

Belt Drives

Martin

Martin V-belt pulleys meet the toughest demands of industry, while continuing the Martin tradition of providing the utmost in service and maintaining unsurpassed manufacturing standards.

Totally committed to meeting the individual needs of customers, Martin Sprocket & Gear now serves the V-belt industry with extensive stock inventories, the capacity to meet large quantity requirements of the versatility to respond quickly to made-to-order applications.



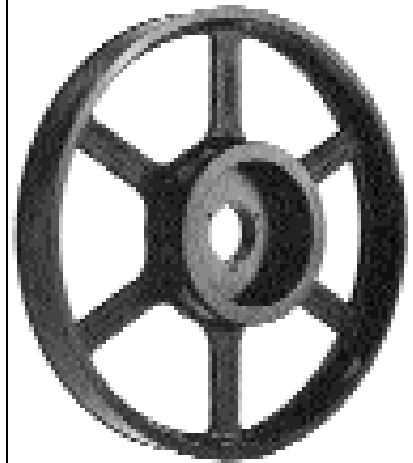
MADE-TO-ORDER CAPABILITIES



WIRE ROPE IDLER



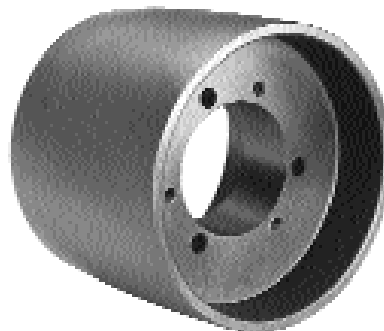
FLAT BELT PULLEY



DUPLEX — V-BELT PULLEY
AND FLAT BELT PULLEY



POLY-V PULLEYS



CROWN FACE PULLEY



IDLER PULLEY

All Martin pulleys and timing pulleys can be manufactured to meet your special requirements: Aluminum, Brass, Ductile, Steel, Stainless Steel. Martin, service and quality drive components you can depend on to get the job done.

TAPER BUSHED — N. AMERICA

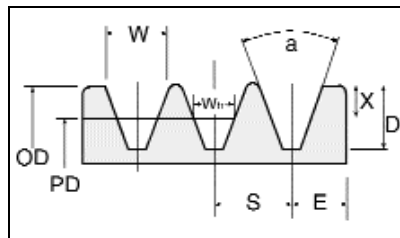
(MPTA) HI-CAP WEDGE (Also Referred To As "Narrow")	(MPTA) CONVENTIONAL (Also Referred To As "Classical")
10 8V 5300 TB	1 B 34 TB
10 — Number of Grooves 8V — Belt Cross Section 5300 — 53.00" <i>Outside Diameter</i> TB — Taper Bushing Required	1 — Number of Grooves B — Belt Cross Section 34 — 3.4" <i>Pitch Diameter</i> (B-Belt) TB — Taper Bushing Required

TAPER BUSHED — ISO

ISO/BRITISH STANDARDS
10 SPC 800
10 — Number of Grooves SPC — Belt Cross Section 800 — 800MM <i>Pitch Diameter</i> ★ — Taper Bushing Required

* - All British Standard Pulleys manufactured by Martin are Taper Bushed.
For other requirements consult Martin.

GROOVE DIMENSIONS (ISO Standard)



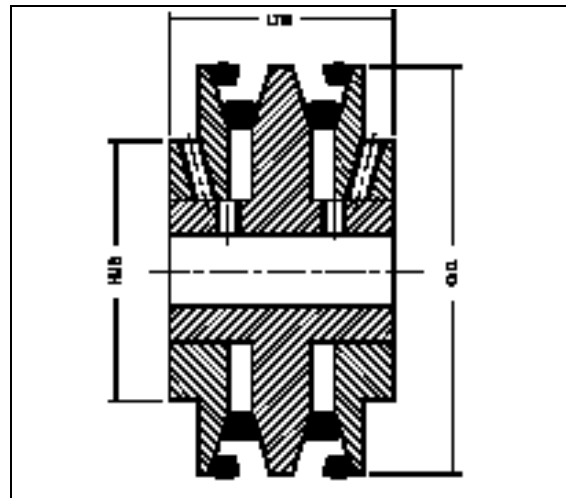
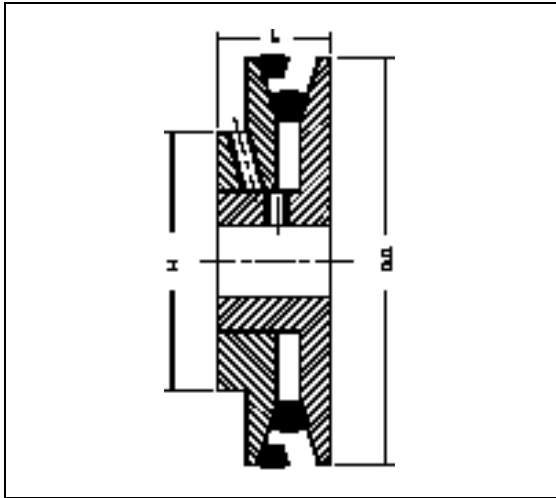
$$W = S(N-1) + 2E$$

N = No. of Grooves

Pulley Groove Dimensions (ISO Standard)

Belt Section	P.D. Range	a° Groove angle +/-0,5°	W +0,2/-0mm	W _b	D +0,6/-0mm	X +0,3/-0mm	S ¹ +/-0,2mm	Sum of deviations of S ²	E +/-0,3mm
SPZ	Up to 80 Over 80	34 38	9,7	8,5	11	2	12	+/-0,6mm	8
SPA	Up to 118 Over 118	34 38	12,7	11	13,8	2,75	15	+/-0,6mm	10
SPB	Up to 190 Over 190	34 38	16,2	14	17,5	3,5	19	+/-0,8mm	12,5
SPC	Up to 315 Over 315	34 38	22	19	23,8	4,8	25,5	+/-1mm	17

Call Martin for your made-to-order and large quantity requirements.



Variable Speed Pulley

Part Number	Belt	No. of Grooves	Pitch Dia.		Type	O.D.	H	L	Bore	
			Min	Max					Min	Max
1V072A087	Z/SPZ A/SPA	1	70 72	89 87	1	93	72	32	10	32
1V076A102	Z/SPZ A/SPA	1	74 76	93 102	1	108	80	38	10	40
1V088A114	Z/SPZ A/SPA	1	86 88	105 114	1	120	80	38	10	40
1V106A132	Z/SPZ A/SPA	1	104 106	123 132	1	138	88	38	12	48
1V128A154	Z/SPZ A/SPA	1	126 128	145 154	1	160	88	38	14	48
1V139B173	A/SPA B/SPB	1	137 139	163 173	1	180	96	44	16	56
1V159B193	A/SPA B/SPB	1	157 159	183 193	1	200	96	44	16	56
1V179B213	A/SPA B/SPB	1	177 179	203 213	1	220	96	44	20	56
1V199B233	A/SPA B/SPB	1	197 199	223 233	1	240	96	44	20	56
2V072A087	Z/SPZ A/SPA	2	70 72	89 87	2	93	72	60	10	32
2V076A102	Z/SPZ A/SPA	2	74 76	93 102	2	108	80	72	10	40
2V088A114	Z/SPZ A/SPA	2	86 88	105 114	2	120	80	72	10	40
2V106A132	Z/SPZ A/SPA	2	104 106	123 132	2	138	88	72	12	48
2V128A154	Z/SPZ A/SPA	2	126 128	145 154	2	160	88	72	14	48
2V139B173	A/SPA B/SPB	2	137 139	163 173	2	180	96	82	16	56
2V159B193	A/SPA B/SPB	2	157 159	183 193	2	200	96	82	16	56
2V179B213	A/SPA B/SPB	2	177 179	203 213	2	220	96	82	20	56
2V199B233	A/SPA B/SPB	2	197 199	223 233	2	240	96	82	20	56



Variable Speed Pulleys

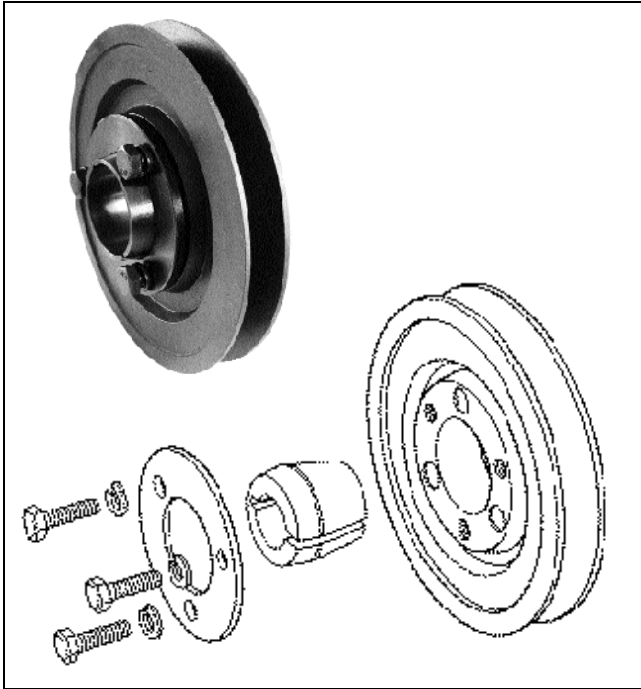
PITCH DIAMETER FOR INCREMENTAL TURN ADJUSTMENTS

Chart 2

NUMBER OF TURNS																Belt Type	Part Number
4	4 1/4	4 1/2	4 3/4	5	5 1/4	5 1/2	5 3/4	6	6 1/4	6 1/2	6 3/4	7	7 1/4	7 1/2			
6	6.375	6.75	7.125	7.5	7.875	8.25	8.625	9	9.375	9.75	10.125	4.5	4.875	11.25			
69,4																Z A	1V072A089
73,4 82,4	81,1	79,9	78,7		77,5	76,2										Z A	1V076A102
85,4 94,4	93,1	91,9	90,7		89,5	88,2										Z A	1V088A114
103,4 112,4	111,1	109,9	108,7		107,5	106,2										Z A	1V106A132
125,4 134,4	133,1	131,9	130,7		129,5	128,2										Z A	1V128A154
143,4 153,4	142,1 152,1	140,9 150,9	139,7 149,7	148,5	138,5 147,2	137,2 146,0	144,8	143,6	142,3	141,1	139,9	138,7	137,4	136,2		A B	1V139B173
163,4 173,4	162,1 172,1	160,9 170,9	159,7 169,7	168,5	158,5 167,2	157,2 166,0	164,8	163,6	162,3	161,1	159,9	158,7	157,4	156,2		A B	1V159B193
183,4 193,4	182,1 192,1	180,9 190,9	179,7 189,7	188,5	178,5 187,2	177,2 186,0	184,8	183,6	182,3	181,1	179,9	178,7	177,4	176,2		A B	1V179B213
203,4 213,4	202,1 212,1	200,9 210,9	199,7 209,7	208,5	198,5 207,2	197,2 206,0	204,8	203,6	202,3	201,1	199,9	198,7	197,4	196,2		A B	1V199B233
69,4																Z A	2V072A087
73,4 82,4	81,1	79,9	78,7		77,5	76,2										Z A	2V076A102
85,4 94,4	93,1	91,9	90,7		89,5	88,2										Z A	2V088A114
103,4 112,4	111,1	109,9	108,7		107,5	106,2										Z A	2V106A132
125,4 134,4	133,1	131,9	130,7		129,5	128,2										Z A	2V128A154
143,4 153,4	142,1 152,1	140,9 150,9	139,7 149,7	148,5	138,5 147,2	137,2 146,0	144,8	143,6	142,3	141,1	139,9	138,7	137,4	136,2		A B	2V139B173
163,4 173,4	162,1 172,1	160,9 170,9	159,7 169,7	168,5	158,5 167,2	157,2 166,0	164,8	163,6	162,3	161,1	159,9	158,7	157,4	156,2		A B	2V159B193
183,4 193,4	182,1 192,1	180,9 190,9	179,7 189,7	188,5	178,5 187,2	177,2 186,0	184,8	183,6	182,3	181,1	179,9	178,7	177,4	176,2		A B	2V179B213
203,4 213,4	202,1 212,1	200,9 210,9	199,7 209,7	208,5	198,5 207,2	197,2 206,0	204,8	203,6	202,3	201,1	199,9	198,7	197,4	196,2		A B	2V199B233

Mi-Lock Pulleys

Martin



Assembly Shown Above.

- Pulleys are made from grated Cast Iron and twin taper bushes in steel.
- Twin Taper bushes are available in a wide range of bores- Metric & Imperial.
- Pulleys are fully machined (Up to size 250A) - inherently balanced.
- Suitable for 'A' or 'B', or 'SPB' Section V Belts.
- Simple and easy to install and remove. Shrunk-on fit. No keys or grub screws required.
- Can be used as single, double and stepped pulley for minimum stock.
- Low cost and low inventory.

BUSH SHAFT SIZES

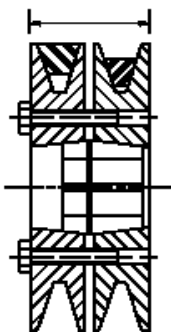
MLB1	mm	10,11,12,14,15,16,18,19,20,22,24,25,28
	inch	3/8,7/16,1/2,9/16,5/8,11/16,13/16,7/8,15/16,1,1-1/16,1-1/8
MLB2	mm	16,18,19,20,22,24,25,28,30,32,35,38,40,42
	inch	1/2,9/16,5/8,11/16,3/4,13/16,7/8,15/16,1,1-1/16,1-1/8,1-3/16,1-1/4,1-5/16,1-3/8,1-7/16,1-1/2,1-9/16

Single Groove Assembly



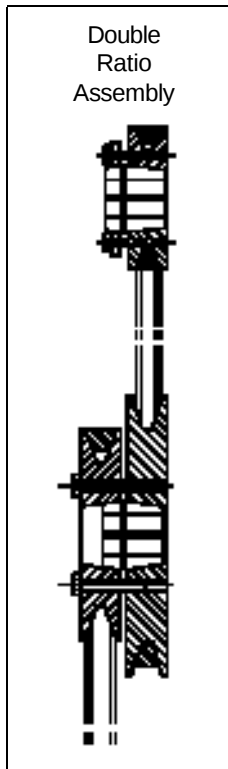
L = 32mm for Bush No. 1
L = 38mm for Bush No. 2

Double Groove Assembly



L = 44mm for Bush No. 1
L = 46mm for Bush No. 2

Double
Ratio
Assembly



MI-LOCK PULLEYS

Part Number	Pulley Size		Outside Diameter	Mass KG	Suitable Bush Retainer Size
	Pitch A	Pitch B			
MLP071	071	81	88,6	0,42	MLB1
MLP075	075	85	91,8	0,47	MLB1
MLP080	080	90	96,8	0,53	MLB1
MLP085	085	95	101,5	0,62	MLB1
MLP090	090	100	106,8	0,72	MLB1
MLP095	095	105	111,8	0,80	MLB1
MLP100	100	110	116,8	0,91	MLB1
MLP106	106	116	122,8	1,02	MLB1
MLP112	112	122	128,8	0,98	MLB1
MLP118	118	128	134,8	1,05	MLB1
MLP125	125	135	141,8	1,17	MLB1
MLP132	132	142	148,8	1,28	MLB1
MLP140	140	150	156,8	1,49	MLB2
MLP150	150	160	166,8	1,61	MLB2
MLP160	160	170	175,8	1,75	MLB2
MLP180	180	190	195,8	2,03	MLB2
MLP200	200	210	215,8	2,38	MLB2
MLP224	224	233	239,8	3,34	MLB2
MLP250	250	259	265,8	4,22	MLB2
MLP280	280	288,7	295,8	3,77	MLB2
MLP315	315	323,7	330,8	4,45	MLB2
MLP355	355	363,7	370,8	4,94	MLB2
MLP400	400	408,7	415,8	7,51	MLB2
MLP450	450	458,7	465,8	9,05	MLB2

Single Pulley P/N

Part Number Example

Pulley	Exp. 1	Exp. 2
Bush	MLP071	MLP140
Retainer Set	MLB1-1(inch)	MLB2-25mm
	MLBR1	MLBR2

Double Pulley P/N

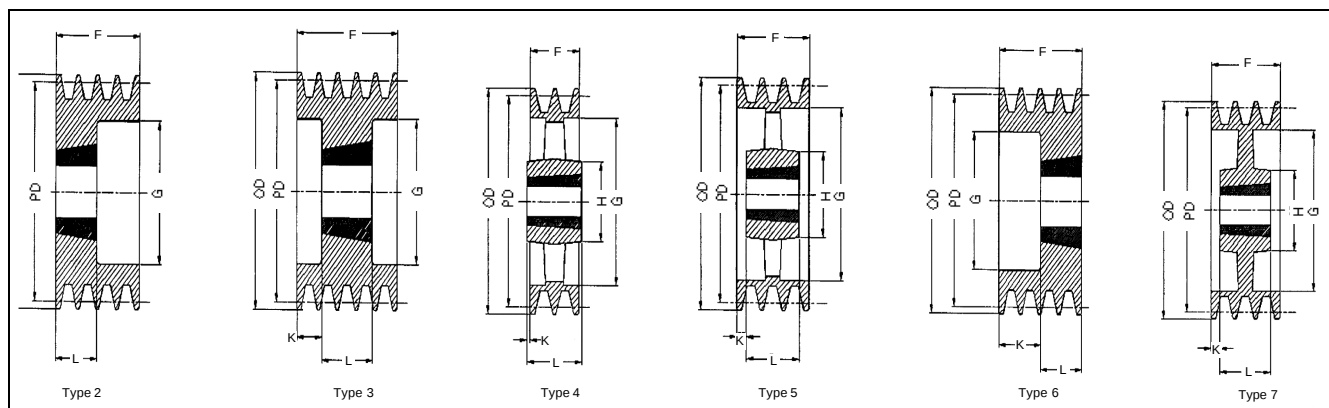
Part Number Example

Pulley	Exp. 1	Exp. 2
Bush	MLP125	MLP200
Retainer Set	MLB1-1 (inch)	MLB2-25mm
	MLBR1*	MLBR2*

SPZ

Taper Bushed Pulley

Martin



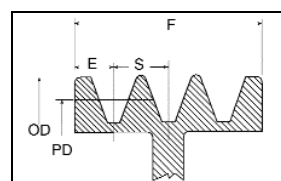
Pulley Groove Dimensions (ISO Standard)

Belt Section	E	S	O.D.
SPZ	8	12	P.D. +2

Dimensions in millimeters.

$F = S(N-1) + 2E$

N = No. of Grooves



$F = S(N-1) + 2E$

N = No. of Grooves

SPZ Taper Bushed Pulley

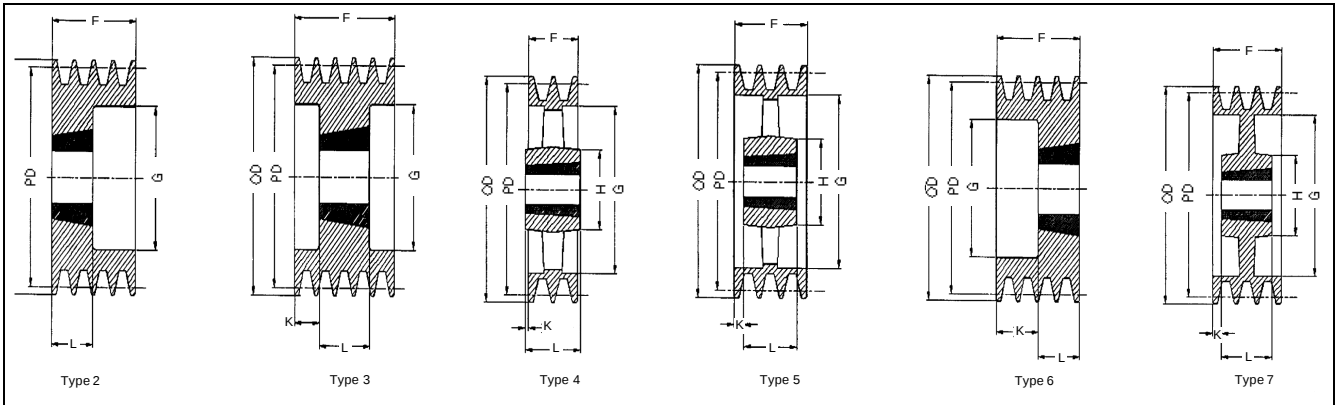
8 Groove											
F = 100mm											
Part Number	OD	PD	Pulley Type	Bush No.	Max. Bore	F	G	K	L	H	Wt. Less Bush
		SPB Belt									
8 SPZ 140	144	140	3	2517	65	100	111	28	45	—	4,0
8 SPZ 150	154	150	3	2517	65	100	121	28	45	—	5,1
8 SPZ 160	164	160	3	2517	65	100	131	28	45	—	5,6
8 SPZ 170	174	170	3	2517	65	100	141	28	45	—	6,8
8 SPZ 180	184	180	3	3020	75	100	151	25	51	—	7,1
8 SPZ 190	194	190	3	3020	75	100	161	25	51	—	8,2
8 SPZ 200	204	200	3	3020	75	100	171	25	51	—	9,3
8 SPZ 212	216	212	3	3020	75	100	182	25	51	—	10,6
8 SPZ 224	228	224	3	3020	75	100	195	25	51	—	11,8
8 SPZ 236	240	236	3	3020	75	100	206	25	51	—	10,6
8 SPZ 250	254	250	5	3020	75	100	221	25	51	145	10,5
8 SPZ 280	284	280	5	3020	75	100	251	25	51	145	10,8
8 SPZ 315	319	315	5	3020	75	100	286	25	51	145	12,9
8 SPZ 355	359	355	5	3030	75	100	326	12	76	145	16,0
8 SPZ 400	404	400	5	3030	75	100	371	12	76	145	18,2
8 SPZ 450	454	450	5	3535	90	100	424	6	89	178	24,0
8 SPZ 500	504	500	5	3535	90	100	471	6	89	178	26,0
8 SPZ 630	634	630	5	3535	90	100	601	6	89	178	35,8

Dimensions in millimeters, weight in kilograms

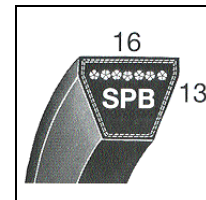
Weights do not include bushings.

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Taper Bushed Pulley **SPB**

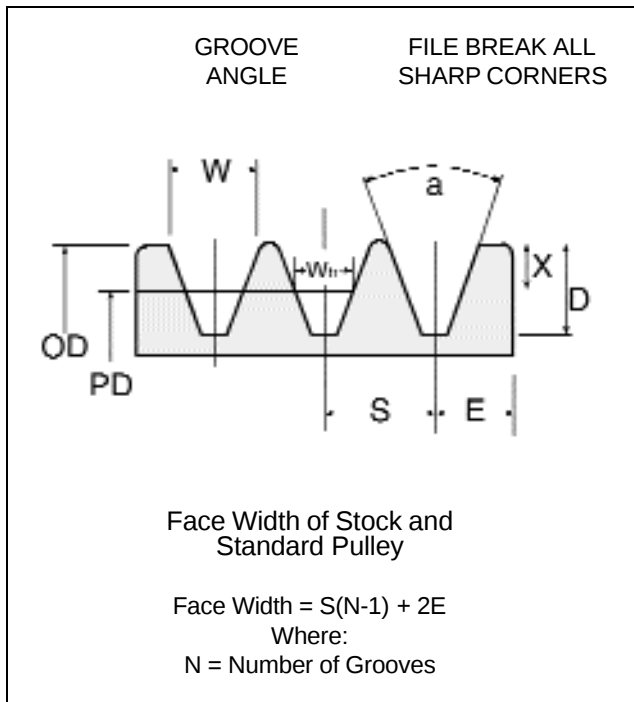


Let Martin quote your made to order and large quantity requirements.



8 Groove												10 Groove											
F = 158mm												F = 196mm											
Part Number	OD	PD	Pulley Type	Bush No.	Max. Bore	F	G	K	L	H	Wt. Less Bush	Part Number	Pulley Type	Bush No.	Max. Bore	F	G	K	L	H	Wt. Less Bush		
		SPB Belt																					
8 SPB 160	167	160	3	3020	75	158	117	54	51	—	8,3												
8 SPB 170	177	170	3	3020	75	158	123	54	51	—	9,5												
8 SPB 180	187	180	3	3020	75	158	137	54	51	—	10,8												
8 SPB 190	197	190	3	3020	75	158	147	54	51	—	12,3												
8 SPB 200	207	200	3	3525	100	158	157	47	65	—	13,7												
8 SPB 212	219	212	3	3525	100	158	169	47	65	—	15,8												
8 SPB 224	231	224	3	3525	100	158	181	47	65	—	17,9	10 SPB 224	3	3525	90	196	184	67	89	—	20,5		
8 SPB 236	243	236	3	3525	100	158	193	47	65	—	20,0	10 SPB 236	3	3525	90	196	198	67	89	—	22,6		
8 SPB 250	257	250	3	3525	100	158	207	47	65	—	23,2	10 SPB 250	3	3525	90	196	204	67	89	—	26,6		
8 SPB 265	272	265	3	3525	90	158	218	47	65	—	25,0												
8 SPB 280	287	280	7	3525	100	158	237	47	65	191	26,6	10 SPB 280	7	3525	90	196	239	67	89	191	27,8		
8 SPB 300	307	300	7	3525	100	158	257	47	65	191	27,3												
8 SPB 315	322	315	7	3525	100	158	272	47	65	191	28,0	10 SPB 315	7	3525	90	196	274	67	89	191	28,8		
8 SPB 335	342	335	7	3525	100	158	292	47	65	191	30,5	10 SPB 335	5	4030	100	196	294	60	102	210	32,0		
8 SPB 355	362	355	7	3525	100	158	312	47	65	191	31,5	10 SPB 355	5	4030	100	196	317	60	102	210	33,5		
8 SPB 375	382	375	7	3525	90	158	335	47	65	191	37,3												
8 SPB 400	407	400	7	3525	100	158	357	47	65	191	43,0	10 SPB 400	5	4030	100	196	362	60	102	210	36,0		
8 SPB 425	432	425	5	3525	100	158	381	47	65	191	44,5												
8 SPB 450	457	450	5	3525	100	158	396	47	65	191	46,0	10 SPB 450	5	4535	110	196	410	54	115	242	47,0		
8 SPB 475	482	475	5	3525	100	158	432	47	65	191	49,5												
8 SPB 500	507	500	5	3525	100	158	457	47	65	191	52,0	10 SPB 500	5	4535	110	196	460	54	115	240	55,0		
8 SPB 530	537	530	5	4030	115	158	484	41	76	215	53,0												
8 SPB 560	567	560	5	4030	115	158	487	41	76	215	54,5												
8 SPB 630	637	630	5	4030	125	158	590	41	76	215	67,0	10 SPB 630	5	4535	110	196	590	54	115	242	66,0		
8 SPB 710	717	710	5	4535	125	158	667	35	89	240	75,5	10 SPB 710	5	4535	125	196	667	41	115	240	75,0		
8 SPB 800	807	800	5	4535	125	158	757	35	89	240	94,5	10 SPB 800	5	4535	125	196	757	41	115	240	96,0		
8 SPB 900	907	900	5	4535	125	158	857	35	89	240	113,5	10 SPB 900	5	5050	125	196	858	35	127	265	119,0		
8 SPB 1000	1007	1000	5	5040	125	158	957	28	102	265	121,5	10 SPB 1000	5	5050	125	196	954	35	127	265	141,0		
8 SPB 1120	1127	1120	5	5040	125	158	1077	28	102	265	182,2	10 SPB 1120	5	5050	125	196	1073	35	127	265	200,0		
8 SPB 1250	1257	1250	5	5040	125	158	1207	28	102	265	242,0	10 SPB 1250	5	5050	125	196	1203	35	127	265	265,0		

Dimensions in millimeters, weight in kilograms
Weights do not include bushings.



PULLEY TOLERANCE

Outside Diameter	
Under 250mm	± 0,6/-0mm
250mm thru 530mm	+ 0,8/-0mm
560mm thru 1250mm	± 1,3/-0mm
Over 1250mm	± 1,5/-0mm
Outside Diameter Radial Run-out	
Under 106mm	0,2mm
106mm thru 160mm	0,3mm
170mm thru 250mm	0,4mm
265mm thru 400mm	0,5mm
425mm thru 630mm	0,6mm
670mm thru 1000mm	0,8mm
1060mm thru 1600mm	1mm
Outside Diameter Axial Run-out	
Under 630mm	not to exceed
	,001mm per mm of P.D.
630mm thru 1250mm	not to exceed 0,8mm
Over 1250mm	not to exceed 1mm

Standard Pulleys (ISO Standard)

Belt Section	P.D. Range	a° Groove angle +/-0,5°	W +0,2/-0mm	W ₀	D +0,6/-0mm	X +0,3/-0mm	S ¹ +/-0,2mm	Sum of deviations of S ²	E +/-0,3mm
SPZ	Up to 80	34	9,7	8,5	11	2	12	+/-0,6mm	8
	Over 80	38							
SPA	Up to 118	34	12,7	11	13,8	2,75	15	+/-0,6mm	10
	Over 118	38							
SPB	Up to 190	34	16,2	14	17,5	3,5	19	+/-0,8mm	12,5
	Over 190	38							
SPC	Up to 315	34	22	19	23,8	4,8	25,5	+/-1mm	17
	Over 315	38							

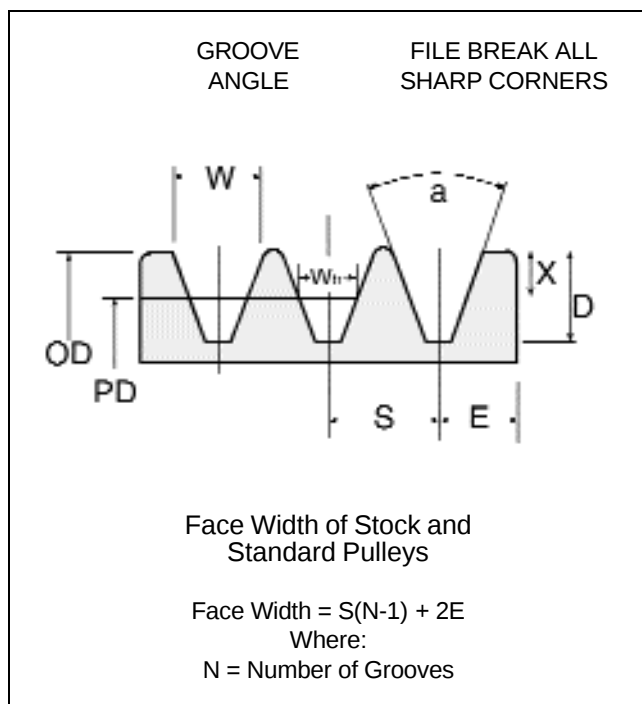
Dimensions in millimeters.

1) S dimension - the tolerance shown is between any two grooves.

2) The sum of all deviation from the nominal value S for all grooves in any one pulley shall not exceed the value stated in the table.

Hi-Cap Wedge (MPTA) Groove Dimensions and Tolerances

Martin



HI-CAP WEDGE PULLEYS TOLERANCES

Outside Diameter	
Under 304,8mm	± 0,1mm
304,8mm thru 456,9mm	+ 0,3mm
457,2mm thru 914,4mm	± 0,4mm
Over 914,4mm	± 0,5mm
Outside Diameter Eccentricity	
Under 228,6mm	0,2mm
228,6mm thru 355,3mm	0,3mm
355,6mm thru 914,4mm	0,3mm
Over 914,4mm	0,5mm
Side Wobble And Runout	
508,0mm O.D.	not to exceed
& Under	,03mm per mm of diameter
Over 508,0mm	0,3mm plus
O.D.	,01mm per mm of O.D.

Standard Pulleys (MPTA Standard)

Belt	Minimum Recommended Outside Diameter	Outside Effective Diameter	a Groove Angle	Groove Dimensions				
				W	D	X	S	E
3V	67,3	Under 88,9	36°	8,9	8,9	0,6	10,3	8,7
		88,9 - 152,4	38°	8,9	8,9	0,6	10,3	8,7
		152,7 - 304,8	40°	8,9	8,9	0,6	10,3	8,7
		Over 304,8	42°	8,9	8,9	0,6	10,3	8,7
5V	180,3	Under 254,0	38°	15,2	15,2	1,3	17,5	12,7
		254,0 - 406,4	40°	15,2	15,2	1,3	17,5	12,7
		Over 406,4	42°	15,2	15,2	1,3	17,5	12,7
8V	317,5	Under 406,4	38°	25,4	25,4	2,5	28,6	19,1
		406,4 - 569,0	40°	25,4	25,4	2,5	28,6	19,1
		Over 569,0	42°	25,4	25,4	2,5	28,6	19,1

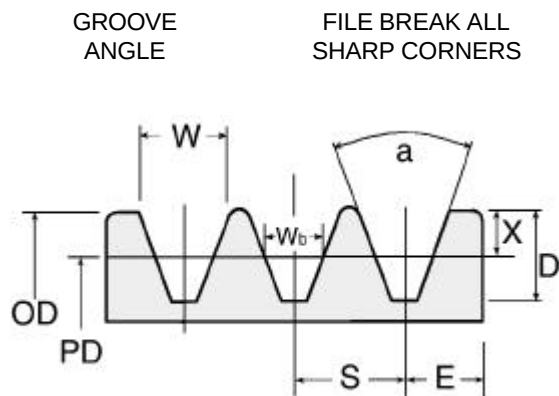
Dimensions in millimeters.

MPTA — Mechanical Power Transmission Association of America.

Martin stocks a complete line of Hi-Cap and conventional pulleys, both Taper Bushed and “QD” style bushings. Up to 12 grooves from “A” section through “D” section and 3V through 8V. Call Martin for your special requirements.

CONVENTIONAL PULLEYS TOLERANCES

Outside Diameter	
Under 304,8mm	± 0,5mm
304,8mm thru 609,3mm	± 1,0mm
609,6mm thru 1472,9mm	± 1,5mm
1473,2mm thru 1828,5mm	± 3,0mm
Over 1828,5mm	± 6,4mm
Outside Diameter Eccentricity	
Under 254,0mm P.D.	0,3mm
254,3mm thru 1524,0mm P.D.	0,3mm plus ,01mm per mm of P.D.
Over 1524,0mm P.D.	Add ,03mm for each add'l mm of P.D.
Side Wobble And Runout	
508,0mm P.D. & Under	not to exceed 0,03mm per mm of P.D.
508,0mm thru 1524,0mm P.D.	Add 0,01mm for each add'l mm of P.D. up to 1524,0mm
Over 1524,0mm P.D.	Add 0,03mm for each add'l mm of P.D. above 1524,0mm



Face Width of Stock and
Standard Pulleys

$$\text{Face Width} = S(N-1) + 2E$$

Where:
N = Number of Grooves

Standard Pulleys (MPTA Standard)

Belt	Minimum Recommended Pitch Diameter	P.D. Range	a Groove Angle ± 1/4°	Groove Dimensions				
				W	D ±0,8	X	S* ± 0,8	E
A	76,2	66,0 - 137,2 Over 137,2	34° 38°	12,5 12,8 ± 0,1	12,4	3,2	15,9	9,5 + 1,8 - 0,0
B	137,2	116,8 - 177,8 Over 177,8	34° 38°	16,2 16,5 ± 0,1	14,7	4,4	19,1	12,7 + 3,8 - 0,0
A - B	A 76,2 B 137,2	86,4 - 172,7 Over 172,7	34° 38°	15,5 15,9 ± 0,1	15,9	4,4	19,1	12,7 + 3,8 - 0,0
C	228,6	177,8 - 202,9 203,2 - 304,8 Over 304,8	34° 36° 38°	22,3 22,5 ± 0,2 22,7	19,8	5,1	25,4	17,5 + 3,8 - 0,0
D	330,2	304,8 - 329,9 330,2 - 431,8 Over 431,8	34° 36° 38°	32,0 32,3 ± 0,2 32,6	26,7	7,6	36,5	22,2 + 6,4 - 0,0
E	533,4	457,2 - 609,6 Over 609,6	36° 38°	38,8 39,2 ± 0,3	33,0	10,2	44,5	28,5 + 6,4 - 0,0

Deep Groove Pulleys (MPTA Standard)

Belt	Minimum Recommended Pitch Diameter	P.D. Range	a Groove Angle ± 1/4°	Groove Dimensions				
				W	D ±0,8	X	S* ± 0,81	E
A	76,2	66,2 - 137,2 Over 137,2	34° 38°	15,0 15,5 ± 0,1	16,4	7,1	19,1	11,1 + 1,8 - 0,0
B	137,2	116,8 - 177,8 Over 177,8	34° 38°	19,0 19,7 ± 0,1	19,3	9,0	22,2	14,3 + 3,8 - 0,0
C	228,6	177,8 - 202,9 203,2 - 304,8 Over 304,8	34° 36° 38°	27,1 27,6 ± 0,2 28,1	27,6	12,8	31,8	20,7 + 3,8 - 0,0
D	330,2	304,8 - 323,9 330,2 - 431,8 Over 431,8	34° 36° 38°	38,4 39,1 ± 0,2 39,9	37,2	18,2	44,5	27,0 + 6,4 - 0,0
E	533,4	457,2 - 609,6 Over 609,6	36° 38°	46,1 47,0 ± 0,3	44,3	21,5	52,4	33,4 + 6,4 - 0,0

Dimensions in millimeters.

*Summation of the deviations from "S" for all grooves in any one pulley shall not exceed ± 1,6mm. Available on request, deep groove pulleys are intended for quarter turn drives and for long center vertical shaft drives. They may also be necessary for such applications as car shakers, vibrating screens and certain types of crushers where oscillation in center distance may occur.

Stock Drive Selection



To select the best V-Belt Drive for an application, utilizing stock pulleys, simply follow the step by step instructions below:

BEFORE SELECTING A DRIVE, YOU NEED TO KNOW THESE FACTS:

1. The power (kW) requirement of the drive.
2. The RPM of the driver.
3. The RPM of the driven machine.
4. The approximate center distance for the drive.
5. Shaft size of both units.
6. Average hours of operation per day.

TABLE 1 — SERVICE FACTORS

THE CORRECT SERVICE FACTOR IS DETERMINED BY:

1. The extent and frequency of peak loads.
2. The number of operating hours per year, broken down into average hours per day of continuous service.
3. The proper service category, (intermittent, normal or continuous). Select the one that most closely approximates your application conditions.

INTERMITTENT SERVICE — SERVICE FACTOR 1,0 TO 1,5

- a. Light Duty — Not more than 6 hours per day.
- b. Never exceeding rated load.

NORMAL SERVICE — SERVICE FACTOR 1,1 TO 1,6

- a. Daily service 6 to 16 hours per day.
- b. Where occasional starting or peak load does not exceed 200% of the full load.

CONTINUOUS SERVICE — SERVICE FACTOR 1,2 TO 1,8

- a. Continuous service 16 to 24 hours per day.
- b. Where starting or peak load is in excess of 200% of the full load or where starting or peak loads and overloads occur frequently.

TYPICAL SERVICE FACTORS

DRIVEN MACHINE TYPES	DRIVER TYPES					
Driven machine types noted below are representative samples only. Select a category most closely approximating your application from those listed below. IF IDLERS ARE USED, ADD THE FOLLOWING TO THE SERVICE FACTOR: Idler on slack side (inside) None Idler on slack side (outside) 0,1 Idler on tight side (inside) 0,1 Idler on tight side (outside) 0,2	ELECTRIC MOTORS: AC Normal Torque Squirrel Cage and Synchronous AC Split Phase DC Shunt Wound Internal Combustion Engines			ELECTRIC MOTORS: AC Hi-Torque AC Hi-Slip AC Repulsion-Induction AC Single Phase Series Wound AC Slip Ring DC Compound Wound		
	INTERMITTENT SERVICE	NORMAL SERVICE	CONTINUOUS SERVICE	INTERMITTENT SERVICE	NORMAL SERVICE	CONTINUOUS SERVICE
Agitators for Liquids Blowers and Exhausters Centrifugal Pumps and Compressors Fans up to 7,5 Kw Light Duty Conveyors	1,0	1,1	1,2	1,1	1,2	1,3
Belt Conveyors For Sand, Grain, etc, Dough Mixers Fans Over 7,5 Kw Generators Line Shafts Laundry Machinery Machine Tools Punches-Presses-Shears Printing Machinery Positive Displacement Rotary Pumps Revolving and Vibrating Screens	1,1	1,2	1,3	1,2	1,3	1,4
Brick Machinery Bucket Elevators Exciters Piston Compressors Conveyors (Drag-Pan-Screw) Hammer Mills Paper Mill Beaters Piston Pumps Positive Displacement Blowers Pulverizers Saw Mill and Woodworking Machinery Textile Machinery	1,2	1,3	1,4	1,4	1,5	1,6
Crushers (Gyratory-Jaw-Roll) Mills (Ball-Rod-Tube) Hoists Rubber Calenders-Extruders-Mills	1,3	1,4	1,5	1,5	1,6	1,8
Chokable Equipment	2,0	2,0	2,0	2,0	2,0	2,0

FOR A GOOD COMMERCIAL DRIVE SELECTION, USE CONTINUOUS SERVICE FACTOR

TYPICAL EXAMPLE

1. The driver is a 3 kW, normal torque electric motor.
2. The driver speed is 1440 RPM.
3. A speed reducer for a Martin screw conveyor is to be driven at 810 RPM.
4. The desired center distance is 530mm.
5. The driver shaft diameter is 38mm and the driven shaft diameter is also 38mm
6. The conveyor will operate 18-20 hours per day.

TABLE 2 — Cross Section Selection Chart

CAUTION

DO NOT USE STOCK PULLEYS ON SUCH EQUIPMENT AS DEBARKERS, WOOD CHIPPERS, CRUSHERS OR OTHER EQUIPMENT SUBJECT TO SEVERE SHOCK LOADS. CONSULT Martin FOR RECOMMENDATIONS.

Table 2

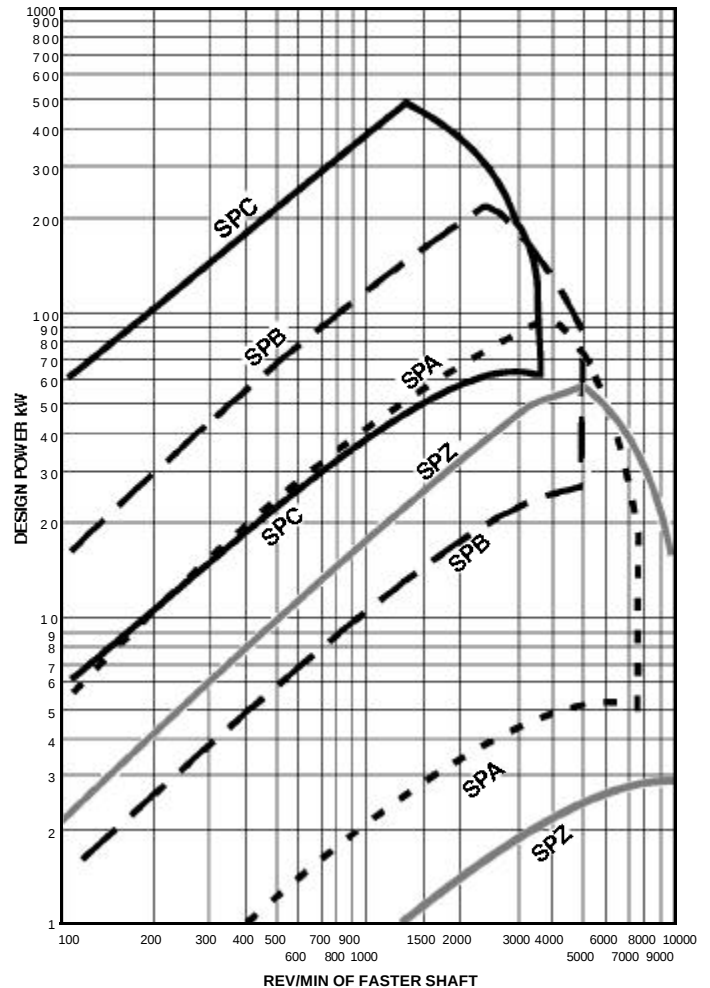


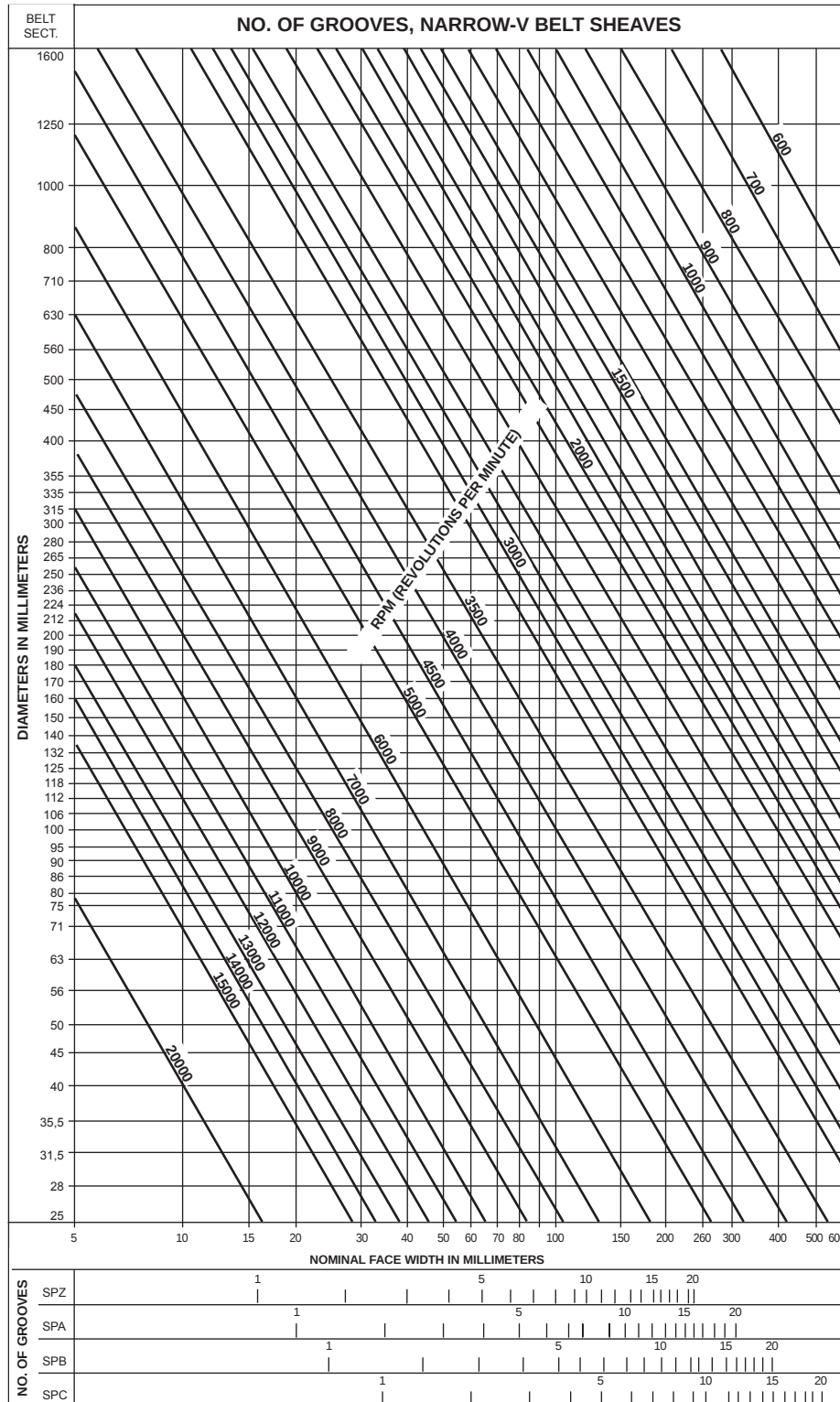
Table 3

Speed of faster shaft rev/min	*Minimum Pulley Diameter (mm)																			
	Design Power (kW)																			
	upto 1	3,0	4,0	5,0	7,5	10	15	20	25	30	40	50	60	75	90	110	130	150	200	250
500	56	90	100	112	125	140	180	200	212	236	250	280	280	315	375	400	450	475	500	560
600	56	85	90	100	112	125	140	180	200	212	224	250	265	280	300	335	375	400	475	500
720	56	80	85	90	100	106	132	150	160	170	200	236	250	265	280	300	335	375	450	500
960	56	75	80	85	95	100	112	132	150	180	180	200	224	250	280	280	300	335	400	450
1200	56	71	80	80	95	95	106	118	132	150	160	180	200	236	236	250	265	300	335	355
1440	56	63	75	80	85	85	100	112	125	140	160	170	190	212	236	236	250	280	315	335
1800	56	63	71	75	85	85	95	106	112	125	150	160	170	190	212	224	236	265	300	335
2880	56	60	67	67	80	80	85	90	100	112	125	140	160	170	180	212	224	236	—	—

*This data is a composite of Electrical Motor Manufactures data. They are generally conservative, and specific motors and bearings may permit the use of a smaller motor sheave. Consult the motor manufacture.
Dimensions in millimeters unless otherwise specified.

TO DETERMINE THE NEED FOR DYNAMIC BALANCE

This chart shows the maximum speed limit (in rpm) for a standard statically balanced pulley by a given diameter and face width. To exceed this speed limit it is recommended the sheave be dynamically balanced. This information can also be used for, other type pulleys.



EXAMPLE: A 254,0mm diameter 52mm wide pulley is recommended to be dynamically balanced (balanced in two planes) at 3450 rpm and above. Below 3350 rpm a static balance (balanced in one plane) is sufficient.

WARNING: When belt speeds exceed 6500 feet per minute or 33mm/sec. special materials may be required; consult **Martin** for special design requirements.

STOCK DRIVE SELECTION PROCEDURE

STEP 1. DETERMINE DESIGN KILOWATT.

Refer to "Table 1 — Service Factors" Page D-26. Determine proper service (intermittent, normal, or continuous). Find the type of driven machine most similar to your application in the left column. Then to the right, find the driver type to be used and locate the service factor under your proper service selection.

DESIGN POWER (Kw) = POWER (Kw) REQUIREMENT X SERVICE FACTOR

Example: From Table 1 Service Factor 1,4

Power Requirement x Service Factor = Design Power (kW)

3 x 1,4 = x 4,20 Design Power (kW)

STEP 2. DETERMINE PREFERRED BELT CROSS SECTION. The choice of belt selection type is determined by conditions unique to your specific application. For advantages and disadvantages of belt section type or a recommendation for your specific application, contact your belt manufacturer.

On the vertical axis of Table 2 locate the **Design Power (kW)** and read over to the **RPM of the Faster Shaft**. The point at which the lines intersect indicates the **Recommended Belt Cross Section**.

Example: From Table 2, SPZ is chosen.

STEP 3. CHECK MINIMUM SMALL (DRIVER) PULLEY DIAMETER.

Refer to Table 3. Locate intersection of given motor designed power (Kw) and speed (rpm) for recommended minimum diameter.

Example: From Table 3 minimum recommended diameter is 80mm.

STEP 4. SELECT THE DRIVE

A) Turn to the **Stock Drive Selection Tables** for the applicable belt section.

B) Find the **RPM of your Driver**. (Speeds shown are for full load motor ratings.)

C) Read down the **DriveN speed column** until you reach the speed nearest your desired speed. Under the same column heading you will find the **kilowatt per belt**.

D) Read across to the left for the required **Driver and DriveN sheaves**, making sure your Driver diameter is larger than the minimum shown in Table 3.

E) Read across to the right for shaft centers nearest to your **Approximate Center Distance**. The belt size is shown at the top of the center distance column.

Example: From Stock Drive Selection tables for SPZ belts:

Given: **The Driver rpm is 1440.**

DriveN speed is 810 rpm.

Therefore: **2,52 is the kW per belt.**

At the far left on the same row, the pulley combination of **95mm Driver** and **170mm DriveN** will provide the desired speeds. (The min. diameter from Table 3 is 80mm.) The nearest shaft centers to the desired 530mm provided by a standard belt is **541mm provided by a SPZ x 1500.**

STEP 5. DETERMINE THE NUMBER OF BELTS REQUIRED

To determine the number of belts (thus, the number of grooves) multiply the **kilowatt per belt** found in step 4C by the **Arc & Length correction factor** found in the center distance column below the center distance selected. This gives the **corrected or actual kilowatt per belt**. Now divide the **Design Power (kW)** found in step 1 by the corrected horsepower to determine the number of belts required. (Always round up to the next whole number)

Example: # of Belts = $\frac{\text{Design kW}}{\text{Corrected kW}}$

Design kW found in step 1 is 4,2 corrected kW is found by: kilowatt power per belt (step 4c) x Arc & length correction factor thus, **corrected kW = 2,52 x .96 = 2,42.**

of belts required = $\frac{4,2}{2,42} = 1,7$

Use 2 belts.

STEP 6. Order Martin

(1) 2 SPZ 95 (driver sheave)

(1) 1610 x 38mm (Bushing)

(1) 2 SPZ 170 (driven sheave)

(1) 2012 x 38mm(Bushing)

Stock Drive Selection



ALTERNATE EXAMPLE

A 18,5 kW, 960 RPM squirrel cage normal torque electric motor is to drive a fan 300 RPM. The shaft centers should be about 1016,0mm. The motor has a 55mm shaft and the fan shaft is 60mm. Service is 15 hours per day, constant load.

- | | |
|--------------------------------------|----------|
| 1. kW Requirement of the Drive | 18,5 kW |
| 2. RPM of DriveR Shaft | 960 RPM |
| 3. RPM of DriveN Machine | 300 RPM |
| 4. Approximate Center Distance | 1016,0mm |

STEP 1 DETERMINE DESIGN KILOWATT

From Table 1 Service Factor 1,2
kW Requirement x Service Factor = Design kW
 $18,5 \times 1,2 = 22,2$ Design kW

STEP 2 DETERMINE BELT CROSS SECTION

From Table 2 — SPA

STEP 3 CHECK MINIMUM SMALL PULLEY DIAMETER

From Table 3 — 150mm minimum.

STEP 4 SELECT THE DRIVE

Locate the Drive Selection Tables
For SPA Belts
RPM of Drive — 960 RPM
Driven Speed — kW per Belt
300 RPM — 4,78 kW per Belt
Required Driver and Driven Pulley
(Re-check minimum)
150mm Driver
475mm Driven

WARNING: BEFORE USING KEVLAR BELTS, CONSULT FACTORY.

Read across to right for shaft centers nearest required center distance. SPA-3000 = 996mm centers

Find corrected kilowatt by multiplying kW per belt by Arc and Length correction factor. $4,78 \times 1,02 = 4,88$

Determine number of belts needed by dividing Design kW by corrected kW $22,2/4,88 = 4,55$. Use 5 belts

Order

- (1) 5 SPA 150 (Driver Pulley)
- (1) 2517 55mm (Bushing)
- (1) 5 SPA 475 (Driven Pulley)
- (1) 3525 x 60mm (Bushing)

NOTE: EQUIPMENT THAT IS SUBJECT TO HEAVY SHOCK LOAD SUCH AS ROCK CRUSHERS OR WOOD CHIPPERS, USUALLY REQUIRE SPECIAL CONSTRUCTION.

CONSULT FACTORY FOR RECOMMENDATIONS.

Although comparatively old in principal today's belt drive is an extremely efficient method of transmitting power between prime mover and machinery.

It owes its present high performance standards to many years of research and development by engineers and technologists. This has led to significant refinements in materials and processes.

To derive maximum benefit from such advances it is important that the simple installation and operation procedures are closely followed. Making these routines standard practice will enable you to obtain optimum performance and long, trouble-free life from your Martin belt drives.

INSTALLATION

PULLEYS

Before assembling the drive, check that the pulley grooves are free from scores or sharp edges, and all dimensions conform to the relevant standard.

The Taper bush is your starting point when it comes to assembly and installation. Drive installation is a straight forward drive with Taper Bush -but the steps set out on the installation leaflet provided with every Taper bush should be followed closely.

ALIGNMENT

Good alignment of pulleys prior to belt installation is important to avoid belt flank wear. The diagrams opposite show some of the common alignment faults. You should only be satisfied if the condition is sketch 4 prevail.

BELTS

When the pulleys have been correctly positioned on the shafts, the belts can be installed to complete the drive. The drive center distance should be reduced prior to the installation of the belts so that they may be fitted without the use of force. Under no circumstances must belts be pried into the grooves. Belt and pulley grooves can easily be damaged by using sharp tools to stretch the belts over the pulley rim.

BELTS (Cont.)

The installation allowance given in the table opposite is the minimum recommended reduction in center distance for the various belt sections and lengths to allow for correct fitting.

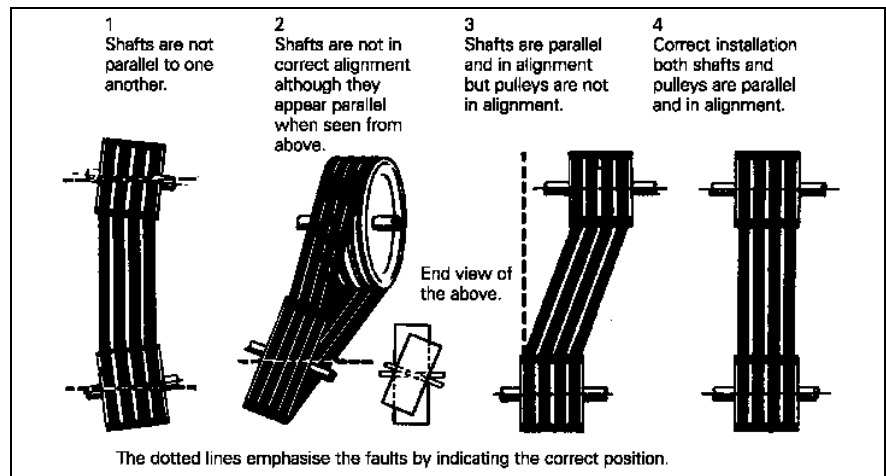
The take-up allowance given in the same table should be added on to the calculated center distance to allow for belt stretch.

GUARDS

Where guards are necessary it is desirable to use the mesh type to permit adequate ventilation.

TAPER BUSH

All of the "dual groove" pulleys featured in this section use Taper Bush shaft fixing. For detailed instruction on the fitting and dismounting of Taper Bush products see Shaft Fixing page B-15.



INSTALLATION AND TAKE-UP ALLOWANCE

Belt Pitch Length (mm)	Installation Allowances					Take-up (mm)
	SPZ Z	SPA A	SPB B	SPC C	8V D	
410 to 530	20	25	30	50	65	5
530 to 840						10
850 to 1160						15
1170 to 1500						20
1510 to 1830						25
1840 to 2170						30
2180 to 2830						40
2840 to 3500						50
3520 to 4160						60
4170 to 5140						70
5220 to 6150						85
6180 to 7500						105
7600 to 8500						125
8880 to 10170						145
10600 to 12500						175

Installation & Operation of Wedge & V-Belt Drives

Martin

INSTALLATION (Cont.)

■ TENSIONING

Place the belts around the pulley with a snug fit, then rotate the pulleys 4-5 revolutions in order to seat the belts into the grooves of the pulley. Set the appropriate tension value of 1,25 stated in the "Tensioning Forces" table opposite (use a belt tension indicator devise supplied by belt manufacturers). Run the drive under load for 20-30 minutes, stop the drive, check the tension, reset the basic value (not 1,25) if necessary. On a properly designed drive for the application there should be no need for any further attention during the life of the drive.

Cogged ran edge belts should be tensioned to the 1,25 values given in the opposite table.

The setting tensions opposite are designed to cover a wide range of drives. A precise setting force for individual applications can be calculated. Please consult your belt manufacture for assistance.

For short centre distance drives where the deflection of the belt is too small to measure accurately it is recommended that both deflection and applied force be doubled.

■ TENSIONINGPULLEYS

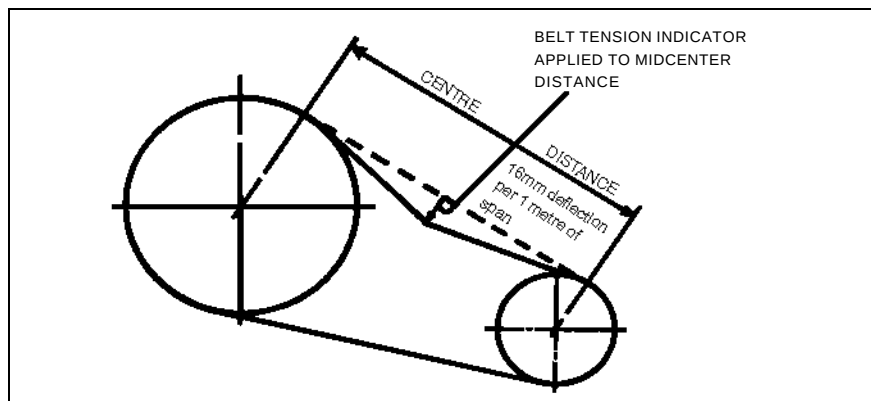
If tensioning (jockey) pulleys are to be used on Wedge-Belt drives, they must be fitted with a grooved pulley bearing on the inside of the drive, preferably on the slack side. The pulley should be positioned as close as possible to the large pulley. Flat tensioning pulleys, bearing on the outside of the drive are permissible only with V and not with Wedge-Belts. They should be positioned within one third of the center distance from the small pulley.

The tensioning pulley must be at least the same diameter as the pulley of the drive.

■ TENSIONINGPULLEYS (Cont.)

Tensioning pulley movement can only be determined by laying out the drive to scale. It must allow for passing the belts over the outside diameter on one of the pulleys on installation and should also allow for belt stretch.

The modern V-Drive is a highly efficient method of transmitting power - but optimum performance will not be achieved unless the correct tensioning procedures are carried out.



Belt Section	Force required to deflect belt 16mm per metre of span				
	Small Pulley Diameter (mm)	Basic setting forces		1,25 x setting forces	
		Newton (N)	Kilograms (kgf)	Newton (N)	Kilograms (kgf)
SPZ	56 to 71	16	1,6	20	2,0
	75 to 90	18	1,8	22	2,2
	95 to 125	20	2,0	25	2,5
	over 125	22	2,2	28	2,8
SPA	80 to 100	22	2,2	28	2,8
	106 to 140	30	3,0	38	3,9
	150 to 200	36	3,7	45	4,6
	over 200	40	4,0	50	5,1
SPB	112 to 160	40	4,0	50	5,1
	170 to 224	50	5,1	62	6,3
	236 to 355	62	6,3	77	7,9
	over 355	65	6,6	81	8,3
SPC	224 to 250	70	7,1	87	8,9
	265 to 355	92	9,4	115	12
	over 375	115	12	144	15
8V	335 & above	150	15	190	19
Z	56 to 100	5 to 7,5	0,5 to 0,8	—	—
A (& HA banded)	80 to 140	10 to 15	1,0 to 1,5	—	—
B	125 to 200	20 to 30	2,0 to 3,1	—	—
C	200 to 400	40 to 60	4,1 to 6,1	—	—
D	355 to 600	70 to 105	7,1 to 10,7	—	—

NOTE: TROUBLE SHOOTING & MAINTENANCE

PLEASE REFER TO **Martin's** PUBLICATION ON "MAINTENANCE & TROUBLE SHOOTING".



V-Belt Drive Selection

PRIME MOVER:

Type & Description

Rated (Nameplate) kW

Shaft Size

RPM

DRIVEN COMPONENTS:

Type & Description

Expected Hours Service

Shaft Size

RPM

CENTER DISTANCE:

Maximum — MM

Minimum — MM

Nominal — MM

Step 1:

Design Power (kW)

x

Prime Mover kW

Service Factor

=

Design kW

Step 2:

Belt Cross Section

NOTE: If Prime Mover is electric motor,
check minimum pulley diameter.

Minimum Pulley Diameter = _____

Step 3:

Speed Ratio

÷

RPM Faster Shaft

RPM Slower Shaft

=

Speed Ratio

Step 4:

From Rating Tables, determined by Belt Cross Section in Step 2, refer
to proper Speed Ratio, then, reading across table determine:

A. _____

Prime Mover Sheave — MM

D. _____

Center Distance — MM

B. _____

Driven Sheave — MM

E. _____

Belt Size (Cross Section & No.)

C. _____

Rated Kw Per Belt

F. _____

Correction Factor

Step 5: Number of Belts Required

A. _____ x _____ = _____

Rated Kw Per Belt Correction Factor Corr. kW Per Belt

B. _____ ÷ _____ = _____

Design Power (kW) Corr. kW Per Belt Number of Belts*

*If number contains a fraction, round off to next largest whole number

SPZ

Power Ratings



Speed Ratio	Sheave Combination		DriveN Speeds and Kw Per Belt						Nominal Center Distance And Arc-Length Correction Factor											
			2850 RPM DriveR		1450 RPM DriveR		950 RPM DriveR													
	DriveR O.D.	DriveN O.D.	DriveN RPM	kW Per Belt	DriveN RPM	kW Per Belt	DriveN RPM	kW Per Belt	SPZ Belt Length Designation											
									560	600	630	670	710	750	800	850	900	950	1000	1060
Arc—Length Correction Factor									—	—	—	—	—	—	—	—	—	—	—	—
11,27	63	710	253	2,02	129	1,22	84	0,88	—	—	—	—	—	—	—	—	—	—	—	
11,27	71	800	253	2,57	129	1,50	84	1,05	—	—	—	—	—	—	—	—	—	—	—	
11,94	67	800	239	2,30	121	1,38	80	0,99	—	—	—	—	—	—	—	—	—	—	—	
Arc—Length Correction Factor									—	—	—	—	—	—	—	—	—	—	—	
11,83	60	710	241	1,81	123	1,11	80	0,80	—	—	—	—	—	—	—	—	—	—	—	
12,68	56	710	225	1,52	114	0,95	75	0,69	—	—	—	—	—	—	—	—	—	—	—	
12,70	63	800	224	2,02	114	1,22	75	0,88	—	—	—	—	—	—	—	—	—	—	—	
13,33	60	800	214	1,81	109	1,11	71	0,80	—	—	—	—	—	—	—	—	—	—	—	
14,29	56	800	199	1,52	101	0,95	66	0,69	—	—	—	—	—	—	—	—	—	—	—	



Power Ratings

SPZ

Nominal Center Distances And Arc-Length Correction Factor																					Speed Ratio
SPZ Belt Length Designation																					
1120	1180	1250	1320	1400	1500	1600	1700	1800	1900	2000	2120	2240	2360	2500	2650	2800	3000	3150	3350	3550	
—	—	—	—	—	—	—	—	—	—	—	0,68	0,74	0,75	0,77	0,78	0,85	0,91	0,97	1,01	1,02	
—	—	—	—	—	—	—	—	—	—	—	—	—	459	548	636	721	830	911	1017	1122	11,27
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	511	607	725	809	919	1027	11,27
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	514	609	727	812	922	1029	11,94
—	—	—	—	—	—	—	—	—	—	—	—	—	0,75	0,86	0,89	0,94	0,99	1,00	1,03	1,07	
—	—	—	—	—	—	—	—	—	—	—	—	—	461	549	638	722	832	913	1019	1124	11,83
—	—	—	—	—	—	—	—	—	—	—	—	—	463	552	640	725	835	915	1021	1126	12,68
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	516	612	729	814	924	1032	12,70
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	518	613	731	816	926	1034	13,33
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	520	616	734	819	929	1036	14,29

SPA

Power Ratings

Martin

Speed Ratio	Sheave Combination		DriveN Speeds and Kw Per Belt						Nominal Center Distance And Arc-Length Correction Factor										
			2850 RPM DriveR		1450 RPM DriveR		950 RPM DriveR												
	DriveR O.D.	DriveN O.D.	DriveN RPM	kW Per Belt	DriveN RPM	kW Per Belt	DriveN RPM	kW Per Belt	Belt Length Designation										
									800	850	900	950	1000	1060	1120	1180	1250	1320	1400
Arc—Length Correction Factor									—	—	—	—	—	—	—	—	—	—	—
11,11	90	1000	257	4,35	131	2,69	86	1,96	—	—	—	—	—	—	—	—	—	—	
11,25	80	900	253	3,24	129	2,07	84	1,53	—	—	—	—	—	—	—	—	—	—	
Arc—Length Correction Factor									—	—	—	—	—	—	—	—	—	—	
11,76	85	1000	242	3,80	123	2,38	81	1,74	—	—	—	—	—	—	—	—	—	—	
12,50	80	1000	228	3,24	116	2,07	76	1,53	—	—	—	—	—	—	—	—	—	—	



Power Ratings

SPA

Nominal Center Distances And Arc-Length Correction Factor																				Speed Ratio
Belt Length Designation																				
1500	1600	1700	1800	1900	2000	2120	2240	2360	2500	2650	2800	3000	3150	3350	3550	3750	4000	4250	4500	
—	—	—	—	—	—	—	—	—	—	0,72	0,83	0,86	0,92	0,95	0,96	0,99	1,02	1,03	1,05	
—	—	—	—	—	—	—	—	—	—	—	—	—	—	663	788	905	1045	1182	1316	11,11
—	—	—	—	—	—	—	—	—	—	—	—	588	683	801	914	1024	1158	1291	1422	11,25
—	—	—	—	—	—	—	—	—	—	—	—	—	—	0,78	0,86	0,89	0,96	0,99	1,02	
—	—	—	—	—	—	—	—	—	—	—	—	—	—	666	791	908	1048	1185	1319	11,76
—	—	—	—	—	—	—	—	—	—	—	—	—	—	669	794	911	1052	1188	1322	12,50

SPB

Power Ratings



Speed Ratio	Sheave Combination		DriveN Speeds and Kw Per Belt						Nominal Center Distance And Arc-Length Correction Factor												
			2850 RPM Driver		1450 RPM Driver		950 RPM Driver														
	DriveR O.D.	DriveN O.D.	DriveN RPM	kW Per Belt	DriveN RPM	kW Per Belt	DriveN RPM	kW Per Belt	Belt Length Designation												
									1250	1320	1400	1500	1600	1700	1800	1900	2000	2120	2240	2360	
Arc—Length Correction Factor									—	—	—	—	—	—	—	—	—	—	—	—	
7,81	160	1250	365	15,11	186	9,61	122	6,81	—	—	—	—	—	—	—	—	—	—	—	—	
8,00	140	1120	356	12,07	181	7,49	119	5,39	—	—	—	—	—	—	—	—	—	—	—	—	
8,00	125	1000	356	9,59	181	6,04	119	4,39	—	—	—	—	—	—	—	—	—	—	—	—	
8,04	112	900	354	7,37	180	4,77	118	3,50	—	—	—	—	—	—	—	—	—	—	—	—	
8,33	150	1250	342	13,68	174	8,45	114	6,06	—	—	—	—	—	—	—	—	—	—	—	—	
Arc—Length Correction Factor									—	—	—	—	—	—	—	—	—	—	—	—	
8,47	118	1000	336	8,40	171	5,36	112	3,91	—	—	—	—	—	—	—	—	—	—	—	—	
8,48	132	1120	336	10,76	171	6,72	112	4,86	—	—	—	—	—	—	—	—	—	—	—	—	
8,93	140	1250	319	12,07	162	7,49	106	5,39	—	—	—	—	—	—	—	—	—	—	—	—	
8,93	112	1000	319	7,37	162	4,77	106	3,50	—	—	—	—	—	—	—	—	—	—	—	—	
8,96	125	1120	318	9,59	162	6,04	106	4,39	—	—	—	—	—	—	—	—	—	—	—	—	
Arc—Length Correction Factor									—	—	—	—	—	—	—	—	—	—	—	—	
9,47	132	1250	301	10,76	153	6,72	100	4,86	—	—	—	—	—	—	—	—	—	—	—	—	
9,49	118	1120	300	8,40	153	5,36	100	3,91	—	—	—	—	—	—	—	—	—	—	—	—	
10,00	125	1250	285	9,59	145	6,04	95	4,39	—	—	—	—	—	—	—	—	—	—	—	—	
10,00	112	1120	285	7,37	145	4,77	95	3,50	—	—	—	—	—	—	—	—	—	—	—	—	
10,59	118	1250	269	8,40	137	5,36	90	3,91	—	—	—	—	—	—	—	—	—	—	—	—	
Arc—Length Correction Factor									—	—	—	—	—	—	—	—	—	—	—	—	
11,16	112	1250	255	7,37	130	4,77	85	3,50	—	—	—	—	—	—	—	—	—	—	—	—	



Power Ratings

SPB

Nominal Center Distances And Arc-Length Correction Factor																					Speed Ratio
Belt Length Designation																					
2500	2650	2800	3000	3150	3350	3550	3750	4000	4250	4500	4750	5000	5300	5600	6000	6300	6700	7100	7500	8000	
—	—	—	0,64	0,65	0,74	0,79	0,84	0,88	0,90	0,9	0,91	0,93	0,96	0,99	1,00	1,03	1,04	1,06	1,07	1,10	
—	—	—	—	—	—	—	—	—	842	994	1138	1277	1440	1600	1811	1968	2175	2381	2586	2841	7,81
—	—	—	—	—	—	—	719	873	1018	1157	1293	1427	1585	1742	1949	2104	2309	2513	2717	2970	8,00
—	—	—	—	—	643	767	884	1023	1159	1293	1425	1555	1711	1866	2071	2224	2427	2630	2833	3086	8,00
—	—	—	569	664	781	894	1003	1137	1269	1400	1530	1659	1813	1966	2170	2322	2525	2727	2929	3181	8,04
—	—	—	—	—	—	—	—	—	848	1000	1144	1283	1446	1607	1818	1974	2182	2388	2593	2848	8,33
—	—	—	—	—	0,74	0,82	0,88	0,90	0,93	0,96	0,97	1,00	1,00	1,02	1,03	1,07	1,08	1,08	1,09	1,12	
—	—	—	—	—	647	771	888	1028	1164	1297	1429	1560	1716	1870	2076	2229	2432	2635	2838	3091	8,47
—	—	—	—	—	—	—	724	878	1023	1162	1298	1432	1590	1747	1955	2109	2314	2519	2722	2976	8,48
—	—	—	—	—	—	—	—	—	853	1006	1150	1289	1453	1613	1824	1981	2188	2395	2600	2855	8,93
—	—	—	—	—	651	775	892	1032	1168	1301	1433	1564	1720	1874	2080	2233	2437	2640	2842	3095	8,93
—	—	—	—	—	—	—	728	882	1027	1167	1303	1437	1595	1752	1960	2114	2319	2524	2727	2981	8,96
—	—	—	—	—	—	—	0,67	0,77	0,77	0,85	0,91	0,93	0,96	0,99	1,00	1,03	1,04	1,06	1,07	1,10	
—	—	—	—	—	—	—	—	—	858	1011	1155	1294	1458	1619	1830	1986	2194	2400	2605	2861	9,47
—	—	—	—	—	—	—	732	887	1032	1171	1307	1441	1600	1757	1964	2119	2324	2529	2732	2986	9,49
—	—	—	—	—	—	—	—	692	862	1015	1159	1299	1462	1623	1834	1991	2199	2405	2610	2865	10,00
—	—	—	—	—	—	—	735	890	1035	1175	1311	1445	1604	1761	1968	2123	2328	2533	2736	2990	10,00
—	—	—	—	—	—	—	—	696	866	1019	1163	1303	1467	1628	1839	1996	2203	2410	2615	2870	10,59
—	—	—	—	—	—	—	—	0,68	0,77	0,85	0,91	0,93	0,96	0,99	1,00	1,03	1,04	1,06	1,07	1,10	
—	—	—	—	—	—	—	—	699	870	1023	1167	1307	1471	1632	1843	2000	2207	2414	2619	2875	11,16

SPC

Power Ratings

Martin

Speed Ratio	Sheave Combination		DriveN Speeds and Kw Per Belt								Nominal Center Distance And Arc-Length Correction Factor							
			2850 RPM DriveR		1450 RPM DriveR		950 RPM DriveR		725 RPM DriveR									
	DriveR O.D.	DriveN O.D.	DriveN RPM	kW Per Belt	DriveN RPM	kW Per Belt	DriveN RPM	kW Per Belt	DriveN RPM	kW Per Belt	Belt Length Designation							
											2000	2120	2240	2360	2500	2650	2800	3000
Arc—Length Correction Factor											0,78	0,81	0,82	0,82	0,85	0,85	0,87	0,88
2,11	475	1000	—	—	687	56,85	450	45,53	344	35,60	—	—	—	—	—	—	—	
Arc—Length Correction Factor											0,78	0,81	0,81	0,82	0,84	0,85	0,87	0,88
2,11	265	560	1351	34,38	687	28,55	450	20,93	344	15,20	—	—	448	511	584	661	738	839
2,12	425	900	—	—	684	51,75	448	40,23	342	31,00	—	—	—	—	—	—	—	
2,12	335	710	—	—	684	39,85	448	29,73	342	22,30	—	—	—	—	—	—	548	653
2,12	212	450	—	—	684	19,95	448	14,68	342	10,30	465	527	588	649	721	796	872	973
2,12	224	475	—	—	684	21,65	448	15,93	342	11,30	433	495	557	619	690	766	842	943
Arc—Length Correction Factor											0,78	0,81	0,81	0,83	0,85	0,86	0,87	0,89
2,12	236	500	—	—	684	23,35	448	17,13	342	12,30	400	463	526	587	659	735	812	913
2,12	250	530	1344	32,08	684	25,95	448	18,93	342	13,60	—	425	488	550	622	699	775	877
2,13	375	800	—	—	681	45,55	446	34,53	340	26,20	—	—	—	—	—	—	—	—
2,13	200	425	—	—	681	18,25	446	13,43	340	9,30	497	558	619	680	751	827	902	1003
2,22	450	1000	—	—	653	54,45	428	42,93	327	33,30	—	—	—	—	—	—	—	—
Arc—Length Correction Factor											0,78	0,81	0,81	0,83	0,85	0,86	0,87	0,89
2,23	224	500	—	—	650	21,65	426	15,93	325	11,30	408	471	534	596	667	744	820	921
2,24	212	475	—	—	647	19,95	424	14,68	324	10,30	441	504	565	627	698	775	851	952
2,24	250	560	1272	32,08	647	25,95	424	18,93	324	13,60	—	—	458	521	594	671	748	850
2,25	400	900	—	—	644	48,75	422	37,43	322	28,60	—	—	—	—	—	—	—	—
2,25	355	800	—	—	644	42,75	422	32,13	322	24,30	—	—	—	—	—	—	—	—
Arc—Length Correction Factor											0,75	0,77	0,79	0,80	0,84	0,85	0,86	0,87
2,25	315	710	—	—	644	36,75	422	27,23	322	20,30	—	—	—	—	—	—	561	666
2,25	280	630	—	—	644	31,15	422	22,83	322	16,70	—	—	—	—	505	584	663	766
2,25	200	450	—	—	644	18,25	422	13,43	322	9,30	473	535	597	658	729	805	881	982
2,25	236	530	—	—	644	23,35	422	17,13	322	12,30	—	434	497	559	632	708	785	887
2,35	425	1000	—	—	617	51,75	404	40,23	309	31,00	—	—	—	—	—	—	—	—
Arc—Length Correction Factor											0,56	0,64	0,70	0,72	0,77	0,78	0,81	0,84
2,36	475	1120	—	—	614	56,85	403	45,53	307	35,60	—	—	—	—	—	—	—	—
2,36	212	500	—	—	614	19,95	403	14,68	307	10,30	416	479	542	604	676	752	829	930
2,37	300	710	—	—	612	34,35	401	25,43	306	18,80	—	—	—	—	—	—	570	676
2,37	224	530	—	—	612	21,65	401	15,93	306	11,30	—	442	505	567	640	717	793	895
2,37	236	560	—	—	612	23,35	401	17,13	306	12,30	—	403	467	530	603	681	758	860
Arc—Length Correction Factor											0,75	0,77	0,79	0,82	0,84	0,85	0,86	0,86
2,38	265	630	1197	34,38	609	28,55	399	20,93	305	15,20	—	—	—	—	515	594	673	776
2,38	200	475	—	—	609	18,25	399	13,43	305	9,30	449	512	574	635	707	783	859	960
2,39	335	800	—	—	607	39,85	397	29,73	303	22,30	—	—	—	—	—	—	—	—
2,40	375	900	—	—	604	45,55	396	34,53	302	26,20	—	—	—	—	—	—	—	—
2,49	450	1120	—	—	582	54,45	382	42,93	291	33,30	—	—	—	—	—	—	—	—
Arc—Length Correction Factor											0,60	0,67	0,71	0,75	0,78	0,80	0,81	0,84
2,50	400	1000	—	—	580	48,75	380	37,43	290	28,60	—	—	—	—	—	—	—	—
2,50	200	500	—	—	580	18,25	380	13,43	290	9,30	424	487	550	612	684	761	837	939
2,50	212	530	—	—	580	19,95	380	14,68	290	10,30	385	449	513	576	648	725	802	904
2,50	224	560	—	—	580	21,65	380	15,93	290	11,30	—	410	475	538	611	689	766	868
2,52	250	630	1131	32,08	575	25,95	377	18,93	288	13,60	—	—	—	449	525	604	683	786
Arc—Length Correction Factor											0,71	0,74	0,76	0,78	0,80	0,82	0,85	0,86
2,54	355	900	—	—	571	42,75	374	32,13	285	24,30	—	—	—	—	—	—	—	—
2,54	315	800	—	—	571	36,75	374	27,23	285	20,30	—	—	—	—	—	—	—	573
2,54	280	710	—	—	571	31,15	374	22,83	285	16,70	—	—	—	—	—	502	583	689
2,63	475	1250	—	—	551	56,85	361	45,53	276	35,60	—	—	—	—	—	—	—	—
2,64	425	1120	—	—	549	51,75	360	40,23	275	31,00	—	—	—	—	—	—	—	—
Arc—Length Correction Factor											0,75	0,76	0,77	0,80	0,84	0,85	0,86	0,88
2,64	212	560	—	—	549	19,95	360	14,68	275	10,30	—	418	483	546	620	697	774	877
2,65	200	530	—	—	547	18,25	358	13,43	274	9,30	392	457	521	584	656	733	810	912
2,67	375	1000	—	—	543	45,55	356	34,53	272	26,20	—	—	—	—	—	—	—	—
2,67	300	800	—	—	543	34,35	356	25,43	272	18,80	—	—	—	—	—	—	—	583
2,67	236	630	—	—	543	23,35	356	17,13	272	12,30	—	—	—	458	534	614	692	796

SPC

Power Ratings



Speed Ratio	Sheave Combination		DriveN Speeds and Kw Per Belt								Nominal Center Distance And Arc-Length Correction Factor								
			2850 RPM DriveR		1450 RPM DriveR		950 RPM DriveR		725 RPM DriveR										
	DriveR O.D.	DriveN O.D.	DriveN RPM	kW Per Belt	DriveN RPM	kW Per Belt	DriveN RPM	kW Per Belt	DriveN RPM	kW Per Belt	Belt Length Designation								
											2000	2120	2240	2360	2500	2650	2800	3000	
Arc—Length Correction Factor											—	0,71	0,74	0,77	0,80	0,82	0,85	0,86	
2,68	265	710	1063	34,38	541	28,55	354	20,93	271	15,20	—	—	—	—	—	511	593	699	
2,69	335	900	—	—	539	39,85	353	29,73	270	22,30	—	—	—	—	—	—	—	—	
2,78	450	1250	—	—	522	54,45	342	42,93	261	33,30	—	—	—	—	—	—	—	—	
2,80	400	1120	—	—	518	48,75	339	37,43	259	28,60	—	—	—	—	—	—	—	—	
2,80	200	560	—	—	518	18,25	339	13,43	259	9,30	—	425	490	554	628	705	783	885	
Arc—Length Correction Factor											—	—	—	0,77	0,80	0,82	0,85	0,86	
2,81	224	630	—	—	516	21,65	338	15,93	258	11,30	—	—	—	465	542	621	700	804	
2,82	355	1000	—	—	514	42,75	337	32,13	257	24,30	—	—	—	—	—	—	—	—	
2,84	250	710	1004	32,08	511	25,95	335	18,93	255	13,60	—	—	—	—	—	521	602	709	
2,86	315	900	—	—	507	36,75	332	27,23	253	20,30	—	—	—	—	—	—	—	—	
2,86	280	800	—	—	507	31,15	332	22,83	253	16,70	—	—	—	—	—	—	—	595	
Arc—Length Correction Factor											—	—	—	0,57	0,59	0,66	0,73	0,75	
2,94	425	1250	—	—	493	51,75	323	40,23	247	31,00	—	—	—	—	—	—	—	—	
2,97	212	630	—	—	488	19,95	320	14,68	244	10,30	—	—	—	473	549	629	708	812	
2,99	375	1120	—	—	485	45,55	318	34,53	242	26,20	—	—	—	—	—	—	—	—	
2,99	335	1000	—	—	485	39,85	318	29,73	242	22,30	—	—	—	—	—	—	—	—	
3,00	300	900	—	—	483	34,35	317	25,43	242	18,80	—	—	—	—	—	—	—	—	
Arc—Length Correction Factor											—	—	—	0,75	0,78	0,78	0,81	0,84	
3,01	236	710	—	—	482	23,35	316	17,13	241	12,30	—	—	—	—	—	529	611	718	
3,02	265	800	944	34,38	480	28,55	315	20,93	240	15,20	—	—	—	—	—	—	—	605	
3,13	400	1250	—	—	463	48,75	304	37,43	232	28,60	—	—	—	—	—	—	—	—	
3,15	355	1120	—	—	460	42,75	302	32,13	230	24,30	—	—	—	—	—	—	—	—	
3,15	200	630	—	—	460	18,25	302	13,43	230	9,30	—	—	—	480	557	637	716	820	
Arc—Length Correction Factor											—	—	—	—	—	0,69	0,73	0,78	
3,17	315	1000	—	—	457	36,75	300	27,23	229	20,30	—	—	—	—	—	—	—	—	
3,17	224	710	—	—	457	21,65	300	15,93	229	11,30	—	—	—	—	—	537	619	726	
3,20	250	800	891	32,08	453	25,95	297	18,93	227	13,60	—	—	—	—	—	—	—	614	
3,21	280	900	—	—	452	31,15	296	22,83	226	16,70	—	—	—	—	—	—	—	—	
3,33	375	1250	—	—	435	45,55	285	34,53	218	26,20	—	—	—	—	—	—	—	—	
Arc—Length Correction Factor											—	—	—	—	—	0,69	0,73	0,78	
3,33	300	1000	—	—	435	34,35	285	25,43	218	18,80	—	—	—	—	—	—	—	—	
3,34	335	1120	—	—	434	39,85	284	29,73	217	22,30	—	—	—	—	—	—	—	—	
3,35	212	710	—	—	433	19,95	284	14,68	216	10,30	—	—	—	—	—	544	627	734	
3,39	236	800	—	—	428	23,54	280	17,25	214	12,30	—	—	—	—	—	—	—	623	
3,40	265	900	838	34,76	426	28,74	279	21,05	213	15,20	—	—	—	—	—	—	—	—	
Arc—Length Correction Factor											—	—	—	—	0,59	0,59	0,64	0,71	
3,52	355	1250	—	—	412	42,94	270	32,25	206	24,30	—	—	—	—	—	—	—	—	
3,55	200	710	—	—	408	18,44	268	13,55	204	9,30	—	—	—	—	466	552	634	742	
3,56	315	1120	—	—	407	36,94	267	27,35	204	20,30	—	—	—	—	—	—	—	—	
3,57	280	1000	—	—	406	31,34	266	22,95	203	16,70	—	—	—	—	—	—	—	—	
3,57	224	800	—	—	406	21,84	266	16,05	203	11,30	—	—	—	—	—	—	516	630	
Arc—Length Correction Factor											—	—	—	—	—	—	0,70	0,75	
3,60	250	900	792	32,46	403	26,14	264	19,05	201	13,60	—	—	—	—	—	—	—	—	
3,73	335	1250	—	—	389	40,04	255	29,85	194	22,30	—	—	—	—	—	—	—	—	
3,73	300	1120	—	—	389	34,54	255	25,55	194	18,80	—	—	—	—	—	—	—	—	
3,77	265	1000	756	34,76	385	28,74	252	21,05	192	15,20	—	—	—	—	—	—	—	—	
3,77	212	800	—	—	385	20,14	252	14,80	192	10,30	—	—	—	—	—	—	523	638	
Arc—Length Correction Factor											—	—	—	—	—	—	0,70	0,75	
3,81	236	900	—	—	381	23,54	249	17,25	190	12,30	—	—	—	—	—	—	—	—	
3,97	315	1250	—	—	365	36,94	239	27,35	183	20,30	—	—	—	—	—	—	—	—	
4,00	280	1120	—	—	363	31,34	238	22,95	181	16,70	—	—	—	—	—	—	—	—	
4,00	250	1000	713	32,46	363	26,14	238	19,05	181	13,60	—	—	—	—	—	—	—	—	
4,00	200	800	—	—	363	18,44	238	13,55	181	9,30	—	—	—	—	—	—	530	645	
Arc—Length Correction Factor											—	—	—	—	—	—	—	—	—
4,02	224	900	—	—	361	21,84	236	16,05	180	11,30	—	—	—	—	—	—	—	—	

SPC

Power Ratings



Speed Ratio	Sheave Combination		DriveN Speeds and Kw Per Belt								Nominal Center Distance And Arc-Length Correction Factor							
			2850 RPM DriveR		1450 RPM DriveR		950 RPM DriveR		725 RPM DriveR									
	DriveR O.D.	DriveN O.D.	DriveN RPM	kW Per Belt	DriveN RPM	kW Per Belt	DriveN RPM	kW Per Belt	DriveN RPM	kW Per Belt	Belt Length Designation							
											2000	2120	2240	2360	2500	2650	2800	3000
Arc—Length Correction Factor											—	—	—	—	—	—	—	—
4,17	300	1250	—	—	348	34,54	228	25,55	174	18,80	—	—	—	—	—	—	—	
4,23	265	1120	674	34,76	343	28,74	225	21,05	171	15,20	—	—	—	—	—	—	—	
4,24	236	1000	—	—	342	23,54	224	17,25	171	12,30	—	—	—	—	—	—	—	
4,25	212	900	—	—	341	20,14	224	14,80	171	10,30	—	—	—	—	—	—	—	
Arc—Length Correction Factor											—	—	—	—	—	—	—	—
4,46	280	1250	—	—	325	31,34	213	22,95	163	16,70	—	—	—	—	—	—	—	
4,46	224	1000	—	—	325	21,84	213	16,05	163	11,30	—	—	—	—	—	—	—	
4,48	250	1120	636	32,46	324	26,14	212	19,05	162	13,60	—	—	—	—	—	—	—	
4,50	200	900	—	—	322	18,44	211	13,55	161	9,30	—	—	—	—	—	—	—	
4,72	265	1250	604	34,76	307	28,74	201	21,05	154	15,20	—	—	—	—	—	—	—	
Arc—Length Correction Factor											—	—	—	—	—	—	—	—
4,72	212	1000	—	—	307	20,14	201	14,80	154	10,30	—	—	—	—	—	—	—	
4,75	236	1120	—	—	305	23,54	200	17,25	153	12,30	—	—	—	—	—	—	—	
5,00	250	1250	570	32,46	290	26,14	190	19,05	145	13,60	—	—	—	—	—	—	—	
5,00	224	1120	—	—	290	21,84	190	16,05	145	11,30	—	—	—	—	—	—	—	
5,00	200	1000	—	—	290	18,44	190	13,55	145	9,30	—	—	—	—	—	—	—	
Arc—Length Correction Factor											—	—	—	—	—	—	—	—
5,28	212	1120	—	—	275	20,14	180	14,80	137	10,30	—	—	—	—	—	—	—	
5,30	236	1250	—	—	274	23,54	179	17,25	137	12,30	—	—	—	—	—	—	—	
5,58	224	1250	—	—	260	21,84	170	16,05	130	11,30	—	—	—	—	—	—	—	
5,60	200	1120	—	—	259	18,44	170	13,55	129	9,30	—	—	—	—	—	—	—	
5,90	212	1250	—	—	246	20,14	161	14,80	123	10,30	—	—	—	—	—	—	—	
Arc—Length Correction Factor											—	—	—	—	—	—	—	—
6,25	200	1250	—	—	232	18,44	152	13,55	116	9,30	—	—	—	—	—	—	—	

Nominal Center Distances And Arc-Length Correction Factor																			Speed Ratio
Belt Length Designation																			
3150	3350	3550	3750	4000	4250	4500	4750	5000	5300	5600	6000	6300	6700	7100	7500	8000	8500	9000	
0,74	0,80	0,83	0,85	0,88	0,91	0,91	0,93	0,94	0,97	0,98	0,99	0,99	1,01	1,02	1,03	1,04	1,05	1,08	
—	—	—	—	—	—	909	1051	1188	1350	1508	1718	1873	2079	2284	2488	2742	2996	3249	4,17
—	—	—	—	798	941	1078	1212	1345	1502	1658	1864	2017	2222	2425	2628	2881	3134	3386	4,23
—	—	701	815	953	1088	1220	1351	1480	1635	1789	1993	2146	2349	2551	2753	3005	3257	3509	4,24
604	720	831	939	1072	1203	1333	1462	1590	1743	1896	2099	2251	2453	2655	2856	3108	3359	3611	4,25
0,60	0,69	0,76	0,79	0,84	0,85	0,87	0,90	0,91	0,94	0,95	0,97	0,97	0,98	0,99	1,02	1,03	1,04	1,06	
—	—	—	—	—	772	921	1063	1201	1363	1522	1731	1887	2093	2298	2502	2756	3010	3263	4,46
—	—	708	823	961	1095	1228	1359	1489	1643	1797	2002	2154	2357	2560	2762	3014	3266	3518	4,46
—	—	—	—	807	950	1088	1222	1355	1512	1668	1874	2028	2232	2436	2639	2892	3144	3397	4,48
611	727	838	947	1080	1211	1341	1470	1598	1752	1904	2107	2259	2462	2664	2865	3117	3368	3620	4,50
—	—	—	—	—	780	930	1073	1211	1372	1532	1741	1897	2103	2308	2512	2767	3021	3274	4,72
—	—	0,76	0,82	0,84	0,87	0,89	0,92	0,93	0,95	0,96	0,99	0,99	1,00	1,01	1,03	1,04	1,05	1,06	
—	—	715	830	968	1103	1236	1367	1497	1652	1806	2010	2163	2366	2568	2771	3023	3275	3527	4,72
—	—	—	—	816	959	1096	1231	1364	1521	1677	1884	2038	2242	2446	2649	2902	3155	3407	4,75
—	—	—	—	—	789	939	1082	1220	1382	1541	1751	1907	2113	2319	2523	2777	3031	3284	5,00
—	—	—	—	823	966	1104	1239	1372	1529	1685	1892	2046	2250	2454	2657	2910	3163	3416	5,00
—	—	722	837	976	1111	1244	1375	1505	1660	1814	2018	2171	2374	2577	2779	3032	3284	3535	5,00
—	—	—	0,70	0,80	0,83	0,85	0,88	0,91	0,94	0,95	0,97	0,97	0,98	1,01	1,02	1,03	1,05	1,06	
—	—	—	677	830	974	1112	1247	1380	1537	1694	1900	2054	2259	2463	2666	2919	3172	3424	5,28
—	—	—	—	—	797	948	1091	1229	1391	1551	1760	1916	2123	2328	2533	2787	3041	3294	5,30
—	—	—	—	—	804	955	1098	1236	1399	1558	1769	1925	2131	2337	2541	2796	3050	3303	5,58
—	—	—	684	837	981	1119	1254	1388	1545	1702	1908	2063	2267	2471	2674	2928	3181	3433	5,60
—	—	—	—	—	811	962	1106	1244	1407	1566	1777	1933	2139	2345	2550	2804	3058	3312	5,90
—	—	—	—	—	0,75	0,80	0,84	0,87	0,90	0,93	0,96	0,96	0,98	0,99	1,00	1,03	1,04	1,05	
—	—	—	—	—	818	970	1113	1252	1414	1574	1785	1941	2148	2353	2558	2813	3067	3320	6,25

CENTER DISTANCE WEDGE BELT DRIVES

Useful Formula

DYNAMIC TENSION ON BELT DRIVES

STATIC TENSION

To determine the static tension, T_s , in the belt(s), measure the force, P , required to depress a belt 16mm per meter of span, by means of a Belt Tension Indicator.

The static tension, T_s , is given by

$$T_s = 2(16P) \times B \text{ (Newtons)}$$

DYNAMIC TENSION

To determine the approximate total tension, T_o , imposed by a drive when running, the centrifugal tension per side, T_c , must be subtracted from the static tension, T_s ,

$$TD = 2(16P - TC) \times B \text{ (Newtons)}$$

where B = the number of belts
and P = Tensioning force in Newtons, for the belt in question

CENTRIFUGAL TENSION

The centrifugal tension, T_c , developed in a belt is a function of its weight and the square of its velocity.

$$T_c = M \times S^2 \text{ (Newtons)}$$

The belt speed, S , may be derived from the formula

$$S = (d \times n) \div 19100 \text{ (m/s)}$$

where d = pitch diameter of either pulley — mm
 n = rotational speed of same pulley — rev/min.
and M = mass per unit length for the belt section in question.

CENTER DISTANCE CALCULATION

To determine belt length required given pulley diameters and center distance use the following formula:

$$L = 2C + \frac{(D-d)^2}{4C} + 1,57 (D+d)$$

where

L = Pitch length of belt in millimeters.

C = Center distance in millimeters.

D = Pitch diameter of large pulley in millimeters.

d = Pitch diameter of small pulley in millimeters.

To determine center distance, given pulley diameters and belt length, use the following formula:

$$C = A + A^2 \sqrt{B}$$

where

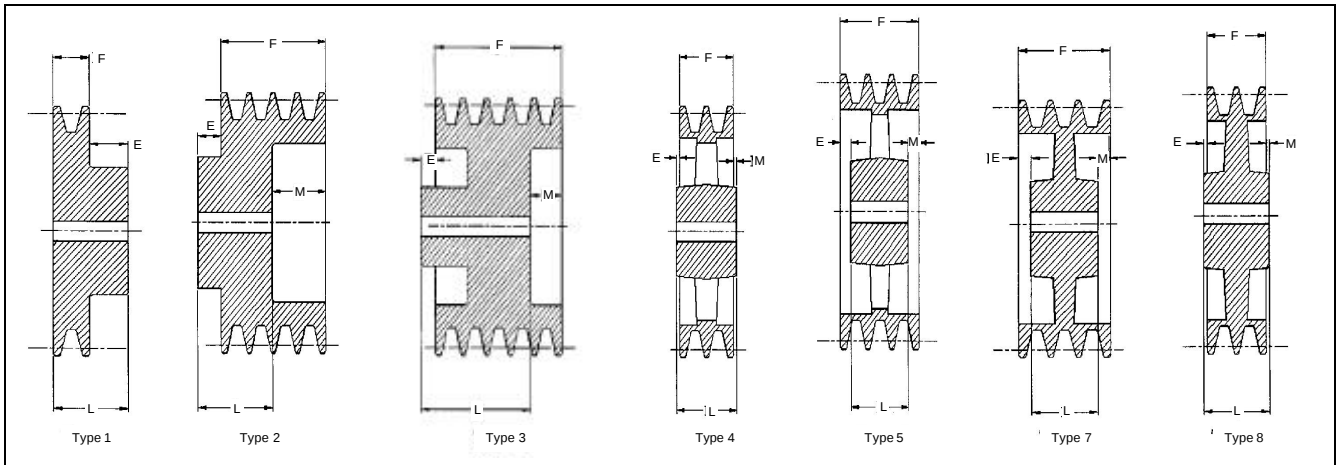
$$A = \frac{L}{4} - 0,3925 (D + d) \text{ and } B = \frac{(D - d)^2}{8}$$

Made-to-Order Pulleys

Martin has the capacity to produce a wide range of Made-To-Order Pulleys. These pulleys meet the same quality standards as our stock line of Taper Bushed Pulleys.

Since Made-To-Order Pulleys can be manufactured to meet most customer requirements, the following pages give standard dimensions for Made-To-Order Pulleys. Martin can alter these dimensions such as hub location, length through bore, to meet desired requirements. These pulleys are normally Bored-To-Size and are furnished with standard keyway and two set screws as indicated. However, most Made-To-Order Pulleys can be furnished in QD or Taper Bushed style hubs. Also, Martin can furnish Made-To-Order Pulleys in a split construction. Consult factory with specific requirements.





O.D. ■ Range	1 — Groove, F = 16				O.D. ■ Range	2 — Groove, F = 28				O.D. ■ Range	3 — Groove, F = 40			
	Type	L	E	M		Type	L	E	M		Type	L	E	M
50-112	1	28	—	12	50-112	1	35	—	7	63-125	1	40	—	—
118-150	8	28	—	12	118-125	8	35	—	7	132-150	8	40	—	—
160-250	8	32	3	16	132-150	8	40	—	12	160-250	8	45	—	5

O.D. ■ Range	4 — Groove, F = 52				O.D. ■ Range	5 — Groove, F = 64				O.D. ■ Range	6 — Groove, F = 76			
	Type	L	E	M		Type	L	E	M		Type	L	E	M
63-118	1	52	—	—	67-180	2	60	16	20	67-180	2	60	16	31
125	8	52	—	—	200	3	70	16	9,5	200	3	75	16	16
132-140	6	52	—	—	224-315	7	45	9,5	9,5	224-315	7	45	15,5	15,5
150-250	8	52	—	—	355-450	5	45	9,5	9,5	355-450	5	45	15,5	15,5
					500-630	5	90	15,1	15,1	500-630	5	65	5,5	5,5
					710-800	4	95	16	—	710-800	4	95	16	—

O.D. ■ Range	8 — Groove, F = 100				O.D. ■ Range	10 — Groove, F = 124				O.D. ■ Range	12 — Groove, F = 148			
	Type	L	E	M		Type	L	E	M		Type	L	E	M
140-224	7	55	16	16	101-125	7	64	16	63	101-125	7	89	16	58
250-630	7	75	16	16	127-175	7	64	16	63	127-175	7	89	16	58
					178-353	7	83	16	44	178-353	7	89	16	58
					356-429	7	89	16	37	356-429	7	89	16	58
					432-531	7	102	16	25	432-531	7	102	16	45
					533-851	7	114	2	2	533-851	7	114	8	8

O.D. ■ Range	14 — Groove, F = 172				O.D. ■ Range	16 — Groove, F = 196				O.D. ■ Range	18 — Groove, F = 220			
	Type	L	E	M		Type	L	E	M		Type	L	E	M
102-226	5	76	16	79	102-226	5	102	16	87	102-226	5	102	16	107
229-429	5	76	16	79	229-429	5	102	16	87	229-429	5	102	16	107
432-531	5	102	16	66	432-531	5	114	16	74	432-531	7	114	16	69
533-633	7	102	25	25	533-633	7	114	29	29	533-633	7	114	39	39
635-760	7	102	25	25	635-760	7	114	29	29	635-760	7	114	39	39
762-851	7	127	12	12	762-851	7	127	23	23	762-851	7	127	33	33

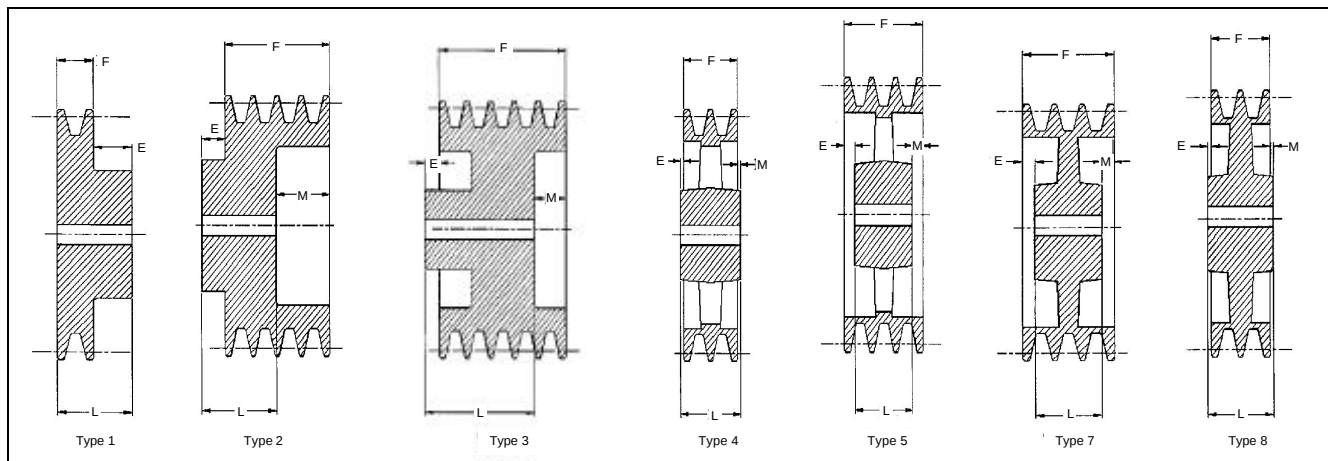
Dimensions in millimeters unless otherwise specified.

■ P.D. = O.D. + 20,3mm



Made-to-Order Pulleys

Martin



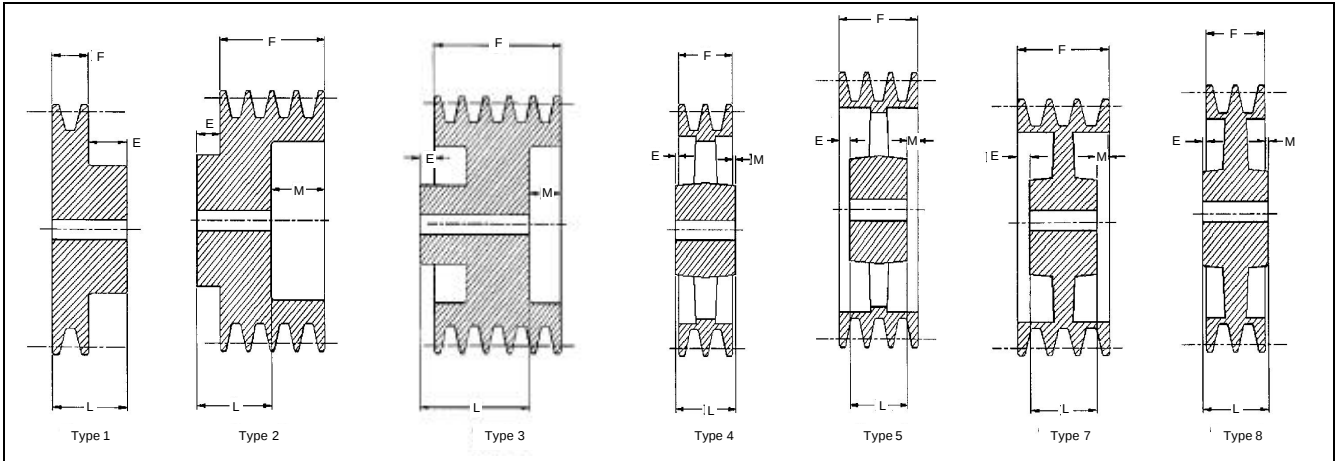
O.D. ■ Range	1 — Groove, F = 20				O.D. ■ Range	2 — Groove, F = 35				O.D. ■ Range	3 — Groove, F = 50			
	Type	L	E	M		Type	L	E	M		Type	L	E	M
50-112	1	35	—	15	50-118	1	45	—	10	56-132	1	50	—	—
118-140	8	35	—	15	125-160	8	45	—	10	140-280	8	50	—	—
150-236	8	40	—	20	180-400	8	50	—	15	300-400	8	60	—	10
250-400	8	50	—	30										

O.D. ■ Range	4 — Groove, F = 65				O.D. ■ Range	5 — Groove, F = 80				O.D. ■ Range	6 — Groove, F = 95			
	Type	L	E	M		Type	L	E	M		Type	L	E	M
63-90	1	65	—	—	80-100	3	62	15	40	80-100	3	73	15	40
95-140	2	50	—	15	106-118	2	62	15	48	106-118	2	73	15	63
150	7	60	—	5	125-224	3	74	5	24	125-244	3	88	5	32
160	2	45	—	20	236-315	7	74	5	15	236-315	7	88	5	5
180-400	7	60	—	5	355-630	5	74	5	7,5	355-630	5	88	5	5

O.D. ■ Range	7 — Groove, F = 110				O.D. ■ Range	8 — Groove, F = 125				O.D. ■ Range	10 — Groove, F = 155			
	Type	L	E	M		Type	L	E	M		Type	L	E	M
80-180	7	90	15	15	80-180	7	90	15	15	80-180	7	90	15	15
180-355	7	90	15	15	180-355	7	90	15	15	180-355	7	90	15	15
400-500	7	90	15	15	400-500	7	102	15	15	400-500	7	102	15	15
500-630	7	90	15	15	500-630	7	102	15	15	500-630	7	102	15	15

Dimensions in millimeters unless otherwise specified.

■ P.D. = O.D. + 20,3mm



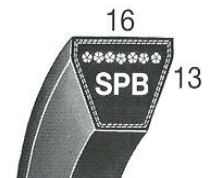
1 — Groove, F = 25					2 — Groove, F = 44					3 — Groove, F = 63				
O.D. ■ Range	Type	L	E	M	O.D. ■ Range	Type	L	E	M	O.D. ■ Range	Type	L	E	M
80-132	1	35	—	10	80-140	1	55	—	10	80-160	2	50	—	13
140	8	35	—	10	150-160	8	55	—	10	180-236	7	50	—	13
150-200	8	40	—	15	180-300	8	50	—	15	250-400	7	60	—	3
200-250	8	45	—	20	315-400	8	60	—	20					

4 — Groove, F = 82					5 — Groove, F = 101					6 — Groove, F = 120				
O.D. ■ Range	Type	L	E	M	O.D. ■ Range	Type	L	E	M	O.D. ■ Range	Type	L	E	M
95-150	2	50	—	32	180-250	3	74	22	25	180-250	3	90	22	28
160	2	60	—	22	280-400	7	80	22	18	280-400	7	95	22	22
180-236	7	60	—	22	450-1250	5	101	6	6	450-1250	5	102	15	15

8 — Groove, F = 158					10 — Groove, F = 196					12 — Groove, F = 234				
O.D. ■ Range	Type	L	E	M	O.D. ■ Range	Type	L	E	M	O.D. ■ Range	Type	L	E	M
180-250	3	90	22	54	224-630	7	110	22	22	224-630	7	130	22	22
280-400	7	102	22	22	630-900	7	115	22	22	630-900	7	140	22	22
450-1250	5	102	22	15	900-1120	7	140	22	22	900-1120	7	150	22	22
					1120-1250	7	150	22	22	1120-1250	7	150	22	22
					1346-1927	7	180	22	22	1346-1927	7	180	22	22

14 — Groove, F = 272					16 — Groove, F = 310					18 — Groove, F = 348				
O.D. ■ Range	Type	L	E	M	O.D. ■ Range	Type	L	E	M	O.D. ■ Range	Type	L	E	M
224-630	7	150	22	22	224-630	7	165	22	22	224-630	7	180	22	22
630-900	7	165	22	22	630-900	7	180	22	22	630-900	7	205	22	22
900-1120	7	180	22	22	400-1120	7	190	22	22	900-1120	7	215	22	22
1120-1250	7	190	22	22	1120-1250	7	205	22	22	1120-1250	7	230	22	22
1346-1927	7	205	22	22	1346-1597	7	215	22	22	1346-1597	7	240	22	22
					1600-1905	7	230	22	22	1600-1905	7	270	22	22

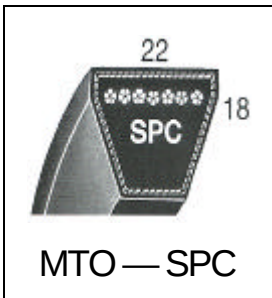
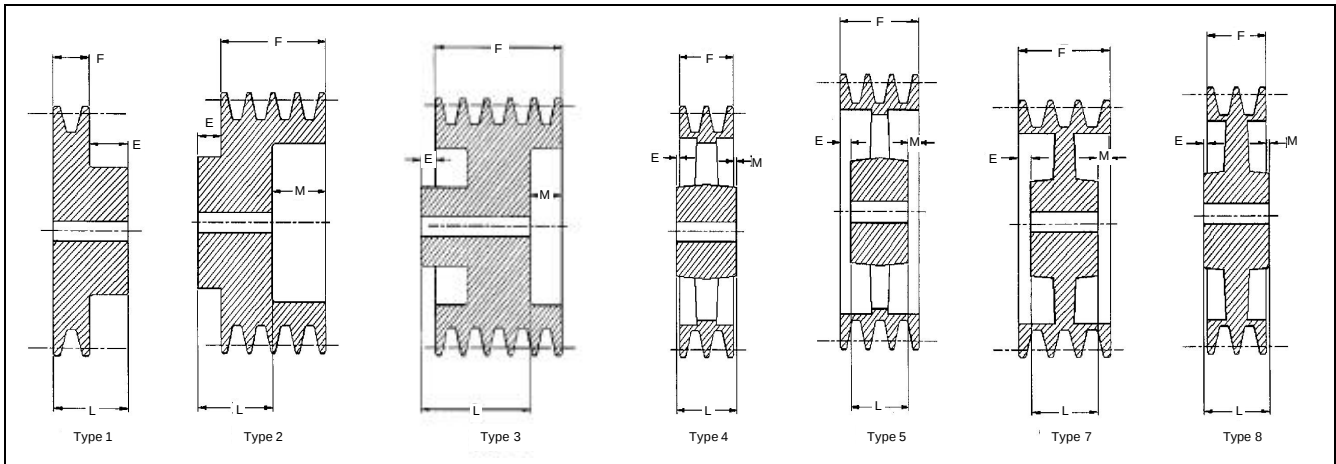
20 — Groove, F = 386				
O.D. ■ Range	Type	L	E	M
224-630	7	205	22	22
630-900	7	215	22	22
900-1120	7	230	22	22
1120-1250	7	240	22	22
1346-1597	7	255	22	22
1600-1905	7	305	22	22



MTO — SPB

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O.D. ■ Range	3 — Groove, F = 85				O.D. ■ Range	4 — Groove, F = 111				O.D. ■ Range	5 — Groove, F = 136			
	Type	L	E	M		Type	L	E	M		Type	L	E	M
224-280	3	71	7	45	224-280	3	71	20	57	224-280	3	90	23	36
300-400	7	80	3	3	300-400	5	90	10	10	300-400	7	100	18	18
425-710	5	80	3	3	425-710	5	100	10	10	425-710	5	100	18	18
800-1250	4	80	3	3	800-1250	5	111	5	5	800-1250	5	125	6	6

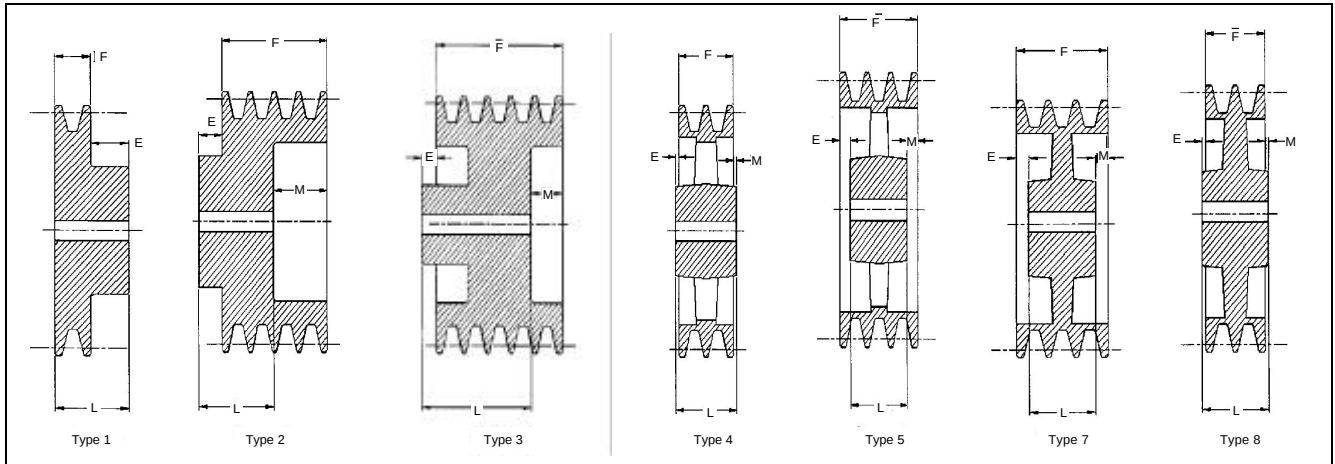
O.D. ■ Range	6 — Groove, F = 162				O.D. ■ Range	7 — Groove, F = 188				O.D. ■ Range	8 — Groove, F = 213			
	Type	L	E	M		Type	L	E	M		Type	L	E	M
224-265	3	100	30	48	224-265	3	105	22	48	224-265	3	137	22	74
280-300	7	100	30	30	280-300	7	115	22	22	280-300	7	173	22	22
315-1250	5	140	10	10	315-1250	5	140	22	22	315-1250	5	212	22	22

O.D. ■ Range	9 — Groove, F = 239				O.D. ■ Range	10 — Groove, F = 265				O.D. ■ Range	11 — Groove, F = 290			
	Type	L	E	M		Type	L	E	M		Type	L	E	M
224-400	7	125	22	22	224-400	7	150	22	22	224-400	7	180	22	22
400-630	7	140	22	22	400-630	7	165	22	22	400-630	7	190	22	22
630-900	7	150	22	22	630-900	7	180	22	22	630-900	7	205	22	22
900-1120	7	165	22	22	900-1120	7	190	22	22	900-1120	7	215	22	22
1120-1250	7	180	22	22	1120-1250	7	205	22	22	1120-1250	7	230	22	22
1422-1625	7	190	22	22	1422-1625	7	215	22	22	1422-1625	7	240	22	22

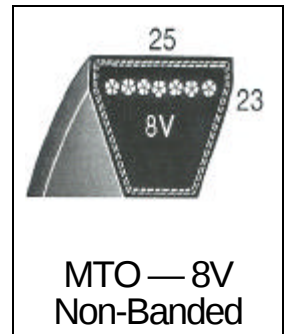
O.D. ■ Range	12 — Groove, F = 316				O.D. ■ Range	13 — Groove, F = 342				O.D. ■ Range	14 — Groove, F = 368			
	Type	L	E	M		Type	L	E	M		Type	L	E	M
224-400	7	180	22	22	224-400	7	205	22	22	224-400	7	205	22	22
400-630	7	190	22	22	400-630	7	205	22	22	400-630	7	205	22	22
630-900	7	205	22	22	630-900	7	215	22	22	630-900	7	215	22	22
900-1120	7	215	22	22	900-1120	7	230	22	22	900-1120	7	230	22	22
1120-1250	7	230	22	22	1120-1250	7	240	22	22	1120-1250	7	240	22	22
1422-1625	7	240	22	22	1422-1625	7	255	22	22	1250-1625	7	255	22	22

Dimensions in millimeters unless otherwise specified.

■ P.D. = O.D. + 20,3mm



4 — Groove, F = 124					5 — Groove, F = 152					7 — Groove, F = 181				
O.D. ■ Range	Type	L	E	M	O.D. ■ Range	Type	L	E	M	O.D. ■ Range	Type	L	E	M
325-678	2	127	29	25	325-678	2	140	29	41	325-678	2	152	29	57
681-1008	2	140	8	8	681-1008	4	152	0	0	681-1008	5	178	2	2
1011-1466	4	152	14	14	1011-1466	4	178	13	13	1011-1466	4	191	5	5
1468-1770	4	178	27	27	1468-1770	4	203	0	0	1468-1770	4	203	11	11
1773-2075	4	203	40	40	1773-2075	4	210	32	32	1773-2075	4	229	24	24
2078-2154	4	216	30	30	2078-2154	4	229	38	38	2078-2154	4	254	37	37



8 — Groove, F = 238					10 — Groove, F = 295					12 — Groove, F = 352				
O.D. ■ Range	Type	L	E	M	O.D. ■ Range	Type	L	E	M	O.D. ■ Range	Type	L	E	M
325-678	2	165	29	102	325-678	2	178	29	146	325-678	2	203	29	178
681-1008	5	190	24	24	681-1008	5	203	46	46	681-1008	5	216	68	68
1011-1466	5	203	18	18	1011-1466	5	229	33	33	1011-1466	5	241	56	56
1468-1770	5	229	5	5	1468-1770	5	241	27	27	1468-1770	5	254	49	49
1773-2075	4	241	2	2	1773-2075	5	254	21	21	1773-2075	5	279	37	37
2078-2154	4	254	8	8	2078-2154	5	279	8	8	2078-2154	5	305	24	24

14 — Groove, F = 410					16 — Groove, F = 467					18 — Groove, F = 524				
O.D. ■ Range	Type	L	E	M	O.D. ■ Range	Type	L	E	M	O.D. ■ Range	Type	L	E	M
325-678	2	235	29	197	325-678	2	267	29	229	325-678	2	419	29	133
681-1008	5	229	91	91	681-1008	5	254	106	106	681-1008	5	305	110	110
1011-1466	5	254	91	78	1011-1466	5	267	100	100	1011-1466	5	318	103	103
1468-1770	5	279	65	65	1468-1770	5	279	94	94	1468-1770	5	330	97	97
1773-2075	5	305	586	52	1773-2075	5	305	81	81	1773-2075	5	356	84	84
2078-2154	5	330	40	40	2078-2154	5	330	68	68	2078-2154	5	381	71	71

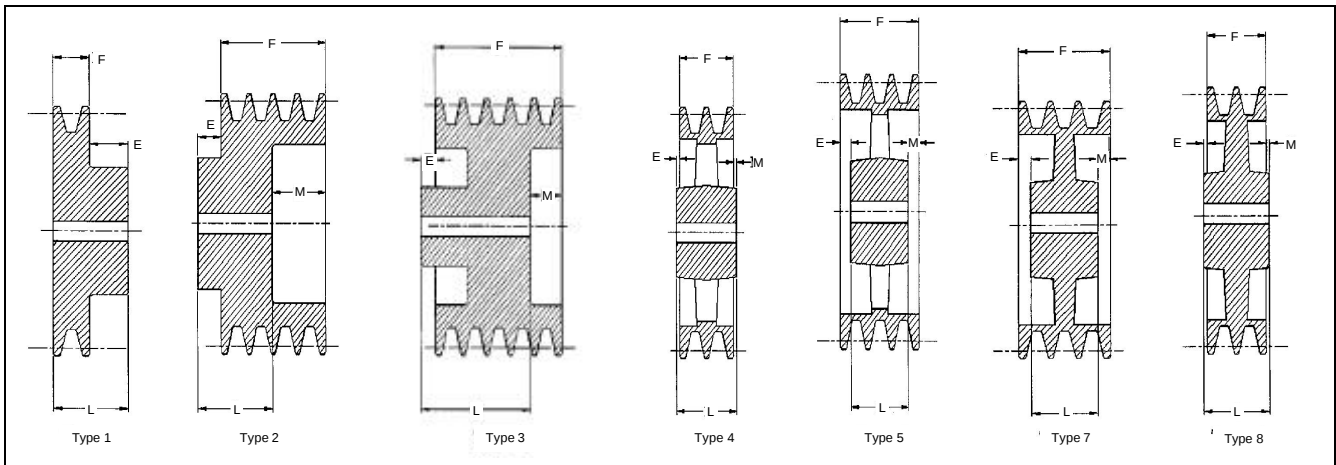
20 — Groove, F = 581					22 — Groove, F = 638					24 — Groove, F = 695				
O.D. ■ Range	Type	L	E	M	O.D. ■ Range	Type	L	E	M	O.D. ■ Range	Type	L	E	M
325-678	2	457	29	152	325-678	2	483	29	184	325-678	2	559	29	165
681-1008	5	343	119	119	681-1008	5	521	71	71	681-1008	5	559	68	68
1011-1466	5	356	113	113	1011-1466	5	381	129	129	1011-1466	5	584	56	56
1468-1770	5	368	106	106	1468-1770	5	406	116	116	1468-1770	5	432	132	132
1773-2075	5	381	100	100	1773-2075	5	419	110	110	1773-2075	5	445	125	125
2078-2154	5	406	87	87	2078-2154	5	432	103	103	2078-2154	5	457	119	119

Dimensions in millimeters unless otherwise specified.

■ P.D. = O.D. + 20,3mm

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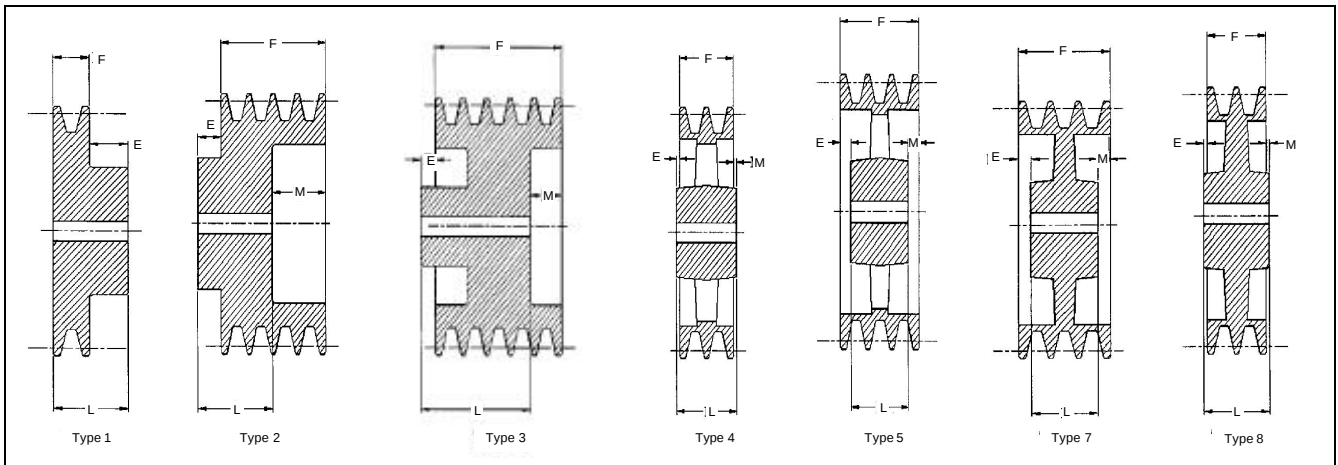
O.D. ■ Range	3 — Groove, F = 85				O.D. ■ Range	4 — Groove, F = 111				O.D. ■ Range	5 — Groove, F = 136			
	Type	L	E	M		Type	L	E	M		Type	L	E	M
315-668	3	71	7	45	224-280	3	71	20	57	224-280	3	90	23	36
671-998	7	80	3	3	300-400	5	90	10	10	300-400	7	100	18	18
1001-1455	5	80	3	3	425-710	5	100	10	10	425-710	5	100	18	18
1458-1760	4	80	3	3	800-1250	5	111	5	5	800-1250	5	125	6	6
1763-2065														
2068-2144														

O.D. ■ Range	6 — Groove, F = 162				O.D. ■ Range	7 — Groove, F = 188				O.D. ■ Range	8 — Groove, F = 213			
	Type	L	E	M		Type	L	E	M		Type	L	E	M
224-265	3	100	30	48	224-265	3	105	22	48	224-265	3	137	22	74
280-300	7	100	30	30	280-300	7	115	22	22	280-300	7	173	22	22
315-1250	5	140	10	10	315-1250	5	140	22	22	315-1250	5	212	22	22

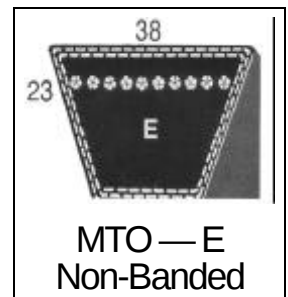
O.D. ■ Range	9 — Groove, F = 239				O.D. ■ Range	10 — Groove, F = 265				O.D. ■ Range	11 — Groove, F = 290			
	Type	L	E	M		Type	L	E	M		Type	L	E	M
224-400	7	125	22	22	224-400	7	150	22	22	224-400	7	180	22	22
400-630	7	140	22	22	400-630	7	165	22	22	400-630	7	190	22	22
630-900	7	150	22	22	630-900	7	180	22	22	630-900	7	205	22	22
900-1120	7	165	22	22	900-1120	7	190	22	22	900-1120	7	215	22	22
1120-1250	7	180	22	22	1120-1250	7	205	22	22	1120-1250	7	230	22	22
1422-1625	7	190	22	22	1422-1625	7	215	22	22	1422-1625	7	240	22	22

O.D. ■ Range	12 — Groove, F = 316				O.D. ■ Range	13 — Groove, F = 342				O.D. ■ Range	14 — Groove, F = 368			
	Type	L	E	M		Type	L	E	M		Type	L	E	M
224-400	7	180	22	22	224-400	7	205	22	22	224-400	7	205	22	22
400-630	7	190	22	22	400-630	7	205	22	22	400-630	7	205	22	22
630-900	7	205	22	22	630-900	7	215	22	22	630-900	7	215	22	22
900-1120	7	215	22	22	900-1120	7	230	22	22	900-1120	7	230	22	22
1120-1250	7	230	22	22	1120-1250	7	240	22	22	1120-1250	7	240	22	22
1422-1625	7	240	22	22	1422-1625	7	255	22	22	1250-1625	7	255	22	22

Dimensions in millimeters unless otherwise specified.
■ P.D. = O.D. + 20,3mm



5 — Groove, F = 191					6 — Groove, F = 279					8 — Groove, F = 368				
O.D. ■ Range	Type	L	E	M	O.D. ■ Range	Type	L	E	M	O.D. ■ Range	Type	L	E	M
513-633	2	127	29	92	513-633	2	178	29	130	513-633	2	229	29	168
666-1146	5	152	19	19	666-1146	5	191	45	45	666-1146	5	241	64	64
1148-1450	5	165	13	13	1148-1450	5	203	38	38	1148-1450	5	254	57	57
1453-1857	5	190	0	0	1453-1857	5	216	38	38	1453-1857	5	267	51	51
1859-2111	5	190	0	0	1859-2111	5	229	25	25	1859-2111	5	279	45	45
2113-2139	5	203	6	6	2113-2139	5	241	19	19	2113-2139	5	292	38	38



10 — Groove, F = 457					12 — Groove, F = 546					14 — Groove, F = 635				
O.D. ■ Range	Type	L	E	M	O.D. ■ Range	Type	L	E	M	O.D. ■ Range	Type	L	E	M
513-633	2	279	29	206	513-633	2	432	29	143	513-633	2	482	29	181
666-1146	5	279	89	89	666-1146	5	330	108	108	666-1146	5	521	57	57
1011-1466	5	292	83	83	1148-1450	5	343	102	102	1148-1450	5	381	127	127
1148-1450	5	305	76	76	1453-1857	5	356	95	95	1453-1857	5	394	121	121
1453-2111	5	317	70	70	1859-2111	5	368	89	89	1859-2111	5	419	108	108
2113-2139	5	330	64	64	2113-2139	5	381	83	83	2113-2139	5	419	108	108

Dimensions in millimeters unless otherwise specified.

■ P.D. = O.D. + 20,3mm

V-Belt Drive Selection

PRIME MOVER:

_____	_____	_____	_____
Type & Description	Rated (Nameplate) kW	Shaft Size	RPM

DRIVEN COMPONENTS:

_____	_____	_____	_____
Type & Description	Expected Hours Service	Shaft Size	RPM

CENTER DISTANCE:

_____	_____	_____
Maximum — MM	Minimum — MM	Nominal — MM

Step 1:

_____	x	_____	=	_____
Design Power (kW)		Service Factor		Design kW
Prime Mover kW				

Step 2:

_____	NOTE: If Prime Mover is electric motor, check minimum pulley diameter. Minimum Pulley Diameter = _____
Belt Cross Section	

Step 3:

_____	÷	_____	=	_____
Speed Ratio		RPM Slower Shaft		Speed Ratio
RPM Faster Shaft				

Step 4:

From Rating Tables, determined by Belt Cross Section in Step 2, refer to proper Speed Ratio, then, reading across table determine:

A. _____	D. _____
Prime Mover Pulley — MM	Center Distance — MM
B. _____	E. _____
Driven Pulley — MM	Belt Size (Cross Section & No.)
C. _____	F. _____
Rated kW Per Belt	Correction Factor

Step 5: Number of Belts Required

A. _____	x	_____	=	_____
Rated kW Per Belt		Correction Factor		Corr. kW Per Belt
B. _____	÷	_____	=	_____
Design Power (kW)		Corr. kW Per Belt		Number Of Belts*

*If number contains a fraction, round off to next largest whole number

V-Belt Drive Selection

PRIME MOVER:

_____	_____	_____	_____
Type & Description	Rated (Nameplate) kW	Shaft Size	RPM

DRIVEN COMPONENTS:

_____	_____	_____	_____
Type & Description	Expected Hours Service	Shaft Size	RPM

CENTER DISTANCE:

_____	_____	_____
Maximum — MM	Minimum — MM	Nominal — MM

Step 1:

_____	x	_____	=	_____
Design Power (kW)		Service Factor		Design kW
Prime Mover kW				

Step 2:

_____	NOTE: If Prime Mover is electric motor, check minimum pulley diameter.
Belt Cross Section	
	Minimum Pulley Diameter = _____

Step 3:

_____	÷	_____	=	_____
Speed Ratio				Speed Ratio
RPM Faster Shaft		RPM Slower Shaft		

Step 4:

From Rating Tables, determined by Belt Cross Section in Step 2, refer to proper Speed Ratio, then, reading across table determine:

A. _____	D. _____
Prime Mover Pulley — MM	Center Distance — MM
B. _____	E. _____
Driven Pulley — MM	Belt Size (Cross Section & No.)
C. _____	F. _____
Rated Kw Per Belt	Correction Factor

Step 5: Number of Belts Required

A. _____	x	_____	=	_____
Rated Kw Per Belt		Correction Factor		Corr. kW Per Belt
B. _____	÷	_____	=	_____
Design Power (kW)		Corr. kW Per Belt		Number of Belts*

*If number contains a fraction, round off to next largest whole number