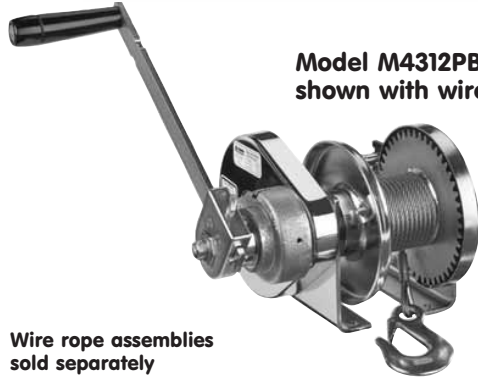


**Model M4022PB**



**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**<sup>1</sup> 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) <sup>2</sup> |                       |                        | single gear ratio | double gear ratio | force <sup>3</sup> 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<br>3/16                | 7<br>4                          | 60<br>27              | 130<br>60              | —                 | —                 | —                                  | 8                     |
| M4022        | 1000 lb – marine duty (for pulling only)           | 1000             | 700      | 500       | 1/8<br>3/16                | 4<br>3                          | 52<br>26              | 130<br>57              | 2.85:1            | —                 | 40 lb                              | 12                    |
| M4022PB      | 1000 lb – marine duty with brake (for lifting)     | 1000             | 700      | 500       | 1/8<br>3/16                | 4<br>3                          | 52<br>26              | 130<br>57              | 2.85:1            | —                 | 41 lb                              | 17                    |
| M4032        | 1000 lb – marine duty (for pulling only)           | 1000             | 700      | 500       | 1/8<br>3/16                | 11<br>7                         | 110<br>51             | 250<br>110             | 2.85:1            | —                 | 40 lb                              | 14                    |
| M4032PB      | 1000 lb – marine duty with brake (for lifting)     | 1000             | 700      | 500       | 1/8<br>3/16                | 11<br>7                         | 110<br>51             | 250<br>110             | 2.85:1            | —                 | 41 lb                              | 18                    |
| M4042PBSS    | 1000 lb – stainless steel with brake (for lifting) | 1000             | 800      | 600       | 1/8<br>3/16<br>1/4<br>5/16 | 12<br>8<br>5                    | 110<br>48<br>27<br>17 | 240<br>110<br>59<br>39 | 3.83:1            | —                 | 46 lb<br>(single gear)             | 24                    |
| M4312        | 2000 lb – marine duty (for pulling only)           | 2000             | 1600     | 1200      | 3/16<br>1/4<br>5/16        | 8<br>5<br>4                     | 48<br>27<br>17        | 110<br>59<br>39        | 3.83:1            | 14.7:1            | 20 lb<br>(double gear)             | 23                    |
| M4312PB      | 2000 lb – marine duty with brake (for lifting)     | 2000             | 1600     | 1200      | 3/16<br>1/4<br>5/16        | 8<br>5<br>4                     | 48<br>27<br>17        | 110<br>59<br>39        | —                 | 14.7:1            | 17 lb<br>(double gear)             | 28                    |
| M4312PBSS    | 2000 lb – stainless steel with brake (for lifting) | 2000             | 1600     | 1200      | 3/16<br>1/4<br>5/16        | 8<br>5<br>4                     | 48<br>27<br>17        | 110<br>59<br>39        | —                 | 14.7:1            | 17 lb<br>(double gear)             | 28                    |
| M4412        | 2000 lb – marine duty (for pulling only)           | 2000             | 1600     | 1200      | 3/16<br>1/4<br>5/16        | 18<br>14<br>11                  | 97<br>52<br>35        | 210<br>120<br>77       | 3.83:1            | 14.7:1            | 20 lb<br>(double gear)             | 25                    |
| M4412PB      | 2000 lb – marine duty with brake (for lifting)     | 2000             | 1600     | 1200      | 3/16<br>1/4<br>5/16        | 18<br>14<br>11                  | 97<br>52<br>35        | 210<br>120<br>77       | —                 | 14.7:1            | 17 lb<br>(double gear)             | 30                    |

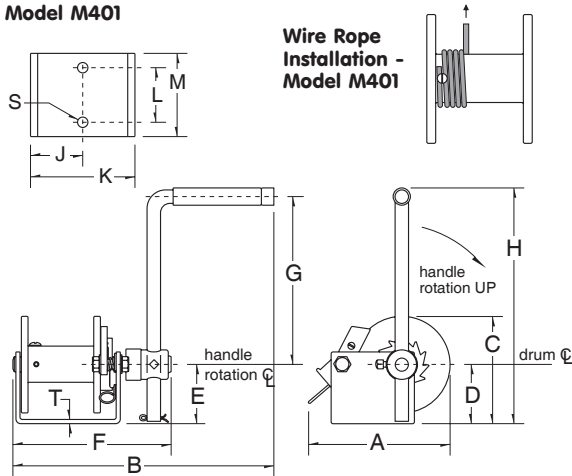
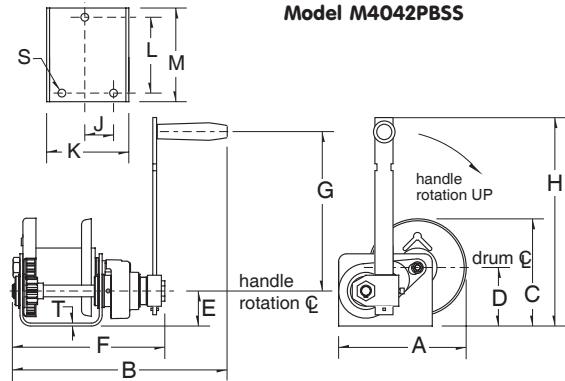
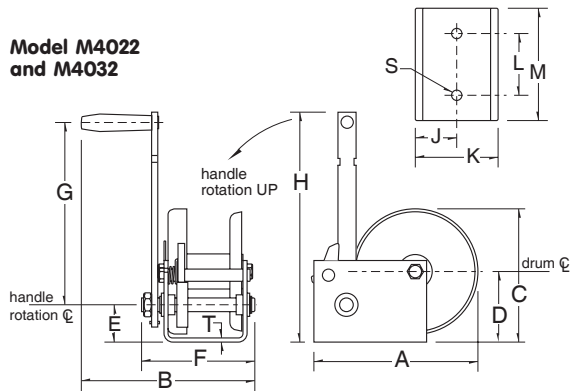
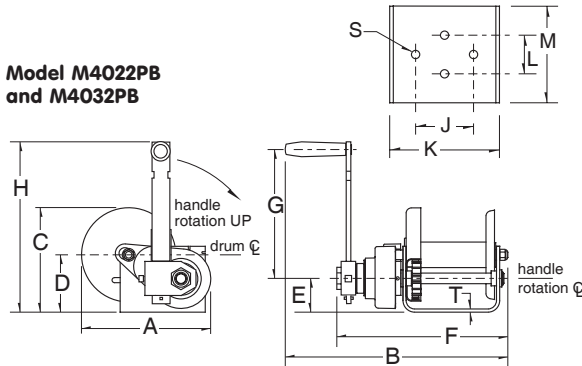
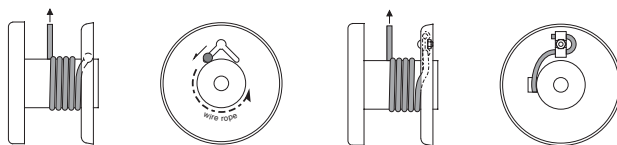
Please contact factory or nearest Thern Distributor for firm fixed price and delivery.

<sup>1</sup> 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.

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

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

**Model M401**

**Wire Rope Installation - Model M401**
**Model M4042PBSS**

**Wire Rope Installation - Models M4042PBSS**
**Model M4022 and M4022PB Base**
**Model M4022 and M4032**

**Model M4032 and M4032PB Base**
**Model M4022PB and M4032PB**

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

**Quick Disconnect Anchor**
**Flange Clip Anchor**
**Quick Disconnect Anchor**
**Flange Clip Anchor**
**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 <sup>1</sup> | 8.50  | 11.03 | 10.59   | 11.03 | 10.59   | 10.59     |
| H <sup>1</sup> | 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       |

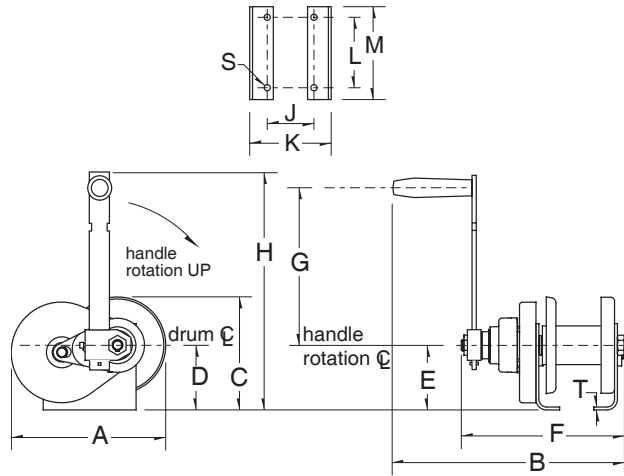
Dimensions are for reference only and subject to change without notice.

<sup>1</sup> Models M401, M4022PB, M4032PB and M4042PBSS handles are adjustable, dimension shown is for maximum handle length.

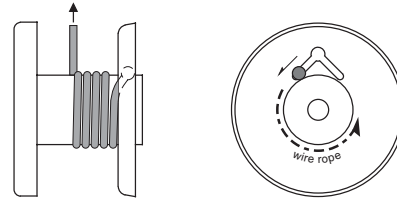
**Important:**

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.

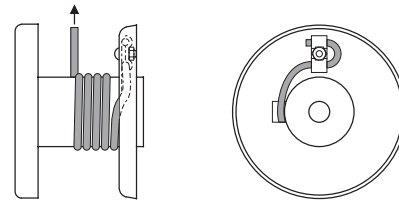
**Models M4312PB, M4412PB and M4312PBSS**



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

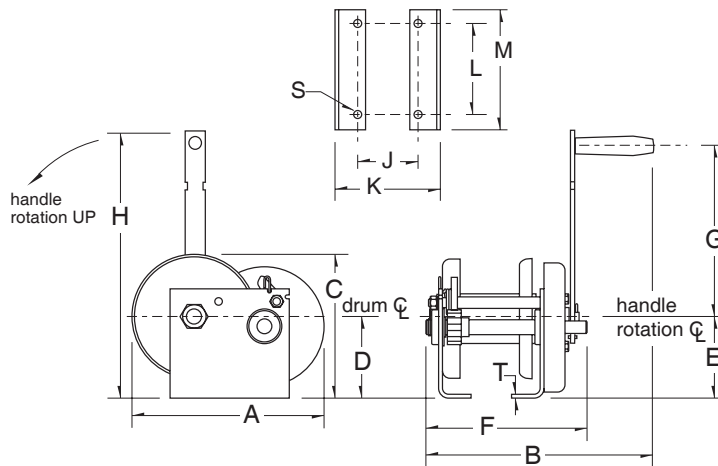


**Quick Disconnect Anchor**



**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 <sup>1</sup> | 8.75  | 10.59   | 10.59     | 8.75  | 10.59   |
| H <sup>1</sup> | 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.

<sup>1</sup> Models M4312PB, M4312PBSS and M4412PB 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.