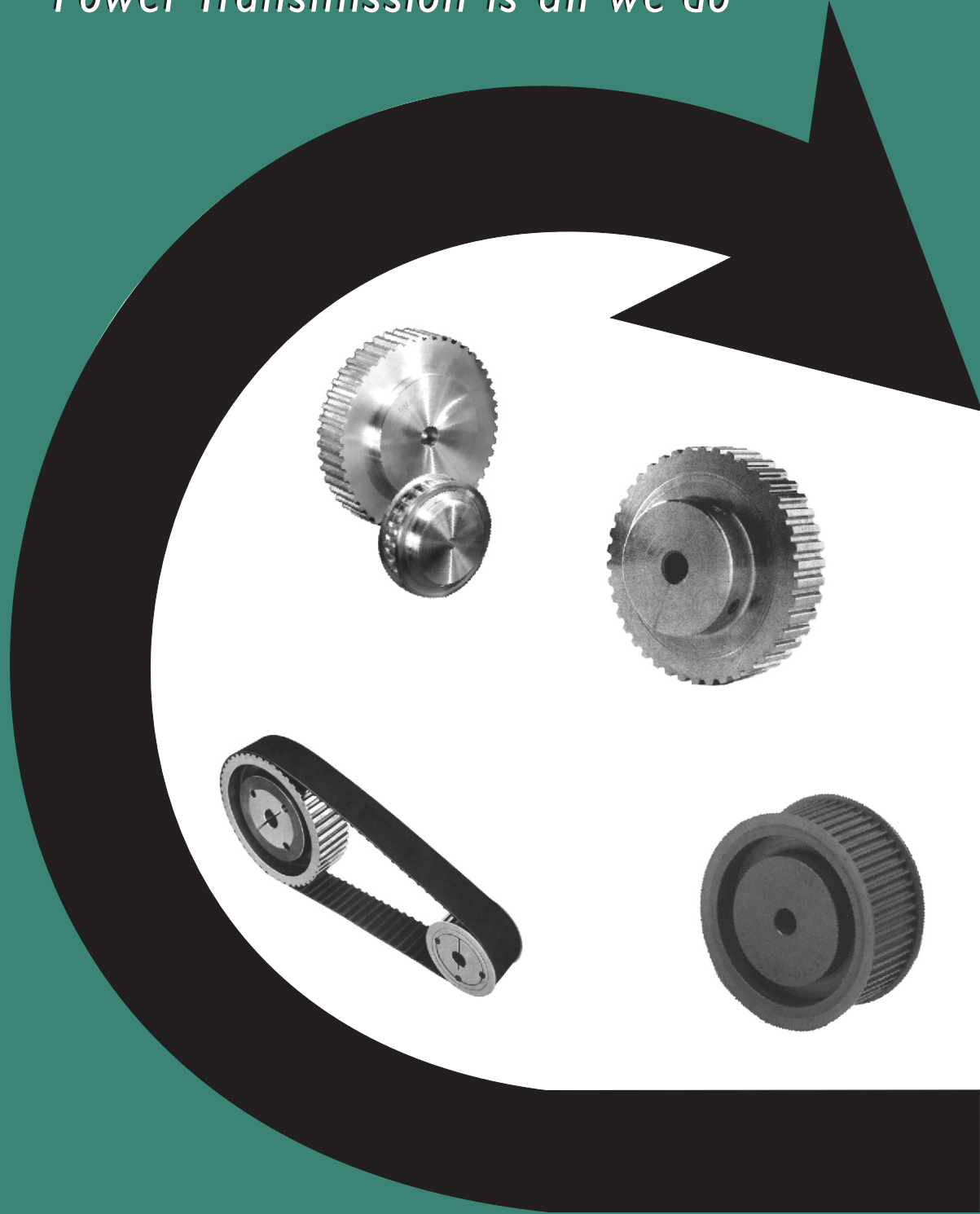


# NAISMITH

*Power Transmission is all we do*



TIMING PULLEYS  
& BELTS

2012



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All dimensions in mm unless otherwise stated

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**NAISMITH** Engineering &  
Manufacturing Co. Pty. Ltd.

# 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.

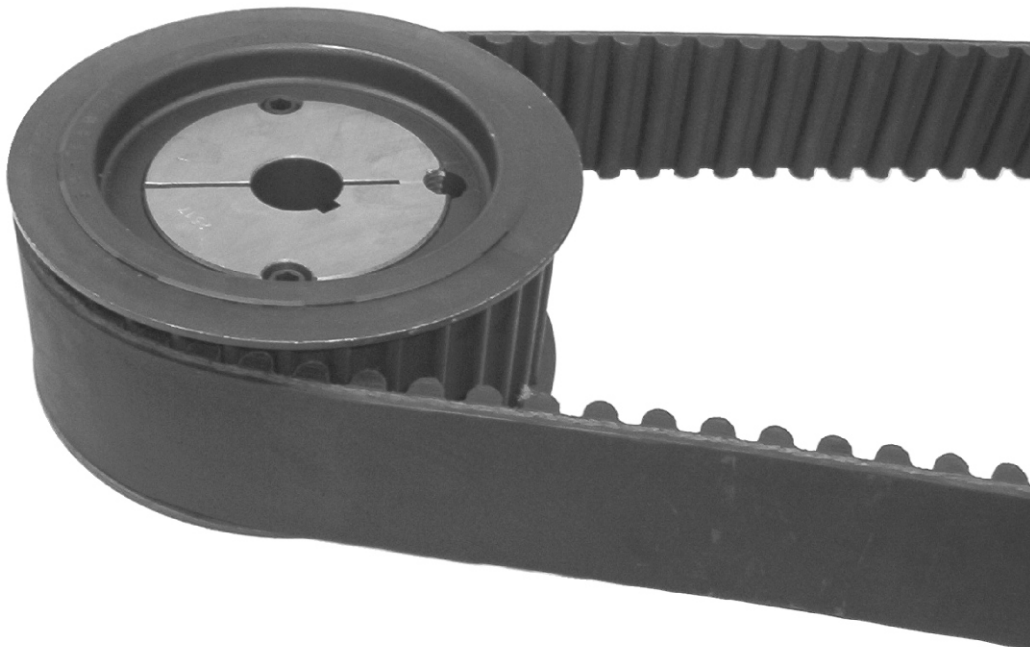
Unlike chain drives no lubrication is required on timing drives so maintenance is again reduced. Chain drives require some form of lubrication, be it drip, splatter or fully enclosed oil bath. With timing belt drives this is not required, saving on the initial set up cost of NOT installing a lubricating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

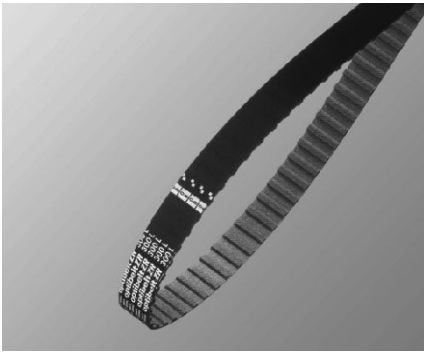
Unlike flat and v-belt drives, timing drives do not rely on friction to produce drive. Slack side tension is very low and the drive side tension is greatly reduced. As a result, the overall bearing loads are reduced and there is a better life expectancy for motors and bearings.

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 this 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.

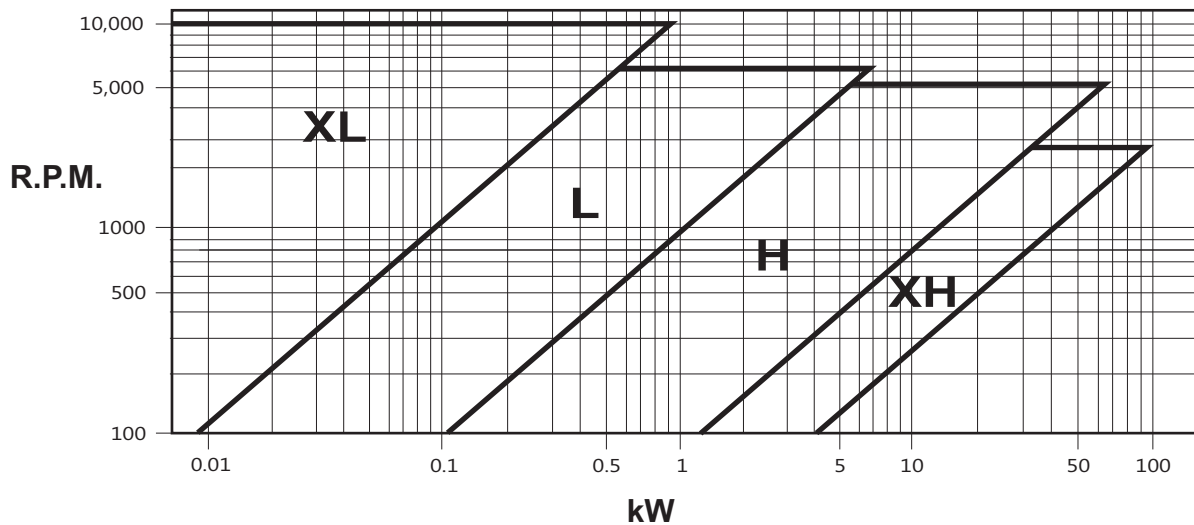
Belts are available in Rubber and Polyurethane depending on the style of belt. Special belts are available upon request. Please contact Naismith Engineering with your enquiries.



# 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. Naismith Engineering stock the Optibelt range of Classical timing belts.



## **OptiBelt ZR Timing Belts**

Naismith Engineering stocks the OptiBelt range of Classical Timing belts. They are available off the shelf in XL (Extra Light), L (Light), H (Heavy) & XH (Extra Heavy) in a large range of belt lengths. MXL (Mini Extra Light) & XXH (Extra Extra Heavy) are available on request.

# Classical Timing Belts XL & L



**Power Transmission**



	Pitch (inch)	Pitch (mm)	T	B
XL	1/5"	5.08	1.27	2.30
L	3/8"	9.53	1.91	3.50

Belt	Teeth	Pitch Length
60XL	30	152.4
70XL	35	177.8
80XL	40	203.2
86XL	43	218.4
88XL	44	223.5
90XL	45	228.6
92XL	46	233.6
94XL	47	238.7
96XL	48	243.8
98XL	49	248.9
100XL	50	254.0
102XL	51	259.0
106XL	53	269.2
108XL	54	274.3
110XL	55	279.4
112XL	56	284.4
116XL	58	294.6
118XL	59	299.7
120XL	60	304.8
124XL	62	314.9
126XL	63	320.0
128XL	64	325.1
130XL	65	330.2
134XL	67	340.3
136XL	68	345.4

Belt	Teeth	Pitch Length
138XL	69	350.5
140XL	70	355.6
142XL	71	360.6
148XL	74	375.9
150XL	75	381.0
156XL	78	396.2
160XL	80	406.4
162XL	81	411.4
166XL	83	421.6
168XL	84	426.7
170XL	85	431.8
180XL	90	457.2
190XL	95	482.6
192XL	96	487.6
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
280XL	140	711.2
300XL	150	762.0
310XL	155	787.4
360XL	180	914.4
630XL	315	1600.2

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

Belt	Teeth	Pitch Length
124L	33	314.3
150L	40	381.0
165L	44	419.1
169L	45	429.2
173L	46	439.4
187L	50	467.2
202L	54	513.0
210L	56	533.4
225L	60	571.5
232L	62	589.2
236L	63	599.4
240L	64	609.6
255L	68	647.7
259L	69	657.8
263L	70	668.0
270L	72	685.8
285L	76	723.9
300L	80	762.0
322L	86	819.1
345L	92	876.3
360L	96	914.4
367L	98	933.4
390L	104	990.6
405L	108	1028.7
420L	112	1066.8
424L	113	1076.9
435L	116	1104.9
450L	120	1143.0
454L	121	1153.1
480L	128	1219.2
510L	136	1295.4
525L	140	1333.5
540L	144	1371.6
600L	160	1524.0
630L	168	1600.2
660L	176	1676.4

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

# Classical Timing Belts H & XH



**Power Transmission**



	Pitch (inch)	Pitch (mm)	T	B
H	1/2"	12.70	2.29	4.00
XH	7/8"	22.23	6.35	11.00

Belt	Teeth	Pitch Length
230H	46	584.2
240H	48	609.6
255H	51	571.5
270H	54	685.8
280H	56	711.2
300H	60	762.0
310H	62	787.4
315H	63	800.1
320H	64	812.8
330H	66	838.2
335H	67	850.9
340H	68	863.6
350H	70	889.0
360H	72	914.4
370H	74	939.8
375H	75	952.5
390H	78	990.6
400H	80	1016.0
410H	82	1041.4
420H	84	1066.8
430H	86	1092.2
450H	90	1143.0
465H	93	1181.1
480H	96	1219.2
490H	98	1244.6
510H	102	1295.4
520H	104	1320.8
530H	106	1346.2
540H	108	1371.6

Belt	Teeth	Pitch Length
560H	112	1422.4
570H	114	1447.8
580H	116	1473.2
600H	120	1524.0
630H	126	1600.2
650H	130	1651.0
660H	132	1676.4
670H	134	1701.8
680H	136	1727.2
700H	140	1778.0
720H	144	1828.8
730H	146	1854.2
750H	150	1905.0
770H	154	1953.8
800H	160	2032.0
810H	162	2057.4
820H	164	2082.8
850H	170	2159.0
860H	172	2184.4
900H	180	2286.0
950H	190	2413.0
1000H	200	2540.0
1100H	220	2794.0
1120H	224	2844.8
1140H	228	2895.6
1150H	230	2921.0
1250H	250	3175.0
1400H	280	3556.0
1700H	340	4318.0

Belt	Teeth	Pitch Length
507XH	58	1289.0
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

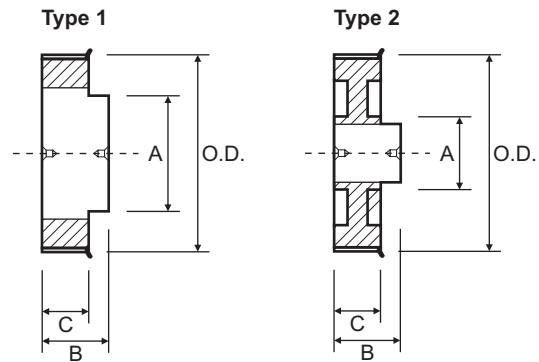
Standard widths of:-  
 50.8mm (2") Code = Length-XH200  
 76.2mm (3") Code = Length-XH300  
 101.6mm (4") Code = Length-XH400  
 Off standard widths are available on request.

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  
 Long Length up to 50.8mm (2") wide is available.

# 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

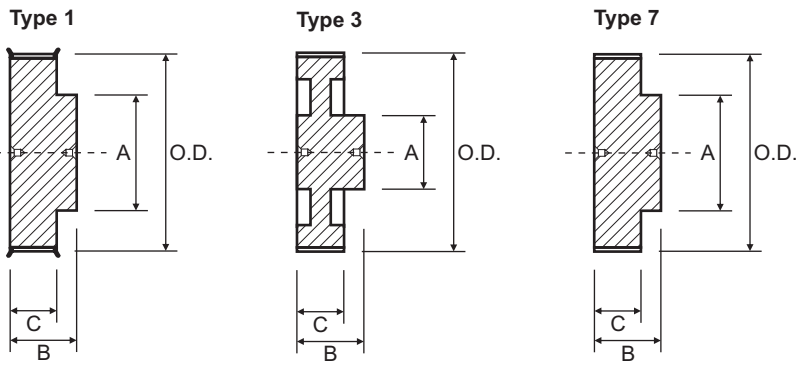
L050					
Suit 12.7mm wide belt (1/2")					
Part No.	O.D.	Type	A	B	C = 17.0
PP10L050	29.6	1	20.0	25.0	
PP12L050	35.6	1	25.0	25.0	
PP14L050	41.7	1	30.0	30.0	
PP16L050	47.8	1	30.0	30.0	
PP18L050	53.8	2	30.0	30.0	
PP20L050	59.9	2	30.0	30.0	
PP22L050	65.9	2	40.0	30.0	
PP24L050	72.0	2	40.0	30.0	
PP26L050	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

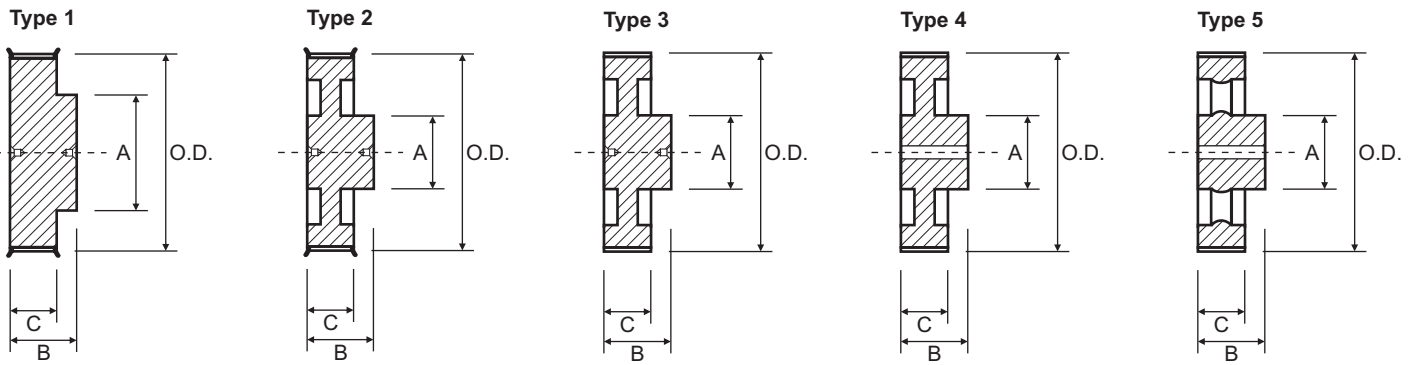
# XL 0.200" Timing Pulleys



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	Aluminium Flanged	
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		Steel
26XL037F	41.5	1	30.0	25.0		Aluminium No Flanges
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	3	52.0	25.0		
56XL037	90.0	3	52.0	25.0		
60XL037	96.5	3	52.0	25.0		
72XL037	115.9	3	52.0	25.0		

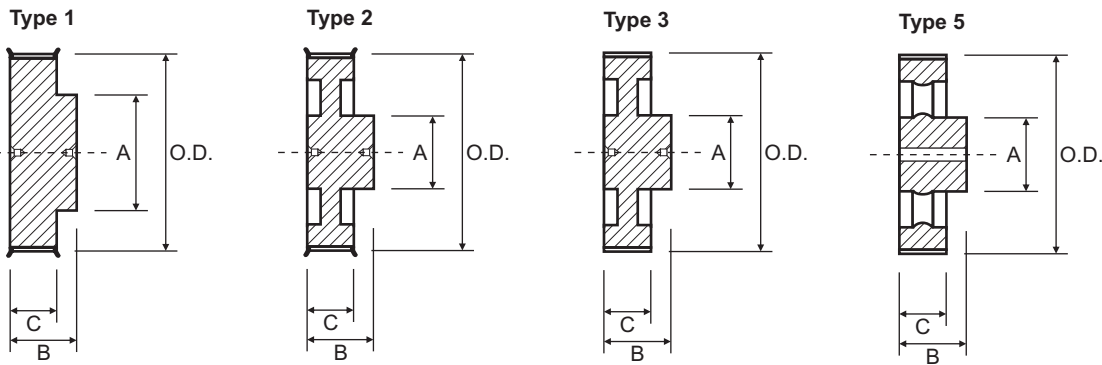


# L Pitch 0.375" Timing Pulleys



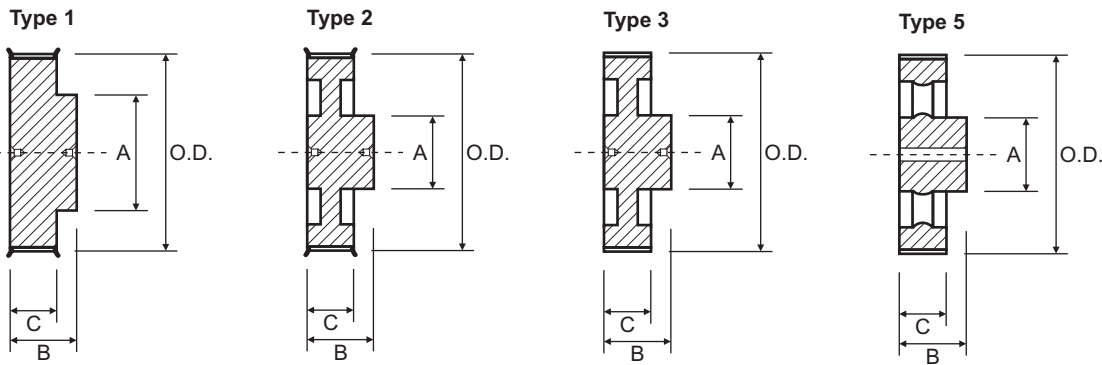
L050						L100					
Suit 12.7mm wide belt (1/2")						Suit 25.4mm wide belt (1")					
Part No.	O.D.	Type	A	B	C = 19.0	Part No.	O.D.	Type	A	B	C = 32.0
10L050F	29.6	1	20.0	30.0	Steel Flanged	10L100F	29.6	1	20.0	46.0	Steel Flanged
11L050F	32.6	1	20.0	30.0		11L100F	32.6	1	20.0	46.0	
12L050F	35.6	1	27.0	30.0		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



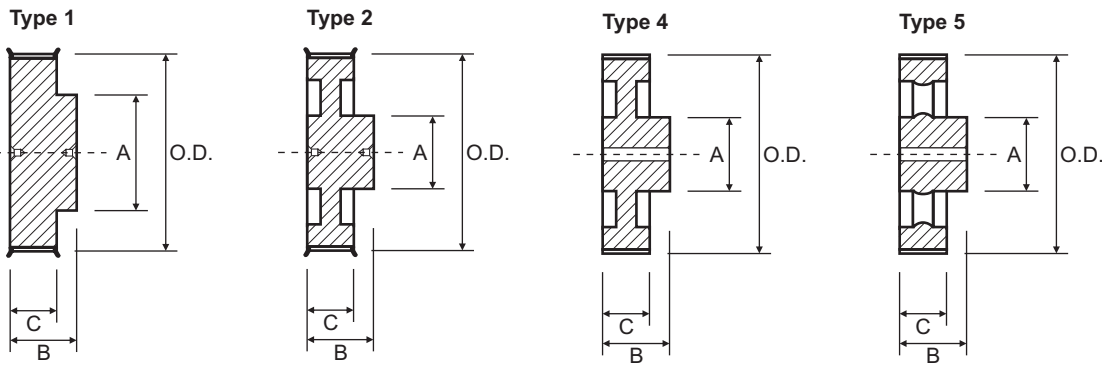
H100					H150							
Suit 25.4mm wide belt (1")					Suit 38.1mm wide belt (1 1/2")							
Part No.	O.D.	Type	A	B	C = 33.0	Part No.	O.D.	Type	A	B	C = 46.0	
14H100F	55.2	1	40.0	44.0	Steel	14H150F	55.2	1	40.0	58.0	Steel	
15H100F	59.3	1	45.0	44.0		15H150F	59.3	1	45.0	58.0		
16H100F	63.3	1	47.0	44.0		16H150F	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		36H150F	144.2	2	75.0	58.0		
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	Cast Iron	60H150	241.2	3	80.0	70.0	Cast Iron	
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		
						No Flanges						No Flanges

# H Pitch 0.500" Timing Pulleys



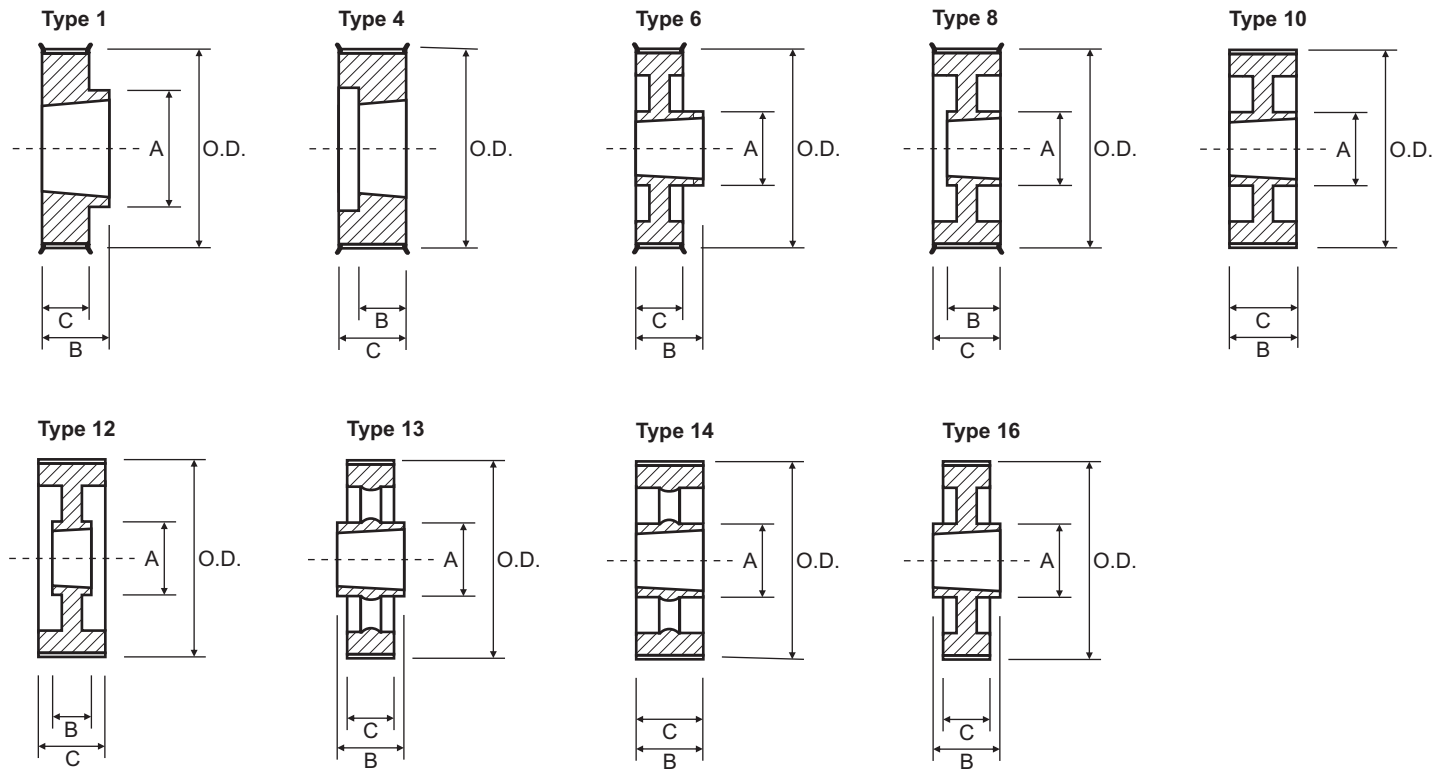
H200					H300						
Suit 50.8mm wide belt (2")					Suit 76.2mm wide belt (3")						
Part No.	O.D.	Type	A	B	C= 59.5	Part No.	O.D.	Type	A	B	C= 85.7
16H200F	63.3	1	47.0	72.0	Steel	18H300F	71.4	1	57.0	98.0	Steel
18H200F	71.4	1	57.0	72.0		20H300F	79.5	1	64.0	98.0	
20H200F	79.5	1	64.0	72.0		22H300F	87.6	1	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	Cast Iron	
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	171.2	1	90.0	80.0		26XH300F	171.2	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	

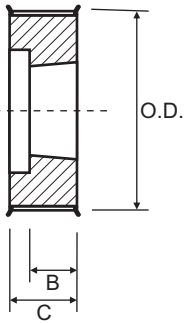
# L Pitch 0.375" Timing Pulleys



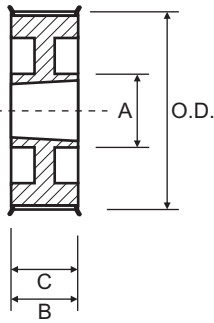
L050							L100						
Suit 12.7mm wide belt (1/2")							Suit 25.4mm wide belt (1")						
Part No.	O.D.	Type	Bush	A	B	C = 19.0	Part No.	O.D.	Type	Bush	A	B	C = 32.0
FG-18L050F	53.8	1	1108	47.0	22.0		FG-18L100F	53.8	4	1108	-	22.0	
FG-19L050F	56.8	1	1108	47.0	22.0		FG-19L100F	56.8	4	1108	-	22.0	
FG-20L050F	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

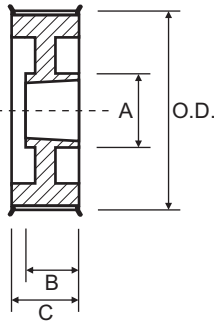
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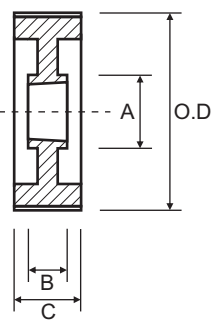
Type 7



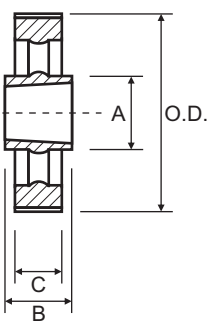
Type 8



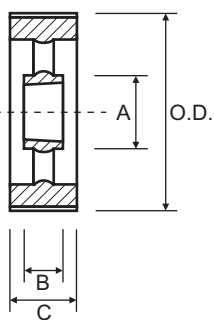
Type 12



Type 13

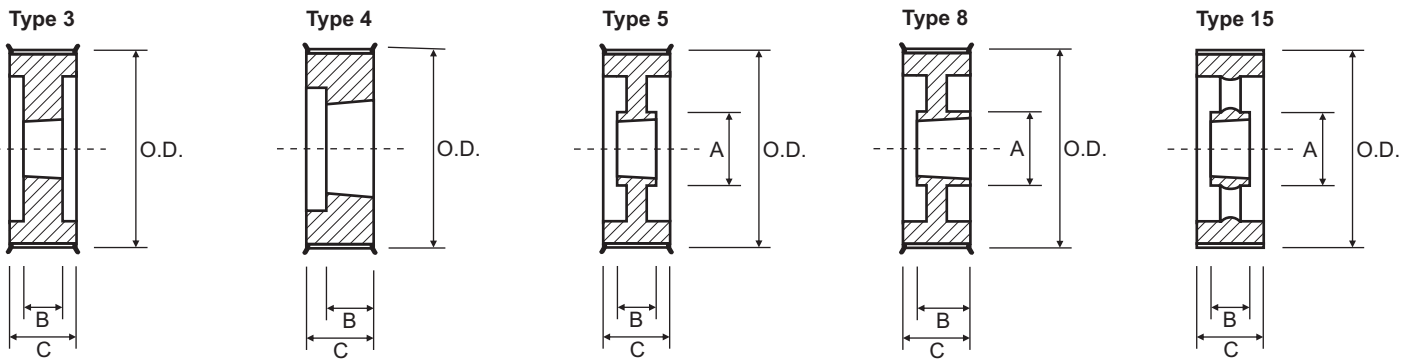


Type 15



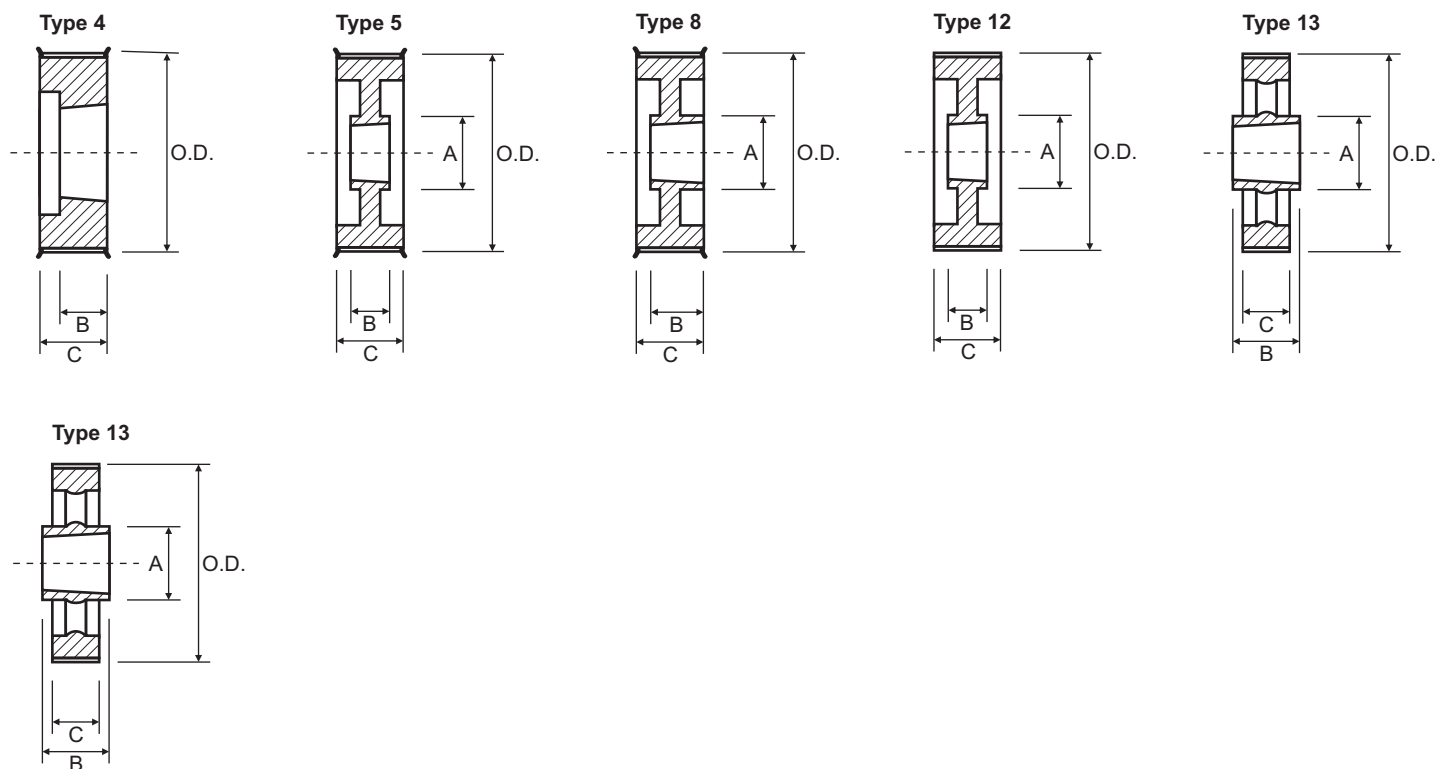
H100 Suit 25.4mm wide belt (1")							H150 Suit 38.1mm wide belt (1 1/2")								
Part No.	O.D.	Type	Bush	A	B	C = 31.0	Part No.	O.D.	Type	Bush	A	B	C = 45.0		
FG-14H100F	55.2	4	1108	-	22.0	Cast Iron Flanged	FG-14H150F	55.2	4	1108	-	22.0	Cast Iron Flanged		
FG-15H100F	59.3	4	1108	-	22.0		FG-15H150F	59.3	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	1210	-	25.0		FG-17H150F	67.4	4	1210	-	25.0			
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	25.0		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			
							No Flanges								No Flanges

# 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")

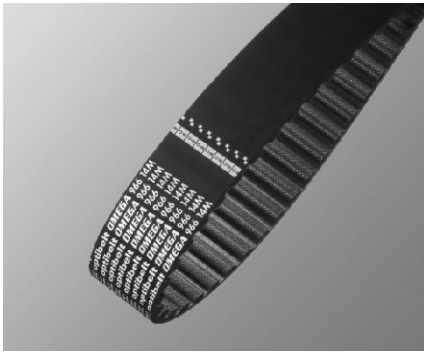
Part No.	O.D	Type	Bush	A	B	C = 64.0
FG-18XH200F	124.6	4	2517	-	45.0	Cast Iron Flanged
FG-20XH200F	138.7	4	2517	-	45.0	
FG-22XH200F	152.9	4	2517	-	45.0	
FG-24XH200F	167.0	4	2517	-	45.0	
FG-26XH200F	181.2	4	2517	-	45.0	
FG-28XH200F	195.3	5	2517	120.0	45.0	
FG-30XH200F	209.4	5	2517	120.0	45.0	
FG-32XH200F	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	
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")

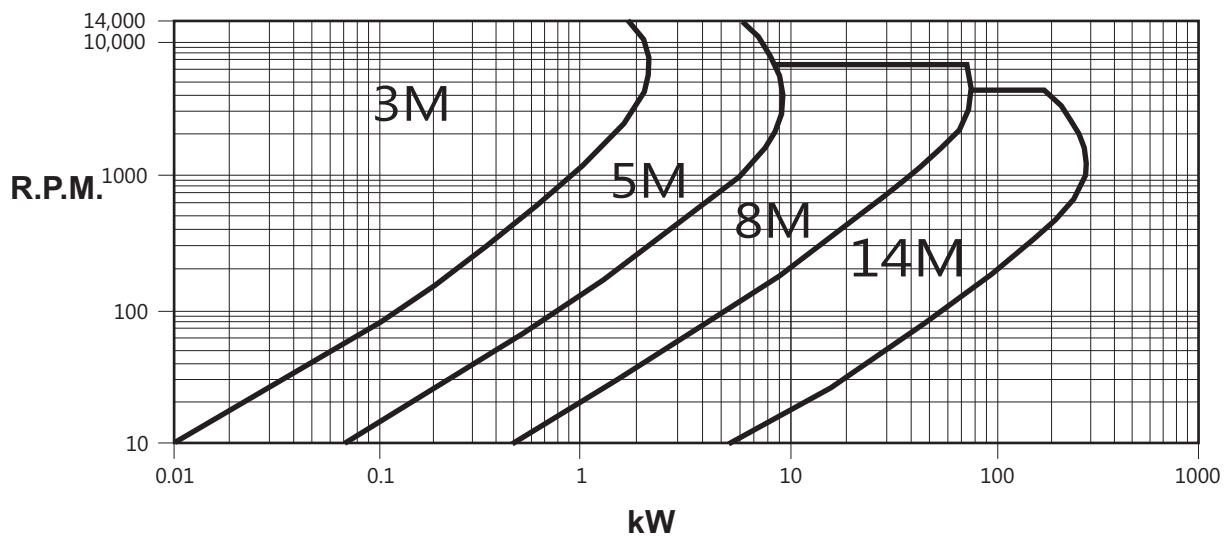
Part No.	O.D	Type	Bush	A	B	C = 90.0
FG-18XH300F	124.6	4	2517	-	45.0	Cast Iron Flanged
FG-20XH300F	138.7	4	2517	-	45.0	
FG-22XH300F	152.9	4	2517	-	45.0	
FG-24XH300F	167.0	4	2517	-	45.0	
FG-26XH300F	181.2	4	2517	-	45.0	
FG-28XH300F	195.3	8	3020	146.0	51.0	
FG-30XH300F	209.4	8	3020	146.0	51.0	
FG-32XH300F	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	
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 Optibelt range of timing belts in 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.



## **Optibelt OMEGA HTD Timing Belts**

Naismith Engineering stocks a large range of Optibelt OMEGA timing belts. Designed to be run with Standard HTD timing pulleys the OMEGA belt is designed for high performance, smooth running and low noise drives. It can operate in a temperature range of -3 up to +100 degrees Celsius and is up to 98% efficient.

## **Optibelt OMEGA HP HTD Timing Belt**

Faster, stronger and more compact, that is how the Optibelt OMEGA HP presents itself, a timing belt for high demand applications. It can last up to 18 times longer and has up to twice the performance of the standard OMEGA belt. Due to these great features it is possible to reduce the size of the drive system, saving both room and money.

## **Optibelt OMEGA Fan Power HTD Timing Belt**

Long life, maintenance free, high power applications are very common requirements on heat exchanger fan applications in the oil industry where belts must perform to the highest standard. Belts must also be Antistatic to ISO9563. The Optibelt OMEGA Fan Power belt is ideal for these applications.

## **Optibelt OMEGA HL HTD Timing Belt**

On drives with low belt speed, Optibelt OMEGA HL timing belts have 25% more capacity than the OMEGA HP belt. In addition, the design was optimized so that the OMEGA HL is much more suitable for shock loads.

# HTD Timing Belts 3M



	Pitch (mm)	T	B
3M	3mm	1.10	2.40

Belt	Teeth	Pitch Length
150-3M	50	150
156-3M	52	156
159-3M	53	159
180-3M	60	180
186-3M	62	186
210-3M	70	210
225-3M	75	225
240-3M	80	240
255-3M	85	255
285-3M	95	285
288-3M	96	288
291-3M	97	291
300-3M	100	300
306-3M	102	306
312-3M	104	312
381-3M	106	318

Belt	Teeth	Pitch Length
330-3M	110	330
339-3M	113	339
345-3M	115	345
357-3M	119	357
384-3M	128	384
420-3M	140	420
447-3M	149	447
513-3M	171	513
531-3M	177	531
564-3M	188	564
633-3M	211	633
669-3M	223	669
711-3M	237	711
804-3M	268	804
882-3M	294	882
1500-3M	500	1500

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

# HTD Timing Belts 5M



Power Transmission



	Pitch (mm)	T	B
5M	5mm	2.10	3.80

Belt	Teeth	Pitch Length
120-5M	24	120
180-5M	36	180
225-5M	45	225
255-5M	51	255
265-5M	53	265
270-5M	54	270
280-5M	56	280
295-5M	59	295
300-5M	60	300
305-5M	61	305
325-5M	65	325
330-5M	66	330
340-5M	68	340
345-5M	69	345
350-5M	70	350
360-5M	72	360
365-5M	73	365
370-5M	74	370
375-5M	75	375
385-5M	77	385
400-5M	80	400
415-5M	83	415
420-5M	84	420
425-5M	85	425
450-5M	90	450
460-5M	92	460
475-5M	95	475
490-5M	98	490
500-5M	100	500
520-5M	104	520
525-5M	105	525
535-5M	107	535
540-5M	108	540
550-5M	110	550

Belt	Teeth	Pitch Length
550-5M	110	550
560-5M	112	560
565-5M	113	565
575-5M	115	575
580-5M	116	580
600-5M	120	600
610-5M	122	610
615-5M	123	615
620-5M	124	620
630-5M	126	630
635-5M	127	635
640-5M	128	640
645-5M	129	645
650-5M	130	650
655-5M	131	655
665-5M	133	665
670-5M	134	670
700-5M	140	700
710-5M	142	710
720-5M	144	720
740-5M	148	740
745-5M	149	745
750-5M	150	750
755-5M	151	755
775-5M	155	775
790-5M	158	790
800-5M	160	800
825-5M	165	825
830-5M	166	830
835-5M	167	835
845-5M	169	845
850-5M	170	850
860-5M	172	860
890-5M	178	890

Belt	Teeth	Pitch Length
900-5M	180	900
925-5M	185	925
935-5M	187	935
940-5M	188	940
950-5M	190	950
965-5M	193	965
975-5M	195	975
980-5M	196	980
985-5M	197	985
1000-5M	200	1000
1025-5M	205	1025
1035-5M	207	1035
1050-5M	210	1050
1100-5M	220	1100
1125-5M	225	1125
1135-5M	227	1135
1200-5M	240	1200
1270-5M	254	1270
1380-5M	276	1380
1400-5M	280	1400
1420-5M	284	1420
1425-5M	285	1425
1500-5M	300	1500
1595-5M	319	1595
1690-5M	338	1690
1800-5M	360	1800
1870-5M	374	1870
1895-5M	379	1895
2000-5M	400	2000
2110-5M	422	2110
2250-5M	450	2250
2350-5M	470	2350
2525-5M	505	2525

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



**Power Transmission**



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

Belt	Teeth	Pitch Length
288-8M	36	288
320-8M	40	320
352-8M	44	352
376-8M	47	376
416-8M	52	416
424-8M	53	424
480-8M	60	480
512-8M	64	512
520-8M	65	520
536-8M	67	536
560-8M	70	560
576-8M	72	576
584-8M	73	584
600-8M	75	600
608-8M	76	608
624-8M	78	624
632-8M	79	632
640-8M	80	640
656-8M	82	656
680-8M	85	680
712-8M	89	712
720-8M	90	720
760-8M	95	760
776-8M	97	776
784-8M	98	784
800-8M	100	800
824-8M	103	824
840-8M	105	840
848-8M	106	848
856-8M	107	856
880-8M	110	880

Belt	Teeth	Pitch Length
896-8M	112	896
912-8M	114	912
920-8M	115	920
936-8M	117	936
960-8M	120	960
976-8M	122	976
1000-8M	125	1000
1040-8M	130	1040
1056-8M	132	1056
1064-8M	133	1064
1080-8M	135	1080
1096-8m	137	1096
1120-8M	140	1120
1128-8M	141	1128
1160-8M	145	1160
1168-8M	146	1168
1184-8M	148	1184
1200-8M	150	1200
1216-8M	152	1216
1224-8M	153	1224
1248-8M	156	1248
1256-8M	157	1256
1264-8M	158	1264
1280-8M	160	1280
1296-8M	162	1296
1304-8M	163	1304
1320-8M	165	1320
1328-8M	166	1328
1344-8M	168	1344
1360-8M	170	1360
1392-8M	174	1392

Belt	Teeth	Pitch Length
1400-8M	175	1400
1424-8M	178	1424
1432-8M	179	1432
1440-8M	180	1440
1480-8M	185	1480
1520-8M	190	1520
1552-8M	194	1552
1584-8M	198	1584
1600-8M	200	1600
1680-8M	210	1680
1696-8M	212	1696
1728-8M	216	1728
1760-8M	220	1760
1800-8M	225	1800
1896-8M	237	1896
1904-8M	238	1904
1936-8M	242	1936
2000-8M	250	2000
2080-8M	260	2080
2104-8M	263	2104
2240-8M	280	2240
2248-8M	281	2248
2272-8M	284	2272
2400-8M	300	2400
2504-8M	313	2504
2600-8M	325	2600
2800-8M	350	2800
3048-8M	350	3048
3280-8M	410	3280
3600-8M	450	3600
4400-8M	550	4400

Standard widths of:-  
 20mm Code = Length-8M-20  
 30mm Code = Length-8M-30  
 55mm Code = Length-8M-50  
 85mm Code = Length-8M-85  
 Long Length up to 85mm wide is available.

# HTD Timing Belts 14M



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

Belt	Teeth	Pitch Length
966-14M	69	966
1092-14M	78	1092
1190-14M	85	1190
1400-14M	100	1400
1456-14M	104	1456
1610-14M	115	1610
1778-14M	127	1778
1890-14M	135	1890
2100-14M	150	2100
2310-14M	165	2310
2450-14M	175	2450
2590-14M	185	2590
2800-14M	200	2800
3150-14M	225	3150
3360-14M	240	3360
3500-14M	250	3500
3850-14M	275	3850
4004-14M	286	4004
4326-14M	309	4326
4578-14M	327	4578

Standard widths of:-

40mm Code = Length-14M-40

55mm Code = Length-14M-55

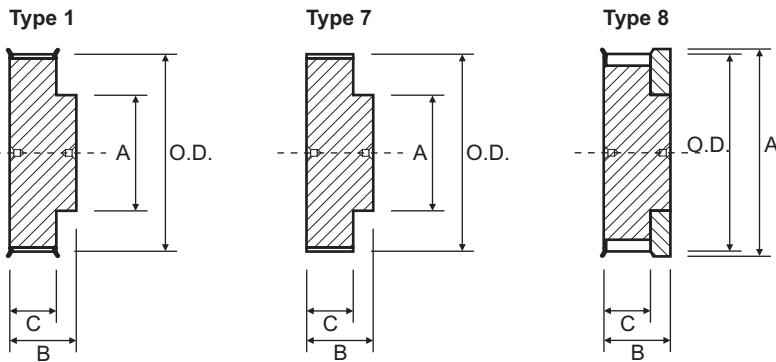
85mm Code = Length-14M-85

115mm Code = Length-14M-115

170mm Code = Length-14M-170

Long Length up to 85mm wide is available.

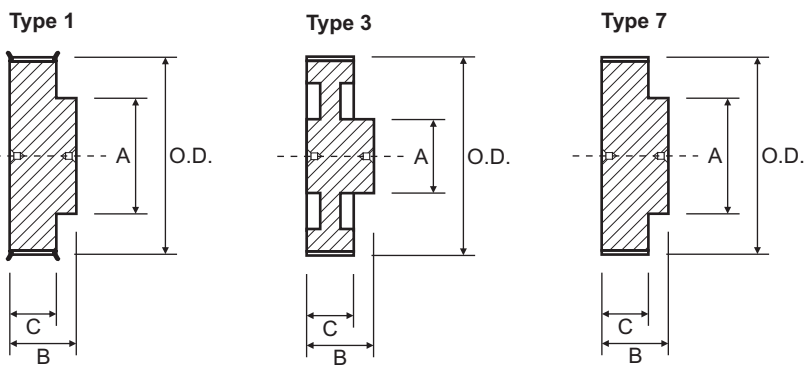
# 3M HTD Timing Pulleys



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

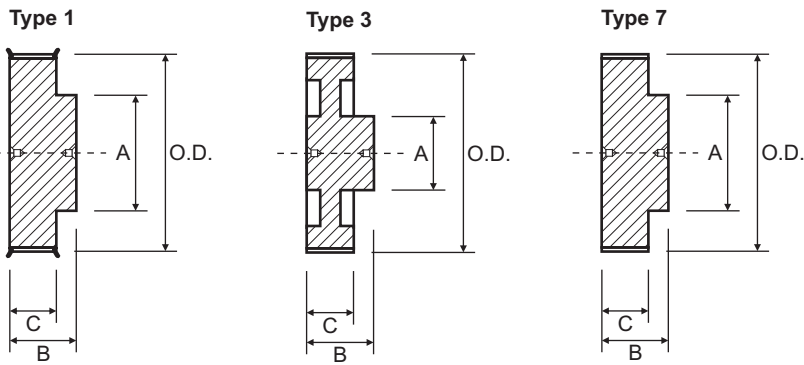
N.F. - No Flanges

# 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

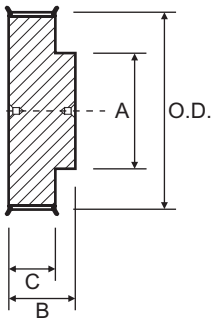


5M-25					
Suit 25mm wide belt					
Part No.	O.D.	Type	A	B	C = 30.0
12-5M-25F	18.0	1	13.0	36.0	Steel Flanged
14-5M-25F	21.1	1	14.0	36.0	
15-5M-25F	22.7	1	16.0	36.0	
16-5M-25F	24.3	1	16.5	36.0	
18-5M-25F	27.5	1	20.0	36.0	
20-5M-25F	30.7	1	23.0	36.0	
21-5M-25F	32.3	1	24.0	38.0	
22-5M-25F	33.9	1	25.5	38.0	
24-5M-25F	37.1	1	27.0	38.0	
26-5M-25F	40.2	1	30.0	38.0	
28-5M-25F	43.4	1	30.5	38.0	
30-5M-25F	46.6	1	35.0	38.0	
32-5M-25F	49.8	1	38.0	38.0	
36-5M-25F	56.2	1	38.0	38.0	
40-5M-25F	62.5	1	38.0	38.0	
44-5M-25	68.9	7	38.0	40.0	Aluminium No Flanges
48-5M-25	75.3	7	38.0	40.0	
60-5M-25	94.4	7	50.0	40.0	
72-5M-25	113.5	3	50.0	40.0	

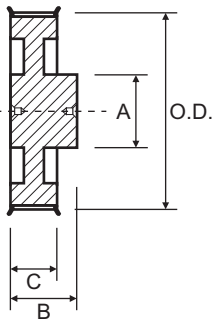


# 8M HTD Timing Pulleys

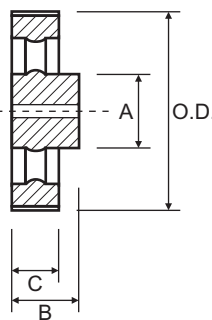
Type 1



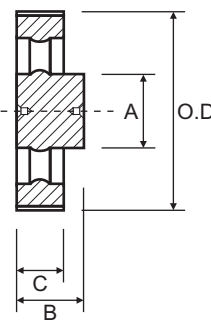
Type 2



Type 5



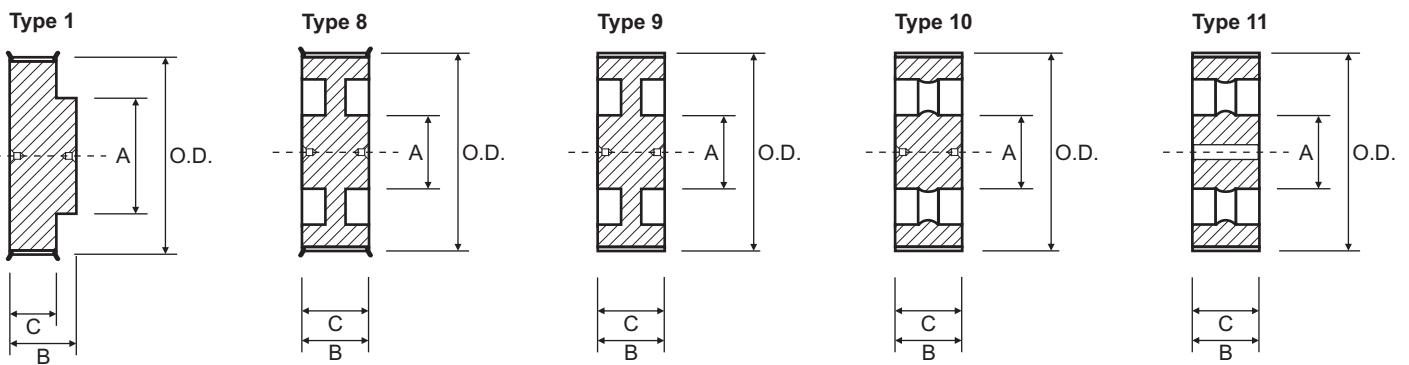
Type 6



8M-20					8M-30								
Suit 20mm wide belt					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			

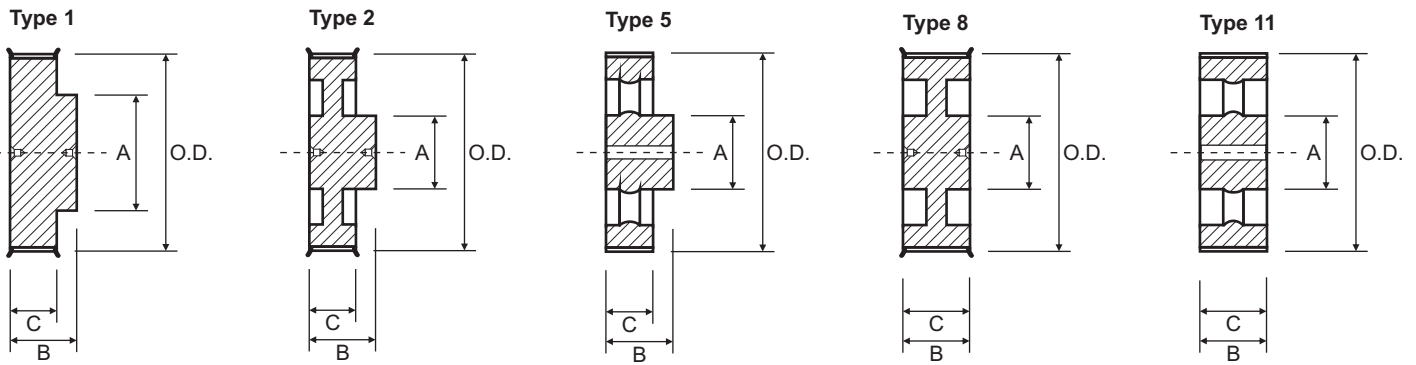
N.F. - No Flanges

# 8M HTD Timing Pulleys



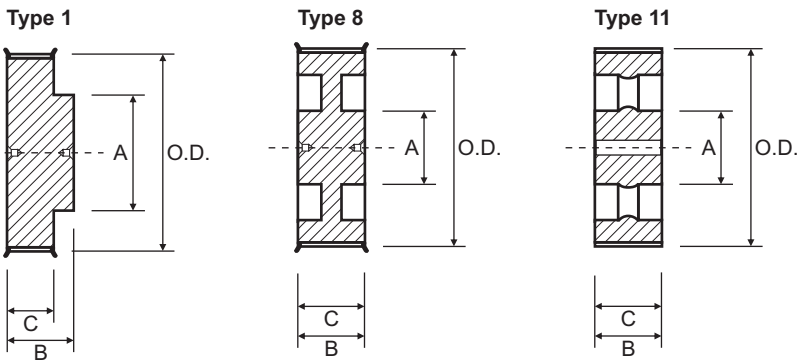
8M-50						8M-85					
Suit 50mm wide belt						Suit 85mm wide belt					
Part No.	O.D.	Type	A	B	C = 60.0	Part No.	O.D.	Type	A	B	C = 95.0
18-8M-50F	44.5	1	32.0	70.0	Steel Flanged	22-8M-85F	54.7	1	43.0	105.0	Steel Flanged
20-8M-50F	49.6	1	36.0	70.0		24-8M-85F	59.7	1	49.0	105.0	
22-8M-50F	54.7	1	43.0	70.0		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



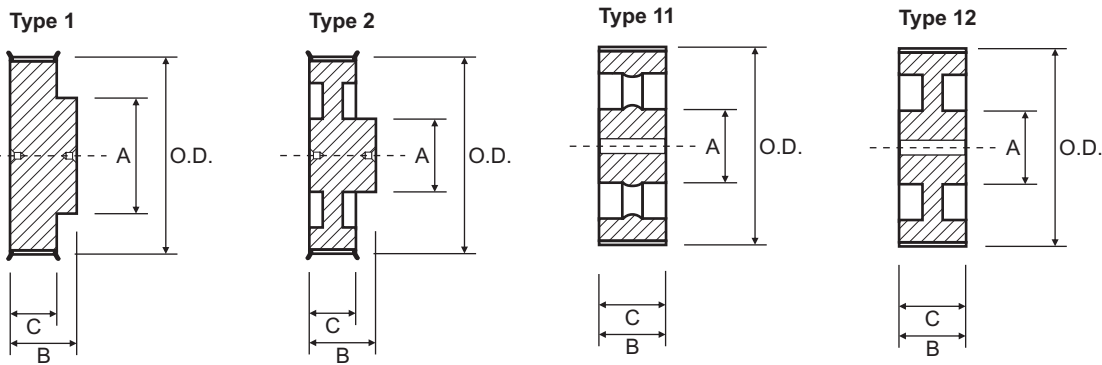
14M-40						14M-55					
Suit 40mm wide belt						Suit 55mm wide belt					
Part No.	O.D.	Type	A	B	C = 54.0	Part No.	O.D.	Type	A	B	C = 70.0
28-14M-40F	122.1	1	100.0	69.0	Cast Iron	28-14M-55F	122.1	1	100.0	85.0	Cast Iron
29-14M-40F	126.6	1	107.0	69.0		29-14M-55F	126.6	1	107.0	85.0	
30-14M-40F	131.0	1	107.0	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



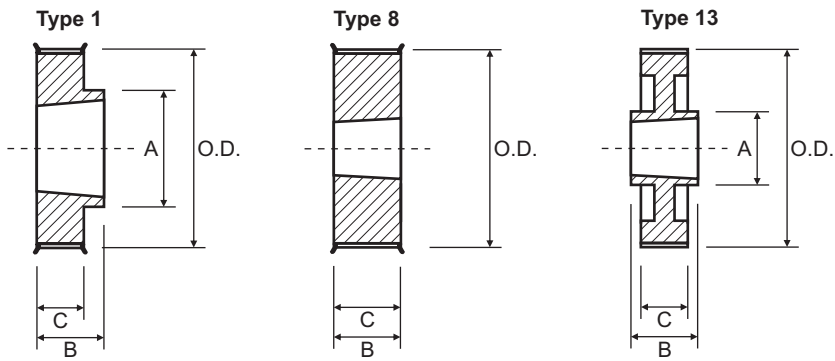
14M-85					14M-115						
Suit 85mm wide belt					Suit 115mm wide belt						
Part No.	O.D.	Type	A	B	C=102.0	Part No.	O.D.	Type	A	B	C=133.0
28-14M-85F	122.1	1	100.0	117.0	Cast Iron	28-14M-115F	122.1	1	100.0	148.0	Cast Iron
29-14M-85F	126.6	1	107.0	117.0		29-14M-115F	126.6	1	107.0	148.0	
30-14M-85F	131.0	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	148.0	
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



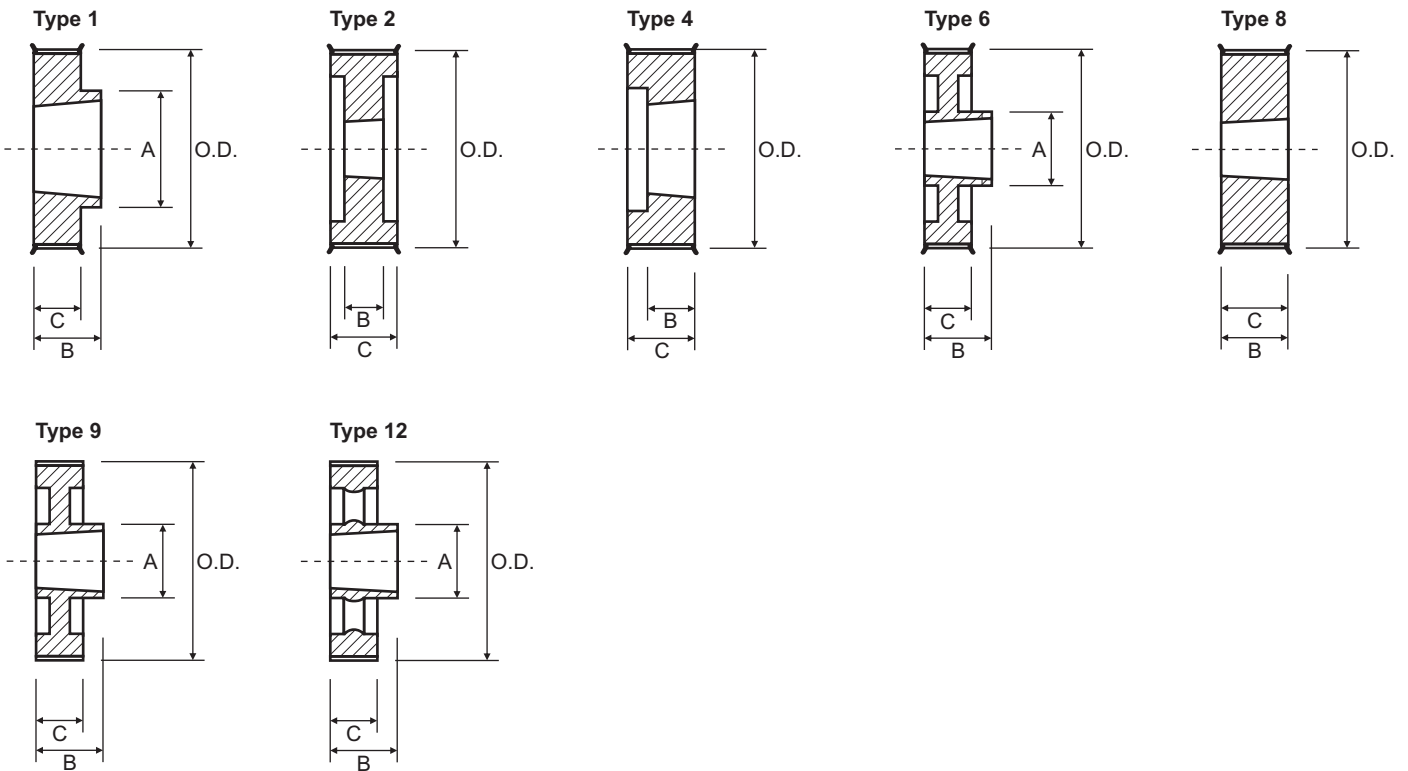
14M-170						
Suit 170mm wide belt						
Part No.	O.D.	Type	A	B	C = 187.0	
28-14M-170F	122.1	1	100.0	202.0	Cast Iron	
29-14M-170F	126.6	1	107.0	202.0		
30-14M-170F	131.0	1	107.0	202.0		
32-14M-170F	139.9	1	114.0	202.0		
34-14M-170F	148.8	1	122.0	202.0		
36-14M-170F	157.7	1	128.0	202.0		
38-14M-170F	166.6	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



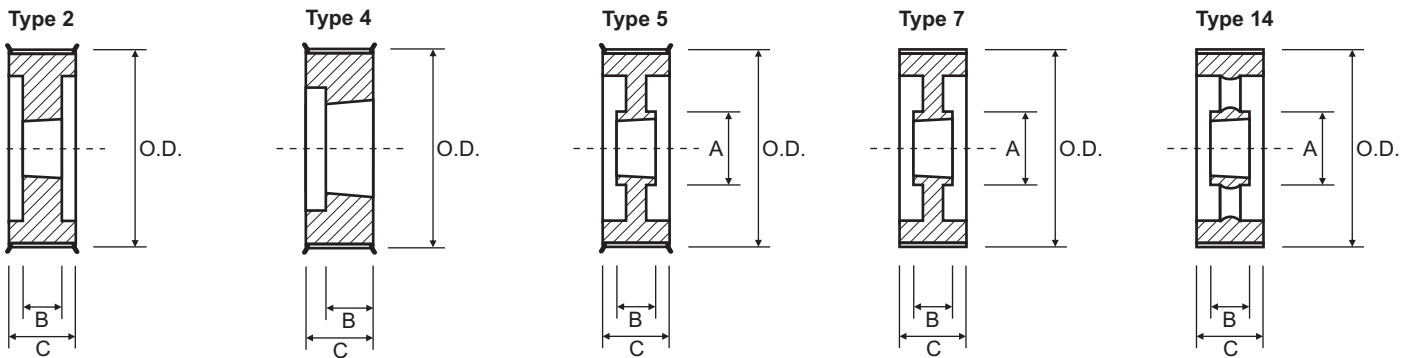
5M-15								
Suit 15mm wide belt								
Part No.	O.D	Type	Bush	A	B	C = 22.0		
P-34-5M-15F	53.0	8	1008	-	22.0		Steel	Flanged
P-36-5M-15F	56.2	8	1108	-	22.0			
P-38-5M-15F	59.3	8	1108	-	22.0			
P-40-5M-15F	62.5	8	1108	-	22.0			
P-44-5M-15F	68.9	8	1108	-	22.0			
P-48-5M-15F	76.3	1	1210	64.0	25.0			
P-56-5M-15F	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			
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	8	2012	-	32.0		
P-48-8M-20F	120.9	1	2012	105.0	32.0		P-48-8M-30F	120.9	8	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	2	2517	120.0	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	6	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. - No Flanges							N.F.	P112-8M-30	283.8	12	2517	120.0		45.0
								P144-8M-30	365.3	12	2517	120.0	45.0	

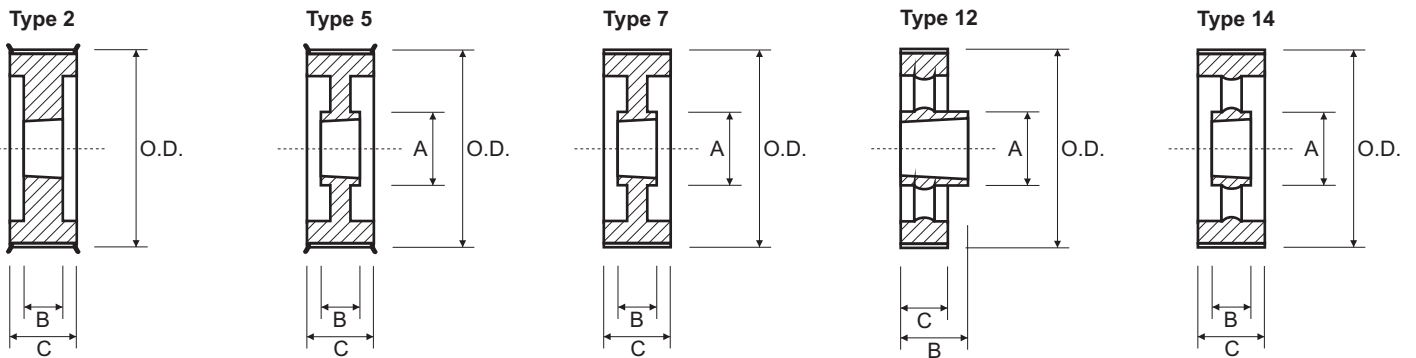
# 8M HTD Timing Pulleys



8M-50 Suit 50mm wide belt							8M-85 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	120.0	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								

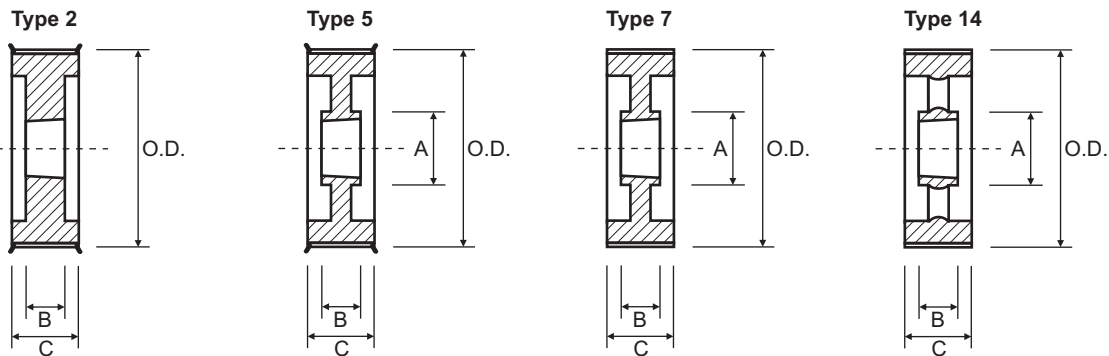


# 14M HTD Timing Pulleys



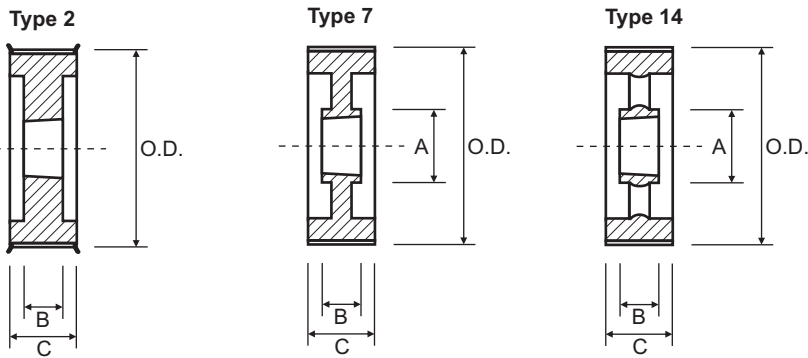
14M-40							14M-55								
Suit 40mm wide belt							Suit 55mm wide belt								
Part No.	O.D	Type	Bush	A	B	C = 54	Part No.	O.D	Type	Bush	A	B	C = 70		
P-28-14M-40F	122.1	2	2012	-	32.0	Cast Iron Flanged	P-28-14M-55F	122.1	2	2012	-	32.0	Cast Iron Flanged		
P-29-14M-40F	126.6	2	2012	-	32.0		P-29-14M-55F	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		Cast Iron No Flanges	P-56-14M-55F	246.8	5	3020	146.0		51.0	Cast Iron No Flanges
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			
P168-14M-40	745.9	14	3020	146.0	51.0	P168-14M-55		745.9	14	3020	146.0	51.0			
						P192-14M-55		852.8	12	3535	178.0	89.0			
						P216-14M-55		959.8	12	4040	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	Cast Iron	P-28-14M-115F	122.1	2	2517	-	45.0	Cast Iron
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

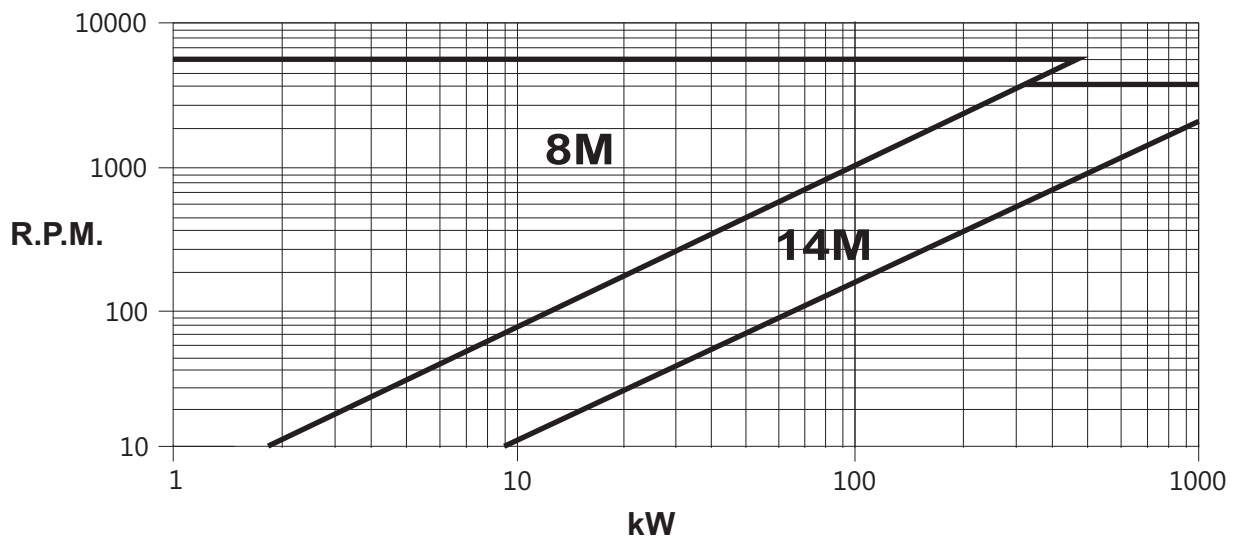


14M-170						
Suit 170mm wide belt						
Part No.	O.D.	Type	Bush	A	B	C = 187.0
P38-14M-170F	166.6	2	3030	-	76.0	Cast Iron Flanged
P40-14M-170F	175.5	2	3030	-	76.0	
P44-14M-170F	193.3	2	3535	-	89.0	
P48-14M-170F	211.1	2	3535	-	89.0	
P56-14M-170F	246.8	2	3535	-	89.0	
P64-14M-170F	282.4	2	4040	-	102.0	
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	

# GTR Pulleys & Giga Torque GX Belt Drives



Suited to a wide range of torques and speeds, transmitting up to 4 times more power, it is up to 60% more compact, and saves up to 30% in weight than Classical drive systems. The Mitsubishi Giga Torque GX belt is designed to be compatible with Poly Chain Pulleys. The Giga Torque GX has a higher power rating than the competitors Polyurethane Carbon belt. Tests have shown that it is also 20% more Durable and has a 16% reduction in the noise level. This belt also has a great resistance to oil and heat being able to run in Ambient temperatures of 121 degrees Celsius. 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 GTR sprocket the following information must be known:

**BORE** - GTR 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..

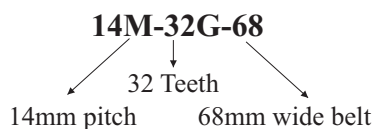
**PITCH** - This is the distance from the centre of one tooth to the centre of the next tooth. There are 2 pitch sizes of GTR Sprockets:

<b>8M</b>	Pitch	<b>8mm</b>
<b>14M</b>		<b>14mm</b>

**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 37 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.



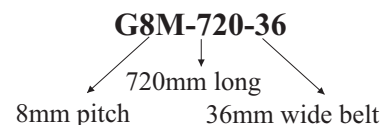
## Identifying a belt

To identify a Giga Torque GX 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 37. 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 37 for a listing of all sizes.



# Giga Torque GX Timing Belts 8M & 14M



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

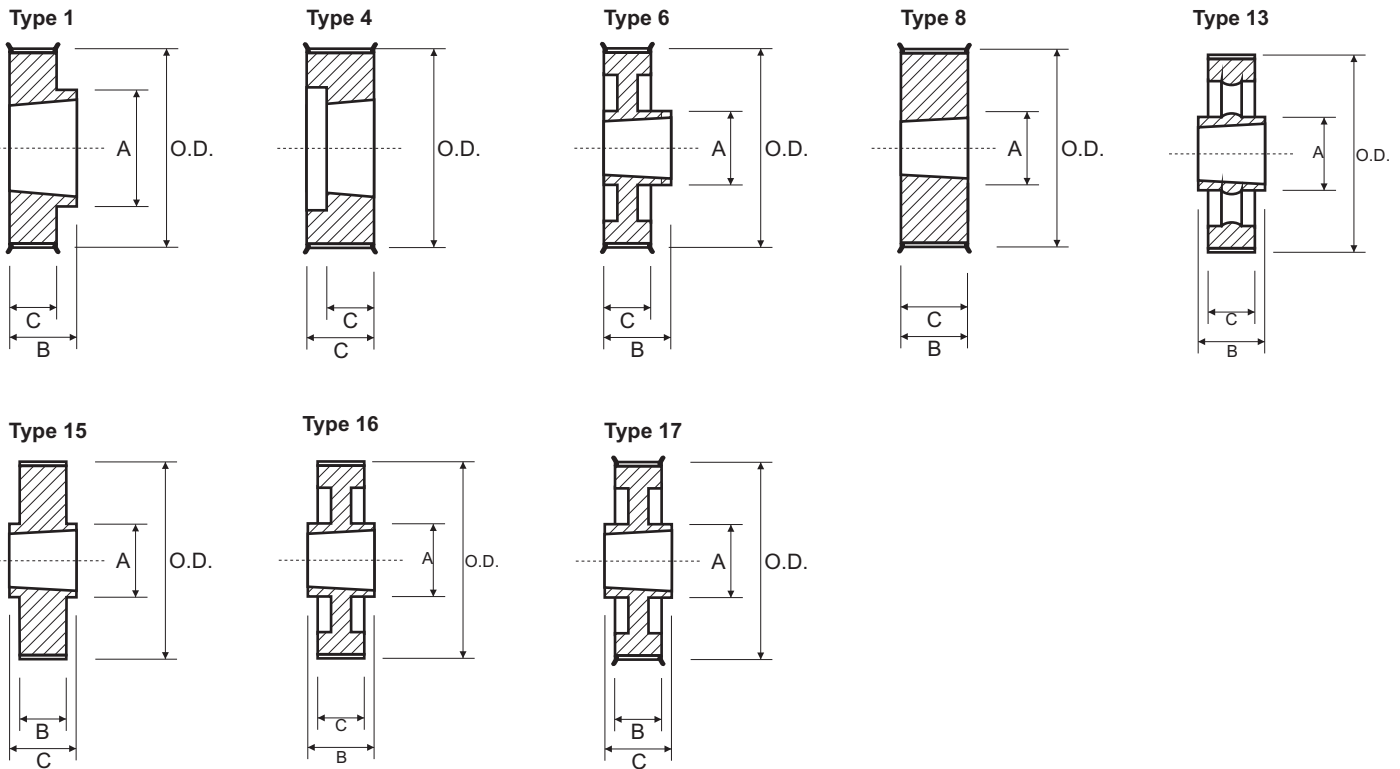
Belt	Teeth	Pitch Length
G8M-640	80	640
G8M-720	90	720
G8M-800	100	800
G8M-896	112	896
G8M-960	120	960
G8M-1000	125	1000
G8M-1040	130	1040
G8M-1120	140	1120
G8M-1200	150	1200
G8M-1224	153	1224
G8M-1280	160	1280
G8M-1440	180	1440
G8M-1600	200	1600
G8M-1760	220	1760
G8M-1792	224	1792
G8M-2000	250	2000
G8M-2200	275	2200
G8M-2240	280	2240
G8M-2400	300	2400
G8M-2520	315	2520
G8M-2600	325	2600
G8M-2800	350	2800
G8M-2840	355	2840
G8M-3048	381	3048
G8M-3200	400	3200
G8M-3280	410	3280
G8M-3600	450	3600
G8M-4000	500	4000
G8M-4400	550	4400
G8M-4480	560	4480

Standard widths of:-  
 12mm Code = G8M-Length-12  
 21mm Code = G8M-Length-21  
 36mm Code = G8M-Length-36  
 62mm Code = G8M-Length-62  
 Long Length up to 36mm wide is available.

Belt	Teeth	Pitch Length
G14M-994	71	994
G14M-1120	80	1120
G14M-1190	85	1190
G14M-1260	90	1260
G14M-1400	100	1400
G14M-1568	112	1568
G14M-1610	115	1610
G14M-1750	125	1750
G14M-1890	135	1890
G14M-1960	140	1960
G14M-2100	150	2100
G14M-2240	160	2240
G14M-2310	165	2310
G14M-2380	170	2380
G14M-2450	175	2450
G14M-2520	180	2520
G14M-2590	185	2590
G14M-2660	190	2660
G14M-2800	200	2800
G14M-3136	224	3136
G14M-3304	236	3304
G14M-3360	240	3360
G14M-3500	250	3500
G14M-3850	275	3850
G14M-3920	280	3920
G14M-4326	309	4326
G14M-4410	315	4410

Standard widths of:-  
 20mm Code = G14M-Length-20  
 37mm Code = G14M-Length-37  
 68mm Code = G14M-Length-68  
 90mm Code = G14M-Length-90  
 125mm Code = G14M-Length-125  
 Long Length up to 37mm wide is available.

# 8M GTR Timing Pulleys

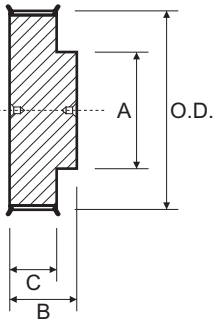


8M-12 Suit 12mm wide belt							8M-21 Suit 21mm wide belt						
Part No.	O.D.	Type	Bush	A	B	C = 20.0	Part No.	O.D.	Type	Bush	A	B	C = 30.0
8M-22G-12F	54.4	8	1008	-	22.0	CAST IRON	8M-22G-21F	54.4	4	1008	-	22.0	CAST IRON
8M-25G-12F	62.1	8	1108	-	22.0		8M-25G-21F	62.1	4	1108	-	22.0	
8M-28G-12F	69.7	8	1108	-	22.0		8M-28G-21F	69.7	4	1108	-	22.0	
8M-30G-12F	74.8	8	1108	-	22.0		8M-30G-21F	74.8	4	1610	-	25.0	
8M-32G-12F	79.9	1	1210	66.0	25.0		8M-32G-21F	79.9	4	1610	-	25.0	
8M-34G-12F	85.0	1	1610	72.0	25.0		8M-34G-21F	85.0	4	1610	-	25.0	
8M-36G-12F	90.1	1	1610	75.0	25.0		8M-36G-21F	90.1	4	1610	-	25.0	
8M-38G-12F	95.2	1	1610	82.0	25.0		8M-38G-21F	95.2	4	1610	-	25.0	
8M-40G-12F	100.3	1	1610	89.0	25.0		8M-40G-21F	100.3	4	1610	-	25.0	
8M-45G-12F	113.0	1	2012	104.0	32.0		8M-45G-21F	113.0	15	2012	104.0	32.0	
8M-48G-12F	120.6	1	2012	105.0	32.0		8M-48G-21F	120.6	15	2012	105.0	32.0	
8M-50G-12F	125.7	1	2012	105.0	32.0		8M-50G-21F	125.7	15	2012	105.0	32.0	
8M-56G-12F	141.0	1	2012	105.0	32.0		8M-56G-21F	141.0	15	2012	105.0	32.0	
8M-60G-12F	151.2	1	2012	110.0	32.0		8M-60G-21F	151.2	15	2517	110.0	45.0	
8M-64G-12F	161.4	6	2012	110.0	32.0		8M-64G-21F	161.4	17	2517	120.0	45.0	
8M-75G-12	189.4	6	2012	110.0	32.0		8M-75G-21	189.4	16	2517	120.0	45.0	
8M-80G-12	202.1	6	2012	110.0	32.0	8M-80G-21	202.1	16	3020	146.0	51.0		
8M-90G-12	227.6	6	2012	110.0	32.0	8M-90G-21	227.6	16	3020	146.0	51.0		
						N.F.	8M-112G-21	283.6	13	3020	146.0	51.0	
							8M-140G-21	354.9	13	3020	146.0	51.0	

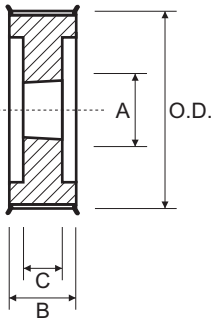
N.F. - No Flanges

# 8M GTR Timing Pulleys

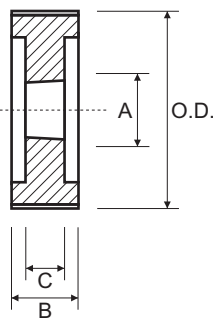
Type 1PB



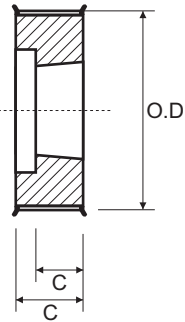
Type 2



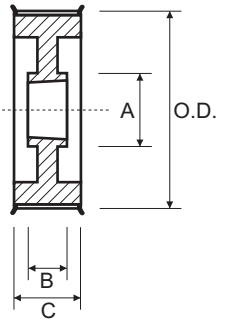
Type 2NF



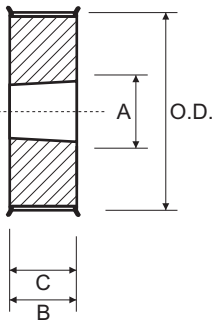
Type 4



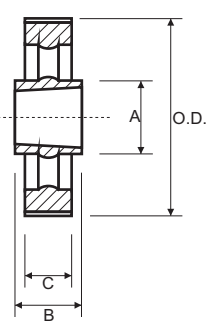
Type 7



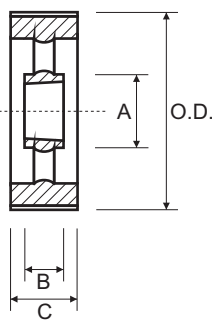
Type 8



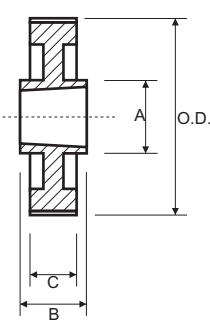
Type 13



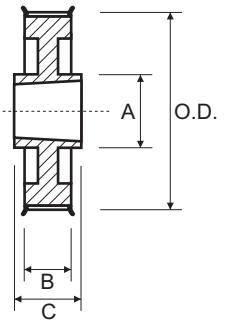
Type 14



Type 16

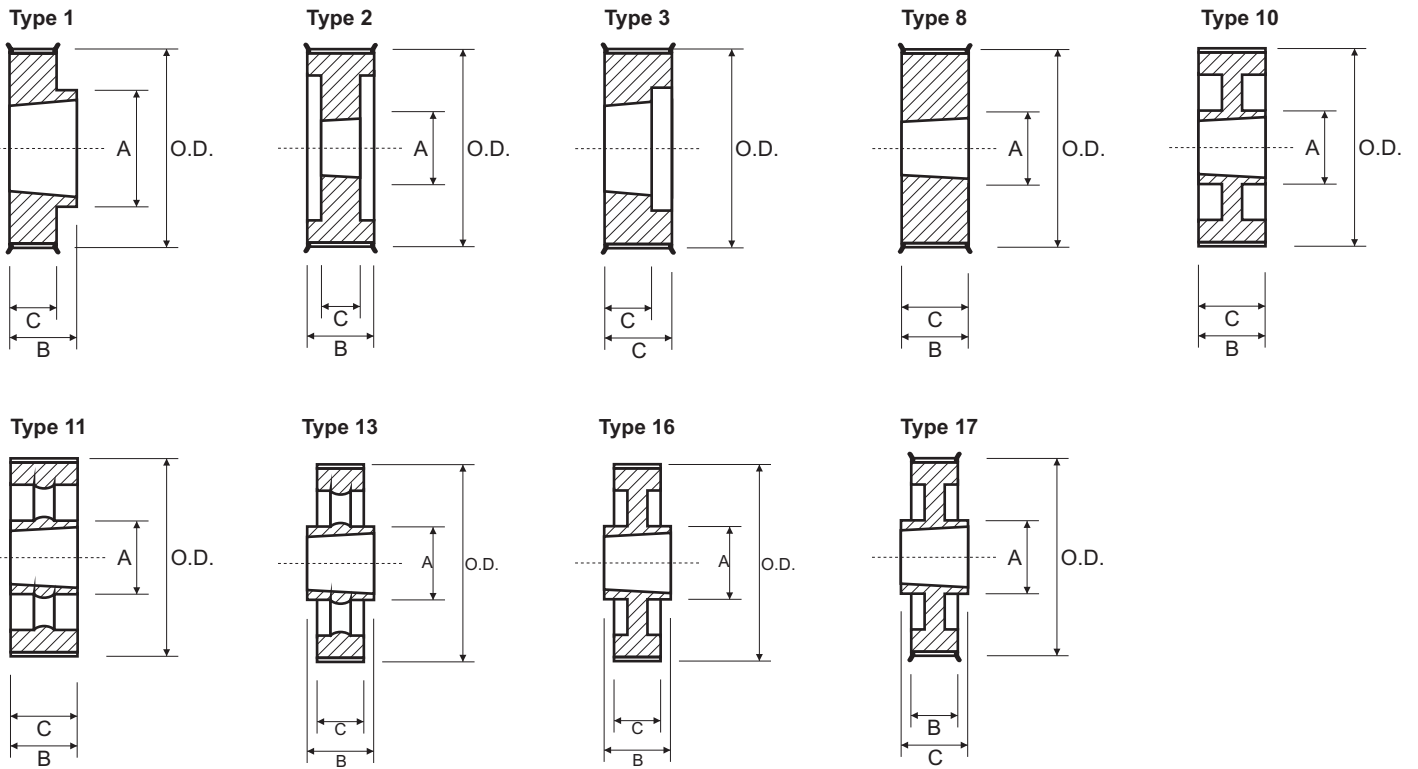


Type 17



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-25G-36F	62.1	1PB	-	49.0	55.0	CAST IRON	8M-30G-62F	74.8	4	1615	-	38.0	CAST IRON
8M-28G-36F	69.7	1PB	-	49.0	55.0		8M-32G-62F	79.9	4	1615	-	38.0	
8M-30G-36F	74.8	4	1615	-	38.0		8M-34G-62F	85.0	2	1615	-	38.0	
8M-32G-36F	79.9	4	1615	-	38.0		8M-36G-62F	90.1	2	1615	-	38.0	
8M-34G-36F	85.0	4	1615	-	38.0		8M-38G-62F	95.2	2	1615	-	38.0	
8M-36G-36F	90.1	4	1615	-	38.0		8M-40G-62F	100.3	2	2012	-	32.0	
8M-38G-36F	95.2	4	1615	-	38.0		8M-45G-62F	113.0	2	2012	-	32.0	
8M-40G-36F	100.3	2	2012	-	32.0		8M-48G-62F	120.6	2	2517	-	45.0	
8M-45G-36F	113.0	2	2012	-	32.0		8M-50G-62F	125.7	2	2517	-	45.0	
8M-48G-36F	120.6	2	2012	-	32.0		8M-56G-62F	141.0	2	2517	-	45.0	
8M-50G-36F	125.7	2	2012	-	32.0		8M-60G-62F	151.2	2	2517	-	45.0	
8M-56G-36F	141.0	8	2517	-	45.0		8M-64G-62F	161.4	2	2517	-	45.0	
8M-60G-36F	151.2	8	2517	-	45.0		8M-75G-62	189.4	2NF	3020	-	51.0	
8M-64G-36F	161.4	17	2517	120.0	45.0		8M-80G-62	202.1	7	3020	146.0	51.0	
8M-75G-36	189.4	16	3020	146.0	51.0		8M-90G-62	227.6	7	3020	146.0	51.0	
8M-80G-36	202.1	16	3020	146.0	51.0		8M-112G-62	283.6	14	3020	146.0	51.0	
8M-90G-36	227.6	16	3020	146.0	51.0		8M-140G-62	354.9	13	3030	140.0	76.0	
8M-112G-36	283.6	13	3020	146.0	51.0		8M-168G-62	426.2	13	3030	140.0	76.0	
8M-140G-36	354.9	13	3020	146.0	51.0		8M-192G-36	487.3	13	3030	140.0	76.0	
8M-168G-36	426.2	13	3020	146.0	51.0								
8M-192G-36	487.3	13	3020	146.0	51.0								

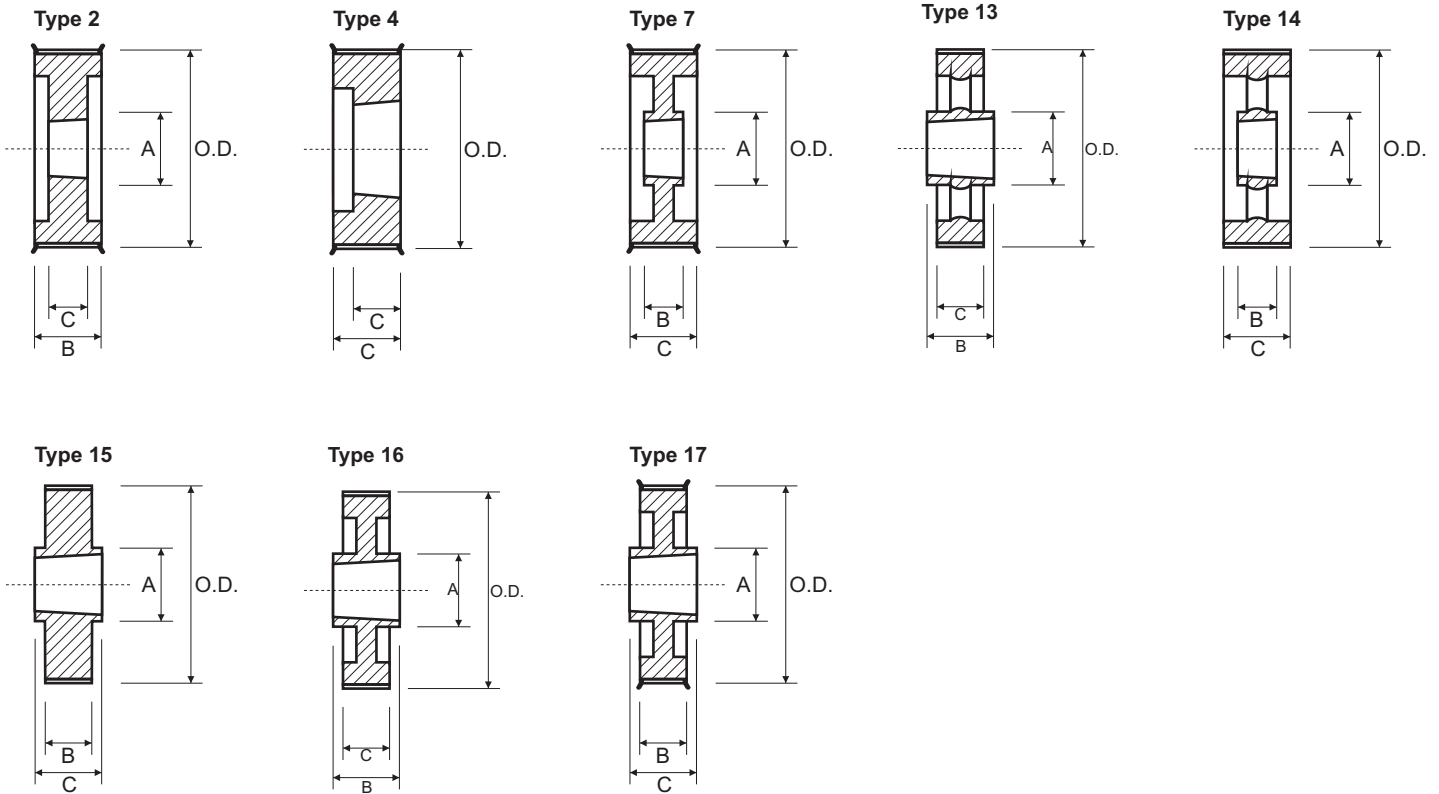
# 14M GTR Timing Pulleys



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-28G-20F	122.0	3	2012	-	32.0	CAST IRON	14M-28G-37F	122.0	2	2012	-	32.0	CAST IRON
14M-30G-20F	130.9	3	2012	-	32.0		14M-30G-37F	130.9	2	2012	-	32.0	
14M-32G-20F	139.8	3	2012	-	32.0		14M-32G-37F	139.8	2	2012	-	32.0	
14M-34G-20F	148.7	1	2517	125.0	45.0		14M-34G-37F	148.7	2	2517	-	45.0	
14M-36G-20F	157.6	1	2517	125.0	45.0		14M-36G-37F	157.6	2	2517	-	45.0	
14M-38G-20F	166.5	1	2517	125.0	45.0		14M-38G-37F	166.5	2	2517	-	45.0	
14M-40G-20F	175.5	1	2517	125.0	45.0		14M-40G-37F	175.5	2	2517	-	45.0	
14M-44G-20F	193.3	1	3020	155.0	51.0		14M-44G-37F	193.3	8	3020	-	51.0	
14M-48G-20F	211.1	1	3020	155.0	51.0		14M-48G-37F	211.1	8	3020	-	51.0	
14M-50G-20F	220.0	1	3020	155.0	51.0		14M-50G-37F	220.0	8	3020	-	51.0	
14M-56G-20F	246.8	17	3020	146.0	51.0		14M-56G-37F	246.8	17	3020	146.0	51.0	
14M-60G-20	264.6	17	3020	146.0	51.0		14M-60G-37	264.6	17	3020	146.0	51.0	
14M-64G-20	282.4	17	3020	146.0	51.0		14M-64G-37	282.4	17	3020	146.0	51.0	
14M-72G-20	318.1	16	3020	146.0	51.0		14M-72G-37	318.1	10	3020	146.0	51.0	
14M-80G-20	353.7	13	3020	146.0	51.0		14M-80G-37	353.7	11	3020	146.0	51.0	
14M-90G-20	398.3	13	3020	146.0	51.0		14M-90G-37	398.3	11	3020	146.0	51.0	
14M-112G-20	496.3	13	3020	146.0	51.0	14M-112G-37	496.3	11	3020	146.0	51.0		
14M-140G-20	621.1	13	3020	146.0	51.0	14M-140G-37	621.1	13	3020	146.0	51.0		
						No Flanges	14M-168G-37	745.9	13	3020	146.0	51.0	No Flanges
							14M-192G-37	852.8	13	3535	178.0	89.0	

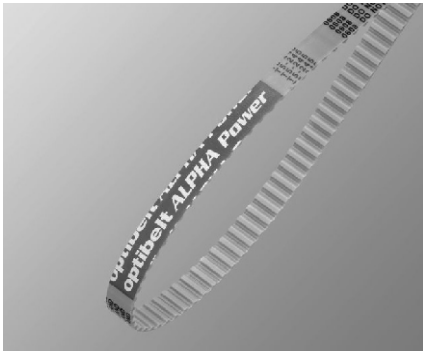


# 14M GTR Timing Pulleys

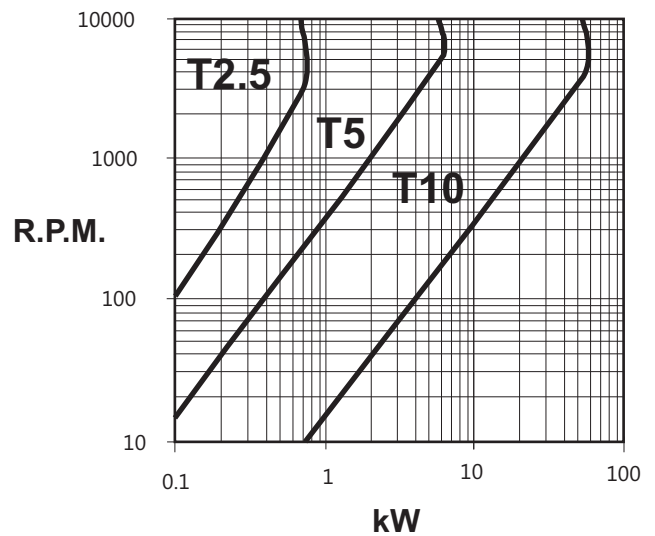
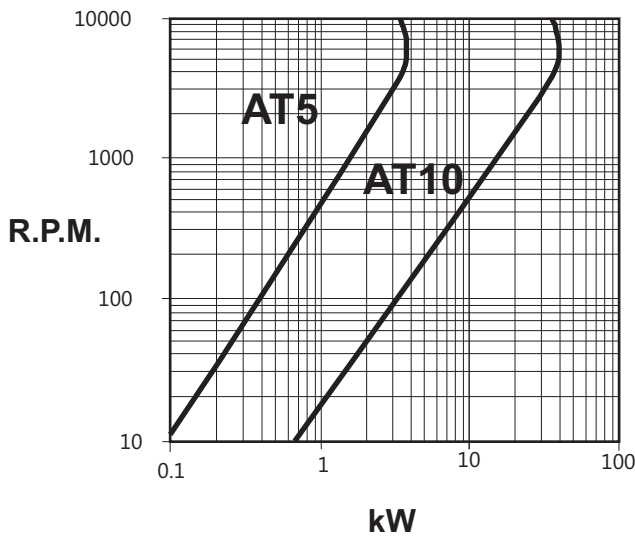


14M-68							14M-90						
Suit 68mm wide belt							Suit 90mm wide belt						
Part No.	O.D	Type	Bush	A	B	C = 84.0	Part No.	O.D	Type	Bush	A	B	C = 106.0
14M-28G-68F	122.0	2	2517	101.0	45.0		14M-32G-90F	139.8	2	3020	-	51.0	
14M-30G-68F	130.9	2	2517	110.0	45.0		14M-34G-90F	148.7	2	3020	-	51.0	
14M-32G-68F	139.8	4	3020	116.0	51.0		14M-36G-90F	157.6	2	3020	-	51.0	
14M-34G-68F	148.7	4	3020	132.0	51.0		14M-38G-90F	166.5	2	3020	-	51.0	
14M-36G-68F	157.6	2	3020	131.0	51.0		14M-40G-90F	175.5	2	3020	-	51.0	
14M-38G-68F	166.5	2	3020	141.0	51.0		14M-44G-90F	193.3	2	3030	-	76.0	
14M-40G-68F	175.5	2	3020	156.0	51.0		14M-48G-90F	211.1	2	3030	-	76.0	
14M-44G-68F	193.3	2	3030	-	76.0		14M-50G-90F	220.0	2	3030	-	89.0	
14M-48G-68F	211.1	2	3030	-	76.0		14M-56G-90F	246.8	2	3535	-	89.0	
14M-50G-68F	220.0	15	3535	178.0	89.0		14M-60G-90	264.6	2	3535	-	89.0	
14M-56G-68F	246.8	15	3535	178.0	89.0		14M-64G-90	282.4	5	3535	178.0	89.0	
14M-60G-68	264.6	17	3535	178.0	89.0		14M-72G-90	318.1	7	3535	178.0	89.0	
14M-64G-68	282.4	17	3535	178.0	89.0		14M-80G-90	353.7	14	3535	178.0	89.0	
14M-72G-68	318.1	16	3535	178.0	89.0		14M-90G-90	398.3	14	3535	178.0	89.0	
14M-80G-68	353.7	13	3535	178.0	89.0		14M-112G-90	496.3	14	4040	215.0	102.0	
14M-90G-68	398.3	13	3535	178.0	89.0		14M-140G-90	621.1	14	4040	215.0	102.0	
14M-112G-68	496.3	13	3535	178.0	89.0		14M-168G-90	745.9	14	5050	267.0	127.0	
14M-140G-68	621.1	13	4040	215.0	102.0		14M-192G-90	852.8	14	5050	267.0	127.0	
14M-168G-68	745.9	17	4040	215.0	102.0								
14M-192G-68	852.8	17	4040	215.0	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 Optibelt belt range 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.



## Alpha

Optibelt Alpha timing belts consist of high tensile strength, flexible tension cord and abrasion resistant polyurethane. Available in T2.5, T5 and T10 as well as AT5 and AT10.

## Alpha Power

Alpha Power timing belts are a result of the consistent developments undertaken by Optibelt. The new Alpha Power belt has more resistant and more durable polyurethane compounds, and an increase in performance of 30%. The Optimized interplay between the polyurethane and the steel cord components guarantees that the Optibelt Alpha Power belt will be an extremely economical solution for a wide range of applications.

# Metric Timing Belts T2.5 & T5



Power Transmission



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

Belt	Teeth	Pitch Length
120-T2.5	48	120
145-T2.5	58	145
160-T2.5	64	160
177.5-T2.5	71	178
180-T2.5	72	180
182.5-T2.5	73	183
185-T2.5	74	185
200-T2.5	80	200
230-T2.5	92	230
245-T2.5	98	245
265-T2.5	106	265
285-T2.5	114	285
290-T2.5	116	290
305-T2.5	122	305
317.5-T2.5	127	318
330-T2.5	132	330
380-T2.5	152	380
395-T2.5	158	395
420-T2.5	168	420
480-T2.5	192	480
500-T2.5	200	500
540-T2.5	216	540
600-T2.5	240	600
620-T2.5	248	620
650-T2.5	260	650
680-T2.5	272	680
700-T2.5	280	700
780-T2.5	312	780
880-T2.5	352	880
915-T2.5	366	915
950-T2.5	380	950
1185-T2.5	474	1185

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

Belt	Teeth	Pitch Length
150-T5	30	150
165-T5	33	165
180-T5	36	180
185-T5	37	185
200-T5	40	200
210-T5	42	210
215-T5	43	215
220-T5	44	220
225-T5	45	225
245-T5	49	245
250-T5	50	250
255-T5	51	255
260-T5	52	260
270-T5	54	270
275-T5	55	275
280-T5	56	280
295-T5	59	295
305-T5	61	305
315-T5	63	315
330-T5	66	330
340-T5	68	340
350-T5	70	350
355-T5	71	355
365-T5	73	365
390-T5	78	390
400-T5	80	400
410-T5	82	410
420-T5	84	420
445-T5	89	445
450-T5	90	450
455-T5	91	455
460-T5	92	460
475-T5	95	475
480-T5	96	480
500-T5	100	500
510-T5	102	510
525-T5	105	525
545-T5	109	545
550-T5	110	550
560-T5	112	560

Belt	Teeth	Pitch Length
575-T5	115	575
590-T5	118	590
600-T5	120	600
610-T5	122	610
620-T5	124	620
625-T5	125	625
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
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
1440-T5	288	1440
1955-T5	391	1955

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

# Metric Timing Belts T10



	Pitch (mm)	T	B
T10	10.00	2.50	4.50

Belt	Teeth	Pitch Length
260-T10	26	260
340-T10	34	340
370-T10	37	370
390-T10	39	390
400-T10	40	400
410-T10	41	410
440-T10	44	440
450-T10	45	450
480-T10	48	480
500-T10	50	500
530-T10	53	530
560-T10	56	560
600-T10	60	600
610-T10	61	610
630-T10	63	630
660-T10	66	660
690-T10	69	690
700-T10	70	700
720-T10	72	720
730-T10	73	730
750-T10	75	750
780-T10	78	780
810-T10	81	810
840-T10	84	840
880-T10	88	880
890-T10	89	890
900-T10	90	900
910-T10	91	910
920-T10	92	920
960-T10	96	960
970-T10	97	970
980-T10	98	980
1010-T10	101	1010

Belt	Teeth	Pitch Length
1080-T10	108	1080
1100-T10	110	1100
1110-T10	111	1110
1140-T10	114	1140
1150-T10	115	1150
1210-T10	121	1210
1240-T10	124	1240
1250-T10	125	1250
1300-T10	130	1300
1320-T10	132	1320
1350-T10	135	1350
1390-T10	139	1390
1400-T10	140	1400
1420-T10	142	1420
1450-T10	145	1450
1460-T10	146	1460
1500-T10	150	1500
1560-T10	156	1560
1610-T10	161	1610
1750-T10	175	1750
1780-T10	178	1780
1800-T10	180	1800
1880-T10	188	1880
1960-T10	196	1960
2250-T10	225	2250

Standard widths of:-  
 16mm Code = Length-T10-16  
 25mm Code = Length-T10-25  
 32mm Code = Length-T10-32  
 50mm Code = Length-T10-50  
 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



Power Transmission

Belt	Teeth	Pitch Length
260-T5DL	52	260
410-T5DL	82	410
460-T5DL	92	460
480-T5DL	96	480
515-T5DL	103	515
590-T5DL	118	590
620-T5DL	124	620
750-T5DL	150	750
815-T5DL	163	815
860-T5DL	172	860
940-T5DL	188	940
1100-T5DL	220	1100

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.

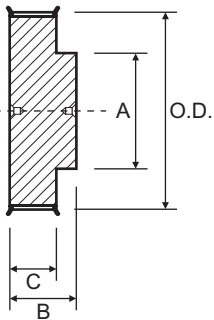
Belt	Teeth	Pitch Length
260-T10DL	26	260
530-T10DL	53	530
600-T10DL	60	600
630-T10DL	63	630
660-T10DL	66	660
720-T10DL	72	720
840-T10DL	84	840
920-T10DL	92	920
980-T10DL	98	980
1100-T10DL	110	1100
1210-T10DL	121	1210
1240-T10DL	124	1240
1250-T10DL	125	1250
1320-T10DL	132	1320
1350-T10DL	135	1350
1420-T10DL	142	1420
1610-T10DL	161	1610
1880-T10DL	188	1880

Standard widths of:-  
 16mm Code = Length-T10-16  
 25mm Code = Length-T10-25  
 32mm Code = Length-T10-32  
 50mm Code = Length-T10-50

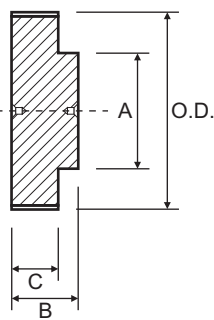
Off standard widths are available on request.

# T2.5 Metric Timing Pulleys

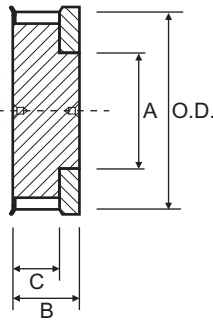
Type 1



Type 7



Type 8

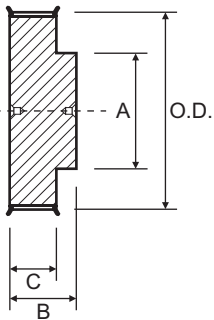


T2.5-6					
Suit 6mm wide belt					
Part No.	O.D.	Type	A	B	C = 10.0
12-T2.5-6F	9.0	8	6.5	16.0	Aluminium Flanged
14-T2.5-6F	10.6	8	8.5	16.0	
15-T2.5-6F	11.4	8	10.0	16.0	
16-T2.5-6F	12.2	1	9.0	16.0	
18-T2.5-6F	13.8	1	9.0	16.0	
19-T2.5-6F	14.6	1	9.0	16.0	
20-T2.5-6F	15.4	1	11.0	16.0	
22-T2.5-6F	17.0	1	11.0	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	

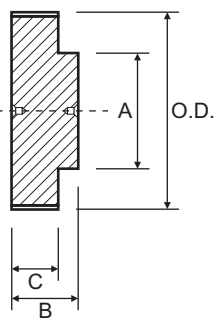
N.F. - No Flanges

# T5 Metric Timing Pulleys

Type 1



Type 7

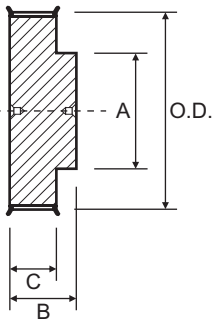


T5-10						T5-16					
Suit 10mm wide belt						Suit 16mm wide belt					
Part No.	O.D.	Type	A	B	C = 15.0	Part No.	O.D.	Type	A	B	C = 21.0
10-T5-10F	15.1	1	8.0	21.0	Aluminium Flanged	10-T5-16F	15.1	1	8.0	27.0	Aluminium Flanged
12-T5-10F	18.3	1	11.0	21.0		12-T5-16F	18.3	1	11.0	27.0	
14-T5-10F	21.5	1	14.0	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		44-T5-16	69.2	7	45.0	27.0	
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		

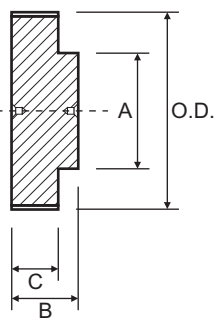
N.F. - No Flanges

# T5 Metric Timing Pulleys

Type 1



Type 7

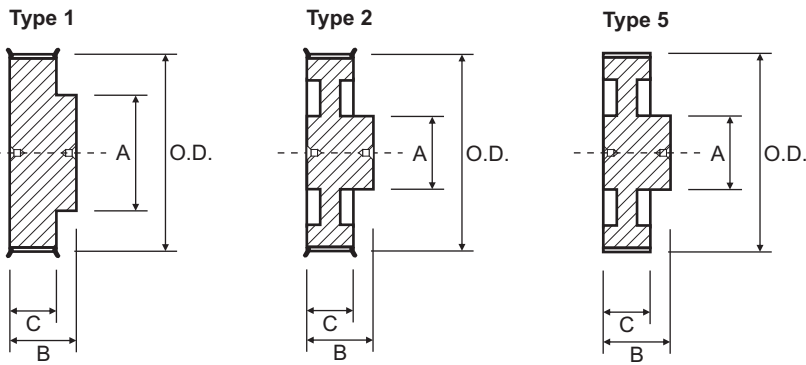


T5-25						
Suit 25mm wide belt						
Part No.	O.D.	Type	A	B	C = 30.0	
10-T5-25F	15.1	1	8.0	36.0	Aluminium Flanged	
12-T5-25F	18.3	1	11.0	36.0		
14-T5-25F	21.5	1	14.0	36.0		
15-T5-25F	23.1	1	16.0	36.0		
16-T5-25F	24.6	1	18.0	36.0		
18-T5-25F	27.8	1	20.0	36.0		
19-T5-25F	29.4	1	22.0	36.0		
20-T5-25F	31.0	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		N.F.
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

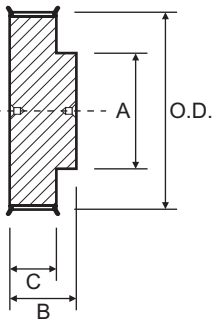


T10-16					T10-25						
Suit 16mm wide belt					Suit 25mm wide belt						
Part No.	O.D.	Type	A	B	C = 21.0	Part No.	O.D.	Type	A	B	C = 30.0
12-T10-16F	36.4	1	28.0	31.0	Aluminium Flanged	12-T10-25F	36.4	1	28.0	40.0	Aluminium Flanged
14-T10-16F	42.7	1	32.0	31.0		14-T10-25F	42.7	1	32.0	40.0	
15-T10-16F	45.9	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		44-T10-25	138.2	5	88.0	40.0	
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.						N.F.

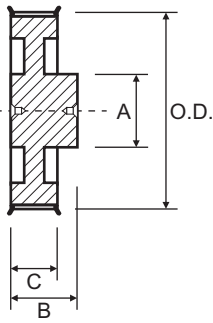
N.F. - No Flanges

# T10 Metric Timing Pulleys

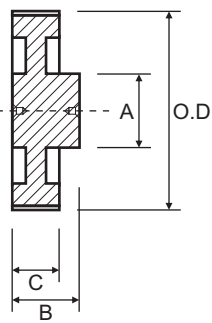
Type 1



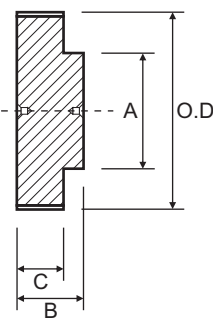
Type 2



Type 5



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.						N.F.

N.F. - No Flanges

# Metric Timing Belts AT5 & AT10



Power Transmission



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

Belt	Teeth	Pitch Length
225-AT5	45	225
255-AT5	51	255
275-AT5	55	275
280-AT5	56	280
300-AT5	60	300
340-AT5	68	340
375-AT5	75	375
390-AT5	78	390
420-AT5	84	420
450-AT5	90	450
455-AT5	91	455
500-AT5	100	500
545-AT5	109	545
600-AT5	120	600
610-AT5	122	610
630-AT5	126	630
660-AT5	132	660
710-AT5	142	710
720-AT5	144	720
750-AT5	150	750
780-AT5	156	780
825-AT5	165	825
860-AT5	172	860
975-AT5	195	975
1050-AT5	210	1050
1125-AT5	225	1125
1500-AT5	300	1500
2000-AT5	400	2000

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

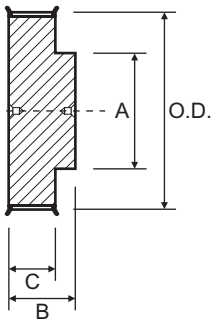
Belt	Teeth	Pitch Length
500-AT10	50	500
560-AT10	56	560
600-AT10	60	600
610-AT10	61	610
660-AT10	66	660
700-AT10	70	700
730-AT10	73	730
780-AT10	78	780
800-AT10	80	800
810-AT10	81	810
840-AT10	84	840
890-AT10	89	890
920-AT10	92	920
960-AT10	96	960
980-AT10	98	980
1000-AT10	100	1000
1010-AT10	101	1010
1050-AT10	105	1050
1080-AT10	108	1080
1100-AT10	110	1100
1150-AT10	115	1150
1200-AT10	120	1200
1210-AT10	121	1210

Belt	Teeth	Pitch Length
1250-AT10	125	1250
1280-AT10	128	1280
1300-AT10	130	1300
1320-AT10	132	1320
1350-AT10	135	1350
1360-AT10	136	1360
1400-AT10	140	1400
1420-AT10	142	1420
1480-AT10	148	1480
1500-AT10	150	1500
1600-AT10	160	1600
1700-AT10	170	1700
1720-AT10	172	1720
1800-AT10	180	1800
1860-AT10	186	1860
1940-AT10	194	1940

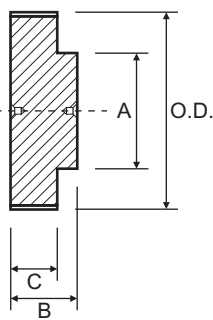
Standard widths of:-  
 16mm Code = Length-AT10-16  
 25mm Code = Length-AT10-25  
 32mm Code = Length-AT10-32  
 50mm Code = Length-AT10-50  
 Long Length up to 50mm wide is available.

# AT5 Metric Timing Pulleys

Type 1



Type 7

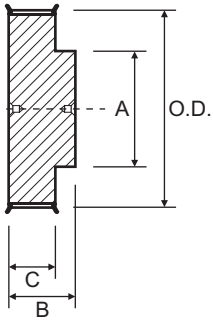


AT5-10						AT5-16							
Suit 10mm wide belt						Suit 16mm wide belt							
Part No.	O.D.	Type	A	B	C = 15.0	Part No.	O.D.	Type	A	B	C = 21.0		
12-AT5-10F	17.9	1	11.0	21.0	Aluminium Flanged	12-AT5-16F	17.9	1	11.0	27.0	Aluminium Flanged		
14-AT5-10F	21.1	1	14.0	21.0		14-AT5-16F	21.1	1	14.0	27.0			
15-AT5-10F	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.							N.F.

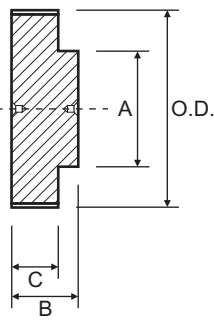
N.F. - No Flanges

# AT5 Metric Timing Pulleys

Type 1



Type 7



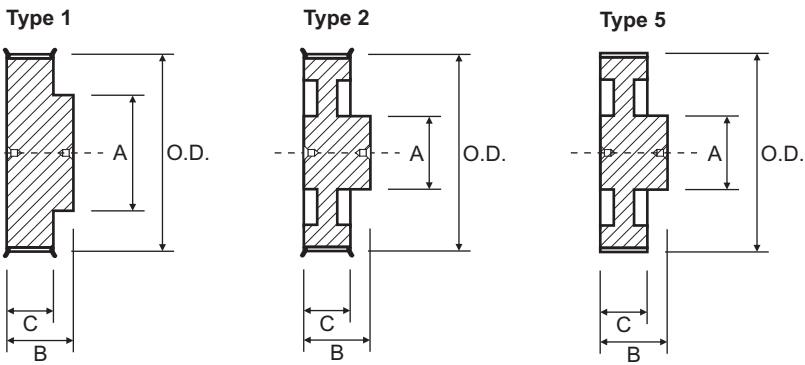
## AT5-25

Suit 25mm wide belt

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

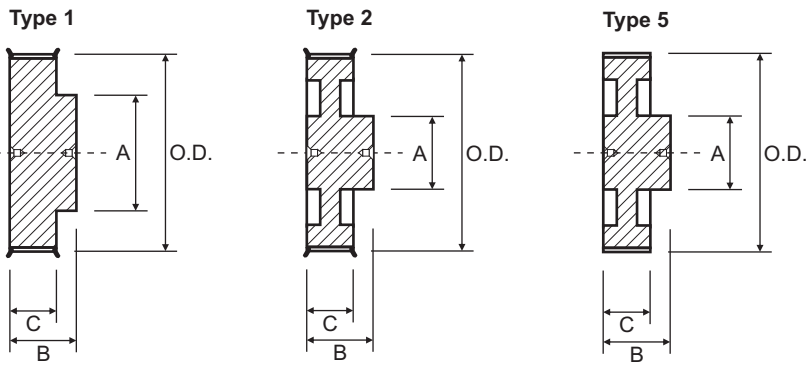
# AT10 Metric Timing Pulleys



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

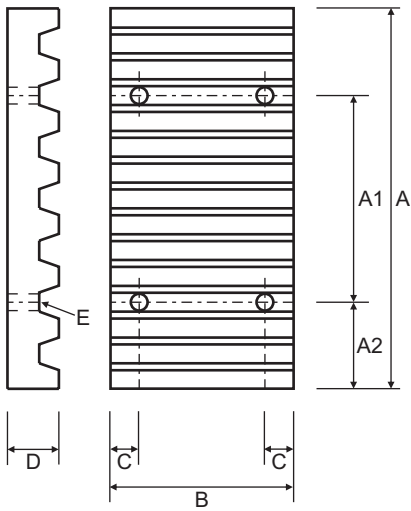
# AT10 Metric Timing Pulleys



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	22.2
	inch	1/2", 5/8", 3/4", 7/8", 1"		
1108	mm	12, 14, 15, 16, 18, 19, 20, 22, 24, 25, 28	38.0	22.2
	inch	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, 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 1/2", 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, 20, 22, 24, 25, 28, 30, 32, 35, 38, 40, 42, 45, 48, 50	70.0	44.4
	inch	3/4", 7/8", 1", 1 1/8", 1 3/8"		
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, 20, 22, 24, 25, 28, 30, 32, 35, 38, 40, 42, 45, 48, 50, 55, 60	85.6	63.5
	inch	3/4", 7/8", 1", 1 1/8"		
3020	mm	24, 25, 28, 30, 32, 35, 38, 40, 42, 45, 48, 50, 55, 60, 65, 70, 75	108.0	50.8
	inch	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", 2 1/4", 2 3/8", 2 1/2", 2 5/8", 2 3/4", 2 7/8", 3"		
3030	mm	32, 35, 38, 40, 42, 45, 48, 50, 55, 60, 65, 70, 75	108.0	76.2
	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",		
	inch	2 5/8", 2 3/4", 2 2/8", 3"		
3525	mm	35, 38, 40, 42, 45, 48, 50, 55, 60, 65, 70, 75, 80, 85, 90	108.0	63.5
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"		
4030	mm	40, 42, 45, 48, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100	146.0	76.2
4040	mm	40, 42, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 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", 2 3/4",		
	inch	3", 3 1/4", 3 1/2", 3 3/4", 4"		
4535	mm	60, 65, 70, 75, 80, 85, 90, 95, 100, 105, 110	162.0	88.9
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"		
5040	mm	70, 95, 100, 110, 115, 120, 125	177.5	101.6
5050	mm	70, 95, 100, 110, 115, 120, 125	177.5	127.0

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 what the rim speed of your pulley will be.

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

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;

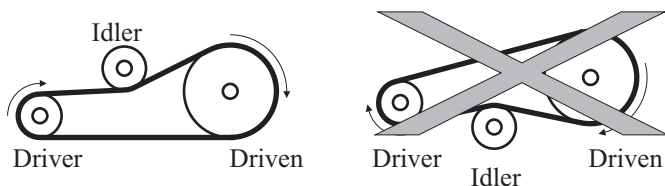
1. On all two-pulley drives, the minimum flanging requirements are two flanges on one pulley or one flange on each pulley on opposite sides.
2. On drives where the center distance is more than eight times the diameter of the small pulley, both pulleys should be flanged on both sides.
3. On drives with 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.



Information on this page has been sourced from the following Gates catalogues  
 Powergrip HTD Design Manual - E2/20068/8.92  
 Gates Design Manual E2/20099

## 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  $\frac{1}{2}(D + 3d)$ , whichever is the larger. You can then find a tentative belt length using the following formula.

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

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.

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

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.

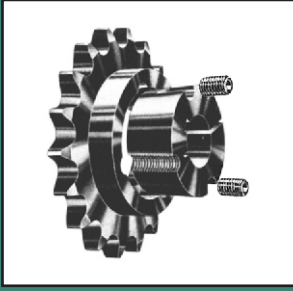
### Aircraft & Motor Vehicle drives

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.

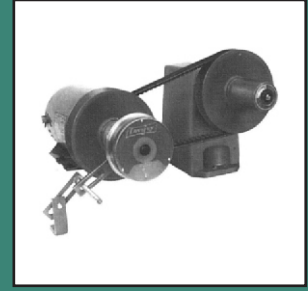
# Notes



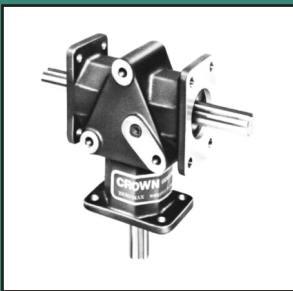
Sprocket in both B.S. A.S.A. - Plates, Simplex, Duplex & Triplex. Chain in B.S. A.S.A. Conveyor & Special chains.



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