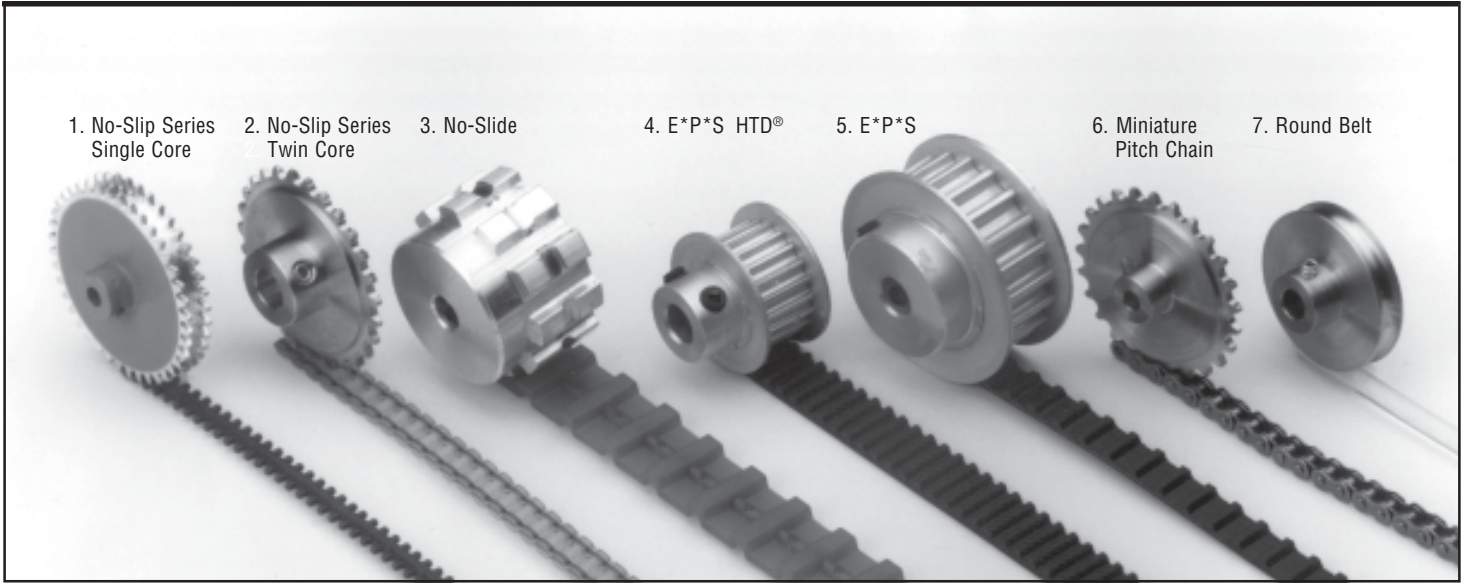


# BELTS AND PULLEYS



PIC Design has increased its range of belts and pulleys to provide users with the most complete line for motion control and light power transmission. Designers are no longer confined to the use of one type of drive system. PIC Design offers No-Slip™ Positioning Timing Belts, No-Slide™, E\*P\*S, E\*P\*S HTD® (Metric), Round Belts, and Miniature Chain. All come with appropriate pulleys or sprockets in various materials.

## PIC Design Belts and Pulleys — A Brief Overview

### NO-SLIP™ POSITIONING BELTS

No-Slip series timing belts feature many design elements. The polyurethane belts operate backlash free without lubrication and have excellent chemical and abrasion resistance for use in medical and food processing applications. Positive tooth engagement offers silent No-Slip drive. No-Slip belts are available with Aramid (Kevlar) or stainless steel cable cores in single or twin core configurations. Sprockets are available in either aluminum or stainless steel. Belts are available in lengths up to 100 feet and can be spliced in the field for added versatility.

### NO-SLIDE™ TIMING BELTS

A new series of synchronous belts, combined with a grooved flangeless pulley, offers high performance timing. No-flange pulleys allow air to escape and prevents it from being trapped between the belt and flange. No-Slide belts are molded in polyurethane with a stainless steel core

(cable). They require no lubrication, handle higher load capacities than standard timing belts, are available in lengths up to 100 feet, and can be spliced in the field for added versatility.

No-Slide belts are excellent for medical, packaging, and labeling applications, and where higher load capacity is required. No-Slide pulleys are available in aluminum.

### E\*P\*S TIMING BELTS

The E\*P\*S synchronous timing belt is the classical timing belt that provides positive, non-slip power transmission. These belts are available in neoprene rubber with nylon facing and a fiberglass tensile member, or urethane with a polyester tensile member as shown. A Kevlar tensile member is also available as an option. These belts are directly interchangeable with each other. The urethane belts have excellent flex characteristics which allows them to operate on pulleys with as few as 10 teeth, and ratios of 8:1 on smaller center distances.

The E\*P\*S line is recommended for use on office, mailing, and data processing equipment, printers, plotters, robotics, optical, and photographic equipment.

### E\*P\*S HTD® TIMING BELTS

The E\*P\*S HTD® timing belts provide positive non-slip transmission at both low and high speeds and offer a higher load carrying capability than the E\*P\*S trapezoidal design, due to the

deeper curvilinear shape of the belt tooth. E\*P\*S HTD® belts can transmit more power with a more compact package as compared to E\*P\*S belts, and can be used in applications where shock load is evident, such as vacuum cleaners, floor polishers, sanders, centrifuges and power tools, as well as office equipment drive systems. Pulleys are available in machined aluminum.

### ROUND BELTS

Round belt or O-ring drive belt systems are used in a wide variety of applications such as vibration dampening in precision mechanisms and reduction of distortion in audio equipment. Round belts also provide overload protection and can act as a clutch in certain applications. Grooved pulleys are available in stainless steel and aluminum.

### MINIATURE PITCH CHAIN

Miniature pitch chains are made of non-magnetic grade stainless steel. The large joint bearing area construction permits greater loads and speeds. Precision control of chain length allows for positioning accuracy between the driver and driven sprockets. Continuous and positive lubrication is recommended for maximum life and efficiency. Sprockets are available in stainless steel and aluminum.

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# TECHNICAL SECTION

## Application Information

To assist customers in selecting the most appropriate flexible drive system in particular applications, PIC Design has included an Application Guide along with a Flexible Drive System Comparison Chart.

The Application Guide assists in determining the drive system suitable for your application. If your specific applications are not listed, use ones which are most similar.

The Comparison Chart will enable users to choose the drive system that will best suit a particular application. The features of these drive systems are listed so that the drive system selected will provide the most economical, maintenance-free and longest life for a particular application.

**No-Slip Series belts** fulfill the need for the most accurate and smoothest running drive system, while the **E\*P\*S Series** provides an economical solution to positive power transmission. **No-Slide timing belts** offer higher load capacities, run on no-flange pulleys, offer quiet operation, and can be used in smaller areas. **Miniature chains** offer a positive drive system for heavier duty applications, while **Round Belts** are most suitable for low-load applications not requiring positioning accuracy.

Users are encouraged to request advise or answers to questions not covered here — please don't hesitate to consult PIC Design directly.

## Application Guide

	Flexible Drive Systems				
	No-Slip Belts	No-Slide Belts	Timing Belts	Chain	Round
CNC Positioning Devices	X	X	X		
Magnification & Focusing Adjustment Devices	X				
Laser Alignment Mechanisms	X				
Gear Boxes	X	X	X	X	
Paper Feeds		X	X		X
Household Appliances		X	X		X
Centrifuges		X	X		
Encoders — High Resolution Std. Resolution	X X	X	X		
Plotters	X				
Plating Room Equipment	X	X	X		X
High Speed Printers		X	X		
Manual Positioning Mechanisms	X	X	X	X	X
Power Tools, Sanders, etc.		X	X		
Machinery Drives		X	X	X	X
Advertising Displays	X	X	X	X	X
Stepper Motor Drives	X	X	X		
Business Machines	X	X	X	X	X
Audio & Visual Equipment	X	X	X	X	X

## Flexible Drive System Feature Comparison

Drive Type	No-Slip	No-Slide	E*P*S (Timing)		E*P*S HTD®	Chain	Round
Catalog Series and Pitch	F, F32 - 32DP, F24C - .1309CP, FR - .1475CP, FL, FM, F20TS - 20DP, F25C - .250CP	F8B-40DP (.0816CP), F20B-.200CP, F37B-.375CP	EPS-A-.080CP, EPS-D-.200CP, EPS-J-.375CP	EPS-A-.080CP, EPS-D-.200CP, EPS-C-.0816CP (40DP)	EPS-F-3mm, EPS-G-5mm	EL-.1475CP EL25-.250CP	AF2-1/16" Thick AF3-3/32" Thick AF4-1/8 " Thick AF5-3/16" Thick AF6-1/4 " Thick
Body Material	Polyurethane	Polyurethane	Neoprene	Polyurethane	Neoprene	Stainless Steel	Polyurethane
Reinforcement	Stainless Steel or Aramid Fiber	Stainless Steel or Aramid Fiber	Fiber Glass	Polyester Fiber	Fiber Glass	—	None
Drive Both Sides of Belt	Yes <sup>1</sup>	No	No	No	No	Yes	Yes
Right Angle Drive	FS & FA <sup>2</sup>	No	No	No	No	No	Yes
Resistance to Oils and Chemicals	Stainless Steel - Excellent Aramid - Good	Stainless Steel - Excellent Aramid - Good	Good	No	No	No	Yes
Pulley to Pulley <sup>3</sup> Misalignment	Single Core — up to 5° Double Core — up to 1/10°	Up to 1/10°	Up to 1/4°	Up to 1/4°	Up to 1/4°	No	Yes
Pulley Tooth Form	32DP — Involute 20DP, 24DP, .1475CP, .250CP — Precision Sprocket	Trapezoidal	Trapezoidal	Trapezoidal	HTD® Curvilinear	Precision Sprocket	Radius Groove
Abrasion Resistance	Excellent	Excellent	Good	Excellent	Good	Good	Excellent
Pulleys Mesh With Standard Spur Gears	32DP — Yes 20DP, 24DP — Option Available .1475CP, .250CP — No	No	No	No	No	No	No
Ability to Withstand Shock Loads	Fair	Fair	Limited	Good	Fair	Limited	Excellent
Temperature (°F)	-65 to +180 <sup>4</sup>	-65 to +180 <sup>4</sup>	-30 to +185	-65 to +180	-30 to +185	—	-40 to +180

**Notes:** **Note <sup>1</sup>** Driving stainless steel reinforced belts on both sides, results in a reduction of belt life due to reverse bending.

**Note <sup>2</sup>** Twisting of the belt may cause the belt to wear excessively and reduce belt life. Shafts at right angles require a center distance at least 5 1/2 times the larger pulley diameter.

**Note <sup>3</sup>** Misalignment of pulleys will cause abrasive wear on the belt and reduce belt life.

**Note <sup>4</sup>** Practical operating temperatures are -10°F to +140°F.

# NO-SLIP AND NO-SLIDE DRIVE SYSTEMS

## PIC Design Guide For No-Slip and No-Slide Drive Systems

No-Slip / No-Slide	Catalog Belt Series	Pitch	Reinforcement Cable Diameter (Inch)	Positional Accuracy	Recommended Minimum Pulley Diameter (Inch)	Recommended Minimum Number Of Teeth In Mesh	Recommended Maximum Belt Operating Speed (No Load / Load) (Feet per Min.)	Recommended Maximum Operating Belt Tension (LBS)	Ultimate Static Tensile Strength For Endless Belt (LBS)
No-Slip	FA	32DP .0982CP Single Core	.032 Aramid Fiber	Excellent	.500	8	900 / 300	4-5	25
	FS		.032 Stainless Steel		.750	8	900 / 350	6-8	50
	F32BS18		.018 Stainless Steel		.500	8	800 / 350	4-5	20
	F32CS	32DP / .0982CP Double Core	.018 Stainless Steel	Very Good	.750	8	850 / 350	6-7	50
	FLA	20DP .15708CP Single Core	.032 Aramid Fiber	Good	.750	6	1100 / 500	5-6	25
	FLS		.032 Stainless Steel		.750	6	1100 / 600	10-12	50
	FMA	20DP .15708CP	.032 Aramid Fiber	Good	.750	6	1300 / 550	10-12	50
	FMS	Double Core	.032 Stainless Steel		.750	6	1300 / 700	20-25	100
	F20TS	20DP Triple Core	.032 Stainless Steel	Good	.750	6	1300 / 700	20-25	100
	FRA	.1475CP Double Core	.032 Aramid Fiber	Good	.750	6	1300 / 550	10-12	50
	FRS		.032 Stainless Steel		.750	6	1300 / 700	20-25	100
	F24CA	24DP .1309CP Double Core	.032 Aramid Fiber	Good	.750	6	1300 / 550	10-12	50
	F24CS		.032 Stainless Steel		.750	6	1300 / 700	20-25	100
	F25CA	.250CP Double Core	.032 Aramid Fiber	Good	.750	5	1300 / 550	10-12	50
	F25CS		.032 Stainless Steel		.750	5	1300 / 700	20-25	100
No-Slide	F8BS	40DP, .0816CP Single Core	.018 Stainless Steel	Good	.500	8	700 / 300	4-5	20
	F20BA	.200CP Single Core	.032 Aramid Fiber	Very Good	.750	6	1200 / 550	5-6	25
	F20BS		.032 Stainless Steel		.750	6	1200 / 650	10-12	50
	F37BS	.375CP Single Core	.047 Stainless Steel	Good	1.375	6	800 / 450	25-30	125

## BELT TENSIONER

TE-1

**Material:** Shaft 303 Stainless Steel  
Housing Aluminum Black Anodized

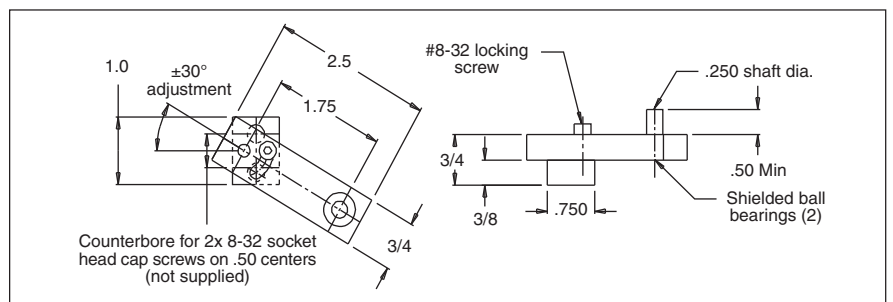
**Features:** Easily adjusted by pivoting tensioner about mounting surface

**Part Number:** TE-1

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# NO-SLIP SERIES

## PIC's No-Slip and No-Slide High Performance Positioning Drive Systems

The No-Slip principle was introduced by PIC over 25 years ago. The No-Slip principle allows the drive system to function primarily as a precise positioning device by locating the drive pins on the belt pitch line, allowing them to mesh smoothly with the pulleys without the clearance required for standard belts and pulleys. The elimination of the clearance makes the drive system "backlash free" and an excellent means of maintaining the accuracy for precision positioning applications.

No-Slip belts utilize round drive pins which are molded perpendicularly to one or more molded tensile members. These molded tensile members are larger than the drive pins, which are located on the pitch line of the tensile member. The molded tensile member(s) surround a reinforcing cable(s) providing strength and minimal stretch while the loads are transferred through the tensile members to the pulley shoulders or grooves.

The 32DP (diametral pitch) No-Slip drive system is an industry standard. The single core belt runs on pulleys that are generated with precision involute form teeth. This fine pitch results in a greater number of teeth engaged, which produces the highest positioning accuracy for applications such as encoders and measuring devices. The involute form of the pulleys allows a spur gear to be driven by the belt or pulley. The 32DP twin core design No-Slip drive system offers additional strength for higher loads.

The .1475CP and .2500 CP No-Slip drive systems are twin core belts that are an economical solution to miniature pitch stainless steel chain. These belts are for high load carrying applications requiring No-Slip accuracy. These belts have replaced miniature pitch stainless steel chain in many existing applications.

The No-Slide principle allows the drive system to operate using pulleys without flanges. The belt stays on the center of the pulley due to an encapsulated stainless steel or Aramid cable in the center of the belt and a matching groove in the pulley.

The elimination of a flange results in two major benefits. It produces a more compact drive system and it also eliminates the air trapped by the flanges found on conventional synchronous belts — therefore making it a quieter running belt.

No-Slide belts are produced by a continuous polyurethane molding process with either a stainless steel or Aramid core. The finished belt is joined by crimping the cable ends within a stainless steel ferrule, which is then overmolded for added strength and protection of the pulley.

These polyurethane belts have inherent chemical and abrasion resistance that allow operation in applications where carbon dusting encountered with neoprene belts cannot be tolerated. The No-Slide series of belts are excellent for medical and packaging applications.

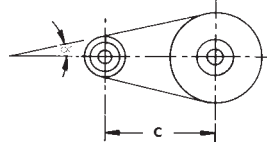
The design guide (shown on previous page) enables users to select the appropriate system for a particular application. The belt length calculations are included to insure that the proper belt length has been selected for the center distance and ratio of your drive system.

### BELT LENGTH CALCULATIONS

D = Pitch Diameter Large Pulley (inches)  
d = Pitch Diameter Small Pulley (inches)  
C = Center Distance (inches)

$\alpha$  = Angle Between Belt and Centerline  
L = Belt Pitch Length (inches — approx.)

#### For Parallel Shafts:



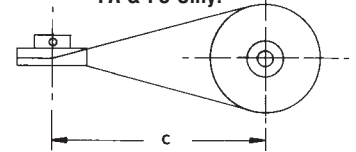
$$\alpha = \sin^{-1} \left[ \frac{D-d}{2C} \right]$$

$$L = 2C \cos \alpha + \frac{\pi(D+d)}{2} + \frac{\pi\alpha(D-d)}{180}$$

or

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

#### For Right Angle Shafts FA & FS Only:



$$L = \frac{\pi}{2} (D + d) + \sqrt{4C^2 + D^2 + d^2}$$

### BELT SPEED CALCULATIONS

$$BS(\text{fpm}) = (.262) \times PD \times \text{RPM}$$

### CENTER DISTANCE CALCULATIONS

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

$$\text{Where } K = 4L - 2\pi(D+d)$$

### STANDARD CALCULATIONS

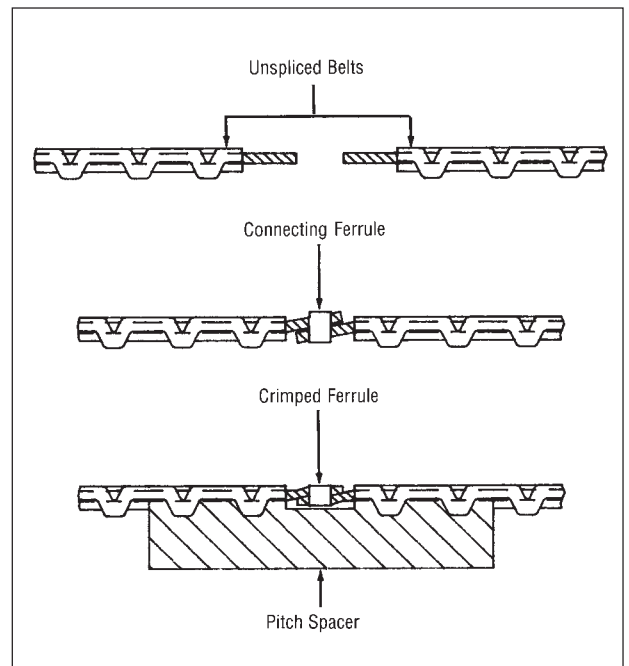
Required	Given	Formula
Speed ratio (R)	Shaft speeds (rpm)	$R = \frac{\text{rpm (faster shaft speed)}}{\text{rpm (slower shaft speed)}}$
	Pulley Diameters (D & d)	$R = \frac{D \text{ (larger pulley diameter)}}{d \text{ (smaller pulley diameter)}}$
	Number of pulley grooves (N & n)	$R = \frac{N \text{ (larger pulley groove no.)}}{n \text{ (smaller pulley groove no.)}}$
Horsepower (hp)	Torque (T) in in.- lbs. Shaft speed (rpm)	$hp = \frac{T \times \text{rpm}}{63,025}$
Torque (T) in in.- lbs.	Shaft horsepower (hp) Shaft speed (rpm)	$T = \frac{63,025 \times \text{hp}}{\text{rpm}}$
Effective tension (Te)	Shaft horsepower (hp) Belt speed (BS)	$Te = \frac{33,000 \times \text{hp}}{BS}$
Effective tension (Te) in pounds	Torque (T) in in.- lbs. Pulley pd in inches	$Te = \frac{2 \times T}{pd}$

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# BELT SPLICING KIT



Belt splicing in the field is possible for NO-SLIP & NO-SLIDE positioning and timing belts when the appropriate splicing kit is used. Part numbers for these kits can be found on each No-Slip — No-Slide belt specification page or in the table below. In addition to containing a crimp tool & die set, positioning holddown rack and cable cutter; detailed procedures define the five basic steps to assure a correct splice. These steps are:

1. Cut belt to desired length
2. Remove polyurethane from each end
3. Insert ends into ferrule
4. Position belt into holddown feature
5. Crimp

When extra ferrules are required they may be ordered as follows:

Cable Size	Ferrule Part Number
.018" Diameter	<b>FER018</b>
.032" Diameter	<b>FER032</b>
.047" Diameter	<b>FER047</b>

**Note:** Because factory crimps use highly controlled pneumatic equipment and, in some cases polyurethane overmolding, field crimps result in loads that are 50% of the catalog ratings.

## Field Belt Splicing Kit

Belt Series Number	Kit Part Number	Crimp Plier Part Number	Crimp Die Part Number	Hobby Knife Part Number	Stripper Cutter Part Number	Ferrules* Part Number	Position Rack & Hold Down Part Number	Flush** Cutter Part Number
FS / FA	F-SK	TL-91	TL-89	TL-86	TL-87	FER032	TL-70-71	—
FLS / FLA	FL-SK	TL-91	TL-89	TL-86	TL-87	FER032	TL-76-77	—
FMS / FMA	FM-SK	TL-91	TL-89	TL-86	TL-87	FER032	TL-78-79	—
FRS / FRA	FR-SK	TL-91	TL-89	TL-86	TL-87	FER032	TL-80-81	—
F8BS	F8B-SK	TL-91	TL-90	TL-86	TL-87	FER018	TL-62-63	—
F20BS / F20BA	F20B-SK	TL-91	TL-89	TL-86	TL-87	FER032	TL-60-61	TL-32
F20TS	F20T-SK	TL-91	TL-89	TL-86	TL-87	FER032	TL-66-67	—
F24CS / F24CA	F24C-SK	TL-91	TL-89	TL-86	TL-87	FER032	TL-72-73	—
F25CS	F25C-SK	TL-91	TL-89	TL-86	TL-87	FER032	TL-74-75	TL-32
F32BS18	F32B18-SK	TL-91	TL-90	TL-86	TL-87	FER018	TL-70-71	—
F32CS / F32CA	F32C-SK	TL-91	TL-90	TL-86	TL-87	FER018	TL-68-69	—
F37BS	F37B-SK	TL-91	TL-88	TL-86	TL-87	FER047	TL-64-65	TL-32

### Notes:

- \* Twenty (20) ferrules included in each kit.
- \*\* Heavy duty cutter supplied as indicated - can be ordered as option for other kits.

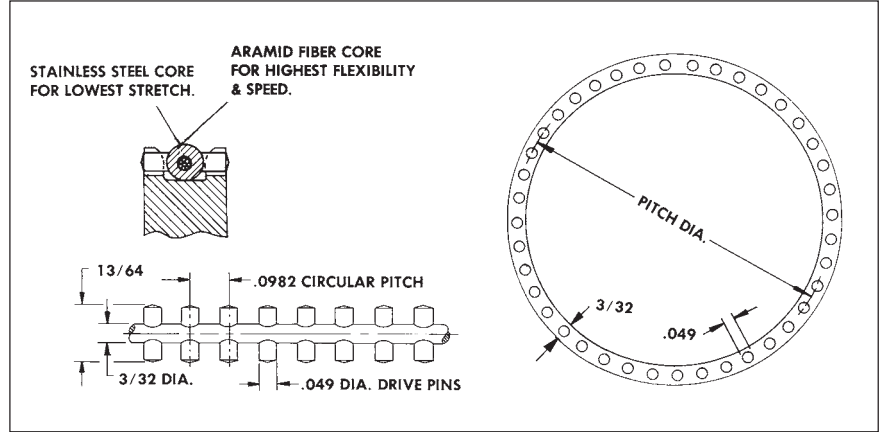
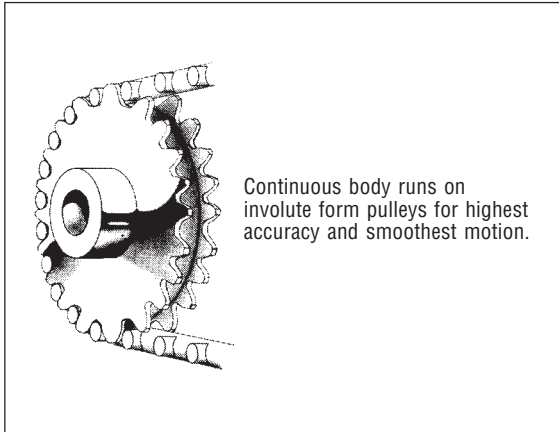
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# NO-SLIP POSITIVE DRIVE BELT - ULTRA PRECISION

32DP, .0982CP — Single Core



## Material:

FA Series: Molded Polyurethane, .032" diameter Aramid Fiber Core (Kevlar). Color: Blue

FS Series: Molded Polyurethane, .032" diameter Stainless Steel Core. Color: Blue

Number of Drive Pins	Length (Ref.)	Part No. Aramid Core	Part No. Steel Core
64	6.283	FA-64	FS-64
80	7.854	FA-80	FS-80
95	9.327	FA-95	FS-95
112	10.996	FA-112	FS-112
126	12.370	FA-126	FS-126
128	12.566	FA-128	FS-128
144	14.137	FA-144	FS-144
158	15.512	FA-158	FS-158
176	17.279	FA-176	FS-176
189	18.557	FA-189	FS-189
208	20.420	FA-208	FS-208
220	21.598	FA-220	FS-220
240	23.562	FA-240	FS-240
252	24.740	FA-252	FS-252
272	26.704	FA-272	FS-272
283	27.784	FA-283	FS-283
304	29.845	FA-304	FS-304
315	30.923	FA-315	FS-315
336	32.987	FA-336	FS-336
346	33.967	FA-346	FS-346
368	36.128	FA-368	FS-368
377	37.011	FA-377	FS-377
400	39.270	FA-400	FS-400
408	40.055	FA-408	FS-408
432	42.412	FA-432	FS-432

Number of Drive Pins	Length (Ref.)	Part No. Aramid Core	Part No. Steel Core
440	43.197	FA-440	FS-440
464	45.553	FA-464	FS-464
471	46.238	FA-471	FS-471
480	47.124	FA-480	FS-480
496	48.695	FA-496	FS-496
512	50.265	FA-512	FS-512
528	51.836	FA-528	FS-528
544	53.407	FA-544	FS-544
560	54.978	FA-560	FS-560
576	56.549	FA-576	FS-576
592	58.120	FA-592	FS-592
608	59.690	FA-608	FS-608
624	61.261	FA-624	FS-624
640	62.832	FA-640	FS-640
656	64.402	FA-656	FS-656
672	65.973	FA-672	FS-672
688	67.544	FA-688	FS-688
704	69.115	FA-704	FS-704
720	70.686	FA-720	FS-720
736	72.257	FA-736	FS-736
752	73.827	FA-752	FS-752
768	75.398	FA-768	FS-768
784	76.969	FA-784	FS-784
800	78.540	FA-800	FS-800
—	—	—	—

For other length belts longer than the minimum listed, substitute the desired number of drive pins at the end of the part number.

## 32DP (.0982 CP) ORIGINAL SINGLE CORE NO-SLIP BELTS — SERIES FA & FS

Smoothest motion, highest accuracy. Continuous molded body runs on precision, involute form pulleys. Fine pitch results in greatest number of teeth engaged. Single core permits non-parallel or right angle shafts position. Recommended for highest accuracy, lower load applications such as encoders and measuring devices.

## INCREASED FLEXIBILITY OPTION

For those applications requiring the greatest flexibility at a reduced load, PIC Design has this belt available with a .018" diameter stainless steel core. The part number is F32BS18-□□□. Where □□□ is the number of drive pins. Example: Part Number for 144 drive pins is F32BS18-144.

## Bulk Lengths — Not Spliced

Length	Aramid Core Part Number	Steel Core Part Number
5 Ft	FA-5FT	FS-5FT
10 Ft	FA-10FT	FS-10FT
25 Ft	FA-25FT	FS-25FT
50 Ft	FA-50FT	FS-50FT

For field splicing use Kit F-SK. See page 5-5.

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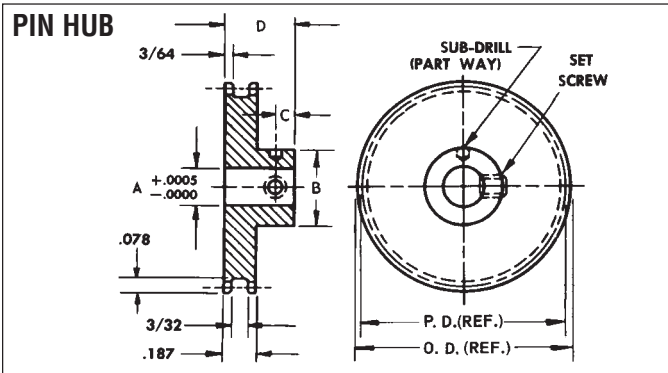
## Bulk Lengths — Not Spliced

Length	Steel Core Part Number
5 Ft	F32BS18-5FT
10 Ft	F32BS18-10FT
25 Ft	F32BS18-25FT
50 Ft	F32BS18-50FT

For field splicing use Kit F-SK. See page 5-5.

# NO-SLIP PULLEYS

32DP, .0982CP — For FA, FS & F32BS18 No-Slip Single Core Drive Belts



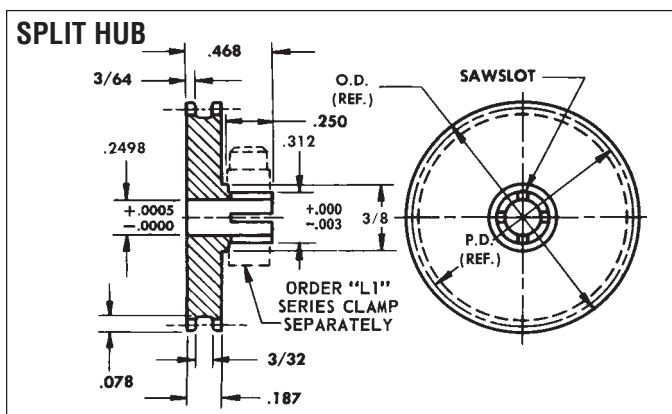
Dimen.	Bore				
	1/8	3/16	1/4	4 mm	6 mm
A	.1248	.1873	.2498	.1573	.2360
B	.312	.375	.500	.375	.500
C	.09	.11	.12	.11	.12
D	.375	.406	.437	.406	.437
Set Screw	#2-56	#4-40	#6-32	M2 x .4	M3 x .5

Material: 303 Stainless Steel  
2024-T4 Aluminum (Anodized before cutting)

Geared Pulley Data			Stainless Steel Bore Size / Part Number					Aluminum Bore Size / Part Number				
No. Teeth	P.D.	O.D.	.1248	.1873	.2498	4mm	6mm	.1248	.1873	.2498	4mm	6mm
14 *	.4375	.500	FC1-14	—	—	—	—	FC2-14	—	—	—	—
15 *	.4687	.531	FC1-15	FC3-15	—	MGP1-15	—	FC2-15	FC4-15	—	MGP2-15	—
16	.5000	.563	FC1-16	FC3-16	—	MGP1-16	—	FC2-16	FC4-16	—	MGP2-16	—
18	.5625	.625	FC1-18	FC3-18	—	MGP1-18	—	FC2-18	FC4-18	—	MGP2-18	—
20	.6250	.688	FC1-20	FC3-20	FC5-20	MGP1-20	MGP3-20	FC2-20	FC4-20	FC6-20	MGP2-20	MGP4-20
22	.6875	.750	FC1-22	FC3-22	FC5-22	MGP1-22	MGP3-22	FC2-22	FC4-22	FC6-22	MGP2-22	MGP4-22
24	.7500	.813	FC1-24	FC3-24	FC5-24	MGP1-24	MGP3-24	FC2-24	FC4-24	FC6-24	MGP2-24	MGP4-24
26	.8125	.875	FC1-26	FC3-26	FC5-26	MGP1-26	MGP3-26	FC2-26	FC4-26	FC6-26	MGP2-26	MGP4-26
28	.8750	.938	FC1-28	FC3-28	FC5-28	MGP1-28	MGP3-28	FC2-28	FC4-28	FC6-28	MGP2-28	MGP4-28
30	.9375	1.000	FC1-30	FC3-30	FC5-30	MGP1-30	MGP3-30	FC2-30	FC4-30	FC6-30	MGP2-30	MGP4-30
32	1.0000	1.063	FC1-32	FC3-32	FC5-32	MGP1-32	MGP3-32	FC2-32	FC4-32	FC6-32	MGP2-32	MGP4-32
36	1.1250	1.188	FC1-36	FC3-36	FC5-36	MGP1-36	MGP3-36	FC2-36	FC4-36	FC6-36	MGP2-36	MGP4-36
40	1.2500	1.313	FC1-40	FC3-40	FC5-40	MGP1-40	MGP3-40	FC2-40	FC4-40	FC6-40	MGP2-40	MGP4-40
48	1.5000	1.563	FC1-48	FC3-48	FC5-48	MGP1-48	MGP3-48	FC2-48	FC4-48	FC6-48	MGP2-48	MGP4-48
56	1.7500	1.813	FC1-56	FC3-56	FC5-56	MGP1-56	MGP3-56	FC2-56	FC4-56	FC6-56	MGP2-56	MGP4-56
64	2.0000	2.063	FC1-64	FC3-64	FC5-64	MGP1-64	MGP3-64	FC2-64	FC4-64	FC6-64	MGP2-64	MGP4-64
72	2.2500	2.313	FC1-72	FC3-72	FC5-72	MGP1-72	MGP3-72	FC2-72	FC4-72	FC6-72	MGP2-72	MGP4-72
80	2.5000	2.563	—	FC3-80	FC5-80	MGP1-80	MGP3-80	—	FC4-80	FC6-80	MGP2-80	MGP4-80
88	2.7500	2.813	—	FC3-88	FC5-88	MGP1-88	MGP3-88	—	FC4-88	FC6-88	MGP2-88	MGP4-88
96	3.0000	3.063	—	FC3-96	FC5-96	MGP1-96	MGP3-96	—	FC4-96	FC6-96	MGP2-96	MGP4-96
112	3.5000	3.563	—	FC3-112	FC5-112	MGP1-112	MGP3-112	—	FC4-112	FC6-112	MGP2-112	MGP4-112
128	4.0000	4.063	—	FC3-128	FC5-128	MGP1-128	MGP3-128	—	FC4-128	FC6-128	MGP2-128	MGP4-128

\* Recommended for use as an idler only

See Note Below.



Note:

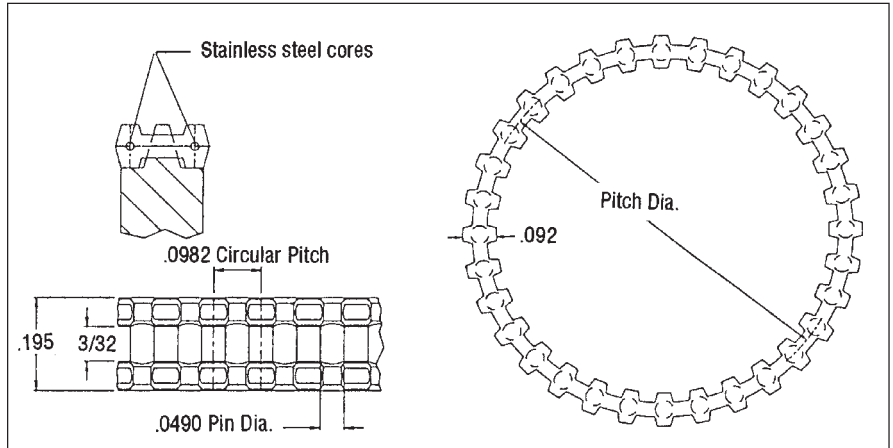
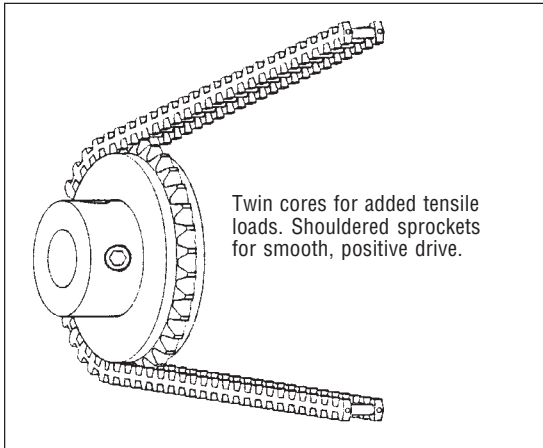
Other Size Bores Available, Consult Factory.  
For unlisted number of teeth, specify the number of teeth desired as the last figure in the part number.  
EXAMPLE: For a 52-tooth stainless steel pulley, specify Part Number: FD5-52.  
For number of teeth above or below listed sizes, consult factory.

No. Teeth	Pully Data		Stainless Steel .2498 Bore Part No.	Aluminum .2498 Bore Part No.
	P.D.	O.D.		
14 *	.4375	.500	FD5-14	FD6-14
15 *	.4687	.531	FD5-15	FD6-15
16	.5000	.563	FD5-16	FD6-16
18	.5625	.625	FD5-18	FD6-18
20	.6250	.688	FD5-20	FD6-20
22	.6875	.750	FD5-22	FD6-22
24	.7500	.813	FD5-24	FD6-24
26	.8125	.875	FD5-26	FD6-26
28	.8750	.938	FD5-28	FD6-28
30	.9375	1.000	FD5-30	FD6-30
32	1.0000	1.063	FD5-32	FD6-32
36	1.1250	1.188	FD5-36	FD6-36
40	1.2500	1.313	FD5-40	FD6-40
48	1.5000	1.563	FD5-48	FD6-48
56	1.7500	1.813	FD5-56	FD6-56
64	2.0000	2.063	FD5-64	FD6-64
72	2.2500	2.313	FD5-72	FD6-72

\* Recommended for use as an idler only

# NO-SLIP POSITIVE DRIVE BELT

32DP, .0982 CP — Twin Core



**Material:** F32CS Series: Molded Polyurethane, .018" diameter Stainless Steel Cores.

**Color:** Blue

Number of Drive Pins	Length (Ref.)	Part No.	Number of Drive Pins	Length (Ref.)	Part No.
42	4.124	F32CS-42	252	24.746	F32CS-252
49	4.812	F32CS-49	272	26.710	F32CS-272
52	5.106	F32CS-52	283	27.791	F32CS-283
53	5.205	F32CS-53	304	29.853	F32CS-304
64	6.285	F32CS-64	315	30.933	F32CS-315
67	6.579	F32CS-67	336	32.955	F32CS-336
75	7.365	F32CS-75	346	33.977	F32CS-346
80	7.856	F32CS-80	377	37.021	F32CS-377
95	9.329	F32CS-95	400	39.280	F32CS-400
112	10.998	F32CS-112	408	40.066	F32CS-408
126	12.373	F32CS-126	432	42.422	F32CS-432
128	12.570	F32CS-128	440	43.208	F32CS-440
144	14.141	F32CS-144	464	45.565	F32CS-464
158	15.516	F32CS-158	471	46.252	F32CS-471
176	17.283	F32CS-176	480	47.136	F32CS-480
189	18.560	F32CS-189	512	50.278	F32CS-512
208	20.426	F32CS-208	544	53.421	F32CS-544
220	21.604	F32CS-220	592	58.134	F32CS-592
240	23.568	F32CS-240	608	59.706	F32CS-608

### Bulk Lengths — Not Spliced

Length	Part Number
5 Ft	F32CS-5FT
10 Ft	F32CS-10FT
25 Ft	F32CS-25FT
50 Ft	F32CS-50FT
100 Ft	F32CS-100FT

For field splicing use Kit F32C-SK. See page 5-5.

For other length belts longer than the minimum listed, substitute the desired number of drive pins at the end of the part number.

### 32DP (.0982 CP) TWIN CORE NO-SLIP BELTS — SERIES F32CS

Smoothest motion, highest accuracy. This belt runs on precision sprockets. Fine pitch results in greatest number of teeth engaged. Twin core offers added strength for higher loads.

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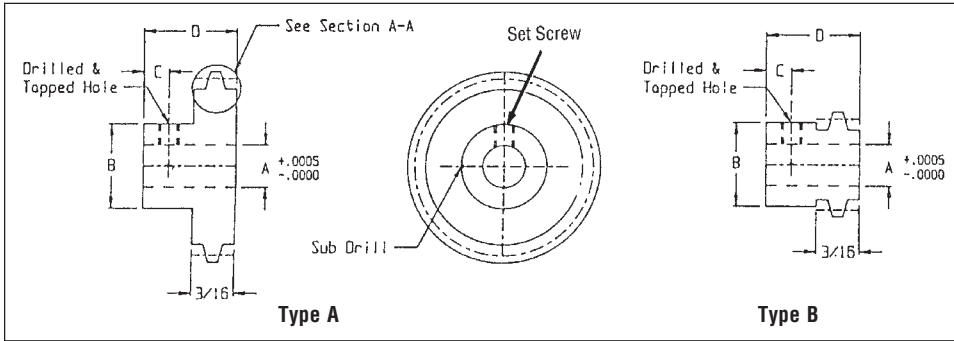


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# NO-SLIP SPROCKETS

32DP, .0982CP — For F32 No-Slip Drive Belts



Dimen.	Bore Size				
	1/8"	3/16"	1/4"	4 mm	6 mm
A	.1248	.1873	.2498	.1573	.2360
B	.312	.375	.500	.375	.500
C	.09	.11	.12	.11	.12
D	.375	.406	.437	.406	.437
Set Screw	#2-56	#4-40	#6-32	M2X.4	M3X.5

**Material:** 303 Stainless Steel  
2024-T4 Aluminum  
(Anodized Before Cutting)

## Hub Style

Type	No. of Teeth	Pitch Dia.	Outside Dia.	Stainless Steel Part No.			Aluminum Part No.		
				.1248	.1873	.2498	.1248	.1873	.2498
B	12 *	.3750	.437	F32G1-12	—	—	F32G2-12	—	—
B	13 *	.4062	.468	F32G1-13	F32G3-13	—	F32G2-13	F32G4-13	—
B	14 *	.4375	.500	F32G1-14	F32G3-14	F32G5-14**	F32G2-14	F32G4-14	F32G6-14**
A	15 *	.4687	.531	F32G1-15	F32G3-15	F32G5-15**	F32G2-15	F32G4-15	F32G6-15**
A	16 *	.5000	.562	F32G1-16	F32G3-16	F32G5-16**	F32G2-16	F32G4-16	F32G6-16**
A	18	.5625	.625	F32G1-18	F32G3-18	F32G5-18**	F32G2-18	F32G4-18	F32G6-18**
A	20	.6250	.687	F32G1-20	F32G3-20	F32G5-20	F32G2-20	F32G4-20	F32G6-20
A	22	.6875	.750	F32G1-22	F32G3-22	F32G5-22	F32G2-22	F32G4-22	F32G6-22
A	24	.7500	.812	F32G1-24	F32G3-24	F32G5-24	F32G2-24	F32G4-24	F32G6-24
A	26	.8125	.875	F32G1-26	F32G3-26	F32G5-26	F32G2-26	F32G4-26	F32G6-26
A	28	.8750	.937	F32G1-28	F32G3-28	F32G5-28	F32G2-28	F32G4-28	F32G6-28
A	30	.9375	1.000	F32G1-30	F32G3-30	F32G5-30	F32G2-30	F32G4-30	F32G6-30
A	32	1.0000	1.062	F32G1-32	F32G3-32	F32G5-32	F32G2-32	F32G4-32	F32G6-32
A	36	1.1250	1.187	F32G1-36	F32G3-36	F32G5-36	F32G2-36	F32G4-36	F32G6-36
A	40	1.2500	1.312	F32G1-40	F32G3-40	F32G5-40	F32G2-40	F32G4-40	F32G6-40
A	48	1.5000	1.562	F32G1-48	F32G3-48	F32G5-48	F32G2-48	F32G4-48	F32G6-48
A	56	1.7500	1.812	F32G1-56	F32G3-56	F32G5-56	F32G2-56	F32G4-56	F32G6-56
A	64	2.0000	2.062	F32G1-64	F32G3-64	F32G5-64	F32G2-64	F32G4-64	F32G6-64
A	72	2.2500	2.312	F32G1-72	F32G3-72	F32G5-72	F32G2-72	F32G4-72	F32G6-72
A	80	2.5000	2.562	F32G1-80	F32G3-80	F32G5-80	F32G2-80	F32G4-80	F32G6-80
A	88	2.7500	2.812	F32G1-88	F32G3-88	F32G5-88	F32G2-88	F32G4-88	F32G6-88
A	96	3.0000	3.062	F32G1-96	F32G3-96	F32G5-96	F32G2-96	F32G4-96	F32G6-96
A	112	3.5000	3.562	F32G1-112	F32G3-112	F32G5-112	F32G2-112	F32G4-112	F32G6-112
A	128	4.0000	4.062	F32G1-128	F32G3-128	F32G5-128	F32G2-128	F32G4-128	F32G6-128

\* Recommended for use as an idler only

\*\* Type "B" Sprocket Style

See Note Below.

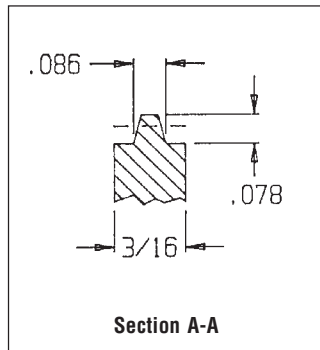
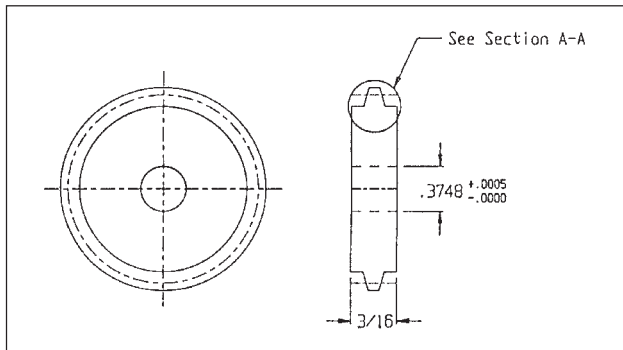
## For Metric Bores:

Bore	Stainless Steel	Aluminum
4 mm	MF32G1-XX	MF32G2-XX
6 mm	MF32G3-XX	MF32G4-XX

XX = Number of grooves

## Hubless Style

No of Teeth	Pitch Dia.	Outside Dia.	Stainless Steel Part No.	Aluminum Part No.
32	1.0000	1.062	F32J1-32	F32J2-32
36	1.1250	1.187	F32J1-36	F32J2-36
40	1.2500	1.312	F32J1-40	F32J2-40
48	1.5000	1.562	F32J1-48	F32J2-48
50	1.5625	1.625	F32J1-50	F32J2-50
56	1.7500	1.812	F32J1-56	F32J2-56
64	2.0000	2.062	F32J1-64	F32J2-64
72	2.2500	2.312	F32J1-72	F32J2-72
80	2.5000	2.562	F32J1-80	F32J2-80
88	2.7500	2.812	F32J1-88	F32J2-88
90	2.8125	2.875	F32J1-90	F32J2-90
96	3.0000	3.062	F32J1-96	F32J2-96
100	3.1250	3.187	F32J1-100	F32J2-100
112	3.5000	3.562	F32J1-112	F32J2-112
120	3.7500	3.812	F32J1-120	F32J2-120
128	4.0000	4.062	F32J1-128	F32J2-128



## Note:

Other Size Bores Available, Consult Factory.

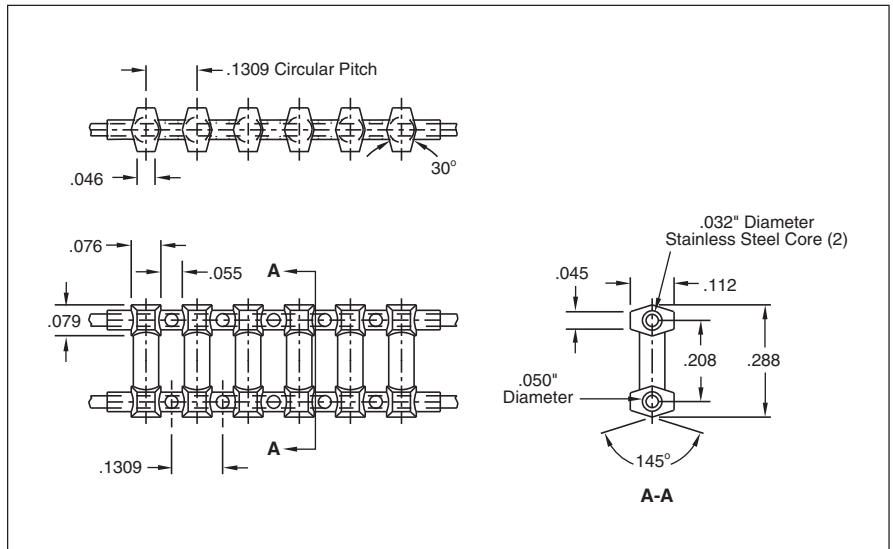
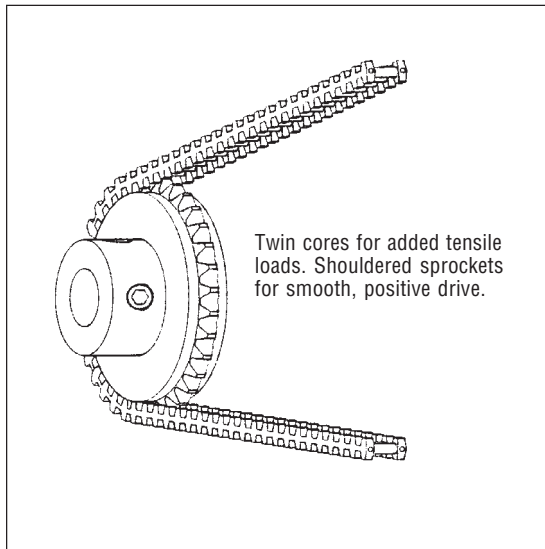
For unlisted number of teeth, specify the number of teeth desired as the last figure in the part number.

EXAMPLE: For a 52-tooth stainless steel sprocket, specify Part Number: F32G5-52.

For number of teeth above or below listed sizes, consult factory.

# NO-SLIP POSITIVE DRIVE BELT

## 24 DP .1309 CP Twin Core



**Material:** F24CS-Series: Molded Polyurethane, .032" diameter Stainless Steel Cores. Color Red  
 F24CA-Series: Molded Polyurethane, .032" diameter Aramid Fiber (Kevlar) Cores. Color Red

Number Of Drive Pins	Length (Ref.)	Part Number*	Number Of Drive Pins	Length (Ref.)	Part Number*
50	6.545	F24CS-50	120	15.708	F24CS-120
52	6.807	F24CS-52	130	17.017	F24CS-130
54	7.069	F24CS-54	140	18.326	F24CS-140
56	7.330	F24CS-56	150	19.635	F24CS-150
58	7.592	F24CS-58	160	20.944	F24CS-160
60	7.854	F24CS-60	170	22.253	F24CS-170
62	8.116	F24CS-62	180	23.562	F24CS-180
64	8.378	F24CS-64	190	24.871	F24CS-190
66	8.639	F24CS-66	200	26.180	F24CS-200
68	8.901	F24CS-68	220	28.798	F24CS-220
70	9.163	F24CS-70	240	31.416	F24CS-240
75	9.818	F24CS-75	260	34.034	F24CS-260
80	10.472	F24CS-80	280	36.652	F24CS-280
85	11.127	F24CS-85	300	39.270	F24CS-300
90	11.781	F24CS-90	320	41.888	F24CS-320
95	12.436	F24CS-95	340	44.506	F24CS-340
100	13.090	F24CS-100	360	47.124	F24CS-360
105	13.745	F24CS-105	380	49.742	F24CS-380
110	14.399	F24CS-110	400	52.360	F24CS-400
115	15.054	F24CS-115	420	54.978	F24CS-420

\* For Aramid Cores, substitute A for S in the part number  
 For other length belts longer than the minimum listed, substitute the desired number of drive pins at the end of the part number.

### Bulk Footage — Not Spliced

Length	Part Number*
5 Ft	F24CS-5FT
10 Ft	F24CS-10FT
25 Ft	F24CS-25FT
50 Ft	F24CS-50FT
100 Ft	F24CS-100FT

Special length belts and other bulk lengths available. Consult factory.

For field splicing use Kit F24C-SK. See page 5-5.

\* For Aramid Cores, substitute A for S in the part number

### 24 DP (.1309CP) Twin Core No-Slip Belts — Series F24CS

Smooth motion, excellent accuracy. Use F24G and MF24G sprockets. Operates with 24-pitch spur gears.

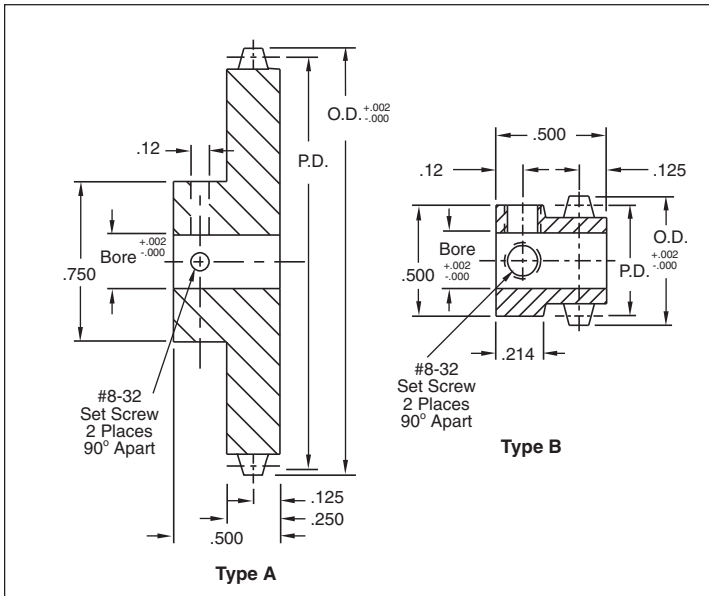
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# NO-SLIP SPROCKETS

24 DP, .1309 CP-1/4, 3/8, 1/2 — 8 mm, 10 mm & 12 mm Bores for No-Slip, Twin Core Drive Belts

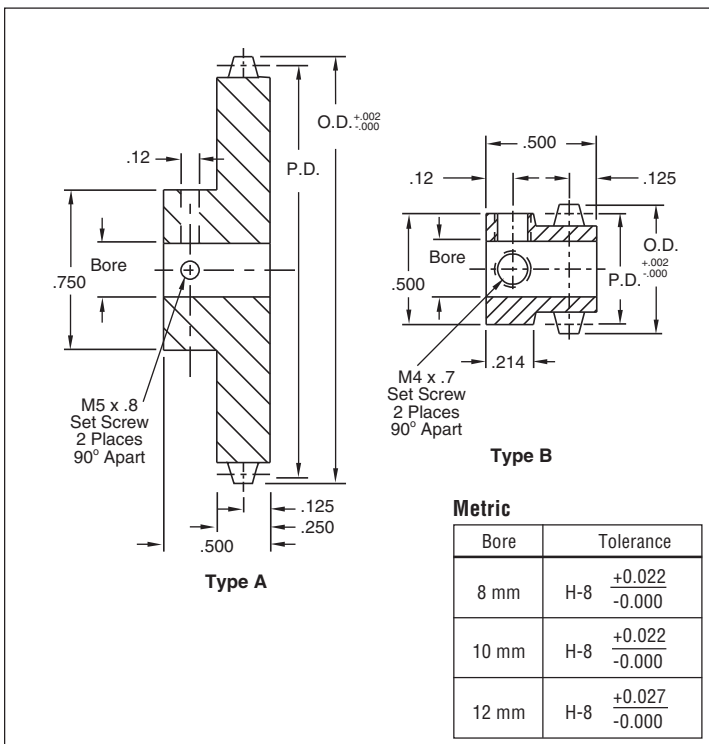


Number Of Teeth	Type	P.D. (Inches)	O.D. (Inches)	Bore Size / Part Number		
				.250	.375	.500
12 *	B	.4994	.582	F24G4-12	—	—
14 *	B	.5827	.665	F24G4-14	—	—
15 *	B	.6243	.707	F24G4-15	F24G6-15	—
16 *	A	.6659	.749	F24G4-16	F24G6-16	F24G8-16
18 *	A	.7492	.832	F24G4-18	F24G6-18	F24G8-18
20	A	.8324	.915	F24G4-20	F24G6-20	F24G8-20
21	A	.8740	.957	F24G4-21	F24G6-21	F24G8-21
24	A	.9989	1.082	F24G4-24	F24G6-24	F24G8-24
30	A	1.2486	1.331	F24G4-30	F24G6-30	F24G8-30
36	A	1.4983	1.581	F24G4-36	F24G6-36	F24G8-36
42	A	1.7480	1.831	F24G4-42	F24G6-42	F24G8-42
48	A	1.9978	2.081	F24G4-48	F24G6-48	F24G8-48
60	A	2.4972	2.580	F24G4-60	F24G6-60	F24G8-60
72	A	2.9966	3.079	F24G4-72	F24G6-72	F24G8-72
96	A	3.9955	4.078	F24G4-96	F24G6-96	F24G8-96
120	A	4.9944	5.077	F24G4-120	F24G6-120	F24G8-120
144	A	5.9933	6.076	F24G4-144	F24G6-144	F24G8-144

\* Recommended for use as an idler only

See Note Below.

Material: 2024-T4 Aluminum (anodized before cutting)



Number Of Teeth	Type	P.D. (Inches)	O.D. (Inches)	Bore Size / Part Number (Metric)		
				8 mm	10 mm	12 mm
12 *	B	.4994	.582	MF24G8-12	—	—
14 *	B	.5827	.665	MF24G8-14	—	—
15 *	B	.6243	.707	MF24G8-15	MF24G10-15	—
16 *	A	.6659	.749	MF24G8-16	MF24G10-16	MF24G12-16
18 *	A	.7492	.832	MF24G8-18	MF24G10-18	MF24G12-18
20	A	.8324	.915	MF24G8-20	MF24G10-20	MF24G12-20
21	A	.8740	.957	MF24G8-21	MF24G10-21	MF24G12-21
24	A	.9989	1.082	MF24G8-24	MF24G10-24	MF24G12-24
30	A	1.2486	1.331	MF24G8-30	MF24G10-30	MF24G12-30
36	A	1.4983	1.581	MF24G8-36	MF24G10-36	MF24G12-36
42	A	1.7480	1.831	MF24G8-42	MF24G10-42	MF24G12-42
48	A	1.9978	2.081	MF24G8-48	MF24G10-48	MF24G12-48
60	A	2.4972	2.580	MF24G8-60	MF24G10-60	MF24G12-60
72	A	2.9966	3.079	MF24G8-72	MF24G10-72	MF24G12-72
96	A	3.9955	4.078	MF24G8-96	MF24G10-96	MF24G12-96
120	A	4.9944	5.077	MF24G8-120	MF24G10-120	MF24G12-120
144	A	5.9933	6.076	MF24G8-144	MF24G10-144	MF24G12-144

\* Recommended for use as an idler only

Metric	
Bore	Tolerance
8 mm	H-8 +0.022 -0.000
10 mm	H-8 +0.022 -0.000
12 mm	H-8 +0.027 -0.000

Material: 2024-T4 Aluminum (anodized before cutting)

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## Note:

Other Size Bores Available, Consult Factory.

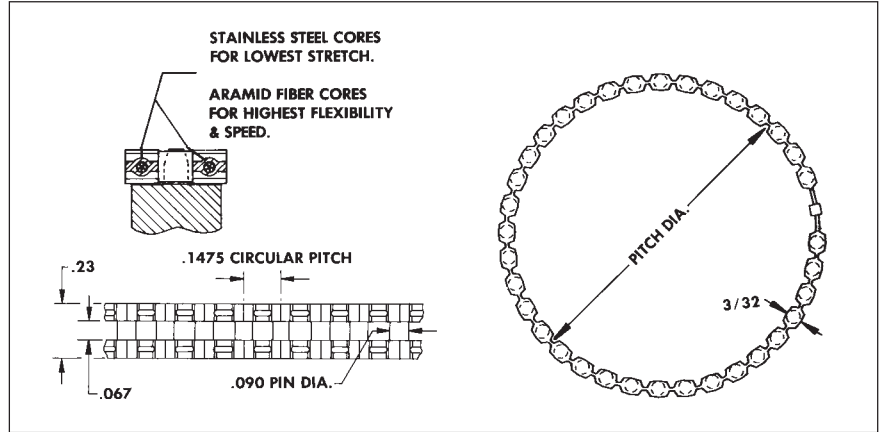
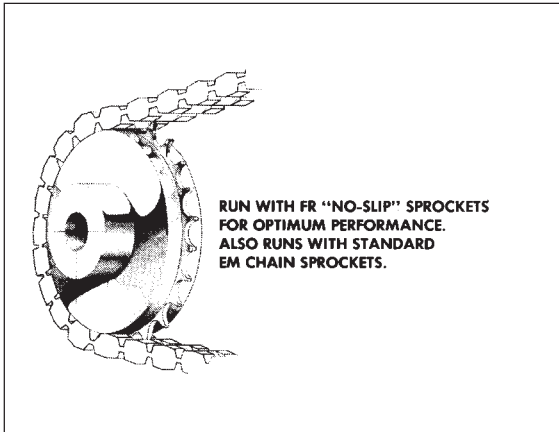
For unlisted number of teeth, specify the number of teeth desired as the last digits in the part number.

EXAMPLE: For a 52-tooth 1/4" bore sprocket, specify Part Number: F24G4-52

For number of teeth above or below listed sizes, consult factory.

# NO-SLIP POSITIVE DRIVE BELT

## .1475CP, Twin Core Economical High Performance Miniature Steel Chain Replacement



### Material:

FRA - Series: Molded Polyurethane, .032" diameter Aramid Fiber Cores. Color: Clear

FRS - Series: Molded Polyurethane, .032" diameter Stainless Steel Cores. Color: Clear

Number of Drive Pins	Length (Ref.)	Part No. Aramid Core	Part No. Steel Core
40	5.900	FRA-040	FRS-040
50	7.375	FRA-050	FRS-050
60	8.850	FRA-060	FRS-060
70	10.325	FRA-070	FRS-070
80	11.800	FRA-080	FRS-080
90	13.275	FRA-090	FRS-090
100	14.750	FRA-100	FRS-100
110	16.225	FRA-110	FRS-110
120	17.700	FRA-120	FRS-120
130	19.175	FRA-130	FRS-130
140	20.650	FRA-140	FRS-140
150	22.125	FRA-150	FRS-150
160	23.600	FRA-160	FRS-160
170	25.075	FRA-170	FRS-170
180	26.550	FRA-180	FRS-180
190	28.025	FRA-190	FRS-190
200	29.500	FRA-200	FRS-200
210	30.975	FRA-210	FRS-210

Number of Drive Pins	Length (Ref.)	Part No. Aramid Core	Part No. Steel Core
220	32.450	FRA-220	FRS-220
230	33.925	FRA-230	FRS-230
240	35.400	FRA-240	FRS-240
250	36.825	FRA-250	FRS-250
260	38.350	FRA-260	FRS-260
270	39.825	FRA-270	FRS-270
280	41.300	FRA-280	FRS-280
290	42.775	FRA-290	FRS-290
300	44.250	FRA-300	FRS-300
310	45.725	FRA-310	FRS-310
320	47.200	FRA-320	FRS-320
330	48.675	FRA-330	FRS-330
340	50.150	FRA-340	FRS-340
350	51.625	FRA-350	FRS-350
360	53.100	FRA-360	FRS-360
370	54.575	FRA-370	FRS-370
380	56.050	FRA-380	FRS-380
390	57.525	FRA-390	FRS-390

### Bulk Lengths — Not Spliced

Length	Aramid Core Part Number	Steel Core Part Number
5 Ft	FRA-5FT	FRS-5FT
10 Ft	FRA-10FT	FRS-10FT
25 Ft	FRA-25FT	FRS-25FT
50 Ft	FRA-50FT	FRS-50FT
100 Ft	FRA-100FT	FRS-100FT

For field splicing use Kit FR-SK.  
See page 5-5.

For other length belts longer than the minimum listed, substitute the desired number of drive pins at the end of the part number.

### .1475 CP TWIN CORE NO-SLIP BELTS. SERIES FRA & FRS

The workhorse of the No-Slip line. Designed to provide an economical alternative to miniature pitch stainless steel chain. Smoother motion than possible with chain. FRA & FRS belts operate without the chordal rise and fall (camming effect) of chain. Will not continually grow in length as chain does. Drive pins are 30% larger in diameter than the FM series for additional strength. Recommended as a cost saving alternative to chain and for the highest load belt applications requiring No-Slip accuracy. Will replace miniature pitch steel chain in many existing applications.

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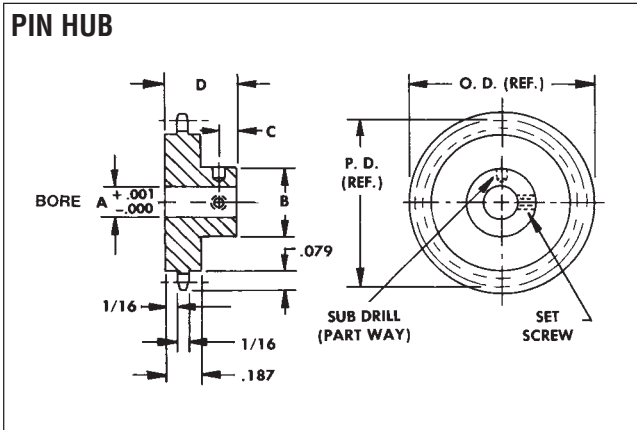


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# NO-SLIP SPROCKETS

.1475CP, 1/8, 3/16, 1/4, Bores For FRA & FRS No-Slip, Twin Core Drive Belts

## PIN HUB



**Material:** 303 Stainless Steel  
2024-T4 Aluminum  
(Anodized Before Cutting)

Dimen.	Bore Size				
	1/8"	3/16"	1/4"	4 mm	6 mm
A	.1248	.1873	.2498	.1573	.2360
B	.312	.375	.500	.375	.500
C	.09	.11	.12	.11	.12
D	.375	.406	.437	.406	.437
Set Screw	#2-56	#4-40	#6-32	M2X.4	M3X.5

### For Metric Bores:

Bore	Stainless Steel	Aluminum
4 mm	MFRG1-XX	MFRG2-XX
6 mm	MFRG3-XX	MFRG4-XX

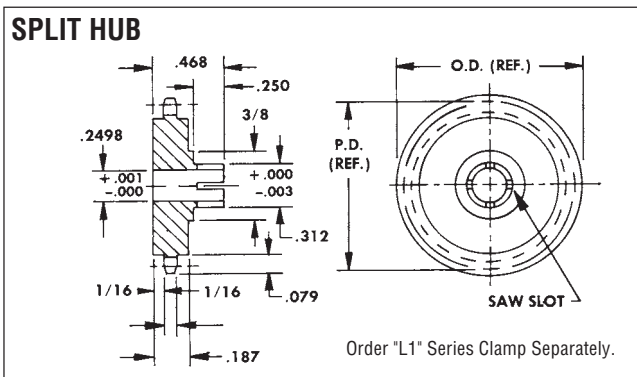
XX = Number of grooves

Sprocket Data			Stainless Steel Bore Size Part Number			Aluminum Bore Size Part Number		
No. Teeth	P.D.	O.D.	.1248	.1873	.2498	.1248	.1873	.2498
10*	.477	.529	FRG1-010	FRG3-010	—	FRG2-010	FRG4-010	—
11*	.524	.579	FRG1-011	FRG3-011	—	FRG2-011	FRG4-011	—
12*	.570	.622	FRG1-012	FRG3-012	—	FRG2-012	FRG4-012	—
13*	.616	.668	FRG1-013	FRG3-013	FRG5-013	FRG2-013	FRG4-013	FRG6-013
14*	.663	.715	FRG1-014	FRG3-014	FRG5-014	FRG2-014	FRG4-014	FRG6-014
15*	.709	.761	FRG1-015	FRG3-015	FRG5-015	FRG2-015	FRG4-015	FRG6-015
16	.756	.808	FRG1-016	FRG3-016	FRG5-016	FRG2-016	FRG4-016	FRG6-016
17	.803	.855	FRG1-017	FRG3-017	FRG5-017	FRG2-017	FRG4-017	FRG6-017
18	.849	.901	FRG1-018	FRG3-018	FRG5-018	FRG2-018	FRG4-018	FRG6-018
19	.896	.948	FRG1-019	FRG3-019	FRG5-019	FRG2-019	FRG4-019	FRG6-019
20	.943	.995	FRG1-020	FRG3-020	FRG5-020	FRG2-020	FRG4-020	FRG6-020
22	1.036	1.088	FRG1-022	FRG3-022	FRG5-022	FRG2-022	FRG4-022	FRG6-022
24	1.130	1.182	FRG1-024	FRG3-024	FRG5-024	FRG2-024	FRG4-024	FRG6-024
25	1.177	1.228	FRG1-025	FRG3-025	FRG5-025	FRG2-025	FRG4-025	FRG6-025
26	1.224	1.276	FRG1-026	FRG3-026	FRG5-026	FRG2-026	FRG4-026	FRG6-026
28	1.317	1.369	FRG1-028	FRG3-028	FRG5-028	FRG2-028	FRG4-028	FRG6-028
30	1.411	1.463	FRG1-030	FRG3-030	FRG5-030	FRG2-030	FRG4-030	FRG6-030
32	1.505	1.557	FRG1-032	FRG3-032	FRG5-032	FRG2-032	FRG4-032	FRG6-032
35	1.645	1.697	FRG1-035	FRG3-035	FRG5-035	FRG2-035	FRG4-035	FRG6-035
36	1.692	1.744	FRG1-036	FRG3-036	FRG5-036	FRG2-036	FRG4-036	FRG6-036
40	1.880	1.932	FRG1-040	FRG3-040	FRG5-040	FRG2-040	FRG4-040	FRG6-040
45	2.114	2.166	FRG1-045	FRG3-045	FRG5-045	FRG2-045	FRG4-045	FRG6-045
48	2.255	2.307	FRG1-048	FRG3-048	FRG5-048	FRG2-048	FRG4-048	FRG6-048
50	2.349	2.401	—	FRG3-050	FRG5-050	—	FRG4-050	FRG6-050
55	2.584	2.636	—	FRG3-055	FRG5-055	—	FRG4-055	FRG6-055
60	2.818	2.870	—	FRG3-060	FRG5-060	—	FRG4-060	FRG6-060
65	3.053	3.105	—	FRG3-065	FRG5-065	—	FRG4-065	FRG6-065
85	3.992	4.044	—	FRG3-085	FRG5-085	—	FRG4-085	FRG6-085

\* Recommended for use as an idler only

See Note Below.

## SPLIT HUB



### Note:

Other Size Bores Available, Consult Factory.  
For unlisted number of teeth, specify the number of teeth desired as the last digits in the part number.  
EXAMPLE: For a 52-tooth stainless steel sprocket, specify Part Number: FRH5-052  
For number of teeth above or below listed sizes, consult factory.

Sprocket Data			Stainless Steel Part Number	Aluminum Part Number
No. Teeth	P.D.	O.D.	.2498 Bore Size	.2498 Bore Size
13*	.616	.668	FRH5-013	FRH6-013
14*	.663	.715	FRH5-014	FRH6-014
15*	.709	.761	FRH5-015	FRH6-015
16	.756	.808	FRH5-016	FRH6-016
17	.803	.855	FRH5-017	FRH6-017
18	.849	.901	FRH5-018	FRH6-018
19	.896	.948	FRH5-019	FRH6-019
20	.943	.995	FRH5-020	FRH6-020
22	1.036	1.088	FRH5-022	FRH6-022
24	1.130	1.182	FRH5-024	FRH6-024
25	1.177	1.228	FRH5-025	FRH6-025
26	1.224	1.276	FRH5-026	FRH6-026
28	1.317	1.369	FRH5-028	FRH6-028
30	1.411	1.463	FRH5-030	FRH6-030
32	1.505	1.557	FRH5-032	FRH6-032
35	1.645	1.697	FRH5-035	FRH6-035
36	1.692	1.744	FRH5-036	FRH6-036
40	1.880	1.932	FRH5-040	FRH6-040
45	2.114	2.166	FRH5-045	FRH6-045
48	2.255	2.307	FRH5-048	FRH6-048

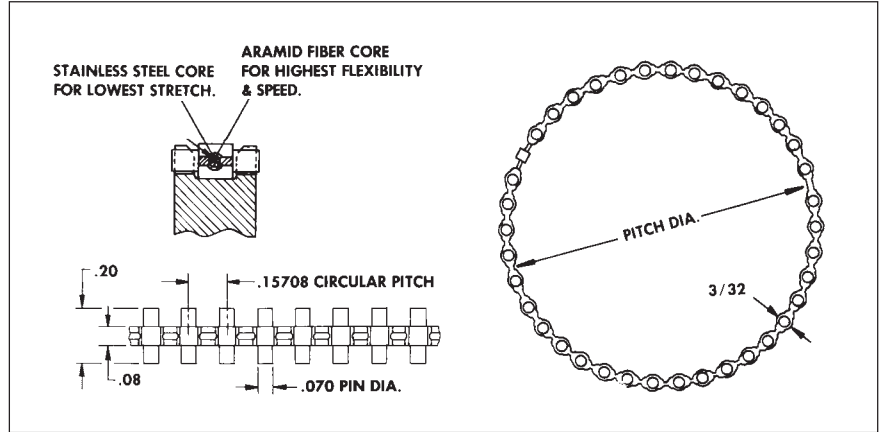
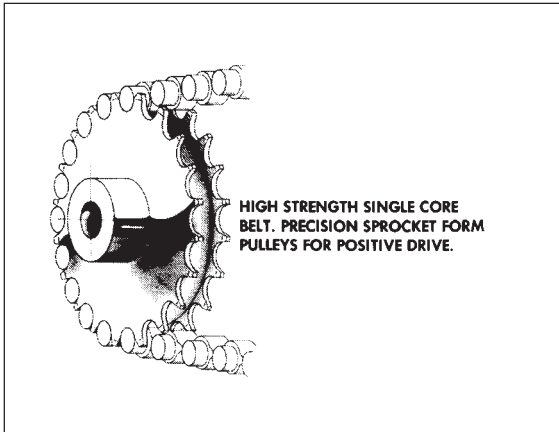
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# NO-SLIP POSITIVE DRIVE BELT

20DP, .15708CP Single Core and Triple Core



**Material:**

FLA-Series: Molded Polyurethane, .032" diameter Aramid Fiber Kevlar Core.

Color: Clear

FLS-Series: Molded Polyurethane, .032" diameter Stainless Steel Core.

Color: Clear

**Triple Core Belts**

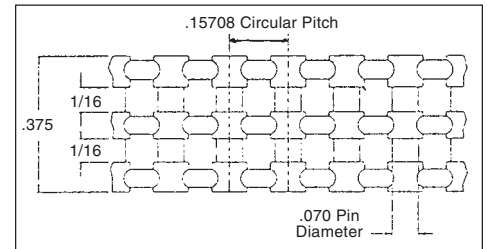
**Material:**

F20TS-Series: Molded Polyurethane, Stainless Steel Core.

Color: Light Brown

Number of Drive Pins	Length (Ref.)	Part No. Aramid Core	Part No. Steel Core
30	4.712	FLA-030	FLS-030
35	5.498	FLA-035	FLS-035
40	6.283	FLA-040	FLS-040
45	7.068	FLA-045	FLS-045
50	7.854	FLA-050	FLS-050
55	8.639	FLA-055	FLS-055
60	9.424	FLA-060	FLS-060
70	10.995	FLA-070	FLS-070
80	12.566	FLA-080	FLS-080
90	14.137	FLA-090	FLS-090
100	15.708	FLA-100	FLS-100
110	17.278	FLA-110	FLS-110
120	18.849	FLA-120	FLS-120
130	20.420	FLA-130	FLS-130
140	21.991	FLA-140	FLS-140
150	23.562	FLA-150	FLS-150
160	25.132	FLA-160	FLS-160
170	26.703	FLA-170	FLS-170
180	28.274	FLA-180	FLS-180
190	29.845	FLA-190	FLS-190
200	31.416	FLA-200	FLS-200

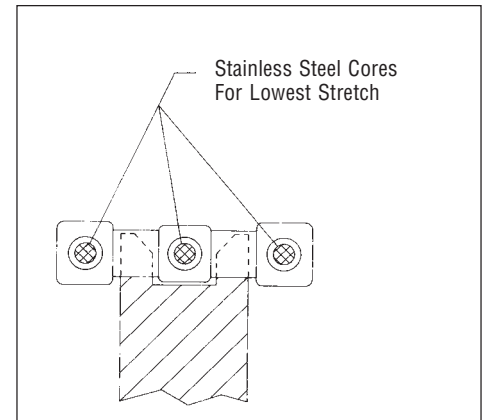
Number of Drive Pins	Length (Ref.)	Part No. Aramid Core	Part No. Steel Core
210	32.986	FLA-210	FLS-210
220	34.557	FLA-220	FLS-220
230	36.128	FLA-230	FLS-230
240	37.699	FLA-240	FLS-240
250	39.270	FLA-250	FLS-250
260	40.840	FLA-260	FLS-260
270	42.411	FLA-270	FLS-270
280	43.982	FLA-280	FLS-280
290	45.553	FLA-290	FLS-290
300	47.124	FLA-300	FLS-300
310	48.694	FLA-310	FLS-310
320	50.265	FLA-320	FLS-320
330	51.836	FLA-330	FLS-330
340	53.407	FLA-340	FLS-340
350	54.978	FLA-350	FLS-350
360	56.548	FLA-360	FLS-360
370	58.119	FLA-370	FLS-370
380	59.690	FLA-380	FLS-380
400	62.832	FLA-400	FLS-400
420	65.973	FLA-420	FLS-420
440	69.115	FLA-440	FLS-440



**For Triple Core Belts use:**

F20TS-XX for Steel Core

Standard triple core belts have been established utilizing the same number of drive pins as shown on the adjoining tabulation.



**Note:** Triple core belt used the same pulleys as the single core belts FLG and FLH Series.

For field splicing triple core, use Kit F20T-SK. See page 5-5.

**Bulk Lengths — Not Spliced**

Length	Single Core		Triple Core
	Aramid Core Part Number	Steel Core Part Number	Steel Core Part Number
5 Ft	FLA-5FT	FLS-5FT	F20TS-5FT
10 Ft	FLA-10FT	FLS-10FT	F20TS-10FT
25 Ft	FLA-25FT	FLS-25FT	F20TS-25FT
50 Ft	FLA-50FT	FLS-50FT	F20TS-50FT
100 Ft	FLA-100FT	FLS-100FT	F20TS-100FT

For field splicing use Kit FL-SK. See page 5-5.

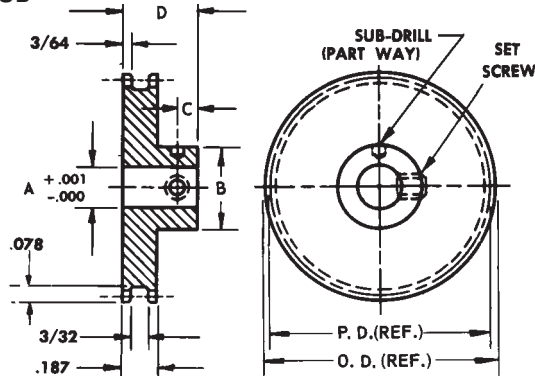
**20DP (.15708 CP) SINGLE CORE NO-SLIP BELTS, SERIES FLA & FLS**

High strength, hi-flex version of the 32DP NO-SLIP belt. Drive pins have 50% larger diameter than the 32DP series. The belt body is relieved between the pins providing ultimate flexibility over small pulleys. The continuous body web is designed to flex laterally to permit shaft misalignment and turning of corners. Run on precision sprocket form pulleys for positive power. Recommended for higher load, speed, and flex applications requiring a single core belt.

# NO-SLIP PULLEYS

20DP, .15708CP — 1/8, 3/16, 1/4, Bores For FLA, FLS and F20TS No-Slip, Single and Triple Core Drive Belts

## PIN HUB



**Material:** 303 Stainless Steel  
2024-T4 Aluminum  
(Anodized Before Cutting)

Dimen.	Bore Size				
	1/8"	3/16"	1/4"	4 mm	6 mm
A	.1248	.1873	.2498	.1573	.2360
B	.312	.375	.500	.375	.500
C	.09	.11	.12	.11	.12
D	.375	.406	.437	.406	.437
Set Screw	#2-56	#4-40	#6-32	M2X.4	M3X.5

## For Metric Bores:

Bore	Stainless Steel	Aluminum
4 mm	MF20G1-XX	MF20G2-XX
6 mm	MF20G3-XX	MF20G4-XX

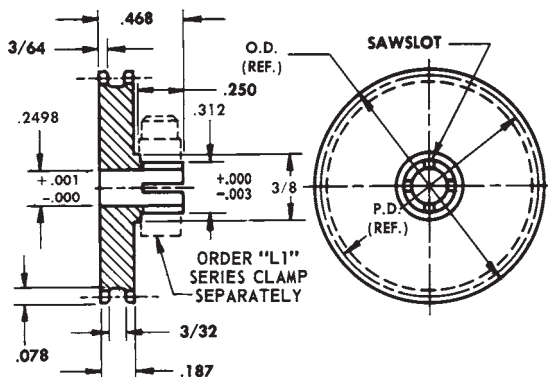
XX = Number of teeth

Pulley Data			Stainless Steel Bore Size Part Number			Aluminum Bore Size Part Number		
No. Teeth	P.D.	O.D.	.1248	.1873	.2498	.1248	.1873	.2498
10*	.500	.562	FLG1-010	FLG3-010	—	FLG2-010	FLG4-010	—
11*	.550	.612	FLG1-011	FLG3-011	—	FLG2-011	FLG4-011	—
12*	.600	.662	FLG1-012	FLG3-012	FLG5-012	FLG2-012	FLG4-012	FLG6-012
13*	.650	.712	FLG1-013	FLG3-013	FLG5-013	FLG2-013	FLG4-013	FLG6-013
14*	.700	.762	FLG1-014	FLG3-014	FLG5-014	FLG2-014	FLG4-014	FLG6-014
15*	.750	.812	FLG1-015	FLG3-015	FLG5-015	FLG2-015	FLG4-015	FLG6-015
16	.800	.862	FLG1-016	FLG3-016	FLG5-016	FLG2-016	FLG4-016	FLG6-016
17	.850	.912	FLG1-017	FLG3-017	FLG5-017	FLG2-017	FLG4-017	FLG6-017
18	.900	.962	FLG1-018	FLG3-018	FLG5-018	FLG2-018	FLG4-018	FLG6-018
19	.950	1.012	FLG1-019	FLG3-019	FLG5-019	FLG2-019	FLG4-019	FLG6-019
20	1.000	1.062	FLG1-020	FLG3-020	FLG5-020	FLG2-020	FLG4-020	FLG6-020
22	1.100	1.162	FLG1-022	FLG3-022	FLG5-022	FLG2-022	FLG4-022	FLG6-022
24	1.200	1.262	FLG1-024	FLG3-024	FLG5-024	FLG2-024	FLG4-024	FLG6-024
25	1.250	1.312	FLG1-025	FLG3-025	FLG5-025	FLG2-025	FLG4-025	FLG6-025
26	1.300	1.362	FLG1-026	FLG3-026	FLG5-026	FLG2-026	FLG4-026	FLG6-026
28	1.400	1.462	FLG1-028	FLG3-028	FLG5-028	FLG2-028	FLG4-028	FLG6-028
30	1.500	1.562	FLG1-030	FLG3-030	FLG5-030	FLG2-030	FLG4-030	FLG6-030
32	1.600	1.662	FLG1-032	FLG3-032	FLG5-032	FLG2-032	FLG4-032	FLG6-032
35	1.750	1.812	FLG1-035	FLG3-035	FLG5-035	FLG2-035	FLG4-035	FLG6-035
36	1.800	1.862	FLG1-036	FLG3-036	FLG5-036	FLG2-036	FLG4-036	FLG6-036
40	2.000	2.062	FLG1-040	FLG3-040	FLG5-040	FLG2-040	FLG4-040	FLG6-040
45	2.250	2.312	FLG1-045	FLG3-045	FLG5-045	FLG2-045	FLG4-045	FLG6-045
50	2.500	2.562	—	FLG3-050	FLG5-050	—	FLG4-050	FLG6-050
60	3.000	3.062	—	FLG3-060	FLG5-060	—	FLG4-060	FLG6-060
70	3.500	3.562	—	FLG3-070	FLG5-070	—	FLG4-070	FLG6-070
80	4.000	4.062	—	FLG3-080	FLG5-080	—	FLG4-080	FLG6-080

\* Recommended for use as an idler only

See Note Below.

## SPLIT HUB



## Note:

Other Size Bores Available, Consult Factory.  
For unlisted number of teeth, specify the number of teeth desired as the last digits in the part number.  
EXAMPLE: For a 52-tooth stainless steel pulley, specify Part Number: FLH5-052.  
For number of teeth above or below listed sizes, consult factory.

Pulley Data			Stainless Steel Part Number	Aluminum Part Number
No. Teeth	P.D.	O.D.	.2498 Bore Size	.2498 Bore Size
12*	.600	.662	FLH5-012	FLH6-012
13*	.650	.712	FLH5-013	FLH6-013
14*	.700	.762	FLH5-014	FLH6-014
15*	.750	.812	FLH5-015	FLH6-015
16	.800	.862	FLH5-016	FLH6-016
17	.850	.912	FLH5-017	FLH6-017
18	.900	.962	FLH5-018	FLH6-018
19	.950	1.012	FLH5-019	FLH6-019
20	1.000	1.062	FLH5-020	FLH6-020
22	1.100	1.162	FLH5-022	FLH6-022
24	1.200	1.262	FLH5-024	FLH6-024
25	1.250	1.312	FLH5-025	FLH6-025
26	1.300	1.362	FLH5-026	FLH6-026
28	1.400	1.462	FLH5-028	FLH6-028
30	1.500	1.562	FLH5-030	FLH6-030
32	1.600	1.662	FLH5-032	FLH6-032
35	1.750	1.812	FLH5-035	FLH6-035
36	1.800	1.862	FLH5-036	FLH6-036
40	2.000	2.062	FLH5-040	FLH6-040
45	2.250	2.312	FLH5-045	FLH6-045

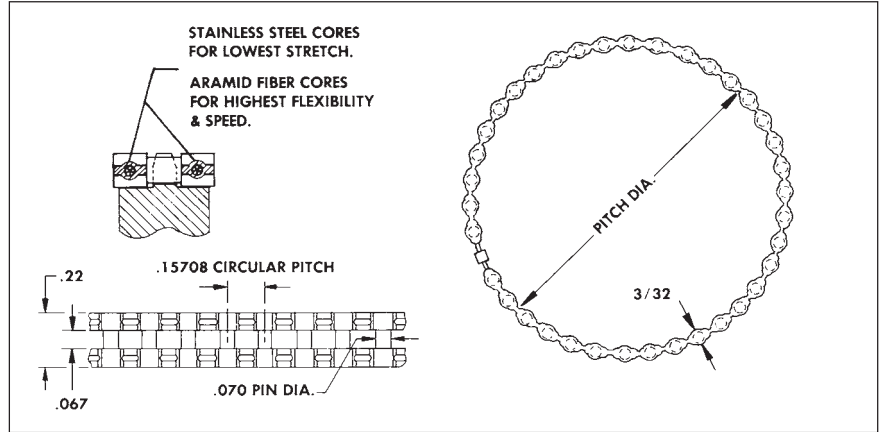
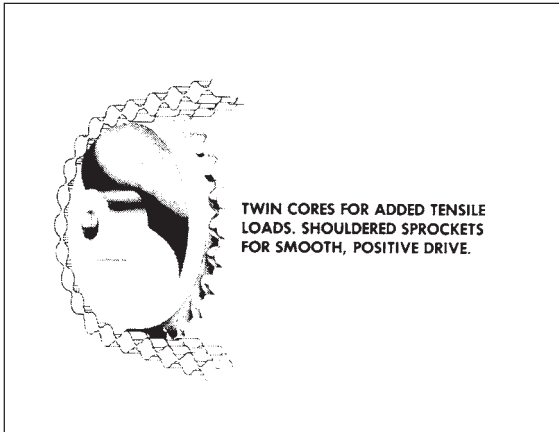
\* Recommended for use as an idler only

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# NO-SLIP POSITIVE DRIVE BELT

20DP, .15708CP — Twin Core



**Material:**

FMA Series: Molded Polyurethane, .032 diameter Aramid Fiber (Kevlar) Cores.

Color: Clear

FMS Series: Molded Polyurethane, .032 diameter Stainless Steel Cores.

Color: Clear

Number of Drive Pins	Length (Ref.)	Part No. Aramid Core	Part No. Steel Core
30	4.712	FMA-030	FMS-030
35	5.498	FMA-035	FMS-035
40	6.283	FMA-040	FMS-040
45	7.068	FMA-045	FMS-045
50	7.854	FMA-050	FMS-050
55	8.639	FMA-055	FMS-055
60	9.424	FMA-060	FMS-060
70	10.995	FMA-070	FMS-070
80	12.566	FMA-080	FMS-080
90	14.137	FMA-090	FMS-090
100	15.708	FMA-100	FMS-100
110	17.278	FMA-110	FMS-110
120	18.849	FMA-120	FMS-120
130	20.420	FMA-130	FMS-130
140	21.991	FMA-140	FMS-140
150	23.562	FMA-150	FMS-150
160	25.132	FMA-160	FMS-160
170	26.703	FMA-170	FMS-170
180	28.274	FMA-180	FMS-180
190	29.845	FMA-190	FMS-190
200	31.416	FMA-200	FMS-200

Number of Drive Pins	Length (Ref.)	Part No. Aramid Core	Part No. Steel Core
210	32.986	FMA-210	FMS-210
220	34.557	FMA-220	FMS-220
230	36.128	FMA-230	FMS-230
240	37.699	FMA-240	FMS-240
250	39.270	FMA-250	FMS-250
260	40.840	FMA-260	FMS-260
270	42.411	FMA-270	FMS-270
280	43.982	FMA-280	FMS-280
290	45.553	FMA-290	FMS-290
300	47.124	FMA-300	FMS-300
310	48.694	FMA-310	FMS-310
320	50.265	FMA-320	FMS-320
330	51.836	FMA-330	FMS-330
340	53.407	FMA-340	FMS-340
350	54.978	FMA-350	FMS-350
360	56.548	FMA-360	FMS-360
370	58.119	FMA-370	FMS-370
380	59.690	FMA-380	FMS-380
400	62.832	FMA-400	FMS-400
420	65.973	FMA-420	FMS-420
440	69.115	FMA-440	FMS-440

**Bulk Lengths — Not Spliced**

Length	Aramid Core Part Number	Steel Core Part Number
5 Ft	FMA-5FT	FMS-5FT
10 Ft	FMA-10FT	FMS-10FT
25 Ft	FMA-25FT	FMS-25FT
50 Ft	FMA-50FT	FMS-50FT
100 Ft	FMA-100FT	FMS-100FT

For field splicing use Kit FM-SK. See page 5-5.

For other length belts longer than the minimum listed, substitute the desired number of drive pins at the end of the part number.

**20DP (.15708 CP) SINGLE CORE NO-SLIP BELTS, SERIES FLA & FLS**

Similar high strength, hi-flex design as "FL" series, but with twin cores providing added strength for higher tensile loads. Loads are carried by two cores, reducing stretch by a factor of two. Sprockets have only one row of teeth, resulting in cost savings vs pulleys with two rows of teeth. Recommended for higher load applications where twisting of the belt is not required.

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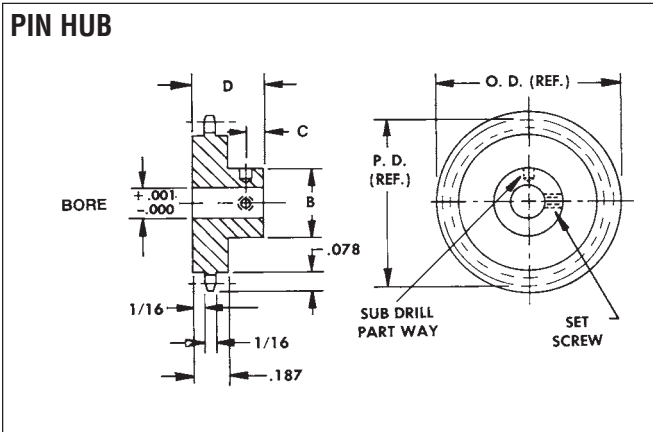
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# NO-SLIP SPROCKETS

20DP, .15708CP — 1/8, 3/16, 1/4, Bores For FMA & FMS No-Slip, Twin Core Drive Belts

## PIN HUB



**Material:** 303 Stainless Steel  
2024-T4 Aluminum  
(Anodized Before Cutting)

Dimen.	Bore Size				
	1/8"	3/16"	1/4"	4 mm	6 mm
A	.1248	.1873	.2498	.1573	.2360
B	.312	.375	.500	.375	.500
C	.09	.11	.12	.11	.12
D	.375	.406	.437	.406	.437
Set Screw	#2-56	#4-40	#6-32	M2X.4	M3X.5

Sprocket Data			Stainless Steel Bore Size Part Number			Aluminum Bore Size Part Number		
No. Teeth	P.D.	O.D.	.1248	.1873	.2498	.1248	.1873	.2498
10*	.500	.562	FMG1-010	FMG3-010	—	FMG2-010	FMG4-010	—
11*	.550	.612	FMG1-011	FMG3-011	—	FMG2-011	FMG4-011	—
12*	.600	.662	FMG1-012	FMG3-012	FMG5-012	FMG2-012	FMG4-012	FMG6-012
13*	.650	.712	FMG1-013	FMG3-013	FMG5-013	FMG2-013	FMG4-013	FMG6-013
14*	.700	.762	FMG1-014	FMG3-014	FMG5-014	FMG2-014	FMG4-014	FMG6-014
15*	.750	.812	FMG1-015	FMG3-015	FMG5-015	FMG2-015	FMG4-015	FMG6-015
16	.800	.862	FMG1-016	FMG3-016	FMG5-016	FMG2-016	FMG4-016	FMG6-016
17	.850	.912	FMG1-017	FMG3-017	FMG5-017	FMG2-017	FMG4-017	FMG6-017
18	.900	.962	FMG1-018	FMG3-018	FMG5-018	FMG2-018	FMG4-018	FMG6-018
19	.950	1.012	FMG1-019	FMG3-019	FMG5-019	FMG2-019	FMG4-019	FMG6-019
20	1.000	1.062	FMG1-020	FMG3-020	FMG5-020	FMG2-020	FMG4-020	FMG6-020
22	1.100	1.162	FMG1-022	FMG3-022	FMG5-022	FMG2-022	FMG4-022	FMG6-022
24	1.200	1.262	FMG1-024	FMG3-024	FMG5-024	FMG2-024	FMG4-024	FMG6-024
25	1.250	1.312	FMG1-025	FMG3-025	FMG5-025	FMG2-025	FMG4-025	FMG6-025
26	1.300	1.362	FMG1-026	FMG3-026	FMG5-026	FMG2-026	FMG4-026	FMG6-026
28	1.400	1.462	FMG1-028	FMG3-028	FMG5-028	FMG2-028	FMG4-028	FMG6-028
30	1.500	1.562	FMG1-030	FMG3-030	FMG5-030	FMG2-030	FMG4-030	FMG6-030
32	1.600	1.662	FMG1-032	FMG3-032	FMG5-032	FMG2-032	FMG4-032	FMG6-032
35	1.750	1.812	FMG1-035	FMG3-035	FMG5-035	FMG2-035	FMG4-035	FMG6-035
36	1.800	1.862	FMG1-036	FMG3-036	FMG5-036	FMG2-036	FMG4-036	FMG6-036
40	2.000	2.062	FMG1-040	FMG3-040	FMG5-040	FMG2-040	FMG4-040	FMG6-040
45	2.250	2.312	FMG1-045	FMG3-045	FMG5-045	FMG2-045	FMG4-045	FMG6-045
50	2.500	2.562	—	FMG3-050	FMG5-050	—	FMG4-050	FMG6-050
60	3.000	3.062	—	FMG3-060	FMG5-060	—	FMG4-060	FMG6-060
70	3.500	3.562	—	FMG3-070	FMG5-070	—	FMG4-070	FMG6-070
80	4.000	4.062	—	FMG3-080	FMG5-080	—	FMG4-080	FMG6-080

\* Recommended for use as an idler only

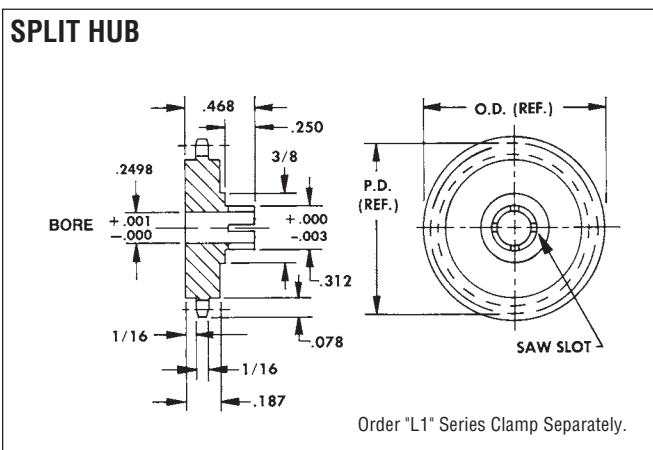
## For Metric Bores:

Bore	Stainless Steel	Aluminum
4 mm	MFMG1-XX	MFMG2-XX
6 mm	MFMG3-XX	MFMG4-XX

XX = Number of teeth

See Note Below.

## SPLIT HUB



## Note:

Other Size Bores Available, Consult Factory.  
For unlisted number of teeth, specify the number of teeth desired as the last digits in the part number.  
EXAMPLE: For a 52-tooth stainless steel sprocket, specify Part Number: FMH5-052  
For number of teeth above or below listed sizes, consult factory.

Sprocket Data			Stainless Steel Part Number	Aluminum Part Number
No. Teeth	P.D.	O.D.	.2498 Bore Size	.2498 Bore Size
12*	.600	.662	FMH5-012	FMH6-012
13*	.650	.712	FMH5-013	FMH6-013
14*	.700	.762	FMH5-014	FMH6-014
15*	.750	.812	FMH5-015	FMH6-015
16	.800	.862	FMH5-016	FMH6-016
17	.850	.912	FMH5-017	FMH6-017
18	.900	.962	FMH5-018	FMH6-018
19	.950	1.012	FMH5-019	FMH6-019
20	1.000	1.062	FMH5-020	FMH6-020
22	1.100	1.162	FMH5-022	FMH6-022
24	1.200	1.262	FMH5-024	FMH6-024
25	1.250	1.312	FMH5-025	FMH6-025
26	1.300	1.362	FMH5-026	FMH6-026
28	1.400	1.462	FMH5-028	FMH6-028
30	1.500	1.562	FMH5-030	FMH6-030
32	1.600	1.662	FMH5-032	FMH6-032
35	1.750	1.812	FMH5-035	FMH6-035
36	1.800	1.862	FMH5-036	FMH6-036
40	2.000	2.062	FMH5-040	FMH6-040
45	2.250	2.312	FMH5-045	FMH6-045

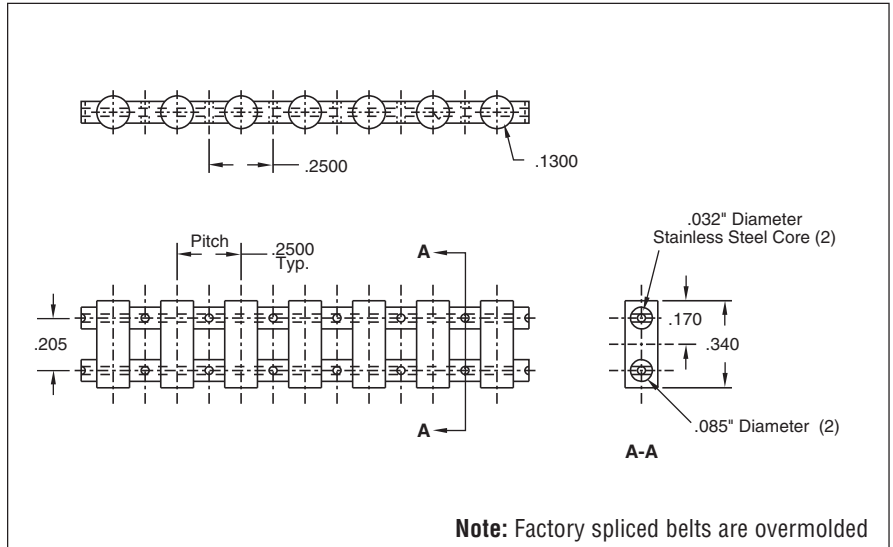
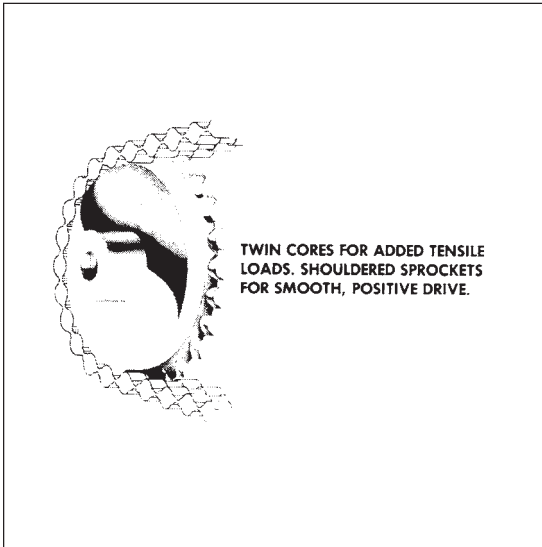
\* Recommended for use as an idler only

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# NO-SLIP POSITIVE DRIVE BELT "CHAIN"

.25 (1/4") Pitch



Note: Factory spliced belts are overmolded

**Material:**

F25CS Series: Molded Polyurethane, .032 diameter Stainless Steel Cores.  
Color: Light Brown

F25CA Series: Molded Polyurethane, .032 diameter Aramid (Kevlar) Cores.  
Color: Light Brown

Number Of Drive Pins	Length (Ref.)	Part Number *	Number Of Drive Pins	Length (Ref.)	Part Number *
40	10.000	F25CS-40	220	55.000	F25CS-220
50	12.500	F25CS-50	230	57.500	F25CS-230
60	15.000	F25CS-60	240	60.000	F25CS-240
70	17.500	F25CS-70	250	62.500	F25CS-250
80	20.000	F25CS-80	260	65.000	F25CS-260
90	22.500	F25CS-90	270	67.500	F25CS-270
100	25.000	F25CS-100	280	70.000	F25CS-280
110	27.500	F25CS-110	290	72.500	F25CS-290
120	30.000	F25CS-120	300	75.000	F25CS-300
130	32.500	F25CS-130	310	77.500	F25CS-310
140	35.000	F25CS-140	320	80.000	F25CS-320
150	37.500	F25CS-150	330	82.500	F25CS-330
160	40.000	F25CS-160	340	85.000	F25CS-340
170	42.500	F25CS-170	350	87.500	F25CS-350
180	45.000	F25CS-180	370	92.500	F25CS-370
190	47.500	F25CS-190	380	95.000	F25CS-380
200	50.000	F25CS-200	390	97.500	F25CS-390
210	52.500	F25CS-210			

\* For Aramid Cores, substitute A for S in the part number

For other length belts longer than the minimum listed, substitute the desired number of drive pins at the end of the part number.

**Bulk Footage — Not Spliced**

Length	Part Number
5 Ft	F25CS-5FT
10 Ft	F25CS-10FT
25 Ft	F25CS-25FT
50 Ft	F25CS-50FT
100 Ft	F25CS-100FT

Special length belts and other bulk lengths available. Consult factory.

For field splicing use Kit F25C-SK. See page 5-5.

\* For Aramid Cores, substitute A for S in the part number

**.25 Pitch Twin Core No-Slip Belts — Series F25CS**

Designed to provide an economical alternative to 25-pitch roller chain, with smoother motion. Drive pins are 44% larger in diameter than FRA & FRS series.

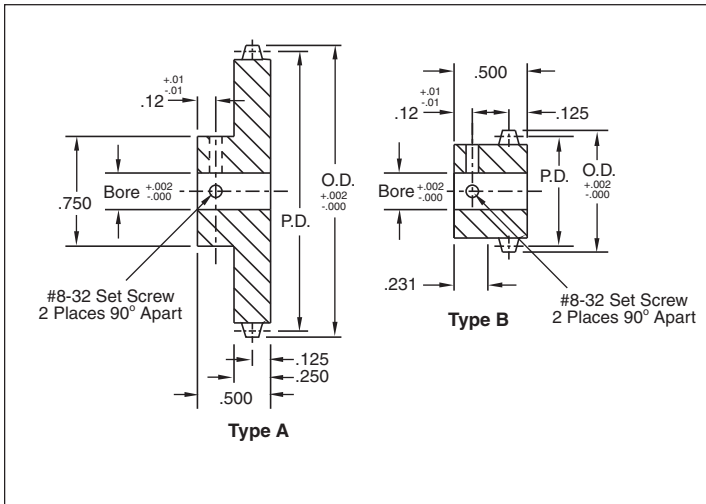
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# NO-SLIP SPROCKETS

.25 (1/4") Pitch 1/4, 3/8, 1/2 — 8 mm, 10 mm & 12 mm Bores for F25 Twin Core Drive Belts

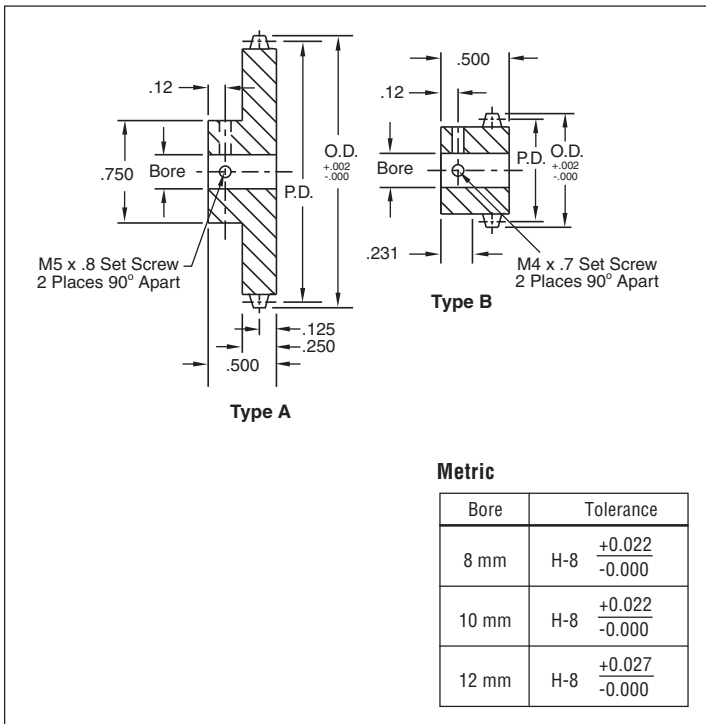


Number Of Teeth	Type	P.D. (Inches)	O.D. (Inches)	Bore Size / Part Number		
				.250	.375	.500
9 *	B	.7162	.836	F25G4-9	F25G6-9	F25G8-9
10	B	.7958	.915	F25G4-10	F25G6-10	F25G8-10
12	A	.9549	1.074	F25G4-12	F25G6-12	F25G8-12
13	A	1.0345	1.154	F25G4-13	F25G6-13	F25G8-13
14	A	1.1141	1.234	F25G4-14	F25G6-14	F25G8-14
15	A	1.1936	1.313	F25G4-15	F25G6-15	F25G8-15
16	A	1.2732	1.393	F25G4-16	F25G6-16	F25G8-16
18	A	1.4324	1.552	F25G4-18	F25G6-18	F25G8-18
20	A	1.5915	1.711	F25G4-20	F25G6-20	F25G8-20
24	A	1.9098	2.029	F25G4-24	F25G6-24	F25G8-24
25	A	1.9894	2.109	F25G4-25	F25G6-25	F25G8-25
28	A	2.2281	2.348	F25G4-28	F25G6-28	F25G8-28
30	A	2.3873	2.507	F25G4-30	F25G6-30	F25G8-30
36	A	2.8648	2.984	F25G4-36	F25G6-36	F25G8-36
40	A	3.1831	3.303	F25G4-40	F25G6-40	F25G8-40
48	A	3.8197	3.939	F25G4-48	F25G6-48	F25G8-48
60	A	4.7746	4.894	F25G4-60	F25G6-60	F25G8-60
72	A	5.7296	5.849	F25G4-72	F25G6-72	F25G8-72

\* Recommended for use as an idler only

Material: 2024-T4 Aluminum (anodized before cutting)

See Note Below.



### Metric

Bore	Tolerance
8 mm	H-8 +0.022 -0.000
10 mm	H-8 +0.022 -0.000
12 mm	H-8 +0.027 -0.000

Number Of Teeth	Type	P.D. (Inches)	O.D. (Inches)	Bore Size / Part Number (Metric)		
				8 mm	10 mm	12 mm
9 *	B	.7162	.836	MF25G4-9	MF25G6-9	MF25G8-9
10	B	.7958	.915	MF25G4-10	MF25G6-10	MF25G8-10
12	A	.9549	1.074	MF25G4-12	MF25G6-12	MF25G8-12
13	A	1.0345	1.154	MF25G4-13	MF25G6-13	MF25G8-13
14	A	1.1141	1.234	MF25G4-14	MF25G6-14	MF25G8-14
15	A	1.1936	1.313	MF25G4-15	MF25G6-15	MF25G8-15
16	A	1.2732	1.393	MF25G4-16	MF25G6-16	MF25G8-16
18	A	1.4324	1.552	MF25G4-18	MF25G6-18	MF25G8-18
20	A	1.5915	1.711	MF25G4-20	MF25G6-20	MF25G8-20
24	A	1.9098	2.029	MF25G4-24	MF25G6-24	MF25G8-24
25	A	1.9894	2.109	MF25G4-25	MF25G6-25	MF25G8-25
28	A	2.2281	2.348	MF25G4-28	MF25G6-28	MF25G8-28
30	A	2.3873	2.507	MF25G4-30	MF25G6-30	MF25G8-30
36	A	2.8648	2.984	MF25G4-36	MF25G6-36	MF25G8-36
40	A	3.1831	3.303	MF25G4-40	MF25G6-40	MF25G8-40
48	A	3.8197	3.939	MF25G4-48	MF25G6-48	MF25G8-48
60	A	4.7746	4.894	MF25G4-60	MF25G6-60	MF25G8-60
72	A	5.7296	5.849	MF25G4-72	MF25G6-72	MF25G8-72

\* Recommended for use as an idler only

Material: 2024-T4 Aluminum (anodized before cutting)

### Note:

Other Size Bores Available, Consult Factory.

For unlisted number of teeth, specify the number of teeth desired as the last digits in the part number.

EXAMPLE: For a 52-tooth 1/4" bore sprocket, specify Part Number: F25G4-52

For number of teeth above or below listed sizes, consult factory.

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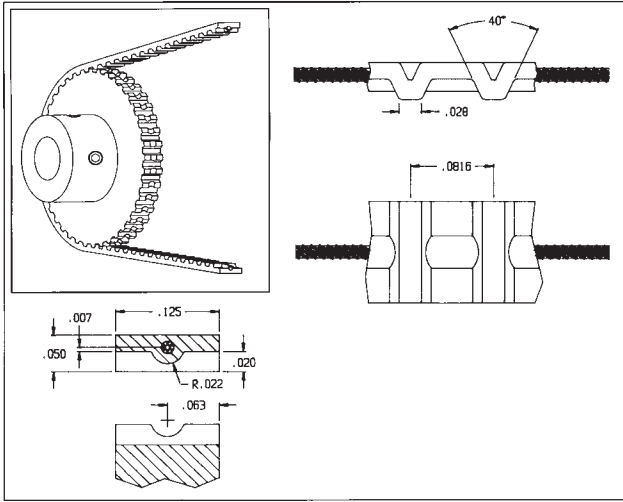
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# NO-SLIDE TIMING BELTS

40 DP (.0816 Pitch), 1/8" Wide — Polyurethane Belt



**Material:** Molded Polyurethane with .018" Dia. Stainless Steel Core

**Color:** Clear

**Maximum Tensile Strength:** 25 Lbs.

**Note:** For maximum life use working tension of less than 4 lbs.

No Of Grooves	Length (Ref.)	Part Number	No Of Grooves	Length (Ref.)	Part Number
24*	1.9584	F8BS-24	114	9.3024	F8BS-114
44	3.5904	F8BS-44	120	9.7920	F8BS-120
45	3.6720	F8BS-45	123	10.0368	F8BS-123
48	3.9168	F8BS-48	126	10.2816	F8BS-126
51	4.1616	F8BS-51	132	10.7721	F8BS-132
52	4.2432	F8BS-52	139	11.3424	F8BS-139
53	4.3248	F8BS-53	140	11.4240	F8BS-140
60	4.8960	F8BS-60	150	12.2400	F8BS-150
64	5.2224	F8BS-64	162	13.2192	F8BS-162
66	5.3856	F8BS-66	175	14.2800	F8BS-175
67	5.4672	F8BS-67	184	15.0144	F8BS-184
72	5.8752	F8BS-72	193	15.7488	F8BS-193
77	6.2832	F8BS-77	214	17.4624	F8BS-214
88	7.1808	F8BS-88	228	18.6048	F8BS-228
96	7.8336	F8BS-96	245	19.9920	F8BS-245
98	7.9968	F8BS-98	249	20.3184	F8BS-249
102	8.3232	F8BS-102	251	20.4816	F8BS-251
109	8.8944	F8BS-109	264	21.5424	F8BS-264
110	8.9760	F8BS-110			

\* Splice not overmolded on 24 grooves

For other length belts longer than the minimum listed, substitute the desired number of drive pins at the end of the part number.

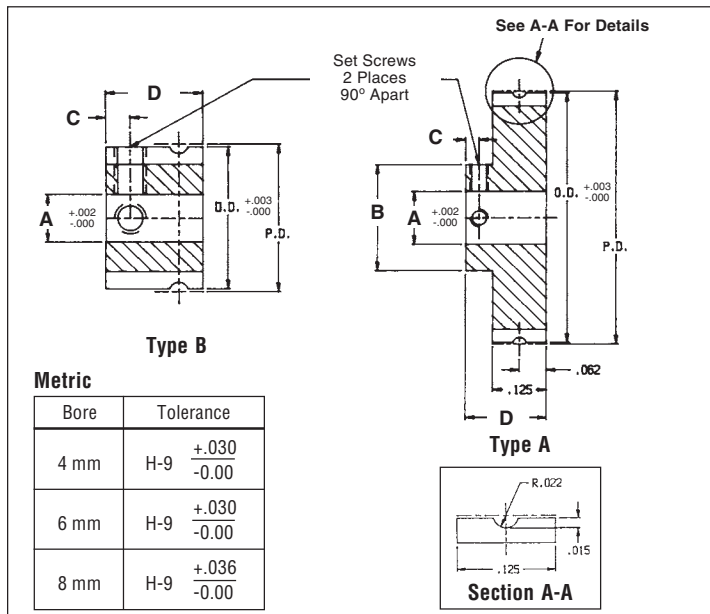
For field splicing use kit F8B-SK. See page 5-5.

### Bulk Lengths — Not Spliced

Length	Part Number
5 Ft	F8BS-5FT
10 Ft	F8BS-10FT
25 Ft	F8BS-25FT
50 Ft	F8BS-50FT
100 Ft	F8BS-100FT

# NO-SLIDE TIMING PULLEYS

40 D.P. (.0816 Pitch), No Flange, Grooved Pulley for 1/8" Wide Belts



### Metric

Bore	Tolerance
4 mm	H-9 +.030 -0.00
6 mm	H-9 +.030 -0.00
8 mm	H-9 +.036 -0.00

**Material:** 2024-T4 Aluminum (anodized before cutting)

**Note 1:** For metric bores prefix part numbers with letter M. XX = number of teeth

4 mm bore part number: **MF8P4-XX**

6 mm bore part number: **MF8P6-XX**

8 mm bore part number: **MF8P8-XX**

Example: Part number for a 6 mm bore with 40 teeth is **MF8P6-40**

**Note 2:** Other number of teeth available for inch and metric pulleys

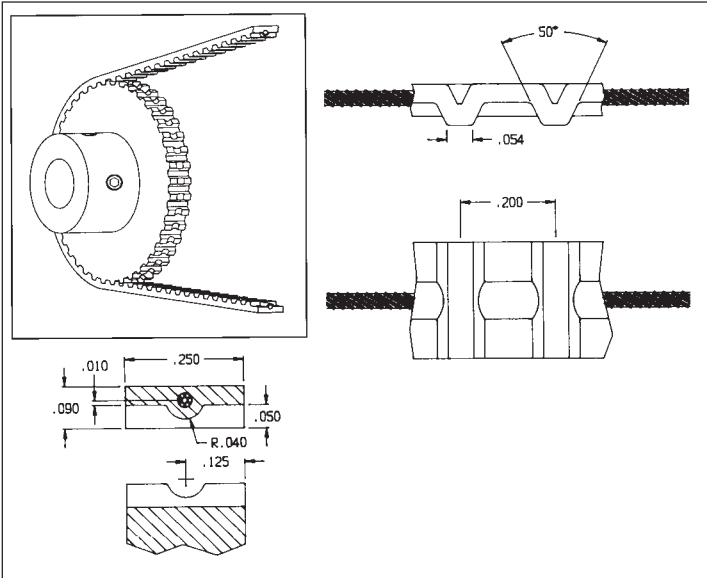
No. of Teeth	Type	Pitch Dia.	Outside Dia.	Bore Size / Part Number		
				.125	.187	.250
14 *	B	.3636	.349	F8P2-14	F8P3-14	—
15 *	B	.3896	.375	F8P2-15	F8P3-15	—
18 *	B	.4675	.453	F8P2-18	F8P3-18	F8P4-18
20	A	.5195	.505	F8P2-20	F8P3-20	F8P4-20
24	A	.6234	.609	F8P2-24	F8P3-24	F8P4-24
25	A	.6494	.635	F8P2-25	F8P3-25	F8P4-25
28	A	.7273	.713	F8P2-28	F8P3-28	F8P4-28
30	A	.7792	.765	F8P2-30	F8P3-30	F8P4-30
32	A	.8312	.817	F8P2-32	F8P3-32	F8P4-32
34	A	.8831	.869	F8P2-34	F8P3-34	F8P4-34
36	A	.9351	.921	F8P2-36	F8P3-36	F8P4-36
38	A	.9870	.973	F8P2-38	F8P3-38	F8P4-38
40	A	1.0390	1.025	F8P2-40	F8P3-40	F8P4-40
42	A	1.0909	1.076	F8P2-42	F8P3-42	F8P4-42
44	A	1.1429	1.128	F8P2-44	F8P3-44	F8P4-44
48	A	1.2468	1.232	F8P2-48	F8P3-48	F8P4-48
50	A	1.2987	1.284	F8P2-50	F8P3-50	F8P4-50
54	A	1.4026	1.388	F8P2-54	F8P3-54	F8P4-54
60	A	1.5584	1.544	F8P2-60	F8P3-60	F8P4-60
72	A	1.8701	1.856	F8P2-72	F8P3-72	F8P4-72
75	A	1.9481	1.934	F8P2-75	F8P3-75	F8P4-75
80	A	2.0779	2.063	F8P2-80	F8P3-80	F8P4-80
84	A	2.1818	2.167	F8P2-84	F8P3-84	F8P4-84
88	A	2.2857	2.271	F8P2-88	F8P3-88	F8P4-88
90	A	2.3377	2.323	F8P2-90	F8P3-90	F8P4-90
96	A	2.4935	2.479	F8P2-96	F8P3-96	F8P4-96
98	A	2.5455	2.531	F8P2-98	F8P3-98	F8P4-98
100	A	2.5974	2.583	F8P2-100	F8P3-100	F8P4-100
120	A	3.1169	3.102	F8P2-120	F8P3-120	F8P4-120

\* Recommended for use as an idler only

Dimen. (In.)	Bore Size					
	1/8"	3/16"	1/4"	4 mm	6 mm	8 mm
A	.1248	.1873	.2498	.1573	.2360	.3148
B	.312	.375	.500	.312	.375	.500
C	.09	.11	.12	.09	.11	.12
D	.312	.343	.375	.312	.343	.375
Set Screw	#2-56	#4-40	#6-32	M2X.4	M3X.5	M4X.7

# NO-SLIDE TIMING BELTS

1/5 (.200) Pitch, 1/4" Wide Polyurethane Belts



No Of Grooves	Length (Ref.)	Part Number	No Of Grooves	Length (Ref.)	Part Number
20*	4.00	F20BS-20	115	23.00	F20BS-115
25*	5.00	F20BS-25	120	24.00	F20BS-120
30*	6.00	F20BS-30	125	25.00	F20BS-125
35	7.00	F20BS-35	130	26.00	F20BS-130
40	8.00	F20BS-40	135	27.00	F20BS-135
45	9.00	F20BS-45	140	28.00	F20BS-140
50	10.00	F20BS-50	145	29.00	F20BS-145
55	11.00	F20BS-55	150	30.00	F20BS-150
60	12.00	F20BS-60	155	31.00	F20BS-155
65	13.00	F20BS-65	160	32.00	F20BS-160
70	14.00	F20BS-70	165	33.00	F20BS-165
75	15.00	F20BS-75	170	34.00	F20BS-170
80	16.00	F20BS-80	175	35.00	F20BS-175
85	17.00	F20BS-85	180	36.00	F20BS-180
90	18.00	F20BS-90	185	37.00	F20BS-185
95	19.00	F20BS-95	190	38.00	F20BS-190
100	20.00	F20BS-100	195	39.00	F20BS-195
105	21.00	F20BS-105	200	40.00	F20BS-200
110	22.00	F20BS-110	210	42.00	F20BS-210

\* Splice not overmolded on less than 35 grooves

For other length belts longer than the minimum listed, substitute the desired number of drive pins at the end of the part number.

Note: For Aramid (Kevlar) fiber core, change Part No. to F20BA-□□□  
Consult factory for availability

### Bulk Lengths — Not Spliced

Length	Part Number
5 Ft	F20BS-5FT
10 Ft	F20BS-10FT
25 Ft	F20BS-25FT
50 Ft	F20BS-50FT
100 Ft	F20BS-100FT

For field splicing use kit F20B-SK. See page 5-5.

**Material:** Molded Polyurethane with .032" Dia. Stainless Steel Core

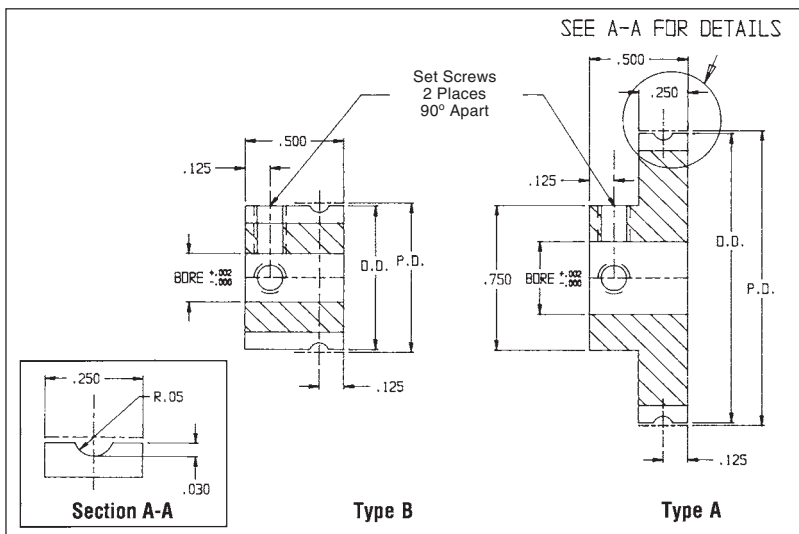
**Color:** Red, Aramid (Kevlar) Core Yellow

**Maximum Tensile Strength:** 50 Lbs.

**Note:** For maximum life use working tension of less than 10 lbs.

# NO-SLIDE TIMING PULLEYS

1/5 (.200) Pitch, No Flange Groove Pulleys for 1/4" Wide Belts



No. of Teeth	Type	Pitch Dia.	Outside Dia.	STD Bore / Part Number		
				.250	.375	.500
10*	B	.6366	.616	F20P4-10	—	—
11*	B	.7003	.680	F20P4-11	F20P6-11	—
12	B	.7639	.743	F20P4-12	F20P6-12	F20P8-12
14	A	.8913	.871	F20P4-14	F20P6-14	F20P8-14
15	A	.9549	.934	F20P4-15	F20P6-15	F20P8-15
16	A	1.0186	.998	F20P4-16	F20P6-16	F20P8-16
17	A	1.0823	1.062	F20P4-17	F20P6-17	F20P8-17
18	A	1.1459	1.125	F20P4-18	F20P6-18	F20P8-18
19	A	1.2096	1.189	F20P4-19	F20P6-19	F20P8-19
20	A	1.2732	1.253	F20P4-20	F20P6-20	F20P8-20
21	A	1.3369	1.316	F20P4-21	F20P6-21	F20P8-21
22	A	1.4006	1.380	F20P4-22	F20P6-22	F20P8-22
23	A	1.4642	1.444	F20P4-23	F20P6-23	F20P8-23
24	A	1.5279	1.507	F20P4-24	F20P6-24	F20P8-24
25	A	1.5916	1.571	F20P4-25	F20P6-25	F20P8-25
27	A	1.7189	1.698	F20P4-27	F20P6-27	F20P8-27
28	A	1.7825	1.762	F20P4-28	F20P6-28	F20P8-28
29	A	1.8462	1.826	F20P4-29	F20P6-29	F20P8-29
30	A	1.9099	1.889	F20P4-30	F20P6-30	F20P8-30
32	A	2.0372	2.017	F20P4-32	F20P6-32	F20P8-32
36	A	2.2918	2.271	F20P4-36	F20P6-36	F20P8-36
40	A	2.5465	2.526	F20P4-40	F20P6-40	F20P8-40
42	A	2.6738	2.653	F20P4-42	F20P6-42	F20P8-42
44	A	2.8011	2.781	F20P4-44	F20P6-44	F20P8-44
45	A	2.8648	2.844	F20P4-45	F20P6-45	F20P8-45
48	A	3.0558	3.035	F20P4-48	F20P6-48	F20P8-48
50	A	3.1831	3.163	F20P4-50	F20P6-50	F20P8-50
60	A	3.8197	3.799	F20P4-60	F20P6-60	F20P8-60
72	A	4.5837	4.563	F20P4-72	F20P6-72	F20P8-72

\* Recommended for use as an idler only

**Material:** 2024-T4 Aluminum (anodized before cutting)

**Note:** For metric bores prefix part numbers with letter M.  
XX = number of teeth

8 mm bore part number: MF20P8-XX

10 mm bore part number: MF20P10-XX

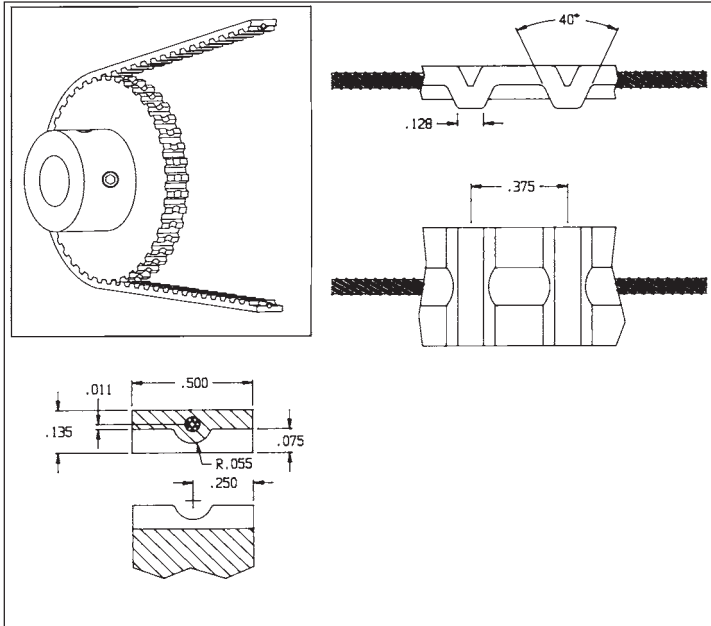
12 mm bore part number: MF20P12-XX

Example: Part number for a 1/5" pitch No-Slide pulley with 50 teeth and 12 mm bore is MF20P12-50

Set Screw Size		
Bore		
Inch	8 mm	10 & 12 mm
8-32	M4X.7	M5X.8

# NO-SLIDE TIMING BELTS

3/8" Pitch, 1/2" Wide — Polyurethane Belt



**Material:** Molded Polyurethane with .047" Diameter Stainless Steel Core

**Color:** Blue

**Maximum Tensile Strength:** 125 Lbs.

**Note:** For maximum life use working tension of less than 25 lbs.

No Of Grooves	Length (Ref.)	Part Number	No Of Grooves	Length (Ref.)	Part Number
20	7.500	F37BS-20	98	36.750	F37BS-98
22	8.250	F37BS-22	100	37.500	F37BS-100
24	9.000	F37BS-24	104	39.000	F37BS-104
26	9.750	F37BS-26	108	40.500	F37BS-108
28	10.500	F37BS-28	112	42.000	F37BS-112
30	11.250	F37BS-30	116	43.500	F37BS-116
33	12.375	F37BS-33	120	45.000	F37BS-120
36	13.500	F37BS-36	124	46.500	F37BS-124
40	15.000	F37BS-40	128	48.000	F37BS-128
45	16.875	F37BS-45	132	49.500	F37BS-132
50	18.750	F37BS-50	136	51.000	F37BS-136
56	21.000	F37BS-56	140	52.500	F37BS-140
60	22.500	F37BS-60	144	54.000	F37BS-144
64	24.000	F37BS-64	148	55.500	F37BS-148
68	25.500	F37BS-68	152	57.000	F37BS-152
72	27.000	F37BS-72	156	58.500	F37BS-156
80	30.000	F37BS-80	160	60.000	F37BS-160
86	32.250	F37BS-86	176	66.000	F37BS-176
92	34.500	F37BS-92	180	67.500	F37BS-180

Factory spliced belts are overmolded

For other length belts longer than the minimum listed, substitute the desired number of drive pins at the end of the part number.

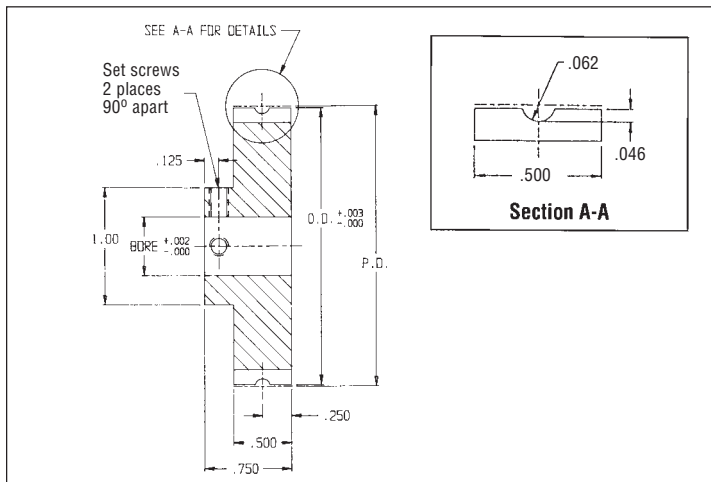
**Bulk Lengths — Not Spliced**

Length	Part Number
5 Ft	F37BS-5FT
10 Ft	F37BS-10FT
25 Ft	F37BS-25FT
50 Ft	F37BS-50FT
100 Ft	F37BS-100FT

For field splicing use kit F37B-SK. See page 5-5.

# NO-SLIDE TIMING PULLEYS

3/8" Pitch, No-Flange Grooved Pulleys for 1/2" Wide Belts



**Material:** 2024-T4 Aluminum (anodized before cutting)

**Note:** For metric bores prefix part numbers with letter M  
XX = number of teeth

8 mm bore part number: MF37P8-XX

10 mm bore part number: MF37P10-XX

12 mm bore part number: MF37P12-XX

Example: Part number for 3/8" pitch No-Slide pulley with 36 teeth and a 12 mm bore is MF37P12-36

Set Screw Size		
Bore		
Inch	8 mm	10 & 12 mm
8-32	M4X.7	M5X.8

No. of Teeth	Pitch Dia.	Outside Dia.	Part No. / Bore Size		
			.250	.375	.500
10*	1.1937	1.164	F37P4-10	F37P6-10	F37P8-10
11*	1.3130	1.284	F37P4-11	F37P6-11	F37P8-11
12	1.4324	1.403	F37P4-12	F37P6-12	F37P8-12
13	1.5518	1.522	F37P4-13	F37P6-13	F37P8-13
14	1.6711	1.642	F37P4-14	F37P6-14	F37P8-14
15	1.7905	1.761	F37P4-15	F37P6-15	F37P8-15
16	1.9099	1.880	F37P4-16	F37P6-16	F37P8-16
17	2.0292	2.000	F37P4-17	F37P6-17	F37P8-17
18	2.1486	2.119	F37P4-18	F37P6-18	F37P8-18
19	2.2680	2.239	F37P4-19	F37P6-19	F37P8-19
20	2.3873	2.358	F37P4-20	F37P6-20	F37P8-20
21	2.5067	2.477	F37P4-21	F37P6-21	F37P8-21
22	2.6261	2.597	F37P4-22	F37P6-22	F37P8-22
24	2.8648	2.835	F37P4-24	F37P6-24	F37P8-24
26	3.1035	3.074	F37P4-26	F37P6-26	F37P8-26
28	3.3422	3.313	F37P4-28	F37P6-28	F37P8-28
30	3.5810	3.552	F37P4-30	F37P6-30	F37P8-30
32	3.8197	3.790	F37P4-32	F37P6-32	F37P8-32
36	4.2972	4.268	F37P4-36	F37P6-36	F37P8-36

\* Recommended for use as an idler only

**Note:**

Other Size Bores Available, Consult Factory.

For unlisted number of teeth, specify the number of teeth desired as the last digits in the part number.

# E\*P\*S\* SYNCHRONOUS TIMING BELTS

Synchronous timing belts provide an economic means of positive power transmission. They are basically flat belts with teeth on the inside circumference resulting in high efficiencies and the capability to carry heavy loads at high speeds. The belts will maintain the relative rotational positions (timing) of pulleys. Required clearance between belt and pulley teeth (.003-.012) can result in a slight backlash.

E\*P\*S\* synchronous timing belts are available in two materials, neoprene and urethane. Neoprene belts are faced with a nylon wear surface and reinforced with fiberglass cord. Urethane belts are reinforced with polyester cord.

PIC urethane belts' high abrasion resistance allows operation in applications where the carbon black dusting encountered with other belts cannot be tolerated. The polyester cord provides shock absorption and some vibration damping capability. This belt is well suited for high speed operation with small pulleys due to its high flexibility.

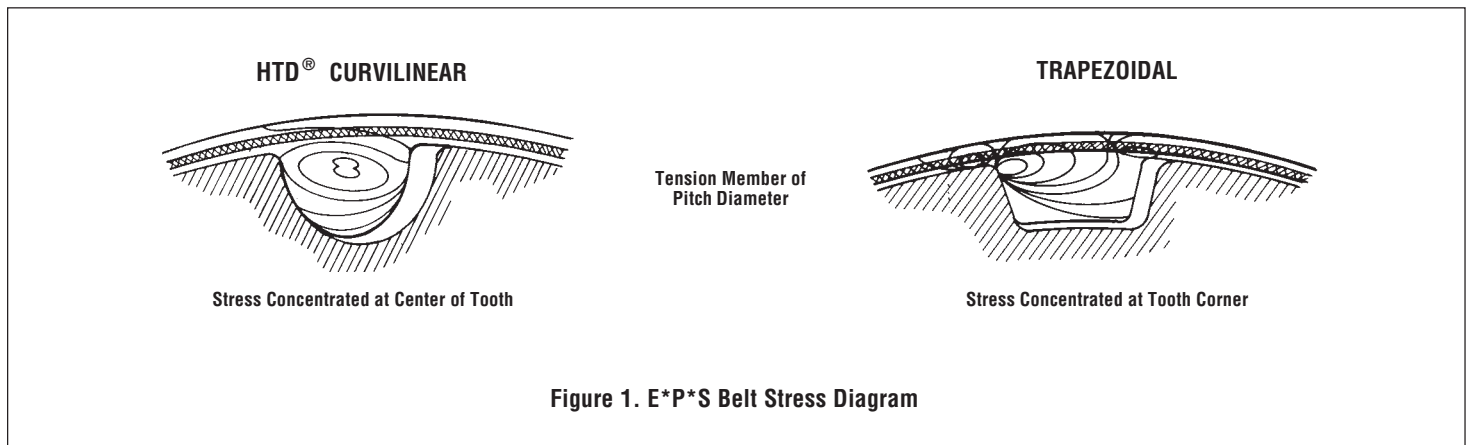
Neoprene belts offer greater load carrying capabilities. The high modulus fiberglass reinforcement allows operation without periodic retensioning.

E\*P\*S belts are available from PIC with two tooth forms, the usual trapezoidal form and the New, High Efficiency, HTD<sup>®</sup> Form. The HTD<sup>®</sup> belt employs a curvilinear tooth which is deeper than the trapezoidal tooth, offering the following advantages:

- Substantial belt size reductions for comparable loads. HTD<sup>®</sup> belts will carry 120% to 200% more horsepower than equivalent trapezoidal tooth belts.
- Speed ratios to 20:1.
- Up to 5.5 hp at speeds to 24000 rpm.
- Energy efficient replacement for "V" belt systems.
- Cost savings; narrower belts will handle larger loads.

HTD<sup>®</sup> belts should be considered for new designs and as cost saving replacements to solve existing problems. The stress diagram below (Figure 1) illustrates the increased load carrying ability of HTD<sup>®</sup> curvilinear form vs. the trapezoidal form.

The Design Guide for E\*P\*S HTD<sup>®</sup> and E\*P\*S drive systems will enable you to select the appropriate timing belts for your particular application.



## Design Guide for E\*P\*S HTD<sup>®</sup> E\*P\*S Drive Systems

Belt Type	Tooth Form	HTD Curvilinear		Trapezoidal					
	Pitch	3 mm	5 mm	.080	.080	.0816	1/5	1/5	3/8
	Material	Neoprene	Neoprene	Neoprene	Urethane	Urethane	Neoprene	Urethane	Neoprene
Catalog Series		EPS-F-N	EPS-G-N	EPS-A-N	EPS-A-U	EPS-C-U	EPS-D-N	EPS-D-U	EPS-J-N
Operating Temperature (°F)		-30 to +185	-30 to +185	-30 to +185	-30 to +180	-30 to +180	-30 to +185	-30 to +180	-30 to +185
Positioning Capability		Limited	Limited	Good	Good	Good	Good	Good	Good
Recommended Minimum Pitch Dia. (In.)		.38	.75	.25	.25	.25	.64	.64	1.19
Pulley Minimum No. of Teeth		10	12	10	10	10	10	10	10
Recommended Maximum Speed (RPM)		24,000	14,000	20,000	20,000	20,000	10,000	10,000	6,000
Recommended Minimum Teeth in Mesh		4	4	5	5	5	5	5	5
Recommended Maximum Working Tension (Lb./In. Width)		60	100	32	21	21	41	27	55

# E\*P\*S DRIVER SYSTEM SELECTION PROCEDURE

In order to select the correct drive system for your application, the following procedure is recommended:

1. Determine the design horsepower (Dhp).  
 $Dhp = \text{rated hp} \times SF$   
 Service factors (SF) of 1.5 to 2.0 are recommended for miniature timing belts. In drive systems which require a high degree of dependability or have high stock loads, higher service factors are recommended.
2. Belt pitch and pulley selection
  - a. Using the E\*P\*S drive belt selection chart, select the pitch belt which has the Dhp capacity at the smaller pulley speed.
  - b. The Speed Ratio is determined by dividing the larger speed, pulley pitch diameter or groove number by the lesser speed, pulley pitch diameter or groove number.
  - c. To select the proper pulley, refer to pulley dimensions listed with corresponding pitch.
  - d. The pitch line velocity of the smaller pulley should not exceed 6500 FPM.  
 $PLV = .262 \times \text{Pulley PD (in.)} \times \text{Pulley RPM}$

3. To determine the proper belt length at nominal center distance, use the following formula:

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

**Where** L = Belt Pitch Length  
 C = Center Distance  
 D = Pitch Diameter Large Pulley (inches)  
 d = Pitch Diameter Small Pulley (inches)

$$L_{\text{EXACT}} = 2C \cos \phi + \frac{\pi(D+d)}{2} + \frac{\pi \phi(D-d)}{180}$$

**Where**  $\phi = \sin^{-1} \left( \frac{D-d}{2C} \right)$

4. To determine the center distance in inches when belt length and pulleys are known.

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

**Where**  $K = 4L - 6.28(D+d)$

**Other useful formulas:**

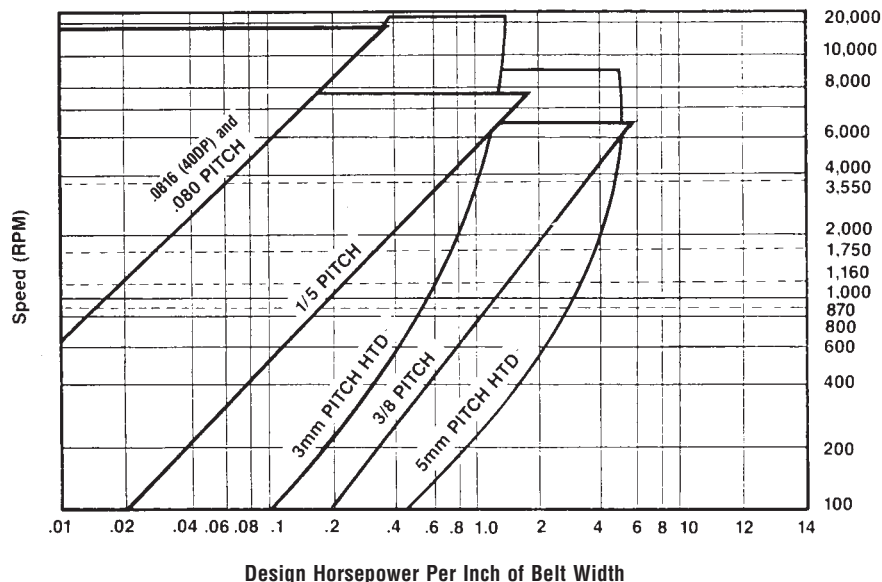
$$HP = \frac{\text{Torque (in-lbs.)} \times \text{RPM}}{63025}$$

$$\text{Belt Speed fpm} = \text{Pitch Diameter} \times \text{RPM} \times .262$$

**NOTE:** If the number of teeth in mesh on the smaller pulley is less than 6, correct the design hp by the following factors:

Teeth in Mesh	Design HP Multiplication Factor
5	1.2
4	1.5
3	2.0
2	Suggest Alternative Drive
1	Suggest Alternative Drive

E\*P\*S Drive Selection Chart



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# E\*P\*S TIMING BELTS

Special Length Timing Belts (Molds Available)

## .080 Pitch

Pitch Length	No. of Teeth	Pitch Length	No. of Teeth	Pitch Length	No. of Teeth	Pitch Length	No. of Teeth
3.36	42	6.64	83	8.40	105	19.84	248
4.32	54	7.04	88	8.48	106	19.92	249
4.48	56	7.36	92	9.12	122	20.08	251
4.72	59	7.44	93	9.84	123	20.48	256
4.88	61	7.52	94	10.08	126	27.76	347
5.12	64	7.60	95	10.56	132	29.76	372
5.36	67	7.76	97	11.52	144	34.72	434
5.44	68	8.16	102	12.24	153	36.24	453
5.68	71	8.24	103	14.40	180	39.84	498
6.32	79			14.72	184	42.56	532
6.56	82			16.64	208		

## .0816 Pitch

Pitch Length	No. of Teeth	Pitch Length	No. of Teeth	Pitch Length	No. of Teeth	Pitch Length	No. of Teeth
2.44	30	7.83	96	13.30	163	21.62	265
2.85	35	7.91	97	13.46	165	22.03	270
3.26	40	8.56	105	13.87	170	22.84	280
3.67	45	8.89	109	14.28	175	23.25	285
4.08	50	9.38	115	15.09	185	23.66	290
4.24	52	10.20	125	15.50	190	25.29	310
4.32	53	10.68	131	15.91	195	26.11	320
4.56	56	10.77	132	16.32	200	26.92	330
4.73	58	11.01	135	16.72	205	28.56	350
5.22	64	11.42	140	17.54	215	29.37	360
5.46	67	11.83	145	17.95	220	20.19	370
5.71	70	11.99	147	18.36	225	31.00	380
5.95	73	12.24	150	19.58	240	31.82	390
6.03	74	12.32	151	20.40	250	32.64	400
6.28	77	12.40	152	20.56	252	34.84	427
6.36	78	12.64	155	20.80	255	43.65	535
7.67	94	12.97	159	21.21	260		

## 1/5 (.200) Pitch

Pitch Length	No. of Teeth	Pitch Length	No. of Teeth	Pitch Length	No. of Teeth	Pitch Length	No. of Teeth	Pitch Length	No. of Teeth	Pitch Length	No. of Teeth
4.20	21	10.80	54	16.20	81	21.80	109	31.00	155	44.40	222
5.40	27	11.20	56	16.40	82	22.20	111	31.60	158	45.00	225
5.80	29	11.60	58	16.60	83	22.60	113	32.20	161	45.40	227
6.20	31	11.80	59	16.80	84	22.80	114	33.80	169	46.00	230
6.40	32	12.20	61	17.20	86	23.20	116	34.00	170	46.80	234
6.60	33	12.40	62	17.40	87	23.40	117	34.40	172	48.00	240
6.80	34	12.60	63	17.60	88	23.60	118	34.80	174	49.20	246
7.20	36	12.80	64	17.80	89	24.20	121	35.00	175	49.80	249
7.40	37	13.20	66	18.20	91	24.40	122	35.20	176	50.00	250
7.60	38	13.40	67	18.40	92	24.60	123	36.20	181	50.60	253
7.80	39	13.60	68	18.60	93	25.40	127	37.00	185	52.40	262
8.20	41	13.80	69	18.80	94	25.80	129	38.00	190	55.40	277
8.40	42	14.20	71	19.20	96	26.20	131	38.40	192	57.00	285
8.60	43	14.40	72	19.40	97	26.40	132	39.00	195	58.00	290
9.20	46	14.60	73	19.60	98	26.60	133	40.00	200	59.20	296
9.40	47	14.80	74	20.20	101	26.80	134	41.20	206	63.00	315
9.60	48	15.20	76	20.40	102	27.40	137	42.00	210	67.20	336
9.80	49	15.40	77	20.60	103	28.60	143	42.40	212	77.00	385
10.20	51	15.60	78	21.20	106	29.60	148	43.20	216	85.00	425
10.60	53	15.80	79	21.40	107	30.60	153	43.80	219		

## 3/8 (.375) Pitch

Pitch Length	No. of Teeth	Pitch Length	No. of Teeth
48.000	128	66.000	176
51.000	136	81.750	218
54.000	144	90.000	240
60.000	160		

## 3 mm HTD® Pitch

Pitch Length	No. of Teeth	Pitch Length	No. of Teeth
5.67	48	13.11	111
5.79	49	14.06	119
7.09	60	18.90	160
7.68	65	19.25	163
8.03	68	22.68	192
8.15	69	23.62	200
8.27	70	37.20	315
10.87	92	41.81	354
11.34	96	44.29	375
11.46	97	49.72	421
11.69	99		

## 5 mm HTD® Pitch

Pitch Length	No. of Teeth	Pitch Length	No. of Teeth
36.42	185	70.47	358
41.34	210	70.87	360
44.29	225	74.61	379
50.00	254	78.74	400
55.91	284	99.41	505
62.80	319		

Sold & Serviced By:

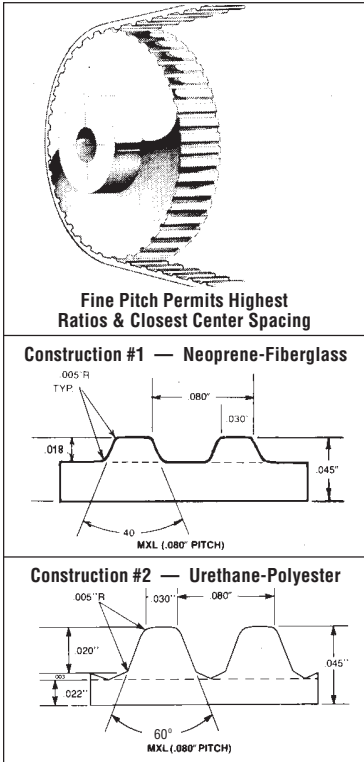


Toll Free Phone (877) SERV098  
 Toll Free Fax (877) SERV099  
[www.electromate.com](http://www.electromate.com)  
[sales@electromate.com](mailto:sales@electromate.com)

# E\*P\*S TIMING BELTS

.080 Pitch, 1/8", 3/16", 1/4" Wide For Economy ■ Power ■ Speed

MXL



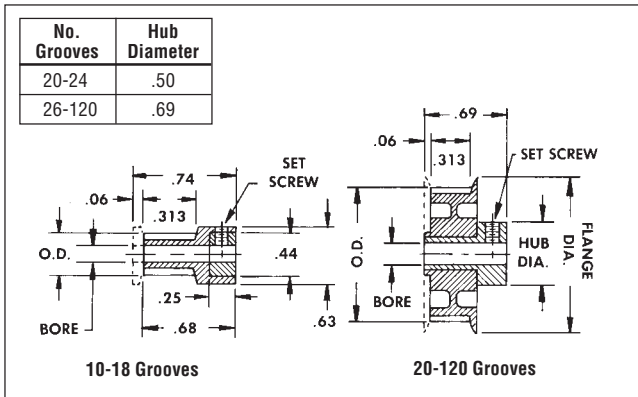
Pitch Length	No. of Grooves	Neoprene Belts			Urethane Belts*		
		1/8" Wide Belts Part No.	3/16" Wide Belts Part No.	1/4" Wide Belts Part No.	1/8" Wide Belts Part No.	3/16" Wide Belts Part No.	1/4" Wide Belts Part No.
3.60	45	EPS0045A125N	EPS0045A187N	EPS0045A250N	EPS0045A125U	EPS0045A187U	EPS0045A250U
4.00	50	EPS0050A125N	EPS0050A187N	EPS0050A250N	EPS0050A125U	EPS0050A187U	EPS0050A250U
4.40	55	EPS0055A125N	EPS0055A187N	EPS0055A250N	EPS0055A125U	EPS0055A187U	EPS0055A250U
4.80	60	EPS0060A125N	EPS0060A187N	EPS0060A250N	EPS0060A125U	EPS0060A187U	EPS0060A250U
5.60	70	EPS0070A125N	EPS0070A187N	EPS0070A250N	EPS0070A125U	EPS0070A187U	EPS0070A250U
6.40	80	EPS0080A125N	EPS0080A187N	EPS0080A250N	EPS0080A125U	EPS0080A187U	EPS0080A250U
6.80	85	EPS0085A125N	EPS0085A187N	EPS0085A250N	—	—	—
7.20	90	EPS0090A125N	EPS0090A187N	EPS0090A250N	EPS0090A125U	EPS0090A187U	EPS0090A250U
7.60	95	EPS0095A125N	EPS0095A187N	EPS0095A250N	EPS0095A125U	EPS0095A187U	EPS0095A250U
8.00	100	EPS0100A125N	EPS0100A187N	EPS0100A250N	EPS0100A125U	EPS0100A187U	EPS0100A250U
8.80	110	EPS0110A125N	EPS0110A187N	EPS0110A250N	EPS0110A125U	EPS0110A187U	EPS0110A250U
9.60	120	EPS0120A125N	EPS0120A187N	EPS0120A250N	EPS0120A125U	EPS0120A187U	EPS0120A250U
10.40	130	EPS0130A125N	EPS0130A187N	EPS0130A250N	—	—	—
11.20	140	EPS0140A125N	EPS0140A187N	EPS0140A250N	EPS0140A125U	EPS0140A187U	EPS0140A250U
12.00	150	EPS0150A125N	EPS0150A187N	EPS0150A250N	EPS0150A125U	EPS0150A187U	EPS0150A250U
13.20	165	EPS0165A125N	EPS0165A187N	EPS0165A250N	EPS0165A125U	EPS0165A187U	EPS0165A250U
14.00	175	EPS0175A125N	EPS0175A187N	EPS0175A250N	EPS0175A125U	EPS0175A187U	EPS0175A250U
15.20	190	EPS0190A125N	EPS0190A187N	EPS0190A250N	EPS0190A125U	EPS0190A187U	EPS0190A250U
16.00	200	EPS0200A125N	EPS0200A187N	EPS0200A250N	EPS0200A125U	EPS0200A187U	EPS0200A250U
16.80	210	EPS0210A125N	EPS0210A187N	EPS0210A250N	EPS0210A125U	EPS0210A187U	EPS0210A250U
18.00	225	EPS0225A125N	EPS0225A187N	EPS0225A250N	EPS0225A125U	EPS0225A187U	EPS0225A250U
20.00	250	EPS0250A125N	EPS0250A187N	EPS0250A250N	—	—	—
20.80	260	EPS0260A125N	EPS0260A187N	EPS0260A250N	EPS0260A125U	EPS0260A187U	EPS0260A250U
23.60	295	EPS0295A125N	EPS0295A187N	EPS0295A250N	EPS0295A125U	EPS0295A187U	EPS0295A250U
24.00	300	EPS0300A125N	EPS0300A187N	EPS0300A250N	EPS0300A125U	EPS0300A187U	EPS0300A250U
32.00	400	EPS0400A125N	EPS0400A187N	EPS0400A250N	EPS0400A125U	EPS0400A187U	EPS0400A250U

\*For Urethane belts with Kevlar tensile member, add "K" to end of part number.

# E\*P\*S TIMING PULLEYS

.080 Pitch, Molded, With Metal Hub or Sleeve. 1/8", to 1/4" Belt Width

MXL



**Material:** Glass Filled Polycarbonate. Hub: Aluminum.  
Special materials, bores, hub styles, sizes, etc., consult factory.

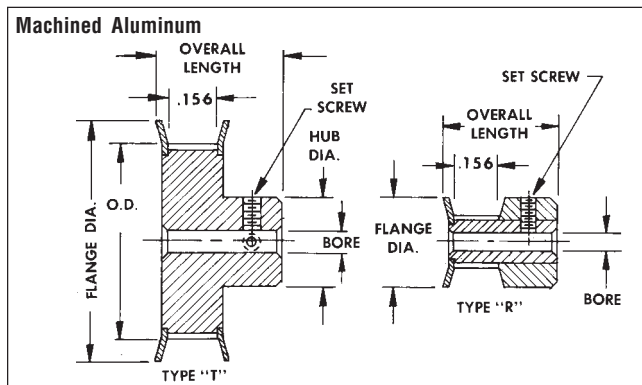
Bore	Set Screw	O.D. Tolerance	
		No. Grooves	+ Tol
.125	#4-40	10-24	+ .003 - .001
.187	#6-32	25-70	+ .004 - .001
.250	#8-32	71-120	+ .005 - .001
.313	#10-32		

Pulley Data					Single Flange	Double Flange
No. of Grooves	Pitch Dia.	Outside Dia.	Flange Dia. ±.03	Bore ±.0015 -.0000	Part Number	Part Number
10	.255	.235	.63	.125	PT010A04K04S	PT010A04K04T
12	.306	.286	.63	.125	PT012A04K04S	PT012A04K04T
14	.357	.337	.63	.125	PT014A04K04S	PT014A04K04T
15	.382	.362	.63	.187	PT015A06K04S	PT015A06K04T
16	.407	.387	.63	.250	PT016A08K04S	PT016A08K04T
18	.458	.438	.63	.250	PT018A08K04S	PT018A08K04T
20	.509	.489	.68	.187	PT020A06K04S	PT020A06K04T
21	.535	.515	.70	.187	PT021A06K04S	PT021A06K04T
22	.560	.540	.73	.187	PT022A06K04S	PT022A06K04T
24	.611	.591	.78	.187	PT024A06K04S	PT024A06K04T
26	.662	.642	.83	.250	PT026A08K04S	PT026A08K04T
28	.713	.693	.88	.250	PT028A08K04S	PT028A08K04T
30	.764	.744	.93	.250	PT030A08K04S	PT030A08K04T
32	.815	.795	.98	.250	PT032A08K04S	PT032A08K04T
36	.917	.897	1.09	.250	PT036A08K04S	PT036A08K04T
38	.968	.948	1.14	.250	PT038A08K04S	PT038A08K04T
40	1.019	.999	1.19	.250	PT040A08K04S	PT040A08K04T
42	1.070	1.050	1.24	.250	PT042A08K04S	PT042A08K04T
44	1.120	1.100	1.29	.250	PT044A08K04S	PT044A08K04T
46	1.171	1.151	1.34	.250	PT046A08K04S	PT046A08K04T
48	1.222	1.202	1.39	.250	PT048A08K04S	PT048A08K04T
50	1.273	1.253	1.44	.250	PT050A08K04S	PT050A08K04T
51	1.299	1.279	1.48	.250	PT051A08K04S	PT051A08K04T
60	1.528	1.508	1.70	.250	PT060A08K04S	PT060A08K04T
70	1.783	1.763	1.95	.313	PT070A10K04S	PT070A10K04T
72	1.833	1.813	2.00	.313	PT072A10K04S	PT072A10K04T
80	2.037	2.017	2.21	.313	PT080A10K04S	PT080A10K04T
90	2.292	2.272	2.46	.313	PT090A10K04S	PT090A10K04T
100	2.546	2.526	2.71	.313	PT100A10K04S	PT100A10K04T
110	2.801	2.781	2.97	.313	PT110A10K04S	PT110A10K04T
120	3.056	3.036	3.22	.313	PT120A10K04S	PT120A10K04T

# E\*P\*S TIMING PULLEYS

MXL

.080 Pitch, 1/8" Belt Width, Double Flange



Material: Aluminum Alloy, Anodized.

Bore	Set Screw	Quantity
.125	#4-40	1
.188	#4-40	2*
.250	#6-40	2

O.D. Tolerance	
O.D.	Tol
Thru 1.000	+ .002
1.001-2.000	+ .003
2.001-4.000	+ .004

\* 15 & 16 grooves, one set screw.

No. of Grooves	Type	Pitch Diameter	Outside Diameter	Flange Diameter ±.016	Overall Length ±.016	Hub Diameter ±.016	Bore +.001 -.000	Part Number
10	R	.255	.235	.425	.436	.425	.125	PT010A04L02R
11	R	.280	.260	.450	.436	.450	.125	PT011A04L02R
12	R	.306	.286	.480	.436	.480	.125	PT012A04L02R
14	R	.357	.337	.530	.436	.530	.125	PT014A04L02R
15	R	.382	.362	.555	.436	.555	.188	PT015A06L02R
16	R	.407	.387	.580	.436	.580	.188	PT016A06L02R
18	T*	.458	.438	.635	.484	.312	.188	PT018A06L02T
20	T*	.509	.486	.685	.484	.364	.188	PT020A06L02T
21	T*	.535	.515	.710	.484	.390	.188	PT021A06L02T
22	T*	.560	.540	.740	.484	.390	.188	PT022A06L02T
24	T	.611	.591	.790	.515	.442	.250	PT024A08L02T
28	T	.713	.693	.895	.515	.494	.250	PT028A08L02T
30	T	.764	.744	.945	.515	.546	.250	PT030A08L02T
32	T	.815	.795	1.000	.515	.598	.250	PT032A08L02T
36	T	.917	.897	1.105	.515	.676	.250	PT036A08L02T
40	T	1.019	.999	1.210	.531	.754	.250	PT040A08L02T
42	T	1.070	1.050	1.260	.531	.806	.250	PT042A08L02T
44	T	1.120	1.100	1.315	.531	.858	.250	PT044A08L02T
48	T	1.222	1.202	1.412	.531	.936	.250	PT048A08L02T
60	T	1.528	1.508	1.730	.531	1.222	.250	PT060A08L02T

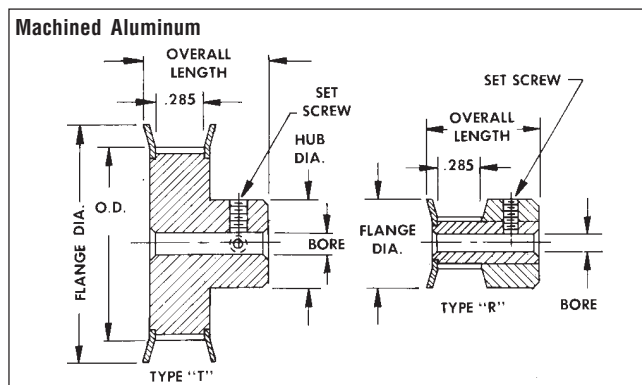
Specials: Materials, bores, hub styles, integral bushings or bearings, widths, finishes, sizes, etc., consult factory.

\* Type "R" hub style available, consult factory.

# E\*P\*S TIMING PULLEYS

MXL

.080 Pitch, 1/4" Belt Width, Double Flange



Material: Aluminum Alloy, Anodized.

Bore	Set Screw	Quantity
.125	#4-40	1
.188 (15-16G)	#6-40	1
.188	#6-40	2
.250 (24-28G)	#6-40	2
.250	#8-32	2
.312	#8-32	2
.375	#10-32	2

O.D. Tolerance	
O.D.	Tol
Thru 1.000	+ .002
1.001-2.000	+ .003
2.001-4.000	+ .004

No. of Grooves	Type	Pitch Diameter	Outside Diameter	Flange Diameter ±.016	Overall Length ±.016	Hub Diameter ±.016	Bore +.001 -.000	Part Number
10	R	.255	.235	.425	.565	.425	.125	PT010A04L04R
11	R	.280	.260	.450	.565	.450	.125	PT011A04L04R
12	R	.306	.286	.480	.565	.480	.125	PT012A04L04R
14	R	.357	.337	.530	.565	.530	.125	PT014A04L04R
15	R	.382	.362	.555	.565	.555	.188	PT015A06L04R
16	R	.407	.387	.580	.565	.580	.188	PT016A06L04R
18	T*	.458	.438	.635	.625	.312	.188	PT018A06L04T
20	T*	.509	.486	.685	.625	.364	.188	PT020A06L04T
21	T*	.535	.515	.710	.625	.390	.188	PT021A06L04T
22	T*	.560	.540	.740	.625	.390	.188	PT022A06L04T
24	T	.611	.591	.790	.687	.442	.250	PT024A08L04T
28	T	.713	.693	.895	.687	.494	.250	PT028A08L04T
30	T	.764	.744	.945	.687	.546	.250	PT030A08L04T
32	T	.815	.795	1.000	.687	.598	.250	PT032A08L04T
36	T	.917	.897	1.105	.687	.676	.250	PT036A08L04T
40	T	1.019	.999	1.210	.718	.754	.250	PT040A08L04T
42	T	1.070	1.050	1.260	.718	.806	.250	PT042A08L04T
44	T	1.120	1.100	1.315	.718	.858	.250	PT044A08L04T
48	T	1.222	1.202	1.412	.718	.936	.250	PT048A08L04T
60	T	1.528	1.508	1.730	.718	1.222	.250	PT060A08L04T
60	N	1.528	1.508	—	.750	1.148	.250	PT060A08L04N
72	N	1.833	1.813	—	.750	1.195	.250	PT072A08L04N
80	N	2.037	2.017	—	.750	1.500	.312	PT080A10L04N
90	N	2.292	2.272	—	.750	1.500	.312	PT090A10L04N
100	N	2.546	2.526	—	.750	1.500	.312	PT100A10L04N
120	N	3.056	3.036	—	.750	1.500	.375	PT120A12L04N

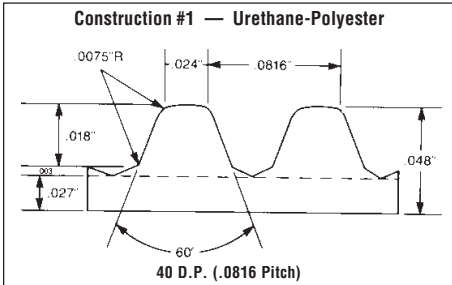
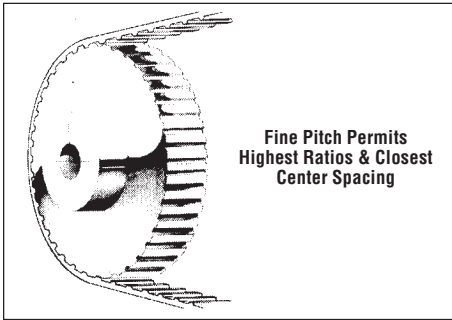
Special: Materials, bores, hub styles, integral bushings or bearings, widths, finishes, sizes, etc., consult factory.

\*Type "R" hub style available. Consult factory.

Type "N", no flange.

# E\*P\*S TIMING BELTS

40 D.P. (.0816 Pitch), 1/8", 1/4" Wide For Economy ■ Power ■ Speed ■ Urethane Belts\*



Pitch Length	No. of Grooves	1/8" Wide Belts Part No.	1/4" Wide Belts Part No.
2.693	33	EPS0033C125U	EPS0033C250U
3.590	44	EPS0044C125U	EPS0044C250U
3.917	48	EPS0048C125U	EPS0048C250U
4.162	51	EPS0051C125U	EPS0051C250U
4.488	55	EPS0055C125U	EPS0055C250U
4.651	57	EPS0057C125U	EPS0057C250U
4.896	60	EPS0060C125U	EPS0060C250U
4.978	61	EPS0061C125U	EPS0061C250U
5.304	65	EPS0065C125U	EPS0065C250U
5.630	69	EPS0069C125U	EPS0069C250U
5.875	72	EPS0072C125U	EPS0072C250U
6.120	75	EPS0075C125U	EPS0075C250U
6.202	76	EPS0076C125U	EPS0076C250U
6.528	80	EPS0080C125U	EPS0080C250U
6.610	81	EPS0081C125U	EPS0081C250U
6.854	84	EPS0084C125U	EPS0084C250U
6.936	85	EPS0085C125U	EPS0085C250U
7.262	89	EPS0089C125U	EPS0089C250U
7.344	90	EPS0090C125U	EPS0090C250U
7.752	95	EPS0095C125U	EPS0095C250U
7.997	98	EPS0098C125U	EPS0098C250U
8.160	100	EPS0100C125U	EPS0100C250U
8.323	102	EPS0102C125U	EPS0102C250U
8.976	110	EPS0110C125U	EPS0110C250U
9.466	116	EPS0116C125U	EPS0116C250U
9.629	118	EPS0118C125U	EPS0118C250U
9.710	119	EPS0119C125U	EPS0119C250U
9.792	120	EPS0120C125U	EPS0120C250U
9.955	122	EPS0122C125U	EPS0122C250U
10.037	123	EPS0123C125U	EPS0123C250U

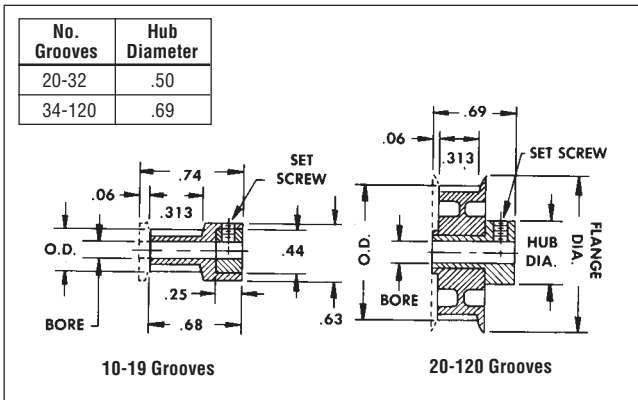
Pitch Length	No. of Grooves	1/8" Wide Belts Part No.	1/4" Wide Belts Part No.
10.608	130	EPS0130C125U	EPS0130C250U
11.342	139	EPS0139C125U	EPS0139C250U
11.669	143	EPS0143C125U	EPS0143C250U
11.750	144	EPS0144C125U	EPS0144C250U
12.158	149	EPS0149C125U	EPS0149C250U
12.485	153	EPS0153C125U	EPS0153C250U
12.566	154	EPS0154C125U	EPS0154C250U
13.056	160	EPS0160C125U	EPS0160C250U
13.219	162	EPS0162C125U	EPS0162C250U
14.525	178	EPS0178C125U	EPS0178C250U
14.688	180	EPS0180C125U	EPS0180C250U
15.667	192	EPS0192C125U	EPS0192C250U
15.749	193	EPS0193C125U	EPS0193C250U
16.973	208	EPS0208C125U	EPS0208C250U
17.136	210	EPS0210C125U	EPS0210C250U
17.462	214	EPS0214C125U	EPS0214C250U
18.768	230	EPS0230C125U	EPS0230C250U
19.176	235	EPS0235C125U	EPS0235C250U
19.992	245	EPS0245C125U	EPS0245C250U
20.971	257	EPS0257C125U	EPS0257C250U
21.053	258	EPS0258C125U	EPS0258C250U
21.542	264	EPS0264C125U	EPS0264C250U
22.440	275	EPS0275C125U	EPS0275C250U
22.930	281	EPS0281C125U	EPS0281C250U
24.072	295	EPS0295C125U	EPS0295C250U
24.480	300	EPS0300C125U	EPS0300C250U
26.438	324	EPS0324C125U	EPS0324C250U
27.744	340	EPS0340C125U	EPS0340C250U
30.110	369	EPS0369C125U	EPS0369C250U
31.987	392	EPS0392C125U	EPS0392C250U

\* For urethane belts with Kevlar tensile member, add "K" to end of part number.

Note: 3/16" and 5/16" wide belts available on request.

# E\*P\*S TIMING PULLEYS

40 D.P. (.0816 Pitch), Molded, With Metal Hub or Sleeve, 1/8" to 1/4" Belt Width



Material: Glass Filled Polycarbonate. Hub: Aluminum.  
Special materials, bores, hub styles, sizes, etc., consult factory.

Bore	Set Screw
.125	#4-40
.187	#6-32
.250	#8-32
.313	#10-32

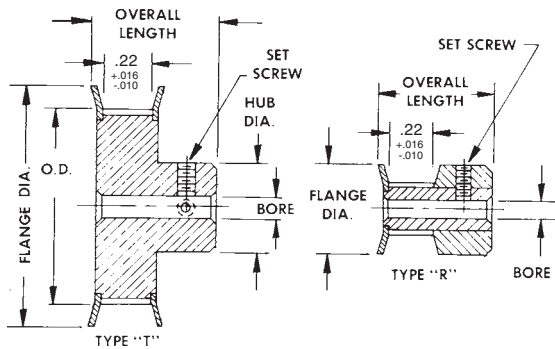
O.D. Tolerance	
No. Grooves	+ Tol
10-24	+0.003 -0.001
25-70	+0.004 -0.001
71-120	+0.005 -0.001

Pulley Data					Single Flange	Double Flange
No. of Grooves	Pitch Dia.	Outside Dia.	Flange Dia. ±.03	Bore ±.0015 -.0000	Part Number	Part Number
10	.260	.246	.63	.125	PT010C04K04S	PT010C04K04T
14	.364	.350	.63	.125	PT014C04K04S	PT014C04K04T
15	.390	.376	.63	.187	PT015C06K04S	PT015C06K04T
16	.416	.402	.63	.250	PT016C08K04S	PT016C08K04T
18	.468	.454	.63	.250	PT018C08K04S	PT018C08K04T
19	.494	.480	.63	.250	PT019C08K04S	PT019C08K04T
20	.520	.506	.697	.187	PT020C06K04S	PT020C06K04T
22	.572	.558	.750	.187	PT022C06K04S	PT022C06K04T
24	.624	.610	.800	.187	PT024C06K04S	PT024C06K04T
25	.650	.636	.834	.250	PT025C08K04S	PT025C08K04T
26	.676	.662	.860	.250	PT026C08K04S	PT026C08K04T
28	.728	.714	.905	.250	PT028C08K04S	PT028C08K04T
29	.754	.740	.926	.250	PT029C08K04S	PT029C08K04T
30	.780	.766	.952	.250	PT030C08K04S	PT030C08K04T
32	.832	.818	1.005	.250	PT032C08K04S	PT032C08K04T
34	.884	.870	1.025	.250	PT034C08K04S	PT034C08K04T
36	.936	.922	1.107	.250	PT036C08K04S	PT036C08K04T
38	.988	.974	1.159	.250	PT038C08K04S	PT038C08K04T
40	1.040	1.026	1.212	.250	PT040C08K04S	PT040C08K04T
42	1.092	1.078	1.266	.250	PT042C08K04S	PT042C08K04T
44	1.144	1.130	1.315	.250	PT044C08K04S	PT044C08K04T
46	1.196	1.182	1.370	.250	PT046C08K04S	PT046C08K04T
48	1.248	1.234	1.442	.250	PT048C08K04S	PT048C08K04T
50	1.300	1.286	1.471	.250	PT050C08K04S	PT050C08K04T
51	1.326	1.312	1.497	.250	PT051C08K04S	PT051C08K04T
54	1.404	1.390	1.575	.250	PT054C08K04S	PT054C08K04T
60	1.560	1.546	1.723	.250	PT060C08K04S	PT060C08K04T
64	1.664	1.650	1.824	.250	PT064C08K04S	PT064C08K04T
70	1.820	1.806	1.991	.250	PT070C08K04S	PT070C08K04T
72	1.872	1.858	2.035	.313	PT072C10K04S	PT072C10K04T
75	1.950	1.936	2.121	.313	PT075C10K04S	PT075C10K04T
80	2.080	2.066	2.251	.313	PT080C10K04S	PT080C10K04T
84	2.184	2.170	2.355	.313	PT084C10K04S	PT084C10K04T
90	2.340	2.326	2.511	.313	PT090C10K04S	PT090C10K04T
98	2.548	2.534	2.719	.313	PT098C10K04S	PT098C10K04T
100	2.600	2.586	2.771	.313	PT100C10K04S	PT100C10K04T
102	2.652	2.638	2.823	.313	PT102C10K04S	PT102C10K04T
110	2.860	2.846	3.031	.313	PT110C10K04S	PT110C10K04T
120	3.120	3.106	3.365	.313	PT120C10K04S	PT120C10K04T

# E\*P\*S TIMING PULLEYS

40 D.P. (.0816 Pitch), 1/8" and 3/16" Belt Width, Double Flange

## Machined Aluminum



Material: Aluminum Alloy, Anodized.

Bore	Set Screw	Quantity
.125	#4-40	1
.188	#6-40	2*
.250	#6-40	2

\* 15 & 16 grooves, one set screw.

No. of Grooves	Type	Pitch Diameter	Outside Diameter -.003	Flange Diameter ±.016	Overall Length ±.016	Hub Diameter ±.016	Bore +.001 -.000	Part Number
10	R	.260	.246	.425	.500	.425	.125	PT010C04L02R
11	R	.286	.272	.450	.500	.450	.125	PT011C04L02R
12	R	.312	.298	.480	.500	.480	.125	PT012C04L02R
14	R	.364	.350	.530	.500	.530	.125	PT014C04L02R
15	R	.390	.376	.555	.500	.555	.188	PT015C06L02R
16	R	.416	.402	.580	.500	.580	.188	PT016C06L02R
18	T*	.468	.454	.635	.563	.312	.188	PT018C06L02T
20	T*	.520	.506	.685	.563	.364	.188	PT020C06L02T
21	T*	.546	.532	.710	.563	.390	.188	PT021C06L02T
22	T*	.572	.558	.740	.563	.390	.188	PT022C06L02T
24	T	.624	.610	.790	.625	.442	.250	PT024C08L02T
28	T	.728	.714	.895	.625	.494	.250	PT028C08L02T
30	T	.780	.766	.945	.625	.546	.250	PT030C08L02T
32	T	.832	.818	1.000	.625	.598	.250	PT032C08L02T
36	T	.936	.922	1.105	.625	.676	.250	PT036C08L02T
40	T	1.040	1.026	1.210	.656	.754	.250	PT040C08L02T
42	T	1.092	1.078	1.260	.656	.806	.250	PT042C08L02T
44	T	1.144	1.130	1.315	.656	.858	.250	PT044C08L02T
48	T	1.248	1.234	1.420	.656	.936	.250	PT048C08L02T
60	T	1.560	1.546	1.730	.656	1.222	.250	PT060C08L02T

Specials: Materials, bores, hub styles, integral bushings or bearings, widths, finishes, sizes, etc., consult factory.

\* Type "R" hub style available, consult factory.

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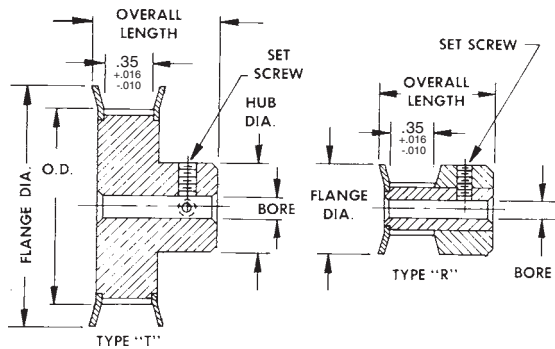
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# E\*P\*S TIMING PULLEYS

40 D.P. (.0816 Pitch), 1/4" and 5/16" Belt Width, Double Flange

## Machined Aluminum



Material: Aluminum Alloy, Anodized.

Bore	Set Screw	Quantity
.125	#4-40	1
.188 (15-16G)	#6-40	1
.188	#6-40	2
.250 (24-28G)	#6-40	2
.250	#8-32	2
.312	#8-32	2
.375	#10-32	2

No. of Grooves	Type	Pitch Diameter	Outside Diameter -.003	Flange Diameter ±.016	Overall Length ±.016	Hub Diameter ±.016	Bore +.001 -.000	Part Number
10	R	.260	.246	.425	.625	.425	.125	PT010C04L04R
11	R	.286	.272	.450	.625	.450	.125	PT011C04L04R
12	R	.312	.298	.480	.625	.480	.125	PT012C04L04R
14	R	.364	.350	.530	.625	.530	.125	PT014C04L04R
15	R	.390	.376	.555	.625	.555	.188	PT015C06L04R
16	R	.416	.402	.580	.625	.580	.188	PT016C06L04R
18	T*	.468	.454	.635	.688	.312	.188	PT018C06L04T
20	T*	.520	.506	.685	.688	.364	.188	PT020C06L04T
21	T*	.546	.532	.710	.688	.390	.188	PT021C06L04T
22	T*	.572	.558	.740	.688	.390	.188	PT022C06L04T
24	T	.624	.610	.790	.750	.442	.250	PT024C08L04T
28	T	.728	.714	.895	.750	.494	.250	PT028C08L04T
30	T	.780	.766	.945	.750	.546	.250	PT030C08L04T
32	T	.832	.818	1.000	.750	.598	.250	PT032C08L04T
36	T	.936	.922	1.105	.750	.676	.250	PT036C08L04T
40	T	1.040	1.026	1.210	.781	.754	.250	PT040C08L04T
42	T	1.092	1.078	1.260	.781	.806	.250	PT042C08L04T
44	T	1.144	1.130	1.315	.781	.858	.250	PT044C08L04T
48	T	1.248	1.234	1.420	.781	.936	.250	PT048C08L04T
60	T	1.560	1.546	1.730	.781	1.222	.250	PT060C08L04T
60	N	1.560	1.546	—	.875	1.184	.250	PT060C08L04N
72	N	1.872	1.858	—	.875	1.195	.250	PT072C08L04N
80	N	2.080	2.066	—	.875	1.500	.250	PT080C08L04N
90	N	2.340	2.326	—	.875	1.500	.250	PT090C08L04N
100	N	2.600	2.586	—	.875	1.500	.312	PT100C10L04N
120	N	3.120	3.106	—	.875	1.500	.375	PT120C12L04N

Special: Materials, bores, hub styles, integral bushings or bearings, widths, finishes, sizes, etc., consult factory.

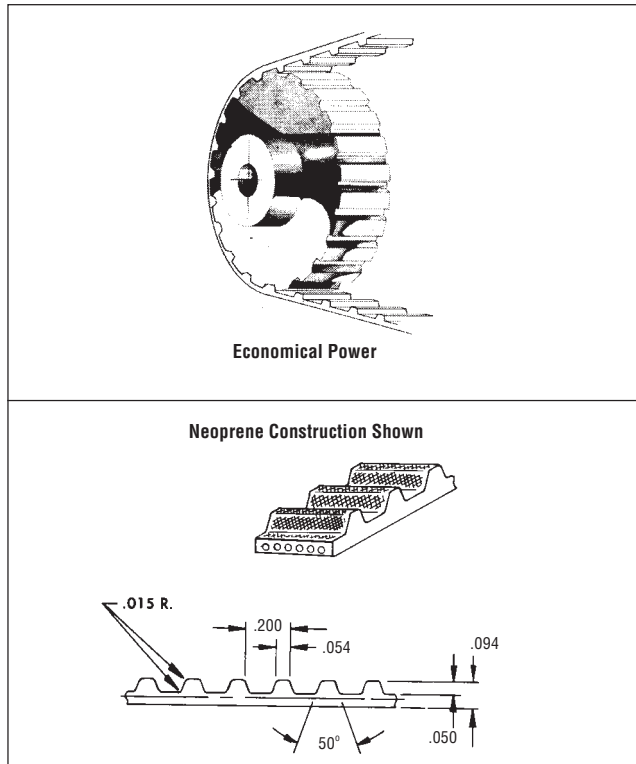
\*Type "R" hub style available. Consult factory. Type "N", no flange.

Note: Pulleys over 60 grooves are without flanges.

# E\*P\*S TIMING BELTS

1/5" (.200) Pitch, 1/4", 3/8" Wide For Economy ■ Power ■ Speed

XL



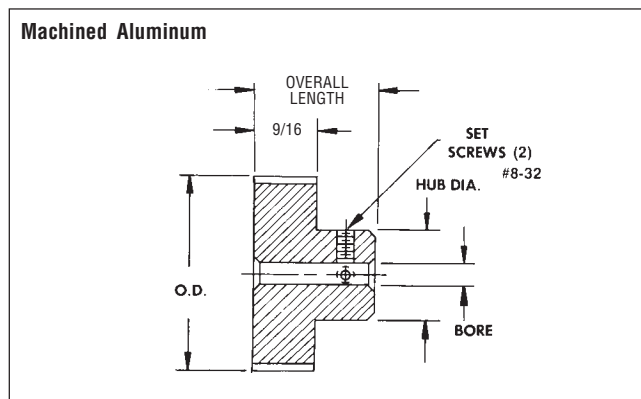
Pitch Length	No. of Grooves	Neoprene Belts		Urethane Belts*	
		1/4" Wide Belts Part No.	3/8" Wide Belts Part No.	1/4" Wide Belts Part No.	3/8" Wide Belts Part No.
5.00	25	EPS0025D250N	EPS0025D375N	—	—
6.00	30	EPS0030D250N	EPS0030D375N	EPS0030D250U	EPS0030D375U
7.00	35	EPS0035D250N	EPS0035D375N	EPS0035D250U	EPS0035D375U
8.00	40	EPS0040D250N	EPS0040D375N	EPS0040D250U	EPS0040D375U
9.00	45	EPS0045D250N	EPS0045D375N	EPS0045D250U	EPS0045D375U
10.00	50	EPS0050D250N	EPS0050D375N	EPS0050D250U	EPS0050D375U
11.00	55	EPS0055D250N	EPS0055D375N	EPS0055D250U	EPS0055D375U
12.00	60	EPS0060D250N	EPS0060D375N	EPS0060D250U	EPS0060D375U
13.00	65	EPS0065D250N	EPS0065D375N	EPS0065D250U	EPS0065D375U
14.00	70	EPS0070D250N	EPS0070D375N	EPS0070D250U	EPS0070D375U
15.00	75	EPS0075D250N	EPS0075D375N	EPS0075D250U	EPS0075D375U
16.00	80	EPS0080D250N	EPS0080D375N	EPS0080D250U	EPS0080D375U
17.00	85	EPS0085D250N	EPS0085D375N	EPS0085D250U	EPS0085D375U
18.00	90	EPS0090D250N	EPS0090D375N	EPS0090D250U	EPS0090D375U
19.00	95	EPS0095D250N	EPS0095D375N	EPS0095D250U	EPS0095D375U
20.00	100	EPS0100D250N	EPS0100D375N	EPS0100D250U	EPS0100D375U
21.00	105	EPS0105D250N	EPS0105D375N	EPS0105D250U	EPS0105D375U
22.00	110	EPS0110D250N	EPS0110D375N	EPS0110D250U	EPS0110D375U
23.00	115	EPS0115D250N	EPS0115D375N	EPS0115D250U	EPS0115D375U
24.00	120	EPS0120D250N	EPS0120D375N	EPS0120D250U	EPS0120D375U
25.00	125	EPS0125D250N	EPS0125D375N	EPS0125D250U	EPS0125D375U
26.00	130	EPS0130D250N	EPS0130D375N	EPS0130D250U	EPS0130D375U
28.00	140	EPS0140D250N	EPS0140D375N	—	—
29.00	145	EPS0145D250N	EPS0145D375N	EPS0145D250U	EPS0145D375U
30.00	150	EPS0150D250N	EPS0150D375N	—	—
31.00	155	EPS0155D250N	EPS0155D375N	—	—
33.00	165	EPS0165D250N	EPS0165D375N	—	—

\*For Urethane belts with Kevlar tensile member, add "K" to end of part number.

# E\*P\*S TIMING PULLEYS

1/5" (.200) Pitch, 3/8" Belt Width, No Flange

XL



Material: Aluminum Alloy, Anodized

No. of Grooves	Pitch Diameter	Outside Diameter	Overall Length ±.016	Hub Diameter ±.016	Standard Bore +.001 - .000	Standard Bore Part Number
10	.637	.617	.813	.438	.188	PT010D06L06N
11	.700	.680	.813	.500	.188	PT011D06L06N
12	.764	.744	.813	.563	.188	PT012D06L06N
14	.891	.871	.813	.625	.250	PT014D08L06N
15	.955	.935	.875	.688	.250	PT015D08L06N
16	1.019	.999	.875	.750	.250	PT016D08L06N
17	1.082	1.062	.875	.813	.250	PT017D08L06N
18	1.146	1.126	.875	.875	.250	PT018D08L06N
19	1.210	1.190	.875	.875	.250	PT019D08L06N
20	1.273	1.253	.938	.938	.250	PT020D08L06N
21	1.337	1.317	.938	1.000	.250	PT021D08L06N
22	1.401	1.381	.938	1.063	.250	PT022D08L06N
23	1.464	1.444	.938	1.125	.250	PT023D08L06N
24	1.528	1.508	.938	1.188	.250	PT024D08L06N
25	1.592	1.572	.938	1.250	.250	PT025D08L06N
27	1.719	1.699	.938	1.250	.313	PT027D10L06N
28	1.783	1.763	.938	1.250	.250	PT028D08L06N
29	1.846	1.826	.938	1.313	.313	PT029D10L06N
30	1.910	1.890	.938	1.375	.250	PT030D08L06N
32	2.037	2.017	1.000	1.500	.313	PT032D10L06N
36	2.292	2.272	1.000	1.500	.313	PT036D10L06N

Specials: Materials, bores, hub styles, integral bushings or bearings, widths, finishes, sizes, etc., consult factory.

Bore	Set Screw	Quantity
.188	#6-40	1
.250	#8-32	2
.313	#8-32	2

O.D. Tolerance	
O.D.	Tol
Thru 1.000	+.002
1.001-2.000	+.003
2.001-4.000	+.004

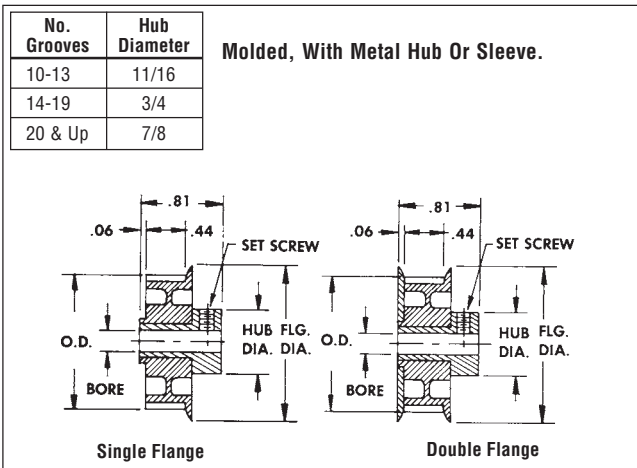
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# E\*P\*S TIMING PULLEYS

XL

1/5" (.200) Pitch, 3/8" Belt Width, Single & Double Flange



Material: Glass Filled Polycarbonate.

Bore	Set Screw
.187	#6-32
.250	#8-32
.313	#10-32

O.D. Tolerance	
No. Grooves	+ Tol
10 - 28	+ .003 - .001
29 - 58	+ .004 - .001
60 - 72	+ .005 - .001

Specials: Materials, bores, hub styles, integral bushings or bearings, widths, finishes, sizes, etc., consult factory.

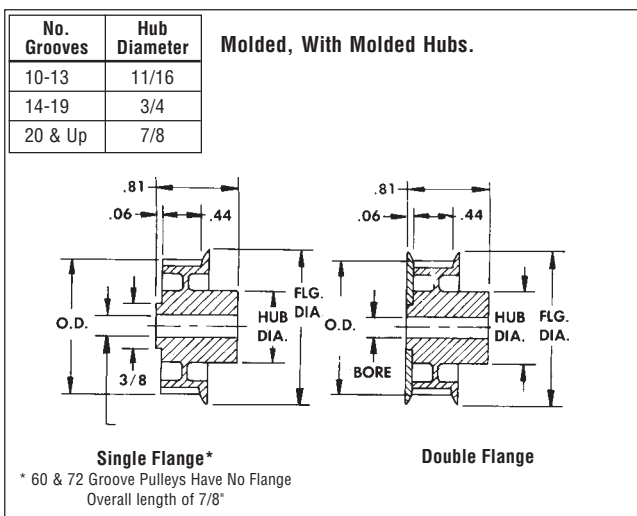
Pulley Data					Single Flange	Double Flange
No. of Grooves	Pitch Dia.	Outside Dia.	Flange Dia. ±.030	Bore +.0015 -.0000	Part Number	Part Number
10	.637	.617	.87	.187	PT010D06K06S	PT010D06K06T
11	.700	.680	.93	.187	PT011D06K06S	PT011D06K06T
12	.764	.744	.99	.187	PT012D06K06S	PT012D06K06T
13	.828	.808	1.06	.187	PT013D06K06S	PT013D06K06T
14	.891	.871	1.12	.250	PT014D08K06S	PT014D08K06T
15	.955	.935	1.19	.250	PT015D08K06S	PT015D08K06T
16	1.019	.999	1.24	.250	PT016D08K06S	PT016D08K06T
17	1.082	1.062	1.31	.250	PT017D08K06S	PT017D08K06T
18	1.146	1.126	1.39	.250	PT018D08K06S	PT018D08K06T
19	1.210	1.190	1.44	.250	PT019D08K06S	PT019D08K06T
20	1.273	1.253	1.51	.250	PT020D08K06S	PT020D08K06T
21	1.337	1.317	1.57	.250	PT021D08K06S	PT021D08K06T
22	1.401	1.381	1.63	.250	PT022D08K06S	PT022D08K06T
23	1.464	1.444	1.69	.250	PT023D08K06S	PT023D08K06T
24	1.528	1.508	1.76	.250	PT024D08K06S	PT024D08K06T
25	1.592	1.572	1.82	.250	PT025D08K06S	PT025D08K06T
26	1.655	1.635	1.89	.250	PT026D08K06S	PT026D08K06T
27	1.719	1.699	1.95	.250	PT027D08K06S	PT027D08K06T
28	1.783	1.763	2.02	.250	PT028D08K06S	PT028D08K06T
29	1.846	1.826	2.08	.250	PT029D08K06S	PT029D08K06T
30	1.910	1.890	2.14	.313	PT030D10K06S	PT030D10K06T
31*	1.974	1.954	2.20	.313	PT031D10K06S	PT031D10K06T
32*	2.037	2.017	2.27	.313	PT032D10K06S	PT032D10K06T
33*	2.165	2.145	2.40	.313	PT034D10K06S	PT034D10K06T
34*	2.228	2.208	2.46	.313	PT035D10K06S	PT035D10K06T
36*	2.292	2.272	2.53	.313	PT036D10K06S	PT036D10K06T
37*	2.355	2.335	2.59	.313	PT037D10K06S	PT037D10K06T
39*	2.482	2.462	2.71	.313	PT039D10K06S	PT039D10K06T
40*	2.546	2.526	2.78	.313	PT040D10K06S	PT040D10K06T
42*	2.674	2.654	2.92	.313	PT042D10K06S	PT042D10K06T
44*	2.801	2.781	3.04	.313	PT044D10K06S	PT044D10K06T
48*	3.056	3.036	3.29	.313	PT048D10K06S	PT048D10K06T

\* Overall length 7/8"

# E\*P\*S TIMING PULLEYS

XL

1/5" (.200) Pitch, 3/8" Belt Width, Single & Double Flange



Material: Glass Filled Polycarbonate.

O.D. Tolerance	
No. Grooves	+ Tol
10 - 28	+ .003
29 - 58	+ .004
60 - 72	+ .005

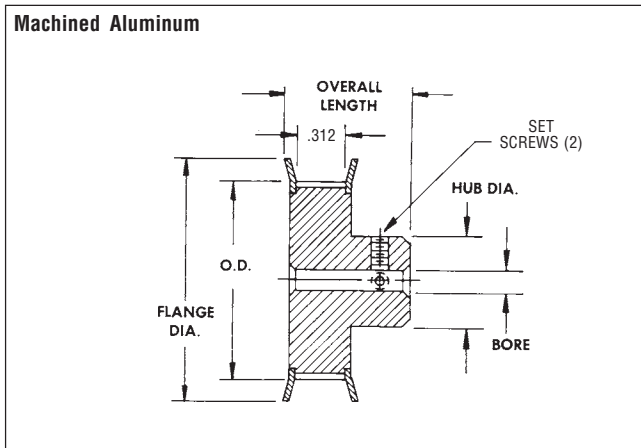
Specials: Materials, bores, hub styles, integral bushings or bearings, widths, finishes, sizes, etc., consult factory.

Pulley Data					Single Flange	Double Flange
No. of Grooves	Pitch Dia.	Outside Dia.	Flange Dia. ±.030	Bore +.002 -.000	Part Number	Part Number
10	.637	.617	.87	.187	PT010D06J06S	PT010D06J06T
11	.700	.680	.93	.187	PT011D06J06S	PT011D06J06T
12	.764	.744	.99	.187	PT012D06J06S	PT012D06J06T
13	.828	.808	1.06	.187	PT013D06J06S	PT013D06J06T
14	.891	.871	1.12	.250	PT014D08J06S	PT014D08J06T
15	.955	.935	1.19	.250	PT015D08J06S	PT015D08J06T
16	1.019	.999	1.24	.250	PT016D08J06S	PT016D08J06T
17	1.082	1.062	1.31	.250	PT017D08J06S	PT017D08J06T
18	1.146	1.126	1.39	.250	PT018D08J06S	PT018D08J06T
19	1.210	1.190	1.44	.250	PT019D08J06S	PT019D08J06T
20	1.273	1.253	1.51	.250	PT020D08J06S	PT020D08J06T
21	1.337	1.317	1.57	.250	PT021D08J06S	PT021D08J06T
22	1.401	1.381	1.63	.250	PT022D08J06S	PT022D08J06T
23	1.464	1.444	1.69	.250	PT023D08J06S	PT023D08J06T
24	1.528	1.508	1.76	.250	PT024D08J06S	PT024D08J06T
25	1.592	1.572	1.82	.250	PT025D08J06S	PT025D08J06T
26	1.655	1.635	1.89	.250	PT026D08J06S	PT026D08J06T
27	1.719	1.699	1.95	.250	PT027D08J06S	PT027D08J06T
28	1.783	1.763	2.02	.250	PT028D08J06S	PT028D08J06T
29	1.846	1.826	2.08	.250	PT029D08J06S	PT029D08J06T
30	1.910	1.890	2.14	.313	PT030D10J06S	PT030D10J06T
31	1.974	1.954	2.20	.313	PT031D10J06S	PT031D10J06T
32	2.037	2.017	2.27	.313	PT032D10J06S	PT032D10J06T
34	2.165	2.145	2.40	.313	PT034D10J06S	PT034D10J06T
35	2.228	2.208	2.46	.313	PT035D10J06S	PT035D10J06T
36	2.292	2.272	2.53	.313	PT036D10J06S	PT036D10J06T
37	2.355	2.335	2.59	.313	PT037D10J06S	PT037D10J06T
39	2.482	2.462	2.71	.313	PT039D10J06S	PT039D10J06T
40	2.546	2.526	2.78	.313	PT040D10J06S	PT040D10J06T
42	2.674	2.654	2.92	.313	PT042D10J06S	PT042D10J06T
44	2.801	2.781	3.04	.313	PT044D10J06S	PT044D10J06T
48	3.056	3.036	3.29	.313	PT048D10J06S	PT048D10J06T
58	3.692	3.672	3.92	.375	PT058D12J06S	—
60*	3.820	3.800	4.05	.375	PT060D12J06N	—
72*	4.584	4.564	4.81	.375	PT072D12J06N	—

# E\*P\*S TIMING PULLEYS

1/5" (.200) Pitch, 1/4" Belt Width, Double Flange

XL



No. of Grooves	Pitch Diameter	Outside Diameter	Flange Diameter ±.016	Overall Length ±.016	Hub Diameter ±.016	Standard Bore +.001 - .000	Bore Part Number
10	.637	.617	.875	.688	.375	.188	PT010D06L04T
11	.700	.680	.938	.688	.438	.188	PT011D06L04T
12	.764	.744	1.000	.688	.500	.188	PT012D06L04T
13	.828	.808	1.063	.688	.563	.250	PT013D08L04T
14	.891	.871	1.095	.688	.563	.250	PT014D08L04T
15	.955	.935	1.188	.688	.625	.250	PT015D08L04T
16	1.019	.999	1.250	.688	.688	.250	PT016D08L04T
18	1.146	1.126	1.375	.688	.813	.250	PT018D08L04T
20	1.273	1.253	1.500	.750	.938	.250	PT020D08L04T
21	1.337	1.317	1.563	.750	1.000	.250	PT021D08L04T
22	1.401	1.381	1.625	.750	1.000	.250	PT022D08L04T
24	1.528	1.508	1.750	.781	1.063	.250	PT024D08L04T
26	1.655	1.635	1.875	.781	1.188	.250	PT026D08L04T
28	1.783	1.763	2.000	.781	1.188	.250	PT028D08L04T
30	1.910	1.890	2.125	.781	1.313	.250	PT030D08L04T

Material: Aluminum Alloy, Anodized.

Specials: Materials, bores, hub styles, integral bushings or bearings, widths, finishes, sizes, etc., consult factory.

Bore	Set Screw	Quantity
.188	#6-40	2
.250	#8-32	2

O.D. Tolerance	
O.D.	Tol
Thru 1.000	+.002
1.001-2.000	+.003
2.001-4.000	+.004

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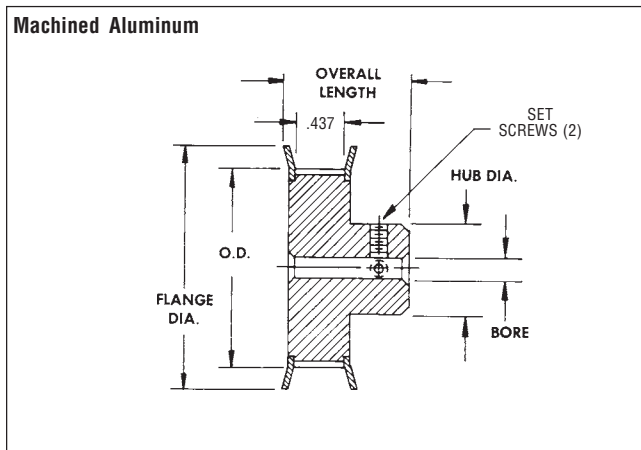


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# E\*P\*S TIMING PULLEYS

1/5" (.200) Pitch, 3/8" Belt Width, Double Flange

XL



No. of Grooves	Pitch Diameter	Outside Diameter	Flange Diameter ±.016	Overall Length ±.016	Hub Diameter ±.016	Standard Bore +.001 - .000	Bore Part Number
10	.637	.617	.875	.813	.438	.188	PT010D06L06T
11	.700	.680	.938	.813	.500	.188	PT011D06L06T
12	.764	.744	1.000	.813	.500	.188	PT012D06L06T
13	.828	.808	1.063	.813	.563	.250	PT013D08L06T
14	.891	.871	1.095	.813	.563	.250	PT014D08L06T
15	.955	.935	1.188	.813	.625	.250	PT015D08L06T
16	1.019	.999	1.250	.813	.688	.250	PT016D08L06T
17	1.082	1.062	1.313	.813	.750	.250	PT017D08L06T
18	1.146	1.126	1.375	.813	.813	.250	PT018D08L06T
19	1.210	1.190	1.438	.813	.875	.250	PT019D08L06T
20	1.273	1.253	1.500	.875	.938	.250	PT020D08L06T
21	1.337	1.317	1.563	.875	1.000	.250	PT021D08L06T
22	1.401	1.381	1.625	.875	1.000	.250	PT022D08L06T
23	1.464	1.444	1.688	.875	1.063	.250	PT023D08L06T
24	1.528	1.508	1.750	.906	1.063	.250	PT024D08L06T
25	1.592	1.572	1.813	.906	1.095	.250	PT025D08L06T
26	1.655	1.635	1.875	.906	1.188	.250	PT026D08L06T
28	1.783	1.763	2.000	.906	1.188	.250	PT028D08L06T
30	1.910	1.890	2.125	.906	1.313	.250	PT030D08L06T
32	2.037	2.017	2.250	.906	1.438	.313	PT032D10L06T

Material: Aluminum Alloy, Anodized.

Specials: Materials, bores, hub styles, integral bushings or bearings, widths, finishes, sizes, etc., consult factory.

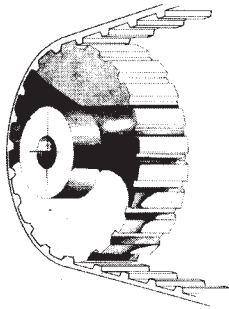
Bore	Set Screw	Quantity
.188	#6-40	2
.250	#8-32	2
.313	#8-32	2

O.D. Tolerance	
O.D.	Tol
Thru 1.000	+.002
1.001-2.000	+.003
2.001-4.000	+.004



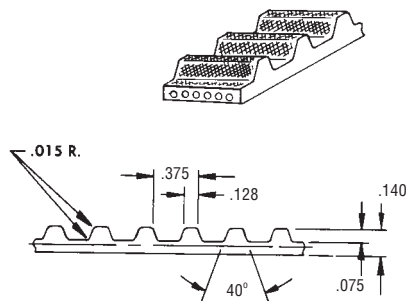
# E\*P\*S TIMING BELTS

3/8" Pitch, 1/2" Wide For Economy ■ Power ■ Speed



Economical Power

Neoprene Construction Shown



Pitch Length	Number of Teeth	1/2" Wide Part Number
12.375	33	EPS0033J500N
13.500	36	EPS0036J500N
15.000	40	EPS0040J500N
16.500	44	EPS0044J500N
18.750	50	EPS0050J500N
19.500	52	EPS0052J500N
21.000	56	EPS0056J500N
22.500	60	EPS0060J500N
24.000	64	EPS0064J500N
25.500	68	EPS0068J500N
27.000	72	EPS0072J500N
28.500	76	EPS0076J500N
30.000	80	EPS0080J500N
31.500	84	EPS0084J500N
32.250	86	EPS0086J500N
34.500	92	EPS0092J500N
36.700	98	EPS0098J500N
39.000	104	EPS0104J500N
42.000	112	EPS0112J500N
45.000	120	EPS0120J500N

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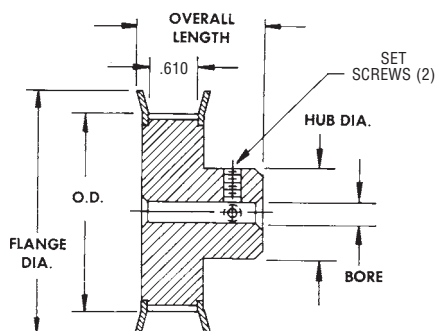
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# E\*P\*S TIMING PULLEYS

3/8" Pitch, 1/2" Belt Width, Double Flange

Machined Aluminum



**Material:** 10-24 Grooves — Aluminum Alloy, Anodized.  
26-32 Grooves — Cast Iron. No hole for set screw on Cast Iron Pulleys.

No. of Grooves	Pitch Diameter	Outside Diameter	Flange Diameter ±.016	Overall Length ±.016	Hub Diameter ±.016	Standard Bore +.001 -.000	Standard Bore Part Number
10	1.194	1.164	1.438	1.125	.813	.375	PT010J12L08T
11	1.313	1.283	1.531	1.125	.938	.375	PT011J12L08T
12	1.432	1.402	1.656	1.250	1.063	.375	PT012J12L08T
13	1.552	1.522	1.781	1.250	1.094	.375	PT013J12L08T
14	1.671	1.641	1.906	1.250	1.125	.375	PT014J12L08T
15	1.790	1.760	2.031	1.250	1.250	.375	PT015J12L08T
16	1.910	1.880	2.125	1.375	1.438	.500	PT016J16L08T
17	2.029	1.999	2.250	1.375	1.500	.500	PT017J16L08T
18	2.149	2.119	2.375	1.375	1.563	.500	PT018J16L08T
19	2.268	2.238	2.500	1.375	1.625	.500	PT019J16L08T
20	2.387	2.357	2.625	1.375	1.688	.500	PT020J16L08T
21	2.507	2.477	2.750	1.438	1.875	.500	PT021J16L08T
22	2.626	2.596	2.875	1.500	2.000	.500	PT022J16L08T
24	2.865	2.835	3.094	1.500	2.250	.500	PT024J16L08T
26	3.104	3.074	3.375	1.500	2.250	.500	PT026J16L08T
28	3.342	3.312	3.625	1.500	2.250	.500	PT028J16L08T
30	3.581	3.551	3.813	1.500	2.250	.500	PT030J16L08T
32	3.820	3.790	4.063	1.625	2.563	.500	PT032J16L08T

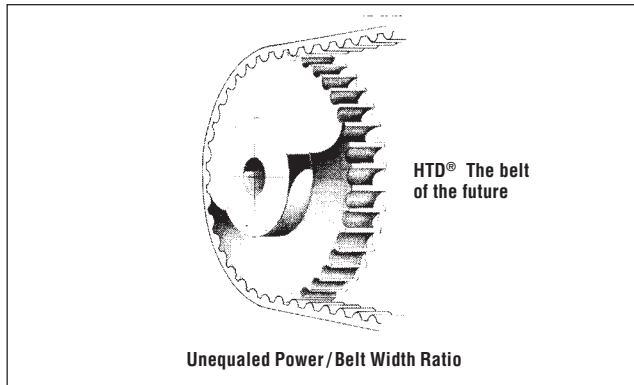
\*Alternate Bores Available, Consult Factory.

Special: Materials, bores, hub styles, integral bushings or bearings, widths, finishes, sizes, etc., consult factory.

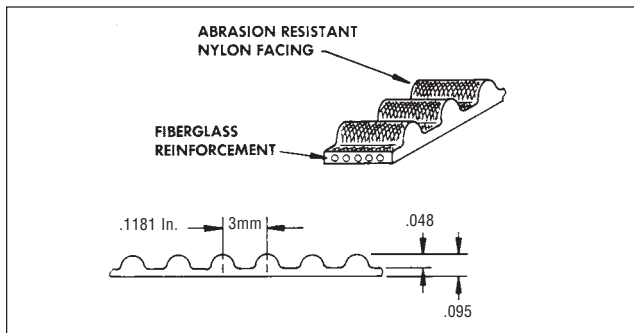
Bore	Set Screw	O.D. Tolerance	
		O.D.	Tol
3/8	#10-32	1.001-2.000	+.003
1/2	#1/4-20	2.001-4.000	+.004

# E\*P\*S HTD® TIMING BELTS

3mm HTD® Pitch, 6mm & 9mm Wide For Economy ▪ Power ▪ Speed



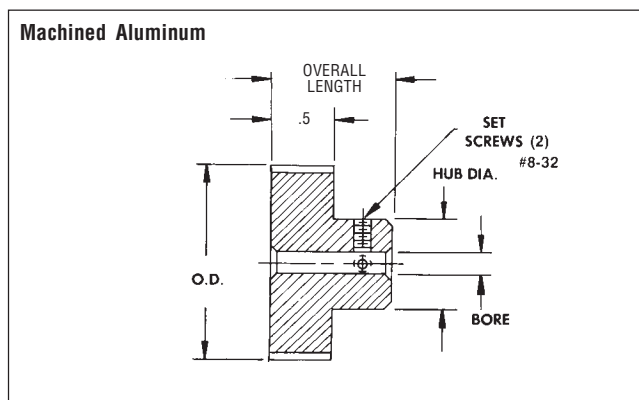
**Material:** Neoprene with nylon wear surface & helically-wound fiberglass reinforcing



Pitch Length		Number of Grooves	6mm Wide Belts Part Number	9mm Wide Belts Part Number
Inch	mm			
5.91	150	50	EPS0050F06mN	EPS0050F09mN
6.26	159	53	EPS0053F06mN	EPS0053F09mN
6.61	168	56	EPS0056F06mN	EPS0056F09mN
6.97	177	59	EPS0059F06mN	EPS0059F09mN
7.91	201	67	EPS0067F06mN	EPS0067F09mN
8.39	213	71	EPS0071F06mN	EPS0071F09mN
8.86	225	75	EPS0075F06mN	EPS0075F09mN
9.92	252	84	EPS0084F06mN	EPS0084F09mN
10.04	255	85	EPS0085F06mN	EPS0085F09mN
10.51	267	89	EPS0089F06mN	EPS0089F09mN
11.22	285	95	EPS0095F06mN	EPS0095F09mN
11.81	300	100	EPS0100F06mN	EPS0100F09mN
12.28	312	104	EPS0104F06mN	EPS0104F09mN
12.52	318	106	EPS0106F06mN	EPS0106F09mN
13.35	339	113	EPS0113F06mN	EPS0113F09mN
14.29	363	121	EPS0121F06mN	EPS0121F09mN
15.12	384	128	EPS0128F06mN	EPS0128F09mN
15.35	390	130	EPS0130F06mN	EPS0130F09mN
16.54	420	140	EPS0140F06mN	EPS0140F09mN
17.60	447	149	EPS0149F06mN	EPS0149F09mN
18.66	474	158	EPS0158F06mN	EPS0158F09mN
19.13	486	162	EPS0162F06mN	EPS0162F09mN
19.72	501	167	EPS0167F06mN	EPS0167F09mN
20.20	513	171	EPS0171F06mN	EPS0171F09mN
20.91	531	177	EPS0177F06mN	EPS0177F09mN
22.20	564	188	EPS0188F06mN	EPS0188F09mN
23.50	597	199	EPS0199F06mN	EPS0199F09mN
24.92	633	211	EPS0211F06mN	EPS0211F09mN
26.34	669	223	EPS0223F06mN	EPS0223F09mN

# E\*P\*S HTD® TIMING PULLEYS

3mm HTD® Pitch, 9mm Belt Width, No Flanges



**Material:** Aluminum Alloy, Anodized

O.D. Tolerance	
O.D.	Tol
Thru 1.000	+ .002
1.001-2.000	+ .003
2.001-4.000	+ .004

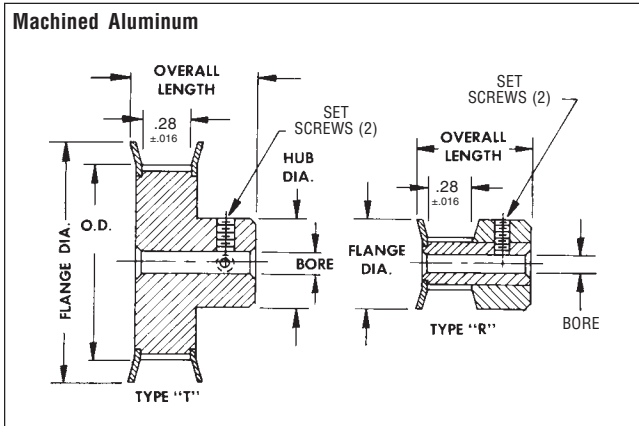
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No. of Grooves	Pitch Diameter	Outside Diameter	Overall Length ±.016	Hub Diameter ±.016	Standard Bore +.001 - .000	Part Number
18	.677	.647	.812	.442	.250	PT018F08L09N
19	.714	.684	.812	.468	.250	PT019F08L09N
20	.752	.722	.812	.500	.250	PT020F08L09N
22	.827	.797	.812	.562	.250	PT022F08L09N
24	.902	.872	.812	.625	.250	PT024F08L09N
25	.940	.910	.812	.625	.250	PT025F08L09N
26	.977	.947	.812	.625	.250	PT026F08L09N
28	1.053	1.023	.812	.701	.250	PT028F08L09N
30	1.128	1.098	.812	.776	.250	PT030F08L09N
32	1.203	1.173	.812	.851	.250	PT032F08L09N
34	1.278	1.248	.834	.921	.250	PT034F08L09N
36	1.353	1.323	.834	1.000	.250	PT036F08L09N
38	1.429	1.399	.834	1.075	.250	PT038F08L09N
40	1.504	1.474	.834	1.150	.250	PT040F08L09N
44	1.654	1.624	.834	1.300	.250	PT044F08L09N
48	1.805	1.775	.875	1.250	.313	PT048F10L09N
50	1.880	1.850	.875	1.250	.313	PT050F10L09N
56	2.105	2.075	.875	1.250	.313	PT056F10L09N
60	2.256	2.226	.875	1.250	.313	PT060F10L09N
62	2.331	2.301	.875	1.250	.313	PT062F10L09N
72	2.707	2.677	.875	1.250	.313	PT072F10L09N

Special: Materials, bores, hub styles, integral bushings or bearings, widths, finishes, sizes, etc., consult factory.

# E\*P\*S HTD® TIMING PULLEYS

3mm HTD® Pitch, 6mm Belt Width, Double Flange



Material: Aluminum Alloy, Anodized.

Bore	Set Screw	Quantity
.125	#4-40	1
.188	#6-40*	2*
.250	#8-32	2

O.D. Tolerance	
O.D.	Tol
Thru 1.000	+0.002
1.001-2.000	+0.003
2.001-4.000	+0.004

\* 12 groove, #4-40 (1)

No. of Grooves	Type	Pitch Diameter	Outside Diameter	Flange Diameter ±.016	Overall Length ±.016	Hub Diameter ±.016	Bore +.001 -.000	Part Number
10	R	.376	.346	.505	.562	.505	.125	PT010F04L06R
11	R	.414	.384	.530	.562	.530	.125	PT011F04L06R
12	R	.451	.421	.580	.562	.580	.188	PT012F06L06R
13	R	.489	.459	.610	.572	.610	.188	PT013F06L06R
14	R	.526	.496	.635	.572	.635	.188	PT014F06L06R
15	R	.564	.534	.685	.572	.685	.188	PT015F06L06R
16	R	.602	.572	.710	.572	.710	.188	PT016F06L06R
17	R	.639	.609	.740	.572	.740	.188	PT017F06L06R
18	T	.677	.647	.790	.691	.442	.250	PT018F08L06T
19	T	.714	.684	.827	.691	.479	.250	PT019F08L06T
20	T	.752	.722	.895	.691	.500	.250	PT020F08L06T
22	T	.827	.797	.945	.691	.562	.250	PT022F08L06T
24	T	.902	.872	1.025	.691	.625	.250	PT024F08L06T
25	T	.940	.910	1.060	.691	.625	.250	PT025F08L06T
26	T	.977	.947	1.105	.691	.625	.250	PT026F08L06T
28	T	1.053	1.023	1.173	.691	.701	.250	PT028F08L06T
30	T	1.128	1.098	1.250	.691	.776	.250	PT030F08L06T
32	T	1.203	1.173	1.323	.691	.851	.250	PT032F08L06T
34	T	1.278	1.248	1.398	.713	.921	.250	PT034F08L06T
36	T	1.353	1.323	1.473	.713	1.000	.250	PT036F08L06T
38	T	1.429	1.399	1.549	.713	1.075	.250	PT038F08L06T
40	T	1.504	1.474	1.625	.713	1.150	.250	PT040F08L06T
44	T	1.654	1.624	1.775	.713	1.300	.250	PT044F08L06T

Specials: Materials, bores, hub styles, integral bushings or bearings, widths, finishes, sizes, etc., consult factory.

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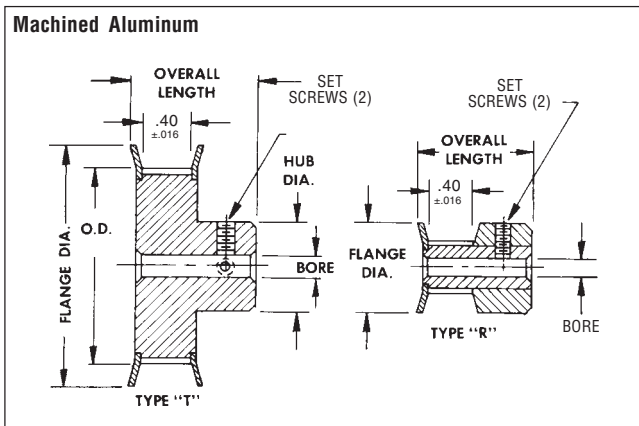
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# E\*P\*S HTD® TIMING PULLEYS

3mm HTD® Pitch, 9mm Belt Width, Double Flange



Material: Aluminum Alloy, Anodized.

Bore	Set Screw	Quantity
.125	#4-40	1
.188	#6-40*	2*
.250	#8-32	2

O.D. Tolerance	
O.D.	Tol
Thru 1.000	+0.002
1.001-2.000	+0.003
2.001-4.000	+0.004

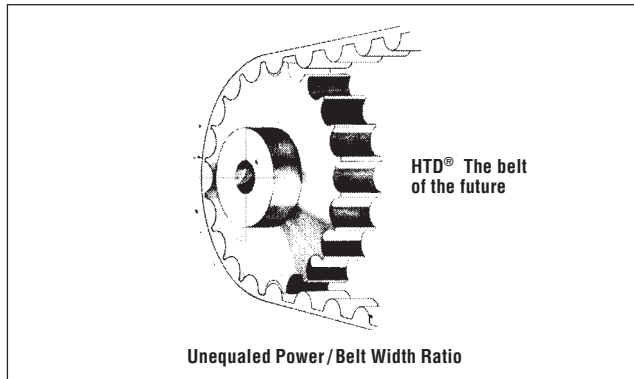
\* 12 groove, #4-40 (1)

No. of Grooves	Type	Pitch Diameter	Outside Diameter	Flange Diameter ±.016	Overall Length ±.016	Hub Diameter ±.016	Bore +.001 -.000	Part Number
10	R	.376	.346	.505	.681	.505	.125	PT010F04L09R
11	R	.414	.384	.530	.681	.530	.125	PT011F04L09R
12	R	.451	.421	.580	.681	.580	.188	PT012F06L09R
13	R	.489	.459	.610	.691	.610	.188	PT013F06L09R
14	R	.526	.496	.635	.691	.635	.188	PT014F06L09R
15	R	.564	.534	.685	.691	.685	.188	PT015F06L09R
16	R	.602	.572	.710	.691	.710	.188	PT016F06L09R
17	R	.639	.609	.740	.691	.740	.188	PT017F06L09R
18	T	.677	.647	.790	.812	.442	.250	PT018F08L09T
19	T	.714	.684	.827	.812	.479	.250	PT019F08L09T
20	T	.752	.722	.895	.812	.500	.250	PT020F08L09T
22	T	.827	.797	.945	.812	.562	.250	PT022F08L09T
24	T	.902	.872	1.025	.812	.625	.250	PT024F08L09T
25	T	.940	.910	1.060	.812	.625	.250	PT025F08L09T
26	T	.977	.947	1.105	.812	.625	.250	PT026F08L09T
28	T	1.053	1.023	1.173	.812	.701	.250	PT028F08L09T
30	T	1.128	1.098	1.250	.812	.776	.250	PT030F08L09T
32	T	1.203	1.173	1.323	.812	.851	.250	PT032F08L09T
34	T	1.278	1.248	1.398	.833	.921	.250	PT034F08L09T
36	T	1.353	1.323	1.473	.833	1.000	.250	PT036F08L09T
38	T	1.429	1.399	1.549	.833	1.075	.250	PT038F08L09T
40	T	1.504	1.474	1.625	.833	1.150	.250	PT040F08L09T
44	T	1.654	1.624	1.775	.833	1.300	.250	PT044F08L09T

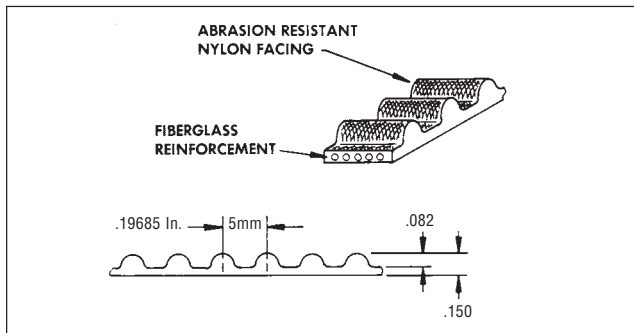
Specials: Materials, bores, hub styles, integral bushings or bearings, widths, finishes, sizes, etc., consult factory.

# E\*P\*S HTD® TIMING BELTS

5mm HTD® Pitch, 9mm & 15mm Wide



**Material:** Neoprene with nylon wear surface & helically-wound fiberglass reinforcing



Pitch Length		Number of Grooves	9mm Wide Belts Part Number	15mm Wide Belts Part Number
Inch	mm			
13.78	350	70	EPS0070G09mN	EPS0070G15mN
14.76	375	75	EPS0075G09mN	EPS0075G15mN
15.75	400	80	EPS0080G09mN	EPS0080G15mN
16.73	425	85	EPS0085G09mN	EPS0085G15mN
17.72	450	90	EPS0090G09mN	EPS0090G15mN
18.70	475	95	EPS0095G09mN	EPS0095G15mN
19.69	500	100	EPS0100G09mN	EPS0100G15mN
21.06	535	107	EPS0107G09mN	EPS0107G15mN
22.24	565	113	EPS0113G09mN	EPS0113G15mN
23.62	600	120	EPS0120G09mN	EPS0120G15mN
25.00	635	127	EPS0127G09mN	EPS0127G15mN
26.38	670	134	EPS0134G09mN	EPS0134G15mN
27.95	710	142	EPS0142G09mN	EPS0142G15mN
29.13	740	148	EPS0148G09mN	EPS0148G15mN
31.50	800	160	EPS0160G09mN	EPS0160G15mN
33.46	850	170	EPS0170G09mN	EPS0170G15mN
35.04	890	178	EPS0178G09mN	EPS0178G15mN
37.40	950	190	EPS0190G09mN	EPS0190G15mN
39.37	1000	200	EPS0200G09mN	EPS0200G15mN

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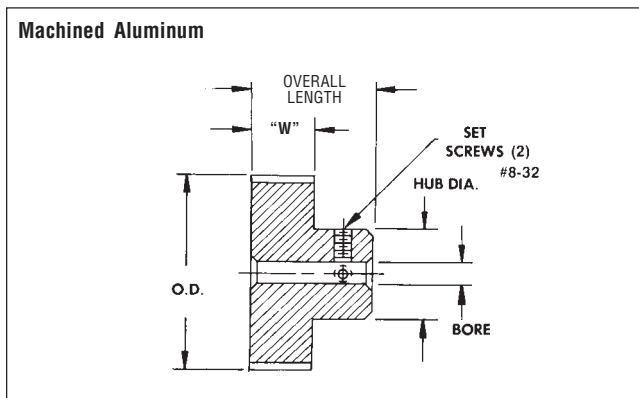
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# E\*P\*S HTD® TIMING PULLEYS

5mm HTD® Pitch, 9mm & 15mm Belt Width, No Flanges



**Material:** Aluminum Alloy, Anodized

Number of Grooves	Overall Length ±.016	
	9mm Width	15mm Width
12-22	.796	1.032
24-34	.859	1.093
36-40	.937	1.187

"W"	Face Width "W"	
	9mm	15mm
"W"	.541	.781

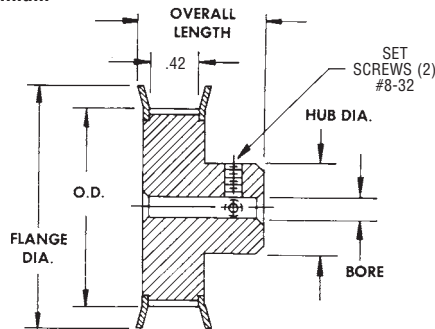
No. of Grooves	Pitch Dia.	Outside Dia.	Hub Dia. ±.016	Bore +.001 -.000	9mm Belt Width Part Number	15mm Belt Width Part Number
12	.752	.707	.437	.250	PT012G08L09N	PT012G08L15N
13	.815	.770	.500	.250	PT013G08L09N	PT013G08L15N
14	.877	.832	.500	.250	PT014G08L09N	PT014G08L15N
15	.940	.895	.562	.250	PT015G08L09N	PT015G08L15N
16	1.003	.958	.562	.250	PT016G08L09N	PT016G08L15N
17	1.065	1.020	.625	.250	PT017G08L09N	PT017G08L15N
18	1.128	1.083	.687	.250	PT018G08L09N	PT018G08L15N
19	1.191	1.146	.750	.250	PT019G08L09N	PT019G08L15N
20	1.253	1.208	.812	.250	PT020G08L09N	PT020G08L15N
22	1.379	1.334	.937	.250	PT022G08L09N	PT022G08L15N
24	1.504	1.459	1.000	.250	PT024G08L09N	PT024G08L15N
25	1.566	1.521	1.000	.250	PT025G08L09N	PT025G08L15N
26	1.629	1.584	1.062	.250	PT026G08L09N	PT026G08L15N
28	1.754	1.709	1.187	.250	PT028G08L09N	PT028G08L15N
30	1.880	1.835	1.187	.250	PT030G08L09N	PT030G08L15N
32	2.005	1.960	1.250	.250	PT032G08L09N	PT032G08L15N
34	2.130	2.085	1.375	.250	PT034G08L09N	PT034G08L15N
36	2.256	2.211	1.500	.313	PT036G10L09N	PT036G10L15N
38	2.381	2.336	1.500	.313	PT038G10L09N	PT038G10L15N
40	2.506	2.461	1.500	.313	PT040G10L09N	PT040G10L15N

Special: Materials, bores, hub styles, integral bushings or bearings, widths, finishes, sizes, etc., consult factory.

# E\*P\*S HTD® TIMING PULLEYS

5mm HTD® Pitch, 9mm Belt Width, Double Flange

## Machined Aluminum



Material: Aluminum Alloy, Anodized.

O.D. Tolerance	
O.D.	Tol
Thru 1.000	+.002
1.001-2.000	+.003
2.001-4.000	+.004

No. of Grooves	Pitch Diameter	Outside Diameter	Flange Diameter ±.016	Overall Length ±.016	Hub Diameter ±.016	Standard Bore +.001 -.000	Standard Bore Part Number
12	.752	.707	.875	.790	.437	.250	PT012G08L09T
13	.815	.770	.939	.790	.500	.250	PT013G08L09T
14	.877	.832	1.000	.790	.500	.250	PT014G08L09T
15	.940	.895	1.063	.790	.562	.250	PT015G08L09T
16	1.003	.958	1.094	.790	.625	.250	PT016G08L09T
17	1.065	1.020	1.188	.790	.625	.250	PT017G08L09T
18	1.128	1.083	1.250	.790	.687	.250	PT018G08L09T
19	1.191	1.146	1.313	.790	.750	.250	PT019G08L09T
20	1.253	1.208	1.375	.790	.812	.250	PT020G08L09T
22	1.379	1.334	1.500	.790	.937	.250	PT022G08L09T
24	1.504	1.459	1.625	.852	1.000	.250	PT024G08L09T
25	1.566	1.521	1.688	.852	1.000	.250	PT025G08L09T
26	1.629	1.584	1.750	.852	1.062	.250	PT026G08L09T
28	1.754	1.709	1.875	.852	1.187	.250	PT028G08L09T
30	1.880	1.835	2.000	.852	1.187	.250	PT030G08L09T
32	2.005	1.960	2.125	.852	1.250	.250	PT032G08L09T
34	2.130	2.085	2.250	.852	1.375	.250	PT034G08L09T

Specials: Materials, bores, hub styles, integral bushings or bearings, widths, finishes, sizes, etc., consult factory.

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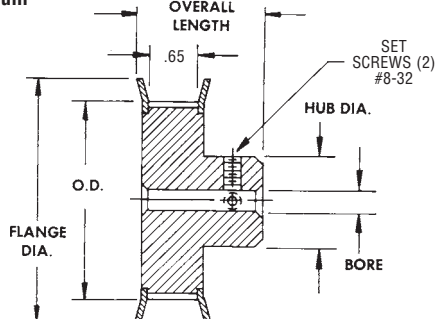
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# E\*P\*S HTD® TIMING PULLEYS

5mm HTD® Pitch, 15mm Belt Width, Double Flange

## Machined Aluminum



Material: Aluminum Alloy, Anodized.

O.D. Tolerance	
O.D.	Tol
Thru 1.000	+.002
1.001-2.000	+.003
2.001-4.000	+.004

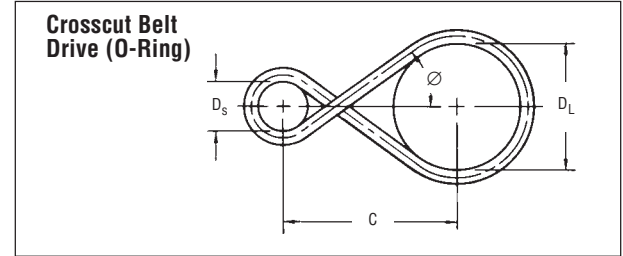
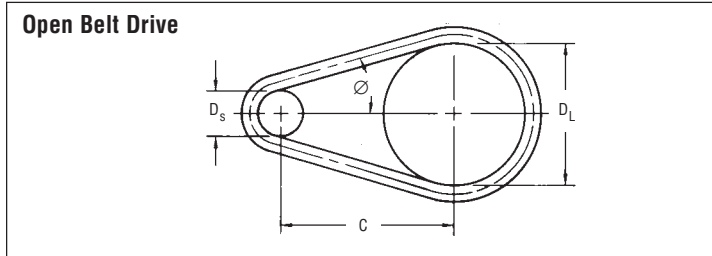
No. of Grooves	Pitch Diameter	Outside Diameter	Flange Diameter ±.016	Overall Length ±.016	Hub Diameter ±.016	Standard Bore +.001 -.000	Standard Bore Part Number
12	.752	.707	.875	1.025	.437	.250	PT012G08L15T
13	.815	.770	.939	1.025	.500	.250	PT013G08L15T
14	.877	.832	1.000	1.025	.500	.250	PT014G08L15T
15	.940	.895	1.063	1.025	.562	.250	PT015G08L15T
16	1.003	.958	1.094	1.025	.625	.250	PT016G08L15T
17	1.065	1.020	1.188	1.025	.625	.250	PT017G08L15T
18	1.128	1.083	1.250	1.025	.687	.250	PT018G08L15T
19	1.191	1.146	1.313	1.025	.750	.250	PT019G08L15T
20	1.253	1.208	1.375	1.025	.812	.250	PT020G08L15T
22	1.379	1.334	1.500	1.025	.937	.250	PT022G08L15T
24	1.504	1.459	1.625	1.087	1.000	.250	PT024G08L15T
25	1.566	1.521	1.688	1.087	1.000	.250	PT025G08L15T
26	1.629	1.584	1.750	1.087	1.062	.250	PT026G08L15T
28	1.754	1.709	1.875	1.087	1.187	.250	PT028G08L15T
30	1.880	1.835	2.000	1.087	1.187	.250	PT030G08L15T
32	2.005	1.960	2.125	1.087	1.250	.250	PT032G08L15T
34	2.130	2.085	2.250	1.087	1.375	.250	PT034G08L15T

Specials: Materials, bores, hub styles, integral bushings or bearings, widths, finishes, sizes, etc., consult factory.

# ROUND BELTS AND PRECISION GROOVED PULLEYS

Round belts are manufactured from a polyurethane seal compound that finds use in drive belt applications where petroleum and chemical products may be encountered and temperatures will not exceed 180°F. The flex life and abrasion resistance of this belt are excellent. The formulas listed on this and the adjacent page are to be used in the selection of belt length and pulley size for the Round Belt drive system.

Open Belt Drives are used in most applications. In a crossed belt drive, the direction of rotation of the driven pulley is reversed. If the axes of the pulleys are parallel to each other, the two belts will rub at the crossing point; this may cause premature wearing of the belt. Tilting one axis will eliminate rubbing of the belt, but may complicate the design of the drive.



The following formulas are to calculate the belt length for either an Open Belt or Cross Cut Belt drive. Tensile = 3,500 psi.

### Open Belt Drive

### Cross Cut Belt Drive

$$\sin \varnothing = \frac{DL - DS}{2C}$$

Belt Half Angle  $\varnothing$

$$\sin \varnothing = \frac{DL + DS}{2C}$$

Length of Belt Under Tension

$$L_1 = \frac{\pi}{2} (DL + DS) + \frac{\pi \varnothing}{180} (DL - DS) + 2C \cos \varnothing \quad L_1 = \left[ \frac{\pi}{2} \left( 1 + \frac{\varnothing}{90} \right) (DL + DS) \right] + 2C \cos \varnothing$$

Free Belt Length

$$LF = L_1 (.88)$$

Inside Diameter Of Belt

$$ID = \frac{LF}{\pi} - W$$

NOTE: It is recommended that belt be installed with an initial stretch of approx. 12%

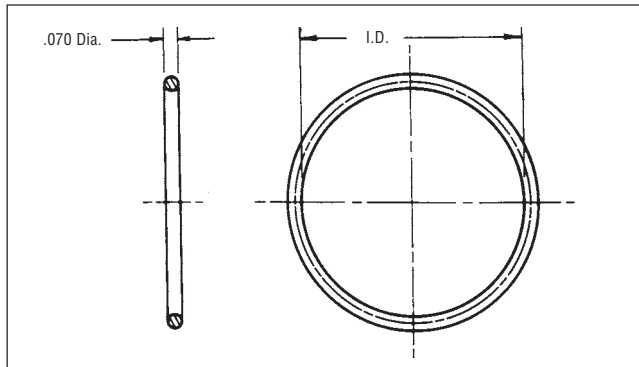
The pulleys are available in aluminum for the 1/6", 3/32" and 3/16" diameter belts. Pulleys for 1/8" and 1/4" diameter belts are available as a standard in stainless steel. The outside diameter of the pulley is equivalent to the pitch diameter of the pulley; therefore the diameters listed could be used to determine the proper ratio. For maximum flex life, the diameter of the smaller pulleys should be at least six times the actual belt width W.

Nominal Belt Size	W	Minimum Pulley Diameter
1/16"	.070	.42
3/32"	.103	.618
1/8"	.139	.834
3/16"	.210	1.260
1/4"	.275	1.650

DS = Smaller Diameter Pulley  
DL = Larger Diameter Pulley

The ratio of change in speed is DL/DS

## 1/16" Diameter



Material: Polyurethane

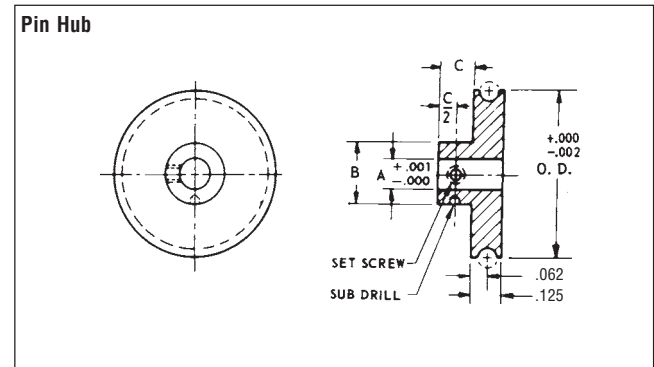
Temperature Range: -30° to +180°F 83 Durometer

Inside Cir. Approx.	I.D.	Part Number
4.71	1.489	AF2-1
5.49	1.739	AF2-2
6.28	1.989	AF2-3
6.67	2.114	AF2-4
7.06	2.239	AF2-5
7.46	2.364	AF2-6
7.85	2.489	AF2-7
8.24	2.614	AF2-8

Inside Cir. Approx.	I.D.	Part Number
8.63	2.739	AF2-9
9.03	2.864	AF2-10
9.42	2.989	AF2-11
10.21	3.239	AF2-12
10.99	3.489	AF2-13
11.78	3.739	AF2-14
12.56	3.989	AF2-15

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## For 1/16" Diameter Pulley Belts

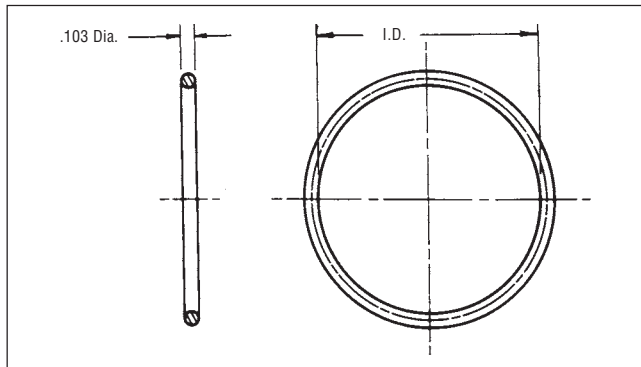


Material: 2024-T4 Aluminum, Anodized

Shaft Size	O.D.	A	B	C	Set Screw	Part Number
1/8	.500	.1248	.312	.187	#2-56	AE5-1
	.750					AE5-2
	1.000					AE5-3
	1.500					AE5-4
	2.000					AE5-5
3/16	.500	.1873	.375	.218	#4-40	AE6-1
	.750					AE6-2
	1.000					AE6-3
	1.500					AE6-4
	2.000					AE6-5
1/4	1.000	.2498	.500	.250	#6-32	AE7-1
	1.500					AE7-2
	2.000					AE7-3
	2.500					AE7-4
	3.000					AE7-5

# ROUND BELTS AND PRECISION GROOVED PULLEYS

## 3/32" Diameter



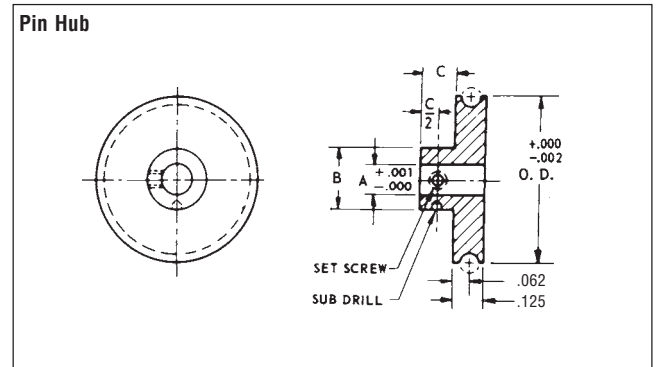
**Material:** Polyurethane

**Temperature Range:** -30° to +180°F 83 Durometer

Inside Cir. Approx.	I.D.	Part Number
7.85	2.487	AF3-1
8.63	2.737	AF3-2
9.42	2.800	AF3-3
10.21	3.237	AF3-4
10.99	3.487	AF3-5
11.78	3.737	AF3-6
12.56	3.987	AF3-7
13.35	4.237	AF3-8

Inside Cir. Approx.	I.D.	Part Number
14.13	4.487	AF3-9
14.92	4.737	AF3-10
15.70	4.987	AF3-11
16.29	5.237	AF3-12
17.27	5.487	AF3-13
18.06	5.737	AF3-14
18.84	5.987	AF3-15

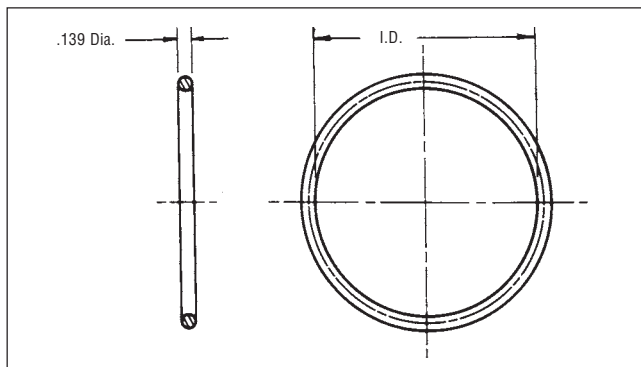
## For 3/32" Diameter Pulley Belts



**Material:** 2024-T4 Aluminum, Anodized

Shaft Size	O.D.	A	B	C	Set Screw	Part Number
1/8	.500	.1248	.312	.187	#2-56	AE8-1
	.750					AE8-2
	1.000					AE8-3
	1.500					AE8-4
	2.000					AE8-5
3/16	.500	.1873	.375	.218	#4-40	AE9-1
	.750					AE9-2
	1.000					AE9-3
	1.500					AE9-4
	2.000					AE9-5
1/4	1.000	.2498	.500	.250	#6-32	AE10-1
	1.500					AE10-2
	2.000					AE10-3
	2.500					AE10-4
	3.000					AE10-5

## 1/8" Diameter



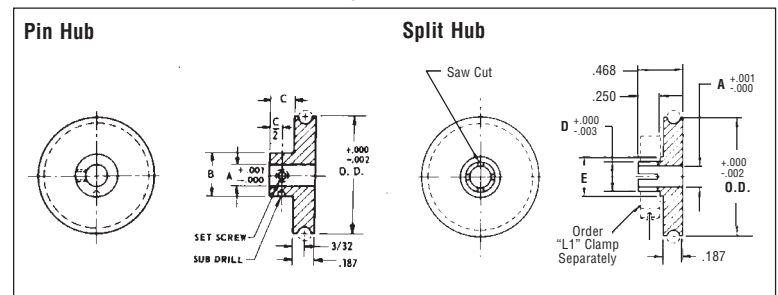
**Material:** Polyurethane

**Temperature Range:** -30° to +180°F 83 Durometer

Inside Cir. Approx.	I.D.	Part Number
13.35	4.234	AF4-1
14.13	4.484	AF4-2
14.92	4.734	AF4-3
15.70	4.984	AF4-4
16.49	5.234	AF4-5
17.27	5.484	AF4-6
18.06	5.734	AF4-7
18.84	5.984	AF4-8
19.63	6.234	AF4-9
20.42	6.484	AF4-10
21.99	6.984	AF4-11
23.56	7.484	AF4-12

Inside Cir. Approx.	I.D.	Part Number
25.13	7.984	AF4-13
26.70	8.484	AF4-14
28.27	8.984	AF4-15
29.84	9.484	AF4-16
31.41	9.984	AF4-17
32.98	10.484	AF4-18
34.55	10.984	AF4-19
36.12	11.484	AF4-20
37.69	11.984	AF4-21
40.84	12.984	AF4-22
43.98	13.984	AF4-23
47.12	14.984	AF4-24

## For 1/8" Diameter Round Pulley Belts

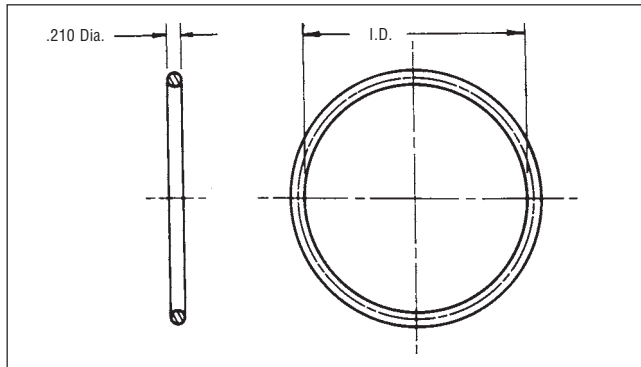


**Material:** 303 Stainless Steel

Shaft Size	O.D.	A	B	C	D	E	Set Screw	Clamp	Pin Hub Part No.	Split Hub Part No.
1/8	.500	.1248	.312	.187	.188	1/4	#2-56	L1-1 or L1-4	AE-1	AE-21
	.750								AE-2	AE-22
	1.000								AE-3	AE-23
	1.500								AE-4	AE-24
	2.000								AE-5	AE-25
3/16	.500	.1873	.375	.218	.250	5/16	#4-40	L1-2 or L1-5	AE-6	AE-26
	.750								AE-7	AE-27
	1.000								AE-8	AE-28
	1.500								AE-9	AE-29
	2.000								AE-10	AE-30
1/4	.500	.2498	.500	.250	.312	3/8	#6-32	L1-3 or L1-6	AE-11	AE-31
	.750								AE-12	AE-32
	1.000								AE-13	AE-33
	1.500								AE-14	AE-34
	2.000								AE-15	AE-35
	2.500								AE-16	AE-36
	3.000								AE-17	AE-37

# ROUND BELTS AND PRECISION GROOVED PULLEYS

## 3/16" Diameter

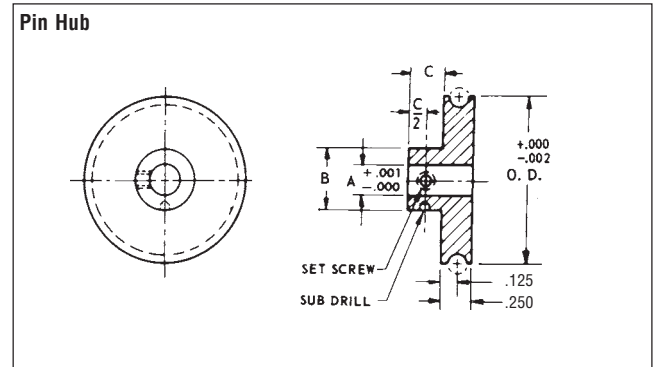


**Material:** Polyurethane

**Temperature Range:** -30° to +180°F 83 Durometer

Inside Cir. Approx.	I.D.	Part Number	Inside Cir. Approx.	I.D.	Part Number
6.28	1.975	AF5-1	10.99	3.475	AF5-7
7.06	2.225	AF5-2	11.78	3.725	AF5-8
7.85	2.475	AF5-3	12.56	3.975	AF5-9
8.63	2.725	AF5-4	13.35	4.225	AF5-10
9.42	2.975	AF5-5	14.13	4.475	AF5-11
10.21	3.225	AF5-6			

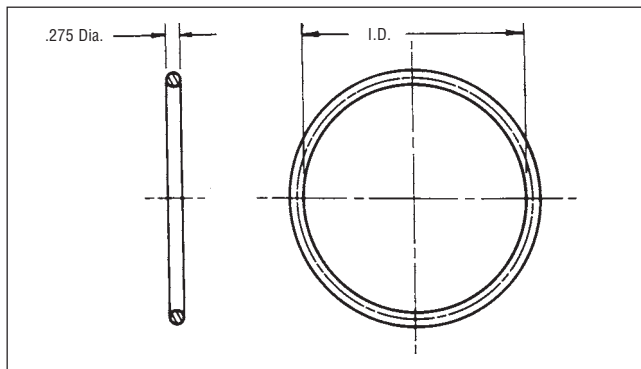
## For 3/16" Diameter Pulley Belts



**Material:** 2024-T4 Aluminum, Anodized

Shaft Size	O.D.	A	B	C	Set Screw	Part Number
1/4	1.000	.2498	.500	.250	#6-32	AE14-1
	1.500					AE14-2
	2.000					AE14-3
	3.000					AE14-4
5/16	1.000	.3123	.750	.375	#8-32	AE15-1
	1.500					AE15-2
	2.000					AE15-3
	3.000					AE15-4
3/8	1.000	.3748	.750	.500	#10-32	AE16-1
	1.500					AE16-2
	2.000					AE16-3
	3.000					AE16-4

## 1/4" Diameter

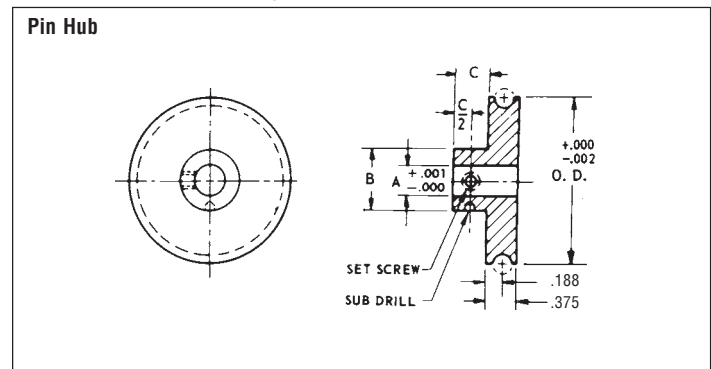


**Material:** Polyurethane

**Temperature Range:** -30° to +180°F 83 Durometer

Inside Cir. Approx.	I.D.	Part Number
18.84	5.975	AF6-1
20.42	6.475	AF6-2
21.99	6.975	AF6-3
25.13	7.975	AF6-4
28.27	8.975	AF6-5
31.41	9.975	AF6-6
37.69	11.975	AF6-7
40.84	12.975	AF6-8
43.98	13.975	AF6-9
47.12	14.975	AF6-10

## For 1/4" Diameter Pulley Belts



**Material:** 303 Stainless Steel

Shaft Size	O.D.	A	B	C	Set Screw	Part Number
3/8	1.000	.3748	.750	.500	#10-32	AE17-1
	1.500					AE17-2
	2.000					AE17-3
	3.000					AE17-4
	4.000					AE17-5
1/2	1.000	.4998	1.000	.500	#1/4-20	AE18-1
	1.500					AE18-2
	2.000					AE18-3
	3.000					AE18-4
	4.000					AE18-5

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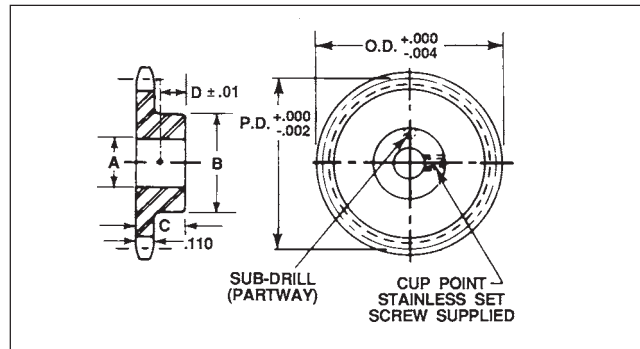
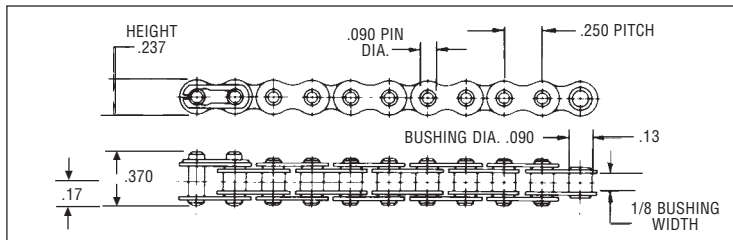
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# .250 PITCH CHAIN AND SPROCKETS

#25 Roller Chain



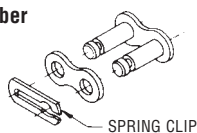
Chain Material: Stainless Steel Type 18-8      Weight per Foot: .0828 lbs.  
Tensile Strength: 700 lbs. Average

Sprocket Material: Stainless Steel  
2024-T4 Aluminum (Anodize Before Cutting)

No. of Teeth	Bore A +.001	B	C	D	Set Size
9-22	1/4	1/2	1/2	.19	#6-32
24-36	3/8	3/4	5/8	.25	#10-32
40-50	1/2	1-1/2	3/4	.31	#10-32

Extra Connectors Available

Catalog Number EL25-C



SPRING CLIP

All Chains Supplied With Connectors

Random lengths available: Specify part number by indicating total number of links ÷ 10 after series number. Specify even numbers of links including connector.

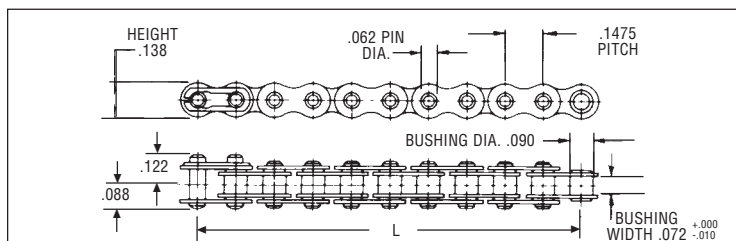
Part Number	L	Part Number	L
EL25-4	10.000	EL25-17	42.500
EL25-5	12.500	EL25-18	45.000
EL25-6	15.000	EL25-19	47.500
EL25-7	17.500	EL25-20	50.000
EL25-8	20.000	EL25-21	52.500
EL25-9	22.500	EL25-22	55.000
EL25-10	25.000	EL25-23	57.500
EL25-12	30.000	EL25-24	60.000
EL25-13	32.500	EL25-25	62.500
EL25-14	35.000	EL25-26	65.000
EL25-15	37.500	EL25-27	67.500
EL25-16	40.000	EL25-28	70.000

Sprocket Data			Stainless Steel	Aluminum
No. Teeth	P.D.	O.D.	Part Number	Part Number
9	.7310	.836	EM255-9	EM256-9
10	.8090	.919	EM255-10	EM256-10
11	.8874	1.001	EM255-11	EM256-11
12	.9659	1.083	EM255-12	EM256-12
13	1.0446	1.164	EM255-13	EM256-13
14	1.1235	1.245	EM255-14	EM256-14
15	1.2024	1.326	EM255-15	EM256-15
16	1.2813	1.406	EM255-16	EM256-16
18	1.4397	1.567	EM255-18	EM256-18
20	1.5981	1.728	EM255-20	EM256-20
21	1.6773	1.808	EM255-21	EM256-21
22	1.7566	1.880	EM255-22	EM256-22

Sprocket Data			Stainless Steel	Aluminum
No. Teeth	P.D.	O.D.	Part Number	Part Number
24	1.9153	2.049	EM255-24	EM256-24
25	1.9946	2.129	EM255-25	EM256-25
26	2.0740	2.209	EM255-26	EM256-26
28	2.2328	2.368	EM255-28	EM256-28
30	2.3917	2.528	EM255-30	EM256-30
32	2.5505	2.688	EM255-32	EM256-32
36	2.8684	3.007	EM255-36	EM256-36
40	3.1863	3.326	EM255-40	EM256-40
45	3.5838	3.725	EM255-45	EM256-45
48	3.8220	3.964	EM255-48	EM256-48
50	3.9815	4.123	EM255-50	EM256-50

# .1475 MINIATURE PITCH CHAINS

.1475 Pitch-Prestretched

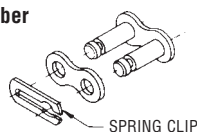


Material: Stainless Steel Type 18-8      Weight per Foot: .035 lbs.  
Tensile Strength: 180 lbs. Average

Part Number	L	Part Number	L	Part Number	L	Part Number	L
EL-4	5.900	EL-13	19.175	EL-22	32.450	EL-31	45.725
EL-5	7.375	EL-14	20.650	EL-23	33.925	EL-32	47.200
EL-6	8.850	EL-15	22.125	EL-24	35.400	EL-33	48.675
EL-7	10.325	EL-16	23.600	EL-25	36.875	EL-34	50.150
EL-8	11.800	EL-17	25.075	EL-26	38.350	EL-35	51.625
EL-9	13.275	EL-18	26.550	EL-27	39.825	EL-36	53.100
EL-10	14.750	EL-19	28.025	EL-28	41.300	EL-37	54.575
EL-11	16.225	EL-20	29.500	EL-29	42.775	EL-38	56.050
EL-12	17.700	EL-21	30.975	EL-30	44.250	EL-39	57.525

Extra Connectors Available

Catalog Number EL-C



SPRING CLIP

Prestretched For:

- Reduced run in time
- Negligible preload expansion

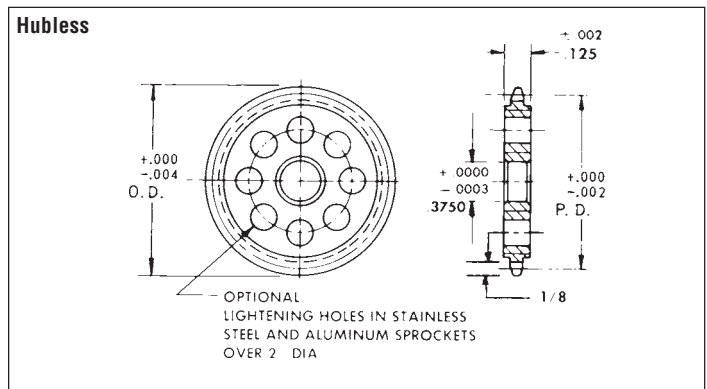
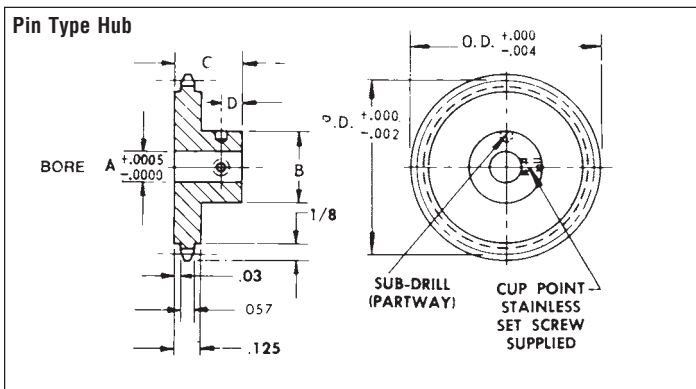
All Chains Supplied With Connectors

Random lengths available: Specify part number by indicating total number of links ÷ 10 after series number. Specify even numbers of links including connector.

Example: EL-54.4 contains 544 links; EL-12.8 contains 128 links.

Closed loop chain available on request (specify length)

# .1475 PITCH MINIATURE PITCH SPROCKETS



**Material:** 303 Stainless Steel  
2024-T4 Aluminum (Anodized - Before Cutting)

Dimension	Bore			
	1/8	3/16	1/4	6mm
A	.1248	.1873	.2498	.2360
B	.312	.375	.500	.500
C	.312	.343	.375	.375
D	.090	.110	.120	.120
Set Screw	#2-56	#4-40	#6-32	M2 x .4 M3 x .5

Sprocket Data			Stainless Steel					Aluminum						
			Pin Hub Part Number Bore Size					Hubless Part No. Bore Size	Pin Hub Part Number Bore Size					Hubless Part No. Bore Size
Number Teeth	P.D.	O.D.	.1248	.1873	.2498	4mm	6mm	.3750	.1248	.1873	.2498	4mm	6mm	.3750
9	.431	.483	EM1-9	—	—	—	—	—	EM2-9	—	—	—	—	—
10	.477	.529	EM1-10	EM3-10	—	MMS1-10	—	—	EM2-10	EM4-10	—	MMS2-10	—	—
11	.524	.576	EM1-11	EM3-11	—	MMS1-11	—	—	EM2-11	EM4-11	—	MMS2-11	—	—
12	.570	.622	EM1-12	EM3-12	—	MMS1-12	—	—	EM2-12	EM4-12	—	MMS2-12	—	—
13	.616	.668	EM1-13	EM3-13	EM5-13	MMS1-13	MMS3-13	—	EM2-13	EM4-13	EM6-13	MMS2-13	MMS4-13	—
14	.663	.715	EM1-14	EM3-14	EM5-14	MMS1-14	MMS3-14	—	EM2-14	EM4-14	EM6-14	MMS2-14	MMS4-14	—
15	.709	.761	EM1-15	EM3-15	EM5-15	MMS1-15	MMS3-15	—	EM2-15	EM4-15	EM6-15	MMS2-15	MMS4-15	—
16	.756	.808	EM1-16	EM3-16	EM5-16	MMS1-16	MMS3-16	—	EM2-16	EM4-16	EM6-16	MMS2-16	MMS4-16	—
17	.803	.855	EM1-17	EM3-17	EM5-17	MMS1-17	MMS3-17	—	EM2-17	EM4-17	EM6-17	MMS2-17	MMS4-17	—
18	.849	.901	EM1-18	EM3-18	EM5-18	MMS1-18	MMS3-18	—	EM2-18	EM4-18	EM6-18	MMS2-18	MMS4-18	—
19	.896	.948	EM1-19	EM3-19	EM5-19	MMS1-19	MMS3-19	—	EM2-19	EM4-19	EM6-19	MMS2-19	MMS4-19	—
20	.943	.995	EM1-20	EM3-20	EM5-20	MMS1-20	MMS3-20	—	EM2-20	EM4-20	EM6-20	MMS2-20	MMS4-20	—
21	.990	1.042	EM1-21	EM3-21	EM5-21	MMS1-21	MMS3-21	—	EM2-21	EM4-21	EM6-21	MMS2-21	MMS4-21	—
22	1.036	1.088	EM1-22	EM3-22	EM5-22	MMS1-22	MMS3-22	—	EM2-22	EM4-22	EM6-22	MMS2-22	MMS4-22	—
23	1.083	1.135	EM1-23	EM3-23	EM5-23	MMS1-23	MMS3-23	—	EM2-23	EM4-23	EM6-23	MMS2-23	MMS4-23	—
24	1.130	1.182	EM1-24	EM3-24	EM5-24	MMS1-24	MMS3-24	—	EM2-24	EM4-24	EM6-24	MMS2-24	MMS4-24	—
25	1.177	1.228	EM1-25	EM3-25	EM5-25	MMS1-25	MMS3-25	—	EM2-25	EM4-25	EM6-25	MMS2-25	MMS4-25	—
26	1.224	1.276	EM1-26	EM3-26	EM5-26	MMS1-26	MMS3-26	—	EM2-26	EM4-26	EM6-26	MMS2-26	MMS4-26	—
27	1.270	1.322	EM1-27	EM3-27	EM5-27	MMS1-27	MMS3-27	EM13-27	EM2-27	EM4-27	EM6-27	MMS2-27	MMS4-27	EM14-27
28	1.317	1.369	EM1-28	EM3-28	EM5-28	MMS1-28	MMS3-28	EM13-28	EM2-28	EM4-28	EM6-28	MMS2-28	MMS4-28	EM14-28
29	1.364	1.416	EM1-29	EM3-29	EM5-29	MMS1-29	MMS3-29	EM13-29	EM2-29	EM4-29	EM6-29	MMS2-29	MMS4-29	EM14-29
30	1.411	1.463	EM1-30	EM3-30	EM5-30	MMS1-30	MMS3-30	EM13-30	EM2-30	EM4-30	EM6-30	MMS2-30	MMS4-30	EM14-30
31	1.458	1.510	EM1-31	EM3-31	EM5-31	MMS1-31	MMS3-31	EM13-31	EM2-31	EM4-31	EM6-31	MMS2-31	MMS4-31	EM14-31
32	1.505	1.557	EM1-32	EM3-32	EM5-32	MMS1-32	MMS3-32	EM13-32	EM2-32	EM4-32	EM6-32	MMS2-32	MMS4-32	EM14-32
33	1.552	1.604	EM1-33	EM3-33	EM5-33	MMS1-33	MMS3-33	EM13-33	EM2-33	EM4-33	EM6-33	MMS2-33	MMS4-33	EM14-33
34	1.598	1.650	EM1-34	EM3-34	EM5-34	MMS1-34	MMS3-34	EM13-34	EM2-34	EM4-34	EM6-34	MMS2-34	MMS4-34	EM14-34
35	1.645	1.697	EM1-35	EM3-35	EM5-35	MMS1-35	MMS3-35	EM13-35	EM2-35	EM4-35	EM6-35	MMS2-35	MMS4-35	EM14-35
36	1.692	1.744	EM1-36	EM3-36	EM5-36	MMS1-36	MMS3-36	EM13-36	EM2-36	EM4-36	EM6-36	MMS2-36	MMS4-36	EM14-36
38	1.786	1.838	EM1-38	EM3-38	EM5-38	MMS1-38	MMS3-38	EM13-38	EM2-38	EM4-38	EM6-38	MMS2-38	MMS4-38	EM14-38
40	1.880	1.932	EM1-40	EM3-40	EM5-40	MMS1-40	MMS3-40	EM13-40	EM2-40	EM4-40	EM6-40	MMS2-40	MMS4-40	EM14-40
42	1.974	2.026	EM1-42	EM3-42	EM5-42	MMS1-42	MMS3-42	EM13-42	EM2-42	EM4-42	EM6-42	MMS2-42	MMS4-42	EM14-42
44	2.068	2.120	EM1-44	EM3-44	EM5-44	MMS1-44	MMS3-44	EM13-44	EM2-44	EM4-44	EM6-44	MMS2-44	MMS4-44	EM14-44
45	2.114	2.166	—	—	—	—	—	EM13-45	—	—	—	—	—	EM14-45
48	2.255	2.307	—	—	—	—	—	EM13-48	—	—	—	—	—	EM14-48
50	2.349	2.401	—	—	—	—	—	EM13-50	—	—	—	—	—	EM14-50
52	2.443	2.495	—	—	—	—	—	EM13-52	—	—	—	—	—	EM14-52
54	2.537	2.589	—	—	—	—	—	EM13-54	—	—	—	—	—	EM14-54
55	2.584	2.636	—	—	—	—	—	EM13-55	—	—	—	—	—	EM14-55
56	2.631	2.683	—	—	—	—	—	EM13-56	—	—	—	—	—	EM14-56
60	2.818	2.870	—	—	—	—	—	EM13-60	—	—	—	—	—	EM14-60
65	3.053	3.105	—	—	—	—	—	EM13-65	—	—	—	—	—	EM14-65
70	3.288	3.340	—	—	—	—	—	EM13-70	—	—	—	—	—	EM14-70
72	3.382	3.434	—	—	—	—	—	EM13-72	—	—	—	—	—	EM14-72
75	3.522	3.574	—	—	—	—	—	EM13-75	—	—	—	—	—	EM14-75
80	3.757	3.809	—	—	—	—	—	EM13-80	—	—	—	—	—	EM14-80
85	3.992	4.044	—	—	—	—	—	EM13-85	—	—	—	—	—	EM14-85