

# [Technical Data] Selection of Timing Belts 1

Selection is easy with Timing Pulleys and Belts automatic calculation tool available at: [http://fawos.misumi.jp/FA\\_WEB/pulley\\_us/](http://fawos.misumi.jp/FA_WEB/pulley_us/)

## [Step 1] Setting the Required Design Conditions

- (1) Machine Type (2) Power Transmission (3) Load Variations (4) Operation Duration per Day (5) Small Pulley Rotational Speed  
(6) Rotation Ratio (Lg. Pulley # of Teeth / Small Pulley # of Teeth) (7) Shaft Center Distance (Interim) (8) Pulley Diameter Limitation (9) Other Usage Conditions

## [Step 2-a] Calculating Design Power.....MXL/XL/L/H/S\_M/MTS\_M/T Series

- Design Power (Pd) = Transmission Power (Pt) x Overload Factor (Ks)
- Calculate Transmission Power at Motor Rated Power Output. (Ideally should be calculated with the load applied to the belt)
- Overload Factor (Ks)=Ko+Kr+Kk Overload Factor (Ks)=Lo+Kr+Kk Ko: Overload Correction Factor (Table 1) Kr: Rotation Ratio Correction Factor (Table 2) Kk: Idler Correction Factor (Table 3)

Table 1. Load Correction Factor (Ko)

Typical Machines Using a Belt	Motor					
	Max. Output not Exceeding 300% of Rated Value			Max. Output Exceeding 300% of Rated Value		
	AC Motor (Standard Motor, Synchronous Motor)			Special Motor (High torque), Single-Cylinder Engine		
	DC Motor (Shunt), Engine with 2 or More Cylinders			DC Motor (Series), Operation with Lye Shaft or Clutch		
Operation Hours						
Intermittent use		Regular Use		Continuous Use		
1 Day		1 Day		1 Day		
3 to 5 hrs		8 to 12 hrs		8 to 12 hrs		
Exhibit Instrument, Projector, Measuring Instrument, Medical Machine	1.0	1.2	1.4	1.2	1.4	1.6
Cleaner, Sewing Machine, Office Machine, Carpentry Lathe, Belt Sawing Machine	1.2	1.4	1.6	1.4	1.6	1.8
Light Load Belt Conveyor, Packer, Sifter	1.3	1.5	1.7	1.5	1.7	1.9
Liquid Mixer, Drill Press, Lathe, Screw Machine, (Circular Sawing) Machine, Planer, Washing Machine, Paper Manufacturing Machine (Excluding Pulp Manufacturing Machine), Printing Machine	1.4	1.6	1.8	1.6	1.8	2.0
Mixer (Cement and Viscous Matter), Belt Conveyor (Ore, Coal and Sand), Grinder, Shaping Machine, Boring Machine, Milling Machine, Compressor (Centrifugal), Vibration Sifter, Textile Machine (Warper and Winder), Rotary Compressor, Compressor (Reciprocal)	1.5	1.7	1.9	1.7	1.9	2.1
Conveyor (Apron, Pan, Bucket and Elevator), Extraction, Fan, Blower (Centrifugal, Suction and Discharge), Power Generator, Exciter, Hoist, Elevator, Rubber Processor (Calendar, Roll and Extruder), Textile Machine (Weaving Machine, Fine Spinning Machine, Twisting Machine and Weft Winding Machine)	1.6	1.8	2.0	1.8	2.0	2.2
Centrifugal Separator, Conveyor (Flight and Screw), Hammer Mill, Paper Manufacturing Machine (Pulpapitor)	1.7	1.9	2.1	1.9	2.1	2.3

Typical machines using a belt are listed above. For other machines using a belt, a load correction coefficient should be fixed by reference to this table.

In the case of starts and stops over 100 times per day or rapid acceleration and deceleration, check the above values multiplied by 1.3. (MTS\_M only)

Table 2. Speed Ratio Correction Coefficient (Kr)

Speed Ratio	Coefficient (Kr)
1.00 to 1.25	0
1.25 to 1.75	0.1
1.75 to 2.50	0.2
2.50 to 3.50	0.3
3.50 or more	0.4

Table 3. Idlers Correction Coefficient (Kk)

Position of Idler	Coefficient (Kk)
Inside the loose side of the belt	0
Outside the loose side of the belt	0.1
Inside the tight side of the belt	0.1
Outside the tight side of the belt	0.2

## [Step 2-b] Calculating Design Power .....For P\_M/UP\_M Series

- Design Power (Pd) = Transmission Power (Pt) x Overload Factor (Ks)
- Calculate Transmission Power at Motor Rated Power Output. (Ideally should be calculated with the load applied to the belt)
- Normal Motor Load Factor (Ks)=Ko+Ki+Kk+Kh Ko: Application Coefficient (Table 4) Ki: Idler Correction Factor (Table 5) Kr: Speed Multiplication Correction Factor (Table 6) Kh: Operation Time Correction Factor (Table 7)

Table 4. Application Coefficient (Ko)

Type of Passive Unit	Type of Motor	Peak Output/Basic Output				
		I	II	III		
		200% or Less	200 to 300	300% or More		
A	Extremely Smooth Transmission	1.0	1.2	1.4		
B	Fairly Smooth Transmission	1.3	1.5	1.7		
C	Transmission with Moderate Impact	1.6	1.8	2.0		
D	Transmission with Considerable Impact	1.8	2.0	2.2		
E	Transmission with Large Impact	2.0	2.2	2.5		
Motor	AC Motor	Single-Phase	-	-	All Types	
		Squirrel-Cage Induction	2 Poles	100kW or More	90~3.7kW	2.2kW or Less
			4 Poles	55kW or More	45kW or Less	-
			6 Poles	37kW or More	30kW or Less	-
			8 Poles	15kW or More	11kW or Less	-
		Wire-Wound	4 Poles	-	15kW or Less	11kW or Less
			6 Poles	-	11kW or Less	7.5kW or Less
			8 Poles	-	5.5kW or Less	3.7kW or Less
			-	-	Average Torque	High Torque
		DC Motor	Shunt	Compound	Series	
Internal Combustion Engine	8 or More Cylinders	7 ~ 5 Cylinders	4 ~ 2 Cylinders			
Hydraulic Motor	-	-	All Types			

Note: When the transmission involves regular, reverse revolutions, large momentum or extreme impact, a basic-use coefficient of 2.5 or more can be used.

Table 5. Correction Coefficient when Idler is Used (Ki)

Location of Idler in Use	Inside	Outside
Loose Side of the Belt	0	+0.1
Tense Side of the Belt	+0.1	+0.2

Should be added for each idler.

Table 6. Speed Increase Correction Coefficient (Kr)

Speed Increase Ratio	Correction Coefficient
1 to 1.25	0
1.25 to 1.75	+0.1
1.75 to 2.5	+0.2
2.5 to 3.5	+0.3
3.5 or more	+0.4

Table 7. Operating Correction Coefficient (Kh)

Operation Hours	Correction Coefficient
Operated 10 or More Hours a Day	+0.1
Operated 20 or More Hours a Day	+0.2
Operated 500 Hours or Less (For Seasonal Operation)	-0.2

## [Step 2-c] Calculating the Design Power.....2GT/3GT Series

- Design Power (Pd) = Transmission Power (Pt) x Overload Coefficient (Ks)
- Calculate the Transmission Power (Pt) in terms of the rated power of the prime motor. (Originally, it is ideal to calculate from the actual load applied to the belt)
- A: Normal Motor Load Factor (Ks)=Ko+Ki+Kr+Kh Ko: Load Correction Factor (Table 8) Ki: Idler Correction Factor (Table 9) Kr: Speed Multiplication Correction Factor (Table 10) Kh: Operation Time Correction Factor (Table 11)
- B: Servo Motor Kp, other table\*

Table 8. Load Correction Factor (Ko)

Type of Motor	Peak Output/Basic Output			
	I	II	III	
	150% or Less	Over 150%-200% or Less	Over 250%	
AC Motor	Single-Phase	-	-	All Types
	Squirrel	-	-	All Types
	Cage	-	37Kw or More	30Kw or Less
	Type	-	-	All Types
	6 Phase - 8 Phase	-	-	-
	Wound	-	-	15Kw or Less
	Field	-	-	11Kw or Less
	Type	-	-	5.5Kw or Less
8 Phase	-	-	-	
Synchronous Motor	-	Standard Torque Type	High Torque Type	
DC Motor	Shunt	Wound Field	Series	
Hydraulic Motor	-	-	All Types	
Office Machinery	Printer · Fax Machine · Copy Machine	-	1.2	1.4
	Juicer	-	1.4	1.6
Home Appliance	Vacuum Cleaner	1	1.2	1.4
	Money Exchange · Ticket Machine · Ticket Gate · Bank Teller Machine	1.3	1.4	1.5
Finance Equipment	Bakery Equipment	1.2	1.4	1.6
	Mixer · Granulator	1.4	1.6	1.8
Food · Medicine · Medical Equipment	Centrifuge	1.5	1.7	1.9
	Medical Machinery · Measurement Equipment	1	1.2	1.4
Machine Tool	Drill Press · Lathe	1.2	1.4	1.6
	Milling Machine	1.3	1.5	1.7
	Wood Lathe	1.2	1.4	1.6
Printing Book Making	Printer · Book Making Machine · Cutter	1.2	1.4	1.6
	Textile · Knitting Machinery	1.3	1.5	1.7
Sawing Machine	Sawing Machine - Home Use	-	1.2	1.4
	Sawing Machine - Industrial	-	1.6	1.8
Belt Conveyor · Packaging Machine	Belt Conveyor - Light Objects	1.1	1.3	1.5
	Packaging Machine	1.2	1.4	1.6
Film · Wire Making Machine	Calendar · Extruder	1.4	1.6	1.8
	Wire Making Machinery	1.4	1.6	1.8

Table 12. Special Motor Correction Factor (Kp)

Motor Type	Load Correction Factor
Servo Motor	Design as Kp=2.5 for Rated Output, and Kp=0.5 for Peak Output (Rational speed as applied speed)
Spindle Motor	Design as Kp=2.2 for Rated Output and Base Rotational Speed

## [Step 2-d] Calculating Designed Power ..... For EV5GT/EV8YU Series

- Design Power (Pd) = Transmission Power (Pt) x Overload Factor (Ks)
- Calculate Transmission Power at Motor Rated Power Output. (Ideally should be calculated with the load applied to the belt)
- Overload Factor (Ks)=Ko+Ki+Kr+Kh+Kk Ko: Load Correction Factor (Table 13) Ki: Idler Correction Factor (Table 14) Kr: Speed Multiplication Correction Factor (Table 15) Kh: Operation Time Correction Factor (Table 16) Km: Start/Stop Correction Factor (Table 17)

Table 13. Load Correction Factor (Ko)

Prime Motor Type	Induction Motor	Spindle Motor	Servo Motor (Peak Output/Rated Output)			
			200% or Less	201~299% / 300% or More		
Robot	Scara Type	2.0	2.0	1.6	1.7	1.8
Injection Mold Machine	Mini Fastening · Ball Screw Drive	1.8	1.8	1.3	1.4	1.5
Machine Tool	Lathe · Drill Press	1.6	1.3	1.2	1.3	1.4
Machine Tool	Milling Machine	1.7	1.3	1.2	1.3	1.4
Conveyor		1.8	1.8	1.4	1.5	1.6
Medical Machinery · Measurement Equipment		1.5	1.5	1.1	0.1	0.2
Packaging Machine		1.6	1.5	1.1	0.1	0.2
Agitator · Mixer	Liquid	1.6	1.6	1.2	1.3	1.4
	Viscous Material	1.7	1.7	1.3	1.4	1.5
Drilling Machine · Granulator		1.8	1.8	1.4	1.5	1.6
Centrifuge		1.9	1.9	1.5	1.6	1.7
Mills	Ball · Rods	2.2	2.2	1.7	1.8	1.9
Printing Machine · Book Making Machine		2.0	2.0	1.6	1.7	1.8
Paper Making Machine	Calendar · Dryer	2.0	2.0	1.6	1.7	1.8
Textile Machine		2.0	2.0	1.6	1.7	1.8
Wire Related	Wire Drawing & Twisting Machine	2.1	2.0	1.6	0.1	0.2
Woodworking Machine		1.7	1.7	1.2	1.3	1.4
Pump		2.0	2.0	1.6	1.7	1.8
Compressor	Reciprocating · Rotating	2.0	2.0	1.6	1.7	1.8
Fan · Blower	Axial Flow · Roots	2.0	1.8	1.3	1.4	1.5
Generator · Exciter		1.8	1.8	1.4	1.5	1.6
Rubber Industry Machinery · Lumber Mill Machinery		2.0	2.0	1.6	1.7	1.8

Table 14. Idler Correction Factor (Ki)

No Idler	0
Inside Idler	0.1 x (Qty-1)
Outside Idler	0.1 x (Qty-1)

Table 15. Speed Multiplication Correction Factor (Kr)

Operation Duration (Hours/Day)	Correction Factor
1 or More Less than 1.25	0
1.25 or More Less than 1.75	0.1
1.75 or More Less than 2.5	0.2
2.5 or More Less than 3.5	0.3
3.5 or More	0.4

Table 16. Operation Time Correction Factor (Kh)

Operation Duration (Hours/Day)	Correction Factor
≤8	0.1
8<16	0.2
16≤	0.3

Table 17. Start/Stop Correction Factor (Km)

Start/Stop Frequency (Times/Day)	Correction Factor
≤10	0.1
11<100	0.2
101<500	0.3
501<	0.4

# [Technical Data] Selection of Timing Belts 2

Selection is easy with Timing Pulleys and Belts automatic calculation tool available at:  
[http://fawos.misumi.jp/FA\\_WEB/pulley\\_us/](http://fawos.misumi.jp/FA_WEB/pulley_us/)

## [Step 3] Temporarily Selecting the Type of Belt from Selection Guide Table

Table 18. Selection Guide Table 1 (MXL, XL, L, H, T5, T10)

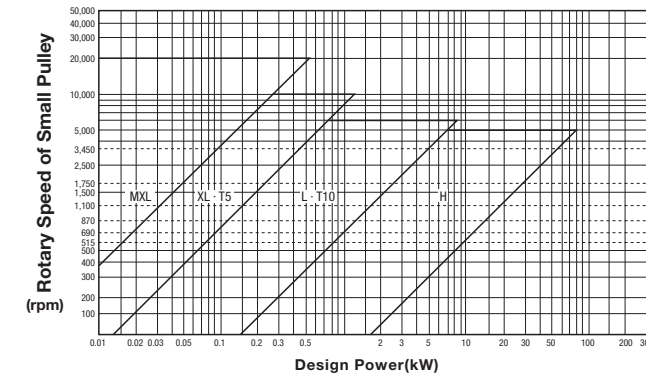


Table 19. Selection Guide Table 2 (S\_M series)

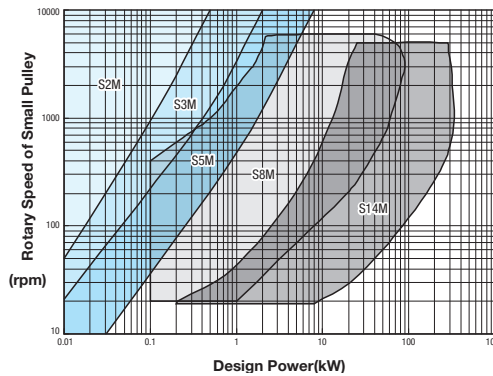


Table 20. Selection Guide Table 3 (P\_M series)

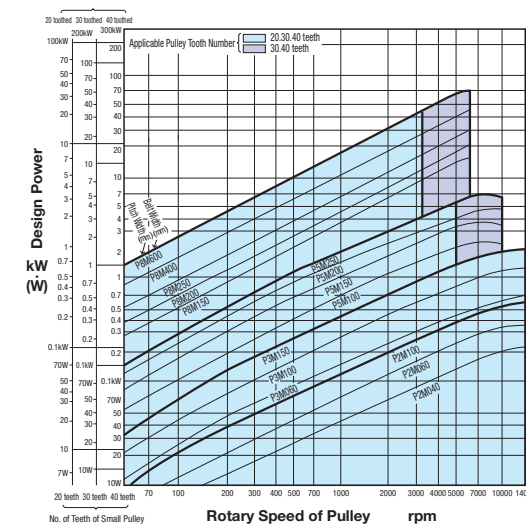


Table 21. Selection Guide Table 4 (MTS8M)

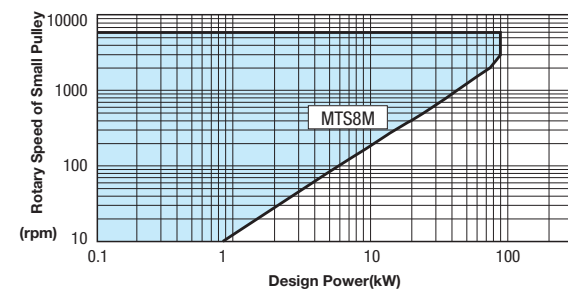


Table 22. Selection Guide Table 5 (UP\_M series)

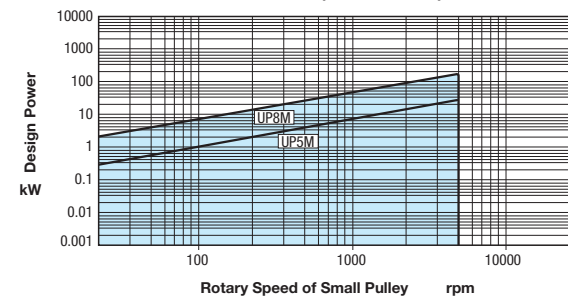


Table 23. Selection Guide Table (2GT-3GT series)

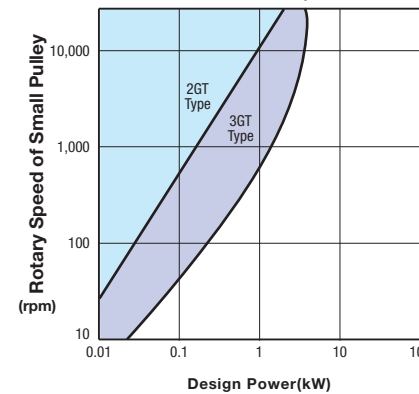
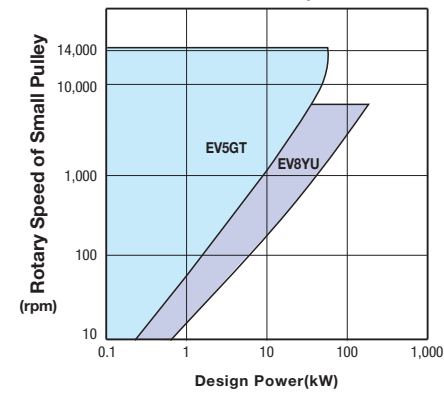


Table 24. Selection Guide Table (EV5GT-EV8YU series)



## [Step 4] Determining Number of Teeth of Large and Small Pulley, Belt Length, Inter-Shaft Distance

(1) Select the number of teeth of large and small pulley from P.3519~3529, which can satisfy the predetermined speed ratio.  
(However, note that the number of teeth for small pulley should be larger than the min. number of teeth shown in Table 25.)

$$\text{Speed Ratio} = \frac{\text{Number of Teeth of Large Pulley}}{\text{Number of Teeth of Small Pulley}}$$

Table 25. Min. Number of Teeth of Pulley

Rotary Speed of Small Pulley (rpm)	Type of Belt, Minimum Number of Teeth											
	MXL	XL	L	H	S2M	S3M	S5M	S8M	S14M	MTS8M	T5	T10
900 or Less	12	10	12	14	14	14	14	22	-	24	12	14
Over 900 1200 or Less	12	10	12	16	14	14	16	24	34	24	12	16
Over 1200 1800 or Less	14	11	14	18	16	16	20	26	38	24	14	18
Over 1800 3600 or Less	16	12	16	20	18	18	24	28	40	24	16	20
Over 3600 4800 or Less	-	16	20	24	20	20	26	30	48	24	20	22
Over 4800 10000 or Less	-	-	-	-	20	20	26	-	-	-	-	-

(2) Determine approx. belt circum. length (Lp') in terms of temporary inter-shaft distance (C'), diameter of large pulley (Dp) and diameter of small pulley (dp).

$$Lp' = 2C' + \frac{\pi(Dp+dp)}{2} + \frac{(Dp-dp)^2}{4C'}$$

C' : Temporary Inter-shaft Distance  
Dp : Pitch Diameter of Large Pulley (mm)  
dp : Pitch Diameter of Small Pulley (mm)  
Lp' : Approx. Belt Circum. Length (mm)

(3) Determine a belt circum. length (Lp') that is the nearest value to approx. belt circum. length referring to P.1173~1184, and then calculate the correct inter-shaft distance using the following formula.

$$C = \frac{b + \sqrt{b^2 - 8(Dp-dp)^2}}{8}$$

$$b = 2Lp - \pi(Dp+dp)$$

Dp : Pitch Diameter of Large Pulley (mm)  
dp : Pitch Diameter of Small Pulley (mm)  
C : Inter-shaft Distance  
Lp : Belt Circum. Length (mm)

## [Step 5] Determining Belt Width

(1) Calculate an approx. belt width using the following formula, and then select a belt width (Bw':mm) that is the nearest value to the approximated value.

$$Bw' = \frac{Pd}{Ps \cdot Km} \times Wp$$

Pd : Design Power  
Ps : Reference Transmission Capacity ..... Use the Reference Transmission Capacity Table on P.3519~3529.  
Km : Engagement Correction Coefficient (Table 26)  
Wp : Reference Belt Width (Table 27)

Table 26. Engagement Correction Coefficient (Km)

No. of Teeth Engaged Zm	More than 6	5	4	3	2
Km	1.0	0.8	0.6	0.4	0.2

Table 27. Reference Belt Width (Wp)

Type of Belt	MXL	XL	L	H	S2M	S3M	S5M	S8M	S14M	MTS8M
Reference Belt Width	6.4	25.4	25.4	25.4	4	6	10	60	120	60

$$\text{No. of Teeth Engaged (Zm)} = \frac{Zd \cdot \theta}{360^\circ}$$

$$\theta = 180^\circ - \frac{57.3(Dp-dp)}{C}$$

Zd : No. of Teeth of Small Pulley  
Dp : Pitch Diameter of Large Pulley (mm)  
C : Inter-shaft Distance (mm)  
dp : Pitch Diameter of Small Pulley (mm)

(2) Check if Design Power (Pd) satisfies the following formula. (If not, select the belt width of one size larger again.)

$$Pd < Ps \cdot Km \cdot Kb$$

$$*2GT \cdot 3GT \cdot EV5GT \cdot EV8YU$$

$$Pd < Ps \cdot Km \cdot Kb \cdot KL$$

Pd : Design Power  
Ps : Reference Transmission Capacity  
Km : Engagement Correction Coefficient  
Kb : Width Correction Coefficient (Table 28)  
KL : Length Correction Coefficient (Table 29)

Table 28. Width Correction Coefficient (Kb)

Type of Belt	Nominal	mm	Kb
MXL	019	4.8	0.72
	025	6.4	1.00
	037	9.5	1.57
	050	12.7	2.18
XL	025	6.4	0.15
	031	7.9	0.21
	037	9.5	0.28
	050	12.7	0.42
L	050	12.7	0.42
	075	19.1	0.71
	100	25.4	1.00
	150	38.1	1.56
H	075	19.1	0.71
	100	25.4	1.00
	150	38.1	1.56
	200	50.8	2.14
S2M	040	4	1.00
	060	6	1.59
	100	10	2.84
	060	6	1.00
S3M	100	10	1.79
	150	15	2.84
	100	10	1.00
	150	15	1.59
S5M	250	25	2.84
	150	15	0.21
	250	25	0.37
	300	30	0.45
S8M	400	40	0.63
	300	30	0.45
	400	40	0.29
	600	60	0.45
S14M	400	40	0.29
	600	60	0.45
	400	40	0.29
	600	60	0.45

Type of Belt	Nominal	mm	Kb
P2M	40	4	1.00
	60	6	1.59
	100	10	1.78
P3M	150	15	2.84
	100	10	1.00
	150	15	1.59
P5M	150	15	1.00
	150	15	1.59
	150	15	1.00
P8M	250	25	1.79
	100	10	1.00
	150	15	1.60
T5	200	20	2.30
	250	25	2.90
	150	15	1.60
T10	200	20	2.30
	250	25	2.90
	300	30	3.50
	400	40	4.60
	500	50	5.80

Type of Belt	Nominal	mm	Kb
2GT	4	4	1.00
	6	6	1.67
	9	9	2.67
3GT	6	6	1.00
	9	9	1.66
	15	15	2.97
EV5GT	9	9	0.53
	12	12	0.76
	15	15	1.00
EV8YU	15	15	0.71
	20	20	1.00
	25	25	1.29

Table 29. Length Correction Coefficient (KL)

Length Correction Coefficient (KL)	0.80	0.90	1.00	1.10	1.20
2GT Belt Length (mm)	130 or less	131~182	183~280	281~419	420 or less
3GT Belt Length (mm)	190 or less	191~260	261~400	401~599	600 or less
EV5GT Belt Length (mm)	440 or less	441~550	551~800	801~1100	1001 or less
EV8YU Belt Length (mm)	600 or less	601~900	901~1250	1251~1799	1800 or less

# [Technical Data] Selection of Timing Belts 3 - Transmission Capacity Table-

Selection is easy with Timing Pulleys and Belts automatic calculation tool available at: [http://fawos.misumi.jp/FA\\_WEB/pulley\\_us/](http://fawos.misumi.jp/FA_WEB/pulley_us/)

[Step 6] Check if Inter-Shaft Distance Adjustment Range is Larger than that in Table 16

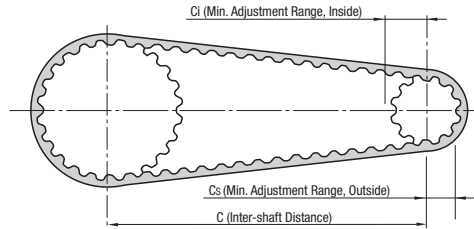


Table 16. Minimum Inter-Axial Distance Adjustment Range

Belt Length	Length Tolerance	Inter-Shaft Distance Tolerance	MXL		XL		L		H		S2M S3M S5M		S8M S14M		MTS8M		P2M P3M P5M		P8M		T5		T10	
			Ci	Cs	Ci	Cs	Ci	Cs	Ci	Cs	Ci	Cs	Ci	Cs	Ci	Cs	Ci	Cs	Ci	Cs	Ci	Cs	Ci	Cs
150 or Less	±0.35	±0.18	3	3	3	3	3	3	2	3	-	3	3	3	3	3	3	3	3	3	3	3	3	3
150 to 250	±0.41	±0.21	3	3	3	3	3	3	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
250 to 380	±0.46	±0.23	5	5	5	5	5	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
380 to 500	±0.51	±0.26	10	10	10	10	10	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
500 to 750	±0.60	±0.30	3	10	5	10	10	10	3	5	15	5	15	5	15	5	10	5	15	5	5	10	10	10
750 to 1000	±0.66	±0.33	15	15	15	15	15	10	3	5	15	5	15	5	15	5	10	5	15	5	5	10	10	15
1000 to 1250	±0.76	±0.38	15	15	15	15	15	15	5	10	5	10	10	10	10	10	10	10	10	10	10	15	15	15
1250 to 1500	±0.82	±0.41	25	25	25	25	25	5	10	10	10	10	10	10	10	10	10	10	10	10	25	25	25	25
1500 to 1750	±0.86	±0.43	25	25	25	25	25	5	10	10	10	10	10	10	10	10	10	10	10	10	25	25	25	25
1750 to 2000	±0.92	±0.46	30	30	30	30	30	5	10	10	10	10	10	10	10	10	10	10	10	10	30	30	30	30

Belt Length	Length Tolerance	Inter-Shaft Distance Tolerance	2GT		3GT		EV5GT		EV8YU	
			Ci	Cs	Ci	Cs	Ci	Cs	Ci	Cs
150 or Less	±0.40	±0.20	3	3	3	3	3	3	3	3
Over 150	±0.40	±0.20	3	3	3	3	3	3	3	3
Over 250	±0.46	±0.23	3	3	3	3	3	3	3	3
Over 380	±0.50	±0.25	3	3	3	3	3	3	3	3
Over 500	±0.60	±0.30	4	5	5	5	10	5	20	5
Over 750	±0.66	±0.33	5	5	5	5	10	5	20	5
Over 1000	±0.76	±0.38	10	10	10	10	10	10	10	10
Over 1250	±0.82	±0.41	10	10	10	10	10	10	10	10
Over 1500	±0.86	±0.43	10	10	10	10	10	10	10	10
Over 1750	±0.92	±0.46	10	10	10	10	10	10	10	10

**Notes on Operation**

- Be careful to avoid the ingress of foreign particles. When solid foreign particles enter during operation, it can scratch the belt and adversely affect the engagement of the belt and the pulley. In some cases, the pulley may disengage, land on the teeth of the pulley, and be cut.
- Avoid Adhesion of oil. Oil on the rubber timing belt may wet and expand it, drastically shortening its service life. (a) Take special care when using solvent type oil. (b) A small amount of lubricant or grease, however, rarely causes a trouble.
- Do not use the belt in a humid atmosphere.
- Please use a well-ventilated safety cover.
- The service life of the belt, when used at a high temperature (80°C or more), can be drastically shortened.

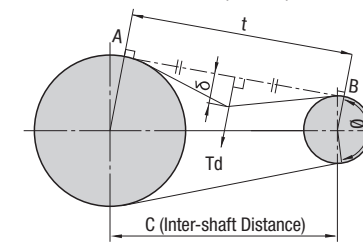
**Reference Belt Width Tolerance** (Unit: mm)

Belt Width	Belt Length			
	351 or Less	351 to 840	840 to 1680	1680 or More
10 or Less	+0.3 -0.6	+0.3 -0.6	+0.3 -0.6	+0.6 -0.6
10 to 40	+0.6 -0.6	+0.6 -0.6	+0.6 -0.6	+0.6 -0.6
40 to 50	+0.6 -0.6	+0.6 -0.6	+1.0 -1.0	+1.0 -1.3

**Cautions on Use of Belt**

**How to Extend Belt**

When the belt is too taut, its service life can be shortened, while when it is not taut enough, the belt may (jump off) the groove of the pulley due to an activating torque or shock load. Keep the belt stationary and optimize its tautness. The warp load necessary to provide the optimum tautness can be calculated from values representing the belt, its width and the span in equation A below.



$$T_d = \frac{T_i + \frac{t \times Y}{L_p}}{16} \quad \text{Equation A}$$

Td: Load N Needed for Deflection d at the Center of Span t

- Ti : Initial Tension N From Table 31 Lp : Length of the Belt (mm)
- Y : Correction Coefficient From Table 31 C : Inter-shaft Distance (mm)
- δ : Deflection (mm) δ=0.016t dp : Diameter of the Pitch Circle of the Small Pulley (mm)
- t : Span Length (mm)  $t = \sqrt{C^2 - \frac{(D_p - d_p)^2}{4}}$  Dp : Diameter of the Pitch Circle of the Large Pulley (mm)

Table 31. Initial Tension (Ti) and Correction Coefficient (Y)

Type	Ti-Y	Belt Nominal Width (mm)										Type	Ti-Y	Belt Width (mm)			
		019	025	031	037	050	075	100	150	200	60			100	150	250	
MXL	Ti	4.8	6.4	7.9	9.5	12.7	19.1	25.4	38.1	50.8	P2M	Ti	13	-	-	-	
	N	5.8	8.2	-	21.6	29.9	-	-	-	-		N	9.8	-	-	-	
	Max. Value Recommended Value	-	-	-	-	-	-	-	-	-		Max. Value Recommended Value	-	46	74	-	
XL	Ti	-	29	37	44	67	-	-	-	-	P3M	Ti	-	46	74	-	
	N	-	18	25	32	51	-	-	-	-		N	-	34	55	-	
	Max. Value Recommended Value	-	-	-	-	-	-	-	-	-		Max. Value Recommended Value	-	147	225.4	166.6	
L	Ti	-	-	-	-	76	125	175	273	-	P5M	Ti	-	147	225.4	166.6	
	N	-	-	-	-	52	87	123	191	-		N	-	107.8	166.6	-	
	Max. Value Recommended Value	-	-	-	-	-	-	-	-	-		Max. Value Recommended Value	-	56.9	82.4	-	
H	Ti	-	-	-	-	-	293	421	646	889	P8M	Ti	-	-	294	509.6	
	N	-	-	-	-	-	222	312	486	668		N	-	-	225.4	382.2	
	Max. Value Recommended Value	-	-	-	-	-	-	-	-	-		Max. Value Recommended Value	-	-	135	239	

Type	Ti-Y	Belt Nominal Width (mm)							
		40	60	100	150	250	300	400	600
S2M	Ti	4	6	10	15	25	30	40	60
	N	5.9	9.8	16.7	-	-	-	-	-
	Max. Value Recommended Value	-	-	-	-	-	-	-	-
S3M	Ti	-	26	46	73	-	-	-	-
	N	-	20	34	54	-	-	-	-
	Max. Value Recommended Value	-	-	-	-	-	-	-	-
S5M	Ti	-	-	77	124	221	-	-	-
	N	-	-	58	93	166	-	-	-
	Max. Value Recommended Value	-	-	-	-	-	-	-	-
S8M MTS8M	Ti	-	-	-	294	510	628	873	-
	N	-	-	-	226	382	470	657	-
	Max. Value Recommended Value	-	-	-	-	-	-	-	-
S14M	Ti	-	-	-	-	-	1226	1912	-
	N	-	-	-	-	-	1108	1726	-
	Max. Value Recommended Value	-	-	-	-	-	-	-	-

Type	Ti-Y	Belt Nominal Width (mm)							
		4	6	9	12	15	20	25	
2GT	Ti	12.2	20.5	32.8	-	-	-	-	
	N	9.4	15.8	25.2	-	-	-	-	
	Max. Value Recommended Value	-	-	-	-	-	-	-	
3GT	Ti	-	38	57	-	96	-	-	
	N	-	29	44	-	74	-	-	
	Max. Value Recommended Value	-	-	-	-	-	-	-	
EV5GT	Ti	-	-	92	127	163	-	-	
	N	-	-	71	98	125	-	-	
	Max. Value Recommended Value	-	-	-	-	-	-	-	
EV8YU	Ti	-	-	-	-	273	364	455	
	N	-	-	-	-	210	280	350	
	Max. Value Recommended Value	-	-	-	-	-	-	-	



[Technical Data]

Selection of Timing Belts 4 -Transmission Capacity Table-

Selection is easy with Timing Pulleys and Belts automatic calculation tool available at: [http://fawos.misumi.jp/FA\\_WEB/pulley\\_us/](http://fawos.misumi.jp/FA_WEB/pulley_us/)

Table 32. Reference Transmission Capacity of MXL Ps -Nominal Width of Belts 025(6.4mm)- (W)

Rotary Speed of Small Pulley(rpm)	No. of Teeth of Small Pulley	Diameter of the Pitch Circle(mm)																																				
		12	14	15	16	18	20	22	24	25	26	28	30	32	36	40																						
950	1160	1425	1750	2850	3450	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800	4000	4200	4400	4600	4800

\*Values in the table above are for nominal belt width 025(6.4mm). For other belt widths, those values should be multiplied by the width correction coefficient, Kb, shown in Table 28.

Table 33. Reference Transmission Capacity of XL Ps -Nominal Width of Belts 100(25.4mm)- (kW)

Rotary Speed of Small Pulley(rpm)	No. of Teeth of Small Pulley	Diameter of the Pitch Circle(mm)																																				
		10	11	12	14	15	16	18	19	20	21	22	24	25	26	28	30																					
950	1160	1425	1750	2850	3450	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800	4000	4200	4400	4600	4800

\*Values in the table above are for nominal belt width 100(25.4mm). For other belt widths, those values should be multiplied by the width correction coefficient, Kb, shown in Table 28.

Table 34. Reference Transmission Capacity of L Ps -Nominal Width of Belts 100(25.4mm)- (kW)

Rotary Speed of Small Pulley(rpm)	No. of Teeth of Small Pulley	Diameter of the Pitch Circle(mm)																																							
		12	14	15	16	18	19	20	21	22	24	25	26	28	30	32	36	40	48																						
725	870	950	1160	1425	1750	2850	3450	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800	4000	4200	4400	4600	4800

\*Values in the table above are for nominal belt width 100(25.4mm). For other belt widths, those values should be multiplied by the width correction coefficient, Kb, shown in Table 28.

Table 35. Reference Transmission Capacity of H Ps -Nominal Width of Belts 100(25.4mm)- (kW)

Rotary Speed of Small Pulley(rpm)	No. of Teeth of Small Pulley	Diameter of the Pitch Circle(mm)																																							
		14	15	16	18	19	20	21	22	24	25	26	28	30	32	36	40	48																							
725	870	950	1160	1425	1750	2850	3450	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800	4000	4200	4400	4600	4800

\*Values in the table above are for nominal belt width 100(25.4mm). For other belt widths, those values should be multiplied by the width correction coefficient, Kb, shown in Table 28.





**[Technical Data]**  
**Selection of Timing Belts 7 -Transmission Capacity Table-**

Selection is easy with Timing Pulleys and Belts automatic calculation tool available at:  
[http://fawos.misumi.jp/FA\\_WEB/pulley\\_us/](http://fawos.misumi.jp/FA_WEB/pulley_us/)

**Table 44. Reference Transmission Capacity of P5M Ps -Belt Width 10mm-** (W)

Rotary Speed of Small Pulley (rpm)	No. of Teeth of Small Pulley		Diameter of the Pitch Circle (mm)																
	12	14	16	18	20	22	24	25	26	28	30	32	34	36	40	42	44	48	56
100	23	26	31	35	41	46	52	55	58	64	70	76	81	86	103	110	118	133	158
200	46	53	63	72	81	92	104	109	115	126	138	151	164	177	205	220	235	267	316
400	77	90	106	122	138	155	173	182	192	211	231	251	272	294	337	361	385	434	514
600	105	123	144	165	188	211	235	247	259	284	310	337	365	394	452	482	513	577	684
800	131	153	179	205	234	262	291	306	322	353	385	417	451	485	556	592	629	706	837
1000	156	182	212	243	276	309	343	361	379	415	453	491	530	570	651	694	738	825	977
1200	179	209	244	280	316	355	394	414	435	476	518	561	605	650	742	790	838	937	1110
1400	201	235	274	319	355	399	443	465	487	532	580	628	677	726	828	880	933	1040	1230
1450	242	282	323	365	409	453	476	499	546	594	643	694	745	850	903	957	1070	1260	
1500	248	288	333	374	420	466	489	512	560	609	659	711	762	869	925	981	1090	1290	
1600	261	303	348	393	441	489	514	538	588	639	691	745	799	910	970	1030	1140	1350	
1750	278	325	372	420	471	522	548	575	628	683	738	795	852	970	1040	1100	1220	1430	
1800	332	380	430	481	532	559	586	640	696	753	810	868	989	1050	1110	1240	1460		
2000	360	412	465	520	576	605	633	691	751	812	874	937	1060	1130	1200	1330	1570		
2400	413	472	532	595	658	691	723	789	857	925	992	1060	1210	1280	1350	1500	2030		
3000	557	628	701	775	812	850	926	1000	1080	1150	1240	1400	1485	1570	1730	2120			
3600	638	719	801	883	925	966	1050	1140	1230	1310	1400	1580	1670	1760	1940	2250			
4000	776	865	953	997	1040	1130	1220	1320	1450	1500	1690	1785	1880	2060	2380				
5000	911	1010	1110	1160	1210	1320	1420	1520	1620	1720	1920	2010	2110	2300	2610				
6000	1140	1260	1310	1370	1480	1580	1690	1790	1900	2100	2190	2290	2460	2720					
8000	1490	1550	1600	1720	1830	1930	2020	2120	2270	2330	2400	2480	2480						
10000	1710	1760	1860	1940	2020	2080	2130	2170	2160	2150	2040								
12000	1770	1810	1880	1910	1940	1920	1900												
14000	1750	1760	1710	1660															

\*Because the durability in terms of hours decreases in the □□□□ marked range, this range should be avoided whenever possible. For other belt widths, values above should be multiplied by the width correction coefficient shown in Table 28.

**Table 45. Reference Transmission Capacity of P8M Ps -Belt Width 15mm-** (kW)

Rotary Speed of Small Pulley (rpm)	No. of Teeth of Small Pulley		Diameter of the Pitch Circle (mm)															
	20	22	24	26	28	30	32	34	36	38	40	44	48	50	56	60	64	72
100	0.16	0.17	0.19	0.21	0.23	0.26	0.31	0.41	0.44	0.48	0.51	0.56	0.60	0.63	0.70	0.74	0.78	0.89
200	0.32	0.35	0.39	0.42	0.45	0.50	0.59	0.69	0.78	0.85	0.91	0.99	1.07	1.14	1.23	1.35	1.40	1.57
400	0.65	0.71	0.77	0.84	0.90	0.95	1.09	1.25	1.37	1.48	1.59	1.72	1.86	1.94	2.16	2.30	2.43	2.71
600	0.96	1.06	1.16	1.25	1.35	1.45	1.53	1.70	1.86	2.02	2.17	2.37	2.55	2.66	2.95	3.12	3.30	3.66
800	1.29	1.41	1.54	1.67	1.80	1.93	2.06	2.18	2.31	2.51	2.69	3.02	3.16	3.27	3.64	3.83	4.08	4.75
870	1.40	1.54	1.68	1.82	1.96	2.10	2.24	2.38	2.51	2.66	2.86	3.16	3.36	3.48	3.90	4.13	4.44	4.98
1000	1.61	1.77	1.93	2.09	2.25	2.41	2.57	2.73	2.89	2.99	3.16	3.64	3.84	4.00	4.47	4.78	5.09	5.71
1160	1.86	2.05	2.24	2.42	2.61	2.79	2.98	3.16	3.35	3.53	3.84	4.08	4.44	4.62	5.17	5.52	6.48	7.28
1200	1.93	2.12	2.31	2.51	2.70	2.89	3.07	3.27	3.46	3.60	3.82	4.22	4.59	4.78	5.34	5.71	6.08	7.52
1400	2.25	2.45	2.70	2.94	3.15	3.37	3.59	3.80	4.03	4.25	4.47	4.90	5.34	5.55	6.20	6.62	7.04	8.68
1450	2.33	2.55	2.79	3.04	3.26	3.65	3.72	3.94	4.17	4.40	4.63	5.07	5.53	5.75	6.41	6.85	7.28	8.96
1500	2.41	2.64	2.89	3.15	3.37	3.72	3.84	4.07	4.31	4.55	4.78	5.25	5.71	5.94	6.62	7.07	7.51	9.25
1600	2.57	2.83	3.07	3.35	3.59	3.84	4.09	4.34	4.59	4.84	5.09	5.59	6.08	6.32	7.04	7.52	7.98	9.81
1750	2.81	3.08	3.36	3.64	3.92	4.20	4.47	4.74	5.01	5.28	5.56	6.09	6.63	6.88	7.68	8.17	8.70	10.6
1800	2.89	3.18	3.72	3.75	4.03	4.31	4.59	4.87	5.15	5.43	5.71	6.26	6.80	7.07	7.86	8.38	8.90	10.9
2000	3.20	3.52	4.01	4.15	4.47	4.78	5.09	5.40	5.71	6.01	6.32	6.93	7.52	7.81	8.68	9.24	9.81	11.9
2400	3.84	4.22	4.59	4.97	5.34	5.71	6.08	6.44	6.80	7.16	7.52	8.22	9.05	9.24	9.86	10.9	11.5	13.8
3000	4.63	5.20	5.62	6.02	6.52	6.81	7.32	7.76	8.22	8.71	9.02	9.84	10.7	11.1	12.2	12.6	12.9	14.6
3600	5.82	6.34	6.75	7.27	7.67	8.17	8.65	9.14	9.72	10.0	10.8	11.7	12.2	13.1	13.9	13.9	15.3	
4000	7.06	7.48	8.14	8.46	9.00	9.60	10.0	10.7	11.0	11.7	12.7	13.2	14.0	14.7	14.9	15.8		
5000	8.81	9.60	10.2	10.7	11.3	11.7	12.4	12.8	13.6	14.5	14.8	15.7						
6000	10.2	11.2	11.9	12.3	13.0	13.2	14.1	14.5	14.9	15.8	16.0							

\*Because the durability in terms of hours decreases in the □□□□ marked range, this range should be avoided whenever possible. For other belt widths, values above should be multiplied by the width correction coefficient shown in Table 28.  
 \* □□□□ The circumferential speed of pulley is 33(m/s) or more; a dynamic balance for the pulley is essential.



## [Technical Data] Selection of Timing Belts 8 -Transmission Capacity Table-

Selection is easy with Timing Pulleys and Belts automatic calculation tool available at:  
[http://fawos.misumi.jp/FA\\_WEB/pulley\\_us/](http://fawos.misumi.jp/FA_WEB/pulley_us/)

Table 46. Reference Transmission Capacity of UP5M Ps -Belt Width 10mm- (W)

No. of Teeth of Small Pulley		12	14	16	18	20	22	24	26	28	30	32	36	40	44	48	50	60	72
Diameter of the Pitch Circle (mm)		19.10	22.28	25.46	28.65	31.83	35.01	38.20	41.38	44.56	47.75	50.93	57.30	63.66	70.03	76.39	79.58	95.49	114.59
20	10	12	15	17	19	21	24	26	29	31	34	39	45	51	58	61	78	101	
40	19	23	28	32	36	40	45	49	54	59	64	74	85	96	108	114	147	187	
60	27	32	39	45	50	56	63	69	76	83	90	104	119	135	152	161	206	267	
100	41	50	60	69	78	88	97	107	118	128	139	162	185	210	236	249	321	420	
200	76	92	111	128	145	162	180	198	215	237	257	298	342	388	436	460	592	774	
400	141	170	206	236	267	299	332	366	401	437	474	550	631	715	804	849	1092	1430	
500	172	207	251	287	325	364	405	446	488	532	577	670	769	871	979	1034	1330	1741	
600	202	243	295	338	382	428	475	524	574	625	678	788	903	1024	1151	1216	1563	2045	
800	260	314	380	436	492	552	613	675	740	806	875	1016	1164	1320	1483	1567	2016	2637	
1000	316	382	463	531	600	672	747	822	901	982	1065	1238	1418	1609	1806	1909	2454	3210	
1200	376	453	550	630	713	799	887	977	1070	1167	1265	1470	1685	1910	2146	2266	2913	3811	
1400	436	526	637	730	826	924	1026	1132	1240	1351	1466	1702	1951	2212	2484	2625	3372	4409	
1450		544	658	755	854	957	1061	1171	1283	1397	1516	1760	2017	2288	2569	2714	3488	4559	
1500		561	681	780	883	988	1098	1209	1324	1444	1566	1819	2084	2364	2654	2803	3601	4707	
1600		599	724	831	940	1052	1169	1287	1410	1537	1667	1935	2218	2514	2823	2984	3833	5007	
1750		652	790	907	1025	1147	1275	1405	1539	1677	1817	2111	2420	2743	3080	3254	4178	5455	
1800			813	931	1053	1179	1309	1443	1582	1724	1868	2171	2486	2820	3165	3344	4293	5605	
2000			902	1032	1169	1309	1453	1601	1754	1912	2071	2407	2757	3124	3508	3707	4687	6201	
2400			1068	1222	1386	1552	1720	1897	2077	2262	2453	2849	3261	3695	4146	4378	5485	7293	
3000				1517	1714	1918	2130	2348	2570	2798	3034	3520	4027	4559	5108	5389	6614	8885	
3600				1794	2029	2272	2519	2774	3039	3307	3584	4151	4743	5361	5996	6320	7629	10250	
4000					2245	2513	2785	3067	3358	3655	3956	4577	5226	5895	6583	6932	8040	11069	
5000					2747	3072	3404	3747	4090	4446	4807	5542	6301	7066	7843	8229	9048		
6000					3217	3585	3969	4359	4757	5154	5559	6376	7185	7995	8776	9159			
8000						5002	5455	5908	6361	6795	7264	8366	8993	9465	9619				
10000							6313	6747	7156	7518	8072	8349	8253						
12000								6824	7142	7359	7475	7316							
14000									6848	6882	6730								

\*Because the durability in terms of hours decreases in the marked range, this range should be avoided whenever possible. For other belt widths, values above should be multiplied by the width correction coefficient shown in Table 28.

Table 47. Reference Transmission Capacity of UP8M Ps -Belt Width 15mm- (kW)

No. of Teeth of Small Pulley		20	22	24	26	28	30	32	34	36	38	40	44	48	50	56	60	64	72
Diameter of the Pitch Circle (mm)		50.93	56.02	61.12	66.21	71.30	76.39	81.49	86.58	91.67	96.77	101.86	112.05	122.23	127.32	142.60	152.79	162.97	183.35
20		0.11	0.12	0.13	0.14	0.15	0.17	0.18	0.19	0.20	0.21	0.23	0.25	0.28	0.29	0.33	0.36	0.40	0.46
40		0.19	0.21	0.24	0.26	0.28	0.30	0.33	0.36	0.38	0.40	0.42	0.47	0.52	0.55	0.62	0.67	0.73	0.84
60		0.27	0.31	0.34	0.37	0.40	0.44	0.47	0.50	0.53	0.56	0.60	0.67	0.74	0.77	0.89	0.96	1.04	1.20
100		0.43	0.48	0.52	0.57	0.62	0.67	0.71	0.77	0.82	0.88	0.93	1.03	1.14	1.20	1.38	1.50	1.62	1.87
200		0.76	0.84	0.93	1.01	1.10	1.19	1.28	1.37	1.46	1.57	1.69	1.85	2.06	2.16	2.48	2.70	2.93	3.40
300		1.06	1.17	1.29	1.41	1.54	1.66	1.78	1.92	2.05	2.18	2.29	2.59	2.88	3.03	3.48	3.79	4.11	4.79
400		1.32	1.47	1.62	1.78	1.93	2.09	2.25	2.41	2.59	2.75	2.92	3.28	3.65	3.84	4.41	4.81	5.22	6.08
500		1.57	1.75	1.93	2.12	2.30	2.50	2.69	2.89	3.09	3.30	3.50	3.93	4.37	4.60	5.30	5.78	6.29	7.32
600		1.81	2.01	2.22	2.44	2.65	2.88	3.10	3.33	3.57	3.80	4.05	4.54	5.06	5.32	6.14	6.71	7.29	8.51
700		2.04	2.26	2.50	2.75	2.99	3.24	3.50	3.75	4.02	4.29	4.57	5.13	5.72	6.02	6.95	7.59	8.26	9.65
800		2.25	2.51	2.77	3.04	3.31	3.59	3.87	4.17	4.46	4.76	5.07	5.70	6.35	6.69	7.73	8.45	9.20	10.75
900		2.46	2.74	3.03	3.32	3.61	3.92	4.24	4.55	4.88	5.21	5.55	6.25	6.97	7.34	8.48	9.29	10.11	11.83
1000		2.66	2.96	3.28	3.58	3.91	4.24	4.58	4.93	5.28	5.64	6.02	6.78	7.56	7.96	9.22	10.08	10.99	12.88
1100		2.86	3.19	3.52	3.87	4.23	4.59	4.95	5.33	5.71	6.10	6.51	7.32	8.18	8.62	9.99	10.93	11.91	13.97
1200		3.06	3.42	3.78	4.15	4.53	4.92	5.31	5.72	6.13	6.55	6.98	7.87	8.79	9.26	10.74	11.76	12.83	15.05
1300		3.26	3.64	4.02	4.42	4.82	5.24	5.67	6.10	6.54	6.99	7.45	8.40	9.40	9.90	11.49	12.59	13.73	16.11
1400		3.46	3.86	4.27	4.69	5.12	5.57	6.01	6.47	6.95	7.43	7.92	8.94	9.99	10.53	12.23	13.40	14.62	17.17
1450		3.55	3.96	4.39	4.82	5.26	5.72	6.18	6.66	7.15	7.64	8.15	9.20	10.28	10.84	12.59	13.80	15.06	17.69
1500		3.65	4.07	4.51	4.95	5.41	5.87	6.35	6.85	7.35	7.85	8.38	9.46	10.58	11.15	12.95	14.20	15.50	18.22
1600		3.83	4.27	4.73	5.21	5.69	6.18	6.69	7.21	7.74	8.28	8.84	9.98	11.16	11.77	13.68	15.00	16.37	19.26
1750		4.11	4.59	5.08	5.59	6.12	6.64	7.19	7.75	8.32	8.91	9.50	10.74	12.03	12.69	14.75	16.19	17.68	20.81
1800		4.19	4.69	5.20	5.71	6.25	6.79	7.35	7.92	8.52	9.11	9.72	11.00	12.31	12.99	15.10	16.58	18.11	21.32
2000		4.56	5.09	5.65	6.21	6.79	7.39	8.00	8.63	9.28	9.93	10.61	11.99	13.44	14.18	16.51	18.14	19.82	23.37
2400		5.25	5.87	6.51	7.17	7.85	8.54	9.27	10.00	10.75	11.52	12.31	13.95	15.65	16.53	19.27	21.20	23.18	27.38
2800		5.91	6.61	7.34	8.09	8.87	9.66	10.48	11.32	12.18	13.06	13.97	15.84	17.81	18.81	21.97	24.19	26.49	31.35
3000		6.22	6.97	7.75	8.54	9.37	10.21	11.09	11.97	12.89	13.82	14.79	16.78	18.87	19.94	23.31	25.68	28.13	33.30
3600		6.93	7.79	8.66	9.56	10.49	11.45	12.44	13.46	14.50	15.57	16.66	18.94	21.33	22.56	26.44	29.15	31.97	37.94
4000		7.36	8.29	9.20	10.18	11.18	12.20	13.27	14.36	15.48	16.63	17.81	20.27	22.85	24.18	28.37	31.30	34.36	40.81
5000		8.29	9.34	10.41	11.52	12.68	13.87	15.10	16.38	17.68	19.02	20.40	23.26	26.29	27.84	32.75	36.20		
6000		9.05	9.05	11.41	12.65	13.95	15.28	16.66	18.08	19.55	21.06	22.61	25.85	29.24	31.02	36.56	40.46		

\*Because the durability in terms of hours decreases in the marked range, this range should be avoided whenever possible. For other belt widths, values above should be multiplied by the width correction coefficient shown in Table 28.

\*The circumferential speed of pulley is 33(m/s) or more; a dynamic balance for the pulley is essential.



[Technical Data]

# Selection of Timing Belts 9 -Transmission Capacity Table-

Selection is easy with Timing Pulleys and Belts automatic calculation tool available at:  
[http://fawos.misumi.jp/FA\\_WEB/pulley\\_us/](http://fawos.misumi.jp/FA_WEB/pulley_us/)

Table 48. Reference Transmission Capacity of T5 Ps -Belt Width 10mm- (W)

No. of Teeth of Small Pulley	12	14	16	18	20	22	24	28	30
Diameter of the Pitch Circle(mm)	19.10	22.28	25.46	28.65	31.83	35.01	38.20	44.56	47.75
1160	98.5	114.9	131.3	147.7	164.1	180.5	196.9	229.7	246.1
1750	134.3	156.7	179.1	201.5	223.9	246.3	268.7	313.5	335.9
3500	222.5	259.6	296.7	333.7	370.8	407.9	445.0	519.1	556.2
100	10.7	12.4	14.2	16.0	17.8	19.5	21.3	24.9	26.6
200	20.8	24.3	27.7	31.2	34.7	38.2	41.6	48.6	52.0
300	30.5	35.6	40.7	45.7	50.8	55.9	61.0	71.2	76.2
400	39.7	46.4	53.0	59.6	66.2	72.9	79.5	92.7	99.4
500	48.6	56.7	64.8	72.9	81.0	89.1	97.2	113.4	121.5
600	57.0	66.5	76.0	85.6	95.1	104.6	114.1	133.1	142.6
700	65.1	76.0	86.8	97.7	108.6	119.4	130.3	152.0	162.8
800	72.9	85.0	97.2	109.3	121.5	133.6	145.8	170.1	182.2
900	80.3	93.7	107.1	120.5	133.9	147.3	160.7	187.5	200.9
1000	87.5	102.1	116.7	131.3	145.9	160.5	175.0	204.2	218.8
1100	94.4	110.2	125.9	141.6	157.4	173.1	188.9	220.3	236.1
1200	101.1	117.9	134.8	151.6	168.5	185.3	202.2	235.9	252.7
1300	107.5	125.5	143.4	161.3	179.2	197.2	215.1	250.9	268.9
1400	113.8	132.8	151.7	170.7	189.7	208.6	227.6	265.5	284.5
1500	119.9	139.8	159.8	179.8	200.0	219.2	239.7	279.7	299.7
1600	125.8	146.7	167.7	188.6	209.6	230.6	251.5	293.4	314.4
1700	131.5	153.4	175.4	197.3	219.2	241.1	263.0	306.9	328.8
1800	137.1	160.0	182.9	205.7	228.6	251.4	274.3	320.0	342.8
1900	142.6	166.4	190.2	214.0	237.7	261.5	285.3	332.8	356.6
2000	148.0	172.7	197.4	222.1	246.7	271.4	296.1	345.4	370.1
2200	158.6	185.0	211.4	237.8	264.3	290.7	317.8	370.0	396.4
2400	168.8	196.9	225.1	253.2	281.4	309.5	337.6	393.9	422.0
2600	178.8	208.7	238.5	268.3	298.1	327.9	357.7	417.3	447.1
2800	188.7	220.2	251.6	283.1	314.5	346.0	377.4	440.4	471.8
3000	198.5	231.6	264.6	297.7	330.8	363.9	397.0	463.1	496.2
3200	208.2	242.8	277.5	312.2	346.9	381.6	416.3	485.7	520.4
3400	217.7	254.0	290.3	326.6	362.9	399.2	435.5	508.0	544.3
3600	227.2	265.1	303.0	340.8	378.7	416.6	454.4	530.2	568.1
3800	236.6	276.0	315.5	354.9	394.3	433.8	473.2	552.1	591.5
4000	245.8	286.8	327.7	368.7	409.7	450.7	491.6	573.6	614.5
4200	254.8	297.3	339.7	382.2	424.7	467.2	509.6	594.6	637.0
4400	263.5	307.4	351.4	395.3	439.2	483.1	527.1	614.9	658.8
4600	271.9	317.2	362.5	407.8	453.1	498.4	543.7	634.4	679.7
4800	279.7	326.4	373.0	419.6	466.2	512.8	559.5	652.7	699.3
5000	287.0	334.8	382.7	430.5	478.3	526.2	574.0	669.7	717.5
5500			402.2	452.4	502.7	553.0	603.2	703.8	754.1
6000			412.1	463.6	515.1	566.6	618.1	721.1	772.6
6500			408.2	459.2	510.2	561.2	612.2	714.3	765.3
7000		385.3	433.5	481.7	529.8	578.0	626.2	727.5	778.5
7500		337.7	379.9	422.1	464.3	506.6	548.9	642.1	684.4
8000			290.8	323.1	355.5	387.8	420.1	495.4	527.7
8500			157.7	175.3	192.8	210.3	227.8	274.4	291.9

\*Avoiding the [ ] marked ranges is recommended as endurance time is shorten  
 \*The above table shows values for the nominal width 10 (10mm). Multiply a value in the table by correction coefficient Kb in the table 28 for other widths.

Table 49. Reference Transmission Capacity of T10 Ps - Belt Width 10mm- (W)

No. of Teeth of Small Pulley	12	14	16	18	20	22	24	26	28	30	32	36	40	44	48
Diameter of the Pitch Circle(mm)	38.20	44.56	50.93	57.30	63.66	70.03	76.39	82.76	89.12	95.49	101.86	114.59	127.32	140.06	152.79
870	254.9	297.4	339.9	382.4	424.9	467.4	509.9	552.4	594.9	637.4	679.8	764.8	849.8	934.8	1019.8
1160	321.2	374.8	428.3	481.8	535.4	588.9	642.4	696.0	749.5	803.0	856.6	963.7	1070.7	1177.8	1284.9
1750	438.3	511.3	584.4	657.4	730.5	803.5	876.6	949.6	1022.7	1095.7	1168.8	1314.9	1461.0	1607.1	1753.2
3500	725.8	846.8	967.8	1088.7	1209.7	1330.6	1451.6	1572.6	1693.6	1814.6	1935.5	2177.5	2419.4	2661.4	2903.3
100	34.8	40.6	46.4	52.1	57.9	63.7	69.5	75.3	81.1	86.9	92.7	104.3	115.9	127.5	139.1
200	67.9	79.2	90.5	101.9	113.2	124.5	135.8	147.1	158.4	169.8	181.1	203.7	226.3	249.0	271.6
300	99.5	116.1	132.7	149.3	165.8	182.4	199.0	215.6	232.2	248.8	265.3	298.5	331.7	364.9	398.0
400	129.7	151.3	172.9	194.5	216.1	237.7	259.4	281.0	302.6	324.2	345.8	389.0	432.3	475.5	518.7
500	158.5	184.9	211.3	237.8	264.2	290.6	317.0	343.4	369.8	396.3	422.7	475.5	528.3	581.2	634.0
600	186.1	217.1	248.1	279.1	310.1	341.1	372.2	403.2	434.2	465.2	496.2	558.2	620.3	682.3	744.3
700	212.5	247.9	283.3	318.7	354.2	389.6	425.0	460.4	495.8	531.2	566.6	637.5	708.3	779.1	850.0
800	237.8	277.5	317.1	356.7	396.4	436.0	475.6	515.3	554.9	594.5	634.2	713.4	792.7	872.0	951.3
900	262.1	305.8	349.5	393.2	436.9	480.6	524.3	568.0	611.7	655.3	699.0	786.4	873.8	961.2	1048.6
1000	285.5	333.1	380.7	428.3	475.9	523.5	571.1	618.7	666.2	713.8	761.4	856.6	951.8	1047.0	1142.1
1100	308.1	359.4	410.8	462.1	513.5	564.8	616.2	667.5	718.8	770.2	821.5	924.2	1026.9	1129.6	1232.3
1200	329.8	384.8	439.8	494.7	549.7	604.7	659.7	714.6	769.6	824.6	879.6	989.5	1099.4	1209.4	1319.3
1300	350.9	409.4	467.8	526.3	584.8	643.3	701.8	760.2	818.7	877.2	935.7	1052.6	1169.6	1286.5	1403.5
1400	371.3	433.1	495.0	556.9	618.8	680.6	742.5	804.4	866.3	928.1	990.0	1113.8	1237.5	1361.3	1485.0
1500	391.0	456.2	521.4	586.6	651.7	716.9	782.1	847.3	912.4	977.6	1042.8	1173.1	1303.5	1433.8	1564.2
1600	410.3	478.7	547.1	615.4	683.8	752.2	820.6	889.0	957.4	1025.7	1094.1	1230.9	1367.7	1504.4	1641.2
1700	429.1	500.6	572.1	643.6	715.1	786.6	858.1	929.6	1001.2	1072.7	1144.2	1287.2	1430.2	1573.3	1716.3
1800	447.4	522.0	596.5	671.1	745.7	820.2	894.8	969.4	1043.9	1118.5	1193.1	1342.2	1485.3	1628.4	1771.4
1900	465.4	542.9	620.5	698.0	775.6	853.1	930.7	1008.3	1085.8	1163.4	1240.9	1396.1	1541.2	1686.3	1831.4
2000	483.0	563.5	643.9	724.4	804.9	885.4	965.9	1046.4	1126.9	1207.4	1287.9	1448.9	1609.9	1770.9	1931.8
2200	517.3	603.5	689.7	776.0	862.2	948.4	1034.6	1120.8	1207.1	1293.3	1379.5	1551.9	1724.4	1896.8	2069.2
2400	550.7	642.5	734.3	826.1	917.9	1009.7	1101.4	1193.2	1285.0	1376.8	1468.6	1652.2	1835.8	2019.3	2202.9
2600	583.5	680.7	777.9	875.2	972.4	1069.7	1166.9	1264.1	1361.4	1458.6	1555.9	1750.4	1944.9	2139.4	2333.8
2800	615.7	718.3	820.9	923.5	1026.1	1128.7	1231.3	1333.9	1436.6	1539.2	1641.8	1847.0	2052.3	2257.5	2462.7
3000		755.4	863.4	971.3	1079.2	1187.1	1295.0	1402.9	1510.9	1618.8	1726.7	1942.5	2158.3	2374.2	2590.1
3200		792.2	905.4	1018.6	1131.8	1244.9	1358.1	1471.2	1584.3	1697.4	1810.5	2037.2	2263.5	2489.9	2716.2
3400		828.7	947.1	1065.5	1183.8	1302.2	1420.6	1539.0	1657.4	1775.8	1894.2	2130.9	2367.7	2604.5	2841.2
3600		864.8	988.4	1111.9	1235.4	1358.9	1482.5	1606.0	1729.6	1853.2	1976.7	2223.8	2470.9	2718.0	2965.1
3800		900.5	1029.1	1157.7	1286.4	1415.0	1543.6	1672.2	1800.9	1929.6	2058.2	2315.5	2572.8	2830.0	3087.3
4000		1069.2	1202.8	1336.5	1470.0	1603.7	1737.3	1871.1	2004.7	2138.4	2272.0				

## [Technical Data] Selection of Timing Belts 10 -Transmission Capacity Table-

Selection is easy with Timing Pulleys and Belts automatic calculation tool available at:  
[http://fawos.misumi.jp/FA\\_WEB/pulley\\_us/](http://fawos.misumi.jp/FA_WEB/pulley_us/)

**Table 50. Reference Transmission Capacity of 2GT Ps -Belt Width 4mm-** (W)

No. of Teeth of Small Pulley Diameter of the Pitch Circle(mm)	Rotary Speed of Small Pulley(rpm)																	
	12	14	16	18	20	22	24	26	28	30	32	36	40	44	48	50	60	72
7.64	8.91	10.19	11.46	12.73	14.01	15.28	16.55	17.83	19.10	20.37	22.92	25.46	28.01	30.56	31.83	38.20	45.84	
20	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.7	1.9	2.2	2.5	2.6	3.4	4.0
40	0.8	1.0	1.1	1.3	1.5	1.7	1.8	2.0	2.2	2.4	2.7	3.1	3.6	4.1	4.6	4.9	6.3	7.6
60	1.1	1.4	1.6	1.8	2.1	2.3	2.6	2.9	3.2	3.5	3.8	4.4	5.1	5.8	6.6	7.0	9.1	10.9
100	1.7	2.1	2.4	2.8	3.2	3.6	4.0	4.5	4.9	5.4	5.9	6.9	8.0	9.1	10.3	11.0	14.3	17.2
200	3.0	3.6	4.3	5.0	5.7	6.4	7.2	8.0	8.8	9.7	10.6	12.5	14.5	16.6	18.9	20.1	26.4	31.7
300	4.2	5.0	5.9	6.9	7.9	8.9	10.0	11.1	12.3	13.6	14.9	17.6	20.4	23.5	26.8	28.5	37.7	45.3
400	5.2	6.3	7.4	8.6	9.9	11.2	12.6	14.1	15.6	17.2	18.8	22.3	26.0	30.0	34.3	36.5	48.5	58.2
500	6.1	7.4	8.8	10.2	11.8	13.4	15.1	16.8	18.7	20.6	22.6	26.8	31.4	36.2	41.4	44.1	58.8	70.6
600	7.0	8.5	10.1	11.8	13.5	15.4	17.4	19.4	21.6	23.8	26.2	31.2	36.5	42.2	48.3	51.5	68.9	82.6
700	7.8	9.5	11.3	13.2	15.2	17.4	19.6	21.9	24.4	27.0	29.6	35.3	41.4	48.0	55.0	58.7	78.6	94.4
800	8.6	10.5	12.5	14.6	16.8	19.2	21.7	24.3	27.1	30.0	33.0	39.4	46.2	53.6	61.5	65.6	88.2	105.8
870	9.1	11.1	13.3	15.5	17.9	20.5	23.2	26.0	28.9	32.0	35.2	42.1	49.5	57.5	66.0	70.4	94.7	113.7
900	9.3	11.4	13.6	15.9	18.4	21.0	23.8	26.7	29.7	32.9	36.2	43.3	50.9	59.1	67.9	72.4	97.5	117.0
1000	10.0	12.3	14.6	17.2	19.9	22.7	25.7	28.9	32.2	35.7	39.3	47.1	55.4	64.4	74.1	79.1	106.7	128.0
1160	11.1	13.6	16.3	19.1	22.1	25.4	28.8	32.3	36.1	40.0	44.2	53.0	62.5	72.7	83.7	89.5	121.0	145.2
1200	11.4	13.9	16.6	19.6	22.7	26.0	29.5	33.2	37.0	41.1	45.3	54.4	64.2	74.8	86.1	92.0	124.6	149.5
1400	12.6	15.4	18.5	21.8	25.3	29.1	33.0	37.2	41.6	46.2	51.1	61.4	72.6	84.7	97.7	104.5	141.9	170.3
1450	12.9	15.8	19.0	22.4	26.0	29.8	33.9	38.2	42.7	47.5	52.5	63.1	74.7	87.2	100.6	107.6	146.2	175.4
1600	13.7	16.8	20.3	23.9	27.8	32.0	36.4	41.1	46.0	51.2	56.6	68.2	80.8	94.4	109.0	116.6	158.8	190.6
1750	14.5	17.8	21.5	25.4	29.6	34.1	38.8	43.8	49.1	54.7	60.6	73.1	86.7	101.4	117.2	125.5	171.2	205.4
1800	14.7	18.2	21.9	25.9	30.2	34.8	39.6	44.7	50.2	55.9	61.9	74.7	88.6	103.7	119.9	128.4	175.3	210.3
2000	15.7	19.4	23.4	27.8	32.4	37.4	42.7	48.3	54.2	60.4	66.9	81.0	96.2	112.8	130.5	139.9	191.4	229.7
2400	17.4	21.7	26.3	31.2	36.6	42.3	48.4	54.9	61.8	69.0	76.6	93.0	110.9	130.2	151.1	162.1	222.8	267.3
2800	19.0	23.7	28.8	34.4	40.4	46.9	53.8	61.1	68.9	77.1	85.8	104.4	124.8	146.9	170.8	183.4	253.1	303.7
3200	20.3	25.5	31.1	37.3	43.9	51.1	58.8	66.9	75.6	84.7	94.4	115.2	138.1	162.9	189.8	204.0	282.4	338.9
3600	21.5	27.1	33.2	39.9	47.2	55.0	63.4	72.4	81.9	92.0	102.6	125.6	150.9	178.4	208.2	223.9	311.0	373.2
4000	22.6	28.6	35.1	42.4	50.2	58.7	67.8	77.5	87.9	98.9	110.5	135.6	163.2	193.3	225.9	243.2	338.9	406.7
5000	24.7	31.6	39.2	47.7	56.9	66.9	77.7	89.2	101.6	114.7	128.7	158.9	192.2	228.7	268.3	289.3	406.0	487.2
6000	26.2	33.8	42.4	52.0	62.5	73.9	86.3	99.6	113.8	129.0	145.1	180.2	219.1	261.7	308.1	332.7	469.8	563.8
7000	27.1	35.5	45.0	55.5	67.2	79.9	93.8	108.8	124.8	142.0	160.2	200.0	244.2	292.8	345.8	373.9	531.0	637.3
8000	27.6	36.6	46.9	58.4	71.1	85.2	100.4	117.0	134.7	153.8	174.1	218.4	267.8	322.2	381.6	413.2	590.0	708.0
10000	27.5	37.5	49.2	62.4	77.1	93.5	111.4	130.9	151.9	174.6	198.7	251.8	311.2	376.8	448.7	487.0	702.1	842.6
12000	26.0	36.9	49.8	64.4	81.0	99.5	119.8	142.0	166.1	192.1	220.0	281.4	350.3	426.8	510.7	555.6	807.9	969.5
14000	23.5	35.1	48.9	64.9	83.1	103.5	126.1	150.9	177.9	207.1	238.4	307.8	385.9	472.8	568.5	619.7	908.3	1090.0

\*Because the durability in terms of hours decreases in the □-□ marked range, this range should be avoided whenever possible. For other belt widths, values above should be multiplied by the width correction coefficient shown in Table 28.

**Table 51. Reference Transmission Capacity of 3GT Ps -Belt Width 6mm-** (W)

No. of Teeth of Small Pulley Diameter of the Pitch Circle(mm)	Rotary Speed of Small Pulley(rpm)																			
	12	14	16	18	20	22	24	26	28	30	32	36	40	44	48	54	60	72	80	
11.46	13.37	15.28	17.19	19.10	21.01	22.92	24.83	26.74	28.65	30.56	34.38	38.20	45.84	51.57	57.30	68.75	76.39			
20	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	5.9	6.4	6.9	7.8	8.7	10.5	11.8	13.1	15.7	17.4		
40	3.6	4.5	5.5	6.4	7.3	8.2	9.1	10.0	10.9	11.8	12.6	14.3	16.0	19.3	21.7	24.2	28.9	32.0		
60	5.0	6.4	7.7	9.0	10.3	11.6	12.9	14.2	15.4	16.7	17.9	20.4	22.8	27.5	30.9	34.4	41.1	45.5		
100	7.6	9.7	11.8	13.9	15.9	18.0	19.9	21.9	23.9	25.9	27.8	31.6	35.3	42.6	48.0	53.4	63.8	70.6		
200	13.1	16.9	20.8	24.6	28.2	32.0	35.6	39.2	42.8	46.4	49.9	56.8	63.6	76.8	86.5	96.1	114.8	127.0		
300	17.7	23.2	28.7	34.1	39.2	44.6	49.6	54.8	59.9	65.0	69.8	79.6	89.2	107.7	121.4	134.8	161.0	178.1		
400	21.9	28.9	35.9	42.8	49.4	56.3	62.7	69.3	75.7	82.2	88.4	100.9	113.0	136.5	153.9	171.0	204.1	225.7		
500	25.6	34.2	42.6	51.0	58.9	67.2	74.9	82.9	90.6	98.5	105.9	121.0	135.6	163.8	184.7	205.1	244.8	270.7		
600	29.1	39.0	48.9	58.7	67.8	77.5	86.5	95.8	104.8	114.0	122.6	140.1	157.1	189.8	214.0	237.7	283.7	313.5		
700	32.2	43.6	54.8	66.0	76.4	87.4	97.6	108.2	118.4	128.9	138.6	158.5	177.8	214.8	242.2	269.1	321.0	354.7		
800	35.2	47.9	60.4	72.9	84.6	96.9	108.3	120.1	131.5	143.2	154.1	176.2	197.7	239.0	269.4	299.3	357.0	394.3		
870	37.2	50.8	64.2	77.6	90.1	103.3	115.5	128.2	140.4	152.9	164.6	188.3	211.3	255.4	288.0	319.8	381.4	421.3		
900	38.0	52.0	65.8	79.6	92.4	106.0	118.6	131.6	144.2	157.0	169.0	193.3	217.0	262.3	295.8	328.5	391.7	432.6		
1000	40.6	55.9	71.0	86.0	100.0	114.9	128.5	142.7	156.4	170.4	183.4	210.0	235.7	285.0	321.3	356.8	425.4	469.8		
1160	44.4	61.8	78.8	95.8	111.6	128.4	143.8	159.9	175.2	191.1	205.7	235.6	264.5	319.9	360.7	400.6	477.4	527.0		
1200	45.4	63.2	80.7	98.2	114.4	131.7	147.5	164.0	179.8	196.1	211.1	241.9	271.6	328.4	370.3	411.2	490.0	540.9		
1400	49.6	69.9	89.7	109.6	128.0	147.5	165.5	184.2	202.1	220.5	237.5	272.2	305.7	369.8	416.9	462.9	551.4	608.3		
1450	50.6	71.5	91.9	112.3	131.2	151.4	169.8	189.0	207.4	226.4	243.9	279.5	314.0	379.8	428.3	475.5	566.2	624.6		
1600	53.4	76.0	98.2	120.3	140.8	162.6	182.5	203.3	223.2	243.7	262.6	301.1	338.4	409.3	461.5	512.3	609.8	672.5		
1750	56.0	80.4	104.2	128.0	149.9	173.4	194.8	217.2	238.5	260.5	280.8	322.1	362.0	437.9	493.7	548.0	652.0	718.7		
1800	56.8	81.7	106.1	130.5	152.9	176.9	198.8	221.7	243.5	266.0	286.7	328.9	369.7	447.2	504.2	559.6	665.7	733.7		
2000	59.9	87.1	113.6	140.1	164.5	190.6	214.4	239.3	263.0	287.4	309.8	355.7	399.8	483.7	545.3	605.1	719.3	792.3		
2400	65.2	96.6	127.3	158.1	186.2	216.4	243.8	272.4	299.7	327.9	353.7	406.3	456.9	552.8	622.9	690.9	820.1	902.2		
2800	72.9	105.0	139.7	174.4	206.1	240.2	271.0	303.3	334.0	365.8	394.6	453.7	510.4	617.2	695.3	770.7	913.1	1003.1		
3200	80.8	112.3	150.9	189.4	224.5	262.4	296.4	332.2	366.2	401.3	433.1	498.2	560.6	677.7	763.0	845.1	999.1	1095.6		
3600	88.4	118.7	161.0	203.2	241.6	283.1	320.3	359.3	396.4	434.7	469.3	540.2	607.8	734.5	826.3	914.4	1078.4	1180.2		
4000	95.9	124.3	170.2	216.0	257.5	302.4	342.6	384.9	424.9	466.3	503.5	579.8	652.4	787.8	885.6	979.0	1151.3	1257.0		
5000	113.8	135.2	189.6	243.9	292.7	345.8	392.9	442.6	489.4	537.9	581.1	669.6	753.							

# [Technical Data] Selection of Timing Belts 11 -Transmission Capacity Table-

**Table52. Reference Transmission Capacity of EV5GT Ps -Belt Width 15mm-** (W)

No. of Teeth of Small Pulley	14	16	18	20	22	24	26	28	30	32	36	40	44	48	54	60	72	80	
20	22.28	25.46	28.65	31.83	35.01	38.20	41.38	44.56	47.75	50.93	57.30	63.66	70.03	76.39	85.94	95.49	114.59	127.32	
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\*Because the durability in terms of hours decreases in the [ ] marked range, this range should be avoided whenever possible. For other belt widths, values above should be multiplied by the width correction coefficient shown in Table 28.

**Table53. Reference Transmission Capacity of EV8YU Ps -Belt Width 20mm-** (W)

No. of Teeth of Small Pulley	20	22	24	26	28	30	32	34	36	38	40	44	48	54	60	64	72	80	
10	50.93	56.02	61.12	66.21	71.30	76.39	81.49	86.58	91.67	96.77	101.86	112.05	122.23	137.51	152.79	162.97	183.35	203.72	
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