	3.86	4.13	4.39	4.66	5.18	5.71	5.97	6.74	7.25	7.76	8.77	9.15	9.77
100	3.64	3.97	4.30	4.62	4.94	5.26	5.58	6.21	6.84	7.15	8.08	8.70	9.31	10.52	10.98	11.73
200	6.40	6.99	7.57	8.16	8.74	9.31	9.88	11.02	12.15	12.71	14.38	15.49	16.58	18.76	19.57	20.91
300	8.95	9.78	10.62	11.44	12.26	13.08	13.89	15.51	17.11	17.90	20.26	21.83	23.38	26.45	27.59	29.48
400	11.36	12.44	13.50	14.56	15.62	16.67	17.71	19.78	21.83	22.85	25.87	27.87	29.86	33.78	35.24	37.66
500	13.68	14.98	16.28	17.57	18.85	20.12	21.39	23.90	26.38	27.61	31.28	33.70	36.10	40.85	42.62	45.54
600	15.92	17.45	18.97	20.48	21.98	23.47	24.95	27.89	30.79	32.24	36.53	39.35	42.16	47.70	49.76	53.16
700	18.09	19.84	21.58	23.30	25.02	26.72	28.41	31.77	35.09	36.74	41.63	44.86	48.05	54.36	56.70	60.57
730	18.73	20.55	22.35	24.14	25.92	27.68	29.44	32.92	36.36	38.07	43.14	46.48	49.79	56.32	58.75	62.75
800	20.21	22.17	24.12	26.06	27.99	29.90	31.80	35.56	39.29	41.13	46.61	50.22	53.80	60.85	63.46	67.78
900	22.27	24.45	26.61	28.76	30.89	33.01	35.11	39.27	43.39	45.43	51.48	55.46	59.41	67.18	70.05	74.80
1000	24.30	26.68	29.05	31.40	33.73	36.05	38.35	42.91	47.41	49.64	56.25	60.60	64.90	73.36	76.49	81.65
1200	28.23	31.02	33.79	36.54	39.26	41.97	44.66	49.97	55.22	57.81	65.50	70.54	75.52	85.30	88.91	94.85
1400	32.02	35.21	38.37	41.50	44.61	47.69	50.75	56.79	62.74	65.69	74.39	80.09	85.71	96.71	100.75	107.39
1460	33.13	36.43	39.71	42.96	46.18	49.37	52.53	58.79	64.95	68.00	77.00	82.88	88.69	100.03	104.19	111.03
1600	35.68	39.26	42.80	46.30	49.78	53.22	56.64	63.38	70.01	73.29	82.96	89.27	95.48	107.59	112.02	119.28
1800	39.24	43.19	47.10	50.97	54.80	58.59	62.35	69.76	77.04	80.63	91.20	98.08	104.83	117.93	122.71	
2000	42.70	47.01	51.27	55.49	59.67	63.80	67.89	75.94	83.83	87.71	99.12	106.52	113.76			
2400	49.33	54.33	59.28	64.16	68.98	73.75	78.45	87.69	96.70	101.11	114.00					
2800	55.60	61.26	66.84	72.35	77.77	83.11	88.37	98.66	108.63	113.49						
2880	56.82	62.61	68.31	73.93	79.46	84.91	90.28	100.76	110.90							
3200	61.55	67.82	73.99	80.06	86.02	91.88	97.64	108.83								
3500	65.79	72.50	79.08	85.54	91.87	98.08	104.16									
4000	72.48	79.84	87.04	94.08	100.95											

NB: Pulleys shown in this table that are not stock items are available on an MTO basis.

POWER RATING IN kW FOR 20 MM WIDE

rpm of faster shaft	Additional power per belt for speed ratio of reduction drives									
	1.00 to 1.04	1.05 to 1.11	1.12 to 1.19	1.20 to 1.30	1.31 to 1.45	1.46 to 1.65	1.66 to 1.99	2.00 to 2.63	2.64 to 4.47	4.48 and over
10	0.00	0.00	0.01	0.01	0.01	0.02	0.02	0.03	0.03	0.03
20	0.00	0.01	0.01	0.02	0.03	0.04	0.04	0.05	0.06	0.07
40	0.00	0.01	0.03	0.04	0.06	0.07	0.09	0.10	0.12	0.13
80	0.00	0.03	0.06	0.09	0.12	0.15	0.18	0.21	0.24	0.26
100	0.00	0.04	0.07	0.11	0.15	0.18	0.22	0.26	0.29	0.33
200	0.00	0.07	0.15	0.22	0.29	0.37	0.44	0.51	0.59	0.66
300	0.00	0.11	0.22	0.33	0.44	0.55	0.66	0.77	0.88	0.99
400	0.00	0.15	0.29	0.44	0.59	0.74	0.88	1.03	1.18	1.32
500	0.00	0.18	0.37	0.55	0.74	0.92	1.10	1.29	1.47	1.65
600	0.00	0.22	0.44	0.66	0.88	1.10	1.32	1.54	1.76	1.99
700	0.00	0.26	0.52	0.77	1.03	1.29	1.54	1.80	2.06	2.32
730	0.00	0.27	0.54	0.81	1.07	1.34	1.61	1.88	2.15	2.42
800	0.00	0.29	0.59	0.88	1.18	1.47	1.77	2.06	2.35	2.65
900	0.00	0.33	0.66	0.99	1.32	1.65	1.99	2.32	2.65	2.98
1000	0.00	0.37	0.74	1.10	1.47	1.84	2.21	2.57	2.94	3.31
1200	0.00	0.44	0.88	1.32	1.76	2.21	2.65	3.09	3.53	3.97
1400	0.00	0.51	1.03	1.54	2.06	2.57	3.09	3.60	4.12	4.63
1460	0.00	0.54	1.07	1.61	2.15	2.68	3.22	3.76	4.29	4.83
1600	0.00	0.59	1.18	1.77	2.35	2.94	3.53	4.12	4.71	5.30
1800	0.00	0.66	1.32	1.99	2.65	3.31	3.97	4.63	5.29	5.96
2000	0.00	0.74	1.47	2.21	2.94	3.68	4.41	5.15	5.88	6.62
2400	0.00	0.88	1.77	2.65	3.53	4.41	5.30	6.18	7.06	7.94
2800	0.00	1.03	2.06	3.09	4.12	5.15	6.18	7.21	8.24	9.27
2880	0.00	1.06	2.12	3.18	4.24	5.30	6.35	7.41	8.47	9.53
3200	0.00	1.18	2.36	3.53	4.71	5.88	7.06	8.24	9.41	10.59
3500	0.00	1.29	2.58	3.86	5.15	6.44	7.72	9.01	10.30	11.58
4000	0.00	1.47	2.94	4.41	5.88	7.35	8.83	10.30	11.77	13.24

Belt length correction factor

Pitch and length designation	No. of teeth	Correction factor
14MGT-994	71	0.68
14MGT-1120	80	0.73
14MGT-1190	85	0.75
14MGT-1260	90	0.77
14MGT-1400	100	0.81
14MGT-1568	112	0.85
14MGT-1610	115	0.86
14MGT-1750	125	0.89
14MGT-1890	135	0.92
14MGT-1960	140	0.94
14MGT-2100	150	0.96
14MGT-2240	160	0.99
14MGT-2310	165	1.00
14MGT-2380	170	1.01
14MGT-2450	175	1.02
14MGT-2520	180	1.03
14MGT-2590	185	1.04
14MGT-2660	190	1.05
14MGT-2800	200	1.07
14MGT-3136	224	1.12
14MGT-3304	236	1.14
14MGT-3360	240	1.14
14MGT-3500	250	1.16
14MGT-3850	275	1.19
14MGT-3920	280	1.20
14MGT-4326	309	1.24
14MGT-4410	315	1.25

Service rating = (power rating + additional factor) x length correction factor.

POWER RATING IN kW FOR 37 MM WIDE

14 mm PITCH BELTS

rpm of faster shaft	Rated kilowatt for small pulley (Number of grooves and pitch diameter in mm)															
	28	30	32	34	36	38	40	44	48	50	56	60	64	72	75	80
	124.78	133.69	142.60	151.52	160.43	169.34	178.25	196.08	213.90	222.82	249.55	267.38	285.21	320.86	334.23	356.51
10	1.32	1.43	1.54	1.64	1.75	1.86	1.96	2.17	2.38	2.48	2.80	3.00	3.21	3.62	3.77	4.03
20	2.04	2.21	2.38	2.55	2.71	2.88	3.05	3.38	3.71	3.88	4.37	4.70	5.02	5.67	5.91	6.31
40	3.32	3.61	3.89	4.18	4.46	4.74	5.02	5.58	6.13	6.41	7.23	7.78	8.32	9.40	9.80	10.47
80	5.65	6.15	6.65	7.14	7.64	8.13	8.62	9.59	10.56	11.04	12.47	13.42	14.36	16.23	16.92	18.08
100	6.74	7.35	7.95	8.54	9.14	9.73	10.32	11.49	12.65	13.23	14.95	16.09	17.22	19.47	20.31	21.69
200	11.84	12.93	14.01	15.09	16.16	17.23	18.29	20.39	22.48	23.52	26.61	28.65	30.68	34.70	36.20	38.68
300	16.55	18.10	19.64	21.17	22.69	24.20	25.70	28.69	31.64	33.11	37.49	40.38	43.24	48.93	51.04	54.54
400	21.02	23.01	24.98	26.94	28.89	30.83	32.76	36.59	40.38	42.27	47.87	51.57	55.24	62.50	65.20	69.67
500	25.30	27.72	30.12	32.50	34.87	37.22	39.56	44.21	48.80	51.09	57.87	62.35	66.79	75.58	78.84	84.24
600	29.45	32.28	35.09	37.88	40.65	43.41	46.15	51.59	56.97	59.64	67.57	72.81	77.99	88.25	92.05	98.35
700	33.47	36.70	39.92	43.11	46.28	49.43	52.57	58.78	64.92	67.97	77.02	82.98	88.89	100.57	104.90	112.05
730	34.65	38.01	41.34	44.66	47.94	51.21	54.46	60.90	67.26	70.42	79.80	85.99	92.11	104.20	108.68	116.09
800	37.38	41.02	44.63	48.21	51.77	55.31	58.83	65.79	72.68	76.09	86.23	92.91	99.52	112.57	117.40	125.39
900	41.21	45.24	49.24	53.21	57.15	61.06	64.95	72.65	80.27	84.04	95.24	102.61	109.90	124.28	129.60	138.39
1000	44.95	49.37	53.75	58.09	62.41	66.69	70.95	79.38	87.70	91.83	104.06	112.10	120.06	135.72	141.51	151.06
1200	52.22	57.39	62.51	67.60	72.64	77.65	82.62	92.45	102.15	106.95	121.17	130.50	139.72	157.81	164.49	175.47
1400	59.23	65.13	70.98	76.77	82.52	88.22	93.88	105.06	116.08	121.52	137.63	148.17	158.57	178.91	186.39	198.67
1460	61.29	67.40	73.46	79.47	85.43	91.33	97.19	108.76	120.16	125.79	142.44	153.34	164.07	185.05	192.76	205.40
1600	66.02	72.63	79.18	85.66	92.09	98.47	104.78	117.26	129.53	135.59	153.47	165.15	176.63	199.03	207.24	220.67
1800	72.60	79.90	87.13	94.29	101.37	108.39	115.35	129.06	142.52	149.16	168.71	181.44	193.93	218.18	227.02	
2000	78.99	86.97	94.85	102.66	110.38	118.02	125.59	140.48	155.08	162.26	183.37	197.06	210.46			
2400	91.25	100.51	109.66	118.70	127.62	136.44	145.14	162.23	178.89	187.06	210.90					
2800	102.86	113.34	123.66	133.84	143.87	153.75	163.49	182.52	200.96	209.96						
2880	105.11	115.82	126.37	136.76	147.00	157.09	167.01	186.40	205.16							
3200	113.86	125.47	136.89	148.11	159.14	169.98	180.63	201.34								
3500	121.72	134.12	146.30	158.24	169.96	181.44	192.69									
4000	134.08	147.70	161.03	174.04	186.75											

NB: Pulleys shown in this table that are not stock items are available on an MTO basis.

POWER RATING IN kW FOR 37 MM WIDE

rpm of faster shaft	Additional power per belt for speed ratio of reduction drives									
	1.00 to 1.04	1.05 to 1.11	1.12 to 1.19	1.20 to 1.30	1.31 to 1.45	1.46 to 1.65	1.66 to 1.99	2.00 to 2.63	2.64 to 4.47	4.48 and over
10	0.00	0.01	0.01	0.02	0.03	0.03	0.04	0.05	0.05	0.06
20	0.00	0.01	0.03	0.04	0.05	0.07	0.08	0.10	0.11	0.12
40	0.00	0.03	0.05	0.08	0.11	0.14	0.16	0.19	0.22	0.24
80	0.00	0.05	0.11	0.16	0.22	0.27	0.33	0.38	0.44	0.49
100	0.00	0.07	0.14	0.20	0.27	0.34	0.41	0.48	0.54	0.61
200	0.00	0.14	0.27	0.41	0.54	0.68	0.82	0.95	1.09	1.22
300	0.00	0.20	0.41	0.61	0.82	1.02	1.22	1.43	1.63	1.84
400	0.00	0.27	0.54	0.82	1.09	1.36	1.63	1.90	2.18	2.45
500	0.00	0.34	0.68	1.02	1.36	1.70	2.04	2.38	2.72	3.06
600	0.00	0.41	0.82	1.22	1.63	2.04	2.45	2.86	3.27	3.67
700	0.00	0.48	0.95	1.43	1.90	2.38	2.86	3.33	3.81	4.29
730	0.00	0.50	0.99	1.49	1.99	2.48	2.98	3.48	3.97	4.47
800	0.00	0.54	1.09	1.63	2.18	2.72	3.27	3.81	4.35	4.90
900	0.00	0.61	1.23	1.84	2.45	3.06	3.67	4.29	4.90	5.51
1000	0.00	0.68	1.36	2.04	2.72	3.40	4.08	4.76	5.44	6.12
1200	0.00	0.82	1.63	2.45	3.27	4.08	4.90	5.71	6.53	7.35
1400	0.00	0.95	1.91	2.86	3.81	4.76	5.71	6.67	7.62	8.57
1460	0.00	0.99	1.99	2.98	3.97	4.97	5.96	6.95	7.95	8.94
1600	0.00	1.09	2.18	3.27	4.35	5.44	6.53	7.62	8.71	9.80
1800	0.00	1.22	2.45	3.67	4.90	6.12	7.35	8.57	9.80	11.02
2000	0.00	1.36	2.72	4.08	5.44	6.80	8.16	9.52	10.88	12.24
2400	0.00	1.63	3.27	4.90	6.53	8.16	9.80	11.43	13.06	14.69
2800	0.00	1.90	3.81	5.71	7.62	9.52	11.43	13.33	15.24	17.14
2880	0.00	1.96	3.92	5.88	7.84	9.80	11.76	13.72	15.67	17.63
3200	0.00	2.18	4.36	6.53	8.71	10.88	13.06	15.24	17.41	19.59
3500	0.00	2.38	4.77	7.14	9.52	11.91	14.29	16.67	19.05	21.43
4000	0.00	2.72	5.45	8.16	10.88	13.61	16.33	19.05	21.77	24.49

Belt length correction factor

Pitch and length designation	No. of teeth	Correction factor
14MGT-994	71	0.68
14MGT-1120	80	0.73
14MGT-1190	85	0.75
14MGT-1260	90	0.77
14MGT-1400	100	0.81
14MGT-1568	112	0.85
14MGT-1610	115	0.86
14MGT-1750	125	0.89
14MGT-1890	135	0.92
14MGT-1960	140	0.94
14MGT-2100	150	0.96
14MGT-2240	160	0.99
14MGT-2310	165	1.00
14MGT-2380	170	1.01
14MGT-2450	175	1.02
14MGT-2520	180	1.03
14MGT-2590	185	1.04
14MGT-2660	190	1.05
14MGT-2800	200	1.07
14MGT-3136	224	1.12
14MGT-3304	236	1.14
14MGT-3360	240	1.14
14MGT-3500	250	1.16
14MGT-3850	275	1.19
14MGT-3920	280	1.20
14MGT-4326	309	1.24
14MGT-4410	315	1.25

Service rating = (power rating + additional factor) x length correction factor.

POWER RATING IN kW FOR 68 MM WIDE

14 mm PITCH BELTS

rpm of faster shaft	Rated kilowatt for small pulley (Number of grooves and pitch diameter in mm)															
	28	30	32	34	36	38	40	44	48	50	56	60	64	72	75	80
	124.78	133.69	142.60	151.52	160.43	169.34	178.25	196.08	213.90	222.82	249.55	267.38	285.21	320.86	334.23	356.51
10	2.43	2.63	2.83	3.02	3.22	3.41	3.60	3.99	4.37	4.57	5.14	5.52	5.90	6.65	6.93	7.40
20	3.75	4.06	4.37	4.68	4.99	5.30	5.60	6.22	6.82	7.13	8.03	8.63	9.23	10.42	10.86	11.60
40	6.11	6.63	7.16	7.68	8.20	8.71	9.23	10.25	11.27	11.78	13.29	14.29	15.29	17.27	18.01	19.23
80	10.38	11.30	12.22	13.13	14.04	14.94	15.84	17.63	19.40	20.28	22.91	24.66	26.39	29.82	31.11	33.23
100	12.39	13.50	14.60	15.70	16.79	17.88	18.96	21.11	23.25	24.31	27.48	29.57	31.65	35.78	37.32	39.87
200	21.76	23.76	25.75	27.73	29.70	31.66	33.61	37.48	41.31	43.22	48.90	52.65	56.38	63.77	66.52	71.08
300	30.42	33.27	36.09	38.90	41.69	44.47	47.23	52.72	58.16	60.86	68.90	74.21	79.48	89.92	93.80	100.23
400	38.63	42.28	45.91	49.52	53.10	56.67	60.21	67.25	74.22	77.68	87.97	94.77	101.51	114.86	119.82	128.04
500	46.51	50.94	55.35	59.73	64.08	68.41	72.71	81.24	89.69	93.89	106.36	114.59	122.75	138.90	144.89	154.82
600	54.12	59.32	64.49	69.62	74.72	79.78	84.82	94.81	104.70	109.61	124.19	133.81	143.34	162.19	169.18	180.75
700	61.50	67.46	73.36	79.23	85.06	90.85	96.61	108.02	119.31	124.91	141.55	152.51	163.37	184.83	192.78	205.94
730	63.68	69.86	75.98	82.07	88.11	94.12	100.09	111.92	123.62	129.43	146.67	158.03	169.28	191.50	199.74	213.36
800	68.70	75.39	82.02	88.61	95.15	101.65	108.11	120.91	133.57	139.85	158.48	170.75	182.91	206.88	215.77	230.45
900	75.73	83.14	90.49	97.78	105.03	112.22	119.37	133.53	147.52	154.45	175.04	188.58	201.99	228.41	238.19	254.33
1000	82.61	90.73	98.78	106.77	114.70	122.57	130.39	145.88	161.18	168.76	191.24	206.02	220.64	249.43	260.07	277.62
1200	95.97	105.47	114.89	124.23	133.50	142.70	151.83	169.91	187.73	196.56	222.69	239.84	256.78	290.03	302.30	322.49
1400	108.86	119.70	130.45	141.10	151.66	162.14	172.54	193.09	213.33	223.34	252.94	272.32	291.42	328.81	342.56	365.13
1460	112.64	123.88	135.02	146.05	157.00	167.85	178.62	199.89	220.84	231.19	261.79	281.81	301.53	340.09	354.25	377.49
1600	121.33	133.48	145.51	157.44	169.25	180.96	192.57	215.50	238.05	249.19	282.05	303.51	324.62	365.79	380.87	405.55
1800	133.42	146.84	160.13	173.28	186.31	199.21	211.99	237.19	261.94	274.14	310.07	333.46	356.42	400.98	417.22	
2000	145.17	159.83	174.33	188.67	202.86	216.91	230.81	258.19	285.01	298.21	337.00	362.17	386.79			
2400	167.71	184.73	201.54	218.15	234.55	250.75	266.75	298.15	328.77	343.78	387.61					
2800	189.05	208.30	227.27	245.98	264.41	282.57	300.47	335.44	369.33	385.86						
2880	193.18	212.86	232.25	251.35	270.16	288.70	306.94	342.58	377.06							
3200	209.26	230.59	251.57	272.20	292.48	312.40	331.97	370.03								
3500	223.70	246.50	268.87	290.83	312.36	333.46	354.13									
4000	246.42	271.46	295.94	319.86	343.22											

NB: Pulleys shown in this table that are not stock items are available on an MTO basis.

POWER RATING IN kW FOR 68 MM WIDE

rpm of faster shaft	Additional power per belt for speed ratio of reduction drives									
	1.00 to 1.04	1.05 to 1.11	1.12 to 1.19	1.20 to 1.30	1.31 to 1.45	1.46 to 1.65	1.66 to 1.99	2.00 to 2.63	2.64 to 4.47	4.48 and over
10	0.00	0.01	0.03	0.04	0.05	0.06	0.08	0.09	0.10	0.11
20	0.00	0.02	0.05	0.08	0.10	0.13	0.15	0.18	0.20	0.23
40	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	0.40	0.45
80	0.00	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90
100	0.00	0.12	0.25	0.38	0.50	0.63	0.75	0.88	1.00	1.13
200	0.00	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25
300	0.00	0.37	0.75	1.13	1.50	1.88	2.25	2.63	3.00	3.38
400	0.00	0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50
500	0.00	0.62	1.25	1.88	2.50	3.13	3.75	4.38	5.00	5.63
600	0.00	0.75	1.50	2.25	3.00	3.75	4.50	5.25	6.00	6.75
700	0.00	0.87	1.75	2.63	3.50	4.38	5.25	6.13	7.00	7.88
730	0.00	0.91	1.83	2.74	3.65	4.56	5.48	6.39	7.30	8.21
800	0.00	1.00	2.00	3.00	4.00	5.00	6.00	7.00	8.00	9.00
900	0.00	1.12	2.25	3.38	4.50	5.63	6.75	7.88	9.00	10.13
1000	0.00	1.25	2.50	3.75	5.00	6.25	7.50	8.75	10.00	11.25
1200	0.00	1.50	3.00	4.50	6.00	7.50	9.00	10.50	12.00	13.50
1400	0.00	1.75	3.50	5.25	7.00	8.75	10.50	12.25	14.00	15.75
1460	0.00	1.82	3.65	5.48	7.30	9.13	10.95	12.78	14.60	16.43
1600	0.00	2.00	4.00	6.00	8.00	10.00	12.00	14.00	16.00	18.00
1800	0.00	2.25	4.50	6.75	9.00	11.25	13.50	15.75	18.00	20.25
2000	0.00	2.50	5.00	7.50	10.00	12.50	15.00	17.50	20.00	22.50
2400	0.00	3.00	6.01	9.00	12.00	15.00	18.00	21.01	24.00	27.00
2800	0.00	3.50	7.01	10.50	14.00	17.50	21.00	24.51	28.00	31.51
2880	0.00	3.60	7.21	10.80	14.40	18.00	21.60	25.21	28.80	32.41
3200	0.00	4.00	8.01	12.00	16.00	20.00	24.01	28.01	32.00	36.01
3500	0.00	4.37	8.76	13.13	17.50	21.88	26.26	30.63	35.00	39.38
4000	0.00	5.00	10.01	15.00	20.00	25.01	30.01	35.01	40.00	45.01

Belt length correction factor

Pitch and length designation	No. of teeth	Correction factor
14MGT-994	71	0.68
14MGT-1120	80	0.73
14MGT-1190	85	0.75
14MGT-1260	90	0.77
14MGT-1400	100	0.81
14MGT-1568	112	0.85
14MGT-1610	115	0.86
14MGT-1750	125	0.89
14MGT-1890	135	0.92
14MGT-1960	140	0.94
14MGT-2100	150	0.96
14MGT-2240	160	0.99
14MGT-2310	165	1.00
14MGT-2380	170	1.01
14MGT-2450	175	1.02
14MGT-2520	180	1.03
14MGT-2590	185	1.04
14MGT-2660	190	1.05
14MGT-2800	200	1.07
14MGT-3136	224	1.12
14MGT-3304	236	1.14
14MGT-3360	240	1.14
14MGT-3500	250	1.16
14MGT-3850	275	1.19
14MGT-3920	280	1.20
14MGT-4326	309	1.24
14MGT-4410	315	1.25

Service rating = (power rating + additional factor) x length correction factor.

POWER RATING IN kW FOR 90 MM WIDE

14 mm PITCH BELTS

rpm of faster shaft	Rated kilowatt for small pulley (Number of grooves and pitch diameter in mm)															
	28	30	32	34	36	38	40	44	48	50	56	60	64	72	75	80
	124.78	133.69	142.60	151.52	160.43	169.34	178.25	196.08	213.90	222.82	249.55	267.38	285.21	320.86	334.23	356.51
10	3.22	3.48	3.74	4.00	4.26	4.51	4.77	5.28	5.79	6.04	6.80	7.30	7.81	8.81	9.18	9.80
20	4.96	5.37	5.78	6.19	6.60	7.01	7.42	8.23	9.03	9.43	10.63	11.42	12.22	13.79	14.38	15.35
40	8.08	8.78	9.47	10.16	10.85	11.53	12.21	13.57	14.92	15.59	17.59	18.92	20.24	22.86	23.83	25.46
80	13.74	14.96	16.17	17.38	18.58	19.77	20.96	23.33	25.68	26.84	30.33	32.63	34.92	39.47	41.17	43.98
100	16.40	17.87	19.33	20.78	22.23	23.67	25.10	27.95	30.77	32.18	36.37	39.14	41.89	47.36	49.39	52.77
200	28.80	31.45	34.09	36.70	39.31	41.90	44.48	49.60	54.68	57.20	64.72	69.69	74.62	84.41	88.05	94.08
300	40.26	44.03	47.77	51.49	55.18	58.86	62.52	69.78	76.97	80.55	91.19	98.21	105.19	119.01	124.15	132.66
400	51.13	55.96	60.77	65.54	70.28	75.00	79.69	89.01	98.23	102.81	116.43	125.43	134.36	152.02	158.59	169.47
500	61.55	67.43	73.26	79.06	84.82	90.54	96.23	107.53	118.71	124.26	140.77	151.66	162.47	183.84	191.77	204.91
600	71.62	78.51	85.35	92.14	98.89	105.60	112.26	125.49	138.57	145.07	164.37	177.10	189.72	214.66	223.91	239.23
700	81.40	89.28	97.10	104.87	112.58	120.24	127.86	142.97	157.91	165.32	187.34	201.85	216.23	244.62	255.15	272.56
730	84.29	92.46	100.57	108.62	116.62	124.57	132.47	148.13	163.62	171.30	194.12	209.15	224.05	253.46	264.36	282.38
800	90.93	99.78	108.56	117.28	125.94	134.54	143.09	160.03	176.78	185.09	209.75	225.99	242.08	273.82	285.58	305.00
900	100.23	110.04	119.76	129.42	139.00	148.53	157.99	176.73	195.24	204.43	231.67	249.59	267.34	302.30	315.25	336.62
1000	109.34	120.08	130.73	141.31	151.80	162.23	172.58	193.08	213.33	223.36	253.12	272.68	292.03	330.12	344.21	367.44
1200	127.02	139.59	152.06	164.42	176.69	188.87	200.96	224.87	248.47	260.15	294.74	317.43	339.85	383.87	400.10	426.82
1400	144.07	158.43	172.65	186.75	200.73	214.60	228.36	255.56	282.35	295.60	334.77	360.42	385.70	435.19	453.38	483.26
1460	149.08	163.96	178.70	193.31	207.79	222.16	236.40	264.56	292.28	305.99	346.48	372.98	399.08	450.12	468.86	499.62
1600	160.58	176.66	192.59	208.37	224.01	239.51	254.88	285.22	315.07	329.81	373.30	401.71	429.65	484.14	504.09	536.76
1800	176.59	194.35	211.94	229.34	246.58	263.66	280.57	313.93	346.68	362.83	410.38	441.35	471.73	530.71	552.21	
2000	192.14	211.54	230.72	249.71	268.49	287.08	305.48	341.72	377.22	394.69	446.03	479.35	511.93			
2400	221.96	244.50	266.75	288.72	310.43	331.87	353.05	394.61	435.13	455.00	513.01					
2800	250.21	275.69	300.80	325.56	349.95	373.99	397.67	443.97	488.82	510.70						
2880	255.68	281.72	307.38	332.67	357.57	382.10	406.25	453.42	499.05							
3200	276.96	305.20	332.97	360.27	387.11	413.48	439.38	489.75								
3500	296.08	326.25	355.86	384.92	413.42	441.35	468.71									
4000	326.14	359.28	391.68	423.35	454.26											

NB: Pulleys shown in this table that are not stock items are available on an MTO basis.

POWER RATING IN kW FOR 90 MM WIDE

rpm of faster shaft	Additional power per belt for speed ratio of reduction drives									
	1.00 to 1.04	1.05 to 1.11	1.12 to 1.19	1.20 to 1.30	1.31 to 1.45	1.46 to 1.65	1.66 to 1.99	2.00 to 2.63	2.64 to 4.47	4.48 and over
20	0.00	0.03	0.07	0.10	0.13	0.17	0.20	0.23	0.26	0.30
40	0.00	0.07	0.13	0.20	0.26	0.33	0.40	0.46	0.53	0.60
80	0.00	0.13	0.26	0.40	0.53	0.66	0.79	0.93	1.06	1.19
100	0.00	0.17	0.33	0.50	0.66	0.83	0.99	1.16	1.32	1.49
200	0.00	0.33	0.66	0.99	1.32	1.65	1.99	2.32	2.65	2.98
300	0.00	0.50	0.99	1.49	1.99	2.48	2.98	3.48	3.97	4.47
400	0.00	0.66	1.32	1.99	2.65	3.31	3.97	4.63	5.29	5.96
500	0.00	0.83	1.66	2.48	3.31	4.14	4.96	5.79	6.62	7.45
600	0.00	0.99	1.99	2.98	3.97	4.96	5.96	6.95	7.94	8.94
700	0.00	1.16	2.32	3.48	4.63	5.79	6.95	8.11	9.27	10.42
730	0.00	1.21	2.42	3.62	4.83	6.04	7.25	8.46	9.66	10.87
800	0.00	1.32	2.65	3.97	5.29	6.62	7.94	9.27	10.59	11.91
900	0.00	1.49	2.98	4.47	5.96	7.45	8.94	10.43	11.91	13.40
1000	0.00	1.65	3.31	4.96	6.62	8.27	9.93	11.58	13.24	14.89
1200	0.00	1.98	3.97	5.96	7.94	9.93	11.91	13.90	15.88	17.87
1400	0.00	2.32	4.64	6.95	9.27	11.58	13.90	16.22	18.53	20.85
1460	0.00	2.42	4.84	7.25	9.66	12.08	14.50	16.91	19.33	21.74
1600	0.00	2.65	5.30	7.94	10.59	13.24	15.89	18.53	21.18	23.83
1800	0.00	2.98	5.96	8.94	11.91	14.89	17.87	20.85	23.83	26.81
2000	0.00	3.31	6.62	9.93	13.24	16.55	19.86	23.17	26.47	29.78
2400	0.00	3.97	7.95	11.91	15.88	19.86	23.83	27.80	31.77	35.74
2800	0.00	4.63	9.27	13.90	18.53	23.17	27.80	32.44	37.06	41.70
2880	0.00	4.76	9.54	14.30	19.06	23.83	28.59	33.36	38.12	42.89
3200	0.00	5.29	10.60	15.89	21.18	26.48	31.77	37.07	42.36	47.66
3500	0.00	5.79	11.59	17.38	23.17	28.96	34.75	40.54	46.33	52.12
4000	0.00	6.62	13.25	19.86	26.47	33.10	39.71	46.34	52.95	59.57

Belt length correction factor

Pitch and length designation	No. of teeth	Correction factor
14MGT-994	71	0.68
14MGT-1120	80	0.73
14MGT-1190	85	0.75
14MGT-1260	90	0.77
14MGT-1400	100	0.81
14MGT-1568	112	0.85
14MGT-1610	115	0.86
14MGT-1750	125	0.89
14MGT-1890	135	0.92
14MGT-1960	140	0.94
14MGT-2100	150	0.96
14MGT-2240	160	0.99
14MGT-2310	165	1.00
14MGT-2380	170	1.01
14MGT-2450	175	1.02
14MGT-2520	180	1.03
14MGT-2590	185	1.04
14MGT-2660	190	1.05
14MGT-2800	200	1.07
14MGT-3136	224	1.12
14MGT-3304	236	1.14
14MGT-3360	240	1.14
14MGT-3500	250	1.16
14MGT-3850	275	1.19
14MGT-3920	280	1.20
14MGT-4326	309	1.24
14MGT-4410	315	1.25

Service rating = (power rating + additional factor) x length correction factor.

POWER RATING IN kW FOR 125 MM WIDE

14 mm PITCH BELTS

rpm of faster shaft	Rated kilowatt for small pulley (Number of grooves and pitch diameter in mm)															
	28	30	32	34	36	38	40	44	48	50	56	60	64	72	75	80
	124.78	133.69	142.60	151.52	160.43	169.34	178.25	196.08	213.90	222.82	249.55	267.38	285.21	320.86	334.23	356.51
10	4.48	4.84	5.20	5.56	5.91	6.27	6.63	7.34	8.04	8.39	9.45	10.15	10.84	12.23	12.75	13.61
20	6.89	7.46	8.03	8.60	9.17	9.74	10.30	11.43	12.54	13.10	14.76	15.87	16.97	19.15	19.97	21.32
40	11.23	12.19	13.15	14.11	15.07	16.02	16.96	18.85	20.72	21.65	24.43	26.27	28.10	31.75	33.10	35.36
80	19.08	20.77	22.46	24.13	25.80	27.46	29.11	32.40	35.66	37.28	42.12	45.32	48.51	54.82	57.18	61.08
100	22.78	24.82	26.85	28.86	30.87	32.87	34.86	38.81	42.74	44.69	50.51	54.36	58.18	65.77	68.60	73.29
200	40.00	43.68	47.34	50.98	54.60	58.20	61.78	68.89	75.95	79.45	89.89	96.79	103.64	117.23	122.29	130.67
300	55.92	61.15	66.34	71.51	76.64	81.75	86.83	96.91	106.91	111.87	126.65	136.41	146.10	165.29	172.43	184.25
400	71.01	77.73	84.40	91.03	97.62	104.17	110.69	123.62	136.43	142.79	161.71	174.21	186.61	211.14	220.26	235.37
500	85.49	93.65	101.75	109.80	117.80	125.75	133.66	149.35	164.88	172.59	195.52	210.64	225.65	255.33	266.35	284.60
600	99.48	109.04	118.54	127.97	137.35	146.66	155.92	174.29	192.46	201.48	228.29	245.97	263.50	298.14	310.99	332.26
700	113.06	124.00	134.86	145.65	156.36	167.01	177.59	198.57	219.32	229.61	260.19	280.34	300.32	339.75	354.38	378.56
730	117.06	128.41	139.68	150.86	161.97	173.01	183.98	205.73	227.25	237.92	269.61	290.49	311.18	352.03	367.17	392.20
800	126.29	138.58	150.78	162.89	174.92	186.86	198.74	222.27	245.53	257.07	291.33	313.88	336.22	380.30	396.63	423.62
900	139.21	152.83	166.34	179.75	193.06	206.29	219.42	245.45	271.17	283.92	321.76	346.65	371.30	419.87	437.84	467.52
1000	151.86	166.78	181.57	196.26	210.84	225.32	239.69	268.17	296.29	310.23	351.55	378.72	405.60	458.51	478.07	510.33
1200	176.41	193.87	211.19	228.37	245.41	262.32	279.11	312.33	345.09	361.32	409.36	440.88	472.02	533.15	555.69	592.81
1400	200.10	220.04	239.79	259.37	278.79	298.06	317.17	354.94	392.15	410.55	464.96	500.58	535.70	604.43	629.70	671.19
1460	207.06	227.72	248.19	268.48	288.60	308.55	328.34	367.45	405.95	424.98	481.23	518.03	554.28	625.17	651.20	693.91
1600	223.03	245.36	267.49	289.40	311.12	332.65	354.00	396.14	437.59	458.06	518.47	557.93	596.74	672.41	700.13	745.50
1800	245.26	269.93	294.35	318.53	342.48	366.19	389.68	436.02	481.50	503.93	569.98	612.99	655.18	737.09	766.95	
2000	266.86	293.80	320.45	346.82	372.91	398.73	424.28	474.61	523.91	548.19	619.49	665.76	711.01			
2400	308.28	339.58	370.48	401.00	431.15	460.93	490.34	548.07	604.35	631.94	712.51					
2800	347.51	382.90	417.78	452.16	486.04	519.43	552.33	616.63	678.92	709.31						
2880	355.11	391.28	426.92	462.04	496.63	530.69	564.24	629.74	693.12							
3200	384.67	423.89	462.45	500.37	537.65	574.27	610.25	680.21								
3500	411.22	453.12	494.25	534.61	574.19	612.98	650.98									
4000	452.98	499.00	544.00	587.98	630.91											

NB: Pulleys shown in this table that are not stock items are available on an MTO basis.

POWER RATING IN kW FOR 125 MM WIDE

rpm of faster shaft	Additional power per belt for speed ratio of reduction drives									
	1.00 to 1.04	1.05 to 1.11	1.12 to 1.19	1.20 to 1.30	1.31 to 1.45	1.46 to 1.65	1.66 to 1.99	2.00 to 2.63	2.64 to 4.47	4.48 and over
10	0.00	0.02	0.05	0.07	0.09	0.11	0.14	0.16	0.18	0.21
20	0.00	0.05	0.09	0.14	0.18	0.23	0.28	0.32	0.37	0.41
40	0.00	0.09	0.18	0.28	0.37	0.46	0.55	0.64	0.74	0.83
80	0.00	0.18	0.37	0.55	0.74	0.92	1.10	1.29	1.47	1.65
100	0.00	0.23	0.46	0.69	0.92	1.15	1.38	1.61	1.84	2.07
200	0.00	0.46	0.92	1.38	1.84	2.30	2.76	3.22	3.68	4.14
300	0.00	0.69	1.38	2.07	2.76	3.45	4.14	4.83	5.52	6.21
400	0.00	0.92	1.84	2.76	3.68	4.60	5.52	6.44	7.35	8.27
500	0.00	1.15	2.30	3.45	4.60	5.75	6.89	8.04	9.19	10.34
600	0.00	1.38	2.76	4.14	5.52	6.89	8.27	9.65	11.03	12.41
700	0.00	1.61	3.22	4.83	6.43	8.04	9.65	11.26	12.87	14.48
730	0.00	1.68	3.36	5.03	6.71	8.39	10.07	11.75	13.42	15.10
800	0.00	1.84	3.68	5.52	7.35	9.19	11.03	12.87	14.71	16.55
900	0.00	2.07	4.14	6.21	8.27	10.34	12.41	14.48	16.55	18.62
1000	0.00	2.30	4.60	6.90	9.19	11.49	13.79	16.09	18.38	20.68
1200	0.00	2.76	5.52	8.27	11.03	13.79	16.55	19.31	22.06	24.82
1400	0.00	3.22	6.44	9.65	12.87	16.09	19.31	22.52	25.74	28.96
1460	0.00	3.35	6.72	10.07	13.42	16.78	20.13	23.49	26.84	30.20
1600	0.00	3.68	7.36	11.03	14.71	18.39	22.06	25.74	29.42	33.09
1800	0.00	4.14	8.28	12.41	16.55	20.68	24.82	28.96	33.09	37.23
2000	0.00	4.59	9.20	13.79	18.39	22.98	27.58	32.18	36.77	41.37
2400	0.00	5.51	11.04	16.55	22.06	27.58	33.10	38.61	44.12	49.64
2800	0.00	6.43	12.88	19.31	25.74	32.18	38.61	45.05	51.48	57.91
2880	0.00	6.62	13.25	19.86	26.47	33.10	39.71	46.34	52.95	59.57
3200	0.00	7.35	14.72	22.06	29.42	36.77	44.13	51.49	58.83	66.19
3500	0.00	8.04	16.10	24.13	32.17	40.22	48.26	56.31	64.35	72.39
4000	0.00	9.19	18.40	27.58	36.77	45.97	55.16	64.36	73.54	82.74

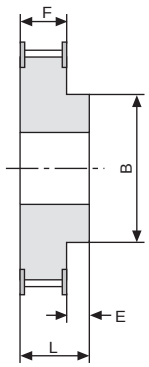
Belt length correction factor

Pitch and length designation	No. of teeth	Correction factor
14MGT-994	71	0.68
14MGT-1120	80	0.73
14MGT-1190	85	0.75
14MGT-1260	90	0.77
14MGT-1400	100	0.81
14MGT-1568	112	0.85
14MGT-1610	115	0.86
14MGT-1750	125	0.89
14MGT-1890	135	0.92
14MGT-1960	140	0.94
14MGT-2100	150	0.96
14MGT-2240	160	0.99
14MGT-2310	165	1.00
14MGT-2380	170	1.01
14MGT-2450	175	1.02
14MGT-2520	180	1.03
14MGT-2590	185	1.04
14MGT-2660	190	1.05
14MGT-2800	200	1.07
14MGT-3136	224	1.12
14MGT-3304	236	1.14
14MGT-3360	240	1.14
14MGT-3500	250	1.16
14MGT-3850	275	1.19
14MGT-3920	280	1.20
14MGT-4326	309	1.24
14MGT-4410	315	1.25

Service rating = (power rating + additional factor) x length correction factor.

PULLEY INFORMATION

PULLEY TYPES



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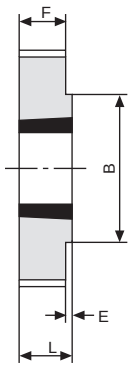

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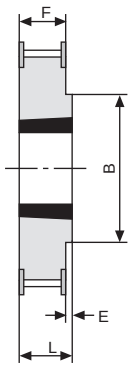

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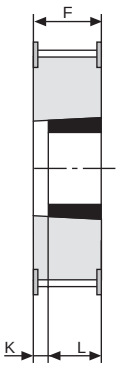

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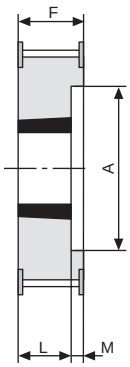

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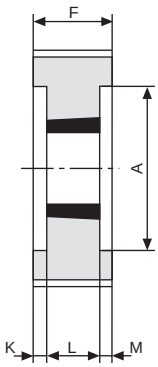

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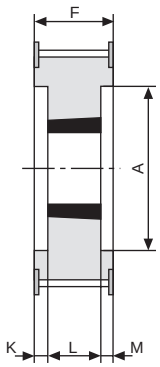
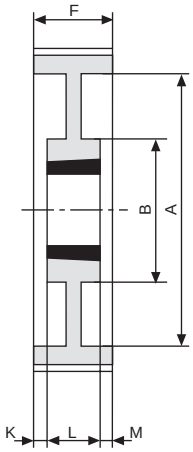
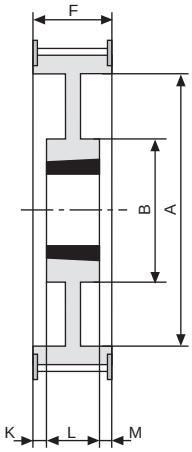


Type 6F



Type 7



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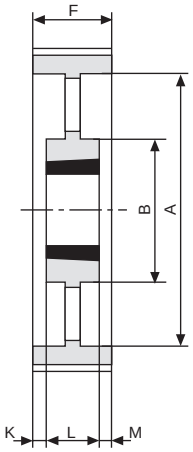
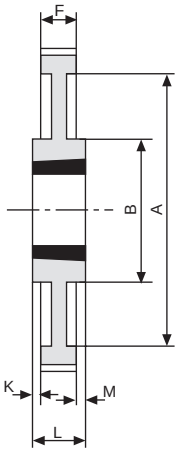
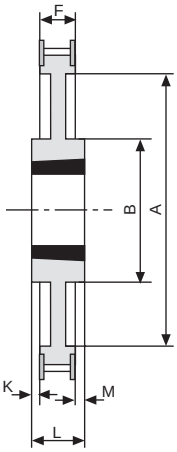


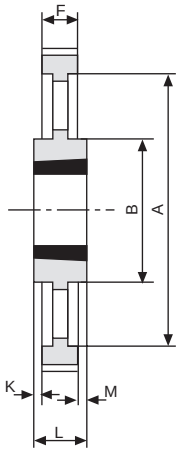
Type 8



Type 9



Type 9F



Type 10

5

PULLEY INFORMATION

PULLEY SPECIFICATIONS

Pulley designation	No. of teeth	Pulley type	Bush No.	Max. bore		Diameters mm			A	B	E	F	K	L	M	Weight (kg)	Moment of inertia 10^{-4} (kgm^2)
				Metric	Inch	Pitch	Outside	Flange									
8M-22S-12	22	1F	PB	28*	1 1/8	56.02	54.42	60	-	43	10	20	-	30	-	0.43	1.68
8M-25S-12	25	2F	1108	28	1 1/8	63.66	62.06	70	-	49	2	20	-	22	-	0.25	1.26
8M-28S-12	28	2F	1108	28	1 1/8	71.30	69.70	75	-	56	2	20	-	22	-	0.37	2.35
8M-30S-12	30	2F	1210	32	1 1/4	76.39	74.79	82.5	-	60	5	20	-	25	-	0.41	2.99
8M-32S-12	32	2F	1610	42	1 5/8	81.49	79.89	87	-	66	5	20	-	25	-	0.37	3.07
8M-34S-12	34	2F	1610	42	1 5/8	86.58	84.98	91	-	69	5	20	-	25	-	0.45	4.21
8M-36S-12	36	2F	1610	42	1 5/8	91.67	90.07	97	-	76	5	20	-	25	-	0.59	6.19
8M-38S-12	38	2F	1610	42	1 5/8	96.77	95.17	102	-	78	5	20	-	25	-	0.70	8.19
8M-40S-12	40	2F	1610	42	1 5/8	101.86	100.26	106	-	85	5	20	-	25	-	0.82	10.63
8M-45S-12	45	2F	2012	50	2	114.59	112.99	120	-	92	12	20	-	32	-	1.10	18.05
8M-48S-12	48	2F	2012	50	2	112.23	120.63	128	-	103	12	20	-	32	-	1.42	26.51
8M-50S-12	50	2F	2012	50	2	127.32	125.72	135	-	104	12	20	-	32	-	1.60	32.42
8M-56S-12	56	2F	2012	50	2	142.60	141.00	150	-	104	12	20	-	32	-	2.10	53.37
8M-60S-12	60	2F	2012	50	2	152.79	151.19	158	-	111	12	20	-	32	-	2.40	70.03
8M-64S-12	64	2F	2012	50	2	162.97	161.37	168	-	111	12	20	-	32	-	2.70	89.64
8M-75S-12	75	2	2012	50	2	190.99	189.39	-	-	111	12	20	-	32	-	3.70	168.70
8M-80S-12	80	2	2012	50	2	203.72	202.12	-	-	111	12	20	-	32	-	4.40	228.26
8M-90S-12	90	2	2012	50	2	229.18	227.58	-	-	111	12	20	-	32	-	5.50	361.10

Pulley designation	No. of teeth	Pulley type	Bush No.	Max. bore		Diameters mm			A	B	E	F	K	L	M	Weight (kg)	Moment of inertia 10^{-4} (kgm^2)
				Metric	Inch	Pitch	Outside	Flange									
8M-22S-21	22	1F	PB	28*	1 1/8	56.02	54.42	60	-	43	12	30	-	42	-	0.56	2.19
8M-25S-21	25	3F	1108	28	1 1/8	63.66	62.06	70	-	-	-	30	8	22	-	0.36	1.82
8M-28S-21	28	3F	1210	32	1 1/4	71.30	69.70	75	-	-	-	30	5	25	-	0.41	2.60
8M-30S-21	30	3F	1210	32	1 1/4	76.39	74.79	82.5	-	-	-	30	5	25	-	0.56	4.08
8M-32S-21	32	3F	1610	42	1 5/8	81.49	79.89	87	-	-	-	30	5	25	-	0.52	4.31
8M-34S-21	34	3F	1610	42	1 5/8	86.58	84.98	91	-	-	-	30	5	25	-	0.61	5.72
8M-36S-21	36	3F	1610	42	1 5/8	91.67	90.07	97	-	-	-	30	5	25	-	0.70	7.13
8M-38S-21	38	3F	1610	42	1 5/8	96.77	95.17	102	-	-	-	30	5	25	-	0.92	10.72
8M-40S-21	40	3F	1610	42	1 5/8	101.86	100.26	106	-	-	-	30	5	25	-	1.06	13.75
8M-45S-21	45	2F	2012	50	2	114.59	112.99	120	-	92	2	30	-	32	-	1.30	21.33
8M-48S-21	48	2F	2012	50	2	122.23	120.63	128	-	103	2	30	-	32	-	1.60	29.88
8M-50S-21	50	2F	2012	50	2	127.32	125.72	135	-	104	2	30	-	32	-	1.83	37.08
8M-56S-21	56	2F	2012	50	2	142.60	141.00	150	-	111	2	30	-	32	-	2.40	61.00
8M-60S-21	60	2F	2517	60	2 1/2	152.79	151.19	158	-	124	15	30	-	45	-	3.20	93.37
8M-64S-21	64	2F	2517	60	2 1/2	162.97	161.37	168	-	124	15	30	-	45	-	3.80	126.15
8M-75S-21	75	2	2517	60	2 1/2	190.99	189.39	-	-	124	15	30	-	45	-	5.20	237.10
8M-80S-21	80	2	2517	60	2 1/2	203.72	202.12	-	-	124	15	30	-	45	-	6.00	311.41
8M-90S-21	90	9	2517	60	2 1/2	229.18	227.58	-	198	124	-	30	7.5	45	7.5	5.40	354.53
8M-112S-21	112	9	2517	60	2 1/2	285.21	283.61	-	253	124	-	30	7.5	45	7.5	7.40	752.44
8M-140S-21	140	10	3020	75	3	356.51	354.91	-	324	150	-	30	10.5	51	10.5	9.00	1429.86

* Max. bore to be fitted with shallow keys PB = Plain Bored Bush

Notes:
Pulleys of cast iron or steel material are supplied. Pulleys of either material provide required durability and service life. Gates reserves the right to supply pulleys of either material against orders for standard pulleys.

Specification:
cast iron 220 N/mm^2
steel 220 M07

For peripheral speeds greater than 40 m/sec consult Gates.

PULLEY INFORMATION

PULLEY SPECIFICATIONS

Pulley designation	No. of teeth	Pulley type	Bush No.	Max. bore		Diameters mm			A	B	E	F	K	L	M	Weight (kg)	Moment of inertia 10^{-4} (kgm^2)
				Metric	Inch	Pitch	Outside	Flange									
8M-25S-36	25	1F	PB	32	1 1/4	63.66	62.06	70	-	49	10	45	-	55	-	1.04	5.26
8M-28S-36	28	3F	1210	32	1 1/4	71.30	69.70	75	-	-	-	45	-	-	-	0.64	4.06
8M-30S-36	30	3F	1610	42	1 5/8	76.39	74.79	82.5	-	-	-	45	-	-	-	0.59	4.30
8M-32S-36	32	3F	1610	42	1 5/8	81.49	79.89	87	-	-	-	45	-	-	-	0.79	6.55
8M-34S-36	34	3F	1610	42	1 5/8	86.58	84.98	91	-	-	-	45	-	-	-	0.93	8.71
8M-36S-36	36	3F	1610	42	1 5/8	91.67	90.07	97	-	-	-	45	-	-	-	1.15	12.07
8M-38S-36	38	3F	1610	42	1 5/8	96.77	95.17	102	-	-	-	45	-	-	-	1.39	16.27
8M-40S-36	40	3F	2012	50	2	101.86	100.26	106	-	-	-	45	-	-	-	1.34	17.37
8M-45S-36	45	3F	2012	50	2	114.59	112.99	120	-	-	-	45	-	-	-	1.87	30.69
8M-48S-36	48	3F	2012	50	2	122.23	120.63	128	-	-	-	45	-	-	-	2.20	41.09
8M-50S-36	50	3F	2012	50	2	127.32	125.72	135	-	-	-	45	-	-	-	2.70	54.71
8M-56S-36	56	3F	2517	60	2 1/2	142.60	141.00	150	-	-	-	45	-	-	-	3.00	76.26
8M-60S-36	60	3F	2517	60	2 1/2	152.79	151.19	158	-	-	-	45	-	-	-	3.80	110.88
8M-64S-36	64	3F	2517	60	2 1/2	161.97	161.37	168	-	-	-	45	-	-	-	4.50	149.40
8M-75S-36	75	2	3020	75	3	190.99	189.39	-	-	150	6	45	-	51	-	6.20	282.70
8M-80S-36	80	2	3020	75	3	203.72	202.12	-	-	150	6	45	-	51	-	7.40	383.89
8M-90S-36	90	9	3020	75	3	229.18	227.58	-	197	150	-	45	3	51	3	7.20	472.71
8M-112S-36	112	9	3020	75	3	285.21	283.61	-	253	150	-	45	3	51	3	10.40	1057.50
8M-140S-36	140	10	3020	75	3	356.51	354.91	-	324	150	-	45	3	51	3	12.70	2017.70
8M-168S-36	168	10	3525	100	4	427.81	426.21	-	396	198	-	45	10	65	10	21.50	4918.70
8M-192S-36	192	10	3525	100	4	488.92	487.32	-	457	198	-	45	10	65	10	27.00	8067.69

Pulley designation	No. of teeth	Pulley type	Bush No.	Max. bore		Diameters mm			A	B	E	F	K	L	M	Weight (kg)	Moment of inertia 10^{-4} (kgm^2)
				Metric	Inch	Pitch	Outside	Flange									
8M-30S-62	30	1F	PB	42	1 5/8	76.39	74.79	82.5	-	63	12	72	-	84	-	2.40	17.50
8M-32S-62	32	1F	PB	50*	2	81.49	79.89	87	-	68	12	72	-	84	-	2.80	23.24
8M-34S-62	34	1F	PB	55*	2 1/4	86.58	84.98	91	-	69	12	72	-	84	-	3.00	28.11
8M-36S-62	36	1F	PB	60*	2 1/2	91.67	90.07	97	-	76	12	72	-	84	-	3.40	35.71
8M-38S-62	38	1F	PB	60	2 1/2	96.77	95.17	102	-	78	12	72	-	84	-	3.80	44.48
8M-40S-62	40	3F	2012	50	2	101.86	100.26	106	-	-	-	72	-	-	-	2.06	26.71
8M-45S-62	45	3F	2012	50	2	114.59	112.99	120	-	-	-	72	-	-	-	3.00	49.24
8M-48S-62	48	3F	2517	60	2 1/2	122.23	120.63	128	-	-	-	72	-	-	-	2.90	54.51
8M-50S-62	50	3F	2517	60	2 1/2	127.32	125.72	135	-	-	-	72	-	-	-	3.25	65.85
8M-56S-62	56	6F	2517	60	2 1/2	142.60	141.00	150	111	-	-	72	13.5	45	13.5	3.90	99.13
8M-60S-62	60	6F	2517	60	2 1/2	152.79	151.19	158	121	-	-	72	13.5	45	13.5	4.70	137.15
8M-64S-62	64	6F	2517	60	2 1/2	162.97	161.37	168	131	-	-	72	13.5	45	13.5	5.60	185.91
8M-75S-62	75	6	3020	75	3	190.99	189.39	-	159	-	-	72	10.5	51	10.5	7.50	341.87
8M-80S-62	80	6	3020	75	3	203.72	202.12	-	172	-	-	72	10.5	51	10.5	9.20	477.21
8M-90S-62	90	6	3020	75	3	229.18	227.58	-	197	-	-	72	10.5	51	10.5	7.70	505.54
8M-112S-62	112	7	3020	75	3	285.21	283.61	-	253	150	-	72	10.5	51	10.5	12.10	1230.34
8M-140S-62	140	7	3525	100	4	356.51	354.91	-	324	198	-	72	3.5	65	3.5	22.70	3606.44
8M-168S-62	168	8	3525	100	4	427.81	426.21	-	396	198	-	72	3.5	65	3.5	26.80	6131.21
8M-192S-62	192	8	3525	100	4	488.92	487.32	-	457	198	-	72	3.5	65	3.5	34.20	10219.08

* Max. bore to be fitted with shallow keys PB = Plain Bored Bush

Notes:
Pulleys of cast iron or steel material are supplied. Pulleys of either material provide required durability and service life. Gates reserves the right to supply pulleys of either material against orders for standard pulleys.

Specification:
cast iron 220 N/mm^2
steel 220 M07

For peripheral speeds greater than 40 m/sec consult Gates.

PULLEY INFORMATION

PULLEY SPECIFICATIONS

Pulley designation	No. of teeth	Pulley type	Bush No.	Max. bore		Diameters mm			A	B	E	F	K	L	M	Weight (kg)	Moment of inertia 10^{-4} (kgm^2)
				Metric	Inch	Pitch	Outside	Flange									
14M-28S-20	28	3F	2012	50	2	124.78	121.98	128	-	-	-	33	-	-	-	1.66	32.30
14M-30S-20	30	3F	2012	50	2	133.69	130.89	138	-	-	-	33	-	-	-	2.20	49.15
14M-32S-20	32	3F	2012	50	2	142.60	139.80	154	-	-	-	33	-	-	-	3.20	81.33
14M-34S-20	34	2F	2517	60	2 1/2	151.52	148.72	160	-	117	12	33	-	45	-	3.00	86.09
14M-36S-20	36	2F	2517	60	2 1/2	160.43	157.63	168	-	117	12	33	-	45	-	3.60	115.82
14M-38S-20	38	2F	2517	60	2 1/2	169.34	166.54	183	-	117	12	33	-	45	-	4.00	143.38
14M-40S-20	40	2F	2517	60	2 1/2	178.25	175.45	188	-	117	12	33	-	45	-	4.70	186.66
14M-44S-20	44	2F	3020	75	3	196.08	193.28	211	-	144	18	33	-	51	-	5.60	269.13
14M-48S-20	48	2F	3020	75	3	213.90	211.11	226	-	144	18	33	-	51	-	6.80	388.90
14M-50S-20	50	2F	3020	75	3	222.82	220.02	240	-	144	18	33	-	51	-	7.70	477.87
14M-56S-20	56	9F	3020	75	3	249.55	246.76	256	207	144	-	33	9	51	9	7.70	599.39
14M-60S-20	60	9	3020	75	3	267.38	264.58	-	224	159	-	33	9	51	9	8.50	759.60
14M-64S-20	64	9	3020	75	3	285.21	282.41	-	242	159	-	33	9	51	9	10.20	1037.15
14M-72S-20	72	9	3020	75	3	320.86	318.06	-	278	159	-	33	9	51	9	11.50	1479.92
14M-80S-20	80	9	3020	75	3	356.51	353.71	-	314	159	-	33	9	51	9	13.50	2144.80
14M-90S-20	90	10	3020	75	3	401.07	398.27	-	360	159	-	33	9	51	9	14.20	2855.21
14M-112S-20	112	10	3020	75	3	499.11	496.31	-	456	159	-	33	9	51	9	18.10	5636.13
14M-140S-20	140	10	3020	75	3	623.89	621.09	-	581	159	-	33	9	51	9	22.90	11149.96

Pulley designation	No. of teeth	Pulley type	Bush No.	Max. bore		Diameters mm			A	B	E	F	K	L	M	Weight (kg)	Moment of inertia 10^{-4} (kgm^2)
				Metric	Inch	Pitch	Outside	Flange									
14M-28S-37	28	5F	2012	50	2	124.78	121.98	128	88	-	-	51	-	32	19	2.20	42.81
14M-30S-37	30	6F	2517	60	2 1/2	133.69	130.89	138	98	-	-	51	3	45	3	2.50	55.85
14M-32S-37	32	6F	2517	60	2 1/2	142.60	139.80	154	100	-	-	51	3	45	3	3.00	76.25
14M-34S-37	34	6F	2517	60	2 1/2	151.52	148.72	160	109	-	-	51	3	45	3	3.80	109.05
14M-36S-37	36	5F	2517	60	2 1/2	160.43	157.63	168	117	-	-	51	-	45	6	4.30	138.34
14M-38S-37	38	5F	2517	60	2 1/2	169.34	166.54	183	126	-	-	51	-	45	6	5.10	182.81
14M-40S-37	40	5F	2517	60	2 1/2	178.25	175.45	188	135	-	-	51	-	45	6	6.00	238.30
14M-44S-37	44	3F	3020	75	3	196.08	193.28	211	-	-	-	51	-	-	-	7.00	336.41
14M-48S-37	48	3F	3020	75	3	213.90	211.11	226	-	-	-	51	-	-	-	9.00	514.72
14M-50S-37	50	3F	3020	75	3	222.82	220.02	240	-	-	-	51	-	-	-	10.00	620.61
14M-56S-37	56	7F	3020	75	3	249.55	246.76	256	207	144	-	51	0	51	0	9.20	715.88
14M-60S-37	60	7	3020	75	3	267.38	264.58	-	224	159	-	51	0	51	0	10.20	911.52
14M-64S-37	64	7	3020	75	3	285.21	282.41	-	242	159	-	51	0	51	0	12.20	1240.51
14M-72S-37	72	7	3020	75	3	320.86	318.06	-	278	159	-	51	0	51	0	13.40	1724.43
14M-80S-37	80	7	3020	75	3	356.51	353.71	-	314	159	-	51	0	51	0	16.10	2557.88
14M-90S-37	90	8	3020	75	3	401.07	398.27	-	360	159	-	51	0	51	0	17.20	3458.43
14M-112S-37	112	8	3020	75	3	499.11	496.31	-	456	159	-	51	0	51	0	23.00	7161.94
14M-140S-37	140	10	3525	100	4	623.89	621.09	-	581	206	-	51	7	65	7	41.00	19948.49
14M-168S-37	168	10	3525	100	4	748.66	745.87	-	706	206	-	51	7	65	7	51.50	36081.66
14M-192S-37	192	10	4030	115	4 1/2	855.61	852.82	-	812	215	-	51	12.5	76	12.5	60.00	54905.14

* Max. bore to be fitted with shallow keys PB = Plain Bored Bush

Notes:
Pulleys of cast iron or steel material are supplied. Pulleys of either material provide required durability and service life. Gates reserves the right to supply pulleys of either material against orders for standard pulleys.

Specification:
cast iron 220 N/mm^2
steel 220 M07

For peripheral speeds greater than 40 m/sec consult Gates.

PULLEY INFORMATION

PULLEY SPECIFICATIONS

Pulley designation	No. of teeth	Pulley type	Bush No.	Max. bore		Diameters mm			A	B	E	F	K	L	M	Weight (kg)	Moment of inertia 10^{-4} (kgm^2)
				Metric	Inch	Pitch	Outside	Flange									
14M-34S-68	34	1F	PB	100	4	151.52	148.72	160	-	132	20	84	-	104	-	10.50	301.33
14M-36S-68	36	1F	PB	100	4 1/4	160.43	157.63	168	-	131	20	84	-	104	-	11.70	376.42
14M-38S-68	38	1F	PB	115*	4 1/2	169.34	166.54	183	-	141	20	84	-	104	-	13.40	481.46
14M-40S-68	40	1F	PB	125*	5	178.25	175.45	188	-	156	20	84	-	104	-	15.40	611.63
14M-44S-68	44	6F	3020	75	3	196.08	193.28	211	153	-	-	84	16.5	51	16.5	9.20	442.14
14M-48S-68	48	5F	3020	75	3	213.90	211.11	226	171	-	-	84	-	51	33	11.30	646.26
14M-50S-68	50	6F	3525	100	4	222.82	220.02	240	180	-	-	84	9.5	65	9.5	15.50	775.76
14M-56S-68	56	6F	3525	100	4	249.55	246.76	256	207	-	-	84	9.5	65	9.5	16.80	1307.78
14M-60S-68	60	6	3525	100	4	267.38	264.58	-	224	-	-	84	9.5	65	9.5	20.40	1823.05
14M-64S-68	64	6	3525	100	4	285.21	282.41	-	242	-	-	84	9.5	65	9.5	23.60	2399.67
14M-72S-68	72	7	3525	100	4	320.86	318.06	-	278	178	-	84	9.5	65	9.5	20.30	2612.89
14M-80S-68	80	7	3525	100	4	356.51	353.71	-	314	178	-	84	9.5	65	9.5	21.30	3384.02
14M-90S-68	90	8	3525	100	4	401.07	398.27	-	360	178	-	84	9.5	65	9.5	24.40	4966.46
14M-112S-68	112	8	3525	100	4	499.11	496.31	-	456	178	-	84	9.5	65	9.5	32.70	10182.40
14M-140S-68	140	8	3525	100	4	623.89	621.09	-	581	206	-	84	9.5	65	9.5	55.00	26760.16
14M-168S-68	168	8	3525	100	4	748.66	745.87	-	706	206	-	84	9.5	65	9.5	71.00	49743.65
14M-192S-68	192	8	4030	115	4 1/2	855.61	852.82	-	812	215	-	84	4	76	4	80.50	73664.39

Pulley designation	No. of teeth	Pulley type	Bush No.	Max. bore		Diameters mm			A	B	E	F	K	L	M	Weight (kg)	Moment of inertia 10^{-4} (kgm^2)
				Metric	Inch	Pitch	Outside	Flange									
14M-36S-90	36	1F	PB	110	4 1/4	160.43	157.63	168	-	131	30	106	-	136	-	14.50	466.50
14M-38S-90	38	1F	PB	115	4 1/2	169.34	166.50	183	-	141	30	106	-	136	-	17.50	627.29
14M-40S-90	40	1F	PB	125	5 1/2	178.25	175.45	188	-	156	30	106	-	136	-	19.10	758.59
14M-44S-90	44	1F	PB	140	6 1/2	196.08	193.28	211	-	169	30	106	-	136	-	23.90	1150.95
14M-48S-90	48	6F	3525	100	4	213.90	211.11	226	171	-	-	106	20	66	20	12.70	726.33
14M-50S-90	50	6F	3525	100	4	222.82	220.02	240	180	-	-	106	20	66	20	14.50	899.88
14M-56S-90	56	6F	3525	100	4	249.55	246.76	256	207	-	-	106	20	66	20	19.00	1479.04
14M-60S-90	60	6	3525	100	4	267.38	264.58	-	224	-	-	106	20	66	20	22.50	2010.71
14M-64S-90	64	6	3525	100	4	285.21	282.41	-	242	-	-	106	20	66	20	24.00	2433.77
14M-72S-90	72	7	3525	100	4	320.86	318.06	-	278	178	-	106	20	66	20	22.60	2908.37
14M-80S-90	80	7	4030	115	4 1/2	356.51	353.71	-	314	215	-	106	15	76	15	27.00	4289.60
14M-90S-90	90	7	4030	115	4 1/2	401.07	398.27	-	360	215	-	106	15	76	15	34.10	6856.54
14M-112S-90	112	8	4535	125	5	499.11	496.31	-	456	215	-	106	8	90	8	46.00	14323.87
14M-140S-90	140	8	4535	125	5	623.89	621.09	-	581	215	-	106	8	90	8	61.00	29679.45
14M-168S-90	168	8	5040	130*	5	748.66	745.87	-	706	267	-	106	2	102	2	90.00	63055.33
14M-192S-90	192	8	5040	130*	5	855.61	852.82	-	812	267	-	106	2	102	2	108.50	93796.27

* Max. bore to be fitted with shallow keys PB = Plain Bored Bush

Notes:
Pulleys of cast iron or steel material are supplied. Pulleys of either material provide required durability and service life. Gates reserves the right to supply pulleys of either material against orders for standard pulleys.

Specification:
cast iron 220 N/mm^2
steel 220 M07

For peripheral speeds greater than 40 m/sec consult Gates.

PULLEY INFORMATION

PULLEY SPECIFICATIONS

Pulley designation	No. of teeth	Pulley type	Bush No.	Max. bore		Diameters mm			A	B	E	F	K	L	M	Weight (kg)	Moment of inertia 10^{-4} (kgm^2)
				Metric	Inch	Pitch	Outside	Flange									
14M-38S-125	38	1F	PB	115*	4 1/2	169.34	166.54	183	-	141	20	141	-	161	-	20.30	727.65
14M-40S-125	40	1F	PB	125*	5	178.25	175.45	188	-	156	20	141	-	161	-	23.00	913.48
14M-44S-125	44	1F	PB	140*	5 1/2	196.08	193.28	211	-	169	20	141	-	161	-	28.80	1384.10
14M-48S-125	48	1F	PB	160*	6 1/4	213.90	211.11	226	-	185	20	141	-	161	-	34.60	1978.83
14M-50S-125	50	6F	3525	100	4	222.82	220.02	240	180	-	-	141	38	65	38	16.80	1042.62
14M-56S-125	56	6F	3525	100	4	249.55	246.76	256	207	-	-	141	38	65	38	21.60	1681.43
14M-60S-125	60	6	4030	115	4 1/2	267.38	264.58	-	224	-	-	141	32.5	76	32.5	25.60	2287.85
14M-64S-125	64	6	4030	115	4 1/2	285.21	282.41	-	242	-	-	141	32.5	76	32.5	29.70	3024.16
14M-72S-125	72	7	4030	115	4 1/2	320.86	318.06	-	278	215	-	141	32.5	76	32.5	30.00	3860.66
14M-80S-125	80	7	4030	115	4 1/2	356.51	353.71	-	314	215	-	141	32.5	76	32.5	33.40	5306.40
14M-90S-125	90	7	4030	115	4 1/2	401.07	398.27	-	360	215	-	141	32.5	76	32.5	39.40	7947.12
14M-112S-125	112	8	4535	125	5	499.11	496.31	-	456	215	-	141	26	89	26	56.00	17437.76
14M-140S-125	140	8	4535	125	5	623.89	621.09	-	581	215	-	141	26	89	26	73.00	35518.03
14M-168S-125	168	8	5040	125	5	748.66	745.87	-	706	267	-	141	19.5	102	19.5	101.00	70762.02
14M-192S-125	192	8	5040	125	5	855.61	852.82	-	812	267	-	141	19.5	102	19.5	121.50	111182.90

Minimum stock bores for Plain Bored (PB) pulleys

Pulley	Minimum bore (mm)
8M-22S-12	12.00
8M-22S-21	12.00
8M-25S-36	12.00
8M-30S-62	20.00
8M-32S-62	20.00
8M-34S-62	20.00
8M-36S-62	20.00
8M-38S-62	20.00

Pulley	Minimum bore (mm)
14M-34S-68	40.00
14M-36S-68	40.00
14M-38S-68	40.00
14M-40S-68	40.00
14M-36S-90	50.00
14M-38S-90	50.00
14M-40S-90	50.00
14M-44S-90	50.00
14M-38S-125	50.00
14M-40S-125	50.00
14M-44S-125	50.00
14M-48S-125	50.00

* Max. bore to be fitted with shallow keys PB = Plain Bored Bush

Notes:
Pulleys of cast iron or steel material are supplied. Pulleys of either material provide required durability and service life. Gates reserves the right to supply pulleys of either material against orders for standard pulleys.

Specification:
cast iron 220 N/mm^2
steel 220 M07

For peripheral speeds greater than 40 m/sec consult Gates.

PULLEY INFORMATION

PULLEY TOLERANCES

Pulleys for Poly Chain® GT2 belts are precision made to close tolerances. Inaccurate manufacturing or reboring may result in poor drive performance. Strict adherence to the standard tolerances (as shown in table below) is highly recommended.

Bore tolerances of plain bored pulleys

Bore (mm)	Tolerances (mm)
up to 25	+ 0.0254 - 0.0000
25 to 50	+ 0.0381 - 0.0000
50 to 75	+ 0.0508 - 0.0000
75 up	+ 0.0635 - 0.0000

Outside diameter range	Outside diameter tolerance	Pitch to pitch tolerance	
mm	mm	adjacent	90°
over 50 to 100	+ 0.10 - 0.000	+ 0.025	+ 0.13
over 100 to 180	+ 0.13 - 0.000	+ 0.025	+ 0.13
over 180 to 300	+ 0.15 - 0.000	+ 0.025	+ 0.15
over 300 to 500	+ 0.18 - 0.000	+ 0.025	+ 0.18
over 500	+ 0.20 - 0.000	+ 0.025	+ 0.20

Radial run-out*
For outside diameters 200 mm and under ..... 0.1 mm
For each additional 25 mm of diameter, add ..... 0.013 mm

Axial run-out*
For diameters 25 mm and under ..... 0.025 mm
For each additional 25 mm up to 250 mm, add ..... 0.025 mm
For each additional 25 mm over 250 mm, add ..... 0.013 mm

* *Total indicator reading*

Balancing

Stock pulleys are statically balanced to ISO 1940 (1973) to class G16.

Caution: stock pulleys should not be used on drives where rim surface speeds exceed 40 m/s. Specially made, dynamically balanced pulleys should be used.

Pulley tooth profile and surface quality

The tooth profile of these pulleys was designed and developed by the Gates Corporation to operate with the Gates Poly Chain® GT belts and following generations such as Poly Chain® GT2.

The tooth surface should be free of any surface defects and should be 3 µm or better.

Note

It is essential that a "side fitting" key is used when assembling a bush and pulley on its shaft in drives subjected to heavy or shock loads.

BUSHES: BORES AND KEYWAYS

Bores and keyways in millimetres

Bore diameter	Keyway		Shallow keyway depth	Bush reference										
				Type										
	Width	Depth		1008	1108	1210	1610	2012	2517	3020	3525	4030	4535	5040
				Prefix										
				029A-	029B-	029C-	029G-	029K-	029M-	029P-	029J-	029X-	029Y-	029Z-
9	3	1.4	-	009	009									
10	3	1.4	-	010	010									
11	4	1.8	-	011	011	011								
12	4	1.8	-	012	012	012	012							
13	5	2.3	-	013	013	013	013							
14	5	2.3	-	014	014	014	014	014						
15	5	2.3	-	015	015	015	015	015						
16	6	2.8	-	016	016	016	016	016	016					
18	6	2.8	-	018	018	018	018	018	018					
19	6	2.8	-	019	019	019	019	019	019					
20	6	2.8	-	020	020	020	020	020	020					
22	6	2.8	-	022	022	022	022	022	022					
24	8	3.3	1.3*	024*	024	024	024	024	024					
25	8	3.3	1.3*	025*	025	025	025	025	025	025				
28	8	3.3	1.3*		028*	028	028	028	028	028	028			
30	8	3.3	-			030	030	030	030	030	030			
32	10	3.3	-			032	032	032	032	032	032			
35	10	3.3	-				035	035	035	035	035			
38	10	3.3	-				038	038	038	038	038			
40	12	3.3	-				040	040	040	040	040	040		
42	12	3.3	-				042	042	042	042	042	042		
45	14	3.8	-					045	045	045	045	045		
48	14	3.8	-					048	048	048	048	048		
50	14	3.8	-					050	050	050	050	050		
55	16	4.3	-						055	055	055	055	055	
60	18	4.4	-						060	060	060	060	060	
65	18	4.4	-						065	065	065	065	065	
70	20	4.9	-							070	070	070	070	070
75	20	4.9	-							075	075	075	075	075
80	22	5.4	-								080	080	080	080
85	22	5.4	-								085	085	085	085
90	25	5.4	-								090	090	090	090
95	25	5.4	-								095	095	095	095
100	28	6.4	4,4*								100*	100	100	100
105	28	6.4	-									105	105	105
110	28	6.4	-									110	110	110
115	32	7.4	5,4*									115*	115	115
120	32	7.4	-										120	120
125	32	7.4	-										125	125

Keyways conform to European standard.

* Shallow key required.

For detailed bush information refer to supplier's catalogue.

PULLEY INFORMATION

BUSHES: BORES AND KEYWAYS

Bores and keyways in inches

Bore diameter	Keyway		Shallow keyway depth	Bush reference										
				Type										
	Width	Depth		1008	1108	1210	1610	2012	2517	3020	3525	4030	4535	5040
				Prefix										
				019A-	019B-	019C-	019G-	019K-	019M-	019P-	019J-	019X-	019Y-	019Z-
0.375	0.125	0.062	-	006	006									
0.5	0.125	0.062	-	008	008		008							
0.625	0.187	0.093	-	010	010	010	010							
0.75	0.187	0.093	-	012	012	012	012	012	012					
0.875	0.25	0.125	-	014	014	014	014	014	014					
1	0.25	0.125	0.062	100*	100	100	100	100	100					
1.125	0.312	0.125	0.078		102*	102	102	102	102					
1.25	0.312	0.125	-			104	104	104	104	104				
1.375	0.375	0.125	-				106	106	106	106				
1.5	0.375	0.125	-				108	108	108	108	108			
1.625	0.437	1.156	0.125				110	110	110	110	110			
1.75	0.437	1.156	-					112	112	112	112	112		
1.875	0.5	1.156	-					114	114	114	114	114		
2	0.5	1.156	-					200	200	200	200	200		
2.125	0.625	0.218	-						202	202	202	202		
2.25	0.625	0.218	-						204	204	204	204	204	
2.375	0.625	0.218	-						206	206	206	206	206	
2.5	0.625	0.218	-						208	208	208	208	208	
2.625	0.75	0.25	-							210	210	210	210	
2.75	0.75	0.25	-							212	212	212	212	212
2.875	0.75	0.25	-							214	214	214	214	214
3	0.75	0.25	-							300	300	300	300	300
3.125	0.875	0.312	-								302	302	302	302
3.25	0.875	0.312	-								304	304	304	304
3.375	0.875	0.312	-								306	306	306	306
3.5	0.876	0.312	-								308	308	308	308
3.75	1	0.375	0.312								312	312	312	312
4	1	0.375	0.218								400*	400	400	400
4.25	1.125	0.437	-									404	404	404
4.5	1.125	0.437	0.343									408*	408	408
4.75	1.125	0.437	-										412	412
5	1.125	0.437	0.343										500*	500

Keyways conform to European standard.

* Shallow key required.

For detailed bush information refer to supplier's catalogue.

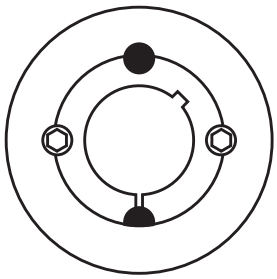
BUSHES: INSTALLATION INSTRUCTIONS

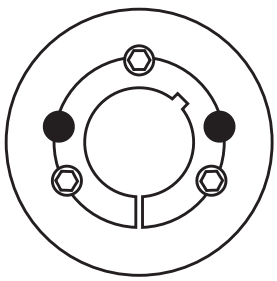
Step 1: insert bush into pulley

Step 2: insert screws and locate on shaft

Step 3: tighten screws finger tight

Step 4: tighten screws alternat ely





To install

A. Remove any protective coating from the bore and outside of bush, and bore of hub. After ensuring that the mating tapered surfaces are completely clean and free from oil or dirt, you can insert the bush in the hub so that the holes line up.

B. Now sparingly oil the thread and point of the grub screws, or the thread and under head of the caps screws. Place the screws loosely in the holes threaded in the hub, shown thus ◎ in the diagram.

C. Clean the shaft and fit the hub to the shaft as one unit and locate them in the desired position, remembering that the bush will nip the shaft first and then the hub will be slightly drawn on to the bush.

D. Using a hexagon wrench tighten the screws gradually and alternately to the torque shown on page 68.

E. Hammer against the large-end of the bush, using a block or sleeve to prevent damage. (This will ensure that the bush is seated squarely in the bore). The screws will now turn a little more. Repeat this alternate hammering and screw tightening once or twice to achieve a maximum grip on the shaft.

F. If a key is to be fitted, place it in the shaft keyway before fitting the bush. It is essential that it is a parallel key and side fitting only and has TOP CLEARANCE.

G. After the drive has been running under a load for a short time stop and check the tightness of the screws.

H. Fill the empty holes with grease to exclude dirt.

To remove

A. Slacken all screws by several turns, remove one or two according to the number of jacking off holes shown thus ● in diagram. Insert the screws in jacking off holes after oiling the thread and point of grub screws or the thread and under head of the cap screws.

B. Tighten the screws alternately until the bush is loosened in the hub and the assembly is free on the shaft.

C. Remove the assembly from the shaft.

PULLEY SPECIFICATIONS

Bush size		1008	1108	1210	1610	2012	2517	3020	3525	4030	4535	5040
Screw tightening torque (Nm)		5.7	5.7	20	20	31	49	92	115	172	195	275
Screw details	qty	2	2	2	2	2	2	2	3	3	3	3
	size (BSW)	1/4"	1/4"	3/8"	3/8"	7/16"	1/2"	5/8"	1/2"	5/8"	1/4"	1/4"
Large end diam. (mm)		35.0	38.0	47.5	57.0	70.0	85.5	108.0	127.0	146.0	162.0	177.5
Approx. mass (kg)		0.1	0.1	0.2	0.3	0.7	1.5	2.7	3.8	7.7	7.5	11.1

PULLEY DIAMETERS

$$\text{Pitch diameter} = \frac{\text{No of grooves x pitch}}{\pi}$$

Outside diameter = Pitch diameter - (2 x PLD)

Pitch	Radial PLD
8 mm	0.8 mm
14 mm	1.4 mm

5

1. USE OF FLANGED PULLEYS

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

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

1. On all two-pulley drives, the minimum flanging requirements are two flanges on one pulley or one flange on each pulley on opposite sides.
2. On drives where the centre distance is more than eight times the diameter of the small pulley, special care has to be taken when setting up the drive. Always make sure the belt runs correctly on both pulleys. In some cases it might be necessary that both pulleys are flanged on both sides. (See point 5 “Belt installation and drive alignment” on page 70.)
3. On drives with more than two pulleys, the minimum flanging requirements are two flanges on every other pulley or one flange on every pulley - alternating sides around the system.

Stock pulleys up to 64 teeth (8 mm) and 56 teeth (14 mm) are supplied with both sides flanged as a standard practice.

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

2. FIXED (NON-ADJUSTABLE) CENTRES

Consult Gates application engineers.

3. IDLERS

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

Idlers should be located on the slack side of the belt drive. For inside idlers, grooved pulleys are recommended up to 40 grooves, while on larger diameters, flat uncrowned idlers can be used.

Outside idlers are not recommended because they could result in significant fatigue damage to the special polymers in the high performance Poly Chain® GT2 belt, thus reducing belt life.

Because idlers contribute to belt fatigue, idler diameters should not be smaller than the smallest pulley diameter in the system. All idlers should be securely locked into place during drive start-up and operation.

The use of tight side spring loaded, non locked idlers is not recommended as the belt can generate sufficient tension to overcome any reasonable force imposed by a spring loaded system. Any spring force sufficient to impose artificially high belt tensions may be excessive and could significantly reduce belt life.

Slack side spring loaded idlers are often used successfully, as long as care is taken to avoid resonant vibration conditions and load reversals.

4. OPERATING ENVIRONMENT

Temperature

Poly Chain® GT2 belt performance is generally unaffected in ambient temperature environments between -54°C and +85°C. In cases where belts are constantly running at or above these temperature extremes, contact Gates application engineers.

Chemical resistance

Based on lab and field testing, Poly Chain® GT2 belts provide excellent resistance to most chemicals, including some acids, alkalis and petroleum distillates. 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 drive belt, Poly Chain® GT2 drives run where excessive lubrication is present, have an increased tendency to ratchet. Special attention should be given to assure that recommended tension is maintained (see also “Standard tensioning procedure” on page 12).

Aircraft / hazardous drives

Gates synchronous belts should not be used in aircraft, aircraft related or hazardous applications where belt failure may cause injury.

5. BELT INSTALLATION AND DRIVE ALIGNMENT

Provision should be made for centre distance adjustment, according to tables 2 and 3 (see page 12), or change the idler position so that the belt can be slipped easily onto the drive. When installing a belt, never force it over a flange. This will damage the belt tensile member.

Synchronous belt performance may be affected by misalignment, which can result in inconsistent belt wear and premature tensile failure.

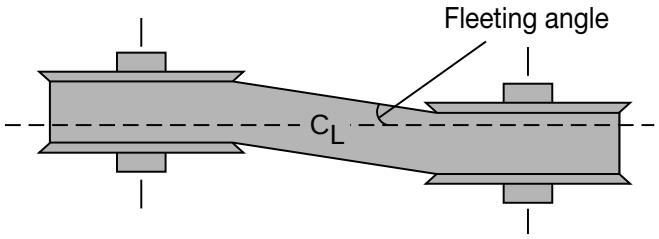
Synchronous belts typically are made with high modulus tensile members which provide length stability over the belt life. Consequently, misalignment does not allow equal load distribution across the entire belt top width. In a misaligned drive, the load is being carried by only a small portion of the belt top width, resulting in reduced performance. Proper drive alignment is especially important when using Poly Chain® GT2 belts because of the extra high modulus cords and premium polymers used.

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

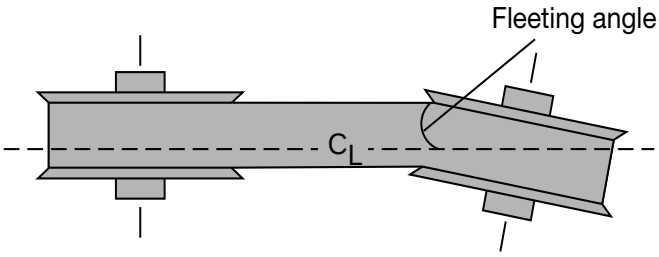
A fleeting angle is the angle at which the belt enters and exits the pulleys, and equals the sum of the parallel and angular misalignments.

Any degree of pulley misalignment will result in some reduction of belt life, which is not accounted for in the normal drive design procedure. Misalignment of all positive belt drives should not exceed 1/4° or 5 mm per metre of centre distance. Misalignment should be checked with a good straight edge tool. The tool should be applied from driveR to driveN and from driveN to driveR so that the effect of parallel and angular misalignment is taken into account.
Drive misalignment can also cause belt tracking problems. However, some degree of belt tracking is normal and won't affect performance.

Parallel misalignment



Angular misalignment



6. BELT STORAGE AND HANDLING

For storage, the belt should be protected from moisture, temperature extremes, direct sunlight and high ozone environments. The belt should be stored in its original package, avoiding any sharp bends or crimping, which will damage the belt.

There is no problem with leaving tension on the belt during equipment storage. Tension could be backed off if desired. Consideration should be given to extended storage of equipment with belts installed if the environment is detrimental as described above.

Handling of the Poly Chain® GT2 belt is also important. Due to high performance characteristics of the Poly Chain® GT2 belt, do not twist, crimp, invert, bend or coil the belt. Belts should not be bent tighter than the smallest recommended sprocket diameter for that cross-section on the inside permissible diameter. Under no circumstances should the belt be forced or prised onto a drive.

The belt may be cleaned by wiping with a rag slightly dampened with a light, non-volatile solvent, such as mineral spirits or paraffin. Soaking or brushing on of such solvent is not advisable. More obviously, sanding or scraping the belt with a sharp object to remove grease or debris is not recommended. Similar solvent procedures should be applied to the pulleys.

7. EFFICIENCY

When properly designed and applied, Poly Chain® GT2 belt drives will be as much as 98% efficient thanks to the non-slip characteristics of synchronous belts. Since the belt has a low profile (thin) and ribbed back, it flexes easily, thus resulting in low hysteresis losses as evidenced by low build-up in the belt.

Poly Chain® GT2 belts are uniquely constructed because they use high performance materials. Optimisation of these high-technology features provides maximum performance and efficiency.

Synchronous belt drive efficiency can be simply defined as shown in the following:

$$\text{Efficiency, per cent} = \frac{\text{DN RPM x DN Torque x 100}}{\text{DR RPM x DR Torque}}$$

When examining the loss of energy, it is necessary to consider belt losses in terms of shaft torque and shaft speed. Torque losses are created due to bending stress and friction.

Chain drives running unlubricated generate significant heat build-up due to increased friction in the roller joints. Even properly lubricated chains running at high 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.

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 may also have inherent inefficiencies which are not a factor in evaluating drive efficiency.

8. STATIC CONDUCTIVITY

Poly Chain® GT2 belts are not static conductive and hence should not be specified for areas where explosive risks are likely to be encountered.

USEFUL INFORMATION

1. FORMULAE

Tentative belt length

1.57 (D + d) + (tentative centre distance x 2)

where: D = diameter of large pulley
d = diameter of small pulley

Pitch length

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

where: L_p = belt length
D = diameter of large pulley
d = diameter of small pulley
C = centre distance

or

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

where: L_p = pitch length of belt
C = centre distance
D = pitch diameter of large pulley
d = pitch diameter of small pulley
$\text{Ø} = \sin^{-1}\frac{(D - d)}{2C}$ distance

Approximate centre distance

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

where: $K = 4L_p - 6.28\,(D + d)$

Teeth in mesh (T.I.M.)

$$\left[0.5 - \left(\frac{D - d}{6C}\right)\right] Ng$$

where: D = pitch circle diameter of large pulley (mm)
d = pitch circle diameter of small pulley (mm)
C = centre distance between shafts (mm)
Ng = number of grooves in small pulley

Static tension

$$T_{st} = 425\frac{P}{v} + mv^2$$

where T_{st} = static tension (N)
P = power (kW)
v = belt speed (m/s)
m = belt unit mass per meter length (kg/m); value in table 4

Min. deflection force

$$\text{Min.} = \frac{T_{st} + \left(\frac{S}{L}\right) Y}{25}, \text{(N)}$$

where: T_{st} = static tension (N)
S = span length (mm)
L = belt pitch length (mm)
Y = constant from table 4

Pitch diameter

$$\text{Pitch diameter} = \frac{\text{N° of grooves x pitch}}{\pi}$$

Outside diameter

Outside diameter = Pitch diameter - (2 x PLD)

2. UNITS OF MEASUREMENT

kW	=	kilowatts
Nm	=	newton metre
N	=	newton
J	=	joule
s	=	second
mm	=	millimetre
m/s	=	metre/second
kg	=	kilogramme
g/m	=	gramme/metre

3. ABBREVIATION TABLE

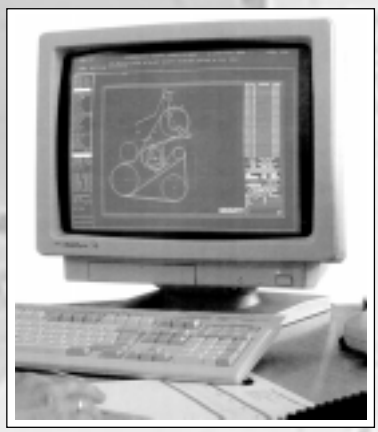
D	=	diameter of large pulley
d	=	diameter of small pulley
L_p	=	pitch length
C	=	centre distance
T.I.M.	=	teeth in mesh
Ng	=	number of grooves in small pulley
T_{st}	=	static tension (N)
P	=	power (kW)
PLD	=	Pitch Line Differential
v	=	belt speed (m/s)
S	=	span length (mm)
L	=	belt length (mm)

4. CONVERSION TABLE

1 lbf	=	0.454 kgf
1 lbf	=	4.448 N
1 kgf	=	9.807 N
1 lbf in	=	0.113 Nm
1 ft	=	0.3048 m
1 in	=	25.4 mm
1 ft^2	=	0.093 m^2
1 in^2	=	645.16 mm^2
1 ft^3	=	0.028 m^3
1 in^3	=	16.387 mm^3
1 oz	=	28.35 g
1 lb	=	0.454 kg
1 lmp. ton	=	1.016 tonne
1 lmp. gal	=	4.546 litres
1 lmp. pint	=	0.568 litre
1 radian	=	57.296 degrees
1 degree	=	0.0175 radian
1 horsepower	=	0.746 kW

DESIGNFLEX CALCULATION SOFTWARE

You may calculate your own application by means of one of Gates' design manuals or by using DesignFlex, a Windows-based multilingual software program. The program is available on CD-ROM (E/20098), but can also be downloaded from Gates' website at www.gates.com/europe. The program offers a step-by-step drive calculation procedure for both V-belts and synchronous belts based on the criteria and/or limitations specified by the user. DesignFlex runs under Windows 95, 98, 2000, NT or Millennium and requires a Pentium 133 processor or higher and an 800 x 600 screen resolution or higher. A minimum of 32 MB RAM is recommended for satisfactory calculation speed.



GATES' APPLICATION ENGINEERS AT YOUR SERVICE

If your application cannot be designed with the aid of Gates' design manuals or the DesignFlex software, you can always contact Gates' application engineers. They are at your service to solve even the most difficult drive design problem.

Gates' application engineers now use DESIGN IQ, a very powerful software program allowing them to calculate multiple pulley drives for the most diverse complex duty cycles. For more information on this software please contact your Gates representative.

ELECTRONIC PRICE LIST

Gates' electronic price list for industrial Power Transmission products is available on CD-ROM and enables the user to easily select any product from the power transmission range by product number, bar code, description, type, profile and dimension. A full colour photograph and a drawing of the belt profiles complete the information.
The information on the CD-ROM is available in six languages.

GATES LITERATURE

Please consult our web site at www.gates.com/europe/pti for specific and updated information on other Gates industrial belt products and our list of available literature. Industrial Power Transmission brochures and leaflets can be downloaded from the site. Distributors may link up with the Gates European site thus supplying visitors with updated information on the European Gates organisation.

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All Gates' European Power Transmission Operations are ISO 9001 and ISO 14001 registered.

Important

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This issue is released January 2005 and supersedes all previous versions of this manual. If your drive design manual is more than 2 years old, please consult a Gates representative to check whether you have the latest version.