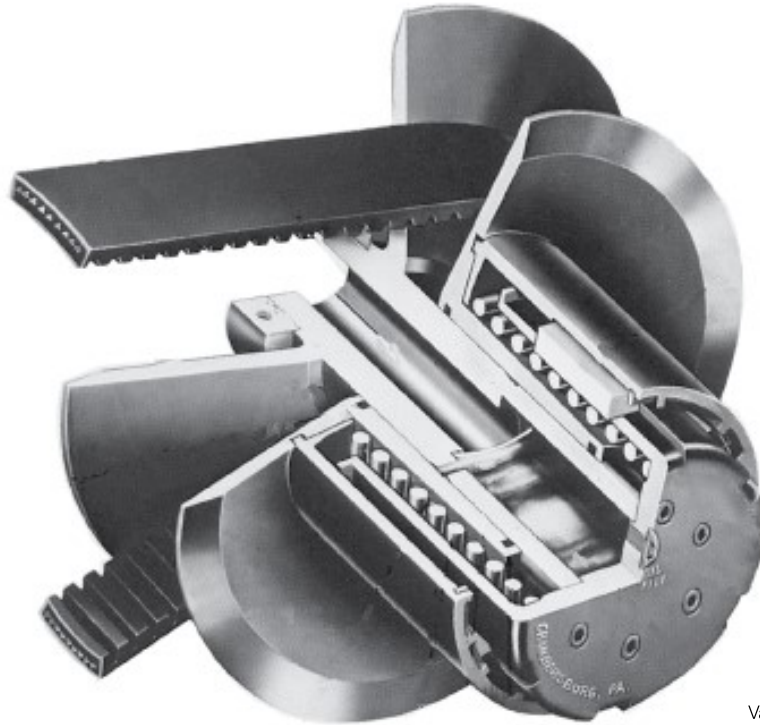


MS Sheave

Features

Wood's MS variable speed drives allow smooth, infinitely variable speed changes without stopping the drive. MS oil lube sheaves employ a revolutionary design that assures continuous, positive lubrication of all moving parts. Single flange moving, they are designed for use with either a flat companion pulley or grooved companion sheave. Capacities from 1/2 to 25 HP @ 1750 RPM. Precision balanced, proven reliability.



MS
Motion Control
Variable Speed Pulley
U.S. Pat. 2,952,161

Wood's exclusive oil lubrication system is shown in this view of a MS sheave. From a built-in reservoir, oil is continually pumped onto the surface of the sleeve, where it spreads to form an oil film that covers the entire bearing surface. The result: no freezing or sticking from fretting corrosion, so speeds can be changed quickly and easily at any time . . . regardless of the time lapse between changes. Maintenance is kept to a minimum and speed-range run through is eliminated.

- **1/2 thru 25 HP @ 1750 RPM**
- **Rugged Cast Iron Construction**
- **Precision Balanced**
- **Revolutionary Oil Lubrication Design**
- **Proven Reliability**

Selection

MODEL	HP RATING @			BELT	PITCH DIAMETER		DRIVE CHART PAGE NO.	
	3500	1750	1160		MIN.	MAX.		
GENERAL PURPOSE								
MS-58	V-F	3/4 - 1-1/2	1/2 - 3/4	1/3 - 1/2	1422V	2.10	5.75	D1-16
MS-72	V-F	1-1/2 - 2	1 - 1-1/2	1/2 - 1	1922V	2.41	7.25	D1-16
MS-77	V-F	1-1/2 - 3	1-1/2 - 3	1 - 2	2322V	2.58	7.75	D1-17
MS-77	V-V *	-	1-1/2 - 3	1 - 2	2322V	2.58	7.75	D1-17
MS-97	V-F	-	5 - 7-1/2	3 - 5	2926V	3.25	9.75	D1-18
MS-97	V-V *	-	5 - 10	3 - 5	2926V	3.25	9.75	D1-18
MS-127	V-F	-	7-1/2 - 15	5 - 10	4430V	4.25	12.75	D1-19
MS-127	V-V *	-	15 - 25	7-1/2 - 15	4430V	4.25	12.75	D1-19
OTHERS								
MS-975-S	V-V *	-	15 - 20	7-1/2 - 10	3230HV	4.70	9.40	D1-20
MS-100W	V-V *	-	15	7-1/2 - 10	4430V	5.00	10.00	D1-20
• MS-127W-HD	V-V *	-	15 - 20	7-1/2 - 10	4430V	4.25	12.75	D1-19

Horsepower ratings are based on constant torque and are shown for maximum pitch diameters.

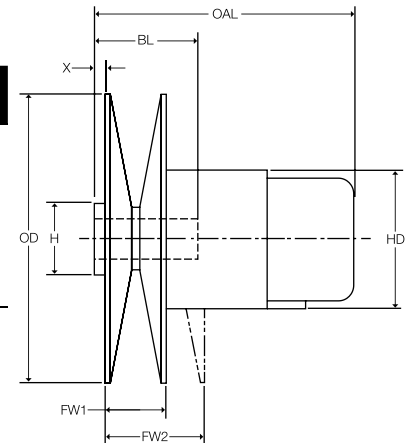
Horsepower ratings at other pitch diameters reduce in proportion to the driven speed.

* Angled motor base required (ref. page D1-22).

• For heavy duty reversing application.

STOCK BORE SIZES

MODEL	5/8	3/4	7/8	1	1-1/8	1-1/4	1-3/8	1-5/8	1-7/8	28MM	MAX. BORE
MS-58	X	X	-	-	-	-	-	-	-	-	1-1/8
MS-72	X	X	X	X	-	-	-	-	-	-	1-1/8
MS-77	-	X	X	X	X	-	-	-	-	-	1-1/8
* MS-97	-	-	-	X	X	X	X	-	-	X	1-3/8
* MS-127	-	-	-	-	-	-	X	X	X	-	1-7/8
MS-975-S	-	-	-	-	-	-	-	X	-	-	1-7/8
MS-100W	-	-	-	-	-	-	-	X	-	-	1-7/8
* MS-127W-HD	-	-	-	-	-	-	-	X	-	-	1-7/8



* Clamp hub style.

ORDERING EXAMPLE: MS-58 x 5/8

MS SHEAVE DIMENSIONS

MODEL	O.D.	H	HD	O.A.L.	B.L.	X	F.W.1	F.W.2	WT. LBS.
MS-58	6	1-7/8	3-7/8	5-1/16	2-5/8	5/16	1-1/16	1-13/16	10
MS-72	7-1/2	1-7/8	3-7/8	5-1/4	2-3/4	5/16	1-7/16	2-3/8	12
MS-77	8	2	3-7/8	5-7/16	2-7/8	5/16	1-11/16	2-3/4	13
MS-97	10	4	4-3/4	7-15/16	4-1/8	5/8	2-1/16	3-9/16	28
MS-127	13	4	6	9-3/16	5-1/4	1/2	3	5-1/4	53
MS-975-S	9-3/4	0	6	7-5/16	3-13/16	0	2-1/4	3-1/2	36
MS-100W	10-1/4	0	6	7-15/16	4	-9/16	3	4-5/16	37
MS-127W-HD	13	4	6	9-3/16	5-1/4	1/2	3	5-1/4	58

For optional Sight-Lube lubrication system, refer to D1-23.

Selection Charts

MS-58 V-FLAT OPERATION

DRIVEN SPEEDS			PRODUCT NUMBER	STRAIGHT FACE COMPANION PULLEY	CENTER DISTANCE IN INCHES AT MAXIMUM AND MINIMUM SPEED								
3500 RPM Motor	1750 RPM Motor	1160 RPM Motor			VARIABLE SPEED V-BELT NUMBER								
					1422V 330	1422V 360	1422V 420	1422V 480	1422V 540	1422V 600	1422V 660	1422V 720	1422V 780
3135	1567	1039	62S	6 x 2-SH	6.9	8.4	11.4	14.4	17.4	20.4	23.4	26.4	29.4
1145	572	379			9.7	11.2	14.3	17.3	20.3	23.3	26.3	29.4	32.4
2712	1356	899	72S	7 x 2-SH	-	7.6	10.6	13.6	16.6	19.6	22.6	25.6	28.6
991	495	328			-	10.3	13.4	16.4	19.5	22.5	25.5	28.5	31.5
2390	1195	792	82S	8 x 2-SH	-	-	9.7	12.8	15.8	18.8	21.8	24.8	27.8
873	436	289			-	-	12.4	15.5	18.6	21.6	24.7	27.7	30.7
2136	1068	708	92S	9 x 2-SH	-	-	8.9	11.9	14.9	17.9	21.0	24.0	27.0
780	390	259			-	-	11.5	14.6	17.7	20.7	23.8	26.8	29.8
1931	966	640	102S	10 x 2-SH	-	-	-	11.0	14.1	17.1	20.1	23.1	26.2
705	353	234			-	-	-	13.6	16.8	19.8	22.9	25.9	29.0
1620	810	537	122S	12 x 2-SH	-	-	-	-	12.2	15.3	18.4	21.4	24.5
592	296	196			-	-	-	-	14.8	18.0	21.1	24.2	27.2
1396	698	463	142S	14 x 2-SDS	-	-	-	-	10.2	13.4	16.6	19.6	22.7
510	255	169			-	-	-	-	12.6	15.9	19.1	22.3	25.4
1226	613	406	162S	16 x 2-SDS	-	-	-	-	-	11.3	14.6	17.7	20.9
448	224	148			-	-	-	-	-	-	13.6	17.0	20.3

MS-72 V-FLAT OPERATION

DRIVEN SPEEDS			PRODUCT NUMBER	STRAIGHT FACE COMPANION PULLEY	CENTER DISTANCE IN INCHES AT MAXIMUM AND MINIMUM SPEEDS									
3500 RPM Motor	1750 RPM Motor	1160 RPM Motor			VARIABLE SPEED V-BELT NUMBER									
					1922V 363	1922V 403	1922V 426	1922V 454	1922V 484	1922V 544	1922V 604	1922V 666	1922V 726	1922V 756
3893	1947	1290	62S	6 x 2-SH	7.3	9.3	10.5	11.9	13.4	16.4	19.4	22.5	25.5	27.0
1298	649	430			10.9	13.0	14.1	15.5	17.1	20.1	23.1	26.2	29.2	30.7
3375	1688	1119	72S	7 x 2-SH	-	8.5	9.7	11.1	12.6	15.6	18.6	21.7	24.7	26.2
1125	563	373			-	12.1	13.2	14.7	16.2	19.2	22.2	25.4	28.4	29.9
2979	1489	987	82S	8 x 2-SH	-	-	8.9	10.3	11.8	14.8	17.8	20.9	23.9	25.4
993	496	329			-	-	12.3	13.8	15.3	18.3	21.4	24.5	27.5	29.0
2666	1333	884	92S	9 x 2-SH	-	-	-	9.5	11.0	14.0	17.0	20.1	23.1	24.6
889	444	295			-	-	-	12.8	14.4	17.5	20.5	23.7	26.7	28.2
2413	1206	800	102S	10 x 2-SH	-	-	-	-	10.1	13.1	16.2	19.3	22.3	23.8
804	402	267			-	-	-	-	13.4	16.5	19.6	22.8	25.8	27.3
2027	1014	672	122S	12 x 2-SH	-	-	-	-	-	11.4	14.4	17.6	20.6	22.1
676	338	224			-	-	-	-	-	-	14.6	17.7	20.9	24.0
1748	874	579	142S	14 x 2-SDS	-	-	-	-	-	-	12.6	15.8	18.9	20.3
583	291	193			-	-	-	-	-	-	-	15.7	19.0	22.2
1536	768	509	162S	16 x 2-SDS	-	-	-	-	-	-	-	13.9	17.0	18.5
512	256	170			-	-	-	-	-	-	-	-	16.9	20.2

Refer to table on page D1-52 for additional belts available.

Selection Charts

MS-77 V-FLAT OPERATION

DRIVEN SPEEDS			PRODUCT NUMBER	STRAIGHT FACE COMPANION PULLEY	CENTER DISTANCE IN INCHES AT MAXIMUM AND MINIMUM SPEEDS									
3500 RPM Motor	1750 RPM Motor	1160 RPM Motor			VARIABLE SPEED V-BELT NUMBER									
					2322V 421	2322V 441	2322V 481	2322V 521	2322V 541	2322V 601	2322V 661	2322V 721	2322V 801	2322V 1001
3145	1572	1042	8234S	8 x 2-3/4-SD	8.2	9.3	11.4	13.2	14.4	17.3	20.3	23.4	27.4	37.4
1048	524	347			11.9	13.0	15.1	16.9	18.2	21.2	24.2	27.2	31.2	41.3
2818	1409	934	9234S	9 x 2-3/4-SD	-	-	10.6	12.4	13.6	16.6	19.6	22.6	26.6	36.7
939	470	311			-	-	14.3	16.0	17.4	20.4	23.4	26.4	30.4	40.5
2553	1276	846	10234S	10 x 2-3/4-SD	-	-	9.7	11.5	12.7	15.7	18.6	21.7	25.6	35.7
851	425	282			-	-	13.3	15.1	16.4	19.5	22.5	25.6	29.5	39.6
2333	1167	773	11234S	11 x 2-3/4-SD	-	-	-	10.6	11.8	14.8	17.8	20.9	24.9	35.0
778	389	258			-	-	-	14.2	15.5	18.5	21.6	24.6	28.7	38.8
2148	1074	712	12234S	12 x 2-3/4-SD	-	-	-	-	10.9	14.0	17.0	20.1	24.2	34.2
716	358	237			-	-	-	-	14.5	17.5	20.6	23.8	27.8	37.9
1855	927	615	14234S	14 x 2-3/4-SF	-	-	-	-	-	12.2	15.3	18.4	22.4	32.5
618	309	205			-	-	-	-	-	15.6	18.9	21.9	26.0	36.2
1631	816	541	16234S	16 x 2-3/4-SF	-	-	-	-	-	-	13.5	16.6	20.6	30.8
544	272	180			-	-	-	-	-	-	16.6	19.9	24.0	34.4
1456	728	483	18234S	18 x 2-3/4-SF	-	-	-	-	-	-	-	14.5	18.6	29.0
485	243	161			-	-	-	-	-	-	-	17.7	22.1	32.6
1315	658	436	20234S	20 x 2-3/4-SF	-	-	-	-	-	-	-	-	16.7	27.2
438	219	145			-	-	-	-	-	-	-	-	19.9	30.7

MS-77 V-V OPERATION

DRIVEN SPEEDS		PRODUCT NUMBER	GROOVED COMPANION PULLEY	CENTER DISTANCE IN INCHES AT MAXIMUM AND MINIMUM SPEEDS									
1750 RPM Motor	1160 RPM Motor			VARIABLE SPEED V-BELT NUMBER									
				2322V 421	2322V 441	2322V 481	2322V 521	2322V 541	2322V 601	2322V 661	2322V 721	2322V 801	2322V 1001
2055	1362	661P	6.6 x 1P-SK	9.7	10.7	12.7	14.7	15.7	18.7	21.7	24.7	28.7	38.7
685	454			13.6	14.6	15.6	18.6	19.6	22.6	25.6	28.6	32.7	42.7
1785	1183	761P	7.6 x 1P-SK	8.9	9.9	11.9	13.9	14.9	17.9	20.9	23.9	27.9	37.9
595	394			12.7	13.7	15.7	17.8	18.8	21.8	24.8	27.8	31.8	41.9
1577	1045	861P	8.6 x 1P-SK	-	9.1	11.1	13.1	14.1	17.1	20.1	23.1	27.1	37.1
526	348			-	12.8	14.9	16.9	17.9	20.9	24.0	27.0	31.0	41.0
1413	936	961P	9.6 x 1P-SK	-	-	10.3	12.3	13.3	16.3	19.3	22.3	26.3	36.3
471	312			-	-	13.9	16.0	17.0	20.1	23.1	26.3	30.2	40.2
1262	836	1081P	10.8 x 1P-SK	-	-	-	11.4	12.4	15.4	18.5	21.5	25.5	35.5
420	278			-	-	-	15.0	16.0	19.1	22.2	25.2	29.3	39.4
1154	765	1181P	11.8 x 1P-SK	-	-	-	10.5	11.6	14.6	17.6	20.6	24.6	34.7
384	255			-	-	-	14.0	15.0	18.2	21.3	24.3	28.4	38.5
986	654	1381P	13.8 x 1P-SK	-	-	-	-	-	12.8	15.9	18.9	23.0	33.0
328	218			-	-	-	-	-	16.2	19.4	22.5	26.6	36.8
861	571	1581P	15.8 x 1P-SK	-	-	-	-	-	-	14.0	17.1	21.2	31.3
287	190			-	-	-	-	-	-	17.4	20.6	24.7	35.0
764	506	1781P	17.8 x 1P-SK	-	-	-	-	-	-	-	15.2	19.3	29.6
254	169			-	-	-	-	-	-	-	18.5	22.8	33.2

Refer to table on page D1-53 for additional belts available.

Selection Charts

MS-97 V-FLAT OPERATION

DRIVEN SPEEDS		PRODUCT NUMBER	STRAIGHT FACE COMPANION PULLEY	CENTER DISTANCE IN INCHES AT MAXIMUM AND MINIMUM SPEEDS							
1750 RPM Motor	1160 RPM Motor			VARIABLE SPEED V-BELT NUMBER							
				2926V 574	2926V 606	2926V 646	2926V 686	2926V 726	2926V 834	2926V 906	2926V 1006
1595	1057	10234S	†10 x 2-3/4-SD	12.5	14.3	16.3	18.4	20.3	25.6	29.4	34.3
532	352			17.2	19.0	21.0	23.0	25.0	30.4	34.2	39.2
1458	967	11234S	†11 x 2-3/4-SD	11.3	13.3	15.3	17.4	19.4	24.6	28.4	33.4
486	322			16.3	18.0	20.1	22.2	24.2	29.6	33.3	38.3
1344	841	12234S	12 x 2-3/4-SD	-	12.5	14.5	16.6	18.6	23.9	27.6	32.6
448	297			-	17.2	19.2	21.3	23.3	28.8	32.4	37.5
1161	769	14234S	14 x 2-3/4-SD	-	-	12.9	14.9	16.9	22.2	26.0	31.0
387	256			-	-	17.3	19.4	21.4	27.0	30.7	35.7
1022	677	16234S	16 x 2-3/4-SF	-	-	-	-	15.2	20.6	24.3	29.4
341	226			-	-	-	-	19.4	25.0	28.9	34.0
912	605	18234S	18 x 2-3/4-SF	-	-	-	-	-	18.8	22.7	27.7
304	202			-	-	-	-	-	23.2	27.0	32.0
824	546	20234S	20 x 2-3/4-SF	-	-	-	-	-	16.7	20.7	25.7
275	182			-	-	-	-	-	20.9	24.9	30.2
691	458	24414S	24 x 4-1/4-SF	-	-	-	-	-	-	-	22.1
230	153			-	-	-	-	-	-	-	26.2

† This companion pulley not recommended for 7-1/2 HP at 1750 RPM or 5 HP at 1160 RPM applications.

MS-97 V-V OPERATION

DRIVEN SPEEDS		PRODUCT NUMBER	GROOVED COMPANION PULLEY	CENTER DISTANCE IN INCHES AT MAXIMUM AND MINIMUM SPEEDS							
1750 RPM Motor	1160 RPM Motor			VARIABLE SPEED V-BELT NUMBER							
				2926V 574	2926V 606	2926V 646	2926V 686	2926V 726	2926V 834	2926V 906	2926V 1006
2245	1488	761T	7.6 x 1T-SK	15.03	16.63	18.63	20.66	22.66	28.07	31.67	36.67
748	496			20.07	21.68	23.68	25.68	27.68	33.12	36.73	41.73
1984	1315	861T	8.6 x 1T-SK	14.29	15.89	17.89	19.89	21.89	27.29	30.89	35.89
661	438			19.20	20.83	22.85	24.85	26.85	32.29	35.90	40.90
1777	1178	961T	9.6 x 1T-SK	13.51	15.11	17.11	19.11	21.11	26.51	30.11	35.11
592	392			18.34	19.96	21.96	24.01	26.01	31.46	35.06	40.09
1609	1067	1061T	10.6 x 1T-SK	12.72	14.32	16.32	18.32	20.32	25.72	29.32	34.32
536	355			17.43	19.08	21.11	23.13	25.17	30.61	34.23	39.26
1470	975	1161T	11.6 x 1T-SK	11.89	13.49	15.49	17.52	19.52	24.93	28.53	33.53
490	325			16.49	18.14	20.19	22.24	24.29	29.74	33.39	38.42
1254	831	1361T	13.6 x 1T-SK	-	-	13.82	15.86	17.87	23.27	26.91	31.92
418	277			-	-	18.32	20.42	22.47	27.97	31.65	36.71
1094	725	1561T	15.6 x 1T-SK	-	-	-	14.10	16.14	21.60	25.24	30.25
364	242			-	-	-	18.45	20.55	26.15	29.85	34.95
969	642	1761T	17.6 X 1T-SK	-	-	-	-	-	19.83	23.48	28.56
323	214			-	-	-	-	-	24.27	28.01	33.13
870	577	1961T	19.6 x 1T-SK	-	-	-	-	-	17.96	21.70	26.81
290	192			-	-	-	-	-	22.25	26.06	31.29

Refer to table on page D1-53 for additional belts available.

MS-127 V-FLAT OPERATION

DRIVEN SPEEDS		PRODUCT NUMBER	STRAIGHT FACE COMPANION PULLEY	CENTER DISTANCE IN INCHES AT MAXIMUM AND MINIMUM SPEEDS													
1750 RPM Motor	1160 RPM Motor			VARIABLE SPEED V-BELT NUMBER													
				4430V 690	4430V 700	4430V 730	4430V 740	4430V 790	4430V 850	4430V 910	4430V 970	4430V 1030	4430V 1090	4430V 1150	4430V 1320	4430V 1460	4430V 1610
1728	1145	12414S	†12 x 4-1/4-SF	14.3	14.7	16.3	16.8	19.2	22.3	25.3	28.4	31.4	34.2	37.4	45.7	52.3	60.6
576	382			20.6	21.2	22.7	23.2	25.7	28.8	31.7	34.8	37.8	40.8	43.9	52.4	58.8	67.3
1496	992	14414S	†14 x 4-1/4-SF	-	-	14.9	15.4	17.8	20.7	23.8	26.9	29.8	32.8	35.7	44.5	50.7	59.2
499	331			-	-	20.9	21.4	23.9	27.0	30.0	33.2	36.0	39.2	42.2	50.8	57.0	65.5
1319	875	16414S	†16 x 4-1/4-SF	-	-	-	-	16.2	19.2	22.2	25.4	28.4	31.2	34.1	42.8	49.2	57.9
440	292			-	-	-	-	22.0	25.1	28.3	31.3	34.4	37.4	40.4	49.1	55.3	63.9
1180	782	18414S	18 x 4-1/4-SF	-	-	-	-	-	17.2	20.3	23.3	26.5	29.3	32.4	41.0	47.3	56.0
393	261			-	-	-	-	-	23.1	26.3	29.4	32.5	35.6	38.6	47.2	53.6	61.9
1067	707	20414S	20 x 4-1/4-SF	-	-	-	-	-	-	18.6	21.7	24.8	27.7	30.6	39.4	45.7	54.3
356	236			-	-	-	-	-	-	24.7	27.7	30.8	33.6	36.9	45.5	51.8	60.5
896	594	24414S	24 x 4-1/4-SF	-	-	-	-	-	-	-	-	21.4	24.2	27.3	36.0	42.4	51.1
299	198			-	-	-	-	-	-	-	-	-	26.4	29.7	33.0	41.8	48.1

† This companion pulley not recommended for 15 HP at 1750 RPM or 10 HP at 1160 RPM applications.

MS-127 & MS-127W-HD V-V OPERATION

DRIVEN SPEEDS		PRODUCT NUMBER	GROOVED COMPANION PULLEY	CENTER DISTANCE IN INCHES AT MAXIMUM AND MINIMUM SPEEDS													
1750 RPM Motor	1160 RPM Motor			VARIABLE SPEED V-BELT NUMBER													
				4430V 690	4430V 700	4430V 730	4430V 740	4430V 790	4430V 850	4430V 910	4430V 970	4430V 1030	4430V 1090	4430V 1150	4430V 1320	4430V 1460	4430V 1610
2231	1479	1001W	10.0 x 1W-SF	16.5	17.0	18.5	19.0	21.5	24.5	27.5	30.5	33.5	36.5	39.5	48.0	55.3	62.7
744	493			23.0	23.5	25.0	25.5	28.0	31.0	34.1	37.1	40.1	43.1	46.1	54.6	61.8	69.2
2028	1344	1101W	11.0 x 1W-SF	15.7	16.2	17.7	18.2	20.7	23.7	26.7	29.7	32.7	35.7	38.7	47.2	54.6	62.0
676	448			22.1	22.6	24.1	24.7	27.2	30.2	33.2	36.2	39.2	42.3	45.3	53.8	60.9	68.4
1859	1233	1201W	12.0 x 1W-SF	14.9	15.4	16.9	17.4	19.9	22.9	25.9	28.4	31.9	34.9	37.9	46.4	53.7	61.2
620	411			20.9	21.4	22.9	23.4	25.9	30.0	32.0	35.0	38.0	41.1	44.1	52.6	60.2	67.8
1716	1138	1301W	13.0 x 1W-SF	14.2	14.7	16.1	16.7	19.1	22.1	25.2	28.2	31.1	34.2	37.2	45.7	53.0	60.5
572	379			20.4	20.9	22.4	22.9	25.4	28.5	31.5	34.6	37.6	40.6	43.6	52.1	59.3	66.8
1594	1056	1401W	14.0 x 1W-SF	-	-	15.3	15.9	18.3	21.3	24.4	27.4	30.4	33.4	36.4	44.9	52.0	59.6
531	352			-	-	21.5	22.0	24.5	27.6	30.7	33.7	36.7	39.7	42.8	51.3	58.5	66.0
1488	986	1501W	15.0 x 1W-SF	-	-	-	15.0	17.5	20.5	23.6	26.6	29.6	32.6	35.6	44.1	51.3	58.8
496	329			-	-	-	21.1	23.6	26.7	29.8	32.8	35.8	38.9	41.9	50.5	57.5	65.0
1394	924	1601W	16.0 x 1W-SF	-	-	-	-	16.7	19.7	22.7	25.8	28.7	31.8	34.8	43.3	50.8	58.0
465	308			-	-	-	-	22.7	25.8	28.9	31.9	35.0	38.0	41.1	49.6	56.8	64.4
1240	822	1801W	18.0 x 1W-SF	-	-	-	-	-	18.0	21.1	24.1	27.1	30.1	33.1	41.6	48.9	56.5
413	274			-	-	-	-	-	23.9	27.0	30.1	33.2	36.3	39.3	47.9	54.9	62.5
1116	740	2001W	20.0 x 1W-SF	-	-	-	-	-	-	19.3	22.4	25.4	28.4	31.5	40.0	47.5	54.9
372	247			-	-	-	-	-	-	25.1	28.2	31.3	34.4	37.5	46.2	53.4	60.9
1014	672	2201W	22.0 x 1W-SF	-	-	-	-	-	-	-	20.6	23.6	26.7	29.7	38.3	45.5	53.0
338	224			-	-	-	-	-	-	-	-	26.3	29.4	32.6	35.7	44.4	51.5
930	616	2401W	24.0 x 1W-SF	-	-	-	-	-	-	-	-	21.8	24.9	28.0	36.6	43.7	51.2
310	205			-	-	-	-	-	-	-	-	-	27.4	30.6	33.7	42.5	49.8
796	528	2801W	28.0 x 1W-E	-	-	-	-	-	-	-	-	-	-	24.3	33.2	40.3	47.9
265	176			-	-	-	-	-	-	-	-	-	-	-	29.8	38.9	46.2

Refer to table on page D1-53 for additional belts available.

Selection Charts

MS-975-S V-V OPERATION

DRIVEN SPEEDS		PRODUCT NUMBER	GROOVED COMPANION PULLEY	CENTER DISTANCE IN INCHES AT MAXIMUM AND MINIMUM SPEEDS																	
1750 RPM Motor	1160 RPM Motor			VARIABLE SPEED V-BELT NUMBER																	
				3230 HV 528	3230 HV 546	3230 HV 553	3230 HV 570	3230 HV 585	3230 HV 603	3230 HV 613	3230 HV 626	3230 HV 644	3230 HV 670	3230 HV 685	3230 HV 723	3230 HV 821	3230 HV 856	3230 HV 931	3230 HV 960	3230 HV 1060	
1731	1147	951S	9.5 x 1S-SF	11.6	12.5	12.8	13.7	14.4	15.3	15.8	16.5	17.4	18.7	19.4	21.3	26.2	28.0	31.7	33.2	38.2	
866	574			15.1	16.0	16.3	17.2	17.9	18.8	19.3	20.0	20.9	22.2	23.0	24.9	29.8	31.6	35.3	36.8	41.8	
1645	1090	1001S	10.0 x 1S-SF	11.2	12.1	12.4	13.3	14.0	14.9	15.4	16.1	17.0	18.3	19.0	20.9	25.8	27.6	31.3	32.8	37.8	
823	546			14.6	15.5	15.9	16.7	17.5	18.4	18.9	19.6	20.5	21.8	22.5	24.5	29.4	31.1	34.9	36.4	41.4	
1495	991	1101S	11.0 x 1S-SF	-	11.3	11.6	12.5	13.2	14.1	14.6	15.3	16.2	17.5	18.2	20.1	25.0	26.8	30.5	32.0	37.0	
748	496			-	14.6	15.0	15.9	16.6	17.5	18.0	18.7	19.6	20.9	21.7	23.6	28.5	30.3	34.1	35.5	40.1	
1370	908	1201S	12.0 x 1S-SF	-	-	-	11.6	12.4	13.3	13.8	14.4	15.4	16.6	17.4	19.3	24.2	26.0	29.7	31.2	36.2	
686	455			-	-	-	14.9	15.7	16.6	17.1	17.8	18.7	20.1	28.0	22.7	27.7	29.5	33.2	34.7	39.7	
1265	838	1301S	13.0 x 1S-SF	-	-	-	-	-	12.4	12.9	13.6	14.5	15.8	16.6	18.5	23.4	25.1	28.9	30.4	35.4	
633	420			-	-	-	-	-	15.7	16.2	16.9	17.8	19.1	19.9	21.9	26.8	28.6	32.4	33.8	38.9	
1175	778	1401S	14.0 x 1S-SF	-	-	-	-	-	-	12.1	12.7	13.6	14.9	15.7	17.6	22.6	24.3	28.1	29.5	34.5	
588	390			-	-	-	-	-	-	-	15.3	15.9	16.9	18.2	19.0	20.9	25.9	27.7	31.5	33.0	38.0
1096	726	1501S	15.0 x 1S-SF	-	-	-	-	-	-	-	-	12.7	14.1	14.8	16.8	21.7	23.5	27.2	28.7	33.7	
549	364			-	-	-	-	-	-	-	-	-	15.9	17.3	18.0	20.0	25.0	26.8	30.6	32.1	37.2
1028	682	1601S	16.0 x 1S-SF	-	-	-	-	-	-	-	-	-	-	-	13.9	15.9	20.8	22.6	26.4	27.9	32.9
514	341			-	-	-	-	-	-	-	-	-	-	-	-	17.1	19.1	24.1	25.9	29.8	31.2
914	606	1801S	18.0 x 1S-SF	-	-	-	-	-	-	-	-	-	-	-	-	13.9	19.0	20.8	24.7	26.1	31.2
457	303			-	-	-	-	-	-	-	-	-	-	-	-	-	17.0	22.2	24.0	27.9	29.4
822	546	2001S	20.0 x 1S-SF	-	-	-	-	-	-	-	-	-	-	-	-	..	17.1	19.0	22.8	24.3	29.4
411	273			-	-	-	-	-	-	-	-	-	-	-	-	-	..	20.2	22.0	26.0	27.5

MS100W V-V OPERATION

DRIVEN SPEEDS		PRODUCT NUMBER	GROOVED COMPANION PULLEY	CENTER DISTANCE IN INCHES AT MAXIMUM AND MINIMUM SPEEDS															
1750 RPM Motor	1160 RPM Motor			VARIABLE SPEED V-BELT NUMBER															
				4430V 530	4430V 555	4430V 578	4430V 610	4430V 630	4430V 660	4430V 690	4430V 730	4430V 790	4430V 850	4430V 910	4430V 970	4430V 1090	4430V 1320	4430V 1610	
2188	1450	801W	8.0 x 1W-SF	12.1	13.5	14.7	16.2	17.2	18.7	20.2	22.2	25.2	28.2	31.2	34.2	40.2	51.7	66.8	
1094	725			16.0	17.4	18.6	20.1	21.1	22.6	24.1	26.1	29.1	32.1	35.1	38.1	44.1	55.6	70.7	
2059	1365	851W	8.5 x 1W-SF	11.7	13.1	14.3	15.8	16.8	18.3	19.8	21.8	24.8	27.8	30.8	33.8	39.8	51.3	66.5	
1029	682			15.6	16.9	18.2	19.7	20.7	22.2	23.7	25.7	28.7	31.7	34.7	37.7	43.7	55.2	70.3	
1944	1289	901W	9.0 x 1W-SF	11.3	12.7	13.9	15.4	16.4	17.9	19.4	21.4	24.4	27.4	30.4	33.5	39.5	51.0	66.1	
972	644			15.1	16.5	17.8	19.3	20.3	21.8	23.3	25.3	28.3	31.3	34.3	37.3	43.3	54.8	69.9	
1842	1221	951W	9.5 x 1W-SF	11.0	12.3	13.6	15.1	16.1	17.6	19.1	21.0	24.0	27.0	30.1	33.1	39.1	50.6	65.6	
921	611			14.7	16.1	17.3	18.9	19.9	21.4	22.9	24.9	27.9	30.9	33.9	36.9	42.9	54.4	69.5	
1750	1160	1001W	10.0 x 1W-SF	10.6	11.9	13.2	14.7	15.7	17.2	18.7	20.7	23.7	26.7	29.7	32.7	38.7	50.2	65.2	
875	580			14.3	15.6	16.9	18.4	19.4	20.9	22.5	24.5	27.5	30.5	33.5	36.5	42.5	54.0	69.0	
1591	1054	1101W	11.0 x 1W-SF	-	11.0	12.4	13.9	14.9	16.4	17.9	19.9	22.9	25.9	28.9	31.9	37.9	49.4	64.2	
795	527			-	14.7	16.0	17.6	18.6	20.1	21.6	23.6	26.6	29.7	32.7	35.7	41.7	53.2	68.2	
1458	967	1201W	12.0 x 1W-SF	-	-	11.6	13.1	14.1	15.6	17.1	19.1	22.1	25.1	28.1	31.1	37.1	48.6	63.5	
729	483			-	-	15.1	16.7	17.7	19.2	20.7	22.7	25.8	28.8	31.8	34.8	40.9	52.4	67.4	
1346	892	1301W	13.0 x 1W-SF	-	-	-	12.4	13.2	14.7	16.2	18.2	21.2	24.3	27.3	30.3	36.3	47.8	62.7	
673	446			-	-	-	15.9	16.8	18.3	19.8	21.9	24.9	28.0	31.0	34.0	40.0	51.6	66.6	
1250	828	1401W	14.0 x 1W-SF	-	-	-	-	12.5	13.9	15.4	17.4	20.4	23.4	26.5	29.5	35.5	47.0	62.1	
625	414			-	-	-	-	16.0	17.3	18.9	21.0	24.0	27.1	30.1	33.2	39.2	50.8	65.8	
1167	773	1501W	15.0 x 1W-SF	-	-	-	-	-	13.2	14.5	16.5	19.6	22.6	25.6	28.6	34.7	46.2	61.3	
583	387			-	-	-	-	-	-	16.5	18.0	20.0	23.1	26.2	29.2	32.3	38.3	49.9	65.0
1094	725	1601W	16.0 x 1W-SF	-	-	-	-	-	-	13.8	15.7	18.7	21.7	24.8	27.8	33.8	45.4	60.5	
547	363			-	-	-	-	-	-	-	17.1	19.1	22.2	25.3	28.3	31.4	37.5	49.1	64.0
972	644	1801W	18.0 x 1W-SF	-	-	-	-	-	-	-	-	-	16.9	20.0	23.0	26.1	32.1	48.7	58.9
486	322			-	-	-	-	-	-	-	-	-	-	-	19.2	24.4	26.5	29.6	35.7
875	580	2001W	20.0 x 1W-SF	-	-	-	-	-	-	-	-	-	-	18.1	21.2	24.3	30.4	42.0	57.1
438	290			-	-	-	-	-	-	-	-	-	-	-	21.4	24.6	27.7	33.9	45.6
795	527	2201W	22.0 x 1W-SF	-	-	-	-	-	-	-	-	-	-	17.2	19.3	22.4	28.6	40.3	55.5
398	264			-	-	-	-	-	-	-	-	-	-	-	19.3	22.6	25.8	32.0	43.9
729	483	2401W	24.0 x 1W-SF	-	-	-	-	-	-	-	-	-	-	-	-	20.5	26.8	38.5	53.7
365	242			-	-	-	-	-	-	-	-	-	-	-	-	-	23.7	30.1	42.0
625	414	2801W	28.0 x 1W-E	-	-	-	-	-	-	-	-	-	-	-	-	-	22.9	35.0	49.9
312	207			-	-	-	-	-	-	-	..	-	-	-	-	-	..	26.1	38.4

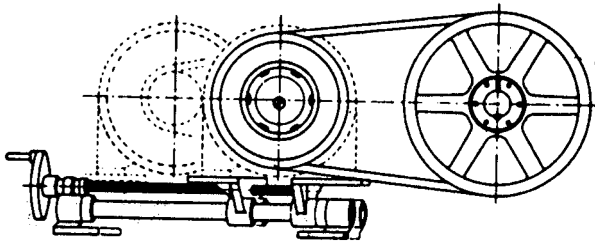
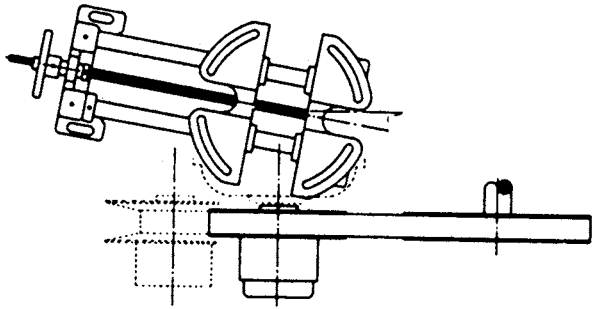
Refer to table on page D1—53 for additional belts available.

MS Single Flange Moving Drive Set-Up

Options

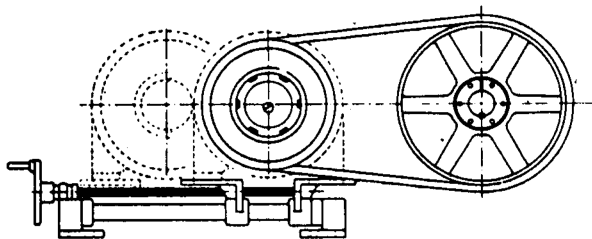
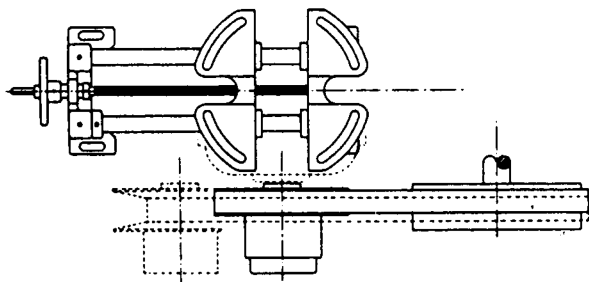
V-V Drive Set-up

On a v-groove to v-groove drive using a single flange moving sheave, it is necessary to angle mount the motor in order to keep the belt aligned. This is due to the fact that the belt is not only moving from max. to min. pitch it is also moving axially as it is being adjusted. The angle mount base compensates for this axial movement of the belt.



V-Flat Drive Set-up

On a v-groove to flat pulley drive using a single flange moving sheave, the movement of the base is perfectly perpendicular to the shafts. As the belt moves from max. to min. pitch on the variable it is also moving axially across the face of the flat pulley. In most cases the drive hp capacity is less on a v-flat than a v-v drive using the same spring-loaded sheave.



Angled Motor Case

Calculations

Because of the unique lubricating principle employed in the Wood's MS sheaves, they are constructed so that only a single flange is adjustable. When a straight face pulley is used as a companion, the belt will traverse across the face of the pulley as the pitch diameter of the MS is changed. However, in order to maintain correct belt alignment when running the MS sheave to a V-groove companion, the motor must be mounted on an angled base to compensate for the belt movement.

When an MC base is furnished, the motor mount holes are drilled in the sliding plate at the angle required by each specific application. When using an MBA motor base, slots are provided for offsetting the motor to any angle.

Angle to Offset Motor Base

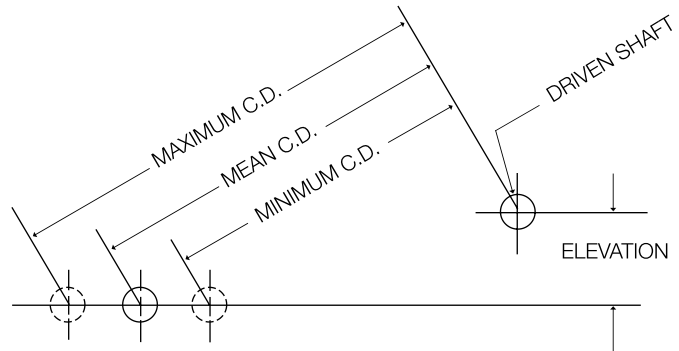
To Find Offset Angle:

- Determine mean center distance.

$$\text{Mean C.D.} = \frac{\text{Max.} + \text{Min.}}{2}$$

- Find difference in center line elevation.
- Using appropriate table below with required elevation, read across until mean center is located; then read at bottom of table the offset angle. Interpolate for elevations or center distances not shown.

Example:
 Sheave MS-100-W
 C.D. Min. 18.0, Max. 22.0
 Elevation 7"
 Offset Angle – 9-1/2°



		MS-77								
Elevation – inches	3	Mean Center Distance – inches								9*
	4	Offset angle 7-1/2° for less than								9 12*
	5	3" elevation; all center								9 10 15*
	6	distances.								9 10 12 18*
	7									9 10 11 12 15 21*
	8									9 10 10 11 12 14 17 24*
	10									12 12 13 14 15 17 21 29*
	12									14 14 15 16 18 21 25 35*
14									16 17 18 19 21 24 29 41*	
16									18 19 20 22 24 27 33 47*	
Offset Angle		4°	4-1/2°	5°	5-1/2°	6°	6-1/2°	7°	7-1/2°	

		MS-97								
Elevation – inches	3	Mean Center Distance – inches								10*
	4	Offset angle 9° for less than								13*
	5	3" elevation; all center								11 16*
	6	distances.								11 13 19*
	7									11 13 16 22*
	8									11 12 13 15 18 25*
	10									12 13 14 15 16 18 22 32*
	12									15 15 16 18 20 22 27 38*
14									17 18 19 21 23 26 31 44*	
16									20 21 22 24 26 30 36 50*	
Offset Angle		5-1/2°	6°	6-1/2°	7°	7-1/2°	8	8-1/2°	9°	

		MS-100W MS-127 MS-975-S										
Elevation – inches	3	Mean Center Distance – inches										11* 19*
	4	Offset angle 10° for less than										12 15* 23*
	5	3" elevation; all center										11 14 19* 29*
	6	distances.										11 13 17 22* 35*
	7											11 13 15 20 26* 41*
	8											11 12 13 15 17 23 30* 47*
	10											12 12 13 14 15 16 18 21 28 37* 58*
	12											14 15 16 17 18 19 22 26 34 44*
14											17 17 18 19 21 23 25 30 40 50*	
16											19 20 21 22 24 26 29 34 46 57*	
Offset Angle		5-1/2°	6°	6-1/2°	7°	7-1/2°	8°	8-1/2°	9°	9-1/2°	9-3/4°	10°

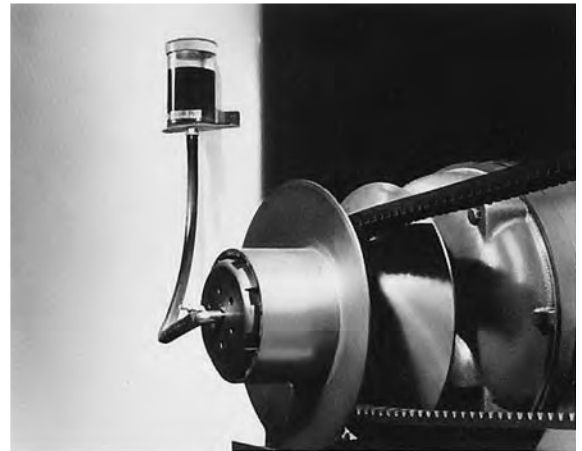
* Mean center distances and larger.

Lubrication System

The Sight-Lube lubrication system is available for Wood's MS and MCS motion control variable speed sheaves.

This system permits split-second checking of the oil level in the sheave's reservoir. The sight gauge can be mounted at any convenient location above the drive.

The advantages that the Sight-Lube lubrication offers combined with the unique features of Wood's exclusive motion control sheave oil lubrication system provide outstanding user benefits. While lubrication checks are required only infrequently with Wood's motion control variable speed drives, downtime for such routine maintenance is nonexistent.



Reservoir Kit

The ADAPTER KIT, shown at right, consisting of the sheave adapter, gasket and three cap screws is available to fit most existing Wood's oil lubricated variable speed sheaves, and can also be supplied for new units.

The RESERVOIR KIT, at left, is included with all Sight-Lube systems unless specified otherwise. The reservoir is of clear polycarbonate plastic permanently attached to a durable plastic bracket with holes for mounting to any vertical or horizontal surface. This kit also includes a 36-inch section of hose with the necessary clamps for connecting to the rotating joint on the sheave.



Sheave Adapter Kit

How to Order the Sight-Lube Lubrication System

Sight-Lube Kits for installation on existing Wood's motion control variable speed sheaves are available as listed in chart below. Determine the part number of the sheave and from the chart select the proper Sight-Lube Kit number. Example: If the Sight-Lube System is required for an existing MS-97 sheave, order one SL2K Adapter Kit and one SR2K Reservoir Kit.

Kits Available

For Use With Variable Sheave No.	Adapter Kit Kit No.	Reservoir Kit Kit No.
MS-97	SL2K	SR2K
MS-127, MS-100W, MS-975-S	SL3K	SR2K
MCS-All sizes except 14Y & 15Y	SL3K	SR2K
MCS 14Y & 15Y	SL4K	SR2K

Interchange

WOOD'S		EATON (WORTHINGTON)		LOVEJOY		RELIANCE (REEVES)		RELIANCE (DODGE)		SPEED SELECTOR	
Model No.	Max. Pitch	Model No.	Max. Pitch	Model No.	Max. Pitch	Model No.	Max. Pitch	Model No.	Max. Pitch	Model No.	Max. Pitch
MS-58	5.75	-	-	1-007 11407 2600	5.80 5.80 5.80	5675	5.11	14SL	5.63	816	6.30
MS-72	7.25	219S	6.75	1-015 11901	8.00 8.03	7202 97	6.72 7.25	19SL	7.38	707 827	6.90 7.53
MS-77	7.75	20 523S	7.75 9.00	-	-	98	7.75	23SL	9.00	709 859	8.75 9.25
MS-97	9.75	1029S	9.95	1-050 12905 1-075 12907	9.70 9.70 9.70 9.70	9205	9.00	-	-	-	-
MS-127 & MS-127W-HD	12.75	2044S 150	12.60 11.75	1-150 1-4415 3215 1-200 14420 3220 1-250 1-4425 14430 3225	12.10 12.10 11.50 12.10 12.10 11.50 12.10 12.10 12.10 11.50	1320 912-15 1330	12.46 11.75 12.46	44SLN 44SLU	12.36 12.36	711 821 833	10.90 11.60 12.60
MS-975-S	9.40	-	-	1-2032 13220	10.37 10.35	-	-	-	-	-	-
MS-100W	10.00	100	11.75	1-100 14410 3210	12.10 12.10 11.50	1110 912 77	10.77 11.75 13.75	44SLK	12.36	-	-