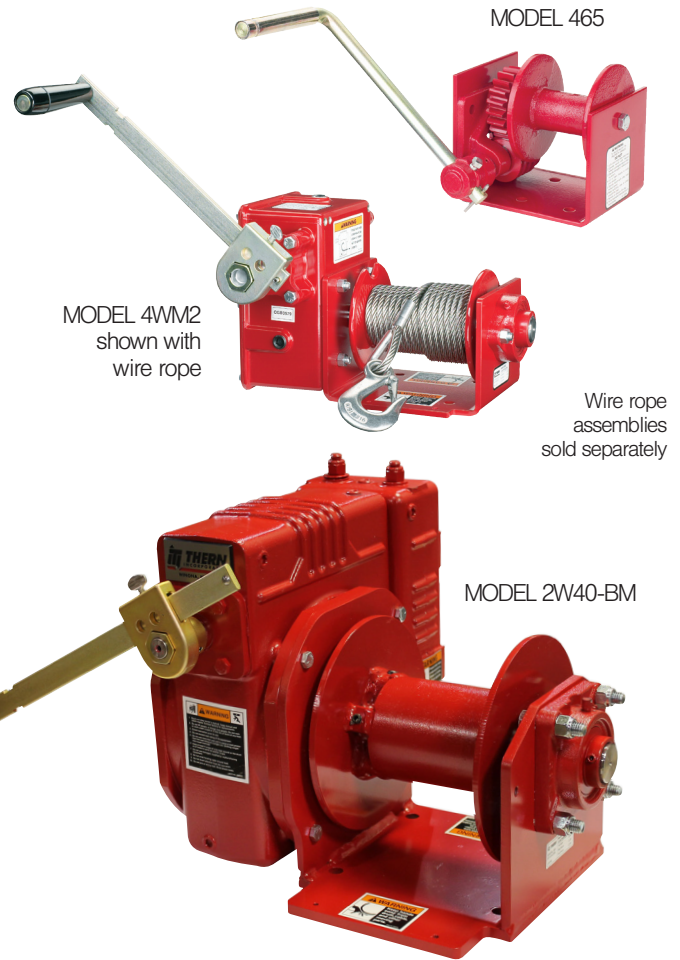


Worm Gear Hand Winches

Up to 4000 lb Capacity

- **Machine Cut Worm Gears** provide accurate operation and long lasting service.
- **Enclosed Oil Bath** provides continuous lubrication of gears to minimize wear, except on Model 465. On Models 4WM2 and 2W40, oil seals keep oil in and dirt out.
- **Hex Drive** and handle are included. Models 4WM2 and 2W40* can be power driven with a maximum 300 rpm drill-motor.
- **Automatic Brake Models** provide positive load control for lifting. Brake models have a PB or B suffix. Models 4WM2 and 2W40-B feature an internal mechanical brake.
- **Corrosion Resistant** durable paint finish protects against corrosion in harsh environments.
- **Bronze Bearings** on most models for smooth operation.
- **Large Diameter Drums** minimize wire rope wear.
- **Handles Adjust** in length to change force required to move the load.
- **Mounting Options** include floor, wall, or ceiling. Adapter plate may be required, contact factory.
- **Two-year Limited Warranty**

*See Drill Drive performance chart on page 11.



Worm Gear Hand Winches – Configurations and Performance Characteristics

Model	Description	LOAD RATING						Wire Rope Dia.		DRUM CAPACITY ¹				Gear Ratio	Force ² to lift 1000 lbs		Approx. Ship Wt.			
		1st Layer		Mid Drum		Full Drum		(in)	(mm)	(ft)	(m)	(ft)	(m)		(ft)	(m)	(lb)	(kg)	(lb)	(kg)
465	750 lb – open gears (recommended for pulling only)	750	340	600	272	400	181	1/8	3.2	7	2	58	17	130	39	20:1	21	9.5	12	5
462	1000 lb – enclosed gearing (recommended for pulling only)	1000	453	700	317	500	226	3/16	4.8	4	1	27	8	59	17	15:1	34	15.4	15	7
4622PB	1000 lb – enclosed gearing with brake (for lifting)	1000	453	700	317	500	226	3/16	4.8	4	1	28	8	61	18	15:1	26	11.8	21	10
472	2000 lb – enclosed gearing (recommended for pulling only)	2000	907	1700	771	1300	589	3/16	4.8	15	4	65	19	140	42	24:1	24	10.9	32	15
4WM2	2000 lb – enclosed gearing with brake (for lifting) Drill Driveable	2000	907	1500	680	1200	544	1/4	6.4	11	3	35	10	77	23	32:1	14	6.4	41	19
2W40-L	4000 lb – enclosed gearing (recommended for pulling only)	4000	1814	2800	1270	2200	997	5/16	7.9	18	5	91	27	200	60	26:1	18	8.2	140	64
2W40-BL	4000 lb – enclosed gearing with brake (for lifting)	4000	1814	2800	1270	2200	997	5/16	7.9	18	5	91	27	200	60				135	62
2W40-M	4600 lb – enclosed gearing (recommended for pulling only) Drill Driveable*	4600	2086	3300	1496	2500	1133	5/16	7.9	18	5	91	27	200	60	31:1	11	5.0	150	69
2W40-BM	4600 lb – enclosed gearing with brake (for lifting) Drill Driveable*	4600	2086	3300	1496	2500	1133	5/16	7.9	18	5	91	27	200	60				145	66

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

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

² Approximate handle force required to lift 1000 lb with an empty drum, and maximum handle length.



These products are not for lifting people or things over people.

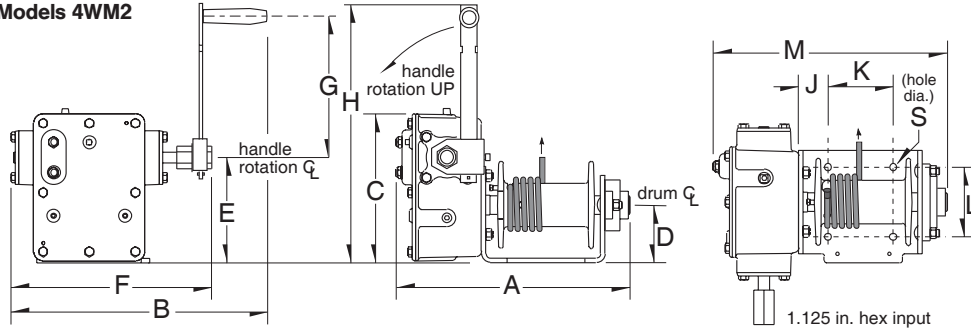
FLCL-0416

Complete, downloadable details on line
www.thern.com



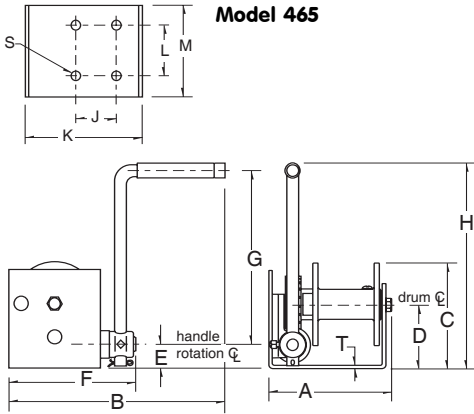
WORM GEAR HAND WINCHES

Models 4WM2

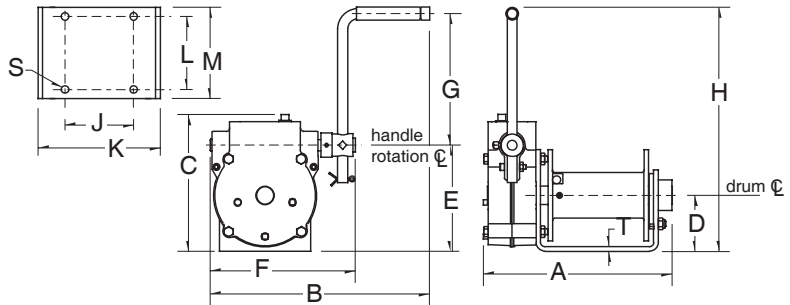


Install wire rope correctly as shown, or brake will not operate properly.

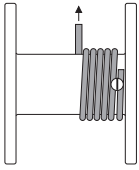
Model 465



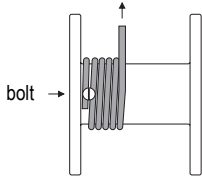
Models 462 and 472



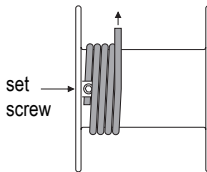
Wire Rope Installation Model 465



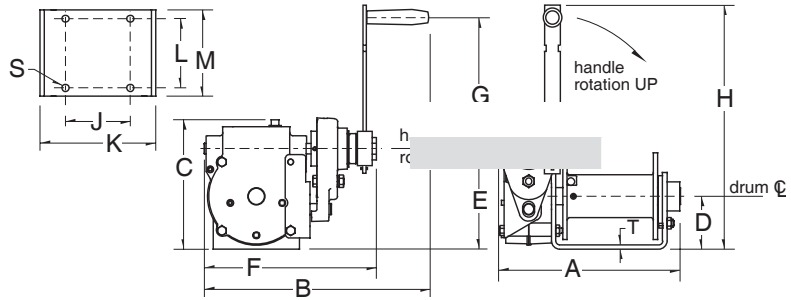
Wire Rope Installation Models 462 and 4622PB



Wire Rope Installation Model 472



Model 4622PB



Worm Gear Hand Winches - Dimensions

	465		462		4622PB		472		4WM2	
	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)
Drum Diameter	1.50	38.1	1.50	38.1	1.50	38.1	2.50	63.5	2.50	63.5
Flange Diameter	4.00	101.6	4.06	103.1	4.06	103.1	5.00	127	5.00	127
Drum Width	2.81	71.3	2.81	71.3	2.81	71.3	5.00	127	5.00	127
A	6.50	165.1	7.75	196.8	7.50	190.5	10.12	257.0	13.50	342.9
B	10.50	266.7	10.25	260.3	11.81	299.9	12.00	304.8	15.56	395.2
C	5.44	138.1	5.63	143.0	5.62	142.7	7.12	180.8	8.56	217.4
D	3.40	86.3	2.38	60.4	2.40	60.9	3.06	77.7	3.31	84.0
E	1.40	35.5	4.38	111.2	4.38	111.2	5.81	147.5	6.04	153.4
F	6.38	162.0	5.88	149.3	7.60	193.0	7.94	201.6	11.56	293.6
G	8.75	222.2	9.00	228.6	10.59	268.9	7.25	184.1	10.59	268.9
H	10.59	268.9	13.38	339.8	15.59	395.9	13.38	339.8	17.30	439.4
J	2.00	50.8	2.00	50.8	2.00	50.8	3.75	95.2	1.75	44.4
K	5.75	146.0	4.44	112.7	4.44	112.7	6.69	169.9	3.75	95.2
L	2.50	63.5	2.50	63.5	2.50	63.5	4.00	101.6	4.00	101.6
M	4.50	114.3	3.50	88.90	3.50	88.90	5.00	127	13.50	342.9
S (hole diameter)	.40	10.1	.40	10.1	.40	10.1	.40	10.1	.41	10.4
T	.19	4.8	.19	4.8	.19	4.8	.25	6.3	-	-

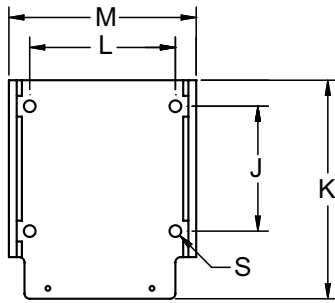
Dimensions are for reference only and subject to change without notice.

IMPORTANT:

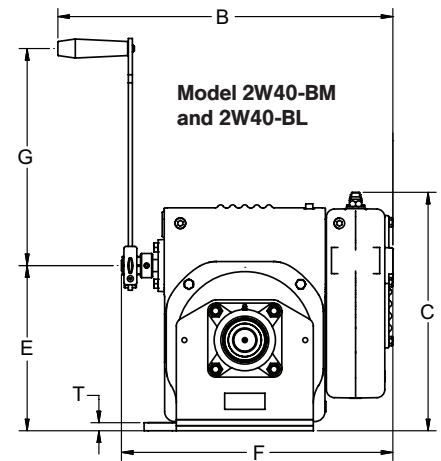
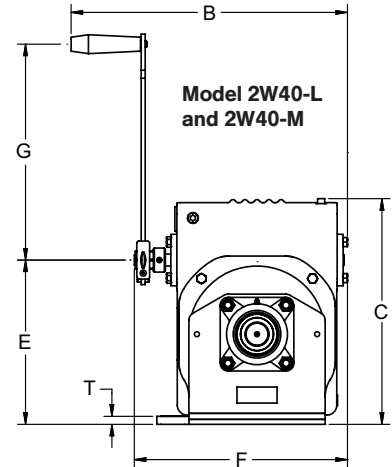
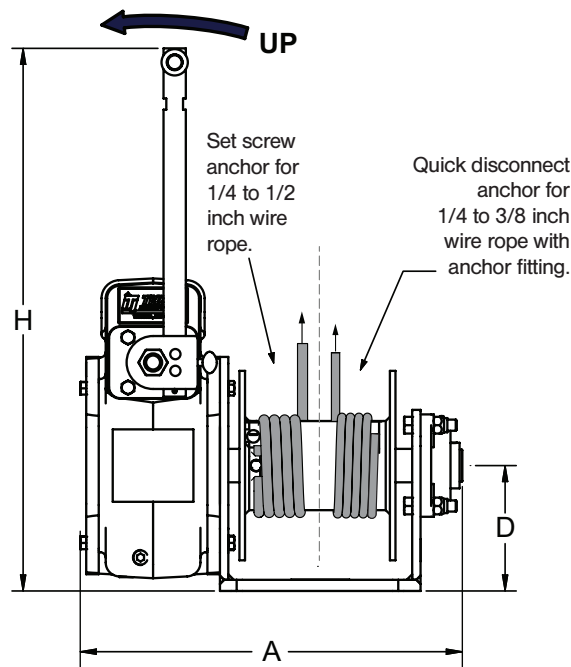
It is the owner or operator's responsibility to determine the suitability of the equipment to its intended use. Study all applicable codes, manuals and regulations. Be sure to read the Owner's Manual supplied with the equipment before operating it.



HAND WINCHES WORM GEAR



Install wire rope correctly as shown, or brake will not operate properly. Underwood - set screw or quick disconnect anchors.



2W40 Series Worm Gear Hand Winches - Dimensions

Model	A	B	C	D	E	F	G	H	J	K	L	M	S (hole dia)	T	Flange Dia	Drum Width	Drum Dia
	(in)	(in)	(in)	(in)	(in)	(in)	(in)	(in)	(in)	(in)	(in)	(in)	(in)	(in)	(in)	(in)	(in)
2W40-L	17.25	19.75	14.25	5.63	10.25	14.5	18.5	29.25	6	10.5	7	9	9/16	.5	8.5	6.5	4
2W40-M	17.25	17.25	14.25	5.63	10.25	13.5	13.5	24.50	6	10.5	7	9	9/16	.5	8.5	6.5	4
2W40-BL	17.25	23.5	15	5.63	10.25	18.25	18.5	29.25	6	10.5	7	9	9/16	.5	8.5	6.5	4
2W40-BM	17.25	21	15	5.63	10.25	17	13.5	24.50	6	10.5	7	9	9/16	.5	8.5	6.5	4

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

2W40 Series Performance Characteristics - Drill Drive¹

Model	Load Rating						Drill Model: ED300-DW11		
	1st Layer		Mid Drum		Full Drum		RPM	Volts	Duty Cycle ² Maximum
	(lb)	(kg)	(lb)	(kg)	(lb)	(kg)			
2W40-M	2300	1043	1650	748	1250	566	300	120	40 ft of life or 5 min of operation
2W40-BM	2300	1043	1650	748	1250	566	300	120	40 ft of life or 5 min of operation

¹ Performance Characteristics refer to standard products. Non-standard products may vary from the original design. Contact Them for this information.

² Duty cycle includes lifting and lowering and may vary depending on load or application. Allow components to cool between cycles.

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