PT7-88

Stock Classical Drives: Standard Motor Speeds

Step 1-Determine Service Factor. Refer to Typical Service factors, Table 7. Locate type of Driven and Driver equipment. (If an idler is used, increase the factor by value indicated). Correct factor is determined by: **1.** The extent and frequency of peak loads. **2.** Number of operating hours/year, broken down in average hours/day of continuous service. **3.** Proper service category: (Intermittent, Normal or Continuous). Select the one closest to the application conditions.

Step 2-Compute Design HP. Multiply normal running HP required or nameplate rating by service factor obtained in Step 1.

Step 3-Choose Belt Section. Using Table 6, below, read up from design HP figure obtained in Step 2 and over from the RPM of faster shaft. This intersection indicates belt sections.

Step 4-Select the Drive. a). Using belt section from Step 3, refer to Stock Drive Selection Tables beginning on page PT7–88. **b).** Under appropriate driver speed column find Driven RPM nearest to the desired speed. To the right note HP per Belt. Read left for Driver/Driven Sheave information. (If driver is an electric motor be sure motor sheave diameter is not less than shown in Table 8.) **c).** Read onto **opposite** page and find figure nearest the required center distance. Note Arc-Length Correction Factor in the shaded row **below** the C.D. figure. **d).** Read to the top of the table for the belt size. **e). To determine number of belts**, multiply the HP per Belt value by the Arc Length Correction Factor. This is the corrected HP/belt. Divide design HP by corrected HP figure to determine number of belts required.

EXAMPLE OF SELECTION

Select a classical drive for a continuous duty 3-piston compressor, with a $2^{7}/_{16}$″ shaft, to run at about 284 RPM, driven by a 30 HP, 1160 RPM squirrel cage electric motor with a $2^{1}/_{8}$″ shaft. Desired center distance is approximately 36″.

Step 1-Service factor from Table 7 is 1.4.

Step 2-Design HP = 1.4 x 30 = 42 HP.

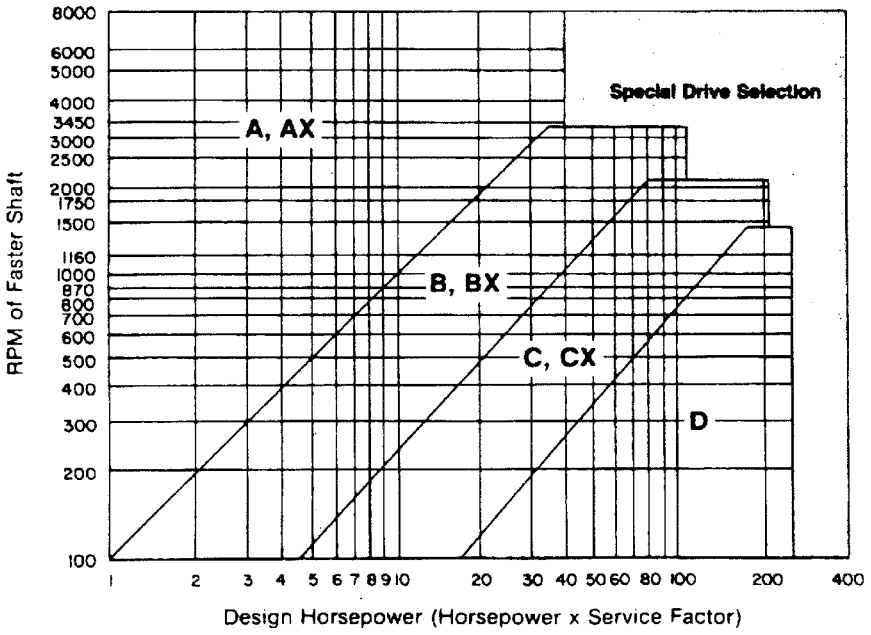
Step 3-A C-section belt is shown in Table 11 when reading to the right of 1160 RPM and up from 42 design HP.

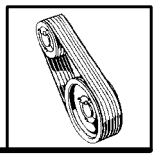
Step 4-Turn to C-Stock Drive Selection Tables beginning on page PT7–106. Under 1160 RPM Driven, read down to find 285 RPM. One selection is 284 on page PT7–110. Note HP/belt as 15.47 for all SL Classic belts and Polyband belts over 116″ and 19.34 for all Classic-Cog and Polyband under 116″. Also note sheaves listed as a 8.5 Driver, 36.0 Driven. Table 8 shows driver is not undersize. Reading to opposite page the C.D. figure of 35.9 is closest to 36″. Top of table shows belt size as C144.

The HP/belt for SL Classic is 15.47. This value x the .95 factor = 14.7 corrected HP/belt. 42 HP÷14.7 = 2.85. Going to the next whole number the drive requires 3 SL Classic belts. (Center to center operating distance is 35.9 nominal.) **Order: 1.** 3-C144 SL Classic Belts. **2.** 1-3-groove C8.5 TAPER-LOCK Sheave. **3.** 1-$2^{1}/_{8}$″ bore 2517 bushing. **4.** 1-3 groove C36.0 TAPER-LOCK Sheave. **5.** 1-$2^{7}/_{16}$″ bore 3535 bushing.

(The steps above may be used to figure a Classic-COG drive with higher HP ratings. This drive usually uses fewer grooves and will be more compact. The decision to use SL Classic, Classic-COG or POLYBAND belts involves economics, interchangeability, etc.).

Table 6 - CLASSICAL CROSS SECTION SELECTION CHART





SERVICE FACTORS

TABLE 7 - TYPICAL SERVICE FACTORS

Driven Machine Types Note: Certain machines may require flywheel sheaves or special construction to withstand heavy shock loads. Consult Mfg'r.	Driver: Normal Torque NEMA Des. A or B Motors DC Shunt Wound Motors Multi-Cylinder Engines			Driver: High Torque NEMA Des. C or D Motors DC Series Wound Motors Single Cylinder Engines		
	Service*			Service*		
	Intermit.	Normal	Contin.	Intermit.	Normal	Cont.
Agitators for Liquids Blowers and Exhausters Centrif. Pumps, Compressors Fans up to 10 HP Light Duty Conveyors	**1.0**	**1.1**	**1.2**	**1.1**	**1.2**	**1.3**
Belt Conveyors, Bulk Mat'l Dough Mixers Fans over 10 HP Generators Line Shafts Laundry Machinery Machine Tools Punches, Presses, Shears Printing Machinery Positive Displ. Rotary Pumps Revolving & 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 Pos. Displacement Blowers Pulverizers Saw Mill, Woodworking Mach'y Textile Machinery	**1.2**	**1.3**	**1.4**	**1.4**	**1.5**	**1.6**
Crushers: Gyratory, Jaw, Roll Mills: Ball, Rod, Tube Hoists Rubber Calendars, Extruders, Mills	**1.3**	**1.4**	**1.5**	**1.6**	**1.7**	**1.8**
Chokable Equipment, Fire Hazard	**2.0**	**2.0**	**2.0**	**2.0**	**2.0**	**2.0**

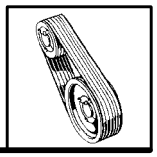
***Note:**
Intermittent:
Up to 6 Hrs/Day
Normal
6-16 Hrs/Day
Continuous:
16-24 Hrs/Day

Adder for Idlers:
Outside on slack side 0.1
Inside on tight side 0.1
Outside on tight side 0.2

TABLE 8 - MIN. RECOMMENDED CLASSICAL GROOVE SHEAVE DIAMETERS FOR DRIVES USING ELECTRIC MOTORS

Motor RPM	A, B, C, D, V-belt Sheave	Motor Horsepower																		
		1/2	3/4	1	1–1/2	2	3	5	7–1/2	10	15	20	25	30	40	50	60	75	100	125
870	Min. P.D.	2.2	2.4	2.4	2.4	3.0	3.0	3.8	4.4	4.6	5.4	6.0	6.8	6.8	8.2	9.0	10.0	10.5	12.5	...
	Max. Face Width	4.3	4.3	5.3	5.3	6.5	6.5	7.8	7.8	9.0	9.0	10.3	10.3	11.5	11.5	14.3	14.3	16.8	16.8	...
1160	Min. P.D.	...	2.2	2.4	2.4	2.4	3.0	3.0	3.8	4.4	4.6	5.4	6.0	6.8	6.8	8.2	9.0	10.0	11.0	12.5
	Max. Face Width	...	4.3	4.3	5.3	5.3	6.5	6.5	7.8	7.8	9.0	9.0	10.3	10.3	11.5	11.5	14.3	14.3	16.8	16.8
1750	Min. P.D.	...	...	2.2	2.4	2.4	2.4	3.0	3.0	3.8	4.4	4.6	5.0	5.4	6.0	6.8	7.4	9.0	10.0	11.5
	Max. Face Width	...	...	4.3	4.3	4.3	5.3	5.3	6.5	6.5	7.8	7.8	9.0	9.0	10.3	10.3	11.5	11.5	14.3	14.3
3500	Min. P.D.	...	...	...	2.2	2.4	2.4	2.6	3.0	3.0	3.8	4.4	4.4	...	...	...	...	...	...	...
	Max. Face Width	...	...	...	4.3	4.3	4.3	5.3	5.3	6.5	6.5	7.8	7.8	...	...	...	...	...	...	...

Data is per NEMA Standard MG1-14.42. In areas where sheaves are not listed, consult motor manufacturer.



Stock Classical Drives: Non Standard Motor Speeds Speed-up Drives

For Speeds Other Than Standard Motor Speeds:

Step 1 - Determine Speed Ratio: $\left(\frac{\text{Driver RPM}}{\text{Driven RPM}}\right)$

Step 2 - Compute Design HP. Multiply normal running HP required or nameplate rating by service factor from Table12.

Step 3 - Determine Maximum Diameter of Driver Sheave @ 6500 FPM : O.D. $= \frac{6500\ \text{FPM}}{.262 \times \text{RPM}}$

Step 4 - Select Belt Cross Section. Using Table 6, read up from design HP figure obtained in Step 2 and over from the RPM of faster shaft. This intersection indicates belt section.

Step 5 - Select Drive. Using the belt section from Step 4, make a tentative sheave selection from **Stock Drive Selection Tables**. (Note that several choices are available in the ratio obtained from Step 1.) Other choices close to this ratio may also produce a functional drive. Read on to opposite page and find figure nearest the required center distance. The Arc Length Correction Factor is listed in the shaded row below the C.D. figure. Read to the top of the table for the belt size.

Step 6 - Size the Drive. From **Basic HP Tables** beginning on page PT7–116, locate HP rating at intersection of RPM row and small sheave column. To this, add the "additional HP" figure based on drive ratio. This becomes the rated HP. Multiply this sum by the arc-length correction factor noted in Step 5. This becomes the corrected HP per belt. To find

required number of belts : $\frac{\text{Design HP}}{\text{Correction HP/Belt}}$

EXAMPLE OF SELECTION

A V-drive is needed for a 15 HP, 2000 RPM gasoline engine, with a 1-$^5/_8$″ shaft, running a reducer on a belt conveyor. 2-$^3/_{16}$″ reducer input shaft runs at 1350 RPM. Service is intermittent. Center distance is 36″ .

Step 1-Speed Ratio $= \frac{2200}{1350} = 1.48$

Step 2-Service Factor=1.1= Design HP= 15x1.1 = 16.5

Step 3-Driver Sheave Max. Dia. $= \frac{6500}{.262 \times 2200} = 2.4$

Step 4-Belt Cross Section = Table 11 indicates A-AX.

Step 5-Turn to A, AX **Stock Drive Selection Tables** beginning on page PT7–89. Find the 1.48 Ratio obtained in the Step 1 calculations. The most economical drive shows a 4.6 Driver, 7.0 Driven Sheave. The C.D. nearest 36″ is 36.5 The correction factor below the C.D. figure is 1.07. Top of table shows a A90 belt.

Refer to **Basic HP Tables** on page PT7–116. From the 2000 RPM of the faster shaft row and down from the 4.6 small sheave:

5.44 HP/belt plus an additional HP of .45 in the 1.52 thru 1.99 ratio column. The sum = 5.89 HP/belt x 1.07 arc length correction factor = 6.3 HP/belt.

Number of belts $= \frac{16.5}{6.3} = 2.61$ or 3 belts

Order: 1-3 groove A4.6 TAPER-LOCK Sheave, 1-1$^5/_8$″ bore 1610 bushing, 1-3 groove A7.0 sheave, 1-2$^3/_{16}$″ bore 2517 bushing, 3-A90 SL Classic Belts.

Example of an "A" Speed-Up Drive

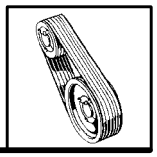
A 10 HP 1750 RPM AC motor with a 1$^3/_8$″ shaft is to drive a high speed blower @ 4000 RPM. The blower shaft is 1$^7/_{16}$″, center distance 24″ and equipment run 24 hrs./day.

1. Service Factor from Table 12 is 1.2.
2. Design HP= 10x 1.2 = 12 HP.
3. Speed Ratio $= \frac{4000}{1750} = 2.29$
4. In Stock Drive Table, under 2.29 ratio, sheaves are listed as 3.4 Driver/8.2 Driven. (In a speed-up drive the 3.4 sheave becomes the Driven, the 8.2 the Driver). The opposite page of the drive table shows the closest center distance as 24.4 with an arc length correction factor of .96. Belt shown at top of table is A66.
5. From Basic HP Tables a 3.4 sheave @ 4000 RPM = (4.38 + 1.00) = 5.20.
   5.38 x .96 = 5.16 corrected HP/belt.
6. Number of Belts $= \frac{\text{Design HP}}{\text{Corrected HP}} = \frac{12}{5.16} = 2.33$ or 3 belts.
7. **Order:** 1-3 groove A8.2 TAPER–LOCK Sheave, 1-1$^3/_8$″ bore 2517 bushing, 1-3 groove A3.4 TAPER-LOCK Sheave, 1-$^{17}/_{16}$″ bore 1610 bushing, 3-A66 SL Classic belts.

NOTE: To determine required belt length when center distance and sheave datum diameters are known, use the following formula.

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

L = Belt Length In Inches
C = Center Distance
D = Datum Dia. of Large Sheave
d = Datum Dia. of Small Sheave



Belt Correction Factors

TABLE 9 - CLASSICAL BELT LENGTH CORRECTION FACTORS

Datum Length	Factor	Datum Length	Factor	Datum Length	Factor	Datum Length	Factor	Datum Length	Factor	Datum Length	Factor	Datum Length	Factor
A Belts		**A Belts (Cont.)**		**A Belts (Cont.)**		**B Belts (Cont.)**		**B Belts (Cont.)**		**C Belts (Cont.)**		**D Belts (Cont.)**	
15.3	0.68	58.3	0.96	113.3	1.11	57.8	0.90	101.8	1.03	107.9	0.94	213.3	0.96
16.3	0.69	59.3	0.97	121.3	1.13	58.8	0.90	102.8	1.03	108.9	0.94	225.8	0.99
17.3	0.71	60.3	0.97	129.3	1.14	59.8	0.91	104.8	1.04	110.9	0.94	240.8	1.00
18.3	0.72	61.3	0.98	134.3	1.14	60.8	0.91	106.8	1.04	111.9	0.94	255.8	1.01
19.3	0.73	62.3	0.98	137.3	1.15	61.8	0.92	109.8	1.04	113.9	0.94	270.8	1.03
20.3	0.74	63.3	0.98	145.3	1.17	62.8	0.92	112.8	1.05	114.9	0.95	285.8	1.04
21.3	0.75	64.3	0.98	159.3	1.19	63.8	0.92	113.8	1.05	117.9	0.95	300.8	1.05
22.3	0.76	65.3	0.99	174.3	1.21	64.8	0.92	117.8	1.06	122.9	0.97	315.8	1.06
23.3	0.77	67.3	0.99	181.3	1.22	65.8	0.93	121.8	1.07	126.9	0.97	330.8	1.07
24.3	0.78	68.3	0.99	**B Belts**		66.8	0.93	125.8	1.07	130.9	0.98	345.8	1.08
25.3	0.79	69.3	1.00	23.8	0.71	67.8	0.93	129.8	1.08	138.9	0.99	360.8	1.09
26.3	0.80	70.3	1.00	24.8	0.72	68.8	0.94	134.8	1.09	146.9	1.00	390.8	1.11
27.3	0.81	71.3	1.00	25.8	0.73	69.8	0.95	137.8	1.09	152.9	1.01	420.8	1.12
28.3	0.81	72.3	1.01	26.8	0.74	70.8	0.95	145.8	1.11	160.9	1.02	450.8	1.14
29.3	0.82	73.3	1.01	27.8	0.75	71.8	0.95	149.8	1.11	164.9	1.03	480.8	1.16
30.3	0.82	74.3	1.01	28.8	0.75	72.8	0.95	159.8	1.13	175.9	1.04	540.8	1.18
31.3	0.83	75.3	1.02	29.8	0.76	73.8	0.95	163.8	1.13	182.9	1.05	600.8	1.20
32.3	0.84	76.3	1.02	30.8	0.77	74.8	0.96	174.8	1.15	197.9	1.07	**E Belts #**	
33.3	0.84	77.3	1.02	31.8	0.77	75.8	0.96	181.8	1.16	212.9	1.08	184.5	0.91
34.3	0.85	78.3	1.02	32.8	0.78	76.8	0.97	191.8	1.16	225.9	1.10	199.5	0.92
35.3	0.86	79.3	1.03	33.8	0.79	77.8	0.97	196.8	1.18	240.9	1.11	214.5	0.94
36.3	0.87	80.3	1.03	34.8	0.79	78.8	0.97	206.8	1.19	255.9	1.12	241.0	0.96
37.3	0.87	81.3	1.04	35.8	0.80	79.8	0.97	211.8	1.19	270.9	1.14	271.0	0.99
38.3	0.87	82.3	1.04	36.8	0.81	80.8	0.97	225.3	1.21	285.9	1.15	301.0	1.01
39.3	0.88	83.3	1.04	37.8	0.81	81.8	0.97	240.3	1.22	300.9	1.16	331.0	1.03
40.3	0.89	84.3	1.04	38.8	0.82	82.8	0.98	255.3	1.24	315.9	1.18	361.0	1.05
41.3	0.89	85.3	1.05	39.8	0.83	83.8	0.98	270.3	1.25	330.9	1.19	391.0	1.07
42.3	0.90	86.3	1.05	40.8	0.83	84.8	0.98	285.3	1.26	345.9	1.20	421.0	1.09
42.3	0.90	87.3	1.05	41.8	0.83	85.8	0.99	300.3	1.27	360.9	1.21	481.0	1.12
43.3	0.91	88.3	1.05	42.8	0.84	86.8	0.99	315.3	1.29	390.9	1.23	541.0	1.14
44.3	0.91	89.3	1.06	43.8	0.85	87.8	0.99	**C Belts**		420.9	1.24	601.0	1.17
45.3	0.92	90.3	1.06	44.8	0.85	88.8	0.99	53.9	0.80	450.9	1.26	....	....
46.3	0.92	91.3	1.06	45.8	0.85	89.8	1.00	57.9	0.81	480.9	1.27	....	....
47.3	0.93	92.3	1.06	46.8	0.86	90.8	1.00	62.9	0.82	**D Belts**		....	....
48.3	0.93	93.3	1.07	47.8	0.87	91.8	1.00	70.9	0.85	108.3	0.83	....	....
49.3	0.93	94.3	1.07	48.8	0.87	92.8	1.00	73.9	0.87	115.3	0.84	....	....
50.3	0.94	95.3	1.07	49.8	0.87	93.8	1.00	77.9	0.89	123.3	0.86	....	....
51.3	0.94	96.3	1.07	50.8	0.88	94.8	1.01	83.9	0.90	131.3	0.87	....	....
52.3	0.95	97.3	1.08	51.8	0.88	95.8	1.01	87.9	0.91	147.3	0.90	....	....
53.3	0.95	98.3	1.08	52.8	0.89	96.8	1.01	92.9	0.92	161.3	0.92	....	....
54.3	0.96	99.3	1.08	53.8	0.89	97.8	1.01	98.9	0.92	165.3	0.92	....	....
55.3	0.96	101.3	1.08	54.8	0.89	98.8	1.02	99.9	0.92	176.3	0.93	....	....
56.6	0.96	106.3	1.10	55.8	0.89	99.8	1.02	101.9	0.92	183.3	0.94	....	....
57.3	0.96	111.3	1.11	56.8	0.90	100.8	1.02	103.9	0.94	198.3	0.96	....	....

E Belts recommended for replacement only, not for new drive design.

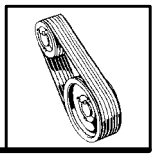
TABLE 10 - ARC CORRECTION FACTORS

D–d★ / C	Approx. Arc of Contact on Small Shv.	Factor	D–d★ / C	Approx. Arc of Contact on Small Shv.	Factor
.00	180°	1.00	.80	133°	.87
.10	174°	.99	.90	127°	.85
.20	169°	.97	1.00	120°	.82
.30	163°	.96	1.10	113°	.80
.40	157°	.94	1.20	106°	.77
.50	151°	.93	1.30	99°	.73
.60	145°	.91	1.40	91°	.70
.70	139°	.89	1.50	83°	.65

★ D=Dia. of large sheave.
d=Dia of small sheave.
C=Center distance.

SHEAVES PAGES PT7–2-PT7–27	BELTS PAGES PT7–28-PT7–41	SELECTION: WEDGE PAGES PT7–42-PT7–83	ENGINEERING/TECHNICAL PAGES PT7–123-PT7–128

DODGE®

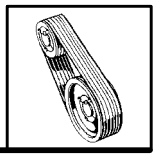


D S-L CLASSIC STOCK DRIVE SELECTIONS

Ratio	Stock Shv. Datum Diam.		1160 RPM Driver		870 RPM Driver		690 RPM Driver		Belt Size/Center Distance					
	Driver	Driven	Driven RPM	HP/Belt D	Driven RPM	HP/Belt D	Driven RPM	HP/Belt D	D120	D128	D144	D158	D162	D173
1.00	12.00	12.00	1160	28.43	870	24.56	690	21.13	42.8	46.8	54.8	61.8	63.8	69.3
1.00	13.00	13.00	1160	32.81	870	28.39	690	24.40	41.2	45.2	53.2	60.2	62.2	67.7
1.00	13.50	13.50	1160	34.92	870	30.26	690	26.02	40.5	44.5	52.5	59.5	61.5	67.0
1.00	14.00	14.00	1160	36.96	870	32.10	690	27.61	39.7	43.7	51.7	58.7	60.7	66.2
1.00	14.50	14.50	1160	38.93	870	33.92	690	29.19	38.9	42.9	50.9	57.9	59.9	65.4
1.00	15.00	15.00	1160	40.84	870	35.70	690	30.75	38.1	42.1	50.1	57.1	59.1	64.6
1.00	15.50	15.50	1160	42.68	870	37.45	690	32.30	37.3	41.3	49.3	56.3	58.3	63.8
1.00	16.00	16.00	1160	44.46	870	39.16	690	33.82	36.5	40.5	48.5	55.5	57.5	63.0
1.00	18.00	18.00	1160	50.84	870	45.70	690	39.74	33.4	37.4	45.4	52.4	54.4	59.9
1.00	22.00	22.00	1160	---	870	57.07	690	50.64	27.1	31.1	39.1	46.1	48.1	53.6
1.03	15.50	16.00	1125	43.34	844	37.94	669	32.69	36.9	40.9	48.9	55.9	57.9	63.4
1.03	15.00	15.50	1124	41.52	843	36.20	669	31.16	37.7	41.7	49.7	56.7	58.7	64.2
1.03	14.50	15.00	1123	39.63	842	34.44	668	29.61	38.5	42.5	50.5	57.5	59.5	65.0
1.03	14.00	14.50	1122	37.67	841	32.64	667	28.04	39.3	43.3	51.3	58.3	60.3	65.8
1.04	13.50	14.00	1120	35.66	840	30.82	666	26.46	40.1	44.1	52.1	59.1	61.1	66.6
1.04	13.00	13.50	1119	33.58	839	28.96	666	24.86	40.8	44.8	52.8	59.8	61.8	67.3
1.06	15.00	16.00	1090	42.09	818	36.64	648	31.50	37.3	41.3	49.3	46.3	58.3	63.8
1.07	14.50	15.50	1088	40.22	816	34.88	647	29.96	38.1	42.1	50.1	57.1	59.1	64.6
1.07	14.00	15.00	1086	38.28	814	33.10	646	28.40	38.9	42.9	50.9	57.9	59.9	65.4
1.07	13.50	14.50	1083	36.28	812	31.28	644	26.83	39.7	43.7	51.7	58.7	60.7	66.2
1.07	13.00	14.00	1081	34.22	810	29.44	643	25.24	40.5	44.5	52.5	59.5	61.5	67.0
1.08	12.00	13.00	1075	29.93	806	25.68	639	22.02	42.0	46.0	54.0	61.0	63.0	68.5
1.10	14.50	16.00	1055	40.72	791	35.26	628	30.26	37.7	41.7	49.7	56.7	58.7	64.2
1.10	14.00	15.50	1052	38.79	789	33.48	626	28.70	38.5	42.5	50.5	57.5	59.5	65.0
1.11	13.50	15.00	1048	36.80	786	31.67	624	27.14	39.3	43.3	51.3	58.3	60.3	65.8
								ARC-LENGTH CORRECTION FACTOR >	**0.86**	**0.87**	**0.90**	**0.92**	**0.92**	**0.93**
1.11	18.00	20.00	1047	52.74	786	47.13	623	40.87	31.8	35.8	43.8	50.8	52.8	58.3
1.11	13.00	14.50	1045	34.85	784	29.84	621	25.55	40.1	44.1	52.1	59.1	61.1	66.6
1.12	12.00	13.50	1037	30.48	777	26.09	617	22.34	41.6	45.6	53.6	60.6	62.6	68.1
1.12	16.00	18.00	1035	46.53	776	40.71	616	35.05	34.9	38.9	46.9	54.0	56.0	61.5
1.14	14.00	16.00	1020	39.22	765	33.80	607	28.96	38.1	42.1	50.1	57.1	59.1	64.6
1.14	13.50	15.50	1016	37.24	762	32.00	604	27.40	38.9	42.9	50.9	57.1	59.9	65.4
1.15	13.00	15.00	1011	35.19	758	30.17	602	25.82	39.7	43.7	51.7	58.7	60.7	66.2
1.16	15.50	18.00	1004	45.15	753	39.30	597	33.76	35.3	39.3	47.3	54.3	56.3	61.2
1.16	12.00	14.00	1001	30.93	751	26.44	595	22.61	41.2	45.2	53.2	60.2	62.2	67.7
1.18	13.50	16.00	985	37.60	739	32.28	586	27.62	38.5	42.5	0.5	57.5	59.5	65.0
1.18	13.00	15.50	980	35.56	735	30.45	583	26.04	39.3	43.3	51.3	58.3	60.3	65.8
1.19	15.00	18.00	973	43.67	730	37.82	579	32.43	35.7	39.7	47.7	54.7	56.7	62.2
1.20	12.00	14.50	968	31.31	726	26.72	576	22.84	40.8	44.8	52.8	59.8	61.8	67.3
1.22	18.00	22.00	955	53.86	716	47.97	568	41.53	30.2	34.2	42.2	49.2	51.2	56.7
1.22	13.00	16.00	950	35.87	713	30.68	565	26.22	38.9	42.9	50.9	57.9	59.9	65.4
1.22	22.00	27.00	950	---	712	59.37	565	52.46	---	27.1	35.1	42.1	44.1	49.6
1.23	14.50	18.00	942	42.08	706	36.27	560	31.06	36.1	40.1	48.1	55.1	57.1	62.6
1.24	12.00	15.00	937	31.62	703	26.95	557	23.02	40.4	44.4	52.4	59.4	61.4	66.9
1.24	16.00	20.00	935	47.67	701	41.57	556	35.73	33.3	37.3	45.3	52.4	54.4	59.9
1.27	14.00	18.00	911	40.38	683	34.67	542	29.65	36.5	40.5	48.5	55.5	57.5	63.0
1.28	12.00	15.50	908	31.88	681	27.15	540	23.18	40.0	44.0	52.0	59.0	61.0	66.5
1.28	15.50	20.00	907	46.14	680	40.04	539	34.36	33.7	37.7	45.7	52.7	54.7	60.2
1.32	12.00	16.00	880	32.10	660	27.31	524	23.31	39.6	43.6	51.6	58.6	60.6	66.1
1.32	13.50	18.00	879	38.59	660	33.02	523	28.20	36.9	40.9	48.9	55.9	57.9	63.4
1.32	15.00	20.00	878	44.52	659	38.46	523	32.94	34.1	38.1	46.1	53.1	55.1	60.6
1.36	16.00	22.00	852	48.33	639	42.07	507	36.12	31.7	35.7	43.7	50.7	52.7	58.2
1.36	14.50	20.00	850	42.81	638	36.83	506	31.50	34.5	38.5	46.5	53.5	55.5	61.0
1.37	13.00	18.00	848	36.71	636	31.31	505	26.72	37.2	41.2	49.3	56.3	58.3	63.8
1.40	15.50	22.00	826	46.72	620	40.47	492	34.69	32.0	36.1	44.1	51.1	53.1	58.6
1.41	14.00	20.00	822	41.01	617	35.15	489	30.03	34.8	38.8	46.9	53.9	55.9	61.4
1.45	15.00	22.00	801	45.02	601	38.83	476	33.24	32.4	36.4	44.5	51.5	53.5	59.0
1.46	13.50	20.00	794	39.13	595	33.42	472	28.52	35.2	39.2	47.2	54.3	56.3	61.8
1.48	12.00	18.00	786	32.68	589	27.75	467	23.66	38.0	42.0	50.0	57.0	59.0	64.5
1.48	18.00	27.00	782	55.12	586	48.91	465	42.28	25.9	30.0	38.1	45.1	47.1	52.6
1.49	22.00	33.00	780	---	585	60.28	464	53.18	---	---	30.0	37.1	39.1	44.6
								ARC-LENGTH CORRECTION FACTOR >	**0.84**	**0.86**	**0.88**	**0.90**	**0.91**	**0.92**

SHEAVES PAGES PT7-2-PT7-27	BELTS PAGES PT7-28-PT7-41	SELECTION: WEDGE PAGES PT7-42-PT7-83	ENGINEERING/TECHNICAL PAGES PT7-123-PT7-128

DODGE®

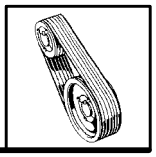


D S-L CLASSIC STOCK DRIVE SELECTIONS

Ratio	Belt Size/Center Distance																
	D180	D195	D210	D225	D240	D255	D270	D300	D315	D330	D360	D390	D420	D480	D540	D600	D660
1.00	72.8	80.3	87.8	94.1	101.6	109.1	116.6	131.6	139.1	146.6	161.6	176.6	191.6	221.6	251.6	281.6	311.6
1.00	71.2	78.7	86.2	92.5	100.0	107.5	115.0	130.0	137.5	145.0	160.0	175.0	190.0	220.0	250.0	280.0	310.0
1.00	70.5	78.0	85.5	91.7	99.2	106.7	114.2	129.2	136.7	144.2	159.2	174.2	189.2	219.2	249.2	279.2	309.2
1.00	69.7	77.2	84.7	90.9	98.4	105.9	113.4	128.4	135.9	143.4	158.4	173.4	188.4	218.4	248.4	278.4	308.4
1.00	68.9	76.4	83.4	90.1	97.6	105.1	112.6	127.6	135.1	142.6	157.6	172.6	187.6	217.6	247.6	277.6	307.6
1.00	68.1	75.6	83.1	89.4	96.8	104.4	111.9	126.9	134.4	141.8	156.8	171.8	186.9	216.9	246.8	276.9	306.9
1.00	67.3	74.8	82.3	88.6	96.1	103.6	111.1	126.1	133.6	141.1	156.1	171.1	186.1	216.1	246.1	276.1	306.1
1.00	66.5	74.0	81.5	87.8	95.3	102.8	110.3	125.3	132.8	140.3	155.3	170.3	185.3	215.3	245.3	275.3	305.3
1.00	63.4	70.9	78.4	84.6	92.1	99.6	107.1	122.1	129.6	137.1	152.1	167.1	182.1	212.1	242.1	272.1	302.1
1.00	57.1	64.6	72.1	78.4	85.9	93.4	100.9	115.9	123.4	130.9	145.9	160.9	175.9	205.9	235.9	265.9	295.9
1.03	66.9	74.4	81.9	88.2	95.7	103.2	110.7	125.7	133.2	140.7	155.7	170.7	185.7	215.7	245.7	275.7	305.7
1.03	67.7	75.2	82.7	89.0	96.5	104.0	111.5	126.5	134.0	141.5	156.5	171.5	186.5	216.5	246.5	276.5	306.5
1.03	68.5	76.0	83.5	89.7	97.2	104.7	112.2	127.2	134.7	142.2	157.2	172.2	187.2	217.2	247.2	277.2	307.2
1.03	69.3	76.8	84.3	90.5	98.0	105.5	113.0	128.0	135.5	143.0	158.0	173.0	188.0	218.0	248.0	278.0	308.0
1.04	70.1	77.6	85.1	91.3	98.8	106.3	113.8	128.8	136.3	143.8	158.8	173.8	188.8	218.8	248.8	278.8	308.8
1.04	70.8	78.3	85.8	92.1	99.6	107.1	114.6	129.6	137.1	144.6	159.6	174.6	189.6	219.6	249.6	279.6	309.6
1.06	67.3	74.8	82.3	88.6	96.1	103.6	111.1	126.1	133.6	141.1	156.1	171.1	186.1	216.1	246.1	276.1	306.1
1.07	68.1	75.6	83.1	89.3	96.8	104.3	111.8	126.8	134.3	141.8	156.8	171.8	186.8	216.8	246.8	276.8	306.8
1.07	68.9	76.4	83.9	90.1	97.6	105.1	112.6	127.6	135.1	142.6	157.6	172.6	187.6	217.6	247.6	277.6	307.6
1.07	69.7	77.2	84.7	90.9	98.4	105.9	113.4	128.4	135.9	143.4	158.4	173.4	188.4	218.4	248.4	278.4	308.4
1.07	70.5	78.0	85.5	91.5	99.2	106.7	114.2	129.2	136.7	144.2	159.2	174.2	189.2	219.2	249.2	279.2	309.2
1.08	72.0	79.5	87.0	93.3	100.8	108.3	115.8	130.8	138.3	145.8	160.8	175.8	190.8	220.8	250.8	280.8	310.8
1.10	67.7	75.2	82.7	89.0	96.5	104.0	111.5	126.5	134.0	141.5	165.5	171.5	186.5	216.5	246.5	276.5	306.5
1.10	68.5	76.0	83.5	89.7	97.2	104.7	112.2	127.2	134.7	142.2	157.2	172.2	187.2	217.2	247.2	277.2	307.2
1.11	69.3	76.8	84.3	90.5	98.0	105.5	113.0	128.0	135.5	143.0	158.0	173.0	188.0	218.0	248.0	278.0	308.0
	0.94	**0.96**	**0.97**	**0.99**	**1.00**	**1.01**	**1.02**	**1.04**	**1.05**	**1.05**	**1.08**	**1.10**	**1.11**	**1.14**	**1.16**	**1.19**	**1.20**
1.11	61.8	69.3	76.8	83.1	90.6	98.1	105.6	120.6	128.1	135.6	150.6	165.6	180.6	210.6	240.6	270.6	300.6
1.11	70.1	77.6	85.1	91.3	98.8	106.3	113.8	128.8	136.3	143.8	158.8	173.8	188.8	218.8	248.8	278.8	308.8
1.12	71.6	79.1	86.6	92.9	100.4	107.9	115.4	130.4	137.9	145.4	160.4	175.4	190.4	220.4	250.4	280.4	310.4
1.12	65.0	72.5	80.0	86.2	93.7	101.2	108.7	123.7	131.2	138.7	153.7	168.7	183.7	213.7	243.7	273.7	303.7
1.14	68.1	75.6	83.1	89.3	96.8	104.3	111.8	126.8	134.3	141.8	156.8	171.8	186.8	216.8	246.8	246.8	306.8
1.14	68.9	76.4	83.9	90.1	97.6	105.1	112.6	127.6	135.1	142.6	157.6	172.6	187.6	217.6	247.6	277.6	307.6
1.15	69.7	77.2	84.7	90.9	98.4	105.9	113.4	128.4	135.9	143.4	158.4	173.4	188.4	218.4	248.4	278.4	308.4
1.16	65.3	72.8	80.3	86.6	94.1	101.6	109.1	124.1	131.6	139.1	154.1	169.1	184.1	214.1	244.1	274.1	304.1
1.16	71.2	78.7	86.2	92.5	100.0	107.5	115.0	130.0	137.5	145.0	160.0	175.0	190.0	220.0	250.0	280.0	310.0
1.18	68.5	76.0	83.5	89.7	97.2	104.7	112.2	127.2	134.7	142.2	157.2	172.2	187.2	217.2	247.2	277.2	307.2
1.18	69.3	76.8	84.3	90.5	98.0	105.5	113.0	128.0	135.5	143.0	158.0	173.0	188.0	218.0	248.0	278.0	308.0
1.19	65.7	73.2	80.7	87.0	94.5	102.0	109.5	124.5	132.0	139.5	154.5	169.5	184.5	214.5	244.5	274.5	304.5
1.20	70.8	78.3	85.8	92.1	99.6	107.1	114.6	129.6	137.1	144.6	159.6	174.6	189.6	219.6	249.6	279.6	309.6
1.22	60.2	67.7	75.2	81.5	89.0	96.5	104.0	119.0	126.5	134.0	149.0	164.0	179.0	209.0	239.0	269.0	299.0
1.22	68.9	76.4	83.9	90.1	97.6	105.1	112.6	127.6	135.1	142.6	157.6	172.6	187.6	217.6	247.6	277.6	307.6
1.22	53.1	60.6	68.1	74.4	81.9	89.4	96.9	111.9	119.4	126.9	141.9	156.9	171.9	201.9	231.9	261.9	291.9
1.23	66.1	73.6	81.1	87.4	94.9	102.4	109.9	124.9	132.4	139.9	154.9	169.9	184.9	214.9	244.9	274.9	304.9
1.24	70.4	77.9	85.4	91.7	99.2	106.7	114.2	129.2	136.7	144.2	159.2	174.2	189.2	219.2	249.2	279.2	309.2
1.24	63.4	70.9	78.4	84.6	92.1	99.6	107.1	122.1	129.6	137.1	152.1	167.1	182.1	212.1	242.1	272.1	302.1
1.27	66.5	74.0	81.5	87.8	95.3	102.8	110.3	125.3	132.8	140.3	155.3	170.3	185.3	215.3	245.3	275.3	305.3
1.28	70.0	77.5	85.0	91.3	98.8	106.3	113.8	128.8	136.3	143.8	158.8	173.8	188.8	218.8	248.8	278.8	308.8
1.28	63.7	71.2	78.8	85.0	92.5	100.0	107.5	122.5	130.0	137.5	152.5	167.5	182.5	212.5	242.5	272.5	302.5
1.32	69.6	77.1	84.6	90.9	98.4	105.9	113.4	128.4	135.9	143.4	158.4	173.4	188.4	218.4	248.4	278.4	308.4
1.32	66.9	74.4	81.9	88.1	95.6	103.1	110.6	125.7	133.2	140.7	155.7	170.7	185.7	215.7	245.7	275.7	305.7
1.32	64.1	71.6	79.1	85.4	92.9	100.4	107.9	122.9	130.4	137.9	152.9	167.9	182.9	212.9	242.9	272.9	302.9
1.36	61.7	69.3	76.8	83.0	90.5	98.0	105.5	120.5	128.0	135.5	150.5	165.5	180.5	210.5	240.6	270.6	300.6
1.36	64.5	72.0	79.5	85.8	93.3	100.8	108.3	123.3	130.8	138.3	153.3	168.3	183.3	213.3	243.3	273.3	303.3
1.37	67.3	74.8	82.3	88.5	96.0	103.5	111.0	126.0	133.5	141.0	156.0	171.0	186.0	216.1	246.1	276.1	306.1
1.40	62.1	69.6	77.1	83.4	90.9	98.4	105.9	120.9	128.4	135.9	150.9	165.9	180.9	210.9	240.9	270.9	300.9
1.41	64.9	72.4	79.9	86.2	93.7	101.2	108.7	123.7	131.2	138.7	153.7	168.7	183.7	213.7	243.7	273.7	303.7
1.45	62.5	70.0	77.5	83.8	91.3	98.8	106.3	121.3	128.8	136.3	151.3	166.3	181.3	211.3	241.3	271.3	301.3
1.46	65.3	72.8	80.3	86.5	94.0	101.6	109.1	124.1	131.6	139.1	154.1	169.1	184.1	214.1	244.1	274.1	304.1
1.48	68.0	75.5	83.0	89.3	96.8	104.3	111.8	126.8	134.3	141.8	156.8	171.8	186.8	216.8	246.8	276.8	306.8
1.48	56.1	63.7	71.2	77.4	85.0	92.5	100.0	115.0	122.5	130.0	145.0	160.0	175.0	205.0	235.0	265.0	295.0
1.49	48.2	55.7	63.2	69.5	77.0	84.5	92.1	107.1	114.6	122.1	137.1	152.1	167.1	197.1	227.2	257.2	287.2
	0.93	**0.95**	**0.97**	**0.98**	**0.99**	**1.00**	**1.02**	**1.04**	**1.05**	**1.06**	**1.08**	**1.09**	**1.11**	**1.14**	**1.16**	**1.18**	**1.19**

SHEAVES PAGES PT7–2-PT7–27	BELTS PAGES PT7–28-PT7–41	SELECTION: WEDGE PAGES PT7–42-PT7–83	ENGINEERING/TECHNICAL PAGES PT7–123-PT7–128

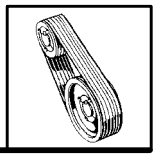
DODGE®



D S-L CLASSIC STOCK DRIVE SELECTIONS

Ratio	Stock Shv. Datum Diam.		1160 RPM Driver		870 RPM Driver		690 RPM Driver		Belt Size/Center Distance					
	Driver	Driven	Driven RPM	HP/Belt D	Driven RPM	HP/Belt D	Driven RPM	HP/Belt D	D120	D128	D144	D158	D162	D173
1.50	14.50	22.00	775	43.24	581	37.14	461	31.75	32.8	36.8	44.8	51.9	53.9	59.4
1.51	13.00	20.00	766	37.16	574	31.65	456	26.99	35.6	39.6	47.6	54.6	56.6	62.1
1.55	14.00	22.00	749	41.38	562	35.42	446	30.24	33.1	37.2	45.2	52.2	54.2	59.8
1.60	13.50	22.00	724	39.44	543	33.65	430	28.71	33.5	37.5	45.6	52.6	54.6	60.1
1.63	12.00	20.00	710	33.00	532	27.99	422	23.85	36.3	40.3	48.4	55.4	57.4	62.9
								ARC-LENGTH CORRECTION FACTOR >	**0.84**	**0.85**	**0.88**	**0.90**	**0.91**	**0.92**
1.66	13.00	22.00	698	37.43	524	31.85	415	27.15	33.9	37.9	46.0	53.0	55.0	60.5
1.66	16.00	27.00	698	49.07	523	42.62	415	36.57	27.3	31.4	39.5	46.6	48.6	54.1
1.71	15.50	27.00	677	47.37	507	40.96	403	35.08	27.7	31.8	39.9	46.9	48.9	54.5
1.77	15.00	27.00	656	45.58	492	39.25	390	33.57	28.0	32.1	40.2	47.3	49.3	54.9
1.79	12.00	22.00	647	33.19	485	28.13	385	23.96	34.6	38.6	46.7	53.7	55.7	61.3
1.80	22.00	40.00	646	---	484	60.65	384	53.47	---	---	---	---	32.7	38.4
1.81	18.00	33.00	642	55.62	482	49.29	382	42.58	---	---	32.8	39.9	41.9	47.5
1.83	14.50	27.00	635	43.73	476	37.51	378	32.04	28.4	32.5	40.6	47.7	49.7	55.2
1.89	14.00	27.00	614	41.80	460	35.74	365	30.49	28.7	32.8	40.9	48.0	50.0	55.6
1.96	13.50	27.00	593	39.80	444	33.93	353	28.92	29.1	33.2	41.3	48.4	50.4	56.0
2.02	16.00	33.00	573	49.38	430	42.86	341	36.75	---	25.8	34.1	41.3	43.4	48.9
2.03	13.00	27.00	572	37.74	429	32.09	340	27.34	29.4	33.5	41.7	48.7	50.8	56.3
2.09	15.50	33.00	556	47.64	417	41.16	331	35.24	---	26.1	34.5	41.7	43.7	49.3
2.15	22.00	48.00	539	---	405	60.81	321	53.60	---	---	---	---	---	---
2.15	15.00	33.00	539	45.82	404	39.43	320	33.72	---	26.4	34.8	42.0	44.1	49.7
2.18	18.00	40.00	531	55.84	399	49.45	316	42.71	---	---	---	33.3	35.4	41.1
2.19	12.00	27.00	530	33.43	397	28.31	315	24.10	30.1	34.2	42.4	49.5	51.5	57.0
2.23	14.50	33.00	521	43.94	391	37.67	310	32.17	---	26.8	35.1	42.4	44.4	50.0
2.30	14.00	33.00	504	41.99	378	35.88	300	30.61	---	27.1	35.5	42.7	44.7	50.4
2.38	13.50	33.00	487	39.97	365	34.05	290	29.02	---	27.4	35.8	43.0	45.1	50.7
								ARC-LENGTH CORRECTION FACTOR >	**0.80**	**0.82**	**0.86**	**0.88**	**0.89**	**0.90**
2.45	16.00	40.00	474	49.53	356	42.96	282	36.84	---	---	---	34.6	36.7	42.5
2.47	13.00	33.00	470	37.89	352	32.19	279	27.42	23.4	27.7	36.2	43.4	45.4	51.1
2.52	15.50	40.00	460	47.77	345	41.26	274	35.32	---	---	---	34.9	37.1	42.8
2.59	22.00	58.00	447	---	336	60.89	266	53.67	---	---	---	---	---	---
2.60	15.00	40.00	446	45.94	334	39.52	265	33.78	---	---	27.6	35.3	37.4	43.2
2.61	18.00	48.00	444	55.94	333	49.53	264	42.77	---	---	---	---	---	---
2.67	12.00	33.00	435	33.54	326	28.39	259	24.16	24.0	28.4	36.8	44.1	46.1	51.8
2.69	14.50	40.00	431	44.04	324	37.75	257	32.23	---	---	28.0	35.6	37.7	43.5
2.78	14.00	40.00	417	42.08	313	35.95	248	30.66	---	---	28.3	35.9	38.0	43.8
2.88	13.50	40.00	403	40.05	302	34.11	240	29.07	---	---	28.6	36.2	38.4	44.2
								ARC-LENGTH CORRECTION FACTOR >	**0.79**	**0.82**	**0.86**	**0.88**	**0.89**	**0.90**
2.93	16.00	48.00	396	49.60	297	43.02	236	36.88	---	---	---	---	---	34.2
2.99	13.00	40.00	389	37.96	291	32.25	231	27.46	---	---	28.9	36.6	38.7	44.5
3.02	15.50	48.00	384	47.83	288	41.31	229	35.36	---	---	---	---	---	34.5
3.12	15.00	48.00	372	46.00	279	39.56	221	33.82	---	---	---	---	---	34.8
3.15	18.00	58.00	368	56.00	276	49.57	219	42.81	---	---	---	---	---	---
3.22	14.50	48.00	360	44.09	270	37.79	214	32.26	---	---	---	---	---	35.1
3.22	12.00	40.00	360	33.59	270	28.43	214	24.20	---	---	29.5	37.2	39.3	45.2
3.33	14.00	48.00	348	42.13	261	35.98	207	30.69	---	---	---	---	---	35.4
3.45	13.50	48.00	337	40.09	252	34.14	200	29.10	---	---	---	---	---	35.7
3.53	16.00	58.00	329	49.64	246	43.05	195	36.90	---	---	---	---	---	---
								ARC-LENGTH CORRECTION FACTOR >	**---**	**---**	**0.75**	**0.81**	**0.82**	**0.85**
3.57	13.00	48.00	325	38.00	243	32.28	193	27.49	---	---	---	---	---	36.0
3.64	15.50	58.00	319	47.87	239	41.34	190	35.38	---	---	---	---	---	---
3.76	15.00	58.00	309	46.03	232	39.59	184	33.84	---	---	---	---	---	---
3.86	12.00	48.00	301	33.63	226	28.45	179	24.22	---	---	---	---	30.2	36.6
3.88	14.50	58.00	299	44.13	224	37.81	178	32.28	---	---	---	---	---	---
4.01	14.00	58.00	289	42.16	217	36.00	172	30.71	---	---	---	---	---	---
4.16	13.50	58.00	279	40.12	209	34.17	166	29.11	---	---	---	---	---	---
4.31	13.00	58.00	269	38.02	202	32.30	160	27.50	---	---	---	---	---	---
4.65	12.00	58.00	249	33.65	187	28.47	148	24.23	---	---	---	---	---	---
								ARC-LENGTH CORRECTION FACTOR >	**---**	**---**	**---**	**---**	**0.74**	**0.77**

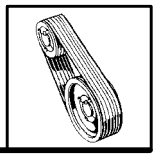
SHEAVES PAGES PT7-2-PT7-27	BELTS PAGES PT7-28-PT7-41	SELECTION: WEDGE PAGES PT7-42-PT7-83	ENGINEERING/TECHNICAL PAGES PT7-123-PT7-128



D S-L CLASSIC STOCK DRIVE SELECTIONS

Ratio	Belt Size/Center Distance																
	D180	D195	D210	D225	D240	D255	D270	D300	D315	D330	D360	D390	D420	D480	D540	D600	D660
1.50	62.9	70.4	77.9	84.9	91.7	99.2	106.7	121.7	129.2	136.7	151.7	166.7	181.7	211.7	241.7	271.7	301.7
1.51	65.7	73.2	80.7	86.9	94.4	101.9	109.4	124.4	131.9	139.5	154.5	169.5	184.5	214.5	244.5	274.5	304.5
1.55	63.3	70.8	78.3	84.5	92.1	99.6	107.1	122.1	129.6	137.1	152.1	167.1	182.1	212.1	242.1	272.1	302.1
1.60	63.6	71.2	78.7	84.9	92.4	99.9	107.4	122.5	130.0	137.5	152.5	167.5	182.5	212.5	242.5	272.5	302.5
1.63	66.4	73.9	81.4	87.7	95.2	102.7	110.2	125.2	132.7	140.2	155.2	170.2	185.2	215.2	245.2	275.3	305.3
	0.93	**0.95**	**0.96**	**0.98**	**0.99**	**1.00**	**1.02**	**1.04**	**1.05**	**1.06**	**1.08**	**1.09**	**1.11**	**1.14**	**1.16**	**1.18**	**1.19**
1.66	64.0	71.5	79.0	85.3	92.8	100.3	107.8	122.8	130.3	137.9	152.9	167.9	182.9	212.9	242.9	272.9	302.9
1.66	57.6	65.2	72.7	79.0	86.5	94.0	101.5	116.5	124.0	131.5	146.5	161.6	176.6	206.6	236.6	266.6	296.6
1.71	58.0	65.5	73.1	79.3	86.8	94.4	101.9	116.9	124.4	131.9	146.9	161.9	176.9	207.0	237.0	267.0	297.0
1.77	58.4	65.9	73.4	79.7	87.2	94.7	102.3	117.3	124.8	132.3	147.3	162.3	177.3	207.3	237.4	267.4	297.4
1.79	64.8	72.3	79.8	86.1	93.6	101.1	108.6	123.6	131.1	138.6	153.6	168.6	183.6	213.7	243.7	273.7	303.7
1.80	42.0	49.7	57.3	63.6	71.2	78.7	86.3	101.3	108.9	116.4	131.4	146.5	161.5	191.5	221.5	251.6	281.6
1.81	51.1	58.6	66.2	72.5	80.0	87.5	95.1	110.1	117.6	125.1	140.2	155.2	170.2	200.2	230.2	260.3	290.3
1.83	58.7	66.3	73.8	80.1	87.6	95.1	102.6	117.7	125.2	132.7	147.7	162.7	177.7	207.7	237.7	267.7	297.8
1.89	59.1	66.6	74.2	80.5	88.0	95.5	103.0	118.0	125.5	133.1	148.1	163.1	178.1	208.1	238.1	268.1	298.1
1.96	59.5	67.0	74.6	80.8	88.3	95.9	103.4	118.4	125.9	133.4	148.5	163.5	178.5	208.5	238.5	268.5	298.5
2.02	52.5	60.1	67.7	73.9	81.5	89.0	96.6	111.6	119.1	126.6	141.7	156.7	171.7	201.8	231.8	261.8	291.8
2.03	59.8	67.4	74.9	81.2	88.7	96.2	103.8	118.8	126.3	133.8	148.8	163.9	178.9	208.9	238.9	268.9	298.9
2.09	52.9	60.4	68.0	74.3	81.9	89.4	96.9	112.0	119.5	127.0	142.1	157.1	172.1	202.1	232.2	262.2	292.2
2.15	---	42.2	50.0	56.5	64.1	71.8	79.4	94.6	102.1	109.7	124.8	139.8	154.9	185.0	215.1	245.1	275.1
2.15	53.2	60.8	68.4	74.7	82.2	89.8	97.3	112.4	119.9	127.4	142.4	157.5	172.5	202.5	232.5	262.6	292.6
2.18	44.8	52.5	60.1	66.5	74.1	81.6	89.2	104.3	111.8	119.4	134.4	149.5	164.5	194.6	224.6	254.6	284.7
2.19	60.6	68.1	75.7	81.9	89.5	97.0	104.5	119.5	127.1	134.6	149.6	164.6	179.6	209.7	239.7	269.7	299.7
2.23	53.6	61.2	68.7	75.0	82.6	90.1	97.7	112.7	120.3	127.8	142.8	157.8	172.9	202.9	232.9	262.9	293.0
2.30	53.9	61.5	69.1	75.4	83.0	90.5	98.0	113.1	120.6	128.2	143.2	158.2	173.2	203.3	233.3	263.3	293.4
2.38	54.3	61.9	69.5	75.8	83.3	90.9	98.4	113.5	121.0	128.5	143.6	158.6	173.6	203.7	233.7	263.7	293.7
	0.91	**0.93**	**0.95**	**0.96**	**0.98**	**0.99**	**1.00**	**1.03**	**1.04**	**1.05**	**1.07**	**1.09**	**1.10**	**1.13**	**1.16**	**1.18**	**1.19**
2.45	46.1	53.9	61.5	67.9	75.5	83.1	90.6	105.8	113.3	120.8	135.9	151.0	166.0	196.1	226.1	256.2	286.2
2.47	54.6	62.2	69.8	76.1	83.7	91.2	98.8	113.9	121.4	128.9	143.9	159.0	174.0	204.0	234.1	264.1	294.1
2.52	46.5	54.2	61.9	68.2	75.8	83.4	91.0	106.1	113.7	121.2	136.3	151.3	166.4	196.5	226.5	256.5	286.6
2.59	---	---	---	46.6	54.6	62.5	70.3	85.7	93.4	101.0	116.2	131.4	146.5	176.7	206.8	236.9	267.0
2.60	46.8	54.5	62.2	68.6	76.2	83.8	91.4	106.5	114.0	121.6	136.7	151.7	166.8	196.8	226.9	256.9	287.0
2.61	36.8	44.8	52.7	59.2	66.9	74.6	82.2	97.4	105.0	112.6	127.7	142.8	157.9	188.0	218.1	248.1	278.2
2.67	55.3	62.9	70.5	76.9	84.4	92.0	99.5	114.6	122.1	129.6	144.7	159.7	174.8	204.8	234.8	264.9	294.9
2.69	47.1	54.9	62.6	68.9	76.6	84.2	91.7	106.9	114.4	122.0	137.0	152.1	167.1	197.2	227.3	257.3	287.3
2.78	47.5	55.2	62.9	69.3	76.9	84.5	92.1	107.2	114.8	122.3	137.4	152.5	167.5	197.6	227.6	257.7	287.7
2.88	47.8	55.6	63.3	69.6	77.3	84.9	92.5	107.6	115.1	122.7	137.8	152.8	167.9	198.0	228.0	258.1	288.1
	0.91	**0.93**	**0.95**	**0.96**	**0.98**	**0.99**	**1.00**	**1.03**	**1.04**	**1.05**	**1.07**	**1.09**	**1.10**	**1.13**	**1.16**	**1.18**	**1.19**
2.93	38.0	46.1	54.0	60.5	68.3	76.0	83.6	98.9	106.5	114.0	129.2	144.3	159.4	189.5	219.6	249.6	279.7
2.99	48.2	55.9	63.6	70.0	77.6	85.2	92.8	108.0	115.5	123.1	138.1	153.2	168.3	198.3	228.4	258.4	288.5
3.02	38.4	46.5	54.4	60.9	68.6	76.3	84.0	99.2	106.8	114.4	129.5	144.6	159.7	189.9	220.0	250.0	280.1
3.12	38.7	46.8	54.7	61.2	69.0	76.7	84.3	99.6	107.2	114.8	129.9	145.0	160.1	190.2	220.3	250.4	280.5
3.15	---	---	42.3	49.2	57.2	65.2	73.0	88.5	96.2	103.8	119.1	134.3	149.4	179.6	209.8	239.9	270.0
3.22	39.0	47.1	55.0	61.6	69.3	77.0	84.7	99.9	107.5	115.1	130.3	145.4	160.5	190.6	220.7	250.8	280.8
3.22	48.8	56.6	64.3	70.7	78.3	85.9	93.5	108.7	116.2	123.8	138.9	153.9	169.0	199.1	229.2	259.2	289.2
3.33	39.3	47.4	55.4	61.9	69.7	77.4	85.0	100.3	107.9	115.5	130.6	145.7	160.8	191.0	221.1	251.2	281.2
3.45	39.6	47.8	55.7	62.2	70.0	77.7	85.4	100.6	108.2	115.8	131.0	146.1	161.2	191.3	221.5	251.5	281.6
3.53	---	---	43.5	50.4	58.5	66.5	74.3	89.9	97.5	105.2	120.5	135.7	150.8	181.1	211.3	241.4	271.5
	0.86	**0.89**	**0.91**	**0.93**	**0.95**	**0.97**	**0.98**	**1.01**	**1.02**	**1.03**	**1.05**	**1.07**	**1.09**	**1.12**	**1.15**	**1.17**	**1.18**
3.57	39.9	48.1	56.0	62.6	70.3	78.1	85.7	101.0	108.6	116.2	131.3	146.5	161.6	191.7	221.8	251.9	282.0
3.64	---	---	43.8	50.8	58.9	66.8	74.7	90.2	97.9	105.6	120.8	136.0	151.2	181.5	211.6	241.8	271.9
3.76	---	---	44.1	51.1	59.2	67.2	75.0	90.5	98.2	105.9	121.2	136.4	151.6	181.8	212.0	242.1	272.2
3.86	40.6	48.7	56.7	63.2	71.0	78.7	86.4	101.7	109.3	116.9	132.1	147.2	162.3	192.5	222.6	252.7	282.7
3.88	---	---	44.4	51.4	59.5	67.5	75.3	90.9	98.6	106.3	121.5	136.8	151.9	182.2	212.4	242.5	272.6
4.01	---	---	44.7	51.7	59.8	67.8	75.7	91.2	98.9	106.6	121.9	137.1	152.3	182.6	212.7	242.9	273.0
4.16	---	36.2	45.0	52.0	60.2	68.1	76.0	91.6	99.3	107.0	122.2	137.5	152.7	182.9	213.1	243.3	273.4
4.31	---	36.5	45.3	52.3	60.5	68.5	76.3	91.9	99.6	107.3	122.6	137.8	153.0	183.3	213.5	243.6	273.7
4.65	---	37.1	45.9	53.0	61.1	69.1	77.0	92.6	100.3	108.0	123.3	138.5	153.7	184.0	214.2	244.4	274.5
	0.80	**0.85**	**0.88**	**0.90**	**0.93**	**0.95**	**0.96**	**0.99**	**1.00**	**1.02**	**1.04**	**1.06**	**1.08**	**1.11**	**1.14**	**1.16**	**1.17**

SHEAVES PAGES PT7-2-PT7-27	BELTS PAGES PT7-28-PT7-41	SELECTION: WEDGE PAGES PT7-42-PT7-83	ENGINEERING/TECHNICAL PAGES PT7-123-PT7-128



D S-L CLASSIC Basic Horsepower Rating

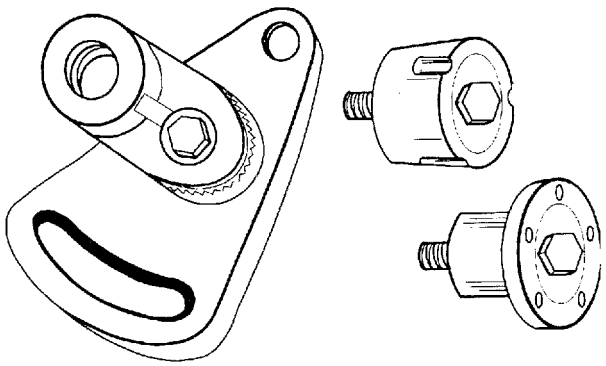
Faster Shaft RPM	Rated HP per Belt for Small Sheave Datum Dia.											Additional HP/Belt for Speed Ratio of:								
	12.0	13.0	13.5	14.0	14.5	15.0	15.5	16.0	18.0	20.0	22.0	1.02 thru 1.04	1.05 thru 1.08	1.09 thru 1.12	1.13 thru 1.18	1.19 thru 1.24	1.25 thru 1.34	1.35 thru 1.51	1.52 thru 1.99	2.00 and Up
700	19.3	22.7	24.3	25.9	27.6	29.2	30.7	32.3	38.4	44.1	49.5	.26	.60	.98	1.29	1.65	1.91	2.20	2.48	2.75
870	22.2	26.1	28.0	29.9	31.7	33.5	35.3	37.1	43.8	50.0	55.5	.32	.75	1.22	1.61	2.05	2.37	2.74	3.09	3.42
1150	25.7	30.2	32.4	34.5	36.5	38.5	40.5	42.3	49.1	54.6	58.8	.43	1.00	1.63	2.14	2.73	3.16	3.65	4.11	4.56
50	2.26	2.59	2.75	2.91	3.07	3.24	3.40	3.56	4.19	4.82	5.44	.02	.04	.07	.09	.12	.14	.16	.18	.20
100	4.10	4.71	5.02	5.32	5.63	5.93	6.23	6.53	7.73	8.91	10.1	.04	.09	.14	.18	.24	.27	.31	.35	.39
150	5.76	6.65	7.09	7.53	7.97	8.41	8.85	9.28	11.0	12.7	14.4	.06	.13	.21	.28	.35	.41	.47	.53	.59
200	7.32	8.47	9.04	9.61	10.2	10.7	11.3	11.9	14.1	16.3	18.5	.07	.17	.28	.37	.47	.54	.63	.71	.79
300	10.2	11.8	12.7	13.5	14.3	15.1	15.9	16.7	19.9	23.0	26.1	.11	.26	.42	.55	.71	.82	.94	1.06	1.18
400	12.8	14.9	16.0	17.0	18.1	19.1	20.1	21.1	25.2	29.2	33.0	.15	.35	.56	.74	.94	1.09	1.26	1.42	1.57
500	15.1	17.7	19.0	20.3	21.5	22.8	24.0	25.2	30.0	34.7	39.3	.19	.43	.70	.92	1.18	1.36	1.57	1.77	1.96
600	17.3	20.3	21.8	23.2	24.7	26.1	27.5	28.9	34.4	39.7	44.8	.22	.52	.84	1.11	1.41	1.63	1.89	2.13	2.36
700	19.3	22.7	24.3	25.9	27.6	29.2	30.7	32.3	38.3	44.1	49.5	.26	.60	.98	1.29	1.65	1.91	2.20	2.48	2.75
800	21.1	24.8	26.6	28.4	30.1	31.9	33.6	35.3	41.7	47.8	53.4	.30	.69	1.13	1.48	1.88	2.18	2.52	2.84	3.14
900	22.6	26.6	28.6	30.5	32.4	34.2	36.0	37.8	44.6	50.7	56.3	.34	.78	127	1.66	2.12	2.45	2.83	3.19	3.53
1000	24.0	28.2	30.3	32.3	34.3	36.2	38.1	39.9	46.8	52.9	58.2	.37	.86	1.41	1.85	2.35	2.72	3.15	3.55	3.93
1100	25.1	29.5	31.7	33.8	35.8	37.8	39.7	41.6	48.4	54.2	58.9	.41	.95	1.55	2.03	2.59	3.00	3.46	3.90	4.32
1200	26.0	30.6	32.8	34.9	36.9	38.9	40.9	42.7	49.3	54.6	58.5	.45	1.04	1.69	2.21	2.82	3.27	3.78	4.26	4.71
1300	26.7	31.3	33.5	35.7	37.7	39.7	41.5	43.3	49.5	54.0	56.8	.49	1.12	1.83	2.40	3.06	3.54	4.09	4.61	5.11
1400	27.0	31.7	33.9	36.0	38.0	39.9	41.7	43.4	48.9	52.4	53.6	.52	1.21	1.97	2.58	3.29	3.81	4.41	4.97	5.50
1500	27.1	31.8	33.9	36.0	37.9	39.7	41.3	42.8	47.4	49.6	49.1	.56	1.30	2.11	2.77	3.53	4.09	4.72	5.32	5.89
1600	27.0	31.5	33.6	35.5	37.3	38.9	40.3	41.6	45.1	45.6	42.9	.60	1.38	2.25	2.95	3.76	4.36	5.04	5.68	6.28
1700	26.5	30.9	32.8	34.6	36.1	37.5	38.8	39.8	41.8	40.4	35.0	.63	1.47	2.39	3.14	4.00	4.63	5.35	6.03	6.68
1800	25.7	29.8	31.6	33.1	34.5	35.6	36.5	37.2	37.6	33.8	---	.67	1.55	2.53	3.32	4.23	4.90	5.67	6.38	7.07

Shaded Areas indicate rim speed exceeding 6500 FPM which may require special sheaves.

IDLER

Brackets and Bushings

- Double Adjustable Bracket for Maximum Flexibility
- Positive Ratchet Locking Between Base and Arm
- Idler Bushings in TAPER-LOCK and QD Style
- Use with Stock Products, such as: Sheaves, Roller Chain Sprockets, HTD Sprockets
- Compatible with Products Machined for: TAPER-LOCK 1610, 2012 and 2517 Bushings QD SK, SF and E Bushings
- Also, Nema – Motor Bases Shaft Collars



Refer to Related Products (page PT12–40) for complete data.