



Model M452B shown with disc 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) <sup>1</sup> |                   |                   |        | single gear ratio | double 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         |        |                   |                        |                                    |                       |
| M452         | 4000 lb – marine duty (for pulling only)                               | 4000             | 3300     | 2500      | 1/4<br>5/16<br>3/8  | 23<br>18<br>14                  | 130<br>89<br>64   | 300<br>200<br>140 | 4.42:1 | 19.54:1           | 10 lb<br>(double gear) | 83                                 |                       |
| M452B        | 4000 lb – marine duty with brake (for lifting)                         | 4000             | 3300     | 2500      | 1/4<br>5/16<br>3/8  | 23<br>18<br>14                  | 130<br>89<br>64   | 300<br>200<br>140 | —      | 19.54:1           | 10 lb<br>(double gear) | 91                                 |                       |
| M452B-A      | 4000 lb – marine duty with brake (for lifting)<br>4 inch drum width    | 4000             | 3300     | 2500      | 1/4<br>5/16<br>3/8  | 13<br>9<br>7                    | 83<br>56<br>40    | 190<br>120<br>89  | —      | 19.54:1           | 10 lb<br>(double gear) | 83                                 |                       |
| M492         | 10,000 lb – marine duty (for pulling only)                             | 10,000           | 7400     | 5400      | 5/16<br>3/8<br>1/2  | 27<br>21<br>15                  | 240<br>170<br>100 | 540<br>390<br>230 | 5.00:1 | 25.00:1           | 8 lb<br>(double gear)  | 166                                |                       |
| M492B        | 10,000 lb – marine duty with brake (for lifting)                       | 10,000           | 7400     | 5400      | 5/16<br>3/8<br>1/2  | 27<br>21<br>15                  | 240<br>170<br>100 | 540<br>390<br>230 | —      | 25.00:1           | 8 lb<br>(double gear)  | 173                                |                       |
| M492-12      | 10,000 lb – marine duty (for pulling only)<br>12 inch drum width       | 10,000           | 7400     | 5400      | 5/16<br>3/8<br>1/2  | 46<br>37<br>27                  | 380<br>270<br>160 | 850<br>610<br>360 | 5.00:1 | 25.00:1           | 8 lb<br>(double gear)  | 175                                |                       |
| M492B-12     | 10,000 lb – marine duty with brake (for lifting)<br>12 inch drum width | 10,000           | 7400     | 5400      | 5/16<br>3/8<br>1/2  | 46<br>37<br>27                  | 380<br>270<br>160 | 850<br>610<br>360 | —      | 25.00:1           | 8 lb<br>(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                                 |                       |

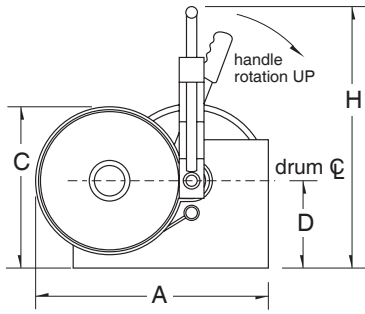
Please contact factory or nearest Thern Distributor for firm fixed price and delivery.

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

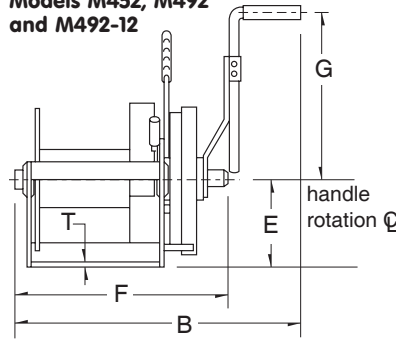
<sup>2</sup> Approximate handle force required to lift 1000 lb with an empty drum, and maximum handle length.

See Dimensions on Next Page

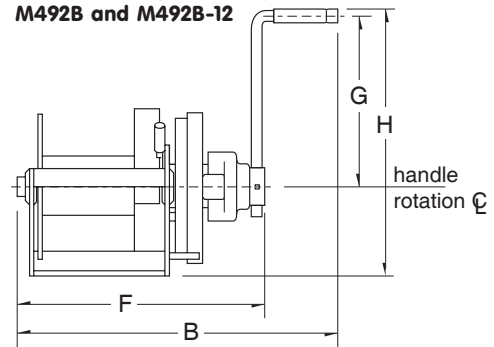
All Models



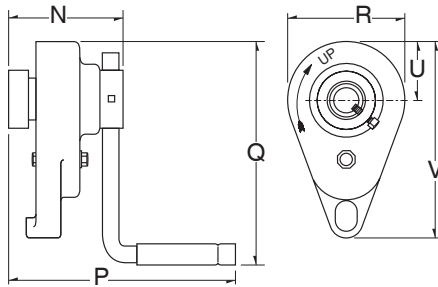
Models M452, M492 and M492-12



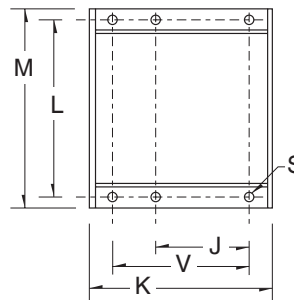
Models M452B, M452B-A, M492B and M492B-12



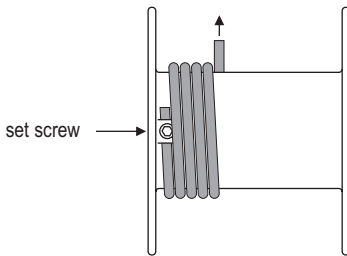
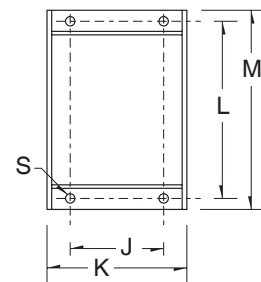
Models MB451 and MB491



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 <sup>1</sup> | 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.

<sup>1</sup> 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 <sup>1</sup> | 18.62 | 18.38 | 18.38   | 22.50 | 18.50 | 22.50   | 18.50    |
| H <sup>1</sup> | 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.

<sup>1</sup> Handles are adjustable, dimension shown is for maximum handle length.