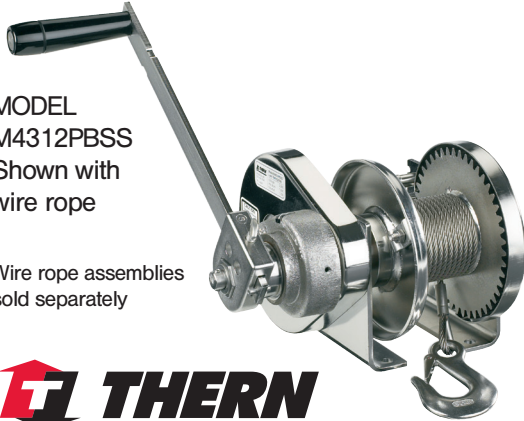


SPUR GEAR HAND WINCHES

MODEL M4022PB



MODEL M4312PBSS
Shown with wire rope



Wire rope assemblies sold separately



Spur Gear Hand Winches

Up to 2000 lb capacity

- **Machine Cut Spur Gears** for accurate and long lasting service.
- **Automatic Brake Models** provide positive load control for lifting and lowering operations. Brake models have PB suffix.
- **Corrosion Resistant** trivalent zinc plated finish protects against corrosion in harsh environments.
- **Quick Disconnect Anchor**¹ for quickly attaching or removing wire rope equipped with a swaged ball fitting.
- **Bronze and Radial Ball Bearings** provide smooth and efficient operation.
- **Large Diameter Drums** minimize wear to extend wire rope life.
- **Gear Covers** protect gears and help prevent injuries.
- **Stainless Steel Models Available** for harsh environments, see models with SS suffix. Stainless steel models are electro-polished for added corrosion resistance.
- **Two-year Limited Warranty**

Spur Gear Hand Winches – Configurations and Performance Characteristics – Section 1

model number	description	load rating (lb)			wire rope dia. (in)	drum capacity (ft) ²			single gear ratio	double gear ratio	force ³ to lift 1000 lb	approx. ship wt. (lb)
		1st layer	mid drum	full drum		1st layer	mid drum	full drum				
M401	500 lb – marine duty (for pulling only)	500	400	300	1/8 3/16	7 4	60 27	130 60	—	—	—	8
M4022	1000 lb – marine duty (for pulling only)	1000	700	500	1/8 3/16	4 3	52 26	130 57	2.85:1	—	40 lb	12
M4022PB	1000 lb – marine duty with brake (for lifting)	1000	700	500	1/8 3/16	4 3	52 26	130 57	2.85:1	—	41 lb	17
M4032	1000 lb – marine duty (for pulling only)	1000	700	500	1/8 3/16	11 7	110 51	250 110	2.85:1	—	40 lb	14
M4032PB	1000 lb – marine duty with brake (for lifting)	1000	700	500	1/8 3/16	11 7	110 51	250 110	2.85:1	—	41 lb	18
M4042PBSS	1000 lb – stainless steel with brake (for lifting)	1000	800	600	1/8 3/16 1/4	12 8 5	110 48 27	240 110 59	3.83:1	—	46 lb (single gear)	24
M4312	2000 lb – marine duty (for pulling only)	2000	1600	1200	3/16 1/4 5/16	8 5 4	48 27 17	110 59 39	3.83:1	14.7:1	20 lb (double gear)	23
M4312PB	2000 lb – marine duty with brake (for lifting)	2000	1600	1200	3/16 1/4 5/16	8 5 4	48 27 17	110 59 39	—	14.7:1	17 lb (double gear)	28
M4312PBSS	2000 lb – stainless steel with brake (for lifting)	2000	1600	1200	3/16 1/4 5/16	8 5 4	48 27 17	110 59 39	—	14.7:1	17 lb (double gear)	28
M4412	2000 lb – marine duty (for pulling only)	2000	1600	1200	3/16 1/4 5/16	18 14 11	97 52 35	210 120 77	3.83:1	14.7:1	20 lb (double gear)	25
M4412PB	2000 lb – marine duty with brake (for lifting)	2000	1600	1200	3/16 1/4 5/16	18 14 11	97 52 35	210 120 77	—	14.7:1	17 lb (double gear)	30

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

¹ For Models M4022, M4022PB, M4032, M4032PB ball end is available for 1/8 inch and 3/16 inch only.

For Models M4042PBSS, M4312, M4312PB, M4312PBSS, M4412, M4412PB ball end is available for 3/16 inch and 1/4 inch only.

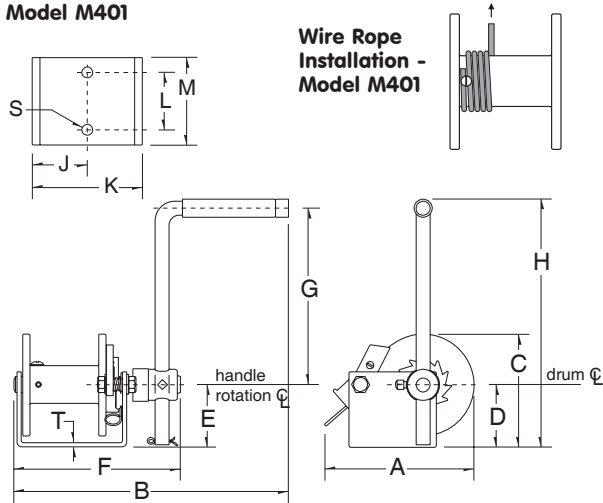
² Actual drum capacities may be 25-30% less, due to nonuniform winding. Wire rope tension will also affect drum capacity.

³ Approximate handle force required to lift 1000 lb with an empty drum, and maximum handle length.

See Dimensions on Next Page

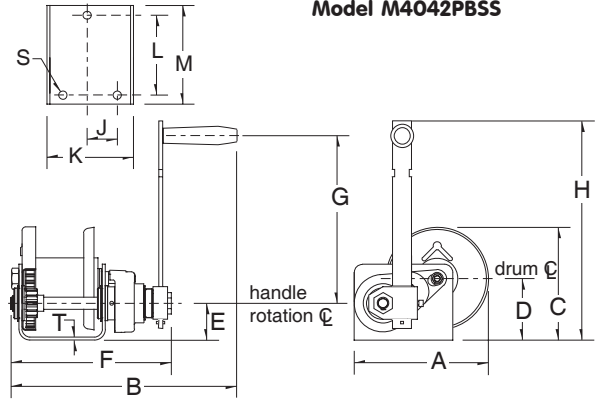
DIMENSIONS

Model M401



Wire Rope Installation - Model M401

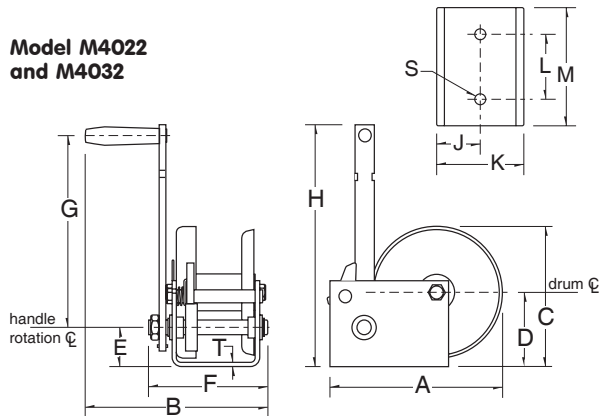
Model M4042PBSS



Wire Rope Installation - Models M4042PBSS

Model M4022 and M4022PB Base

Model M4022 and M4032

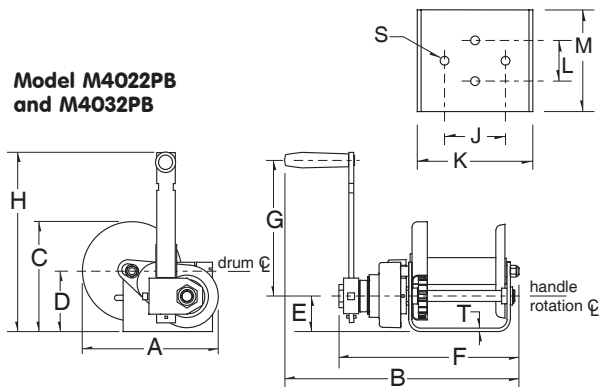


Quick Disconnect Anchor

Flange Clip Anchor

Model M4032 and M4032PB Base

Model M4022PB and M4032PB



Spur Gear Hand Winches – Dimensions (in)

	M401	M4022	M4022PB	M4032	M4032PB	M4042PBSS
drum dia.	1.50	1.50	1.50	1.50	1.50	2.50
flange dia.	4.06	4.56	4.56	4.56	4.56	5.50
drum width	2.75	2.00	2.00	4.00	4.00	3.00
A	6.56	7.27	7.27	7.27	7.27	8.21
B	10.56	9.00	12.12	11.00	14.12	13.77
C	4.56	6.12	6.12	6.12	6.12	6.90
D	2.50	3.31	3.31	3.31	3.31	3.75
E	2.50	2.00	2.00	2.00	2.00	2.25
F	5.81	5.25	8.12	7.25	10.12	9.76
G ¹	8.50	11.03	10.59	11.03	10.59	10.59
H ¹	11.28	13.56	13.12	13.56	13.12	13.50
J	2.19	1.84	1.84	3.00	3.00	1.44
K	4.38	3.68	3.68	5.68	5.68	5.26
L	2.50	2.82	2.82	2.00	2.00	5.00
M	3.50	5.00	5.00	5.00	5.00	6.00
S(hole dia.)	.40	.43	.43	.43	.43	.41
T	.18	.18	.18	.18	.18	.18

Dimensions are for reference only and subject to change without notice.
¹ Models M401, M4022PB, M4032PB and M4042PBSS handles are adjustable, dimension shown is for maximum handle length.

Wire Rope Installation - Models M4022, M4022PB, M4032 and M4032PB



Quick Disconnect Anchor

Flange Clip Anchor

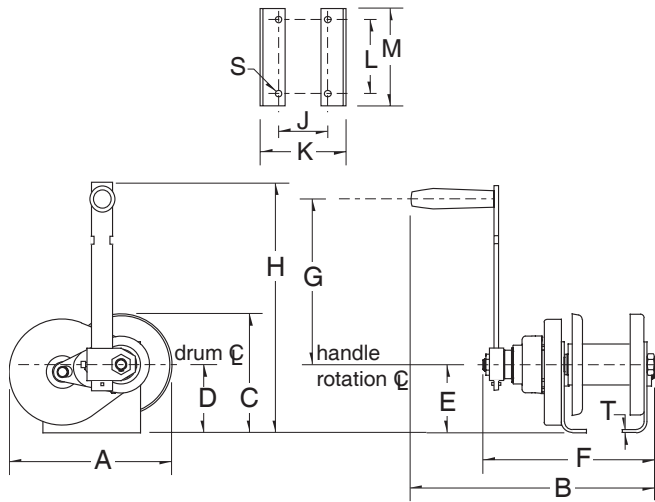
Important:

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.

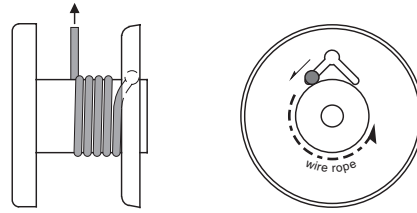
See Additional Dimensions on Next Page

DIMENSIONS

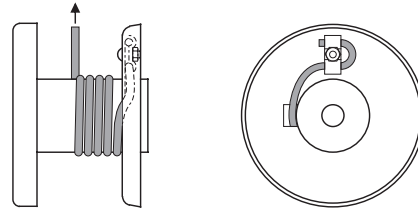
Models M4312PB, M4412PB and M4312PBSS



Wire Rope Installation - Models M4312, M4312PB, M4312PBSS, M4412 and M4412PB

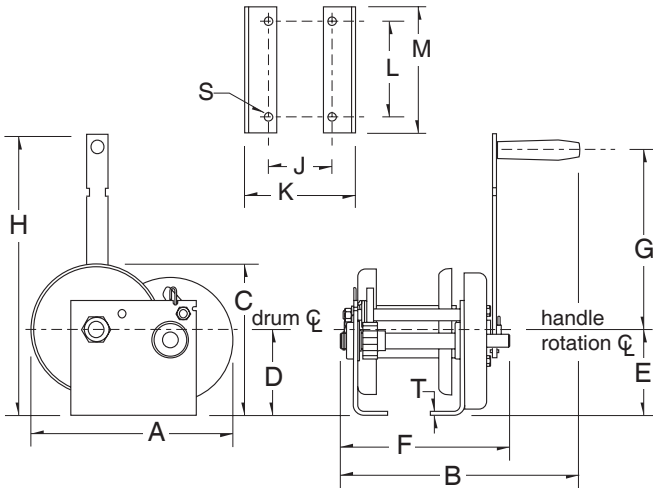


Quick Disconnect Anchor



Flange Clip Anchor

Models M4312 and M4412



Spur Gear Hand Winches – Dimensions (in)

	M4312	M4312PB	M4312PBSS	M4412	M4412PB
drum dia.	2.50	2.50	2.50	2.50	2.50
flange dia.	5.50	5.50	5.50	5.50	5.50
drum width	3.00	3.00	3.00	6.00	6.00
A	10.00	10.00	10.00	10.00	10.00
B	12.70	14.50	14.50	15.70	17.50
C	7.15	7.15	7.15	7.15	7.15
D	4.00	4.00	4.00	4.00	4.00
E	4.00	4.00	4.00	4.00	4.00
F	8.00	10.78	10.78	11.00	13.78
G ¹	8.75	10.59	10.59	8.75	10.59
H ¹	13.35	15.19	15.19	13.35	15.19
J	3.34	3.34	3.34	6.34	6.34
K	5.31	5.31	5.31	8.31	8.31
L	5.00	5.00	5.00	5.00	5.00
M	6.00	6.00	6.00	6.00	6.00
S (hole dia.)	.40	.40	.41	.40	.40
T	.18	.18	.18	.18	.18

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

¹ Models M4312PB, M4312PBSS and M4412PB handles are adjustable, dimension shown is for maximum handle length.



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www.thern.com

Important:

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