

M452 / M492 SERIES SPECS

MODEL M452B
Shown with brake and wire rope



Wire rope assemblies sold separately

MODEL M492



Spur Gear Hand Winches Double Reduction

Up to 10,000 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 B suffix.
- **Corrosion Resistant** durable paint finish combined with trivalent zinc plating protects against corrosion.
- **Bronze and Radial Ball Bearings** provide smooth and efficient operation.
- **Large Diameter Drums** minimize wear to extend wire rope life.
- **Spring Loaded Ratchets** for positive engagement with gear.
- **Steel Gear Covers** protect gears and help prevent injuries.
- **Handles Adjust** in length to change force required to move load.
- **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) ¹			single gear ratio	double gear ratio	force ² to lift 1000 lb	approx. ship wt. (lb)
		1st layer	mid drum	full drum		1st layer	mid drum	full drum				
M452	4000 lb – marine duty (for pulling only)	4000	3300	2500	1/4 5/16 3/8	23 18 14	130 89 64	300 200 140	4.42:1	19.54:1	10 lb (double gear)	83
M452B	4000 lb – marine duty with brake (for lifting)	4000	3300	2500	1/4 5/16 3/8	23 18 14	130 89 64	300 200 140	—	19.54:1	10 lb (double gear)	91
M452B-A	4000 lb – marine duty with brake (for lifting) 4 inch drum width	4000	3300	2500	1/4 5/16 3/8	13 9 7	83 56 40	190 120 89	—	19.54:1	10 lb (double gear)	83
M492	10,000 lb – marine duty (for pulling only)	10,000	7400	5400	5/16 3/8 1/2	27 21 15	240 170 100	540 390 230	5.00:1	25.00:1	8 lb (double gear)	166
M492B	10,000 lb – marine duty with brake (for lifting)	10,000	7400	5400	5/16 3/8 1/2	27 21 15	240 170 100	540 390 230	—	25.00:1	8 lb (double gear)	173
M492-12	10,000 lb – marine duty (for pulling only) 12 inch drum width	10,000	7400	5400	5/16 3/8 1/2	46 37 27	380 270 160	850 610 360	5.00:1	25.00:1	8 lb (double gear)	175
M492B-12	10,000 lb – marine duty with brake (for lifting) 12 inch drum width	10,000	7400	5400	5/16 3/8 1/2	46 37 27	380 270 160	850 610 360	—	25.00:1	8 lb (double gear)	190
MB451	disc brake only for M452 (for lifting)											13
MB491	disc brake only for M492 and M492-12 (for lifting)											15
HW452	hand wheel only for M452 (for pulling only)											19
HW492	hand wheel only for M492 and M492-12 (for pulling only)											20

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

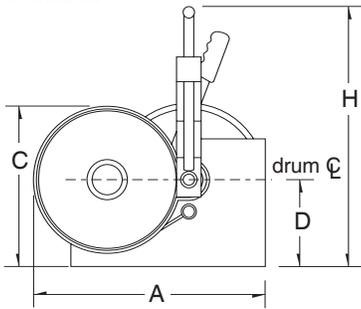
¹ Actual drum capacities may be 25-30% less, due to nonuniform winding. Wire rope tension will also affect drum capacity.

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

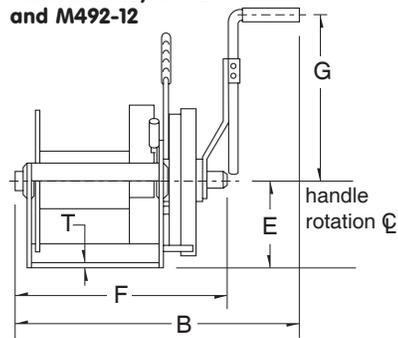
See Dimensions on Next Page

M452 / M492 DIMENSIONS

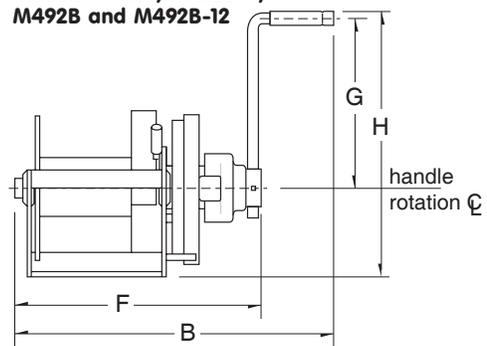
All Models



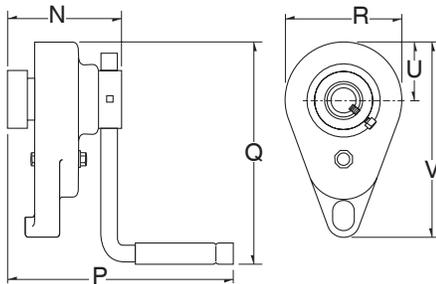
Models M452, M492 and M492-12



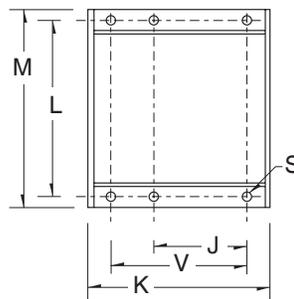
Models M452B, M452B-A, M492B and M492B-12



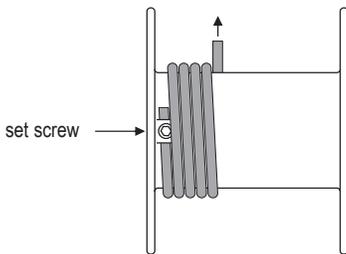
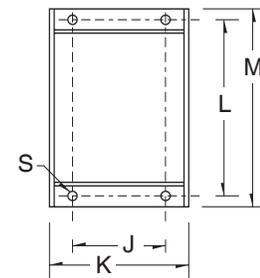
Models MB451 and MB491



Base for M492-12 and M492B-12



Base for M452, M452B, M452B-A, M492 and M492B Models



Wire Rope Installation - All Models



Disc Brakes – Dimensions (in)

	MB451	MB491
N	4.97	5.15
P	10.44	10.62
Q ¹	21.25	21.38
R	4.87	4.87
U	2.44	2.44
V	8.62	10.56

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

¹ Handles are adjustable, dimension shown is for maximum handle length.

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.

Spur Gear Hand Winches – Dimensions (in)

	M452	M452B	M452B-A	M492	M492B	M492-12	M492B-12
drum dia.	4.00	4.00	4.00	5.00	5.00	5.00	5.00
flange dia.	8.50	8.50	8.50	12.38	12.38	12.38	12.38
drum width	6.38	6.38	4.00	7.62	7.62	12.00	12.00
A	15.25	15.25	15.25	20.38	20.38	20.38	20.38
B	22.00	21.90	19.62	25.12	25.00	29.50	29.38
C	10.69	10.69	10.83	14.00	14.00	14.00	14.00
D	5.81	5.81	5.81	7.50	7.50	7.50	7.50
E	5.81	5.81	5.81	7.50	7.50	7.50	7.50
F	14.81	16.43	14.06	18.44	19.53	22.82	23.90
G ¹	18.62	18.38	18.38	22.50	18.50	22.50	18.50
H ¹	24.44	24.19	24.19	30.00	26.00	30.00	26.00
J	6.75	6.75	4.50	8.00	8.00	8.00	8.00
K	9.50	9.50	7.12	12.00	12.00	16.38	16.38
L	11.25	11.25	11.25	15.50	15.50	15.50	15.50
M	12.50	12.50	12.50	17.00	17.00	17.00	17.00
S (hole dia.)	.56	.56	.56	.81	.81	.81	.81
T	.25	.25	.25	.38	.38	.38	.38
V	-	-	-	-	-	12.38	12.38

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

¹ Handles are adjustable, dimension shown is for maximum handle length.