

Series 4WS3M10 shown with clutch



Wire rope assemblies and controls sold separately

Series 4WS Worm/Spur Gear Power Winches

Up to 6000 lb capacity

- **Modular Design** allows us to make-to-order each winch to meet your exact needs.
- **Standard Features** include TEFC brake motors, enclosed machine cut gearing and flange style ball bearings.
- **Custom Modifications** available include grooved drums, special drum lengths and diameters, limit switches, roller pressure bars, and special finishes. Pneumatic, hydraulic and alternate motor voltages are also available.
- **Two-year Limited Warranty**

Series 4WS Electric – Configurations and Performance Characteristics – Section 2

When ordering, please indicate Model Number and Extensions

Examples: 4WS1M6-1100-20-A (without clutch); 4WS1M6-1100-20-A-C (with clutch)

model number	model number extensions					load rating(lb)			wire rope dia.(in)	line speed(fpm)		drum capacity(ft) ¹			approx. ² ship wt.(lb)
	load rating	line speed	motor codes	clutch option	motor hp	1st layer	mid drum	full drum		1st layer	full drum	1st layer	mid drum	full drum	
4WS1M6	800	15	A, B, D, E, F	C	.5	800	550	420	3/16	17	33	21	110	260	155
4WS1M6	800	30	A, B, D, E, F	C	.75	800	550	420	3/16	29	55	21	110	260	165
4WS1M6	800	40	A, B, D, E, F	C	1	800	550	420	3/16	43	82	21	110	260	175
4WS1M6	1100	20	A, B, D, E, F	C	.75	1100	800	600	1/4	18	32	16	62	140	165
4WS1M6	1100	30	A, B, D, E, F	C	1	1100	800	600	1/4	30	54	16	62	140	175
4WS1M6	1100	40	D, E, F	C	1.5	1100	800	600	1/4	44	81	16	62	140	170
4WS1M6	1500	20	A, B, D, E, F	C	1	1500	1000	800	1/4	18	32	16	62	140	175
4WS1M6	1500	30	D, E, F	C	1.5	1500	1100	800	1/4	30	54	16	62	140	170
4WS1M6	1500	40	B, D, E, F	C	2	1500	1100	800	1/4	44	81	16	62	140	180
clutch option for 4WS1M6 (for horizontal pulling only)															add: 5
4WS3M10	2000	15	A, B, D, E, F	C	1	2000	1300	1000	5/16	14	29	34	220	500	310
4WS3M10	2000	20	D, E, F	C	1.5	2200	1400	1000	5/16	18	39	34	220	500	305
4WS3M10	2500	20	B, D, E, F	C	2	2500	1600	1200	3/8	22	46	27	160	360	320
4WS3M10	3000	15	D, E, F	C	1.5	3000	2000	1500	3/8	14	29	27	160	360	305
4WS3M10	3000	20	B, D, E, F	C	2	3000	2000	1500	3/8	19	39	27	160	360	320
4WS3M10	3500	7	A, B, D, E, F	C	1	3500	2300	1700	7/16	8	15	23	120	270	330
4WS3M10	3500	15	B, D, E, F	C	2	3700	2500	1800	7/16	14	29	23	120	270	320
4WS3M10	3500	20	D, E, F	C	3	3700	2500	1800	7/16	23	46	23	120	270	330
clutch option for 4WS3M10 (for horizontal pulling only)															add: 8
4WS6M12	3000	10	D, E, F	C	1.5	3400	2200	1600	3/8	12	25	40	300	660	515
4WS6M12	3000	20	B, D, E, F	C	2	3100	2000	1500	3/8	20	42	40	300	660	530
4WS6M12	4000	10	B, D, E, F	C	2	4500	2900	2100	7/16	12	25	34	220	500	530
4WS6M12	4000	20	D, E, F	C	3	4000	2500	1900	7/16	24	50	34	220	500	540
4WS6M12	6000	4	A, B, D, E, F	C	1	6200	4000	3000	1/2	4	8	30	170	390	535
4WS6M12	6000	10	D, E, F	C	3	6400	4200	3100	9/16	12	25	26	140	310	540
4WS6M12	6000	20	D, E, F	C	5	6400	4200	3100	9/16	24	50	26	140	310	585
clutch option for 4WS6M12 (for horizontal pulling only)															add: 12

Motor Codes

A	115 volt	1 phase
B	230 volt	1 phase
D	230 volt	3 phase
E	460 volt	3 phase
F	All other voltages – please contact factory.	

- For more information and other control options, please see pages 46-48.
- Custom controls are available including wireless remote control, variable speed control, electronic overload, and enclosures for special environments.

Please contact factory or nearest Thern Distributor for firm fixed price and delivery.

¹ Actual drum capacities 25-30% less, due to nonuniform winding. Wire rope tension will also affect drum capacity.

² Weight may vary with motor.

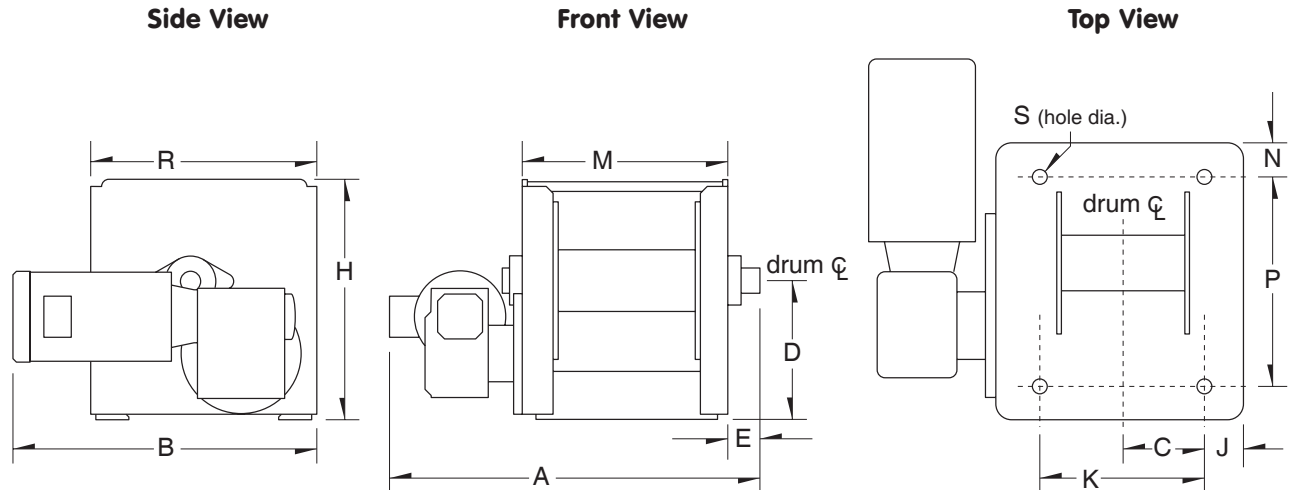
Electric Drum Control Switches – Order Separately – Section 2

model	description	115/1/60 ³	230/1/60	230/3/60	460/3/60
EL1CS	NEMA 1	to 1.5 hp	to 2 hp	to 3 hp	to 3 hp
EL2CS	NEMA 1	to 1.5 hp	to 3 hp	to 5 hp	to 7.5 hp
EL1CSW	NEMA 4 – watertight	to 1.5 hp	to 2 hp	to 3 hp	to 3 hp
EL2CSW	NEMA 4 – watertight	—	to 3 hp	to 5 hp	to 7.5 hp
EL1PD	6 ft pendant control	to 1 hp	—	—	—

Please contact factory or nearest Thern Distributor for firm fixed price and delivery.

³ Controls for 115V single phase motors up to 1.5 hp, include an 8 ft power cord with grounded plug.

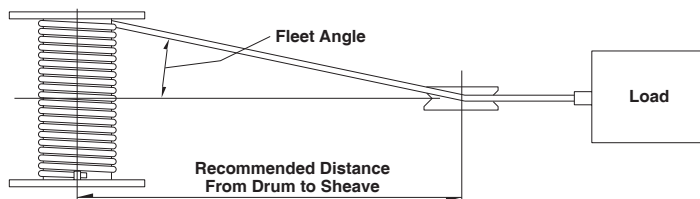
See Dimensions on Next Page



Series 4WS – Winch Dimensions (in)

model extension	A	B	C	D	E	H	J	K	M	N	P	R	S (hole dia.)
4WS1M6-800-15	21.00	21.62	3.00	6.75	2.25	11.75	1.75	6.00	9.75	1.25	8.50	11.00	.44
4WS1M6-800-30	21.00	22.38	3.00	6.75	2.25	11.75	1.75	6.00	9.75	1.25	8.50	11.00	.44
4WS1M6-800-40	21.75	23.38	3.00	6.75	2.25	11.75	1.75	6.00	9.75	1.25	8.50	11.00	.44
4WS1M6-1100-20	21.00	22.38	3.00	6.75	2.25	11.75	1.75	6.00	9.75	1.25	8.50	11.00	.44
4WS1M6-1100-30	21.75	23.38	3.00	6.75	2.25	11.75	1.75	6.00	9.75	1.25	8.50	11.00	.44
4WS1M6-1100-40	21.75	22.38	3.00	6.75	2.25	11.75	1.75	6.00	9.75	1.25	8.50	11.00	.44
4WS1M6-1500-20	21.75	23.38	3.00	6.75	2.25	11.75	1.75	6.00	9.75	1.25	8.50	11.00	.44
4WS1M6-1500-30	21.75	22.38	3.00	6.75	2.25	11.75	1.75	6.00	9.75	1.25	8.50	11.00	.44
4WS1M6-1500-40	21.75	25.00	3.00	6.75	2.25	11.75	1.75	6.00	9.75	1.25	8.50	11.00	.44
4WS3M10-2000-15	27.75	26.75	5.00	10.12	2.38	17.50	2.38	10.00	15.00	1.88	12.75	16.50	.59
4WS3M10-2000-20	27.75	25.75	5.00	10.12	2.38	17.50	2.38	10.00	15.00	1.88	12.75	16.50	.59
4WS3M10-2500-20	27.75	28.25	5.00	10.12	2.38	17.50	2.38	10.00	15.00	1.88	12.75	16.50	.59
4WS3M10-3000-15	27.75	25.75	5.00	10.12	2.38	17.50	2.38	10.00	15.00	1.88	12.75	16.50	.59
4WS3M10-3000-20	27.75	28.25	5.00	10.12	2.38	17.50	2.38	10.00	15.00	1.88	12.75	16.50	.59
4WS3M10-3500-7	27.75	32.00	5.00	10.12	2.38	17.50	2.38	10.00	15.00	1.88	12.75	16.50	.59
4WS3M10-3500-15	27.75	28.25	5.00	10.12	2.38	17.50	2.38	10.00	15.00	1.88	12.75	16.50	.59
4WS3M10-3500-20	28.81	33.00	5.00	10.12	2.38	17.50	2.38	10.00	15.00	1.88	12.75	16.50	.59
4WS6M12-3000-10	33.00	26.75	5.62	12.88	2.50	22.50	3.25	12.00	19.00	1.88	18.25	22.00	.88
4WS6M12-3000-20	33.00	29.50	5.62	12.88	2.50	22.50	3.25	12.00	19.00	1.88	18.25	22.00	.88
4WS6M12-4000-10	33.00	29.50	5.62	12.88	2.50	22.50	3.25	12.00	19.00	1.88	18.25	22.00	.88
4WS6M12-4000-20	34.00	29.25	5.62	12.88	2.50	22.50	3.25	12.00	19.00	1.88	18.25	22.00	.88
4WS6M12-6000-4	33.00	27.75	5.62	12.88	2.50	22.50	3.25	12.00	19.00	1.88	18.25	22.00	.88
4WS6M12-6000-10	34.00	29.25	5.62	12.88	2.50	22.50	3.25	12.00	19.00	1.88	18.25	22.00	.88
4WS6M12-6000-20	34.00	31.00	5.62	12.88	2.50	22.50	3.25	12.00	19.00	1.88	18.25	22.00	.88

Dimensions are for reference only and subject to change without notice.



Important:

It is the owner's or operator's responsibility to determine the suitability of the equipment to its intended use. Study all applicable codes, manuals, and regulations. Be sure to read the Owner's Manual supplied with the equipment before operating it.

Series 4WS – Drum Dimensions

model extension	drum diameter	flange diameter	drum width	fleet angle distance ¹
4WS1M6	2.88 in	7.00 in	6.00 in	10 ft
4WS3M10	4.50 in	11.50 in	10.00 in	16 ft
4WS6M12	5.50 in	14.00 in	12.00 in	20 ft

Dimensions are for reference only and subject to change without notice.

¹ Recommended minimum distance between drum and lead sheave for smooth drum.