

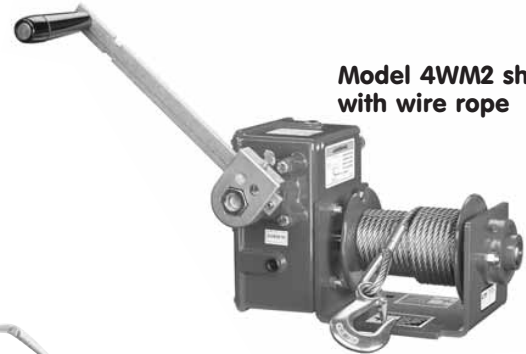
## Worm Gear Hand Winches

Up to 4000 lb capacity

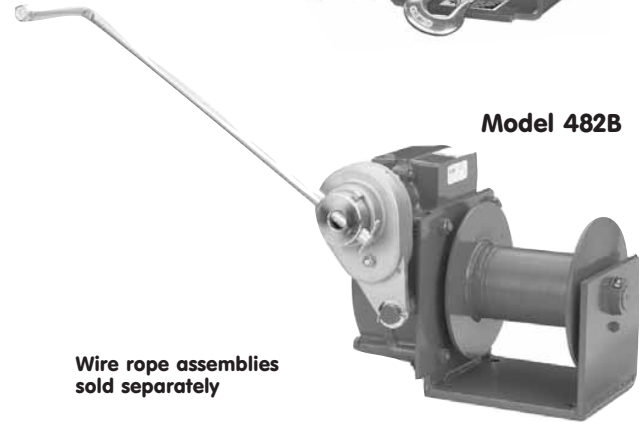
- **Machine Cut Worm Gears** provide accurate operation and long lasting service.
- **Enclosed Oil Bath** provides continuous lubrication of gears to minimize wear, except on Model 465. On Model 4WM2 oil seals keep oil in and dirt out.
- **Hex Drive** and handle are included. Model 4WM2 can be power driven with a maximum 400 rpm drill-motor.
- **Automatic Brake Models** provide positive load control for lifting. Brake models have a PB or B suffix. Model 4WM2 features 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**



Model 465



Model 4WM2 shown with wire rope



Model 482B

Wire rope assemblies sold separately

### Worm Gear Hand Winches – Configurations and Performance Characteristics – Section 1

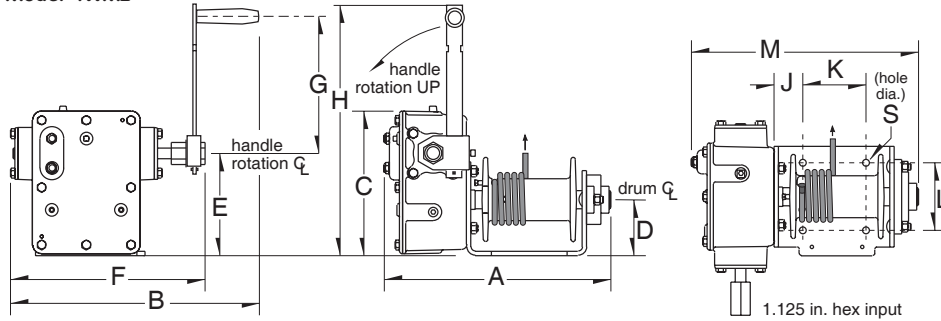
model number	description	load rating (lb)			wire rope dia. (in)	drum capacity (ft) <sup>1</sup>			gear ratio	force <sup>2</sup> to lift 1000 lb	approx. ship wt. (lb)
		1st layer	mid drum	full drum		1st layer	mid drum	full drum			
465	750 lb – open gears (recommended for pulling only)	750	600	400	1/8 3/16	7 4	58 27	130 59	20:1	21 lb	12
462	1000 lb – enclosed gearing (recommended for pulling only)	1000	700	500	1/8 3/16	7 4	61 28	140 61	15:1	34 lb	15
4622PB	1000 lb – enclosed gearing with brake (for lifting)	1000	700	500	1/8 3/16	7 4	61 28	140 61	15:1	26 lb	21
472	2000 lb – enclosed gearing (recommended for pulling only)	2000	1700	1300	3/16 1/4 5/16	15 11 8	65 35 23	140 77 52	24:1	24 lb	32
4WM2	2000 lb – enclosed gearing with brake (for lifting) <b>Drill Driveable</b>	2000	1500	1200	1/4 3/16 (not recommended for this winch)	11	35	77	32:1	14 lb	41
482	4000 lb – enclosed gearing (recommended for pulling only)	4000	3300	2500	1/4 5/16 3/8	23 18 14	140 91 65	300 200 140	26:1	31 lb	100
482B	4000 lb – enclosed gearing with brake (for lifting)	4000	3300	2500	1/4 5/16 3/8	23 18 14	140 91 65	300 200 140	26:1	21 lb	113

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

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

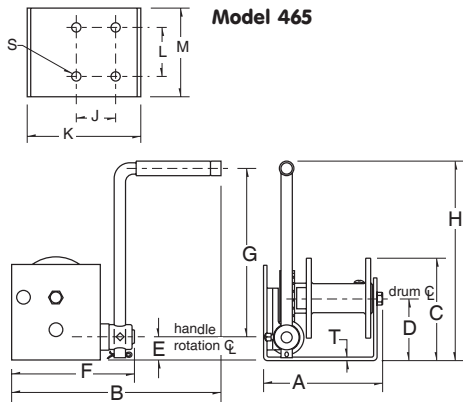
<sup>2</sup> Approximate handle force required to lift 1000 lb with an empty drum, and maximum handle length.

Model 4WM2

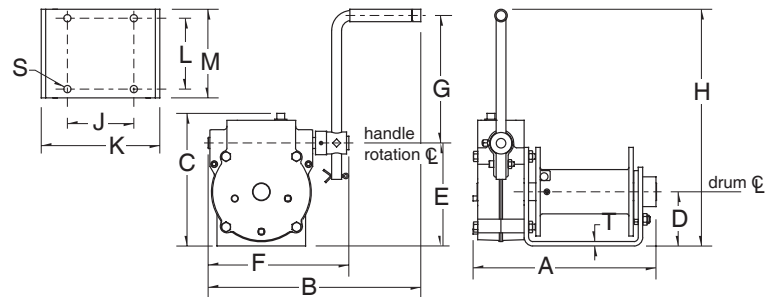


Install wire rope correctly as shown, or brake will not operate properly.

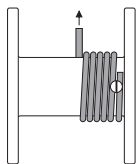
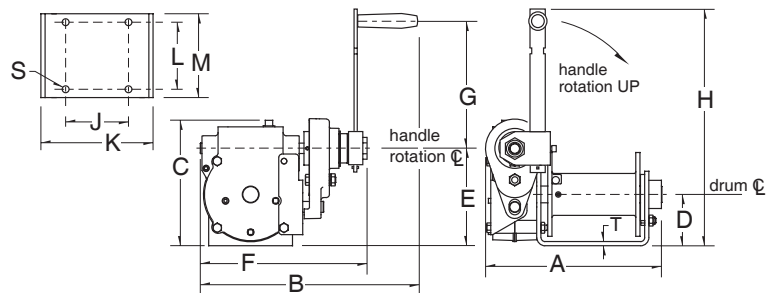
Model 465



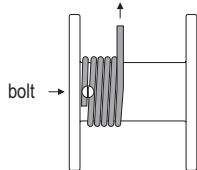
Models 462, 472 and 482



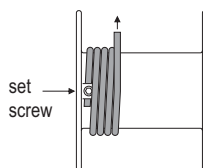
Models 4622PB and 482B



Wire Rope Installation  
Model 465



Wire Rope Installation  
Models 462 and 4622PB



Wire Rope Installation  
Models 472, 482  
and 482B

### Worm Gear Hand Winches – Dimensions (in)

	465	462	4622PB	472	482	482B	4WM2
drum dia.	1.50	1.50	1.50	2.50	4.00	4.00	2.50
flange dia.	4.00	4.06	4.06	5.00	8.50	8.50	5.00
drum width	2.81	2.81	2.81	5.00	6.50	6.50	5.00
A	6.50	7.75	7.50	10.12	13.97	13.97	13.50
B	10.50	10.25	11.81	12.00	18.88	20.94	15.56
C	5.44	5.63	5.62	7.12	12.80	12.80	8.56
D	3.40	2.38	2.40	3.06	5.75	5.75	3.31
E	1.40	4.38	4.38	5.81	10.38	10.38	6.04
F	6.38	5.88	7.60	7.94	12.50	15.47	11.56
G	8.75	9.00	10.59	7.25	12.25	18.38	10.59
H	10.59	13.38	15.59	13.38	22.62	29.19	17.30
J	2.00	2.00	2.00	3.75	7.00	7.00	1.75
K	5.75	4.44	4.44	6.69	9.00	9.00	3.75
L	2.50	2.50	2.50	4.00	6.00	6.00	4.00
M	4.50	3.50	3.50	5.00	8.00	8.00	13.50
S (hole dia.)	.40	.40	.40	.40	.56	.56	.41
T	.19	.19	.19	.25	.50	.50	-

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.