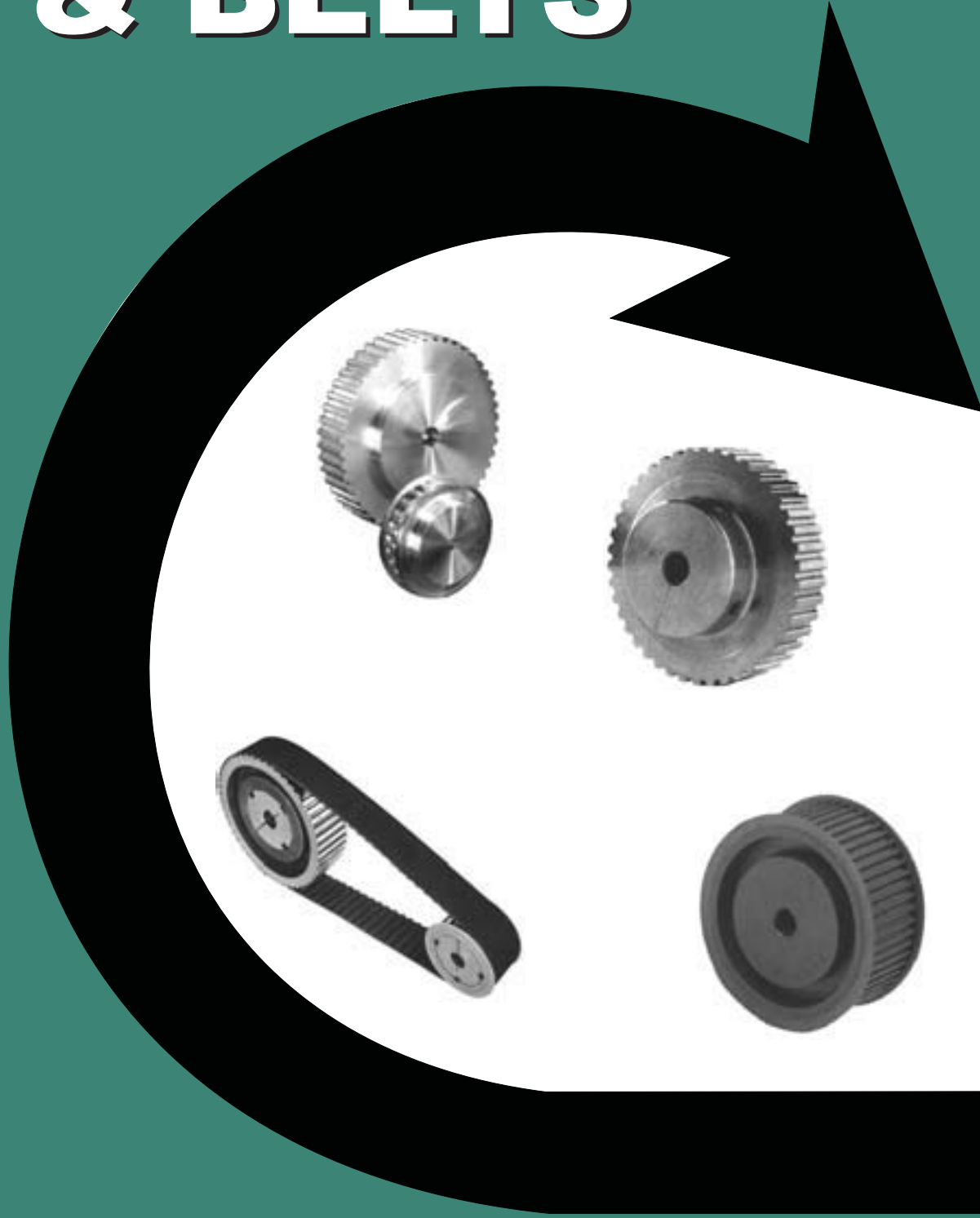


TIMING PULLEYS & BELTS



POWER TRANSMISSION - PNEUMATIC CYLINDERS

2005



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All dimensions in mm unless otherwise stated

All descriptions and dimensions as published are believed to be correct, but subject to the possibility of printing errors. The right is reserved by us or our suppliers to alter or modify dimensions or designs without notice.

Features of Timing Pulley Drives

Timing belts use teeth that mesh with grooves in a pulley to drive the system. There is no slippage, which will cause speed variations, allowing drives to be timed very accurately. The tensile cord, which could be made of many materials; Fibreglass, Steel, Carbon Fibre, or Kevlar, has minimal stretch so the constant need for take up adjustment is removed.

Unlike chain drives no lubrication is required on timing drives so maintenance is again reduced. Chain drives require some form of lubrication, be it drip, splatter or fully enclosed oil bath. With timing belt drives this is not required, saving on the initial set up cost of NOT installing a lubricating system but also the cost of maintaining it.

Timing drives will work over a very wide range of speed and torques, with some belts being capable of speeds up to 10,000 RPM. Torque ranges of between very light office equipment to heavy duty crushing equipment up to several hundred kW are also capable of being driven by timing drives.

Unlike flat and v-belt drives, timing drives do not rely on friction to produce drive. Slack side tension is very low and the drive side tension is greatly reduced. As a result, the overall bearing loads are reduced and there is a better life expectancy for motors and bearings.

Pulleys are available in a variety of materials such as Steel, Cast Iron, Aluminium and some are available in Plastic. All of the pulleys in the catalogue are kept on the shelf at Naismith Engineering. If you require a special pulley with non-standard number of teeth or a special material, please contact Naismith Engineering and we will make it for you in our own factory.

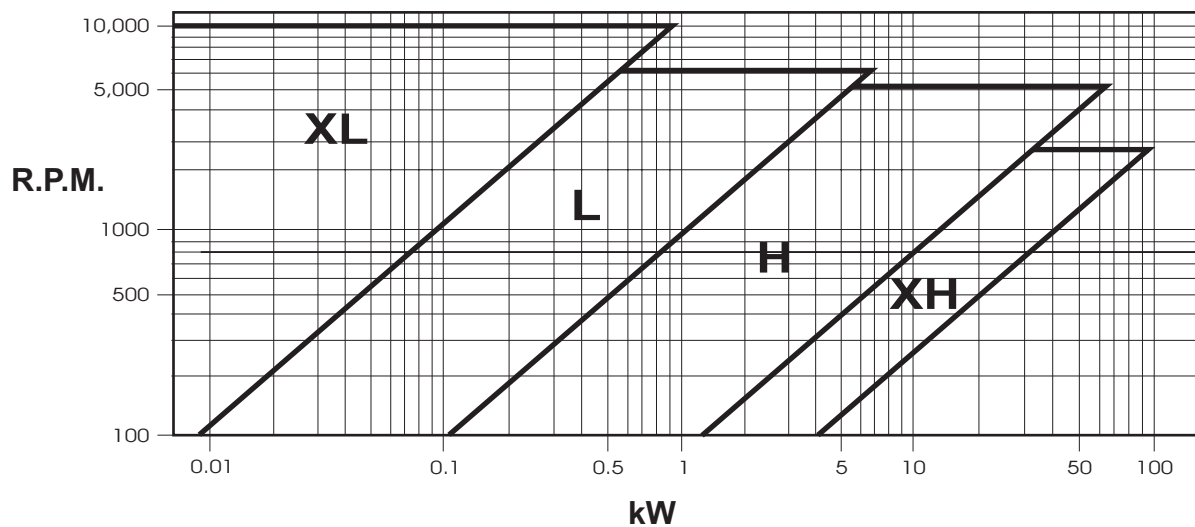
Belts are available in Rubber and Polyurethane depending on the style of belt. Special belts are available upon request. Please contact Naismith Engineering with your enquiries.



Classical Timing Pulley & Belt Drives



Classical timing belts offer a maintenance free and economical alternative to conventional drives like chains and gears. Capable of transmitting up to 100kW and speeds of 10,000 rpm. Classical timing belts can be used in a wide range of applications from light duty office machinery to heavy duty industrial drives. To select a drive it is necessary to know the driver and driven shaft speeds, the demand power, proposed centre distance and duty cycle. The chart below can be used to select the optimum belt size for a drive. For further information or help in selecting a drive contact Naismith Engineering.



Identifying a Pulley

To identify a Classical timing pulley the following information must be known:

BORE - Naismith Engineering carries full stocks of pilot and taper bore pulleys. For Classical pulleys, the taper bore pulleys have a prefix FG.

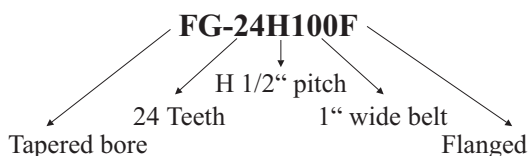
PITCH - This is the distance from the centre of one tooth to the centre of the next tooth. Naismith Engineering stocks 4 pitch sizes of Classical timing pulley:

XL	Pitch	0.200" (5.08mm)
L		0.375" (9.53mm)
H		0.500" (12.70mm)
XH		0.875" (22.23mm)

TEETH - Number of teeth.

WIDTH - The tooth width allows for a clearance of $\frac{1}{8}$ " (3mm) to $\frac{1}{4}$ " (6mm) on the belt. The tooth width code is the belt size width measured in $\frac{1}{100}$ ". So for a belt width of 1.5", the width code becomes 150. Refer to Page 5 for a listing of all sizes.

FLANGES - Pulleys with a small number of teeth are fitted with flanges. The part number for flanged pulleys ends with 'F'. Refer to the pulley tables for more details.



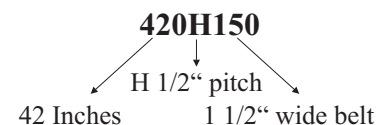
Identifying a belt

To identify a Classical timing belt the following information must be known:

LENGTH - A belt pitch length is determined by the number of teeth multiplied by the pitch. – refer page 5. The length code for a belt is the pitch length in $\frac{1}{10}$ ". So a H section (0.5" pitch) belt with 102 teeth has a pitch length of 51" and a code of 510H.

PITCH - This is the distance from the centre of one tooth to the centre of the next tooth. Naismith Engineering stocks 4 pitch sizes of Classical timing belts.

WIDTH - The belt width measured in $\frac{1}{100}$ ^{ths} of an inch gives the width code. So a belt width of 1.5", has a width code of 150. Refer to Page 5 for a listing of all sizes.



Classical Timing Belts XL, L, H & XH



	Pitch (inch)	Pitch (mm)	T	B
XL	1/5"	5.08	1.27	2.30
L	3/8"	9.53	1.91	3.50
H	1/2"	12.70	2.29	4.00
XH	7/8"	22.23	6.35	11.00

Code & Pitch	Number of Teeth	Pitch Length mm
60XL	30	152.4
70XL	35	177.8
80XL	40	203.2
90XL	45	228.6
100XL	50	254.0
110XL	55	279.4
120XL	60	304.8
130XL	65	330.2
140XL	70	355.6
150XL	75	381.0
160XL	80	406.4
170XL	85	431.8
180XL	90	457.2
190XL	95	482.6
200XL	100	508.0
210XL	105	533.4
220XL	110	558.8
230XL	115	584.2
240XL	120	609.6
250XL	125	635.0
260XL	130	660.4

Standard widths of:-
 6.4mm (1/4") Code = Length-XL025
 9.5mm (3/8") Code = Length-XL037
 Off standard widths are available on request.
 Long Length up to 12.7mm (1/2") wide is available.

Code & Pitch	Number of Teeth	Pitch Length mm
124L	33	315.0
150L	40	381.0
187L	50	475.0
210L	56	533.4
225L	60	571.5
240L	64	609.6
255L	68	647.7
270L	72	685.8
285L	76	723.9
300L	80	762.0
322L	86	817.9
345L	92	876.3
367L	98	932.2
390L	104	990.6
420L	112	1066.8
450L	120	1143.0
480L	128	1219.2
510L	136	1295.4
540L	144	1371.6
600L	160	1524.0

Standard widths of:-
 12.7mm (1/2") Code = Length-L050
 19.1mm (3/4") Code = Length-L075
 25.4mm (1") Code = Length-L100
 Off standard widths are available on request.
 Long Length up to 25.4mm (1") wide is available.

Code & Pitch	Number of Teeth	Pitch Length mm
240H	48	609.6
270H	54	685.8
300H	60	762.0
330H	66	838.2
360H	72	914.4
390H	78	990.6
420H	84	1066.8
450H	90	1143.0
480H	96	1219.2
510H	102	1295.4
540H	108	1371.6
570H	114	1447.8
600H	120	1524.0
630H	126	1600.2
660H	132	1676.4
700H	140	1778.0
750H	150	1905.0
800H	160	2032.0
850H	170	2159.0
900H	180	2286.0
1000H	200	2540.0
1100H	220	2794.0
1250H	250	3175.0
1400H	280	3556.0
1700H	340	4318.0

Standard widths of:-
 19.1mm (3/4") Code = Length-H075
 25.4mm (1") Code = Length-H100
 38.1mm (1.1/2") Code = Length-H150
 50.8mm (2") Code = Length-H200
 76.2mm (3") Code = Length-H300
 Off standard widths are available on request.
 Long Length up to 50.8mm (2") wide is available.

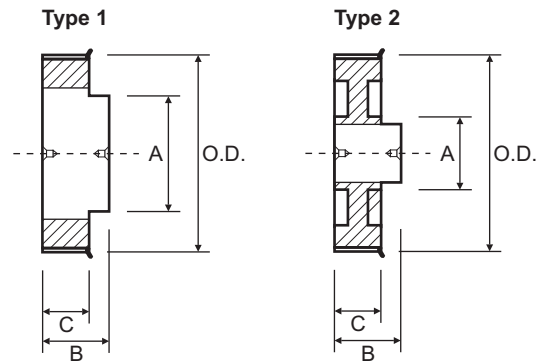
Code & Pitch	Number of Teeth	Pitch Length mm
507XH	58	1287.8
560XH	64	1422.4
630XH	72	1600.2
700XH	80	1778.0
770XH	88	1955.8
840XH	96	2133.6
980XH	112	2489.2
1120XH	128	2844.8
1260XH	144	3200.4
1400XH	160	3556.0
1540XH	176	3911.6
1750XH	200	4445.0

Standard widths of:-
 50.8mm (2") Code = Length-XH200
 76.2mm (3") Code = Length-XH300
 101.6mm (4") Code = Length-XH400
 Off standard widths are available on request.

Plastic Timing Pulleys

XL Pitch 0.200"

L Pitch 0.375"



XL037					
Suit 9.5mm wide belt (3/8")					
Part No.	O.D.	Type	A	B	C = 13.0
PP11XL037	17.3	1	12.5	21.0	
PP12XL037	18.9	1	12.5	21.0	
PP14XL037	22.1	1	16.0	21.0	
PP15XL037	23.7	1	18.0	25.0	
PP16XL037	25.4	1	18.0	25.0	
PP18XL037	28.6	1	20.0	25.0	
PP20XL037	31.8	1	20.0	25.0	
PP21XL037	33.5	1	20.0	25.0	
PP22XL037	35.1	1	20.0	25.0	
PP24XL037	38.3	1	25.0	25.0	
PP28XL037	44.8	1	25.0	25.0	
PP30XL037	48.0	2	25.0	25.0	
PP32XL037	51.2	2	25.0	25.0	
PP36XL037	57.7	2	35.0	25.0	
PP40XL037	64.2	2	35.0	25.0	
PP42XL037	67.4	2	35.0	25.0	
PP44XL037	70.6	2	35.0	25.0	
PP48XL037	77.1	2	35.0	25.0	
PP50XL037	80.3	2	35.0	25.0	

Plastic with an Aluminium hub
1 Flange on boss side only

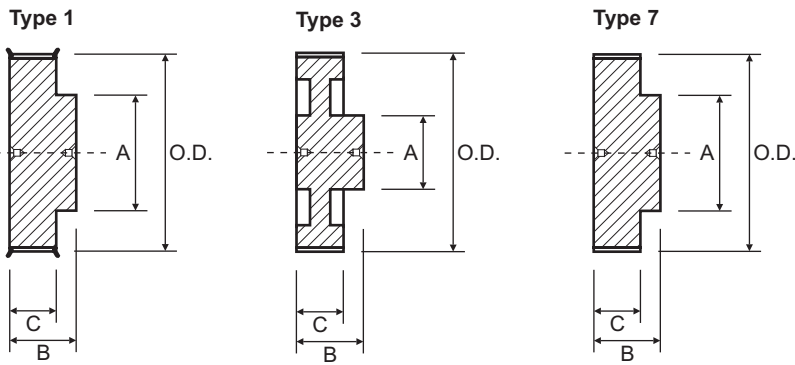
L050					
Suit 12.7mm wide belt (1/2")					
Part No.	O.D.	Type	A	B	C = 17.0
PP10L050	29.6	1	20.0	25.0	
PP12L050	35.6	1	25.0	25.0	
PP14L050	41.7	1	30.0	30.0	
PP16L050	47.8	1	30.0	30.0	
PP18L050	53.8	2	30.0	30.0	
PP20L050	59.9	2	30.0	30.0	
PP22L050	65.9	2	40.0	30.0	
PP24L050	72.0	2	40.0	30.0	
PP26L050	78.1	2	40.0	30.0	
PP28L050	84.1	2	40.0	30.0	
PP30L050	90.2	2	40.0	30.0	
PP32L050	96.3	2	40.0	30.0	
PP36L050	108.4	2	50.0	40.0	
PP40L050	120.5	2	50.0	40.0	

Plastic with an Aluminium hub
1 Flange on boss side only

L100					
Suit 25.4mm wide belt (1")					
Part No.	O.D.	Type	A	B	C = 30.0
PP10L100	29.6	1	20.0	40.0	
PP12L100	35.6	1	25.0	40.0	
PP14L100	41.7	1	30.0	40.0	
PP16L100	47.8	1	30.0	40.0	
PP18L100	53.8	1	40.0	50.0	
PP20L100	59.9	1	40.0	50.0	
PP22L100	65.9	2	40.0	50.0	
PP24L100	72.0	2	40.0	50.0	
PP26L100	78.1	2	40.0	50.0	
PP28L100	84.1	2	48.0	50.0	
PP30L100	90.2	2	48.0	50.0	
PP32L100	96.3	2	48.0	50.0	
PP36L100	108.4	2	57.0	50.0	
PP40L100	120.5	2	57.0	50.0	

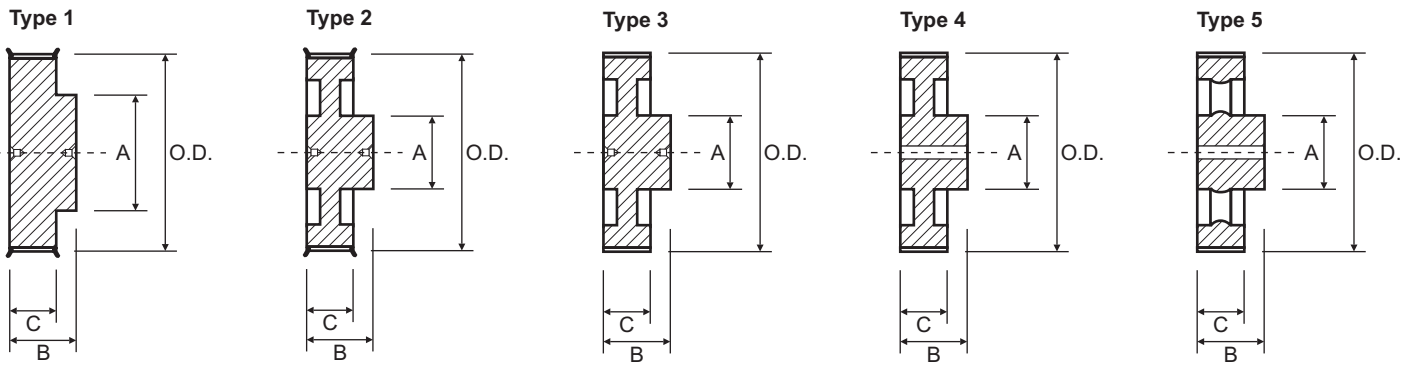
Plastic with a Steel hub
1 Flange on boss side only

XL 0.200" Timing Pulleys



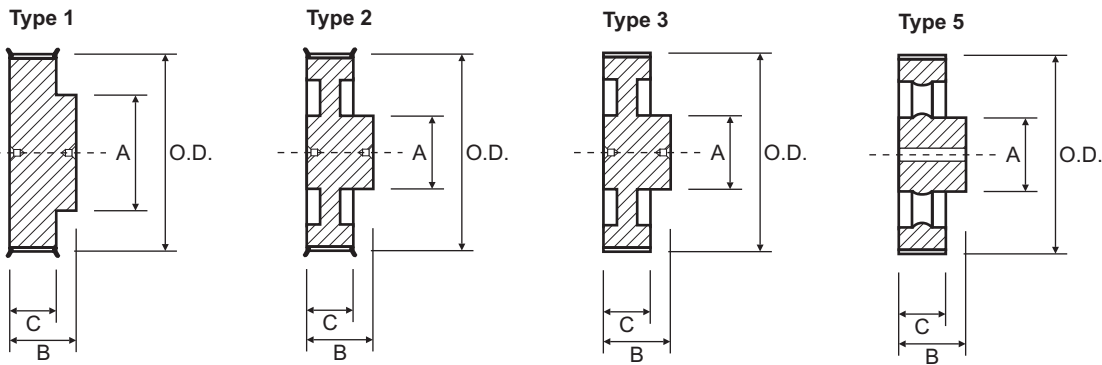
XL037				
Suit 9.5mm wide belt (3/8")				
Part No.	O.D.	Type	A	B
C= 14.3				
10XL037F	15.7	1	12.0	25.0
11XL037F	17.3	1	12.0	25.0
12XL037F	18.9	1	12.0	25.0
13XL037F	20.5	1	12.0	25.0
14XL037F	22.1	1	16.0	25.0
15XL037F	23.7	1	17.0	25.0
16XL037F	25.4	1	20.0	25.0
17XL037F	27.0	1	20.0	25.0
18XL037F	28.6	1	20.0	25.0
19XL037F	30.2	1	25.0	25.0
20XL037F	31.8	1	25.0	25.0
21XL037F	33.5	1	26.0	25.0
22XL037F	35.1	1	27.0	25.0
24XL037F	38.3	1	30.0	25.0
25XL037F	39.9	1	25.0	22.5
26XL037F	41.5	1	30.0	25.0
27XL037F	43.2	1	32.0	25.0
28XL037F	44.8	1	34.0	25.0
30XL037F	48.0	1	38.0	25.0
32XL037	51.2	7	45.0	25.0
34XL037	54.5	7	45.0	25.0
36XL037	57.7	7	52.0	25.0
40XL037	64.2	7	52.0	25.0
42XL037	67.4	7	52.0	25.0
44XL037	70.6	7	52.0	25.0
48XL037	77.1	7	52.0	25.0
52XL037	83.8	7	52.0	25.0
56XL037	90.0	7	52.0	25.0
60XL037	96.5	3	52.0	25.0
72XL037	115.9	3	52.0	25.0

L Pitch 0.375" Timing Pulleys



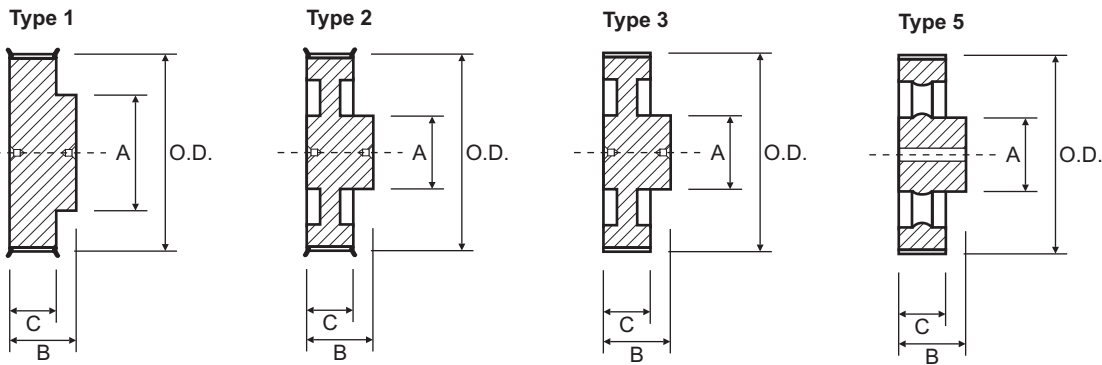
L050						L100					
Suit 12.7mm wide belt (1/2")						Suit 25.4mm wide belt (1")					
Part No.	O.D.	Type	A	B	C = 19.0	Part No.	O.D.	Type	A	B	C = 32.0
10L050F	29.6	1	20.0	30.0	Steel	10L100F	29.6	1	20.0	46.0	Steel
11L050F	32.6	1	20.0	30.0		11L100F	32.6	1	20.0	46.0	
12L050F	35.6	1	27.0	30.0		12L100F	35.6	1	27.0	46.0	
13L050F	38.7	1	27.0	30.0		13L100F	38.7	1	27.0	46.0	
14L050F	41.7	1	29.0	30.0		14L100F	41.7	1	29.0	46.0	
15L050F	44.7	1	32.0	30.0		15L100F	44.7	1	32.0	46.0	
16L050F	47.8	1	37.0	30.0		16L100F	47.8	1	37.0	46.0	
17L050F	50.8	1	37.0	30.0		17L100F	50.8	1	37.0	46.0	
18L050F	53.8	1	41.0	30.0		18L100F	53.8	1	41.0	46.0	
19L050F	56.8	1	41.0	30.0		19L100F	56.8	1	41.0	46.0	
20L050F	59.9	1	47.0	30.0		20L100F	59.9	1	47.0	46.0	
21L050F	62.9	1	47.0	30.0		21L100F	62.9	1	47.0	46.0	
22L050F	65.9	1	50.0	30.0		22L100F	65.9	1	50.0	46.0	
23L050F	69.0	1	50.0	30.0		23L100F	69.0	1	50.0	46.0	
24L050F	72.0	1	57.0	32.0		24L100F	72.0	1	57.0	46.0	
25L050F	75.0	1	58.0	32.0		25L100F	75.0	1	58.0	46.0	
26L050F	78.1	1	64.0	32.0		26L100F	78.1	1	64.0	46.0	
27L050F	81.1	1	64.0	32.0		27L100F	81.1	1	64.0	46.0	
28L050F	84.1	1	70.0	32.0		28L100F	84.1	1	70.0	46.0	
30L050F	90.2	1	72.0	34.0		30L100F	90.2	1	72.0	46.0	
32L050F	96.3	1	75.0	34.0		32L100F	96.3	1	75.0	46.0	
34L050F	102.3	1	85.0	34.0	34L100F	102.3	1	85.0	46.0		
36L050F	108.4	1	88.0	34.0	36L100F	108.4	1	88.0	46.0		
40L050F	120.5	2	68.0	34.0	40L100F	120.5	2	68.0	46.0		
44L050F	132.6	2	68.0	34.0	44L100F	132.6	2	68.0	46.0		
48L050F	144.8	2	68.0	46.0	48L100F	144.8	2	68.0	50.0		
60L050	181.2	3	68.0	46.0	60L100	181.2	3	75.0	54.0		
72L050	217.5	3	75.0	46.0	72L100	217.5	3	75.0	54.0		
84L050	253.9	3	75.0	46.0	84L100	253.9	3	80.0	54.0		
96L050	290.3	4	80.0	46.0	96L100	290.3	4	80.0	54.0		
120L050	363.1	5	85.0	46.0	120L100	363.1	5	90.0	54.0		

H Pitch 0.500" Timing Pulleys



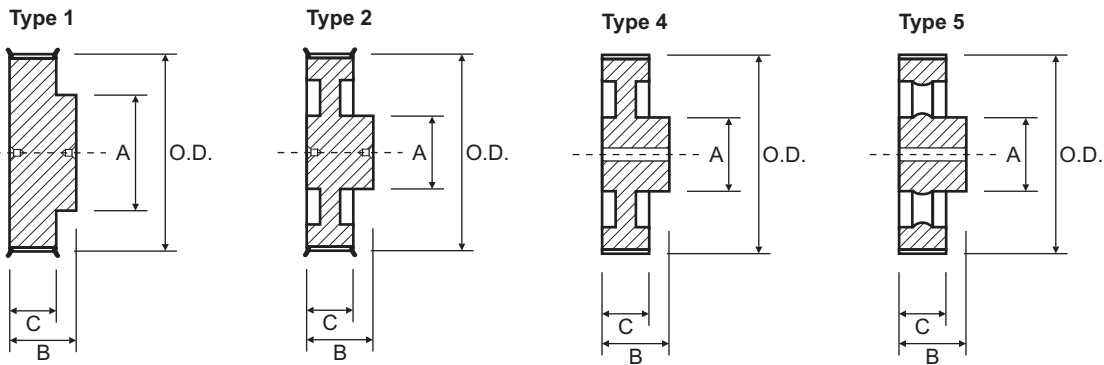
H100					H150								
Suit 25.4mm wide belt (1")					Suit 38.1mm wide belt (1 1/2")								
Part No.	O.D.	Type	A	B	C = 33.0	Part No.	O.D.	Type	A	B	C = 46.0		
14H100F	55.2	1	40.0	44.0	Steel	14H150F	55.2	1	40.0	58.0	Steel		
15H100F	59.3	1	45.0	44.0		15H150F	59.3	1	45.0	58.0			
16H100F	63.3	1	47.0	44.0		16H150F	63.3	1	47.0	58.0			
17H100F	67.4	1	49.0	44.0		17H150F	67.4	1	49.0	58.0			
18H100F	71.4	1	57.0	44.0		18H150F	71.4	1	57.0	58.0			
19H100F	75.4	1	60.0	44.0		19H150F	75.4	1	60.0	58.0			
20H100F	79.5	1	64.0	44.0		20H150F	79.5	1	64.0	58.0			
21H100F	83.5	1	64.0	44.0		21H150F	83.5	1	64.0	58.0			
22H100F	87.6	1	70.0	44.0		22H150F	87.6	1	70.0	58.0			
23H100F	91.6	1	72.0	44.0		23H150F	91.6	1	72.0	58.0			
24H100F	95.7	1	80.0	44.0	Flanged	24H150F	95.7	1	80.0	58.0	Flanged		
25H100F	99.7	1	80.0	44.0		25H150F	99.7	1	80.0	58.0			
26H100F	103.7	1	85.0	44.0		26H150F	103.7	1	85.0	58.0			
27H100F	107.8	1	88.0	44.0		27H150F	107.8	1	88.0	58.0			
28H100F	111.9	1	94.0	48.0		28H150F	111.9	1	94.0	58.0			
30H100F	119.9	1	104.0	50.0		30H150F	119.9	1	104.0	58.0			
32H100F	128.0	1	112.0	52.0		32H150F	128.0	1	112.0	58.0			
34H100F	136.1	1	118.0	52.0		34H150F	136.1	1	118.0	58.0			
36H100F	144.2	2	75.0	52.0		Cast Iron	36H150F	144.2	2	75.0		58.0	Cast Iron
40H100F	160.3	2	75.0	54.0			40H150F	160.3	2	75.0		70.0	
44H100F	176.5	2	75.0	54.0	44H150F		176.5	2	75.0	70.0			
48H100F	192.7	2	75.0	60.0	48H150F		192.7	2	75.0	70.0			
60H100	241.2	3	80.0	60.0	No Flanges		60H150	241.2	3	80.0	70.0	No Flanges	
72H100	289.7	3	80.0	60.0			72H150	289.7	3	80.0	70.0		
84H100	338.2	5	90.0	60.0			84H150	338.2	5	90.0	70.0		
96H100	386.7	5	100.0	60.0			96H150	386.7	5	100.0	70.0		
120H100	483.7	5	100.0	60.0			120H150	483.7	5	100.0	70.0		
156H100	629.3	5	120.0	60.0			156H150	629.3	5	120.0	70.0		

H Pitch 0.500" Timing Pulleys



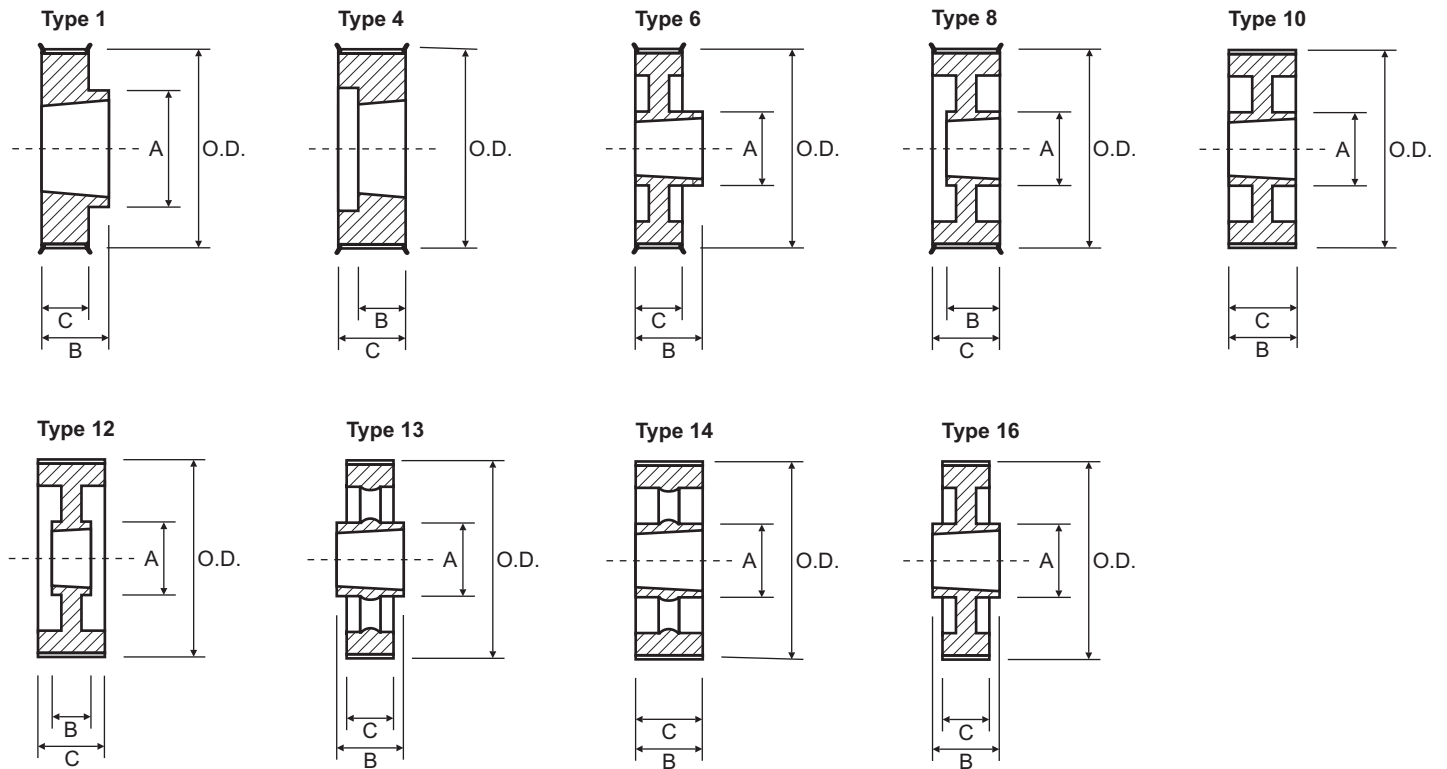
H200					H300						
Suit 50.8mm wide belt (2")					Suit 76.2mm wide belt (3")						
Part No.	O.D.	Type	A	B	C= 59.5	Part No.	O.D.	Type	A	B	C= 85.7
16H200F	63.3	1	47.0	72.0	Steel	18H300F	71.4	1	57.0	98.0	Steel
18H200F	71.4	1	57.0	72.0		20H300F	79.5	1	64.0	98.0	
20H200F	79.5	1	64.0	72.0		22H300F	87.6	1	70.0	98.0	
22H200F	87.6	1	70.0	72.0		24H300F	95.7	1	80.0	98.0	
24H200F	95.7	1	80.0	72.0		26H300F	103.7	1	85.0	98.0	
26H200F	103.7	1	85.0	72.0		28H300F	111.9	1	94.0	98.0	
28H200F	111.9	1	94.0	72.0		30H300F	119.9	1	104.0	98.0	
30H200F	119.9	1	104.0	72.0		32H300F	128.0	1	112.0	98.0	
32H200F	128.0	1	112.0	72.0		36H300F	144.2	2	80.0	98.0	
36H200F	144.2	2	80.0	72.0		40H300F	160.3	2	80.0	98.0	
40H200F	160.3	2	80.0	72.0		44H300F	176.5	2	80.0	98.0	
44H200F	176.5	2	80.0	72.0		48H300F	192.7	2	90.0	98.0	
48H200F	192.7	2	80.0	80.0	60H300	241.2	3	100.0	98.0		
60H200	241.2	3	90.0	80.0	72H300	289.7	3	100.0	98.0		
72H200	289.7	3	90.0	80.0	84H300	338.2	5	100.0	98.0		
84H200	338.2	5	100.0	80.0	96H300	386.7	5	110.0	98.0		
96H200	386.7	5	100.0	80.0	120H300	483.7	5	120.0	98.0		
120H200	483.7	5	120.0	80.0	156H300	629.3	5	130.0	98.0		
156H200	629.3	5	130.0	80.0							

XH Pitch 0.875" Timing Pulleys



XH200					XH300						
Suit 50.8mm wide belt (2")					Suit 76.2mm wide belt (3")						
Part No.	O.D.	Type	A	B	C = 65.0	Part No.	O.D.	Type	A	B	C = 92.0
18XH200F	124.6	1	100.0	80.0	Cast Iron	18XH300F	124.6	1	100.0	107.0	Cast Iron
20XH200F	138.7	1	114.0	80.0		20XH300F	138.7	1	114.0	107.0	
22XH200F	152.9	1	128.0	80.0		22XH300F	152.9	1	128.0	107.0	
24XH200F	167.0	1	141.0	80.0		24XH300F	167.0	1	141.0	107.0	
26XH200F	181.2	1	157.0	80.0		26XH300F	181.2	1	157.0	107.0	
28XH200F	195.3	1	169.0	80.0		28XH300F	195.3	1	169.0	107.0	
30XH200F	209.4	2	100.0	80.0		30XH300F	209.4	2	110.0	107.0	
32XH200F	223.6	2	110.0	80.0		32XH300F	223.6	2	110.0	107.0	
40XH200F	280.2	2	120.0	100.0		40XH300F	280.2	2	120.0	100.0	
48XH200	336.8	4	120.0	100.0		48XH300	336.8	4	120.0	100.0	
60XH200	421.7	4	130.0	100.0	60XH300	421.7	4	120.0	100.0		
72XH200	506.6	5	140.0	100.0	72XH300	506.6	5	140.0	120.0		
84XH200	591.5	5	150.0	100.0	84XH300	591.5	5	160.0	120.0		

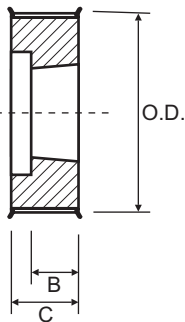
L Pitch 0.375" Timing Pulleys



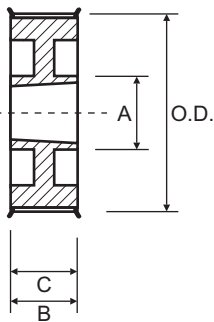
L050						L100							
Suit 12.7mm wide belt (1/2")						Suit 25.4mm wide belt (1")							
Part No.	O.D	Type	Bush	A	B	C = 19.0	Part No.	O.D	Type	Bush	A	B	C = 32.0
FG-18L050F	53.8	1	1108	47.0	22.0	Cast Iron	FG-18L100F	53.8	4	1108	-	22.0	Cast Iron
FG-19L050F	56.8	1	1108	47.0	22.0		FG-19L100F	56.8	4	1108	-	22.0	
FG-20L050F	59.9	1	1108	48.0	22.0		FG-20L100F	59.9	4	1108	-	22.0	
FG-21L050F	62.9	1	1108	48.0	22.0		FG-21L100F	62.9	4	1108	-	22.0	
FG-22L050F	65.9	1	1108	51.0	22.0		FG-22L100F	65.9	4	1108	-	22.0	
FG-23L050F	69.0	1	1108	51.0	22.0		FG-23L100F	69.0	4	1108	-	22.0	
FG-24L050F	72.0	1	1108	58.0	22.0		FG-24L100F	72.0	4	1108	-	22.0	
FG-25L050F	75.0	1	1108	58.0	22.0		FG-25L100F	75.0	4	1108	-	22.0	
FG-26L050F	78.1	1	1108	58.0	22.0		FG-26L100F	78.1	4	1108	-	22.0	
FG-27L050F	81.1	1	1108	58.0	22.0		FG-27L100F	81.1	4	1108	-	22.0	
FG-28L050F	84.1	1	1108	58.0	22.0		FG-28L100F	84.1	4	1108	-	22.0	
FG-30L050F	90.2	1	1108	58.0	22.0		FG-30L100F	90.2	4	1210	-	25.0	
FG-32L050F	96.3	1	1108	58.0	22.0		FG-32L100F	96.3	4	1210	-	25.0	
FG-36L050F	108.4	6	1108	58.0	22.0		FG-36L100F	108.4	4	1610	-	25.0	
FG-40L050F	120.5	1	1610	90.0	25.0		FG-40L100F	120.5	4	1610	-	25.0	
FG-44L050F	132.6	6	1610	90.0	25.0		FG-44L100F	132.6	8	1610	90.0	25.0	
FG-48L050F	144.8	6	1610	90.0	25.0		FG-48L100F	144.8	8	1610	90.0	25.0	
FG-60L050	181.2	16	1610	90.0	25.0		FG-60L100	181.2	12	1610	90.0	25.0	
FG-72L050	217.5	13	1610	90.0	25.0	FG-72L100	217.5	10	2012	110.0	32.0		
FG-84L050	253.9	13	1610	90.0	25.0	FG-84L100	253.9	14	2012	110.0	32.0		
FG-96L050	290.3	13	2012	110.0	32.0	FG-96L100	290.3	14	2012	110.0	32.0		
FG120L050	363.1	13	2012	110.0	32.0	FG120L100	363.1	14	2012	110.0	32.0		

H Pitch 0.500" Timing Pulleys

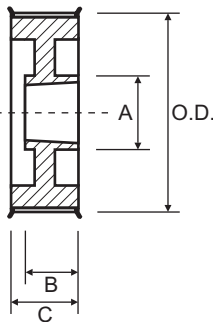
Type 4



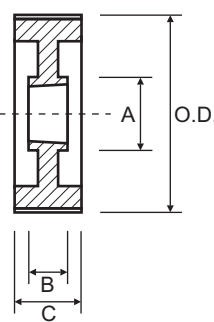
Type 7



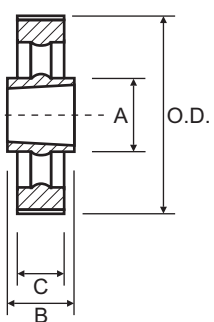
Type 8



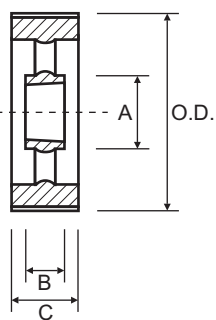
Type 12



Type 13

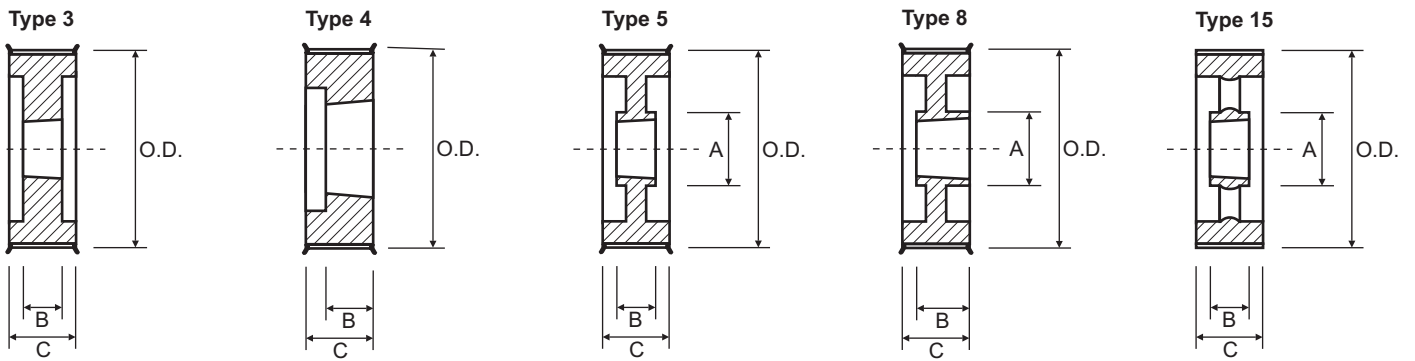


Type 15



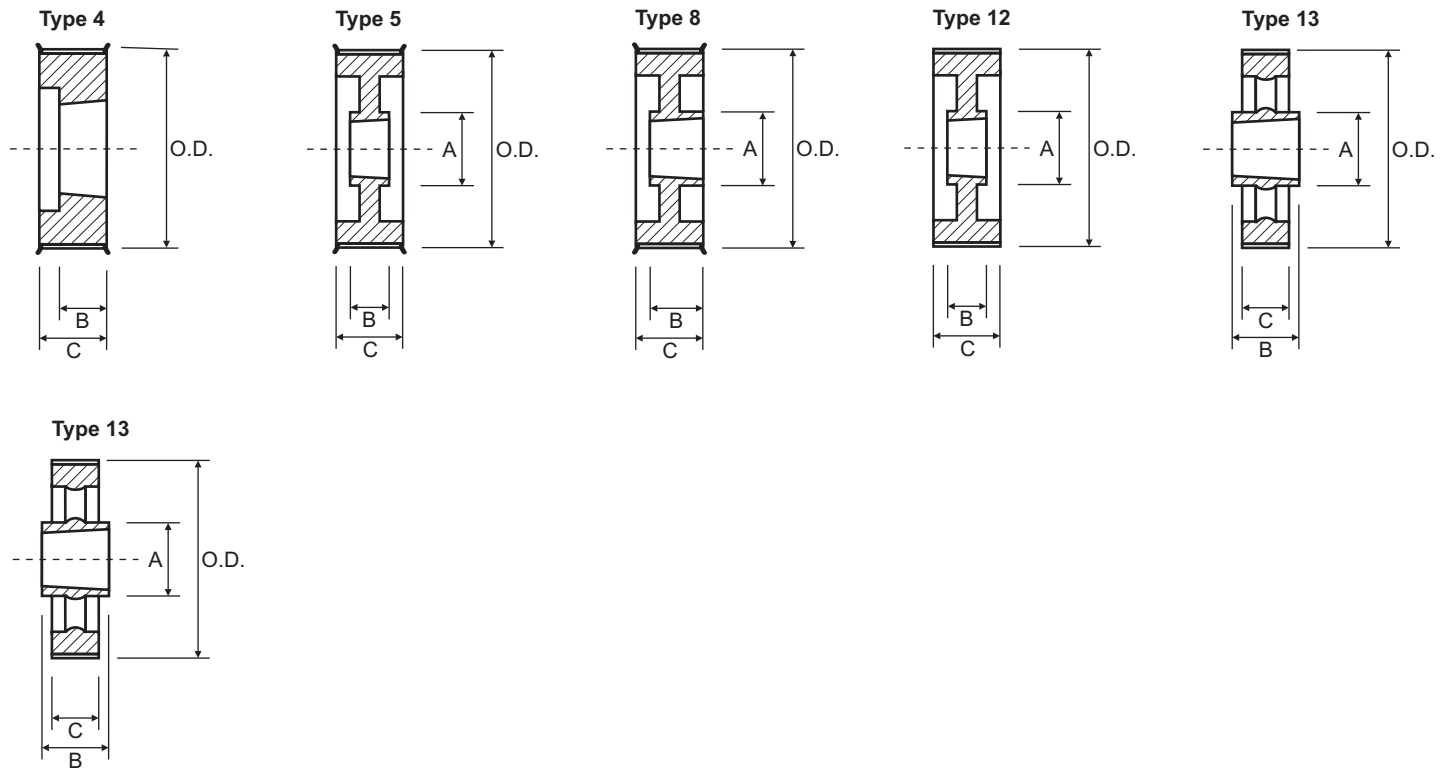
H100 Suit 25.4mm wide belt (1")							H150 Suit 38.1mm wide belt (1 1/2")						
Part No.	O.D	Type	Bush	A	B	C = 31.0	Part No.	O.D	Type	Bush	A	B	C = 45.0
FG-14H100F	55.2	4	1108	-	22.0	Cast Iron Flanged	FG-14H150F	55.2	4	1108	-	22.0	Cast Iron Flanged
FG-15H100F	59.3	4	1108	-	22.0		FG-15H150F	59.3	4	1108	-	22.0	
FG-16H100F	63.3	4	1108	-	22.0		FG-16H150F	63.3	4	1108	-	22.0	
FG-17H100F	67.4	4	1108	-	22.0		FG-17H150F	67.4	4	1108	-	22.0	
FG-18H100F	71.4	4	1210	-	25.0		FG-18H150F	71.4	4	1210	-	25.0	
FG-19H100F	75.4	4	1210	-	25.0		FG-19H150F	75.4	4	1210	-	25.0	
FG-20H100F	79.5	4	1210	-	25.0		FG-20H150F	79.5	4	1210	-	25.0	
FG-21H100F	83.5	4	1210	-	25.0		FG-21H150F	83.5	4	1210	-	25.0	
FG-22H100F	87.6	4	1210	-	25.0		FG-22H150F	87.6	4	1210	-	25.0	
FG-23H100F	91.6	4	1610	-	25.0		FG-23H150F	91.6	4	1610	-	25.0	
FG-24H100F	95.7	4	1610	-	25.0		FG-24H150F	95.7	4	1610	-	25.0	
FG-25H100F	99.7	4	1610	-	25.0		FG-25H150F	99.7	4	1610	-	25.0	
FG-26H100F	103.7	4	1610	-	25.0		FG-26H150F	103.7	4	1610	-	25.0	
FG-27H100F	107.8	4	1610	-	25.0		FG-27H150F	107.8	4	1610	-	25.0	
FG-28H100F	111.9	4	1610	-	25.0		FG-28H150F	111.9	4	1610	-	25.0	
FG-30H100F	120.0	4	1610	-	25.0		FG-30H150F	120.0	4	1610	-	25.0	
FG-32H100F	128.0	8	1610	82.0	25.0		FG-32H150F	128.0	8	1610	82.0	25.0	
FG-36H100F	144.2	8	1610	82.0	25.0		FG-36H150F	144.2	8	1610	82.0	25.0	
FG-40H100F	160.3	8	1610	82.0	32.0		FG-40H150F	160.3	8	1610	82.0	25.0	
FG-44H100F	176.5	7	2012	110.0	32.0		FG-44H150F	176.5	8	2012	110.0	32.0	
FG-48H100F	192.7	7	2012	110.0	32.0		FG-48H150F	192.7	8	2012	110.0	32.0	
FG-60H100	241.2	12	2012	110.0	32.0		FG-60H150	241.2	15	2012	110.0	32.0	
FG-72H100	289.7	15	2012	110.0	32.0		FG-72H150	289.7	15	2012	110.0	32.0	
FG-84H100	338.2	15	2012	110.0	32.0		FG-84H150	338.2	15	2012	110.0	32.0	
FG-96H100	386.7	13	2517	120.0	45.0		FG-96H150	386.7	15	2517	120.0	45.0	
FG-120H100	483.7	13	2517	120.0	45.0		FG-120H150	483.7	15	2517	120.0	45.0	

H Pitch 0.500" Timing Pulleys



H200							H300						
Suit 50.8mm wide belt (2")							Suit 76.2mm wide belt (3")						
Part No.	O.D	Type	Bush	A	B	C = 58.0	Part No.	O.D	Type	Bush	A	B	C = 84.0
FG-16H200F	63.3	4	1108	-	22.0	Cast Iron	FG-20H300F	79.5	3	1615	-	38.0	Cast Iron
FG-18H200F	71.4	4	1210	-	25.0		FG-22H300F	87.6	3	1615	-	38.0	
FG-20H200F	79.5	4	1610	-	25.0		FG-24H300F	95.7	3	1615	-	38.0	
FG-22H200F	87.6	4	1610	-	25.0		FG-26H300F	103.7	3	1615	-	38.0	
FG-24H200F	95.7	4	1610	-	25.0		FG-28H300F	111.9	3	2012	-	32.0	
FG-26H200F	103.7	4	1610	-	25.0		FG-30H300F	119.9	3	2012	-	32.0	
FG-28H200F	111.9	4	1610	-	25.0		FG-32H300F	128.0	3	2517	-	45.0	
FG-30H200F	119.9	4	1610	-	25.0		FG-36H300F	144.2	3	2517	-	45.0	
FG-32H200F	128.0	4	2012	-	32.0		FG-40H300F	160.3	5	2517	120.0	45.0	
FG-36H200F	144.2	8	2012	102.0	32.0		FG-44H300F	176.5	5	2517	120.0	45.0	
FG-40H200F	160.3	8	2012	110.0	32.0		FG-48H300F	192.7	5	2517	120.0	45.0	
FG-44H200F	176.5	8	2012	110.0	32.0		FG-60H300	241.2	15	2517	120.0	45.0	
FG-48H200F	192.7	8	2517	120.0	45.0		FG-72H300	289.7	15	2517	120.0	45.0	
FG-60H200	241.2	15	2517	120.0	45.0		FG-84H300	338.2	15	2517	120.0	45.0	
FG-72H200	289.7	15	2517	120.0	45.0		FG-96H300	386.7	15	3030	146.0	76.0	
FG-84H200	338.2	15	2517	120.0	45.0		FG-120H300	483.7	15	3030	146.0	76.0	
FG-96H200	386.7	15	2517	120.0	45.0								
FG-120H200	483.7	15	2517	120.0	45.0								

XH Pitch 0.875" Timing Pulleys



XH200

Suit 50.8mm wide belt (2")

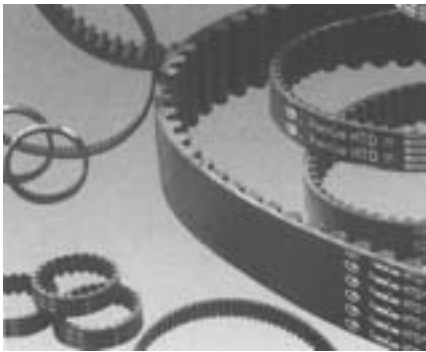
Part No.	O.D	Type	Bush	A	B	C = 64.0
FG-18XH200F	124.6	4	2517	-	45.0	Cast Iron Flanged
FG-20XH200F	138.7	4	2517	-	45.0	
FG-22XH200F	152.9	4	2517	-	45.0	
FG-24XH200F	167.0	4	2517	-	45.0	
FG-26XH200F	181.2	4	2517	-	45.0	
FG-28XH200F	195.3	5	2517	120.0	45.0	
FG-30XH200F	209.4	5	2517	120.0	45.0	
FG-32XH200F	223.6	5	2517	120.0	45.0	
FG-40XH200F	280.2	5	3020	146.0	51.0	
FG-48XH200	336.8	15	3020	146.0	51.0	
FG-60XH200	421.7	13	3535	178.0	89.0	No Flanges
FG-72XH200	506.6	13	3535	178.0	89.0	
FG-84XH200	591.5	13	3535	178.0	89.0	

XH300

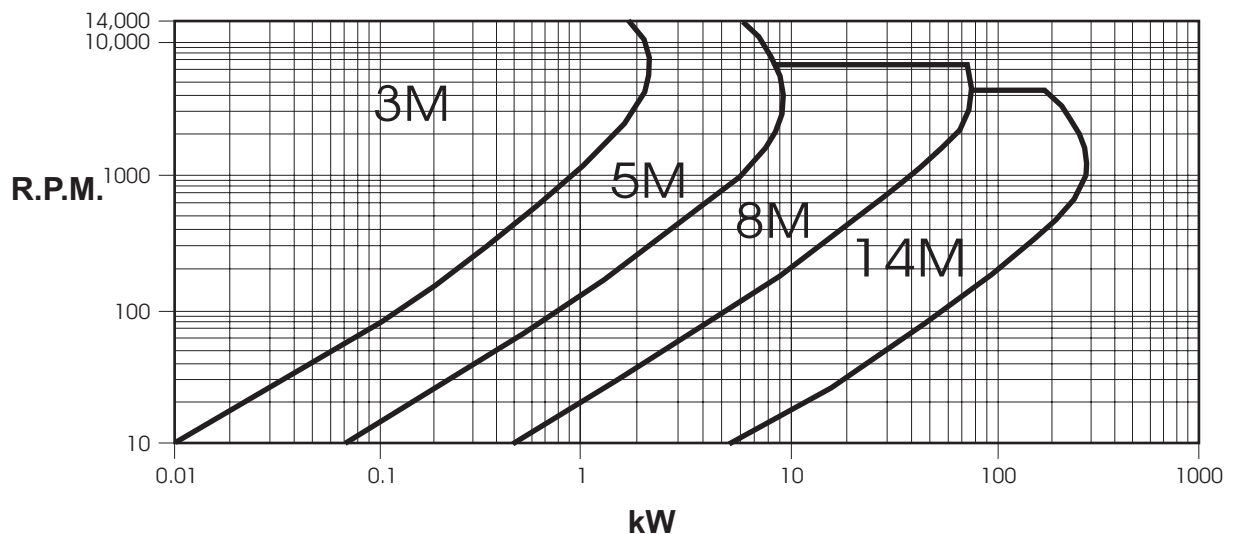
Suit 76.2mm wide belt (3")

Part No.	O.D	Type	Bush	A	B	C = 90.0
FG-18XH300F	124.6	4	2517	-	45.0	Cast Iron Flanged
FG-20XH300F	138.7	4	2517	-	45.0	
FG-22XH300F	152.9	4	2517	-	45.0	
FG-24XH300F	167.0	4	2517	-	45.0	
FG-26XH300F	181.2	4	2517	-	45.0	
FG-28XH300F	195.3	8	3020	146.0	51.0	
FG-30XH300F	209.4	8	3020	146.0	51.0	
FG-32XH300F	223.6	8	3020	146.0	51.0	
FG-40XH300F	280.2	5	3020	146.0	51.0	
FG-48XH300	336.8	12	3020	146.0	51.0	
FG-60XH300	421.7	12	3535	178.0	89.0	No Flanges
FG-72XH300	506.6	15	3535	178.0	89.0	
FG-84XH300	591.5	13	4040	215.0	102.0	

HTD Pulley & Belt Drives



HTD timing belts offer optimised load distribution through the rounded tooth form, guaranteeing high power transmission in low speed and high torque applications. Capable of transmitting up to 300kW and speeds of 14,000 rpm. HTD timing belts can be used in a wide range of applications from minimum drives like electronic power tools to heavy duty machinery where durability and low maintenance is required. To select a drive it is necessary to know the driver and driven shaft speeds, the demand power, proposed centre distance and duty cycle. The chart below can be used to select the optimum belt size for a drive. For further information or help in selecting a drive contact Naismith Engineering.



Identifying a Pulley

To identify a HTD timing pulley the following information must be known:

BORE - Naismith Engineering carries full stocks of pilot and taper bore pulleys. For HTD pulleys, the taper bore pulleys have a prefix P.

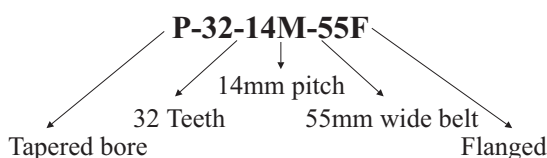
PITCH - This is the distance from the centre of one tooth to the centre of the next tooth. Naismith Engineering stocks 4 pitch sizes of HTD timing pulley:

3M	Pitch	3mm
5M		5mm
8M		8mm
14M		14mm

TEETH - Number of teeth.

WIDTH - The tooth width allows for a clearance of 3mm to 6mm on the belt. The tooth width code is the belt size width measured in mm. So for a belt width of 50mm, the width code becomes 50. Refer to Page 17 & 18 for a listing of all sizes.

FLANGES - Pulleys with a small number of teeth are fitted with flanges. The part number for flanged pulleys ends with 'F'. Refer to the pulley tables for more details.



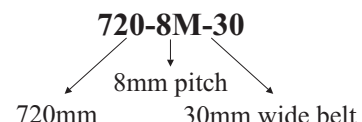
Identifying a belt

To identify a HTD timing belt the following information must be known:

LENGTH - A belt pitch length is determined by the number of teeth multiplied by the pitch. – refer page 17 & 18. The length code for a belt is the pitch length in mm. So a 8M section (8mm pitch) belt with 90 teeth has a pitch length of 720mm and a code of 720-8M.

PITCH - This is the distance from the centre of one tooth to the centre of the next tooth. Naismith Engineering stocks 4 pitch sizes of HTD timing belts.

WIDTH - The belt width measured in mm and gives the width code. So a belt width of 30mm, has a width code of 30. Refer to Page 17 & 18 for a listing of all sizes.



HTD Timing Belts 3M & 5M



	Pitch (mm)	T	B
3M	3mm	1.10	2.40
5M	5mm	2.10	3.80

Code & Pitch	Number of Teeth	Pitch Length mm
150-3M	50	150.0
156-3M	52	156.0
159-3M	53	159.0
210-3M	70	210.0
225-3M	75	225.0
255-3M	85	255.0
285-3M	95	285.0
288-3M	96	288.0
291-3M	97	291.0
300-3M	100	300.0
306-3M	102	306.0
312-3M	104	312.0
330-3M	110	330.0
345-3M	115	345.0
357-3M	119	357.0
384-3M	128	384.0
420-3M	140	420.0
447-3M	149	447.0
513-3M	171	513.0
531-3M	177	531.0
564-3M	188	564.0
633-3M	211	633.0
669-3M	223	669.0
711-3M	237	711.0
804-3M	268	804.0
1500-3M	500	1500.0

Standard widths of:-
 9mm Code = Length-3M-09
 15mm Code = Length-3M-15
 Long Length up to 15mm wide is available.

Code & Pitch	Number of Teeth	Pitch Length mm
120-5M	24	120.0
180-5M	36	180.0
225-5M	45	225.0
255-5M	51	255.0
265-5M	53	265.0
270-5M	54	270.0
280-5M	56	280.0
295-5M	59	295.0
300-5M	60	300.0
305-5M	61	305.0
325-5M	65	325.0
330-5M	66	330.0
340-5M	68	340.0
345-5M	69	345.0
350-5M	70	350.0
360-5M	72	360.0
370-5M	74	370.0
375-5M	75	375.0
400-5M	80	400.0
425-5M	85	425.0
450-5M	90	450.0
475-5M	95	475.0
500-5M	100	500.0
520-5M	104	520.0
525-5M	105	525.0
535-5M	107	535.0

Code & Pitch	Number of Teeth	Pitch Length mm
560-5M	112	560.0
575-5M	115	575.0
580-5M	116	580.0
600-5M	120	600.0
610-5M	122	610.0
615-5M	123	615.0
635-5M	127	635.0
640-5M	128	640.0
645-5M	129	645.0
670-5M	134	670.0
700-5M	140	700.0
750-5M	150	750.0
800-5M	160	800.0
825-5M	165	825.0
835-5M	167	835.0
860-5M	172	860.0
890-5M	178	890.0
900-5M	180	900.0
935-5M	187	935.0
950-5M	190	950.0
980-5M	196	980.0
1035-5M	207	1035.0
1100-5M	220	1100.0

Standard widths of:-
 9mm Code = Length-5M-09
 15mm Code = Length-5M-15
 25mm Code = Length-5M-25
 Long Length up to 25mm wide is available.

HTD Timing Belts 8M & 14M



	Pitch (mm)	T	B
8M	8mm	3.40	6.00
14M	14mm	6.00	10.00

Code & Pitch	Number of Teeth	Pitch Length mm
480-8M	60	480.0
560-8M	70	560.0
600-8M	75	600.0
640-8M	80	640.0
720-8M	90	720.0
800-8M	100	800.0
880-8M	110	880.0
960-8M	120	960.0
1040-8M	130	1040.0
1120-8M	140	1120.0
1200-8M	150	1200.0
1280-8M	160	1280.0
1440-8M	180	1440.0
1600-8M	200	1600.0
1760-8M	220	1760.0
1800-8M	225	1800.0
2000-8M	250	2000.0
2400-8M	300	2400.0
2600-8M	325	2600.0
2800-8M	350	2800.0

Standard widths of:-

20mm Code = Length-8M-20

30mm Code = Length-8M-30

55mm Code = Length-8M-50

85mm Code = Length-8M-85

Off standard widths are available on request.

Long Length up to 85mm wide is available.

Code & Pitch	Number of Teeth	Pitch Length mm
966-14M	69	966.0
1190-14M	85	1190.0
1400-14M	100	1400.0
1610-14M	115	1610.0
1778-14M	127	1778.0
1890-14M	135	1890.0
2100-14M	150	2100.0
2310-14M	165	2310.0
2450-14M	175	2450.0
2590-14M	185	2590.0
2800-14M	200	2800.0
3150-14M	225	3150.0
3500-14M	250	3500.0
3850-14M	275	3850.0
4326-14M	309	4326.0
4578-14M	327	4578.0

Standard widths of:-

40mm Code = Length-14M-40

55mm Code = Length-14M-55

85mm Code = Length-14M-85

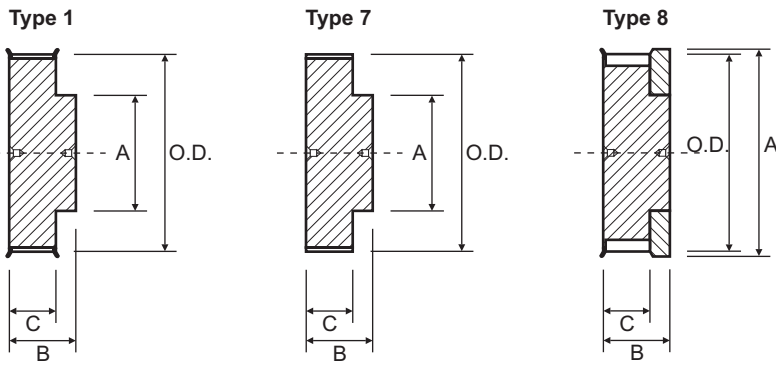
115mm Code = Length-14M-115

170mm Code = Length-14M-170

Off standard widths are available on request.

Long Length up to 85mm wide is available.

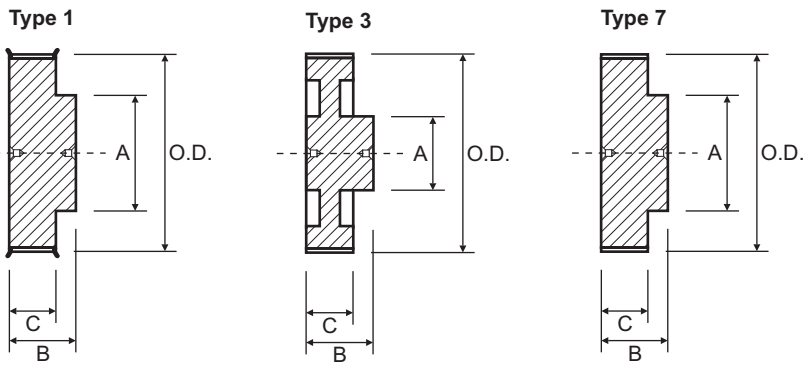
3M HTD Timing Pulleys



3M-9						3M-15					
Suit 9mm wide belt						Suit 15mm wide belt					
Part No.	O.D.	Type	A	B	C	Part No.	O.D.	Type	A	B	C
10-3M-9F	8.8	8	12.0	17.5	10.2	10-3M-15F	8.8	8	12.0	26.0	17.0
12-3M-9F	10.7	8	15.0	17.5	10.2	12-3M-15F	10.7	8	15.0	26.0	17.0
14-3M-9F	12.6	8	18.0	17.5	10.2	14-3M-15F	12.6	8	18.0	26.0	17.0
15-3M-9F	13.6	8	18.0	17.5	10.2	15-3M-15F	13.6	8	18.0	26.0	17.0
16-3M-9F	14.5	1	10.0	20.6	12.8	16-3M-15F	14.5	1	10.0	26.0	19.5
18-3M-9F	16.4	1	11.0	20.6	12.8	18-3M-15F	16.4	1	11.0	26.0	19.5
20-3M-9F	18.3	1	13.0	20.6	12.8	20-3M-15F	18.3	1	13.0	26.0	19.5
21-3M-9F	19.3	1	14.0	20.6	12.8	21-3M-15F	19.3	1	14.0	26.0	19.5
22-3M-9F	20.1	1	14.0	20.6	12.8	22-3M-15F	20.1	1	14.0	26.0	19.5
24-3M-9F	22.2	1	14.0	20.6	12.8	24-3M-15F	22.2	1	14.0	26.0	19.5
26-3M-9F	24.1	1	16.0	20.6	12.8	26-3M-15F	24.1	1	16.0	26.0	19.5
28-3M-9F	26.0	1	18.0	20.6	12.8	28-3M-15F	26.0	1	18.0	26.0	19.5
30-3M-9F	27.9	1	20.0	20.6	12.8	30-3M-15F	27.9	1	20.0	26.0	19.5
32-3M-9F	29.8	1	22.0	20.6	12.8	32-3M-15F	29.8	1	22.0	26.0	19.5
36-3M-9F	33.6	1	26.0	22.2	13.4	36-3M-15F	33.6	1	26.0	30.0	20.0
40-3M-9F	37.4	1	28.0	22.2	13.4	40-3M-15F	37.4	1	28.0	30.0	20.0
44-3M-9F	41.3	1	33.0	22.2	13.4	44-3M-15F	41.3	1	33.0	30.0	20.0
48-3M-9	45.1	7	33.0	22.2	13.4	48-3M-15	45.1	7	33.0	30.0	20.0
60-3M-9	56.5	7	33.0	22.2	13.4	60-3M-15	56.5	7	33.0	30.0	20.0
72-3M-9	68.0	7	33.0	22.2	13.4	72-3M-15	68.0	7	33.0	30.0	20.0

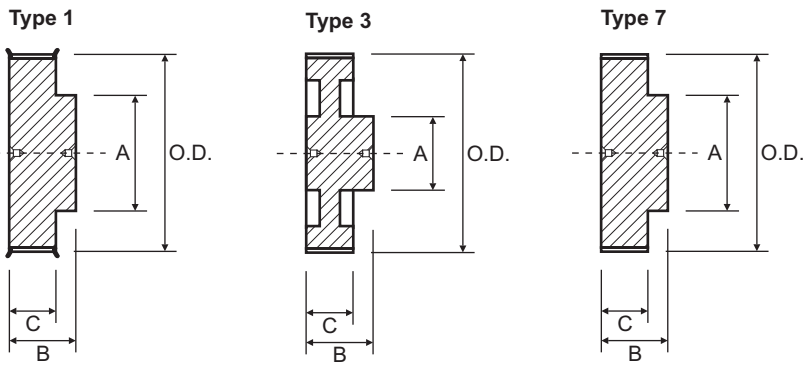
N.F. - No Flanges

5M HTD Timing Pulleys



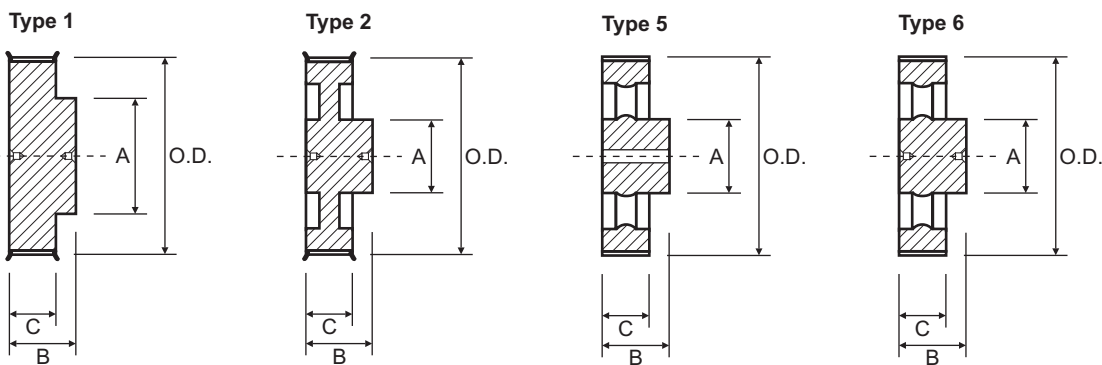
5M-9					5M-15						
Suit 9mm wide belt					Suit 15mm wide belt						
Part No.	O.D.	Type	A	B	C = 14.5	Part No.	O.D.	Type	A	B	C = 20.0
12-5M-9F	18.0	1	13.0	20.0	Steel Flanged	12-5M-15F	18.0	1	13.0	26.0	Steel Flanged
14-5M-9F	21.1	1	14.0	20.0		14-5M-15F	21.1	1	14.0	26.0	
15-5M-9F	22.7	1	16.0	20.0		15-5M-15F	22.7	1	16.0	26.0	
16-5M-9F	24.3	1	16.5	20.0		16-5M-15F	24.3	1	16.5	26.0	
18-5M-9F	27.5	1	20.0	20.0		18-5M-15F	27.5	1	20.0	26.0	
20-5M-9F	30.7	1	23.0	22.5		20-5M-15F	30.7	1	23.0	26.0	
21-5M-9F	32.3	1	24.0	22.5		21-5M-15F	32.3	1	24.0	26.0	
22-5M-9F	33.9	1	25.0	22.5		22-5M-15F	33.9	1	25.5	26.0	
24-5M-9F	37.1	1	27.0	22.5		24-5M-15F	37.1	1	27.0	28.0	
26-5M-9F	40.2	1	30.0	22.5		26-5M-15F	40.2	1	30.0	28.0	
28-5M-9F	43.4	1	30.5	22.5		28-5M-15F	43.4	1	30.5	28.0	
30-5M-9F	46.6	1	35.0	22.5		30-5M-15F	46.6	1	35.0	28.0	
32-5M-9F	49.8	1	38.0	22.5		32-5M-15F	49.8	1	38.0	28.0	
36-5M-9F	56.2	1	38.0	22.5		36-5M-15F	56.2	1	38.0	28.0	
40-5M-9F	62.5	1	38.0	22.5	40-5M-15F	62.5	1	38.0	28.0		
44-5M-9	68.9	7	38.0	25.5	Aluminium No Flanges	44-5M-15	68.9	7	38.0	30.0	Aluminium No Flanges
48-5M-9	75.3	7	45.0	25.5		48-5M-15	75.3	7	38.0	30.0	
60-5M-9	94.4	7	45.0	25.5		60-5M-15	94.4	7	50.0	30.0	
72-5M-9	113.5	3	45.0	25.5		72-5M-15	113.5	3	50.0	30.0	

5M HTD Timing Pulleys



5M-25					
Suit 25mm wide belt					
Part No.	O.D.	Type	A	B	C = 30.0
12-5M-25F	18.0	1	13.0	36.0	Steel Flanged
14-5M-25F	21.1	1	14.0	36.0	
15-5M-25F	22.7	1	16.0	36.0	
16-5M-25F	24.3	1	16.0	36.0	
18-5M-25F	27.5	1	16.0	36.0	
20-5M-25F	30.7	1	16.0	36.0	
21-5M-25F	32.3	1	16.0	38.0	
22-5M-25F	33.9	1	16.0	38.0	
24-5M-25F	37.1	1	16.0	38.0	
26-5M-25F	40.2	1	16.0	38.0	
28-5M-25F	43.4	1	16.0	38.0	
30-5M-25F	46.6	1	16.0	38.0	
32-5M-25F	49.8	1	16.0	38.0	
36-5M-25F	56.2	1	16.0	38.0	
40-5M-25F	62.5	1	16.0	38.0	
44-5M-25	68.9	7	16.0	40.0	Aluminium No Flanges
48-5M-25	75.3	7	16.0	40.0	
60-5M-25	94.4	7	16.0	40.0	
72-5M-25	113.5	3	16.0	40.0	

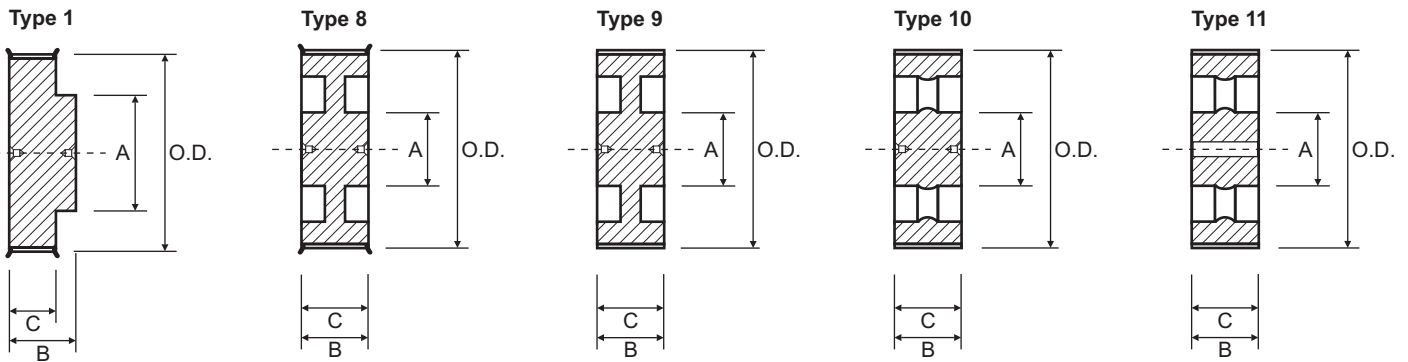
8M HTD Timing Pulleys



8M-20 Suit 20mm wide belt					8M-30 Suit 30mm wide belt								
Part No.	O.D.	Type	A	B	C = 28.0	Part No.	O.D.	Type	A	B	C = 38.0		
18-8M-20F	44.5	1	32.0	38.0	Steel Flanged	18-8M-30F	44.5	1	32.0	48.0	Steel Flanged		
20-8M-20F	49.6	1	36.0	38.0		20-8M-30F	49.6	1	36.0	48.0			
22-8M-20F	54.7	1	43.0	38.0		22-8M-30F	54.7	1	43.0	48.0			
24-8M-20F	59.7	1	49.0	38.0		24-8M-30F	59.7	1	49.0	48.0			
26-8M-20F	64.8	1	50.0	38.0		26-8M-30F	64.8	1	50.0	48.0			
28-8M-20F	69.9	1	55.0	38.0		28-8M-30F	69.9	1	55.0	48.0			
30-8M-20F	75.0	1	60.0	38.0		30-8M-30F	75.0	1	60.0	48.0			
32-8M-20F	80.1	1	64.0	38.0		32-8M-30F	80.1	1	64.0	48.0			
34-8M-20F	85.2	1	70.0	38.0		34-8M-30F	85.2	1	70.0	48.0			
36-8M-20F	90.3	1	75.0	38.0		36-8M-30F	90.3	1	75.0	48.0			
38-8M-20F	95.4	1	80.0	38.0		38-8M-30F	95.4	1	80.0	48.0			
40-8M-20F	100.5	1	85.0	38.0		40-8M-30F	100.5	1	85.0	48.0			
44-8M-20F	110.7	1	96.0	38.0		44-8M-30F	110.7	1	96.0	48.0			
48-8M-20F	120.9	1	104.0	38.0		48-8M-30F	120.9	1	104.0	48.0			
56-8M-20F	141.2	2	80.0	38.0	Cast Iron	56-8M-30F	141.2	2	90.0	48.0	Cast Iron		
64-8M-20F	161.6	2	80.0	38.0		64-8M-30F	161.6	2	90.0	48.0			
72-8M-20F	182.0	2	80.0	38.0		72-8M-30F	182.0	2	95.0	48.0			
80-8M-20	202.4	6	90.0	38.0		N.F.	80-8M-30	202.4	6	100.0		48.0	N.F.
90-8M-20	227.8	6	90.0	38.0			90-8M-30	227.8	6	100.0		48.0	
					112-8M-30		283.8	5	100.0	48.0			
						144-8M-30	365.3	5	100.0	48.0			

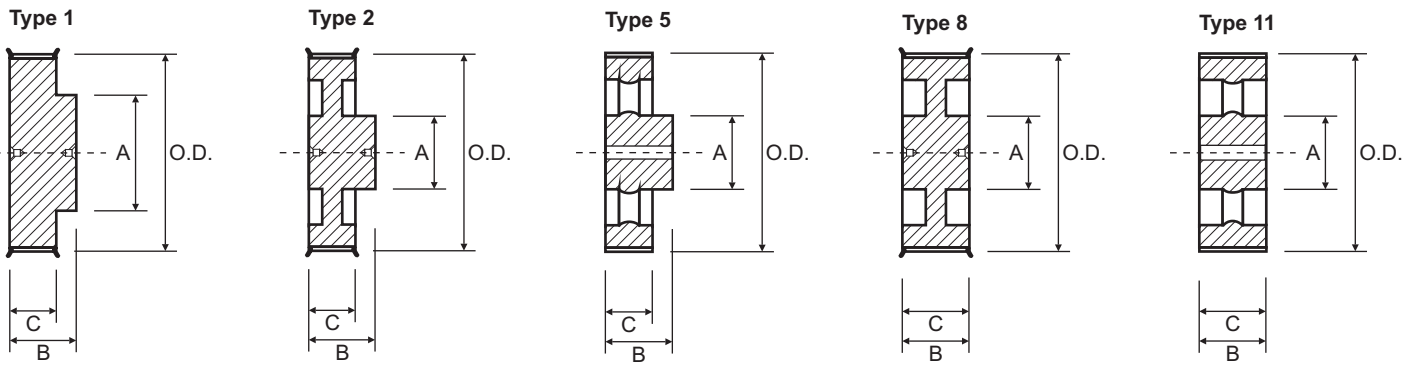
N.F. - No Flanges

8M HTD Timing Pulleys



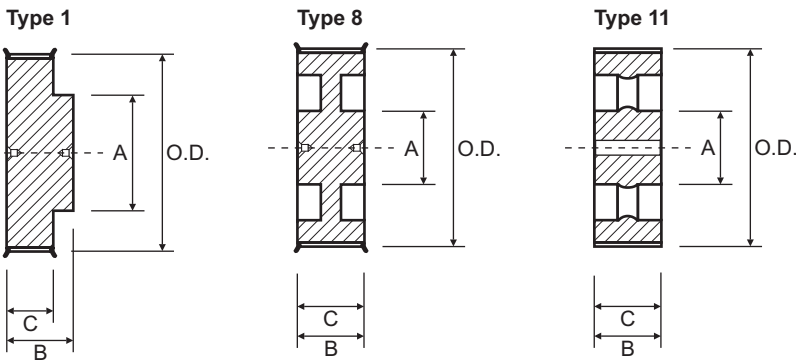
8M-50						8M-85					
Suit 50mm wide belt						Suit 85mm wide belt					
Part No.	O.D.	Type	A	B	C = 60.0	Part No.	O.D.	Type	A	B	C = 95.0
18-8M-50F	44.5	1	32.0	70.0	Steel Flanged	22-8M-85F	54.7	1	43.0	105.0	Steel Flanged
20-8M-50F	49.6	1	36.0	70.0		24-8M-85F	59.7	1	49.0	105.0	
22-8M-50F	54.7	1	43.0	70.0		26-8M-85F	64.8	1	50.0	105.0	
24-8M-50F	59.7	1	49.0	70.0		28-8M-85F	69.9	1	55.0	105.0	
26-8M-50F	64.8	1	50.0	70.0		30-8M-85F	75.0	1	60.0	105.0	
28-8M-50F	69.9	1	55.0	70.0		32-8M-85F	80.1	1	64.0	105.0	
30-8M-50F	75.0	1	60.0	70.0		34-8M-85F	85.2	1	70.0	105.0	
32-8M-50F	80.1	1	64.0	70.0		36-8M-85F	90.3	1	75.0	105.0	
34-8M-50F	85.2	1	70.0	70.0		38-8M-85F	95.4	1	80.0	105.0	
36-8M-50F	90.3	1	75.0	70.0		40-8M-85F	100.5	1	85.0	105.0	
38-8M-50F	95.4	1	80.0	70.0		44-8M-85F	110.7	1	96.0	105.0	
40-8M-50F	100.5	1	85.0	70.0		48-8M-85F	120.9	1	104.0	105.0	
44-8M-50F	110.7	1	96.0	70.0		56-8M-85F	141.2	1	107.0	105.0	
48-8M-50F	120.9	1	104.0	70.0		64-8M-85F	161.6	8	100.0	95.0	
56-8M-50F	141.2	8	90.0	60.0	72-8M-85F	182.0	8	110.0	95.0		
64-8M-50F	161.6	8	100.0	60.0	80-8M-85	202.4	9	110.0	95.0		
72-8M-50F	182.0	8	100.0	60.0	90-8M-85	227.8	10	110.0	95.0		
80-8M-50	202.4	9	110.0	60.0	112-8M-85	283.8	11	110.0	95.0		
90-8M-50	227.8	10	110.0	60.0	144-8M-85	365.3	11	120.0	95.0		
112-8M-50	283.8	11	110.0	60.0	168-8M-85	426.4	11	120.0	95.0		
144-8M-50	365.3	11	110.0	60.0	192-8M-85	487.5	11	130.0	95.0		
168-8M-50	426.4	11	120.0	60.0						Cast Iron No Flanges	
192-8M-50	487.5	11	130.0	60.0							

14M HTD Timing Pulleys



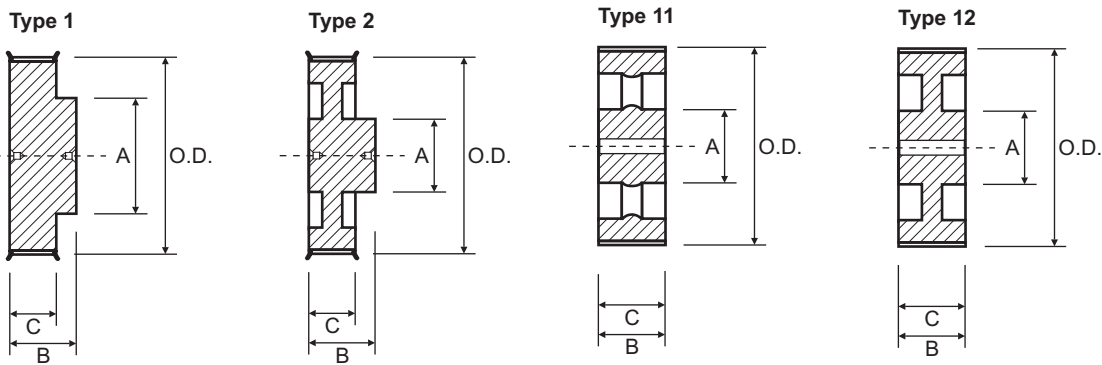
14M-40					14M-55						
Suit 40mm wide belt					Suit 55mm wide belt						
Part No.	O.D.	Type	A	B	C = 54.0	Part No.	O.D.	Type	A	B	C = 70.0
28-14M-40F	122.1	1	100.0	69.0	Cast Iron	28-14M-55F	122.1	1	100.0	85.0	Cast Iron
29-14M-40F	126.6	1	107.0	69.0		29-14M-55F	126.6	1	107.0	85.0	
30-14M-40F	131.0	1	107.0	69.0		30-14M-55F	131.0	1	107.0	85.0	
32-14M-40F	139.9	1	114.0	69.0		32-14M-55F	139.9	1	114.0	85.0	
34-14M-40F	148.8	1	122.0	69.0		34-14M-55F	148.8	1	122.0	85.0	
36-14M-40F	157.7	1	128.0	69.0		36-14M-55F	157.7	1	128.0	85.0	
38-14M-40F	166.6	1	141.0	69.0		38-14M-55F	166.6	1	141.0	85.0	
40-14M-40F	175.5	1	148.0	69.0		40-14M-55F	175.5	1	148.0	85.0	
44-14M-40F	193.3	2	120.0	69.0		44-14M-55F	193.3	2	120.0	85.0	
48-14M-40F	211.1	2	135.0	69.0		48-14M-55F	211.1	8	135.0	70.0	
56-14M-40F	246.8	2	135.0	69.0		56-14M-55F	246.8	8	135.0	70.0	
64-14M-40F	282.4	2	135.0	69.0		64-14M-55F	282.4	8	135.0	70.0	
72-14M-40	318.1	5	135.0	69.0		72-14M-55	318.1	11	135.0	70.0	
80-14M-40	353.7	5	135.0	69.0		80-14M-55	353.7	11	135.0	70.0	
90-14M-40	398.3	5	135.0	69.0	90-14M-55	398.3	11	135.0	70.0		
112-14M-40	496.3	5	135.0	69.0	112-14M-55	496.3	11	135.0	70.0		
144-14M-40	638.9	5	135.0	69.0	144-14M-55	638.9	11	135.0	70.0		

14M HTD Timing Pulleys



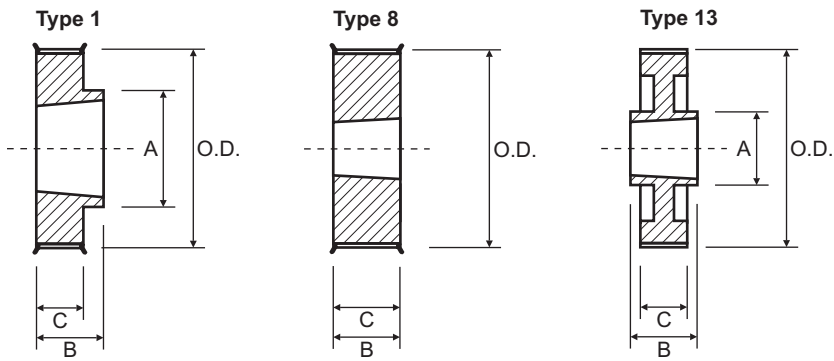
14M-85						14M-115					
Suit 85mm wide belt						Suit 115mm wide belt					
Part No.	O.D.	Type	A	B	C=102.0	Part No.	O.D.	Type	A	B	C=133.0
28-14M-85F	122.1	1	100.0	117.0	Cast Iron	28-14M-115F	122.1	1	100.0	148.0	Cast Iron
29-14M-85F	126.6	1	107.0	117.0		29-14M-115F	126.6	1	107.0	148.0	
30-14M-85F	131.0	1	107.0	117.0		30-14M-115F	131.0	1	107.0	148.0	
32-14M-85F	139.9	1	114.0	117.0		32-14M-115F	139.9	1	114.0	148.0	
34-14M-85F	148.8	1	122.0	117.0		34-14M-115F	148.8	1	122.0	148.0	
36-14M-85F	157.7	1	128.0	117.0		36-14M-115F	157.7	1	128.0	148.0	
38-14M-85F	166.6	1	141.0	117.0		38-14M-115F	166.6	1	141.0	148.0	
40-14M-85F	175.5	1	148.0	117.0		40-14M-115F	175.5	1	148.0	148.0	
44-14M-85F	193.3	1	169.0	117.0		44-14M-115F	193.3	1	169.0	148.0	
48-14M-85F	211.1	1	186.0	117.0		48-14M-115F	211.1	1	186.0	148.0	
56-14M-85F	246.8	8	150.0	102.0		56-14M-115F	246.8	8	150.0	133.0	
64-14M-85F	282.4	8	150.0	102.0		64-14M-115F	282.4	8	150.0	133.0	
72-14M-85	318.1	11	150.0	102.0		72-14M-115	318.1	11	150.0	133.0	
80-14M-85	353.7	11	150.0	102.0		80-14M-115	353.7	11	150.0	133.0	
90-14M-85	398.3	11	150.0	102.0	90-14M-115	398.3	11	150.0	133.0		
112-14M-85	496.3	11	150.0	102.0	112-14M-115	496.3	11	150.0	133.0		
144-14M-85	638.9	11	150.0	102.0	144-14M-115	638.9	11	150.0	133.0		

14M HTD Timing Pulleys



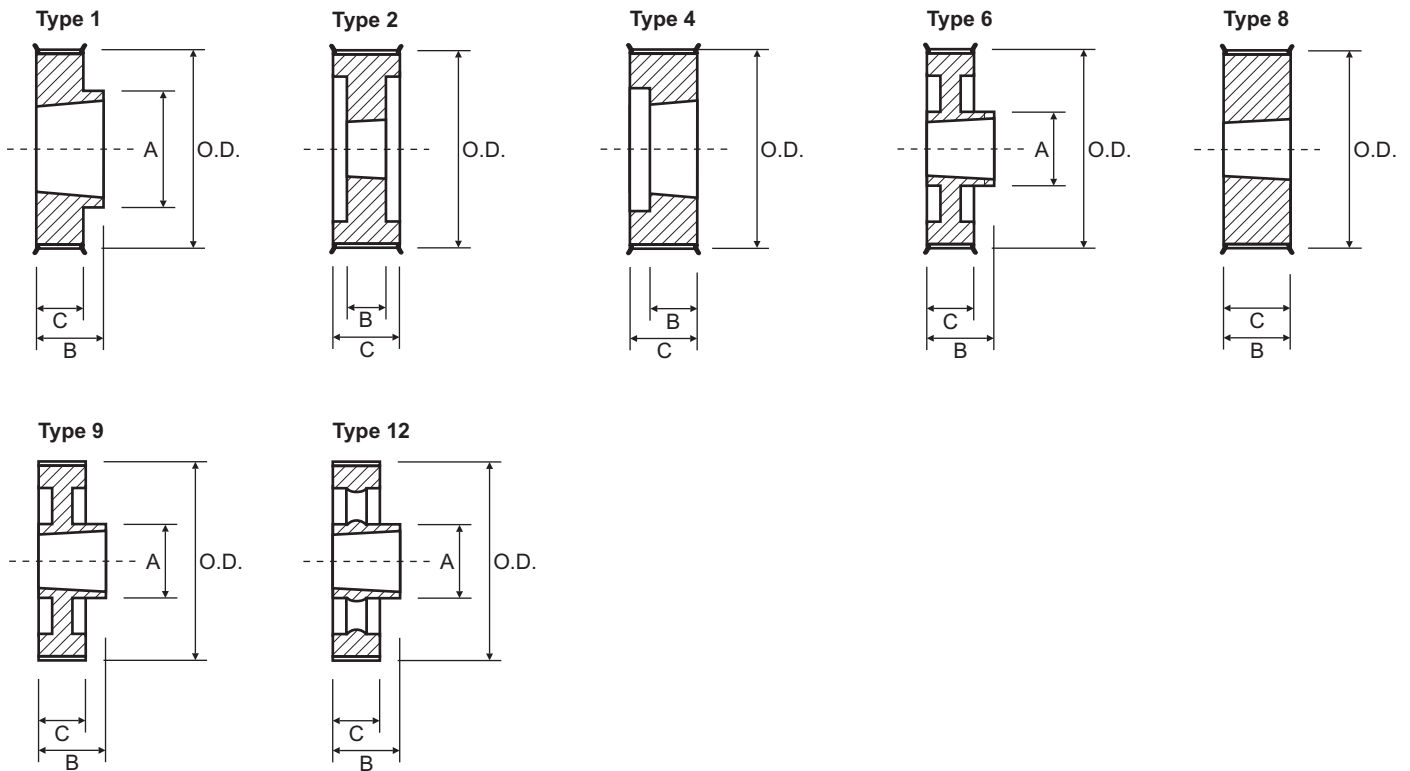
14M-170						
Suit 170mm wide belt						
Part No.	O.D.	Type	A	B	C = 187.0	
28-14M-170F	122.1	1	100.0	202.0	Cast Iron	
29-14M-170F	126.6	1	107.0	202.0		
30-14M-170F	131.0	1	107.0	202.0		
32-14M-170F	139.9	1	114.0	202.0		
34-14M-170F	148.8	1	122.0	202.0		
36-14M-170F	157.7	1	128.0	202.0		
38-14M-170F	166.6	1	141.0	202.0		
40-14M-170F	175.5	1	148.0	202.0		
44-14M-170F	193.3	1	169.0	202.0		
48-14M-170F	211.1	1	186.0	202.0		
56-14M-170F	246.8	2	160.0	202.0		
64-14M-170F	282.4	2	180.0	202.0		
72-14M-170	318.1	12	180.0	187.0		No Flanges
80-14M-170	353.7	12	180.0	187.0		
90-14M-170	398.3	11	180.0	187.0		
112-14M-170	496.3	11	200.0	187.0		
144-14M-170	638.9	11	200.0	187.0		

5M HTD Timing Pulleys



5M-15						
Suit 15mm wide belt						
Part No.	O.D	Type	Bush	A	B	C = 22.0
P-34-5M-15F	53.0	8	1008	-	22.0	Steel Flanged
P-36-5M-15F	56.2	8	1108	-	22.0	
P-38-5M-15F	59.3	8	1108	-	22.0	
P-40-5M-15F	62.5	8	1108	-	22.0	
P-44-5M-15F	68.9	8	1108	-	22.0	
P-48-5M-15F	72.3	1	1210	64.0	25.0	
P-56-5M-15F	88.0	1	1210	70.0	25.0	Cast Iron No Flanges
P-64-5M-15F	100.7	1	1210	78.0	25.0	
P-72-5M-15F	113.5	1	1610	90.0	25.0	
P-80-5M-15F	126.2	1	1610	92.0	25.0	
P-90-5M-15	142.1	13	1610	92.0	25.0	
P112-5M-15	177.1	13	1610	92.0	25.0	Cast Iron No Flanges
P136-5M-15	215.3	13	2012	110.0	32.0	
P150-5M-15	237.6	13	2012	110.0	32.0	

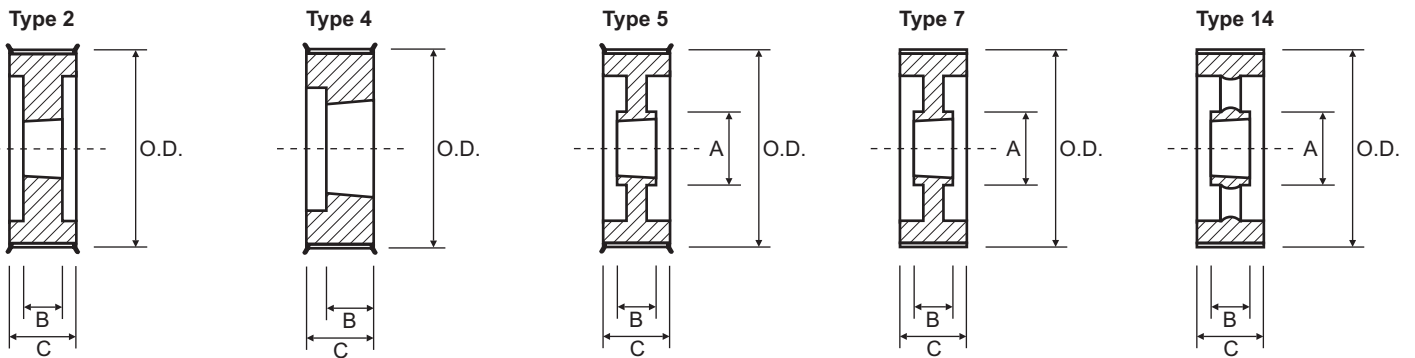
8M HTD Timing Pulleys



8M-20							8M-30						
Suit 20mm wide belt							Suit 30mm wide belt						
Part No.	O.D.	Type	Bush	A	B	C = 28.0	Part No.	O.D.	Type	Bush	A	B	C = 38.0
P-22-8M-20F	54.7	4	1008	-	22.0	Cast Iron	P-22-8M-30F	54.7	4	1008	-	22.0	Cast Iron
P-24-8M-20F	59.7	4	1108	-	22.0		P-24-8M-30F	59.7	4	1108	-	22.0	
P-26-8M-20F	64.8	4	1108	-	22.0		P-26-8M-30F	64.8	4	1108	-	22.0	
P-28-8M-20F	69.9	4	1108	-	22.0		P-28-8M-30F	69.9	4	1108	-	22.0	
P-30-8M-20F	75.0	4	1108	-	22.0		P-30-8M-30F	75.0	8	1615	-	38.0	
P-32-8M-20F	80.1	4	1610	-	25.0		P-32-8M-30F	80.1	8	1615	-	38.0	
P-34-8M-20F	85.2	4	1610	-	25.0		P-34-8M-30F	85.2	8	1615	-	38.0	
P-36-8M-20F	90.3	4	1610	-	25.0		P-36-8M-30F	90.3	8	1615	-	38.0	
P-38-8M-20F	95.4	4	1610	-	25.0		P-38-8M-30F	95.4	8	1615	-	38.0	
P-40-8M-20F	100.5	4	1610	-	25.0		P-40-8M-30F	100.5	8	1615	-	38.0	
P-44-8M-20F	110.7	1	2012	99.0	32.0		P-44-8M-30F	110.7	2	2012	-	32.0	
P-48-8M-20F	120.9	1	2012	105.0	32.0		P-48-8M-30F	120.9	2	2012	-	32.0	
P-56-8M-20F	141.2	1	2012	105.0	32.0		P-56-8M-30F	141.2	2	2012	-	32.0	
P-64-8M-20F	161.6	6	2012	110.0	32.0		P-64-8M-30F	161.6	1	2517	115.0	45.0	
P-72-8M-20F	182.0	6	2012	110.0	32.0		P-72-8M-30F	182.0	6	2517	120.0	45.0	
P-80-8M-20	202.4	9	2012	110.0	32.0		P-80-8M-30	202.4	9	2517	120.0	45.0	
P-90-8M-20	227.8	12	2012	110.0	32.0		P-90-8M-30	227.8	12	2517	120.0	45.0	
							N.F.	P112-8M-30	283.8	12	2517	120.0	
							P144-8M-30	365.3	12	2517	120.0	45.0	

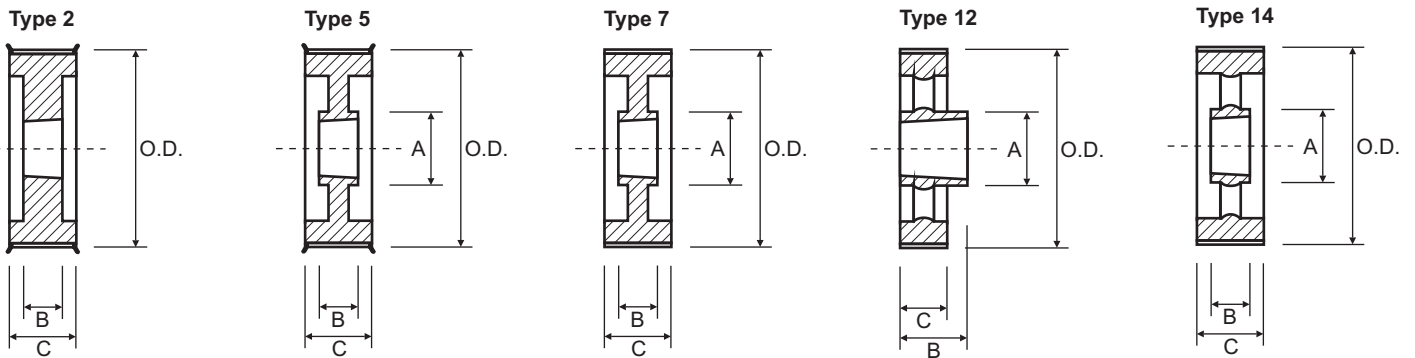
N.F. - No Flanges

8M HTD Timing Pulleys



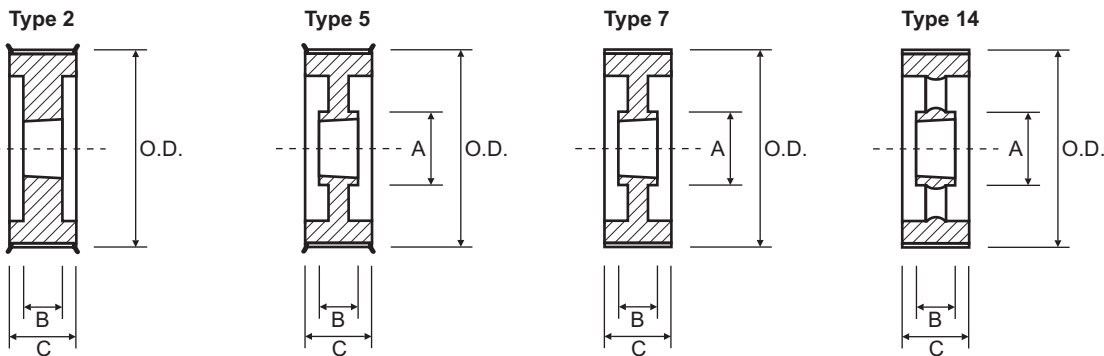
8M-50						8M-85							
Suit 50mm wide belt						Suit 85mm wide belt							
Part No.	O.D	Type	Bush	A	B	C = 60.0	Part No.	O.D	Type	Bush	A	B	C = 95.0
P-28-8M-50F	69.9	2	1108	-	22.0	Cast Iron	P-34-8M-85F	85.2	2	1615	-	38.0	Cast Iron
P-30-8M-50F	75.0	4	1615	-	38.0		P-36-8M-85F	90.3	2	1615	-	38.0	
P-32-8M-50F	80.1	4	1615	-	38.0		P-38-8M-85F	95.4	2	1615	-	38.0	
P-34-8M-50F	85.2	4	1615	-	38.0		P-40-8M-85F	100.5	2	2012	-	32.0	
P-36-8M-50F	90.3	4	1615	-	38.0		P-44-8M-85F	110.7	2	2012	-	32.0	
P-38-8M-50F	95.4	4	1615	-	38.0		P-48-8M-85F	120.9	2	2517	-	45.0	
P-40-8M-50F	100.5	2	2012	-	32.0		P-56-8M-85F	141.2	2	2517	-	45.0	
P-44-8M-50F	110.7	2	2012	-	32.0		P-64-8M-85F	161.6	2	2517	-	45.0	
P-48-8M-50F	120.9	2	2012	-	32.0		P-72-8M-85F	182.0	2	3020	-	51.0	
P-56-8M-50F	141.2	2	2517	-	45.0		P-80-8M-85	202.4	7	3020	140.0	51.0	
P-64-8M-50F	161.6	5	2517	115.0	45.0		P-90-8M-85	227.8	7	3020	146.0	51.0	
P-72-8M-50F	182.0	5	2517	120.0	45.0		P112-8M-85	283.8	14	3020	146.0	51.0	
P-80-8M-50	202.4	7	3020	140.0	51.0		P144-8M-85	365.3	14	3030	140.0	76.0	
P-90-8M-50	227.8	7	3020	146.0	51.0		P168-8M-85	426.4	14	3030	140.0	76.0	
P112-8M-50	283.8	14	3020	146.0	51.0		P192-8M-85	487.5	14	3030	140.0	76.0	
P144-8M-50	365.3	14	3020	146.0	51.0								
P168-8M-50	426.4	14	3020	146.0	51.0								
P192-8M-50	487.5	14	3020	146.0	51.0								

14M HTD Timing Pulleys



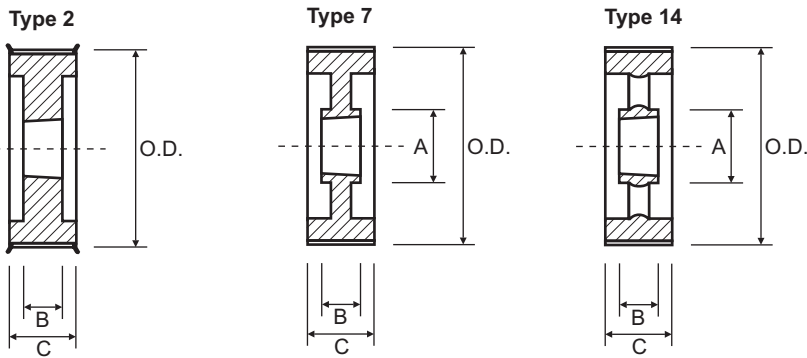
14M-40							14M-55						
Suit 40mm wide belt							Suit 55mm wide belt						
Part No.	O.D	Type	Bush	A	B	C = 54.0	Part No.	O.D	Type	Bush	A	B	C = 70.0
P-28-14M-40F	122.1	2	2012	-	32.0	Cast Iron	P-28-14M-55F	122.1	2	2012	-	32.0	Cast Iron
P-29-14M-40F	126.6	2	2012	-	32.0		P-29-14M-55F	126.6	2	2012	-	32.0	
P-30-14M-40F	131.0	2	2012	-	32.0		P-30-14M-55F	131.0	2	2517	-	45.0	
P-32-14M-40F	139.9	2	2012	-	32.0		P-32-14M-55F	139.9	2	2517	-	45.0	
P-34-14M-40F	148.8	2	2517	-	45.0		P-34-14M-55F	148.8	2	2517	-	45.0	
P-36-14M-40F	157.7	2	2517	-	45.0		P-36-14M-55F	157.7	2	2517	-	45.0	
P-38-14M-40F	166.6	2	2517	-	45.0		P-38-14M-55F	166.6	2	2517	-	45.0	
P-40-14M-40F	175.5	2	2517	-	45.0		P-40-14M-55F	175.5	2	2517	-	45.0	
P-44-14M-40F	193.3	2	3020	-	51.0		P-44-14M-55F	193.3	2	3020	-	51.0	
P-48-14M-40F	211.1	2	3020	-	51.0		P-48-14M-55F	211.1	2	3020	-	51.0	
P-56-14M-40F	246.8	5	3020	146.0	51.0		P-56-14M-55F	246.8	5	3020	146.0	51.0	
P-64-14M-40F	282.4	5	3020	146.0	51.0		P-64-14M-55F	282.4	5	3020	146.0	51.0	
P-72-14M-40	318.1	7	3020	146.0	51.0		P-72-14M-55	318.1	7	3020	146.0	51.0	
P-80-14M-40	353.7	14	3020	146.0	51.0		P-80-14M-55	353.7	14	3020	146.0	51.0	
P-90-14M-40	398.3	14	3020	146.0	51.0	P-90-14M-55	398.3	14	3020	146.0	51.0		
P112-14M-40	496.3	14	3020	146.0	51.0	P112-14M-55	496.3	14	3020	146.0	51.0		
P144-14M-40	638.9	14	3020	146.0	51.0	P144-14M-55	638.9	14	3020	146.0	51.0		
						No Flanges	P168-14M-55	745.9	14	3020	146.0	51.0	No Flanges
							P192-14M-55	852.8	12	3535	178.0	89.0	

14M HTD Timing Pulleys



14M-85						14M-115					
Suit 85mm wide belt						Suit 115mm wide belt					
Part No.	O.D	Type	Bush	A	B C = 102.0	Part No.	O.D	Type	Bush	A	B C = 133.0
P-28-14M-85F	122.1	2	2517	-	45.0	P-28-14M-115F	122.1	2	2517	-	45.0
P-29-14M-85F	126.6	2	2517	-	45.0	P-29-14M-115F	126.6	2	2517	-	45.0
P-30-14M-85F	131.0	2	2517	-	45.0	P-30-14M-115F	131.0	2	2517	-	45.0
P-32-14M-85F	139.9	2	2517	-	45.0	P-32-14M-115F	139.9	2	2517	-	45.0
P-34-14M-85F	148.8	2	2517	-	45.0	P-34-14M-115F	148.8	2	2517	-	45.0
P-36-14M-85F	157.7	2	3020	-	51.0	P-36-14M-115F	157.7	2	3020	-	51.0
P-38-14M-85F	166.6	2	3020	-	51.0	P-38-14M-115F	166.6	2	3020	-	51.0
P-40-14M-85F	175.5	2	3020	-	51.0	P-40-14M-115F	175.5	2	3020	-	51.0
P-44-14M-85F	193.3	2	3030	-	76.0	P-44-14M-115F	193.3	2	3030	-	76.0
P-48-14M-85F	211.1	2	3030	-	76.0	P-48-14M-115F	211.1	2	3030	-	76.0
P-56-14M-85F	246.8	2	3535	-	89.0	P-56-14M-115F	246.8	2	3535	-	89.0
P-64-14M-85F	282.4	5	3535	178.0	89.0	P-64-14M-115F	282.4	5	3535	178.0	89.0
P-72-14M-85	318.1	7	3535	178.0	89.0	P-72-14M-115	318.1	7	3535	178.0	89.0
P-80-14M-85	353.7	14	3535	178.0	89.0	P-80-14M-115	353.7	14	3535	178.0	89.0
P-90-14M-85	398.3	14	3535	178.0	89.0	P-90-14M-115	398.3	14	3535	178.0	89.0
P112-14M-85	496.3	14	3535	178.0	89.0	P112-14M-115	496.3	14	3535	178.0	89.0
P144-14M-85	638.9	14	3535	178.0	89.0	P144-14M-115	638.9	14	4040	215.0	102.0
P149-14M-85	661.2	14	3535	195.0	89.0	P168-14M-115	745.9	14	4040	215.0	102.0
P168-14M-85	745.9	14	3535	178.0	89.0	P192-14M-115	852.8	14	4040	215.0	102.0
P192-14M-85	852.8	14	4040	215.0	102.0	P216-14M-115	959.8	14	4040	215.0	102.0
P216-14M-85	959.8	14	4040	215.0	102.0						

14M HTD Timing Pulleys

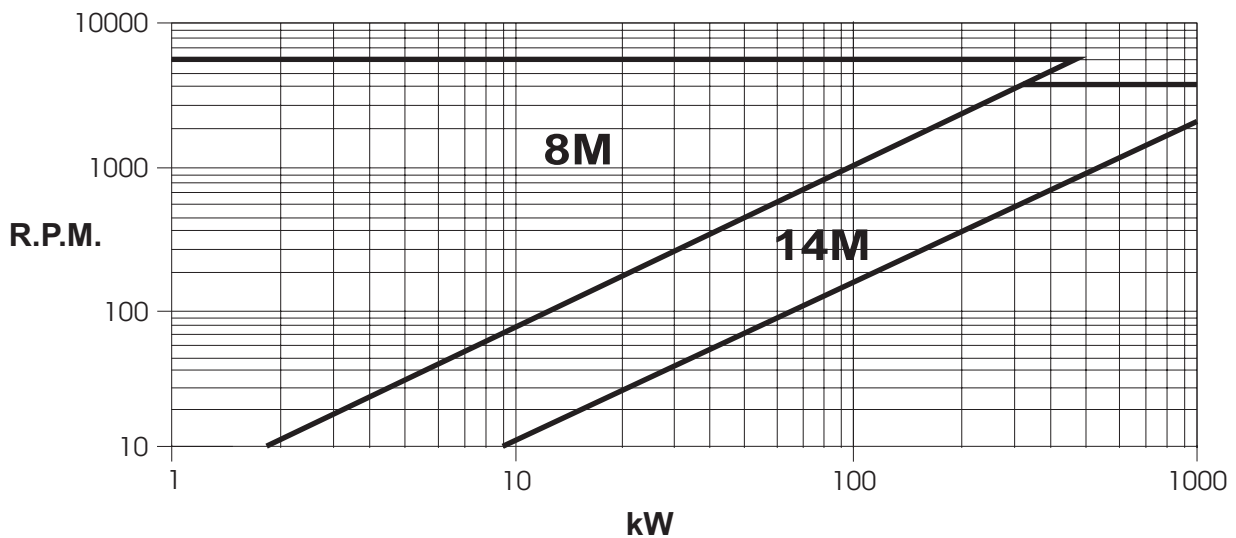


14M-170						
Suit 170mm wide belt						
Part No.	O.D.	Type	Bush	A	B	C = 187.0
P38-14M-170F	166.6	2	3030	-	76.0	Cast Iron Flanged
P40-14M-170F	175.5	2	3030	-	76.0	
P44-14M-170F	193.3	2	3535	-	89.0	
P48-14M-170F	211.1	2	3535	-	89.0	
P56-14M-170F	246.8	2	3535	-	89.0	
P64-14M-170F	282.4	2	4040	-	102.0	
P72-14M-170	318.1	7	4040	215.0	102.0	Cast Iron No Flanges
P80-14M-170	353.7	7	4040	215.0	102.0	
P90-14M-170	398.3	14	4040	215.0	102.0	
P112-14M-170	496.3	14	5050	267.0	127.0	
P144-14M-170	638.9	14	5050	267.0	127.0	
P168-14M-170	745.9	14	5050	267.0	127.0	
P192-14M-170	852.8	14	5050	267.0	127.0	
P216-14M-170	959.8	14	5050	267.0	127.0	

Poly Chain GT Sprockets & Belt Drives



Technically innovative, Poly Chain GT drives consistently outperform traditional drive systems. Poly Chain GT, which is suited to a wide range of torques and speeds, transmits up to 4 times more power, is up to 60% more compact, and saves up to 30% in weight than Classical drive systems. Capable of transmitting up to 1000kW and speeds of 5,000 rpm. Poly Chain GT timing belts can be used in a wide range of applications from minimum drives like electronic power tools to heavy duty machinery where durability and low maintenance is required. To select a drive it is necessary to know the driver and driven shaft speeds, the demand power, proposed centre distance and duty cycle. The chart below can be used to select the optimum belt size for a drive. For further information or help in selecting a drive contact Naismith Engineering.



Identifying a Sprocket

To identify a Poly Chain GT sprocket the following information must be known:

BORE - Poly Chain GT sprockets are supplied in taper bore as standard with the exception of only a few small sizes where the taper will not fit and they are supplied in Pilot Bore..

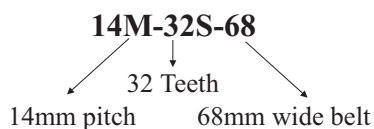
PITCH - This is the distance from the centre of one tooth to the centre of the next tooth. There are 2 pitch sizes of Poly Chain GT:

8M	Pitch	8mm
14M		14mm

TEETH - Number of teeth.

WIDTH - The tooth width allows for a clearance of 3mm to 6mm on the belt. The tooth width code is the belt size width measured in mm. So for a belt width of 36mm, the width code becomes 36. Refer to Page 34 for a listing of all sizes.

FLANGES - Pulleys with a small number of teeth are fitted with flanges. Refer to the pulley tables for more details.



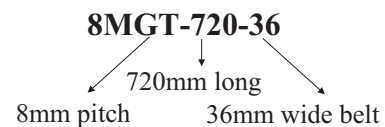
Identifying a belt

To identify a Poly Chain GT belts the following information must be known:

LENGTH - A belt pitch length is determined by the number of teeth multiplied by the pitch. – refer page 34. The length code for a belt is the pitch length in mm. So a 8M section (8mm pitch) belt with 125 teeth has a pitch length of 1000mm and a code of 8M-1000.

PITCH - This is the distance from the centre of one tooth to the centre of the next tooth.

WIDTH - The belt width measured in mm and gives the width code. So a belt width of 36mm, has a width code of 36. Refer to Page 34 for a listing of all sizes.



Poly Chain GT2 Timing Belts 8M & 14M



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

Code & Pitch	Number of Teeth	Pitch Length mm
*8MGT-640	80	640.0
*8MGT-720	90	720.0
*8MGT-800	100	800.0
*8MGT-896	112	896.0
*8MGT-1000	125	1000.0
8MGT-1120	140	1120.0
8MGT-1200	150	1200.0
8MGT-1280	160	1280.0
8MGT-1440	180	1440.0
8MGT-1600	200	1600.0
8MGT-1792	224	1792.0
8MGT-2000	250	2000.0
8MGT-2240	280	2240.0
8MGT-2400	300	2400.0
8MGT-2520	315	2520.0
8MGT-2840	355	2840.0
8MGT-3200	400	3200.0
8MGT-3600	450	3600.0
8MGT-4000	500	4000.0
8MGT-4480	560	4480.0

Standard widths of:-

12mm Code = 8MGT-Length-12

21mm Code = 8MGT-Length-21

36mm Code = 8MGT-Length-36

62mm Code = 8MGT-Length-62

* = Not available in 62mm wide

Long Length up to 36mm wide is available.

Code & Pitch	Number of Teeth	Pitch Length mm
14MGT-994	71	994.0
14MGT-1120	80	1120.0
14MGT-1190	85	1190.0
14MGT-1260	90	1260.0
14MGT-1400	100	1400.0
14MGT-1568	112	1568.0
14MGT-1750	125	1750.0
14MGT-1890	135	1890.0
14MGT-1960	140	1960.0
14MGT-2100	150	2100.0
14MGT-2240	160	2240.0
14MGT-2380	170	2380.0
14MGT-2520	180	2520.0
14MGT-2660	190	2660.0
14MGT-2800	200	2800.0
14MGT-3136	224	3136.0
14MGT-3304	236	3304.0
14MGT-3500	250	3500.0
14MGT-3920	280	3920.0
14MGT-4410	315	4410.0

Standard widths of:-

20mm Code = 14MGT-Length-20

37mm Code = 14MGT-Length-37

68mm Code = 14MGT-Length-68

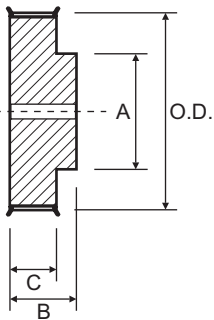
90mm Code = 14MGT-Length-90

125mm Code = 14MGT-Length-125

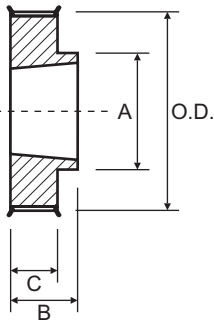
Long Length up to 37mm wide is available.

8M Poly Chain GT Timing Pulleys

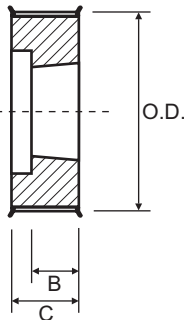
Type 1*



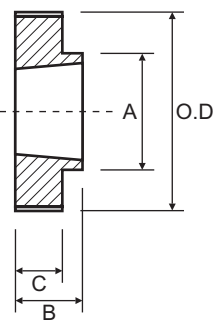
Type 1



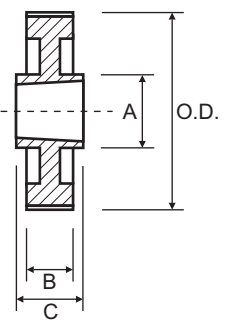
Type 4



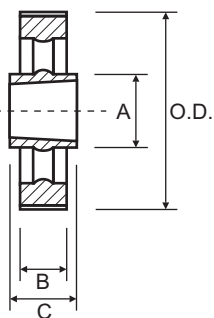
Type 6



Type 10



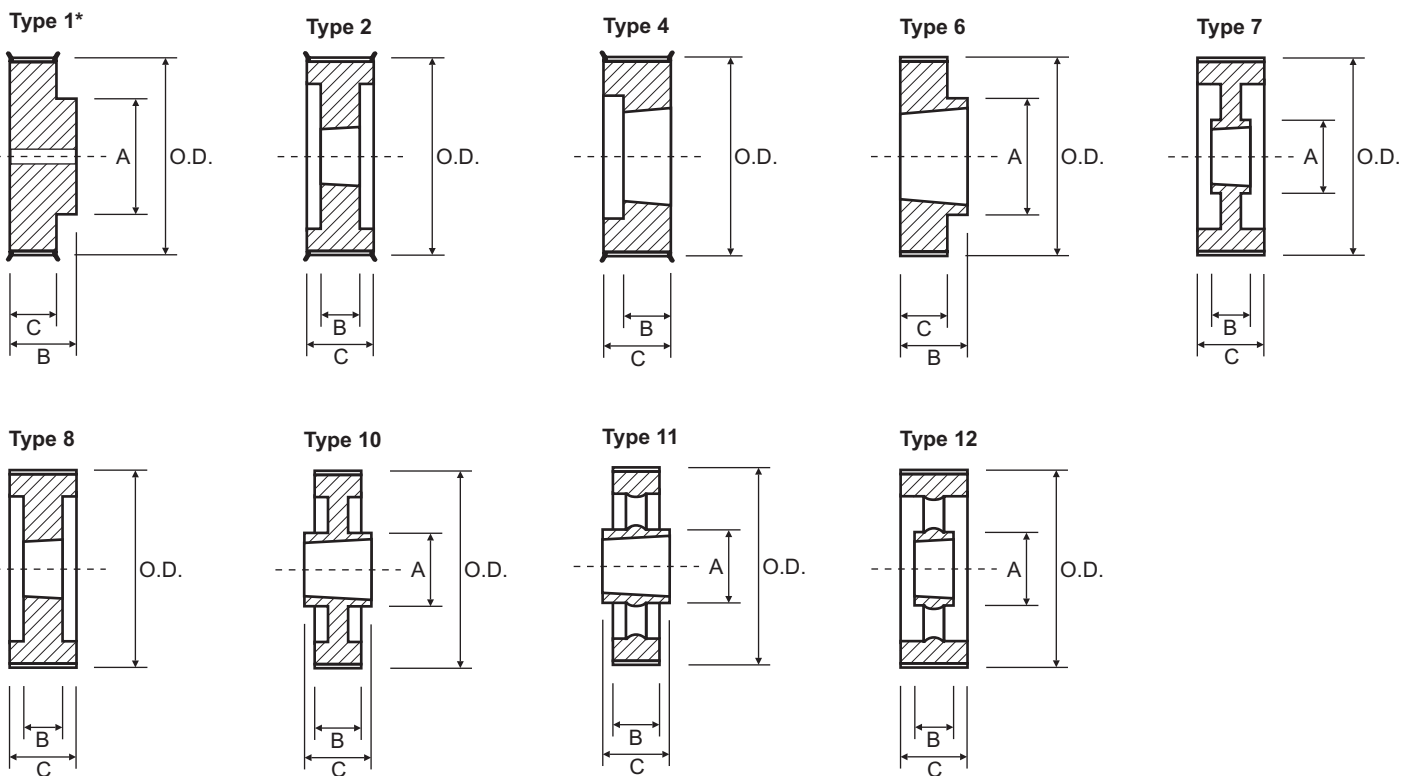
Type 11



8M-12							8M-21						
Suit 12mm wide belt							Suit 21mm wide belt						
Part No.	O.D.	Type	Bush	A	B	C = 20.0	Part No.	O.D.	Type	Bush	A	B	C = 30.0
8M-22S-12F	54.4	1*	-	43.0	30.0	Contact Gates Australia for Material Specification	8M-22S-21F	54.4	1*	-	43.0	42.0	Contact Gates Australia for Material Specification
8M-25S-12F	62.1	1	1108	49.0	22.0		8M-25S-21F	62.1	4	1108	-	22.0	
8M-28S-12F	69.7	1	1108	56.0	22.0		8M-28S-21F	69.7	4	1210	-	25.0	
8M-30S-12F	74.8	1	1210	60.0	25.0		8M-30S-21F	74.8	4	1210	-	25.0	
8M-32S-12F	79.9	1	1610	66.0	25.0		8M-32S-21F	79.9	4	1610	-	25.0	
8M-34S-12F	85.0	1	1610	69.0	25.0		8M-34S-21F	85.0	4	1610	-	25.0	
8M-36S-12F	90.1	1	1610	76.0	25.0		8M-36S-21F	90.1	4	1610	-	25.0	
8M-38S-12F	95.2	1	1610	78.0	25.0		8M-38S-21F	95.2	4	1610	-	25.0	
8M-40S-12F	100.3	1	1610	85.0	25.0		8M-40S-21F	100.3	4	1610	-	25.0	
8M-45S-12F	113.0	1	2012	92.0	32.0		8M-45S-21F	113.0	1	2012	92.0	32.0	
8M-48S-12F	120.6	1	2012	103.0	32.0		8M-48S-21F	120.6	1	2012	103.0	32.0	
8M-50S-12F	125.7	1	2012	104.0	32.0		8M-50S-21F	125.7	1	2012	104.0	32.0	
8M-56S-12F	141.0	1	2012	104.0	32.0		8M-56S-21F	141.0	1	2012	111.0	32.0	
8M-60S-12F	151.2	1	2012	111.0	32.0		8M-60S-21F	151.2	1	2517	124.0	45.0	
8M-64S-12F	161.4	1	2012	111.0	32.0		8M-64S-21F	161.4	1	2517	124.0	45.0	
8M-75S-12	189.4	6	2012	111.0	32.0		8M-75S-21	189.4	6	2517	124.0	45.0	
8M-80S-12	202.1	6	2012	111.0	32.0		8M-80S-21	202.1	6	2517	124.0	45.0	
8M-90S-12	227.6	6	2012	111.0	32.0		8M-90S-21	227.6	10	2517	124.0	45.0	
						N.F.	8M-112S-21	283.6	10	2517	124.0	45.0	
							8M-140S-21	354.9	11	3020	150.0	51.0	

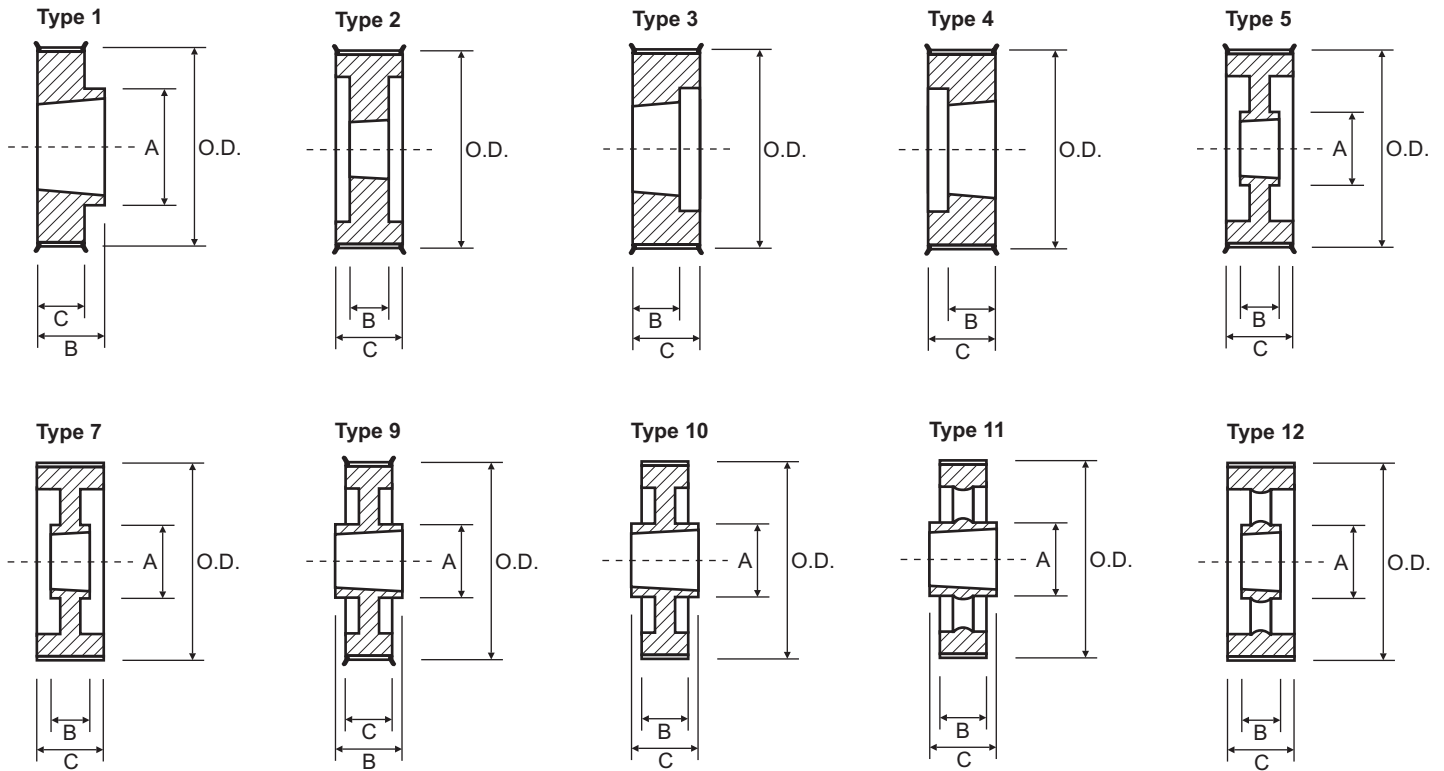
N.F. - No Flanges

8M Poly Chain GT Timing Pulleys



8M-36						8M-62							
Suit 36mm wide belt						Suit 62mm wide belt							
Part No.	O.D	Type	Bush	A	B	C = 45.0	Part No.	O.D	Type	Bush	A	B	C = 72.0
8M-25S-36F	62.1	1*	-	49.0	55.0	Contact Gates Australia for Material Specification Flanged	8M-30S-62F	74.8	1*	-	63.0	84.0	Contact Gates Australia for Material Specification Flanged
8M-28S-36F	69.7	4	1210	-	25.0		8M-32S-62F	79.9	1*	-	68.0	84.0	
8M-30S-36F	74.8	4	1610	-	25.0		8M-34S-62F	85.0	1*	-	69.0	84.0	
8M-32S-36F	79.9	4	1610	-	25.0		8M-36S-62F	90.1	1*	-	76.0	84.0	
8M-34S-36F	85.0	4	1610	-	25.0		8M-38S-62F	95.2	1*	-	78.0	84.0	
8M-36S-36F	90.1	4	1610	-	25.0		8M-40S-62F	100.3	4	2012	-	32.0	
8M-38S-36F	95.2	4	1610	-	25.0		8M-45S-62F	113.0	4	2012	-	32.0	
8M-40S-36F	100.3	4	2012	-	32.0		8M-48S-62F	120.6	4	2517	-	45.0	
8M-45S-36F	113.0	4	2012	-	32.0		8M-50S-62F	125.7	4	2517	-	45.0	
8M-48S-36F	120.6	4	2012	-	32.0		8M-56S-62F	141.0	2	2517	-	45.0	
8M-50S-36F	125.7	4	2012	-	32.0		8M-60S-62F	151.2	2	2517	-	45.0	
8M-56S-36F	141.0	4	2517	-	45.0		8M-64S-62F	161.4	2	2517	-	45.0	
8M-60S-36F	151.2	4	2517	-	45.0		8M-75S-62	189.4	8	3020	-	51.0	
8M-64S-36F	161.4	4	2517	-	45.0		8M-80S-62	202.1	8	3020	-	51.0	
8M-75S-36	189.4	6	3020	150.0	51.0		8M-90S-62	227.6	8	3020	-	51.0	
8M-80S-36	202.1	6	3020	150.0	51.0		8M-112S-62	283.6	7	3020	150.0	51.0	
8M-90S-36	227.6	10	3020	150.0	51.0		8M-140S-62	354.9	7	3525	198.0	65.0	
8M-112S-36	283.6	10	3020	150.0	51.0		8M-168S-62	426.2	12	3525	198.0	65.0	
8M-140S-36	354.9	11	3020	150.0	51.0	8M-192S-36	487.3	12	3525	198.0	65.0		
8M-168S-36	426.2	11	3525	198.0	65.0								
8M-192S-36	487.3	11	3525	198.0	65.0								

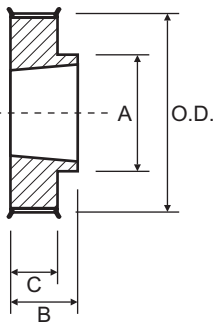
14M Poly Chain GT Timing Pulleys



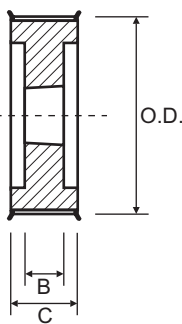
14M-20							14M-37						
Suit 20mm wide belt							Suit 37mm wide belt						
Part No.	O.D	Type	Bush	A	B	C = 33.0	Part No.	O.D	Type	Bush	A	B	C = 51.0
14M-28S-20F	122.0	4	2012	-	-	Contact Gates Australia for Material Specification	14M-28S-37F	122.0	3	2012	-	32.0	Contact Gates Australia for Material Specification
14M-30S-20F	130.9	4	2012	-	-		14M-30S-37F	130.9	2	2517	-	45.0	
14M-32S-20F	139.8	4	2012	-	-		14M-32S-37F	139.8	2	2517	-	45.0	
14M-34S-20F	148.7	1	2517	117.0	45.0		14M-34S-37F	148.7	2	2517	-	45.0	
14M-36S-20F	157.6	1	2517	117.0	45.0		14M-36S-37F	157.6	3	2517	-	45.0	
14M-38S-20F	166.5	1	2517	117.0	45.0		14M-38S-37F	166.5	3	2517	-	45.0	
14M-40S-20F	175.5	1	2517	117.0	45.0		14M-40S-37F	175.5	3	2517	-	45.0	
14M-44S-20F	193.3	1	3020	144.0	51.0		14M-44S-37F	193.3	4	3020	-	51.0	
14M-48S-20F	211.1	1	3020	144.0	51.0		14M-48S-37F	211.1	4	3020	-	51.0	
14M-50S-20F	220.0	1	3020	144.0	51.0		14M-50S-37F	220.0	4	3020	-	51.0	
14M-56S-20F	246.8	9	3020	144.0	51.0		14M-56S-37F	246.8	5	3020	144.0	51.0	
14M-60S-20	264.6	10	3020	159.0	51.0		14M-60S-37	264.6	7	3020	159.0	51.0	
14M-64S-20	282.4	10	3020	159.0	51.0		14M-64S-37	282.4	7	3020	159.0	51.0	
14M-72S-20	318.1	10	3020	159.0	51.0		14M-72S-37	318.1	7	3020	159.0	51.0	
14M-80S-20	353.7	10	3020	159.0	51.0		14M-80S-37	353.7	7	3020	159.0	51.0	
14M-90S-20	398.3	11	3020	159.0	51.0		14M-90S-37	398.3	12	3020	159.0	51.0	
14M-112S-20	496.3	11	3020	159.0	51.0		14M-112S-37	496.3	12	3020	159.0	51.0	
14M-140S-20	621.1	11	3020	159.0	51.0		14M-140S-37	621.1	11	3525	206.0	65.0	
						No Flanges	14M-168S-37	745.9	11	3525	206.0	65.0	No Flanges
							14M-192S-37	852.8	11	4030	215.0	76.0	

14M Poly Chain GT Timing Pulleys

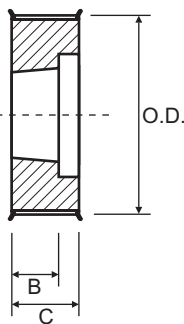
Type 1



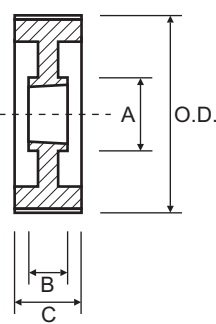
Type 2



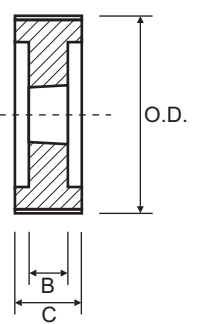
Type 3



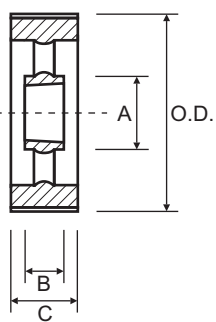
Type 7



Type 8



Type 12

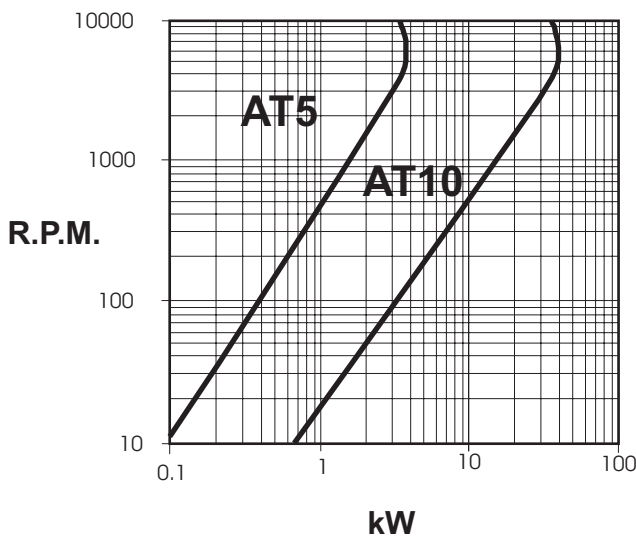


14M-68							14M-90						
Suit 68mm wide belt							Suit 90mm wide belt						
Part No.	O.D	Type	Bush	A	B	C = 84.0	Part No.	O.D	Type	Bush	A	B	C = 106.0
14M-28S-68F	122.0	1*	-	101.0	108.0	Contact Gates Australia for Material Specification	14M-28S-90F	122.0	1*	-	101.0	127.0	Contact Gates Australia for Material Specification
14M-30S-68F	130.9	1*	-	110.0	108.0		14M-30S-90F	130.9	1*	-	110.0	127.0	
14M-32S-68F	139.8	1*	-	116.0	108.0		14M-32S-90F	139.8	1*	-	116.0	127.0	
14M-34S-68F	148.7	1*	-	132.0	104.0		14M-34S-90F	148.7	1*	-	124.0	131.0	
14M-36S-68F	157.6	1*	-	131.0	104.0		14M-36S-90F	157.6	1*	-	131.0	136.0	
14M-38S-68F	166.5	1*	-	141.0	104.0		14M-38S-90F	166.5	1*	-	141.0	136.0	
14M-40S-68F	175.5	1*	-	156.0	104.0		14M-40S-90F	175.5	1*	-	156.0	136.0	
14M-44S-68F	193.3	2	3020	-	51.0		14M-44S-90F	193.3	1*	-	169.0	136.0	
14M-48S-68F	211.1	3	3020	-	51.0		14M-48S-90F	211.1	2	3525	-	66.0	
14M-50S-68F	220.0	2	3525	-	65.0		14M-50S-90F	220.0	2	3525	-	66.0	
14M-56S-68F	246.8	2	3525	-	65.0		14M-56S-90F	246.8	2	3525	-	66.0	
14M-60S-68	264.6	8	3525	-	65.0		14M-60S-90	264.6	8	3525	-	66.0	
14M-64S-68	282.4	8	3525	-	65.0		14M-64S-90	282.4	8	3525	-	66.0	
14M-72S-68	318.1	7	3525	178.0	65.0		14M-72S-90	318.1	7	3525	178.0	66.0	
14M-80S-68	353.7	7	3525	178.0	65.0		14M-80S-90	353.7	7	4030	215.0	76.0	
14M-90S-68	398.3	12	3525	178.0	65.0		14M-90S-90	398.3	7	4030	215.0	76.0	
14M-112S-68	496.3	12	3525	178.0	65.0		14M-112S-90	496.3	12	4535	215.0	90.0	
14M-140S-68	621.1	12	3525	206.0	65.0		14M-140S-90	621.1	12	4535	215.0	90.0	
14M-168S-68	745.9	12	3525	206.0	65.0		14M-168S-90	745.9	12	5040	267.0	102.0	
14M-192S-68	852.8	12	4030	215.0	76.0	14M-192S-90	852.8	12	5040	267.0	102.0		

Metric T & AT Pulley & Belt Drives



The metric T & AT series was created to meet industries need for polyurethane belts with a high price/quality ratio. They provide maximum power transmission combined with perfect tooth meshing. Capable of transmitting up to 60kW and speeds of 10,000 rpm. To select a drive it is necessary to know the driver and driven shaft speeds, the demand power, proposed centre distance and duty cycle. The chart below can be used to select the optimum belt size for a drive. For further information or help in selecting a drive contact Naismith Engineering.



Identifying a Pulley

To identify a T & AT metric timing pulley the following information must be known:

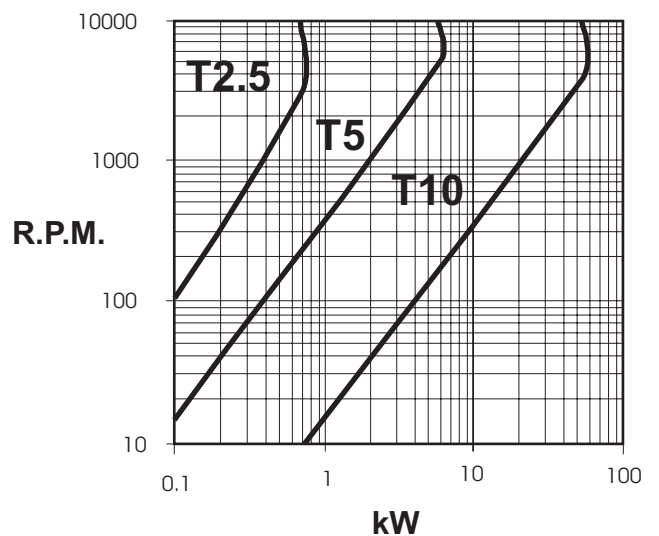
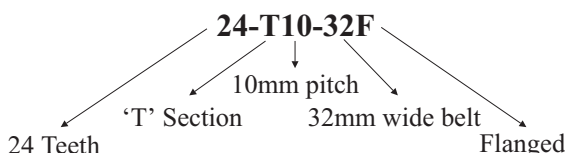
BORE - Naismith Engineering carries full stocks of pilot pulleys. As they are only available in aluminium taper bore is not recommended

PITCH - This is the distance from the centre of one tooth to the centre of the next tooth. Naismith Engineering stocks 3 pitch sizes of metric timing pulley:

T2.5	Pitch	2.5mm
AT5 & T5		5mm
AT10 & T10		10mm

TEETH - Number of teeth.

WIDTH - The tooth width allows for a clearance of 3mm to 6mm on the belt. The tooth width code is the belt size width measured in mm. So for a belt width of 50mm, the width code becomes 50. Refer to Page 40, 41, 42 & 48 for a listing of all sizes. **FLANGES** - Pulleys with a small number of teeth are fitted with flanges. The part number for flanged pulleys ends with 'F'. Refer to the pulley tables for more details.



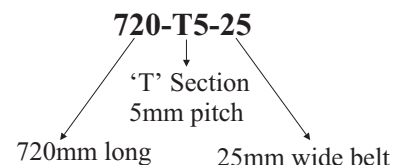
Identifying a belt

To identify a T & AT metric timing belt the following information must be known:

LENGTH - A belt pitch length is determined by the number of teeth multiplied by the pitch. – refer page 40, 41, 42 & 48. The length code for a belt is the pitch length in mm. So a T5 section (5mm pitch) belt with 49 teeth has a pitch length of 245mm and a code of 245-T5.

PITCH - This is the distance from the centre of one tooth to the centre of the next tooth. Naismith Engineering stocks 3 pitch sizes of metric timing belts.

WIDTH - The belt width measured in mm and gives the width code. So a belt width of 25mm, has a width code of 25. Refer to Page 40, 41, 42 & 48 for a listing of all sizes.



Metric Timing Belts T2.5 & T5



	Pitch (mm)	T	B
T2.5	2.50	0.70	1.30
T5	5.00	1.20	2.20

Code & Pitch	Number of Teeth	Pitch Length mm
120-T2.5	48	120.0
145-T2.5	58	145.0
160-T2.5	64	160.0
177.5-T2.5	71	177.5
182.5-T2.5	73	182.5
185-T2.5	74	185.0
200-T2.5	80	200.0
230-T2.5	92	230.0
245-T2.5	98	245.0
265-T2.5	106	265.0
285-T2.5	114	285.0
305-T2.5	122	305.0
317.5-T2.5	127	317.5
330-T2.5	132	330.0
380-T2.5	152	380.0
395-T2.5	158	395.0
420-T2.5	168	420.0
480-T2.5	192	480.0
500-T2.5	200	500.0
540-T2.5	216	540.0
600-T2.5	240	600.0
620-T2.5	248	620.0
650-T2.5	260	650.0
680-T2.5	272	680.0
700-T2.5	280	700.0
780-T2.5	312	780.0
880-T2.5	352	880.0
915-T2.5	366	915.0
950-T2.5	380	950.0
1185-T2.5	474	1185.0

Standard widths of:-
 6mm Code = Length-T2.5-6
 Off standard widths are available on request.

Code & Pitch	Number of Teeth	Pitch Length mm
150-T5	30	150.0
165-T5	33	165.0
180-T5	36	180.0
185-T5	37	185.0
200-T5	40	200.0
210-T5	42	210.0
215-T5	43	215.0
220-T5	44	220.0
225-T5	45	225.0
245-T5	49	245.0
250-T5	50	250.0
255-T5	51	255.0
260-T5	52	260.0
270-T5	54	270.0
275-T5	55	275.0
280-T5	56	280.0
295-T5	59	295.0
305-T5	61	305.0
315-T5	63	315.0
330-T5	66	330.0
340-T5	68	340.0
350-T5	70	350.0
355-T5	71	355.0
365-T5	73	365.0
390-T5	78	390.0
400-T5	80	400.0
410-T5	82	410.0
420-T5	84	420.0
445-T5	89	445.0
450-T5	90	450.0
455-T5	91	455.0
460-T5	92	460.0
475-T5	95	475.0
480-T5	96	480.0
500-T5	100	500.0
510-T5	102	510.0
525-T5	105	525.0
545-T5	109	545.0
550-T5	110	550.0
560-T5	112	560.0

Code & Pitch	Number of Teeth	Pitch Length mm
575-T5	115	575
590-T5	118	590
610-T5	122	610
620-T5	124	620
630-T5	126	630
640-T5	128	640
650-T5	130	650
660-T5	132	660
675-T5	135	675
690-T5	138	690
700-T5	140	700
720-T5	144	720
750-T5	150	750
765-T5	153	765
780-T5	156	780
815-T5	163	815
830-T5	166	830
840-T5	168	840
860-T5	172	860
885-T5	177	885
900-T5	180	900
940-T5	188	940
990-T5	198	990
1075-T5	215	1075
1100-T5	220	1100
1160-T5	232	1160
1200-T5	240	1200
1215-T5	243	1215
1275-T5	255	1275
1280-T5	256	1280
1315-T5	263	1315
1355-T5	271	1355
1380-T5	276	1380
1955-T5	391	1955

Standard widths of:-
 10mm Code = Length-T5-10
 16mm Code = Length-T5-16
 25mm Code = Length-T5-25
 Off standard widths are available on request.
 Long Length up to 32mm wide is available.

Metric Timing Belts T10



	Pitch (mm)	T	B
T10	10.00	2.50	4.50

Code & Pitch	Number of Teeth	Pitch Length mm
260-T10	26	260.0
340-T10	34	340.0
370-T10	37	370.0
390-T10	39	390.0
400-T10	40	400.0
410-T10	41	410.0
440-T10	44	440.0
450-T10	45	450.0
480-T10	48	480.0
500-T10	50	500.0
530-T10	53	530.0
560-T10	56	560.0
600-T10	60	600.0
610-T10	61	610.0
630-T10	63	630.0
660-T10	66	660.0
680-T10	68	680.0
690-T10	69	690.0
700-T10	70	700.0
720-T10	72	720.0
730-T10	73	730.0
750-T10	75	750.0
780-T10	78	780.0
810-T10	81	810.0
840-T10	84	840.0
880-T10	88	880.0
890-T10	89	890.0
900-T10	90	900.0
910-T10	91	910.0
920-T10	92	920.0
960-T10	96	960.0
970-T10	97	970.0
980-T10	98	980.0

Code & Pitch	Number of Teeth	Pitch Length mm
1010-T10	101	1010.0
1080-T10	108	1080.0
1100-T10	110	1100.0
1110-T10	111	1110.0
1140-T10	114	1140.0
1150-T10	115	1150.0
1210-T10	121	1210.0
1240-T10	124	1240.0
1250-T10	125	1250.0
1300-T10	130	1300.0
1320-T10	132	1320.0
1350-T10	135	1350.0
1390-T10	139	1390.0
1400-T10	140	1400.0
1420-T10	142	1420.0
1450-T10	145	1450.0
1460-T10	146	1460.0
1500-T10	150	1500.0
1560-T10	156	1560.0
1610-T10	161	1610.0
1750-T10	175	1750.0
1780-T10	178	1780.0
1880-T10	188	1880.0
1960-T10	196	1960.0
2250-T10	225	2250.0

Standard widths of:-
 16mm Code = Length-T10-16
 25mm Code = Length-T10-25
 32mm Code = Length-T10-32
 50mm Code = Length-T10-50
 Off standard widths are available on request.
 Long Length up to 100mm wide is available.

Metric Double Sided Timing Belts T5 & T10



	Pitch (mm)	T	B
T5	5.00	1.20	3.30
T10	10.00	2.50	6.70

Code & Pitch	Number of Teeth	Pitch Length mm
260-T5DL	52	260.0
410-T5DL	82	410.0
460-T5DL	92	460.0
480-T5DL	96	480.0
515-T5DL	103	515.0
590-T5DL	118	590.0
620-T5DL	124	620.0
750-T5DL	150	750.0
815-T5DL	163	815.0
860-T5DL	172	860.0
940-T5DL	188	940.0
1100-T5DL	220	1100.0

Standard widths of:-

10mm Code = Length-T5-10

16mm Code = Length-T5-16

25mm Code = Length-T5-25

Off standard widths are available on request.

Code & Pitch	Number of Teeth	Pitch Length mm
260-T10DL	26	260.0
530-T10DL	53	530.0
600-T10DL	60	600.0
630-T10DL	63	630.0
660-T10DL	66	660.0
720-T10DL	72	720.0
840-T10DL	84	840.0
920-T10DL	92	920.0
980-T10DL	98	980.0
1210-T10DL	121	1210.0
1240-T10DL	124	1240.0
1250-T10DL	125	1250.0
1320-T10DL	132	1320.0
1350-T10DL	135	1350.0
1420-T10DL	142	1420.0
1610-T10DL	161	1610.0
1880-T10DL	188	1880.0

Standard widths of:-

16mm Code = Length-T10-16

25mm Code = Length-T10-25

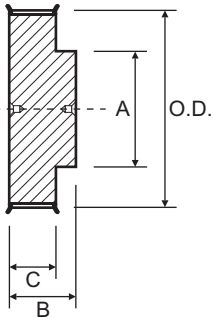
32mm Code = Length-T10-32

50mm Code = Length-T10-50

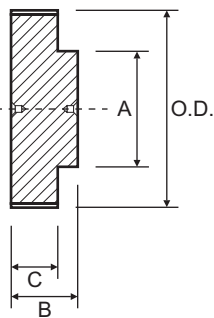
Off standard widths are available on request.

T2.5 Metric Timing Pulleys

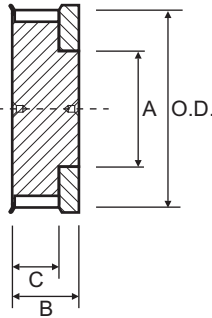
Type 1



Type 7



Type 8



T2.5-6

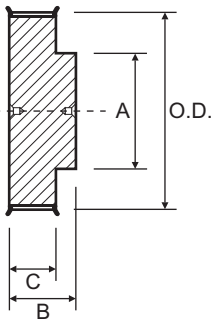
Suit 6mm wide belt

Part No.	O.D.	Type	A	B	C = 10.0
12-T2.5-6F	9.0	8	6.5	16.0	Aluminium Flanged
14-T2.5-6F	10.6	8	8.5	16.0	
15-T2.5-6F	11.4	8	10.0	16.0	
16-T2.5-6F.	12.2	1	9.0	16.0	
18-T2.5-6F	13.8	1	9.0	16.0	
19-T2.5-6F	14.6	1	9.0	16.0	
20-T2.5-6F	15.4	1	11.0	16.0	
22-T2.5-6F	17.0	1	11.0	16.0	
24-T2.5-6F	18.6	1	12.0	16.0	
25-T2.5-6F	19.4	1	13.0	16.0	
26-T2.5-6F	20.2	1	14.0	16.0	
28-T2.5-6F	21.8	1	14.0	16.0	
30-T2.5-6F	23.4	1	16.0	16.0	
32-T2.5-6F	25.0	1	16.0	16.0	
36-T2.5-6F	28.1	1	20.0	16.0	
40-T2.5-6F	31.3	1	22.0	16.0	
44-T2.5-6F	34.5	1	24.0	16.0	
48-T2.5-6	37.7	7	28.0	16.0	
60-T2.5-6	47.3	7	34.0	16.0	

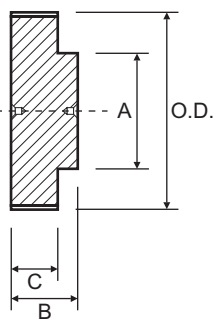
N.F. - No Flanges

T5 Metric Timing Pulleys

Type 1



Type 7

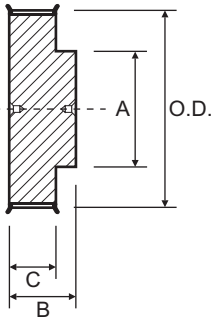


T5-10					T5-16						
Suit 10mm wide belt					Suit 16mm wide belt						
Part No.	O.D.	Type	A	B	C = 15.0	Part No.	O.D.	Type	A	B	C = 21.0
10-T5-10F	15.1	1	8.0	21.0	Aluminium Flanged	10-T5-16F	15.1	1	8.0	27.0	Aluminium Flanged
12-T5-10F	18.3	1	11.0	21.0		12-T5-16F	18.3	1	11.0	27.0	
14-T5-10F	21.5	1	14.0	21.0		14-T5-16F	21.5	1	14.0	27.0	
15-T5-10F	23.1	1	16.0	21.0		15-T5-16F	23.1	1	16.0	27.0	
16-T5-10F	24.6	1	18.0	21.0		16-T5-16F	24.6	1	18.0	27.0	
18-T5-10F	27.8	1	20.0	21.0		18-T5-16F	27.8	1	20.0	27.0	
19-T5-10F	29.4	1	22.0	21.0		19-T5-16F	29.4	1	22.0	27.0	
20-T5-10F	31.0	1	23.0	21.0		20-T5-16F	31.0	1	23.0	27.0	
22-T5-10F	34.3	1	24.0	21.0		22-T5-16F	34.3	1	24.0	27.0	
24-T5-10F	37.4	1	26.0	21.0		24-T5-16F	37.4	1	26.0	27.0	
25-T5-10F	39.0	1	26.0	21.0		25-T5-16F	39.0	1	26.0	27.0	
26-T5-10F	40.6	1	26.0	21.0		26-T5-16F	40.6	1	26.0	27.0	
27-T5-10F	42.2	1	30.0	21.0		27-T5-16F	42.2	1	30.0	27.0	
28-T5-10F	43.8	1	32.0	21.0		28-T5-16F	43.8	1	32.0	27.0	
30-T5-10F	47.0	1	34.0	21.0		30-T5-16F	47.0	1	34.0	27.0	
32-T5-10F	50.1	1	38.0	21.0		32-T5-16F	50.1	1	38.0	27.0	
36-T5-10F	56.5	1	38.0	21.0		36-T5-16F	56.5	1	38.0	27.0	
40-T5-10F	62.9	1	40.0	21.0		40-T5-16F	62.9	1	40.0	27.0	
42-T5-10F	66.0	1	40.0	21.0		42-T5-16F	66.0	1	40.0	27.0	
44-T5-10	69.2	7	45.0	21.0		N.F.	44-T5-16	69.2	7	45.0	
48-T5-10	75.6	7	50.0	21.0	48-T5-16		75.6	7	50.0	27.0	
60-T5-10	94.7	7	65.0	21.0	60-T5-16		94.7	7	65.0	27.0	

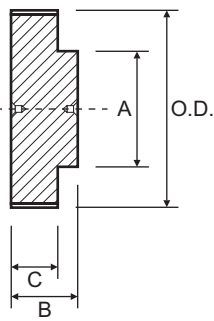
N.F. - No Flanges

T5 Metric Timing Pulleys

Type 1



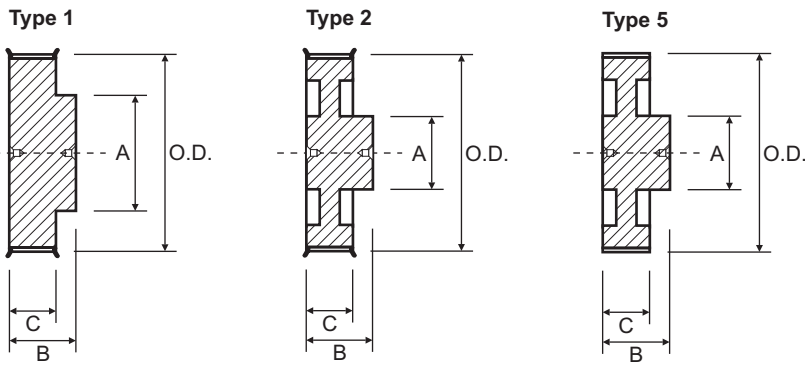
Type 7



T5-25					
Suit 25mm wide belt					
Part No.	O.D.	Type	A	B	C = 30.0
10-T5-25F	15.1	1	8.0	36.0	Aluminium Flanged
12-T5-25F	18.3	1	11.0	36.0	
14-T5-25F	21.5	1	14.0	36.0	
15-T5-25F	23.1	1	16.0	36.0	
16-T5-25F	24.6	1	18.0	36.0	
18-T5-25F	27.8	1	20.0	36.0	
19-T5-25F	29.4	1	22.0	36.0	
20-T5-25F	31.0	1	23.0	36.0	
22-T5-25F	34.3	1	24.0	36.0	
24-T5-25F	37.4	1	26.0	36.0	
25-T5-25F	39.0	1	26.0	36.0	
26-T5-25F	40.6	1	26.0	36.0	
27-T5-25F	42.2	1	30.0	36.0	
28-T5-25F	43.8	1	32.0	36.0	
30-T5-25F	47.0	1	34.0	36.0	
32-T5-25F	50.1	1	38.0	36.0	
36-T5-25F	56.5	1	38.0	36.0	
40-T5-25F	62.9	1	40.0	36.0	
42-T5-25F	66.0	1	40.0	36.0	
44-T5-25	69.2	7	45.0	36.0	
48-T5-25	75.6	7	50.0	36.0	
60-T5-25	94.7	7	65.0	36.0	

N.F. - No Flanges

T10 Metric Timing Pulleys

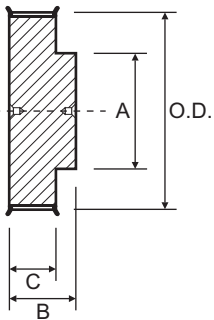


T10-16					T10-25								
Suit 16mm wide belt					Suit 25mm wide belt								
Part No.	O.D.	Type	A	B	C = 21.0	Part No.	O.D.	Type	A	B	C = 30.0		
12-T10-16F	36.4	1	28.0	31.0	Aluminium Flanged	12-T10-25F	36.4	1	28.0	40.0	Aluminium Flanged		
14-T10-16F	42.7	1	32.0	31.0		14-T10-25F	42.7	1	32.0	40.0			
15-T10-16F	45.9	1	32.0	31.0		15-T10-25F	45.9	1	32.0	40.0			
16-T10-16F	49.1	1	35.0	31.0		16-T10-25F	49.1	1	35.0	40.0			
18-T10-16F	55.5	1	40.0	31.0		18-T10-25F	55.5	1	40.0	40.0			
19-T10-16F	58.6	1	44.0	31.0		19-T10-25F	58.6	1	44.0	40.0			
20-T10-16F	61.8	1	46.0	31.0		20-T10-25F	61.8	1	46.0	40.0			
22-T10-16F	68.2	1	52.0	31.0		22-T10-25F	68.2	1	52.0	40.0			
24-T10-16F	74.6	1	58.0	31.0		24-T10-25F	74.6	1	58.0	40.0			
25-T10-16F	77.7	1	60.0	31.0		25-T10-25F	77.7	1	60.0	40.0			
26-T10-16F	80.9	1	60.0	31.0		26-T10-25F	80.9	1	60.0	40.0			
27-T10-16F	84.1	1	60.0	31.0		27-T10-25F	84.1	1	60.0	40.0			
28-T10-16F	87.3	1	60.0	31.0		28-T10-25F	87.3	1	60.0	40.0			
30-T10-16F	93.7	1	60.0	31.0		30-T10-25F	93.7	1	60.0	40.0			
32-T10-16F	100.0	1	65.0	31.0		32-T10-25F	100.0	1	65.0	40.0			
36-T10-16F	112.8	1	70.0	31.0		36-T10-25F	112.8	1	70.0	40.0			
40-T10-16F	125.5	2	80.0	31.0		40-T10-25F	125.5	2	80.0	40.0			
44-T10-16	138.2	5	88.0	31.0		N.F.	44-T10-25	138.2	5	88.0		40.0	N.F.
48-T10-16	151.0	5	95.0	31.0			48-T10-25	151.0	5	95.0		40.0	
60-T10-16	189.1	5	110.0	31.0			60-T10-25	189.1	5	110.0		40.0	

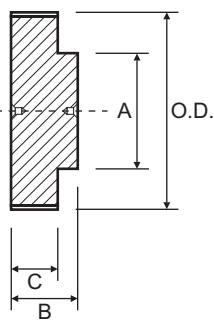
N.F. - No Flanges

T10 Metric Timing Pulleys

Type 1



Type 7



T10-32						T10-50					
Suit 32mm wide belt						Suit 50mm wide belt					
Part No.	O.D.	Type	A	B	C = 37.0	Part No.	O.D.	Type	A	B	C = 56.0
18-T10-32F	55.5	1	40.0	47.0	Aluminium Flanged	18-T10-50F	55.5	1	40.0	66.0	Aluminium Flanged
19-T10-32F	58.6	1	44.0	47.0		19-T10-50F	58.6	1	44.0	66.0	
20-T10-32F	61.8	1	46.0	47.0		20-T10-50F	61.8	1	46.0	66.0	
22-T10-32F	68.2	1	52.0	47.0		22-T10-50F	68.2	1	52.0	66.0	
24-T10-32F	74.6	1	58.0	47.0		24-T10-50F	74.6	1	58.0	66.0	
25-T10-32F	77.7	1	60.0	47.0		25-T10-50F	77.7	1	60.0	66.0	
26-T10-32F	80.9	1	60.0	47.0		26-T10-50F	80.9	1	60.0	66.0	
27-T10-32F	84.1	1	60.0	47.0		27-T10-50F	84.1	1	60.0	66.0	
28-T10-32F	87.3	1	60.0	47.0		28-T10-50F	87.3	1	60.0	66.0	
30-T10-32F	93.7	1	60.0	47.0		30-T10-50F	93.7	1	60.0	66.0	
32-T10-32F	100.0	1	65.0	47.0		32-T10-50F	100.0	1	65.0	66.0	
36-T10-32F	112.8	1	70.0	47.0		36-T10-50F	112.8	1	70.0	66.0	
40-T10-32F	125.5	2	80.0	47.0		40-T10-50F	125.5	2	80.0	66.0	
44-T10-32	138.2	5	88.0	47.0		44-T10-50	138.2	5	88.0	66.0	
48-T10-32	151.0	5	95.0	47.0	48-T10-50	151.0	5	95.0	66.0		
60-T10-32	189.1	5	110.0	47.0	60-T10-50	189.1	5	110.0	66.0		

N.F. - No Flanges

Metric Timing Belts AT5 & AT10



	Pitch (mm)	T	B
AT5	5.00	1.20	2.50
AT10	10.00	2.70	4.50

Code & Pitch	Number of Teeth	Pitch Length mm
225-AT5	45	225.0
255-AT5	51	255.0
275-AT5	55	275.0
280-AT5	56	280.0
300-AT5	60	300.0
330-AT5	66	330.0
340-AT5	68	340.0
375-AT5	75	375.0
390-AT5	78	390.0
420-AT5	84	420.0
450-AT5	90	450.0
455-AT5	91	455.0
500-AT5	100	500.0
545-AT5	109	545.0
600-AT5	120	600.0
610-AT5	122	610.0
630-AT5	126	630.0
660-AT5	132	660.0
710-AT5	142	710.0
720-AT5	144	720.0
750-AT5	150	750.0
780-AT5	156	780.0
825-AT5	165	825.0
860-AT5	172	860.0
975-AT5	195	975.0
1050-AT5	210	1050.0
1125-AT5	225	1125.0
1500-AT5	300	1500.0
2000-AT5	400	2000.0

Standard widths of:-
 10mm Code = Length-AT5-10
 16mm Code = Length-AT5-16
 25mm Code = Length-AT5-25
 Off standard widths are available on request.
 Long Length up to 32mm wide is available.

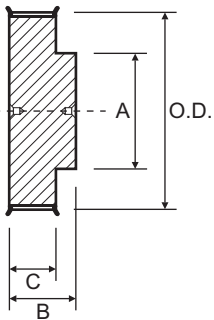
Code & Pitch	Number of Teeth	Pitch Length mm
500-AT10	50	500.0
560-AT10	56	560.0
600-AT10	60	600.0
610-AT10	61	610.0
660-AT10	66	660.0
700-AT10	70	700.0
730-AT10	73	730.0
780-AT10	78	780.0
800-AT10	80	800.0
810-AT10	81	810.0
840-AT10	84	840.0
880-AT10	88	880.0
890-AT10	89	890.0
920-AT10	92	920.0
960-AT10	96	960.0
980-AT10	98	980.0
1000-AT10	100	1000.0
1010-AT10	101	1010.0
1050-AT10	105	1050.0
1080-AT10	108	1080.0
1100-AT10	110	1100.0
1150-AT10	115	1150.0
1200-AT10	120	1200.0
1210-AT10	121	1210.0
1220-AT10	122	1220.0

Code & Pitch	Number of Teeth	Pitch Length mm
1250-AT10	125	1250.0
1280-AT10	128	1280.0
1300-AT10	130	1300.0
1320-AT10	132	1320.0
1350-AT10	135	1350.0
1360-AT10	136	1360.0
1400-AT10	140	1400.0
1420-AT10	142	1420.0
1480-AT10	148	1480.0
1500-AT10	150	1500.0
1600-AT10	160	1600.0
1700-AT10	170	1700.0
1720-AT10	172	1720.0
1800-AT10	180	1800.0
1860-AT10	186	1860.0
1940-AT10	194	1940.0

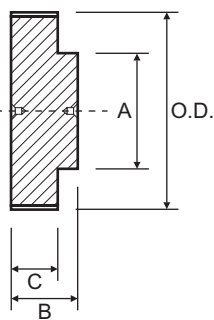
Standard widths of:-
 16mm Code = Length-AT10-16
 25mm Code = Length-AT10-25
 32mm Code = Length-AT10-32
 50mm Code = Length-AT10-50
 Off standard widths are available on request.
 Long Length up to 50mm wide is available.

AT5 Metric Timing Pulleys

Type 1



Type 7

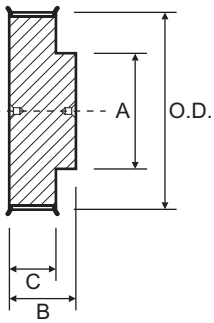


AT5-10						AT5-16					
Suit 10mm wide belt						Suit 16mm wide belt					
Part No.	O.D.	Type	A	B	C = 15.0	Part No.	O.D.	Type	A	B	C = 21.0
12-AT5-10F	17.9	1	11.0	21.0	Aluminium Flanged	12-AT5-16F	17.9	1	11.0	27.0	Aluminium Flanged
14-AT5-10F	21.1	1	14.0	21.0		14-AT5-16F	21.1	1	14.0	27.0	
15-AT5-10F	22.7	1	16.0	21.0		15-AT5-16F	22.7	1	16.0	27.0	
16-AT5-10F	24.2	1	18.0	21.0		16-AT5-16F	24.2	1	18.0	27.0	
18-AT5-10F	27.4	1	20.0	21.0		18-AT5-16F	27.4	1	20.0	27.0	
19-AT5-10F	29.0	1	22.0	21.0		19-AT5-16F	29.0	1	22.0	27.0	
20-AT5-10F	30.6	1	23.0	21.0		20-AT5-16F	30.6	1	23.0	27.0	
22-AT5-10F	34.9	1	24.0	21.0		22-AT5-16F	34.9	1	24.0	27.0	
24-AT5-10F	37.0	1	26.0	21.0		24-AT5-16F	37.0	1	26.0	27.0	
25-AT5-10F	38.6	1	26.0	21.0		25-AT5-16F	38.6	1	26.0	27.0	
26-AT5-10F	40.2	1	26.0	21.0		26-AT5-16F	40.2	1	26.0	27.0	
27-AT5-10F	41.8	1	30.0	21.0		27-AT5-16F	41.8	1	30.0	27.0	
28-AT5-10F	43.4	1	32.0	21.0		28-AT5-16F	43.4	1	32.0	27.0	
30-AT5-10F	46.6	1	34.0	21.0		30-AT5-16F	46.6	1	34.0	27.0	
32-AT5-10F	49.7	1	38.0	21.0		32-AT5-16F	49.7	1	38.0	27.0	
36-AT5-10F	56.1	1	38.0	21.0		36-AT5-16F	56.1	1	38.0	27.0	
40-AT5-10F	62.5	1	40.0	21.0		40-AT5-16F	62.5	1	40.0	27.0	
42-AT5-10F	65.6	1	40.0	21.0		42-AT5-16F	65.6	1	40.0	27.0	
44-AT5-10	68.8	7	45.0	21.0		44-AT5-16	68.8	7	45.0	27.0	
48-AT5-10	75.2	7	50.0	21.0		48-AT5-16	75.2	7	50.0	27.0	
60-AT5-10	94.3	7	65.0	21.0	60-AT5-16	94.3	7	65.0	27.0		

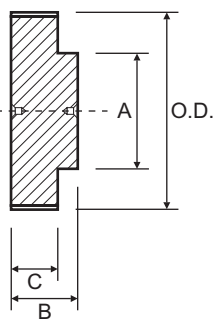
N.F. - No Flanges

AT5 Metric Timing Pulleys

Type 1



Type 7



AT5-25

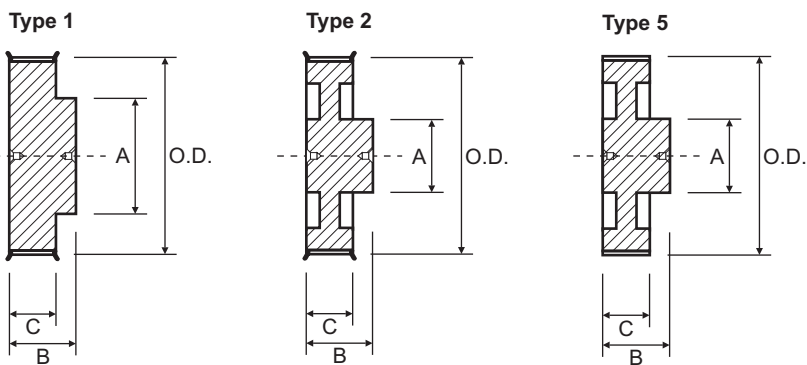
Suit 25mm wide belt

Part No. O.D. Type A B C = 30.0

Part No.	O.D.	Type	A	B	C = 30.0
12-AT5-25F	17.9	1	11.0	36.0	Aluminium Flanged
14-AT5-25F	21.1	1	14.0	36.0	
15-AT5-25F	22.7	1	16.0	36.0	
16-AT5-25F	24.2	1	18.0	36.0	
18-AT5-25F	27.4	1	20.0	36.0	
19-AT5-25F	29.0	1	22.0	36.0	
20-AT5-25F	30.6	1	23.0	36.0	
22-AT5-25F	34.9	1	24.0	36.0	
24-AT5-25F	37.0	1	26.0	36.0	
25-AT5-25F	38.6	1	26.0	36.0	
26-AT5-25F	40.2	1	26.0	36.0	
27-AT5-25F	41.8	1	30.0	36.0	
28-AT5-25F	43.4	1	32.0	36.0	
30-AT5-25F	46.6	1	34.0	36.0	
32-AT5-25F	49.7	1	38.0	36.0	
36-AT5-25F	56.1	1	38.0	36.0	
40-AT5-25F	62.5	1	40.0	36.0	
42-AT5-25F	65.6	1	40.0	36.0	
44-AT5-25	68.8	7	45.0	36.0	N.F.
48-AT5-25	75.2	7	50.0	36.0	
60-AT5-25	94.3	7	65.0	36.0	

N.F. - No Flanges

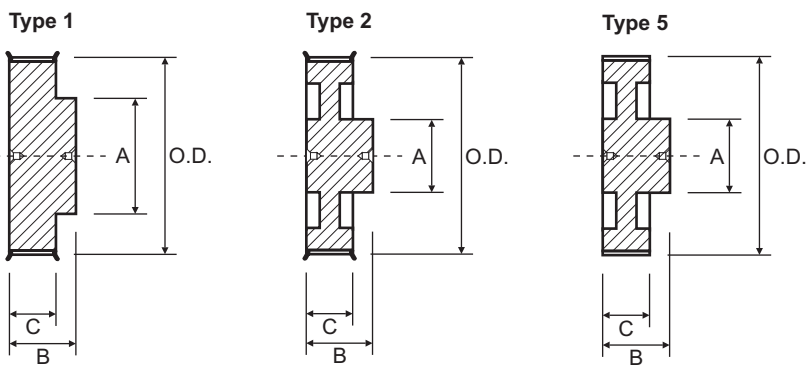
AT10 Metric Timing Pulleys



AT10-16						AT10-25					
Suit 16mm wide belt						Suit 25mm wide belt					
Part No.	O.D.	Type	A	B	C = 21.0	Part No.	O.D.	Type	A	B	C = 30.0
15-AT10-16F	45.9	1	32.0	31.0	Aluminium Flanged	15-AT10-25F	45.9	1	32.0	40.0	Aluminium Flanged
16-AT10-16F	49.1	1	35.0	31.0		16-AT10-25F	49.1	1	35.0	40.0	
18-AT10-16F	55.5	1	40.0	31.0		18-AT10-25F	55.5	1	40.0	40.0	
19-AT10-16F	58.6	1	44.0	31.0		19-AT10-25F	58.6	1	44.0	40.0	
20-AT10-16F	61.8	1	46.0	31.0		20-AT10-25F	61.8	1	46.0	40.0	
22-AT10-16F	68.2	1	52.0	31.0		22-AT10-25F	68.2	1	52.0	40.0	
24-AT10-16F	74.6	1	58.0	31.0		24-AT10-25F	74.6	1	58.0	40.0	
25-AT10-16F	77.7	1	60.0	31.0		25-AT10-25F	77.7	1	60.0	40.0	
26-AT10-16F	80.9	1	60.0	31.0		26-AT10-25F	80.9	1	60.0	40.0	
27-AT10-16F	84.1	1	60.0	31.0		27-AT10-25F	84.1	1	60.0	40.0	
28-AT10-16F	87.3	1	60.0	31.0		28-AT10-25F	87.3	1	60.0	40.0	
30-AT10-16F	93.7	1	60.0	31.0		30-AT10-25F	93.7	1	60.0	40.0	
32-AT10-16F	100.0	1	65.0	31.0		32-AT10-25F	100.0	1	65.0	40.0	
36-AT10-16F	112.8	1	70.0	31.0		36-AT10-25F	112.8	1	70.0	40.0	
40-AT10-16F	125.5	2	80.0	31.0	40-AT10-25F	125.5	2	80.0	40.0		
44-AT10-16	138.2	5	88.0	31.0	44-AT10-25	138.2	5	88.0	40.0		
48-AT10-16	151.0	5	95.0	31.0	48-AT10-25	151.0	5	95.0	40.0		
60-AT10-16	189.1	5	110.0	31.0	N.F.	60-AT10-25	189.1	5	110.0	40.0	

N.F. - No Flanges

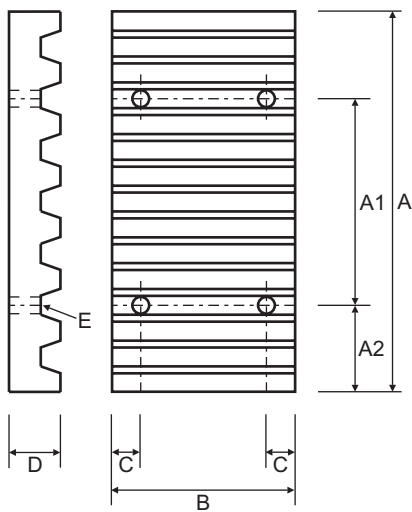
AT10 Metric Timing Pulleys



AT10-32					AT10-50						
Suit 32mm wide belt					Suit 50mm wide belt						
Part No.	O.D.	Type	A	B	C = 37.0	Part No.	O.D.	Type	A	B	C = 56.0
18-AT10-32F	55.5	1	40.0	47.0	Aluminium Flanged	18-AT10-50F	55.5	1	40.0	66.0	Aluminium Flanged
19-AT10-32F	58.6	1	44.0	47.0		19-AT10-50F	58.6	1	44.0	66.0	
20-AT10-32F	61.8	1	46.0	47.0		20-AT10-50F	61.8	1	46.0	66.0	
22-AT10-32F	68.2	1	52.0	47.0		22-AT10-50F	68.2	1	52.0	66.0	
24-AT10-32F	74.6	1	58.0	47.0		24-AT10-50F	74.6	1	58.0	66.0	
25-AT10-32F	77.7	1	60.0	47.0		25-AT10-50F	77.7	1	60.0	66.0	
26-AT10-32F	80.9	1	60.0	47.0		26-AT10-32F	80.9	1	60.0	66.0	
27-AT10-32F	84.1	1	60.0	47.0		27-AT10-50F	84.1	1	60.0	66.0	
28-AT10-32F	87.3	1	60.0	47.0		28-AT10-50F	87.3	1	60.0	66.0	
30-AT10-32F	93.7	1	60.0	47.0		30-AT10-50F	93.7	1	60.0	66.0	
32-AT10-32F	100.0	1	65.0	47.0		32-AT10-50F	100.0	1	65.0	66.0	
36-AT10-32F	112.8	1	70.0	47.0		36-AT10-50F	112.8	1	70.0	66.0	
40-AT10-32F	125.5	2	80.0	47.0		40-AT10-50F	125.5	2	80.0	66.0	
44-AT10-32	138.2	5	88.0	47.0		N.F.	44-AT10-50	138.2	5	88.0	
48-AT10-32	151.0	5	95.0	47.0	48-AT10-50		151.0	5	95.0	66.0	
60-AT10-32	189.1	5	110.0	47.0	60-AT10-50		189.1	5	110.0	66.0	

N.F. - No Flanges

Timing Belt Clamping Plates



Ideal for applications where the belt must be firmly held in one spot. Perfect for use with long length belting. Naismith Engineering keep a large range of Clamp Plates on the shelf.

Classical	Part No	A	A1	A2	B	C	D	E
XL	PIA-XL025	42.5	25.4	8.6	25.4	6.0	8.0	5.5
	PIA-XL037	42.5	25.4	8.6	28.5	6.0	8.0	5.5
L	PIA-L050	76.6	47.6	14.5	39.1	8.0	15.0	9.0
	PIA-L075	76.6	47.6	14.5	45.0	8.0	15.0	9.0
	PIA-L100	76.6	47.6	14.5	51.5	8.0	15.0	9.0
H	PIA-H050	106.9	63.5	21.7	45.0	10.0	22.0	11.0
	PIA-H075	106.9	63.5	21.7	51.0	10.0	22.0	11.0
	PIA-H100	106.9	63.5	21.7	57.4	10.0	22.0	11.0

HTD	Part No	A	A1	A2	B	C	D	E
5M	PIA-5M09	41.8	25.0	8.4	28.0	6.0	8.0	5.5
	PIA-5M15	41.8	25.0	8.4	34.0	6.0	8.0	5.5
	PIA-5M25	41.8	25.0	8.4	44.0	6.0	8.0	5.5
8M	PIA-8M20	66.0	40.0	13.0	45.0	8.0	15.0	9.0
	PIA-8M30	66.0	40.0	13.0	55.0	8.0	15.0	9.0
	PIA-8M50	66.0	40.0	13.0	75.0	8.0	15.0	9.0
	PIA-8M85	66.0	40.0	13.0	110.0	8.0	15.0	9.0
14M	PIA-14M40	116.0	70.0	23.0	71.0	10.0	22.0	11.0
	PIA-14M55	116.0	70.0	23.0	86.0	10.0	22.0	11.0
	PIA-14M85	116.0	70.0	23.0	116.0	10.0	22.0	11.0
	PIA-14M115	116.0	70.0	23.0	146.0	10.0	22.0	11.0
	PIA-14M170	116.0	70.0	23.0	201.0	10.0	22.0	11.0

Metric	Part No	A	A1	A2	B	C	D	E
T5	PIA-T5/10	41.8	25.0	8.4	29.0	6.0	8.0	5.5
	PIA-T5/16	41.8	25.0	8.4	35.0	6.0	8.0	5.5
	PIA-T5/25	41.8	25.0	8.4	44.0	6.0	8.0	5.5
T10	PIA-T10/16	80.0	50.0	15.0	41.0	8.0	15.0	9.0
	PIA-T10/25	80.0	50.0	15.0	50.0	8.0	15.0	9.0
	PIA-T10/32	80.0	50.0	15.0	57.0	8.0	15.0	9.0
	PIA-T10/50	80.0	50.0	15.0	75.0	8.0	15.0	9.0
AT5	PIA-AT5/10	41.8	25.0	8.4	29.0	6.0	8.0	5.5
	PIA-AT5/16	41.8	25.0	8.4	35.0	6.0	8.0	5.5
	PIA-AT5/25	41.8	25.0	8.4	44.0	6.0	8.0	5.5
AT10	PIA-AT10/16	80.0	50.0	15.0	41.0	8.0	15.0	9.0
	PIA-AT10/25	80.0	50.0	15.0	50.0	8.0	15.0	9.0
	PIA-AT10/32	80.0	50.0	15.0	57.0	8.0	15.0	9.0
	PIA-AT10/50	80.0	50.0	15.0	75.0	8.0	15.0	9.0



Taper Bushes

Taper bushes are designed to give the following:-

1. Easy assembly.
2. Rapid dismantling of the pulley and other transmission equipment.
3. No special tool requirement except hexagonal allen key.

A large range of bores are available off the shelf which ensures that an immediate assembly can be made, thus avoiding costly factory down-time.

The bushes are machined with standard keyways. This, in addition to clamping screws is sufficient to meet the required torque.

Part No.		Stock Bore Sizes	OD	L
1008	mm	12, 14, 15, 16, 18, 19, 20, 22, 24, 25	35.0	20.3
	inch	3/8", 1/2", 5/8", 3/4", 7/8", 1"		
1108	mm	12, 14, 15, 16, 18, 19, 20, 22, 24, 25, 28	38.0	20.3
	inch	3/8", 1/2", 5/8", 3/4", 7/8", 1", 1 1/8"		
1210	mm	12, 14, 15, 16, 18, 19, 20, 22, 24, 25, 26, 28, 30, 32	47.5	25.4
	inch	1/2", 5/8", 3/4", 7/8", 1", 1 1/8", 1 1/4"		
1215	mm	12, 14, 16, 18, 19, 20, 22, 24, 25, 28, 30, 32	47.5	38.1
	inch	1/2", 5/8", 3/4", 7/8", 1", 1 1/8", 1 1/4"		
1610	mm	12, 14, 15, 16, 18, 19, 20, 22, 24, 25, 28, 30, 32, 35, 38, 40, 42	57.0	25.4
	inch	1/2", 5/8", 3/4", 7/8", 1", 1 1/8", 1 1/4", 1 3/8", 1 5/8"		
1615	mm	12, 14, 16, 18, 19, 20, 22, 24, 25, 28, 30, 32, 35, 38, 40, 42	57.0	38.1
	inch	1/2", 5/8", 3/4", 7/8", 1", 1 1/8", 1 1/4", 1 3/8", 1 1/2", 1 5/8"		
2012	mm	16, 19, 20, 22, 24, 25, 28, 30, 32, 35, 38, 40, 42, 45, 48, 50	70.0	31.8
	inch	3/4", 7/8", 1", 1 1/8", 1 1/4", 1 3/8", 1 1/2", 1 5/8", 1 3/4", 1 7/8", 2"		
* 2017	mm	19, 22, 24, 32, 48	70.0	44.4
	inch	3/4", 7/8", 1", 1.1/8"		
2517	mm	19, 20, 22, 24, 25, 28, 30, 32, 35, 38, 40, 42, 45, 48, 50, 55, 60	85.5	44.5
	inch	3/4", 7/8", 1", 1 1/8", 1 1/4", 1 3/8", 1 1/2", 1 5/8", 1 3/4", 1 7/8", 2", 2 1/8",		
	inch	2 1/4", 2 3/8", 2 1/2"		
* 2525	mm	19, 22	85.6	63.5
	inch	3/4", 7/8", 1", 1 1/8"		
3020	mm	32, 35, 38, 40, 42, 45, 48, 50, 55, 60, 65, 70, 75	108.0	50.8
	inch	1 1/4", 1 3/8", 1 1/2", 1 5/8", 1 3/4", 1 7/8", 2", 2 1/8", 2 1/4", 2 3/8", 2 1/2", 2 5/8", 2 3/4", 2 7/8", 3"		
3030	mm	32, 38, 40, 42, 45, 48, 55, 65, 70	108.0	76.2
	inch	1 3/8", 1 1/2", 1 5/8", 1 3/4", 1 7/8", 2 1/8", 2 3/8", 2 5/8", 2 3/4", 3"		
3535	mm	35, 38, 40, 42, 45, 48, 50, 55, 60, 65, 70, 75, 80, 85, 90	127.0	88.9
	inch	1 1/2", 1 5/8", 1 3/4", 1 7/8", 2", 2 1/8", 2 1/4", 2 3/8", 2 1/2", 2 5/8", 2 3/4",		
	inch	2 7/8", 3", 3.1/8, 3.1/4", 3 3/8", 3 1/2"		
4040	mm	40, 55, 60, 65, 70, 75, 80, 85, 95, 100	146.0	101.6
	inch	1 3/8", 1 3/4", 1 7/8", 2", 2 1/8", 2 1/4", 2 1/2", 2 5/8", 3 1/2", 4"		
4545	mm	60, 65, 70, 75, 80, 85, 90, 95, 100, 105, 110	162.0	114.3
	inch	3", 3 1/8", 3 1/4", 3 3/8", 3 1/2", 3 3/4", 4 1/2"		
5050	mm	70, 95, 100, 110, 115, 120, 125	177.5	127.0

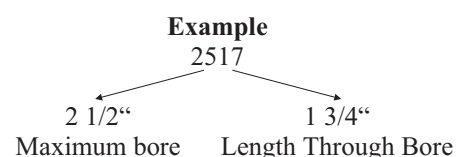
* Discontinued size, only limited bore sizes available.

OD = Outside Diameter

L = Length Through Bore

The first 2 digits of the part number are the maximum bore size in inches.

The second 2 digits of the part number are the length through bore in inches.



Useful Information

PULLEY DIAMETER - SPEED

When choosing a pulley that is made of cast iron, care must be taken not to exceed pulley rim speed of 40 m/s. Centrifugal forces developed beyond this speed may prohibit the use of stock cast iron pulleys. For rim speeds exceeding 40 m/s, contact Naismith Engineering sales representative for recommendations. The formula below will help you work out

$$\text{Metres/Sec} = \frac{(\text{O.D.} \times .001) \times 3.142 \times \text{RPM}}{60}$$

O.D. Is in millimetres

USE OF FLANGED PULLEYS

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 this belt ride off

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

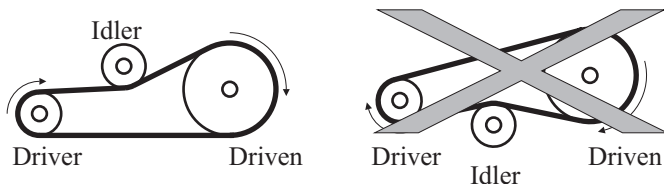
1. On all two-pulley drives, the minimum flanging requirements are two flanges on one pulley or one flange on each pulley on opposite sides.
2. On drives where the center distance is more than eight times the diameter of the small pulley, both pulleys should be flanged on both sides.
3. On drives with 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. On made to order pulleys, flanges must be securely fastened by using mechanical fasteners, welding, shrink fit or other equivalent methods.

IDLERS

Use of idlers should be restricted to those cases in which they are functionally necessary. Idlers usually are used to apply 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. On larger diameters, flat, uncrowned idlers may be used. Inside idler diameters should not be smaller than the smallest loaded pulley in the system.

Outside or backside idlers should be flat and uncrowned. Flanges are not recommended. Diameters should generally not be smaller than the smallest loaded pulley in the system. Slack side spring loaded idlers can be used, as long as care is taken to avoid resonant vibration conditions and load reversals.



CENTRE DISTANCE AND BELT LENGTH

If you do not already know a tentative centre distance, a good estimate to use is equal to the diameter of the large pulley, or $\frac{1}{2}(\mathbf{D} + \mathbf{3d})$, whichever is the larger. You can then find a tentative belt length using the following formula.

$$\text{Tentative Belt Length} = 1.57(\mathbf{D} + \mathbf{d}) + (\mathbf{TCD} \times \mathbf{2})$$

D = Pitch diameter, Large pulley

d = Pitch diameter, Small pulley

TCD = Tentative Center Distance

TEETH IN MESH

Power ratings are based on a minimum of six teeth in mesh between the belt and the 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. To calculate how many teeth your drive has in mesh use the formula below.

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

D = Pitch diameter, Large pulley

d = Pitch diameter, Small pulley

C = Center distance between shafts

T = Number of teeth in small pulley

OPERATING ENVIRONMENT

Temperature

Gates PowerGrip (XL, L, H & XH) and HTD (3M, 5M, 8M & 14M) belt performance is generally unaffected in ambient temperature environments between -25°C and 100°C. Gates Poly Chain GT has a temperature range of -54°C to 85°C. Polyurethane T and AT belts work best between -30°C and 80°C. In cases where belts are constantly running at or above these temperature extremes contact Naismith Engineering.

Aircraft & Motor Vehicle drives

Gates belts should not be used on aircraft, motor vehicle or hazardous applications where belt failure may cause injury.

BELT STORAGE AND HANDLING

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



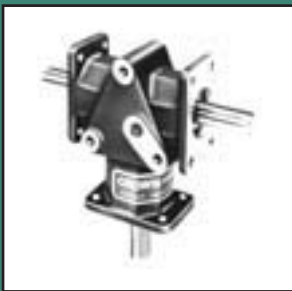
Sprocket in both B.S. A.S.A. - Plates, Simplex, Duplex & Triplex. Chain in B.S. A.S.A. Conveyor & Special chains.



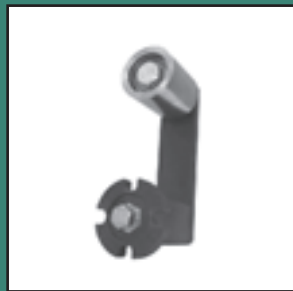
We can supply more than 40 different types of coupling from 9 different suppliers.



Variable speed pulleys. Zero-Max variable speed drives.



Winsmith gear boxes, Zero-max Crown Gear Drives & Tol-O-Matic Float-A-Shafts.



A large range of Tensioners are available, with attachments including; Rollers, Polyethylene Slide Bocks and Sprockets to suit British Standard chain.



A full range of Poly-V Pulleys, V-pulleys with belts to suit.



A large range of shaft locking bushes can be supplied.



A full range of Ruland shaft collars are available.



Miki Pulley clutches and brakes, Tol-O-Matic caliper disc brakes & pneumatic clutches.



POWER TRANSMISSION - PNEUMATIC CYLINDERS

2005

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