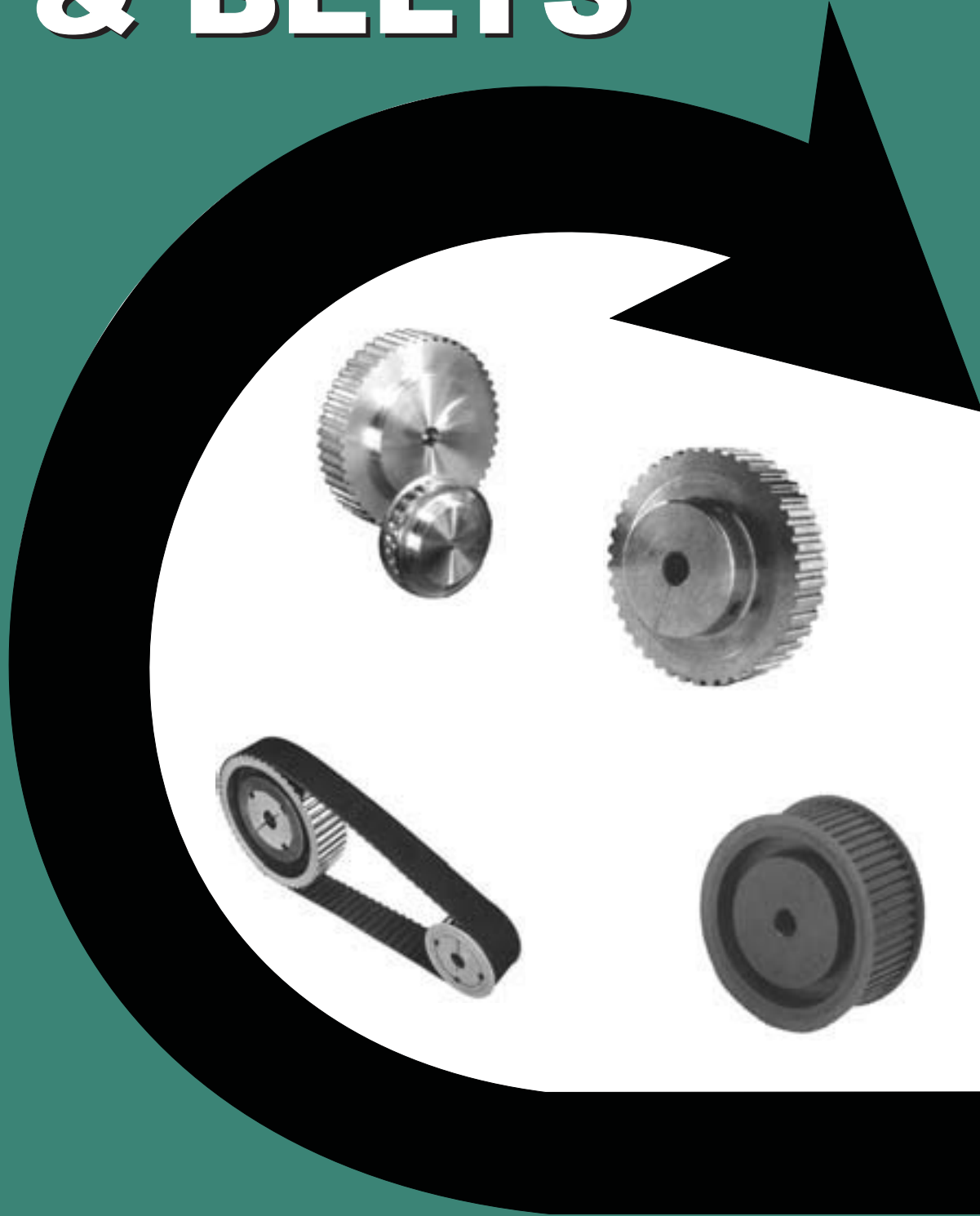


TIMING PULLEYS & BELTS



POWER TRANSMISSION - PNEUMATIC CYLINDERS

2005



INDEX

| | |
|--|--------------|
| FEATURES OF TIMING PULLEY DRIVES | Page 3 |
| CLASSICAL TIMING PULLEY & BELT DRIVES | Page 4 |
| CLASSICAL TIMING BELTS | Page 5 |
| CLASSICAL TIMING PULLEYS PILOT BORE | Page 6 - 11 |
| CLASSICAL TIMING PULLEYS TAPER BORE | Page 12 - 15 |
| HTD PULLEY & BELT DRIVES | Page 16 |
| HTD TIMING BELTS | Page 17 - 18 |
| HTD TIMING PULLEYS PILOT BORE | Page 19 - 26 |
| HTD TIMING PULLEYS TAPER BORE | Page 27 - 32 |
| POLY CHAIN G.T. SPROCKETS & BELT DRIVES | Page 33 |
| POLY CHAIN G.T. BELTS | Page 34 |
| POLY CHAIN G.T. SPROCKETS TAPER AND PILOT BORE | Page 35 - 38 |
| METRIC TIMING PULLEY & BELT DRIVES | Page 39 |
| METRIC 'T' TIMING BELTS | Page 40 - 42 |
| METRIC 'T' TIMING PULLEYS PILOT BORE | Page 43 - 47 |
| METRIC 'AT' TIMING BELTS | Page 48 |
| METRIC 'AT' TIMING PULLEYS PILOT BORE | Page 49 - 52 |
| TIMING BELT CLAMP PLATES | Page 53 |
| TAPER BUSHES | Page 54 |
| USEFUL INFORMATION | Page 55 |

All dimensions in mm unless otherwise stated

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

Features of Timing Pulley Drives

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

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

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

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

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

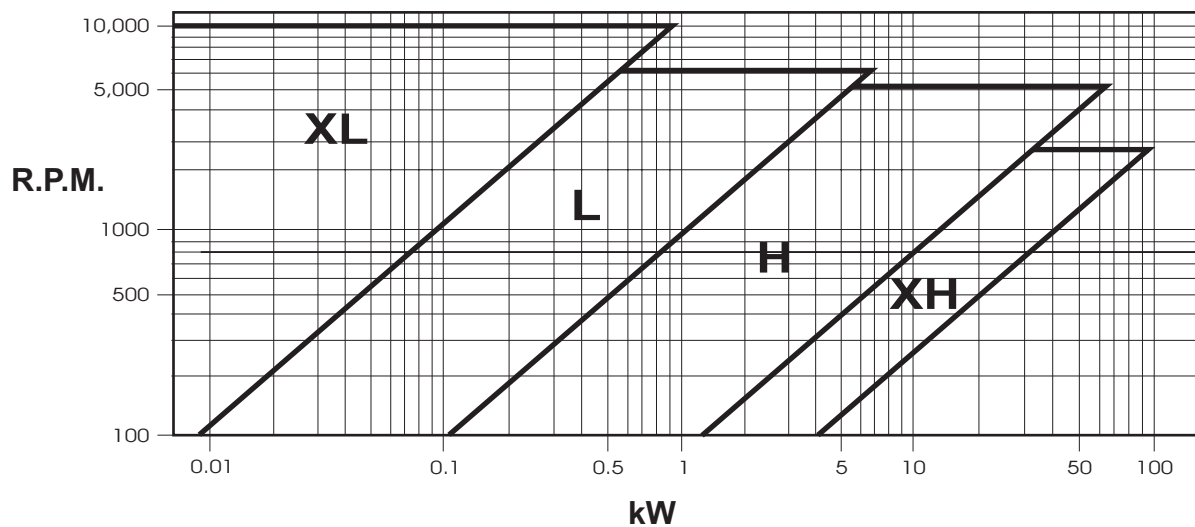
Belts are available in Rubber and Polyurethane depending on the style of belt. Special belts are available upon request. Please contact Naismith Engineering with your enquiries.



Classical Timing Pulley & Belt Drives



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



Identifying a Pulley

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

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

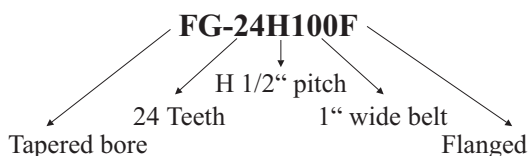
PITCH - This is the distance from the centre of one tooth to the centre of the next tooth. Naismith Engineering stocks 4 pitch sizes of Classical timing pulley:

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

TEETH - Number of teeth.

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

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



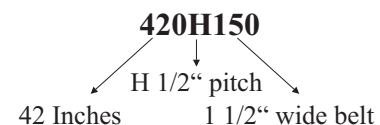
Identifying a belt

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

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

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

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



Classical Timing Belts XL, L, H & XH



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

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

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

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

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

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

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

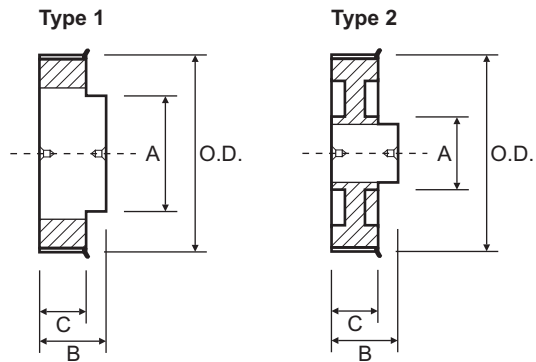
| Code & Pitch | Number of Teeth | Pitch Length mm |
|--------------|-----------------|-----------------|
| 507XH | 58 | 1287.8 |
| 560XH | 64 | 1422.4 |
| 630XH | 72 | 1600.2 |
| 700XH | 80 | 1778.0 |
| 770XH | 88 | 1955.8 |
| 840XH | 96 | 2133.6 |
| 980XH | 112 | 2489.2 |
| 1120XH | 128 | 2844.8 |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

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

Plastic Timing Pulleys

XL Pitch 0.200"

L Pitch 0.375"



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

Plastic with an Aluminium hub
1 Flange on boss side only

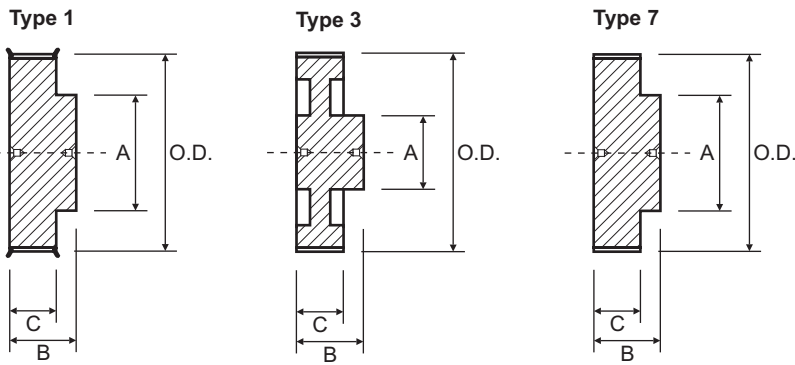
| L050 | | | | | |
|------------------------------|-------|------|------|------|----------|
| Suit 12.7mm wide belt (1/2") | | | | | |
| Part No. | O.D. | Type | A | B | C = 17.0 |
| PP10L050 | 29.6 | 1 | 20.0 | 25.0 | |
| PP12L050 | 35.6 | 1 | 25.0 | 25.0 | |
| PP14L050 | 41.7 | 1 | 30.0 | 30.0 | |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

Plastic with an Aluminium hub
1 Flange on boss side only

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

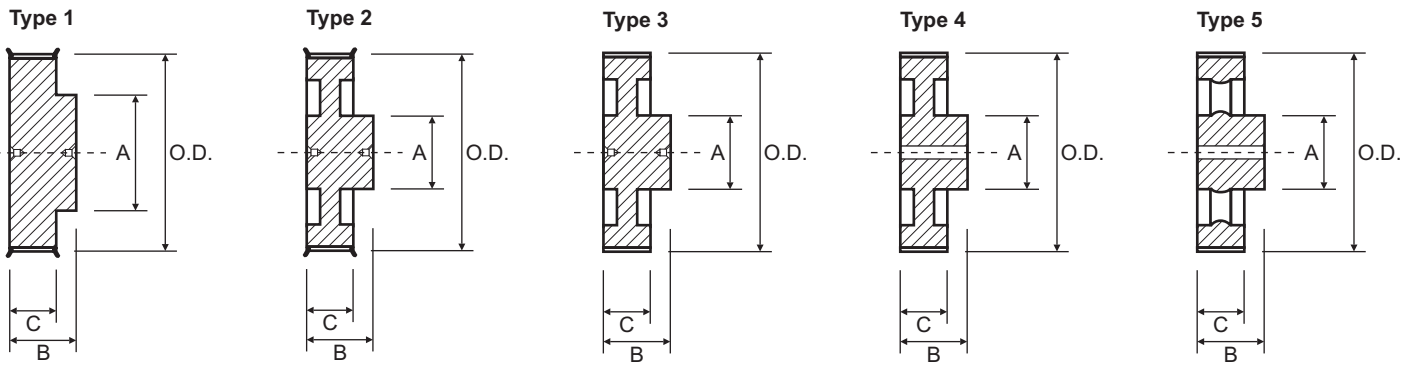
Plastic with a Steel hub
1 Flange on boss side only

XL 0.200" Timing Pulleys



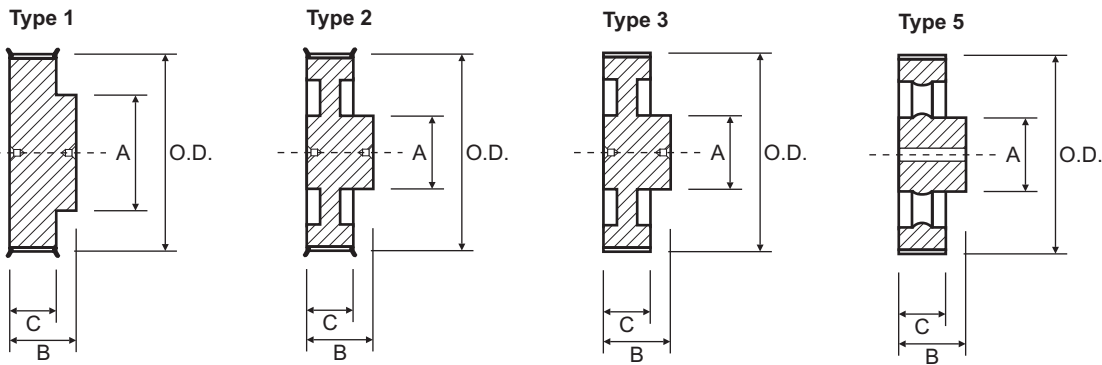
| XL037 | | | | |
|-----------------------------|-------|------|------|------|
| Suit 9.5mm wide belt (3/8") | | | | |
| Part No. | O.D. | Type | A | B |
| C= 14.3 | | | | |
| 10XL037F | 15.7 | 1 | 12.0 | 25.0 |
| 11XL037F | 17.3 | 1 | 12.0 | 25.0 |
| 12XL037F | 18.9 | 1 | 12.0 | 25.0 |
| 13XL037F |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

L Pitch 0.375" Timing Pulleys



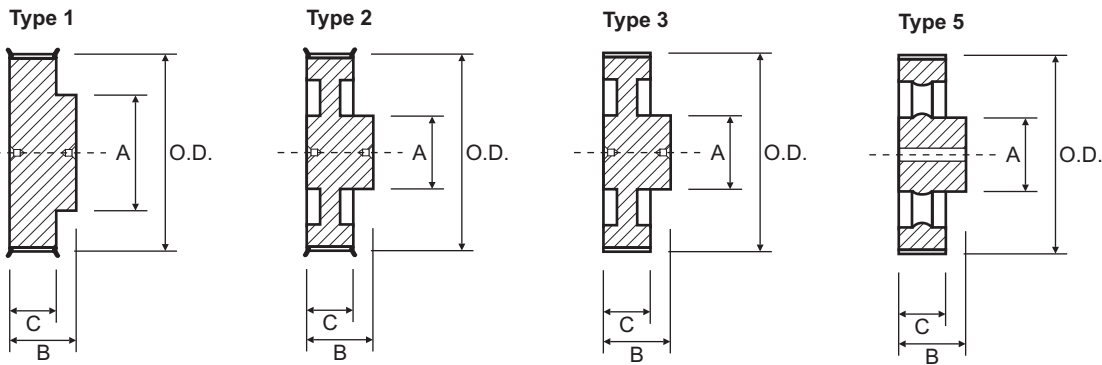
| L050 | | | | | | L100 | | | | | |
|------------------------------|-------|------|------|------|----------|----------------------------|------|------|------|------|----------|
| Suit 12.7mm wide belt (1/2") | | | | | | Suit 25.4mm wide belt (1") | | | | | |
| Part No. | O.D. | Type | A | B | C = 19.0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

H Pitch 0.500" Timing Pulleys



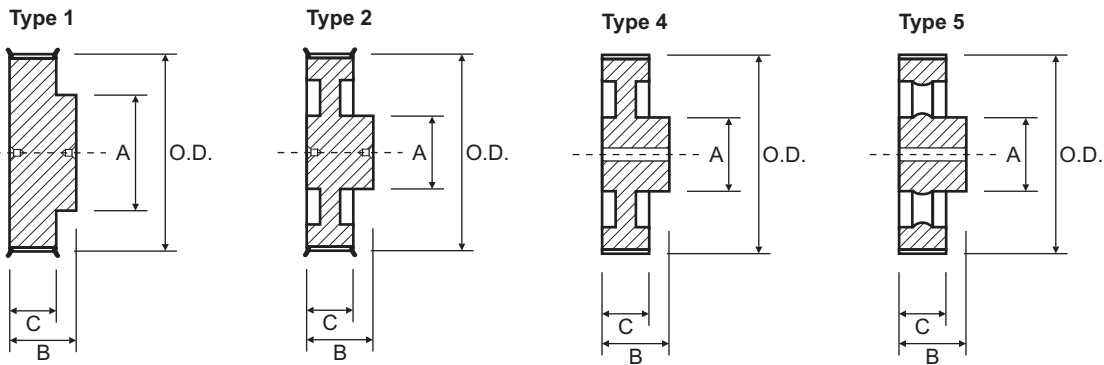
| H100 | | | | | H150 | | | | | | | | |
|----------------------------|-------|------|-------|------|--------------------------------|-----------|---------|-------|-------|-------|----------|------------|-----------|
| Suit 25.4mm wide belt (1") | | | | | Suit 38.1mm wide belt (1 1/2") | | | | | | | |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

H Pitch 0.500" Timing Pulleys



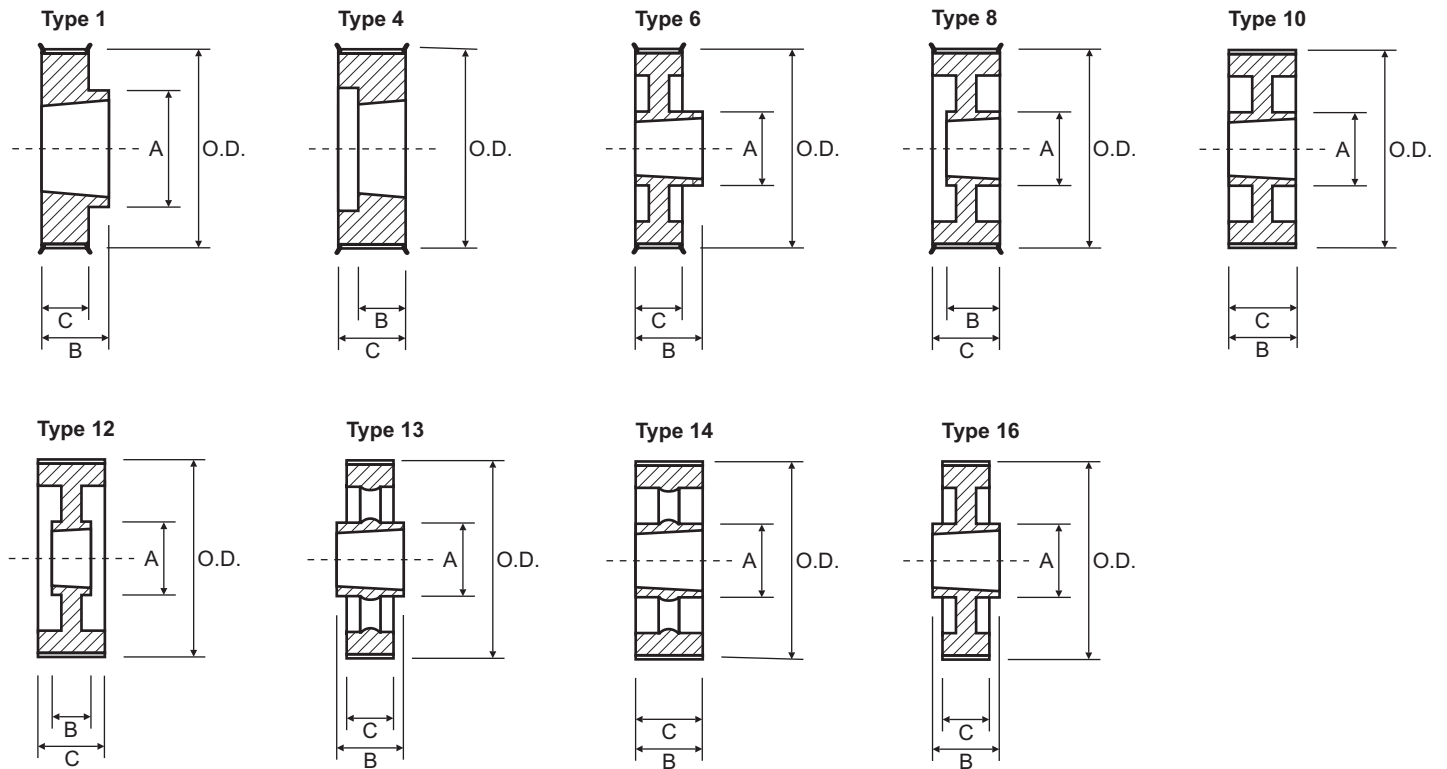
| H200 | | | | | H300 | | | | | | |
|----------------------------|-------|------|-------|------|----------------------------|----------|-------|-------|-------|------|---------|
| Suit 50.8mm wide belt (2") | | | | | Suit 76.2mm wide belt (3") | | | | | | |
| Part No. | O.D. | Type | A | B | C= 59.5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

XH Pitch 0.875" Timing Pulleys



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

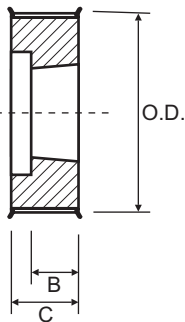
L Pitch 0.375" Timing Pulleys



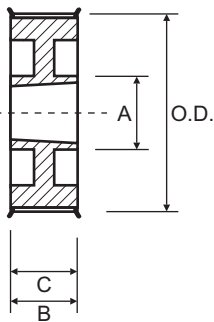
| L050 | | | | | | L100 | | | | | | | |
|------------------------------|-------|------|------|-------|------|----------------------------|------------|-------|------|-------|------|------|-----------|
| Suit 12.7mm wide belt (1/2") | | | | | | Suit 25.4mm wide belt (1") | | | | | | | |
| Part No. | O.D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

H Pitch 0.500" Timing Pulleys

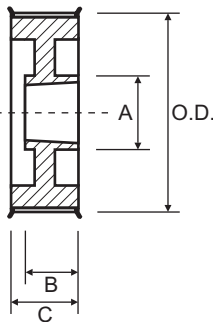
Type 4



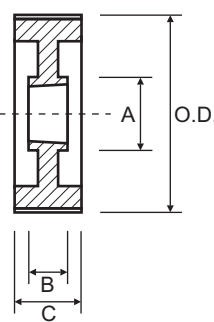
Type 7



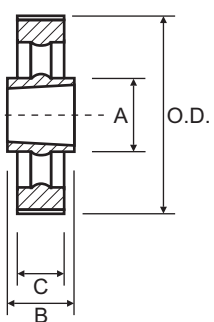
Type 8



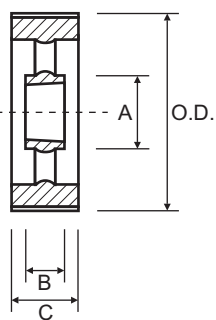
Type 12



Type 13

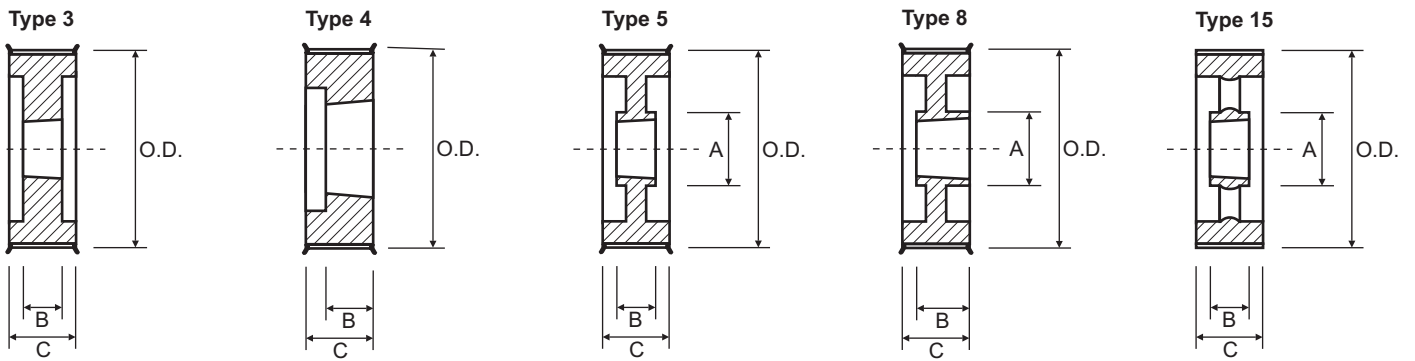


Type 15



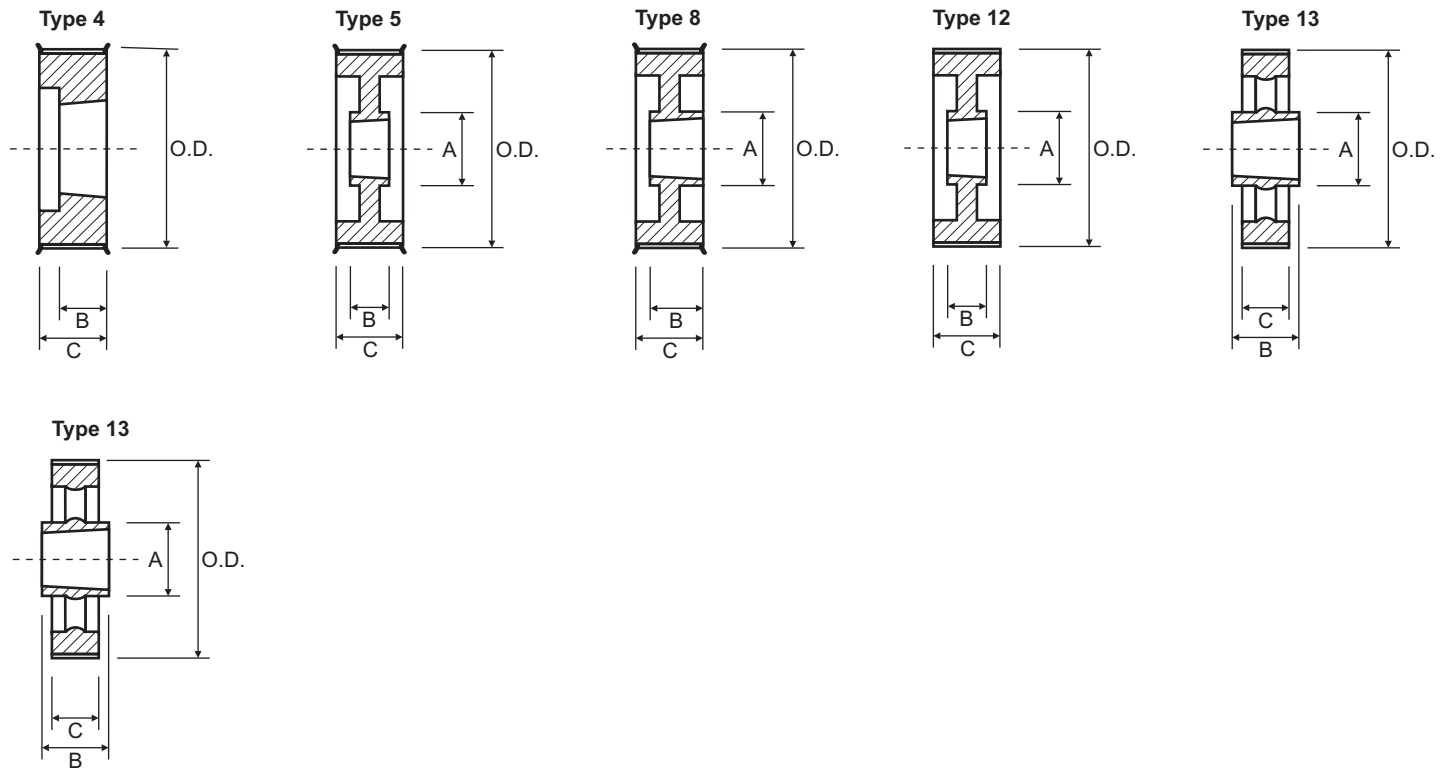
| H100 Suit 25.4mm wide belt (1") | | | | | | | H150 Suit 38.1mm wide belt (1 1/2") | | | | | | |
|------------------------------------|-------|------|------|-------|------|----------------------|--|-------|------|------|-------|------|----------------------|
| Part No. | O.D | Type | Bush | A | B |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

H Pitch 0.500" Timing Pulleys



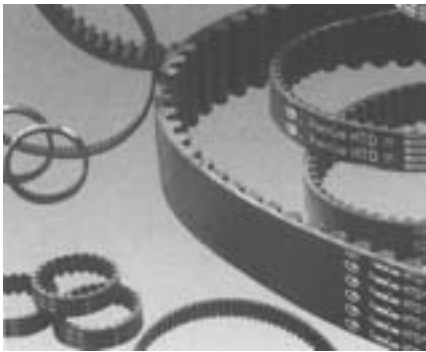
| H200 | | | | | | | H300 | | | | | | |
|----------------------------|-------|------|------|-------|------|-----------|----------------------------|-------|------|------|-------|------|-----------|
| Suit 50.8mm wide belt (2") | | | | | | | Suit 76.2mm wide belt (3") | | | | | | |
| Part No. | O.D |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

XH Pitch 0.875" Timing Pulleys

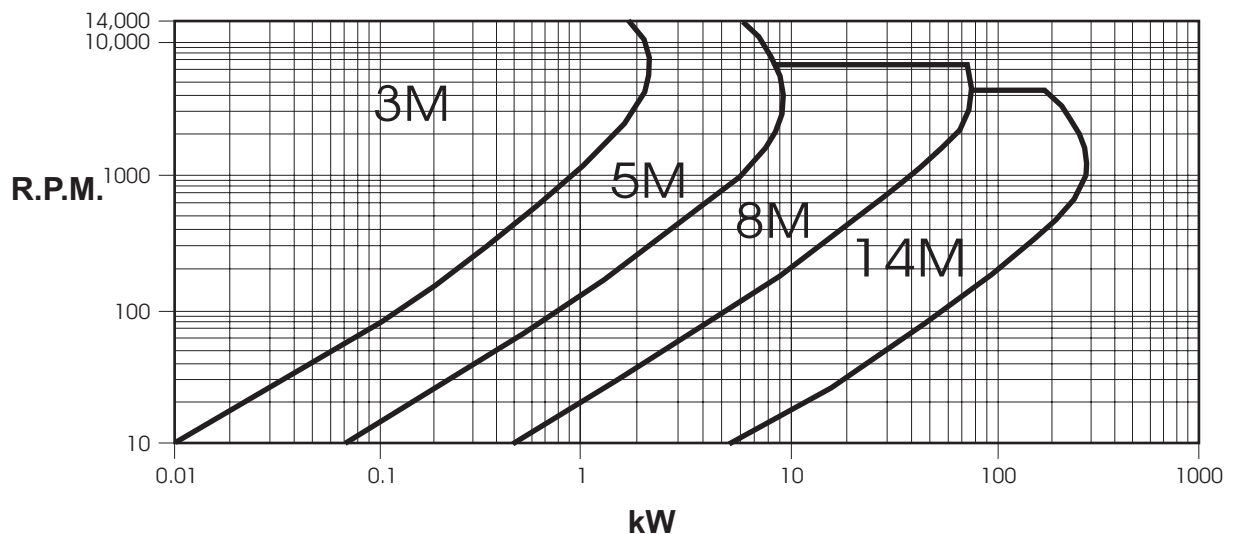


| XH200 | | | | | | | XH300 | | | | | | |
|----------------------------|-------|------|------|-------|------|------------|----------------------------|-------|------|------|-------|-------|------------|
| Suit 50.8mm wide belt (2") | | | | | | | Suit 76.2mm wide belt (3") | | | | | | |
| Part No. | O.D | Type | Bush | A | B | C = 64.0 | Part No. | O.D | Type | Bush | A | B | C = 90.0 |
| FG-18XH200F | 124.6 | 4 | 2517 | - | 45.0 | Cast Iron | FG-18XH300F | 124.6 | 4 | 2517 | - | 45.0 | Cast Iron |
| FG-20XH200F | 138.7 | 4 | 2517 | - | 45.0 | | FG-20XH300F | 138.7 | 4 | 2517 | - | 45.0 | |
| FG-22XH200F | 152.9 | 4 | 2517 | - | 45.0 | | FG-22XH300F | 152.9 | 4 | 2517 | - | 45.0 | |
| FG-24XH200F | 167.0 | 4 | 2517 | - | 45.0 | | FG-24XH300F | 167.0 | 4 | 2517 | - | 45.0 | |
| FG-26XH200F | 181.2 | 4 | 2517 | - | 45.0 | | FG-26XH300F | 181.2 | 4 | 2517 | - | 45.0 | |
| FG-28XH200F | 195.3 | 5 | 2517 | 120.0 | 45.0 | | FG-28XH300F | 195.3 | 8 | 3020 | 146.0 | 51.0 | |
| FG-30XH200F | 209.4 | 5 | 2517 | 120.0 | 45.0 | | FG-30XH300F | 209.4 | 8 | 3020 | 146.0 | 51.0 | |
| FG-32XH200F | 223.6 | 5 | 2517 | 120.0 | 45.0 | | FG-32XH300F | 223.6 | 8 | 3020 | 146.0 | 51.0 | |
| FG-40XH200F | 280.2 | 5 | 3020 | 146.0 | 51.0 | | FG-40XH300F | 280.2 | 5 | 3020 | 146.0 | 51.0 | |
| FG-48XH200 | 336.8 | 15 | 3020 | 146.0 | 51.0 | | FG-48XH300 | 336.8 | 12 | 3020 | 146.0 | 51.0 | |
| FG-60XH200 | 421.7 | 13 | 3535 | 178.0 | 89.0 | No Flanges | FG-60XH300 | 421.7 | 12 | 3535 | 178.0 | 89.0 | No Flanges |
| FG-72XH200 | 506.6 | 13 | 3535 | 178.0 | 89.0 | | FG-72XH300 | 506.6 | 15 | 3535 | 178.0 | 89.0 | |
| FG-84XH200 | 591.5 | 13 | 3535 | 178.0 | 89.0 | | FG-84XH300 | 591.5 | 13 | 4040 | 215.0 | 102.0 | |

HTD Pulley & Belt Drives



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



Identifying a Pulley

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

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

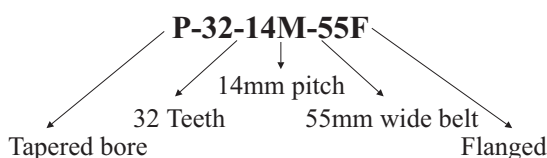
PITCH - This is the distance from the centre of one tooth to the centre of the next tooth. Naismith Engineering stocks 4 pitch sizes of HTD timing pulley:

| | | |
|------------|-------|-------------|
| 3M | Pitch | 3mm |
| 5M | | 5mm |
| 8M | | 8mm |
| 14M | | 14mm |

TEETH - Number of teeth.

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

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



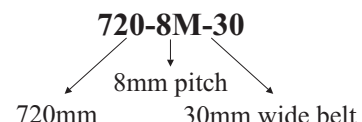
Identifying a belt

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

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

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

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



HTD Timing Belts 3M & 5M



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

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

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

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

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

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

HTD Timing Belts 8M & 14M



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

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

Standard widths of:-

20mm Code = Length-8M-20

30mm Code = Length-8M-30

55mm Code = Length-8M-50

85mm Code = Length-8M-85

Off standard widths are available on request.

Long Length up to 85mm wide is available.

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

Standard widths of:-

40mm Code = Length-14M-40

55mm Code = Length-14M-55

85mm Code = Length-14M-85

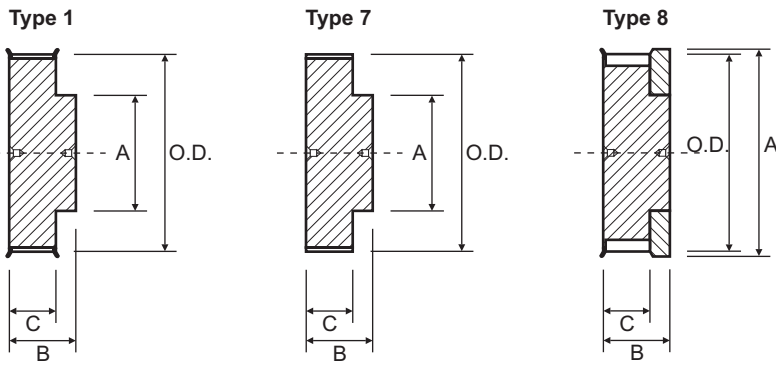
115mm Code = Length-14M-115

170mm Code = Length-14M-170

Off standard widths are available on request.

Long Length up to 85mm wide is available.

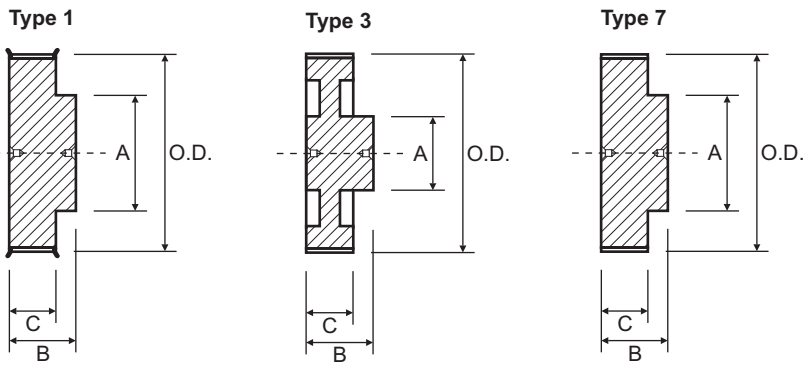
3M HTD Timing Pulleys



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

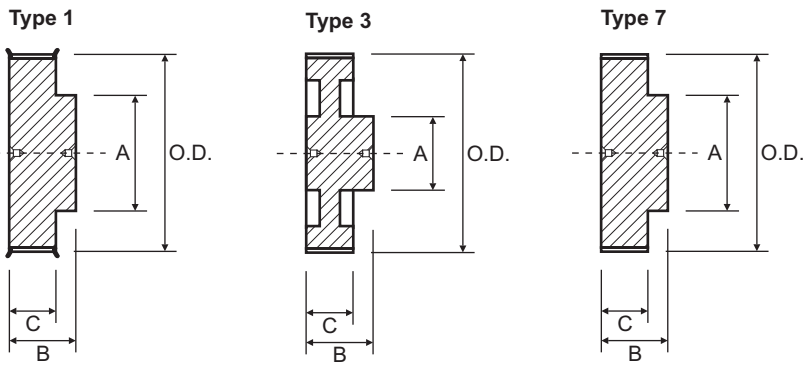
N.F. - No Flanges

5M HTD Timing Pulleys



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

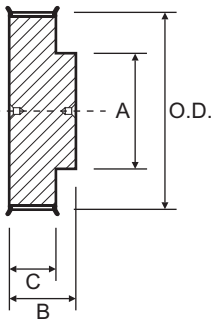
5M HTD Timing Pulleys



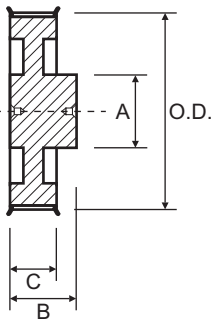
| 5M-25 | | | | | |
|---------------------|-------|------|------|------|-------------------------|
| Suit 25mm wide belt | | | | | |
| Part No. | O.D. | Type | A | B | C = 30.0 |
| 12-5M-25F | 18.0 | 1 | 13.0 | 36.0 | Steel Flanged |
| 14-5M-25F | 21.1 | 1 | 14.0 | 36.0 | |
| 15-5M-25F | 22.7 | 1 | 16.0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

8M HTD Timing Pulleys

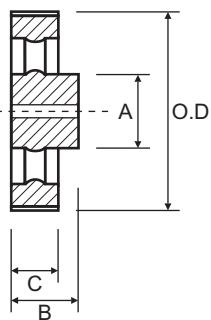
Type 1



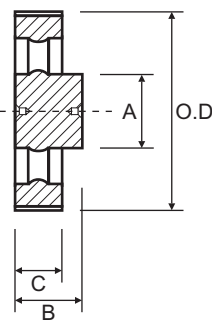
Type 2



Type 5



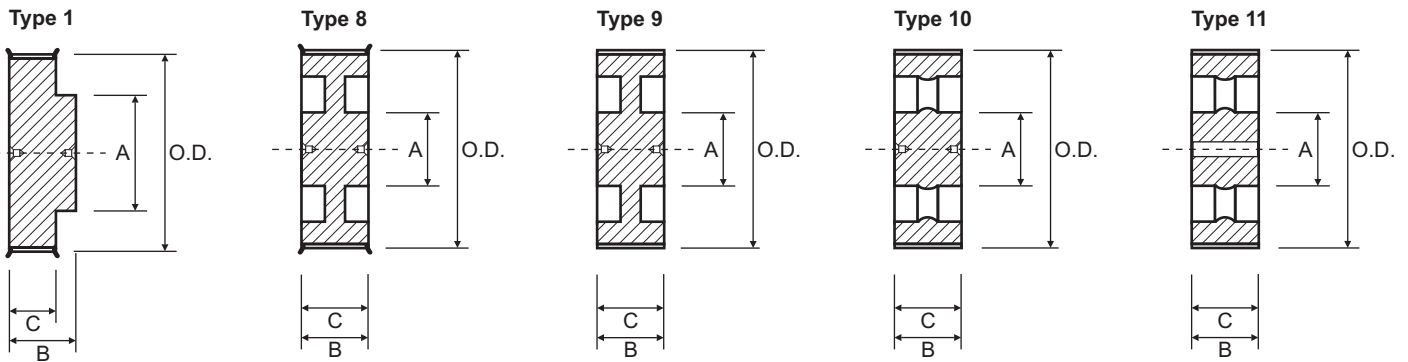
Type 6



| 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 N.F. | 56-8M-30F | 141.2 | 2 | 90.0 | 48.0 | |
| 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 | | 80-8M-30 | 202.4 | 6 | 100.0 | 48.0 | |
| 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 | |

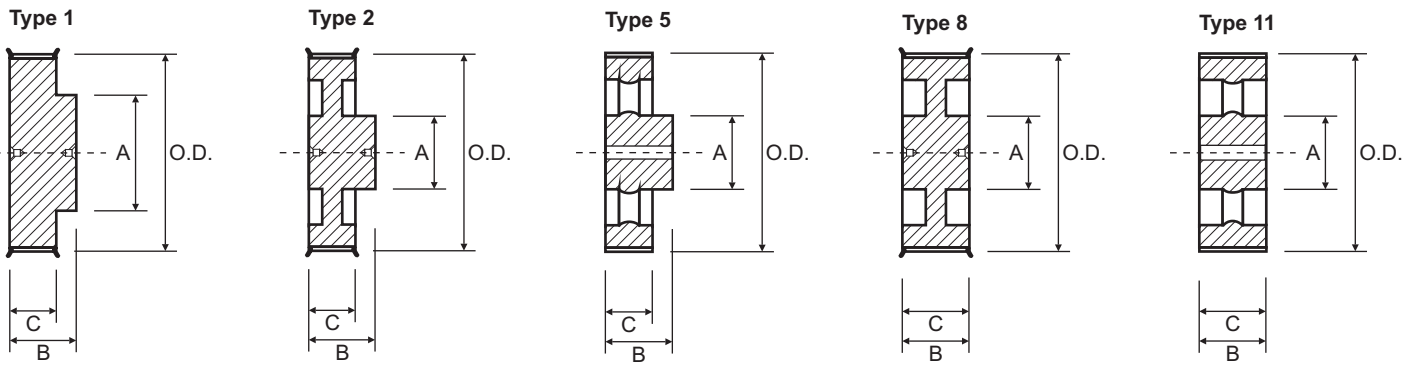
N.F. - No Flanges

8M HTD Timing Pulleys



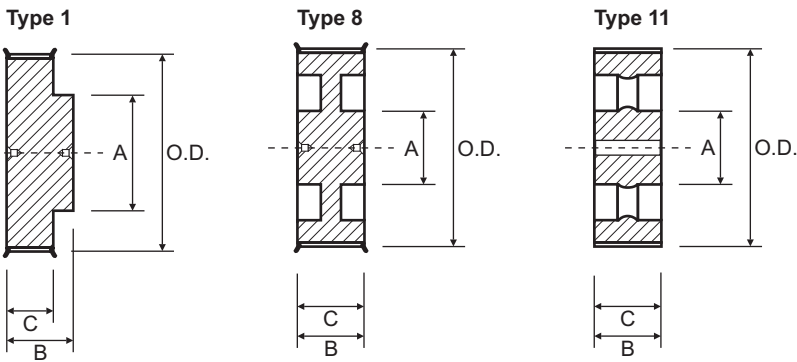
| 8M-50 | | | | | | 8M-85 | | | | | |
|---------------------|-------|------|-------|------|------------------|---------------------|-------|-------|-------|-------------------------|------------------|
| Suit 50mm wide belt | | | | | | Suit 85mm wide belt | | | | | |
| Part No. | O.D. | Type | A | B | 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



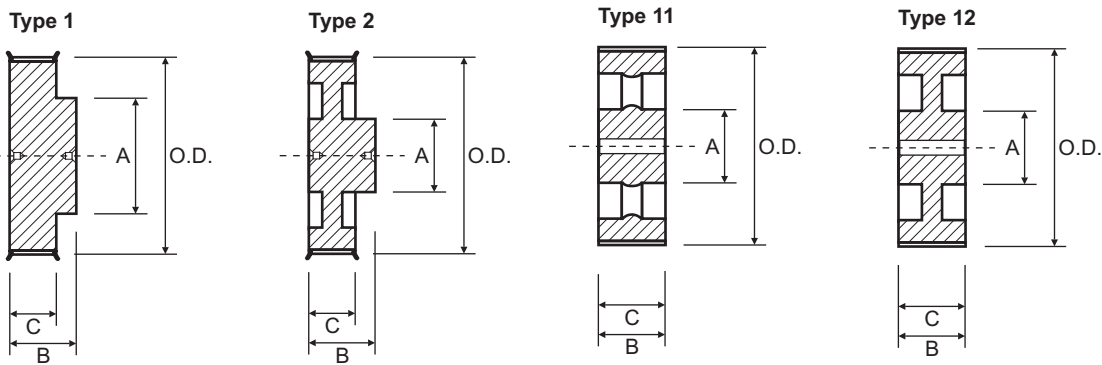
| 14M-40 | | | | | 14M-55 | | | | | | |
|---------------------|-------|------|-------|------|---------------------|------------|-------|-------|-------|------|-----------|
| Suit 40mm wide belt | | | | | Suit 55mm wide belt | | | | | | |
| Part No. | O.D. | Type | A | B | C = 54.0 | Part No. | O.D. | 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



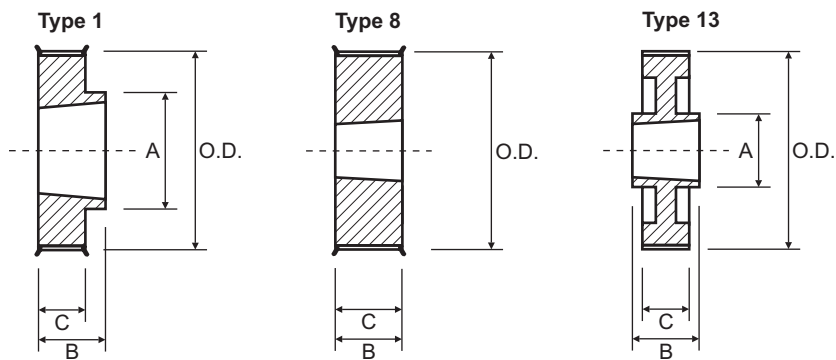
| 14M-85 | | | | | | 14M-115 | | | | | |
|---------------------|-------|------|-------|-------|----------------------|----------------------|-------|-------|-------|-------|----------------------|
| Suit 85mm wide belt | | | | | | Suit 115mm wide belt | | | | | |
| Part No. | O.D. | Type | A | B | C=102.0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

14M HTD Timing Pulleys



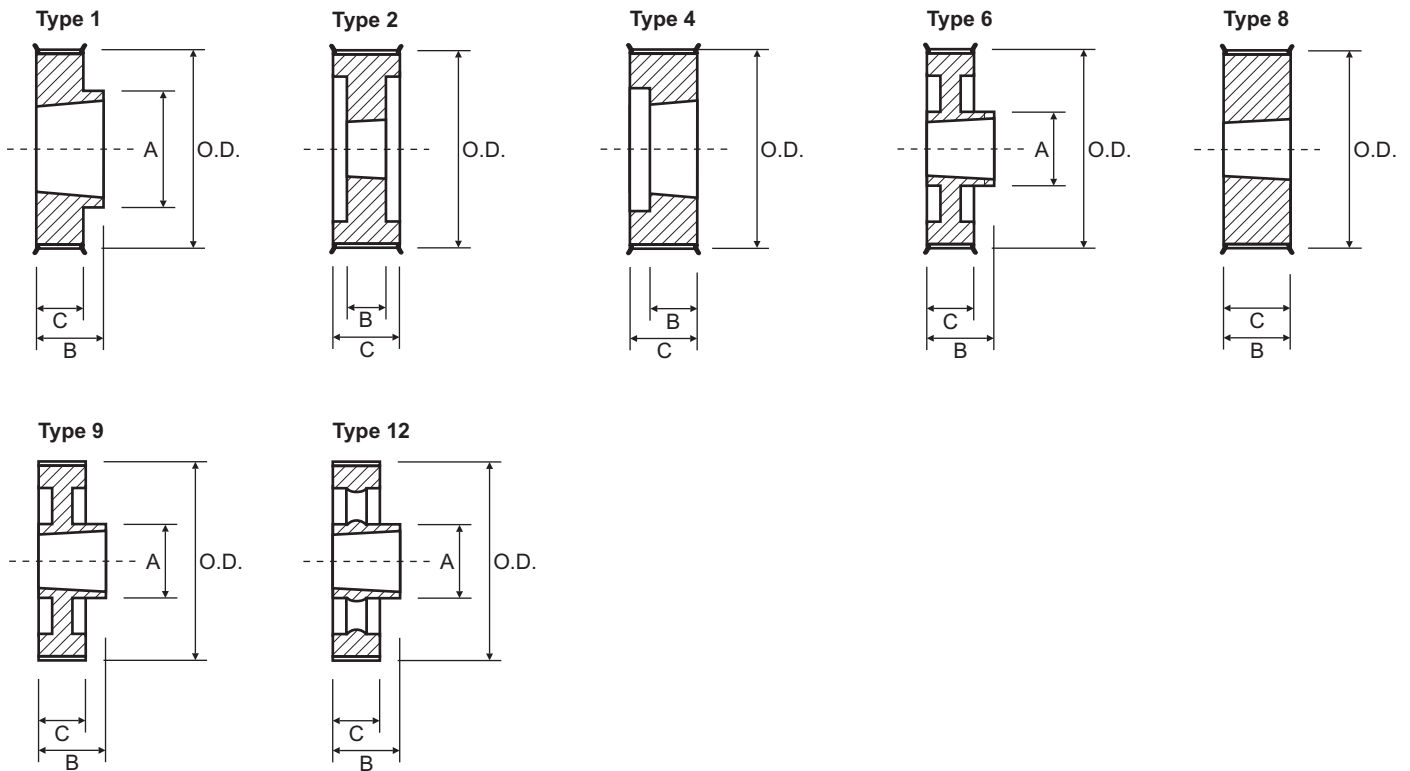
| 14M-170 | | | | | | |
|----------------------|-------|------|-------|-------|-----------|------------|
| Suit 170mm wide belt | | | | | | |
| Part No. | O.D. | Type | A | B | C = 187.0 | |
| 28-14M-170F | 122.1 | 1 | 100.0 | 202.0 | Cast Iron | |
| 29-14M-170F | 126.6 | 1 | 107.0 | 202.0 | | |
| 30-14M-170F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

5M HTD Timing Pulleys



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

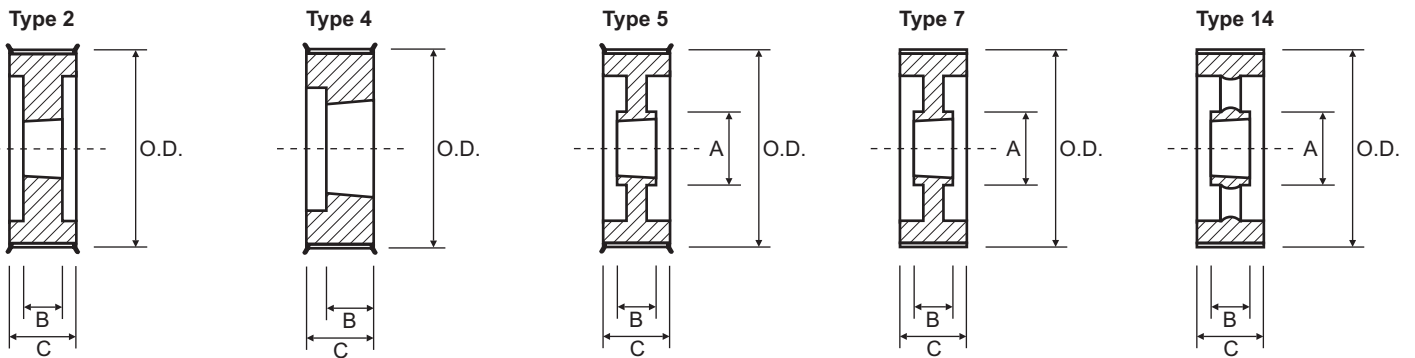
8M HTD Timing Pulleys



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

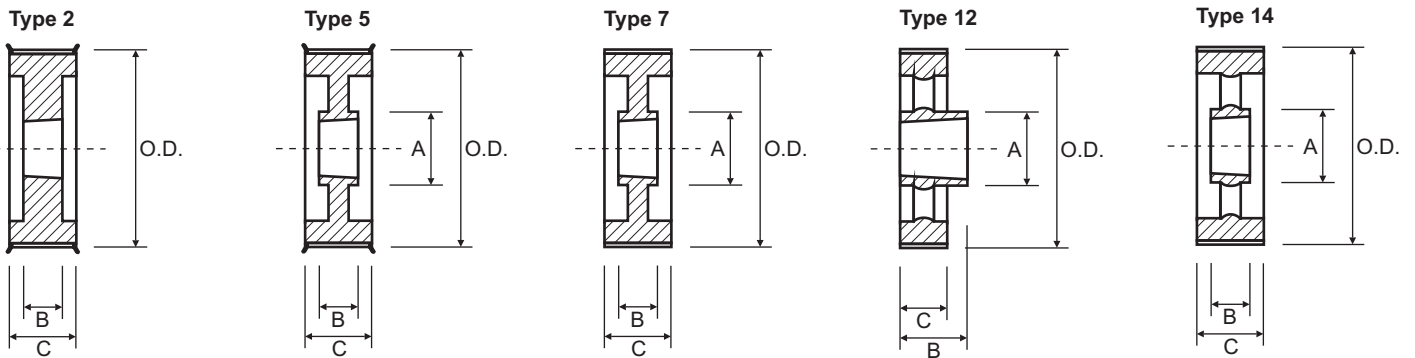
N.F. - No Flanges

8M HTD Timing Pulleys



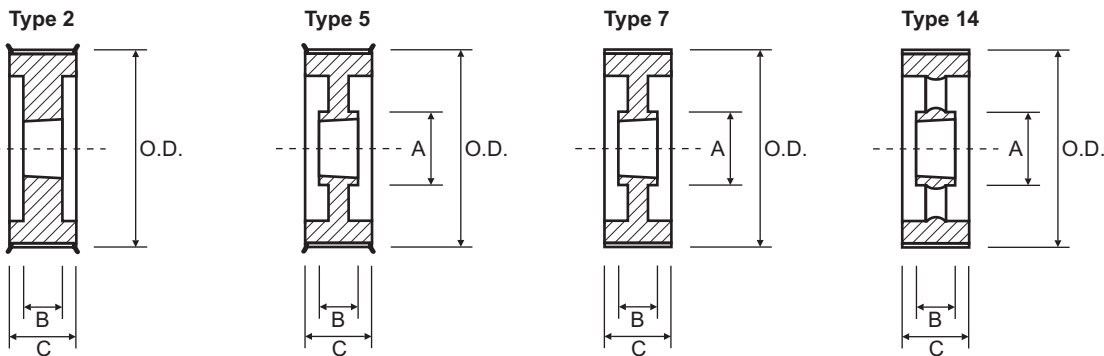
| 8M-50 | | | | | | 8M-85 | | | | | | | |
|---------------------|-------|------|------|-------|------|---------------------|-------------|-------|------|------|-------|------|-----------|
| Suit 50mm wide belt | | | | | | Suit 85mm wide belt | | | | | | | |
| Part No. | O.D | Type | Bush | A | B | C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

14M HTD Timing Pulleys



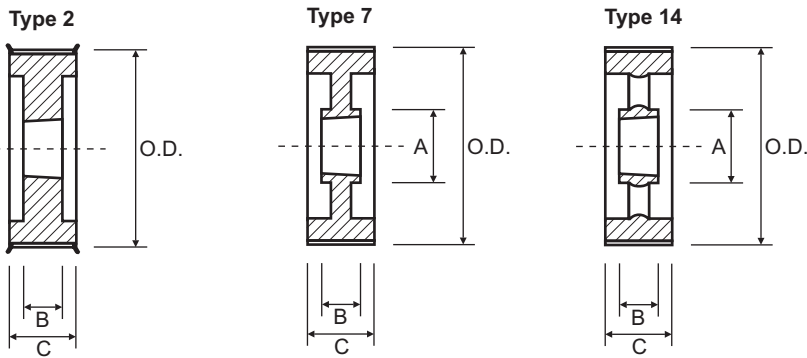
| 14M-40 | | | | | | | 14M-55 | | | | | | |
|---------------------|-------|------|------|-------|------|-------------|---------------------|-------|------|-------|-------|------|------------|
| Suit 40mm wide belt | | | | | | | Suit 55mm wide belt | | | | | | |
| Part No. | O.D | Type | Bush | A | B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

14M HTD Timing Pulleys



| 14M-85 Suit 85mm wide belt | | | | | | 14M-115 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

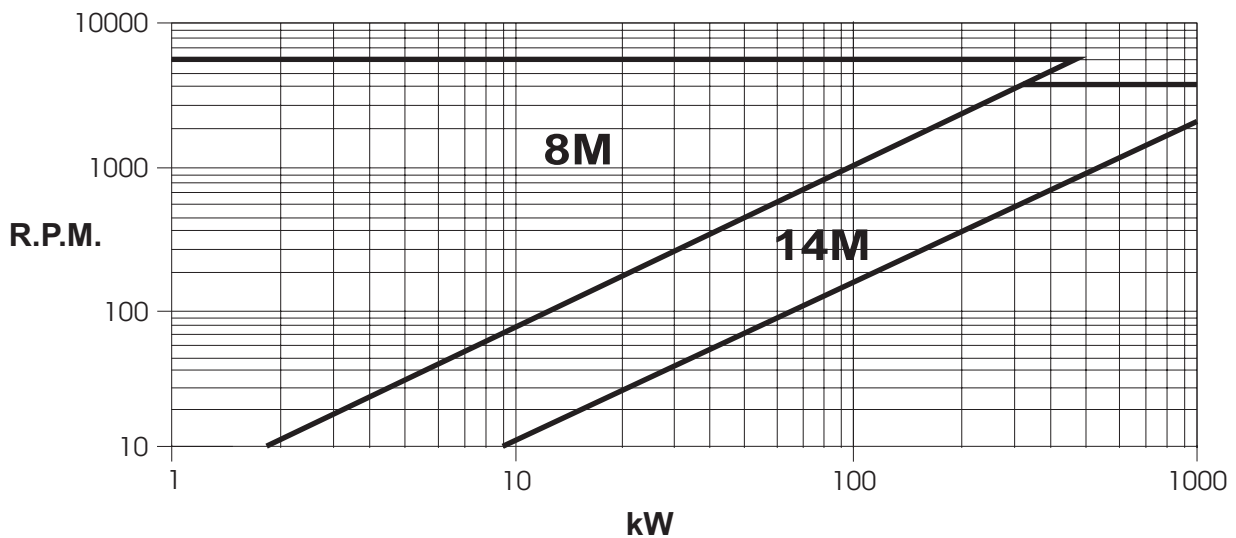


| 14M-170 | | | | | | |
|----------------------|-------|------|------|-------|-------|-------------------------|
| Suit 170mm wide belt | | | | | | |
| Part No. | O.D. | Type | Bush | A | B | C = 187.0 |
| P38-14M-170F | 166.6 | 2 | 3030 | - | 76.0 | Cast Iron Flanged |
| P40-14M-170F | 175.5 | 2 | 3030 | - | 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 | |

Poly Chain GT Sprockets & Belt Drives



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



Identifying a Sprocket

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

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

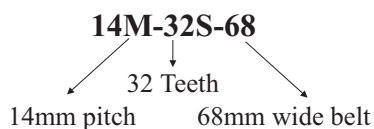
PITCH - This is the distance from the centre of one tooth to the centre of the next tooth. There are 2 pitch sizes of Poly Chain GT:

| | | |
|------------|-------|-------------|
| 8M | Pitch | 8mm |
| 14M | | 14mm |

TEETH - Number of teeth.

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

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



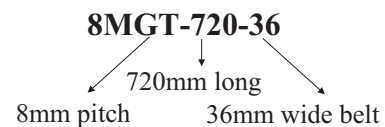
Identifying a belt

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

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

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

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



Poly Chain GT2 Timing Belts 8M & 14M



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

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

Standard widths of:-

12mm Code = 8MGT-Length-12

21mm Code = 8MGT-Length-21

36mm Code = 8MGT-Length-36

62mm Code = 8MGT-Length-62

* = Not available in 62mm wide

Long Length up to 36mm wide is available.

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

Standard widths of:-

20mm Code = 14MGT-Length-20

37mm Code = 14MGT-Length-37

68mm Code = 14MGT-Length-68

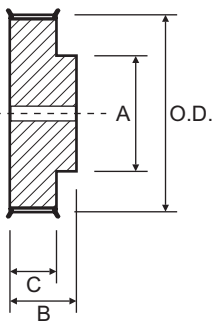
90mm Code = 14MGT-Length-90

125mm Code = 14MGT-Length-125

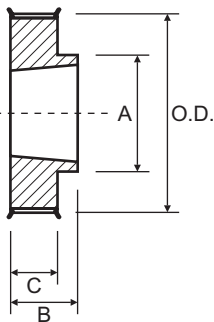
Long Length up to 37mm wide is available.

8M Poly Chain GT Timing Pulleys

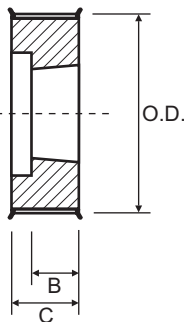
Type 1*



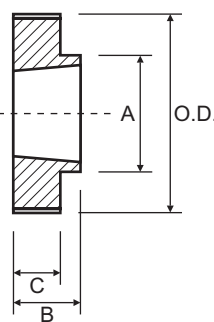
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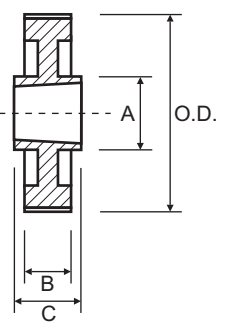
Type 4



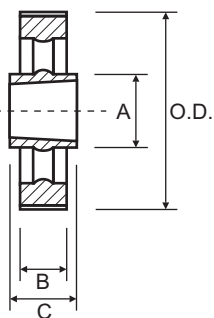
Type 6



Type 10



Type 11

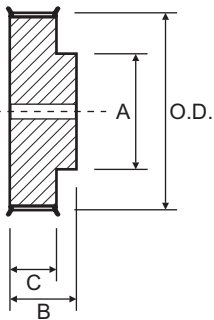


| 8M-12 | | | | | | | 8M-21 | | | | | | |
|---------------------|-------|------|------|-------|------|--|---------------------|-------|------|------|-------|------|--|
| Suit 12mm wide belt | | | | | | | Suit 21mm wide belt | | | | | | |
| Part No. | O.D. | Type | Bush | A | B | C = 20.0 | Part No. |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

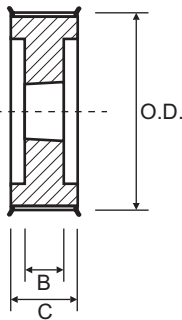
N.F. - No Flanges

8M Poly Chain GT Timing Pulleys

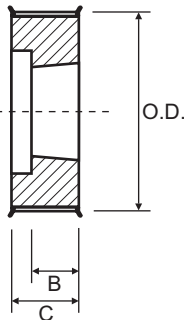
Type 1*



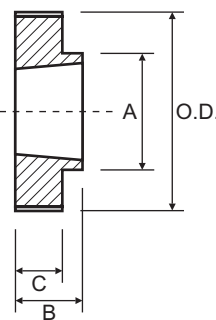
Type 2



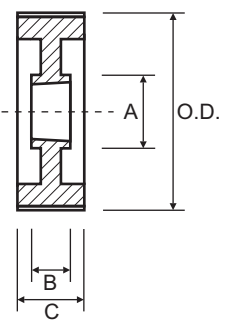
Type 4



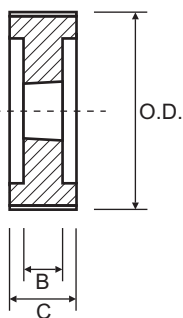
Type 6



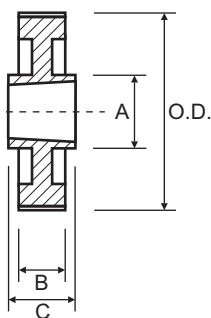
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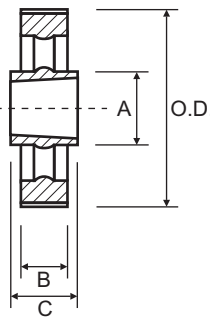
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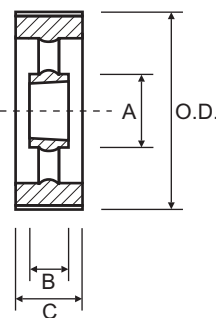
Type 10



Type 11



Type 12



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

Contact Gates Australia for Material Specification

Flanged

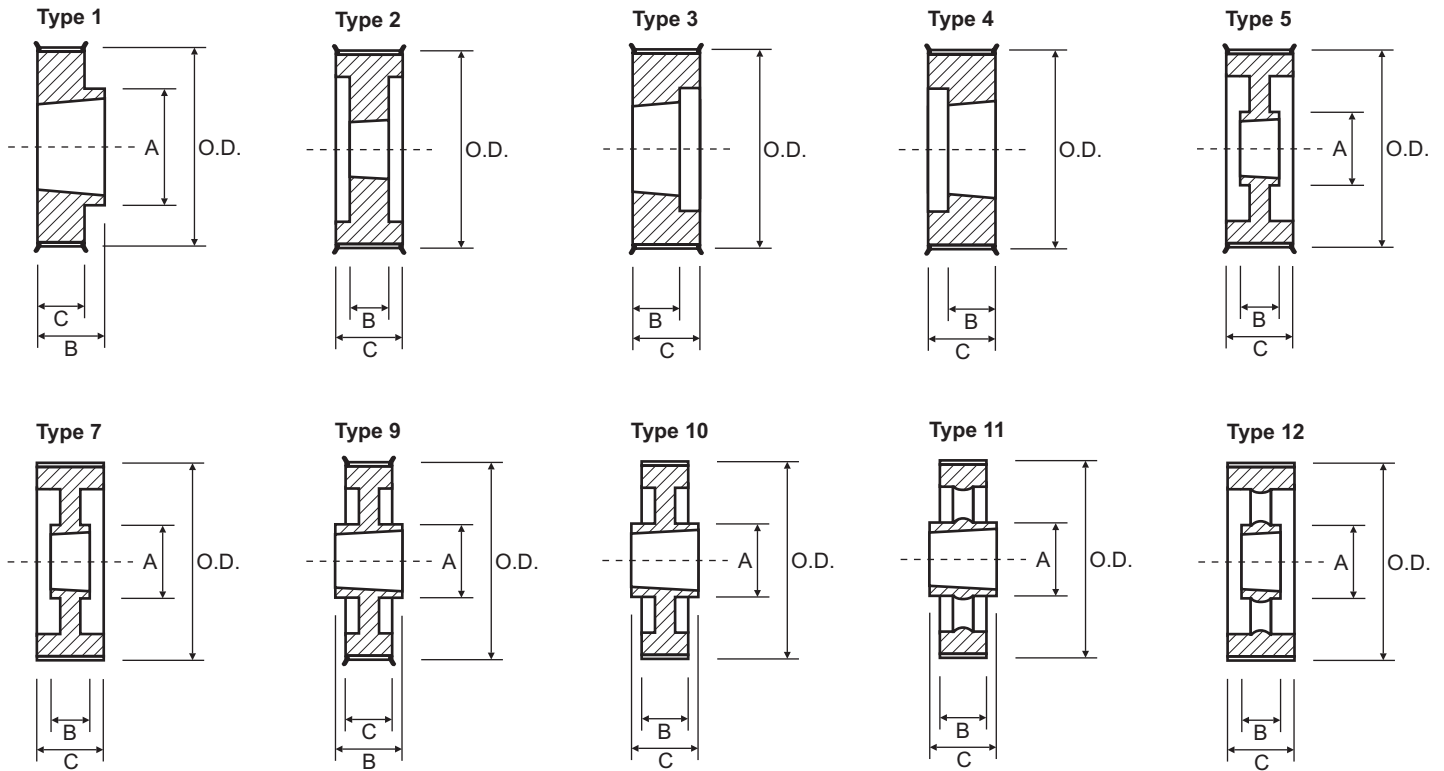
No Flanges

Contact Gates Australia for Material Specification

Flanged

No Flanges

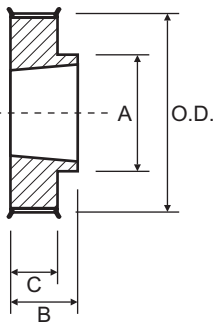
14M Poly Chain GT Timing Pulleys



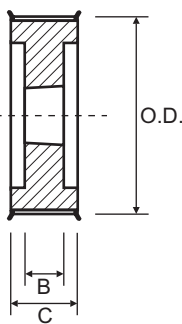
| 14M-20 | | | | | | | 14M-37 | | | | | | | |
|---------------------|-------|------|------|-------|------|--|---------------------|-------|------|-------|-------|------|--|------------|
| Suit 20mm wide belt | | | | | | | Suit 37mm wide belt | | | | | | | |
| Part No. | O.D | Type | Bush | A | B | C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

14M Poly Chain GT Timing Pulleys

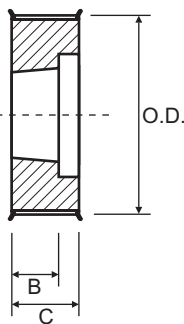
Type 1



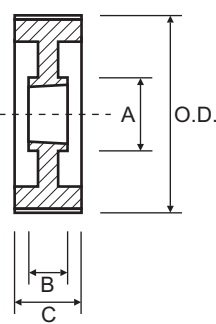
Type 2



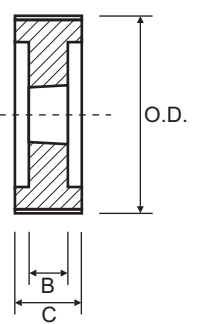
Type 3



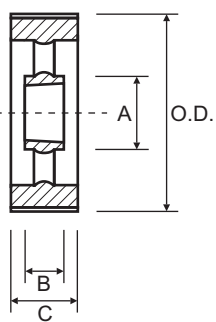
Type 7



Type 8



Type 12

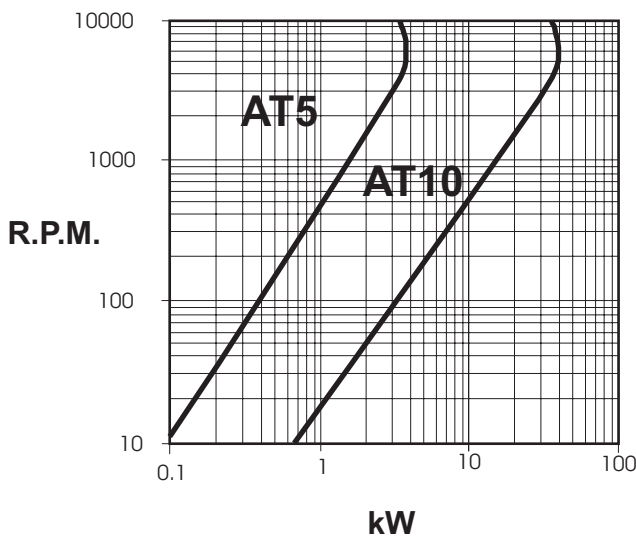


| 14M-68 | | | | | | | 14M-90 | | | | | | |
|---------------------|-------|------|------|-------|-------|--|---------------------|-------|------|-------|-------|-------|--|
| Suit 68mm wide belt | | | | | | | Suit 90mm wide belt | | | | | | |
| Part No. | O.D | Type | Bush | A | B | C = 84.0 | Part No.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

Metric T & AT Pulley & Belt Drives



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



Identifying a Pulley

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

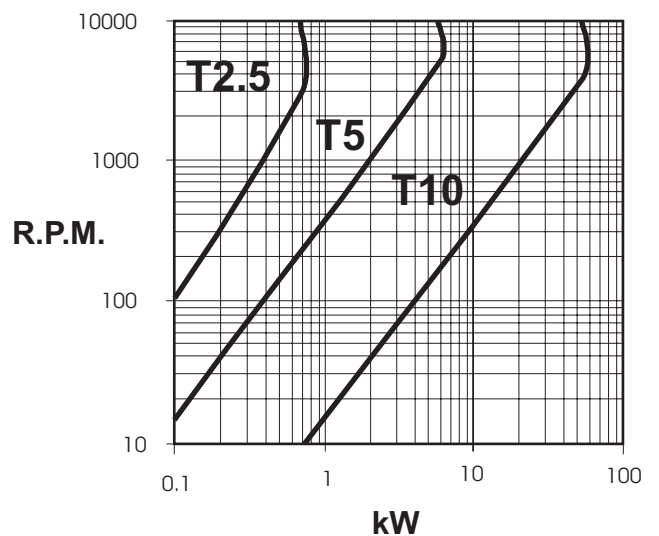
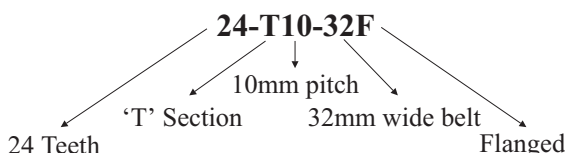
BORE - Naismith Engineering carries full stocks of pilot pulleys. As they are only available in aluminium taper bore is not recommended

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

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

TEETH - Number of teeth.

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



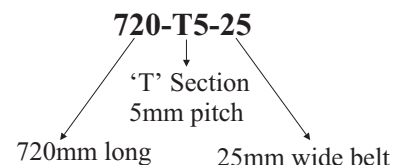
Identifying a belt

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

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

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

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



Metric Timing Belts T2.5 & T5



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

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

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

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

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

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

Metric Timing Belts T10



| | Pitch (mm) | T | B |
|-----|------------|------|------|
| T10 | 10.00 | 2.50 | 4.50 |

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

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

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

Metric Double Sided Timing Belts T5 & T10



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

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

Standard widths of:-

10mm Code = Length-T5-10

16mm Code = Length-T5-16

25mm Code = Length-T5-25

Off standard widths are available on request.

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

Standard widths of:-

16mm Code = Length-T10-16

25mm Code = Length-T10-25

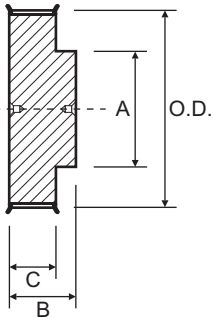
32mm Code = Length-T10-32

50mm Code = Length-T10-50

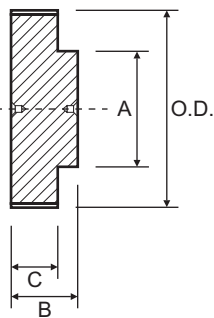
Off standard widths are available on request.

T2.5 Metric Timing Pulleys

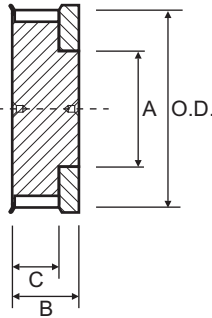
Type 1



Type 7



Type 8



T2.5-6

Suit 6mm wide belt

| Part No. | O.D. | Type | A | B | C = 10.0 |
|-------------|------|------|------|------|----------|
| 12-T2.5-6F | 9.0 | 8 | 6.5 | 16.0 | |
| 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 | |

Aluminium

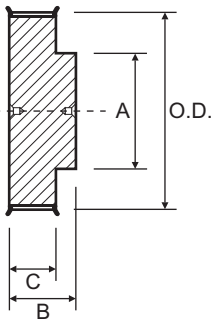
Flanged

N.F.

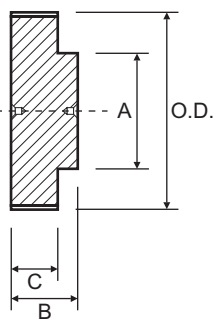
N.F. - No Flanges

T5 Metric Timing Pulleys

Type 1



Type 7

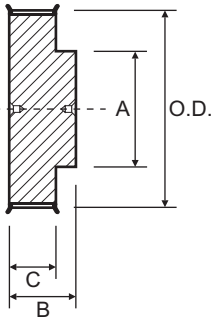


| T5-10 | | | | | T5-16 | | | | | | |
|---------------------|------|------|------|------|----------------------|-----------|------|------|------|------|----------------------|
| Suit 10mm wide belt | | | | | Suit 16mm wide belt | | | | | | |
| Part No. | O.D. | Type | A | B | C = 15.0 | Part No. | O.D. | 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. | | | | | | N.F. |

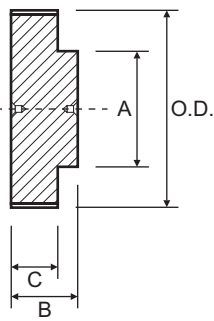
N.F. - No Flanges

T5 Metric Timing Pulleys

Type 1



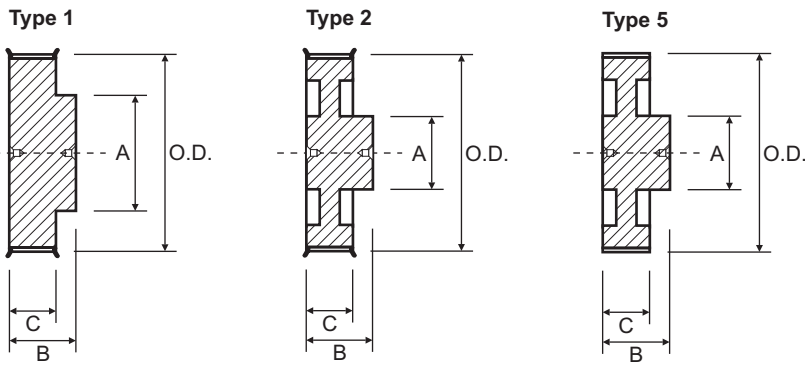
Type 7



| T5-25 | | | | | Aluminium | Flanged |
|---------------------|------|------|------|------|-----------|---------|
| Suit 25mm wide belt | | | | | | |
| Part No. | O.D. | Type | A | B | C = 30.0 | |
| 10-T5-25F | 15.1 | 1 | 8.0 | 36.0 | | |
| 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

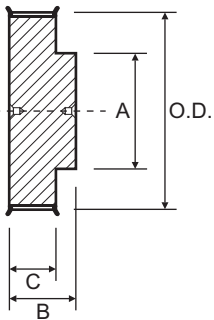


| T10-16 | | | | | T10-25 | | | | | | |
|---------------------|-------|------|-------|------|----------------------|------------|-------|------|-------|------|----------------------|
| Suit 16mm wide belt | | | | | Suit 25mm wide belt | | | | | | |
| Part No. | O.D. | Type | A | B | C = 21.0 | Part No. | 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. |

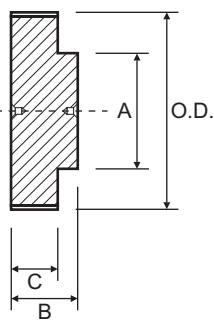
N.F. - No Flanges

T10 Metric Timing Pulleys

Type 1



Type 7



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

N.F. - No Flanges

Metric Timing Belts AT5 & AT10



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

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

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

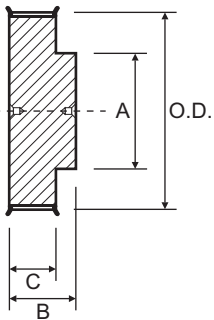
| Code & Pitch | Number of Teeth | Pitch Length mm |
|--------------|-----------------|-----------------|
| 500-AT10 | 50 | 500.0 |
| 560-AT10 | 56 | 560.0 |
| 600-AT10 | 60 | 600.0 |
| 610-AT10 | 61 | 610.0 |
| 660-AT10 | 66 | 660.0 |
| 700-AT10 | 70 | 700.0 |
| 730-AT10 | 73 | 730.0 |
| 780-AT10 |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

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

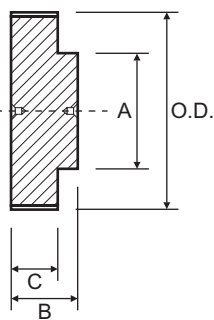
Standard widths of:-
 16mm Code = Length-AT10-16
 25mm Code = Length-AT10-25
 32mm Code = Length-AT10-32
 50mm Code = Length-AT10-50
 Off standard widths are available on request.
 Long Length up to 50mm wide is available.

AT5 Metric Timing Pulleys

Type 1



Type 7

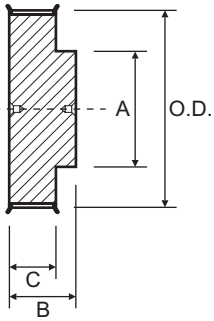


| AT5-10 | | | | | | AT5-16 | | | | | |
|---------------------|------|------|------|------|----------------------|---------------------|------|------|------|------|----------------------|
| Suit 10mm wide belt | | | | | | Suit 16mm wide belt | | | | | |
| Part No. | O.D. | Type | A | B | C = 15.0 | Part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

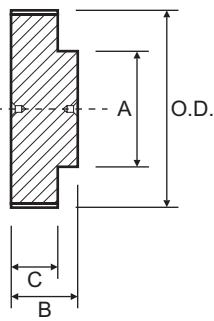
N.F. - No Flanges

AT5 Metric Timing Pulleys

Type 1



Type 7



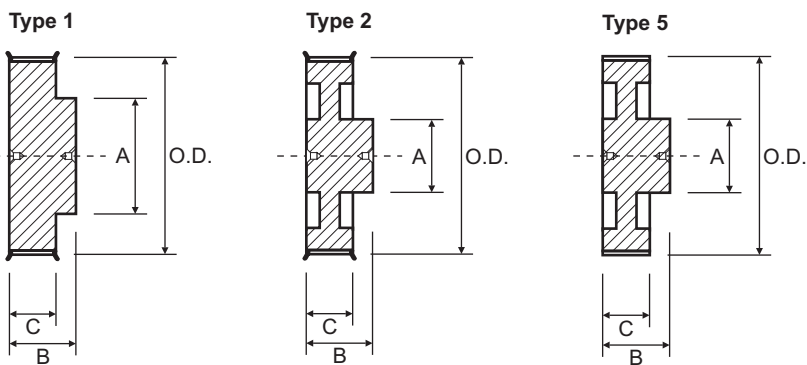
AT5-25

Suit 25mm wide belt

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

N.F. - No Flanges

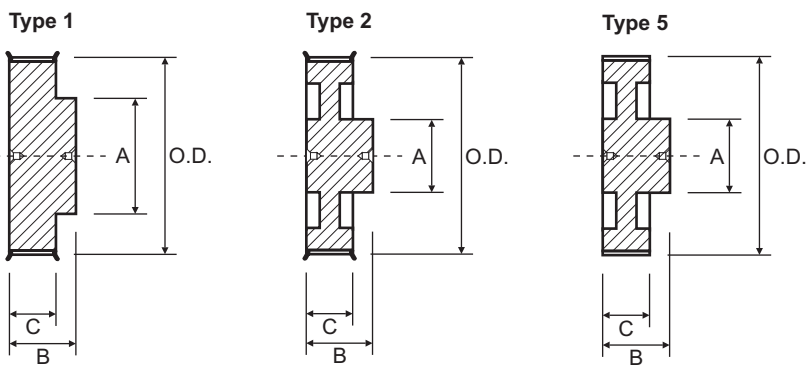
AT10 Metric Timing Pulleys



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

N.F. - No Flanges

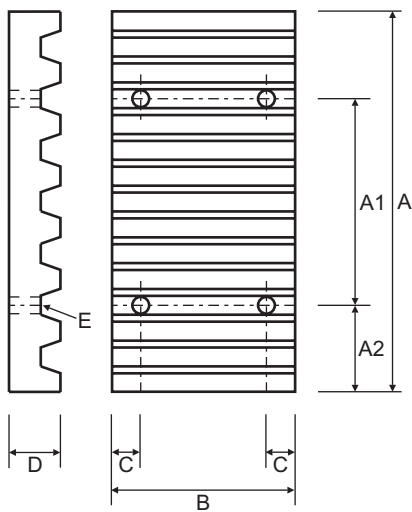
AT10 Metric Timing Pulleys



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

N.F. - No Flanges

Timing Belt Clamping Plates



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

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

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

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



Taper Bushes

Taper bushes are designed to give the following:-

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

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

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

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

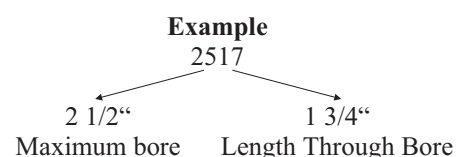
* Discontinued size, only limited bore sizes available.

OD = Outside Diameter

L = Length Through Bore

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

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



Useful Information

PULLEY DIAMETER - SPEED

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

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

O.D. Is in millimetres

USE OF FLANGED PULLEYS

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

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

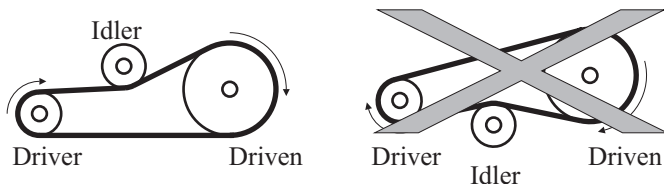
1. On all two-pulley drives, the minimum flanging requirements are two flanges on one pulley or one flange on each pulley on opposite sides.
2. On drives where the center distance is more than eight times the diameter of the small pulley, both pulleys should be flanged on both sides.
3. On drives with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

IDLERS

Use of idlers should be restricted to those cases in which they are functionally necessary. Idlers usually are used to apply tension when centres are not adjustable

Idlers should be located on the slack side of the belt drive. For inside idlers, grooved pulleys are recommended up to 40 grooves. On larger diameters, flat, uncrowned idlers may be used. Inside idler diameters should not be smaller than the smallest loaded pulley in the system.

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



CENTRE DISTANCE AND BELT LENGTH

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

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

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.

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

D = Pitch diameter, Large pulley

d = Pitch diameter, Small pulley

C = Center distance between shafts

T = Number of teeth in small pulley

OPERATING ENVIRONMENT

Temperature

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

Aircraft & Motor Vehicle drives

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

BELT STORAGE AND HANDLING

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



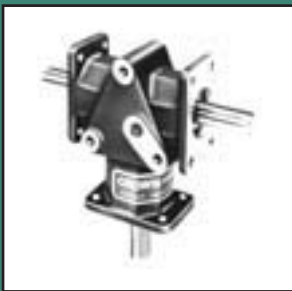
Sprocket in both B.S. A.S.A. - Plates, Simplex, Duplex & Triplex. Chain in B.S. A.S.A. Conveyor & Special chains.



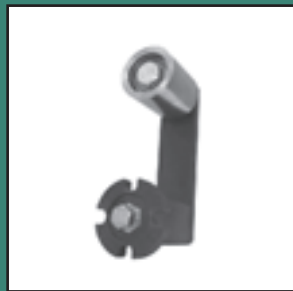
We can supply more than 40 different types of coupling from 9 different suppliers.



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



A large range of shaft locking bushes can be supplied.



A full range of Ruland shaft collars are available.



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



POWER TRANSMISSION - PNEUMATIC CYLINDERS

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