

Timing Sprockets & Belts

C3



- **Freedom from high tension**
- **No lubrication required**
- **Compact design**

Timing Belt Drives

Features

Timing Belt Drives take their place in industry as a highly efficient, job-proved medium for mechanical power transmission. This drive combines the advantages of the chain and gear with advantages of the belt, but without the limitations usually associated with these drives.

Timing Belt Drives make possible important savings in weight, space and construction without the sacrifice of efficiency.

They are adaptable to almost any kind of power transmission drive.

Timing Belt Drives are being used by virtually every industry. They have been adopted as standard equipment by a wide variety of machine builders and equipment manufacturers.

- **positive—slip-proof . . .**

Positive grip of belt teeth with sprocket grooves eliminates slippage, speed variation. There's no initial stretch, no elongation to require belt take-up.

- **no lubrication . . .**

Absence of metal-to-metal contact eliminates the need for lubricating systems, oil-retaining devices—and their nuisance, cost, weight, and possibility of product contamination.

- **wide capacity range . . .**

The load capacities of synchronous belt drives range from subfractional horsepower to 600 hp and up.

- **freedom from high tension . . .**

Since the synchronous belt drive does not rely on friction, there is no need for high tension. Thus, overhung bearing loads are reduced to a minimum.

- **constant angular velocity . . .**

Speed is transmitted *uniformly*. There is no chordal rise and fall of pitch line as with roller chain, no belt creep or slippage—thus no chatter or vibration.

- **compact design . . .**

Small sprockets, short centers, narrow belts, high capacity—all these inherent features can be combined to reduce space requirements.

- **minimum backlash . . .**

Because of advanced design, backlash—between the teeth and the stock belts and the grooves of stock sprockets—is reduced to a negligible minimum.

- **high efficiency . . .**

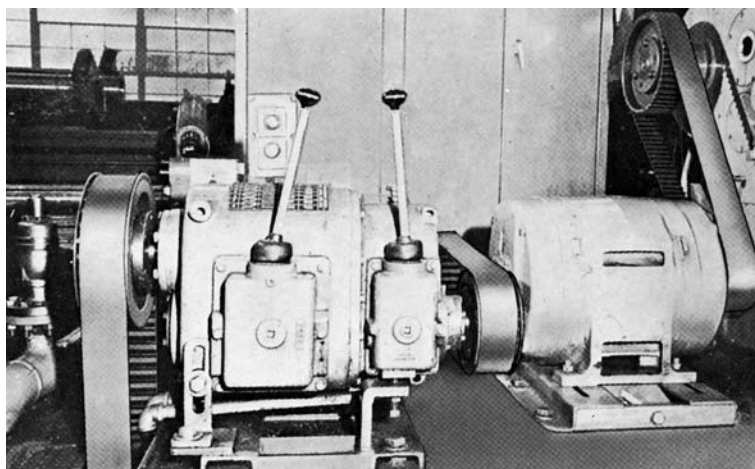
Three factors—inherent elimination of friction, lack of high tension, and the belt's thin construction—contribute to the drive's unusually high mechanical efficiency.

- **light weight . . .**

The horsepower-to-weight ratio is high—an important consideration where weight is a critical factor, as on portable equipment.

- **economical operation . . .**

By comparison with other systems, a synchronous belt drive generally is the least costly. The cost of the drive itself is the only expense. Synchronous belt drives do not require motor bases, lubrication systems or tensioning devices. Maintenance costs are minimal.



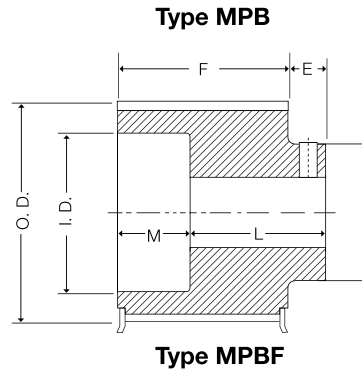
Three Timing Belt Drives on a Niles Boring Lathe

Timing Sprocket XL

Dimensions

The Timing Sprockets listed below are all carried in stock with a minimum plain bore only but can be re-bored to any size within the bore range.

In the "type" column, the first letter indicates the type sketch, the figure describes the construction (1—Solid, no web; 2—Web) and the letter F indicates the sprocket has flanges.



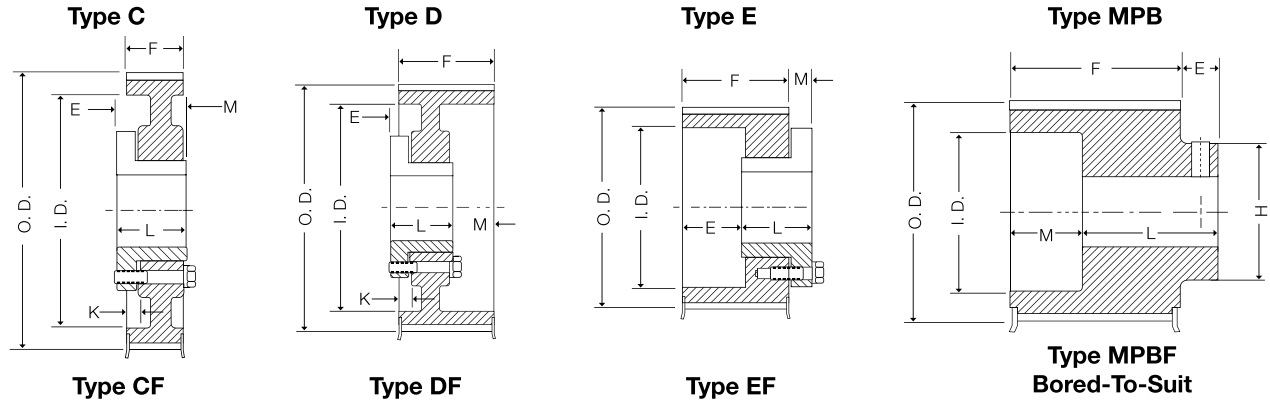
PRODUCT NUMBER	NUMBER OF GROOVES	PITCH DIAM.	O.D.		TYPE	DIMENSIONS, IN.			BORE RANGE		WT. Lbs. App.
			Sprocket	Flange		E	L	H	Min.	Max.*	
Sprockets stocked in 3/8 inch (XL037) width only for belts 1/4 inch (XL025) 3/8 inch (XL037) wide • Face Width (F) = 9/16											
10XL037	10	.637	.617	.88	MPB1F	1/4	13/16	7/16	3/16	1/4	.03
11XL037	11	.700	.680	.88	MPB1F	1/4	13/16	1/2	3/16	5/16	.03
12XL037	12	.764	.744	1.00	MPB1F	1/4	13/16	1/2	3/16	5/16	.06
14XL037	14	.891	.871	1.09	MPB1F	1/4	13/16	9/16	1/4	3/8	.06
15XL037	15	.955	.935	1.18	MPB1F	1/4	13/16	5/8	1/4	7/16	.09
16XL037	16	1.019	.999	1.25	MPB1F	1/4	13/16	11/16	1/4	1/2	.09
18XL037	18	1.146	1.126	1.38	MPB1F	1/4	13/16	13/16	1/4	9/16	.13
20XL037	20	1.273	1.253	1.50	MPB1F	5/16	7/8	15/16	1/4	11/16	.19
21XL037	21	1.337	1.317	1.56	MPB1F	5/16	7/8	1	1/4	3/4	.19
22XL037	22	1.401	1.381	1.63	MPB1F	5/16	7/8	1	1/4	3/4	.22
24XL037	24	1.528	1.508	1.75	MPB1F	11/32	29/32	1-1/16	1/4	13/16	.25
28XL037	28	1.783	1.763	2.00	MPB1F	11/32	29/32	1-3/16	1/4	15/16	.34
30XL037	30	1.910	1.890	2.12	MPB1F	11/32	29/32	1-5/16	5/16	1	.41
32XL037	32	2.037	2.017	-	MPB1	7/16	1	1-1/2	5/16	1-3/16	.22
36XL037	36	2.292	2.272	-	MPB1	7/16	1	1-1/2	5/16	1-3/16	.30
40XL037	40	2.546	2.526	-	MPB1	7/16	1	1-1/2	5/16	1-3/16	.31
42XL037	42	2.674	2.654	-	MPB1	7/16	1	1-1/2	5/16	1-3/16	.31
44XL037	44	2.801	2.781	-	MPB1	7/16	1	1-1/2	5/16	1-3/16	.31
48XL037	48	3.056	3.036	-	MPB1	7/16	1	1-1/2	5/16	1-3/16	.38
60XL037MPB	60	3.820	3.800	-	MPB2	7/16	1	1-1/2	3/8	1-3/16	.38
72XL037	72	4.584	4.564	-	MPB2	7/16	1	1-1/2	3/8	1-3/16	.50

Bored-to-suit construction, minimum plain bore with 2 setscrews.
*Maximum bore without keyseat.

Timing Sprocket L

Dimensions

The Timing Sprockets listed below and on the following pages are all stock sizes. The dimensions given are with the Sure-Grip bushings in place. The figure following the type sketch letter in the "type" column indicates the construction: (1—Solid, 2—Web, 3—Arms), and the letter F indicates the sprocket has flanges.



PRODUCT NUMBER	NUMBER OF GROOVES	PITCH DIAM.	O.D.		I.D.	BUSH.	TYPE	DIMENSIONS, INCHES					BORE RANGE		WT.
			Sprocket	Flange				E	L	M	K	H	Min.	Max.	
For belts 1/2 inch wide • 3/8-inch pitch (L050) • Face Width (F) = 3/4															
10L050	10	1.194	1.164	1.44	-	*	MPB1F	1/2	1-1/4	-	-	13/16	3/8*	1/2	.2
12L050	12	1.432	1.402	1.66	-	*	MPB1F	1/2	1-1/4	-	-	1	3/8*	11/16	.4
14L050	14	1.671	1.641	1.91	-	*	MPB1F	1/2	1-1/4	-	-	1-1/8	3/8*	3/4	.5
16L050	16	1.910	1.880	2.13	-	*	MPB1F	1/2	1-1/4	-	-	1-7/16	1/2*	1	.8
17L050	17	2.029	1.999	2.25	-	*	MPB1F	1/2	1-1/4	-	-	1-7/16	1/2*	1	.9
18L050	18	2.149	2.119	2.38	-	JA	E1F	7/32	1	15/32	-	-	1/2	1-1/4	.7
19L050	19	2.268	2.238	2.50	-	*	MPB1F	1/2	1-1/4	-	-	1-11/16	1/2*	1-3/16	1.1
20L050	20	2.387	2.357	2.62	-	JA	E1F	7/32	1	15/32	-	-	1/2	1-1/4	.9
21L050	21	2.507	2.477	2.75	-	*	MPB1F	1/2	1-1/4	-	-	2	1/2*	1-5/16	1.3
22L050	22	2.626	2.596	2.88	-	JA	D1F	15/32	1	7/32	0	-	1/2	1-1/4	1.1
24L050	24	2.865	2.835	3.09	-	SH	D1F	9/16	1-1/4	1/16	0	-	1/2	1-5/8	1.4
26L050	26	3.104	3.074	3.33	-	SH	D1F	9/16	1-1/4	1/16	0	-	1/2	1-5/8	1.6
26L050MPB	26	3.104	3.074	3.34	-	*	MPB1F	1/2	1-1/4	-	-	2-1/4	1/2*	1-5/8	2.3
28L050	28	3.342	3.312	3.56	-	SH	D1F	9/16	1-1/4	1/16	0	-	1/2	1-5/8	1.9
30L050	30	3.581	3.551	3.81	-	SDS	D1F	5/8	1-5/16	1/16	0	-	1/2	1-15/16	2.2
32L050	32	3.820	3.790	4.06	-	SDS	D1F	5/8	1-5/16	1/16	0	-	1/2	1-15/16	2.5
36L050	36	4.297	4.267	4.53	-	SDS	D1F	5/8	1-5/16	1/16	0	-	1/2	1-15/16	3.0
40L050	40	4.775	4.745	5.00	-	SDS	D1F	5/8	1-5/16	1/16	0	-	1/2	1-15/16	3.6
44L050	44	5.252	5.222	5.48	-	SDS	D1F	5/8	1-5/16	1/16	0	-	1/2	1-15/16	4.3
48L050	48	5.730	5.700	5.94	-	SDS	D1F	5/8	1-5/16	1/16	0	-	1/2	1-15/16	5.1
60L050	60	7.162	7.132	-	6.25	SD	C2	7/8	1-13/16	3/16	-1/4	-	1/2	1-15/16	5.9
72L050	72	8.594	8.564	-	7.62	SD	C3	7/8	1-13/16	3/16	-1/4	-	1/2	1-15/16	7.1
84L050	84	10.027	9.997	-	9.12	SD	C3	7/8	1-13/16	3/16	-1/4	-	1/2	1-15/16	9.0
96L050	96	11.459	11.429	-	10.50	SD	C3	7/8	1-13/16	3/16	-1/4	-	1/2	1-15/16	10.7
120L050	120	14.324	14.294	-	13.38	SD	C3	7/8	1-13/16	3/16	-1/4	-	1/2	1-15/16	13.6

* Bored-to-suit construction, minimum plain bore, no setscrews.

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

Refer to page C1—18 for balancing standards.

Timing Sprocket L

Dimensions

PRODUCT NUMBER	NUMBER OF GROOVES	PITCH DIAM.	O.D.		I.D.	BUSH.	TYPE	DIMENSIONS, INCHES					BORE RANGE		WT.
			Sprocket	Flange				E	L	M	K	H	Min.	Max.	
For belts 3/4 inch wide • 3/8-inch pitch (L075) • Face Width (F) = 1"															
12L075	12	1.432	1.402	1.66	-	*	MPB1F	1/2	1-1/2	-	-	1	3/8*	11/16	.5
14L075	14	1.671	1.641	1.91	-	*	MPB1F	1/2	1-1/2	-	-	1-1/8	3/8*	3/4	.6
16L075	16	1.910	1.880	2.13	-	*	MPB1F	1/2	1-1/2	-	-	1-7/16	1/2*	1	.9
17L075	17	2.029	1.999	2.25	-	*	MPB1F	1/2	1-1/2	-	-	1-7/16	1/2*	1	1.0
18L075	18	2.149	2.119	2.38	-	JA	E1F	15/32	1	15/32	-	-	1/2	1-1/4	.8
19L075	19	2.268	2.238	2.50	-	*	MPB1F	1/2	1-1/2	-	-	1-11/16	1/2*	1-3/16	1.3
20L075	20	2.387	2.357	2.62	-	JA	E1F	15/32	1	15/32	-	-	1/2	1-1/4	1.1
21L075	21	2.507	2.477	2.75	-	*	MPB1F	1/2	1-1/2	-	-	2	1/2	1-5/16	1.5
22L075	22	2.626	2.596	2.88	1.88	JA	E1F	15/32	1	15/32	-	-	1/2	1-1/4	1.2
24L075	24	2.865	2.835	3.09	-	SH	D1F	5/16	1-1/4	5/16	0	-	1/2	1-5/8	1.6
26L075	26	3.104	3.074	3.33	-	SH	D1F	5/16	1-1/4	5/16	0	-	1/2	1-5/8	1.8
28L075	28	3.342	3.312	3.56	2.63	SH	D1F	5/16	1-1/4	5/16	0	-	1/2	1-5/8	2.1
30L075	30	3.581	3.551	3.81	-	SDS	D1F	5/8	1-5/16	5/16	0	-	1/2	1-15/16	2.5
32L075	32	3.820	3.790	4.06	-	SDS	D1F	5/8	1-5/16	5/16	0	-	1/2	1-15/16	2.8
36L075	36	4.297	4.267	4.53	3.38	SDS	D1F	3/8	1-5/16	1/16	1/4	-	1/2	1-15/16	3.3
40L075	40	4.775	4.745	5.00	3.75	SDS	D1F	3/8	1-5/16	1/16	1/4	-	1/2	1-15/16	4.0
44L075	44	5.252	5.222	5.48	4.25	SDS	D1F	3/8	1-5/16	1/16	1/4	-	1/2	1-15/16	4.8
48L075	48	5.730	5.700	5.94	4.75	SDS	D1F	3/8	1-5/16	1/16	1/4	-	1/2	1-15/16	5.6
60L075	60	7.162	7.132	-	6.25	SD	C2	3/4	1-13/16	1/16	-1/8	-	1/2	1-15/16	7.6
72L075	72	8.594	8.564	-	7.62	SD	C3	3/4	1-13/16	1/16	-1/8	-	1/2	1-15/16	7.8
84L075	84	10.027	9.997	-	9.12	SD	C3	3/4	1-13/16	1/16	-1/8	-	1/2	1-15/16	9.8
96L075	96	11.459	11.429	-	10.50	SD	C3	3/4	1-13/16	1/16	-1/8	-	1/2	1-15/16	11.7
120L075	120	14.324	14.294	-	13.38	SD	C3	3/4	1-13/16	1/16	-1/8	-	1/2	1-15/16	15.6
For belts 1 inch wide • 3/8-inch pitch (L100) • Face Width (F) = 1-1/4"															
14L100	14	1.671	1.641	1.91	-	*	MPBF	1/2	1-3/4	-	-	1-1/8	3/8*	3/4	.8
16L100	16	1.910	1.880	2.13	-	*	MPBF	1/2	1-3/4	-	-	1-7/16	1/2*	1	1.1
17L100	17	2.029	1.999	2.25	-	*	MPBF	1/2	1-3/4	-	-	1-7/16	1/2*	1	1.2
18L100	18	2.149	2.119	2.38	-	JA	E1F	23/32	1	15/32	-	-	1/2	1-1/4	1.0
19L100	19	2.268	2.238	2.50	-	*	MPBF	1/2	1-3/4	-	-	1-11/16	1/2*	1-3/16	1.6
20L100	20	2.387	2.357	2.62	-	JA	E1F	23/32	1	15/32	-	-	1/2	1-1/4	1.3
21L100	21	2.507	2.477	2.75	-	*	MPBF	1/2	1-3/4	-	-	2	5/8*	1-5/16	1.8
22L100	22	2.626	2.596	2.88	1.88	JA	E1F	23/32	1	15/32	-	-	1/2	1-1/4	1.3
24L100	24	2.865	2.835	3.09	-	SH	D1F	9/16	1-1/4	9/16	0	-	1/2	1-5/8	1.8
26L100	26	3.104	3.074	3.33	-	SH	D1F	9/16	1-1/4	9/16	0	-	1/2	1-5/8	2.0
28L100	28	3.342	3.312	3.56	2.63	SH	D1F	9/16	1-1/4	9/16	0	-	1/2	1-5/8	2.4
30L100	30	3.581	3.551	3.81	-	SDS	D1F	5/8	1-5/16	9/16	0	-	1/2	1-15/16	2.7
32L100	32	3.820	3.790	4.06	3.00	SDS	D1F	5/8	1-5/16	9/16	0	-	1/2	1-15/16	3.0
36L100	36	4.297	4.267	4.53	3.38	SDS	D1F	1/8	1-5/16	1/16	1/2	-	1/2	1-15/16	3.6
40L100	40	4.775	4.745	5.00	3.75	SDS	D1F	1/8	1-5/16	1/16	1/2	-	1/2	1-15/16	4.4
44L100	44	5.252	5.222	5.48	4.25	SDS	D1F	1/8	1-5/16	1/16	1/2	-	1/2	1-15/16	5.2
48L100	48	5.730	5.700	5.94	4.75	SDS	D1F	1/8	1-5/16	1/16	1/2	-	1/2	1-15/16	6.1
60L100	60	7.162	7.132	-	6.25	SD	D2	5/8	1-13/16	1/16	0	-	1/2	1-15/16	7.1
72L100	72	8.594	8.564	-	7.62	SD	D3	5/8	1-13/16	1/16	0	-	1/2	1-15/16	8.6
84L100	84	10.027	9.997	-	9.12	SD	D3	5/8	1-13/16	1/16	0	-	1/2	1-15/16	10.7
96L100	96	11.459	11.429	-	10.50	SD	D3	5/8	1-13/16	1/16	0	-	1/2	1-15/16	12.7
120L100	120	14.324	14.294	-	13.38	SD	D3	5/8	1-13/16	1/16	0	-	1/2	1-15/16	16.1

* Bored-to-suit construction, minimum plain bore, no setscrews.

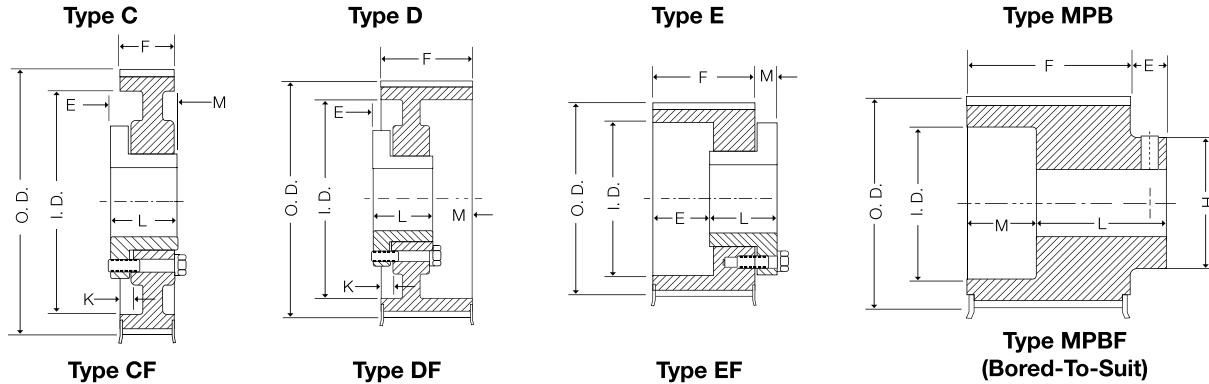
Weights for all Sure-Grip bushed items are approximate and include the bushing.

Refer to page C1—18 for balancing standards.

Timing Sprocket H

Dimensions

The Timing Sprockets listed below and on the following pages are all stock sizes. The dimensions given are with the Sure-Grip bushings in place. The figure following the type sketch letter in the "type" column indicates the construction: (1—Solid, 2—Web, 3—Arms), and the letter F indicates the sprocket has flanges.



PRODUCT NUMBER	NUMBER OF GROOVES	PITCH DIAM.	O.D.		I.D.	BUSH.	TYPE	DIMENSIONS, INCHES					BORE RANGE		WT.
			Sprocket	Flange				E	L	M	K	H	Min.	Max.	
For belts 1 inch wide • 1/2-inch pitch (H100) also use for 3/4-inch (H075) belts Face Width (F) = 1-5/16 • 156 H100 F = 1-3/8															
14H100MPB	14	2.228	2.174	2.50	-	*	MPB1F	9/16	1-7/8	-	-	1-5/8	5/8*	1-1/8	1.4
14H100	14	2.228	2.174	2.50	-	JA	E1F	25/32	1	15/32	-	-	1/2	1-1/4	1.1
16H100	16	2.546	2.492	2.78	-	JA	E1F	25/32	1	15/32	-	-	1/2	1-1/4	1.2
18H100	18	2.865	2.811	3.12	-	SH	E1F	5/8	1-1/4	9/16	-	-	1/2	1-11/16	1.8
19H100	19	3.024	2.970	3.25	-	*	MPB1F	11/16	2	-	-	2-3/8	5/8*	1-9/16	3.0
20H100MPB	20	3.183	3.129	3.42	-	*	MPB1F	13/16	2-1/8	-	-	2-1/2	5/8*	1-5/8	3.4
20H100	20	3.183	3.129	3.42	-	SH	E1F	5/8	1-1/4	9/16	-	-	1/2	1-11/16	2.2
21H100	21	3.342	3.288	3.58	2.63	SH	E1F	5/8	1-1/4	9/16	-	-	1/2	1-11/16	2.4
22H100	22	3.501	3.447	3.75	-	SDS	E1F	5/8	1-5/16	5/8	-	-	1/2	2	2.6
23H100	23	3.661	3.607	4.06	3.03	SDS	E1F	5/8	1-5/16	5/8	-	-	1/2	2	2.9
24H100	24	3.820	3.766	4.06	3.00	SDS	E1F	5/8	1-5/16	5/8	-	-	1/2	2	3.0
25H100	25	3.979	3.925	4.38	3.25	SDS	E1F	5/8	1-5/16	5/8	-	-	1/2	2	3.3
26H100	26	4.138	4.084	4.38	3.31	SDS	D1F	1/16	1-5/16	1/16	9/16	-	1/2	2	3.4
27H100	27	4.297	4.243	4.69	3.44	SDS	D1F	1/16	1-5/16	1/16	9/16	-	1/2	2	3.8
28H100	28	4.456	4.402	4.69	3.50	SDS	D1F	1/16	1-5/16	1/16	9/16	-	1/2	2	4.0
29H100	29	4.615	4.561	4.76	3.63	SDS	D1F	1/8	1-5/16	1/8	1/2	-	1/2	2	5.2
30H100	30	4.775	4.721	5.00	-	SD	D1F	5/8	1-13/16	1/8	0	-	1/2	2	5.7
31H100	31	4.934	4.880	5.31	-	SD	D1F	5/8	1-13/16	1/8	0	-	1/2	2	6.4
32H100	32	5.093	5.039	5.31	-	SK	D1F	23/32	1-7/8	5/32	0	-	1/2	2-5/8	6.6
33H100	33	5.252	5.198	5.31	-	SK	D1F	23/32	1-7/8	5/32	0	-	1/2	2-5/8	7.3
34H100	34	5.411	5.357	5.95	-	SK	D1F	23/32	1-7/8	5/32	0	-	1/2	2-5/8	7.7
35H100	35	5.570	5.516	5.95	-	SK	D1F	23/32	1-7/8	5/32	0	-	1/2	2-5/8	8.1
36H100	36	5.730	5.676	5.95	-	SK	D1F	23/32	1-7/8	5/32	0	-	1/2	2-5/8	8.4
37H100	37	5.889	5.835	6.38	-	SK	D1F	23/32	1-7/8	5/32	0	-	1/2	2-5/8	9.1
38H100	38	6.048	5.994	6.56	-	SK	D1F	23/32	1-7/8	5/32	0	-	1/2	2-5/8	9.6
39H100	39	6.207	6.153	6.60	-	SK	D1F	23/32	1-7/8	5/32	0	-	1/2	2-5/8	10.1
40H100	40	6.366	6.312	6.60	-	SK	D1F	23/32	1-7/8	5/32	0	-	1/2	2-5/8	10.4
41H100	41	6.525	6.471	6.77	-	SK	D1F	23/32	1-7/8	5/32	0	-	1/2	2-5/8	11.2
42H100	42	6.684	6.631	7.25	-	SK	D1F	23/32	1-7/8	5/32	0	-	1/2	2-5/8	11.8
43H100	43	6.844	6.790	7.25	-	SK	D1F	23/32	1-7/8	5/32	0	-	1/2	2-5/8	12.3
44H100	44	7.003	6.949	7.25	-	SK	D1F	23/32	1-7/8	5/32	0	-	1/2	2-5/8	12.6
45H100	45	7.162	7.108	7.54	-	SK	D1F	23/32	1-7/8	5/32	0	-	1/2	2-5/8	13.4
46H100	46	7.321	7.267	7.60	-	SK	D1F	23/32	1-7/8	5/32	0	-	1/2	2-5/8	14.1
48H100	48	7.639	7.585	7.88	-	SK	D1F	23/32	1-7/8	5/32	0	-	1/2	2-5/8	14.8
60H100	60	9.549	9.495	-	8.50	SF	C3	11/16	2	0	0	-	1/2	2-15/16	15.0
72H100	72	11.459	11.405	-	10.38	SF	C3	11/16	2	0	0	-	1/2	2-15/16	20.8
84H100	84	13.369	13.315	-	12.25	SF	C3	11/16	2	0	0	-	1/2	2-15/16	23.6
96H100	96	15.279	15.225	-	14.12	SF	C3	11/16	2	0	0	-	1/2	2-15/16	26.9
120H100	120	19.099	19.045	-	17.88	SF	C3	11/16	2	0	0	-	1/2	2-15/16	34.4
156H100	156	24.828	24.774	-	23.50	SF	C3	5/8	2	0	1/16	-	1/2	2-15/16	48.8

* Bored-to-suit construction, minimum plain bore, no setscrews.

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

Refer to page C1—18 for balancing standards.

Timing Sprocket H

Dimensions

PRODUCT NUMBER	NUMBER OF GROOVES	PITCH DIAM.	O.D.		I.D.	BUSH.	TYPE	DIMENSIONS, INCHES					BORE RANGE		WT.
			Sprocket	Flange				E	L	M	K	H	Min.	Max.	
For belts 1-1/2 inch wide • 1/2-inch pitch (H150) Face Width (F) = 1-13/16 • 156 H150 F = 1-7/8															
14H150	14	2.228	2.174	2.50	-	JA	E1F	1-9/32	1	15/32	-	-	1/2	1-1/4	1.3
16H150	16	2.546	2.492	2.75	1.88	JA	E1F	1-9/32	1	15/32	-	-	1/2	1-1/4	1.4
18H150	18	2.865	2.811	3.12	1.97	SH	E1F	1-1/8	1-1/4	9/16	-	-	1.2	1-5/8	2.2
19H150	19	3.024	2.970	3.25	...	*	MPB1F	11/16	2-1/2	-	-	2-3/8	3/4*	1-9/16	3.7
20H150	20	3.183	3.129	3.42	-	SH	E1F	1-1/8	1-1/4	9/16	...	-	1/2	1-5/8	2.6
21H150	21	3.342	3.288	3.58	-	*	MPB1F	13/16	2-5/8	-	-	2-5/8	3/4*	1-11/16	4.8
22H150	22	3.501	3.447	3.75	-	SD	E1F	5/8	1-13/16	5/8	-	-	1/2	1-15/16	3.5
24H150	24	3.820	3.766	4.06	3.00	SD	E1F	5/8	1-13/16	5/8	-	-	1/2	1-15/16	4.2
26H150	26	4.138	4.084	4.38	3.31	SD	D1F	1/8	1-13/16	1/8	1/2	-	1/2	1-15/16	4.7
28H150	28	4.456	4.402	4.69	3.50	SD	D1F	1/8	1-13/16	1/8	1/2	-	1/2	1-15/16	5.6
30H150	30	4.775	4.721	5.00	3.75	SD	D1F	1/8	1-13/16	1/8	1/2	-	1/2	1-15/16	6.4
32H150	32	5.093	5.039	5.31	4.12	SK	D1F	5/32	1-7/8	3/32	9/16	-	1/2	2-1/2	7.2
36H150	36	5.730	5.676	5.95	4.50	SK	D1F	5/32	1-7/8	3/32	9/16	-	1/2	2-1/2	9.2
40H150	40	6.366	6.312	6.60	4.88	SK	D1F	5/32	1-7/8	3/32	9/16	-	1/2	2-1/2	11.1
44H150	44	7.003	6.949	7.25	5.88	SK	D1F	5/32	1-7/8	3/32	9/16	-	1/2	2-1/2	13.6
48H150	48	7.639	7.585	8.00	6.63	SK	D2F	5/32	1-7/8	3/32	9/16	-	1/2	2-1/2	12.5
60H150	60	9.549	9.495	-	8.50	SF	D3	7/16	2	1/4	1/4	-	1/2	2-3/4	16.7
72H150	72	11.459	11.405	-	10.38	SF	D3	7/16	2	1/4	1/4	-	1/2	2-3/4	22.9
84H150	84	13.369	13.315	-	12.25	SF	D3	7/16	2	1/4	1/4	-	1/2	2-3/4	25.9
96H150	96	15.279	15.225	-	14.12	SF	D3	7/16	2	1/4	1/4	-	1/2	2-3/4	31.5
120H150	120	19.099	19.045	-	17.88	SF	D3	7/16	2	1/4	1/4	-	1/2	2-3/4	38.5
156H150	156	24.828	24.774	-	23.50	SF	D3	3/8	2	1/4	5/16	-	1/2	2-3/4	54.7
For belts 2 inch wide • 1/2-inch pitch (H200) Face Width (F) = 2-11/32 • 156 H200 F = 2-1/2															
14H200	14	2.228	2.174	2.50	-	JA	E1F	1-13/16	1	15/32	-	-	1/2	1-1/4	1.7
16H200	16	2.546	2.492	2.75	1.88	JA	E1F	1-13/16	1	15/32	-	-	1/2	1-1/4	1.7
18H200	18	2.865	2.811	3.12	2.00	SH	E1F	1-21/32	1-1/4	9/16	-	-	1/2	1-5/8	2.6
19H200	19	3.024	2.970	3.25	...	*	MPB1F	11/16	3-1/32	-	-	2-3/8	3/4*	1-9/16	4.6
20H200	20	3.183	3.129	3.42	-	SH	E1F	1-21/32	1-1/4	9/16	-	-	1/2	1-5/8	3.1
21H200	21	3.342	3.288	3.58	-	*	MPB1F	13/16	3-5/32	-	-	2-5/8	1*	1-11/16	5.6
22H200	22	3.501	3.447	3.75	-	SD	E1F	1-5/32	1-13/16	5/8	-	-	1/2	1-15/16	4.1
24H200	24	3.820	3.766	4.06	3.00	SD	E1F	1-5/32	1-13/16	5/8	-	-	1/2	1-15/16	4.7
26H200	26	4.138	4.084	4.38	3.31	SD	A1F	0	1-13/16	17/32	5/8	-	1/2	1-15/16	5.0
28H200	28	4.456	4.402	4.69	3.50	SD	A1F	0	1-13/16	17/32	5/8	-	1/2	1-15/16	6.2
30H200	30	4.775	4.721	5.00	3.75	SD	D1F	1/16	1-13/16	19/32	9/16	-	1/2	1-15/16	7.1
32H200	32	5.093	5.039	5.31	4.12	SK	D1F	1/32	1-7/8	11/16	11/16	-	1/2	2-1/2	8.1
36H200	36	5.730	5.676	5.95	4.62	SK	D1F	7/32	1-7/8	11/16	1/2	-	1/2	2-1/2	10.3
40H200	40	6.366	6.312	6.60	4.88	SK	D1F	7/32	1-7/8	11/16	11/16	-	1/2	2-1/2	12.2
44H200	44	7.003	6.949	7.25	5.88	SK	D1F	7/32	1-7/8	11/16	1/2	-	1/2	2-1/2	15.0
48H200	48	7.639	7.585	8.00	6.50	SF	D1F	1/8	2	15/32	9/16	-	1/2	2-3/4	18.1
60H200	60	9.549	9.495	-	8.50	SF	D3	3/16	2	17/32	1/2	-	1/2	2-3/4	19.8
72H200	72	11.459	11.405	-	10.38	SF	D3	3/16	2	17/32	1/2	-	1/2	2-3/4	24.8
84H200	84	13.369	13.315	-	12.25	SF	D3	3/16	2	17/32	1/2	-	1/2	2-3/4	29.7
96H200	96	15.279	15.225	-	14.12	E	D3	13/32	2-5/8	1/8	1/2	-	7/8	3-7/16	42.3
120H200	120	19.099	19.045	-	17.88	E	D3	13/32	2-5/8	1/8	1/2	-	7/8	3-7/16	53.8
156H200	156	24.828	24.774	-	23.50	E	D3	9/32	2-5/8	5/32	5/8	-	7/8	3-7/16	74.5
For belts 3 inch wide • 1/2-inch pitch (H300) Face Width (F) = 3-3/8 • 156 H300 F = 3-1/2															
16H300	16	2.546	2.492	2.78	-	*	MPB1F	11/16	4-1/16	-	-	1-7/8	3/4*	1-1/4	4.1
18H300	18	2.865	2.811	3.12	-	*	MPB1F	11/16	4-1/16	-	-	2-1/4	3/4*	1-3/8	5.4
19H300	19	3.024	2.970	3.25	-	*	MPB1F	11/16	4-1/16	-	-	2-3/8	3/4*	1-5/8	6.2
20H300	20	3.183	3.129	3.42	-	*	MPB1F	13/16	4-3/16	-	-	2-1/2	3/4*	1-7/8	7.0
21H300	21	3.342	3.288	3.58	-	*	MPB1F	13/16	4-3/16	-	...	2-5/8	1*	1-11/16	7.5
22H300	22	3.501	3.447	3.75	-	SD	E1F	2-3/16	1-13/16	5/8	-	-	1/2	1-15/16	5.1
24H300	24	3.820	3.766	4.06	3.00	SD	E1F	2-3/16	1-13/16	5/8	-	-	1/2	1-15/16	5.8
26H300	26	4.138	4.084	4.38	3.31	SD	A1F	0	1-13/16	1-9/16	5/8	-	1/2	1-15/16	6.2
28H300	28	4.456	4.402	4.69	3.50	SD	A1F	0	1-13/16	1-9/16	5/8	-	1/2	1-15/16	7.5
30H300	30	4.775	4.721	5.00	3.75	SD	A1F	7/16	1-13/16	1-1/8	1-1/16	-	1/2	1-15/16	8.7
32H300	32	5.093	5.039	5.31	4.12	SK	A1F	11/32	1-7/8	1-5/32	1-1/16	-	1/2	2-1/2	9.6
36H300	36	5.730	5.676	5.95	4.50	SK	A1F	11/32	1-7/8	1-5/32	1-1/16	-	1/2	2-1/2	12.4
40H300	40	6.366	6.312	6.60	4.88	SK	A1F	11/32	1-7/8	1-5/32	1-1/16	-	1/2	2-1/2	14.3
44H300	44	7.003	6.949	7.25	5.88	SK	A1F	9/32	1-7/8	1-7/32	1	-	1/2	2-1/2	17.6
48H300	48	7.639	7.585	7.88	6.50	SF	A1F	5/16	2	1-1/16	1	-	1/2	2-3/4	21.1
60H300	60	9.549	9.495	-	8.50	SF	A2	5/16	2	1-1/16	1	-	1/2	2-3/4	24.2
72H300	72	11.459	11.405	-	10.38	SF	A3	5/16	2	1-1/16	1	-	1/2	2-3/4	28.5
84H300	84	13.369	13.315	-	12.25	SF	A3	5/16	2	1-1/16	1	-	1/2	2-3/4	34.9
96H300	96	15.279	15.225	-	14.12	E	D3	5/32	2-5/8	29/32	3/4	-	7/8	3-7/16	48.6
120H300	120	19.099	19.045	-	17.88	E	D3	5/32	2-5/8	29/32	3/4	-	7/8	3-7/16	62.2
156H300	156	24.828	24.774	-	23.50	E	D3	5/32	2-5/8	1-1/32	3/4	-	7/8	3-7/16	86.3

* Bored-to-suit construction, minimum plain bore, no setscrews.

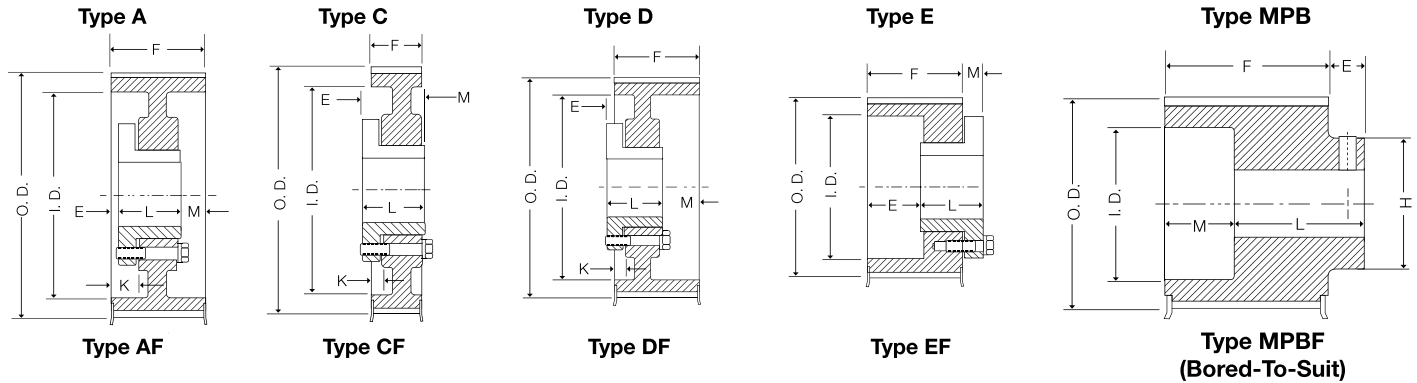
Weights for all Sure-Grip bushed items are approximate and include the bushing.

Refer to page C1—18 for balancing standards.

Timing Sprocket XH

Dimensions

The Timing Sprockets listed below and on the following pages are all stock sizes. The dimensions given are with the Sure-Grip bushings in place. The figure following the type sketch letter in the "type" column indicates the construction: (1—Solid, 2—Web, 3—Arms), and the letter F indicates the sprocket has flanges.



PRODUCT NUMBER	NUMBER OF GROOVES	PITCH DIAM.	O.D.		I.D.	BUSH.	TYPE	DIMENSIONS, INCHES					BORE RANGE		WT.
			Sprocket	Flange				E	L	M	K	H	Min.	Max.	
For belts 2 inch wide • 7/8-inch pitch (XH200) Face Width (F) = 2-9/16															
18XH200	18	5.013	4.903	5.56	-	SK	E1F	1-13/32	1-7/8	23/32	0	...	1/2	2-1/2	8.8
20XH200	20	5.570	5.460	6.09	4.00	SK	D1F	1/16	1-7/8	3/4	21/32	-	1/2	2-1/2	9.9
22XH200	22	6.127	6.017	6.47	4.38	SK	D1F	1/16	1-7/8	3/4	21/32	-	1/2	2-1/2	12.6
24XH200	24	6.685	6.575	7.18	4.94	SF	D1F	1/32	2	19/32	21/32	-	1/2	2-3/4	15.3
26XH200	26	7.241	7.131	7.78	5.50	SF	D1F	1/32	2	19/32	21/32	-	1/2	2-3/4	17.7
28XH200	28	7.799	7.689	8.38	6.25	E	D1F	7/16	2-5/8	3/8	15/32	-	7/8	3-7/16	23.8
30XH200	30	8.356	8.246	8.91	6.47	E	D1F	7/16	2-5/8	3/8	15/32	-	7/8	3-7/16	27.7
32XH200	32	8.913	8.803	9.44	7.00	E	D1F	7/16	2-5/8	3/8	15/32	-	7/8	3-7/16	31.2
36XH200	36	10.027	9.917	10.62	8.12	E	D2F	7/16	2-5/8	3/8	15/32	-	7/8	3-7/16	33.4
40XH200	40	11.141	11.031	11.71	9.25	F	C2F	1-1/32	3-5/8	1/32	1/32	-	1	3-15/16	50.5
48XH200	48	13.369	13.259	-	11.75	F	C2	1-1/32	3-5/8	1/32	1/32	-	1	3-15/16	58.0
60XH200	60	16.711	16.601	-	15.06	F	C3	1-1/32	3-5/8	1/32	1/32	-	1	3-15/16	58.6
72XH200	72	20.054	19.944	-	18.38	F	C3	1-1/32	3-5/8	1/32	1/32	-	1	3-15/16	70.1
84XH200	84	23.369	23.286	-	21.75	F	C3	1-1/32	3-5/8	1/32	1/32	-	1	3-13/16	79.0
96XH200	96	26.738	26.628	-	25.06	F	C3	1-1/32	3-5/8	1/32	1/32	-	1	3-13/16	94.1
120XH200	120	33.423	33.313	-	31.75	F	C3	1-1/32	3-5/8	1/32	1/32	-	1	3-13/16	118.3

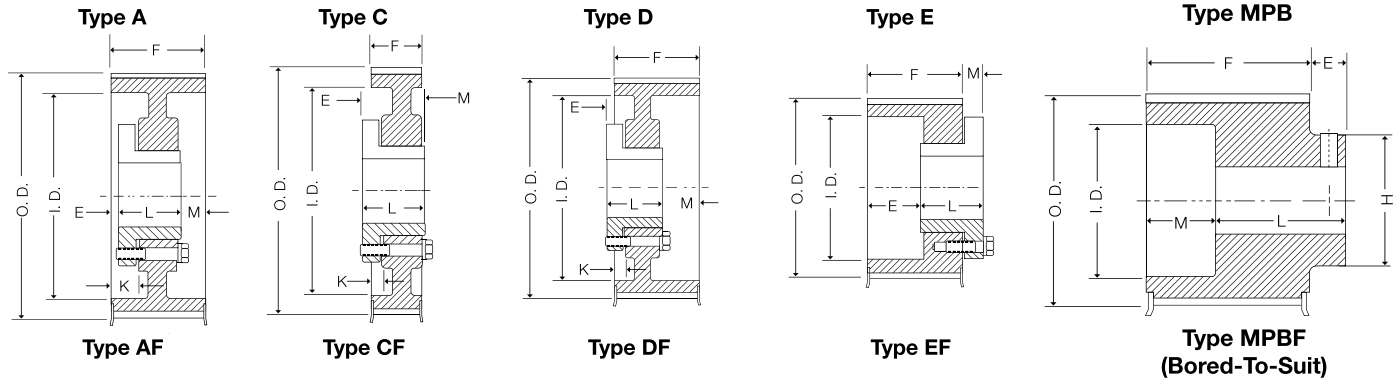
Weights for all Sure-Grip bushed items are approximate and include the bushing.

Refer to page C1—18 for balancing standards.

Timing Sprocket XH

Dimensions

The Timing Sprockets listed below and on the following pages are all stock sizes. The dimensions given are with the Sure-Grip bushings in place. The figure following the type sketch letter in the "type" column indicates the construction: (1—Solid, 2—Web, 3—Arms), and the letter F indicates the sprocket has flanges.



PRODUCT NUMBER	NUMBER OF GROOVES	PITCH DIAM.	O.D.		I.D.	BUSH.	TYPE	DIMENSIONS, INCHES					BORE RANGE		WT.
			Sprocket	Flange				E	L	M	K	H	Min.	Max.	
For belts 3 inch wide • 7/8-inch pitch (XH300) Face Width (F) = 3-5/8															
18XH300	18	5.013	4.903	5.56	-	SK	E1F	2-15/32	1-7/8	23/32	0	-	1/2	2-1/2	11.4
20XH300	20	5.570	5.460	6.09	4.00	SK	A1F	15/32	1-7/8	1-9/32	1-3/16	-	1/2	2-1/2	12.2
22XH300	22	6.127	6.017	6.47	4.38	SK	A1F	15/32	1-7/8	1-9/32	1-3/16	-	1/2	2-1/2	15.9
24XH300	24	6.685	6.575	7.18	4.94	SF	A1F	1/2	2	1-1/8	1-3/16	-	1/2	2-3/4	19.0
26XH300	26	7.241	7.131	7.78	5.50	SF	A1F	1/2	2	1-1/8	1-3/16	-	1/2	2-3/4	21.7
28XH300	28	7.799	7.689	8.31	5.94	E	A1F	3/32	2-5/8	29/32	1	-	7/8	3-7/16	27.3
30XH300	30	8.356	8.246	8.91	6.47	E	A1F	3/32	2-5/8	29/32	1	-	7/8	3-7/16	32.5
32XH300	32	8.913	8.803	9.44	7.00	E	A1F	3/32	2-5/8	29/32	1	-	7/8	3-7/16	36.4
36XH300	36	10.027	9.917	10.62	8.12	E	A2F	3/32	2-5/8	29/32	1	-	7/8	3-7/16	39.7
40XH300	40	11.141	11.031	11.71	9.25	F	D2F	1/2	3-5/8	1/2	9/16	-	1	3-15/16	63.1
48XH300	48	13.369	13.259	-	11.75	F	D2	1/2	3-5/8	1/2	9/16	-	1	3-15/16	64.8
60XH300	60	16.711	16.601	-	15.06	F	D3	1/2	3-5/8	1/2	9/16	-	1	3-15/16	70.3
72XH300	72	20.054	19.944	-	18.38	J	D3	1-1/32	4-1/2	5/32	7/32	-	1-7/16	4-7/16	94.8
84XH300	84	23.369	23.286	-	21.75	J	D3	1-1/32	4-1/2	5/32	7/32	-	1-7/16	4-7/16	118.0
96XH300	96	26.738	26.628	-	25.06	J	D3	1-1/32	4-1/2	5/32	7/32	-	1-7/16	4-7/16	122.4
120XH300	120	33.423	33.313	-	31.75	J	D3	1-1/32	4-1/2	5/32	7/32	-	1-7/16	4-7/16	158.8
For belts 4 inch wide • 7/8-inch pitch (XH400) Face Width (F) = 4-11/16															
18XH400	18	5.013	4.903	5.56	-	*	MPB1F	7/8	5.56	-	-	3-11/16	1	2-1/4	18.9
20XH400	20	5.570	5.460	6.09	4.00	SK	A1F	15/32	1-7/8	2-11/32	1-3/16	-	1/2	2-1/2	14.5
22XH400	22	6.127	6.017	6.47	4.38	SK	A1F	15/32	1-7/8	2-11/32	1-3/16	-	1/2	2-1/2	18.5
24XH400	24	6.685	6.575	7.18	4.94	SF	A1F	1/2	2	2-3/16	1-3/16	-	1/2	2-3/4	22.2
26XH400	26	7.241	7.131	7.78	5.50	SF	A1F	1/2	2	2-3/16	1-3/16	-	1/2	2-3/4	25.7
28XH400	28	7.799	7.689	8.31	5.94	E	A1F	5/8	2-5/8	1-7/16	1-17/32	-	7/8	3-7/16	30.8
30XH400	30	8.356	8.246	8.91	6.47	E	A1F	5/8	2-5/8	1-7/16	1-17/32	-	7/8	3-7/16	37.3
32XH400	32	8.913	8.803	9.44	7.00	E	A1F	5/8	2-5/8	1-7/16	1-17/32	-	7/8	3-7/16	41.7
36XH400	36	10.027	9.917	10.62	8.12	E	A2F	5/8	2-5/8	1-7/16	1-17/32	-	7/8	3-7/16	45.9
40XH400	40	11.141	11.031	11.71	9.25	F	A2F	1/32	3-5/8	1-1/32	1-3/32	-	1	3-15/16	68.2
48XH400	48	13.369	13.259	-	11.75	J	D2	1/2	4-1/2	11/16	3/4	-	1-7/16	4-7/16	84.9
60XH400	60	16.711	16.601	-	15.06	J	D3	1/2	4-1/2	11/16	3/4	-	1-7/16	4-7/16	93.8
72XH400	72	20.054	19.944	-	18.38	J	D3	1/2	4-1/2	11/16	3/4	-	1-7/16	4-7/16	109.1
84XH400	84	23.369	23.286	-	21.75	J	D3	1/2	4-1/2	11/16	3/4	-	1-7/16	4-7/16	123.0
96XH400	96	26.738	26.628	-	25.06	J	D3	1/2	4-1/2	11/16	3/4	-	1-7/16	4-7/16	145.8
120XH400	120	33.423	33.313	-	31.75	J	D3	1/2	4-1/2	11/16	3/4	-	1-7/16	4-7/16	181.4

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

* Bored to suit construction, minimum plain bore, no setscrews

Refer to page C1—18 for balancing standards.

Timing Sprocket XXH

Dimensions

PRODUCT NUMBER	NUMBER OF GROOVES	PITCH DIAM.	O.D.		I.D.	BUSH.	TYPE	DIMENSIONS, INCHES					BORE RANGE		WT.
			Sprocket	Flange				E	L	M	K	H	Min.	Max.	
For belts 2 inch wide • 1-1/4-inch pitch (XXH200) Face Width (F) = 2-5/8															
18XXH200	18	7.162	7.042	7.88	4.50	SK	D1F	1/32	1-7/8	25/32	11/16	-	1/2	2-1/2	18.1
20XXH200	20	7.958	7.838	8.69	5.31	SK	D1F	1/32	1-7/8	25/32	11/16	-	1/2	2-1/2	21.8
22XXH200	22	8.753	8.633	9.50	6.25	E	D1F	13/32	2-5/8	13/32	1/2	-	7/8	3-7/16	30.7
24XXH200	24	9.549	9.429	10.31	6.89	E	D1F	13/32	2-5/8	13/32	1/2	-	7/8	3-7/16	36.4
26XXH200	26	10.345	10.225	11.06	7.68	E	D2F	13/32	2-5/8	13/32	1/2	-	7/8	3-7/16	42.0
30XXH200	30	11.937	11.817	12.69	9.25	F	C2F	1	3-5/8	0	1/16	-	1	3-15/16	58.5
34XXH200	34	13.528	13.408	14.25	10.88	F	C2F	1	3-5/8	0	1/16	-	1	3-15/16	67.6
40XXH200	40	15.915	15.795	16.62	13.25	F	C3F	1	3-5/8	0	1/16	-	1	3-15/16	70.6
48XXH200	48	19.099	18.979	-	16.81	J	C3	1-17/32	4-1/2	11/32	-9/32	-	1-7/16	4-7/16	88.5
60XXH200	60	23.873	23.753	-	21.56	J	C3	1-17/32	4-1/2	11/32	-9/32	-	1-7/16	4-7/16	108.6
72XXH200	72	28.648	28.528	-	26.31	J	C3	1-17/32	4-1/2	11/32	-9/32	-	1-7/16	4-7/16	127.5
90XXH200	90	35.810	35.690	-	33.44	J	C3	1-17/32	4-1/2	11/32	-9/32	-	1-7/16	4-7/16	156.9
For belts 3 inch wide • 1-1/4-inch pitch (XXH300) Face Width (F) = 3-11/16															
18XXH300	18	7.162	7.042	7.88	4.75	SF	A1F	11/16	2	1	1-3/8	-	1/2	2-3/4	22.6
20XXH300	20	7.958	7.838	8.69	5.31	SF	A1F	11/16	2	1	1-3/8	-	1/2	2-3/4	28.2
22XXH300	22	8.753	8.633	9.50	6.25	E	A1F	1/8	2-5/8	15/16	1-1/32	-	7/8	3-7/16	36.9
24XXH300	24	9.549	9.429	10.31	6.89	E	A1F	1/8	2-5/8	15/16	1-1/32	-	7/8	3-7/16	43.8
26XXH300	26	10.345	10.225	11.06	7.68	E	A2F	1/8	2-5/8	15/16	1-1/32	-	7/8	3-7/16	50.2
30XXH300	30	11.937	11.817	12.69	9.25	F	D2F	15/32	3-5/8	17/32	19/32	-	1	3-15/16	75.0
34XXH300	34	13.528	13.408	14.25	10.88	F	D2F	15/32	3-5/8	17/32	19/32	-	1	3-15/16	78.7
40XXH300	40	15.915	15.795	16.62	13.25	F	D3F	15/32	3-5/8	17/32	19/32	-	1	3-15/16	86.2
48XXH300	48	19.099	18.979	-	16.81	J	D3	1	4-1/2	3/16	1/4	-	1-7/16	4-7/16	105.6
60XXH300	60	23.873	23.753	-	21.56	J	D3	1	4-1/2	3/16	1/4	-	1-7/16	4-7/16	128.3
72XXH300	72	28.648	28.528	-	26.31	J	D3	1	4-1/2	3/16	1/4	-	1-7/16	4-7/16	158.4
90XXH300	90	35.810	35.690	-	33.44	J	D3	1	4-1/2	3/16	1/4	-	1-7/16	4-7/16	208.8
For belts 4 inch wide • 1-1/4-inch pitch (XXH400) Face Width (F) = 4-3/4															
18XXH400	18	7.162	7.042	7.88	4.75	SF	A1F	11/16	2	2-1/16	1-3/8	-	1/2	2-3/4	27.3
20XXH400	20	7.958	7.838	8.69	5.31	SF	A1F	11/16	2	2-1/16	1-3/8	-	1/2	2-3/4	34.1
22XXH400	22	8.753	8.633	9.50	6.25	E	A1F	21/32	2-5/8	1-15/32	1-9/16	-	7/8	3-7/16	43.1
24XXH400	24	9.549	9.429	10.31	6.89	E	A1F	21/32	2-5/8	1-15/32	1-9/16	-	7/8	3-7/16	51.3
26XXH400	26	10.345	10.225	11.06	7.68	F	A1F	1/16	3-5/8	1-1/16	1-1/8	-	1	3-15/16	67.6
30XXH400	30	11.937	11.817	12.69	9.25	F	A2F	1/16	3-5/8	1-1/16	1-1/8	-	1	3-15/16	77.9
34XXH400	34	13.528	13.408	14.25	10.88	J	D2F	15/32	4-1/2	23/32	25/32	-	1-7/16	4-7/16	102.5
40XXH400	40	15.915	15.795	16.62	13.25	J	D3F	15/32	4-1/2	23/32	25/32	-	1-7/16	4-7/16	112.2
48XXH400	48	19.099	18.979	-	16.81	J	D3	15/32	4-1/2	23/32	25/32	-	1-7/16	4-7/16	119.9
60XXH400	60	23.873	23.753	-	21.56	M	C3	1-11/16	6-3/4	5/16	-7/32	-	2	5-1/2	203.3
72XXH400	72	28.648	28.528	-	26.31	M	C3	1-11/16	6-3/4	5/16	-7/32	-	2	5-1/2	258.3
90XXH400	90	35.810	35.690	-	33.44	M	C3	1-11/16	6-3/4	5/16	-7/32	-	2	5-1/2	293.9
For belts 5 inch wide • 1-1/4-inch pitch (XXH500) Face Width (F) = 5-13/16															
18XXH500	18	7.162	7.042	7.88	4.50	*	MPB1F	1-1/4	5	2-1/16	-	5	1-1/4*	3-1/4	48.6
20XXH500	20	7.958	7.838	8.69	5.31	*	MPB1F	1-1/4	5	2-1/16	-	5-7/8	1-1/4*	3-1/4	61.0
22XXH500	22	8.753	8.633	9.50	6.25	E	A1F	1-3/16	2-5/8	2	2-3/32	-	7/8	3-7/16	49.4
24XXH500	24	9.549	9.429	10.31	6.89	F	A1F	19/32	3-5/8	1-19/32	1-21/32	-	1	3-15/16	65.9
26XXH500	26	10.345	10.225	11.06	7.68	F	A1F	19/32	3-5/8	1-19/32	1-21/32	-	1	3-15/16	75.7
30XXH500	30	11.937	11.817	12.69	9.25	J	A1F	1/16	4-1/2	1-1/4	1-5/16	-	1-7/16	4-7/16	109.1
34XXH500	34	13.528	13.408	14.25	10.88	J	A2F	1/16	4-1/2	1-1/4	1-5/16	-	1-7/16	4-7/16	113.6
40XXH500	40	15.915	15.795	16.62	13.25	J	A3F	1/16	4-1/2	1-1/4	1-5/16	-	1-7/16	4-7/16	125.9
48XXH500	48	19.099	18.979	-	16.81	M	D3	1-5/32	6-3/4	7/32	5/16	-	2	5-1/2	188.7
60XXH500	60	23.873	23.753	-	21.56	M	D3	1-5/32	6-3/4	7/32	5/16	-	2	5-1/2	229.3
72XXH500	72	28.648	28.528	-	26.31	M	D3	1-5/32	6-3/4	7/32	5/16	-	2	5-1/2	266.5
90XXH500	90	35.810	35.690	-	33.44	M	D3	1-5/32	6-3/4	7/32	5/16	-	2	5-1/2	363.1

* Bored-to-suit construction, minimum plain bore, no setscrews.

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

Refer to page C1—18 for balancing standards.

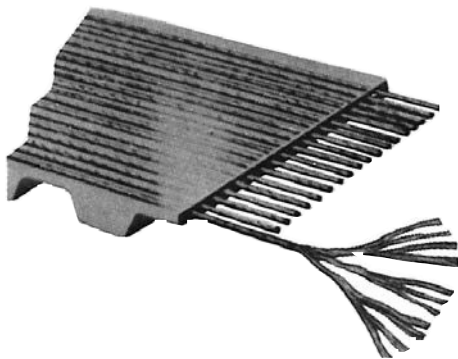
Construction

Timing belt drives are built on a revolutionary tooth-grip principle. The molded teeth of the belt are designed to make positive engagement with the mating axial grooves on the pulleys. These teeth enter and leave the grooves in a smooth, rolling manner—with negligible friction; they function in much the same manner as the teeth on a gear. The tooth profile is the result of years of engineering research and development.

Timing belts, unlike most other types of belts, do not derive their great tensile strength from their thickness. Instead, these belts are built extremely *thin* with teeth; yet they are all “muscle”—with tension members that give them inherent power to *grip* and to *pull*.

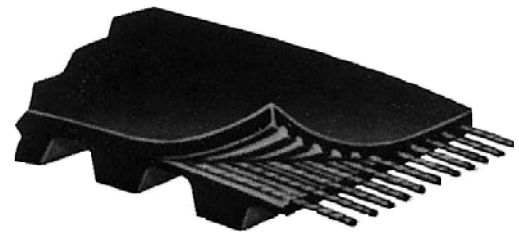
In many respects both the engineering and the nomenclature of these timing belts parallel those of chain and gear drives. The relationship between a synchronous belt and its matching grooved pulley is similar to that between an internal ring gear and its pinion.

The construction of the timing belt is not complex. It consists of only four components.



1. The Tension Member

Continuous, helically wound fiberglass cords—the pulling or load-carrying element, the very heart of the belt. This tension member is the secret of the belt’s enormous tensile strength, its excellent flex life, its high resistance to elongation.



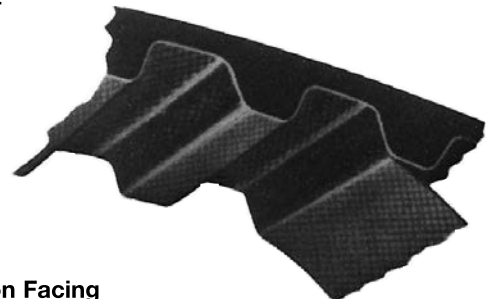
2. The Neoprene Backing

The durable, flexible backing that encases the load-carrying tension member. Made of strong, wear-resisting neoprene, bonded to the tension member—and built thin. It protects the cords from grime, oil, moisture—also from frictional wear if power is transmitted from back of belt. It is highly resistant to action of machine oils (but not to vegetable and water-soluble coolant oils). For severe oil conditions, belts can be made of special oil-resisting compounds.



3. The Neoprene Teeth

Molded integral with the neoprene backing that protects the fiberglass cords. Made of a shear-resistant, moderately hard neoprene compound. These teeth—to assure correct engagement with the pulley grooves—are precisely formed and accurately spaced. They are so located that the tooth root line lies substantially on the pitch line; thus the tooth spacing (circular pitch) of the belt is not altered by flexing. The belt tooth strength actually exceeds the tensile strength when 6 or more teeth are in mesh.



4. The Nylon Facing

The tough, wear-resistant fabric that covers the belt’s wearing surfaces. Made of tough nylon duck with low coefficient of friction, this facing protects the tooth surfaces in much the same way that case-hardening protects the wearing surfaces of steel. This facing, after long service, becomes highly polished; it normally outlasts the other components of the belt.

Timing Belts

Dimensions

XL (1/5-inch Pitch)

PRODUCT NO.	PITCH LENGTH	NO. OF TEETH	WT./WIDTH (LBS)		PRODUCT NO.	PITCH LENGTH	NO. OF TEETH	WT./WIDTH (LBS)	
			025	037				025	037
50XL	5.00	25	.01	.01	250XL	25.00	125	.03	.04
60XL	6.00	30	.01	.01	260XL	26.00	130	.03	.04
70XL	7.00	35	.01	.01	280XL	28.00	140	.03	.04
80XL	8.00	40	.01	.01	290XL	29.00	145	.04	.04
90XL	9.00	45	.01	.01	300XL	30.00	150	.04	.04
100XL	10.00	50	.01	.01	310XL	31.00	155	.04	.05
110XL	11.00	55	.01	.02	330XL	33.00	165	.04	.05
120XL	12.00	60	.01	.02	340XL	34.00	170	.04	.05
130XL	13.00	65	.01	.02	350XL	35.00	175	.04	.06
140XL	14.00	70	.01	.02	370XL	37.00	185	.04	.06
150XL	15.00	75	.02	.02	380XL	38.00	190	.04	.06
160XL	16.00	80	.02	.02	390XL	39.00	195	.04	.06
170XL	17.00	85	.02	.03	400XL	40.00	200	.04	.06
180XL	18.00	90	.02	.03	420XL	42.00	210	.04	.06
190XL	19.00	95	.02	.03	450XL	45.00	225	.04	.06
200XL	20.00	100	.02	.03	460XL	46.00	230	.04	.06
210XL	21.00	105	.02	.03	480XL	48.00	240	.04	.08
220XL	22.00	110	.02	.03	500XL	50.00	250	.06	.08
230XL	23.00	115	.02	.03	570XL	57.00	285	.06	.08
240XL	24.00	120	.02	.04	630XL	63.00	315	.08	.10
					770XL	77.00	385	.08	.12

L (3/8-inch Pitch)

PRODUCT NO.	PITCH LENGTH	NO. OF TEETH	WT./WIDTH (LBS)		
			050	075	100
124L	12.38	33	.02	.05	.07
135L	13.50	36	.02	.05	.07
150L	15.00	40	.03	.06	.08
165L	16.50	44	.03	.06	.08
187L	18.75	50	.04	.07	.09
195L	19.50	52	.04	.08	.10
210L	21.00	56	.04	.08	.10
225L	22.50	60	.05	.08	.11
240L	24.00	64	.06	.09	.12
255L	25.50	68	.06	.09	.13
270L	27.00	72	.06	.10	.13
285L	28.50	76	.07	.10	.14
300L	30.00	80	.07	.11	.15
322L	32.25	86	.08	.12	.16
345L	34.50	92	.08	.13	.17
367L	36.75	98	.09	.13	.18
390L	39.00	104	.09	.14	.19
420L	42.00	112	.10	.15	.21
450L	45.00	120	.11	.16	.22
480L	48.00	128	.12	.17	.24
510L	51.00	136	.12	.18	.25
540L	54.00	144	.13	.20	.26
600L	60.00	160	.13	.21	.27
660L	66.00	176	.16	.24	.32
817L	81.75	218	.20	.30	.42
900L	90.00	240	.22	.32	.44

H (1/2-inch Pitch)

PRODUCT NO.	PITCH LENGTH	NO. OF TEETH	WT./WIDTH (LBS)				
			075	100	150	200	300
210H	21.00	42	.12	.16	.25	.33	.49
220H	22.00	44	.13	.17	.27	.35	.52
230H	23.00	46	.13	.19	.28	.38	.56
240H	24.00	48	.13	.20	.28	.41	.56
270H	27.00	54	.15	.21	.31	.44	.63
300H	30.00	60	.17	.23	.35	.47	.70
320H	32.00	64	.18	.24	.36	.49	.73
330H	33.00	66	.19	.25	.38	.51	.77
340H	34.00	68	.19	.26	.40	.53	.79
350H	35.00	70	.20	.27	.41	.55	.81
360H	36.00	72	.20	.28	.42	.56	.84
370H	37.00	74	.21	.29	.42	.58	.87
390H	39.00	78	.22	.30	.45	.61	.91
400H	40.00	80	.23	.31	.47	.63	.93
410H	41.00	82	.23	.31	.48	.64	.95
420H	42.00	84	.24	.32	.49	.65	.98
450H	45.00	90	.25	.35	.52	.70	1.05
480H	48.00	96	.27	.37	.56	.75	1.12
490H	49.00	98	.28	.38	.57	.77	1.15
510H	51.00	102	.29	.39	.59	.79	1.19
540H	54.00	108	.30	.41	.63	.84	1.26
560H	56.00	112	.31	.42	.65	.86	1.28
570H	57.00	114	.32	.44	.66	.89	1.33
585H	58.50	117	.33	.45	.68	.91	1.37
600H	60.00	120	.34	.46	.70	.93	1.40

PRODUCT NO.	PITCH LENGTH	NO. OF TEETH	WT./WIDTH (LBS)				
			075	100	150	200	300
630H	63.00	126	.35	.48	.73	.98	1.47
645H	64.50	129	.36	.49	.75	1.00	1.50
660H	66.00	132	.37	.51	.77	1.02	1.54
700H	70.00	140	.39	.54	.81	1.09	1.64
730H	73.00	146	.41	.56	.83	1.12	1.69
750H	75.00	150	.42	.58	.87	1.16	1.75
780H	78.00	156	.43	.59	.89	1.20	1.80
800H	80.00	160	.45	.61	.93	1.24	1.87
820H	82.00	164	.40	.63	.95	1.27	1.93
840H	84.00	168	.47	.64	.97	1.29	1.95
850H	85.00	170	.48	.68	.99	1.32	1.99
900H	90.00	180	.51	.69	1.04	1.40	2.10
960H	96.00	192	.54	.73	1.10	1.47	2.22
1000H	100.00	200	.56	.77	1.16	1.55	2.35
1100H	110.00	220	.62	.84	1.27	1.71	2.57
1140H	114.00	228	.66	.90	1.36	1.83	2.74
1250H	125.00	250	.70	.96	1.45	1.94	2.92
1400H	140.00	280	.79	1.07	1.62	2.17	3.27
1550H	155.00	310	.88	1.19	1.79	2.40	3.62
1700H	170.00	340	.96	1.30	1.95	2.63	3.97

Note: For complete product number, add width to belt length given in Product No. column.

Examples: 50XL025 or 310XL037.

XH (7/8-inch Pitch)

PRODUCT NO.	PITCH LENGTH	NO. OF TEETH	WT./WIDTH (LBS)		
			200	300	400
507XH	50.75	58	2.11	3.16	4.22
560XH	56.00	64	2.33	3.49	4.66
630XH	63.00	72	2.62	3.93	5.24
700XH	70.00	80	2.91	4.37	5.82
770XH	77.00	88	3.20	4.81	6.41
840XH	84.00	96	3.49	5.24	6.99
980XH	98.00	112	4.08	6.12	8.15
1120XH	112.00	128	4.66	6.99	9.32
1260XH	126.00	144	5.24	7.86	10.48
1400XH	140.00	160	5.82	8.74	11.65
1540XH	154.00	176	6.41	9.61	12.81
1750XH	175.00	200	7.28	10.92	14.56

XXH (1-1/4-inch Pitch)

PRODUCT NO.	PITCH LENGTH	NO. OF TEETH	WT./WIDTH (LBS)			
			200	300	400	500
700XXH	70.00	56	4.09	6.13	8.18	10.22
800XXH	80.00	64	4.67	7.01	9.34	11.68
900XXH	90.00	72	5.26	7.88	10.51	13.14
1000XXH	100.00	80	5.84	8.76	11.68	14.50
1200XXH	120.00	96	7.01	10.51	14.60	17.52
1400XXH	140.00	112	8.18	12.26	16.35	20.44
1600XXH	160.00	128	9.34	14.02	18.69	23.36
1800XXH	180.00	144	10.57	15.77	21.02	26.28

Note: For complete product number, add width to belt length given in Product No. column.

Examples: 700XH300 or 1200XXH200.

STOCK BELT TOLERANCES

LENGTH TOLERANCES

on center distance*

BELT LENGTH, INCHES	TOLERANCE
5 to 10	± .008
over 10 to 15	± .009
over 15 to 20	± .010
over 20 to 30	± .012
over 30 to 40	± .013
over 40 to 50	± .015
over 50 to 60	± .016
over 60 to 70	± .017
over 70	add .001" for each 10.0" increase in belt length

* These tolerances are for reference only. For fixed center drive applications, consult the factory.

Tolerances on special belts on application.

WIDTH TOLERANCES

for 1/2-in. pitch belts and under**

BELT WIDTH, INCHES	BELT LENGTH, INCHES		
	0 TO 33	33 TO 66	OVER 66
1/8 to 7/16	+ 1/64 - 1/32	+ 1/64 - 1/32	-
over 7/16 to 1-1/2	+ 1/32 - 1/32	+ 1/32 - 3/64	+ 1/32 - 3/64
over 1-1/2 to 2	+ 1/32 - 3/64	+ 3/64 - 3/64	+ 3/64 - 1/16
over 2 to 2-1/2	+ 3/64 - 3/64	+ 3/64 - 1/16	+ 1/16 - 1/16
over 2-1/2 to 3	+ 3/64 - 1/16	+ 1/16 - 1/16	+ 1/16 - 1/16
over 3 to 4	+ 1/16 - 1/16	+ 1/16 - 5/64	+ 5/64 - 5/64
over 4	+ 3/32 - 3/32	+ 3/32 - 7/64	+ 3/32 - 1/8

** For other pitch belts up to and including 4 inches wide tolerance = ± 3/16 in. For belts over 4 inches wide tolerance = +3/16 - 1/4".

Twin Power

Twin Power Timing Belts have fully molded and jacketed teeth on both sides. Twin Power Timing Belts can transmit 100% of their maximum rated load from either side of the belt or in any combination where the sum of loading exerted on both sides does not exceed the maximum rating of the belt.

Prior to the development of fully-molded construction, conventional timing belts were manufactured with extra rubber on the backside of the belts. This extra rubber was then ground to provide the tooth profile on the second side of the belt. The disadvantage of

this method was that the ground tooth could only transmit 35% of the load of a conventional molded tooth. Further disadvantages were that it is virtually impossible to adhere nylon fabric to the ground tooth surface to retard wear and reduce friction. The advent of fully-molded construction has eliminated these load capacity and wear problems.

While Twin Power Timing Belts provide unique solutions to difficult design problems, their construction similarities to conventional timing belts allow essentially the same design parameters.

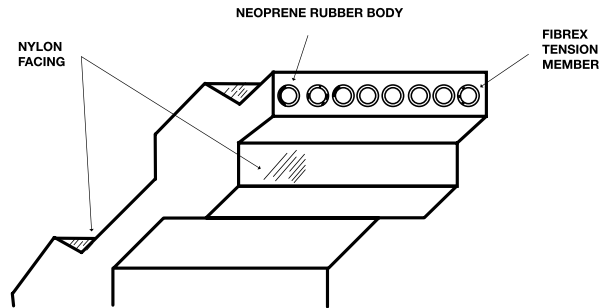
TWIN POWER SPECIFICATION

The prefix “TP” precedes the standard code to differentiate Twin Power from regular one-sided timing belts. For example, a 26” long, 1/5” pitch, 3/8” wide Twin Power Timing Belt is specified: TP260XL037.

TWIN POWER CONSTRUCTION

Twin Power Timing Belts have the identical basic components as our standard timing belts, namely:

- Tension Member – Fibrex (fiberglass) cords, helically wound, provide the same load-carrying elements as in the standard timing belt.
- Neoprene Body – Standard Neoprene compound provides tooth material and support for fibrex cords.
- Nylon Facing – Specially treated nylon fabric adhered through patented process provides tough wear-resistant tooth surface with minimal friction.



TWIN POWER SIZES AVAILABLE

XL (1/5-inch Pitch)

PITCH LENGTH CODES				STANDARD WIDTH CODES	
TP140XL	TP190XL	TP240XL	TP300XL		
TP150XL	TP200XL	TP250XL	TP310XL		
TP160XL	TP210XL	TP260XL	TP330XL	1/4"	- 025
TP170XL	TP220XL	TP280XL		3/8"	- 037
TP180XL	TP230XL	TP290XL			

L (3/8-inch Pitch)

PITCH LENGTH CODES				STANDARD WIDTH CODES	
TP210L	TP285L	TP390L	TP540L		
TP225L	TP300L	TP420L	TP600L	1/2"	- 050
TP240L	TP322L	TP450L	TP660L	3/4"	- 075
TP255L	TP345L	TP480L		1"	- 100
TP270L	TP367L	TP510L			

H (1/2-inch Pitch)

PITCH LENGTH CODES				STANDARD WIDTH CODES	
TP360H	TP510H	TP660H	TP900H	3/4"	- 075
TP390H	TP540H	TP700H	TP1000H	1"	- 100
TP420H	TP570H	TP750H	TP1100H	1-1/2"	- 150
TP450H	TP600H	TP800H		2"	- 200
TP480H	TP630H	TP850H		3"	- 300

There are many special Timing belts in use today. These special belts are necessary for one reason or another. The belt may be of special pitch, length, and/or construction. When replacement belts are required, complete information on the original belts must be given. A typical special belt number would be No. 9108 x 3-V8N2. This information is necessary at all times when requesting price or when ordering belts. The omission of any

section of this number makes it impossible to furnish. The mold for making Special Timing Belts is normally 15 inches wide and will make a slab this wide which will then be cut into the desired widths. Special belts must always be purchased in the minimum and multiple quantities as shown in the table below.

MINIMUM AND MULTIPLE QUANTITIES PER ORDER BASED ON 15" MOLD

MADE-TO-ORDER belts must be ordered in minimum quantities. Consult factory for minimum quantity.

NOMINAL BELT WIDTH, INCHES	NO. OF BELTS	NOMINAL BELT WIDTH, INCHES	NO. OF BELTS	NOMINAL BELT WIDTH INCHES	NO. OF BELTS	NOMINAL BELT WIDTH, INCHES	NO. OF BELTS	NOMINAL BELT WIDTH, INCHES	NO. OF BELTS
1/8	116	13/32	34	7/8	16	1-7/8	7	4	3
5/32	90	7/16	33	15/16	15	2	7	4-1/2	3
3/16	80	15/32	30	1	14	2-1/4	6	5	2
7/32	64	1/2	29	1-1/8	13	2-1/2	5	5-1/2	2
1/4	60	9/16	26	1-1/4	11	2-3/4	5	6	2
9/32	50	5/8	23	1-3/8	10	3	4	6-1/2	2
5/16	48	11/16	21	1-1/2	9	3-1/4	4	7	2
11/32	42	3/4	20	1-5/8	9	3-1/2	4	8	1
3/8	40	13/16	17	1-3/4	8	3-3/4	3	-	-

Example: For MADE-TO-ORDER belts 2 inches wide, the minimum quantity is 7 belts. Minimum quantity for belts 3 inches wide is 4 belts. Minimum quantity for 1/2-inch wide belts is 29 belts.

Orders must also specify the exact number of belts desired by the customer. This exact number may differ from the minimum quantity required on the order. Possible rejects can reduce the total number furnished.

Example: Customer requires 5 MADE-TO-ORDER belts 2 inches wide. Minimum quantity order is for 7 belts. However, due to factory reject of 1 belt, customers will be shipped 6 belts.

NOTE: New molds may be 30" wide. Consult factory for information.

MINIMUM AND MAXIMUM BELT WIDTHS AND LENGTHS

BELT	BELT LENGTH, INCHES	WIDTH, INCHES	
		MINIMUM	MAXIMUM
XL 1/5 in.	Under 30	3/16	14-1/2
	30 to 60	1/4	14-1/2
	60 to 180	1/2	14-1/2
L 3/8 in.	8 to 60	1/4	14-1/2
	60 to 180	1/2	14-1/2
H 1/2 in.	20 to 180	1/2	14-1/2
XH 7/8 in.	50 to 180	2	14
XXH 1-1/4 in.	70 to 180	2	14

SPECIAL CONSTRUCTION

Static Dissipating—

Resistivity of 6 megohms or less

Low Temperature—

For dry operating temperature range of -65°F. to +180°F. (-54°C. to + 82°C.)

High Temperature—

For dry operating temperature range of -40°F. to +230°F. (Stock belt temperature range: -30°F. to +185°F.) (-40°C. to +110°C.)

Oil Resistant—

For excessive oil atmosphere, including immersion in commercial motor oil; temperature range of -20°F. to +240°F. in oil. (Dry: -20°F. to +210°F.) (-29°C. to +99°C.)

Non-Marking—

For conveyors, food handling, etc. Light grey neoprene 50 to 60 shore durometer.

Ground Backing—

Special applications involving vibration or outside idlers. Class I ± .005 – Class II ± .010".

Extra Backing Rubber Thickness—

For functional and special applications.