Appendix 1



Belt Section	Width a, in	Thickness <i>b,</i> in	Minimum Sheave Diameter, in	hp Range, One or More Belts
А	$\frac{1}{2}$	11 32	3.0	14-10
В	$\frac{21}{32}$	7 16	5.4	1-25
С	<u>7</u>	1 <i>7</i> 32	9.0	15–100
D	$1\frac{1}{4}$	34	13.0	50-250
Е	$1\frac{1}{2}$	1	21.6	100 and up

Table 1: standard V-Belt Sections

Section	Circumference, in
Α	26, 31, 33, 35, 38, 42, 46, 48, 51, 53, 55, 57, 60, 62, 64, 66, 68, 71, 75, 78, 80, 85, 90, 96, 105, 112, 120, 128
В	35, 38, 42, 46, 48, 51, 53, 55, 57, 60, 62, 64, 65, 66, 68, 71, 75, 78, 79, 81, 83, 85, 90, 93, 97, 100, 103, 105, 112, 120, 128, 131, 136, 144, 158, 173, 180, 195, 210, 240, 270, 300
С	51, 60, 68, 75, 81, 85, 90, 96, 105, 112, 120, 128, 136, 144, 158, 162,173, 180, 195, 210, 240, 270, 300, 330, 360, 390, 420
D	120, 128, 144, 158, 162, 173, 180, 195, 210, 240, 270, 300, 330, 360,390, 420, 480, 540, 600, 660
Е	180, 195, 210, 240, 270, 300, 330, 360, 390, 420, 480, 540, 600, 660

Table2: Inside Circumferences of Standard V Belt

	Nominal Belt Length, in				
Length Factor	A Belts	B Belts	C Belts	D Belts	E Belts
0.85	Up to 35	Up to 46	Up to 75	Up to 128	
0.90	38-46	48-60	81-96	144-162	Up to 195
0.95	48-55	62–75	105-120	173-210	210-240
1.00	60–75	78-97	128-158	240	270-300
1.05	78-90	105-120	162-195	270-330	330-390
1.10	96-112	128-144	210-240	360-420	420-480
1.15	120 and up	158-180	270-300	480	540-600
1.20		195 and up	330 and up	540 and up	660

Table 3: Belt-Length Correction Factor K2*

D-d			K,
C	€, deg		V Flat
0.00	180	1.00	0.75
0.10	174.3	0.99	0.76
0.20	166.5	0.97	0.78
0.30	162. <i>7</i>	0.96	0.79
0.40	156.9	0.94	0.80
0.50	151.0	0.93	0.81
0.60	145.1	0.91	0.83
0.70	139.0	0.89	0.84
0.80	132.8	0.87	0.85
0.90	126.5	0.85	0.85
1.00	120.0	0.82	0.82
1.10	113.3	0.80	0.80
1.20	106.3	0.77	0.77
1.30	98.9	0.73	0.73
1.40	91.1	0.70	0.70
1.50	82.8	0.65	0.65

Table 4: Angle of Contact Correction Factor K1 for VV* and V-Flat Drives

	Source of Power		
Driven Machinery	Normal Torque Characteristic	High or Nonuniform Torque	
Uniform	1.0 to 1.2	1.1 to 1.3	
Light shock	1.1 to 1.3	1.2 to 1.4	
Medium shock	1.2 to 1.4	1.4 to 1.6	
Heavy shock	1.3 to 1.5	1.5 to 1.8	

Table 5: Suggested Service Factors KS for V-Belt Drives