
Synchronous Sprockets & Belts

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- **Positive Slip-Proof Engagement**
- **High Mechanical Efficiency**
- **No Lubrication Needed**

Synchronous Belt Drives

Features

Positive Slip-Proof Engagement

Because the teeth of the Synchronous Belt mesh with sprocket grooves, there is no creepage to cause speed variations. Powerful tensile cords can't stretch, so take-up is eliminated from drive maintenance. Precision is guaranteed. This feature is especially important in printing, packaging and material-handling where synchronization is a necessity. Because of this, Synchronous Drives have replaced gears and silent chain in these and many similar applications.

Wide Speed Range

Drives, such as chains perform best within a limited range of speeds. With Synchronous Drives, the speed range is more than doubled. This feature is of special importance when the entire speed range is developed from a single drive such as in DC drives or machine tool applications. Synchronous Belt efficiency remains high throughout the entire speed range.

Constant Driven Speeds

The unique Synchronous tooth configuration engages and clears each sprocket groove in a continuous flow of quiet, smoothly transmitted power. Thus, angular velocity of the driven sprocket is constant. There is no jerking or vibration caused by chordal rise and fall of the pitch line as occurs in chain drives. There is no loss of speed caused by belt creep or slippage as with flat and V-belts. The Synchronous Drive's constant output speed is a definite advantage in precision work such as in high-speed printers and machine tools like indexers, drill presses and boring mills.

Wide Range of Load Capacities

Load capacities of stock Synchronous Drives range from fractional to hundreds of horsepower. Torque loads range from thousands of foot-pounds to inch-ounces. The high efficiencies offered by Synchronous Drives make them ideal for many purposes.

No Lubrication

Unlike chain or gear drives, Synchronous Drives never need lubrication, since there is no metal-to-metal contact. Maintenance costs are cut to a minimum. Contamination from oil drip, spatter, splash or spray mist is eliminated, too. In addition, there is no oil or grease to trap dirt, grit or abrasive particles and accelerate wear. Food processors, grain elevator operators and other contamination-sensitive industries benefit especially from this feature.

High Tension Eliminated

Unlike flat and V-belts, Synchronous Belts do not rely on friction for their pulling power. Slack-side tension is practically zero, and tight-side tension is reduced. As a result, overhung bearing loads are lessened with resultant improvements in motor and bearing life.

High Mechanical Efficiency

Synchronous Drives have unusually high mechanical efficiency. Furthermore, transmission efficiency is not lost with use. The belt construction insures very little heat build-up since friction is not required to pull the load. In addition, belt tension is reduced. Significant power savings are thus obtainable, particularly when using Synchronous Belts on larger horsepower installations.

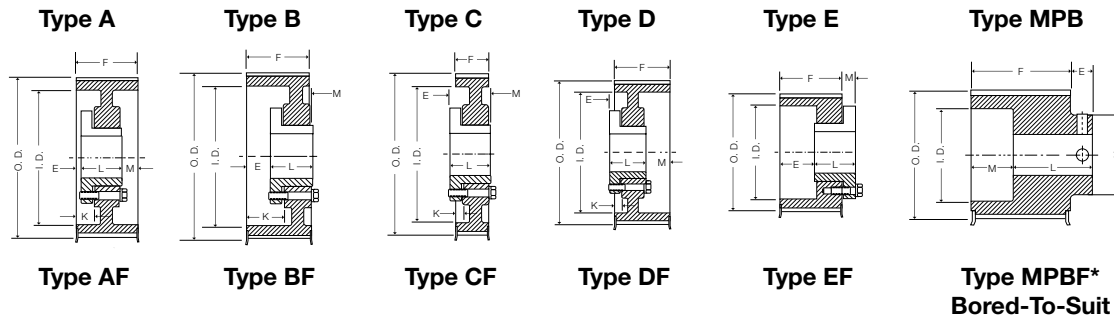
Economical Operation

The overall cost of Synchronous Drives can be lower than those of other drives. Original equipment costs are reduced by eliminating adjustable motor bases, lubricating systems and tensioning devices. Maintenance is simpler. No adjustments are needed due to stretch or wear. These savings are not confined to newly designed drives alone, because most roller chain drives can be converted to Wood's Synchronous Drives. Synchronous Belts are also ideal for areas where proper maintenance is difficult or where downtime could prove to be extremely expensive.

Synchronous 'QD' Sprocket 5M

Sprocket Types

The synchronous sprockets listed in the tables below are all stock sizes. All dimensions given are for the sprocket with the Sure-Grip bushing in place and are in inches only.



The figure following the sketch reference letter in the "Type" column indicates the construction of the sprocket. (1 = Solid, 2 = Web, and 3 = Arms), and the letter "F" indicates that the sprocket has flanges.

Dimensions

PRODUCT NO.	BUSH-ING	NO. OF TEETH	DIAMETERS				TYPE	DIMENSIONS (INCHES)				BORE		WT. (INCL. BUSH.)
			P.D.	O.D.		I.D.		E	K	L	M	Min.	Max.	
				Sprocket	Flange									
FOR BELTS 15mm (.59 in.) WIDE • 5mm PITCH (5M-15) Face Width (F) = .89														
P325M15*	-	32	2.005	1.960	2.16	-	MPB1F	.45	1.55	1.34	0	*.5	.875	0.8
P345M15*	-	34	2.130	2.085	2.29	-	MPB1F	.45	1.68	1.34	0	*.5	1.00	1.0
P365M15*	-	36	2.256	2.211	2.41	-	MPB1F	.45	1.80	1.34	0	*.5	1.12	1.1
P385M15	JA	38	2.381	2.336	2.54	1.34	E1F	.36	0	1.00	.47	.5	1.25	0.9
P405M15	JA	40	2.506	2.461	2.66	1.34	E1F	.36	0	1.00	.47	.5	1.25	1.0
P445M15	JA	44	2.757	2.712	2.91	1.34	E1F	.36	0	1.00	.47	.5	1.25	1.3
P485M15	JA	48	3.008	2.963	3.16	2.36	D1F	.14	.33	1.00	.03	.5	1.25	1.3
P525M15	JA	52	3.258	3.213	3.41	2.62	D1F	.14	.33	1.00	.03	.5	1.25	1.5
P565M15	SH	56	3.509	3.464	3.81	-	D1F	.56	0	1.25	.20	.5	1.68	2.2
P605M15	SH	60	3.760	3.715	3.92	-	D1F	.56	0	1.25	.20	.5	1.68	2.5
P645M15	SH	64	4.010	3.965	4.16	-	D1F	.56	0	1.25	.20	.5	1.68	2.7
P685M15	SDS	68	4.261	4.216	4.41	3.50	D1F	.48	.14	1.31	.06	.5	2.00	3.0
P725M15	SDS	72	4.511	4.466	4.66	3.75	D1F	.48	.14	1.31	.06	.5	2.00	3.3
P805M15	SDS	80	5.013	4.968	-	4.25	D1	.48	.14	1.31	.06	.5	2.00	4.0
P905M15	SDS	90	5.639	5.594	-	4.88	D1	.48	.14	1.31	.06	.5	2.00	5.0
P1125M15	SDS	112	7.018	6.973	-	6.05	D1	.48	.14	1.31	.06	.5	2.00	6.9
FOR BELTS 25mm (.98in.) WIDE • PITCH (5M-25) Face Width (F) = 1.28														
P325M25*	-	32	2.005	1.960	2.16	-	MPB1F	.45	1.55	1.73	0	*.5	.875	1.1
P345M25*	-	34	2.130	2.085	2.29	-	MPB1F	.45	1.68	1.73	0	*.5	1.00	1.3
P365M25*	-	36	2.256	2.211	2.41	-	MPB1F	.45	1.80	1.73	0	*.5	1.12	1.5
P385M25	JA	38	2.381	2.336	2.54	1.34	E1F	.75	0	1.00	.47	.5	1.25	1.2
P405M25	JA	40	2.506	2.461	2.66	1.34	E1F	.75	0	1.00	.47	.5	1.25	1.4
P445M25	JA	44	2.757	2.712	2.91	1.34	E1F	.75	0	1.00	.47	.5	1.25	1.7
P485M25	JA	48	3.008	2.963	3.16	2.36	A1F	.25	.72	1.00	.03	.5	1.25	1.5
P525M25	JA	52	3.258	3.213	3.41	2.62	A1F	.25	.72	1.00	.03	.5	1.25	1.7
P565M25	SH	56	3.509	3.464	3.81	2.86	D1F	.09	.47	1.25	.13	.5	1.68	2.4
P605M25	SH	60	3.760	3.715	3.92	3.12	D1F	.09	.47	1.25	.13	.5	1.68	2.8
P645M25	SH	64	4.010	3.965	4.16	3.37	D1F	.09	.47	1.25	.13	.5	1.68	2.9
P685M25	SDS	68	4.261	4.216	4.41	3.50	D1F	.09	.53	1.31	.06	.5	2.00	3.4
P725M25	SDS	72	4.511	4.466	4.66	3.75	D1F	.09	.53	1.31	.06	.5	2.00	3.7
P805M25	SDS	80	5.013	4.968	-	4.25	D1	.09	.53	1.31	.06	.5	2.00	4.5
P905M25	SDS	90	5.639	5.594	-	4.88	D1	.09	.53	1.31	.06	.5	2.00	5.6
P1125M25	SDS	112	7.018	6.973	-	6.05	D3	.09	.53	1.31	.06	.5	2.00	6.9

Weights for all Sure-Grip bushed items are approximate and include the bushing.

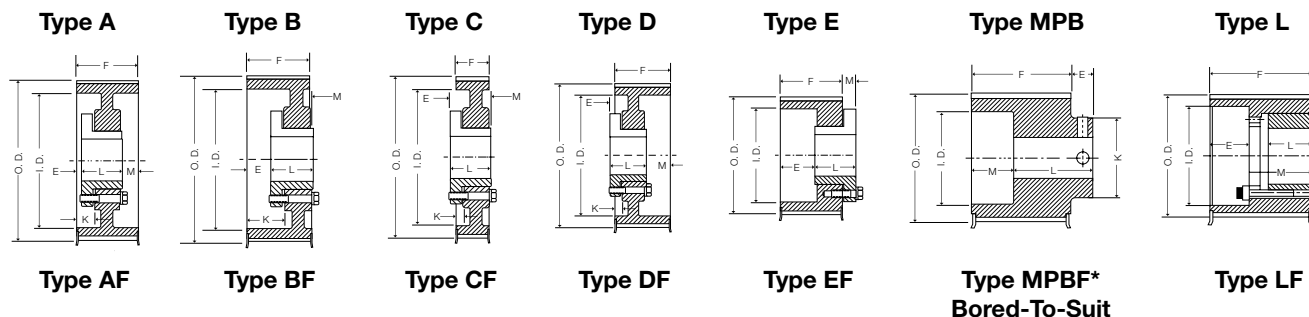
* Bored-To-Suit construction, minimum plain bore with 2 setscrews.

Synchronous 'QD' Sprocket 8M

Dimensions

SPROCKET TYPES

The synchronous sprockets listed in the tables below are all stock sizes. All dimensions given are for the sprocket with the Sure-Grip bushing in place and are in inches only.



The figure following the sketch reference letter in the "Type" column indicates the construction of the sprocket. (1 = Solid, 2 = Web, and 3 = Arms), and the letter "F" indicates that the sprocket has flanges.

PRODUCT NO.	BUSH-ING	NO. OF TEETH	DIAMETERS				TYPE	DIMENSIONS (INCHES)				BORE		WT.
			P.D.	O.D.		I.D.		E	K	L	M	Min.	Max.	
				Sprocket	Flange									
FOR BELTS 20mm (.79 in.) WIDE • 8mm PITCH (8M-20) Face Width (F) = 1-1/8 Dual Drilled (inch/metric) ①														
P228M20*	-	22	2.206	2.152	2.56	-	MPB1F	5/8	1-5/8	1-3/4	0	* 1/2	1-3/16	1.1
P248M20	JA	24	2.406	2.352	2.76	1.34	E1F	19/32	0	1	15/32	1/2	1-1/4	1.0
P268M20	JA	26	2.607	2.553	2.95	1.88	E1F	19/32	0	1	15/32	1/2	1-1/4	1.2
P288M20	QT	28	2.807	2.759	3.15	1.57	E1F	1/4	0	1-1/4	3/8	1/2	1-1/2	1.6
P308M20	QT	30	3.008	2.958	3.35	1.57	E1F	1/4	0	1-1/4	3/8	1/2	1-1/2	1.9
P328M20	QT	32	3.208	3.156	3.54	2.56	D1F	1/8	1/4	1-1/4	0	1/2	1-1/2	2.0
P348M20	SH	34	3.409	3.355	3.82	2.75	D1F	1/4	5/16	1-1/4	1/8	1/2	1-11/16	2.0
P368M20	SH	36	3.609	3.555	3.94	2.82	D1F	1/4	5/16	1-1/4	1/8	1/2	1-11/16	2.2
P388M20	SH	38	3.810	3.756	4.13	3.00	D1F	1/4	5/16	1-1/4	1/8	1/2	1-11/16	2.5
P408M20	SH	40	4.010	3.956	4.33	3.00	D1F	1/4	5/16	1-1/4	1/8	1/2	1-11/16	2.8
P448M20	SDS	44	4.411	4.357	4.76	3.50	D1F	1/4	3/8	1-5/16	1/16	1/2	2	3.4
P488M20	SDS	48	4.812	4.758	5.16	3.80	D1F	1/4	3/8	1-5/16	1/16	1/2	2	4.0
P568M20	SDS	56	5.614	5.560	5.95	4.60	D1F	1/4	3/8	1-5/16	1/16	1/2	2	5.3
P648M20	SDS	64	6.416	6.362	6.77	5.40	D1F	1/4	3/8	1-5/16	1/16	1/2	2	6.9
P728M20	SDS	72	7.218	7.164	7.60	6.20	D2F	1/4	3/8	1-5/16	1/16	1/2	2	6.7
P808M20	SDS	80	8.020	7.966	8.39	6.90	D2F	1/4	3/8	1-5/16	1/16	1/2	2	7.5
P908M20	SDS	90	9.023	8.969	-	7.90	D3	1/4	3/8	1-5/16	1/16	1/2	2	8.5

Weights for all Sure-Grip bushed items are approximate and include the bushing.

* Bored-To-Suit construction, minimum plain bore with 2 setscrews.

① Drilled for both inch and metric bushing hardware.

Synchronous 'QD' Sprocket 8M

Dimensions

PRODUCT NO.	BUSH-ING	NO. OF TEETH	DIAMETERS				TYPE	DIMENSIONS (INCHES)				BORE		WT.
			P.D.	O.D.		I.D.		E	K	L	M	Min.	Max.	
				Sprocket	Flange									
FOR BELTS 30mm (1.18 in.) WIDE • 8mm PITCH (8M-30) Face Width (F) = 1-1/2 Dual Drilled (inch/metric) ①														
P228M30*	-	22	2.206	2.152	2.56	-	MPB1F	5/8	1-5/8	2-1/8	0	* 1/2	1-3/16	1.5
P248M30	JA	24	2.406	2.352	2.76	1.34	E1F	31/32	0	1	15/32	1/2	1-1/4	.8
P268M30	JA	26	2.607	2.553	2.95	1.88	E1F	31/32	0	1	15/32	1/2	1-1/4	.9
P288M30	QT	28	2.807	2.759	3.15	1.57	E1F	5/8	0	1-1/4	3/8	1/2	1-1/2	1.8
P308M30	QT	30	3.008	2.958	3.35	1.57	E1F	5/8	0	1-1/4	3/8	1/2	1-1/2	2.2
P328M30	QT	32	3.208	3.156	3.54	2.56	B1F	1/4	5/8	1-1/4	0	1/2	1-1/2	2.0
P348M30	SH	34	3.409	3.355	3.82	2.75	A1F	1/8	11/16	1-1/4	1/8	1/2	1-11/16	2.3
P368M30	SH	36	3.609	3.555	3.94	2.82	A1F	1/8	11/16	1-1/4	1/8	1/2	1-11/16	2.7
P388M30	SH	38	3.810	3.756	4.13	3.00	A1F	1/8	11/16	1-1/4	1/8	1/2	1-11/16	3.0
P408M30	SH	40	4.010	3.956	4.33	3.00	A1F	1/8	11/16	1-1/4	1/8	1/2	1-11/16	3.3
P448M30	SDS	44	4.411	4.357	4.76	3.50	A1F	1/8	3/4	1-5/16	1/16	1/2	2	3.8
P488M30	SDS	48	4.812	4.758	5.16	3.80	A1F	1/8	3/4	1-5/16	1/16	1/2	2	4.5
P568M30	SDS	56	5.614	5.560	5.95	4.60	A1F	1/8	3/4	1-5/16	1/16	1/2	2	5.9
P648M30	SK	64	6.416	6.362	6.77	5.40	D1F	15/32	1/4	1-7/8	3/32	1/2	2-5/8	10.4
P728M30	SK	72	7.218	7.164	7.60	6.20	D2F	15/32	1/4	1-7/8	3/32	1/2	2-5/8	10.7
P808M30	SK	80	8.020	7.966	8.39	6.90	D2F	15/32	1/4	1-7/8	3/32	1/2	2-5/8	11.8
P908M30	SK	90	9.023	8.969	-	7.90	D2	15/32	1/4	1-7/8	3/32	1/2	2-5/8	13.5
P1128M30	SK	112	11.229	11.175	-	10.00	D3	15/32	1/4	1-7/8	3/32	1/2	2-5/8	16.3
FOR BELTS 50mm (1.97 in.) WIDE • 8mm PITCH (8M-50) Face Width (F) = 2-3/8 Dual Drilled (inch/metric) ①														
P288M50*	-	28	2.807	2.759	3.15	-	MPB1F	3/4	2-9/32	3-1/8	0	* 3/4	1-3/8	3.7
P308M50*	-	30	3.008	2.958	3.35	-	MPB1F	3/4	2-15/32	3-1/8	0	* 3/4	1-3/8	4.3
P328M50*	-	32	3.208	3.156	3.54	-	MPB1F	3/4	2-11/16	3-1/8	0	* 3/4	1-1/2	5.3
P348M50	SH	34	3.409	3.355	3.82	2.75	D1F	1/16	1/2	1-1/4	1-3/16	1/2	1-11/16	2.7
P368M50	SH	36	3.609	3.555	3.94	2.82	D1F	1/16	1/2	1-1/4	1-3/16	1/2	1-11/16	3.4
P388M50	SH	38	3.810	3.756	4.13	3.00	D1F	1/16	1/2	1-1/4	1-3/16	1/2	1-11/16	3.7
P408M50	SH	40	4.010	3.956	4.33	3.00	D1F	1/16	1/2	1-1/4	1-3/16	1/2	1-11/16	4.2
P448M50	SD	44	4.411	4.357	4.76	3.50	D1F	1/16	9/16	1-13/16	5/8	1/2	2	5.7
P488M50	SD	48	4.812	4.758	5.16	3.80	D1F	1/16	9/16	1-13/16	5/8	1/2	2	6.9
P568M50	SK	56	5.614	5.560	5.95	4.60	D1F	5/32	9/16	1-7/8	21/32	1/2	2-5/8	9.4
P648M50	SK	64	6.416	6.362	6.77	5.40	D1F	5/32	9/16	1-7/8	21/32	1/2	2-5/8	12.0
P728M50	SK	72	7.218	7.164	7.60	6.20	D1F	5/32	9/16	1-7/8	21/32	1/2	2-5/8	15.0
P808M50	SF	80	8.020	7.966	8.39	6.90	D2F	1/8	9/16	2	1/2	1/2	2-15/16	17.0
P908M50	SF	90	9.023	8.969	-	7.90	D2	1/8	9/16	2	1/2	1/2	2-15/16	19.1
P1128M50	SF	112	11.229	11.175	-	10.00	D3	1/8	9/16	2	1/2	1/2	2-15/16	23.9
P1448M50	E	144	14.437	14.383	-	13.20	D3	17/32	3/8	2-5/8	9/32	7/8	3-1/2	38.1
P1928M50	E	192	19.249	19.195	-	18.00	D3	17/32	3/8	2-5/8	9/32	7/8	3-1/2	52.5
FOR BELTS 85mm (3.35 in.) WIDE • 8mm PITCH (8M-85) Face Width (F) = 3-3/4 Dual Drilled (inch/metric) ①														
P348M85*	-	34	3.409	3.355	3.82	-	MPB1F	3/4	2-15/16	4-1/2	0	* 7/8	1-3/4	8.4
P368M85	SKL	36	3.609	3.555	3.94	2.88	L1F	1-25/32	-	1-1/8	1-31/32	1/2	1-15/16	4.6
P388M85	SKL	38	3.810	3.756	4.13	3.00	L1F	1-25/32	-	1-1/8	1-31/32	1/2	1-15/16	5.4
P408M85	SKL	40	4.010	3.956	4.33	3.00	L1F	1-25/32	-	1-1/8	1-31/32	1/2	1-15/16	6.0
P448M85	SFL	44	4.411	4.357	4.76	3.50	L1F	1-25/32	-	1-1/8	1-31/32	1/2	2-3/8	7.5
P488M85	SFL	48	4.812	4.758	5.16	3.63	L1F	1-25/32	-	1-1/8	1-31/32	1/2	2-3/8	9.5
P568M85	EL	56	5.614	5.560	5.95	4.56	L1F	1-3/8	-	1-1/2	2-3/8	7/8	2-7/8	13.5
P648M85	SF	64	6.416	6.362	6.77	5.38	A1F	9/16	1-1/4	2	1-3/16	1/2	2-15/16	15.6
P728M85	E	72	7.218	7.164	7.60	6.19	A1F	5/32	1-1/16	2-5/8	31/32	7/8	3-1/2	24.0
P808M85	E	80	8.020	7.966	8.39	6.88	A1F	5/32	1-1/16	2-5/8	31/32	7/8	3-1/2	29.1
P908M85	E	90	9.023	8.969	-	7.88	A1	5/32	1-1/16	2-5/8	31/32	7/8	3-1/2	35.5
P1128M85	F	112	11.229	11.175	-	10.00	D1	7/16	5/8	3-5/8	9/16	1	4	70.5
P1448M85	F	144	14.437	14.383	-	13.19	D3	7/16	5/8	3-5/8	9/16	1	4	64.5
P1928M85	F	192	19.249	19.195	-	18.00	D3	7/16	5/8	3-5/8	9/16	1	4	78.1

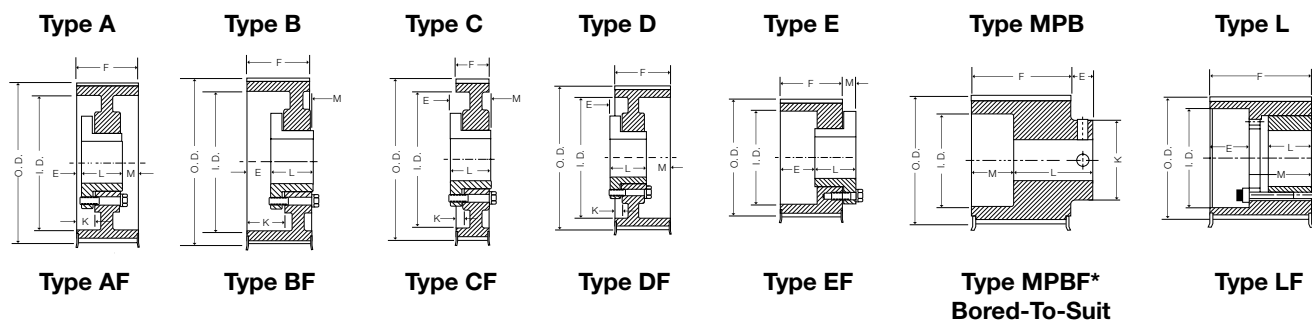
Weights for all Sure-Grip bushed items are approximate and include the bushing.

* Bored-To-Suit construction, minimum plain bore with 2 setscrews.

① Drilled for both inch and metric bushing hardware.

Synchronous 'QD' Sprocket 14M

Dimensions



The figure following the sketch reference letter in the "Type" column indicates the construction of the sprocket.
(1 = Solid, 2 = Web, and 3 = Arms), and the letter "F" indicates that the sprocket has flanges.

PRODUCT NO.	BUSH-ING	NO. OF TEETH	DIAMETERS				TYPE	DIMENSIONS (INCHES)				BORE		WT.
			P.D.	O.D.		I.D.		E	K	L	M	Min.	Max.	
				Sprocket	Flange									
FOR BELTS 40mm (1.57 in.) WIDE • 14mm PITCH (14M-40) Face Width (F) = 2-1/8 Dual Drilled (inch/metric) ①														
P2814M40	SK	28	4.912	4.802	5.56	-	E1F	31/32	0	1-7/8	23/32	1/2	2-5/8	7.2
P2914M40	SK	29	5.088	4.978	5.56	-	E1F	31/32	0	1-7/8	23/32	1/2	2-5/8	7.9
P3014M40	SK	30	5.263	5.153	5.56	4.04	D1F	9/32	7/16	1-7/8	17/32	1/2	2-5/8	7.6
P3214M40	SK	32	5.614	5.504	6.09	4.04	D1F	9/32	7/16	1-7/8	17/32	1/2	2-5/8	9.2
P3414M40	SK	34	5.965	5.855	6.50	4.22	D1F	9/32	7/16	1-7/8	17/32	1/2	2-5/8	10.6
P3614M40	SF	36	6.316	6.206	6.87	4.84	D1F	1/4	7/16	2	3/8	1/2	2-15/16	11.9
P3814M40	SF	38	6.667	6.557	7.22	4.94	D1F	1/4	7/16	2	3/8	1/2	2-15/16	13.3
P4014M40	SF	40	7.018	6.908	7.50	5.06	D1F	1/4	7/16	2	3/8	1/2	2-15/16	15.1
P4414M40	E	44	7.720	7.610	8.34	6.12	D1F	21/32	1/4	2-5/8	5/32	7/8	3-1/2	21.7
P4814M40	E	48	8.421	8.311	8.90	6.50	D1F	21/32	1/4	2-5/8	5/32	7/8	3-1/2	25.9
P5214M40	E	52	9.123	9.013	9.68	7.18	D1F	21/32	1/4	2-5/8	5/32	7/8	3-1/2	30.0
P5614M40	E	56	9.825	9.715	10.38	7.88	D1F	21/32	1/4	2-5/8	5/32	7/8	3-1/2	34.6
P6014M40	E	60	10.527	10.417	11.06	8.50	D1F	21/32	1/4	2-5/8	5/32	7/8	3-1/2	39.4
P6414M40	E	64	11.229	11.119	11.68	9.25	D2F	21/32	1/4	2-5/8	5/32	7/8	3-1/2	35.7
P6814M40	E	68	11.930	11.820	12.50	10.00	D2F	21/32	1/4	2-5/8	5/32	7/8	3-1/2	38.0
P7214M40	E	72	12.632	12.522	13.19	10.69	D2F	21/32	1/4	2-5/8	5/32	7/8	3-1/2	36.8
P8014M40	E	80	14.036	13.926	14.63	12.13	D2F	21/32	1/4	2-5/8	5/32	7/8	3-1/2	41.1
P9014M40	E	90	15.790	15.680	-	14.50	D3	21/32	1/4	2-5/8	5/32	7/8	3-1/2	42.9
P11214M40	E	112	19.650	19.540	-	18.38	D3	21/32	1/4	2-5/8	5/32	7/8	3-1/2	53.8
P14414M40	E	144	25.264	25.154	-	23.88	D3	21/32	1/4	2-5/8	5/32	7/8	3-1/2	80.9
P16814M40	F	168	29.475	29.365	-	28.25	C3	1-1/16	0	3-5/8	7/16	1	4	105.0
P19214M40	F	192	33.686	33.576	-	32.38	C3	1-1/16	0	3-5/8	7/16	1	4	126.0
P21614M40	F	216	37.896	37.786	-	36.62	C3	1-1/16	0	3-5/8	7/16	1	4	159.0
FOR BELTS 55mm (2.17 in.) WIDE • 14mm PITCH (14M-55) Face Width (F) = 2-3/4 Dual Drilled (inch/metric) ①														
P2814M55	SK	28	4.912	4.802	5.56	2.73	E1F	1-19/32	0	1-7/8	23/32	1/2	2-5/8	8.5
P2914M55	SK	29	5.088	4.978	5.56	2.73	E1F	1-19/32	0	1-7/8	23/32	1/2	2-5/8	9.5
P3014M55	SK	30	5.263	5.153	5.56	4.04	A1F	1/32	3/4	1-7/8	27/32	1/2	2-5/8	8.7
P3214M55	SK	32	5.614	5.504	6.09	4.04	A1F	1/32	3/4	1-7/8	27/32	1/2	2-5/8	10.7
P3414M55	SK	34	5.965	5.855	6.50	4.22	A1F	1/32	3/4	1-7/8	27/32	1/2	2-5/8	12.5
P3614M55	SF	36	6.316	6.206	6.87	4.84	A1F	1/16	3/4	2	11/16	1/2	2-15/16	13.6
P3814M55	SF	38	6.667	6.557	7.22	4.94	A1F	1/16	3/4	2	11/16	1/2	2-15/16	15.2
P4014M55	SF	40	7.018	6.908	7.50	5.06	A1F	1/16	3/4	2	11/16	1/2	2-15/16	17.4
P4414M55	E	44	7.720	7.610	8.34	6.12	D1F	11/32	9/16	2-5/8	15/32	7/8	3-1/2	23.8
P4814M55	E	48	8.421	8.311	8.90	6.50	D1F	11/32	9/16	2-5/8	15/32	7/8	3-1/2	28.8
P5214M55	E	52	9.123	9.013	9.68	7.18	D1F	11/32	9/16	2-5/8	15/32	7/8	3-1/2	33.2
P5614M55	E	56	9.825	9.715	10.38	7.88	D1F	11/32	9/16	2-5/8	15/32	7/8	3-1/2	38.0
P6014M55	E	60	10.527	10.417	11.06	8.50	D1F	11/32	9/16	2-5/8	15/32	7/8	3-1/2	43.3
P6414M55	F	64	11.229	11.119	11.68	9.25	D1F	15/16	1/8	3-5/8	1/16	1	4	62.6
P6814M55	F	68	11.930	11.820	12.50	10.00	D2F	15/16	1/8	3-5/8	1/16	1	4	54.5
P7214M55	F	72	12.632	12.522	13.19	10.69	D2F	15/16	1/8	3-5/8	1/16	1	4	58.0
P8014M55	F	80	14.036	13.926	14.63	12.12	D2F	15/16	1/8	3-5/8	1/16	1	4	61.9
P9014M55	F	90	15.790	15.680	-	14.50	D3	15/16	1/8	3-5/8	1/16	1	4	58.1
P11214M55	F	112	19.650	19.540	-	18.38	D3	15/16	1/8	3-5/8	1/16	1	4	72.2
P14414M55	F	144	25.264	25.154	-	23.88	D3	15/16	1/8	3-5/8	1/16	1	4	106.3
P16814M55	F	168	29.475	29.365	-	28.25	D3	15/16	1/8	3-5/8	1/16	1	4	110.2
P19214M55	F	192	33.686	33.576	-	32.38	D3	15/16	1/8	3-5/8	1/16	1	4	133.2
P21614M55	F	216	37.896	37.786	-	36.62	D3	15/16	1/8	3-5/8	1/16	1	4	161.6

Weights for all Sure-Grip bushed items are approximate and include the bushing.

① Drilled for both inch and metric bushing hardware.

Synchronous 'QD' Sprocket 14M

Dimensions

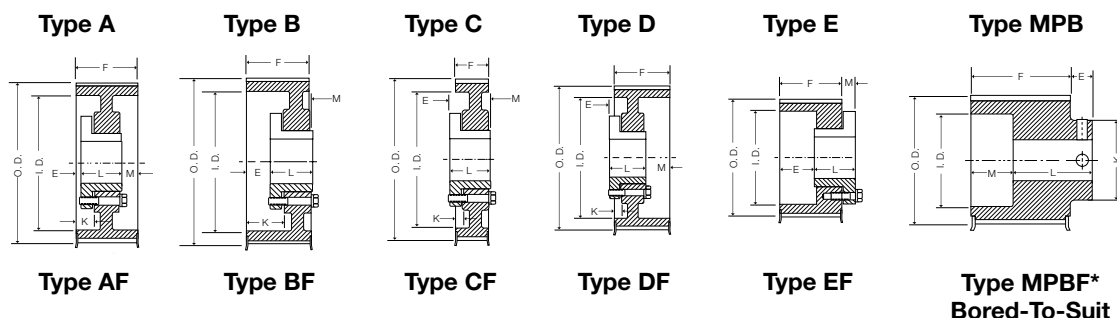
PRODUCT NO.	BUSH-ING	NO. OF TEETH	DIAMETERS				TYPE	DIMENSION (INCHES)				BORE		WT.
			P.D.	O.D.		I.D.		E	K	L	M	Min.	Max.	
				Sprocket	Flange									
FOR BELTS 85mm (3.35 in.) WIDE • 14mm PITCH (14M-85) Face Width (F) = 4														
P2814M85	SFL	28	4.912	4.802	5.56	3.12	L1F	2-1/32	-	1-1/8	1-31/32	1/2	2-3/8	10.4
P2914M85	SFL	29	5.088	4.978	5.56	3.25	L1F	2-1/32	-	1-1/8	1-31/32	1/2	2-3/8	11.7
P3014M85	EL	30	5.263	5.153	5.56	3.94	L1F	1-5/8	-	1-1/2	2-3/8	7/8	2-7/8	11.1
P3214M85	EL	32	5.614	5.504	6.09	3.94	L1F	1-5/8	-	1-1/2	2-3/8	7/8	2-7/8	14.1
P3414M85	EL	34	5.965	5.855	6.50	4.06	L1F	1-5/8	-	1-1/2	2-3/8	7/8	2-7/8	17.0
P3614M85	SF	36	6.316	6.206	6.87	4.84	A1F	11/16	1-3/8	2	1-5/16	1/2	2-15/16	16.9
P3814M85	SF	38	6.667	6.557	7.22	4.94	A1F	11/16	1-3/8	2	1-5/16	1/2	2-15/16	19.1
P4014M85	SF	40	7.018	6.908	7.50	5.06	A1F	11/16	1-3/8	2	1-5/16	1/2	2-15/16	22.1
P4414M85	E	44	7.720	7.610	8.34	6.12	A1F	9/32	1-3/16	2-5/8	1-3/32	7/8	3-1/2	27.9
P4814M85	E	48	8.421	8.311	8.90	6.50	A1F	9/32	1-3/16	2-5/8	1-3/32	7/8	3-1/2	34.5
P5214M85	E	52	9.123	9.013	9.68	7.18	A1F	9/32	1-3/16	2-5/8	1-3/32	7/8	3-1/2	39.5
P5614M85	F	56	9.825	9.715	10.38	7.88	D1F	5/16	3/4	3-5/8	11/16	7/8	3-1/2	54.8
P6014M85	F	60	10.527	10.417	11.06	8.50	D1F	5/16	3/4	3-5/8	11/16	1	4	62.8
P6414M85	F	64	11.229	11.119	11.68	9.25	D1F	5/16	3/4	3-5/8	11/16	1	4	70.8
P6814M85	F	68	11.930	11.820	12.50	10.00	D2F	5/16	3/4	3-5/8	11/16	1	4	64.1
P7214M85	F	72	12.632	12.522	13.19	10.69	D2F	5/16	3/4	3-5/8	11/16	1	4	68.6
P8014M85	F	80	14.036	13.926	14.63	12.13	D2F	5/16	3/4	3-5/8	11/16	1	4	71.0
P9014M85	F	90	15.790	15.680	-	14.50	D3	5/16	3/4	3-5/8	11/16	1	4	68.5
P11214M85	F	112	19.650	19.540	-	18.25	D3	5/16	3/4	3-5/8	11/16	1	4	89.2
P14414M85	F	144	25.264	25.154	-	23.88	D3	5/16	3/4	3-5/8	11/16	1	4	118.3
P16814M85	J	168	29.475	29.365	-	28.12	D3	27/32	13/32	4-1/2	11/32	1-7/16	4-1/2	153.0
P19214M85	J	192	33.686	33.576	-	32.38	D3	27/32	13/32	4-1/2	11/32	1-7/16	4-1/2	182.0
P21614M85	J	216	37.896	37.786	-	36.38	D3	27/32	13/32	4-1/2	11/32	1-7/16	4-1/2	244.0
FOR BELTS 115mm (4.53 in.) WIDE • 14mm PITCH (14M-115) Face Width (F) = 5-1/4														
P2814M115	SFL	28	4.912	4.802	5.56	3.25	L1F	3-9/32	-	1-1/8	1-31/32	1/2	2-3/8	13.0
P2914M115	SFL	29	5.088	4.978	5.56	3.25	L1F	3-9/32	-	1-1/8	1-31/32	1/2	2-3/8	14.7
P3014M115	EL	30	5.263	5.153	5.56	3.94	L1F	2-7/8	-	1-1/2	2-3/8	7/8	2-7/8	13.5
P3214M115	EL	32	5.614	5.504	6.09	3.94	L1F	2-7/8	-	1-1/2	2-3/8	7/8	2-7/8	16.0
P3414M115	EL	34	5.965	5.855	6.50	4.06	L1F	2-7/8	-	1-1/2	2-3/8	7/8	2-7/8	20.0
P3614M115	FL	36	6.316	6.206	6.87	4.69	L1F	1-3/4	-	2-3/8	3-1/2	1	3-1/8	24.2
P3814M115	FL	38	6.667	6.557	7.22	4.94	L1F	1-3/4	-	2-3/8	3-1/2	1	3-1/8	28.5
P4014M115	FL	40	7.018	6.908	7.50	5.06	L1F	1-3/4	-	2-3/8	3-1/2	1	3-1/8	33.4
P4414M115	E	44	7.720	7.610	8.34	6.12	A1F	29/32	1-13/16	2-5/8	1-23/32	7/8	3-1/2	32.1
P4814M115	E	48	8.421	8.311	8.90	6.50	A1F	29/32	1-13/16	2-5/8	1-23/32	7/8	3-1/2	40.1
P5214M115	F	52	9.123	9.013	9.68	7.18	A1F	5/16	1-3/8	3-5/8	1-5/16	1	4	53.8
P5614M115	F	56	9.825	9.715	10.38	7.88	A1F	5/16	1-3/8	3-5/8	1-5/16	1	4	61.7
P6014M115	F	60	10.527	10.417	11.06	8.50	A1F	5/16	1-3/8	3-5/8	1-5/16	1	4	70.6
P6414M115	J	64	11.229	11.119	11.68	9.25	D1F	1/4	1	4-1/2	1	1-7/16	4-1/2	90.0
P6814M115	J	68	11.930	11.820	12.50	10.00	D1F	1/4	1	4-1/2	1	1-7/16	4-1/2	100.8
P7214M115	J	72	12.632	12.522	13.19	10.69	D1F	1/4	1	4-1/2	1	1-7/16	4-1/2	112.7
P8014M115	J	80	14.036	13.926	14.63	12.12	D2F	1/4	1	4-1/2	1	1-7/16	4-1/2	100.8
P9014M115	J	90	15.790	15.680	-	14.50	D2	1/4	1	4-1/2	1	1-7/16	4-1/2	89.3
P11214M115	J	112	19.650	19.540	-	18.25	D3	1/4	1	4-1/2	1	1-7/16	4-1/2	116.5
P14414M115	J	144	25.264	25.154	-	23.88	D3	1/4	1	4-1/2	1	1-7/16	4-1/2	159.5
P16814M115	M	168	29.475	29.365	-	28.09	C3	1-13/32	1/16	6-3/4	3/32	1-15/16	5-1/2	261.0
P19214M115	M	192	33.686	33.576	-	32.25	C3	1-13/32	1/16	6-3/4	3/32	1-15/16	5-1/2	302.0
P21614M115	M	216	37.896	37.786	-	36.38	C3	1-13/32	1/16	6-3/4	3/32	1-15/16	5-1/2	350.0
FOR BELTS 170mm (6.69 in.) WIDE • 14mm PITCH (14M-170) Face Width (F) = 7-3/8														
P3614M170	FL	36	6.316	6.206	6.87	4.69	L1F	3-7/8	-	2-3/8	3-1/2	1	3-1/8	30.5
P3814M170	FL	38	6.667	6.557	7.22	4.94	L1F	3-7/8	-	2-3/8	3-1/2	1	3-1/8	35.4
P4014M170	FL	40	7.018	6.908	7.50	5.06	L1F	3-7/8	-	2-3/8	3-1/2	1	3-1/8	42.0
P4414M170	FL	44	7.720	7.610	8.34	6.12	L1F	3-7/8	-	2-3/8	3-1/2	1	3-1/8	46.4
P4814M170	FL	48	8.421	8.311	8.90	6.50	L1F	3-7/8	-	2-3/8	3-1/2	1	3-1/8	58.4
P5214M170	F	52	9.123	9.013	9.68	7.18	A1F	1-3/8	2-7/16	3-5/8	2-3/8	1	4	64.6
P5614M170	F	56	9.825	9.715	10.38	7.88	A1F	1-3/8	2-7/16	3-5/8	2-3/8	1	4	73.4
P6014M170	J	60	10.527	10.417	11.06	8.50	A1F	7/8	2-1/8	4-1/2	2	1-7/16	4-1/2	93.1
P6414M170	J	64	11.229	11.119	11.68	9.25	A1F	7/8	2-1/8	4-1/2	2	1-7/16	4-1/2	103.9
P6814M170	J	68	11.930	11.820	12.50	10.00	A1F	7/8	2-1/8	4-1/2	2	1-7/16	4-1/2	115.3
P7214M170	J	72	12.632	12.522	13.19	10.69	A1F	7/8	2-1/8	4-1/2	2	1-7/16	4-1/2	128.2
P8014M170	J	80	14.036	13.926	14.63	12.12	A2F	7/8	2-1/8	4-1/2	2	1-7/16	4-1/2	119.9
P9014M170	J	90	15.790	15.680	-	14.50	A2	7/8	2-1/8	4-1/2	2	1-7/16	4-1/2	104.2
P11214M170	M	112	19.650	19.540	-	18.25	D3	1/32	1-7/16	6-3/4	21/32	1-15/16	5-1/2	205.6
P14414M170	M	144	25.264	25.154	-	23.62	D3	1/32	1-7/16	6-3/4	21/32	1-15/16	5-1/2	268.2
P16814M170	M	168	29.475	29.365	-	28.10	D3	1/32	1-7/16	6-3/4	21/32	1-15/16	5-1/2	293.3
P19214M170	M	192	33.686	33.576	-	32.25	D3	1/32	1-7/16	6-3/4	21/32	1-15/16	5-1/2	334.9
P21614M170	M	216	37.896	37.786	-	36.38	D3	1/32	1-7/16	6-3/4	21/32	1-15/16	5-1/2	383.6

Weights for all Sure-Grip bushed items are approximate and include the bushing.

Synchronous 'QD' Sprocket 20M

Dimensions

The synchronous sprockets listed in the tables below are all stock sizes. All dimensions given are for the sprocket with the Sure-Grip bushing in place and are in inches only.



The figure following the sketch reference letter in the "Type" column indicates the construction of the sprocket.
(1 = Solid, 2 = Web, and 3 = Arms), and the letter "F" indicates that the sprocket has flanges.

PRODUCT NO.	BUSH-ING	NO. OF TEETH	DIAMETERS				TYPE	DIMENSIONS (INCHES)				BORE		WT.
			P.D.	O.D.		I.D.		E	K	L	M	Min.	Max.	
				Sprocket	Flange									
FOR BELTS 115mm (4.53 in.) WIDE • 20mm PITCH (20M-115) Face Width (F) = 5-3/8														
P3420M115	F	34	8.522	8.352	9.45	6.88	A1F	3/8	1-7/16	3-5/8	1-3/8	1	4	41.5
P3620M115	F	36	9.023	8.853	9.84	7.00	A1F	3/8	1-7/16	3-5/8	1-3/8	1	4	50.1
P3820M115	F	38	9.524	9.354	10.43	7.56	A1F	3/8	1-7/16	3-5/8	1-3/8	1	4	54.9
P4020M115	F	40	10.026	9.856	10.83	8.00	A1F	3/8	1-7/16	3-5/8	1-3/8	1	4	61.0
P4420M115	F	44	11.028	10.858	11.81	8.93	A1F	3/8	1-7/16	3-5/8	1-3/8	1	4	73.6
P4820M115	J	48	12.031	11.861	12.80	9.93	D1F	1/16	1-3/16	4-1/2	15/16	1-7/16	4-1/2	99.6
P5220M115	J	52	13.033	12.863	13.76	10.88	D2F	1/16	1-3/16	4-1/2	15/16	1-7/16	4-1/2	95.5
P5620M115	J	56	14.036	13.866	14.76	11.88	D2F	1/16	1-3/16	4-1/2	15/16	1-7/16	4-1/2	103.1
P6020M115	J	60	15.038	14.868	15.93	13.06	D2F	1/16	1-3/16	4-1/2	15/16	1-7/16	4-1/2	109.7
P6420M115	J	64	16.041	15.871	16.93	14.06	D2F	1/16	1-3/16	4-1/2	15/16	1-7/16	4-1/2	119.4
P6820M115	J	68	17.044	16.874	17.93	15.00	D2F	1/16	1-3/16	4-1/2	15/16	1-7/16	4-1/2	125.4
P7220M115	J	72	18.046	17.876	18.90	16.00	D2F	1/16	1-3/16	4-1/2	15/16	1-7/16	4-1/2	134.7
P8020M115	M	80	20.051	19.881	20.87	18.00	C2F	1-9/32	3/16	6-3/4	3/32	1-15/16	5-1/2	216.2
P9020M115	M	90	22.558	22.388	23.43	20.56	C2F	1-9/32	3/16	6-3/4	3/32	1-15/16	5-1/2	246.5
P11220M115	M	112	28.072	27.902	-	26.38	C3	1-9/32	3/16	6-3/4	3/32	1-15/16	5-1/2	273.2
P14420M115	N	144	36.092	35.922	-	34.38	C3	1-11/16	0	8-1/8	1-1/16	2-7/16	6	392.3
P16820M115	N	168	42.108	41.938	-	40.38	C3	1-11/16	0	8-1/8	1-1/16	2-7/16	6	469.0
P19220M115	N	192	48.123	47.953	-	46.25	C3	1-11/16	0	8-1/8	1-1/16	2-7/16	6	551.7
P21620M115	N	216	54.138	53.968	-	52.25	C3	1-11/16	0	8-1/8	1-1/16	2-7/16	6	617.5
FOR BELTS 170mm (6.69 in.) WIDE • 20mm PITCH (20M-170) Face Width (F) = 7-1/2														
P3420M170*	-	34	8.522	8.352	9.45	6.50	MPB1F	1-1/4	6-1/2	6-1/2	2-1/4	2-1/8*	4-1/8	81.4
P3620M170*	-	36	9.023	8.853	9.84	7.00	MPB1F	1-1/4	7	6-1/2	2-1/4	2-1/8*	4-1/2	92.6
P3820M170	J	38	9.524	9.354	10.43	7.56	A1F	15/16	2-3/16	4-1/2	2-1/16	1-7/16	4-1/2	71.7
P4020M170	J	40	10.026	9.856	10.83	8.00	A1F	15/16	2-3/16	4-1/2	2-1/16	1-7/16	4-1/2	79.8
P4420M170	J	44	11.028	10.858	11.81	8.93	A1F	15/16	2-3/16	4-1/2	2-1/16	1-7/16	4-1/2	96.5
P4820M170	M	48	12.031	11.861	12.80	9.93	A1F	1/32	1-1/2	6-3/4	23/32	1-15/16	5-1/2	148.0
P5220M170	M	52	13.033	12.863	13.76	10.88	A1F	1/32	1-1/2	6-3/4	23/32	1-15/16	5-1/2	175.3
P5620M170	M	56	14.036	13.866	14.76	11.88	A1F	1/32	1-1/2	6-3/4	23/32	1-15/16	5-1/2	204.4
P6020M170	M	60	15.038	14.868	15.93	13.06	A1F	1/32	1-1/2	6-3/4	23/32	1-15/16	5-1/2	233.3
P6420M170	M	64	16.041	15.871	16.93	14.06	A2F	1/32	1-1/2	6-3/4	23/32	1-15/16	5-1/2	209.5
P6820M170	M	68	17.044	16.874	17.93	15.00	A2F	1/32	1-1/2	6-3/4	23/32	1-15/16	5-1/2	222.0
P7220M170	M	72	18.046	17.876	18.90	16.00	A2F	1/32	1-1/2	6-3/4	23/32	1-15/16	5-1/2	230.2
P8020M170	M	80	20.051	19.881	20.87	18.00	A2F	1/32	1-1/2	6-3/4	23/32	1-15/16	5-1/2	248.8
P9020M170	M	90	22.558	22.388	23.43	20.56	A2F	1/32	1-1/2	6-3/4	23/32	1-15/16	5-1/2	284.5
P11220M170	N	112	28.072	27.902	-	26.25	C3	7/16	1-1/4	8-1/8	3/16	2-7/16	6	360.7
P14420M170	N	144	36.092	35.922	-	34.25	C3	7/16	1-1/4	8-1/8	3/16	2-7/16	6	478.0
P16820M170	P	168	42.108	41.938	-	40.25	C3	13/16	1-1/16	9-3/8	1-1/16	2-15/16	7	658.3
P19220M170	P	192	48.123	47.953	-	46.25	C3	13/16	1-1/16	9-3/8	1-1/16	2-15/16	7	739.1
P21620M170	P	216	54.138	53.968	-	52.12	C3	13/16	1-1/16	9-3/8	1-1/16	2-15/16	7	900.6

Weights for all Sure-Grip bushed items are approximate and include the bushing.

*Bored-To-Suit construction, minimum plain bore with 2 setscrews.

Synchronous 'QD' Sprocket 20M

Dimensions

PRODUCT NO.	BUSH-ING	NO. OF TEETH	DIAMETERS				TYPE	DIMENSIONS (INCHES)				BORE		WT.
			P.D.	O.D.		I.D.		E	K	L	M	Min.	Max.	
				Sprocket	Flange									
FOR BELTS 230mm (9.06in.) WIDE • 20mm PITCH (20M-230) Face Width (F) = 9-7/8														
P3820M230*	-	38	9.524	9.354	10.43	7.56	MPB1F	1-1/4	7-1/2	7-1/2	3-5/8	2-7/8*	5-1/4	119.9
P4020M230*	-	40	10.026	9.856	10.83	8.00	MPB1F	1-1/4	8	8-1/2	2-5/8	2-7/8*	5-7/8	146.8
P4420M230*	-	44	11.028	10.858	11.81	8.93	MPB1F	1-1/4	8-1/4	8-1/2	2-5/8	2-7/8*	6	179.6
P4820M230	M	48	12.031	11.861	12.80	9.93	A1F	17/32	2	6-3/4	2-19/32	1-15/16	5-1/2	163.6
P5220M230	M	52	13.033	12.863	13.76	10.88	A1F	17/32	2	6-3/4	2-19/32	1-15/16	5-1/2	193.0
P5620M230	M	56	14.036	13.866	14.76	11.88	A1F	17/32	2	6-3/4	2-19/32	1-15/16	5-1/2	223.5
P6020M230	M	60	15.038	14.868	15.93	13.06	A1F	17/32	2	6-3/4	2-19/32	1-15/16	5-1/2	251.8
P6420M230	M	64	16.041	15.871	16.93	14.06	A2F	17/32	2	6-3/4	2-19/32	1-15/16	5-1/2	232.7
P6820M230	N	68	17.044	16.874	17.93	15.00	A1F	1/8	1-13/16	8-1/8	1-5/8	2-7/16	6	375.3
P7220M230	N	72	18.046	17.876	18.90	16.00	A2F	1/8	1-13/16	8-1/8	1-5/8	2-7/16	6	338.7
P8020M230	N	80	20.051	19.881	20.37	18.00	A2F	1/8	1-13/16	8-1/8	1-5/8	2-7/16	6	331.3
P9020M230	N	90	22.558	22.388	23.43	20.56	A2F	1/8	1-13/16	8-1/8	1-5/8	2-7/16	6	370.2
P11220M230	N	112	28.072	27.902	-	26.25	A3	1/8	1-13/16	8-1/8	1-5/8	2-7/16	6	408.6
P14420M230	P	144	36.092	35.922	-	34.25	D3	9/16	1-5/16	9-3/8	1-1/16	2-15/16	6	622.1
P16820M230	P	168	42.018	41.938	-	40.25	D3	9/16	1-5/16	9-3/8	1-1/16	2-15/16	7	741.8
P19220M230	W	192	48.123	47.953	-	46.00	C3	3/4	1-1/2	11-3/8	3/4	4-1/4	8-1/2	1111.1
P21620M230	W	216	54.138	53.968	-	52.00	C3	3/4	1-1/2	11-3/8	3/4	4-1/4	8-1/2	1237.5
FOR BELTS 290mm (11.42in.) WIDE • 20mm PITCH (20m-290) Face Width (F) =12-1/4														
P5220M290	N	52	13.033	12.863	13.76	10.88	A1F	13/16	2-1/2	8-1/8	3-5/16	2-7/16	6	238.0
P5620M290	N	56	14.036	13.866	14.76	11.88	A1F	13/16	2-1/2	8-1/8	3-5/16	2-7/16	6	275.0
P6020M290	N	60	15.038	14.868	15.93	13.06	A1F	13/16	2-1/2	8-1/8	3-5/16	2-7/16	6	309.0
P6420M290	N	64	16.041	15.871	16.93	14.06	A1F	13/16	2-1/2	8-1/8	3-5/16	2-7/16	6	350.7
P6820M290	N	68	17.044	16.874	17.93	15.00	A1F	13/16	2-1/2	8-1/8	3-5/16	2-7/16	6	397.3
P7220M290	N	72	18.046	17.876	18.89	16.00	A2F	13/16	2-1/2	8-1/8	3-5/16	2-7/16	6	362.2
P8020M290	N	80	20.051	19.881	20.87	18.00	A2F	13/16	2-1/2	8-1/8	3-5/16	2-7/16	6	365.7
P9020M290	N	90	22.558	22.388	23.43	20.56	A2F	13/16	2-1/2	8-1/8	3-5/16	2-7/16	6	411.0
P11220M290	P	112	28.072	27.902	-	26.12	A2	5/8	2-1/2	9-3/8	2-1/4	2-15/16	7	600.9
P14420M290	P	144	36.092	35.922	-	34.00	A3	5/8	2-1/2	9-3/8	2-1/4	2-15/16	7	724.9
P16820M290	W	168	42.108	41.938	-	40.00	A3	7/16	2-11/16	11-3/8	7/16	4-1/4	8-1/2	1067.2
P19220M290	W	192	48.123	47.953	-	46.00	A3	7/16	2-11/16	11-3/8	7/16	4-1/4	8-1/2	1236.3
P21620M290	W	216	54.138	53.968	-	52.00	A3	7/16	2-11/16	11-3/8	7/16	4-1/4	8-1/2	1414.9
FOR BELTS 340mm (13.39in.) WIDE • 20mm PITCH (20m-340) Face Width (F) = 14-1/4														
P5220M340	N	52	13.033	12.863	13.76	10.88	A1F	13/16	2-1/2	8-1/8	5-5/16	2-7/16	6	252.8
P5620M340	N	56	14.036	13.866	14.76	11.88	A1F	13/16	2-1/2	8-1/8	5-5/16	2-7/16	6	291.1
P6020M340	N	60	15.038	14.868	15.93	13.06	A1F	13/16	2-1/2	8-1/8	5-5/16	2-7/16	6	324.5
P6420M340	N	64	16.041	15.871	16.93	14.06	A1F	13/16	2-1/2	8-1/8	5-5/16	2-7/16	6	367.4
P6820M340	N	68	17.044	16.874	17.93	15.00	A1F	13/16	2-1/2	8-1/8	5-5/16	2-7/16	6	415.9
P7220M340	N	72	18.046	17.876	18.90	16.00	A2F	13/16	2-1/2	8-1/8	5-5/16	2-7/16	6	382.0
P8020M340	P	80	20.051	19.881	20.87	18.00	A2F	1-5/8	3-1/2	9-3/8	3-1/4	2-15/16	7	494.0
P9020M340	P	90	22.558	22.388	23.43	20.56	A2F	1-5/8	3-1/2	9-3/8	3-1/4	2-15/16	7	513.1
P11220M340	P	112	28.072	27.902	-	26.12	A2	1-5/8	3-1/2	9-3/8	3-1/4	2-15/16	7	630.6
P14420M340	W	144	36.092	35.922	-	34.00	A3	3/8	2-5/8	11-3/8	2-1/2	4-1/4	8-1/2	989.4
P16820M340	W	168	42.108	41.938	-	40.00	A3	3/8	2-5/8	11-3/8	2-1/2	4-1/4	8-1/2	1123.2
P19220M340	S	192	48.123	47.953	-	46.00	D3	2-1/2	1-1/8	15-3/4	1	6	10	1710.8
P21620M340	S	216	54.138	53.968	-	51.88	D3	2-1/2	1-1/8	15-3/4	1	6	10	1897.9

Weights for all Sure-Grip bushed items are approximate and include the bushing.

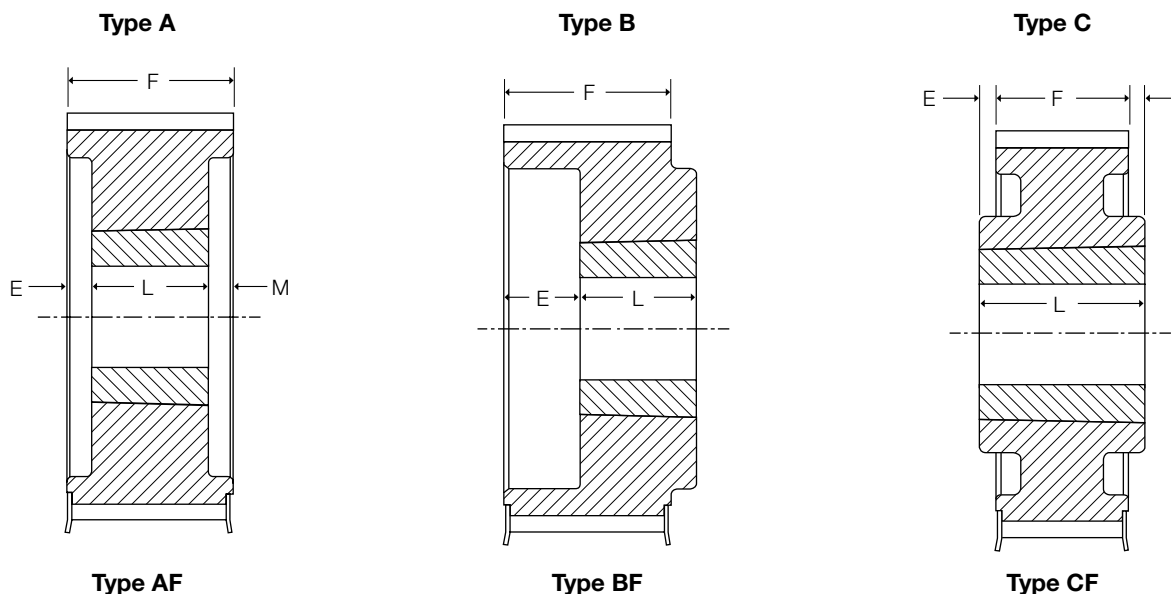
*Bored-To-Suit construction, minimum plain bore with 2 setscrews.

Synchronous Taper-Lock® Sprocket 8M

Dimensions

SPROCKET TYPES

The synchronous sprockets listed in the tables below are all stock sizes. All dimensions given are for the sprocket with the Taper-Lock bushing in place and are in inches only.



The figure following the sketch reference letter in the "Type" column indicates the construction of the sprocket. (1 = Solid, 2 = Web, and 3 = Arms), and the letter "F" indicates that the sprocket has flanges.

PRODUCT NO.	BUSHING	NO. OF TEETH	DIAMETERS				TYPE	DIMENSIONS (INCHES)			BORE		WT.
			P.D.	O.D.		I.D.		E	L	M	Min.	Max.	
				Sprocket	Flange								
FOR BELTS 20mm (.79 in.) WIDE • 8mm PITCH (8M-20) Face Width (F) = 1-1/8													
P228M20TL	TL1108	22.00	2.206	2.152	2.56	0.25	A1F	0.25	0.88	0	0.50	1.12	0.5
P248M20TL	TL1108	24.00	2.406	2.352	2.76	1.75	A1F	0	0.88	0.25	0.50	1.12	0.7
P268M20TL	TL1108	26.00	2.607	2.553	2.95	1.88	A1F	0	0.88	0.25	0.50	1.12	0.9
P288M20TL	TL1108	28.00	2.807	2.759	3.15	2.06	A1F	0	0.88	0.25	0.50	1.12	1.2
P308M20TL	TL1210	30.00	3.008	2.958	3.35	2.18	A1F	0.12	1.00	0	0.50	1.25	1.2
P328M20TL	TL1210	32.00	3.208	3.156	3.54	2.56	A1F	0.12	1.00	0	0.50	1.25	1.4
P348M20TL	TL1610	34.00	3.409	3.355	3.82	2.75	A1F	0.12	1.00	0	0.50	1.69	1.4
P368M20TL	TL1610	36.00	3.609	3.555	3.94	2.69	A1F	0.12	1.00	0	0.50	1.69	1.7
P388M20TL	TL1610	38.00	3.810	3.756	4.13	2.94	A1F	0.12	1.00	0	0.50	1.69	2.0
P408M20TL	TL1610	40.00	4.010	3.956	4.33	3.00	A1F	0.12	1.00	0	0.50	1.69	2.4
P448M20TL	TL2012	44.00	4.411	4.357	4.76	0	B1F	0	1.25	0.12	0.50	2.12	2.6
P488M20TL	TL2012	48.00	4.812	4.758	5.16	0	B1F	0	1.25	0.12	0.50	2.12	3.4
P568M20TL	TL2012	56.00	5.614	5.560	5.95	0	B1F	0	1.25	0.12	0.50	2.12	5.3
P648M20TL	TL2012	64.00	6.416	6.362	6.77	0	B1F	0	1.25	0.12	0.50	2.12	7.5
P728M20TL	TL2012	72.00	7.218	7.164	7.60	0	B1F	0	1.25	0.12	0.50	2.12	9.9
P808M20TL	TL2517	80.00	8.020	7.966	8.39	0	B1F	0	1.75	0.62	0.50	2.69	11.9
P908M20TL	TL2517	90.00	9.023	8.969	0	7.88	B2	0	1.75	0.62	0.50	2.69	12.5

Weights for all Taper-Lock bushed items are approximate and include the bushing.

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Synchronous Taper-Lock® Sprocket 8M

Dimensions

PRODUCT NO.	BUSH-ING	NO. OF TEETH	DIAMETERS				TYPE	DIMENSIONS (INCHES)			BORE		WT.
			P.D.	O.D.		I.D.		E	L	M	Min.	Max.	
				Sprocket	Flange								
FOR BELTS 30mm (1.18 in) WIDE. 8mm PITCH (8M-30) Face Width (F) = 1-1/2													
P228M30TL	TL1108	22.00	2.206	2.152	2.56	0	A1F	0.63	0.88	0	0.50	1.12	0.7
P248M30TL	TL1108	24.00	2.406	2.352	2.76	1.34	A1F	0	0.88	0.63	0.50	1.12	0.9
P268M30TL	TL1108	26.00	2.607	2.553	2.95	1.88	A1F	0	0.88	0.63	0.50	1.12	1.2
P288M30TL	TL1108	28.00	2.807	2.759	3.15	1.57	A1F	0.12	0.88	0.50	0.50	1.12	1.6
P308M30TL	TL1210	30.00	3.008	2.958	3.35	2.25	A1F	0.12	1.00	0.38	0.50	1.25	1.5
P328M30TL	TL1210	32.00	3.208	3.156	3.54	2.38	A1F	0.12	1.00	0.38	0.50	1.25	1.9
P348M30TL	TL1610	34.00	3.409	3.355	3.82	2.75	A1F	0.12	1.00	0.38	0.50	1.69	2.3
P368M30TL	TL1610	36.00	3.609	3.555	3.94	2.81	A1F	0.12	1.00	0.38	0.50	1.69	2.2
P388M30TL	TL1610	38.00	3.810	3.756	4.13	3.00	A1F	0.12	1.00	0.38	0.50	1.69	2.7
P408M30TL	TL2012	40.00	4.010	3.956	4.33	3.19	A1F	0	1.25	0.25	0.50	2.12	2.4
P448M30TL	TL2012	44.00	4.411	4.357	4.76	3.50	A1F	0	1.25	0.25	0.50	2.12	3.4
P488M30TL	TL2012	48.00	4.812	4.758	5.16	3.81	A1F	0	1.25	0.25	0.50	2.12	4.5
P568M30TL	TL2012	56.00	5.614	5.560	5.95	4.56	A1F	0	1.25	0.25	0.50	2.12	7.0
P648M30TL	TL2517	64.00	6.416	6.362	6.77	0	B1F	0	1.75	0.25	0.50	2.69	8.9
P728M30TL	TL2517	72.00	7.218	7.164	7.60	0	B1F	0	1.75	0.25	0.50	2.69	12.1
P808M30TL	TL2517	80.00	8.020	7.966	8.39	0	B1F	0	1.75	0.25	0.50	2.69	15.8
P908M30TL	TL2517	90.00	9.023	8.969	0	7.88	C2	0.12	1.75	0.12	0.50	2.69	13.8
P1128M30TL	TL2517	112.00	11.229	11.175	0	10.00	C2	0.12	1.75	0.12	0.50	2.69	23.5
FOR BELTS 50mm (1.97 in) WIDE. 8mm PITCH (8M-50) Face Width (F) = 2-3/8													
P288M50TL	TL1108	28.00	2.807	2.759	3.15	0	A1F	0	0.88	1.50	0.50	1.12	2.1
P308M50TL	TL1210	30.00	3.008	2.958	3.35	0	A1F	0	1.00	1.38	0.50	1.25	2.2
P328M50TL	TL1210	32.00	3.208	3.156	3.54	0	A1F	0	1.00	1.38	0.50	1.25	2.1
P348M50TL	TL1610	34.00	3.409	3.355	3.82	2.75	A1F	0	1.00	1.38	0.50	1.69	2.1
P368M50TL	TL1610	36.00	3.609	3.555	3.94	2.81	A1F	0	1.00	1.38	0.50	1.69	2.7
P388M50TL	TL1610	38.00	3.810	3.756	4.13	3.00	A1F	0	1.00	1.38	0.50	1.69	3.1
P408M50TL	TL2012	40.00	4.010	3.956	4.33	3.00	A1F	0	1.25	1.12	0.50	2.12	3.4
P448M50TL	TL2012	44.00	4.411	4.357	4.76	3.50	A1F	0	1.25	1.12	0.50	2.12	4.3
P488M50TL	TL2012	48.00	4.812	4.758	5.16	3.75	A1F	0	1.25	1.12	0.50	2.12	5.5
P568M50TL	TL2517	56.00	5.614	5.560	5.95	4.62	A1F	0	1.75	0.62	0.50	2.69	8.1
P648M50TL	TL2517	64.00	6.416	6.362	6.77	5.40	A1F	0	1.75	0.62	0.50	2.69	11.7
P728M50TL	TL2517	72.00	7.218	7.164	7.60	6.19	A1F	0	1.75	0.62	0.50	2.69	15.7
P808M50TL	TL2517	80.00	8.020	7.966	8.39	6.88	A1F	0	1.75	0.62	0.50	2.69	20.3
P908M50TL	TL3020	90.00	9.023	8.969	0	7.88	A1	0	2.00	0.38	0.88	3.25	31.7
P1128M50TL	TL3020	112.00	11.229	11.175	0	10.00	A2	0	2.00	0.38	0.88	3.25	34.7
FOR BELTS 85mm (3.35 in) WIDE. 8mm PITCH (8M-85) Face Width (F) = 3-3/4													
P348M85TL	TL1615	34.00	3.409	3.355	3.82	0	A1F	0.75	1.50	1.50	0.50	1.69	3.3
P368M85TL	TL1615	36.00	3.609	3.555	3.94	2.88	A1F	0.75	1.50	1.50	0.50	1.69	4.2
P388M85TL	TL1610	38.00	3.810	3.756	4.13	3.00	A1F	1.38	1.00	1.38	0.50	1.69	4.7
P408M85TL	TL2012	40.00	4.010	3.956	4.33	3.00	A1F	1.25	1.25	1.25	0.50	2.12	4.7
P448M85TL	TL2012	44.00	4.411	4.357	4.76	3.50	A1F	1.25	1.25	1.25	0.50	2.12	6.4
P488M85TL	TL2012	48.00	4.812	4.758	5.16	3.75	A1F	1.25	1.25	1.25	0.50	2.12	8.0
P568M85TL	TL2517	56.00	5.614	5.560	5.95	4.56	A1F	1.00	1.75	1.00	0.50	2.69	11.0
P648M85TL	TL2517	64.00	6.416	6.362	6.77	5.38	A1F	1.00	1.75	1.00	0.50	2.69	15.0
P728M85TL	TL3020	72.00	7.218	7.164	7.60	6.19	A1F	0.88	2.00	0.88	0.88	3.25	18.2
P808M85TL	TL3020	80.00	8.020	7.966	8.39	6.88	A1F	0.88	2.00	0.88	0.88	3.25	24.2
P908M85TL	TL3020	90.00	9.023	8.969	0	7.88	A1	0.88	2.00	0.88	0.88	3.25	31.9
P1128M85TL	TL3020	112.00	11.229	11.175	0	10.00	A2	0.88	2.00	0.88	0.88	3.25	34.6

Weights for all Taper-Lock bushed items are approximate and include the bushing.

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Synchronous Taper-Lock® Sprocket 14M

Dimensions

PRODUCT NO.	BUSH-ING	NO. OF TEETH	DIAMETERS				TYPE	DIMENSIONS (INCHES)			BORE		WT.
			P.D.	O.D.		I.D.		E	L	M	Min.	Max.	
				Sprocket	Flange								
FOR BELTS 40mm (1.57 in) WIDE. 14mm PITCH (14M-40) Face Width (F) = 2-1/8													
P2814M40TL	TL2012	28.00	4.912	4.808	5.56	3.12	A1F	0	1.25	0.88	0.50	2.12	3.5
P2914M40TL	TL2012	29.00	5.088	4.983	5.56	3.12	A1F	0	1.25	0.88	0.50	2.12	3.9
P3014M40TL	TL2012	30.00	5.263	5.157	6.09	3.92	A1F	0	1.25	0.88	0.50	2.12	6.4
P3214M40TL	TL2012	32.00	5.614	5.507	6.09	3.92	A1F	0	1.25	0.88	0.50	2.12	8.0
P3414M40TL	TL2012	34.00	5.965	5.858	6.50	4.06	A1F	0	1.25	0.88	0.50	2.12	9.4
P3614M40TL	TL2517	36.00	6.316	6.208	6.87	4.84	A1F	0	1.75	0.38	0.50	2.69	10.5
P3814M40TL	TL2517	38.00	6.667	6.559	7.22	4.94	A1F	0	1.75	0.38	0.50	2.69	12.2
P4014M40TL	TL2517	40.00	7.018	6.909	7.50	5.06	A1F	0	1.75	0.38	0.50	2.69	14.2
P4414M40TL	TL2517	44.00	7.720	7.610	8.34	6.12	A1F	0	1.75	0.38	0.50	2.69	17.6
P4814M40TL	TL2517	48.00	8.421	8.311	8.90	6.50	A1F	0	1.75	0.38	0.50	2.69	22.0
P5214M40TL	TL2517	52.00	9.123	9.013	9.68	7.18	A1F	0	1.75	0.38	0.50	2.69	26.5
P5614M40TL	TL2517	56.00	9.825	9.715	10.38	7.88	A2F	0	1.75	0.38	0.50	2.69	21.5
P6014M40TL	TL3020	60.00	10.527	10.417	11.06	8.50	A2F	0	2.00	0.12	0.88	3.25	33.7
P6414M40TL	TL3020	64.00	11.229	11.119	11.68	9.25	A2F	0	2.00	0.12	0.88	3.25	36.5
P6814M40TL	TL3020	68.00	11.930	11.820	12.50	10.00	A2F	0	2.00	0.12	0.88	3.25	39.3
P7214M40TL	TL3020	72.00	12.632	12.522	13.19	10.69	A2F	0	2.00	0.12	0.88	3.25	42.6
P8014M40TL	TL3020	80.00	14.036	13.926	14.63	12.12	A3F	0	2.00	0.12	0.88	3.25	38.8
P9014M40TL	TL3020	90.00	15.790	15.680	0	14.50	A3	0	2.00	0.12	0.88	3.25	44.5
P11214M40TL	TL3020	112.00	19.650	19.540	0	18.38	A3	0	2.00	0.12	0.88	3.25	64.9
FOR BELTS 55mm (2.17 in) WIDE. 14mm PITCH (14M-55) Face Width (F) = 2-3/4													
P2814M55TL	TL2012	28.00	4.912	4.808	5.56	3.12	A1F	0	1.25	1.50	0.50	2.12	7.4
P2914M55TL	TL2012	29.00	5.088	4.983	5.56	3.12	A1F	0	1.25	1.50	0.50	2.12	8.4
P3014M55TL	TL2517	30.00	5.263	5.157	6.09	3.92	A1F	0	1.75	1.00	0.50	2.69	7.2
P3214M55TL	TL2517	32.00	5.614	5.507	6.09	3.92	A1F	0	1.75	1.00	0.50	2.69	9.3
P3414M55TL	TL2517	34.00	5.965	5.858	6.50	4.06	A1F	0	1.75	1.00	0.50	2.69	11.2
P3614M55TL	TL2517	36.00	6.316	6.208	6.87	4.84	A1F	0	1.75	1.00	0.50	2.69	12.4
P3814M55TL	TL2517	38.00	6.667	6.559	7.22	4.94	A1F	0	1.75	1.00	0.50	2.69	14.4
P4014M55TL	TL2517	40.00	7.018	6.909	7.50	5.06	A1F	0	1.75	1.00	0.50	2.69	16.7
P4414M55TL	TL2517	44.00	7.720	7.610	8.34	6.12	A1F	0	1.75	1.00	0.50	2.69	19.9
P4814M55TL	TL3020	48.00	8.421	8.311	8.90	6.50	A1F	0	2.00	0.75	0.88	3.25	29.2
P5214M55TL	TL3020	52.00	9.123	9.013	9.68	7.18	A1F	0	2.00	0.75	0.88	3.25	34.5
P5614M55TL	TL3020	56.00	9.825	9.715	10.38	7.88	A1F	0	2.00	0.75	0.88	3.25	40.1
P6014M55TL	TL3020	60.00	10.527	10.417	11.06	8.50	A1F	0	2.00	0.75	0.88	3.25	46.4
P6414M55TL	TL3020	64.00	11.229	11.119	11.68	9.25	A1F	0	2.00	0.75	0.88	3.25	52.7
P6814M55TL	TL3020	68.00	11.930	11.820	12.50	10.00	A2F	0	2.00	0.75	0.88	3.25	45.5
P7214M55TL	TL3020	72.00	12.632	12.522	13.19	10.69	A2F	0	2.00	0.75	0.88	3.25	49.5
P8014M55TL	TL3020	80.00	14.036	13.926	14.63	12.12	A3F	0	2.00	0.75	0.88	3.25	45.2
P9014M55TL	TL3020	90.00	15.790	15.680	0	14.50	A3	0	2.00	0.75	0.88	3.25	46.1
P11214M55TL	TL3020	112.00	19.650	19.540	0	18.38	A3	0	2.00	0.75	0.88	3.25	69.8

Weights for all Taper-Lock bushed items are approximate and include the bushing.
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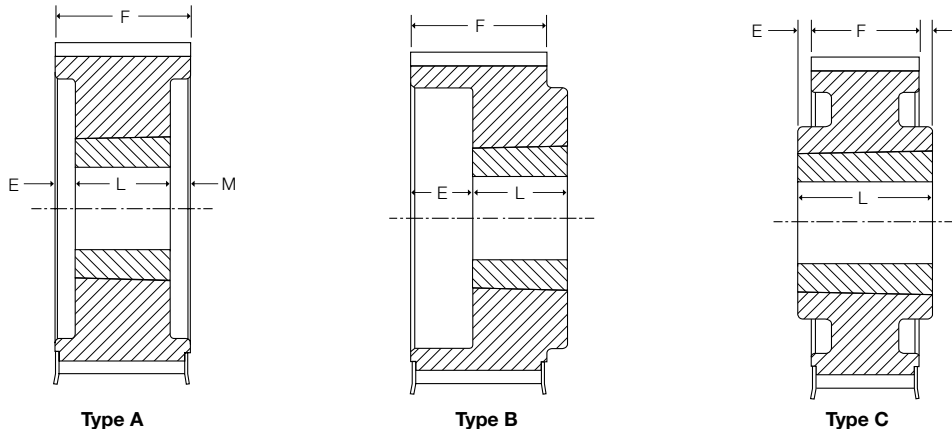
Synchronous Taper-Lock® Sprocket 14M

Dimensions

PRODUCT NO.	BUSH-ING	NO. OF TEETH	DIAMETERS				TYPE	DIMENSIONS (INCHES)			BORE		WT.
			P.D.	O.D.		I.D.		E	L	M	Min.	Max.	
				Sprocket	Flange								
FOR BELTS 85mm (3.35 in) WIDE. 14mm PITCH (14M-85) Face Width (F) = 4													
P2814M85TL	TL2012	28.00	4.912	4.808	5.56	3.12	A1F	0.50	1.25	2.25	0.50	2.12	10.5
P2914M85TL	TL2012	29.00	5.088	4.983	5.56	3.25	A1F	0.50	1.25	2.25	0.50	2.12	11.9
P3014M85TL	TL2517	30.00	5.263	5.157	6.09	3.94	A1F	0.50	1.75	1.75	0.50	2.69	9.7
P3214M85TL	TL2517	32.00	5.614	5.507	6.09	3.94	A1F	0.88	1.75	1.38	0.50	2.69	12.7
P3414M85TL	TL2517	34.00	5.965	5.858	6.50	4.06	A1F	0.88	1.75	1.38	0.50	2.69	15.3
P3614M85TL	TL3020	36.00	6.316	6.208	6.87	4.84	A1F	0.53	2.00	1.47	0.88	3.25	19.3
P3814M85TL	TL3020	38.00	6.667	6.559	7.22	4.94	A1F	0.53	2.00	1.47	0.88	3.25	21.9
P4014M85TL	TL3020	40.00	7.018	6.909	7.50	5.06	A1F	0.53	2.00	1.47	0.88	3.25	25.1
P4414M85TL	TL3020	44.00	7.720	7.610	8.34	6.12	A1F	0.53	2.00	1.47	0.88	3.25	28.4
P4814M85TL	TL3020	48.00	8.421	8.311	8.90	6.50	A1F	0.53	2.00	1.47	0.88	3.25	35.4
P5214M85TL	TL3535	52.00	9.123	9.013	9.68	7.18	A1F	0	3.50	0.50	1.19	3.94	42.9
P5614M85TL	TL3535	56.00	9.825	9.715	10.38	7.88	A1F	0	3.50	0.50	1.19	3.94	52.4
P6014M85TL	TL3535	60.00	10.527	10.417	11.06	8.50	A1F	0	3.50	0.50	1.19	3.94	62.7
P6414M85TL	TL3535	64.00	11.229	11.119	11.68	9.25	A1F	0	3.50	0.50	1.19	3.94	73.6
P6814M85TL	TL3535	68.00	11.930	11.820	12.50	10.00	A1F	0	3.50	0.50	1.19	3.94	64.2
P7214M85TL	TL3535	72.00	12.632	12.522	13.19	10.69	A1F	0	3.50	0.50	1.19	3.94	97.4
P8014M85TL	TL3535	80.00	14.036	13.926	14.63	12.12	A2F	0	3.50	0.50	1.19	3.94	68.9
P9014M85TL	TL3535	90.00	15.790	15.680	0	14.50	A2	0	3.50	0.50	1.19	3.94	69.1
P11214M85TL	TL3535	112.00	19.650	19.540	0	18.25	A3	0	3.50	0.50	1.19	3.94	85.7
FOR BELTS 115mm (4.53 in) WIDE. 14mm PITCH (14M-115) Face Width (F) = 5-1/4													
P3014M115TL	TL2517	30.00	5.263	5.157	6.09	3.94	A1F	1.75	1.75	1.75	0.50	2.69	13.5
P3214M115TL	TL2517	32.00	5.614	5.507	6.09	3.94	A1F	1.75	1.75	1.75	0.50	2.69	17.3
P3414M115TL	TL2517	34.00	5.965	5.858	6.50	4.06	A1F	1.75	1.75	1.75	0.50	2.69	20.9
P3614M115TL	TL3020	36.00	6.316	6.208	6.87	4.69	A1F	1.62	2.00	1.62	0.88	3.25	18.6
P3814M115TL	TL3020	38.00	6.667	6.559	7.22	4.94	A1F	1.62	2.00	1.62	0.88	3.25	22.5
P4014M115TL	TL3020	40.00	7.018	6.909	7.50	5.06	A1F	1.62	2.00	1.62	0.88	3.25	26.8
P4414M115TL	TL3535	44.00	7.720	7.610	8.34	6.12	A1F	0.88	3.50	0.88	1.19	3.94	30.8
P4814M115TL	TL3535	48.00	8.421	8.311	8.90	6.50	A1F	0.88	3.50	0.88	1.19	3.94	41.1
P5214M115TL	TL4040	52.00	9.123	9.013	9.68	7.18	A1F	0.62	4.00	0.62	1.44	4.44	46.9
P5614M115TL	TL4040	56.00	9.825	9.715	10.38	7.88	A1F	0.62	4.00	0.62	1.44	4.44	58.3
P6014M115TL	TL4040	60.00	10.527	10.417	11.06	8.50	A1F	0.62	4.00	0.62	1.44	4.44	70.9
P6414M115TL	TL4545	64.00	11.229	11.119	11.68	9.25	A1F	0.38	4.50	0.38	1.94	4.94	82.1
P6814M115TL	TL4545	68.00	11.930	11.820	12.50	10.00	A1F	0.38	4.50	0.38	1.94	4.94	97.1
P7214M115TL	TL4545	72.00	12.632	12.522	13.19	10.69	A1F	0.38	4.50	0.38	1.94	4.94	113.3
P8014M115TL	TL4545	80.00	14.036	13.926	14.63	12.12	A2F	0.38	4.50	0.38	1.94	4.94	108.9
P9014M115TL	TL4545	90.00	15.790	15.680	0	14.50	A2	0.38	4.50	0.38	1.94	4.94	112.9
P11214M115TL	TL4545	112.00	19.650	19.540	0	18.25	A3	0.38	4.50	0.38	1.94	4.94	122.4

Weights for all Taper-Lock bushed items are approximate and include the bushing.

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Synchronous Plus

Features And Benefits

SYNCHRONOUS PLUS

1. FIBERGLASS TENSION MEMBER

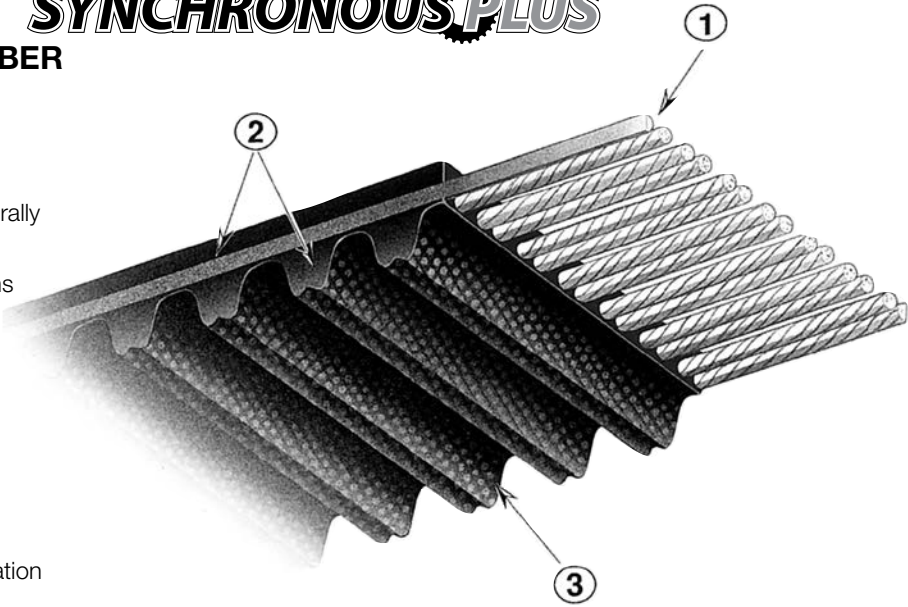
FEATURE	BENEFIT
Excellent Dimensional Stability	Less Maintenance
No Stretch Under Load	Retensioning Generally not Required
Allows for Small Pulley and Short Center Drives	Economical Designs

2. MOLDED TEETH & BACKING

FEATURE	BENEFIT
Resists Damaging Environmental Factors	Longer Belt Life
Outstanding Bending Characteristics	Smooth Belt Operation
Superior Molding Characteristics	Smooth Surface Reduces Vibration

3. IMPREGNATED NYLON WEAR JACKET

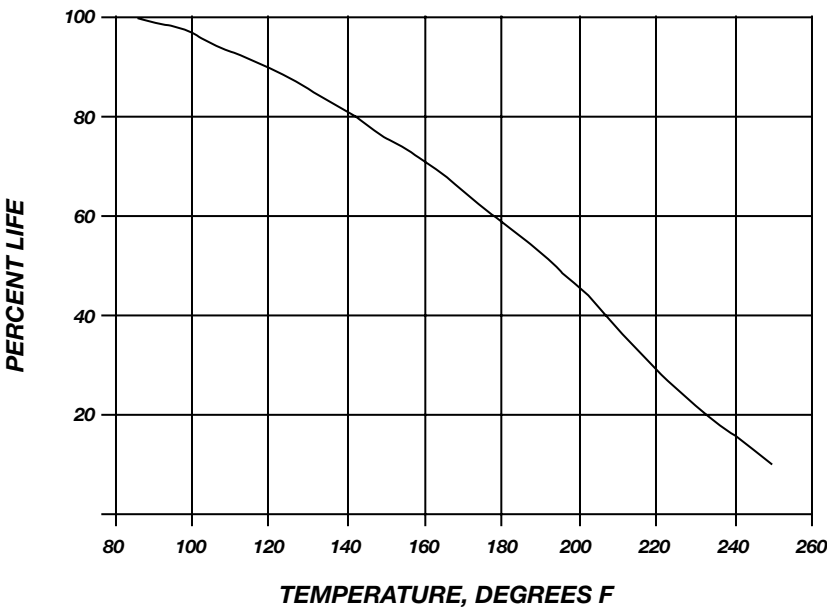
FEATURE	BENEFIT
Durable Tooth Protection	Extends Belt Life
Minimal Drag/Reduces Friction	Smooth Precise Operation



Synchronous Plus belts are capable of operating at temperatures of -30°F with no adverse effects.

Any time a belt is used in an elevated ambient temperature, the expected life will decrease. The relationship between ambient temperatures and belt life is shown in the chart below. As an example, at a temperature of 180°F, we would expect life to be 60% of the life that would be obtained at 85°F.

LIFE vs TEMPERATURE



Tolerances On Belt Length

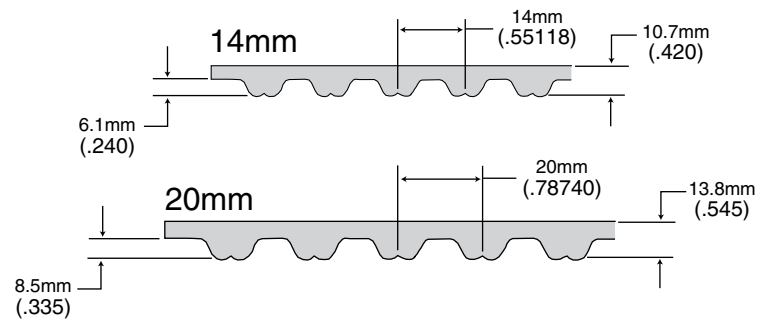
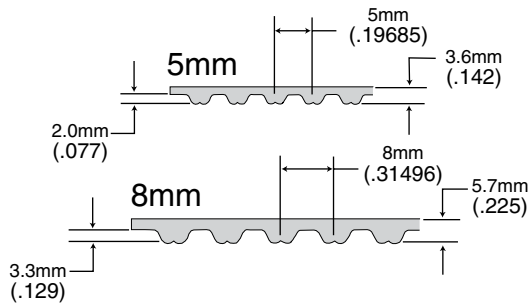
Dimensions

Belt Length (mm)	*Std. Length Tolerances (Center-to-Center)
Over 254 to 381	±0.23
Over 381 to 508	±0.25
Over 508 to 762	±0.30
Over 762 to 1016	±0.33
Over 1016 to 1270	±0.38
Over 1270 to 1524	±0.41
Over 1524 to 1778	±0.43
Over 1778 to 2032	±0.46
Over 2032 to 2286	±0.48
Over 2286 to 2540	±0.51
Over 2540 to 2794	±0.53
Over 2794 to 3048	±0.56
Over 3048 to 3302	±0.58

Belt Length (mm)	*Std. Length Tolerances (Center-to-Center)
Over 3302 to 3556	±0.61
Over 3556 to 3810	±0.64
Over 3810 to 4064	±0.66
Over 4064 to 4318	±0.69
Over 4318 to 4572	±0.71
Over 4572 to 4826	±0.74
Over 4826 to 5080	±0.76
Over 5080 to 5534	±0.79
Over 5534 to 5588	±0.81
Over 5588 to 5842	±0.84
Over 5842 to 6096	±0.86
Over 6096 to 6350	±0.89
Over 6350 to 6604	±0.91
Over 6604 to 6860	±0.94

*NOTE: The length tolerances given for positive drive belts refer to the center to center tolerance between belts when checked on a standard measuring fixture. The actual pitch length tolerance is twice the value shown. If a special tension member is used, consult the factory for proper length tolerances.

BELT DIMENSIONS



Center Distance Installation and Take-up Allowance

Pitch Length	Decrease in Center Distance for Installation		
	> 1525mm	1525-3050mm	<3050mm
5M Both Flanged	-0.8	-0.9	-
5M One Flanged	-0.6	-0.7	-
8M Both Flanged	-1.4	-1.5	-1.6
8M One Flanged	-0.9	-1.0	-1.1
14M Both Flanged	-2.3	-2.4	-2.5
14M One Flanged	-1.4	-1.5	-1.6
20M Both Flanged	-	-3.2	-3.3
20M One Flanged	-	-2.0	-2.1
Take-up in Center Distance for Installation			
(All Pitches)	+0.1	+0.2	+0.3

Synchronous Plus Belts

Dimensions

5MM Pitch Belts

Belt Length & Pitch Code	Pitch Length		No. of Teeth	Width Code†	
				15 .59	25 .98
	in.	mm		Approx Wt. (lbs.)	
300-5M	11.81	300	60	0.04	0.06
355-5M	13.98	355	71	0.05	0.08
375-5M	14.76	375	75	0.05	0.08
400-5M	15.75	400	80	0.05	0.09
405-5M	15.94	405	81	0.05	0.09
425-5M	16.73	425	85	0.05	0.09
450-5M	17.72	450	90	0.06	0.10
500-5M	19.69	500	100	0.06	0.11
535-5M	21.06	535	107	0.07	0.12
565-5M	22.24	565	113	0.07	0.12
575-5M	22.64	575	115	0.07	0.12
580-5M	22.83	580	116	0.07	0.12
600-5M	23.62	600	120	0.08	0.13
625-5M	24.61	625	125	0.08	0.13
650-5M	25.59	650	130	0.08	0.14
700-5M	27.56	700	140	0.09	0.15
750-5M	29.53	750	150	0.10	0.16
800-5M	31.50	800	160	0.10	0.17
815-5M	32.09	815	163	0.11	0.18
850-5M	33.46	850	170	0.11	0.18
900-5M	35.43	900	180	0.12	0.19
1000-5M	39.37	1000	200	0.13	0.20
1150-5M	45.28	1150	230	0.15	0.30
1300-5M	51.18	1300	260	0.17	0.30
1450-5M	57.09	1450	290	0.19	0.30
1600-5M	62.99	1600	320	0.20	0.30
1720-5M	67.72	1720	344	0.20	0.40
1755-5M	69.09	1755	351	0.20	0.40
2100-5M	82.68	2100	420	0.30	0.50

8MM Pitch Belts

Belt Length & Pitch Code	Pitch Length		No. of Teeth	Width Code†			
				20 .79	30 1.18	50 1.97	85 3.35
	in.	mm		Approx Wt. (lbs.)			
384-8M	15.12	384	48	0.09	0.13	0.22	0.38
480-8M	18.90	480	60	0.13	0.20	0.34	0.57
560-8M	22.05	560	70	0.16	0.23	0.39	0.66
576-8M	22.68	576	72	0.13	0.2	0.33	0.56
600-8M	23.62	600	75	0.17	0.25	0.42	0.71
640-8M	25.20	640	80	0.18	0.27	0.45	0.76
720-8M	28.35	720	90	0.20	0.30	0.50	0.85
800-8M	31.50	800	100	0.22	0.33	0.56	0.95
840-8M	33.07	840	105	0.19	0.29	0.49	0.83
880-8M	34.65	880	110	0.25	0.37	0.61	1.04
920-8M	36.22	920	115	0.21	0.32	0.53	0.90
960-8M	37.80	960	120	0.27	0.40	0.67	1.14
1040-8M	40.94	1040	130	0.29	0.43	0.74	1.23
1064-8M	41.89	1064	133	0.25	0.37	0.62	1.05
1104-8M	43.46	1104	138	0.26	0.38	0.64	1.09
1120-8M	44.09	1120	140	0.31	0.47	0.78	1.33
1160-8M	45.67	1160	145	0.27	0.40	0.67	1.14
1200-8M	47.24	1200	150	0.34	0.50	0.84	1.42
1224-8M	48.19	1224	153	0.35	0.51	0.85	1.43
1280-8M	50.39	1280	160	0.36	0.53	0.89	1.52
1440-8M	56.69	1440	180	0.40	0.60	1.01	1.71
1512-8M	59.53	1512	189	0.35	0.53	0.88	1.49
1584-8M	62.36	1584	198	0.37	0.55	0.92	1.56
1600-8M	62.99	1600	200	0.45	0.67	1.11	1.90
1760-8M	69.29	1760	220	0.49	0.73	1.23	2.08
1800-8M	70.87	1800	225	0.50	0.75	1.25	2.13
2000-8M	78.74	2000	250	0.56	0.83	1.39	2.37
2200-8M	86.61	2200	275	0.62	0.92	1.53	2.61
2400-8M	94.49	2400	300	0.67	1.00	1.67	2.84
2600-8M	102.36	2600	325	0.73	1.09	1.81	3.08
2800-8M	110.24	2800	350	0.78	1.17	1.95	3.32
3048-8M	120.00	3048	381	0.86	1.28	2.12	3.60
3280-8M	129.13	3280	410	0.90	1.34	2.22	3.80
3600-8M	141.73	3600	450	1.00	1.50	2.50	4.26
4400-8M	173.23	4400	550	1.20	1.80	3.00	5.02

† The bold number is the belt width in millimeters, while the number directly under it is the width in inches.

PART NUMBER EXAMPLE:

210014M40 SYNCHRONOUS PLUS BELT

14MM Pitch Belts

Belt Length & Pitch Code	Pitch Length		No. of Teeth	Width Code†				
				40	55	85	115	170
	1.57	2.17		3.35	4.53	6.69		
	in.	mm		Approx Wt. (lbs.)				
966-14M	38.03	966	69	.84	1.15	1.78	2.41	3.56
1190-14M	46.85	1190	85	1.03	1.42	2.20	2.98	4.39
1400-14M	55.12	1400	100	1.21	1.67	2.58	3.50	5.16
1610-14M	63.39	1610	115	1.40	1.92	2.97	4.02	5.95
1778-14M	70.00	1778	127	1.54	2.13	3.28	4.45	6.56
1890-14M	74.41	1890	135	1.64	2.26	3.49	4.73	6.97
2100-14M	82.68	2100	150	1.82	2.51	3.88	5.25	7.75
2310-14M	90.94	2310	165	2.00	2.76	4.26	5.77	8.53
2450-14M	96.46	2450	175	2.13	2.93	4.52	6.13	9.04
2590-14M	101.97	2590	185	2.25	3.10	4.78	6.47	9.55
2800-14M	110.24	2800	200	2.43	3.34	5.17	7.00	10.33
3150-14M	124.02	3150	225	2.73	3.77	5.82	7.87	11.62
3360-14M	132.28	3360	240	2.58	3.98	6.14	8.31	12.26
3500-14M	137.80	3500	250	3.03	4.19	6.46	8.75	12.90
3850-14M	151.58	3850	275	3.33	4.60	7.10	9.62	14.20
4326-14M	170.32	4326	309	3.74	5.17	8.00	10.80	15.96
4578-14M	180.24	4578	327	3.96	5.48	8.45	11.42	16.90
4956-14M	195.12	4956	354	4.29	5.93	9.15	12.36	18.30
5320-14M	209.45	5320	380	4.60	6.37	9.82	13.27	19.64
5740-14M	225.98	5740	410	4.97	6.83	10.55	14.29	21.12
6160-14M	242.52	6160	440	5.33	7.33	11.32	15.34	22.67
6860-14M	270.08	6860	490	5.94	8.16	12.61	17.08	25.25

20MM Pitch Belts

Belt Length & Pitch Code	Pitch Length		No. of Teeth	Width Code†				
				115 4.53	170 6.69	230 9.06	290 11.42	340 13.39
	in.	mm		Approx Wt. (lbs.)				
2000-20M	78.74	2000	100	6.0	9.0	12.0	16.0	19.0
2500-20M	98.43	2500	125	8.0	11.0	15.0	20.0	24.0
3400-20M	133.85	3400	170	11.0	16.0	22.0	27.0	32.0
3800-20M	149.60	3800	190	12.0	18.0	24.5	30.5	35.5
4200-20M	165.35	4200	210	13.0	20.0	27.0	34.0	39.0
4600-20M	181.10	4600	230	14.5	21.5	29.5	37.0	43.0
5000-20M	196.85	5000	250	16.0	23.0	32.0	40.0	47.0
5400-20M	212.60	5400	270	17.0	25.0	34.0	43.0	51.0
5800-20M	228.35	5800	290	18.0	27.0	37.0	46.0	54.0
6200-20M	244.09	6200	310	20.0	29.0	39.0	50.0	58.0
6600-20M	259.84	6600	330	21.0	31.0	42.0	53.0	62.0

† The bold number is the belt width in millimeters, while the number directly under it is the width in inches.

PART NUMBER EXAMPLE:

210014M40 SYNCHRONOUS PLUS BELT

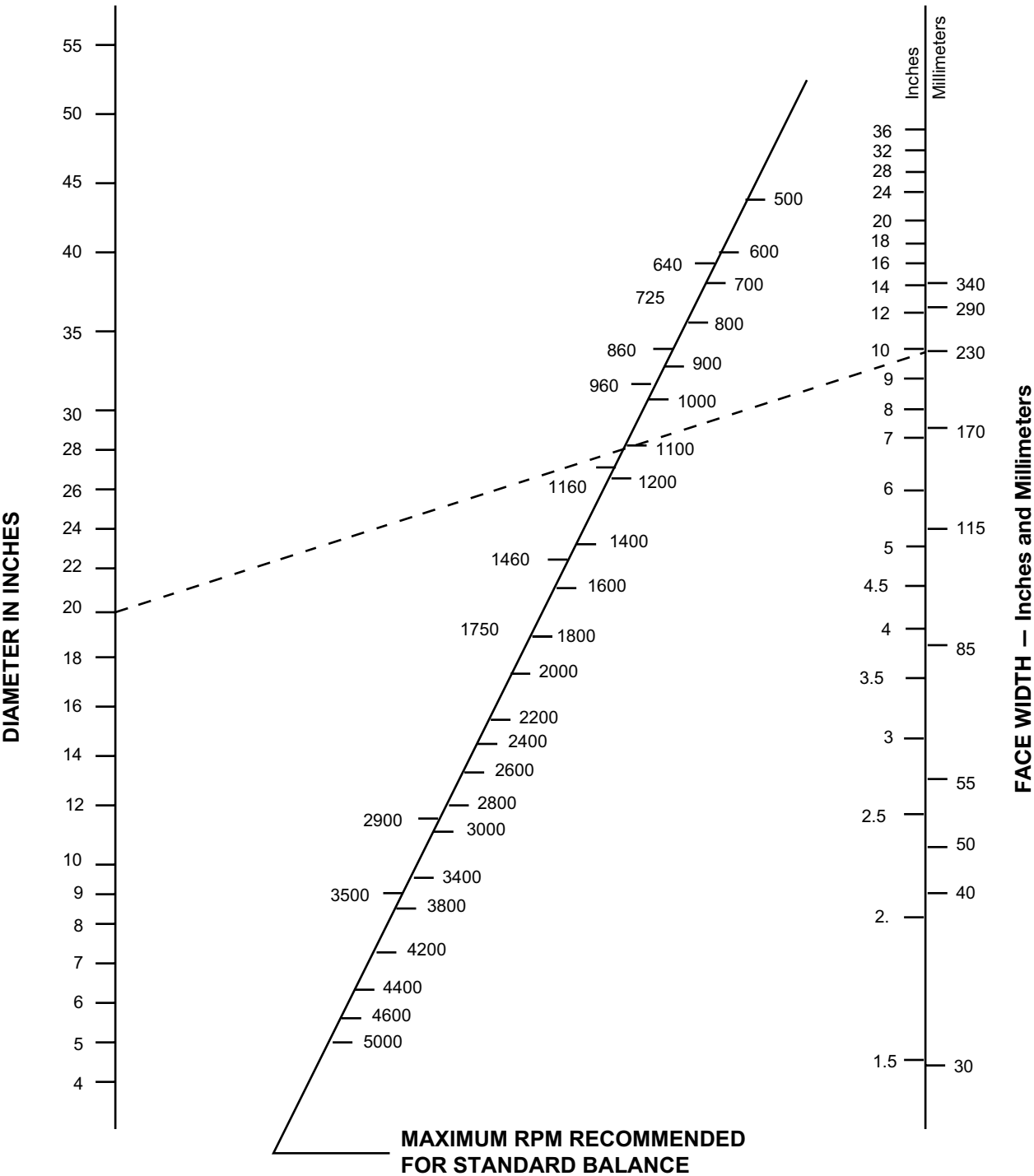
Balancing Standards

Proper balance of rotating products is important for smooth, vibration-free operation. Standard balance of Wood's stock products is a one plane balance. Depending on the face width, outside diameter, and operating speed a higher precision balance may be required for smooth operation. In those cases a two-plane balance is suggested.

Note: Two plane balance is for smooth operation only and DOES NOT increase the maximum safe operating speed of the product. Stock cast iron wheels may not exceed 6,550 feet per minute; and ductile iron wheels are limited to 10,000 FPM. (FPM = sheave outside diameter x RPM x .262)

The nomograph below may be used as a guideline to determine when two-plane balance is recommended. To use this chart lay a straight-edge between the diameter of the part on the left of the chart and the face width of the part on the right. The straight edge will intersect the slanted scale in the center of the chart. When the operating speed is greater than the intersection point a two-plane balance is recommended.

Example: If a 20 in. diameter x 10 in. (230 mm) face width sprocket runs faster than 1100 rpm, dynamic balancing is recommended.



Service Factors

1a: driveR (prime mover)

Class of driveR	Class I	Class II	Class III
Momentary Peak Load, % of Rated Load	149%	150 to 249%	250 to 400%
AC Electric Motors: Single Phase			all
Squirrel Cage NEMA design A 3600 rpm 1800 rpm 1200 rpm 900 rpm	40 HP up 100 HP up 15 HP up 5 HP up	1-1/2 thru 30 HP 5 thru 75 HP 3/4 thru 10 HP 1/2 thru 3 HP	1 thru 3 HP
NEMA design B 3600 rpm 1800 rpm 1200 rpm 900 rpm		5 HP up 5 HP up 5 HP up 2 HP up	1-1/2 thru 3 HP 1 thru 3 HP 3/4 thru 3 HP 1-1/2 thru 1-1/2 HP
NEMA design C 1800 rpm 1200 rpm 900 rpm		15 HP up 7-1/2 HP up all	5 thru 10 HP 3 and 5 HP
NEMA design D			all
NEMA design F	all		
Wound Rotor 1800 rpm 1200 rpm 900 rpm		20 HP 15 HP 7-1/2 HP	2 to 15 HP 2 to 10 HP 1 to 5 HP
Synchronous		normal torque	high torque
DC Electric Motors	shunt	compound	series
Engines —int combust	8 cyl up	6 cyl	4 cyl or less
Hydraulic Motors, Line Shafts			all

1c: Additional Service Factors

Operating Conditions	
Intermittent or seasonal	Sub 0.1
Add for 10–16 hr service	Add 0.2
Add for 16–24 hr service	Add 0.4
Add for each idler	Add 0.2

Speed-up Drives

For speed-up drives, add to the basic service factor the additional factor given below.

Speed-up Ratio Range	Additional Factor	Speed-up Ratio Range	Additional Factor
1 to 1.24	none	2.50 to 3.49	.30
1.25 to 1.74	.10	3.50 & over	.40
1.75 to 2.49	.20		

Unusual Conditions

Additional service factors are required for unusual conditions — such as load reversal, heavy shock, plugged motor stop, electric brake. These should be determined by a transmission specialist.

1b: Basic Service Factors of driveN Machines

driveN Machines	Class I	Class II	Class III
Agitators, Mixers liquid (paddle or propeller) semi-liquid	1.2 1.3	1.4 1.5	1.6 1.7
Bakery Machinery, Dough Mixers	1.2	1.4	1.6
Brick and Clay Machinery augers, mixers, granulators pug mills	1.4 1.6	1.6 1.8	1.8 2.0
Centrifuges	1.5	1.7	-
Compressors reciprocating* centrifugal	1.6 1.4	1.8 1.5	2.0 1.6
Conveyors belt, light package; oven belt: ore, coal, sand apron, bucket, elevator, pan flight, screw	1.1 1.2 1.4 1.4	1.2 1.4 1.6 1.6	1.3 1.6 1.8 1.8
Fans, blowers Centrifugal, induced draft exhausters propeller, mine fans, positive blowers	1.4 1.6	1.6 1.8	1.8 2.0
Generators and Exciters	1.4	1.6	1.8
Hammer Mills	1.5	1.7	1.9
Hoists, Elevators	1.4	1.6	1.8
Laundry Machinery general extractors, washers	1.2 1.4	1.4 1.6	1.6 1.8
Line Shafts	1.2	1.4	1.6
Machine Tools drill presses, lathes, screw machines boring mills, grinders milling machines, shapers	1.2 1.3 1.3	1.4 1.5 1.5	1.6 1.7 1.7
Mills ball, rod, pebble, etc	-	1.9	2.1
Paper Machinery agitators, calenders, dryers beaters, jordans, Nash pumps, pulpers	1.2 1.4	1.4 1.6	1.6 1.8
Printing Machinery presses: newspaper, rotary, embossing, flat bed, magazine; linotype machines; cutters; folders	1.2	1.4	1.6
Pumps centrifugal, gear, rotary, pipeline reciprocating*	1.2 1.7	1.4 1.9	1.6 2.1
Rubber Plant Machinery	1.4	1.6	1.8
Saw Mill Machinery	1.4	1.6	1.8
Screens vibrating (shakers) drum, conical	1.3 1.2	1.5 1.4	- -
Textile Machinery looms, spinning frames, twistors warpers, reels	1.3 1.2	1.5 1.4	1.7 -
Woodworking Machinery lathes, band saws jointer, circular saws, planers	1.2 1.2	1.3 1.4	- -

* **Note:** When the driveN sprocket is used as a flywheel to reduce speed fluctuations a specially constructed sprocket may be required. Obtain the WR² of the unit and consult TB Wood's Engineering.

Pitch Selection

Chart

RPM OF FASTEST SHAFT

		1160	1750	3500	100	200	300	400	500	600	800	1000	1400	1600	2000	2400	2800	3200	4000
MOTOR HORSEPOWER	0.5	5M	5M	5M	5M	5M	5M	5M	5M	5M	5M	5M	5M	5M	5M	5M	5M	5M	5M
	1	5M	5M	5M	8M	5M	5M	5M	5M	5M	5M	5M	5M	5M	5M	5M	5M	5M	5M
	1.5	5M	5M	5M	8M	8M	5M	5M	5M	5M	5M	5M	5M	5M	5M	5M	5M	5M	5M
	2	5M	5M	5M	8M	8M	8M	5M	5M	5M	5M	5M	5M	5M	5M	5M	5M	5M	5M
	3	5M	5M	5M	8M	8M	8M	8M	8M	8M	5M	5M	5M	5M	5M	5M	5M	5M	5M
	5	8M	5M	5M	8M	8M	8M	8M	8M	8M	8M	8M	5M	5M	5M	5M	5M	5M	5M
	7.5	8M	8M	5M	8M	8M	8M	8M	8M	8M	8M	8M	8M	8M	8M	8M	8M	8M	5M
	10	8M	8M	8M	14M	8M	8M	8M	8M	8M	8M	8M	8M	8M	8M	8M	8M	8M	8M
	15	8M	8M	8M	14M	8M	8M	8M	8M	8M	8M	8M	8M	8M	8M	8M	8M	8M	8M
	20	8M	8M	8M	14M	14M	8M	8M	8M	8M	8M	8M	8M	8M	8M	8M	8M	8M	8M
	25	8M	8M	8M	14M	14M	14M	8M	8M	8M	8M	8M	8M	8M	8M	8M	8M	8M	8M
	30	8M	8M	8M	14M	14M	14M	14M	8M	8M	8M	8M	8M	8M	8M	8M	8M	8M	8M
	40	8M	8M	8M	14M	14M	14M	14M	14M	8M	8M	8M	8M	8M	8M	8M	8M	8M	8M
	50	8M	8M	8M	14M	14M	14M	14M	14M	14M	8M	8M	8M	8M	8M	8M	8M	8M	8M
	60	8M	8M	8M	20M	14M	14M	14M	14M	14M	14M	8M	8M	8M	8M	8M	8M	8M	8M
	75	14M	8M	8M	20M	14M	14M	14M	14M	14M	14M	14M	8M	8M	8M	8M	8M	8M	8M
	100	14M	14M	8M	20M	14M	14M	14M	14M	14M	14M	14M	14M	14M	8M	8M	8M	8M	8M
	125	14M	14M	14M	20M	20M	14M	14M	14M	14M	14M	14M	14M	14M	14M	14M	14M	14M	
	150	14M	14M	14M	20M	20M	14M	14M	14M	14M	14M	14M	14M	14M	14M	14M	14M	14M	
	200	14M	14M	14M		20M	20M	20M	14M	14M	14M	14M	14M	14M	14M	14M	14M	14M	
	250	14M	14M			20M	20M	20M	20M	20M	14M	14M	14M	14M	14M				
	300	14M	20M			20M	20M	20M	20M	20M	20M	14M	14M	14M					
	350	20M	20M				20M	20M	20M	20M	20M	20M	20M	20M					
	400	20M	20M				20M	20M	20M	20M	20M	20M	20M	20M					
	500	20M	20M				20M	20M	20M	20M	20M	20M	20M	20M					
	600	20M	20M					20M	20M	20M	20M	20M	20M	20M					
	700	20M	20M						20M	20M	20M	20M	20M	20M					
	800									20M	20M	20M	20M	20M					
	900										20M	20M	20M						

Minimum Recommended Sprocket Pitch Diameters for General Purpose Electric Motors Synchronous Belts

Motor Horsepower	Motor RPM (60 Cycle and 50 Cycle Electric Motors)					
	575 485*	690 575*	870 725*	1160 950*	1750 1425*	3450 2850*
1/2	-	-	2.0	-	-	-
3/4	-	-	2.2	2.0	-	-
1	2.7	2.3	2.2	2.2	2.0	-
1 1/2	2.7	2.7	2.2	2.2	2.2	2.0
2	3.4	2.7	2.7	2.2	2.2	2.2
3	4.1	3.4	2.7	2.7	2.2	2.2
5	4.1	4.1	3.4	2.7	2.7	2.2
7 1/2	4.7	4.1	4.0	3.4	2.7	2.7
10	5.4	4.7	4.0	4.0	3.4	2.7
15	6.1	5.4	4.7	4.0	4.0	3.4
20	7.4	6.1	5.4	4.7	4.0	4.0
25	8.1	7.4	6.1	5.4	4.0	4.0
30	9.0	8.1	6.1	6.1	4.7	-
40	9.0	9.0	7.4	6.1	5.4	-
50	9.9	9.0	7.6	7.4	6.1	-
60	10.8	9.9	9.0	7.2	6.7	-
75	12.6	11.7	8.6	9.0	7.7	-
100	16.2	13.5	10.8	9.0	7.7	-
125	18.0	16.2	13.5	10.8	9.5#	-
150	19.8	18.0	16.2	11.7	9.5	-
200	19.8	19.8	19.8	-	11.9	-
250	19.8	19.8	-	-	-	-
300	24.3	24.3	-	-	-	-

* Indicates 50 cycle RPM electric motors. # Frame 444T use 8.6.

Data in the white area is from NEMA Standards MG-1-14-42 of June 1972 and MG-1-14-43 of January 1968. The data in the shaded area is a composite of various motor manufacturers data. They are usually conservative, and a smaller sprocket may be permitted. Consult the motor manufacturer data.

- BELT LENGTH = $2 \times C + 1.57 \times (D + d) + [(D - d)^2 / (4 \times C)]$

- [†]CENTER DISTANCE = $1/2 \times [A - h \times (D - d)]$

WHERE:

C = Center Distance (in.)[†] D = P.D. of larger sprocket (in.)
 L = Belt Length (in.) d = P.D. of smaller sprocket (in.)
 A = $L - 1.57 \times (D + d)$ h = Factor from chart below

$\frac{D-d}{A}$	h	$\frac{D-d}{A}$	h	$\frac{D-d}{A}$	h	$\frac{D-d}{A}$	h
0.00	0.00	0.16	0.08	0.30	0.16	0.43	0.24
0.02	0.01	0.18	0.09	0.32	0.17	0.44	0.25
0.04	0.02	0.20	0.10	0.34	0.18	0.46	0.26
0.06	0.03	0.21	0.11	0.35	0.19	0.47	0.27
0.08	0.04	0.23	0.12	0.37	0.20	0.48	0.28
0.10	0.05	0.25	0.13	0.39	0.21	0.50	0.29
0.12	0.06	0.27	0.14	0.40	0.22	0.51	0.30
0.14	0.07	0.29	0.15	0.41	0.23	-	-

[†]Center distances must be fixed and rigid.

Notes

Notes

Notes