

DCW Series Adjustable Center Distance Drives

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Drive Features

Two Face Moveable Design for variable speed belts
Maintains belt alignment between the variable speed pulley and the companion sheave. The wider variable speed belts allow a greater speed ratio change than standard V-belts, while maintaining a match between the included angle of the pulley faces and the belt.

Pulley Face Material

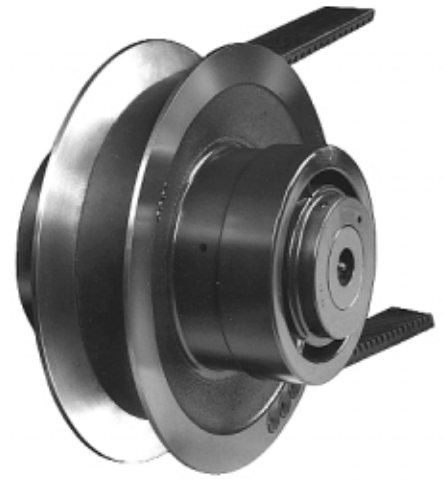
Models 1160 and 1270 use a lightweight, corrosion-resistant aluminum alloy material. Models 1590, 1711, 2011 and 2513 use close-grained, cast-iron faces.

Permanently Lubricated Moveable Face Bushings

High load carrying precisely fit bronze bushings with a specially formulated oil impregnation are used to eliminate most fretting and corrosion problems. For severe corrosion conditions the pulley shafts can be treated to resist the particular corrosion condition.

Torque-Sensing Design

Belt tension is regulated to the load requirements. Bushing wear is reduced by the peripheral support of the cam followers. There are no torque carrying keys.



Dimensions and Specifications • DCW Series

All dimensions are in inches

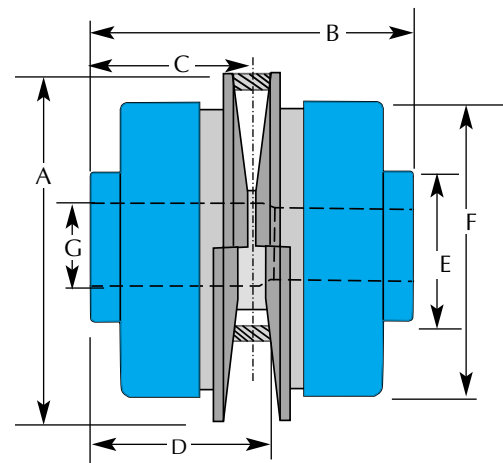
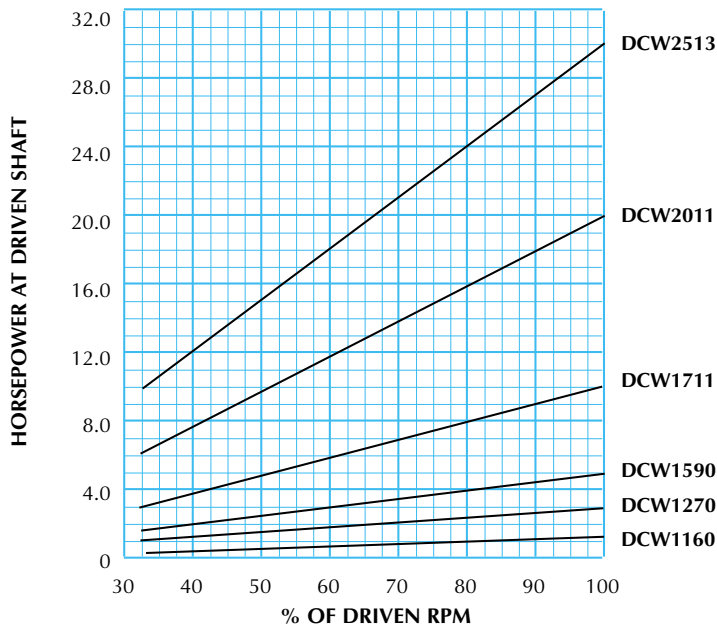
HP Rating 1750 RPM	1150 RPM	Torque Capacity 1 lb.-in.	Model Number	Max. P.D.	Min. P.D.	Ratio	Belt Size	A	B	C	D	E	F	Stock Bores G	Shaft Travel (inches)
1.5	1	54	1160	5.90	1.98	3:1	1422V	6.13	4.38	2.19	2.25	1.88	4.06	.625•.75•.875	2.90
3	2	108	1270	7.28	2.42	3:1	1922V	7.50	5.88	2.87	3.25	2.25	5.07	.75•.875•1•1.125	3.40
5	3	180	1590	8.75	2.90	3:1	2322V	9.00	7.06	3.53	3.87	4.25	7.13	.875•1•1.125, 1.25•1.375	4.30
10	7.5	360	1711	10.70	3.57	3:1	3226V	11.00	8.66	4.33	4.50	4.25	7.13	1.125•1.25•1.375	5.00
20	15	720	2011	10.65	4.26	2.5:1	3230HV	11.00	9.75	4.88	4.62	4.25	7.13	1.375•1.625•1.875	4.60
30	20	1080	2513	12.60	4.20	3:1	4430V	13.00	9.75	4.88	4.62	4.25	7.13	1.375•1.625•1.875	5.90

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HP Ratings and Torque Capacities are at the Maximum P.D.

$$\text{Driven Torque Capacity} = \frac{\text{P.D. (Driven Sheave)}}{\text{Max. P.D. (Driver)}} \times \text{Torque Capacity (Driver)}$$

Horsepower Curve • 1750 RPM Input



Pre-Engineered Belt and Center Distance Selection Chart • DCW Series

All dimensions are in inches

Driver Pulley Model	Driven Sheave		Driven Speeds				Belt Size 1422V • Shaft Center Distance (Max. RPM Position)											
			1750 RPM		1150 RPM		300	340	360	400	440	460	480	540	600	660	720	780
			Min.	Max.	Min.	Max.												
1160	14W5.5SH	5.3	649	1948	427	1280	6.2	8.2	9.2	11.2	13.2	14.2	15.2	18.2	21.2	24.2	27.2	30.2
	14W6SH	5.8	563	1780	390	1170		7.8	8.8	10.8	12.8	13.8	14.8	17.8	20.8	23.6	26.8	29.8
	14W7SH	6.8	506	1518	333	998			7.9	9.9	11.9	12.9	13.9	16.9	19.9	22.9	25.9	28.9
	14W8SH	7.8	441	1324	290	870				9.2	11.2	12.2	13.2	16.2	19.2	22.2	25.2	28.2
	14W9SH	8.8	391	1173	257	771					10.4	11.4	12.4	15.4	18.4	21.4	24.4	27.4
	14W10SH	9.8	351	1054	231	692						10.6	11.6	14.6	17.6	20.6	23.6	26.6
	14W11SH	10.8	319	956	209	628								13.7	16.7	19.7	22.7	25.7
	14W12SH	11.8	292	875	192	575								12.8	15.8	18.8	21.9	24.9
	14W14SH	13.8	249	748	164	492										17.1	20.1	23.1

Driver Pulley Model	Driven Sheave		Driven Speeds				Belt Size 1922V • Shaft Center Distance (Max. RPM Position)											
			1750 RPM		1150 RPM		403	426	454	484	526	544	604	646	686	721	751	806
			Min.	Max.	Min.	Max.												
1270	19W7SK	6.78	599	1781	390	1170	9.4	10.6	12.0	13.5	15.6	16.5	19.5	21.6	23.6	25.3	26.8	29.6
	19W8SK	7.78	517	1552	340	1020	8.6	9.8	11.2	12.7	14.8	15.7	18.7	20.8	22.8	24.5	26.0	28.8
	19W9SK	8.78	458	1375	301	904			10.4	11.9	14.0	14.9	17.9	20.0	22.0	23.7	25.2	28.0
	19W10SK	9.78	412	1235	270	811				11.0	13.1	14.0	17.0	19.1	21.1	22.9	24.4	27.2
	19W12SK	11.78	342	1025	225	674						12.3	15.3	17.5	19.5	21.2	22.7	25.5
	19W14SK	13.78	292	876	192	576							13.6	15.7	17.7	19.5	21.0	23.8
	19W16SK	15.78	255	765	168	503									15.9	17.7	19.2	22.0

Driver Pulley Model	Driven Sheave		Driven Speeds				Belt Size 2322V • Shaft Center Distance (Max. RPM Position)											
			1750 RPM		1150 RPM		441	461	481	521	541	601	621	661	681	701	721	801
			Min.	Max.	Min.	Max.												
1590	23W7SK	6.75	756	2269	497	1491	9.8	10.8	11.8	13.8	14.8	17.8	18.9	20.9	21.9	22.9	23.9	27.9
	23W8SK	7.75	659	1976	433	1298		10.1	11.1	13.1	14.1	17.1	18.1	20.1	21.1	22.1	23.1	27.1
	23W9SK	8.75	583	1750	383	1150			10.3	12.3	13.3	16.3	17.3	19.3	20.3	21.3	22.3	26.3
	23W10SK	9.75	524	1571	344	1032				11.5	12.5	15.5	16.5	18.5	19.5	20.5	21.5	25.5
	23W12SK	11.75	434	1303	286	856						13.9	14.9	16.9	17.9	18.9	19.9	23.9
	23W14SK	13.75	371	1114	244	732							13.2	15.2	16.2	17.2	18.2	22.2
	23W16SK	15.75	324	972	213	639								13.4	14.5	15.5	16.5	20.5

Driver Pulley Model	Driven Sheave		Driven Speeds				Belt Size 3226V • Shaft Center Distance (Max. RPM Position)											
			1750 RPM		1150 RPM		514	545	585	603	663	723	783	843	903	963	1023	1083
			Min.	Max.	Min.	Max.												
1711	32W99SF	9.6	650	1950	427	1282												
	32W104SF	10.1	618	1854	406	1218		11.3	13.3	14.2	17.2	20.2	23.2	26.2	29.2	32.2	35.2	38.2
	32W114SF	11.1	562	1687	370	1109			12.9	13.8	16.8	19.8	22.8	25.8	28.8	31.8	34.8	37.8
	32W124SF	12.1	516	1548	339	1017			12.1	13.0	16.0	19.0	22.0	25.0	28.0	31.0	34.0	37.0
	32W134SF	13.1	477	1429	313	939				12.2	15.2	18.2	21.2	24.2	27.2	30.2	33.2	36.2
	32W144SF	14.1	443	1328	291	873					14.4	17.4	20.4	23.4	26.4	29.4	32.4	35.4
	32W154SF	15.1	413	1240	272	815						16.6	19.6	22.6	25.6	28.6	31.6	34.6
	32W164SF	16.1	388	1163	255	764						15.8	18.8	21.8	24.8	27.8	30.8	33.8
	32W184SF	18.1	345	1035	227	680						14.9	17.9	20.9	24.0	27.0	30.0	33.0
	32W204SF	20.1	311	932	204	612							16.2	19.2	22.2	25.3	28.3	31.3
													17.4	20.5	23.5	26.5	29.6	

Driver Pulley Model	Driven Sheave		Driven Speeds				Belt Size 3230V • Shaft Center Distance (Max. RPM Position)												
			1750 RPM		1150 RPM		603	620	644	656	670	685	702	723	821	856	931	960	
			Min.	Max.	Min.	Max.													
2011	32W99SF	9.5	785	1962	516	1289	14.3	15.1	16.3	16.9	17.6	18.4	19.2	20.3	25.2	26.9	30.7	32.1	
	32W104SF	10.0	746	1864	490	1225	13.9	14.7	15.9	16.5	17.2	18.0	18.8	19.9	24.8	26.5	30.3	31.7	
	32W114SF	11.0	678	1694	445	1113	13.2	14.0	15.2	15.8	16.5	17.3	18.1	19.2	24.1	25.8	29.6	31.0	
	32W124SF	12.0	621	1553	408	1021		13.2	14.4	15.0	15.7	16.5	17.3	18.4	23.3	25.0	28.8	30.2	
	32W134SF	13.0	574	1434	377	942			13.6	14.2	14.9	15.6	16.5	17.5	22.5	24.2	28.0	29.4	
	32W144SF	14.0	533	1331	350	875						14.1	14.8	15.7	16.7	21.6	23.4	27.1	28.6
	32W154SF	15.0	497	1243	327	817							14.8	15.9	20.8	22.6	26.3	27.8	
	32W164SF	16.0	466	1165	306	766								15.0	20.0	21.7	25.5	26.9	
	32W184SF	18.0	414	1035	272	680									18.2	20.2	23.8	25.2	
	32W204SF	20.0	373	932	245	612									16.5	18.2	22.0	23.5	

Driver Pulley Model	Driven Sheave		Driven Speeds				Belt Size 4430V • Shaft Center Distance (Max. RPM Position)												
			1750 RPM		1150 RPM		670	718	730	740	767	790	850	910	970	1030	1090	1150	
			Min.	Max.	Min.	Max.													
2513	44W10SF	10.0	735	2205	483	1449	15.7	18.1	18.7	19.2	20.6	21.7	24.7	27.7	30.7	33.7	36.7	39.7	
	44W11SF	11.0	668	2004	439	1317	15.0	17.4	18.0	18.5	19.8	21.0	24.0	27.0	30.0	33.0	36.0	39.0	
	44W12SF	12.0	613	1838	403	1208	14.2	16.6	17.2	17.7	19.0	20.2	23.2	26.2	29.2	32.2	35.2	38.2	
	44W13SF	13.0	565	1696	372	1115		15.8	16.4	16.9	18.3	19.4	22.4	25.4	28.4	31.4	34.4	37.4	
	44W15SF	15.0	490	1470	322	966					15.3	16.6	17.8	20.8	23.8	26.8	29.8	32.8	35.8
	44W17SF	17.0	432	1297	284	852							16.1	19.2	22.2	25.2	28.2	31.2	34.2
	44W18SF	18.0	408	1225	268	805								18.3	21.3	24.3	27.3	30.3	33.4
	44W20SF	20.0	368	1103	242	725									19.6	22.6	25.6	28.7	31.7
	44W22SF	22.0	334	1002	220	659									17.9	20.9	23.9	26.9	30.0
	44W24SF	24.0	306	919	201	603										19.1	22.1	25.2	28.2